Appendix 3-A

Drilling Logs and Well Completion Reports

8-423

QUADRUPLICATE
Use to comply with
local requirements

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in

No. 051199

State Well No. 2S/1W-16B1

Other Well No. ______

Notice of Intent No. ______

Local Permit No. or Date 8423

ASD Corporation

(1) OWNER: Name [redacted]

Address [redacted]

City [redacted] Zip 92399

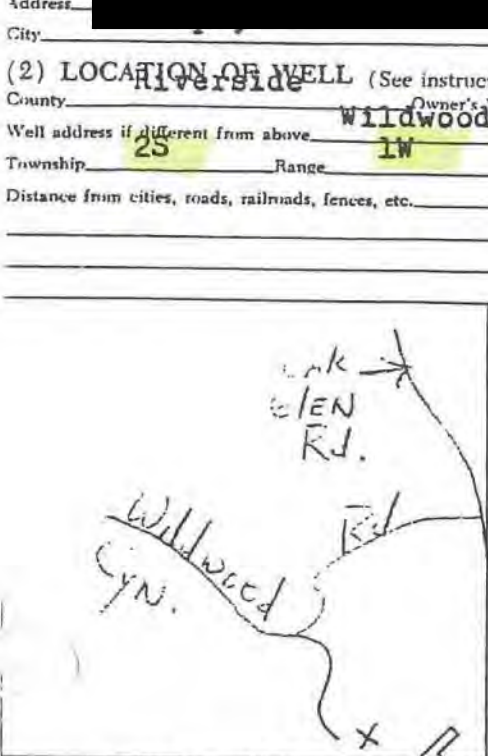
(2) LOCATION OF WELL (See instructions):

County Riverside Owner's Well Number ______

Well address if different from above Wildwood Canyon

Township 2S Range 1W Section 16

Distance from cities, roads, railroads, fences, etc. ______



WELL LOCATION SKETCH

(3) TYPE OF WORK:

New Well [XX] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:

Domestic [ ]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [XX]

(5) EQUIPMENT:

Rotary [ ] Reverse [X]
Cable [ ] Air [ ]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:

Yes [XX] No [ ] Size birdseye
Diameter of bore 24"
Packed from bottom to 50 ft.

(7) CASING INSTALLED:

Steel [X] Plastic [ ] Concrete [ ]

From ft.	To ft.	Dia. in.	Gage or Wall
0	506	12	¼"

(8) PERFORATIONS:

Type of perforation or size of screen

From ft.	To ft.	Slot size
206	506	3/32
12 rows	3 inch apart	

(9) WELL SEAL:

Was surface sanitary seal provided? Yes [XX] No [ ] If yes, to depth 50 ft.

Were strata sealed against pollution? Yes [ ] No [XX] Interval ______ ft.

Method of sealing Steel/Concrete

(10) WATER LEVELS:

Depth of first water, if known - ft.

Standing level after well completion - ft.

(11) WELL TESTS:

Was well test made? Yes [XX] No [ ] If yes, by whom? ______

Type of test Pump [X] Bailer [ ] Air lift [ ]

Depth to water at start of test ______ ft. At end of test ______ ft

50 gal/min after ______ hours Water temperature ______

Chemical analysis made? Yes [ ] No [XX] If yes, by whom? ______

Was electric log made? Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 506 ft. Depth of completed well 506 ft.

from ft. 0 to 506 ft. Formation (Describe by color, character, size or material)

From	To	Formation
0	48	Sandy gravel
48	60	Clay
60	80	Gravel & rock
80	185	Clay
185	200	Sand
200	250	Gravel & sand
250	305	Sand
305	340	Clay
340	500	Gravel, sand & clay
500	506	Sandy clay

CONFIDENTIAL
DO NOT FOR PUBLIC USE
WATER CODE SEC. 13752

Work started 1-23 19 79 Completed 2-16 19 79

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED Joseph W. Grammer (Well Driller)

NAME Jack Jones Wells & Pumps
(Person, firm, or corporation) (Typed or printed)

Address P.O. Box 2031

City Hemet, California Zip 92343

License No. 281601 Date of this report 3-16-79

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

GSSI
410

Mail Two Copies to:
DEPARTMENT OF PUBLIC HEALTH
Court House
Riverside, California

WATER WELL DRILLERS REPORT

(County Ordinances No. 340 and 340A)
COUNTY OF RIVERSIDE
DEPARTMENT OF PUBLIC HEALTH

Do Not Fill In 451
State Well No. 2S/1W-18L
Other Well No.
Region

(1) OWNER:

Name [redacted]
Address

(2) LOCATION OF WELL:

County Riverside Owner's number, if any— 3
1110 So. Fremont - Yucaipa

(3) TYPE OF WORK (check):

New well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☑ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☐
Cable ☑
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☑ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	340	12"	1/4"
339	415	10"	1/4"

Type and size of shoe or well ring 10"x3/4"x12"
Describe joint All joints butt welded

If gravel packed

Diameter of Bore	from ft.	to ft.

Size of gravel:

(7) PERFORATIONS:

Type of perforator used Mills
Size of perforations 1/2 in., length, by 3/8 in.
From 100 ft. to 335 ft. Perf. per row Rows per ft.
5 holes on 12" centers

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☑ No To what depth ft.
Were any strata sealed against pollution? ☐ Yes ☑ No If yes, note depth of strata
From ft. to ft.
Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found 100 ft.
ing level before perforating 100 ft.
ing level after perforating 100 ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☑ No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.

(11) WELL LOG:

Total depth 415 ft. Depth of completed well 415 ft.
Formation: *Describe by color, character, size of material, and structure.*

ft. to	ft.	
0	80	BROWN SANDY CLAY
80	275	FRACTURED ROCK WITH CLAY STREAKS
275	412	DECOMPOSED GRANITE
412	415	HARD BLUE GRANITE

12" CASING WAS STUCK AT 340 REDUCTION TO 10" CASING 339' TO 415' WITH 10"x12" ADAPTER AT 339'

10" CASING TORCH PERFORATED

BAILER TEST SHOWING ACCOVERY OF 4½ GPM BASED ON 12" 10" CASING AREA.

Work started OCT. 10 19 63. Completed Dec. 9 1963

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Kirkland Well Service
(Person, firm, or corporation) (Typed or printed)
Address 32291 Dunlap
Yucaipa, Calif.
[SIGNED] K. Kirkland
Well Driller 19 1/7

7551
283

Mail Two Copies to:
DEPARTMENT OF PUBLIC HEALTH
Court House
Riverside, California

WATER WELL DRILLERS REPORT

(County Ordinances No. 340 and 340A)
COUNTY OF RIVERSIDE
DEPARTMENT OF PUBLIC HEALTH

Do Not Fill In
State Well No. 2S/1W-18P1
Other Well No.
Region

(1) OWNER:

Name [redacted]
Address [redacted]
Los Angeles, Calif.

(2) LOCATION OF WELL:

County Riverside Owner's number, if any—
36300 1/2 Singleton Rd.
Calimesa, Calif.

(3) TYPE OF WORK (*check*):

New well ☑ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):

Domestic ☑ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☐
Cable ☑
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☑ DOUBLE ☐

From	ft. to	ft.	Diam.	Gage or Wall
0	288	8"	3/16"	
288	300	8"	1/4"	

Type and size of shoe or well ring 8x8x1/4"
Describe joint ALL JOINTS CIRCUMFERENTIALLY Welded

If gravel packed

Diameter of Bore	from ft.	to ft.

Size of gravel:

(7) PERFORATIONS:

Type of perforator used Mills
Size of perforations 2 in., length, by 1/4 in.
From 130 ft. to 298 ft. 4 Perf. per row 1 Rows per ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☑ Yes ☐ No To what depth 20 ft.
Were any strata sealed against pollution? ☐ Yes ☑ No If yes, note depth of strata
From 0 ft. to 20 ft.
Method of Sealing Clay Jel mixture

(9) WATER LEVELS:

Depth at which water was first found 132 ft.
Standing level before perforating 132 ft.
Standing level after perforating 132 ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☑ No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.

(11) WELL LOG:

Total depth 300 ft. Depth of completed well 300 ft.
Formation: *Describe by color, character, size of material, and structure.*

0 ft.	25 ft.	Brown Sandy Soil
25 "	51 "	Clay, small gravel
51 "	68 "	Brown gravel & Boulder
68 "	105 "	Brown clay & gravel
105 "	300 "	Hard Brown Sandy Clay
		Brown Sandy clay some gravel embedded.

Work started Dec. 29 1962. Completed JAN. 22 1963

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Kirkland Well Service
(Person, firm, or corporation) (Typed or printed)
Address 32291 Dunlap Blvd.
Yucaipa, Calif.
[SIGNED] K. Kirkland
Well Driller

2551
409

QUADRUPLICATE
Use to comply with
local requirements

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 277307

State Well No. 2S/1W-19C

Other Well No.

of Intent No.

Local Permit No. or Date

(1) OWNER: Name [redacted]
Address [redacted]
City Redlands, CA ZIP 92374

(2) LOCATION OF WELL (See instructions):
County Riverside Owner's Well Number
Well address if different from above
Township 2-South Range 1-West Section 19
Distance from cities, roads, railroads, fences, etc.

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [X]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Municipal [ ]
Other [ ]
(Describe)

(5) EQUIPMENT:
Rotary [X] Reverse [ ]
Cable [ ] Air [ ]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:
Yes [X] No [ ] Size 3/8 Spl
Diameter of bore 15
Packed from 0 to 435 ft.

(7) CASING INSTALLED:
Steel [X] Plastic [ ] Concrete [ ]

(8) PERFORATIONS:
Type of perforation or size of screen Vert. Mill Slot

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	435	3/16	8-5/8	195	275	.093
				295	435	.093

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [X] No [ ] If yes, to depth 50 ft.
Were strata sealed against pollution? Yes [ ] No [X] Interval ft.
Method of sealing Cement in Place

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion 90 ft.

(11) WELL TESTS:
Well test made? Yes [X] No [ ] If yes, by whom?
Type of test Pump [ ] Bailer [ ] Air lift [X]
Depth to water at start of test ft At end of test ft
Discharge X gal/min after hours Water temperature
Chemical analysis made? Yes [ ] No [X] If yes, by whom?
Was electric log made Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 435 ft. Completed depth 435 ft.

from ft	to ft	Formation (Describe by color, character, size or material)
0	4	Top Soil
4	54	Small Gravel
54	59	Loose Gravel
59	91	Gravel with Some Brown Clay
91	94	Loose Gravel
94	168	Sand and Gravel
168	192	Gravel and Brown Clay
192	200	Boulder Zone
200	211	Sand and Gravel
211	213	Boulder Zone
213	273	Gravel
273	275	Rock Very Hard
275	281	Hard Brown Clay
281	294	Gray Clay with Some Rock
294	321	Gravel 1" - 2"
321	334	Brown Clay and Gravel
334	342	Gravel
342	351	Brown Clay and Gravel
351	355	Gravel
355	373	Gravel
373	377	Brown Clay
377	435	Boulder Zone

NOT FOR WATER SUPPLY USE

Work started 10-4 1988 Completed 10-24 1988

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed (signature) (Well Driller)

NAME McCalla Brothers - Division of Layne We
(Person, firm, or corporation) (Typed or printed)
Address 3132 W. 17th St.
City Santa Ana ZIP 92703
License No. 510011 Date of this report 10-31-88

DWR 188 (REV. 12-86)

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

86 96355

[redacted]

LOG OF WELL NO. 8
S.R. No. 36-01856

25/2W-20A #8
25/2W-20Z - USGS
NOT #8

LOCATION: Hill Ranch
NW¼ of SW¼, sect. 25, T1S, R2W, SBB&M
DRILLED BY: E. J. Brockman YEAR: March 3, 1951 completed
R. 1, Box 150
Colton, Calif.

log from YLWD = in folder for well 08

Depth From	Depth To		Material
0	4'	sand/gravel	Top Soil
4'	50'		Sand and rock 2329'
50'	85'		Sandy clay
85'	105'	sandy clay & gravel	Sand and small gravel
105'	178'		Sandy clay
178'	222'		Sand and coarse gravel 2152'
222'	260'	CL	Hard clay 2119
260'	274'	sandy clay/gravel	Sand and small gravel
274'	300'		Sandy clay
300'	306'		Sand 2058'
306'	340'	clay/rock	Clay and rock 2039'
340'	354'		Rock and Sand
354'	415'	sand w/ clay	Sandy clay
415'	425'		Sand
425'	478'		Sand with streaks of clay 1896'
478'	506'	CL	Hard clay

Hole was reamed to 16" to 363' and 10" x 3/16" casing installed. 10" casing was perforated with 3/16" x 4" slots 4 to the round every foot.

Hole was reamed to 10" from 363' to 506' and 6" x 1/8" casing installed. 6" casing was perforated all the way with 3/16" x 4" slots 4 to the round, one round every foot.

Hole was gravel packed with 3/8" gravel all the way.

Static water level 115'

Well on the pump test pumped the following capacities:

from 143' - 162 GPM
" 166' - 279 GPM
" 178' - 342 GPM

Rotary Rig

2S/2W-2P1 Well 8

WELL RECORD

Rec. #36 01997

SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

Company _____

Location 8th Street South of Washington Drive Elevation = 2360'

NE 1/4 NE 1/4 Township 2 S Range 2 W Section 3

PIT

Date drilled 1959 By _____

Depth 750' Diameter _____ Packed 500'

CASING

Diameter 16" Length 500' Gauge 10 ga.

" _____ " _____ " _____

Perforated interval _____

COLUMN

Diameter 8" Length 400 Gauge STD

" _____ " _____ " _____

Tube diameter _____ Shaft diameter _____

BOWLS

Date installed March 18, 1963 By Turley Pump Company

Make _____ Model 10 LA Serial no. R 58225

Size 10" Stages 11 Length _____ Suction 10'

DESIGN PERFORMANCE

GPM 450	RPM 1760	TDH 400	HP 55
GPM _____	RPM _____	TDH _____	HP _____
GPM _____	RPM _____	TDH _____	HP _____

ENGINE

Date installed 3-63 (from #3 well) By _____

Type Elect. Make U.S. Model HU Serial no. 1251837

Cu. in. _____ B & S _____ HP 60 RPM 1800

GEAR

Date installed _____ By _____

Make _____ Model _____ Serial no. _____ HP _____

Shaft _____ Universals _____

Notes: Pump test July 25, 1966

Pump Head Jacuzzi - Pump as shown

SBVMWD FORM JK-10C

FORM 115

INVESTIGATION

South Coastal Basin

DIVISION OF WATER RESOURCES
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

WELL LOG

2S/2W-13E2

SHEET 1

NUMBER E-138e-

LOCAL DESIGNATION Owner #4

Hicks Y-4

Loc. #18249A

LOCATION 300' S. of Ave. "L," 30' E. of W. line of Lot 225, Sub. 9, Yucaipa Valley, Yucaipa. Sec. 13.

OWNER [redacted]

DATE COMPLETED 1913

DIAMETER OF CASING 16"

DRILLED BY W. D. Anderson

SOURCE OF INFORMATION P. E. Hicks

INSPECTED WHILE DRILLING SEE FILE NO.

SURFACE ELEVATION 2453. Hicks

SKETCH

DEPTH	ELEVATION OF BOTTOM OF STRATUM	MATERIAL	THICKNESS FEET	% VOIDS	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
0-20	2432	Packed soil	20			
44	2409	Cement gravel	24			
94	2359	Cement clay	50			
108	2345	Cement and gravel	14			
120	2333	Red clay	12			
168	2285	Gravel	48			
178	2275	Red clay	10			
182	2271	Gravel	4			
188	2265	Red clay, struck water	6			
206	2247	Water gravel	18			
208	2245	Red clay	2			
218	2235	Water gravel	10			
220	2233	Clay	2			
222	2231	Water gravel	2			
270	2183	Cement clay	48			
276	2177	Cement gravel	6			
310	2143	Red clay	34			
316	2137	Water gravel	6			
338	2115	Red clay	22			
360	2093	Water gravel	22			
362	2091	Red clay	2			
368	2085	Water gravel	6			
370	2083	Red clay	2			
372	2081	Cement gravel	2			
408	2045	Red clay	36			
426	2027	Cement gravel	18			
436	2017	Cement clay	10			
440	2013	Cement gravel	4			
476	1977	Cement clay	36			
497	1956	Cement gravel	21			
		Pumps 40" - Drawdown 100'.				

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FOR FIELD COPIES USE ALTERNATE LINES

LOG OBTAINED BY DATE

50612 6/51 15M CALIFORNIA STATE PRINTING OFFICE

FORM 115

INVESTIGATION

South Coastal Basin

DIVISION OF WATER RESOURCES
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

WELL LOG

2S/2W-14 F1

SHEET 1

NUMBER E-136j-

LOCAL DESIGNATION Owner #15

LOCATION 60' N. of Ave. L, 1700' W. of State Highway, Lot 213, Sub. 9, Yucaipa.

Loc. #182393

OWNER [redacted]

DATE COMPLETED About 1928

DIAMETER OF CASING 16"

DRILLED BY Clark McEuen

SOURCE OF INFORMATION Redlands-Yucaipa Water Co.

INSPECTED WHILE DRILLING SEE FILE NO.

SURFACE ELEVATION

SKETCH

DEPTH	ELEVATION OF BOTTOM OF STRATUM	MATERIAL	THICKNESS FEET	% VOIDS	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
1-152		Top soil and clay	152			
330		Water gravel - good	178			
342		Clay and red sandstone	12			
346		Rocks, square gravel	4			
350		Clay	2			
352		Red formation - rock and gravel	4			
356		Clay	2			
358		Red rocks and gravel	2			
360		Clay	2			
		At 300' some streaks of brown sandstone were found. Very thin.				
		Pumps 100"; 100' drawdown.				

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USGS
347

LOG OBTAINED BY DATE

FORM 115

INVESTIGATION

South Coastal Basin

2S/2W-15R1

SHEET 1

DIVISION OF WATER RESOURCES
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

NUMBER E-829-

WELL LOG

LOCAL DESIGNATION

Hicks #Y-74

LOCATION 2000' N. and 200' E. from S.W. corner Sec. 14, T.2S., R.2W., Yucaipa.

Loc. #17330-

OWNER [redacted]

DATE COMPLETED 1926

DIAMETER OF CASING 12"

DRILLED BY

SOURCE OF INFORMATION P.E.Hicks

INSPECTED WHILE DRILLING SEE FILE NO.

SURFACE ELEVATION

SKETCH

DEPTH	ELEVATION OF TOP OF STRATUM	MATERIAL	THICKNESS FEET	% VOIDS	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
0-70		Soil				
109		Gravel				
114		Clay and gravel mixed				
125		Clay				

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GSSI
210

QUADRUPLICATE
Jse to comply with
:al requirements

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

RECEIVED MAY 17 1990
Ans'd

Do not fill i

No. 294181

Notice of Intent No. ______
Local Permit No. or Date ______

State Well No. 2S/2W-16A1
Other Well No. ______

(1) OWNER: Name [redacted]
Address [redacted]
City La Quinta, CA ZIP 92253

(2) LOCATION OF WELL (See instructions):
County Riverside Owner's Well Number 1
Well address if different from above ______
Township 2S Range 2W Section 16
Distance from cities, roads, railroads, fences, etc.
3000' W. of County Line Rd.
1000' So. of San Bernardino County Line

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☒
Irrigation ☒
Industrial ☐
Test Well ☐
Municipal ☐
Other ☐
(Describe)

(5) EQUIPMENT:
Rotary ☐ Reverse ☒
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size ______
Diameter of bore ______
Packed from ______ to ______ ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☐ Concrete ☐

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	760	16	5/16	210	760	3/32
760	1070	12	5/16	760	1060	3/32

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 100 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ______ ft.
Method of sealing ______

(10) WATER LEVELS:
Depth of first water, if known ______ ft.
Standing level after well completion 230' ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? McCalla Bros.
Type of test Pump ☒ Bailer ☐ Air lift ☐
Depth to water at start of test 221 ft At end of test 230 ft.
Discharge 1050 gal/min after 56 hours Water temperature ______
Chemical analysis made? Yes ☐ No ☒ If yes, by whom? ______
Was electric log made Yes ☒ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 1320 ft. Completed depth 1070 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	30	Sandy Clay
30	80	Sand, Gravel & Clay
80	110	Sand & Gravel
110	280	Sand, Gravel, Streaks of Clay
280	460	Sand, Gravel & Rock
460	550	Brown Clay & Sandy Gravel
550	750	Rocks, Sand & Spots of Clay
750	885	Hadd Granite Formation, Spots
885	975	Fine & Coarse Sand, Clay Strea
975	1087	Sandy Brown Clay
1087	1200	Granite Boulders, Spots of Cla
1200	1320	Sand, Gravel, Granite Boulders

Work started 7-19 19 89 Completed 9-20 19 89

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed [illegible]
(Well Driller)

NAME McCalla Bros., Div. of Layne-Western Co
(Person, firm, or corporation) (Typed or printed)
Address 3132 W. 17th St.
City Santa Ana, CA ZIP 92703
License No. 510011 Date of this report 9-22-89

2S/2W-17R1

2S/2W-17-R1

DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WATER RESOURCES DIVISION

No. 2S/2W-17R1

OTHER

WELL LOG

State Calif. County Riverside Subarea Calimesa

Owner [redacted]

Location

Drilled by Brewer and Son Address

Date March 1, 1956 Casing diam. 16 Land-surf. alt. 2335 topo.

Source of data

(Enter type of well, perforations, yield, and drawdown at end of log)

Correlation	Ft.	Material	Thickness (feet)	Depth (feet)
		Top soil	3	3
		Sand with some clay	27	30
		Brown clay	70	100
		Brown clay	32	132
		Reddish-brown clay with sand	16	148
		Yellowish clay with sand	37	185
		Sand and gravel with streaks of rock	215	400
		Mainly sand from 393-400.		
		Rotary to 400, cable tool to 500.		
		SW/L - 130-130 ft.		

GSSI
350

NOT IN FILES

2S/2W -24E3 Well 34

~~35~~ WELL 34 Plotted on BFW

F-2

WATER WELL DRILLERS REPORT

DUPLICATE

THIS HAS TO BE W-35

Permit No. 3703
T. 2S., R. 2 W Sec. 24
State Well No.
R.C.F.C.D. No. 34
02S/02W-24E3 -24E3

(1) OWNER:

Name [redacted] Phone: 797-3329

Address [redacted]

Calimesa, California

(2) LOCATION OF WELL:

County Riverside Owner's number, if any— No. 2

Sec. 24-T2S R2W 800 North of Chandler Road

[illegible] Ftte East of Highway 99

(3) TYPE OF WORK (check):

New well [X] Deepening [ ] Reconditioning [ ] Abandon [ ]

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic [ ] Industrial [ ] Municipal [ ]
Irrigation [X] Test Well [ ] Other [ ]

(5) EQUIPMENT:

Rotary [X]
Cable [ ]
Dug Well [ ]

(6) CASING INSTALLED:

From ft.	to ft.	Diam.	Gage or wall	Diameter of Bore	from ft.	to ft.
0	800	14	3/16	21	0	800

Type and size of shoe or well ring: none Size of gravel: Pea

Describe joint: Butt weld

(7) PERFORATIONS:

Type of perforator used: Torch

Size of perforations: 1/4 in., length, by 3/16 in.

From ft.	to ft.	Perf. per row	Rows per ft.
170	800	1	6

(8) CONSTRUCTION:

Method of Sealing: Cement

(9) WATER LEVELS:

Depth at which water was first found: [illegible] ft.
Standing level before perforating: 168 ft.
Standing level after perforating: 168 ft.

(10) WELL TESTS:

(11) WELL LOG:

Total depth 800 ft. Depth of completed well 800 ft.

Formation: Describe by color, character, size of material, and structure.

From ft.	to ft.	Formation
0	4	Top soil
4	75	Gravel sand and clay
75	155	Gravel and sand
155	220	Sand and clay
220	260	Rock and sand
260	360	Sandy clay & gravel
360	380	Clay
380	394	Sand
394	410	Rock and sand
410	440	Gravel
440	475	Hard sand & clay
475	510	Rock and sand
510	648	Sand & gravel
648	650	Rock
650	800	Hard sand and clay

CONFIDENTIAL - NOT FOR PUBLIC RELEASE

MAR 1960 RECEIVED YUCAIPA VALLEY WATER DIST.

Work started: 19 Completed: 19

Driller:

Name R. L. Trower

Address 145 E. Wabash

San Bernardino, California

TRIPLICATE
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No.
(insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

Do Not Fill In
No. 54064
State Well No.
Other Well No.

(1) OWNER:

Name [redacted]
Address
Calimesa, Calif.

(2) LOCATION OF WELL:

County Riverside Owner's number, if any No. 2
R. F. D. or Street No. Sec. 24-t2s 2-W 800 North
of chandle road 400 ft.
East of Highway 99

Permit No! 3703

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	800	14	3/16

Type and size of shoe or well ring none
Describe joint but weld

If gravel packed

Diameter of Bore	from ft.	to ft.
21	0	800

Size of gravel: Pea

(7) PERFORATIONS:

Type of perforator used torach
Size of perforations 4 1/2 in., length, by 3/16 in.

From ft.	in.	to ft.	Perf. per row	Rows per ft.
170	800	1	6	

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☒ Yes ☐ No To what depth 90 ft.
Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata

From	ft. to	ft.
"	"	"

Method of Sealing Cement

(9) WATER LEVELS:

Depth at which water was first found 168 ft.
Standing level before perforating 168 ft.
Standing level after perforating 168 ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☐ No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? ☐ Yes ☐ No
Was electric log made of well? ☐ Yes ☐ No

(11) WELL LOG:

Total depth 800 ft. Depth of completed well 800 ft.

Formations: Describe by color, character, size of material, and structure.

	ft. to		ft.	
0	"	4	"	Top Soil.
4	"	75	"	Gravel sand and clay
75	"	155	"	gravel and sand.
155	"	220	"	sand and clay
220	"	260	"	rock and sand
260	"	360	"	sandy clay& gravel
360	"	380	"	Clay
380	"	394	"	sand
394	"	410	"	rock and sand
410	"	440	"	gravel
440	"	475	"	Hard sand & clay
475	"	510	"	rock and sand
510	"	648	"	sand & gravel
648	"	650	"	rock
650	"	800	"	Hard sand and clay

Work started 19 Completed 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME R. L. Trower
(Person, firm, or corporation) (Typed or printed)
Address 445 E. Wabash
San Bernardino, Calif.

[SIGNED] Well Driller
License No. 189826 Dated , 19

57028 8-57 3OM QUIN △ SPO DWR 188 (REV. 2-54)

Well #35

WELL LOG

14E2

2S/2W - 24E3

Well No. _____

Well Owner [redacted] Well No. 1

Location Approximately 2200 feet south of north line of Section 24

; SW ¼, NW ¼, Section 24, T 2 S, R 2 W

Drilled by Trower & Son Date completed October 1959

Drilling method rotary

Total depth _____ Size of casing and depth 14" Gauge 3/16" (Double) (Single)

Type of well _____

Struck water at _____, SWL before perforating 120 after perforating _____ (ft.)

Completion test data: SWL _____ PWL _____ Discharge _____ Hours run _____

Surface elev. 2320 Source of information _____

Perforations _____

Depth	Elev. Bot. of Stratum	Material	Thickness
3 - 3		Top soil	3
3 - 90		Red clay and decomposed granite	87
90 - 134		Gravel and sand	44
134 - 178		Clay and sand	44
178 - 200		Gravel rock and sand	22
200 - 210		Sand	10
210 - 225		Gravel and sand	15
225 - 247		Clay	22
247 - 282		Gravel	35
282 - 310		Clay and sand	28
310 - 365		Gravel and sand	55
365 - 491		Fine sand and clay	126
491 - 560		Alternate layers of sand and rock	69
560 - 790		Hard cemented gravel rock and sand	230

Remarks: 21-inch hole to 530 feet
18-inch hole to 790 feet

SHEET _____ of _____ Sheets

2S/2W-24E2

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
10½ West Citrus Avenue - Redlands, California

WELL LOG

Well No. 35

Well Owner [redacted] WELL NO 1
Location apprx 2200 ft S. of North Line of Sec 24

; ¼, ¼, Section 24, T 2S, R 2W
Drilled by TROWER & SON Date completed Oct 1959
Drilling method Rotary
Total depth ____ Size of casing and depth 14-inch Gauge 3/16" (Double) (Single)
Type of well ____
Struck water at ____, SWL before perforating 120 after perforating ____ (ft.)
Completion test data: SWL ____ PWL ____ Discharge ____ Hours run ____
Surface elev. 2320 Source of information ____
Perforations ____

Depth	Elev. Bot. of Stratum	Material	Thickness	
0-3		Top Soil		
3-90		Red clay & Decomposed GRANITE		
90-134		Gravel & Sand		
134-178		Clay & Sand		
178-200		GRAVEL Rock & Sand		
200-210		SAND		
210-225		GRAVEL & SAND		
225-247		Clay		
247-282		GRAVEL		
282-310		Clay & SAND		
310-365		GRAVEL & SAND		
365-491		FINE SAND & Clay		
491-560		alternate layers of Sand & rock		
560-790		Hard cemented Gravel Rock & Sand		

Remarks:
21-inch hole to 530 feet
18-inch hole to 790

SHEET ____ of ____ Sheets

Well 103

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0106895

Page 1 of 1

Owner's Well Number MW-3

Date Work Began 11/17/2009 Date Work Ended 11/20/2009

Local Permit Agency County of San Bernardino Environmental Health

Permit Number 2009110688 Permit Date 11/10/09

DWR Use Only – Do Not Fill In

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Hollow Stem Auger Drilling Fluid Air

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	2	Asphalt on silty sand (fill)
2	4	Silty sand, brown
4	12	Sandy clay, fine, dark brown
12	40	Silty sand, fine to coarse, dark brown
40	50	Silt with sand, fine, gray brown
50	60	Sand, fine to coarse, dark gray
60	70	Gravelly sand, fine to coarse, dark gray

Total Depth of Boring 70 Feet

Total Depth of Completed Well 60 Feet

Well Owner

Name [redacted]

Mailing Address [redacted]

City Yucaipa State CA Zip 92399

Well Location

Address San Timoteo Canyon Road

City Redlands County San Bernardino

Latitude 34 Deg. 1 Min. 23 Sec. N Longitude 117 Deg. 11 Min. 48 Sec. W

Datum NAD83 Decimal Lat. 34.023 Decimal Long. 116.197

APN Book Page Parcel

Township 2S Range 3W Section 4

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. **Please be accurate and complete.**

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
◉ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 19 (Feet below surface)

Depth to Static Water Level (Feet) Date Measured

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	45	10	Blank	PVC Sch. 40		4		
45	60	10	Screen	PVC Sch. 40		4	Milled Slots	0.020

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	39	Cement	seal
39	42	Bentonite	seal
42	60	Filter Pack	sand

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Jay J. Martin for C.H.J., Incorporated, Vice President, CEG 1529
Person, Firm or Corporation

1355 E. Cooley Drive Colton CA 92324
Address City State Zip

Signed [signature] 3/4/2010 766402
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

MONITORING WELL NO. MW-3

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 34.023°-116.197° Logged by: VJR Groundwater First Encountered (ft): 19.2

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES: DRIVE	SAMPLES: BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
		8" Asphalt Concrete, No Aggregate Base							
		(SM) Silty Sand, fine with medium, light brown	Fill	X		5 2 2			SPT
		(SM) Silty Sand, fine with clay, dark brown	Native						
5		(CL) Sandy Clay, fine, dark brown							
10				X		3 10 10			SPT
		(SM) Silty Sand, fine to coarse with gravel, dark brown							
15									
			Groundwater ▼						
20		(SM) Silty Sand, fine to coarse with gravel, dark brown		X		4 7 12			SPT
25									
30				X		3 6 7			SPT

MONITORING_WELL 09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-3a

MONITORING WELL NO. MW-3

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 34.023°-116.197° Logged by: VJR Groundwater First Encountered (ft): 19.2

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES: DRIVE	SAMPLES: BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
40		(ML) Silt with Sand, fine, gray brown		X		3 4 7			SPT
50		(SP-SM) Sand, fine to coarse with silt and gravel, dark gray		X		21 50/5"			SPT
60		(SP-SM) Gravelly Sand, fine to coarse with silt, gravel, dark gray		X		24 38 50/5"			SPT
65									

MONITORING_WELL 09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-3b

MONITORING WELL NO. MW-3

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 34.023°-116.197° Logged by: VJR Groundwater First Encountered (ft): 19.2

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES DRIVE	SAMPLES BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
		(ML) Silt with sand, fine and clay, dark gray to red brown		X		15 16 24			SPT
		END OF BORING							
		BORING TERMINATED AT 70.0' - REDRILLED TO 60.0' FILL TO 2.0', SLIGHT CAVING GROUNDWATER AT 18.8'							
75									
80									
85									
90									
95									
100									

MONITORING_WELL 09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-3c

MW 104

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0106893

Page 1 of 1

Owner's Well Number MW-2

Date Work Began 11/16/2009 Date Work Ended 11/20/2009

Local Permit Agency County of San Bernardino Environmental Health

Permit Number 2009110689 Permit Date 11/10/09

DWR Use Only – Do Not Fill In

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Hollow Stem Auger Drilling Fluid Air

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	3	Asphalt concrete on sand (fill)
3	20	Silty sand, fine to medium, brown
20	30	Silty sand,fine to coarse w/clay,dark brown
30	40	Clayey sand, fine w/medium and silt, yellow brown
40	50	Silty sand,fine w/medium & clay,brown
50	60	sand,fine to coarse w/silt, gray
60	71	Silty sand, fine w/medium & clay,brown

Total Depth of Boring 71 Feet

Total Depth of Completed Well 70 Feet

Well Owner

Name [redacted]

Mailing Address [redacted]

City Yucaipa State CA Zip 92399

Well Location

Address Alessandro Road

City Redlands County San Bernardino

Latitude 34 Deg. 0 Min. 51 Sec. N Longitude 117 Deg. 10 Min. 46 Sec. W

Datum NAD83 Decimal Lat. 34.014 Decimal Long. 117.179

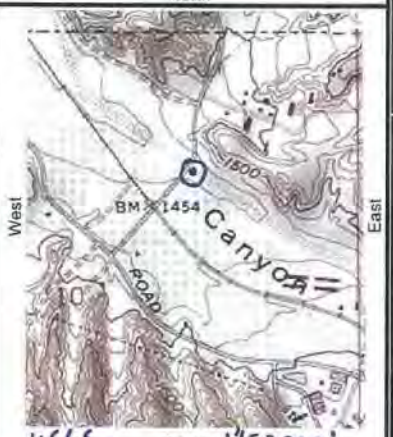
APN Book Page Parcel

Township 2S Range 3W Section 10

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. **Please be accurate and complete.**

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
◉ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 17 (Feet below surface)

Depth to Static Water Level (Feet) Date Measured

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	55	10	Blank	PVC Sch. 40		4		
55	70	10	Screen	PVC Sch. 40		4	Milled Slots	0.020

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	46	Cement	seal
46	49	Bentonite	seal
49	70	Filter Pack	sand

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Jay J. Martin for C.H.J., Incorporated, Vice President, CEG 1529
Person, Firm or Corporation

1355 E. Cooley Drive Colton CA 92324
Address City State Zip

Signed [signature] 3/4/2010 766402
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

MONITORING WELL NO. MW-2

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 34.014°-117.179° Logged by: VJR Groundwater First Encountered (ft): 16.5

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES: DRIVE	SAMPLES: BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
		7-1/2" Asphalt Concrete	Asphalt						
		(SP-SM) Sand, fine to medium with coarse, silt and gravel, brown	Fill	X		7 6 7			SPT
		(SM) Silty Sand, fine to medium, brown	Native						
5									
10				X		4 5 7			SPT
15			▼ Groundwater						
20		(SM) Silty Sand, fine to coarse with clay, dark brown		X		7 11 11			SPT
25									
30		(SC) Clayey Sand, fine with medium and silt, yellow brown		X		2 2 4			SPT

MONITORING_WELL 09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-2a

MONITORING WELL NO. MW-2

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 34.014°-117.179° Logged by: VJR Groundwater First Encountered (ft): 16.5

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES: DRIVE	SAMPLES: BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
40		(SM) Silty Sand, fine with medium and clay, brown		X		8 10 15			SPT
50		(SP) Sand, fine to coarse with silt, gray		X		4 15 25			SPT
60		(SM) Silty Sand, fine with medium and clay, brown		X		5 9 16			SPT
65									

MONITORING_WELL_09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-2b

MONITORING WELL NO. MW-2

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 34.014°-117.179° Logged by: VJR Groundwater First Encountered (ft): 16.5

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES: DRIVE	SAMPLES: BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				X		30 50/5"			SPT
		END OF BORING	Refusal						
		REFUSAL AT 71.0', NO BEDROCK FILL TO 3.0', SLIGHT CAVING GROUNDWATER AT 16.5'							
75									
80									
85									
90									
95									
100									

MONITORING_WELL 09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-2c

well 105

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0107582

Page 1 of 1

Owner's Well Number MW-1

Date Work Began 11/18/2009 Date Work Ended 11/18/2009

Local Permit Agency Riverside County Department of Environmental Health

Permit Number WP 20440 Permit Date 11/10/09

DWR Use Only – Do Not Fill In

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Hollow Stem Auger Drilling Fluid Air

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	1	Asphalt concrete and aggregate on sand (fill)
1	10	Silty sand, fine with clay, brown
10	20	Sand,fine to medium w/coarse, brown
20	30	Silty sand, fine to medium w/clay, gray brown
30	40	Silty sand,fine to coarse w/gravel, brown
40	50	Sand,fine to medium w/coarse, silt & gravel,gray
50	72	Silty sand, fine to medium w/clay, gray brown

Total Depth of Boring 72 Feet

Total Depth of Completed Well 60 Feet

Well Owner

Name [redacted]

Mailing Address [redacted]

City Yucaipa State CA Zip 92399

Well Location

Address Live Oak Canyon Road

City Calimesa County Riverside

Latitude 34 Deg. 0 Min. 10 Sec. N Longitude 117 Deg. 9 Min. 52 Sec. W

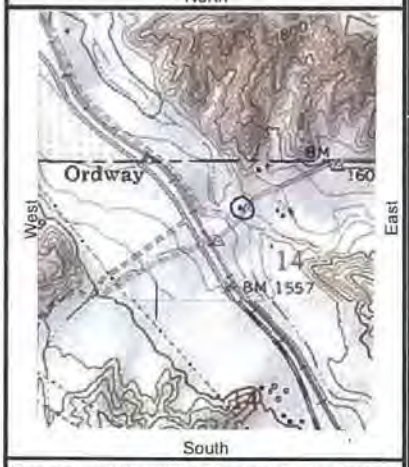
Datum NAD83 Decimal Lat. 34.003 Decimal Long. 117.165

APN Book 473 Page 320 Parcel 012

Township 2S Range 3W Section 14

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. **Please be accurate and complete.**

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
◉ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 19 (Feet below surface)

Depth to Static Water Level (Feet) Date Measured

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	45	10	Blank	PVC Sch. 40		4		
45	60	10	Screen	PVC Sch. 40		4	Milled Slots	0.020

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	36	Cement	seal
36	39	Bentonite	seal
39	60	Filter Pack	sand

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Jay J. Martin for C.H.J., Incorporated, Vice President, CEG 1529
Person, Firm or Corporation

1355 E. Cooley Drive Colton CA 92324
Address City State Zip

Signed [signature] 3/18/2010 766402
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Y VwD

MONITORING WELL NO. MW-1

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 34.003°-117.164° Logged by: VJR Groundwater First Encountered (ft): 19.0

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES: DRIVE	SAMPLES: BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
		5" Asphalt Concrete, 4" Aggregate Base	Asphalt						
		(SP-SM) Sand, fine with silt, gray brown	Base						
		(SM) Silty Sand, fine with clay, brown	Fill	X		2 3 2			SPT
			Native						
5									
10		(SP-SM) Sand, fine to medium with coarse, brown		X		4 6 7			SPT
15									
			▼ Groundwater						
20		(SM) Silty Sand, fine to medium with clay, gray brown		X		3 4 4			SPT
25									
30		(SM) Silty Sand, fine to coarse with gravel, brown		X		11 17 21			SPT

MONITORING_WELL_09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-1a

MONITORING WELL NO. MW-1

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 34.003°-117.164° Logged by: VJR Groundwater First Encountered (ft): 19.0

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES: DRIVE	SAMPLES: BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
40		(SP-SM) Sand, fine to medium with coarse, silt and gravel, gray		X		4 6 14			SPT
45									
50		(SM) Silty Sand, fine to medium with clay, gray brown		X		14 22 23			SPT
55									
60				X		9 17 30			SPT
65									

MONITORING_WELL 09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-1b

MONITORING WELL NO. MW-1

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 34.003°-117.164° Logged by: VJR Groundwater First Encountered (ft): 19.0

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES: DRIVE	SAMPLES: BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				X		22 35 50			SPT
		END OF BORING	Refusal						
		REFUSAL AT 71.5', NO BEDROCK FILL TO 1.0', SLIGHT CAVING GROUNDWATER AT 19.0'							
75									
80									
85									
90									
95									
100									

MONITORING_WELL 09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-1c

FORM 115
INVESTIGATION

South Coastal Basin

25-2W-13E1

DIVISION OF WATER RESOURCES
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

SHEET 1

NUMBER E-138d-

WELL LOG

LOCAL DESIGNATION

Owner #2
Hicks #Y-2
Loc. #18249 —

LOCATION 700' S. of Ave. L; 20' E. of W. line of Lot 225, Sub. 9, Yucaipa Valley, Yucaipa . Sec.13.

OWNER [redacted]

DATE COMPLETED 1913

DIAMETER OF CASING 16"

DRILLED BY W. D. Anderson

SOURCE OF INFORMATION P. E. Hicks

INSPECTED WHILE DRILLING ______ SEE FILE NO. ______

SURFACE ELEVATION 2453. levels Hicks.

SKETCH

FOR FIELD COPIES USE ALTERNATE LINES

DEPTH	ELEVATION OF BOTTOM OF STRATUM	MATERIAL	THICKNESS FEET	% VOIDS	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
0-95	2358	Packed clay	95			
190	2263	Cement gravel	95			
202	2251	Water gravel	12			
204	2249	Clay	2			
208	2245	Water gravel	4			
212	2241	Clay	4			
220	2233	Gravel	8			
226	2227	Clay	6			
230	2223	Gravel	4			
238	2215	Clay	8			
266	2187	Gravel	28			
277	2176	Clay	11			
313	2140	Gravel	36			
316	2137	Red clay	3			
330	2123	Cement gravel	14			
336	2117	Gravel	6			
338	2115	Clay	[illegible]			
346	2107	Gravel	[illegible]			
350	2103	Cement and quicksand	4			
362	2091	Red clay	12			
375	2078	Granite	[illegible]			
383	2070	Concrete	8			

Pumps 40" Drawdown 100'

MICROFILMED

LOG OBTAINED BY ______ DATE ______

66612 6-31 15M CALIFORNIA STATE PRINTING OFFICE

GSSI 342

MAY 31 1968

SMWC Well 4

-2S/2W-14R3

ORIGINAL
File with DWR

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Do Not Fill In

Nº 35123

State Well No. 2S/2W-14

Other Well No.

(1) OWNER:

Name [redacted]

Address Calimesa, California.

(2) LOCATION OF WELL:

County Riverside Owner's number, if any No. 4 well

Township, Range, and Section SE-1/4, Sec 14, Twp 2-S

Distance from cities, roads, railroads, etc. R-2-W, Riverside County

(3) TYPE OF WORK (check):

New Well [X] Deepening [ ] Reconditioning [ ] Destroying [ ]

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic [ ] Industrial [ ] Municipal [ ] Irrigation [ ] Test Well [ ] Other [X]

(5) EQUIPMENT:

Rotary [X] Cable [ ] Other [ ]

(6) CASING INSTALLED:

STEEL: OTHER: SINGLE [X] DOUBLE [ ]

If gravel packed

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
100	30" x 1/4" conductor casing					
76'	16" x 5/16" blank casing					
624'	- 16" x 5/16" perforated casing					

Size of shoe or well ring: Size of gravel:

Describe joint

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
352	976	10 holes per		2-2/3"

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes [X] No [ ] To what depth 100 ft.

Were any strata sealed against pollution? Yes [ ] No [ ] If yes, note depth of strata

From ft. to ft.

From ft. to ft.

Method of sealing

(9) WATER LEVELS:

Depth at which water was first found, if known ft.

Standing level before perforating, if known ft.

Standing level after perforating and developing ft.

(10) WELL TESTS:

Pump test made? Yes [X] No [ ] If yes, by whom? Roscoe Moss

Yield: 1720 gal./min. with 335 ft. drawdown after 49 hrs.

Temperature of water Was a chemical analysis made? Yes [ ] No [ ]

Was electric log made of well? Yes [ ] No [ ] If yes, attach copy

(11) WELL LOG:

Total depth 1000 ft. Depth of completed well ft.

Formation: Describe by color, character, size of material, and structure

0 to 14' Soil
14 to 69' Gravel
69 to 73' Clay and gravel
73 to 92' Boulders
92 to 110' Gravel and clay
110 to 124' Sand and gravel
124 to 135' Red sandy clay, some gravel
135 to 195' Sand and gravel with cemented streaks
195 to 240' Sandy clay, some gravel
240 to 250' Red clay
250 to 280' Hard sand and gravel, some clay
280 to 348' Sand, gravel and rocks
348 to 358' Sand, gravel and clay
358 to 365' Brown clay
365 to 504' Hard sand, gravel, boulders and clay
504 to 535' Sand, gravel and clay
535 to 539' Sand and gravel
539 to 549' Sand and clay
549 to 580' Sand and gravel
580 to 635' Sand and gravel, some clay
635 to 694' Sandy clay, some sand and gravel
694 to 700' Hard rocks and sand
700 to 715' Brown clay
715 to 758' Sand and gravel
758 to 802' Clay, some sand and gravel
802 to 808' Hard rock and sand
808 to 835' Brown clay and gravel
835 to 840' Sand and gravel, some clay
840 to 856' Sandy clay, some sand
856 to 934' Sand, gravel and boulders
934 to 940' Sand and gravel, some clay
940 to 982' Sand gravel and boulders
982 to 1000' Brown clay

Work started 3-22-68, Completed 4-19-68

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Roscoe Moss Company (Person, firm, or corporation) (Typed or printed)

Address 4360 Worth Street

Los Angeles, California.

[SIGNED] (Well Driller)

License No. 624 C-57 Dated May 17, 1968

SKETCH LOCATION OF WELL ON REVERSE SIDE

MAY 3 1 1968

SMWC well 4

-2S/2W-14R3

ORIGINAL
File with DWR

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Do Not Fill In

Nº 35123

State Well No. 2S/2W-14

Other Well No.

(1) OWNER:

Name [redacted]

Address Calimesa, California.

(2) LOCATION OF WELL:

County Riverside Owner's number, if any No. 4 well

Township, Range, and Section SE-1/4, Sec 14, Twp 2-S

Distance from cities, roads, railroads, etc. R-2-W, Riverside County

(3) TYPE OF WORK (check):

New Well [X] Deepening [ ] Reconditioning [ ] Destroying [ ]

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic [ ] Industrial [ ] Municipal [ ] Irrigation [ ] Test Well [ ] Other [X]

(5) EQUIPMENT:

Rotary [X] Cable [ ] Other [ ]

(6) CASING INSTALLED:

STEEL: SINGLE [X] DOUBLE [ ] OTHER:

If gravel packed

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
100	30" x 1/4" conductor casing					
76'	16" x 5/16" blank casing					
624'	16" x 5/16" perforated casing					

Size of shoe or well ring: Size of gravel:

Describe joint

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
352	976	10 holes per		2-2/3"

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes [X] No [ ] To what depth 100 ft.

Were any strata sealed against pollution? Yes [ ] No [ ] If yes, note depth of strata

From ft. to ft.

From ft. to ft.

Method of sealing

(9) WATER LEVELS:

Depth at which water was first found, if known ft.

Standing level before perforating, if known ft.

Standing level after perforating and developing ft.

(10) WELL TESTS:

Pump test made? Yes [X] No [ ] If yes, by whom? Roscoe Moss

Yield: 1720 gal./min. with 335 ft. drawdown after 49 hrs.

Temperature of water Was a chemical analysis made? Yes [ ] No [ ]

Was electric log made of well? Yes [ ] No [ ] If yes, attach copy

(11) WELL LOG:

Total depth 1000 ft. Depth of completed well ft.

Formation: Describe by color, character, size of material, and structure

0 to 14' Soil
14 to 69' Gravel
69 to 73' Clay and gravel
73 to 92' Boulders
92 to 110' Gravel and clay
110 to 124' Sand and gravel
124 to 135' Red sandy clay, some gravel
135 to 195' Sand and gravel with cemented streaks
195 to 240' Sandy clay, some gravel
240 to 250' Red clay
250 to 280' Hard sand and gravel, some clay
280 to 348' Sand, gravel and rocks
348 to 358' Sand, gravel and clay
358 to 365' Brown clay
365 to 504' Hard sand, gravel, boulders and clay
504 to 535' Sand, gravel and clay
535 to 539' Sand and gravel
539 to 549' Sand and clay
549 to 580' Sand and gravel
580 to 635' Sand and gravel, some clay
635 to 694' Sandy clay, some sand and gravel
694 to 700' Hard rocks and sand
700 to 715' Brown clay
715 to 758' Sand and gravel
758 to 802' Clay, some sand and gravel
802 to 808' Hard rock and sand
808 to 835' Brown clay and gravel
835 to 840' Sand and gravel, some clay
840 to 856' Sandy clay, some sand
856 to 934' Sand, gravel and boulders
934 to 940' Sand and gravel, some clay
940 to 982' Sand gravel and boulders
982 to 1000' Brown clay

Work started 3-22-68, Completed 4-19-68

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Roscoe Moss Company (Person, firm, or corporation) (Typed or printed)

Address 4360 Worth Street
Los Angeles, California.

[SIGNED] (Well Driller)

License No. 624 C-57 Dated May 17, 1968

SKETCH LOCATION OF WELL ON REVERSE SIDE

QUADRUPLICATE
For Local Requirements

Page ___ of ___

Owner's Well No. Well #5

Date Work Began 09/11/96 , Ended ___

Local Permit Agency County of Riverside Environmental Health

Permit No. 21447 Permit Date 09/11/96

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 441027

DWR USE ONLY — DO NOT FILL IN
25/2W-15-1
STATE WELL NO./STATION NO
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)

DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain size, color, etc*
	Install 14" liner to depth of 514', Gravel Pack Liner

RECEIVED
OCT 21 1996

TOTAL DEPTH OF BORING ___ (Feet)

TOTAL DEPTH OF COMPLETED WELL ___ (Feet)

WELL OWNER

Name [redacted]

Mailing Address [redacted]

Calimesa CITY Ca. STATE 92320 ZIP

WELL LOCATION

Address S.of Ave. L, W of 7th St. Behind Mobil

City Home Park, - Calimesa

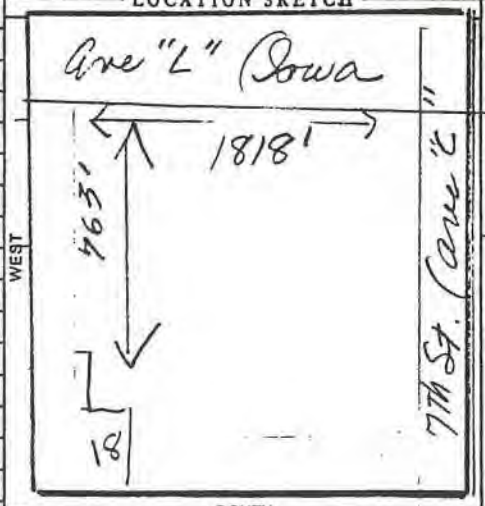
County Riverside

APN Book ___ Page ___ Parcel 411-200-018-9

Township 2S Range 2W Section 15

Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH



Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

___ NEW WELL

MODIFICATION/REPAIR

___ Deepen

X Other (Specify) Annular Seal

___ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USE(S) (✓)

___ MONITORING

WATER SUPPLY

___ Domestic

X Public

___ Irrigation

___ Industrial

___ "TEST WELL"

___ CATHODIC PROTECTION

___ OTHER (Specify)

DRILLING METHOD ___ FLUID ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL ___ (Ft.) & DATE MEASURED ___

ESTIMATED YIELD* ___ (GPM) & TEST TYPE ___

TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (Ft.)

* *May not be representative of a well's long-term yield.*

CASING(S)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 : 50	22	X				Mild Steel	16"	1/4	
0 : 264		X				Mild Steel	14"	1/4	
264 : 514			X			Mild Steel	14"	1/4	.090

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 : 50	X			3"

ATTACHMENTS (✓)

___ Geologic Log

___ Well Construction Diagram

___ Geophysical Log(s)

___ Soil/Water Chemical Analyses

___ Other ___

ATTACH ADDITIONAL INFORMATION IF IT EXISTS.

GSSI
354

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Layne Western Division of Layne Christensen
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

900 Nevada Street ADDRESS Redlands CITY Ca. STATE 92373 ZIP

Signed ___ (WELL DRILLER/AUTHORIZED REPRESENTATIVE) 10/18/96 DATE SIGNED 511 0011 C57 LICENSE NUMBER

DWR 188 REV. 3-96

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

February 7, 1949

Log of Test-hole Drilled for the [redacted]
Driller: C. C. Scott
Box 26,
Beaumont, California

#5 #5

Total Depth of Test-Hole- 1, 119 Feet

FROM	TO	DESCRIPTION OF FORMATIONS
0	48	Gravel, and sand imbedded in Clay
48	70	Fine Gravel
70	120	Gravel, and Sand imbedded in Clay
120	132	Sandy Clay
132	170	Gravel imbedded in Clay
170	185	Shale
185	240	Clay
240	248	Fine Gravel
248	260	Clay
260	268	Rock
268	293	Gravel imbedded in Clay
293	305	Coarse Sand (Water)
305	370	Clay
370	375	Rock Ledge
375	400	Clay
400	406	Rock, and Decomposed Granite
406	415	Sand
415	450	Clay
450	480	Sandy Clay
480	490	Rock
490	538	Sandy Clay
538	555	Hard, solid Clay
555	578	Coarse sand (Water)
578	586	Rock
586	615	Clay
615	625	Sand
625	650	Sandy Clay
650	670	Very Hard Clay
670	683	Coarse Water Sand, and Gravel
683	693	Rock
693	730	Clay
730	740	S andy Clay
740	745	S and-Stone
745	750	Sand
750	756	Hard Clay
756	760	Sand
760	770	Sandy Clay
770	782	Clay
782	816	Very Hard Clay
816	830	Sand
830	850	Clay
850	855	Rock, and Sand-Stone

(Log continued on Page 2)

~~3S/2W-14B2~~ form basis for 3S/2W-14E1

WATER WELL DRILLERS REPORT

DUPLICATE

Permit No. 292
T. 2 S., R. 2 E. Sec. 1
State Well No.
R.C.F.C.D. No.

SMWC #5

M 14 F

OWNER:

Name [redacted]

Address

Calimesa, California

(2) LOCATION OF WELL:

County Riverside Owner's number, if any—

Portion of Blk. 251, Subd. 9, of Yucaipa Valley, Riverside Co.

(3) TYPE OF WORK (*check*):

New well ☐ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):

Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☐
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☐ DOUBLE ☐

From	ft. to	ft.	Diam.	Gage or Wall
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"
"	"	"	"	"

Type and size of shoe or well ring

Describe joint

If gravel packed

Diameter of Bore	from ft.	to ft.
	"	"
	"	"
	"	"
	"	"
	"	"

Size of gravel:

(7) PERFORATIONS:

Type of perforator used

Size of perforations in., length, by in.

From	ft. to	ft.	Perf. per row	Rows per ft.
"	"	"	" " "	" " "
"	"	"	" " "	" " "
"	"	"	" " "	" " "
"	"	"	" " "	" " "

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☐ Yes ☐ No To what depth ft.

Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata

From	ft. to	ft.
"	"	"

Method of Sealing

(9) WATER LEVELS:

Depth at which water was first found	230 ft.
ding level before perforating	230 ft.
ding level after perforating	180 ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☐ No If yes, by whom?

(11) WELL LOG:

Total depth 1,119 ft. Depth of completed well

Formations *Describe by color, character, size of material, and structure.*

0	ft. to 48	ft.	gravel & sand imbedded in
48	" 70	"	fine gravel
70	" 120	"	gravel & sand imbedded in
120	" 132	"	sandy clay
132	" 170	"	gravel imbedded in clay
170	" 185	"	shale
185	" 240	"	clay
240	" 248	"	fine gravel
248	" 260	"	clay
260	" 268	"	rock
268	" 293	"	gravel imbedded in clay
293	" 305	"	coarse sand (water)
305	" 370	"	clay
370	" 375	"	rock ledge
375	" 400	"	clay
400	" 406	"	rock & decomposed granite
406	" 415	"	sand
415	" 450	"	clay
450	" 480	"	sandy clay
480	" 490	"	rock
490	" 538	"	sandy clay
538	" 555	"	hard, solid clay
555	" 578	"	coarse sand (water)
578	" 586	"	rock
586	" 615	"	clay
615	" 625	"	sand
625	" 650	"	sandy clay
650	" 670	"	very hard clay
670	" 683	"	coarse water sand & gravel
683	" 693	"	rock
693	" 730	"	clay
730	" 740	"	sandy clay
740	" 745	"	sand-stone
745	" 750	"	sand
750	" 756	"	hard clay
756	" 760	"	sand
760	" 770	"	sandy clay
770	" 782	"	clay
782	" 816	"	very hard clay
816	" 830	"	sand
830	" 850	"	clay
850	" 855	"	rock and sandstone
	"	"	cont'd next page

Work started Jan. 6 1949 Completed Feb. 7 19

Driller

1 of 2

Name C. C. Scott

Address Box 26

Beaumont, California

2/5/2w-14R2

WATER WELL DRILLERS REPORT

DUPLICATE

Permit No. 292 page
T. 2S., R. 2W Sec.
State Well No.
R.C.F.C.D. No.

2/14R

OWNER:
Name [redacted]
Address
Calimesa, California

(2) LOCATION OF WELL:
County Owner's number, if any—
Portion of Blk. 251, Subd. 9, of
Yucaipa Valley, Riverside Co.

(3) TYPE OF WORK (*check*):
New well ☐ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):
Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:
Rotary ☐
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:
SINGLE ☐ DOUBLE ☐

From ft. to ft.	Diam.	Gage or Wall	If gravel packed: Diameter of Bore	from ft.	to ft.

Type and size of shoe or well ring
Size of gravel:
Describe joint

(7) PERFORATIONS:
Type of perforator used
Size of perforations in., length, by in.

From ft. to ft.	Perf. per row	Rows per ft.

(8) CONSTRUCTION:
Was a surface sanitary seal provided? ☐ Yes ☐ No To what depth ft.
Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata
From ft. to ft.
Method of Sealing

(9) WATER LEVELS:
at which water was first found ft.
Standing level before perforating ft.
level after perforating ft.

(10) WELL TESTS:
Was a pump test made? ☐ Yes ☐ No If yes, by whom?
Yield: gal./min. with ft.

(11) WELL LOG:
Total depth 1,119 ft. Depth of completed well
Formation: Describe by color, character, size of material, and structure.

From ft.	to ft.	Formation
855	863	fine sand
863	890	clay
890	910	coarse sand (water)
910	970	sandy clay
970	978	hard clay
978	985	sandy clay
985	1,000	sand & fine gravel (water)
1,000	1,004	hard clay
1,004	1,016	hard clay
1,016	1,020	rock
1,020	1,050	clay
1,050	1,070	coarse sand (water)
1,070	1,085	clay
1,085	1,090	rock ledge
1,090	1,119	hard clay

NOTE:
Water meas. at 410', level 230'
" " " 650' " 230'
" " " 1,119' " stood at
approx. 180', on Feb. 7, 1949

Work started Jan. 6 1949 Completed Feb. 7 1949

Driller
Name C. C. Scott
Address Box 26
Beaumont, California

Mail Two Copies to:
DEPARTMENT OF PUBLIC HEALTH
Court House
Riverside, California

WATER WELL DRILLERS REPORT

(County Ordinances No. 340 and 340A)
COUNTY OF RIVERSIDE
DEPARTMENT OF PUBLIC HEALTH

Do Not Fill In 431

State Well No. ~
Other Well No. 2S/4W-15A
Region

(1) OWNER:

Name [redacted]

Address P. O. Box 307
Calimesa, Calif.

(2) LOCATION OF WELL:

County Riverside Owner's number, if any—

NE 1/4 NE 1/4 Sec. 15 T 2-S
R 1-W., S.B.B. & M.

(3) TYPE OF WORK (*check*):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):

Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	800	16	1/4"

Type and size of shoe or well ring None

Describe joint Butt weld

If gravel packed

Diameter of Bore	from ft.	to ft.
22	0	800

Size of gravel: 1/2

(7) PERFORATIONS:

Type of perforator used Tearch

Size of perforations 4 1/2 in., length, by 3/16 in.

From ft.	to ft.	Perf. per row	Rows per ft.
242	800	6	1

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☒ Yes ☐ No To what depth 50 ft.

Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata

From ft. to ft.

Method of Sealing Cement

(9) WATER LEVELS:

Depth at which water was first found 242 ft.
Standing level before perforating 242 ft.
Standing level after perforating 242 ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☐ No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

(11) WELL LOG:

Total depth 1200 ft. Depth of completed well 800 ft.

Formation: *Describe by color, character, size of material, and structure.*

ft. to	ft.	
0	8	Brown Clay.
8	11	light Tan Clay.
11	94	Brown clay.
94	262	Sand, Gravel and Rock.
262	311	Sand with some clay.
311	400	Decomposed granite.
400	472	Hard decomposed.
472	500	Sand course.
500	528	Sand and clay.
528	578	Sand course.
578	584	Rock and gravel.
584	675	Sand and gravel.
675	691	Gravel and D. G.
691	705	Sandy clay.
705	980	Cemented rock and gravel
980	1004	Very hard D. G.
1004	1202	Granite Niece.

Work started 19 , Completed Nov. 8 19 62

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME R.L. Trower
(Person, firm, or corporation) (*Typed or printed*)

Address 445 E. Wabash
San Bernarding, Calif

[SIGNED] Robert L. Trower

DUPLICATE
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No.____
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

Do Not Fill In
No. 54073

State Well No.____

Other Well No.____

(1) OWNER:

Name [redacted]

Address [redacted]

Calimesa, Calif.

(2) LOCATION OF WELL:

County Riverside Owner's number, if any--

R. F. D. or Street No.

NE. 1/4 NE. 1/4 Sec. 15 T 2-S
R. 1-W., S. B. B. &M.

(3) TYPE OF WORK (*check*):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):

Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	800	16 1/4	

Type and size of shoe or well ring none

Describe joint Butt weld

If gravel packed

Diameter of Bore	from ft.	to ft.
22	0	800

Size of gravel: 1/2 in.

(7) PERFORATIONS:

Type of perforator used Torach

Size of perforations 4 1/2 in., length, by 3/16 in.

From ft.	to ft.	Perf. per row	Rows per ft.
242	800	6	1

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☒ Yes ☐ No To what depth 50 ft.

Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata

From ft. to ft.

Method of Sealing Cement

(9) WATER LEVELS:

Depth at which water was first found 242 ft.

Standing level before perforating 242 ft.

Standing level after perforating 242 ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☐ No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☐ No

Was electric log made of well? ☐ Yes ☐ No

(11) WELL LOG:

Total depth 1200 ft. Depth of completed well 800 ft.

Formation: *Describe by color, character, size of material, and structure.*

ft. to ft.	Formation
0 – 8	Brown Clay.
8 – 11	Light tan clay.
11 – 94	Brown clay.
94 – 262	Sand, gravel and rock.
262 – 311	Sand with some clay.
311 – 400	Decomposed granite.
400 – 472	Hard decomposed granite
472 – 500	Course sand.
500 – 528	Sand and clay
528 – 578	Course sand.
578 – 584	Rock and gravel.
584 – 675	Sand and gravel.
675 – 691	D.G. and gravel.
691 – 705	Sandy clay.
705 – 980	Cemented rock and gravel
980 – 1004	Very hard DIG!
1004 – 1200	Granite niece.

Work started 19 . Completed Nov. 8 1962

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME R. L. Trower
(Person, firm, or corporation) (Typed or printed)

Address 445 E. Wabash
San Bernardino, Calif.

[SIGNED] Robert L. Trower
Well Driller

License No. 189826 Dated Nov. 8 1962

87025 6-57 50M QUIN △ SPO

DWR 188 (REV. 3-54)

DUPLICATE
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No.____
(Insert appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

Do Not Fill In
No. 54073

State Well No.____

Other Well No.____

(1) OWNER:

Name [redacted]

Address [redacted]

Calimesa, Calif.

(2) LOCATION OF WELL:

County Riverside Owner's number, if any--

R. F. D. or Street No.

NE. 1/4 NE. 1/4 Sec. 15 T 2-S
R. 1-W., S. B. B. &M.

(3) TYPE OF WORK (*check*):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):

Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	800	16 1/4	

Type and size of shoe or well ring none

Describe joint Butt weld

If gravel packed

Diameter of Bore	from ft.	to ft.
22	0	800

Size of gravel: 1/2 in.

(7) PERFORATIONS:

Type of perforator used Torach

Size of perforations 4 1/2 in., length, by 3/16 in.

From ft.	to ft.	Perf. per row	Rows per ft.
242	800	6	1

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☒ Yes ☐ No To what depth 50 ft.

Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata

From ft. to ft.

Method of Sealing Cement

(9) WATER LEVELS:

Depth at which water was first found 242 ft.

Standing level before perforating 242 ft.

Standing level after perforating 242 ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☐ No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☐ No

Was electric log made of well? ☐ Yes ☐ No

(11) WELL LOG:

Total depth 1200 ft. Depth of completed well 800 ft.

Formation: *Describe by color, character, size of material, and structure.*

ft. to ft.	
0 – 8	Brown Clay.
8 – 11	Light tan clay.
11 – 94	Brown clay.
94 – 262	Sand, gravel and rock.
262 – 311	Sand with some clay.
311 – 400	Decomposed granite.
400 – 472	Hard decomposed granite
472 – 500	Course sand.
500 – 528	Sand and clay
528 – 578	Course sand.
578 – 584	Rock and gravel.
584 – 675	Sand and gravel.
675 – 691	D.G. and gravel.
691 – 705	Sandy clay.
705 – 980	Cemented rock and gravel
980 – 1004	Very hard DIG!
1004 – 1200	Granite niece.

Work started 19 . Completed Nov. 8 1962

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME R. L. Trower
(Person, firm, or corporation) (Typed or printed)

Address 445 E. Wabash
San Bernardino, Calif.

[SIGNED] Robert L. Trower
Well Driller

License No. 189826 Dated Nov. 8 1962

87025 6-57 50M QUIN △ SPO

DWR 188 (REV. 3-54)

QUADRUPLICATE
RETAIN THIS COPY

#9

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

15/2W 15A02

SMWC No. #9

Do Not Fill In
№ 54055
State Well No.
Other Well No.

(1) OWNER:
Name [redacted]
Address

(2) LOCATION OF WELL:
County Riverside Owner's number, if any—#9
R. F. D. or Street No.

(3) TYPE OF WORK (*check*):
New well ☐ Deepening ☒ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):
Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:
Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:
SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	985	16	1/4

If gravel packed

Diameter of Bore	From ft.	to ft.
22	0	985
12	985	1400

Type and size of shoe or well ring none
Size of gravel: 3/8 pea
Describe joint butt weld

(7) PERFORATIONS:
Type of perforator used milling blade
Size of perforations 5/16 in., length, by 3 1/4 in.

From ft.	to ft.	Perf. per row	Rows per ft.
250	760	4	8
800	985	4	8

(8) CONSTRUCTION:
Was a surface sanitary seal provided? ☒ Yes ☐ No To what depth 65 ft.
Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata
From ft. to ft.
Method of Sealing 65 ft. of 22in. pipe cemented

(9) WATER LEVELS:
Depth at which water was first found 256 ft.
Standing level before perforating 256 ft.
Standing level after perforating 256 ft.

(10) WELL TESTS:
Was a pump test made? ☐ Yes ☐ No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? ☐ Yes ☐ No
Was electric log made of well? ☐ Yes ☐ No

(11) WELL LOG:
Total depth 1400 ft. Depth of completed well 985 ft.
Formation: *Describe by color, character, size of material, and structure.*

Top: 1823
bot: 1672

ft. to	ft.	Formation
538	689	packed sand, graveland rock.
689	745	redish brown clay &sand
745	746	rock.
746	759	sand and rock.
759	820	sandy clay.
820	1005	sand, gravel and rock.
1005	1400	blue clay and gray sand.

Work started 19 Completed Jan 20 1965

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME R.L. Trower (Person, firm, or corporation) (Typed or printed)
Address 445 E. Wabash
San Bernardino, Calif
[SIGNED] Robert L. Trower (Well Driller)
License No. 189826 Dated Jan 26, 1965

57026 6-57 50M QUIN SPO DWR 188 (REV. 3-54)

ARI 352

QUADRUPLICATE
RETAIN THIS COPY

#9

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

Do Not Fill In
No. 54055

State Well No.
Other Well No.

(1) OWNER:
Name [redacted]
Address

(2) LOCATION OF WELL:
County Riverside Owner's number, if any #9
R. F. D. or Street No.

(3) TYPE OF WORK (*check*):
New well ☐ Deepening ☒ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):
Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:
Rotary ☒
Cable ☐
Dug Well ☐

(6) CASING INSTALLED:
SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
0	985	16	1/4

If gravel packed

Diameter of Bore	from ft.	to ft.
22	0	985
12	985	1400

Type and size of shoe or well ring none
Size of gravel: 3/8 pea
Describe joint butt weld

(7) PERFORATIONS:
Type of perforator used milling blade
Size of perforations 5/16 in., length, by 3 1/4 in.

From ft.	to ft.		Perf. per row	Rows per ft.
250	760	4	8	
800	985	4	8	

(8) CONSTRUCTION:
Was a surface sanitary seal provided? ☒ Yes ☐ No To what depth 65 ft.
Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata

From ft.	to ft.

Method of Sealing 65 ft. of 22in. pipe cemented

(9) WATER LEVELS:
Depth at which water was first found 256 ft.
Standing level before perforating 256 ft.
Standing level after perforating 256 ft.

(10) WELL TESTS:
Was a pump test made? ☐ Yes ☐ No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? ☐ Yes ☐ No
Was electric log made of well? ☐ Yes ☐ No

(11) WELL LOG:
Total depth 1400 ft. Depth of completed well 985 ft.
Formation: *Describe by color, character, size of material, and structure.*

ft. to	ft.	
538	689	packed sand, gravel and gravel rock.
689	745	redish brown clay & sand
745	746	rock.
746	759	sand and rock.
759	820	sandy clay.
820	1005	sand, gravel and rock.
1005	1400	blue clay and gray sand.

Work started 19 . Completed JAN 20 19 65

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME R. L. TROWER (Person, firm, or corporation) (*Typed or printed*)
Address 445 E. WABASH
SAN BERNARDINO, CALIF
[SIGNED] Robert L Trower (Well Driller)
License No. 189826 Dated Jan 26, 19 65

57028 6-57 50M QUIN △ SPO

DWR 188 (REV. 3-54)

SMWC well 11

FORM 115

INVESTIGATION

South Coastal Basin

DIVISION OF WATER RESOURCES
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

2S/2W-14C

SHEET

NUMBER E-1364

WELL LOG

LOCAL DESIGNATION Owner #
Marliave Red. #51
Hicks Y-11

LOCATION 10' S. of County Line Road, 150' W. of State Highway, Lot 209, Sub. 9. Yucaipa.

~~Loc. #1823C~~

OWNER [redacted]

DATE COMPLETED ~~-1911~~ About 1922

DIAMETER OF CASING 16"

DRILLED BY Henry E. Gansner

SOURCE OF INFORMATION P. E. Hicks

INSPECTED WHILE DRILLING SEE FILE NO.

SURFACE ELEVATION

SKETCH

DEPTH	ELEVATION OF BOTTOM OF STRATUM	MATERIAL	THICKNESS FEET	% VOIDS	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
0-135		Clay and some gravel	135			
140		Sand	5			
190		Clay	50			
208		Sand and clay	18			
894		Sand and gravel, greater part cemented.	686			
336		Gravel, some clay				
360		Clay and gravel	32			
369		Clay	9			
430		Hard red clay	61			
431		Clay, little gravel	1			
440		Soft sandy clay	9			
443		Clay	3			
		Perf 205-363				
		Pumps 150" - drawdown 1 '				

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LOG OBTAINED BY DATE

80612 6 31 10M CALIFORNIA STATE PRINTING OFFICE

345
7

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in
No. 161398

Notice of Intent No.
Local Permit No. or Date
State Well No.
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City Calimesa, CA Zip 92320

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number 28
Well address if different from above
Township 2S Range 2W Section 11
Distance from cities, roads, railroads, fences, etc. Calimesa
500' East of County Line Rd.
200' South of "H" St.

PER BULLETIN
#74
WATER WELL STANDARDS

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well [x] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [ ]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [x]
Other [ ]

(5) EQUIPMENT:
Rotary [x] Reverse [ ]
Cable [ ] Air [ ]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:
Yes [x] No [ ] Size #5 Gravel
Diameter of bore 24"
Packed from 50' to 770 ft.

(7) CASING INSTALLED:
Steel [x] Plastic [ ] Concrete [ ]

(8) PERFORATIONS:
Type of perforation or size of screen R/M Hirizontal Louvre

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	770	5/16	5/16	250	770	3/32x2½"

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [x] No [ ] If yes, to depth 50 ft.
Were strata sealed against pollution? Yes [ ] No [ ] Interval ft.
Method of sealing Cement in place

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion 183 ft.

(11) WELL TESTS:
Was well test made? Yes [x] No [ ] If yes, by whom? McCalla Bros.
Type of test Pump [x] Bailer [ ] Air lift [ ]
[illegible]th to water at start of test ft. At end of test ft
arge 2400 gal/min after 26½ hours Water temperature
Chemical analysis made? Yes [ ] No [x] If yes, by whom?
Was electric log made? Yes [x] No [ ] If yes, attach copy to this report N.A.

(12) WELL LOG: Total depth 1000 ft. Depth of completed well 770 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	16	Top Soil, Clay, Rock & Sand
16	41	Clay, Rock & Gravel
41	103	Samll Gravel & Sand
103	214	Spotted Rock, Sand & Gravel
214	260	Granite Formation, firm
260	327	Small Gravel, Sand & Rock
327	390	Small Gravel, tight
390	506	Gravel
506	540	Gravel & Small Boulders
540	556	Red Clay
556	587	Gravel, w/Clay Streaks
587	611	Gravel & Granite, tight spots
611	620	Sandy Clay, tight
620	637	Sandy Clay, Gravel Streaks
637	744	Gravel & Small Rocks
744	762	Small Gravel, Sandy Clay
762	770	Gravel
770	802	Sandy Clay
802	808	Gravel & Rock
808	865	Sandy Clay
865	952	Gravel w/Clay Streaks
952	1000	Sand & Gravel

Work started 11-20 19 85 Completed 1-9 19 86

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
SIGNED (Well Driller)
NAME McCalla Bros. (Person, firm, or corporation) (Typed or printed)
Address 3132 W. 17th St.
City Santa Ana, CA Zip 92703
License No. 196824 Date of this report 1-27-86

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

FORM 115

INVESTIGATION

South Coastal Basin

DIVISION OF WATER RESOURCES
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

2S/2W - 14B01

SHEET 1

NUMBER E-136h

WELL LOG

LOCAL DESIGNATION Owner #14
Marliave Red. #53
Hicks Y-14

LOCATION 50' S. of County Line Road, 700' E. of State Highway, Lot 205, Sub. 9, Yucaipa.

Loc. #8239-

OWNER [redacted]

DATE COMPLETED About 1927

DIAMETER OF CASING 16"

DRILLED BY Clark McEuen

SOURCE OF INFORMATION P.E.Hicks

INSPECTED WHILE DRILLING SEE FILE NO.

SURFACE ELEVATION

SKETCH

DEPTH	ELEVATION OF BOTTOM OF STRATUM	MATERIAL	THICKNESS FEET	% VOIDS	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
0-130		Clay	130			
150		Tight gravel	20			
160		Clay	15			
175		Tight gravel	15			
210		Coarse gravel, loose	35			
212		Red coarse sand	2			
250		Coarse gray gravel	38			
265		Clay and gravel, hard	15			
310		Coarse gravel, good	45			
317		Sand and clay	7			
325		All clay	8			
348		Wash gravel, coarse	23			
351		Clay	2			
353		Fine sand	2			
395		Clay	42			
		Pumps 100" Drawdown 300'				

MICROFILMED

FOR FIELD COPIES USE ALTERNATE LINES

LOG OBTAINED BY DATE

60612 6 31 15M CALIFORNIA STATE PRINTING OFFICE

FORM 115 INVESTIGATION

2 - 2 - 14E 01

DIVISION OF WATER RESOURCES
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

25/2W-14E01

SHEET 1

NUMBER E-136K

WELL LOG

LOCAL DESIGNATION

LOCATION E. side of [illegible] St. extended S. of N. of Ave. — 50 south of county line and 100 feet west of Highway 99 — 14' E. of acc. #18239 L

Loc. # 18239 C

OWNER [redacted]

DATE COMPLETED drilled 1920

DIAMETER OF CASING

DRILLED BY Ganzer

SOURCE OF INFORMATION San Bernardino Valley Water Conservation District

INSPECTED WHILE DRILLING SEE FILE NO.

SURFACE ELEVATION 2370.0

SKETCH

DEPTH	ELEVATION OF BOTTOM OF STRATUM	MATERIAL	THICKNESS FEET	% VOIDS	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
0 - 130		clay				
130 - 135		sand				
135 - 170		clay				
170 - 185		sand and gravel				
185 - 195		clay and gravel				
195 - 200		gravel				
235						

FOR FIELD COPIES USE ALTERNATE LINES

MICROFILMED

GSSI 346

LOG OBTAINED BY DATE

PACIFIC SURVEYS

ELECTRIC LOG
GAMMA-RAY

Job No. 16423

File No.

Company [redacted]

Well CAL MESA WATER 7TH ST. WELL

Field YUCAIPA

County SAN BERNARDINO State CA

Location:

EAST END OF 7TH ST
GPS: N34o 00.769' W117o 04.032'

Sec. Twp. Rge.

Other Services:

SONIV/VDL

			Elevation
Permanent Datum	G.L.	Elevation above perm. datum	K.B.
Log Measured From	G.L.	0'	D.F.
Drilling Measured From	G.L.		G.L.

Date	02-27-2012
Run Number	ONE
Depth Driller	913'
Depth Logger	912'
Bottom Logged Interval	910'
Top Log Interval	50'
Casing Driller	30" @ 50'
Casing Logger	50'
Bit Size	17.5"
Type Fluid in Hole	WATER
Density / Viscosity	N/A
pH / Fluid Loss	N/A
Source of Sample	PIT
Rm @ Meas. Temp	14.2 @ 77F
Rmf @ Meas. Temp	14.2 @ 77F
Rmc @ Meas. Temp	N/A
Source of Rmf / Rmc	MEAS
Rm @ BHT	N/A
Time Circulation Stopped	3 HRS
Time Logger on Bottom	02:10
Max. Recorded Temperature	N/A
Equipment Number	PS-5
Location	L.A.
Recorded By	RIDDER
Witnessed By	--

<<< Fold Here >>>

Comments

Calibration Report

Database File: 16423.db
Dataset Pathname: Elog
Dataset Creation: Mon Feb 27 02:06:10 2012 by Log Open-Cased 100827

ELOG Calibration Report

Serial:	D1
Model:	DTQ
Shop Calibration Performed:	Fri Sep 02 10:21:35 2011
Before Survey Verification Performed:	Wed May 18 15:44:28 2011
After Survey Verification Performed:	Wed May 18 15:45:08 2011

Shop Calibration

	Readings Zero	Readings Cal		References Zero	References Cal		Results Gain	Results Offset
Short	8.723	99.406		10.200	102.200	Ohm-m	1.015	1.350
Long	7.680	96.048		10.200	102.200	Ohm-m	1.041	-17.600
IEE	52.920	3270.320	counts	0.058	3.579	A		
VSN	49.080	5373.320	counts	0.936	102.490	V		
VLN	204.820	45711.480	counts	3.907	871.891	V		

Before Survey Verification

	Readings Zero	Readings Cal		References Zero	References Cal		Results Gain	Results Offset
Short	80.215	146.194		82.548	146.243	Ohm-m	0.965	5.112
Long	1342.350	4974.190		4976.440	4976.440	Ohm-m	0.991	47.934
IEE	54.260	3251.500	counts	0.059	3.558	A		
VSN	48.900	5340.600	counts	0.933	101.865	V		
VLN	204.580	45427.860	counts	3.902	866.481	V		

After Survey Verification

	Readings Zero	Readings Cal		References Zero	References Cal		Results Gain	Results Offset
Short	79.445	146.186		80.215	146.194	Ohm-m	0.989	1.677
Long	1341.850	4973.840		4974.190	4974.190	Ohm-m	1.000	0.554
IEE	54.360	3249.300	counts	0.059	3.556	A		
VSN	48.520	5336.700	counts	0.925	101.791	V		
VLN	204.880	45393.900	counts	3.908	865.833	V		

After Survey Verification compared to Before Survey Calibration

	Zero Before	Zero After		Cal Before	Cal After	
Short	82.548	80.215	Ohm-m	146.243	146.194	Ohm-m
Long	1377.960	1342.350	Ohm-m	4976.440	4974.190	Ohm-m

Gamma Ray Calibration Report

Serial Number:	D4	
Tool Model:	ELOG	
Performed:	Sat Apr 09 12:21:07 2011	
Calibrator Value:	162.0	GAPI
Background Reading:	212.4	cps
Calibrator Reading:	707.5	cps

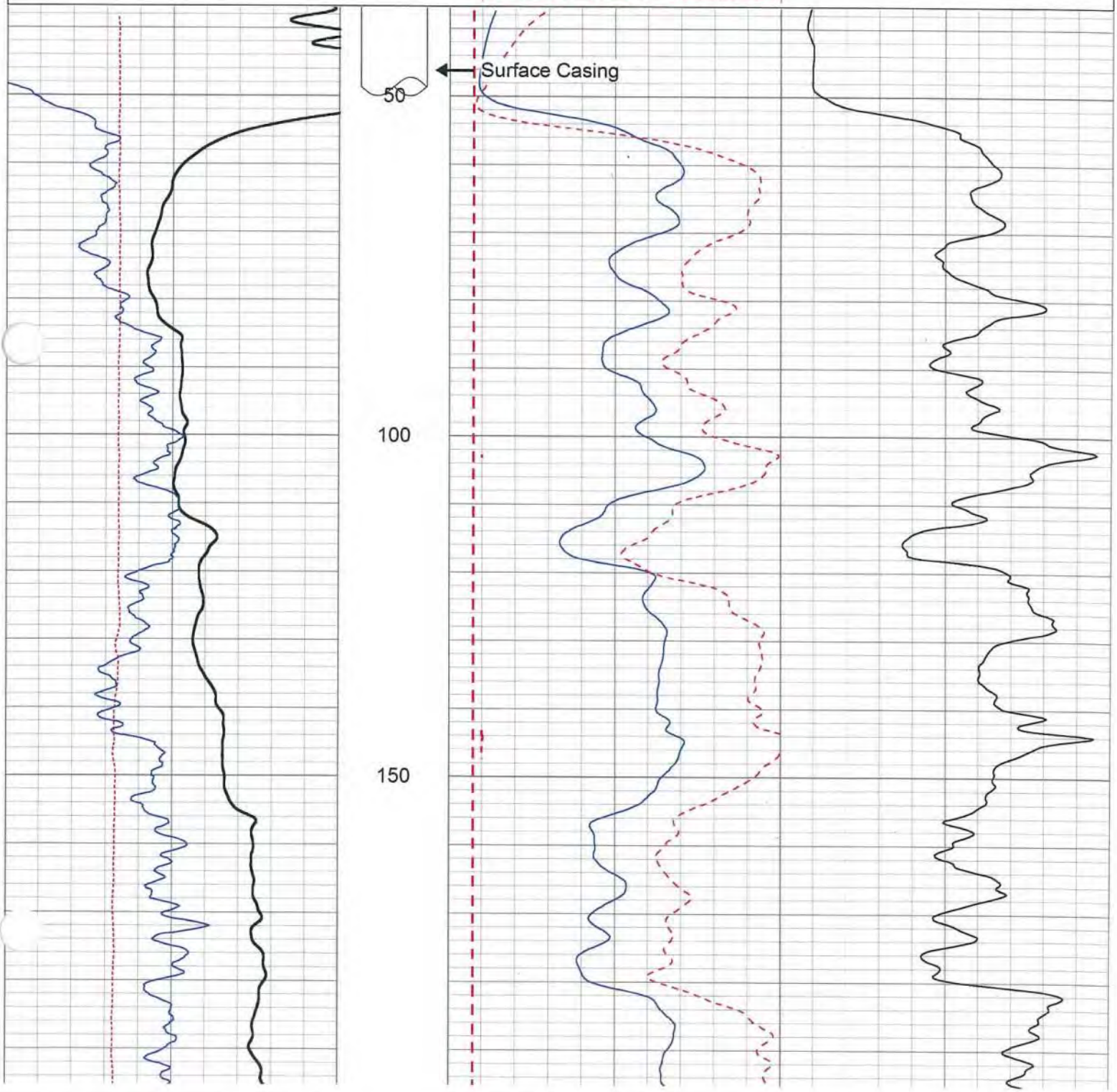
Sensitivity:	0.3272	GAPI/cps

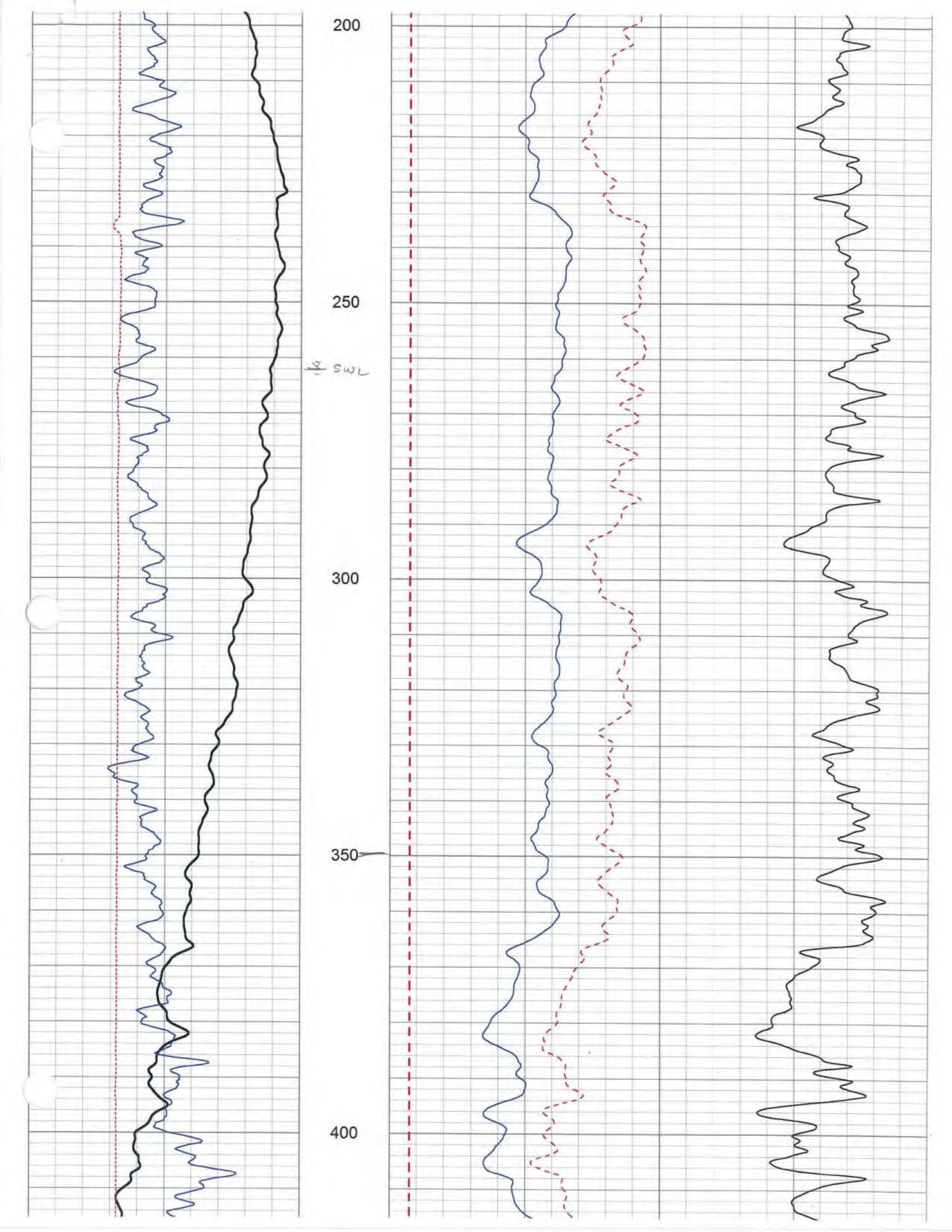
Database File:	16423.db
Dataset Pathname:	Elog
Presentation Format:	elog
Dataset Creation:	Mon Feb 27 02:06:10 2012 by Log Open-Cased 100827
Charted by:	Depth in Feet scaled 1:240

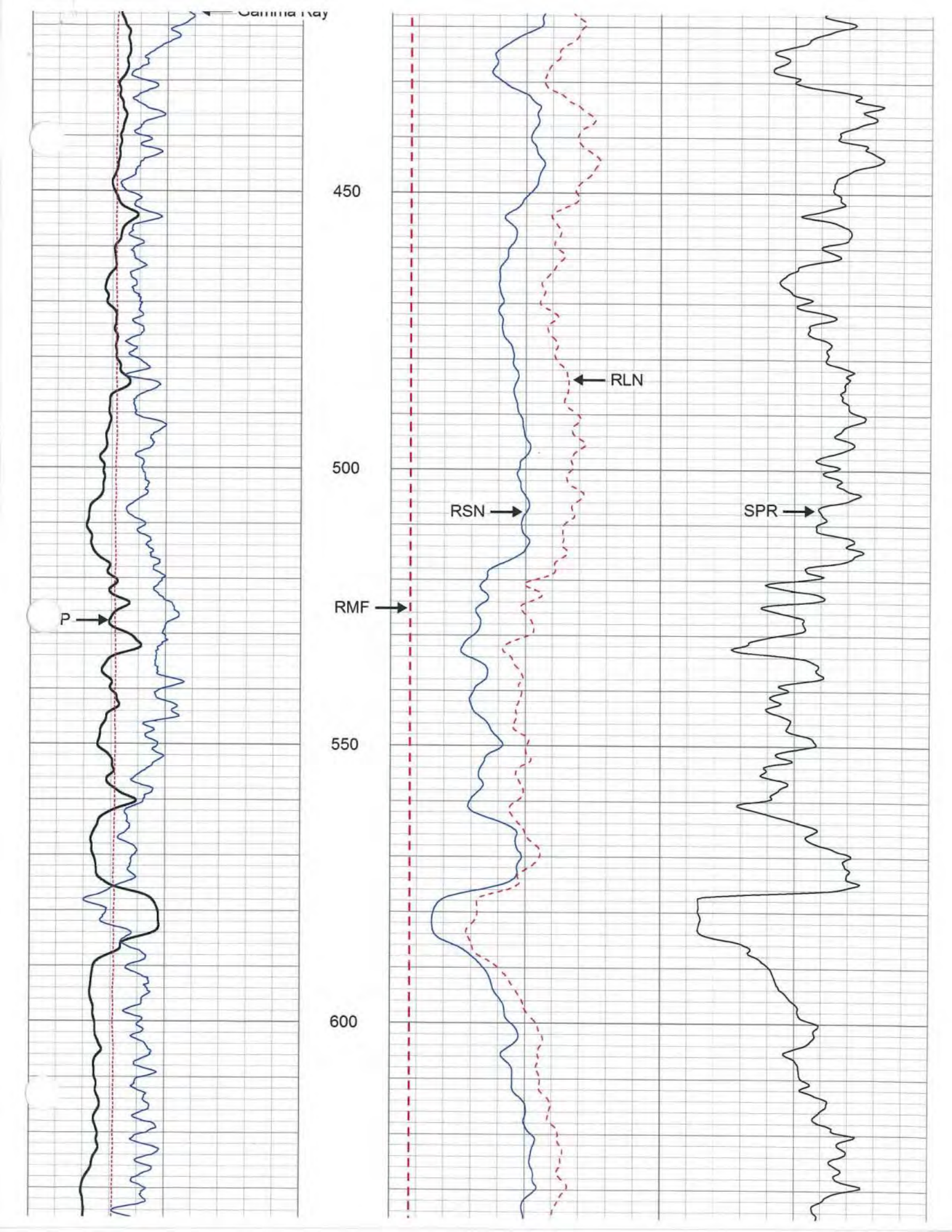
-75	SP (mV)	50
0	Line Speed (ft/min)	-100
30	Gamma Ray (GAPI)	130

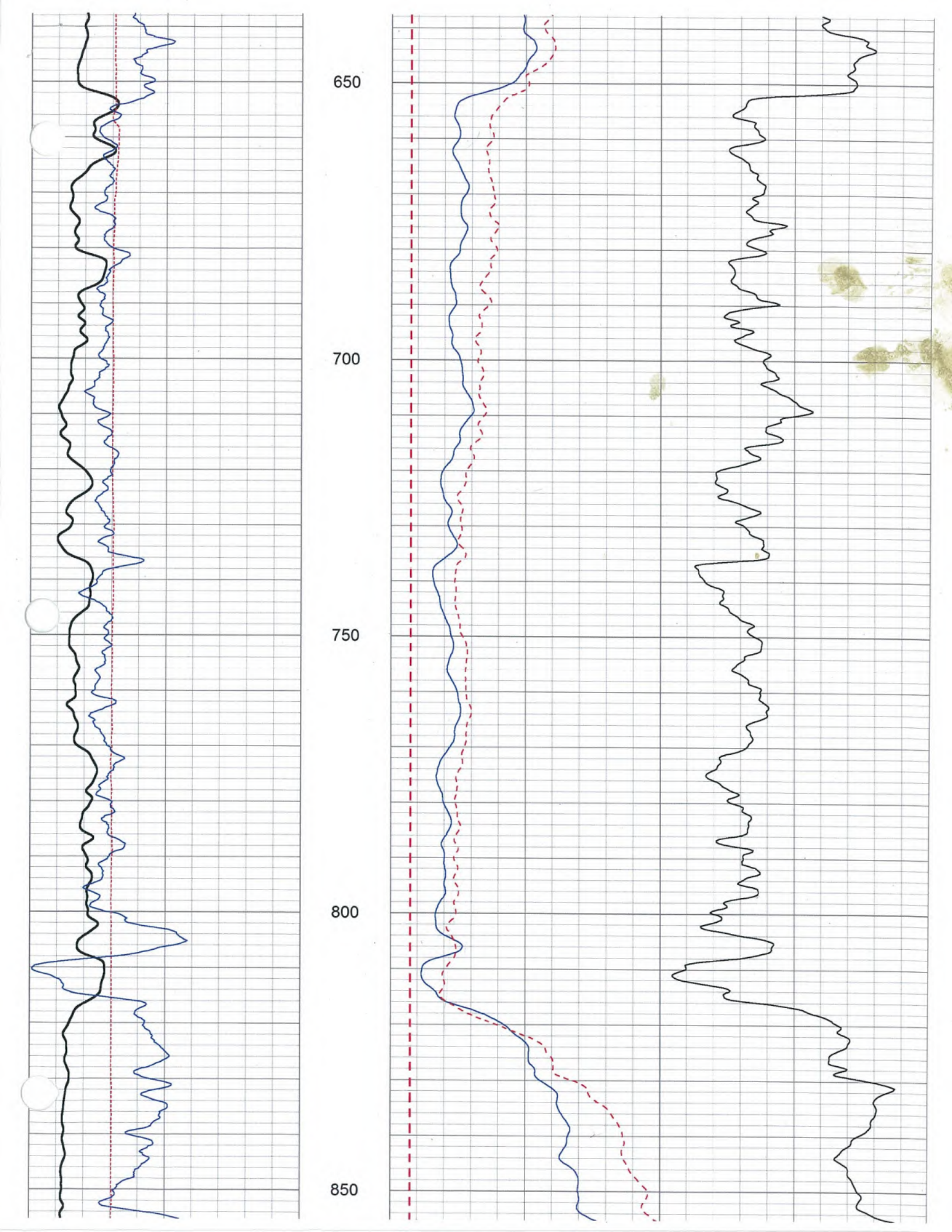
0	RSN (Ohm-m)	200
0	RLN (Ohm-m)	200
0	RMF (Ohm-m)	200
200	RSN x 10 (Ohm-m)	2000
200	RLN x 10 (Ohm-m)	2000

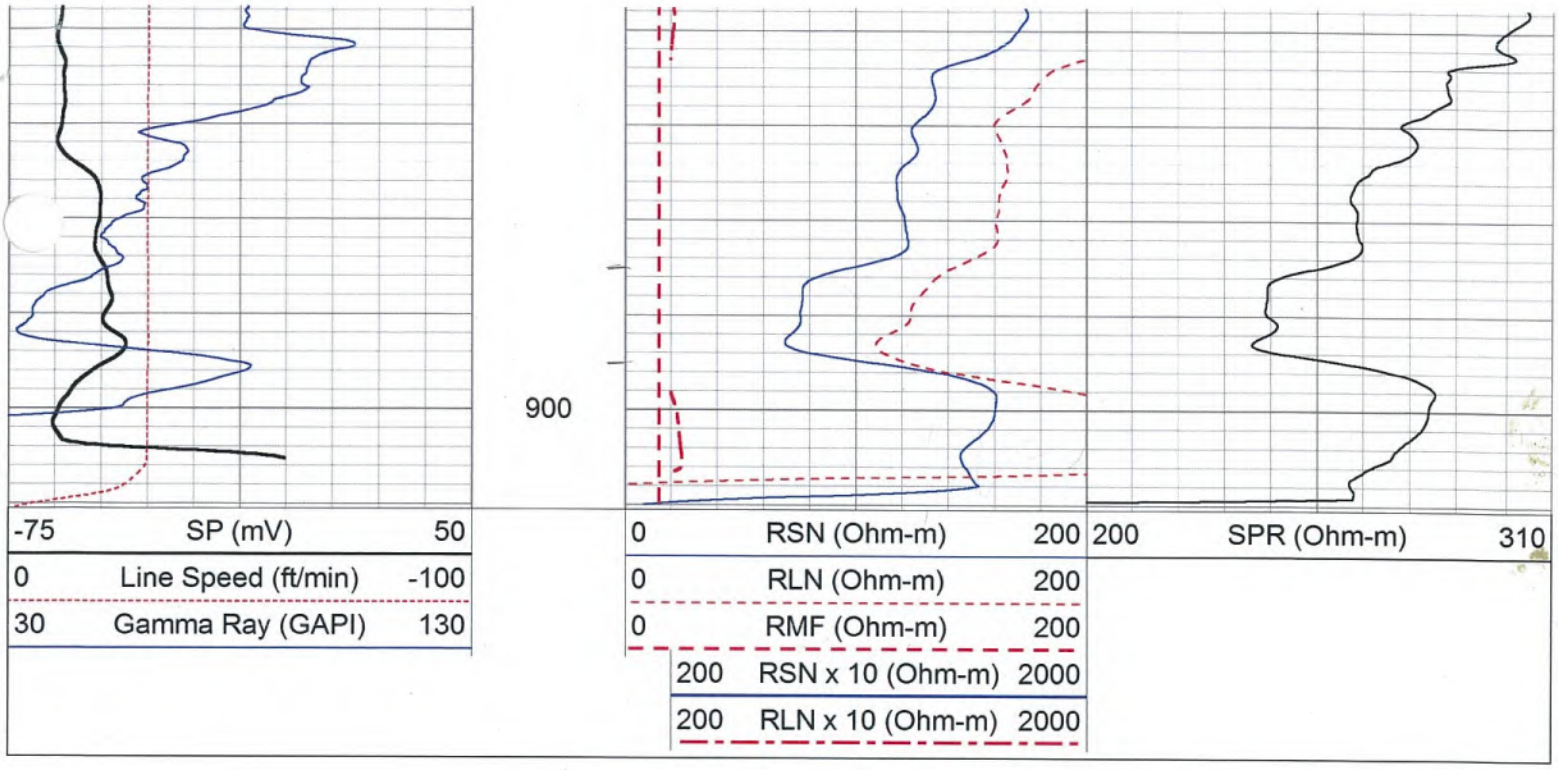
200	SPR (Ohm-m)	310




200
250
TMS ↓
300
350
400


Gamma Ray
450
500
550
600
RLN
RSN
SPR
RMF
P


650
700
750
800
850


900
-75 SP (mV) 50
0 Line Speed (ft/min) -100
30 Gamma Ray (GAPI) 130
0 RSN (Ohm-m) 200
0 RLN (Ohm-m) 200
0 RMF (Ohm-m) 200
200 RSN x 10 (Ohm-m) 2000
200 RLN x 10 (Ohm-m) 2000
200 SPR (Ohm-m) 310

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0115380

Page 1 of 2

Owner's Well Number

Date Work Began 07/29/2010 Date Work Ended 8/4/2010

Local Permit Agency San Bernardino Department of Public Health

Permit Number 7010070342 Permit Date 7/23/10

DWR Use Only – Do Not Fill In

State Well Number/Site Number

N W

Latitude Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Reverse Rotary Drilling Fluid Fresh Water

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
35	90	Sand Gravel
90	120	Sand Clay
120	200	Sand Gravel
200	250	Sand Gravel Clay
250	310	Sand Gravel
310	340	Sand Gravel Clay
340	417	Sand Gravel

Total Depth of Boring 417 Feet

Total Depth of Completed Well 415 Feet

Well Owner

Name [redacted]

Mailing Address [redacted]

City Yucaipa State CA. Zip 92399

Well Location

Address San Timoteo Canyon Road

City Yucaipa County San Bernardino

Latitude Deg. Min. Sec. N Longitude Deg. Min. Sec. W

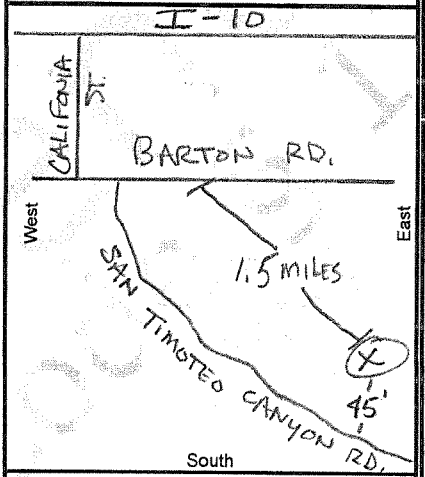
Datum Decimal Lat. Decimal Long.

APN Book 0175 Page 221 Parcel 06

Township 2S Range 3W Section 4

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
◉ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level (Feet) Date Measured

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	35	32	Conductor	Low Carbon Steel	.250	20		
0	340	17.5	Blank	PVC Sch. 80	.214	5		
340	360	17.5	Screen	PVC Sch. 80	.214	5		0.050
0	285	17.5	Blank	PVC Sch. 80	.214	5		
285	305	17.5	Screen	PVC Sch. 80	.214	5		0.050
0	120	17.7	Blank	PVC Sch. 80	.214	5		

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	225	Filter Pack	8x16 Midcal
225	230	Fill	Sand
230	250	Bentonite	Seal
250	255	Fill	Sand
255	310	Filter Pack	8x16 Gravel
310	315	Fill	Sand

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Bakersfield Well & Pump Co.
Person, Firm or Corporation

7212 Fruitvale Ave Address Bakersfield City CA State 93308 Zip

Signed C-57 Licensed Water Well Contractor 8/20/2010 Date Signed 440537 C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0115380

Page 2 of 2

Owner's Well Number

Date Work Began 07/29/2010 Date Work Ended 8/4/2010

Local Permit Agency San Bernardino Department of Public Health

Permit Number 7010070342 Permit Date 7/23/10

DWR Use Only – Do Not Fill In

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Reverse Rotary Drilling Fluid Fresh Water

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
35	90	Sand Gravel
90	120	Sand Clay
120	200	Sand Gravel
200	250	Sand Gravel Clay
250	310	Sand Gravel
310	340	Sand Gravel Clay
340	417	Sand Gravel

Total Depth of Boring 417 Feet

Total Depth of Completed Well 415 Feet

Well Owner

Name [redacted]

Mailing Address [redacted]

City Yucaipa State CA. Zip 92399

Well Location

Address San Timoteo Canyon Road

City Yucaipa County San Bernardino

Latitude Deg. Min. Sec. N Longitude Deg. Min. Sec. W

Datum Decimal Lat. Decimal Long.

APN Book 0175 Page 221 Parcel 06

Township 2S Range 3W Section 4

Location Sketch

(Sketch must be drawn by hand after form is printed.)

North

West East

South

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. **Please be accurate and complete.**

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
◉ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level (Feet) Date Measured

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
120	140	17.5	Screen	PVC Sch. 80	.214	5		0.050

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
315	330	Bentonite	Seal
330	335	Fill	Sand
335	415	Filter Pack	8x16 Midcal

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Bakersfield Well & Pump Co.
Person, Firm or Corporation

7212 Fruitvale Ave Address Bakersfield City CA State 93308 Zip

Signed Kevin Ward C-57 Licensed Water Well Contractor

8/20/2010 Date Signed

440537 C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do Not Fill In
No 105799
State Well No.
Other Well No.

Local Permit # 03098701

Lo

(1) OWNER:

Name [redacted]
Address [redacted]
Yucaipa, California 92399

(2) LOCATION OF WELL:

County San Bernardino Owner's number, if any 2A
Township, Range, and Section 2S, 2W, Section 4
Distance from cities, roads, railroads, etc. 1,000 FT. N. of Ave. E., 600' E.of 14th St.

(3) TYPE OF WORK (check):

New Well [X] Deepening [ ] Reconditioning [ ] Destroying [ ]
If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic [ ] Industrial [ ] Municipal [X]
Irrigation [ ] Test Well [ ] Other [ ]

(5) EQUIPMENT:

Rotary [X]
Cable [ ]
Other [ ]

(6) CASING INSTALLED:

STEEL: X OTHER:
SINGLE [ ] DOUBLE [ ]

If gravel packed: Yes

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	630	16"	5/16	26"	50	630

Type of shoe or well ring:
Describe joint
Size of gravel: 4 x 7 mix

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
400'	620'			3/32

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes [X] No [ ] To what depth 50 ft.
Were any strata sealed against pollution? Yes [ ] No [X] If yes, note depth of strata
From ft. to ft.
From ft. to ft.
Method of sealing Concrete

(9) WATER LEVELS:

Depth at which water was first found, if known ft.
Standing level before perforating, if known ft.
Standing level after perforating and developing 270' ft.

(10) WELL TESTS:

Was pump test made? Yes [X] No [ ] If yes, by whom? McCalla Bros.
Yield: 1500 gal./min. with 86' ft. drawdown after 6½ hrs.
Temperature of water Was a chemical analysis made? Yes [X] No [ ]
Was electric log made of well? Yes [X] No [ ] If yes, attach copy

(11) WELL LOG:

Total depth 673' ft. Depth of completed well 630' ft.
Formations: Describe by color, character, size of material, and structure

ft. to	ft.	
0'-50'		Conductor
50'-80'		Coarse sand, fine gravel
80'-109'		Sand
109'-115'		Gray clay, fine gravel
115'-125'		Brown clay, coarse sand
125'-132'		Sticky brown clay &sand
132'-135'		Coarse sand
135'-173'		Sticky brown clay, sand, gravel
173'-175'		Sand & little clay
175'-180'		Sand & gravel, with clay streaks
180'-183'		Sticky clay & coarse sand
183'-190'		Sticky clay,fine sand & silt
190'-192'		Loose clay, fine & coarse sand
192'-200'		Sticky brown clay,& sand
200'-215'		Coarse sand,loose clay,& gravel
215'-225'		Sticky brown clay,sand& gravel
225'-239'		Coarse sand & loose clay
239'-250'		Sticky clay, sand, & gravel
250'-258'		Coarse sand & loose clay
258'-308'		Coarse sand & gravel
308'-346'		Sticky clay & coarse sand
346'-353'		Sand & small fragmented gravel
353'-547'		Coarse sand, sticky clay, gravel
547'-560'		Coarse sand,gravel, white quartz
560'-590'		Coarse sand & gravel, little cla
590'-673'		Coarse sand, little or no clay gravel very firm

Work started 3-10 19 87 Completed 5-8 19 87

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME McCalla Bros.
(Person, firm, or corporation) (Typed or printed)
Address 802 Nevada Street, Redlands, Ca.
[SIGNED] [signature]
(Well Driller)
License No. C-57196824 Dated July 10, 1987

SKETCH LOCATION OF WELL ON REVERSE SIDE

87139-790 8-72 30M TRIP (1) OSP

[redacted]

Well 2A

0-50'	Conductor
50-80'	Coarse sand and fine gravel
80-109'	Sand no clays
109-115'	Gray clay (loose) and fine gravel
115-125'	Brown clay (loose) coarse sand 70% fine gravel
125-132'	Sticky brown clay and sand
132-135'	Sand (coarse) very loose clay (4')
135-148'	Sticky brown clay sand and gravel (rough drilling)
148-173'	Sticky brown clay some sand and fine gravel, firm spots
173-175'	Sand little clay
175-180'	Sand and gravel with clay streaks
180-183'	Sticky brown clay and coarse sand
183-190'	Very sticky clay and fine sand and silt, some gravel.
190-192'	Loose clay, fine and coarse sand
192-200'	Very sticky brown clay and sand, some small gravel
200-215'	Coarse sand and loose clay, some gravel
215-225'	Sticky brown clay, sand, and gravel
225-239'	Coarse sand and loose clay
239-250'	Sticky clay sand and gravel (fragmented)
250-258'	Coarse sand and loose clay
258-280'	Coarse sand and fine gravel , little clay
280-283'	Coarse sand and gravel, increase in sticky clay
283-308'	Coarse sand and gravel, very loose clay
308-338'	Sticky clay and coarse sand
338-341'	Very sticky clay, some sand and gravel
341-346'	Sticky clay and coarse sand
346-353'	Sand and small fragmented gravel, little clay
353-370'	Coarse sand, very uniform and clay, some gravel.
370-393'	Increase in clay, very sticky
393-409'	Very sticky clay, some sand and gravel (40%)
409-435'	Sticky sand and clay
435-445'	Sticky loose sand, clay, and gravel
445-470'	Loose clay and coarse sand (80%)
470-473'	Sticky clay, sand, and gravel
473-481'	Coarse sand and gravel, loose clay
481-485'	Very tight sticky clay and coarse sand
485-494'	Clay and coarse sand (clay is loose and sticky)
494-545'	Coarse sand fragmented gravel, some clay
545-547'	Coarse sand, gravel, (fragged) sticky clay
547-560'	Coarse sand gravel little loose clay, a lot of very fragged white quartz
560-566'	Coarse sand and gravel, little clay, very rough drilling very tight.
566-578'	Sticky clay coarse sand and fragmented gravel
578-583'	Loose sticky clay coarse sand and gravel
583-587'	Coarse sand, some gravel (fine) loose sticky clay
587-590'	Coarse sand, spotty gravels, tight sticky clay
590-608'	Coarse uniform sand and loose clay (20%) fine fragmented gravels
608-648'	Coarse uniform sand, sticky clay little gravel
648-673'	Coarse sand (uniform) little or no clay, very firm

[redacted]

ORIGINAL
File with DWR

BMWC WELL 2A

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

25/2W-4G3 *Do Not Fill In*

No. ~~105799~~

State Well No. _____

Other Well No. _____

Local Permit # 03098701

(1) OWNER:

Name [redacted]

Address [redacted]

Yucaipa, California 92399

(2) LOCATION OF WELL:

County San Bernardino Owner's number, if any 2A

Township, Range, and Section 2S, 2W, Section 4

Distance from cities, roads, railroads, etc. 1,000 FT. N. of Ave. E., 600' E. of 14th St.

(3) TYPE OF WORK *(check)*:

New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE *(check)*:

Domestic ☐ Industrial ☐ Municipal ☒

Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒

Cable ☐

Other ☐

(6) CASING INSTALLED:

STEEL: X OTHER: _____

SINGLE ☐ DOUBLE ☐

If gravel packed: Yes

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	630	16"	5/16	26"	50	630

Size of shoe or well ring: _____ Size of gravel: 4 x 7 mix

Describe joint _____

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
400'	620'			3/32

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☒ No ☐ To what depth 50 ft.

Were any strata sealed against pollution? Yes ☐ No ☒ If yes, note depth of strata

From ft. to ft.

From ft. to ft.

Method of sealing Concrete

(9) WATER LEVELS:

Depth at which water was first found, if known ft.

Standing level before perforating, if known ft.

Standing level after perforating and developing 270' ft.

(10) WELL TESTS:

Was pump test made? Yes ☒ No ☐ If yes, by whom? McCalla Bros.

Yield: 1500 gal./min. with 81' ft. drawdown after 6½ hrs.

Temperature of water _____ Was a chemical analysis made? Yes ☒ No ☐

Electric log made of well? Yes ☒ No ☐ If yes, attach copy

(11) WELL LOG:

Total depth 673' ft. Depth of completed well 630' ft.

Formation: Describe by color, character, size of material, and structure

ft.	to ft.	
		0'-50' Conductor
		50'-80' Coarse sand, fine gravel
		80'-109' Sand
		109'-115' Gray clay, fine gravel
		115'-125' Brown clay, coarse sand
		125'-132' Sticky brown clay &sand
		132'-135' Coarse sand
		135'-173' Sticky brown clay, sand, gravel
		173'-175' Sand & little clay
		175'-180' Sand & gravel, with clay streaks
		180'-183' Sticky clay & coarse sand
		183'-190' Sticky clay, fine sand & silt
		190'-192' Loose clay, fine & coarse sand
		192'-200' Sticky brown clay, & sand
		200'-215' Coarse sand, loose clay, & gravel
		215'-225' Sticky brown clay, sand & gravel
		225'-239' Coarse sand & loose clay
		239'-250' Sticky clay, sand, & gravel
		250'-258' Coarse sand & loose clay
		258'-308' Coarse sand & gravel
		308'-346' Sticky clay & coarse sand
		346'-353' Sand & small fragmented gravel
		353'-547' Coarse sand, sticky clay, gravel
		547'-560' Coarse sand, gravel, white quartz
		560'-590' Coarse sand & gravel, little cla
		590'-673' Coarse sand, little or no clay & gravel very firm

Alw. 330'

Work started 3-10 19 87 Completed 5-8 19 87

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME McCalla Bros.
(Person, firm, or corporation) *(Typed or printed)*

Address 802 Nevada Street, Redlands, Ca.

[SIGNED] [signature]
(Well Driller)

License No. C-57196824 Dated July 10, 1987

SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-68) 18954

2A

67133-780 6-72 30M TRIP ① OSP

[redacted]

Well 2A

0-50'	Conductor
50-80'	Coarse sand and fine gravel
80-109'	Sand no clays
109-115'	Gray clay (loose) and fine gravel
115-125'	Brown clay (loose) coarse sand 70% fine gravel
125-132'	Sticky brown clay and sand
132-135'	Sand (coarse) very loose clay (4')
135-148'	Sticky brown clay sand and gravel (rough drilling)
148-173'	Sticky brown clay some sand and fine gravel, firm spots
173-175'	Sand little clay
175-180'	Sand and gravel with clay streaks
180-183'	Sticky brown clay and coarse sand
183-190'	Very sticky clay and fine sand and silt, some gravel.
190-192'	Loose clay, fine and coarse sand
192-200'	Very sticky brown clay and sand, some small gravel
200-215'	Coarse sand and loose clay, some gravel
215-225'	Sticky brown clay, sand, and gravel
225-239'	Coarse sand and loose clay
239-250'	Sticky clay sand and gravel (fragmented)
250-258'	Coarse sand and loose clay
258-280'	Coarse sand and fine gravel , little clay
280-283'	Coarse sand and gravel, increase in sticky clay
283-308'	Coarse sand and gravel, very loose clay
308-338'	Sticky clay and coarse sand
338-341'	Very sticky clay, some sand and gravel
341-346'	Sticky clay and coarse sand
346-353'	Sand and small fragmented gravel, little clay
353-370'	Coarse sand, very uniform and clay, some gravel.
370-393'	Increase in clay, very sticky
393-409'	Very sticky clay, some sand and gravel (40%)
409-435'	Sticky sand and clay
435-445'	Sticky loose sand, clay, and gravel
445-470'	Loose clay and coarse sand (80%)
470-473'	Sticky clay, sand, and gravel
473-481'	Coarse sand and gravel, loose clay
481-485'	Very tight sticky clay and coarse sand
485-494'	Clay and coarse sand (clay is loose and sticky)
494-545'	Coarse sand fragmented gravel, some clay
545-547'	Coarse sand, gravel, (fragged) sticky clay
547-560'	Coarse sand gravel little loose clay, a lot of very fragged white quartz
560-566'	Coarse sand and gravel, little clay, very rough drilling very tight.
566-578'	Sticky clay coarse sand and fragmented gravel
578-583'	Loose sticky clay coarse sand and gravel
583-587'	Coarse sand, some gravel (fine) loose sticky clay
587-590'	Coarse sand, spotty gravels, tight sticky clay
590-608'	Coarse uniform sand and loose clay (20%) fine fragmented gravels
608-648'	Coarse uniform sand, sticky clay little gravel
648-673'	Coarse sand (uniform) little or no clay, very firm

2A

[redacted]

County of San Bernardino – Environmental Public Works Agency
ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
385 North Arrowhead Avenue · San Bernardino, CA 924[illegible] 160

WELL PERMIT

Do Not Fill In
Permit No. 03098701
Expiration
FF
FA
SN

PLEASE PRINT:

1. OWNER: Name [redacted]
Mailing Address [redacted]
City YUCAIPA CA Zip 92399
Phone No. 790-1901

2. DATE OF WORK *(approximate)*:
Start _____ Complete _____

3. WELL DRILLER *(Check One)*:
☐ Owner ☒ Contractor _____ *Name*

4. WELL USE *(check)*:
☒ Community ☐ Industrial
☐ Individual ☐ Test
☐ Agricultural ☐ Other
☐ Dairy ☐ Horizontal

5. TYPE OF WORK *(check)*:
☑ New ☐ Reconstruction ☐ Destruction

Items 6 through 10 to be estimated for new wells, and exact for all other wells.

6. ANNULAR SEAL: Depth 50 ft.
Furnished by: ☐ Owner ☑ Contractor
☐ Driven Conductor Dia. _____ in., Wall (Gage) _____
☑ Sealing Material Concrete, Thickness _____ in.

7. DEPTH OF WELL *(feet)*:
Proposed 650 Existing _____
DIAMETER OF BORE *(in.)*: 24 to 26

8. CASING INSTALLED:
☑ Steel ☐ Plastic ☐ Other

From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
0	650	16"	1/4

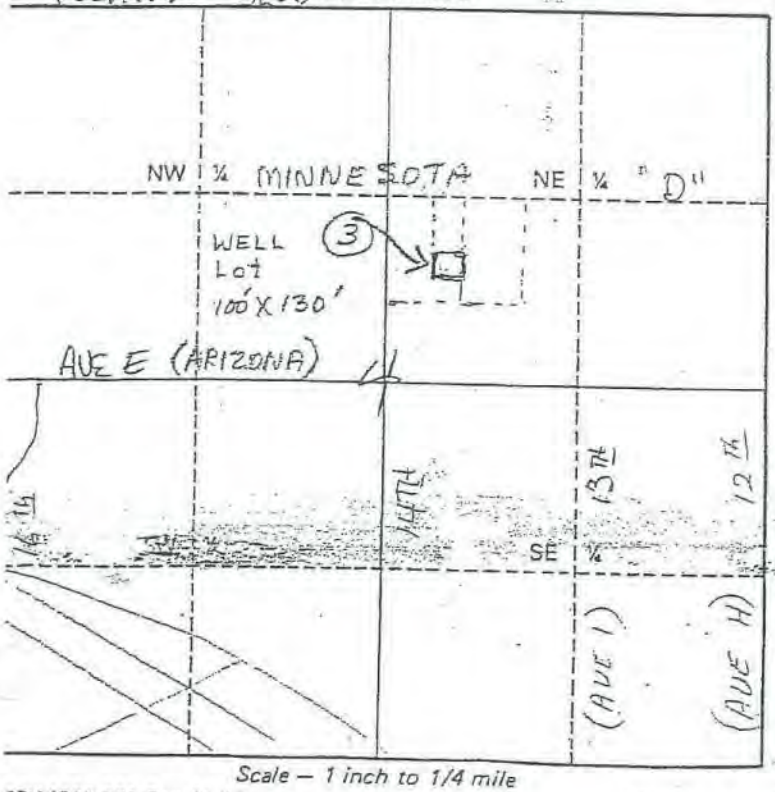
GRAVEL PACK: ☑ Yes ☐ No
From 50' to 650 ft.

9. PERFORATIONS *(if applicable)*:
From 400 to 650 ft.

10. SEALED ZONES *(if applicable)*:
From ? to _____ ft.

11. GENERAL LOCATION MAP: Pg 30-6E
DUNLAP RANCH SUBDV
(a) Sketch location of well, name(s) and location of road(s) on section map.
(b) Township 2S N/S Range 2W E/W
Section 4
(c) Assessor's Parcel No. 301-091-03
(d) Solid or liquid waste disposal site within two miles?
☐ Yes ☐ No
Location: _____

YUCAIPA BLVD SECTION MAP



Scale – 1 inch to 1/4 mile

Do Not Fill In
Fee Stamp | Date Stamp
DATE 030987 2
AMOUNT 170.00
RECEIPT NO. 030987 2
BY: McCulla Bros #5309
PAID

03-14785-631 Rev. 11/82

Continue on Reverse Side
NO MAP YIDL
2A

ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
385 North Arrowhead Avenue · San Bernardino, CA 92415-0

WELL PERMIT

Do Not Fill In
Permit No. 03028701
Expiration MAR. 2, 1988
FF
FA
SN

PLEASE PRINT:

1. OWNER: Name [redacted]
Mailing Address [redacted]
WELL #2
City YUCAIPA CA. Zip 92399
Phone No. 714-790-1901

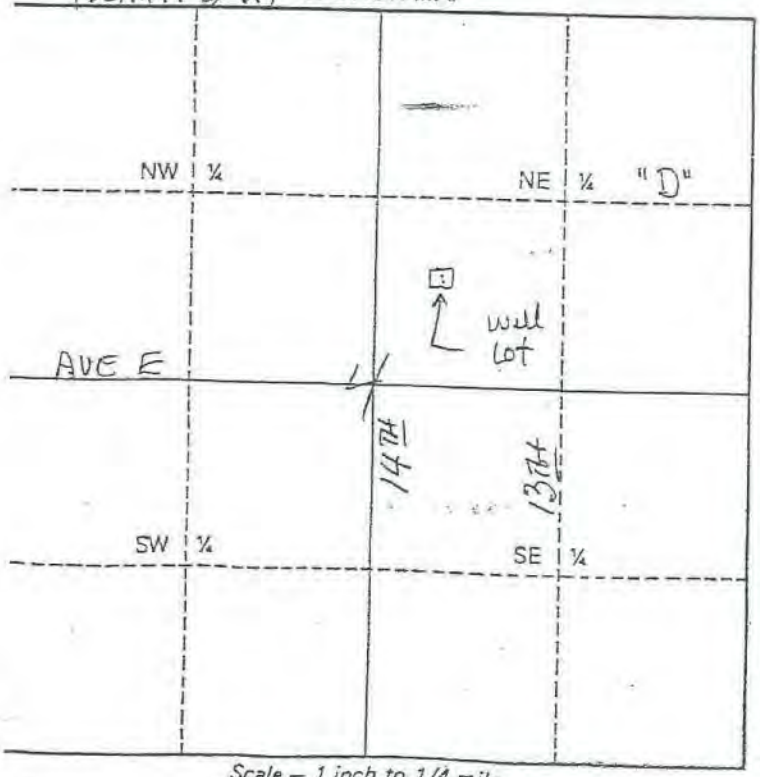
2. DATE OF WORK *(approximate)*:
Start 2 MAR 87 Complete 2 APRIL 87

3. WELL DRILLER *(Check One)*:
☐ Owner ☐ Contractor NOT KNOWN
Name

4. WELL USE *(check)*:
☑ Community ☐ Industrial
☐ Individual ☐ Test
☐ Agricultural ☐ Other
☐ Dairy ☐ Horizontal

5. TYPE OF WORK *(check)*:
☐ New ☐ Reconstruction ☒ Destruction

YUCAIPA BLVD SECTION MAP



Scale – 1 inch to 1/4 mile

Items 6 through 10 to be estimated for new wells, and exact for all other wells.

6. ANNULAR SEAL: Depth _____ ft.
Furnished by: ☑ Owner ☐ Contractor
☐ Driven Conductor Dia. 10 in., Wall (Gage) _____
☐ Sealing Material N/A, Thickness N/A in.

7. DEPTH OF WELL *(feet)*:
Proposed _____ Existing 472'
DIAMETER OF BORE *(in.)*: 10'

8. CASING INSTALLED:
☐ Steel ☐ Plastic ☐ Other

From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
0	472'	10"	

GRAVEL PACK: ☐ Yes ☑ No
From N/A to N/A ft.

9. PERFORATIONS *(if applicable)*:
From N/A to N/A ft.

10. SEALED ZONES *(if applicable)*:
From N/A to N/A ft.

11. GENERAL LOCATION MAP:
(a) Sketch location of well, name(s) and location of road(s) on section map.
(b) Township 2S N/S Range 2W E/W
Section 4
(c) Assessor's Parcel No. 301-051-03
(d) Solid or liquid waste disposal site within two miles?
☐ Yes ☑ No
Location: _____

Do Not Fill In
Fee Stamp | Date Stamp
Fee Exempt
Rec'd 3/2/87

12. PLOT PLAN:

(a) In perspective to the well site, sketch and label the following items: well lot property lines, other wells *(include abandoned wells)*, sewage disposal systems *(sewers, septic tanks, leaching fields, seepage pits, cesspools)*, lakes and ponds, water courses and animals or fowl kept.

(b) Indicate the distance in *feet*, of any of the following which are within 200 ft. of the well site:

Other wells	
Sewers	
Septic tanks	
Leaching fields	
Seepage pits	
Cesspools	
Lakes and ponds	
Water courses	
Animals or fowl kept	

I have read this application and agree to comply with all laws regulating the type of work being performed. The California Labor Code requires Workers' Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate:

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation laws of California.

Owner's Signature Louis F. Burns Date 2 MAR 87

☐ Contractor's Signature _____ Date _____ Reg. No. _____

DISPOSITION OF PERMIT

(Do Not Fill In)

☑ Approved subject to the following:

A. Notify the Department, STUART LONG 387-4666, twenty-four (24) hours in advance to make an inspection of the following operations:

☐ Prior to sealing of the annular space or filling of the conductor casing.

☐ Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing.

☐ After installation of the surface protective slab and pumping equipment.

☑ During destruction of wells, prior to pouring the sealing material.

B. Submit to the Department within thirty (30) days after completion of work, a copy of:

☑ Water Well Driller's Report ☐ Bacteriological Analysis ☐ Inorganic Chemical Analysis

C. Other _____

☐ DENIED _____

12. PLOT PLAN:

(a) In perspective to the well site, sketch and label the following items: well lot property lines, other wells *(include abandoned wells)*, sewage disposal systems *(sewers, septic tanks, leaching fields, seepage pits, cesspools)*, lakes and ponds, water courses and animals or fowl kept.

(b) Indicate the distance in *feet*, of any of the following which are within 200 ft. of the well site:

Other wells 50' - Abandoned per Bail;
Sewers
Septic tanks
Leaching fields
Seepage pits
Cesspools
Lakes and ponds
Water courses
Animals or fowl kept

MAR 6 1987
ENVIRONMENTAL HEALTH SERVICES
CLEARED

13. I have read this application and agree to comply with all laws regulating the type of work being performed. The California Labor Code requires Workers' Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate:

☑ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation laws of California.

Owner's Signature _____ Date _____

☐ Contractor's Signature Bill Provence Date 3/3/87 Reg. No. _____

DISPOSITION OF PERMIT

(Do Not Fill In)

☒ Approved subject to the following:

A. Notify the Department, Stuart Iraq (714) 387-4665, twenty-four (24) hours in advance to make an inspection of the following operations:

☒ Prior to sealing of the annular space or filling of the conductor casing.

☐ Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing.

☒ After installation of the surface protective slab and pumping equipment.

☐ During destruction of wells, prior to pouring the sealing material.

B. Submit to the Department within thirty (30) days after completion of work, a copy of:

☒ Water Well Driller's Report. ☐ Bacteriological Analysis ☐ Inorganic Chemical Analysis

C. Other _____

DENIED _____

[redacted]

Hy 1.	22'
DC.	27'10"
DC	21'11"
	71'9"
DC	27'3"
	99'0"
DC	17'1"
	116'1"
DC	17'3"
	133'4"
D	21'7"
1.	154'11"
	21'8"
2	176'7"
	21'7"
3.	198'2"
	21'7"
4.	219'9"
	21'7"
5.	241'4"
	22'5"
6.	263'9"
	21'7"
7.	285'4"
	21'6"
8.	306'10"
	21'7"
9	328'5"
	21'7"
10	350'0

10.	350'0"
	21'7"
11.	371'7"
	21'7"
12.	393'2"
	21'8
13.	414'10"
	21'7"
14.	436'5"
	21'7
15.	458'0
	21'8"
16.	479'8"
	21'8
17.	501'4"
	21'7"
18.	522'11"
	21'6"
19.	544'5"
	21'5"
20.	565'10"
	21'7"
21.	586'5
	21'7"
22.	608'0"
	22'1"

24	630'1"
	21'
	651'3
	21'6"
25	673'2"

235-240 very rough.
258-270 rough.

old #2

static 273

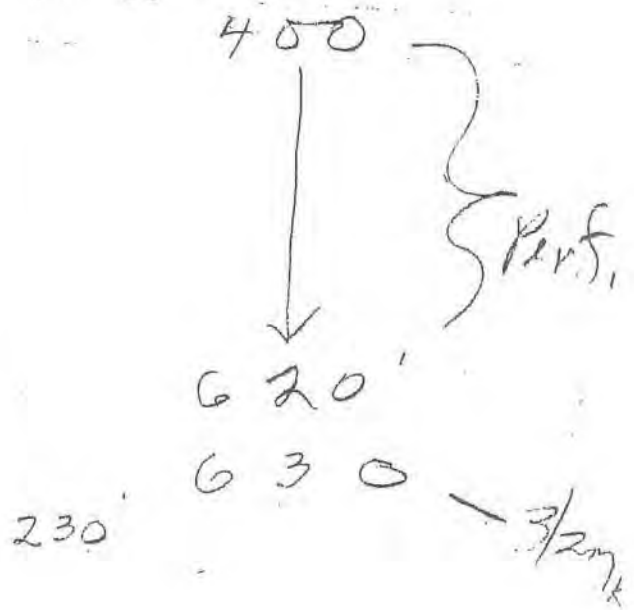
[redacted]

Well # 2A
2S/2W-9G3

0-50'	conductor
50'-80'	coarse sand and fine gravel
80'-109'	sand no clays
109'-115'	gray clay (loose) & fine gravel
115'-125	brown clay (loose) coarse sand 70% fine gr
125'-132'	sticky brown clay & sand
132-135'	sand (coarse) very loose clay 4'
135-148	sticky brown clay sand & gravel (rough drillin
148-173	sticky brown clay some sand & fine gravel firm spots
173-175	sand c̄ little clay
175-180	sand & gravel with clay streaks.
180-183	sticky brown clay & coarse sand
183-190	very sticky clay & fine sand & silt some gravel.
190-192	loose clays fine & coarse sand.
192-200	very sticky brown clay & sand some small grav
200-215	coarse sand & loose clay some gravel.
215-225	sticky brown clay & sand & gravel.
225-239	coarse sand & loose clay
239-250	sticky clay, sand & gravel. (fragmented)
250-258	coarse sand & loose clay
258-280	coarse sand & fine gravel little clay
280-283	coarse sand & gravel increase in sticky clay.
283-308	coarse sand & gravel very loose clay
308-338	sticky clay & coarse sand
338-341	VERY sticky clay some sand & gravel.
341-346	sticky clay & coarse sand
346-353	sand & small fragmented gravel, little clay
353-370	coarse sand very uniform & clay. some gravel.
370-393	increase in clay very sticky
393-409	very sticky clay some sand & gravel (40%)

24

445	sticky loose clay sand & gravel
445-470	loose clay & coarse sand (80%)
470-473	sticky clay sand & gravel
473-481	coarse sand & gravel loose clay
481-485	very tight sticky clay & coarse sand.
485-494	clay & coarse sand (clay is loose & stick)
494-545	coarse sand fragmented gravel some clay
545-547	coarse sand gravel (jagged) sticky clay
547-560	coarse sand gravel little loose clay. a lot of very jagged white quartz
560-566	coarse sand & gravel little clay very rough drilling very tight
566-573	sticky clay coarse sand and fragmented gravel
573-583	loose sticky clay coarse sand & gravel
583-587	coarse sand some gravel (fine) loose sticky clay
587-590	coarse sand spotty gravels tight sticky clay
590-608	coarse uniform sand and loose clay (20%) fine fragmented gravels
608-648	coarse uniform sand sticky clay little gravel
648-673	coarse sand uniform little of no clay very firm.



FORM 115

INVESTIGATION

South Coastal Basin

DIVISION OF WATER RESOURCES
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

2S/2W-3E1

SHEET 1

NUMBER E-132j-

WELL LOG

LOCAL DESIGNATION Owner #6

LOCATION 40 ~~50~~ S. of Ave. D, ST on ℄ of 11th St., proj. S., Lot #40, Dunlap Sub. #2, Yucaipa.

Loc.#18216F

OWNER [redacted]

DATE COMPLETED ~~1930~~ 1927

DIAMETER OF CASING 20"

DRILLED BY Clark McEwen

SOURCE OF INFORMATION S.B.V.W.C.D. Redlands-Yucaipa Land Co.

INSPECTED WHILE DRILLING SEE FILE NO.

SURFACE ELEVATION 2160 D.W.R. Map

SKETCH

DEPTH	ELEVATION OF BOTTOM OF STRATUM	MATERIAL	THICKNESS FEET	% VOIDS	ABSOLUTE VOIDS FEET	TOTAL VOIDS FEET
1-122		Dry sand	122			
122-130		Dirty gravel	8			
130-137		Clay	7			
152		Gravel	15			
236		Sandy clay	84			
240		Dirty gravel	4			
252		Fair gravel	12			
328		Sandy clay	74			
340		Gravel - extra good	12			
378		Clay and silt	38			
388		Gravel	10			
395		Dirty gravel	7			
440		Clay and gravel	45			
456		Gravel	16			
466		Clay	10			
472		Fair gravel	6			
478		Clay	6			
500		Gravel	22			
505		Clay	5			
544		Gravel	39			
590		Rocks and muddy gravel	46			
599		Clay	9			
		Perf 135-578				
		Pumps 90" - drawdown 90'				
		PERF. WITH 1/2" KNIFE 6 HOLES TO A ROUND				

MICROFILMED

FOR FIELD COPIES USE ALTERNATE LINES

LOG OBTAINED BY DATE

85612 8-31 15M CALIFORNIA STATE PRINTING OFFICE

SOUTHERN CALIFORNIA EDISON COMPANY

APRIL 9, 1979

[redacted]

YUCAIPA, CA 92399

SUBJECT: HYDRAULIC TEST RESULTS - WELL 6
ACCT: 4-26-31-618-3080
LOTH & AVE "D"
DATE OF TEST:FEBRUARY 28,1979

IN ACCORDANCE WITH YOUR REQUEST, A TEST WAS MADE ON YOUR TURBINE WELL PUMP ON THE DATE LISTED ABOVE. IF YOU HAVE ANY QUESTIONS REGARDING THE TEST RESULTS WHICH FOLLOW, PLEASE CONTACT L. E. WILSON, 793-2712.

EQUIPMENT

PUMP: L&B NO: 26896
MOTOR: US 125.0 HP NO: 499075
METER: P229-204

TEST RESULTS

DISCHARGE PRESSURE,PSI	53.5
STANDING WATER LEVEL,FT	321.7
DRAWDOWN,FT	23.8
DISCHARGE HEAD,FT	123.6
PUMPING WATER LEVEL,FT	345.5
TOTAL HEAD,FT	469.1
CAPACITY,GPM	557.
GPM PER FT DRAWDOWN	23.4
ACRE FT PUMPED IN 24 HRS	2.466
KW INPUT TO MOTOR	106.3
HP INPUT TO MOTOR	142.5
MOTOR LOAD(%)	103.8
MEASURED SPEED OF PUMP,RPM	1775.0
KWH PER ACRE FT	1035.
OVERALL PLANT EFFICIENCY(%)	46.4
CUSTOMER'S METER,GPM	553

W. S. FRANKEN
DISTRICT MANAGER

QUADRUPLICATE
RETAIN THIS COPY

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

8

Do Not Fill In
Nº 100589
State Well No. 2S/2W-5K1
Other Well No.

(1) OWNER:
Name [redacted]
Address [redacted]
Yucaipa, California

(2) LOCATION OF WELL:
County San Bernardino Owner's number, if any— 10
R. F. D. or Street No. Ave. E near the corner of 17th St.

(3) TYPE OF WORK (*check*):
New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (*check*):
Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:
Rotary ☐
Cable ☒
Dug Well ☐

(6) CASING INSTALLED:
SINGLE ☒ DOUBLE ☐
From 0 ft. to 690 ft. 16 Diam. 5/16 Gage or Wall

If gravel packed

Diameter of Bore	from ft.	to ft.

Type and size of shoe or well ring 16"x14"x1/4" Size of gravel:
Describe joint All joints butt welded

(7) PERFORATIONS:
Type of perforator used Mills
Size of perforations 3/8 in., length, by 2 in.

From ft.	to ft.	Perf. per row	Rows per ft.
330	670	7	1 row per ft.

(8) CONSTRUCTION:
Was a surface sanitary seal provided? ☒ Yes ☐ No To what depth By Owners 50 ft.
Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata

From ft.	to ft.

Method of Sealing

(9) WATER LEVELS:
Depth at which water was first found 169 ft.
Standing level before perforating 169 ft.
Standing level after perforating 169 ft.

(10) WELL TESTS:
Was a pump test made? ☒ Yes ☐ No If yes, by whom? Owners
Yield: gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? ☐ Yes ☐ No
Was electric log made of well? ☐ Yes ☐ No

(11) WELL LOG:
Total depth 690 ft. Depth of completed well 690 ft.
Formation: *Describe by color, character, size of material, and structure.*

0 ft. to	4 ft.	Black adobe
4 "	7 "	White caleche
7 "	55 "	Brown clay
55 "	133 "	Brown sandy clay and gravel
133 "	151 "	Sand and gravel
151 "	165 "	Brown sandy clay
165 "	175 "	Gravel
175 "	242 "	Brown sandy clay with gravel streaks
242 "	248 "	Brown sandy clay
248 "	282 "	Brown clay with gravel streaks
282 "	330 "	Clay and embedded gravel
330 "	335 "	Loose sand and gravel
335 "	360 "	50% cemented gravel & 50% loose gravel with clay streaks
360 "	548 "	Clean coarse sand and gravel with streaks of cemented gravel
548 "	570 "	Brown clay with large gravel embedded
570 "	600 "	Brown gravel- clay-and conglomerate
600 "	618 "	Loose coarse sand-gravel and boulders
618 "	622 "	Tight clay-gravel and boulders
622 "	667 "	Clean coarse sand-gravel and boulders
667 "	690 "	Brown tight clay-gravel and boulders

Work started Jan. 16 19 64 Completed Mar. 31 19 64

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
NAME KIRKLAND WELL SERVICE
(Person, firm, or corporation) (*Typed or printed*)
Address 32291 Dunlap Blvd.
Yucaipa, California
[SIGNED] K. Kirkland
Well Driller
License No. 168847 Dated April 5, 19 64

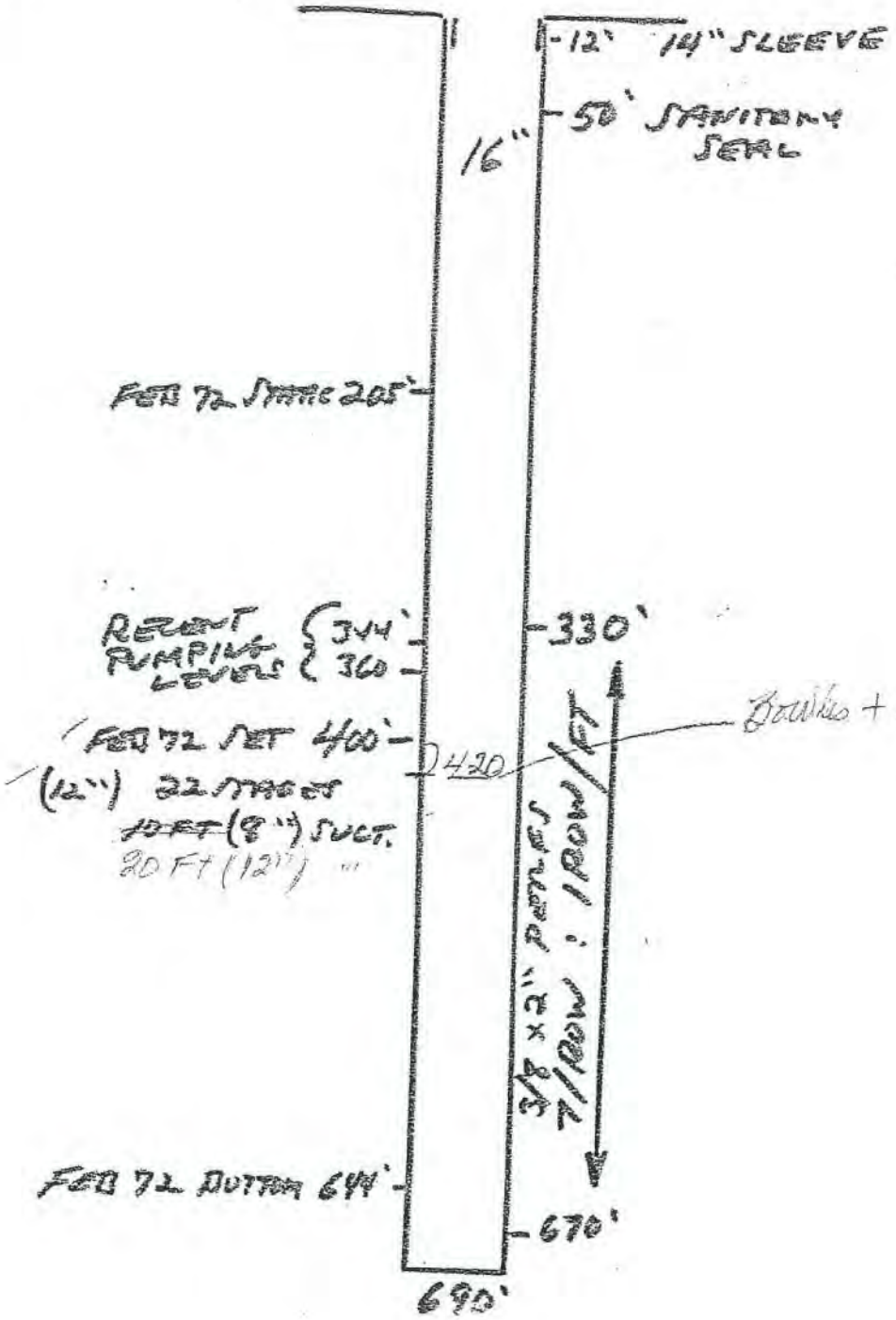
2102 7-59 600 QUIN △ SPO

DWR 188 (REV 4-61)

99421

#10 Well

This is Harold's Note.
Can't find bill that
it was done
Bernice



4/10

TRIPLICATE
Owner's Copy

Page 1 of 1

Owner's Well No. 11

Date Work Began 4/23/97 Ended 7/3/97

Local Permit Agency san bernardino environmental health

Permit No. 04219701 Permit Date 4/21/97

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 469733

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)

DEPTH TO FIRST WATER 347 (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	50	SAND & CLAY
50	180	course sand & clay
180	210	COARSE SAND & CLAY
210	350	CLAY
350	940	COARSE GRAVEL, SAND & SOME CLAY
940	960	SAND, GRAVEL & SMALL ROCKS
960	1720	CLAY

RECEIVED
DEC - 3 1997
[redacted]

TOTAL DEPTH OF BORING 1720 (Feet)

TOTAL DEPTH OF COMPLETED WELL 1710 (Feet)

WELL OWNER

Name [redacted]

Mailing Address [redacted]

YUCAIPA CA 92399
CITY STATE ZIP

WELL LOCATION

Address

City YUCAIPA

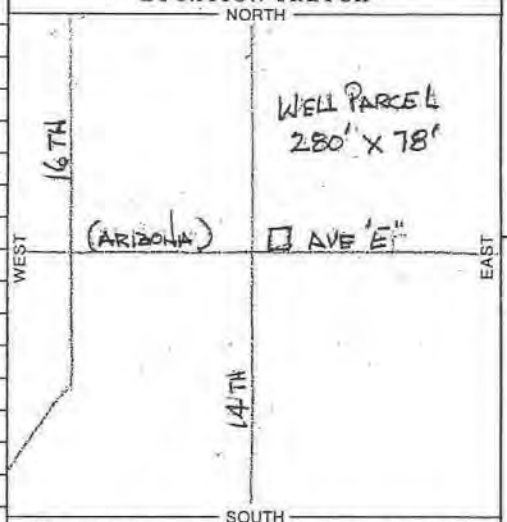
County SAN BERNARDINO

APN Book ___ Page ___ Parcel ___

Township 25 Range 2W Section 4

Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH



Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

X NEW WELL

MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)

___ DESTROY *(Describe Procedures and Materials Under "GEOLOGIC LOG")*

PLANNED USE(S) (✓)

___ MONITORING

WATER SUPPLY
___ Domestic
X Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD REVERSE ROTARY FLUID WATER

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 347 (Ft.) & DATE MEASURED 6/18/97

ESTIMATED YIELD 2000 (GPM) & TEST TYPE PUMP

TEST LENGTH 51 (Hrs.) TOTAL DRAWDOWN 76 (Ft.)

* *May not be representative of a well's long-term yield.*

CASING(S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	36			X		STEEL	30	3/8	
0	705	26	X				STEEL	16	5/16	.090
705	1205	26		X			STEEL	16	5/16	.090
1205	1210	24	X				STEEL	16x12	5/16	
1210	1690	24		X			STEEL	12	5/16	.090
1690	1710	24	X				STEEL	12	5/16	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	300	X			
300	1710				4x10

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other ___

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME LAYNE CHRISTENSEN COMPANY
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

11001 ETIWANDA AVE. FONTANA CA 92337
ADDRESS CITY STATE ZIP

Signed [signature] 11-26-97
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED

510011
C-57 LICENSE NUMBER

DWR 188 REV. 7-96 IF ADDITIONAL SPACE IS NEEDED, USE CONSECUTIVELY NUMBERED FORM

- 2S/2W - 46G

TRIPLICATE
Owner's Copy
Page 1 of 1
Owner's Well No. 11

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 469733

Date Work Began 4/23/97 Ended 7/3/97
Local Permit Agency san bernardino environmental health
Permit No. 04219701 Permit Date 4/21/97

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER 347 (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	50	SAND & CLAY
50	180	course sand & clay
180	210	COARSE SAND & CLAY
210	350	CLAY
350	940	COARSE GRAVEL, SAND & SOME CLAY
940	960	SAND, GRAVEL & SMALL ROCKS
960	1720	CLAY

RECEIVED
DEC - 3 1997
[redacted]

TOTAL DEPTH OF BORING 1720 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1710 (Feet)

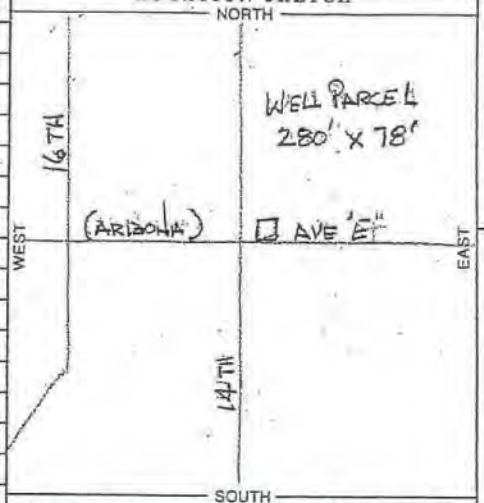
WELL OWNER

Name [redacted]
Mailing Address [redacted]
YUCAIPA CA 92399
CITY STATE ZIP

WELL LOCATION

Address
City YUCAIPA
County SAN BERNARDINO
APN Book ___ Page ___ Parcel ___
Township 2S Range 2W Section 4
Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH



Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)
X NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY *(Describe Procedures and Material. Under "GEOLOGIC LOG")*

PLANNED USE(S) (✓)
___ MONITORING
WATER SUPPLY
___ Domestic
X Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD REVERSE ROTARY FLUID WATER

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 347 (Ft.) & DATE MEASURED 6/18/97
ESTIMATED YIELD* 2000 (GPM) & TEST TYPE PUMP
TEST LENGTH 51 (Hrs.) TOTAL DRAWDOWN 76 (Ft.)
* *May not be representative of a well's long-term yield.*

CASING(S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	36			X		STEEL	30	3/8	
0	705	26	X				STEEL	16	5/16	
705	1205	26		X			STEEL	16	5/16	.090
1205	1210	24	X				STEEL	16x12	5/16	
1210	1690	24		X			STEEL	12	5/16	.090
1690	1710	24	X				STEEL	12	5/16	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	300	X			
300	1710				4x10

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other ___

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME LAYNE CHRISTENSEN COMPANY (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 11001 ETIWANDA AVE. CITY FONTANA STATE CA ZIP 92337
Signed Ronald Eck WELL DRILLER/AUTHORIZED REPRESENTATIVE
DATE SIGNED 11-26-97
C-57 LICENSE NUMBER 510011

DWR 188 REV. 7-90 18955 IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM WELL NO. 11

APR-16-2001 MON 11:07 AM LAYNE CHRISTENSEN CO FAX NO. 909 390 6097 P. 04

DUPLICATE
Driller's Copy
Page 1 of 2
Owner's Well No. 12
Date Work Began 9/25/98, Ended 11/23/98
Local Permit Agency San Bernardino County dept. of Health
Permit No. 1998080117 Permit Date

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 537229

DWR USE ONLY — DO NOT FILL IN —
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER 321 (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION Describe material, grain size, color, etc.
0 – 40	Top Soil, sand & gravel
40 – 60	sand & gravel
60 – 110	sand & gravel w/clay
110 – 130	Black & brown sand w/gravel & clay
130 – 140	sand
140 – 160	sand & gravel
160 – 170	sand & clay
170 – 200	sand, gravel & clay
200 – 230	fine sand & clay
230 – 240	fine sand, clay & little gravel
240 – 280	fine sand & little gravel
280 – 330	sand, gravel, little clay
330 – 360	Black sand & little gravel
360 – 400	consolidated sand
400 – 440	sand & gravel
440 – 450	sand
450 – 470	cemented sand
470 – 530	sand & some gravel
530 – 540	sand
540 – 570	consolidated sand
570 – 610	sand, gravel & clay
610 – 650	sand & gravel
650 – 680	sand & gravel
680 – 750	sand & gravel
750 – 770	sand
770 – 800	sand & gravel
800 – 810	consolidated sand
810 – 830	cemented sand w/ rock
830 – 850	sand & gravel
850 – 860	sand, gravel & clay

TOTAL DEPTH OF BORING 1120 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1100 (Feet)

WELL OWNER

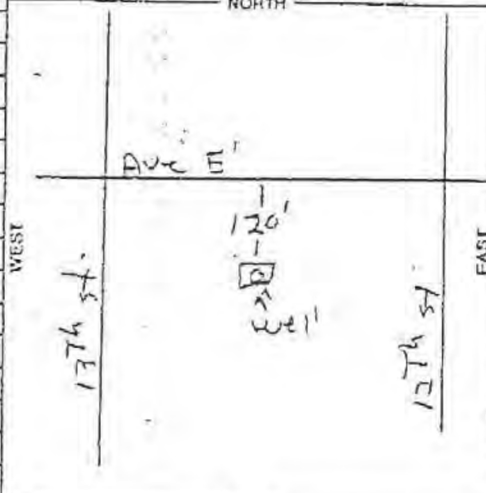
Name [redacted]
Mailing Address [redacted]
City Yucaipa Ca. 92399 STATE ZIP

WELL LOCATION

Address XXXXXXX
City Yucaipa
County San Bernardino
APN Book 31 Page 71 Parcel 301-112-07
Township 2S Range 2W Section 4
Latitude ___ DEG. MIN. SEC. NORTH Longitude ___ DEG. MIN. SEC. WEST

LOCATION SKETCH

NORTH



WEST EAST
SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

X NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USE(S) (✓)

___ MONITORING
WATER SUPPLY
___ Domestic
X Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD Reverse FLUID water

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 321 (Ft.) & DATE MEASURED 10/8/98
ESTIMATED YIELD* 2500 (GPM) & TEST TYPE pump
TEST LENGTH 59 (Hrs.) TOTAL DRAWDOWN 60 (Ft.)
* May not be representative of a well's long-term yield.

CASING(S)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 – 35	36	X		X		A53GB	30	3/8	
35 – 390	26	X				A53GB	16	5/16	
390 – 430	26		X			A53GB	16	5/16	std flo.050
430 – 470	26		X			A53GB	16	5/16	fullflo.050
470 – 620	26		X			A53GB	16	5/16	std.flo.050
620 – 740	26		X			A53GB	16	5/16	fullflo.050

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 – 35	X			
0 – 300	X			
301 – 1100				6x14kol-p

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

NAME Layne Christensen Company
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

11001 Etiwanda Ave., Fontana, Ca. 92337
ADDRESS CITY STATE ZIP

Signed [signature] 11-26-98 510011
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

18956

DUPLICATE
Driller's Copy

Page 2 of 2
Owner's Well No. 12
Date Work Began 8/25/98, Ended 11/23/98
Local Permit Agency San Bernardino County Dept. of Health
Permit No. 19980801117 Permit Date

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 537230

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)
DEPTH TO FIRST WATER 321 (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
860	910	sand & gravel
910	950	sand, gravel & clay
950	960	gravel & sand
960	970	coarse sand & rocks
970	1050	gravel & sand
1050	1060	gravel, sand & granule granite fractured layer
1060	1090	granite, mostly crushed
1090	1120	granite, fractured

TOTAL DEPTH OF BORING 1120 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1100 (Feet)

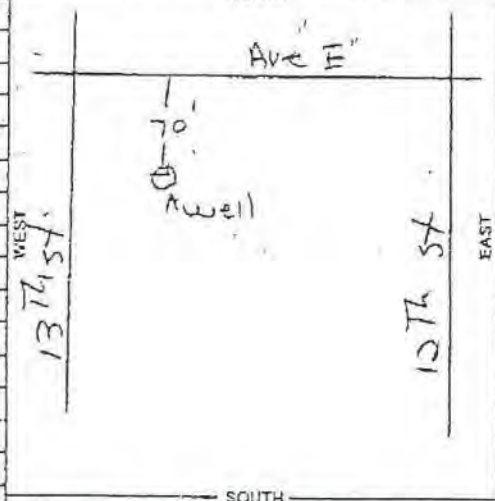
WELL OWNER

Name [redacted]
Mailing Address [redacted]
City Yucaipa State Ca Zip 92399

WELL LOCATION

Address
City Yucaipa
County San Bernardino
APN Book 31 Page 71 Parcel 301-112-07
or Township 2S Range 2W Section 4
or Latitude DEG. MIN. SEC. NORTH Longitude DEG. MIN. SEC. WE

LOCATION SKETCH



Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

X NEW WELL
MODIFICATION/REPAIR
— Deepen
— Other (Specify)
— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USE (✓)

— MONITORING
WATER SUPPLY
— Domestic
X Public
— Irrigation
— Industrial
— "TEST WELL"
— CATHODIC PROTECTION
— OTHER (Specify)

DRILLING METHOD Reverse FLUID water

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 321 (Ft.) & DATE MEASURED 10/8/98
ESTIMATED YIELD* 2500 (GPM) & TEST TYPE pump
TEST LENGTH 59 (Hrs.) TOTAL DRAWDOWN 50 (Ft.)
* *May not be representative of a well's long-term yield.*

CASING(S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
740	1090	26		X			A53GB	16	5/16	std. flo. 050
1090	1100	26	X				A53GB	16	5/16	full flo. 050

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)

ATTACHMENTS (✓)

— Geologic Log
— Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analyses
— Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belie

NAME Layne Christensen Company (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 11001 Etiwanda Ave., Fontana, Ca. 92337 CITY STATE ZIP
Signed [signature] (WELL DRILLER/AUTHORIZED REPRESENTATIVE) DATE SIGNED
510011 C.S.L. LICENSE NUMBER

San Bernardino County Department of Public Health
DIVISION OF ENVIRONMENTAL HEALTH SERVICES
385 North Arrowhead Avenue, San Bernardino, CA 92415-0160

387-4646 Sco[illegible] 4666 Mike Ford

DO NOT FILL IN
Permit Number 1998080117
Expiration 8-25-99
FF
FA
SN

WELL PERMIT
(Please Print)

RECEIVED
AUG 2 5 1998

#12

DO NOT FILL IN
Date 8-25-98
Amount $ 370.00
Receipt Number 14039
Paid By Layne Christensen Co.
Check #2712109

1. OWNER: Name [redacted]
Mailing Address [redacted]
City Yucaipa, ca. 92399 Zip 92399
Site Address
City Yucaipa Zip 92399
Telephone Number (909) 790-1901

2. WELL DRILLER: Layne Christensen Co.
Business Name
Sept 1998
Start Date *Completion Date*

3. WELL USE *(check)*:
☐ Community ☐ Horizontal ☐ Test
☐ Individual ☐ Monitoring ☐ Dairy
☐ Agricultural ☒ Public Water Supply ☐ Other

4. TYPE OF WORK *(check)*:
☒ New ☐ Reconstruction ☐ Destruction

Items 6 through 10 to be estimated for new wells, exact for all other wel[ls]

5. ANNULAR SEAL: Seal Depth 300'
Furnished by: ☐ Owner ☒ Contractor
☒ [illegible] Conductor Dia. 30"x35" in., Wall (Gage) [illegible]
☐ Sealing Material Concrete, Thickness 5"

6. DEPTH OF WELL *(feet)*:
Proposed 1100' Existing
DIAMETER OF BORE *(in.)*: 26"

7. CASING INSTALLED:
☒ Steel ☐ Plastic ☐ Other

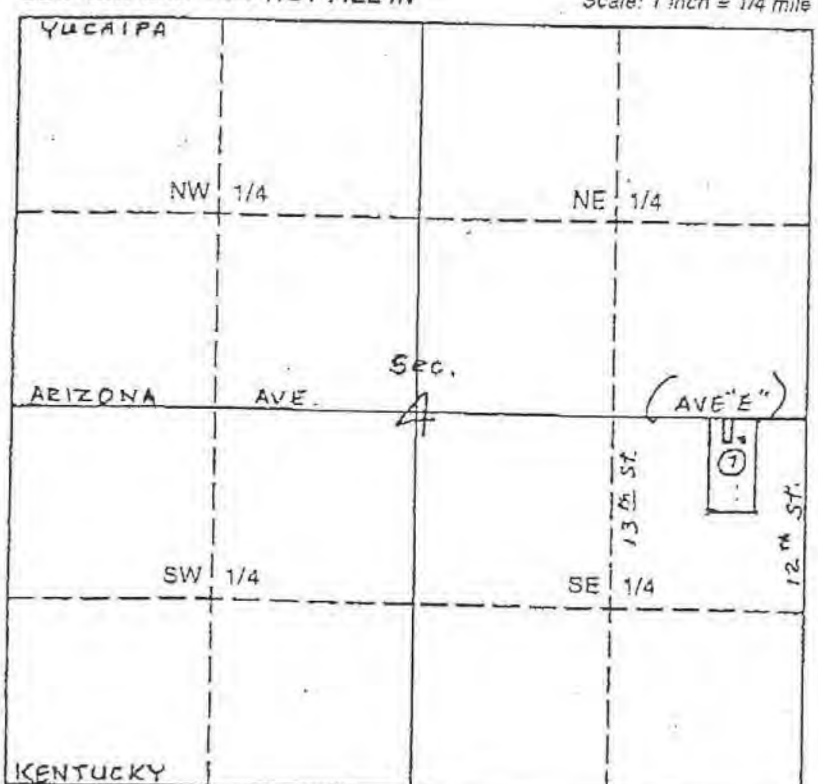
From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
0	1100	16	[illegible]

Gravel Pack: ☒ Yes ☐ No
From 300' to 1100' ft.

8. PERFORATIONS *(if applicable)*:
From 390' to 1090' ft. 40' LBD

9. SEALED ZONES *(if applicable)*:
From 0 to 300' ft.

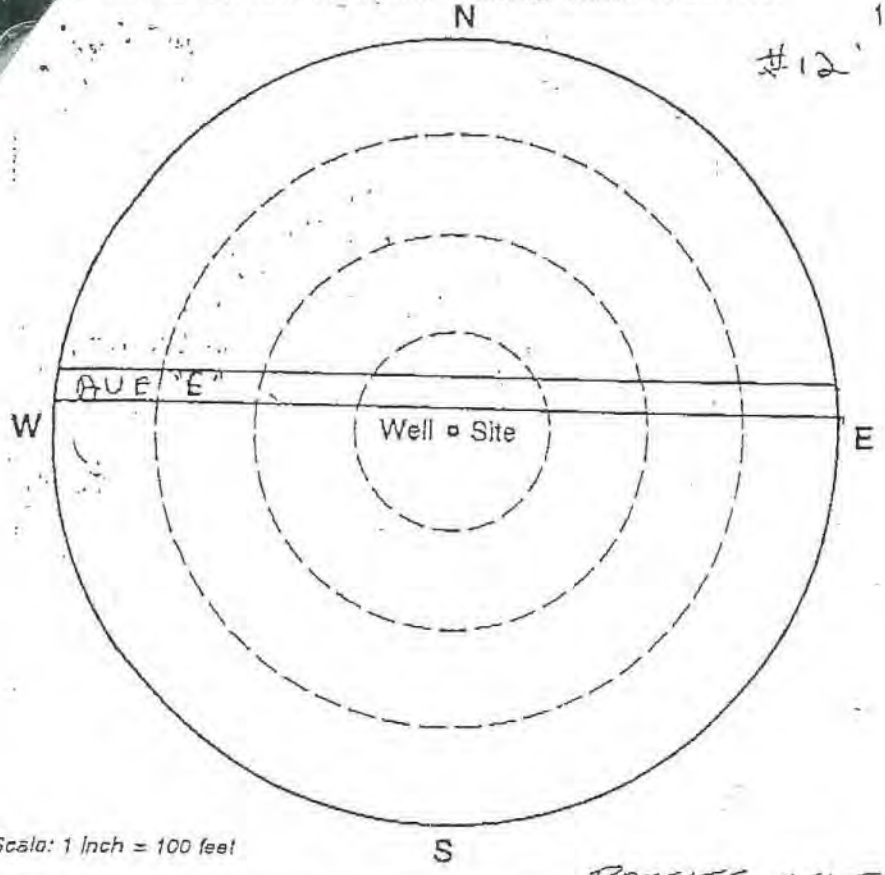
SECTION MAP - DO NOT FILL IN *Scale: 1 inch = 1/4 mile*



10. LOCATION INFORMATION: 30-E6
649-D4
(a) Township:
Tier 2S N/S Range 2W E/W Section 4
(b) Assessor's Parcel No. ~~301-112-06~~ 301-112-07
(c) Latitude and Longitude
Book 31 Page 71
Lat: ____ °, ____ ', ____ " N/S
Long: ____ °, ____ ', ____ " E/W
(d) Solid or Liquid Disposal Site within Two Miles
☐ Yes ☐ No
Location

DO NOT FILL IN
Seal
Cap
Check Valve
Electricals
Slab
Tag
Building & Safety Notified

11. PLOT PLAN: 1998080117



Scale: 1 inch = 100 feet

(a) In perspective to the well site, sketch and label the following items: well lot property lines, other wells *(include abandoned wells)*, sewage disposal systems *(sewers, septic tanks, leaching fields, seepage pits, cesspools)*, lakes and ponds, watercourses and animals or fowl kept.

(b) Indicate the distance, in feet, of any of the following which are within 200 ft. of the well site:

Other _____
Sewers _____
Septic tanks _____
Leaching fields _____
Seepage pits _____
Cesspools _____
Lakes and ponds _____
Watercourses _____
Animals or fowl kept _____

(c) ☐ None of the above are within 200 feet of the well si

PRESITE OK BY M. FARRELL 8.25.98

12. I have read this application and agree to comply with all laws regulating the type of work being performed.

C-57 Contractor's Signature Robert A. Evitts Date 8-21-98

County Registration No. 84 California License No. 510011

DISPOSITON OF PERMIT

(For Department Use Only)

☐ Sent to Water Agency for review.

☐ Water Agency conditions or recommendations attached.

☐ Denied _____

☒ Approved subject to the following:

A. ☒ Notify the Department, Safe Drinking Water Section (909) 387-4666, twenty-four (24) hours in advanc to make an inspection of the following operations:

- ☒ Prior to sealing of the annular space or filling of the conductor casing.
- ☒ After installation of the surface protective slab and pumping equipment.
- ☐ During destruction of wells, prior to pouring the sealing material.

B. ☒ Submit to the Department, within thirty (30) days after completion of work, a copy of:

- ☒ Water Well Driller's Report
- ☒ Bacterial Analysis
- ☒ Inorganic Chemical Analysis
- ☒ Radiological Analysis
- ☒ General Mineral
- ☒ Organic Chemical Analysis
- ☒ General Physical

Comments _____

25/2W-4L

WHWC Well 14

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e054636

Page 1 of 1

Owner's Well Number 14

Date Work Began 11/27/2006 Date Work Ended 1/29/2007

Local Permit Agency San Bernardino Department of Environmental Health

Permit Number 2006111150 Permit Date 11/29/06

DWR Use Only – Do Not Fill In

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Reverse Circulation Rotary Drilling Fluid Bentonite mud

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
0	40	Top soil, sand & gravel.
40	70	Sand and gravel.
70	130	Sand, gravel and some clay.
130	150	Sand and clay.
150	195	Sand, clay and gravel.
195	230	Fine sand and clay.
230	275	Fine sand, clay and gravel.
275	309	Fine sand, and gravel.
309	340	Black sand and gravel.
340	390	Consolidated sand.
390	425	Sand and gravel.
425	450	Sand, gravel and some clay.
450	480	Sand.
480	515	Cemented sand.
515	540	Sand and gravel.
540	575	Sand, gravel and clay.
575	605	Consolidated sand.
605	640	Sand and gravel.
640	685	Sand, gravel and some clay.
685	715	Sand and gravel.
715	760	Sand.
760	795	Sand and gravel.
795	813	Consolidated sand.
813	845	Sand and gravel.
845	881	Cemented sand and rock.
881	910	Coarse sand, gravel, and clay.
910	964	Coarse sand, rocks.
964	1,030	Gravel, coarse sand.
1030	1,090	Gravel, sand, rocks.
1090	1,120	Granite, mostly crushed.

Total Depth of Boring 1120 Feet

Total Depth of Completed Well 1100 Feet

Well Owner

Name [redacted]

Mailing Address [redacted]

City Yucaipa State CA Zip 92399

Well Location

Address 32419 Avenue E

City Yucaipa County San Bernardino

Latitude ___ Deg. ___ Min. ___ Sec. N Longitude ___ Deg. ___ Min. ___ Sec. W

Datum ___ Decimal Lat. ___ Decimal Long. ___

APN Book 0301 Page 132 Parcel 85

Township 2 S Range 2 W Section 4

Location Sketch

(Sketch must be drawn by hand after form is printed.)

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

◉ Water Supply
☑ Domestic ☑ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
○ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 320 (Feet below surface)

Depth to Static Water Level 320 (Feet) Date Measured 01/29/2007

Estimated Yield * 1,506 (GPM) Test Type Constant Rate

Test Length 16.0 (Hours) Total Drawdown 66 (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	50	42	Conductor	Low Carbon Steel	.3125	30		
0	410	26	Blank	Low Carbon Steel	.3125	16		
410	1,090	26	Screen	Low Carbon Steel	.3125	16	Louver	0.050
1,090	1,100	26	Blank	Low Carbon Steel	.3125	16		

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	50	Cement	10.5 sack
0	300	Cement	10.5 sack
300	1,100	Filter Pack	Tacna 8x20

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Layne Christensen Company (Person, Firm or Corporation)

11001 Etiwanda Avenue (Address) Fontana (City) CA (State) 92337 (Zip)

Signed [signature] (C-57 Licensed Water Well Contractor) 5-8-2007 (Date Signed) 510011 (C-57 License Number)

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

23191

WELL No. 14

2S/2W - 4L

San Bernardino County Department of Public Health
DIVISION OF ENVIRONMENTAL HEALTH SERVICES
385 North Arrowhead Avenue - 2nd Floor, San Bernardino, CA 92415-0160

WP 3371
SR 15216

DO NOT FILL IN
Permit Number 2006111150
Expiration 05-29-07
SN

K Deeds Presite
WELL PERMIT
(Please Print)
presite o.k. #Hoslop Dif
Owner's Well No. 14

DO NOT FILL IN
Date 11-29-06
Amount $ 493.00
Receipt Number 59738
Paid by LAYNE CHRISTENSEN

1. OWNER: Name [redacted]
Mailing Address [redacted]
City Yucaipa Zip 92399
Site Address 32419 Ave E
City Yucaipa Zip 92399
Telephone Number (909) 790-1901

2. WELL DRILLER: Layne Christensen Company
Business Name
11-27-2006 (Start Date) 2-27-2006 (Completion Date)

3. WELL USE (check):
☐ Agricultural ☐ Horizontal ☐ Test
☐ Cathodic ☐ Monitoring/Observation ☐ Dairy
☐ Ind/Domestic ☒ Community/PWS/City ☐ Other

4. TYPE OF WORK (check):
☒ New ☐ Reconstruction ☐ Destruction

Items 6 through 9 to be estimated for new wells, exact for all other wells

5. ANNUALAR SEAL: Seal Depth 50 ft.
Furnished by: ☐ Owner ☒ Contractor
☐ Driven Conductor Dia. 30 in., Wall (Gage) .375
☐ Sealing Material 10.5 sack, Thickness 6 in.

6. DEPTH OF WELL (feet):
Proposed 1100 Existing
DIAMETER OF BORE (in.): 26

7. CASING INSTALLED:
☒ Steel ☐ Plastic ☐ Other

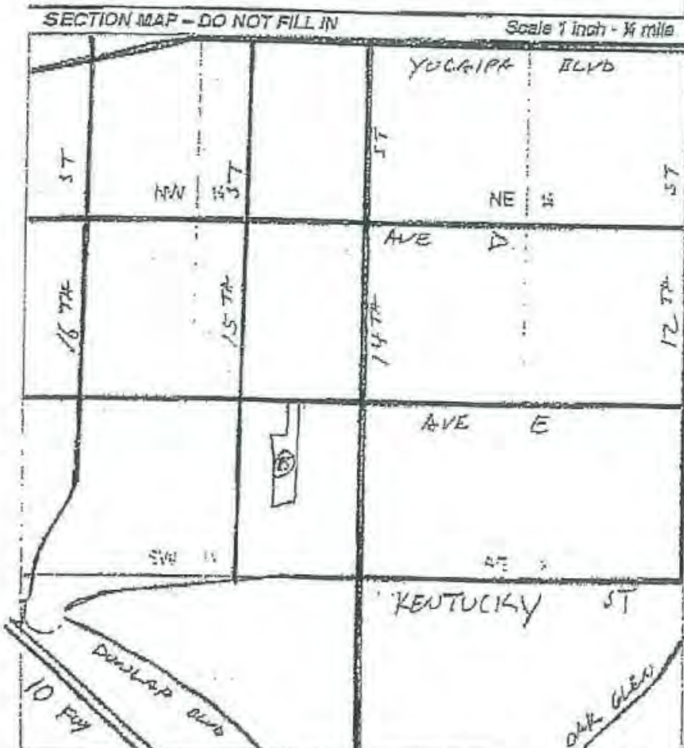
From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
0	400	16	.312

Gravel Pack ☒ Yes ☐ No
From 300 to 1100 ft.

8. PERFORATIONS (if applicable):
From 400 to 1100 ft.

9. SEALED ZONES (if applicable):
From ____ to ____ ft.

SECTION MAP – DO NOT FILL IN Scale 1 inch - ¼ mile



10. LOCATION INFORMATION
(a) Assessor's Parcel No. 0301132850000
(b) Consulting Firm & Project Number:
(c) Latitude and Longitude (If Known)
Lat: ___ °, ___ ', ___ "N/S
Long: ___ °, ___ ', ___ "E/W
(d) Township:
Tier 2 N/(S) Range 2 E/(W) Section 4
Map Info TG# 649 C4

DO NOT FILL IN
Seal
Cap
Check Valve
Electricals
Slab
Tag
Building & Safety Notified

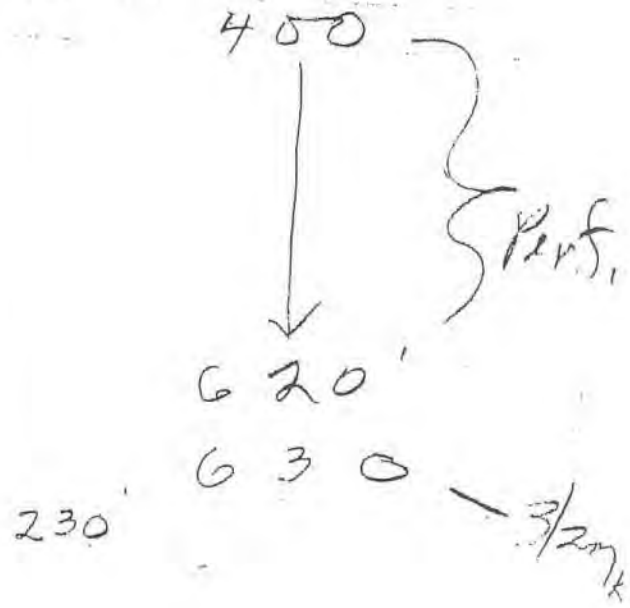
[redacted]

Fly	22'	235-240 very rough	
DC	27' 10"	258-270 rough	
DC	21' 11"		
	71' 9"		
DC	27' 3"	10. 350' 0"	24 630' 1"
	44' 0"	21' 7"	21' ±
DC	17' 1"	11. 371' 7"	651' 3"
	116' 1"	21' 7"	21' 6"
DC	17' 3"	12. 393' 2"	25 673' 2"
	133' 4"	21' 8"	
D	21' 7"	13. 414' 10"	oil #2
1.	154' 11"	21' 7"	
	21' 8"	14. 436' 5"	static 273
2	176' 7"	21' 7"	
	21' 7"	15. 458' 0"	
3.	198' 2"	21' 8"	
	21' 7"	16. 479' 8"	
4.	219' 7"	21' 8"	
	21' 7"	17. 501' 4"	
5.	241' 4"	21' 7"	
	22' 5"	18. 522' 11"	
6.	263' 7"	21' 6"	
	21' 7"	19. 544' 5"	
7.	285' 4"	21' 5"	
	21' 6"	20. 565' 10"	
8.	306' 10"	21' 7"	
	21' 7"	21. 586' 5"	
9	328' 5"	21' 7"	
	21' 7"	22. 608' 0"	
10	350' 0	22' 1"	

[redacted]

0-50	conductor
50'-80'	coarse sand and fine gravel
80'-109'	sand no clays.
109'-115'	gray clay (loose) & fine gravel
115'-125	brown clay (loose) coarse sand 70% fine gvl
125'-132'	sticky brown clay & sand
132-135	sand (coarse) very loose clay 4'
135-148	sticky brown clay sand & gravel (rough drilling
148-173	sticky brown clay some sand & fine gravel, firm spots
173-175	sand & little clay
175-180	sand & gravel with clay streaks.
180-183	sticky brown clay & coarse sand.
183-190	very sticky clay & fine sand & till some gravel.
190-192	loose clays fine & coarse sand.
192-200	very sticky brown clay & sand some small gravel
200-215	coarse sand & loose clay some gravel.
215-225	sticky brown clay & sand & gravel.
225-239	coarse sand & loose clay
239-250	sticky clay sand & gravel (fragmented)
250-258	coarse sand & loose clay
258-280	coarse sand & fine gravel little clay
280-283	coarse sand & gravel increase in sticky clay.
283-308	coarse sand & gravel very loose clay.
308-338	sticky clay & coarse sand
338-341	very sticky clay some sand & gravel.
341-346	sticky clay & coarse sand.
346-353	sand & small fragmented gravel, little clay
353-370	coarse sand very uniform & clay. some gravel.
370-393	increase in clay very sticky
393-400	very sticky clay some sand & gravel (40%) till

0-445	sticky loose clay sand & gravel
445-470	loose clay & coarse sand (80%)
470-473	sticky clay sand & gravel
473-481	coarse sand & gravel loose clay
481-485	very tight sticky clay & coarse sand.
485-494	clay & coarse sand. (Clay is loose & sticky)
494-545	coarse sand fragmented gravel some clay
545-547	coarse sand gravel (jagged) sticky clay
547-560	coarse sand gravel little loose clay. a lot of very jagged white quartz
560-566	coarse sand & gravel little clay very rough drilling very tight
566-573	sticky clay coarse sand and fragmented gravel.
573-583	loose sticky clay coarse sand & gravel.
583-587	coarse sand some gravel (fine) loose sticky clay
587-590	coarse sand spotty gravels tight sticky clay
590-608	coarse uniform sand and loose clay (20%) fine fragmented gravels
608-648	coarse uniform sand sticky clay little gravel
648-673	coarse sand uniform little of no clay very firm.



TLX: 62933889
TWX: 510-601-5891

Water Well Redevelopers, Inc.

1365-B DYNAMICS STREET
ANAHEIM, CALIFORNIA 92806

(714) 996-1462
(714) 779-2425

VIDEOLOG FIELD REPORT

OWNER [redacted]
[redacted]
Los Angeles, Ca. 90004

WELL LOCATION 1/2 mile West of Oak Glen Rd.,
on Davies Ranch Rd.,
San Bernardino, Ca.

WELL NO. 6 TECHNICIAN BC UNIT NO. 1 DATE 4-1-88

WELL HISTORY

Casing: 6" - - 0' to 142'+ Perforations: 25' to 142'+

(Per VIDEOLOG)

Drilled 1979 By Jack Jones Type C-Tool Perf. Type Drilled Holes

Pump: Type DWT Column 4" x 130' Bowls 4" x 8' Depth of Intake 138'

Remarks

VIDEOLOG INFORMATION

SWL 56' TWD 142' Water Visibility GOOD Date 4-1-88

Camera COLOR Tape Format VHS Speed SP Make TDK

Videolog X Revideo ____ Reruns ____ PC Log to Dickinson / Hackers Pump Tape to Dickinson

REMARKS

No camera centering device was used during survey, due to (minimum size) 6" casing diameter. No drag was noted while descending.

8" steel casing is visible from 0' to 5', where a straight reduction to 6" PVC casing exists

The highly reflective white PVC produces glare and requires viewing from behind the saturated ring of light in front of the camera.

Possible roots entering through perforations at 85'.

Organic material can be seen entering through perforations, when disturbed by the camera, see 74', 86' and 100' to 200'. (Also note excessive material being drawn into well bore while camera more rapidly ascends).

Dark stains can be seen on casing adjacent to where bowls setting 130' to 135'.

The casing appears clean and drilled perforations open throughout the survey (i.e., 5' to 141

Casing, reduction, joints and perforations all appear clean and in normal condition.

The entrance of organics along with specific capacity loss would indicate a coagulation of the surrounding formation.

well #2 YVWD #2.

DUPLICATE
Retain this copy

WATER WELL DRILLERS REPORT

(Sections 7079, 7080, 7081, 7082, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Do Not Fill In

No 32912

State Well No.

Other Well No.

2S/2W-11B1

(1) OWNER: Valley

Name [redacted]

Addres [redacted]

(2) LOCATION OF WELL:

County San Bernardino Owner's number, if any 2

Township, Range, and Section NW ¼ of NE ¼ T 2S R 2W Sec. 11

Distance from cities, roads, railroads, etc. Ave. F between 5th & 6th Streets- Yucaipa

(3) TYPE OF WORK *(check):*

New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE *(check):*

Domestic ☒ Industrial ☒ Municipal ☒

Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☐

Cable ☒

Other ☐

(6) CASING INSTALLED:

STEEL: OTHER:

SINGLE ☒ DOUBLE ☐

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	614	16"	¼"			
	638	16"	5/16"			

If gravel packed

Size of shoe or well ring: 16x12x1" Bit Steel Size of gravel:

Describe joint All joints butt weld

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen Mills

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
350	563	8	1	2½ x 7/16"
613	625	8	1	2½ x 7/16"

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☒ No ☐ To what depth 40 ft.

Were any strata sealed against pollution? Yes ☐ No ☒ If yes, note depth of strata

From ft. to ft.

From ft. to ft.

Method of sealing Concrete grout installed between casing and formation

(9) WATER LEVELS:

Depth at which water was first found, if known 308 ft.

Standing level before perforating, if known 308 ft.

Standing level after perforating and developing 308 ft.

(10) WELL TESTS: Will be made by Owner

Pump test made? Yes ☐ No ☐ If yes, by whom?

gal./min. with ft. drawdown after hrs.

Temperature of water Was a chemical analysis made? Yes ☐ No ☐

Was electric log made of well? Yes ☐ No ☐ If yes, attach copy

(11) WELL LOG:

Total depth 638 ft. Depth of completed well 638 ft.

Formation: *Describe by color, character, size of material, and structure*

0	128	Brown clay with sand and gravel
128	190	Loose gravel, some brown clay
190	284	Brown clay, gravel and boulders
284	386	Gravel and boulders, some brown clay
386	414	Light brown clay with gravel embedded
414	430	Loose rough gravel
430	475	Hard tight gravel with trace of gray clay
475	512	Brown and gray clay with gravel embedded
512	563	Rough gravel some g clay
563	613	Tough brown clay
613	619	Gravel, some brown clay
619	638	Tough brown clay

Bob Thompson

Work started Jan. 14 67, Completed Mar. 21, 1967

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME KIRKLAND WELL SERVICE
(Person, firm, or corporation) (Typed or printed)

Address 32291 Dunlap Blvd.
Yucaipa, Calif.

[SIGNED] K. Kirkland
(Well Driller)

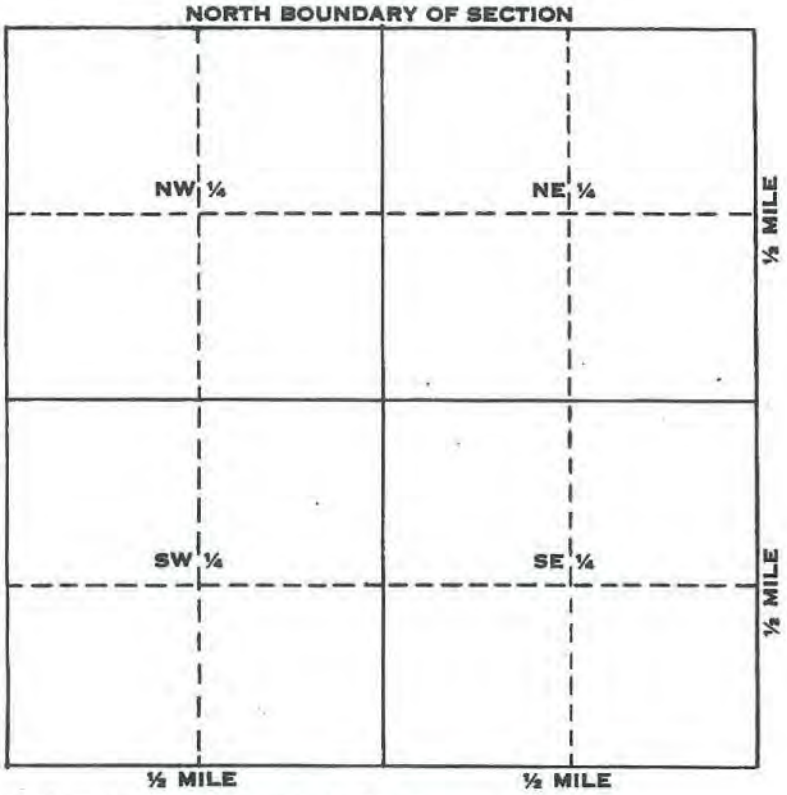
License No. 168847 Dated Mar. 22, 19 67

SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-65)

86291-950 10-65 50M TRIP ① △ OSP

WELL LOCATION SKETCH

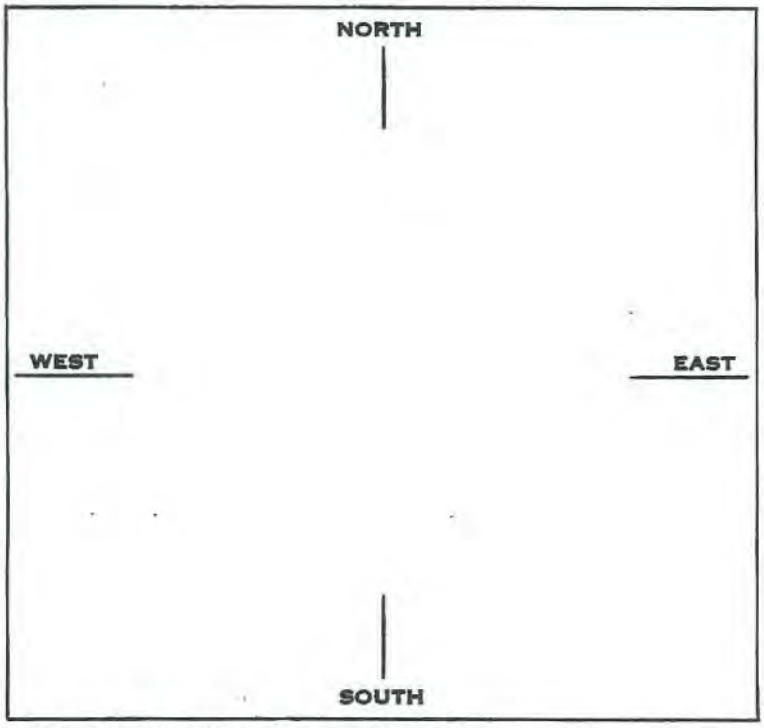


Township 28 N/S

Range 2W E

Section No. 11

A. Location of well in sectionized areas.
Sketch roads, railroads, streams, or other features as necessary.



B. Location of well in areas not sectionized.
Sketch roads, railroads, streams, or other features as necessary.
Indicate distances.

#2

YUCAIPA WATER COMPANY NO. 1
LOG OF WELL NO. 2
S.R. No. 36-01850

LOCATION: Avenue F, between Fifth and Sixth Streets
NW¼ of NE¼, Sect. 11, T2S, R2W, SBB&M

DRILLED BY: Unknown YEAR: 1921

Depth From	Depth To	Material
0	155'	Clay & Gravel
155'	172'	Gravel No cuts
172'	202'	Clay & Gravel
202'	240'	Gravel
240'	260'	Boulders 512 cuts between 225' & 280'
260'	289'	Gravel
289'	300'	Clay & Gravel
300'	315'	Gravel 152 cuts
315'	360'	Clay & Gravel
360'	378'	Gravel 144 cuts
378'	398'	Clay & Gravel
398'	464'	Gravel 320 cuts between 398' & 438' top of Starter

Cuts are about 1/2" wide x 4" long, and are made 8 per foot.

Standard Rig

Note: It [illegible] Spring of 1992 and apparently [illegible]

13/2W-36N1

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

No. 5

WELL DATA

(1) Place and Owner [redacted]

(2) Source of Information Data on File

Collected by [redacted] Date 15 June 62

(3) Number or Name	#5		
Date drilled	Jan. 24, 1946		
(4) Location: Neighborhood	Residential		
Size of lot			
Distance to: Sewer	No sewers in area		
Sewage disposal	Cesspool or septic tank		
Abandoned well			
Nearest property line			
(5) Housing: Type	Metal		
Condition	Good		
Pit depth *(if any)*	None		
Floor *(material)*	Concrete		
Drainage	Yes		
(6) Well Depth	508'		
(7) Casing: Depth	465'		
Diameter	16" to 465' depth		
Kind	Steel-10 ga Double		
Height above floor	4"		
Distance to highest perforations			
Surface sealed *(yes or no)*	Yes		
Gravel pack *(yes or no)*	No		
Second casing depth			
Second casing diameter			
Annular seal *(depth)*			
(8) Impervious Strata Penetrated: Thickness			
Depth to			
(9) Water Levels: Depth to Surface	251.9		
Static			
When Pumping			
(10) Pump: Make	Layne & Bowler		
Type	D.W. Turbine		
Capacity, g.p.m.	750'		
Lubrication	Oil		
Power	N Gas		
Auxiliary power	No		
Control			
Discharge location	Above Ground		
Discharge to	Mains		
(11) Frequency of Use	Cont.		
(12) Flood Hazard	No		
(13) Remarks and Defects (Use other side if necessary)			

(14) Show well log on other side.

COPY

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

15768 2-50 2M SPO

(REV. 1-1-51)
FORM SE-1402

1S/2W-36N1

Well 5
Rec. #36 01853

WELL RECORD

[redacted]

Company

Location Cedar Avenue between 3rd & 4th Streets Elev 2560'

SW 1/4 SW 1/4 Township 1S Range 2W Section 36

PIT

Date drilled January 1946 By Eula Wells Roberts
Depth 508' Diameter Packed

CASING

Diameter 16" Length 465' Gauge 10 ga. - double
" " " "
Perforated interval

COLUMN

Diameter 10" Length 310' Gauge
" 8" " 40' "

Tube diameter Shaft diameter

BOWLS

Date installed March 26, 1963 By Turley Pump Co.
Make Peerless Model 10 MA Serial no. R58283
Size 10" Stages 14 Length Suction 10'

DESIGN PERFORMANCE

GPM	700	RPM	1760	TDH	550	HP	120
GPM	675	RPM	1760	TDH	555	HP	
GPM	600	RPM	1760	TDH	594	HP	

ENGINE

Date installed February 1958 By Wilson Engine Service
Type Nat. Gas Make Climax Model K67 Serial no. 53576
Cu. in. 1616 B & S 7 x 7" HP 125 RPM 880

GEAR

Date installed February 1958 By Ray Roberts
Make U.S. Model 1.2 Serial no. 1138599 HP 150
Shaft Spicer WL 71 Universals

Notes: March 1963 - All new shaft bearings, strainer spiders, head shaft & tension section.

SBVMWD FORM JK-10C

1S/2W-36N1

REDEVELOPING
VIDEOLOGGING
PHOTOLOGGING

Water Well Redevelopers, Inc.

5583 PEBBLE BEACH LANE
YORBA LINDA, CALIFORNIA 92686

TELEPHONE
(714) 996-1462
(714) 779-2425

VIDEOLOG FIELD REPORT

OWNER [redacted]

WELL LOCATION Approximately
34586 Cedar St.
Yucaipa, Calif.

WELL NO. 5

DATE OF VIDEOLOG 12-5-83 BY B.J.C.

WELL HISTORY

Casing: 16" -- 0' to 508'

Perforations: 190' to 199', 220' to 227', 236' to 245', 254' to 355', 366' to 400'& 422' to 470'.

Drilled 1946 By Flula Wells

Type C-Tool Perf's Mills Knife.

Depth of Pump Setting: Column 350' Bowls 10' Suction 10'

Remarks All out for service.

'RING SURVEY

Standing Water Level 174'

Depths Televised 0' to Present Bottom.

Total Well Depth 490'

Water Conditions Good

VIDEO

VTR Beta SETTING 1 TAPE: On File ____ Customer ____ Dealer X None ____

POLAROID SUPPLEMENTS None.

REMARKS

Camera centering guide set at 14"O.D. during survey. No drag noted while camera descended.

Sample mills knife cuts are visible at 2'.

Casing and perforations appear clean and in normal condition from 174' (static) to 400'. Some perforation plugging and or restriction can be seen from 400'± to 470', end of casing.

Open hole from 470' to 490'(bottom).

Perforations on joint 328' and 433'.

Lost airline visible at 475' and 481'.

San Bernardino Valley Municipal Water District

1350 SOUTH "E" STREET - P. O. BOX 5906 - SAN BERNARDINO, CALIFORNIA 92412 - (714) 824-2200
(714) 889-0433

September 9, 1976

[redacted]

Dear Sir:

On behalf of the SBVMWD I would like to thank you for your assistance this summer with our vertical control project.

All of our surveys were run to determine the mean sea elevation of the measuring point for each well. All of our work was done within third order limits.

The following are the wells surveyed and their elevation:

Well No. 4	2346.36 ft.
Well No. 5	2561.98 ft.
Well No. 7	2711.00 ft.
Well No. 8	2364.18 ft.
Well No. 11	2387.92 ft.
Well No. 12	2379.15 ft.
Well No. 13	3180.95 ft.
Well No. 14	3341.77 ft.
Well No. 24	2434.71 ft.
Well No. 33	3127.80 ft.

Thank you again.

Sincerely,

Robert Martin
Water Resources Aide

RM:as

1S/2W-36R1 No. 7

STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC HEALTH

WELL DATA

(1) Place and Owner [redacted]

(2) Source of Information Data on File

Collected by [redacted] Date 15 June 62

(3) Number or Name	#7
Date drilled	October 18, 1950
(4) Location: Neighborhood	
Size of lot	
Distance to: Sewer	No sewer in area
Sewage disposal	Cesspool or septic tank
Abandoned well	
Nearest property line	
(5) Housing: Type	
Condition	
Pit depth *(if any)*	
Floor *(material)*	
Drainage	
(6) Well Depth	695'
(7) Casing: Depth	665'
Diameter	14"
Kind	1/4" Steel
Height above floor	4"
Distance to highest perforations	
Surface sealed *(yes or no)*	Yes
Gravel pack *(yes or no)*	Yes
Second casing depth	
Second casing diameter	
Annular seal *(depth)*	
(8) Impervious Strata Penetrated: Thickness	
Depth to	
(9) Water Levels: Depth to Surface	383.7
Static	
When Pumping	
(10) Pump: Make	Layne & Bowler
Type	Turbine-L.S.
Capacity, g.p.m.	450
Lubrication	Oil
Power	N Gas
Auxiliary power	No
Control	
Discharge location	Above ground
Discharge to	Mains
(11) Frequency of Use	Cont.
(12) Flood Hazard	No
(13) Remarks and Defects (Use other side if necessary)	

(14) Show well log on other side.

COPY

[redacted]

1S/2W-36J #7

LOG OF WELL NO. 7
S.R. No. 36-01855

LOCATION: Cedar and Adams Streets
SE¼ of SE¼, Sect. 36, T1S, R2W, SBB&M

DRILLED BY: E. J. Brockman, Drilling Contractor DATE: Oct. 18, 1950
R. 1, Box 150, Colton, Calif.

Depth From	Depth To	Material
0	18'	Decomposed granite boulders
18'	120'	Sand and rock
120'	184'	Sand and clay with some rock
184'	195'	Clay and rock
195'	223'	Red clay
223'	298'	Sandy clay
298'	315'	Sand and gravel
315'	328'	Sandy clay
328'	340'	Sand and gravel
340'	395'	Sandy clay
395'	415'	Rock and clay
415'	460'	Sandy clay
460'	475'	Rock and clay
475'	514'	Sand
514'	520'	Sandy clay
520'	530'	Cemented gravel
530'	540'	Sandy clay
540'	545'	Sand
545'	552'	Granite ledge
552'	568'	Sandy clay
568'	580'	Sand
580'	584'	Sandy clay
584'	589'	Sand
589'	594'	Clay and rock
594'	605'	Sandy clay
605'	625'	Cemented gravel
625'	635'	Clay and rock
635'	660'	Soft sand clay
660'	688'	Clay and rock
688'	695'	Rock

Hole was reamed to 20" diameter to a depth of 665' and 14" x ¼" wall casing installed to 665'.

1S/2W -36R1

Well 7

WELL RECORD

[redacted]

Company _____

Location Cedar & Adams # 36 01867

SE 1/4 SE 1/4 Township 1 S Range 2 W Section 36

PIT

Date drilled Oct. 1950 By E.S. Brockman

Depth 695' Diameter 30" Packed 665'

CASING

Diameter 14 Length 665 Gauge 1/4"

" " "

Perforated interval _____

COLUMN

Diameter 6 Length 500 Gauge STD

" " "

Tube diameter 2½ Shaft diameter 1½

BOWLS

Date installed 3-25-57 By Roberts

Make Layne & Bowler Model ELL - M Serial no. _____

Size 12 Stages 12 Length _____ Suction 10' of 6"

DESIGN PERFORMANCE

3/25/57

GPM 450 RPM 1650 TDH 423 HP 79

GPM _____ RPM _____ TDH _____ HP _____

GPM _____ RPM _____ TDH _____ HP _____

ENGINE

Date installed _____ By _____

Type _____ Make Waukesha Model Wak R-25A Serial no. 1018788

Cu. in. 1197 B & S 6 1/4 X 6½ HP 96 RPM 900

GEAR

Date installed _____ By _____

Make US Model 1.2 Serial no. 1101571 HP 110

Shaft Delte WI. 61 Universals _____

Notes: 1 CK 189 S Gas Engine Starter - Serial - 1016352

SBVMWD FORM JK-10C

15/2W-36R1

695' 14" DEPTH DIAM. DRILLED

USE

LOG AVAILABLE Yes

San Bernardino Valley Water Conservation District
REDLANDS, CALIFORNIA

WELL RECORDS

WELL NO.

LOCATION NO. Yuc. W. Co. No. 1 #7

36-01855

LOCATION 80' n/o Cedar, 40' w/o Adams

OWNER [redacted] - Well No. 20 (old) (new) No. 7

EQUIPMENT

DESCRIPTION OF M. P. Top of casing

ELEV. M. P.

ELEV. G. S. 2710

LEVELS BY

DATE	OBSERVER	DEPTH TO WATER	ELEVATION OF WATER	REMARKS
1950				
11-03	Hicks	316.7	2393.3	To top casing
1951				
3-03	Serber	317.1	2392.9	
4-04	Hicks	317.2	2392.8	To top casing
5-15	Serber	319.7	2390.3	
1952				
4-11	Hicks	325.7	2384.3	New bench plug-outlet pipe
4-11	Edison Co.	325	2385	1.65' above pump base
1953				
3-17	Serber	328.6	2381.4	
1955				
3-28	USGS	334.8	2375.2	
8-9	Edison Co.	367.2	2342.8	
8-9	"	497.7	2212.3	Pumping 434 GPM
9-17	USGS	400±	2310	
1957				
4-2	Dibble	346.6	2363.4	2" pipe East side
1958				
4-28	Foster	466.6	2243.4	Pumping
1960				
3-9	Hanstad	383.7	2326.3	Idle
1961				
4-24	Stafford	440.6	2269.4	Pumping
1963				
3-20	SBCFCD	383.7	2322.3	
1967			2328	

[redacted]

25/2W-20J #8

LOG OF WELL NO. 8
S.R. No. 36-01856

NOT #8

LOCATION: Hill Ranch
NW¼ of SW¼, sect. 25, T1S, R2W, SBB&M
DRILLED BY: E. J. Brockman YEAR: March 3, 1951 completed
R. 1, Box 150
Colton, Calif.

Depth From	Depth To	Material
0	4'	Top Soil
4'	50'	Sand and rock
50'	85'	Sandy clay
85'	105'	Sand and small gravel
105'	178'	Sandy clay
178'	222'	Sand and coarse gravel
222'	260'	Hard clay
260'	274'	Sand and small gravel
274'	300'	Sandy clay
300'	306'	Sand
306'	340'	Clay and rock
340'	354'	Rock and Sand
354'	415'	Sandy clay
415'	425'	Sand
425'	478'	Sand with streaks of clay
478'	506'	Hard clay

Hole was reamed to 16" to 363' and 10" x 3/16" casing installed. 10" casing was perforated with 3/16" x 4" slots 4 to the round every foot.

Hole was reamed to 10" from 363' to 506' and 6" x 1/8" casing installed. 6" casing was perforated all the way with 3/16" x 4" slots 4 to the round, one round every foot.

Hole was gravel packed with 3/8" gravel all the way.

Static water level 115'

Well on the pump test pumped the following capacities:

from 143' - 162 GPM
" 166' - 279 GPM
" 178' - 342 GPM

Rotary Rig

2S/2W-2P1 Well 8

WELL RECORD

Rec. #36 01997

[redacted]

Company

Location 8th Street South of Washington Drive Elevation = 2360'

NE 1/4 NE 1/4 Township 2 S Range 2 W Section 3

PIT

Date drilled 1959 By

Depth 750' Diameter Packed 500'

CASING

Diameter 16" Length 500' Gauge 10 ga.

" " "

Perforated interval

COLUMN

Diameter 8" Length 400 Gauge STD

" " "

Tube diameter Shaft diameter

BOWLS

Date installed March 18, 1963 By Turley Pump Company

Make Model 10 LA Serial no. R 58225

Size 10" Stages 11 Length Suction 10'

DESIGN PERFORMANCE

GPM 450	RPM 1760	TDH 400	HP 55
GPM	RPM	TDH	HP
GPM	RPM	TDH	HP

ENGINE

Date installed 3-63 (from #3 well) By

Type Elect. Make U.S. Model HU Serial no. 1251837

Cu. in. B & S HP 60 RPM 1800

GEAR

Date installed By

Make Model Serial no. HP

Shaft Universals

Notes: Pump test July 25, 1966

Pump Head Jacuzzi - Pump as shown

SBVMWD FORM JK-10C

[redacted]

LOG OF WILDWOOD CANYON WELL
S.R. No. 36-01804

2S/1W-8E1

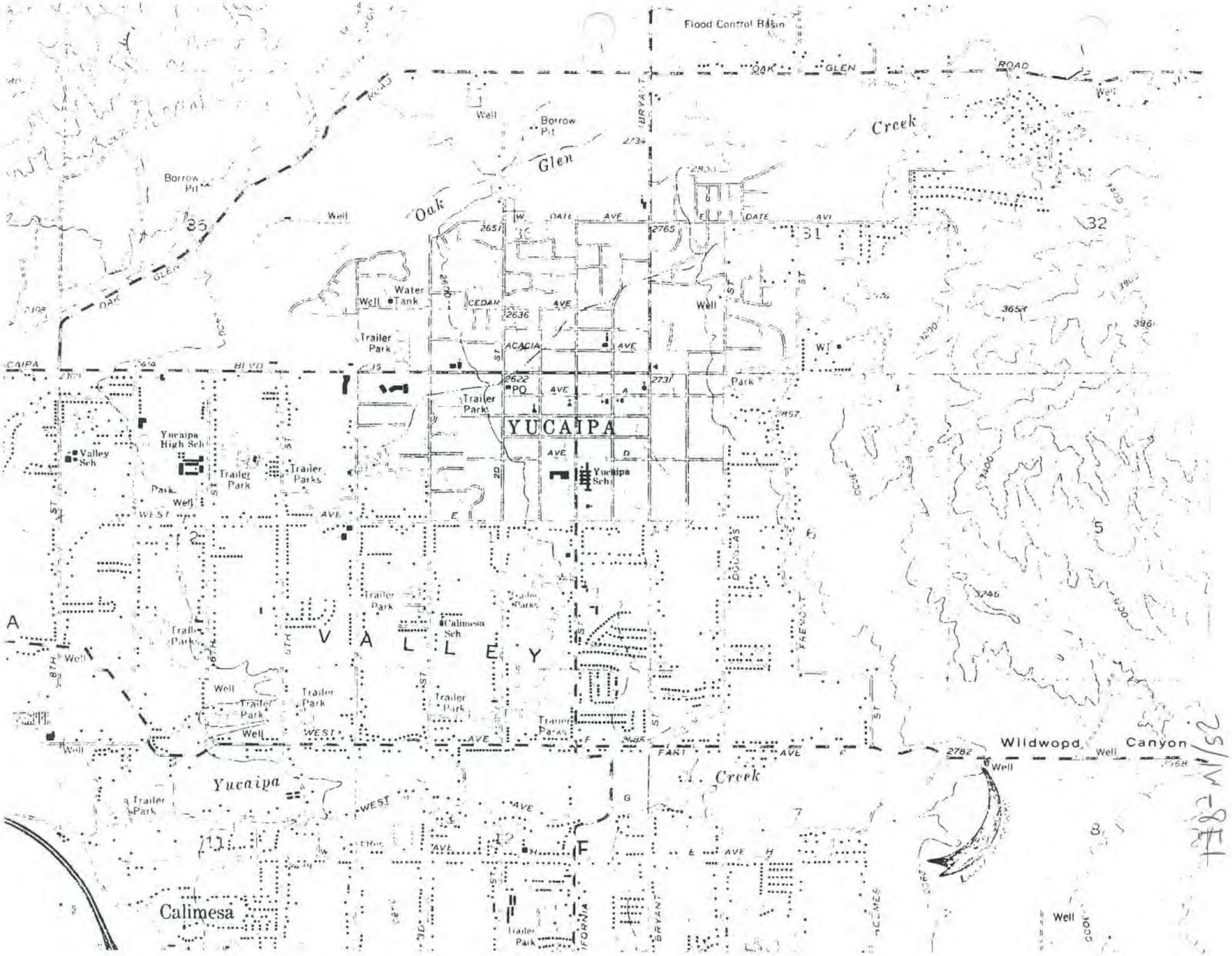
Well -15

LOCATION: Wildwood Canyon
NW¼ of NW¼, Sect. 8, T2S, R1W, SBB&M

DRILLED BY: Unknown YEAR: Unknown

Depth From	Depth To	Material
0	85'	Gravel size of a pea to 6" mixed with sand & some clay to cement slightly not enough water to attract attention above 80'.
85'	90'	Sand & clay mixed not cemented but loose.
90'	129'	Gravel size of a pea to 6" with sand and no clay.
129'	145'	Decomposed granite or soft schist becoming harder as well went down.

All 100 perforations between 50' and 129' below surface perforation 8" to 18" long and average width 5/8 of an inch.



Flood Control Basin
OAK GLEN ROAD
Well
Borrow Pit
Creek
Glen
Oak
DATE AVE
BRYANT
Water Tank
CEDAR AVE
ACACIA AVE
Trailer Park
BLVD
PO
YUCAIPA
Yucaipa High Sch
Valley Sch
Trailer Parks
Yucaipa Sch
WEST AVE
DOUGLAS
FREMONT
VALLEY
Calimesa Sch
EAST AVE
Wildwood Canyon
Yucaipa
Creek
Calimesa

2S/1W-8E1

Well Wildwood #15

WELL RECORD

[redacted]

Company _____

Location Wildwood Canyon 36 01864

NW 1/4 NW 1/4 Township 2 S Range 1 W Section 8

PIT

Date drilled Unknown By Unknown

Depth 145 Diameter _____ Packed _____

CASING

Diameter 12 Length 145 Gauge 1/4

" _____ " _____ " _____

Perforated interval 50 - 129

COLUMN

Diameter 5 Length 120 Gauge STD

" _____ " _____ " _____

Tube diameter 1½ Shaft diameter 1

BOWLS

Date installed _____ By _____

Make Wintroath Model 8-75 Serial no. _____

Size 8 Stages 5 Length _____ Suction 10 ft.

DESIGN PERFORMANCE

GPM _____ RPM _____ TDH _____ HP _____

GPM _____ RPM _____ TDH _____ HP _____

GPM _____ RPM _____ TDH _____ HP _____

ENGINE

Date installed _____ By _____

Type Elec. Make GE Model 12 F 56715 Serial no. XCS 6721749

Cu. in. _____ B & S _____ HP 7½ RPM _____

GEAR

Date installed _____ By _____

Make _____ Model _____ Serial no. _____ HP _____

Shaft _____ Universals _____

Notes: _____

SBVMWD FORM JK-10C

well 15-1
Test well

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in
No. 182243

e of Intent No.
al Permit No. or Date 07208924

State Well No.
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City [redacted] Zip [redacted]

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number
Well address if different from above Wildwood Canyon
Township 2 S Range 1 W Section 8
Distance from cities, roads, railroads, fences, etc.
Assessors Parcel #322-212-05

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☒
Stock ☐
Municipal ☐
Other ☐

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size Pea Gravel
Diameter of bore 12 ¼
Packed from 0 to 315 ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	315	6	1/8

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
80	295	.090

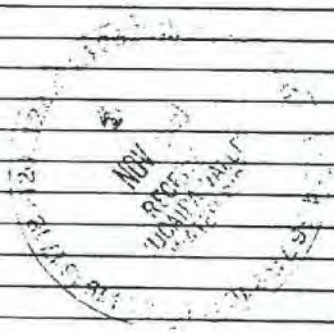
(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☐ No ☒ If yes, to depth ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing

(10) WATER LEVELS:
Depth of first water, if known 62 ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☒ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☒
Depth to water at start of test ft. At end of test ft
harge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☒ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 315 ft. Depth of completed well 315 ft.
from ft. to ft. Formation (Describe by color, character, size or material)

0 - 102 ft Fine sand short streak of clay.
102 - 149 ft Medium & coarse sand, gravel mix.
149 - 315 ft Blue Granite (Decompose).



Work started 6-14 19 89 Completed 6-23 19 89

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED (Well Driller)

NAME SoCal Pump & Well Service, Inc. (Person, firm, or corporation) (Typed or printed)
Address 585 W. Valley Blvd
City Bloomington, California Zip 92316
License No. 510836 Date of this report Nov 1, 1989

R 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

This is our well Dave Pofund

15/1W-33M1

Well BAUMANN 1 ½

WELL RECORD
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

Company________

Location S of Potato Canyon Rd. Lot 7 - So Mtn Sub. 36 01866

SE 1/4 SE 1/4 Township 1 S Range 1 W Section 27

PIT

Date drilled________ By________

Depth 115 Diameter________ Packed________

CASING

Diameter 8 Length 115 Gauge 12

" ________ " ________ " ________

Perforated interval________

COLUMN

Diameter 3 Length 90 Gauge STD

" ________ " ________ " ________

Tube diameter 1 1/4 Shaft diameter 3/4

BOWLS

Date installed________ By________

Make Peerless Model 6 L.A. Serial no.________

Size 6 Stages 12 Length________ Suction 10

DESIGN PERFORMANCE

GPM________ RPM________ TDH________ HP________

GPM________ RPM________ TDH________ HP________

GPM________ RPM________ TDH________ HP________

ENGINE

Date installed________ By________

Type________ Make Waukesha 4 cyl Model ICK 136C Serial no. 758040

Cu. in. 61 B & S 2½x3 1/8 HP 10.5 RPM 1950

GEAR

Date installed________ By________

Make Johnson Model HA - 2.3 Serial no. 17348 HP 15

Shaft Spicer Universals________

Notes:________

SBVMWD FORM JK-10C

1S/1W-33M1

TRIPLICATE
Owner's Copy

Well 16

Page 1 of 1

Owner's Well No. 16

Date Work Began 4/23/01 . Ended 4/27/01

Local Permit Agency San Bernardino County Health Services

Permit No. 20010402O4 Permit Date 4/13/01

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 584982

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)

DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	50	Installed sanitary seal on existing well, bored 6" around existing 16" casing and filled with 6 sack concrete and pea gravel by tremmie pipe Depth of Sanitary seal 50'

TOTAL DEPTH OF BORING ___ (Feet)

TOTAL DEPTH OF COMPLETED WELL ___ (Feet)

WELL OWNER

Name [redacted]

Mailing Address [redacted]

CITY [redacted] STATE ZIP

WELL LOCATION

Address Canyon Drive 3/4 mile east of Oak Glen

City Yucaipa

County San Bernardino

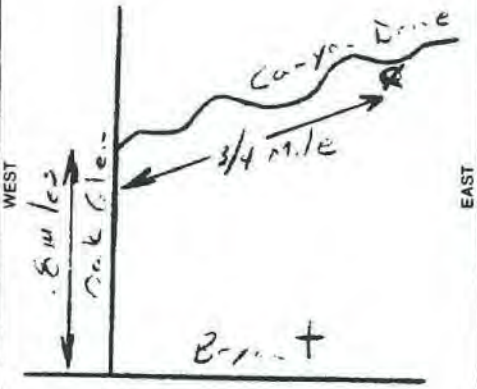
APN Book 0321 Page 251 Parcel 14

Township 1S Range 1 Section 33

Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

NORTH



SOUTH

Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc.
PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

___ NEW WELL

MODIFICATION/REPAIR

___ Deepen

X Other (Specify) **Sanitary Seal**

___ DESTROY *(Describe Procedures and Materials Under "GEOLOGIC LOG")*

PLANNED USE(S) (✓)

___ MONITORING

WATER SUPPLY

___ Domestic

X Public*

___ Irrigation

___ Industrial

___ "TEST WELL"

___ CATHODIC PROTECTION

___ OTHER (Specify)

DRILLING METHOD ___ FLUID ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL ___ (Ft.) & DATE MEASURED ___

ESTIMATED YIELD* ___ (GPM) & TEST TYPE ___

TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (Ft.)

** May not be representative of a well's long-term yield.*

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	CASING(S) TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL/GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)

DEPTH FROM SURFACE Ft.	to Ft.	ANNULAR MATERIAL TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	X			N/A

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other ___

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Tri County Pump Company
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 241 South Arrowhead Ave. CITY San Bernardino STATE CA ZIP 92408

Signed ___ (WELL DRILLER/AUTHORIZED REPRESENTATIVE)

DATE SIGNED 5/9/01

C-57 LICENSE NUMBER 744742

DWR 188 REV. 7-90

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Well 17 [illegible]   2S/1W-2L1

TRIPLICATE
Owner's Copy

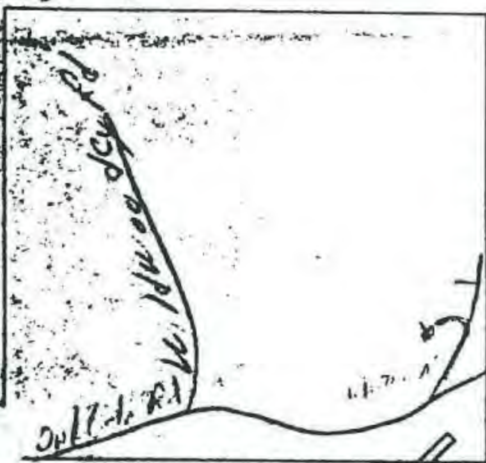
Notice of Intent No.
Permit No. or Date

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in
No. 15689
State Well No. 02S/07W-02L02
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City [redacted] Zip [redacted]

(2) LOCATION OF WELL (See instructions):
County San Bernadino   Owner's Well Number W-62
Well address if different from above
Township   Range   Section
Distance from cities, roads, railroads, fences, etc.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☒
Other ☐

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size
Diameter of bore
Packed from   to   ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia.	Gage or Wall

(8) PERFORATIONS:
Type of perforation or size of screen

From	To	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth ___ ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ___ ft.
Method of sealing Steel & Cement

(10) WATER LEVELS:
Depth of first water, if known 80 ft.
Standing level after well completion 65 ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☒
Depth to water at start of test ___ ft. At end of test ___ ft
Discharge 100 gal/min after ___ hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 180 ft. Depth of completed well 180 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	10	Brown DG & Firm
10	20	Brown DG & Firm
20	40	firmeDG brown
40	80	Gravel brown DG mix
80	100	rusty brown gravel water
100	140	brown DG firm
140	150	black sand stone or rock
150	160	brown green DG
160	180	Harder DG brown
180		STOP

Work started 4-7 1987   Completed 4-9 1987

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED ______ (Well Driller)

NAME Ron Engeldinger (Person, firm, or corporation) (Typed or printed)
Address P.O. Box 250
City Hemet, Ca.   Zip 92343
License No. 294625   Date of this report 4-16-87

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

WR 188 (REV. 7-76)

was 50 ft sanitary seal   pumps [illegible]

Well 17 [redacted] 2S/1W-24 well 62

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill
No. 15689

Notice of Intent No. [redacted]
Permit No. or Date [redacted]

State Well No. [redacted]
Other Well No. [redacted]

(1) OWNER: Name [redacted]
Address [redacted]
City [redacted] Zip [redacted]

(2) LOCATION OF WELL (See instructions):
County San Bernadino Owner's Well Number [redacted]
Well address if different from above [redacted]
Township [redacted] Range [redacted] Section [redacted]
Distance from cities, roads, railroads, fences, etc. [redacted]

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [ ]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:
Rotary [ ] Reverse [ ]
Cable [ ] Air [X]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:
Yes [ ] No [ ] Size [redacted]
Diameter of bore [redacted]
Packed from [redacted] to [redacted] ft.

(7) CASING INSTALLED:
Steel [ ] Plastic [X] Concrete [ ]

From ft.	To ft.	Dia. in.	Gage or Wall
	180	8"	

(8) PERFORATIONS:
Type of perforation or size of screen [redacted]

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [X] No [ ] If yes, to depth [redacted] ft.
Were strata sealed against pollution? Yes [ ] No [X] Interval [redacted] ft.
Method of sealing Steel & Cement

(10) WATER LEVELS:
Depth of first water, if known 80 ft.
Standing level after well completion 65 ft.

(11) WELL TESTS:
Was well test made? Yes [X] No [ ] If yes, by whom? [redacted]
Type of test Pump [X] Bailer [ ] Air lift [X]
Depth to water at start of test [redacted] ft. At end of test [redacted] ft.
Discharge 100 gal/min after [redacted] hours Water temperature [redacted]
Chemical analysis made? Yes [ ] No [X] If yes, by whom? [redacted]
Electric log made? Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 180 ft. Depth of completed well 180 ft.
from ft. to ft. Formation (Describe by color, character, size or material)

0 10 Brown DG & Firm
10 20 Brown DG & Firm
20 40 firmeDG brown
40 80 Gravel brown DG mix
80 100 rusty brown/gravel water
100 140 brown DG firm
140 150 black/sand stone or rock
150 160 brown/green DG
160 180 Harder DG brown
180 STOP

USE 752

Work started 4-7 19 87 Completed 4-9 19 87

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED [redacted] (Well Driller)
NAME Ron Engeldinger (Person, firm, or corporation) (Typed or printed)
ADD. P.O. Box 250
CITY Hemet, Ca. Zip 92343
License No. 294625 Date of this report 4-16-87

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 43816-850 7-76 50M QUAD (1) T OSP

15/2W-25G1

FROM : SOCAL PUMP & WELL DRILLING INC FAX NO. : 9093415031 Dec. 07 2000 09:40AM P2

ORIGINAL
File with DWR

Page 1 of 1

Owner's Well No. [redacted] WEll #19

Date Work Began 9/28/99 Ended 10/12/99

Local Permit Agency San Bernardino County EHS Div

Permit No. 1999100830 Permit Date 10/22/99

STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. 766676

DWR USE ONLY — DO NOT FILL IN

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) ___ VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)

DRILLING METHOD ___ FLUID ___

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION (Describe material, grain size, color, etc.)
	Excavated down 6 feet, graveled well up to 50 feet and pumped in a 50 feet 10 sack sand slurry mix.

TOTAL DEPTH OF BORING ___ (Feet)

TOTAL DEPTH OF COMPLETED WELL ___ (Feet)

WELL OWNER

Name [redacted]

Mailing Address [redacted]

Yucaipa CA 92399
CITY STATE ZIP

WELL LOCATION

Address Fir/Coldstein

City Yucaipa

County San Bernardino

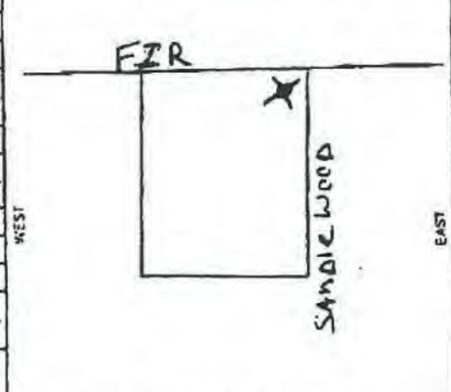
APN Book ___ Page ___ Parcel 303-391-78

Township 1S Range 2W Section 25

Latitude ___ NORTH Longitude ___ WEST
DEG. MIN. SEC.

LOCATION SKETCH

NORTH



SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

___ NEW WELL

MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)

X DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY
___ Domestic ___ Public
___ Irrigation ___ Industrial

MONITORING ___
TEST WELL ___
CATHODIC PROTECTION ___
HEAT EXCHANGE ___
DIRECT PUSH ___
INJECTION ___
VAPOR EXTRACTION ___
SPARGING ___
REMEDIATION ___
OTHER (SPECIFY) ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL ___ (Ft.) & DATE MEASURED ___

ESTIMATED YIELD * ___ (GPM) & TEST TYPE ___

TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (Ft.)

* May not be representative of a well's long-term yield.

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	CASING (S) TYPE (✓) BLANK	SCREEN	CON-DUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)

DEPTH FROM SURFACE Ft. to Ft.	ANNULAR MATERIAL TYPE CE-MENT (✓)	BEN-TONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other ___

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME SoCal Pump & Well Drilling, Inc.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

P.O. Box 5488 Riverside CA 92517
ADDRESS CITY STATE ZIP

Signed [signature] 12-7-00 510836
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

1S/2W-25G1

Well 19
36-01105

WELL RECORD

SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

Company _____

Location 1200 W. Bryant 800 No. Oak Glen ELEV 2770

NW 1/4 SE 1/4 Township 1S Range 1W Section 25

PIT

Date drilled _____ By _____

Depth 365 Diameter _____ Packed _____

CASING

Diameter 16 Length 365 Gauge _____

" _____ " _____ " _____

Perforated interval _____

COLUMN

Diameter _____ Length 300 Gauge _____

" _____ " _____ " _____

Tube diameter _____ Shaft diameter _____

BOWLS

Date installed _____ By Coe

Make Pomona Model Water tube Serial no. _____

Size _____ Stages _____ Length _____ Suction _____

DESIGN PERFORMANCE

GPM _____ RPM _____ TDH _____ HP _____

GPM _____ RPM _____ TDH _____ HP _____

GPM _____ RPM _____ TDH _____ HP _____

ENGINE

Date installed _____ By _____

Type Elect Make G.E. Model 12F3262 Serial no. 5777487

Cu. in. _____ B & S _____ HP 30 RPM 1770

GEAR

Date installed _____ By _____

Make _____ Model _____ Serial no. _____ HP _____

Shaft _____ Universals _____

Notes: Motor Rewind 64

SBVMWD FORM JK-10C

1S/2W-25G1

Well 1G1
36-01165

MONTHLY PRODUCTION RECORD

SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

Company _____

Month of _____ 5655

DATE	WATER METER	GPD	GPM	GAS METER	Cu. Ft.	OIL	MIN. DOWN
64 J				3879		—	15
F				4041			140
M				4092		22.73	85
A				4116			150
M				4137		8436	80
J				4160			12.5
J				4196		8951	190
A				4251			145
S				4294		89.87	18
O				4341			20
N				4404		10.30	9
D				4428			5-1/2
	200 GPM						
							201.5
65 J				4444		3.59	3
F				4453			5.5
M				4468		4.37	4.5
A				4482			4.0
M				4494		82.64	12.0
J				4520			14
J				4558		87.95	17.5
A				4608			
S				4676		86.70	17
O				4676			14
N				4715		9.52	8.5
D				4733			8.5
	200 GPM est.						
	1,242,000 GAL. 3.81 AF.						
TOT.							

REMARKS _____

SBVMWD FORM JK-101

WW #20

FROM: DEPT WATER RESOURCES FAX NO.: 8185434604 08-06-97 11:12A P.02

DUPLICATE

...ginal, Duplicate and Triplicate with the ...ONAL WATER POLLUTION ...ROL BOARD No. 7 (appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

Do Not Fill In

No. 59344

State Well No. 1S/2W-25 R01

Other Well No.

(1) OWNER:

Name [redacted]

Address [redacted]

(2) LOCATION OF WELL:

County San Bernardino Owner's number, if any

R. F. D. or Street No. South 120 acres of SE¼, section 25, T1S Range 2W, NW corner of Bryant and Oak Glen, Yucaipa, Calif.

(3) TYPE OF WORK (check):

New well X Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal X

Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary X

Cable ☐

Dug Well ☐

(6) CASING INSTALLED:

SINGLE X DOUBLE ☐

From ft.	To ft.	Diam.	Gage or Wall	If gravel packed: Diameter of Bore	From ft.	To ft.
	590	12 3/4"	¼	18 5/8"	0	590

8 5/8" to 12 3/4" ...ing guides

pea ...tile

Type and size of shoe or well ring

Describe joint welded ... joint collars

(7) PERFORATIONS:

Type of perforator used mill cut

Size of perforations 120 mesh ... in., length, by 14 rows in.

From ft.	to ft.	Perf. per row	Rows per ft.
190	590	120 mesh	14

(8) CONSTRUCTION:

Was a surface sanitary seal provided? X Yes ☐ No To what depth 150 ft.

Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata

From ft. to ft.

Method of Sealing Rotary mud slurry

(9) WATER LEVELS:

Depth at which water was first found ft.

Standing level before perforating ft.

Standing level after perforating 400 ft. ft.

(10) WELL TESTS:

Was a pump test made? X Yes ☐ No If yes, by whom? C.V. Pump

Yield: 830 gal./min. with 340 ft. draw down after 24 hrs.

Temperature of water Was a chemical analysis made? ☐ Yes X No

(11) WELL LOG:

Total depth 590 ft. Depth of completed well 590 ft.

Formation: Describe by color, character, size of material, and structure

From ft.	to ft.	Formation
0	58	coarse sand & gravel
58	70	coarse sand & gravel
70	104	coarse sand w streaks of heavy gravel
104	149	coarse sand w/gravel
149	190	sand & gravel
190	220	coarse sand
220	240	coarse sand
240	255	sand & gravel
255	280	sand w/ some clay
280	290	sand & gravel
290	300	sand & rock
300	320	sand & gravel
320	340	rocks & sand
340	375	sand & rock
375	395	snad & gravel, free
395	410	sand
410	440	hard sand & rock
440	480	hard sand & rock
480	500	coarse sand
500	555	coarse sand
555	578	coarse sand
578	590	coarse sand
590		Hard rock

CONFIDENTIAL - NOT FOR PUBLIC RELEASE

MICROFILMED

Work started 6/8 .62 Completed July 20 .62

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Coachella Valley Pump & Supply, I...

(Person, firm, or corporation) (Typed or printed)

Address P.O. Box 1274

Indio, Calif.

[SIGNED] ... (Well Driller)

License No. 161541 Dated , 19

DWR 188 (REV. 5-...)

DUPLICATE
ginal, Duplicate and Triplicate with the
ONAL WATER POLLUTION
TROL BOARD No. 7
(appropriate number)

WATER WELL DRILLERS REPORT

(Sections 7076, 7077, 7078, Water Code)

WELL WAS #'D R01, R02 & R03

STATE OF CALIFORNIA

AS OF 8-7-97 - 015/02W-25R02S

Do Not Fill In

No 59344

State Well No. 1S/2W-25 R01

Other Well No.

OWNER:

Name [redacted]

Address

(2) LOCATION OF WELL:

County San Bernardino Owner's number, if any—

R. F. D. or Street No.

South 133 acers of SE¼, section 25, T1S Range 2W, NW corner of Bryant and Oak Glen, Yucaipa, Calif.

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☐ Industrial ☐ Municipal ☒

Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒

Cable ☐

Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☒ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall
590	12 3/4"		¼
18 5/8" to 12 5/4"			
ding guides			

If gravel packed

Diameter of Bore	from ft.	to ft.
18 5/8"	0	590

Type and size of shoe or well ring

Size of gravel Sm pea

Describe joint welded slip joint collars Holtville

(7) PERFORATIONS:

Type of perforator used mill cut

Size of perforations 120 mesh, length, by 14 rows in.

From ft.	to ft.	Perf. per row	Rows per ft.
590	590	120 mesh	14

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☒ Yes ☐ No To what depth 150 ft.

Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata

From ft. to ft.

Method of Sealing Rotary mud slurry

(9) WATER LEVELS:

ft. which water was first found ft.

g level before perforating ft.

g level after perforating 400 ft. ft.

WELL TESTS:

ump test made? ☒ Yes ☐ No If yes, by whom? C.V. Pump

Yield: 850 gal./min. with 340 ft. draw down after 24 hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☒ No

Was electric log made of well? ☐ Yes ☒ No

(11) WELL LOG:

Total depth 590 ft. Depth of completed well 590 ft.

Formation: *Describe by color, character, size of material, and structure.*

ft. to	ft. to	
0	58	coarse sand & gravel
58	70	coarse sand & gravel
70	104	coarse sand w streaks of heavy gravel
104	149	coarse sand w/gravel
149	190	sand & gravel
190	220	coarse sand
220	240	coarse sand
240	255	sand & gravel
255	280	sand w/ some clay
280	290	sand & gravel
290	300	sand & rock
300	320	sand & gravel
320	340	rocks & sand
340	375	sand & rock
375	395	sand & gravel, free
395	410	sand
410	440	hard sand & rock
440	480	hard sand & rock
480	500	coarse sand
500	555	coarse sand
555	578	coarse sand
578	590	coarse sand
590		Hard rock

No test yield

CONFIDENTIAL - NOT FOR PUBLIC RELEASE

AUG 11 1997

MICROFILME

Work started 6/8 19 62 Completed July 20 62

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Coachella Valley Pump & Supply, Inc.

(Person, firm, or association) (Typed or printed)

Address P.O. Box 1274

Indio, Calif.

[SIGNED] [signature]

Well Driller

License No. 161541 Dated , 19

87028 6-67 50M QUIN △ SPO

DWR 188 (REV. 3-54)

#20

COACHELLA VALLEY PUMP & SUPPLY, Inc.

JOHNSTON PUMP DISTRIBUTORS
COMPLETE PUMPING EQUIPMENT
DOMESTIC AND IRRIGATION

Licensed Contractors
Telephone EXpress 9-2192
P. O. BOX 1274 ☆ INDIO, CALIF. 92201

SPRINKLER IRRIGATION SYSTEMS
WATER WELL DRILLING
FABRICATED STEEL PIPE

May 30, 1968

San Bernardino Valley Municipal Water District
L.D. Hook, Water Superintendent
P.O. Box 458
Yucaipa, California 92399

Dear Mr. Hook:

I cannot find a copy of the report that was sent to the State on their forms, but below is the needed information as we have in our records. This information is the same as that reported.

Drilled for: E.J. Culligan
Started: June8, 1962
finished: July 20, 1962
Legal description: South 133 acres of SE¼, Sec. 25; T1S; R2W; NW corner of Bryant and Oak Glen, Yucaipa, Calif.

Well Log:

0'	to	58'	Coarse sand & gravel
58'		70'	coarse sand & gravel
70		104	coarse sand w/streaks of heavy gravel
104		149	coarse sand w/gravel
149		190	sand & gravel
190		240	coarse sand
240		255	sand & gravel
255		280	sand w/some clay
280		290	sand & gravel
290		300	sand & rock
300		320	sand & gravel
320		340	rocks & sand
340		375	sand & rock
375		395	sand & gravel
395		410	sand
410		480	hard sand & rock
480		590	coarse sand
590		597	hard rock

Casing record:

0'	590'	12 3/4" OD X ¼" wall casing
190'	590'	perforations, mill cut, 120 mesh, 14 rows

Water standing level: 400'

diameter of drilled hole: 18 5/8"

Size of gravel: small pea

Sealed to 150'

Yours truly,

Julia Mendoza

State of California
DEPARTMENT OF WATER RESOURCES
Southern District

FACSIMILE TRANSMISSION COVER SHEET

DATE: 8/6/97

TO: Ron McCool
NAME OF RECIPIENT

YVWD
ORGANIZATION

909 7976381
FAX NUMBER OF RECIPIENT

PHONE NUMBER OF RECIPIENT

FROM: Gary Gilbreath
NAME OF SENDER

818 543-4600 Ext 222
PHONE

Data Section Fax # 818 543-4604
SECTION OR UNIT

770 Fairmont Ave. Glendale, Ca. 91203

1 PAGES TO FOLLOW

APPROVAL

SUBJECT: per our conversation

COMMENTS:

IF ALL PAGES SHOWN ARE NOT RECEIVED, PLEASE CALL:
ATSS 8-667-4600 OR PUBLIC 818-543-4600

SOUTHERN DISTRICT FACSIMILE MACHINE PHONE NUMBERS ARE:
ATSS 8-667-4604 OR PUBLIC 818-543-4604

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

State Well No. 01S / 02W- 25R01, S B&M

WELL INDEX

Location No.
Serial or Ventura No.
Local or Riv. No.
Bulletin 39-J No.
Other No. Log No 59344

County 36
Areal Designation ~~Y-01 F6~~
Areal Code No. 8 Y-01. F6

Well Condition 4
Ref. Pt. Elev. 2762.0 ft.
Effective Date
Ground Elev. 2760.0 ft.

Data Available		Filed Under
Log	2	5050
Water Analyses	-	
Water Levels	-	
Prod. Records	-	

Original Well Depth 0590 ft.
Well Soundings
Casing: Dia. 12 3/4 in., Length 0590 ft.
Perf. 190' to 590'

Well Use 3

Aquifer(s)
Record: Begins 6/8/62, Ends

State of California
The Resources Agency
DEPARTMENT OF WATER RESOURCES

State Well No. 01S / 02W 25R 02S B&M

WELL INDEX

Location No.
Serial or Ventura No.
Local or Riv. No.
Bulletin 39-J No.
Other No. Yucaipa V.C.W.D Nr 20

County S. Bernardino (36)
Areal Designation
Areal Code No. Y 01 F6

Well Condition
Ref. Pt. Elev. 2740' ft.
Effective date
Ground Elev. ft.

Data Available	Filed Under
Log	
Water Analyses	
Water Levels	
Prod. Records	

Original Well Depth 576 ft.
Well Soundings
Casing Dia. 12 in., Length ft.
Perf.

Well Use
Well Type

Aquifer(s)
Record: Begins , Ends

DWR 1058 (Rev. 6/70)

AUG 1 1 1997

Well 20

WELL RECORD

Rec. #36 02321

SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

Company _____

Location 400' No. of Oak Glen Road - 1000' W. of Bryant Street

SE 1/4 SE 1/4 Township 1S Range 2W Section 25

PIT

Date drilled 1962 By _____

Depth 576' Diameter 12" Packed No

CASING

Diameter 12" Length 576' Gauge 1/4

" _____ " _____ " _____

Perforated interval _____

COLUMN

Diameter 8" Length 460' Gauge _____

" 6" " 50' " _____

Tube diameter 2½" Shaft diameter 1½"

BOWLS

Date installed April 1966 By Turley Pump Co.

Make Peerless Model 8 LB Serial no. 250120

Size 8" Stages 22 Length _____ Suction Strainer

DESIGN PERFORMANCE

GPM 275	RPM 1760	TDH 620	HP 60
GPM _____	RPM _____	TDH _____	HP _____
GPM _____	RPM _____	TDH _____	HP _____

ENGINE

Date installed 11-65 By Turley Pump Co.

Type Elect. Make U.S. Model _____ Serial no. 3831181

Cu. in. _____ B & S _____ HP 60 RPM 1760

GEAR

Date installed _____ By _____

Make _____ Model _____ Serial no. _____ HP _____

Shaft _____ Universals _____

Notes: 540' Air Line

SBVMWD FORM JK-10C

2S/2W-11B2

QUINTUPLICATE
RETAIN THIS COPY

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA

Do Not Fill In 24
No 122021

State Well No.
Other Well No.

(1) OWNER:
District
Name [redacted]
Address [redacted]

(2) LOCATION OF WELL:
County San Bernardino Owner's number, if any- [redacted]
R. F. D. or Street No. 100 ft.-of east of 5th St. - 1000 feet north of Ave. F - Yucaipa

(3) TYPE OF WORK (check):
New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic ☐ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:
Rotary ☐
Cable ☒
Dug Well ☐

(6) CASING INSTALLED:
SINGLE ☒ DOUBLE ☐

From	ft. to	ft.	Diam.	Gage or Wall
0	566	16	1/4	
566	590	16	5/16"	

Type and size of shoe or well ring 16"x12"x1" Bit steel
Describe joint All joints butt weld

If gravel packed

Diameter of Bore	from ft.	to ft.

(7) PERFORATIONS:
Type of perforator used Mills
Size of perforations 2 1/2 in., length, by 7/16 in.
From 320 ft. to 585 ft. 8 Perf. per row 1 Rows per ft.

(8) CONSTRUCTION:
Was a surface sanitary seal provided? ☒ Yes ☐ No To what depth 20 ft.
Were any strata sealed against pollution? ☐ Yes ☒ No If yes, note depth of strata
From ft. to ft.
" Ring of concrete between
Method of Sealing casing and formation

(9) WATER LEVELS:
Depth at which water was first found 310 ft.
Standing level before perforating 306 ft.
Standing level after perforating 305 ft.

(10) WELL TESTS:
Was a pump test made? ☐ Yes ☒ No If yes, by whom?
Yield: gal./min. with ft. draw down after hrs.
Temperature of water Was a chemical analysis made? ☐ Yes ☐ No
Was electric log made of well? ☐ Yes ☐ No

(11) WELL LOG:
Total depth 590 ft. Depth of completed well 590 ft.
Formation: *Describe by color, character, size of material, and structure.*

0 ft. to	245 ft.	Hard brown gravelly clay	2192.4
245 "	328 "	Gray tight sand & gravel	
"	"	some clay	
328 "	430 "	Rough gray gravel & boulders,	
"	"	some clay	
430 "	456 "	Brown clay with gravel	
"	"	embedded	
456 "	532 "	Rough gravel with few clay	
"	"	streaks	
532 "	540 "	Brown clay withstreaks of	
"	"	gravel	1847.4
540 "	563 "	Gray and brown soft decomposed	
"	"	granite	
563 "	590 "	Hard gray decomposed granite	1847
590 "	"	Hard blue granite	

Work started Nov. 2 19 65 Completed Dec. 27 19 65

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME KIRKLAND WELL SERVICE
(Person, firm, or corporation) *(Typed or printed)*
Address 32291 Dunlap Blvd.
Yucaipa, Calif.
[SIGNED] K. Kirkland
Well Driller
License No. 169847 Dated Jan. 3 19 66

87649 5-62 25M QUIN ① △ SPO

DWR 188 (REV. 3-54)

File Original, Duplicate and Triplicate with the REGIONAL WATER POLLUTION CONTROL BOARD No. ......
(Insert appropriate number)

WATER WELL DRILLERS REPORT 2S/2W-11B2
(Sections 7076, 7077, 7078, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA

No 122022

State Well No. ......

Other Well No. ......

(1) OWNER:

Name [redacted]

Address [redacted]

(2) LOCATION OF WELL:

County San Bernardino Owner's number, if any— (24)

R. F. D. or Street No. 100 ft. of 5th St.-1000 ft North of F St. Yucaipa.

Avenue F

(3) TYPE OF WORK (check):

New well [X] Deepening [ ] Reconditioning [ ] Abandon [ ]

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic [ ] Industrial [ ] Municipal [X] Irrigation [ ] Test Well [ ] Other [ ]

(5) EQUIPMENT:

Rotary [ ] Cable [X] Dug Well [ ]

(6) CASING INSTALLED:

SINGLE [X] DOUBLE [ ]

From ft.	to ft.	Diam.	Gage or Wall
0	566	16"	1/4
566	590	"	5/16

If gravel packed

Diameter of Bore	from ft.	to ft.

Type and size of shoe or well ring Bit Steel-16" x 2" ...

Describe joint All joints butt weld

(7) PERFORATIONS:

Type of perforator used Mills

Size of perforations 2 1/2 in., length, by 7/16 in.

From 320 ft. to 585 ft. 8 Perf. per row 1 Rows per ft.

(8) CONSTRUCTION:

Was a surface sanitary seal provided? [X] Yes [ ] No To what depth 20 ft.

Were any strata sealed against pollution? [ ] Yes [X] No If yes, note depth of strata

From ft. to ft.

" Ring of concrete between casing

Method of Sealing and formation

(9) WATER LEVELS:

Depth at which water was first found 310 ft.

Standing level before perforating 306 ft.

Standing level after perforating 305 ft.

(10) WELL TESTS:

Was a pump test made? [ ] Yes [X] No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? [ ] Yes [ ] No

Was electric log made of well? [ ] Yes [ ] No

(11) WELL LOG: TOPO ......

Total depth 590 ft. Depth of completed well 590 ft.

Formation: Describe by color, character, size of material, and structure.

From ft.	to ft.	Formation
0	245	Hard brown gravelly clay.
245	328	Gray tight sand and gravel some clay.
328	430	Rough gray, gravel and boulders, some clay.
430	456	Brown clay with gravel embedded.
456	532	Rough gravel with few clay streaks.
532	540	Brown clay with streaks of gravel.
540	563	Gray and brown, soft decomposed granite.
563	590	Hard gray decomposed granite.
	590	Hard blue granite.

Work started Nov. 2 1965 Completed Dec. 27 1965

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Kirkland Well Service
(Person, firm, or corporation) (Typed or printed)

Address 32291 Dunlap Blvd. Yucaipa, Calif.

[SIGNED] K. Kirkland
Well Driller

License No. 168511 Dated 19 66

2S/2W-11B2

Well 24
5S-02322

WELL RECORD
SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT

Company _____

Location 200 ft. E of 5th St. 900 ft No. of Ave. F. ELEV 2440

NW 1/4 NE 1/4 Township 2S Range 2W Section 11

PIT

Date drilled Dec. 1965 By Kirkland

Depth 590 Diameter 16 ~~Cable Tool~~ Packed No

CASING

Diameter 16 Length 590 Gauge 1/4

" " "

Perforated interval 320 to 585 2½ by 7/16

COLUMN

Diameter 8 Length 400 Gauge std

" " "

Tube diameter 3 Shaft diameter 1-11/16

BOWLS

Date installed June 66 By Roberts

Make Johnston Model 14BC imp F Serial no. JY-2354

Size 14 Stages 12 Length _____ Suction ~~10 ft pipe~~ strainer only

DESIGN PERFORMANCE

	GPM	850	RPM	1188	TDH	560	HP 150
ACT	GPM	750	RPM	1188	TDH		HP
	GPM		RPM		TDH		HP

ENGINE

Date installed June 66 By Roberts

Type Elec Make _____ Model _____ Serial no. _____

Cu. in. _____ B&S _____ HP 150 RPM 1160

GEAR

Date installed _____ By _____

Make _____ Model _____ Serial no. _____ HP _____

Shaft _____ Universals _____

Notes: ~~400 ft airline, plastic~~
P-61 Pump control valve installed. Warric automation to the 2nd. St. reservoir. Well has 10 min. blow off time for heavy sand condition experienced for first 5-10 min.

SBVMWD FORM JK-10C

RETAIN THIS COPY

2S 1W 8F01S Wildwood Canyon #27

(Sections 7076, 7077, 7078, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA

Nº 109203

State Well No.

Other Well No. #5

(1) OWNER:

Name [redacted]

Address

(2) LOCATION OF WELL:

County ... Owner's number, if any—

R. F. D. or Street No.

[illegible]

[illegible]

(3) TYPE OF WORK (check):

New well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐

If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☒ Industrial ☐ Municipal ☐ Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☒ Cable ☐ Dug Well ☐

(6) CASING INSTALLED:

SINGLE ☐ DOUBLE ☐

From ft.	to ft.	Diam.	Gage or Wall	Diameter of Bore	from ft.	to ft.
0	314	5 5/8 x	1/16	12 1/4	0	314

Type and size of shoe or well ring

Size of gravel: [illegible]

Describe joint [illegible]

(7) PERFORATIONS:

Type of perforator used [illegible]

Size of perforations 1/4 in., length, by 1/2 in.

From ft.	to ft.	Perf. per row	Rows per ft.
164	314	4	2

(8) CONSTRUCTION:

Was a surface sanitary seal provided? ☒ Yes ☐ No To what depth 40 ft.

Were any strata sealed against pollution? ☐ Yes ☐ No If yes, note depth of strata

From ft. to ft.

Method of Sealing [illegible]

(9) WATER LEVELS:

Depth at which water was first found ft.

Standing level before perforating ft.

Standing level after perforating ft.

(10) WELL TESTS:

Was a pump test made? ☐ Yes ☒ No If yes, by whom?

Yield: gal./min. with ft. draw down after hrs.

Temperature of water Was a chemical analysis made? ☐ Yes ☒ No

Was electric log made of well? ☐ Yes ☒ No

(11) WELL LOG:

Total depth 314 ft. Depth of completed well 314

Formation: *Describe by color, character, size of material, and structure.*

ft. to	ft.	
0	15	TOP SOIL
15	75	SAND & CLAY
75	95	CLAY
95	110	SAND
110	130	SAND & GRAVEL
130	161	SAND & ROCK
161	175	SAND
175	185	SAND & ROCK
185	210	ROCK & CLAY
210	250	ROCK
250	300	SAND & ROCK
300	314	DECOMPOSED GRANITE

314

150

164

Perf

PERF 95 –

Work started 19 , Completed

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME R. L. [illegible] (Person, firm, or corporation) (Typed or printed)

Address [illegible]

[illegible] California

[SIGNED] [illegible] Well Driller

License No. 151026 Dated Feb. 2, 19

AUG 30 RECD

DWR 188 (R)

MONITORING WELL NEXT TO WELL 27 (Well 27A monitoring well) 25/2W-8F2

not well 27

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 182242

Notice of Intent No.
al Permit No. or Date 07208923

State Well No.
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City [redacted] Zip 92399

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number
Well address if different from above Wildwood Canyon
Township 2 S Range 1 W Section 8
Distance from cities, roads, railroads, fences, etc.
Assessors Parcel #322-212-30

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☒
Stock ☐
Municipal ☐
Other ☐

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size Pea Gravel
Diameter of bore 12¼
Packed from 20 to 207 ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☒ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	207	4"	Sch40

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
160	207	.032

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 20 ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing Bentonite

(10) WATER LEVELS:
Depth of first water, if known 65 ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☒ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☒
Yield to water at start of test ft. At end of test ft
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 207 ft. Depth of completed well 207 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	60	ft fine sand
60	160	ft medium & coarse sand, small gravel.
160	180	ft Blue Grahite (Decompose).

Work started 6-21 1989 Completed 6-23 1989

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED [signature] (Well Driller)

NAME SoCal Pump & Well Service, Inc. (Person, firm, or corporation) (Typed or printed)
Address 585 W. Valley Blvd
City Bloomington, California Zip 92316
License No. 510836 Date of this report Nov 1, 1989

R 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

WELL #2
SMP. DIST. NO. 2

Girl Scout

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
724 West Citrus Avenue - Redlands, California

YVCWD #29

Should be Well 28

WILDWOOD CANYON

WELL LOG

Well No. 29

Well Owner [redacted]

Location On Mesa East of end of Wildwood Canyon. South of road about ½ mile.

¼; ¼; Sect., T., R.

Drilled by Brockman Date completed

Drilling method Rotary

Total depth 606' Size of casing and depth Gauge (Double) (Single)

Type of well Irrigation

Struck water at , SWL before perforating after perforating (ft.)

Completion test data: SWL PWL Discharge Hours run

Surface elev. 3341.2 Source of information

Perforations

Depth	Elev. Bot. of Stratum	Material	Thickness
0-10		Top Soil	10
10-28		Sand	18
28-50		Soft Clay	22
50-72		Sandy Rock	22
72-160		Clay	88
160-191		Sand	31
191-205		Soft Clay	14
205-218		Sand, Gravel	13
218-248		Clay	30
248-256		Black sand	8
256-318		Soft Clay	62
318-329		Sand and Rock	11
329-408		Sandy Clay	79
408-420		Sand	12
420-490		Clay and Few Rocks	70
490-494		Sand	4
494-532		Sandy Clay	38
532-565		Clay Rock	33
565-572		Fine Sand	7
572-606		Clay	34
		ELEV. OF WELL 3341.2	

(Continued on reverse side)

Remarks: Pumped 45 miners inches

When filled out, please mail this form to
San Bernardino Valley Water Conservation District
724 West Citrus Ave., Redlands, California

TRIPLICATE
Owner's Copy

29?

Page ___ of ___

Owner's Well No. ~~Well #29~~

Date Work Began ~~Jan~~ Ended ~~Health~~

Local Permit Agency ~~County of Riv./Service Agency~~

Permit No. ~~23720~~ Permit Date ~~January 23, 2000~~

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 766704

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO / STATION NO
LATITUDE LONGITUDE
APN TRS OTHER

GEOLOGIC LOG

ORIENTATION (✓) ___ VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)

DRILLING METHOD ___ FLUID ___

DEPTH FROM SURFACE Ft	to Ft	DESCRIPTION *Describe material, grain size, color, etc.*
		~~Excavate down 6 feet from finish grade.~~
		~~Cut off casing, gravel well up to 50 feet.~~
		~~Install 2" tremie line and pumped in a 10 sack sand slurry mix, remove tremie and backfill hole.~~

RECEIVED
YUCAIPA VALLEY
WATER DIST.

TOTAL DEPTH OF BORING ___ Feet

TOTAL DEPTH OF COMPLETED WELL ___ Feet

WELL OWNER

Name [redacted]

Mailing Address [redacted]

CITY ~~Yucaipa~~ STATE ~~CA~~ ZIP ~~92399~~

WELL LOCATION

Address ~~Pineview~~

City ~~Calimesa~~

County ~~Riverside~~

APN Book ___ Page ___ Parcel ~~403-320-066~~

Township ~~25~~ Range ~~1W~~ Section ~~16~~

Latitude ___ DEG ___ MIN ___ SEC NORTH Longitude ___ DEG ___ MIN ___ SEC WEST

LOCATION SKETCH

NORTH

SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. ***PLEASE BE ACCURATE & COMPLETE.***

ACTIVITY (✓)

___ NEW WELL

MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)

X DESTROY (*Describe Procedures and Materials Under "GEOLOGIC LOG"*)

PLANNED USES (✓)

WATER SUPPLY
___ Domestic ___ Public
___ Irrigation ___ Industrial

___ MONITORING
___ TEST WELL
___ CATHODIC PROTECTION
___ HEAT EXCHANGE
___ DIRECT PUSH
___ INJECTION
___ VAPOR EXTRACTION
___ SPARGING
___ REMEDIATION
___ OTHER (SPECIFY)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER ___ (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL ___ (Ft.) & DATE MEASURED ___

ESTIMATED YIELD * ___ (GPM) & TEST TYPE ___

TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (Ft.)

* *May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE Ft	to Ft	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	160		X				steel	6"	~~.250~~	
~~160~~	308			X			steel	3"	.250	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft	to Ft	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other ___

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME ~~Keith Collier~~ ~~SoCal Pump and Well, Inc.~~
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS ~~P.O. Box 5483~~ CITY ~~Riverside~~ STATE ~~CA~~ ZIP ~~92517~~

Signed ___ (WELL DRILLER/AUTHORIZED REPRESENTATIVE) DATE SIGNED ~~5-26-01~~ C-57 LICENSE NUMBER ~~510836~~

DWR 188 REV 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

WELL # 2
WP DIST. NO. 2

SAN BERNARDINO VALLEY WATER CONSERVATION DISTRICT
... ½ West Citrus Avenue - Redlands, California

WILDWOOD CNYN

297. 28 28

WELL LOG

Well No. 2S/1W - 9F-2

Well Owner [redacted]
Location
; ¼, ¼, Section , T. , R.
Drilled by Trower   Date completed Dec. 1959
Drilling method Rotary
Total depth 289'   Size of casing and depth 8" & 6" 289   Gauge (Double) (Single)
Type of well
Struck water at , SWL before perforating after perforating (ft.)
Completion test data: SWL PWL Discharge Hours run
Surface elev. 3145   Source of information
Perforations

Depth	Elev. Bot. of Stratum	Material	Thickness	
0-2		Surface Soil	2	
2-25		Coarse pea gravel	23	
25-30		Coarse Sand	5	
30-45		Gravel (small) and Sand	15	
45-70		Decomposed Granite (soft) and Blue Shale	25	
70-85		Fine Sand	15	
85-200		Coarse sand and gravel with occasional rock	115	
200-215		Light colored decomposed granite	15	
215-289		Granite - broken	74	
		Standing water level 35' prior to casing and cleaning		
		Casing:		
		8" Id 130		
		8" OD 130-160		
		6" OD 160-289		
		Pump Test January 1960		
		Static W/L 40 Ft.		
		100 GPM 80 Ft.		
		125 GPM 95 Ft.		
		150 GPM 113 Ft.		
		170 GPM 141 Ft.		
		Pump tested about 3 weeks before coming in		

Remarks: 3145'

SHEET of Sheets

wel 31   1S/1W-19G2

TRIPLICATE
Owner's Copy   Monet

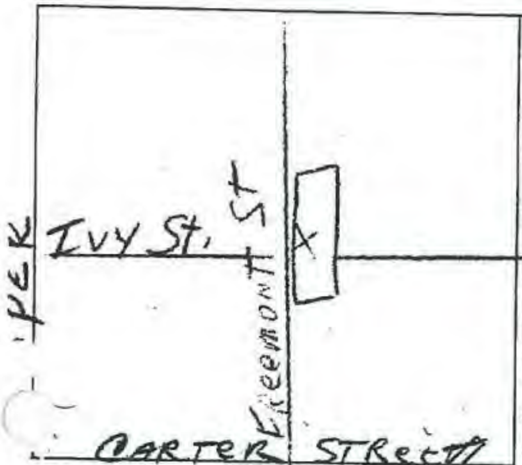
Notice of Intent No. 199078
Permit No. or Date 11248101

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in
No. 093756
State Well No.
Other Well No.

(1) OWNER: [redacted]
Address [redacted]
City Zip 92399

(2) LOCATION OF WELL (See instructions): Ackerman Well
County San Bernardino Owner's Well Number
Well address if different from above at Ivy Aven ue and Fremont St
Township 1S Range 1W Section 19
Distance from cities, roads, railroads, fences, etc. Assessors Parcel No. 320-191 0- 43



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☐ Deepening ☐
Reconstruction ☒
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other community ☒

(5) EQUIPMENT:
Rotary ☐ Reverse ☒
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☒ Size
Diameter of bore 24"
Packed from to ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing 9 sack grout mix

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☒ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth ft. Depth of completed well ft.
from ft. to ft. Formation (Describe by color, character, size or material)

Work started 11/25/ 19 81 Completed 11/27 19 81

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED John R. Beylik
(Well Driller)
NAME BEYLIK DRILLING, INC.
(Person, firm, or corporation) (Typed or printed)
Address 591 South Walnut Street
City La Habra, Calif. 90631 Zip 90631
License No. 306291-C57&SC-61 Date of this report June 23, 1982

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

15/1W-19B1

ORIGINAL
File Original, Duplicate and Triplicate with the
REGIONAL WATER POLLUTION
CONTROL BOARD No.______
(Insert appropriate number)

WATER WELL DRILLERS REPORT
(Sections 7076, 7077, 7078, Water Code)

STATE OF CALIFORNIA

Well #33

Do Not Fill In
Nº 21869
State Well No.______
Other Well No. 33 YVCWD

(1) OWNER:
Name [redacted]
Address

(2) LOCATION OF WELL:
County ______ Owner's number, if any—
R. F. D. or Street No.
~~IVY ST. OFF BRYANT~~

(3) TYPE OF WORK (check):
New well [X] Deepening [ ] Reconditioning [ ] Abandon [ ]
If abandonment, describe material and procedure in Item 11.

(4) PROPOSED USE (check):
Domestic [ ] Industrial [ ] Municipal [ ]
Irrigation [X] Test Well [ ] Other [ ]

(5) EQUIPMENT:
Rotary [ ]
Cable [X]
Dug Well [ ]

(6) CASING INSTALLED:
SINGLE [X] DOUBLE [ ]

From ft.	to ft.	Diam.	Gage or Wall
0	470	12	4

If gravel packed

Diameter of Bore	from ft.	to ft.

Type and size of shoe or well ring
Size of gravel:
Describe joint

(7) PERFORATIONS:
Type of perforator used MILLS
Size of perforations 3/8 in., length, by 1½ in.

From ft.	to ft.	Perf. per row	Rows per ft.
340	460	5	1

(8) CONSTRUCTION: ✓NO CEMENT SANITARY SEAL
Was a surface sanitary seal provided? [X] Yes [ ] No To what depth 200 ft.
Were any strata sealed against pollution? [X] Yes [ ] No If yes, note depth of strata
From 0 ft. to 200 ft.
Method of Sealing WELD PIPE SOLID

(9) WATER LEVELS:
Depth at which water was first found 300 ft.
Standing level before perforating 255 ft.
Standing level after perforating 245 ft.

(10) WELL TESTS:
Was a pump test made? [ ] Yes [ ] No If yes, by whom?
Yield: ______ gal./min. with ______ ft. draw down after ______ hrs.
Temperature of water ______ Was a chemical analysis made? [ ] Yes [ ] No
Was electric log made of well? [ ] Yes [ ] No

(11) WELL LOG:
Total depth ______ ft. Depth of completed well ______ ft.
Formation: *Describe by color, character, size of material, and structure.*

From ft.	to ft.	Formation
0	20	ROCK
20	50	SANDY CLAY
50	88	SANDY CLAY PEA GRAVEL
88	94	SANDY CLAY
94	97	ROCK
97	148	SANDY CLAY ROCK
148	197	SANDY CLAY
197	221	SANDY CLAY SMALL GRAVEL
221	366	SANDY CLAY ROCK
366	393	SANDY ROCK D G
393	455	D G CLAY
455	465	D G SAND ROCK CLAY
465	479	D G CLAY
479	496	SAND ROCK D G HARD

Work started ______ 19__ Completed ______ 19__

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME R & W Drilling Inc
(Person, firm, or corporation) (Typed or printed)
Address 25525 [illegible]
[illegible]

[SIGNED] RD [illegible]
Well Driller

License No. 231340 Dated 6/1[illegible], 1965

15/1W-20M1

DUPLICATE
Retain this copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do Not Fill In

№ 104927

State Well No. _____

Other Well No. #36

OWNER:

Name [redacted]

Address [redacted]

(2) LOCATION OF WELL:

County San Bernardino Owner's number, if any 36

Township, Range, and Section T 1S; R 1W; Sec. 20

Distance from cities, roads, railroads, etc. 360' So. of center of Ivy Ave., 33' East of center of Jefferson St. Yuc.

(3) TYPE OF WORK (check):

New Well XX Deepening ☐ Reconditioning ☐ Destroying ☐

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☒ Industrial ☐ Municipal ☒

Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☐

Cable ☒

Other ☐

(6) CASING INSTALLED:

STEEL: OTHER:

SINGLE ☒ DOUBLE ☐

From ft.	To ft.	Diam.	~~Gage~~ or Wall	Diameter of Bore	From ft.	To ft.
0	443	12"	1/4"			

If gravel packed

Type of shoe or well ring: 12 x 3/4 x 12" Size of gravel:

Describe joint All joints butt weld

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen Mills

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
251	260	6	3" centers	5/16 x 2 1/4
260	430	6	12" centers	5/16 x 2 1/4

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☒ No ☐ To what depth 50 ft.

Were any strata sealed against pollution? Yes ☐ No ☒ If yes, note depth of strata

From ft. to ft.

From ft. to ft.

Method of sealing 12 sacks cement-sand mix, pumped into annular space from 50' depth to surface.

(9) WATER LEVELS:

Depth at which water was first found, if known 245 ft.

Standing level before perforating, if known 245 ft.

Standing level after perforating and developing 245 ft.

(10) WELL TESTS:

Was pump test made? Yes ☐ No ☐ If yes, by whom?

Yield: gal./min. with ft. drawdown after hrs.

Temperature of water Was a chemical analysis made? Yes ☐ No ☐

Was electric log made of well? Yes ☐ No ☐ If yes, attach copy

To be in future

(11) WELL LOG:

Total depth 440 ft. Depth of completed well 440 ft.

Formation: *Describe by color, character, size of material, and structure*

0 ft. to	60 ft.	Brown clay, gravel, boulders
60	155	Brown sandy clay, sharp gravel, few boulders
155	233	Brown sandy clay with small gravel embedded
233	251	Brown clay, sand, small gravel-tight
251	260	Brown clay, sand, small gravel-loose
260	430	Brown tight clay, sand, small gravel
430	440	Blue decomposed granite

Copies to:
☐ Directors
☐ General Manager
☐ Attorney
☐ District Engineer
☐ Counseling Engineer
☐ Auditor
☐ Superintendent
☐ Agenda
☐ Shop

RECEIVED
FEB 18 1976
Y.V.C.W.D.
BY
File
Date Routed

Work started 12/18 19 75 Completed 2/3 19 76

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Kirkland Well Service
(Person, firm, or corporation) (*Typed or printed*)

Address 32291 Dunlap Blvd.
Yucaipa, Ca. 92399

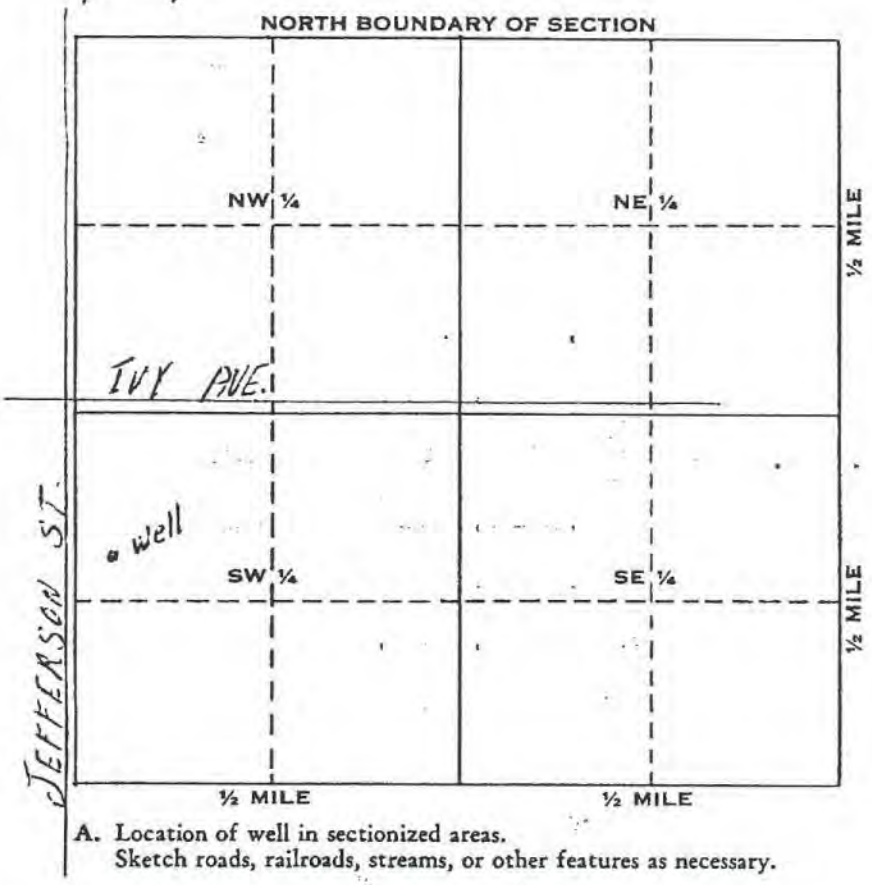
[SIGNED] K. Kirkland
(Well Driller)

License No. 168847 Dated Feb. 14, 19 76

SKETCH LOCATION OF WELL ON REVERSE SIDE

YUCAIPA AREA

WELL LOCATION SKETCH

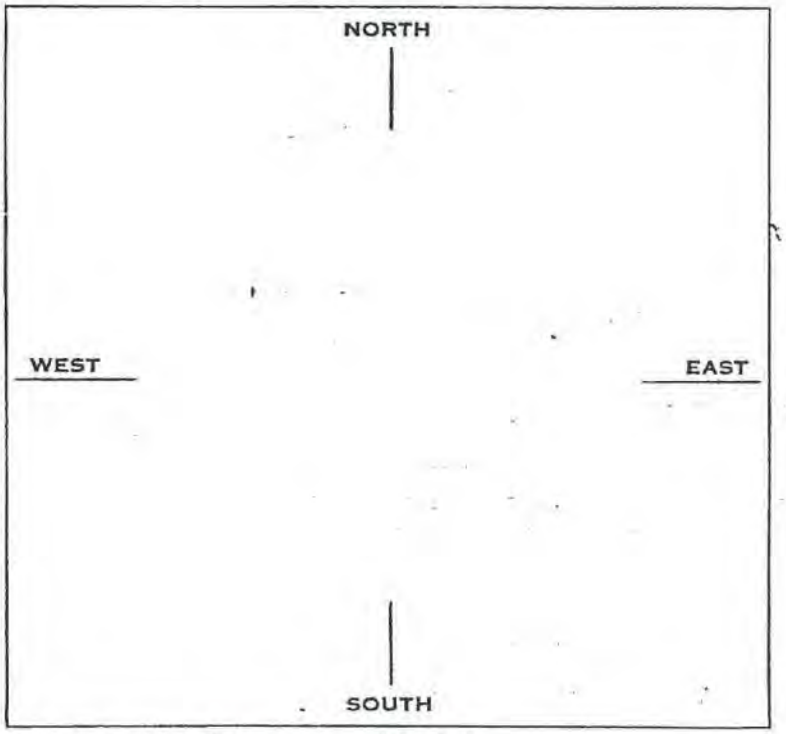


Township 1 N/S

Range 1 E/W

Section No. 20

A. Location of well in sectionized areas.
Sketch roads, railroads, streams, or other features as necessary.



B. Location of well in areas not sectionized.
Sketch roads, railroads, streams, or other features as necessary.
Indicate distances.

1S/1W-20M1

DUPLICATE
Retain this copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do Not Fill In

№ 104927

State Well No. Well #36

Other Well No.

(1) OWNER:

Name [redacted]

Address [redacted]

(2) LOCATION OF WELL:

County San Bernardino Owner's number, if any 36

Township, Range, and Section T 1S; R 1W; Sec. 20

Distance from cities, roads, railroads, etc. 360' So. of center of Ivy Ave., 33' East of center of Jefferson St. Yuc.

(3) TYPE OF WORK (check):

New Well ☒ Deepening ☐ Reconditioning ☐ Destroying ☐

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☒ Industrial ☐ Municipal ☒
Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☐
Cable ☒
Other ☐

(6) CASING INSTALLED:

STEEL: OTHER:
SINGLE ☒ DOUBLE ☐

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	443	12"	1/4"			

If gravel packed

Size of shoe or well ring: 12 x 3/4 x 12" Size of gravel:

Describe joint All joints butt weld

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen Mills

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
251	260	6	8" centers	5/16 x 2 1/4
260	430	6	12" centers	5/16 x 2 1/4

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☒ No ☐ To what depth 50 ft.

Were any strata sealed against pollution? Yes ☐ No ☒ If yes, note depth of strata

From ft. to ft.

From ft. to ft.

Method of sealing 12 sacks cement-sand mix, pumped

(9) WATER LEVELS:

Depth at which water was first found, if known 245 ft.

Standing level before perforating, if known 245 ft.

Standing level after perforating and developing 245 ft.

(10) WELL TESTS:

Was pump test made? Yes ☐ No ☐ If yes, by whom?

gal./min. with ft. drawdown after hrs.

Temperature of water Was a chemical analysis made? Yes ☐ No ☐

Was electric log made of well? Yes ☐ No ☐ If yes, attach copy

To be in future

(11) WELL LOG:

Total depth 440 ft. Depth of completed well 440 ft.

Formation: *Describe by color, character, size of material, and structure*

0 ft. to 60 ft.	Brown clay, gravel, boulders	
60	Brown sandy clay, sharp gravel, few boulders	155
155	Brown sandy clay with small gravel embedded	233
233	Brown clay, sand, small gravel-tight	251
251	Brown clay, sand, small gravel-loose	260
260	Brown tight clay, sand, small gravel	430
430	Blue decomposed granite	440

Copies to:
☐ Directors
☐ General Manager
☐ Attorney
☐ District Engineer
☐ Counseling Engineer
☐ Auditor
☑ Superintendent
☐ Agenda
☐ Shop

RECEIVED
FEB 18 1976
BY Y.V.C.W.D.

File

Date routed

into annular space from 50' depth to surface.

Work started 12/18 19 75 Completed 2/3 19 76

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Kirkland Well Service
(Person, firm, or corporation) (*Typed or printed*)

Address 32291 Dunlap Blvd.
Yucaipa, Ca. 92399

[SIGNED] K. Kirkland
(Well Driller)

License No. 168847 Dated Feb. 14, 19 76

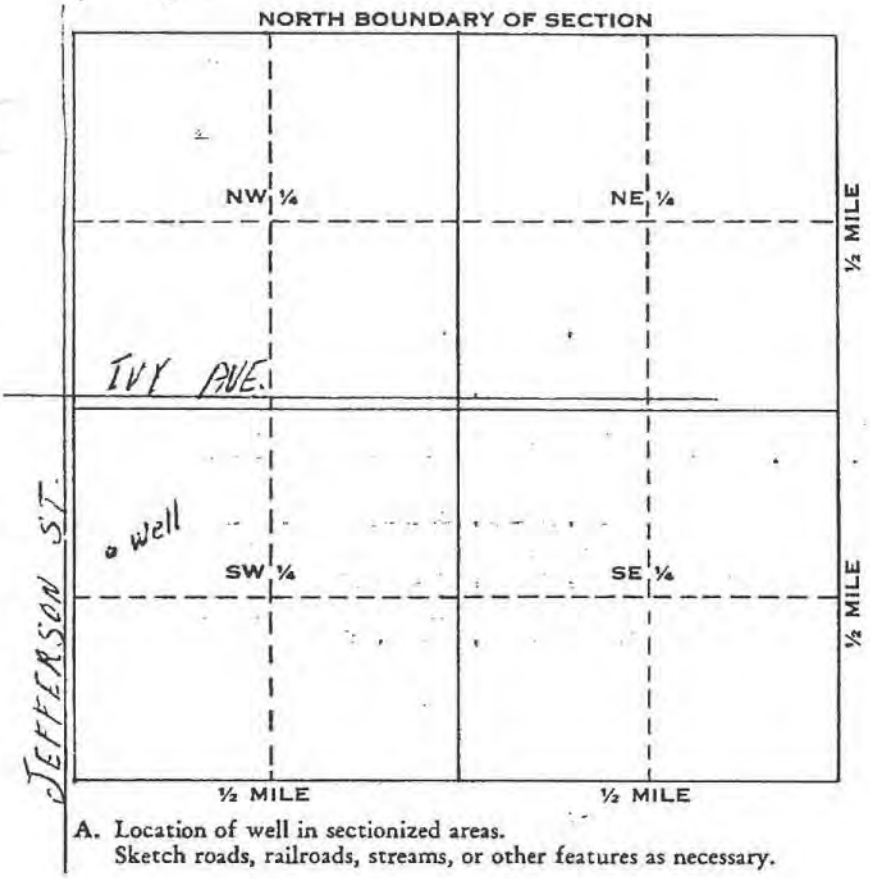
SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-68)

67139-790 8-72 30M TRIP ⓘT OSP

YUCAIPA AREA

WELL LOCATION SKETCH

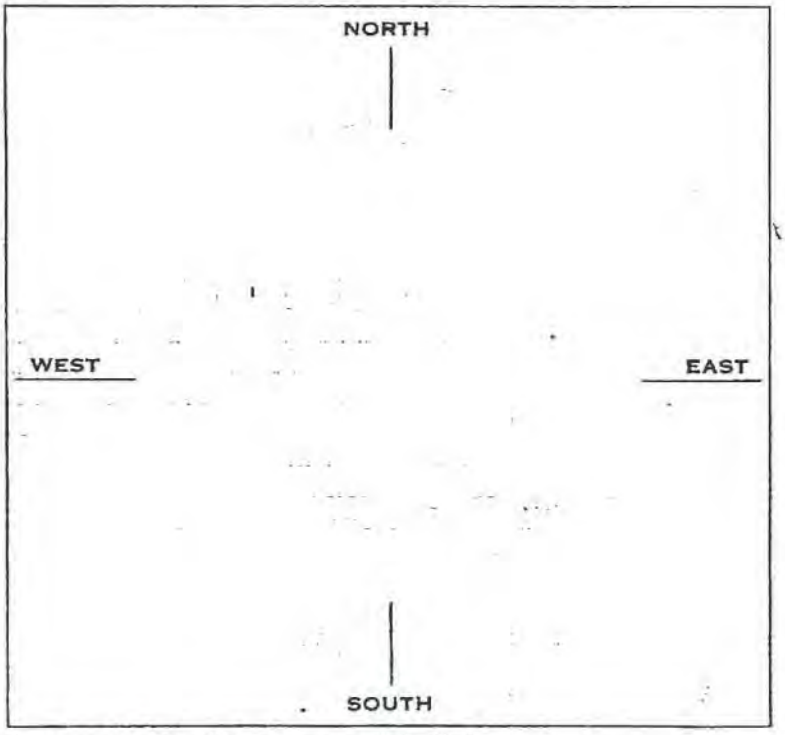


Township 1 N/S

Range 1 E/W

Section No. 20

A. Location of well in sectionized areas.
Sketch roads, railroads, streams, or other features as necessary.



B. Location of well in areas not sectionized.
Sketch roads, railroads, streams, or other features as necessary.
Indicate distances.

(2S/1W-17F1 (Well (39)

DUPLICATE
Driller's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

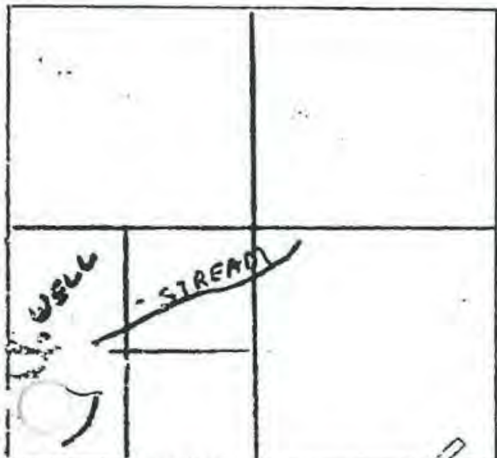
Do not fill in
No. 069230

State Well No.
Other Well No. Well # 2

N___ent No.
L___ Permit No. or Date 9024

(1) OWNER: Name [redacted]
Address [redacted]
City ___ Zip ___

(2) LOCATION OF WELL (See instructions):
County Riverside Owner's Well Number
Well address if different from above
Township 2S Range 1W Section 17
Distance from cities, roads, railroads, fences, etc.
NW¼, SW¼



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [X]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:
Rotary [X] Reverse [ ]
Cable [ ] Air [ ]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:
Yes [X] No [ ] Size 5/16 X 7
Diameter of bore 0 to 413 is 10", 413 to 540 in 6¼"
Packed from 50 to 413 ft.

(7) CASING INSTALLED:
Steel [X] Plastic [ ] Concrete [ ]

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	413	6-5/8	.188	73	93	6 rows
				113	133	12 cuts
				153	173	2¼ X 1/8"

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [X] No [ ] If yes, to depth 50 ft.
Were strata sealed against pollution? Yes [ ] No [X] Interval ___ ft.
Method of sealing cement grout

(10) WATER LEVELS:
Depth of first water, if known 45 ft.
Standing level after well completion 30 ft.

(11) WELL TESTS:
Was well test made? Yes [X] No [ ] If yes, by whom? driller
Type of test Pump [ ] Bailer [ ] Air lift [X]
Depth to water at start of test 400 ft. At end of test ___ ft
75 gal/min after ___ hours Water temperature ___
Chemical analysis made? Yes [ ] No [X] If yes, by whom? ___
Was electric log made? Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 540 ft. Depth of completed well 540 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	10	Top soil
10	13	Sand
13	16	Boe
16	33	Clay
33	48	Sand & clay
48	50	Rock
50	75	Clay
75	81	Rock
81	96	Clay & rock
96	180	Blue granite
180	185	Quartz & decomposed granite
185	205	Granite
205	228	Sandstone
228	265	Granite
265	272	Clay
272	540	Granite with fractured areas of about 4 ft. depths at 358, 380, 446 with quartz, 481, 510, and 519. Quartz fracture at 540

Perf. - continued
193 - 253
273 - 293
313 - 333
353 - 413

Work started Jan. 22 1980 Completed Feb. 6 1980

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED Donald B. Trunnell (Well Driller)
NAME AMERICAN DRILLING, INC. (Person, firm, or corporation) (Typed or printed)
Address 104 W. Main
City Aguanga, CA Zip 92302
License No. 324684 Date of this report Feb. 3, 1980

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

(2S/1W-17L1 (

YVWD #40

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

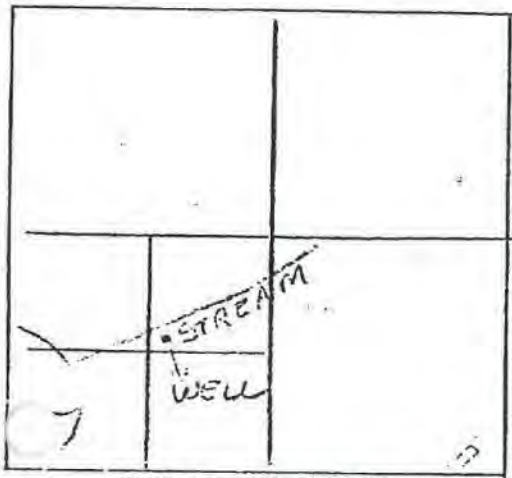
WATER WELL DRILLERS REPORT

Do not fill in
No. 218802

Notice of Intent No.
Permit No. or Date
State Well No.
Other Well No. Well #3

(1) OWNER:
Name [redacted]
Address [redacted]
City Zip 92320

(2) LOCATION OF WELL (See instructions):
County Riverside Owner's Well Number
Well address if different from above
Township 2S Range 1W Section 17
Distance from cities, roads, railroads, fences, etc.
NW¼, SW¼,



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☐X Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐X
Other ☐

(5) EQUIPMENT:
Rotary ☐X Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐X No ☐ Size 5/16 X 4
Diameter of bore 10"
Packed from 50 to 349 ft.

(7) CASING INSTALLED:
Steel ☐X Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Cage or Wall
0	349	6-5/8	.188

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
69	349	6 rows 12 ~~cuts~~ 2½ X .120

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☐X No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☐X Interval ft.
Method of sealing cement grout

(10) WATER LEVELS:
Depth of first water, if known 40 ft.
Standing level after well completion 29 ft.

(11) WELL TESTS:
Was well test made? Yes ☐X No ☐ If yes, by whom? driller
Type of test Pump ☐ Bailer ☐ Air lift ☐X
Depth to water at start of test ft. At end of test ft
Yield: 100+ gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☐X If yes, by whom?
Electric log made? Yes ☐ No ☐X If yes, attach copy to this report

(12) WELL LOG:
Total depth 349 ft. Depth of completed well 349 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	13	Soft dirt
13	26	Fractured white rock
26	28	Brown clay
28	35	Gray clay
35	145	Fractured white rock with water increasing at 60', 100', & 120'
145	150	Very fractured
150	162	Firm to hard white rock
162	165	Fractured
165	180	Firm to hard white rock w/ increase in water
180	195	Firm to hard black rock
195	201	Firm to hard white rock
201	204	Fractured
204	209	Firm to hard
209	212	Fractured w/ more water
212	220	Fairly hard granite
221	224	Fractured
225	234	Firm to hard gray granite, w/ increase in water
234	245	Light fracture
245	255	Granite with increase in water
255	260	Heavily fractured with water
260	264	Fairly hard
264	295	Fractured white rock w/ increase in water
295	349	Dark gray rock, fractured

Work started Dec. 12 19 80 Completed Dec. 19 19 80

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED [signature] (Well Driller)
NAME AMERICAN DRILLING, INC. (Person, firm, or corporation) (Typed or printed)
Address 104 W. Main,
City Aguanga, CA Zip 92302
License No. 324684 Date of this report Dec. 22, 1980

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

1S/2W-36A011

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in
No. 217102

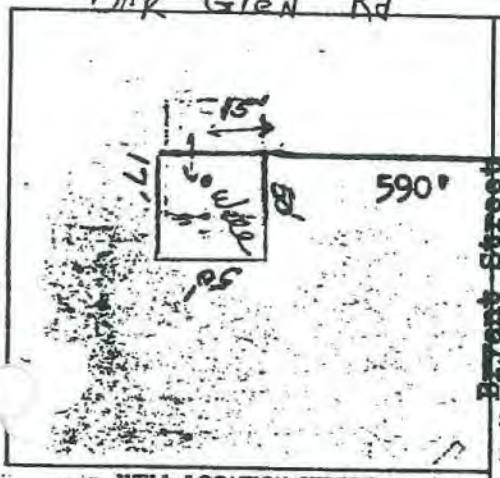
tent No. 195450
mit No. or Date 02098204

State Well No.
Other Well No. #44

(1) OWNER: [redacted] Water District
Address [redacted]
City San Bernardino, Cal. Zip 92412

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number
Well address if different from above
Township 1S Range 2W Section 36
Distance from cities, roads, railroads, fences, etc.

Oak Glen Rd



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☒
Other ☐

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK: 5/16 x 16
Yes ☒ No ☐ Size
Diameter of bore 22"
Packed from 0 to 660 ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☐ Concrete ☐

(8) PERFORATIONS:
Type of perforation or size of screen: Roscoe Moss Louver

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	50	16"	5/16	275	650	1/8" x Std.
0	660					

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☐ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☒ No ☐ Interval ft.
Method of sealing cement grout

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion 311' ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom? C.V. Pump
Type of test Pump ☒ Bailer ☐ Air lift ☐
Depth to water at start of test 311 ft. At end of test 386 ft
1000 gal/min after 24 hours Water temperature
Chemical analysis made? Yes ☐ No ☐ If yes, by whom?
Electric log made? Yes ☒ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 660 ft. Depth of completed well 660 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	50	fine sand with large rock mix
50	65	fine sand with large rock size of hand.
65	110	medium & coarse sand mixed
110	120	Medium & coarse sand with small rock, mixed
120	180	Medium & coarse sand with small gravel & short streaks of sandy clay
180	320	Medium & coarse sand with small gravel
320	360	Medium & Coarse sand, dark
360	380	Med. & coarse sand with short streak of brown clay
380	660	Decomposed granite

Work started 2/14 19 82 Completed 5/20/82

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED Coachella Valley Pump & Supply, Inc. (Well Driller)
NAME (Person, firm, or corporation) (Typed or printed)
Address P.O. Drawer QQQ
City Indio, Calif. Zip 92202
License No. 164541 Date of this report 8/9/82

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Welenco

WELL ENGINEERING SURVEYS

ELECTRIC LOG

FILING NO

COMPANY McCALLA BROS.

WELL #46

FIELD YUCAIPA

STATE CALIFORNIA COUNTY SAN BERNARDINO

LOCATION 2ND ST @ OAK GLEN Rd.

SEC TWP RGE

OTHER SERVICES NONE

Permanent Datum: GROUND LEVEL Elev. Elev.: K.B.
Log Measured From: G.L. 0 Ft. Above Perm. Datum D.F.
Drilling Measured From: GROUND LEVEL G.L.

Date	3/16/88			
Run No.	ONE			
Depth—Driller	1155'			
Depth—Logger	1155'			
Btm. Log Inter.	1154'			
Top Log Inter.	100'			
Casing—Driller	36" @ 50'	@	@	
Casing—Logger	NOT REACHED			
Bit Size	17.5"			
Type Fluid in Hole	WATER			
Dens. / Visc.	N/A	/	/	/
pH / Fluid Loss	N/A	/ ml	/ ml	/ ml
Source of Sample	PIT			
R_m @ Meas. Temp.	2.20 @ 63 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	2.20 @ 63 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	N/A @ °F	@ °F	@ °F	@ °F
Source: R_{mf} / R_{mc}	MEAS. /	/	/	/
R_m @ BHT	N/A @ °F	@ °F	@ °F	@ °F
Time Since Circ.	2 HOURS			
Max. Rec. Temp.	N/A °F	°F	°F	°F
Equip. / Location	DU-1 / LAT.	/	/	/
Recorded By	RODGER			
Witnessed By				

Fold Here — This Heading and Log Conform To API RP 33

REMARKS

Changes in Mud Type or Additional Samples

Date | Sample No.
Depth—Driller
Type Fluid in Hole
Dens. / Visc.
pH / Fluid Loss ml
Source of Sample
R_m @ Meas. Temp. @ °F
R_{mf} @ Meas Temp @ °F
R_{mc} @ Meas. Temp. @ °F
Source: R_{mf} / R_{mc}
R_m @ BHT @ °F
R_{mf} @ BHT @ °F
R_{mc} @ BHT @ °F

Scale Changes

Type Log	Depth	Scale Up Hole	Scale Down Hole
E-LOG		~~0-500 OHMS/M~~	0-2000 OHMS/M

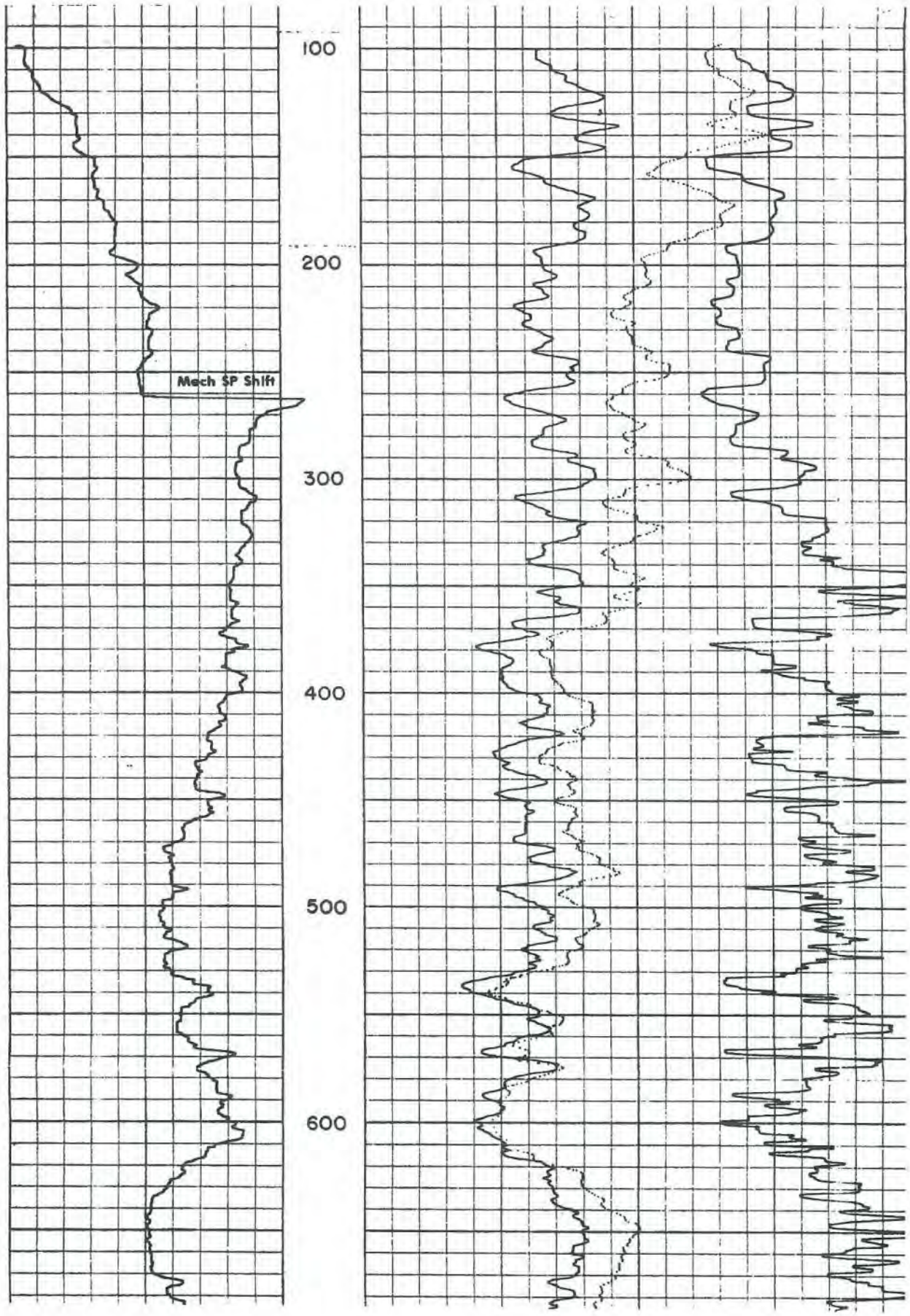
Equipment Data

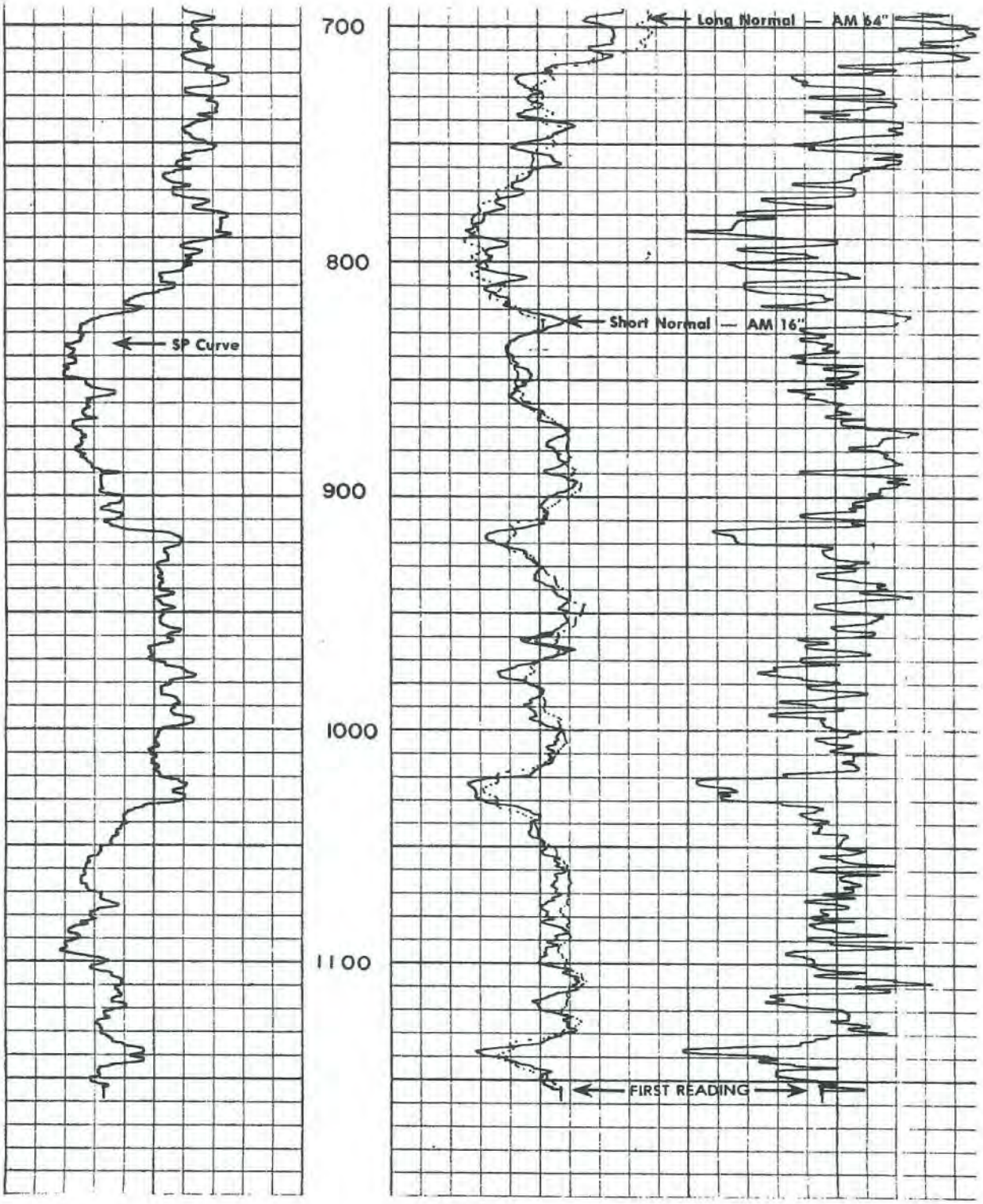
Run No.	Tool Type	Pad Type	Tool Position	Other
ONE	NORMAL	—	FREE	

SPONTANEOUS POTENTIAL millivolts	Depths	RESISTIVITY ohms. m²/m	RESISTIVITY ohms. m²/m
10 (- ↔ +)		SHORT NORMAL 16 Inch 0 — 200	
		LONG NORMAL 64 Inch 0 — 200	RESISTANCE Detail Curve

1995 - M2/S1

96 mm


100
200
Mech SP Shift
300
400
500
600


700
800
900
1000
1100
SP Curve
Long Normal — AM 64"
Short Normal — AM 16"
FIRST READING

County of San Bernardino – Environmental Public Works Agency
ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
385 North Arrowhead Avenue • San Bernardino, CA 92415-0160

1&2

Do Not Fill In
Permit No. 0126-2808
Expiration 1-26-89
FF
FA
SN

WELL PERMIT

PLEASE PRINT: Job # 5113 Well # 46

1. OWNER: Name [redacted]
Mailing Address [redacted]
City Yucaipa Zip
Phone No. 714) 797-5117

2. DATE OF WORK *(approximate)*:
Start 2/15/88 Complete 4/1/88

3. WELL DRILLER *(Check One)*:
☐ Owner ☒ Contractor McCalla Bros.
Name

4. WELL USE *(check)*:
☒ Community ☐ Industrial
☐ Individual ☐ Test
☐ Agricultural ☐ Other
☐ Dairy ☐ Horizontal

TYPE OF WORK *(check)*:
☒ New ☐ Reconstruction ☐ Destruction

Items 6 through 10 to be estimated for new wells, and exact for all other wells.

6. ANNULAR SEAL: Depth 50 ft.
Furnished by: ☐ Owner ☒ Contractor
☐ Driven Conductor Dia. 32 in., Wall (Gage) .250
☐ Sealing Material concrete, Thickness 4 in.

7. DEPTH OF WELL *(feet)*:
Proposed 800 Existing
DIAMETER OF BORE *(in.)*: 28

8. CASING INSTALLED:
☒ Steel ☐ Plastic ☐ Other

From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
0	500	~~250~~ 16"	.250
500	800	~~250~~ 16"	.250 perforated

GRAVEL PACK: ☒ Yes ☐ No
From 0 to 800 ft.

9. PERFORATIONS *(if applicable)*:
From 500 to 800 ft.

10. SEALED ZONES *(if applicable)*:
From 0 to 50 ft.

11. GENERAL LOCATION MAP: 31-C4

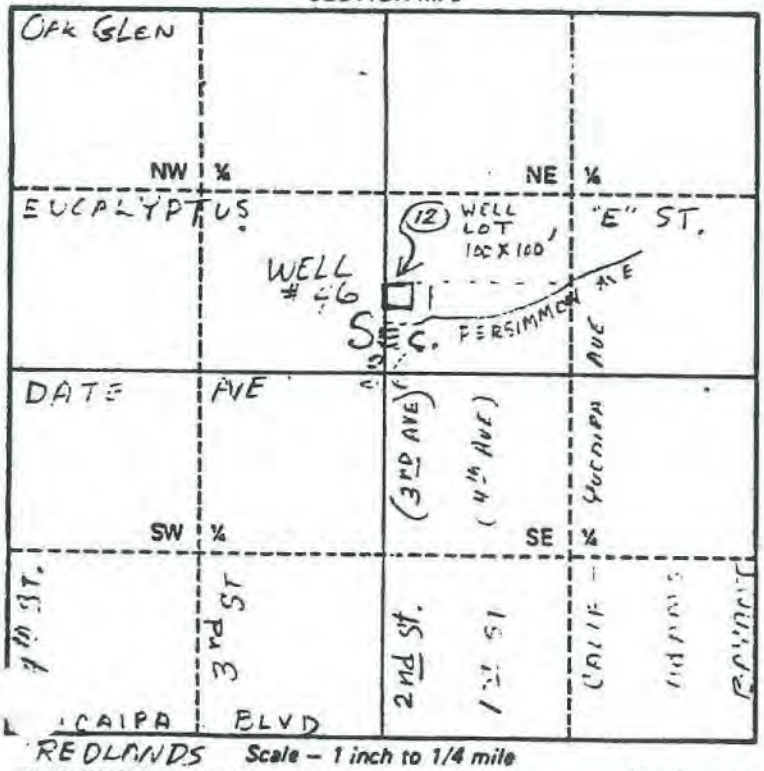
(a) Sketch location of well, name(s) and location of road(s) on section map.

(b) Township 1S N/S Range 3W E/W
Section 31

(c) Assessor's Parcel No. 303-191-12

(d) Solid or liquid waste disposal site within two miles?
☐ Yes ☒ No
Location:

SECTION MAP



REDLANDS Scale – 1 inch to 1/4 mile

Do Not Fill In

Fee Stamp	Date Stamp
DATE 1-8-88	
AMOUNT 252.00	
RECEIPT NO. 21084	
BY:	

PAID

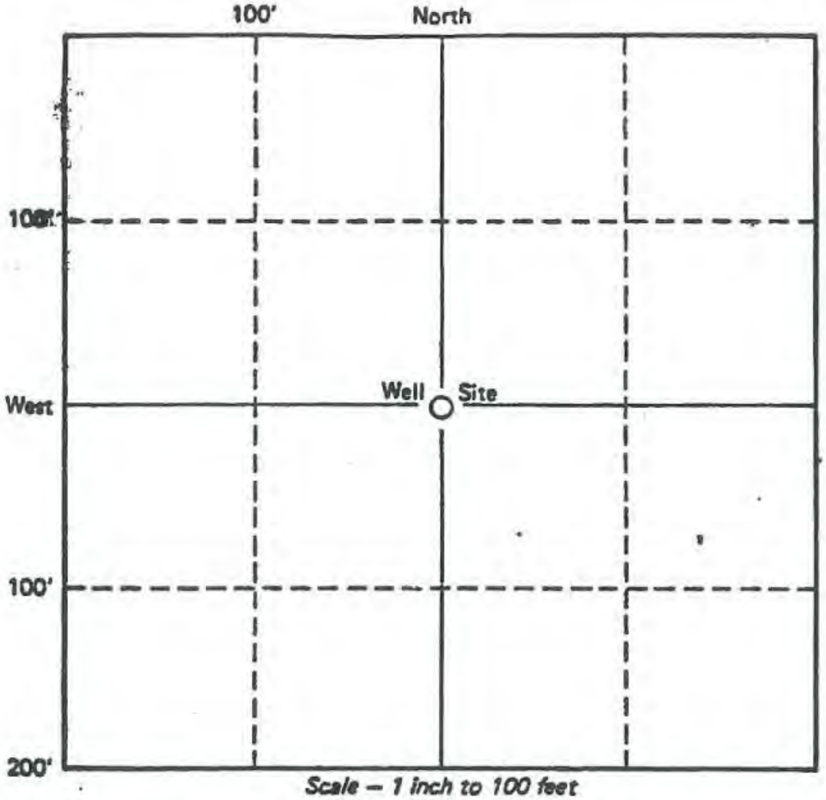
FEB 1988
RECEIVED
YUCAIPA VALLEY WATER DIST.

03-14785-631 Rev. 11/82

Continue on Reverse Side
AS N.A.V.

Well Permit

1 of 2



12. PLOT PLAN:

(a) In perspective to the ..ell site, sketch and label the following items: well lot property lines other wells *(include abandoned wells)*, sewage disposal systems *(sewers, septic tanks, leaching fields, seepage pits, cesspools)*, lakes and ponds, water courses and animals or fowl kept.

(b) Indicate the distance in *feet*, of any of the following which are within 200 ft. of the well site:

Other wells	
Sewers	
Septic tanks	
Leaching fields	
Seepage pits	
Cesspools	
Lakes and ponds	
Water courses	
Animals or fowl kept	

NONE OF THE ABOVE

---

13. I have read this application and agree to comply with all laws regulating the type of work being performed. The California Labor Code requires Workers' Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate:

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation laws of California.

Owner's Signature __________ Date __________

☐ Contractor's Signature *[signature]* Date 1/15/88 Reg. No. __________

DISPOSITION OF PERMIT

(Do Not Fill In)

☑ Approved subject to the following:

A. Notify the Department, *[illegible] (714) 387-4666*, twenty-four (24) hours in advance to make an inspection of the following operations:

☑ Prior to sealing of the annular space or filling of the conductor casing.

☐ Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing.

☑ After installation of the surface protective slab and pumping equipment.

☐ During destruction of wells, prior to pouring the sealing material.

B. Submit to the Department within thirty (30) days after completion of work, a copy of:

☑ Water Well Driller's Report ☑ Bacteriological Analysis ☑ Inorganic Chemical Analysis

C. Other __________

DENIED __________

1S/2W-36G1 Well 46 143

TRIPLICATE
Owner's Copy

...of Intent No.
...rmit No. or Date

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in
No. 158791
State Well No.
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City [redacted] Zip 92399

(2) LOCATION OF WELL (See instructions):
County San Bernaddino Owner's Well Number 46
Well address if different from above
Township 1S Range 2W Section 36
Distance from cities, roads, railroads, fences, etc.
50' E. of 2nd St.
350' N. of Persimmon

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☒
Other ☐

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size Brawley 4x8
Diameter of bore 28"
Packed from 0 to 1150 ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☐ Concrete ☐

(8) PERFORATIONS:
R/M Horizontal Louvre

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	340	16	.250	1		
340	800	16	.250	340	800	.060
800	1130	16	.312	800	1130	.060

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ft.
Method of sealing 32" Conductor Cemented in 40" Bore

(10) WATER LEVELS:
Depth of first water, if known 187' ft.
Standing level after well completion 187' ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? McCalla Bros.
Type of test Pump ☒ Bailer ☐ Air lift ☐
Depth to water at start of test 187 ft. At end of test 321 ft
Discharge 2800 gal/min after 1424 hours Water temperature
Chemical analysis made? Yes ☒ No ☐ If yes, by whom? Y.V.W.D.
Electric log made? Yes ☒ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 1154 ft. Depth of completed well 1150 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	50	Conductor
50	64	Sand, Gravel & Sm. & Med. Rock
64	73	Fine Sand, Gravel & Clay
73	107	Fine Sand, Gravel & Small Rock
107	123	Fine Sand
123	132	Gravel & Rock
132	140	Gravel & Boulders
140	152	Fine Sand & Gravel
152	166	Cemented Sand & Gravel
166	205	Sand, Sm. & Med. Gravel & Sm. Rock
205	208	White Granite Ledge
208	272	Sand Gravel, Rock & Clay
272	274	Small Boulders
274	279	Sand, Gravel & Rocks
279	282	Boulders
282	292	Sand, Gravel & Rocks
292	298	Rocks & Boulders
298	302	Sand, Gravel & Rocks
302	310	Sand, Clay & Sm. Gravel
310	314	Granite, Boulders
314	328	Sand, Gravel & Clay
328	342	Sand, Gravel, Sm. & Med.
342	354	Sand, Gravel & Boulders
354	372	Sand, Gravel & Clay
372	390	Sand, Gravel & Sm. Rocks
390	414	Sand, Gravel, Sm. Rocks & Clay
414	426	Sm. Boulders & Large Rocks
426	448	Sand, Gravel & Clay
448	450	Sm. Boulders
450	470	Sand, Gravel, Sm. Boulders & Rocks
470	553	Sand, Sm. Gravel
553	586	Sand, Sm. & Med. Gravel
586	596	Sand, Gravel w/Clay
596	604	Fine Sand
604	613	Fine Sand, & Sm. Gravel
613	636	Gravel & Large Rocks
636	640	Rock Boulder
640	644	Boulders

Work started 3-3 1988 Completed 4-1 1988

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED (Well Driller)

NAME McCalla Bros., Division of Layne Western C
(Person, firm, or corporation) (Typed or printed)
Address 3132 W. 17th St.
City Santa Ana, CA Zip 92703
License No. 510011 Date of this report 8-10-88

- CONTINUED -

15/2W-36G1

well 46

-203

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in
No. 277299

Notice of Intent No. _____
Local Permit No. or Date _____

State Well No. _____
Other Well No. _____

(1) OWNER: Name [redacted]
Address _____
City _____ ZIP _____

(2) LOCATION OF WELL (See instructions):
County _____ Owner's Well Number _____
Well address if different from above _____
Township _____ Range _____ Section _____
Distance from cities, roads, railroads, fences, etc. _____

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☐ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ☐
(Describe)

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size
Diameter of bore _____
Packed from _____ ft. to _____ ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☐ No ☐ If yes, to depth _____ ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval _____ ft.
Method of sealing _____

(10) WATER LEVELS:
Depth of first water, if known _____ ft.
Standing level after well completion _____ ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom? _____
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge _____ gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes ☐ No ☐ If yes, by whom? _____
Was electric log made Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 1154 ft. Completed depth 1150 ft.
from ft to ft. Formation (Describe by color, character, size or material)

CONTINUED FROM FORM# 158791

644	651	Sand, Sm. & Med. Gravel, Rocks
651	657	Boulders
657	682	Sand
682	704	Sand, Gravel & Rock
704	709	Sand, Sm. & Med. Gravel
709	732	Sand, Sm. Gravel, Sandy Clay
732	747	Gravel & Rocks
747	752	Sand & Clay
752	765	Sand, Gravel & Clay
765	767	Small Boulders
767	773	Sand, Gravel & Clay
773	775	Small Boulders
775	786	Sandy Clay, Sm. Gravel
786	800	Course Sand, Sm. Gravel & Clay
800	806	Large Boulders
806	828	Course Sand, Sm. Gravel & Clay
828	833	Sand, Sm. & Med. Gravel
833	854	Gravel, Sandy Clay
854	894	Sand, Sm. Gravel & Rock
894	897	Boulders
897	921	Sm. & Med. Lrg. Gravel & Rock
921	927	Lrg. Boulders
927	939	Sand, Gravel & Rocks
939	942	Boulders
942	965	Med. Lrg. Gravel & Rocks
965	968	Boulders
968	975	Sm., Med. & Large Gravel & Rocks
975	987	Sand, Sm. & Med. Gravel
987	992	Fine Sand & Sandy Clay
992	1021	Sand, Sm. & Med. Gravel & Rocks
1021	1044	Fine Sand & Sandy Clay
1044	1060	Fine Sand & Sm. Gravel
1060	1064	Boulders
1064	1085	Fine Sand & Small Gravel
1085	1092	Sm. Boulders & Rocks
1092	1098	Sand, Sm. & Med. Gravel & Rocks
1098	1105	Fine Sand, Sm. Gravel & Rocks
1105	1109	Boulders

Work started _____ 19__ Completed _____ 19__

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed _____ (Well Driller)
NAME McCalla Bros., Div. of Layne-Western Co. (Person, firm, or corporation) (Typed or printed)
Address _____
City _____ ZIP _____
License No. _____ Date of this report _____

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

86 96355

15/2W-36G1 VCM 4th 343

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in
No. 277300

Notice of Intent No. _____
Local Permit No. or Date _____

State Well No. _____
Other Well No. _____

(1) OWNER: Name [redacted]
Address _____
City _____ ZIP _____

(2) LOCATION OF WELL (See instructions):
County _____ Owner's Well Number _____
Well address if different from above _____
Township _____ Range _____ Section _____
Distance from cities, roads, railroads, fences, etc. _____

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☐ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ☐
(Describe)

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size
Diameter of bore _____
Packed from _____ to _____ ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☐ No ☐ If yes, to depth _____ ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval _____ ft.
Method of sealing _____

(10) WATER LEVELS:
Depth of first water, if known _____ ft.
Standing level after well completion _____ ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☑ If yes, by whom? _____
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge _____ gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes ☐ No ☐ If yes, by whom? _____
Was electric log made Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 1154 ft. Completed depth 1150 ft.
from ft. to ft. Formation (Describe by color, character, size or material)

CONTINUED FROM FORM# 277299

1109 - 1110 Sand
1110 - 1118 Drilling (hard) Lrg. Boulders
1118 - 1126 Lrg. Boulder Steel (hard) drilling
1126 - 1135 Sand, Sm. & Med. Gravel & Rocks
1135 - 1150 Sand, Gravel & Clay
1150 - 1154 Bedrock T.D.

CONFIDENTIAL
NOT FOR PUBLIC USE
WATER CODE SEC. 13752

Work started _____ 19__ Completed _____ 19__

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed _____ (Well Driller)
NAME McCalla Bros., Division of Layne Western Co. (Person, firm, or corporation) (Typed or printed)
Address _____
City _____ ZIP _____
License No. _____ Date of this report _____

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 96355

QUADRUPLICATE
Use of comply with
local requirements

Intent No.
Permit No. or Date 12809

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Herbert

Do not fill in
No. 157622
State Well No. 25/2W-1/13-P
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City Redlands, CA Zip 92373

(2) LOCATION OF WELL (See instructions):
County Riverside Owner's Well Number
Well address if different from above
Township Range Section
Distance from cities, roads, railroads, fences, etc.

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☒
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☐

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size
Diameter of bore
Packed from to ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☒ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	300	4	

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
300	100	1/8
100	0	1/8

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 20 ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing driven steel

(10) WATER LEVELS:
Depth of first water, if known 180 ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? JJWP
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft
Discharge 10+ gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth ft. Depth of completed well ft.
from ft. to ft. Formation (Describe by color, character, size or material)

0-20 soft sandy topsoil to sandy& grav
20-40 colored gravel & sand some boulc
40-60 colored gravel & sand
60-80 colored gravel & sand (pit drop)
80-100 colored gravel & some grey clay
100-120 firm grey clay & sand
120-140 brown clay & sand (hard)
140-160 brown clay & sand stone
160-180 brown clay sand stone
180-200 hard clayish((brown) sandstone
200-220 Hard brown clayish sandstone
220-240 hard sandstone & clay
240-260 hard sandstone some clay
260-280 hard sand stone some clay
280-300 hard sand stone some caay

Work started 19 Completed 19

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED
(Well Driller)
NAME Jack Jones Wells & Pumps
(Person, firm, or corporation) (Typed or printed)
Address P.O. Box 2031
City Hemet, CA 92343
License No. 436011 Date of this report 7-29-85

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

well #48

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 341080

Notice of Intent No. 243716
Local Permit No. or Date 016174

025/02W-24L01S (L02S)

State Well No. 025/02W-24L01 S
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City Yucaipa, CA ZIP 92399

(2) LOCATION OF WELL (See instructions):
County Riverside Owner's Well Number 48
Well address if different from above Singleton Road
Township 2S Range 2W Section 24
Distance from cities, roads, railroads, fences, etc.

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well XX Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal XX
Other ☐ (Describe)

(5) EQUIPMENT:
Rotary XX Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes XX No ☐ Size 4 X 8
Diameter of bore 26
Packed from 0 to 1180

(7) CASING INSTALLED:
Steel XX Plastic ☐ Concrete ☐

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	380	16 5/8	5/16	380	870	.060
870	930	"	"	930	1160	.060
1160	1180	"	"			

(9) WELL SEAL:
Was surface sanitary seal provided? Yes XX No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing concrete grout

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☐ If yes, by whom?
Was electric log made? Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 1230 ft. Completed depth 1180 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	30	Sand & gravel
30	32	Silty clay and sand
32	63	Sand & gravel
63	115	Silty clay and sand
115	129	Sand and gravel
129	137	Silty clay with sand
137	150	Sand and gravel
150	162	Silty clay
162	188	Sand and gravel
188	201	Sand, gravel and cobbles
201	224	Silty clay with sand
224	243	Sand, gravel and cobbles
243	258	Silty clay with sand
258	286	Sand, gravel and cobbles
286	321	Silty clay with sand
321	338	Sand and gravel
338	371	Silty clay with sand
371	385	Silty clay (greenish)
385	414	Sand and gravel
414	451	Sand and gravel (rough)
451	508	Sand and gravel
508	545	Sand, gravel and silt
545	562	Sand, gravel and silty clay
562	674	Sand and gravel
674	698	Silty clay with sand
698	711	Sand and gravel
711	757	Silty clay with sand
757	770	Sand and gravel
770	783	Silty clay
783	825	Sand and gravel
825	860	Silty clay with interbedded sand layers
860	875	Silty clay, more sand
875	1132	Silty clay with interbedded sand layers
1132	1161	Sand & gravel with silty clay
1161	1230	Silty clay with sand

Work started 2-12 19 90 Completed 3-9 19 90

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed Gary S. Hall, Jr. (Well Driller)
NAME Howard Pump, Inc. (Person, firm, or corporation) (Typed or printed)
Address P.O. Box 1249
City Barstow, CA ZIP 92312-1249
License No. Date of this report

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

WMN #48

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. **341080**

Notice of Intent No. 243716
Local Permit No. or Date 016174

2S/2W - 24L2

State Well No. ______
Other Well No. ______

(1) OWNER: Name [redacted]
Address [redacted]
City Yucaipa, CA ZIP 92399

(2) LOCATION OF WELL (See instructions):
County Riverside Owner's Well Number 48
Well address if different from above Singleton Road
Township 2S Range 2W Section 24
Distance from cities, roads, railroads, fences, etc. ______

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well [✓ XX] Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal [✓]
Other ☐
(Describe)

(5) EQUIPMENT:
Rotary [✓ XX] Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes [✓ XX] No ☐ Size 4 X 8
Diameter of bore 26"
Packed from 0 to 1180 ft.

(7) CASING INSTALLED:
Steel [✓ XX] Plastic ☐ Concrete ☐

(8) PERFORATIONS
Type of perforation or size of screen

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	380	16 5/8	5/16	380	870	.060
870	930	"	"	930	1160	.060
1160	1180	"	"			

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [✓ XX] No ☐ If yes, to depth 50 ft
Were strata sealed against pollution? Yes ☐ No ☐ Interval ______ ft
Method of sealing concrete grout

(10) WATER LEVELS:
Depth of first water, if known ______ ft
Standing level after well completion ______ ft

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom? ______
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ______ ft At end of test ______ ft
Discharge ______ gal/min after ______ hours Water temperature ______
Chemical analysis made? Yes ☐ No ☐ If yes, by whom? ______
Was electric log made Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 1230 ft. Completed depth 1180 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	30	Sand & gravel
30	32	Silty clay and sand
32	63	Sand & gravel
63	115	Silty clay and sand
115	129	Sand and gravel
129	137	Silty clay with sand
137	150	Sand and gravel
150	162	Silty clay
162	188	Sand and gravel
188	201	Sand, gravel and cobbles
201	224	Silty clay with sand
224	243	Sand, gravel and cobbles
243	258	Silty clay with sand
258	286	Sand, gravel and cobbles
286	321	Silty clay with sand
321	338	Sand and gravel
338	371	Silty clay with sand
371	385	Silty clay (greenish)
385	414	Sand and gravel
414	451	Sand and gravel (rough)
451	508	Sand and gravel
508	545	Sand, gravel and silt
545	562	Sand, gravel and silty clay
562	674	Sand and gravel
674	698	Silty clay with sand
698	711	Sand and gravel
711	757	Silty clay with sand
757	770	Sand and gravel
770	783	Silty clay
783	825	Sand and gravel
825	860	Silty clay with interbedded sand layers
860	875	Silty clay, more sand
875	1132	Silty clay with interbedded sand layers
1132	1161	Sand & gravel with silty clay
1161	1230	Silty clay with sand

Work started 2-12 19 90 Completed 3-9 19 90

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed Gary S. Hall, Jr. (Well Driller)
NAME Howard Pump, Inc. (Person, firm, or corporation) (Typed or printed)
Address ______
City P.O. Box 1249 ZIP ______
License No. Barstow, CA Date of this report 92312-1249

DWR 188 (REV. 12-86)
IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM
86 96355

Well 48
2S/2W-29L2

welenco

ELECTRIC LOG

Filing No.	
Company	HOWARD PUMP
Well	#48 YUCAIPA VALLEY WATER DISTRICT
Field	YUCAIPA
State	CA
County	RIVERSIDE
Location	SINGLETON BLVD
Sec. / Twp. / Rge.	
Other Services	NONE
Permanent Datum	GROUND LEVEL, Elev.
Log Measured From	G.L., 0 Ft. Above Perm. Datum
Drilling Measured From	GROUND LEVEL
Elev.: K.B. / D.F. / G.L.	

Date	2-20-90			
Run No.	ONE			
Depth—Driller	1230'			
Depth—Logger	1230'			
Btm. Log Inter.	1230'			
Top Log Inter.	35'			
Casing—Driller	NONE @	@	@	@
Casing—Logger	—			
Bit Size	9 7/8"			
Type Fluid in Hole	BENTONITE			
Dens. / Visc.	N/A			
pH / Fluid Loss	N/A ml	ml	ml	ml
Source of Sample	P.T			
Rm @ Meas. Temp.	13.0 @ 73 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	12.8 @ 73 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	N/A @ °F	@ °F	@ °F	@ °F
Source: Rmf Rmc	MEAS			
Rm @ BHT	N/A @ °F	@ °F	@ °F	@ °F
Time Since Circ.	2 HOURS			
Max. Rec. Temp.	N/A °F	°F	°F	°F
Equip. / Location	DU-1 / L.B.			
Recorded By	RIDDER			
Witnessed By	B. FOX			

FIELD PRINT

This Heading and Log Conform To API RP 33

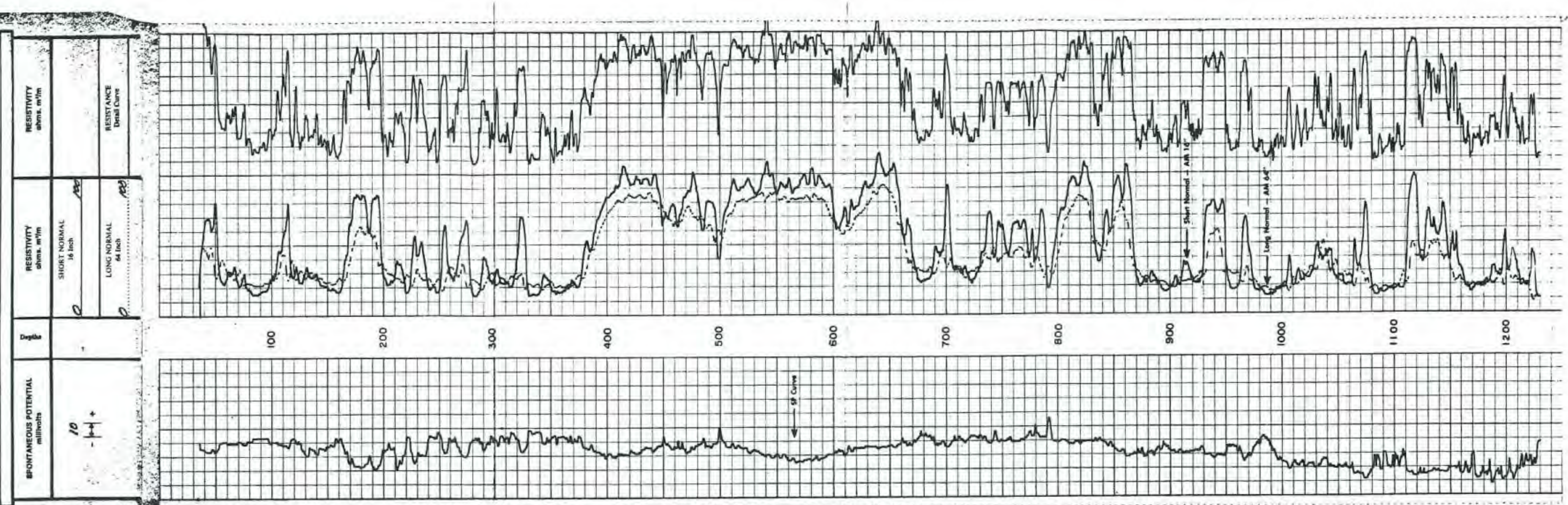
Fold Here

REMARKS

Changes in Mud Type or Additional Samples

Scale Changes

Equipment Data

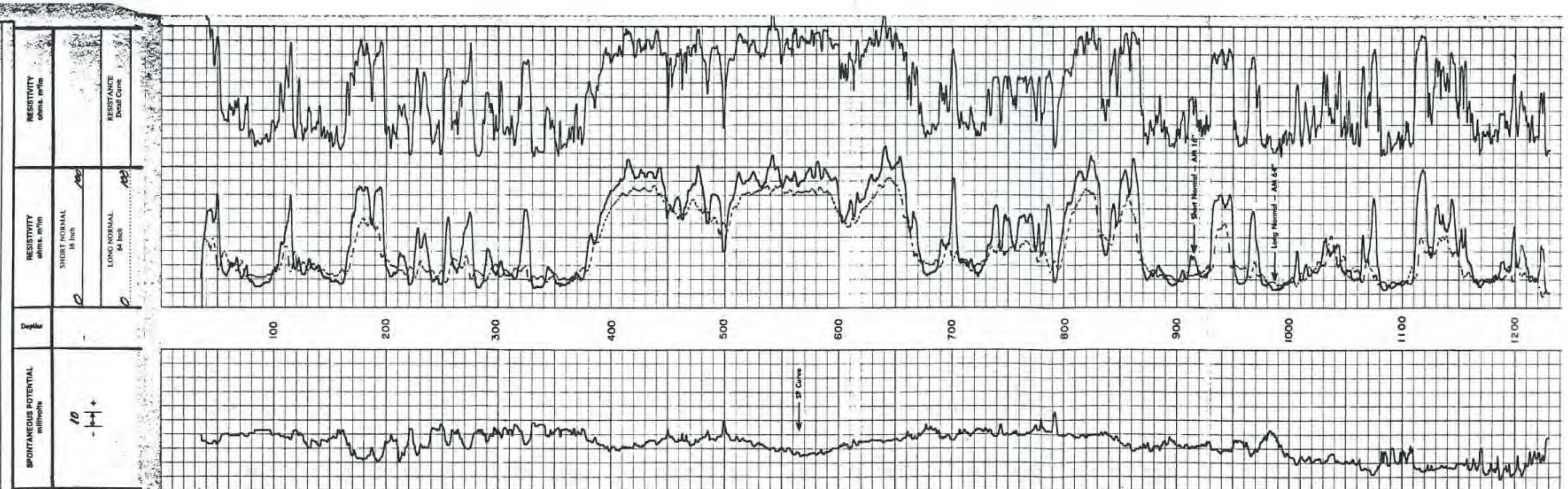


C.O. #194

welenco

ELECTRIC LOG

Company HOWARD PUMP
Well #48 YUCAIPA VALLEY WATER DISTRICT
Field YUCAIPA
State CA County RIVERSIDE
Location SINGLETON BLVD
Other Services NONE
Permanent Datum GROUND LEVEL
Log Measured From G.L., 0 Ft. Above Perm. Datum
Drilling Measured From GROUND LEVEL
Date 2-20-90
Run No. ONE
Depth—Driller 1230'
Depth—Logger 1230'
Btm. Log Inter. 1230'
Top Log Inter. 35'
Casing—Driller NONE @
Casing—Logger —
Bit Size 9 7/8"
Type Fluid in Hole BENTONITE
Dens. / Visc. N/A
pH / Fluid Loss N/A
Source of Sample P.T
Rm @ Meas. Temp. 13.0 @ 73 °F
Rmf @ Meas. Temp. 12.8 @ 73 °F
Rmc @ Meas. Temp. N/A
Source: Rmf Rmc MEAS
Rm @ BHT N/A
Time Since Circ. 2 HOURS
Max. Rec. Temp. N/A
Equip. / Location DU-1 / L.B.
Recorded By RIDDER
Witnessed By B. FOX
FIELD PRINT



welenco

ELECTRIC LOG

FILING NO

COMPANY: HOWARD PUMP

WELL: #48 YUCAIPA VALLEY WATER DISTRICT

FIELD: YUCAIPA

STATE: CALIFORNIA COUNTY: RIVERSIDE

LOCATION: SINGLETON RD. EAST OF I-10

SEC. ____ TWP. ____ RGE. ____

OTHER SERVICES: NONE

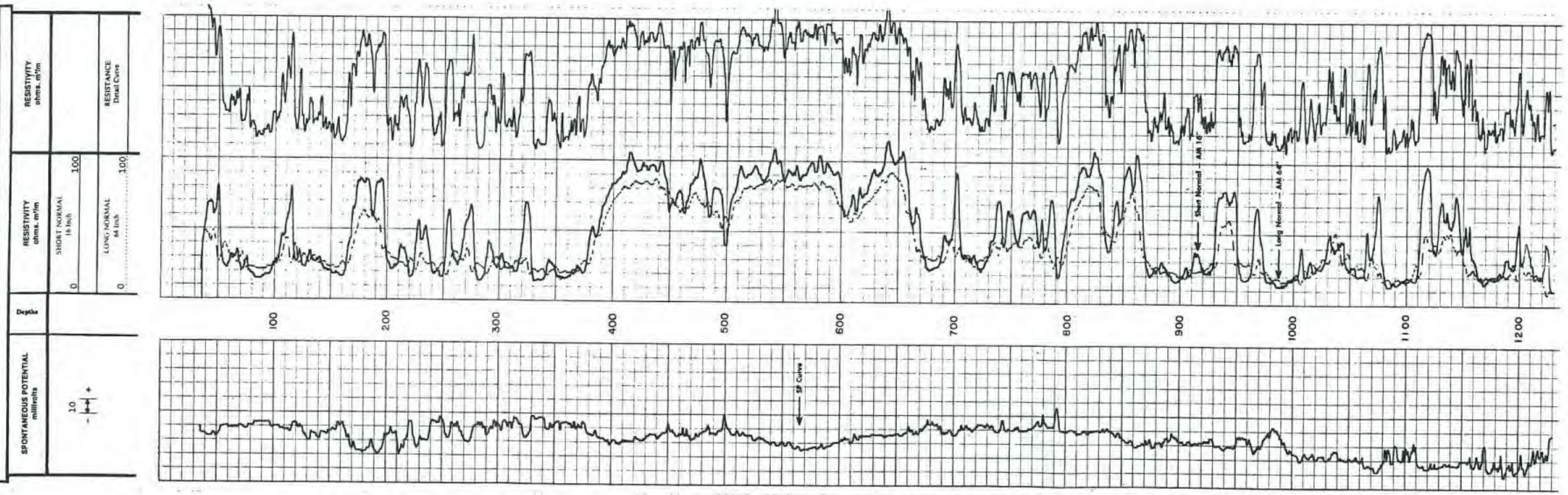
Permanent Datum: GROUND LEVEL, Elev. ____

Log Measured From: G.L., 0 Ft. Above Perm. Datum

Drilling Measured From: GROUND LEVEL

Elev.: K.B. ____ D.F. ____ G.L. ____

Date	2-20-90			
Run No.	ONE			
Depth—Driller	1230'			
Depth—Logger	1230'			
Btm. Log Inter.	1230'			
Top Log Inter.	35'			
Casing—Driller	NONE @	@	@	@
Casing—Logger	--			
Bit Size	9 7/8"			
Type Fluid in Hole	BENTONITE			
Dens. | Visc.	N/A			
pH | Fluid Loss	N/A | ml	| ml	| ml	| ml
Source of Sample	PIT			
R_m @ Meas. Temp.	13.0 @ 73 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	12.8 @ 73 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	N/A @ °F	@ °F	@ °F	@ °F
Source: R_{mf} R_{mc}	MEAS			
R_m @ BHT	N/A @ °F	@ °F	@ °F	@ °F
Time Since Circ.	2 HOURS			
Max. Rec. Temp.	N/A °F	°F	°F	°F
Equip. | Location	DV-1 | L.A.			
Recorded By	RIDDER			
Witnessed By	S. ROY			



#49

2S/2W-3J1

DUPLICATE
Driller's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 341209

Notice of Intent No. 243729
Local Permit No. or Date

State Well No.
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City Yucaipa, Ca 92399 ZIP

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number #49
Well address if different from above
Township 2S Range 2W Section 3
Distance from cities, roads, railroads, fences, etc. sand & gravel
Parcel # 318-051-43

1615

(3) TYPE OF WORK:
New Well ☐ Deepening ☐
Reconstruction ☐ same
Reconditioning ☐ silt
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☒
Municipal ☐
Other ☐
(Describe)

WELL LOCATION SKETCH

1593

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size
Diameter of bore
Packed from ft. to ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	400		
520	670		
830	910		
1160	1180		

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
420	622	
670	800	
830	880	
910	1100	

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom?
Type of test Pump ☒ Bailer ☐ Air lift ☐
Depth to water at start of test ft At end of test ft
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☒ No ☐ If yes, by whom?
Was electric log made Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth ft. Completed depth ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0'	390'	7.5hr Sand and gravel & cobbles
390'	439'	22hr Drlg slowed down
439'	459'	22hr Sand & gravel & cobbles w/some clay
459'	470'	22hr Sand & gravel w/some cobbl and silt
470'	473'	22 hr Sand & gravel w/some clay
473'	490'	18hr Fine t. med sand & silt
490	520	18hr Med to course sand & silt
520	535	Looks like chipped rock sharp cobbles
535	615	Med to course sand w/cobbles and silt
615	627	Sand & Gravel w/some clay
627	700	Sand & gravel w/some cobbles & silt
700	765	Med to course sand
765	845	Med to course sand& gravel
845	854	TD
854	935	Sand, Gravel and silts
935	1198	Med to course sand

Work started 19 Completed 19 90

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief

Signed Mark C. (Well Driller)
NAME Howard Pump Inc. (Person, firm, or corporation) (Typed or printed)
Address PO Box 1249
City Barstow Ca ZIP 92311
License No. 231314 Date of this report

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

86 96355

THIS WELL DRILLED PRIOR TO PERMITTING OR PRESITE BY DEHS.

County of San Bernardino — Environmental Public Works Agency
DEPARTMENT OF ENVIRONMENTAL HEALTH SERVICES
385 North Arrowhead Avenue, San Bernardino, CA 92415-0160

25/2N-3J1

DO NOT FILL IN
Permit Number 04129021
Expiration 4-12-91
FF
FA
SN

WELL PERMIT
(Please Print)

DO NOT FILL IN CK: 19787 $ 275 - 137.50
Date 4-12-90
Amount $ 412.50
Receipt Number 041290-2
By Howard Pump #19787

1. OWNER: Name [redacted]
Mailing Address [redacted]
City Yucaipa, CA Zip 92399
Site Address Well #49
City Yucaipa Zip
Telephone Number (714) 797-5117

2. WELL DRILLER:
Contractor Howard Pump, Inc. (Name)
Date Start April 1990
Date Complete May 1990

3. WELL USE *(check)*:
☒ Community ☐ Horizontal ☐ Other
☐ Individual ☐ Test
☐ Agricultural ☐ Monitoring
☐ Dairy ☐ Public Water Supply

4. TYPE OF WORK *(check)*:
☒ New ☐ Reconstruction ☐ Destruction

Items 6 through 10 to be estimated for new wells, exact for all other wells.

5. ANNULAR SEAL: Seal Depth 50 ft.
Furnished by: ☐ Owner ☒ Contractor
☐ Driven Conductor Dia. ____ in., Wall (Gage) ____
☒ Sealing Material cement, Thickness 2 in.

6. DEPTH OF WELL *(feet)*:
Proposed 1000 Existing 0
DIAMETER OF BORE *(in.)*: 28"

7. CASING INSTALLED:
☒ Steel ☐ Plastic ☐ Other

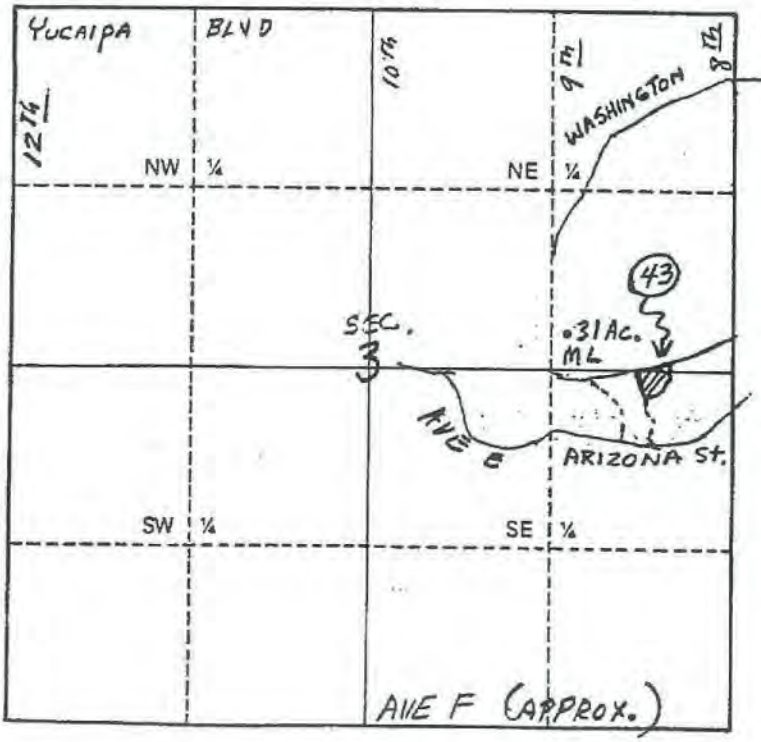
From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)
0	650	14"	

GRAVEL PACK: ☒ Yes ☐ No
From 50 to 1000 ft.

8. PERFORATIONS *(if applicable)*:
From 650 to 1000 ft.

9. SEALED ZONES *(if applicable)*:
From 0 to 50 ft.

SECTION MAP — DO NOT FILL IN *Scale: 1 inch = ¼ mile*



10. LOCATION INFORMATION: 31-A6
(a) Township 2S N/S Range 2W E/W
Section 3
(b) Assessor's Parcel No. 318-051-43
(c) Solid or liquid waste disposal site within two miles?
☐ Yes ☒ No
Location

(Continue on reverse side)

NO M.A.V.

DO NOT FILL IN
Seal
Cap
Check Valve
Electricals
Slab
Tag
Building and Safety Notified

well 49
2S/2W-3J1

CG #339

welenco

ELECTRIC LOG

FILING NO.	
COMPANY	HOWARD PUMP
WELL	#49 (RUN TWO)
FIELD	YUCAIPA
STATE	CA
COUNTY	SAN BERNARDINO
LOCATION	9TH AVE @ AVE E.
SEC	
TWP	
RGE	
OTHER SERVICES	E-LOG
Permanent Datum	GROUND LEVEL
Elev.	
Log Measured From	G.L. , 0 Ft. Above Perm. Datum
Drilling Measured From	GROUND LEVEL
Elev.: K.B.	
D.F.	
G.L.	

Date	9-6-90			
Run No.	ONE			
Depth—Driller	1178'			
Depth—Logger	1194'			
Btm. Log Inter.	1192'			
Top Log Inter.	30'			
Casing—Driller	NONE @	@	@	@
Casing—Logger	—			
Bit Size	9 7/8"			
Type Fluid in Hole	BENTONITE			
Dens. | Visc.	N/A			
pH | Fluid Loss	N/A ml	ml	ml	ml
Source of Sample	PIT			
R_m @ Meas. Temp.	10.8 @ 65 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	11.0 @ 66 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	N/A @ °F	@ °F	@ °F	@ °F
Source: R_{mf} | R_{mc}	MEAS			
R_m @ BHT	N/A @ °F	@ °F	@ °F	@ °F
Time Since Circ.	3 HOURS			
Max. Rec. Temp.	N/A °F	°F	°F	°F
Equip. | Location	DV-1 | L.R.			
Recorded By	RIDDER			
Witnessed By				

FIELD PRINT

Fold Here

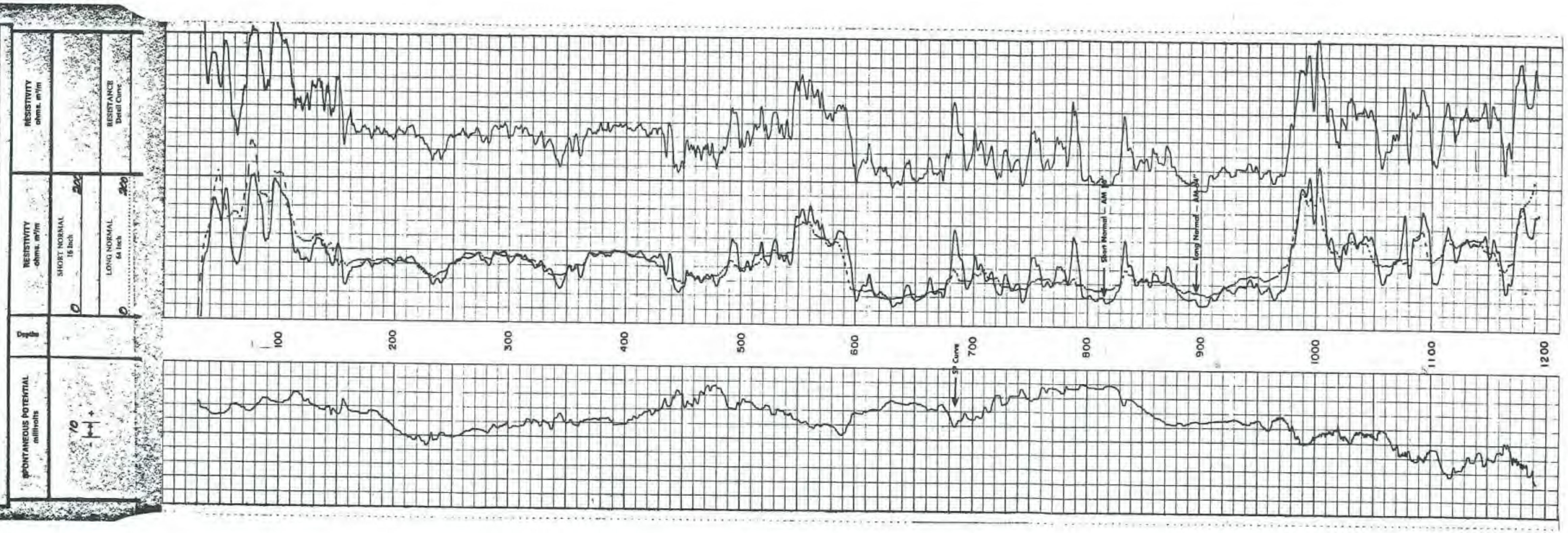
This Heading and Log Conform To API RP 31

REMARKS

Changes in Mud Type or Additional Samples							
Date	Sample No.	Depth—Driller	Type Fluid in Hole	Dens. | Visc.	pH | Fluid Loss	Source of Sample	R_m @ Meas. Temp. / R_{mf} @ Meas. Temp. / R_{mc} @ Meas. Temp. / Source: R_{mf} | R_{mc} / R_m @ BHT

Scale Changes			
Type Log	Depth	Scale Up Hole	Scale Down Hole

Equipment Data			
Run No.	Tool Type	Pad Type	Tool Position	Other
ONE	NORMAL	—	FREE



welenco

ELECTRIC LOG

FILING NO

COMPANY HOWARD PUMP

WELL #49

FIELD YUCAIPA

STATE CALIFORNIA COUNTY SAN BERNARDINO

LOCATION: 8th AVE. @ AVE E

SEC. TWP. RGE.

OTHER SERVICES: NONE

Permanent Datum: G.L. Elev. Elev.: K.B.

Log Measured From G.L. 0 Ft. Above Perm. Datum D.F.

Drilling Measured From G.L. G.L.

Date	3-30-90			
Run No.	ONE			
Depth—Driller	854'			
Depth—Logger	853'			
Btm. Log Inter.	850'			
Top Log Inter.	100'			
Casing—Driller	NONE @	@	@	@
Casing—Logger	-			
Bit Size	9 7/8"			
Type Fluid in Hole	BENTONITE			
Dens. | Visc.	N/A			
pH | Fluid Loss	N/A | ml	| ml	| ml	| ml
Source of Sample	PIT			
R_m @ Meas. Temp.	11.0 @ 70 °F	@ °F	@ °F	@ °F
R_{mf} @ Meas. Temp.	11.2 @ 71 °F	@ °F	@ °F	@ °F
R_{mc} @ Meas. Temp.	N/A @ °F	@ °F	@ °F	@ °F
Source: R_{mf} R_{mc}	MEAS |	|	|	|
R_m @ BHT	N/A @ °F	@ °F	@ °F	@ °F
Time Since Circ.	0 HOURS			
Max. Rec. Temp.	N/A °F	°F	°F	°F
Equip. | Location	DV-1 | LA	|	|	|
Recorded By	RIDDER			
Witnessed By				

Fold Here — This Reading and Log Conform To API RP 31

REMARKS

Changes in Mud Type or Additional Samples
Date | Sample No.
Depth—Driller
Type Fluid in Hole
Dens. | Visc.
pH | Fluid Loss ml
Source of Sample
R_m @ Meas. Temp. @ °F
R_{mf} @ Meas. Temp. @ °F
R_{mc} @ Meas. Temp. @ °F
Source: R_{mf} | R_{mc}
R_m @ BHT @ °F
R_{mf} @ BHT @ °F
R_{mc} @ BHT @ °F

Bore Changes
Scale Up Hole
Scale Down Hole

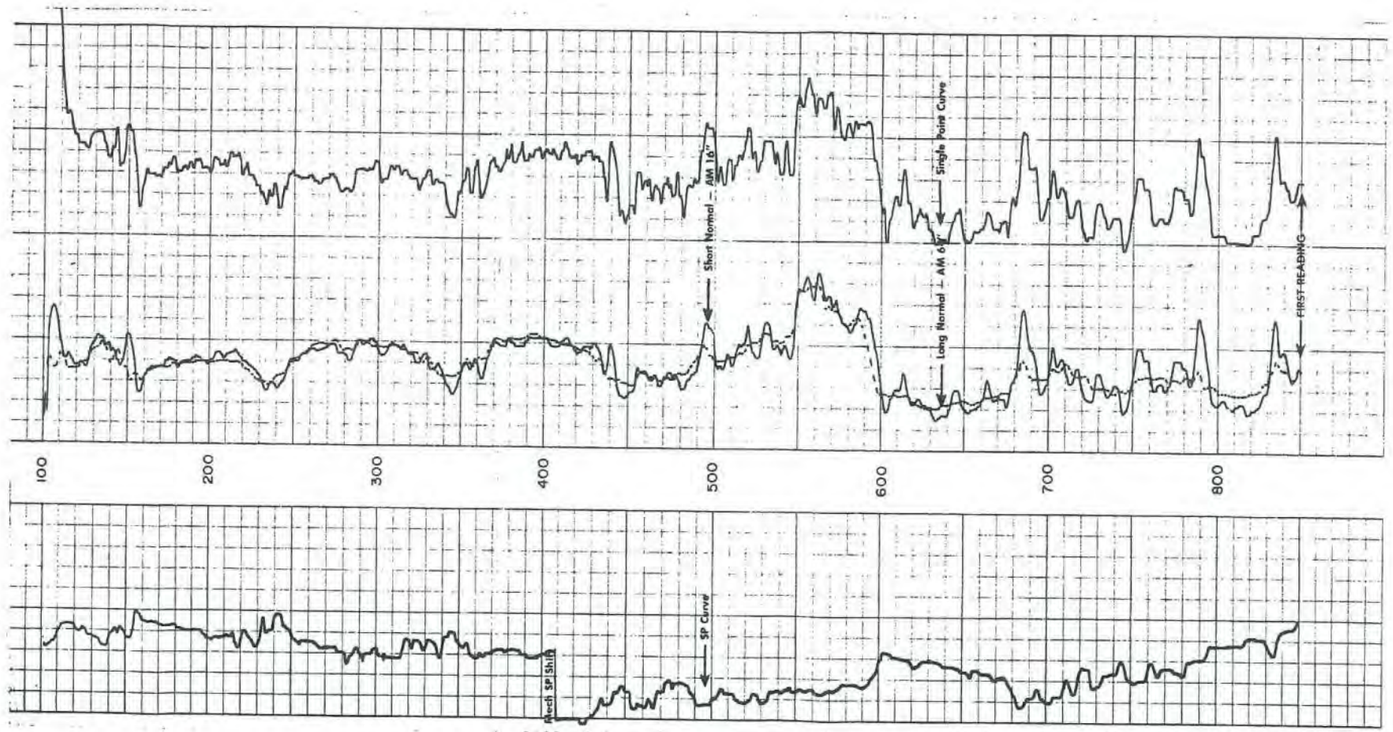
Type Log
Depth

Equipment Data
Run No. | Tool Type | Tool Position | Other
1 | NORMAL | FREE

RESISTIVITY ohms. m²/m
SHORT NORMAL 16 Inch 0 200
LONG NORMAL 64 Inch 0 200
RESISTANCE Detail Curve

Depths

SPONTANEOUS POTENTIAL millivolts
-S +



25/2W-1Q1 - Notes say changed to 25/2W-1K1 in 2003 per Yucaipa well database = 25/2W-1Q1 #50

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 341098

Notice of Intent No. 249930
Local Permit No. or Date

State Well No.
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City [redacted] ZIP 92399

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number #50
Well address if different from above
Township Range Section
Distance from cities, roads, railroads, fences, etc.
Parcel # 310-132-25

(3) TYPE OF WORK:
New Well XX Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well XX
Municipal ☐
Other ☐

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary XX Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size
Diameter of bore
Packed from ft. to ft.

(7) CASING INSTALLED:
Steel XX Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	330	6 5/8	.134

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
330	358	.080

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 20' ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing Hole plug

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☐ If yes, by whom?
Was electric log made? Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth ft. Completed depth ft.

from ft.	to	ft.	Formation (Describe by color, character, size or material)
0	-	5	Clay (brown silty)
5	-	80	Sand and gravel
80	-	270	Sand gravel & cobbles
270	-	291	Sand, gravel & boulders
291	-	300	Silty clay and asand
300	-	334	Sand gravel and boulders
334	-	341	Silty clay and sand
341	-	372	Sand & gravel and cobbles
372	-	388	Dark green rock (hard)
388	-	420	Sand & gravel and cobbles
420	-	450	Sand & gravel & cobbles
450	-	451	Granite
450	-	451	Granite w/silts

Work started 4-9 19 90 Completed 4-13 19 90

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed Gary Hall (Well Driller)
NAME Howard Pump, Inc. (Person, firm, or corporation) (Typed or printed)
Address PO Box 1219
City Barstow, Ca ZIP 92311
License No. 221311 Date of this report

DWR 188 (REV. 12-8) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 96355

25/2W-10Q1

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in
No. 341098

...Copy

Notice of Intent No. 249930
Local Permit No. or Date

State Well No.
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City [redacted] ZIP 92399

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number #50
Well address if different from above
Township Range Section
Distance from cities, roads, railroads, fences, etc.
Parcel # 310-132-25

(3) TYPE OF WORK:
New Well XX Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well XX
Municipal ☐
Other ☐
(Describe)

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary XX Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size
Diameter of bore
Packed from ft. to ft.

(7) CASING INSTALLED:
Steel XX Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	330	6 5/8	.134

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
330	350	.080

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 20' ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing Hole plug

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☐ If yes, by whom?
Was electric log made Yes ☒ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth ft. Completed depth ft.

from ft.	to	ft.	Formation (Describe by color, character, size or material)
0	–	5	Clay (brown silty)
5	–	80	Sand and gravel
80	–	270	Sand gravel & cobbles
270	–	291	Sand, gravel & boulders
291	–	300	Silty clay and asand
300	–	334	Sand gravel and boulders
334	–	341	Silty clay and sand
341	–	372	Sand & gravel and cobbles
372	–	388	Dark green rock (hard)
388	–	420	Sand & gravel and cobbles
420	–	430	Sand & gravel & cobbles
430	–	450	Granite
450	–	461	Granite w/silts

Work started 4-9 19 90 Completed 4-13 19 90

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Signed Gary Hall (Well Driller)
NAME Howard Pump, Inc.
(Person, firm, or corporation) (Typed or printed)
Address PO Box 1249
City Barstow, Ca ZIP 92311
License No. 281214 Date of this report

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 96335

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in
No. 341098

Notice of Intent No. 249930
025/02W-01K0015 (1st)
State Well No. ~~025/02W01K01~~
Local Permit No. or Date
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City [redacted] ZIP 92399

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number #50
Well address if different from above
Township 2S Range 2W Section 1
Distance from cities, roads, railroads, fences, etc.
Parcel # 319-132-25

changed 3/28/03 plots in K 01K001 gg

(3) TYPE OF WORK:
New Well XX Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☑
Irrigation ☐
Industrial ☐
Test Well XX
Municipal ☐
Other ☐
(Describe)

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary XX Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☑ Size
Diameter of bore
Packed from ft. to ft.

(7) CASING INSTALLED:
Steel XX Plastic ☐ Concrete ☐

From ft.	To ft.	Dia in.	Gage or Wall
0	330	6-5/8	.134

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
330	350	.080

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☑ No ☐ If yes, to depth 20' ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing Hole plug

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☐ If yes, by whom?
Was electric log made Yes ☑ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 481 ft. Completed depth 350 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	5	Clay (brown silty)
5	80	Sand and gravel
80	270	Sand gravel & cobbles
270	291	Sand, gravel & boulders
291	300	Silty clay and sand
300	334	Sand gravel and boulders
334	341	Silty clay and sand
341	372	Sand & gravel and cobbles
372	388	Dark green rock (hard)
388	420	Sand - gravel and cobbles
420	450	Sand & gravel & cobbles
420	450	Granite
450	481	Granite w/silts

Work started 4-9 19 98 Completed 4-13 19 98

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed Gary Hall
NAME Howard Pump, Inc. (Well Driller)
(Person, firm, or corporation) (Typed or printed)
Address PO Box 1249
City Barstow, Ca ZIP 92311
License No. 281814 Date of this report

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

DWR 188 (REV. 12-86) 86 94355

1S/2W -29C1

ORIGINAL
File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 341364

Notice of Intent No. 243729
Local Permit No. or Date 04129021

State Well No. ______
Other Well No. ______

(1) OWNER: Name [redacted]
Address
City ______ ZIP 92399

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number #51
Well address if different from above ______
Township ______ Range ______ Section ______
Distance from cities, roads, railroads, fences, etc. ______

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☐ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ☒
(Describe)

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☒ Size ______
Diameter of bore ______
Packed from ______ to ______ ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☐ No ☐ If yes, to depth ______ ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ______ ft.
Method of sealing ______

(10) WATER LEVELS:
Depth of first water, if known ______ ft.
Standing level after well completion ______ ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom? ______
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ______ ft. At end of test ______ ft.
Discharge ______ gal/min after ______ hours Water temperature ______
Chemical analysis made? Yes ☐ No ☐ If yes, by whom? ______
Was electric log made Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth ______ ft. Completed depth ______ ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	18	Clay
18	45	Sand, Gravel and Cobbles
45	65	Clay w/sand
65	84	Sand, gravel and cobbles
84	110	Clay w/sand
110	291	Sand, gravel and cobbles
291	298	Clay w/sand and gravel
298	345	Sand and Gravel
345	360	Sand and gravel w/ clay
360	482	Sand and gravel and cobbles
482	490	Sand and gravel (green)
490	600	Sand and gravel
600	610	Sand and gravel w/sharp chips of rock. very hard DRLG
610	683	Very hard Rock CHips No sand or clay (granite)
	683	T D

CONFIDENTIAL NOT FOR PUBLIC USE WATER CODE SEC. 13752

Work started 4-23 19 90 Completed ______ 19 ______

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed ______ (Well Driller)
NAME Howard Pump, Inc
(Person, firm, or corporation) (Typed or printed)
Address P.O. Box 1249 Barstow, Ca 92312-1249
City ______ ZIP ______
License No. 281814 Date of this report ______

DWR 188 (REV. 12-86)

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

86 96355

1S/2W-24C1

#51

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in
No. 341364

Notice of Intent No. 243729
Local Permit No. or Date 04129021

State Well No. _____
Other Well No. _____

(1) OWNER: Name [redacted]
Address [redacted]
City [redacted] ZIP 92399

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number #51
Well address if different from above Kadota & Bryant
Township 1S Range 2W Section 24
Distance from cities, roads, railroads, fences, etc. _____

302-311-04

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ☐
(Describe)

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size: All Amer. Rancho
Diameter of bore 30"
Packed from 0 ft. to XX 610 ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	230	12"	.
590	610		

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
230	590	.080

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval _____ ft.
Method of sealing 30" conductor cemented in place

(10) WATER LEVELS:
Depth of first water, if known 82.1 ft.
Standing level after well completion 90.1 ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? HPI
Type of test Pump ☒ Bailer ☐ Air lift ☐
Depth to water at start of test 82.1 At end of test 90.1 ft.
Discharge 1500 gal/min after 65 hours Water temperature _____
Chemical analysis made? Yes ☐ No ☒ If yes, by whom? _____
Was electric log made Yes ☒ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth _____ ft. Completed depth _____ ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	18	Clay
18	45	Sand, Gravel and Cobbles
45	55	Clay w/sand
55	84	Sand, gravel and cobbles
84	110	Clay w/sand
110	291	Sand, gravel and cobbles
291	295	Clay w/sand and gravel
295	345	Sand and Gravel
345	360	Sand and gravel w/ clay
360	488	Sand and gravel and cobbles
488	492	Sand and gravel (green)
492	500	Sand and gravel
500	515	Sand and gravel w/sharp chips of rock. very hard DRLG
515	633	Very hard Rock CHips No sand or clay (granite)
	633	T D

Work started 1 19 91 Completed _____ 19 _____

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Signed Cary Hall (Well Driller)

NAME Howard Pump, Inc (Person, firm, or corporation) (Typed or printed)

Address P.O. Box 1249 Barstow, Ca 92312-1249

City _____ ZIP _____

License No. 231914 Date of this report 1-22-91

Yucaipa Valley Water District

12770 Second Street • P. O. Box 730 • Yucaipa, California 92399-0730
(909) 797-5117 • • E-mail: yvwd@eee.org

FAX COVER SHEET
YVWD ENGINEERING FAX NO.: 909-797-5937

Date: 02-05-99

Number of Pages Including Cover 6

To: MR. TONG
Geo Science

FAX NO.: (909) 920-0403

FROM: B. Antonl / Ray

REGARDING: Well #53 (YVWD)
Ray - Asked Me to Send you
E-Log & Driller's Log

Carefully account for the number of pages faxed to you. If there are any missing or illegible pages, please notify the sender immediately.

TRIPLICATE
Owner's Copy
Page 1 of 1

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet
No. 477777

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Owner's Well No. 53
Date Work Began 11-10-92 Ended 1-30-93
Local Permit Agency San Bernardino Environment Health
Permit No. 1109211 Permit Date 11-4-92

GEOLOGIC LOG

ORIENTATION (∠) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DEPTH TO FIRST WATER 331 (Ft) BELOW SURFACE

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0 : 50	TOP SOIL
50 : 60	FINE SAND AND GRAVEL
60 : 110	FINE SAND, COARSE SAND, GRAVEL
110 : 150	FINE & COARSE SAND
150 : 250	FINE SAND, COARSE SAND, GRAVEL
250 : 290	FINE SAND, GRAVEL, CLAY
290 : 440	FINE SAND, GRAVEL, ROCK
440 : 490	SAND, GRAVEL, ROCK
490 : 500	DECOMPOSED GRANITE, HARD
500 : 520	DECOMPOSED GRANITE, SAND, GRAVEL
520 : 640	SAND, GRAVEL, CLAY
640 : 680	SAND, GRAVEL, ROCK, CLAY
680 : 710	SAND, GRAVEL, CLAY
710 : 740	SAND, GRAVEL, CLAY, ROCK
740 : 800	GRAVEL, ROCK, GRANITE, BOULDERS
800 : 840	SAND, GRAVEL, ROCK, CLAY
840 : 860	CEMENTED SAND, GRAVEL, ROCK
860 : 1030	SAND, GRAVEL, SMALL & LARGE ROCK, CLAY
1030 : 1140	SAND, GRAVEL, CLAY, VOULDERS
1140 : 1210	SAND, GRAVEL, CLAY
1210 : 1220	CEMENTED SAND, GRAVEL, GRANITE

TOTAL DEPTH OF BORING 1225 (Feet)
TOTAL DEPTH OF COMPLETED WELL 970 (Feet)

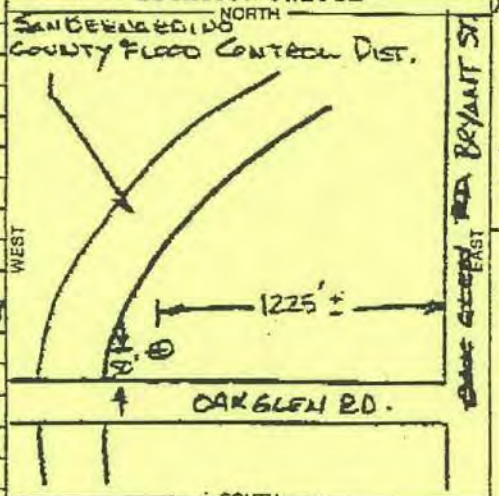
WELL OWNER

Name [redacted]
Mailing Address
City STATE ZIP

WELL LOCATION

Address Side of Oak Glen Road, between Sunnyside & Bryant in City of Yucaipa
City San Bernardino
County
APN Book 303 Page 51 Parcel 45
or Township 1S Range 2W Section 5
or Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH



Illustrate or Describe Distance of Well from Landmarks such as Roads, Buildings, Fences, Rivers, etc.
PLEASE BE ACCURATE & COMPLETE

ACTIVITY (∠)

___ NEW WELL
___ MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
___ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USE(S) (∠)
___ MONITORING
WATER SUPPLY
X Domestic
___ Public
___ Irrigation
___ Industrial
___ "TEST WELL"
___ CATHODIC PROTECTION
___ OTHER (Specify)

DRILLING METHOD Reverse FLUID Water

WATER LEVEL & FIELD OF COMPLETED WELL

DEPTH OF STATIC WATER LEVEL 331' (Ft.) & DATE MEASURED 1-4-93
ESTIMATED YIELD 1750 (GPM) & TEST TYPE constant
TEST LENGTH 24 (Hrs.) TOTAL DRAWDOWN 115 (Ft.)
* May not be representative of a well's long-term yield.

CASING(S)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (∠) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL/ GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0 : 50	40"			X		M.S.	30"	5/16	
0 : 450	30"	X				M.S.	16"	5/16	
450 : 950	30"		X			M.S.	16"	5/16	.080
950 : 970	30"	X				M.S.	16"	5/16	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE: CEMENT (∠)	BENTONITE (∠)	FILL (∠)	FILTER PACK (TYPE/SIZE)
0 : 50	X			10 sack slurr
0 : 970			X	4x12 valley
970 : 1225			X	Natural

ATTACHMENTS (∠)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil Water Chemical Analyses
___ Other
ATTACH ADDITIONAL INFORMATION IF IT EXISTS

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Stevan A. Hicks - McCalla (PERSON, FIRM OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 900 Nevada St. CITY Redlands STATE CA ZIP 92373
Signed Stevan A. Hicks (WELL DRILLER AUTHORIZED REPRESENTATIVE) DATE SIGNED 2-1-93
C57 LICENSE NUMBER 510011

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

COUNTY: SAN BERNARDINO CA.
FIELD: YUCAIPA
LOCATION: OAK GLEN AVE SOUTH OF BR
WELL: #53
COMPANY: McCALLA BROS. DRILLING [redacted]

COMPANY MCCALLA BROS. DRILLING
WELL #53
FIELD YUCAIPA
COUNTY SAN BERNARDINO STATE CA.

LOCATION OAK GLEN AVE SOUTH OF BRYAN
Sec. Twp. Rge.

Other Services NONE

Permanent datum GROUND LEVEL Elev. N/A
Log Measured From GROUND LEVEL Above Perm. Datum
Drilling Measured From GROUND LEVEL

Elev.: K.B.
D.F.
G.L.

Welenco

ELECTRIC LOG

25R4

Date	11/23/92			
Run No.	ONE			
Depth-Driller	1180'			
Depth-Logger	1180'			
Btm Log Interval	1178'			
Top Log Interval	50'			
Casing Driller	30" @ 60'	@	@	@
Casing Logger	60'			
Bit Size	12.5"			
Type Fluid in Hole	WATER			
Density / Viscosity	N/A / N/A			
pH / Fluid Loss	N/A cc	cc	cc	cc
Source of Sample	PIT			
Rm @ Meas. Temp.	16.8 @ 70 °F	@ °F	@ °F	@ °F
Rmf @ Meas. Temp.	16.8 @ 70 °F	@ °F	@ °F	@ °F
Rmc @ Meas. Temp.	N/A @ N/A °F	@ °F	@ °F	@ °F
Source of Rmf and Rmc	MEAS / N/A			
Rm @ BHT	N/A @ N/A °F	@ °F	@ °F	@ °F
Time Circulation	11/22 21:00			
Time Logger on bottom	11:59			
Max Rec Temp Deg. F	N/A °F	°F	°F	°F
Equip No. / Location	L-14 / L.A.			
Recorded By	RIDDER			

Fold Here

CWP DRS 1.2616

Changes in Mud Type or Additional Samples

Date / Sample No		
Depth Driller		
Type Fluid		
Dens / Visc		
pH / Fluid Loss		
Source of Sample		
Rm @ Meas Temp	@	@
Rmf @ Meas Temp	@	@
Rmc @ Meas Temp	@	@
Source RMF / Rmc		
Rm @ BHT	@	@
Rmf @ BHT	@	@
Rmc @ BHT	@	@

Scale Changes

Type Log	Depth	Scale Up Hole	Scale Down Hole

EQUIPMENT DATA

Run No.	Tool No.	Tool Type	Tool Pos.		Gamma Ray Tool No.
ONE	--	NORMAL	FREE		

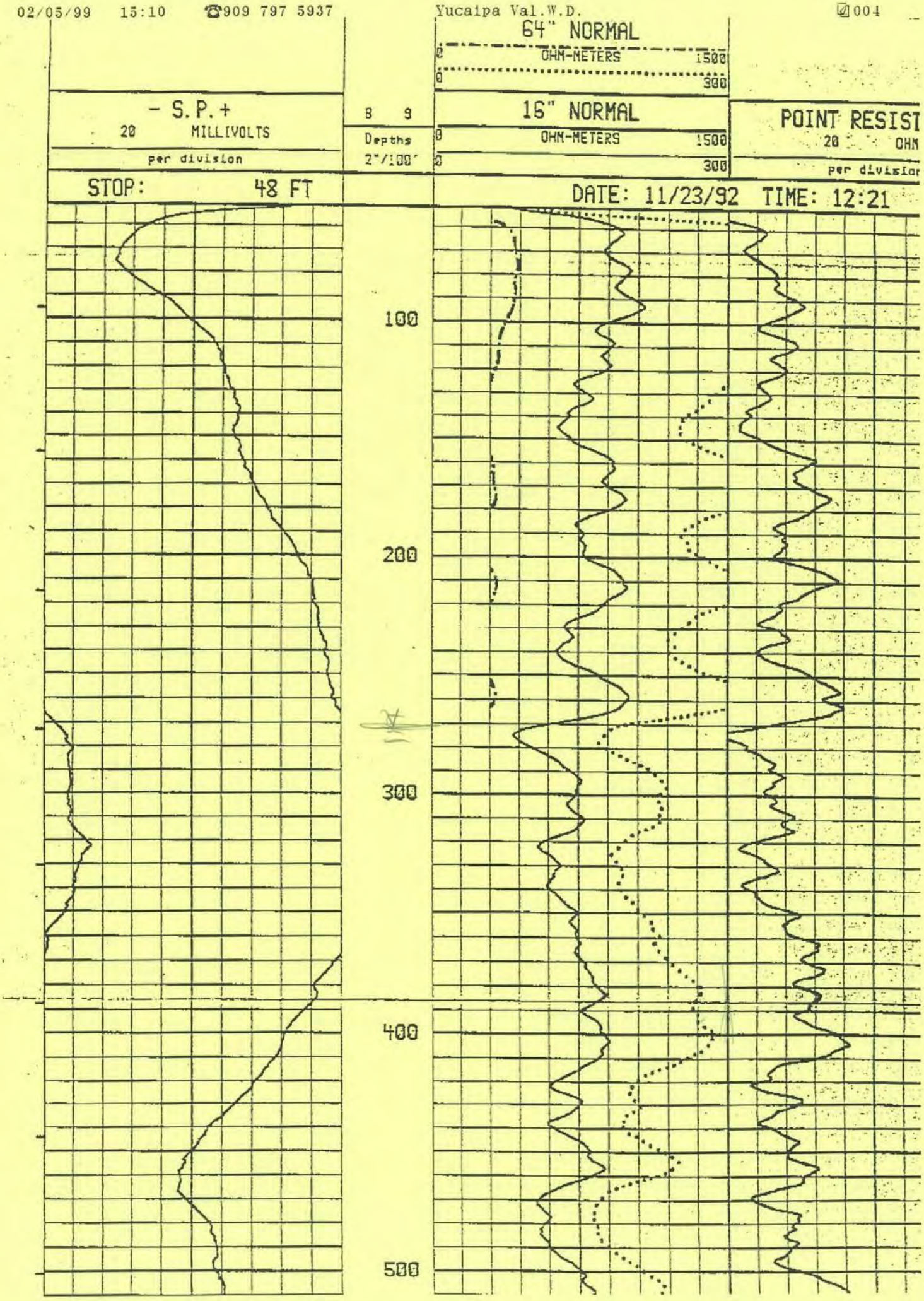
CALIBRATION DATA

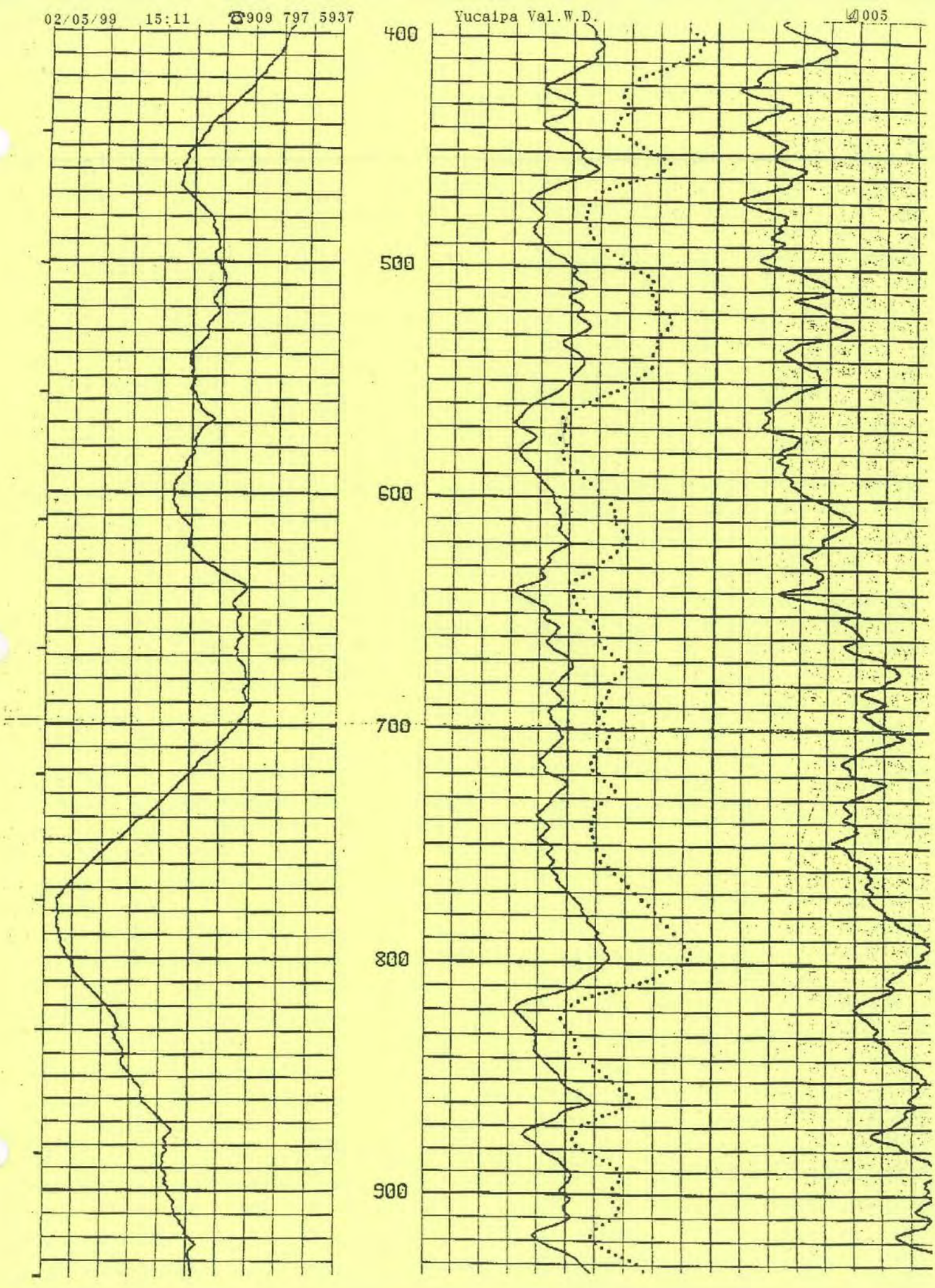
Run No.	16"Normal Zero	16"Normal Int. Cal	Induction Loop Cal	Induction Tool Zero	Induction Tool Cal	GAMMA RAY API SCALE	GAMMA RAY BKG CPS	GAMMA RAY STD C

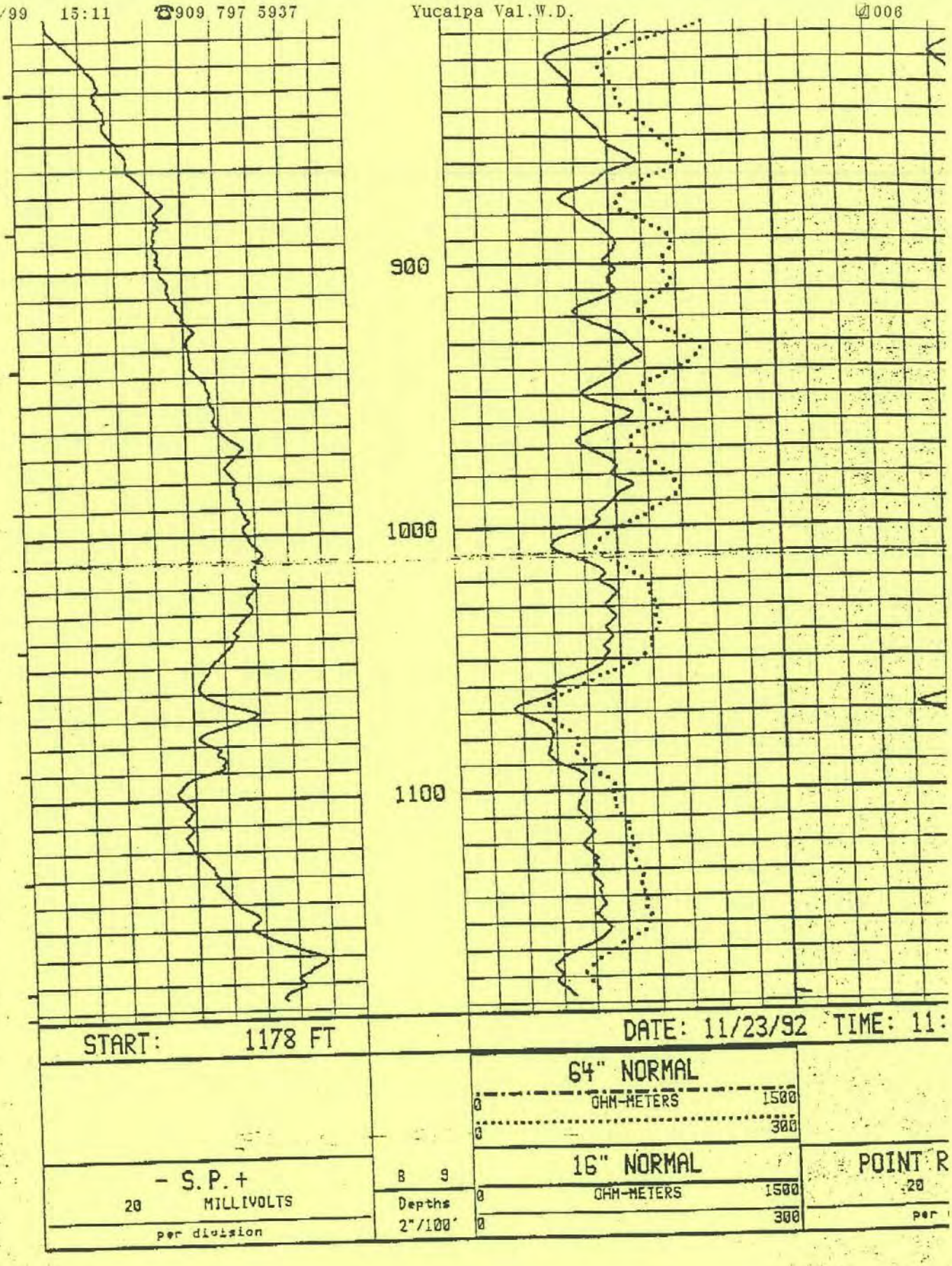
REFERENCE LITERATURE:

REMARKS:

64" NORMAL
0 OHM-METERS 500

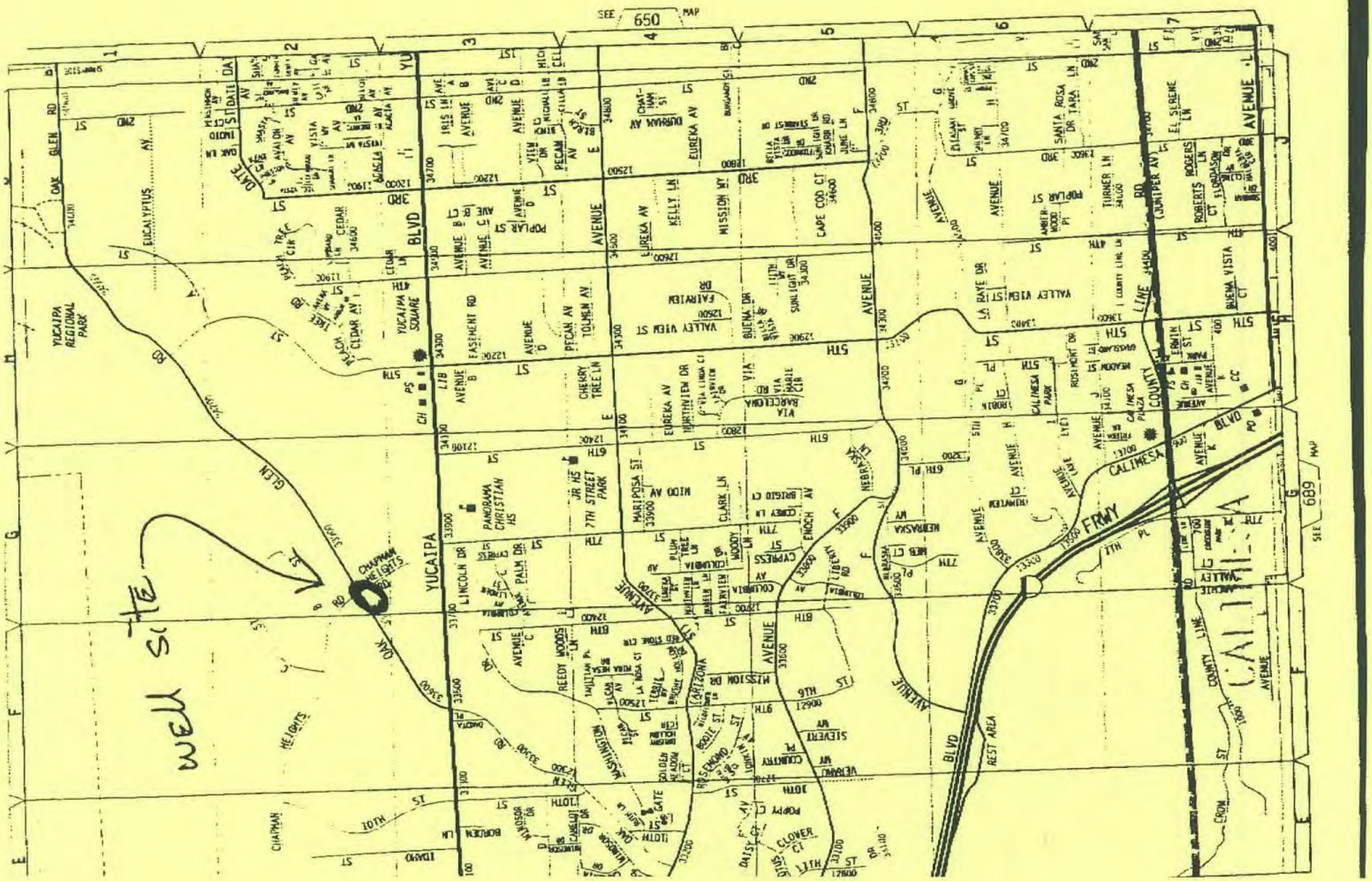

64" NORMAL
OHM-METERS
0
1500
0
300
- S.P. +
20 MILLIVOLTS
per division
B 9
Depths
2"/100'
16" NORMAL
OHM-METERS
0
1500
0
300
POINT RESIST
20 OHM
per division
STOP: 48 FT
DATE: 11/23/92 TIME: 12:21
100
200
300
400
500


02/05/99 15:11 ☎909 797 5937
Yucaipa Val.W.D.
005
400
500
600
700
800
900


900
1000
1100
START: 1178 FT
DATE: 11/23/92 TIME: 11:
64" NORMAL
0 OHM-METERS 1500
0 300
16" NORMAL
0 OHM-METERS 1500
0 300
POINT R
.20
per
- S.P. +
20 MILLIVOLTS
per division
8 9
Depths
2"/100'

REF. 649 G-2

INLAND EMPIRE



1S/2W-35H3

ORIGINAL
File with DWR

Page 1 of 1

Owner's Well No. 55

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 748842

DWR USE ONLY — DO NOT FILL IN
01N 1S 01 2W 13 15 1H 10 03
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

Date Work Began 1-22-01, Ended 7-28-01

Local Permit Agency San Bernardino County Dept. of Public Health

Permit No. 2001 010028 Permit Date 1-18-01

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL — HORIZONTAL — ANGLE — (SPECIFY)

DRILLING METHOD Reverse Cir. FLUID Polybore

DEPTH FROM SURFACE Ft.	to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0	50	Top Soil Rock
50	100	Sand & Gravel
100	180	Sand, Gravel, & Rock
180	200	Sand, Clay, & Granite
200	230	Sand, Gravel, & Granite
230	250	Sand, Hard
250	270	Sand & Gravel
270	290	Hard Sand
290	380	Sand, Gravel, & Rock
380	430	Sand & small Gravel
430	480	Sand & Gravel
480	490	Sand
490	550	Hard Sand & Gravel
550	630	Sand & Gravel
630	700	Hard Sand & Gravel
700	770	Sand & Gravel
770	870	Gravel & Rocks
870	950	Sand & Gravel Granite
950	1000	Sand & Gravel
1000	1050	Hard Sand & Gravel
50	1070	Granite & Rocks

TOTAL DEPTH OF BORING 1070 (Feet)
TOTAL DEPTH OF COMPLETED WELL 1050 (Feet)

WELL OWNER

Name [redacted]
Mailing Address [redacted]
CITY [redacted] CA STATE 92399 ZIP

WELL LOCATION

Address ½ mile South Oak Glen Rd 100 East of 5th
City Yucaipa
County San Bernardino
APN Book 0303 Page 151 Parcel 31
Township 1S Range 2W Section 35
Latitude ___ DEG. ___ MIN. ___ SEC. NORTH
Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

X NEW WELL
MODIFICATION/REPAIR
— Deepen
— Other (Specify)
— DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY
— Domestic X Public
— Irrigation — Industrial
— MONITORING
— TEST WELL
— CATHODIC PROTECTION
— HEAT EXCHANGE
— DIRECT PUSH
— INJECTION
— VAPOR EXTRACTION
— SPARGING
— REMEDIATION
— OTHER (SPECIFY)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 232' (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL 232' (Ft.) & DATE MEASURED 6-18-01
ESTIMATED YIELD * 1500 (GPM) & TEST TYPE Constant
TEST LENGTH 24 (Hrs.) TOTAL DRAWDOWN 144 (Ft.)
* *May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE Ft.	to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)
0	50	42			x		A53 GradeB	30	5/16	
+2	460	26	x				CopperBearing	16	5/16	
460	1030	26		x			FulFlo	16	5/16	.050
1030	1050	26	x				CopperBearing	16	5/16	
+2	459	26				x	A53 GradeB	2	Sch 40	

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft.	to Ft.	TYPE: CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0	50	x			
50	1070				6x16 Tacna Sand & Gravel

ATTACHMENTS (✓)

— Geologic Log
— Well Construction Diagram
— Geophysical Log(s)
— Soil/Water Chemical Analyses
— Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bakersfield Well & Pump Co. (PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

ADDRESS 7212 Fruitvale Ave. CITY Bakersfield STATE CA ZIP 93308

Signed [signature] (WELL DRILLER/AUTHORIZED REPRESENTATIVE) DATE SIGNED 8-6-01

C-57 LICENSE NUMBER 440537

DWR 188 REV. 11-97

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

1S/2W-35

Page 1 of 2

Owner's Well No. 57

Date Work Began 1-18-01 Ended 7-30-02

Local Permit Agency San Bernardino Environmental Health Services

Permit No. 2001010029 Permit Date 1-18-01

STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. 788723

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN TRS OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)

DRILLING METHOD Reverse Circulation FLUID Poly Bore

DEPTH FROM SURFACE ft. to ft.	DESCRIPTION - *Describe material, grain size, color, etc.*
40 to 130	sand & gravel
130 to 140	coarse gravel, sand, rock
140 to 160	sand, gravel, & rock
160 to 170	sand
170 to 180	gravel, sand , & rock
180 to 190	sand and small gravel
190 to 200	sand, some short cut gravel
200 to 210	sand, little clay, & gravel
210 to 230	sand with clay and small gravel
230 to 240	sand and gravel
240 to 250	sand and small gravel
250 to 260	sand, gravel, and different colors
260 to 270	sand, gravel, & granite
270 to 280	sand, gravel, sharp cuttings
280 to 290	sand and gravel
290 to 300	sand and large gravel
300 to 310	sand and mediam sharp
310 to 320	sand and gravel
320 to 330	sand and gravel (fine sharp)
330 to 390	sand and gravel
390 to 410	sand and mediam gravel
410 to 420	gravel and rock
420 to 440	sand and gravel
440 to 450	large gravel and different colors
450 to 470	sand and gravel
470 to 480	granite and gravel
480 to 490	sand and hard gravel
490 to 500	sand, gravel and little clay
500 to 520	sand and hard gravel
520 to 540	sand and mediam gravel

TOTAL DEPTH OF BORING 900 (Feet)

TOTAL DEPTH OF COMPLETED WELL N/A (Feet)

WELL OWNER

Name [redacted]

Mailing Address [redacted]

Yucaipa CA. 92399

CITY STATE ZIP

WELL LOCATION

Address 100' South of Oak Glen Rd. 250' West Chapman

City Yucaipa

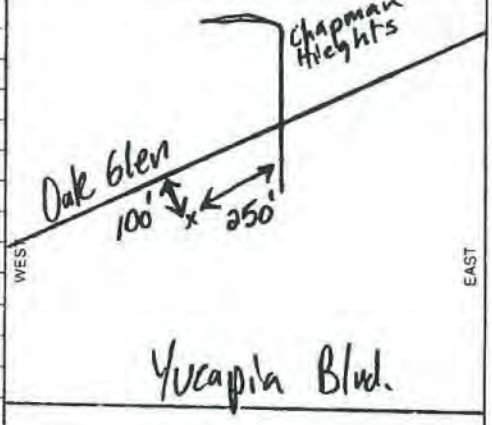
County San Bernardino

APN Book 0303 Page 131 Parcel 66

Township 1S Range 2W Section 35

Latitude ___ DEG ___ MIN ___ SEC NORTH Longitude ___ DEG ___ MIN ___ SEC WEST

LOCATION SKETCH



Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

X NEW WELL

MODIFICATION/REPAIR ___ Deepen ___ Other (Specify)

___ DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY ___ Domestic ___ Public ___ Irrigation ___ Industrial

MONITORING ___

TEST WELL X

CATHODIC PROTECTION ___

HEAT EXCHANGE ___

DIRECT PUSH ___

INJECTION ___

VAPOR EXTRACTION ___

SPARGING ___

REMEDIATION ___

OTHER (SPECIFY) ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 259 (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL 259 (Ft.) & DATE MEASURED 2-29-01

ESTIMATED YIELD * 100 (GPM) & TEST TYPE Air Lift

TEST LENGTH 3 (Hrs.) TOTAL DRAWDOWN N/A (Ft.)

* *May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE ft. to ft.	BORE-HOLE DIA. (inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (inches)
0 to 50	42			x		A53 Grade B	30	5/16	
0 to 100	17½	x				PVC	5	Sch.40	
100 to 650	17½		x			PVC	5	Sch.40	.040

ANNULAR MATERIAL

DEPTH FROM SURFACE ft. to ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 to 50	x			
50 to 650				
650 to 900			x	

ATTACHMENTS (✓)

___ Geologic Log

___ Well Construction Diagram

___ Geophysical Log(s)

___ Soil/Water Chemical Analyses

___ Other

ATTACH ADDITIONAL INFORMATION, IF IT EXISTS

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bakersfield Well & Pump Co.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)

7212 Prvitvale Ave Bakersfield CA. 93308
ADDRESS CITY STATE ZIP

Signed [signature]
(WELL DRILLER/AUTHORIZED REPRESENTATIVE)

8-10-02
DATE SIGNED

440537
C-57 LICENSE NUMBER

DWR 188 REV 10-95

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORICINAL
File with DWR

Page 2 of 2

Owner's Well No. 57

Date Work Began 1-18-02 Ended 7-30-02

Local Permit Agency San Bernardino Environmental Health services

Permit No. 2001010029 Permit Date 1-18-02

STATE OF CALIFORNIA

WELL COMPLETION REPORT

Refer to Instruction Pamphlet

No. 788724

STATE WELL NO./STATION NO.

LATITUDE LONGITUDE

APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)

DRILLING METHOD Reverse Circulation FLUID Poly Bore

DEPTH FROM SURFACE Ft	to Ft	DESCRIPTION *Describe material, grain size, color, etc.*
540	550	rock
550	560	sand, gravel, and little clay
560	570	some white gravel and clay
570	580	white gravel and granite
580	600	brown clay and white gravel
600	610	sand and fine gravel
610	630	granite and brwn clay
630	640	clay and mediam gravel
640	650	gravel and little clay
650	670	gravel and black & green clay
670	680	gravel and small cuttings
680	690	gray clay
690	700	gravel
700	710	clay brown green gravel
710	720	brown clay
720	730	sand, gravel & sharp cuttings
730	740	gravel and sand
740	750	sand and gravel & clay
750	760	granite
760	770	sand and clay
770	780	sand gravel and smallcuttings
780	800	granite
800	840	gravel and sand
840	860	mediam cuttings, sand & gravel
860	870	coarse large granite cut.
870	880	granite and some gravel
880	900	granite

TOTAL DEPTH OF BORING _____ (Feet)

TOTAL DEPTH OF COMPLETED WELL _____ Feet

WELL OWNER

Name [redacted]

Mailing Address [redacted]

Yucaipa CA. 92399

CITY STATE ZIP

WELL LOCATION

Address _____

City _____

County _____

APN Book _____ Page _____ Parcel _____

Township _____ Range _____ Section _____

Latitude _____ DEG MIN SEC NORTH Longitude _____ DEG MIN SEC WEST

LOCATION SKETCH

NORTH

WEST EAST

SOUTH

Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. ***PLEASE BE ACCURATE & COMPLETE.***

ACTIVITY (✓)

___ NEW WELL

MODIFICATION/REPAIR

___ Deepen

___ Other (Specify)

___ DESTROY *(Describe Procedures and Materials Under GEOLOGIC LOG)*

PLANNED USES (✓)

WATER SUPPLY

___ Domestic ___ Public

___ Irrigation ___ Industrial

MONITORING ___

TEST WELL ___

CATHODIC PROTECTION ___

HEAT EXCHANGE ___

DIRECT PUSH ___

INJECTION ___

VAPOR EXTRACTION ___

SPARGING ___

REMEDIATION ___

OTHER (SPECIFY) ___

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER _____ (Ft.) BELOW SURFACE

DEPTH OF STATIC WATER LEVEL _____ (Ft.) & DATE MEASURED _____

ESTIMATED YIELD * _____ (GPM) & TEST TYPE _____

TEST LENGTH _____ (Hrs.) TOTAL DRAWDOWN _____ (Ft.)

* *May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE Ft	to Ft	BORE HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft	to Ft	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)

ATTACHMENTS (✓)

___ Geologic Log

___ Well Construction Diagram

___ Geophysical Log(s)

___ Soil/Water Chemical Analyses

___ Other _____

ATTACH ADDITIONAL INFORMATION IF IT EXISTS

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bakersfield Well & Pump Co.
(PERSON, FIRM OR CORPORATION) (TYPED OR PRINTED)

7212 Fruitvale Ave. Bakersfield CA. 93308

ADDRESS CITY STATE ZIP

Signed _____ 8-10-02 440537

WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED C-57 LICENSE NUMBER

DWR 188 REV. 11/98

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

ORIGINAL
File with DWR

Page 1 of 1

Owner's Well No. 57

Date Work Began 8-29-02 Ended 9-20-02

Local Permit Agency San Bernardino Environmental Health Services

Permit No. 2002 08 0700 Permit Date 8-29-02

STATE OF CALIFORNIA
WELL COMPLETION REPORT
Refer to Instruction Pamphlet

No. 788719

DWR USE ONLY — DO NOT FILL IN
STATE WELL NO./STATION NO.
LATITUDE LONGITUDE
APN/TRS/OTHER

GEOLOGIC LOG

ORIENTATION (✓) X VERTICAL ___ HORIZONTAL ___ ANGLE ___ (SPECIFY)
DRILLING METHOD Abandon Well FLUID ___

DEPTH FROM SURFACE Ft. to Ft.	DESCRIPTION *Describe material, grain size, color, etc.*
0 10	fill
10 650	cement

TOTAL DEPTH OF BORING: 650 (Feet)
TOTAL DEPTH OF COMPLETED WELL: 650 (Feet)

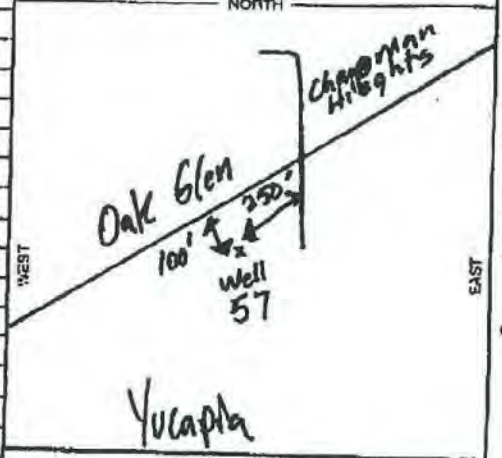
WELL OWNER

Name [redacted]
Mailing Address [redacted]
Yucaipa CA. 92399
CITY STATE ZIP

WELL LOCATION

Address 100' South of Oak Glen Rd. 250' West Chapman
City Yucaipa
County San Bernardino
APN Book 0303 Page 131 Parcel 66
Township 1S Range 2W Section 35
Latitude ___ DEG. ___ MIN. ___ SEC. NORTH Longitude ___ DEG. ___ MIN. ___ SEC. WEST

LOCATION SKETCH



Illustrate or Describe Distance of Well from Roads, Buildings, Fences, Rivers, etc. and attach a map. Use additional paper if necessary. PLEASE BE ACCURATE & COMPLETE.

ACTIVITY (✓)

___ NEW WELL
MODIFICATION/REPAIR
___ Deepen
___ Other (Specify)
X DESTROY (Describe Procedures and Materials Under "GEOLOGIC LOG")

PLANNED USES (✓)

WATER SUPPLY
___ Domestic ___ Public
___ Irrigation ___ Industrial
___ MONITORING
___ TEST WELL
___ CATHODIC PROTECTION
___ HEAT EXCHANGE
___ DIRECT PUSH
___ INJECTION
___ VAPOR EXTRACTION
___ SPARGING
___ REMEDIATION
___ OTHER (SPECIFY)

WATER LEVEL & YIELD OF COMPLETED WELL

DEPTH TO FIRST WATER 259 (Ft.) BELOW SURFACE
DEPTH OF STATIC WATER LEVEL ___ (Ft.) & DATE MEASURED ___
ESTIMATED YIELD * ___ (GPM) & TEST TYPE ___
TEST LENGTH ___ (Hrs.) TOTAL DRAWDOWN ___ (Ft.)
* *May not be representative of a well's long-term yield.*

CASING (S)

DEPTH FROM SURFACE Ft. to Ft.	BORE-HOLE DIA. (Inches)	TYPE (✓) BLANK	SCREEN	CONDUCTOR	FILL PIPE	MATERIAL / GRADE	INTERNAL DIAMETER (Inches)	GAUGE OR WALL THICKNESS	SLOT SIZE IF ANY (Inches)

ANNULAR MATERIAL

DEPTH FROM SURFACE Ft. to Ft.	TYPE CEMENT (✓)	BENTONITE (✓)	FILL (✓)	FILTER PACK (TYPE/SIZE)
0 10			X	
10 650	X			

ATTACHMENTS (✓)

___ Geologic Log
___ Well Construction Diagram
___ Geophysical Log(s)
___ Soil/Water Chemical Analyses
___ Other ___
ATTACH ADDITIONAL INFORMATION, IF IT EXISTS.

CERTIFICATION STATEMENT

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief.

NAME Bakersfield Well & Pump Co.
(PERSON, FIRM, OR CORPORATION) (TYPED OR PRINTED)
ADDRESS 7212 Fruitvale Ave. Bakersfield CA. 93308
CITY STATE ZIP
Signed [signature] 11-20-02
WELL DRILLER/AUTHORIZED REPRESENTATIVE DATE SIGNED
C-57 LICENSE NUMBER 440537

DWR 188 (REV. 11-97) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Well 57
1S/2W-35

welenco

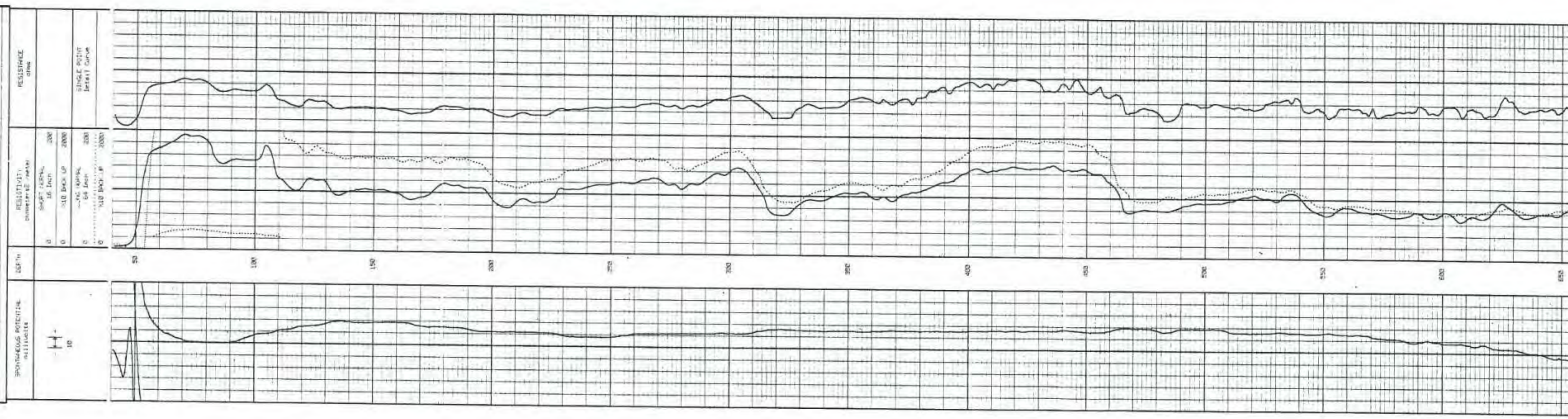
ELECTRIC LOG

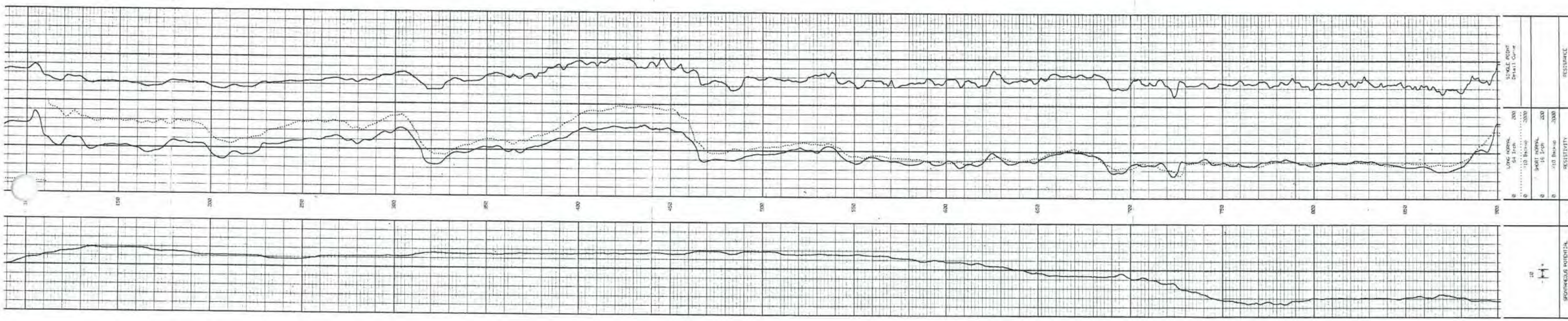
FILING NO.	COMPANY KRIEGER & STEWART WELL 57 **57** FIELD YUCAIPA COUNTY RIVERSIDE STATE CALIFORNIA
JOB NO. 33869	LOCATION: OAK GLEN ROAD SEC TWP RGE
OTHER SERV	GAMMA RAY SONIC/VDL

Permanent Datum: GROUND LEVEL Elev: K.B.
Log Measured From G.L. 0 Ft Above Perm Datum D.F.
Drilling Measured From GROUND LEVEL G.L.

Date	02-10-2001	- -	- -
Run No.	ONE		
Depth - Driller	900'		
Depth - Logger	900'		
Btm. Log Inter.	900'		
Top Log Inter.	40'		
Casing-Driller	30" at 50'	at	at
Casing-Logger	at 50'	at	at
Bit Size	17.5"		
Type Fluid In Hole	POLY BORE		
Dens. / Visc.	N/A / N/A		
pH / Fluid Loss	N/A / N/A ml	ml	ml
Source of Sample	PIT		
Rm at Meas. Temp	16.6 at 75 F	at 75 F	at 75 F
Rmf at Meas. Temp	15.2 at 75 F	at 75 F	at 75 F
Rmc at Meas. Temp	N/A at -- F	at F	at F
Source: Rmf / Rmc	MEAS / N/A		
Rm at BHT	N/A at F	at F	at F
Time Since Circ.	14 HOURS		
Max. Rec. Temp.	N/A F	F	F
Equip / Location	L-16 / BFL		
Recorded By	D. JACKSON		
Witnessed By	M. S. L.		

Fold Here




SINGLE POINT Detail Curve
RESISTANCE ohms
LONG NORMAL 64 Inch
SHORT NORMAL 16 Inch
RESISTIVITY
DEPTH
SPONTANEOUS POTENTIAL millivolts
150
200
250
300
350
400
450
500
550
600
650
700
750
800
850
900

well #2

1S/2W-35

welenco

GAMMA RAY - SONIC - VDL LOG

FILING NO.	COMPANY KRIEGER & STEWART		
	WELL 57		
	FIELD YUCAIPA		
	COUNTY RIVERSIDE	STATE CALIFORNIA	
	LOCATION: OAK GLEN ROAD		OTHER SERV: (LOG
708 NO 33969	SEC TWP	RGE	
PERMANENT DATUM: GROUND LEVEL	ELEV.		ELEVATION: KB DF GL
LOG MEASURED FROM G.L. 0 FT ABOVE PERM DATUM			
DRILLING MEASURED FROM GROUND LEVEL			

	02-10-2001	02-10-2001	
1 OF LOG	GAMMA RAY	SONIC - VDL	
RUN NO.	ONE	ONE	
DEPTH - DRILLER	988'	988'	
DEPTH - LOGGER	988'	980'	
BOTTOM LOGGED INT	388'	892'	
TOP LOGGED INT	0'	0'	
TYPE FLUID IN HOLE	POLY BORE	POLY BORE	
FLUID LEVEL	FULL	FULL	
MAX TEMP DEG F	N-A	N/A	
OPERATING RIG TIME	1 HOUR	1 5 HOURS	
EQUIP. LOCATION	L-16 BFL	L-16 BFL	
OPERATOR	S. JACKSON	S. JACKSON	
WITNESSED BY	M. S. L.	M. S. L.	

RUN	BORE HOLE RECORD			CASING RECORD			
NO.	BIT	FROM	TO	SIZE	TYPE	FROM	TO
ONE	17.5"	58'	988'	16"	STEEL	5'	58'

EQUIPMENT DATA

LOG TYPE	GAMMA RAY	SONIC - VDL	
RUN NO.	ONE	ONE	
TOOL MODEL NO.	GRS	MLS	
TOOL SERIAL NO	T-34	T-22	
DIAMETER	1 5"	2.125"	
DETECTOR TYPE	SCINT.	PIEZO	
DETECTOR LENGTH	8"	3' & 5'	
UNITS/DIV	10 API	20 uSec/Ft	
SENSITIVITY	100-122	4	
ZERO DIV L OR R	0 - L	2 - R	
SPEED-FPM	30	12	
DATA SAMPLES/FT	10	10	
FORMATION FACTOR	N-A	N/A	
TIME CONSTANT	3	N-A	
PUMP RATE-GPM	N/A	N/A	
PUMP RATE-GPM	N-A	N-A	
PUMP RATE-GPM	N-A	N-A	

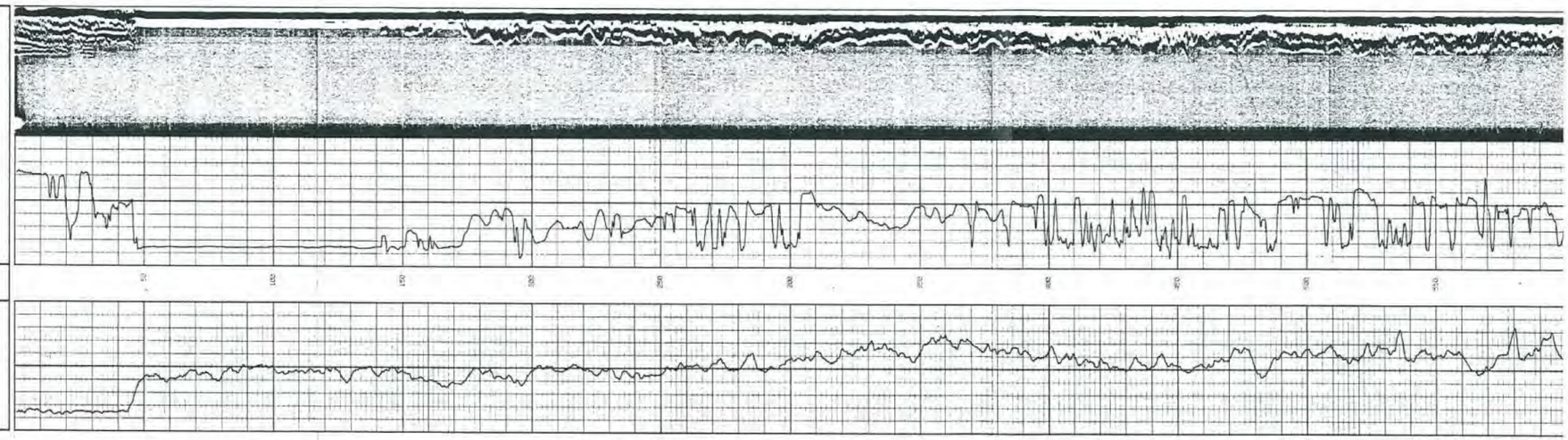
SOURCE TYPE	STRENGTH	SPACING	MODEL NO	SERIAL NO

PERFORATIONS:

REMARKS: VDL RECORDED FROM 5' RECIEVER

NOTICE:
All interpretations are opinions based on inferences from electrical or other measurements and we cannot, and do not guarantee the accuracy or correctness of any interpretations, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages or expenses incurred or sustained by anyone resulting from any interpretation made by one of our officers, agents or employees. These interpretations are also subject to our General Terms and Conditions as set out in our current Price Schedule.

WELENCO, INC



VARIABLE DENSITY LOG 1200
Microseconds
40 1200
DELTA TIME
usec Ft
240

DEPTH

GAMMA RAY
API Units
100
0

DUPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in

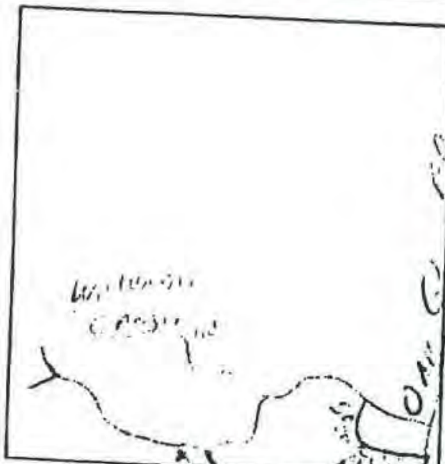
No. 253147

State Well No. 02S-01W-15F02S
Other Well No.

Notice of Intent No. F
Local Permit No. or Date 014773

(1) OWNER: Name [redacted]
Address [redacted]
City LOS ANGELES, CA. ZIP 90004

(2) LOCATION OF WELL (See instructions): W-60
County RIVERSIDE Owner's Well Number #26
Well address if different from above OFF WILDWOOD CYN. RD.
Township 2S Range 1W Section 15F02
Distance from cities, roads, railroads, fences, etc.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Municipal ☐
Other ☒
(Describe) COMMERCIAL

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size 3/8"
Diameter of bore
Packed from 50 to 462 ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	462	9 5/8	188

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
189	399	.060
399	462	.0120

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ft.
Method of sealing STEEL CASING & CEMENT

(10) WATER LEVELS:
Depth of first water, if known 140 ft.
Standing level after well completion 140 ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? DRILLER
Type of test Pump ☐ Bailer ☐ Air lift ☒
Depth to water at start of test 140 ft. At end of test ft.
Discharge 500 gal/min after 2 hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 0 ft. Completed depth 462 ft.
from ft. 0 to 462 Formation (Describe by color, character, size or material)

0-20' - FIRM BROWN DIRT
20-25' - FIRM BLUE DG
25-115' - FIRM BROWN DG
115-140' - BROKEN UP BLUE GRANITE/LITTLE WATER
140-180' - BROKEN UP BLACK GRANITE/WHITE QUARTZ
180-260' - BROKEN UP BLUE GRANITE
260-280' - BLUE & GREEN GRANITE/LITTLE WATER
280-340' - HARD BLUE GRANITE
340-360' - HARD BLACK GRANITE
360-380' - BROKEN UP BLUE-GREEN GRANITE/WATER
380-400' - BROKEN UP BLUE & WHITE GRANITE/WATER
400-420' - BROKEN UP BLUE-GREEN GRANITE/WATER
420-440' - BROKEN UP BLUE, GREEN, WHITE GRANITE/WATER
440-462' - HARD BLUE GRANITE

Work started 11-29 19 88 Completed 12-8 19 88

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Signed [signature] (Well Driller)
NAME SAM CRUM WATER WELL DRILLING
(Person, firm, or corporation) (Typed or printed)
Address 1803 MARYVALE LN.
City HEMET, CA. ZIP 92344
License No. 534298 Date of this report 12-13-88

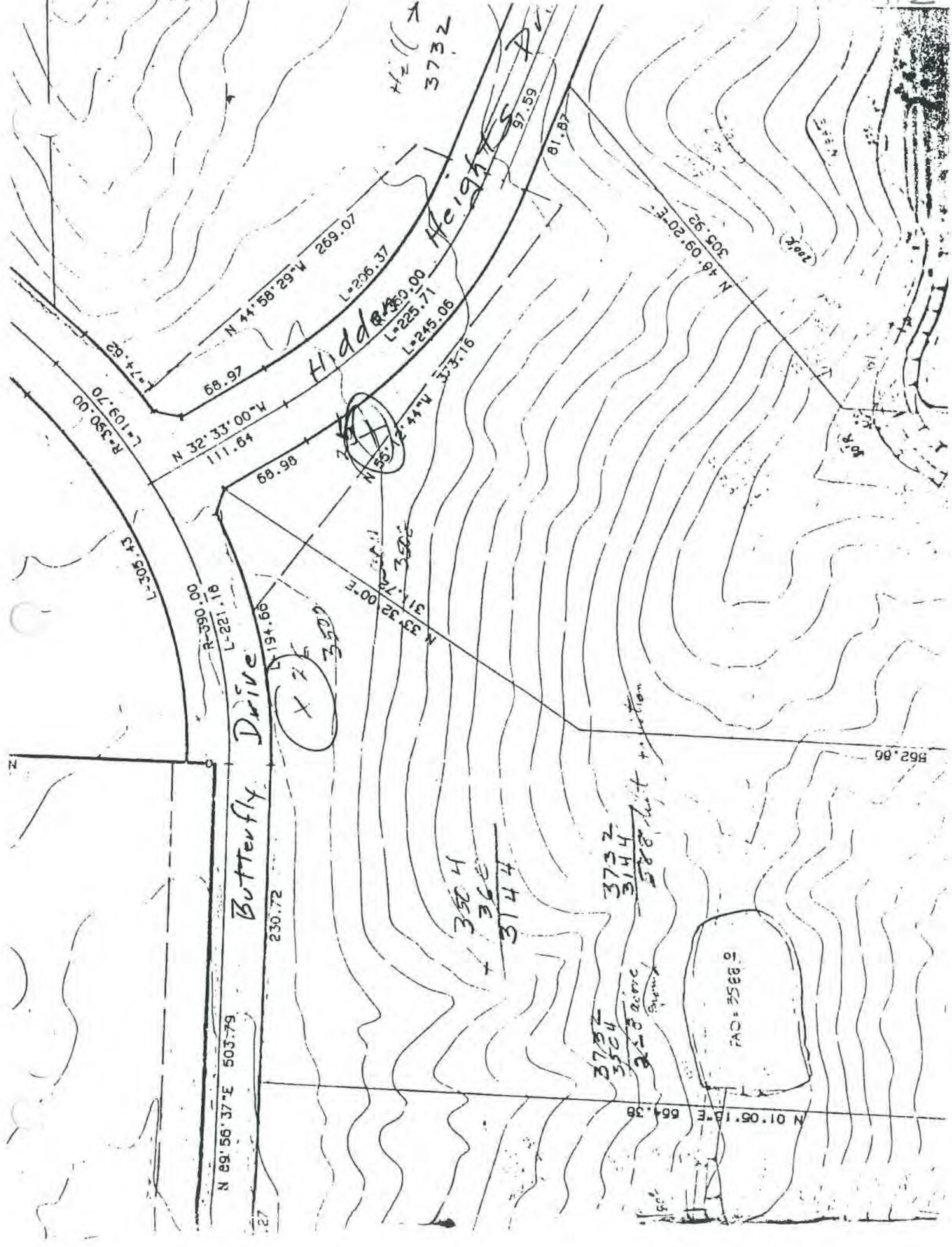
DWR 188 (REV. 12-86)

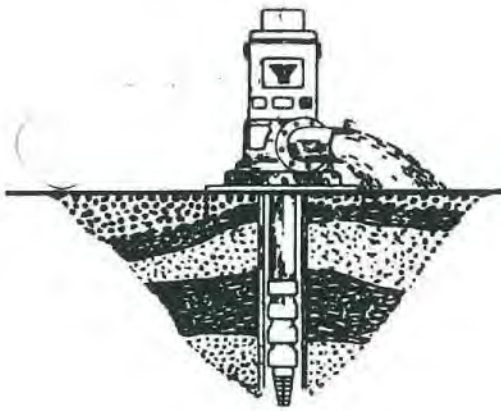
IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

86 96355

Well 60

2S/1W-15F2





Miller Pump Service

Deep Well Turbine Specialists

January 16, 1989

[redacted]
Los Angeles,Ca. 90004

SUBJECT: Well test information:

Dear Mr. [redacted];

Please find enclosed test reports on Wells # 25, and # 26, tested on January 12th., and 13th., 1989.

Well # 25 - I would suggest a pump setting of 300 feet at 150 GPM. Pressure above ground would determine the horse-power of the pump.

Well # 26 - I would suggest a pump setting of 300 feet at 550 GPM maximum in order to stay away from the air being produced from cascading water. I believe the well is capable of producing 800 GPM on a daily basis, 24 hours a day. Pressure above ground would determine the horse-power of the pump.

If you have any questions, please feel free to call me.

Sincerely,

Robert W. Miller

RWM/gf

24041 Mesa View Street • San Jacinto, California 92383 • Telephone (714) 654-8466

well-61

LICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in
No. 253143

ice of Intent No. _____
Local Permit No. or Date 014770

State Well No. 005/010-15F01S
Other Well No _____

(1) OWNER: Name [redacted]
Address [redacted]
City LOS ANGELES, CA. ZIP 90004

(2) LOCATION OF WELL (See instructions): W-61
County RIVERSIDE Owner's Well Number #25
Well address if different from above OFF WILDWOOD CYN. RD.
Township 2S Range 1W Section 15F01
Distance from cities, roads, railroads, fences, etc. _____

(3) TYPE OF WORK:
New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [ ]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Municipal [ ]
Other [X]
(Describe) COMMERCIAL

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary [ ] Reverse [ ]
Cable [ ] Air [X]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:
Yes [XX] No [ ] Size 3/8"
Diameter of bore 12"
Packed from 50 ft. to 462 ft.

(7) CASING INSTALLED
Steel [XX] Plastic [ ] Concrete [ ]

From ft	To ft	Dia in	Gage or Wall	Perforations From ft	To ft	Slot size
0	480	8 5/8	188	189	399	.060
				399	462	.0120

(8) PERFORATIONS
Type of perforation or size of screen

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [X] No [ ] If yes, to depth DRILLER ft.
Were strata sealed against pollution? Yes [ ] No [X] Interval _____ ft.
Method of sealing STEEL CASING & CEMENT

(10) WATER LEVELS:
Depth of first water, if known 260 ft.
Standing level after well completion 143 ft.

(11) WELL TESTS:
Was well test made? Yes [X] No [ ] If yes, by whom? DRILLER
Type of test Pump [ ] Bailer [ ] Air lift [XX]
Depth to water at start of test 143 ft. At end of test _____ ft.
Yield 475 gal/min after 2 hours Water temperature _____
Chemical analysis made? Yes [ ] No [X] If yes, by whom? _____
Was electric log made Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 480 ft. Completed depth 480 ft.
from ft. 0 to 480 Formation (Describe by color, character, size or material)

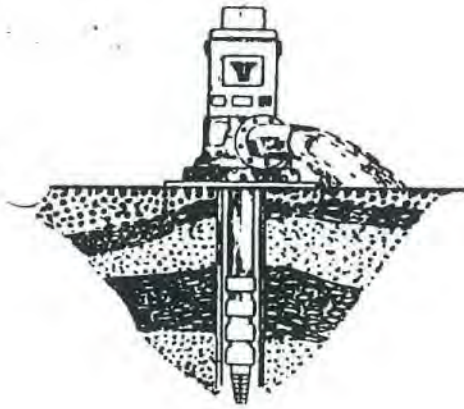
0-40' - SOFT BROWN DG
40-120' FIRM BROWN DG
120-180' FIRM BLUE DG
180-240' HARD BLUE DG
240-260' BROKEN-UP BLUE DG
260-320' BROKEN-UP BLUE & GREEN DG/WATER
320-340' BLUE & BROWN DG MIX
340-380' BROKEN-UP BLUE DG/WHITE QUARTZ
- & MORE WATER
380-480' BROKEN-UP BLUE & GREEN DG WITH
- LOTS OF WATER

Work started 12-8 19 88 Completed 12-14 19 88

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Signed _____ (Well Driller)
NAME SAM CRUM WATER WELL DRILLING
1803 MARYVALE LN. (Person, firm or corporation) (Typed or printed)
Address _____
City HEMET, CA. ZIP 92344
License No 534298 Date of this report _____

VOID
NOT FOR PUBLIC USE
WATER CODE SEC. 13752

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 26355



Miller Pump Service

Deep Well Turbine Specialists

January 16, 1989

[redacted]
Los Angeles,Ca. 90004

SUBJECT: Well test information:

Dear Mr. Dickinson;

Please find enclosed test reports on Wells # 25, and # 26, tested on January 12th., and 13th., 1989.

Well # 25 - I would suggest a pump setting of 300 feet at 150 GPM. Pressure above ground would determine the horse-power of the pump.

Well # 26 - I would suggest a pump setting of 300 feet at 550 GPM maximum in order to stay away from the air being produced from cascading water. I believe the well is capable of producing 800 GPM on a daily basis, 24 hours a day. Pressure above ground would determine the horse-power of the pump.

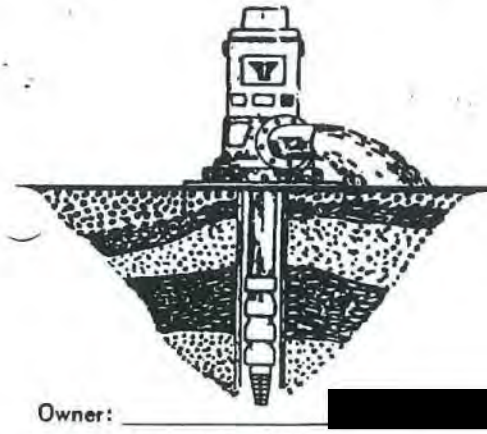
If you have any questions, please feel free to call me.

Sincerely,

Robert W. Miller

RWM/gf

24041 Mesa View Street • San Jacinto, California 92383 • Telephone (714) 654-8466



Miller Pump Service

Deep Well Turbine Specialists

FIELD TEST REPORT

Owner: [redacted] Well No. 25

Pump Mfr. Goulds Ser. No. _____ Well Dia. 8" Depth 462

Motor Mfr. _____ Ser. No. _____ Frame _____

H.P. 25 RPM 3500 Volts 400 Amps _____ Cycle _____

Power Co. _____ Meter No. _____ Kh _____ C.T. Ratio _____

Engine Mfr. Generator

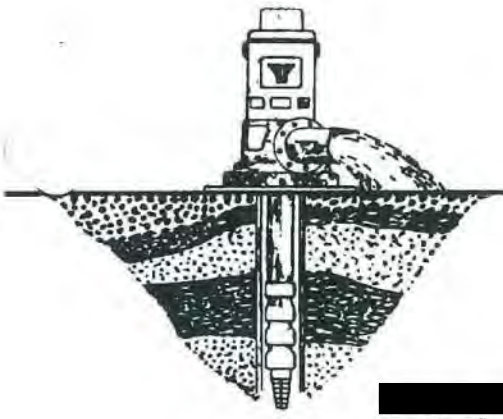
TEST DATES:		1/12/89	1/13/89			
Pressure Readings in Lbs.	Airline, Static	109	104			
	Airline, Pumping					
	Discharge Head					
Airline Length – Feet		395	395			
Airline Static Pressure – Feet						
STATIC WATER LEVEL		144	155			
Airline Length – Feet						
Airline Pumping Pressure – Feet						
PUMPING LEVEL		201	252			
Discharge Head – Feet						
TOTAL HEAD – Feet		Ø	Ø			
Pumping Level – Feet		201	252			
Static Level – Feet		144	155			
DRAWDOWN		57	97			
Flow Reading	Pitot					
	Orifice					
	Other					
CAPACITY	GPM	185	165			
	Miners Inches					
GPM Per Foot Drawdown		3.24	1.70			
METER DATA: Revs/Sec						
KW Input						
HP Input						
BHP Input to Pump @ % Motor eff.						
PUMP RPM						
LOAD Volts						
LOAD Amps						
Water Horsepower						
Pump Efficiency						
Overall Efficiency						
KWH per Acre Foot						

Pump Setting: 395 ft. 395 ft.

Column Size: 3" Discharge dia. 4" meter

Bowl Assembly (Stages & Type) _____

Remarks:



Miller Pump Service

Deep Well Turbine Specialists

[redacted]

Well # 25

1/12/89

SWL - standing	water level	144 ft.	
9:30 A:M	100 GPM	109 PSI	144 ft. p/L
10:30 A:M	200 GPM	108 PSI	145 ft.
11:30 A:M	220 GPM	106 PSI	149 ft.
12:30 P:M	220 GPM	106 PSI	149 ft.
1:30 P:M	220 GPM	104 PSI	155 ft.
2:30 P:M	200 GPM	94 PSI	179 ft.
3:30 P:M	190 GPM	88 PSI	192 ft.
4:30 P:M	185 GPM	84 PSI	201 ft.

1/13/89

SWL - standing	water level	155 ft.	
8:30 A:M	220 GPM	104 PSI	155 ft. p/L
9:30 A:M	185 GPM	84 PSI	201 ft.
10:30 A:M	177 GPM	76 PSI	219 ft.
11:30 A:M	170 GPM	72 PSI	229 ft.
12:30 P:M	165 GPM	70 PSI	233 ft.
1:30 P:M	165 GPM	66 PSI	243 ft.
2:30 P:M	165 GPM	62 PSI	252 ft.
4:00 P:M	165 GPM	62 PSI	252 ft.

24041 Mesa View Street • San Jacinto, California 92383 • Telephone (714) 654-8466

NOW YUVD WELL #64

H

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in
No. 074476

State Well No.
Other Well No.

Notice of Intent No. Well #6
Local Permit No. or Date 08037902

(1) OWNER: Name [redacted]
Address [redacted]
City Los Angeles, Ca. Zip 90057

(2) LOCATION OF WELL (See instructions): County San Bernardino Owner's Well Number
Well address if different from above
Township 2S Range 1W Section 2
Distance from cities, roads, railroads, fences, etc.

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☒ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☒
Stock ☐
Municipal ☐
Other ☐

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☒ Size
Diameter of bore 6.218
Packed from ___ to ___ ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Cage or Wall

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☐ No ☒ If yes, to depth ___ ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ___ ft.
Method of sealing

(10) WATER LEVELS:
Depth of first water, if known ___ ft.
Standing level after well completion ___ ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☒ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ___ ft. At end of test ___ ft.
Discharge 5-6 gal/min after ___ hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 360 ft. Depth of completed well 360 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	145	DG
145	168	White Quartz, & black rock
168	200	DG
200	210	Fractured granite & DG
210	230	DG
230	258	Fractured granite & DG
258	265	Firmer DG
265	280	Softer- lots of white clay
280	360	Granite & DG
360		STOP-------------------

-Method of Destruction-

Hole filled in with earth & natural cuttings, as per County requirements.

Work started 8-13 19 79 Completed 8-14 19 79

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED Joseph W. Grammer (Well Driller)

NAME Jack Jones Wells & Pumps (Person, firm, or corporation) (Typed or printed)
Address P.O. Box 2031
City Hemet, Ca. Zip 92343
License No. 281601 Date of this report 9-19-79

 IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Well 5 V Comp[illegible]

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Well #5

Very Good

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in

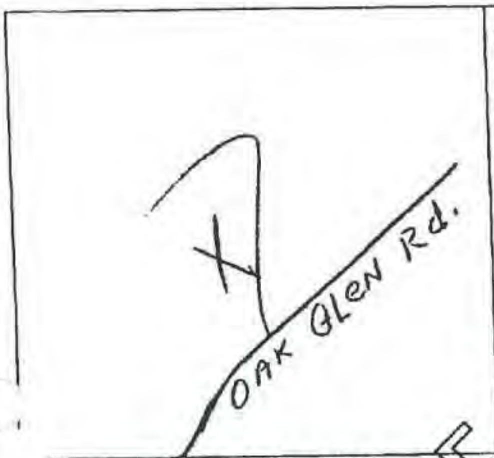
No. 068637

State Well No. ______
Other Well No. ______

...ice of Intent No. ______
...ocal Permit No. or Date ______

(1) OWNER: Name [redacted]
Address [redacted]
City Los Angeles CA. Zip 90057

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number Oak Glen Piggah Peak Truck Tr.
Well address if different from above ______
Township ______ Range ______ Section ______
Distance from cities, roads, railroads, fences, etc. ______



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☐

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size ______
Diameter of bore ______
Packed from ______ to ______ ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☒ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	200	6	.125

(8) PERFORATIONS:
Type of perforation or size of screen ______

From ft.	To ft.	Slot size
0	200	.188

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth ______ ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ______ ft.
Method of sealing Concrete & Steel

(10) WATER LEVELS:
Depth of first water, if known 115 ft.
Standing level after well completion 140 ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? ______
Type of test Pump ☐ Bailer ☐ Air lift ☒
Depth to water at start of test ______ ft. At end of test ______ ft
Discharge 120 gal/min after ______ hours Water temperature ______
Chemical analysis made? Yes ☐ No ☒ If yes, by whom? ______
Was electric log made? Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 200 ft. Depth of completed well 200 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	50	Sealed Off
50	95	Fractured Granite & DG
95		Hard Granite
98		Broken Up
99		Hard
105		Broken Granite
115	118	Soft Broken (First Water)
120		15 GPM Hard White Rock
122	123	Broken Up
123		Hard Gray Rock
125		Hard Black Rock
127		Broken Up (More Water)
128		Hard
135		Softer Black (Broken up)
138		DG (Brown) Firm
140		50 GPM
155		Grey DG & Quartz (Firm to Soft)
160		60 GPM
165		Light Gray Rock Almost Quartz (Firm to 50 Ft.)
180		60 GPM
182		Fairly Hard
200 STOP		

Work started 10-3-79 Completed 10-8 19 79

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED (Well Driller)

NAME Jack Jones Wells & Pumps
(Person, firm, or corporation) (Typed or printed)

Address P.O. Box # 2031
City Hemet Zip Ca. 92343
License No. 281601 Date of this report 10-20-80

WATER CODE SEC. 13752

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Well 5 Vert

No Good

DUPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in
No. 074477

Well of Interest No. Well #7
Permit No. or Date 08147901

State Well No. _____
Other Well No. _____

(1) OWNER: Name [redacted]
Address [redacted]
City Los Angeles, Ca. Zip 90057

(2) LOCATION OF WELL: (See instructions):
County San Bernardino Owner's Well Number _____
Well address if different from above _____
Township 2S Range 1W Section 2
Distance from cities, roads, railroads, fences, etc. _____

(3) TYPE OF WORK:
New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [X] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [ ]
Irrigation [ ]
Industrial [ ]
Test Well [X]
Stock [ ]
Municipal [ ]
Other [ ]

WELL LOCATION SKETCH

(5) EQUIPMENT:
Rotary [ ] Reverse [ ]
Cable [ ] Air [X]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:
Yes [ ] No [ ] Size 6.218
Diameter of bore _____
Packed from _____ ft. to _____ ft.

(7) CASING INSTALLED:
Steel [ ] Plastic [ ] Concrete [ ]

From ft.	To ft.	Dia. in	Gage or Wall

(8) PERFORATIONS:
Type of perforation or size of screen _____

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [ ] No [X] If yes, to depth _____ ft.
Were strata sealed against pollution? Yes [ ] No [X] Interval _____ ft.
Method of sealing _____

(10) WATER LEVELS:
Depth of first water, if known _____ ft.
Standing level after well completion _____ ft.

(11) WELL TESTS:
Was well test made? Yes [ ] No [X] If yes, by whom? _____
Type of test Pump [ ] Bailer [ ] Air lift [ ]
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge 125 gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes [ ] No [X] If yes, by whom? _____
Was electric log made? Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 180 ft. Depth of completed well 180 ft.

ft.	to ft.	Formation (Describe by color, character, size of material)
0	65	Broken rock & clay
65	115	Broken rock & some clay
115	160	Fractured rock (60-120 GPM)
160	180	Hard rock
130		STOP----------

-Method of Destruction-

Hole filled in with earth & Natural cuttings, as per County requirements.

Work started 8-15 19 79 Completed 8-16 19 79

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief

SIGNED _____ (Well Driller)
NAME Jack Jones Wells & Pumps (Person, firm or corporation) (Typed or printed)
Address P.O. Box 2031
City Hemet, Ca. Zip 92343
License No. 281601 Date of this report 9-19-79

(PRI) (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

G 7

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Owner's Copy

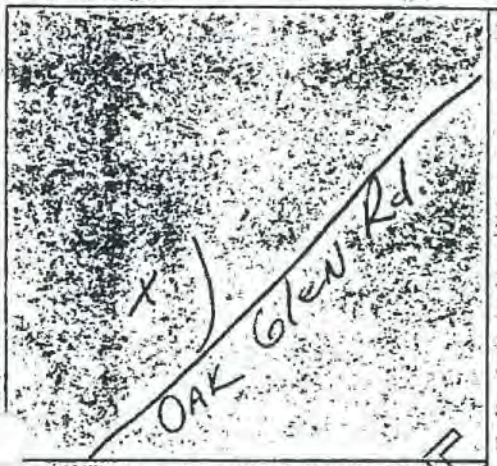
Notice of Intent No. Well #5
Local Permit No. or Date 08107901

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in
No. 074475
State Well No.
Other Well No.

(1) OWNER: Name [redacted]
City Los Angeles, Ca. Zip 90057

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number
Well address if different from above
Township 2S Range 1W Section 2
Distance from cities, roads, railroads, fences, etc.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☒ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☒
Stock ☐
Municipal ☐
Other ☐

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size
Diameter of bore 6.218
Packed from to ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☐ No ☒ If yes, to depth ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ft.
Method of sealing

(10) WATER LEVELS:
Depth of first water, if known ft.
Standing level after well completion ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☒ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge 1 gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 240 ft. Depth of completed well 240 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	18	Clay & Broken rock
18	29	Red clay
29	70	Clay, DG, & broken rock
70	115	Soft brittle rock
115	140	Darker-Broken rock
140	145	Fractured black rock
145	154	Black Rock
154	185	Large fractured area
185	200	Soft black rock
200	210	Fractured rock
210	218	Black rock.
218	220	White Quartz
220	230	Soft Rock
230	231	White Quartz
231	240	Granite & fractured rock
240		STOP

-Method of Destruction-

Hole filled in with earth & natural cuttings, as per County requirements.

VOID

CONFIDENTIAL NOT FOR PUBLIC WATER CODE SEC 13752

Work started 8-10 1979 Completed 8-10 1979

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
SIGNED Joseph W. Grammer (Well Driller)
NAME Jack Jones Wells & Pumps (Person, firm, or corporation) (Typed or printed)
Address P.O. Box 2031
City Hemet, Ca. Zip 92343
License No. 281601 Date of this report 9-19-79

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

WELL 3

NOW YVWD WELL 66

WATER WELL DRILLERS REPORT

(Sections 7879, 7880, 7881, 7882, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Do Not Fill In

Nº 48782

State Well No. _____

Other Well No. _____

(1) OWNER:

Name [redacted]

Address [redacted]

ANAHEIM, CA. 92807

(2) LOCATION OF WELL:

County SAN BERNARDINO Owner's number, if any 3

Township, Range, and Section T.1S., R.1W., SEC. 2

Distance from cities, roads, railroads, etc. ANAHEIM, 1/2 MI. IN A NORTHERLY DIRECTION FROM INTERSECTION OF [illegible] AVE.

(3) TYPE OF WORK (check):

New Well ☑ Deepening ☐ Reconditioning ☐ Destroying ☐

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic ☑ Industrial ☐ Municipal ☐

Irrigation ☐ Test Well ☐ Other ☐

(5) EQUIPMENT:

Rotary ☑

Cable ☐

Other ☐

(6) CASING INSTALLED:

STEEL: ☑ OTHER: _____

SINGLE ☑ DOUBLE ☐

~~If gravel packed~~

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	180	2" I.D.	STD.	2 7/8"	0	180
		GALV.	PIPE	2"	180	506
				1 1/2"	506	550

Size of shoe or well ring: _____ Size of gravel: _____

Describe joint: COUPLED

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen 1/4" PERF. STD. GALV. PIPE

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
300	394 1/2	7	3	3/16" DRILLED HOLES
		(PERFORATIONS FROM 311' TO 338')		

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes ☑ No ☐ To what depth 150 ft.

Were any strata sealed against pollution? Yes ☑ No ☐ If yes, note depth of strata

ALL STRATA - ft. 0 TO 180 FT.

From ft. to ft.

Method of sealing

(9) WATER LEVELS: SEE NOTE ** *

Depth at which water was first found, if known ft.

Standing level before perforating, if known ft.

Standing level after perforating and developing ft.

(10) WELL TESTS: SEE NOTE ** *

Was a pump test made? Yes ☑ No ☐ If yes, by whom? PIERSON DRILLING

Yield: 44 gal./min. with ft. drawdown after hrs.

Temperature of water 60° Was a chemical analysis made? Yes ☐ No ☑

Was electric log made of well? Yes ☐ No ☑ If yes, attach copy

(11) WELL LOG:

Total depth 550 ft. Depth of completed well 550 ft.

Formations: Describe by color, character, size of material, and structure

FT. TO FT.	ft. to ft.
0 - 30 - OVERBURDEN	
30 - 156 FT. - MED. RK.	
156 - 157 FT. - CLAY	
157 - 190 FT. - MED. RK.	
190 - 196 FT. - ALT. MED. & HARD RK.	
196 - 256 FT. - MED. RK.	
256 - 309 1/2 FT. - ALT. MED. & HARD RK.	
309 1/2 FT. - 310 FT. - CLAY	
310 - 325 FT. - ALT. MED. & HARD RK.	
325 - 326 FT. - CLAY	
326 - 497 FT. ALT. MED. & HARD RK.	
497 - 550 FT. - HARD RK.	

** WATER PICKUPS (INITIAL FLOWS)

FROM - TO FLOW

0 - 180 FT. - 1 GPM (SEALED OFF)

180 - 196 FT. - 2 GPM

196 - 310 FT. - 1 GPM

310 - 315 FT. - 2 GPM

315 - 430 FT. - 4 GPM

430 - 480 FT. - 10 GPM

480 - 512 FT. - 2 GPM

512 - 550 FT. - 17 GPM

TOTAL INITIAL FLOW - 44 GPM

NOTE: WHEN CAPPED, WELL WILL STORE WATER UNDERGROUND UNTIL THE PRESSURE AT COLLAR LEVEL REACHES 14(+) PSI.

* DURING DRILLING OPERATIONS AND AFTER COMPLETION, WELL WAS ALLOWED TO FLOW UN-RESTRICTED FOR PERIODS OF UP TO 48 HRS. & FLOW NEVER DROPPED BELOW 28 GPM. WHEN CAPPED, WELL TURNED BACK TO MAXIMUM PRESSURE OVER NIGHT.

Work started 2/3/72 1972 Completed 3/29 19 73

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME PIERSON DRILLING

(Person, firm, or corporation) (Typed or printed)

Address 23003 OAK LN. (P.O. BOX 1028)

CRESTLINE, CALIF. 92325

[SIGNED] Glen P. Pierson

(Well Driller)

License No. 207691 Dated 5/30 19 73

SKETCH LOCATION OF WELL ON REVERSE SIDE

DWR 188 (REV. 9-68)

ORIGINAL File with DWR WELL #3

WATER WELL DRILLERS REPORT

(Sections 7076, 7080, 7081, 7082, Water Code)

THE RESOURCES AGENCY OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Do Not Fill In

№ 48782

State Well No.

Other Well No.

(1) OWNER:

Name [redacted]

Address [redacted]

[redacted] ANAHEIM, CA. 92807

(2) LOCATION OF WELL:

County SAN BERND Owner's number, if any 3

Township, Range, and Section T2S, R1W, SEC. 2

Distance from cities, roads, railroads, etc. APPROX. 1½ MI. N.A. NORTHERLY DIRECTION FROM INTERSECTION OF WILDWOOD CYN & OAK GLEN RDS.

(3) TYPE OF WORK (check):

New Well [x] Deepening [ ] Reconditioning [ ] Destroying [ ]

If destruction, describe material and procedure in Item 11.

(4) PROPOSED USE (check):

Domestic [x] Industrial [ ] Municipal [ ]
Irrigation [ ] Test Well [ ] Other [ ]

(5) EQUIPMENT:

Rotary [x]
Cable [ ]
Other [ ]

(6) CASING INSTALLED:

STEEL ✓ OTHER:
SINGLE [x] DOUBLE [ ]

~~If gravel packed~~

From ft.	To ft.	Diam.	Gage or Wall	Diameter of Bore	From ft.	To ft.
0	180	2" 50	STD.	2 7/8"	0	180
		GALV. PIPE		2"	180	506
				1½"	506	550

Size of shoe or well ring:

Size of gravel:

Describe joint COUPLED

(7) PERFORATIONS OR SCREEN:

Type of perforation or name of screen 1½" S.D. STD. GALV. PIPE

From ft.	To ft.	Perf. per row	Rows per ft.	Size in. x in.
300	394¼	7	13	1/4" DRILLED HOLES
		(PERFORATIONS FROM 311' TO 378')		

(8) CONSTRUCTION:

Was a surface sanitary seal provided? Yes [x] No [ ] To what depth 180 ft.

Were any strata sealed against pollution? Yes [x] No [ ] If yes, note depth of strata

ALL STRATA — ft. 0 TO 180 FT.

From ft. to ft.

Method of sealing

(9) WATER LEVELS: SEE NOTE —— ** *

Depth at which water was first found, if known ft.

Standing level before perforating, if known ft.

Standing level after perforating and developing ft.

(10) WELL TESTS: SEE NOTE —— *

Was pump test made? Yes [x] No [ ] If yes, by whom? PIERSON DRILLING

Yield: 44 gal./min. with ft. drawdown after hrs.

Temperature of water 60° Was a chemical analysis made? Yes [ ] No [x]

Was electric log made of well? Yes [ ] No [x] If yes, attach copy

(11) WELL LOG:

Total depth 550 ft. Depth of completed well 550 ft.

Formation: Describe by color, character, size of material, and structure

FT. TO FT. ft. to ft.

0 - 30 - OVERBURDEN
30 - 156 FT. - MED. RK.
156 - 157 FT. - CLAY
157 - 190 FT. - MED. RK.
190 - 196 FT. - ALT. MED. & HARD RK.
196 - 256 FT. - MED. RK.
256 - 309¾ FT. - ALT. MED. & HARD RK.
309¾ FT. - 310 FT. - CLAY
310 - 375 FT. - ALT. MED. & HARD RK.
375 - 376 FT. - CLAY
376 - 497 FT. ALT. MED. & HARD RK.
497 - 550 FT. - HARD RK.

** WATER PICKUPS (INITIAL FLOWS)
FROM - TO - FLOW
0 - 180 FT. - 1 GPM (SEALED OFF)
180 - 196 FT. - 2 GPM
196 - 310 FT. - 1 GPM
310 - 315 FT. - 2 GPM
315 - 430 FT. - 4 GPM
430 - 460 FT. 10 GPM
460 - 512 FT. - 8 GPM
512 - 550 FT. - 17 GPM
TOTAL INITIAL FLOW - 44 GPM

NOTE: WHEN CAPPED, WELL WILL STORE WATER UNDERGROUND UNTIL THE PRESSURE AT COLLAR LEVEL REACHES 140 PSI.

* DURING DRILLING OPERATIONS AND AFTER COMPLETION, WELL WAS ALLOWED TO FLOW UN-RESTRICTED FOR PERIODS OF UP TO 48 HRS. & FLOW NEVER DROPPED BELOW 28 GPM. WHEN CAPPED, WELL STORED BACK TO MAXIMUM PRESSURE OVER-NIGHT.

Work started 7/20 1972. Completed 7/29 1972

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME PIERSON DRILLING
(Person, firm, or corporation) (Typed or printed)

Address 23003 OAK LN. (P.O. BOX 1028)
CRESTLINE, CALIF. 92325

[SIGNED] [signature]
(Well Driller)

License No. 207491 Dated 9/30, 1972

SKETCH LOCATION OF WELL ON REVERSE SIDE

ARROWHEAD

TRIPLICATE
Owner's Copy

NOW YVWD
WELL #68

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

JUL 6 - 1982

DEPARTMENT OF HEALTH SERVICES * SAN BERNARDINO

Do not fill in

No. 069416

Notice of Intent No. 193717

Permit No. or Date 05068201

State Well No. _____

Other Well No. _____

OWNER: Name [redacted]

Address [redacted]

City Los Angeles Zip 90057

(2) LOCATION OF WELL (See instructions):

County San Bernardino. Owner's Well Number 10

Well address if different from above In S.W. ¼ of N.W. ¼

Township 2S Range 1W Section 2

Distance from cities, roads, railroads, fences, etc. Approx. ½ mi. N. of intersection of Oak Glen rd. & Wildwood Cyn. rd.

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [X]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [X]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:
Rotary [X] Reverse [ ]
Cable [ ] Air [ ]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:
Yes [ ] No [ ] 2½" - 0 to 284
Diameter of bore 2" - 284 to 400
Packed from _____ ft. to _____ ft.

(7) CASING INSTALLED:
Steel [X] Plastic [ ] Concrete [ ]

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	284	2	sch. 40	283	400	3/16" drilled holes

(8) PERFORATIONS: ½" std. galv. pipe
Type of perforation or size of screen

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [X] No [ ] If yes, to depth 284 ft.
Were strata sealed against pollution? Yes [ ] No [X] Interval _____ ft.
Method of sealing Grout under pressure

(10) WATER LEVELS: See note - - - - - - #
Depth of first water, if known _____ ft.
Standing level after well completion _____ ft.

(11) WELL TESTS: See note - - - - - - - ##
Was well test made? Yes [X] No [ ] If yes, by whom? Pierson Drilling
Type of test Flow Pump [ ] Bailer [ ] Air lift [ ]
Depth to water at start of test 67 ft. At end of test 60 ft.
Discharge 1 gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes [ ] No [X] If yes, by whom? _____
Was electric log made? Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 400 ft. Depth of completed well 400 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	10	- rky overburden
10	30	- decomposed granite
30	201	- med. hard rk
201	203	- clay
203	282	- alt. med. & hard rk
282	283	- clay
283	344	- alt. med. & hard rk
344	354	- unstable fault material
354	380	- fract. med. rk
380	400	- med. hard rk

* Water Pick-ups (Initial Flows)

From	To	Flow
0	283	- 1½ gpm (sealed off)
283	344	- 4 gpm
344	350	- 55 gpm
350	380	- 8 gpm
380	400	- 0

Total initial flow - 67 gpm

Note: When capped, well will store water underground until the pressure at collar level reaches 28+ psi.

** After completion, well was allowed to flow unrestricted for 72 hrs. During this time, flow dropped to 64 gpm. where it appeared to be holding steady.

Work started 5/10 19 82 Completed 5/21 19 82

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief

Signed _____ (Well Driller)

NAME Pierson Drilling (Person, firm, or corporation) (Typed or printed)

Address P.O. Box 1028

City Crestline Zip 92325

License No. 304075 Date of this report 6/5/82

188 (REV. 7-78) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

YVWD # 68

TRIPLICATE
Owner's Copy

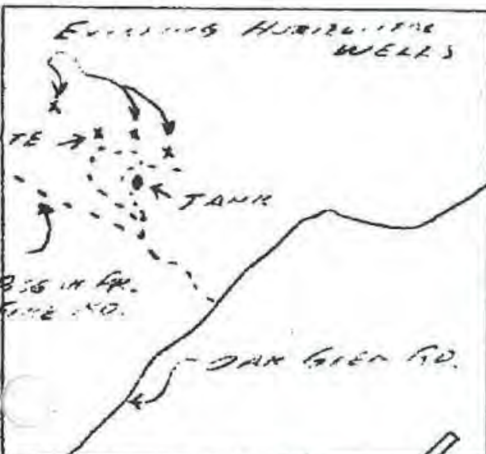
Intent No. 193717
Local Permit No. or Date 05068201

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in
No. 069416
State Well No. ______
Other Well No. ______

(1) OWNER: Name [redacted]
Address [redacted]
City Los Angeles Zip 90057

(2) LOCATION OF WELL (See instructions):
County San Berdo. Owner's Well Number 10
Well address if different from above In S.W. ¼ of N.W. ¼
Township 2S Range 1W Section 2
Distance from cities, roads, railroads, fences, etc. Approx. 1½ mi. N. of intersection of Oak Glen rd. & Wildwood Cyn. rd.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☒
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☒
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☐

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☒ Size 2½" — 0 to 284
Diameter of bore 2" — 284 to 400
Packed from ______ to ______ ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	284	2	sch. 40

(8) PERFORATIONS: 1½" galv. pipe
Type of perforation or size of screen

From ft.	To ft.	Slot size
283	400	3/16" drilled holes

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 284 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ______ ft.
Method of sealing Grout under pressure

(10) WATER LEVELS: See note - - - - - - *
Depth of first water, if known ______ ft.
Standing level after well completion ______ ft.

(11) WELL TESTS: See note - - - - - - - **
Was well test made? Yes ☒ No ☐ If yes, by whom? Pierson Drilling
Type of test Flow Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ______ ft. At end of test ______ ft
Discharge 67 gal/min after 1 hours Water temperature 60°
Chemical analysis made? Yes ☐ No ☒ If yes, by whom? ______
Electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 400 ft. Depth of completed well 400 ft.
from ft. to ft. Formation (Describe by color, character, size or material)

From ft.	To ft.	Formation
0	10	rky overburden
10	30	decomposed granite
30	201	med. hard rk
201	203	clay
203	282	alt. med. & hard rk
282	283	clay
283	344	alt. med. & hard rk
344	354	unstable fault material
354	380	fract. med. rk
380	400	med. hard rk

* Water Pick-ups (Initial Flows)

From	To	Flow
0	283	½ gpm (sealed off)
283	344	4 gpm
344	350	55 gpm
350	380	8 gpm
380	400	0

Total initial flow 67 gpm

Note: When capped, well will store water underground until the pressure at collar level reaches 25+ psi.

** After completion, well was allowed to flow unrestricted for 72 hrs. During this time, flow dropped to 64 gpm. where it appeared to be holding steady.

Work started 5/10 19 82 Completed 5/21 19 82

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED ______ (Well Driller)
NAME Pierson Drilling
(Person, firm, or corporation) (Typed or printed)
Address P.O. Box 1028
City Crestline Zip 92325
License No. 304075 Date of this report 6/5/82

DWR 188 REV. 7-76 IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

TRIPLICATE
Owner's Copy

4 Horiz

YVWD # 69

THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

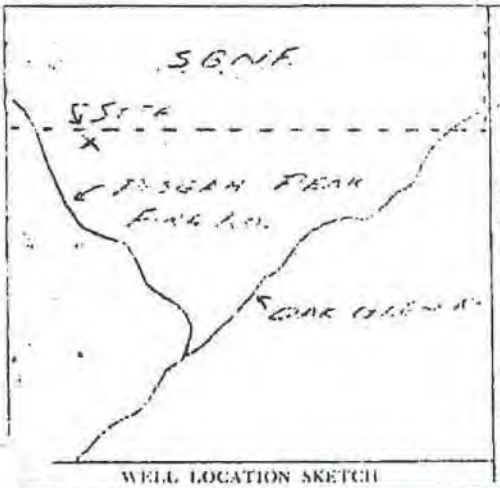
No. 04281

Notice of Intent No. 10583
Local Permit No. or Date 09217802

State Well No.
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City Los Angeles Zip 90057

(2) LOCATION OF WELL (See instructions):
County San Berdo. Owner's Well Number #2
Well address if different from above Old Oak Glen Ranch
Township 2S. Range 1W. Section 2
Distance from cities, roads, railroads, fences, etc. Approx. 1⅓ mi. N. of intersection of Wildwood Cyn. Rd. & Oak Glen Rd.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [X]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [X]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:
Rotary [X] Reverse [ ]
Cable [ ] Air [ ]
Other [X] Horizontal [ ]

(6) CASING RACK:
Yes [ ] No [ ] Size
Diameter of bore 2½" 0 to 333½'
2" 333½ to 455'
1½" 455 to 520'
Packed from

(7) CASING INSTALLED:
Steel [X] Plastic [ ] Concrete [ ]

(8) PERFORATIONS:
Type 1½" std. galv. pipe

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	333½	2"	I.D. std. galv.	328-8	455	3/16" drilled holes

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [X] No [ ] If yes, to depth 333-6 ft.
Were strata sealed against pollution? Yes [ ] No [ ] Interval ft.
Method of sealing Grout under pressure

(10) WATER LEVELS: See note - - - - - - - *
Depth of first water, if known ft.
Standing level after well completion ft.

(11) WELL TESTS: See note - - - - - - - **
Was well test made? Yes [X] No [ ] If yes, by whom? Pierson Drilling
Type of test Flow Pump [ ] Bailer [ ] Air lift [ ]
Depth to water at start of test ft. At end of test ft.
Discharge 30 gal/min after hours Water temperature 59°
Chemical analysis made? Yes [ ] No [X] If yes, by whom?
Electric log made? Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 520 ft. Depth of completed well 520 ft.
(from ft. to ft. Formation (Describe by color, character, size or material)

0	5	loose fractured rk.
5	47	Med. hard rk.
47	49	tough clay
49	160	Med. hard rk.
160	196	alt. med. and hard rk.
196	200	very hard rk.
200	332	alt. med. & hard rk.
332	333	tough clay
333	452	Med. hard rk.
452	466	very hard rk.
466	520	alt. med.hard & hard rk.

* Water pick-ups (Initial Flows)

From	To	Flow
0	333	3 G.P.M. (sealed off)
333	390	35 G.P.M.
390	430	15 G.P.M.
430	470	10 G.P.M.

Total initial flow - 60 G.P.M.

Note - When capped, well will store water underground until the pressure at collar level reaches 30+ p.s.i.

** After completion, well was allowed to run unrestricted for periods of up to 72 hrs. several times. During these periods, the flow dropped off from its initial flow of 60 G.P.M. to approx. 30 G.P.M. within 12 hrs. and then held steady for the remainder of the test.

Work started 3/26 19 79 Completed 8/27 19 79

WELL DRILLERS STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
SIGNED (Well Driller)
NAME Pierson Drilling (Person, firm, or corporation) (Typed or printed)
Address P.O.Box 1028
City Crestline Zip 92325
License No. 304075 Date of this report 5/8/79

WR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Well 4 H

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

NOW YVWD WELL # 69

Do not fill in
No. 04281

Notice of Intent No. 10583
Permit No. or Date 0921780?

State Well No.
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City Los Angeles Zip 90057

(2) LOCATION OF WELL (See instructions):
County San Berdo. Owner's Well Number #2
Well address if different from above Old Oak Glen Ranch
Township 2S. Range 1W. Section 2
Distance from cities, roads, railroads, fences, etc. Approx. 1½ mi. N. of intersection of Wildwood Cyn. Rd. & Oak Glen Rd.

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well [X] Deepening [ ]
Reconstruction [ ]
Recondituoning [ ]
Horizontal Well [X]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [X]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:
Rotary [X] Reverse [ ]
Cable [ ] Air [ ]
Other [X] Horizontal [ ]

(6) GRAVEL PACK:
Yes [ ] No [ ] Size
Diameter of hole 2½" 0 to 333½'
Packed from 2" 333½ to 455'
1½" 455 to 520'

(7) CASING INSTALLED:
Steel [X] Plastic [ ] Concrete [ ]
Type 1½" Perf. std. galv. pipe

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	333½ std.	2" galv.	I.D.	328-8	455 drilled	3/16" holes

(8) PERFORATIONS:

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [X] No [ ] If yes, to depth 333-6 ft.
Were strata sealed against pollution? Yes [ ] No [ ] Interval ft.
Method of sealing Grout under pressure

(10) WATER LEVELS: See note - - - - - - - *
Depth of first water, if known ft.
Standing level after well completion ft.

(11) WELL TESTS: See note - - - - - - - **
Was well test made? Yes [X] No [ ] If yes, by whom? Pierson Drilling
Type of test Flow Pump [ ] Bailer [ ] Air [ ]
Depth to water at start of test ft. At end of test ft.
Discharge 30 gal/min after hours Water temperature 59°
Chemical analysis made? Yes [ ] No [X] If yes, by whom?
Was electric log made? Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 520 ft. Depth of completed well 520 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	5	- loose fractured rk.
5	47	- Med. hard rk.
47	49	- tough clay
49	160	- Med. hard rk.
160	196	- alt. med. and hard rk.
196	200	- very hard rk.
200	332	- alt. med. & hard rk.
332	333	- tough clay
333	452	- Med. hard rk.
452	466	- very hard rk.
466	520	- alt. med.hard & hard rk.

* Water pick-ups (Initial Flows)

From	To	Flow
0	333	- 3 G.P.M. (sealed off)
333	390	- 35 G.P.M.
390	430	- 15 G.P.M.
430	470	- 10 G.P.M.

Total initial flow - 60 G.P.M.

Note - When capped, well will store water underground until the pressure at collar level reaches 30+ p.s.i.

** After completion, well was allowed to run unrestricted for periods of up to 72 hrs. several times. During these periods, the flow dropped off from its initial flow of 60 G.P.M. to approx. 30 G.P.M. within 12 hrs. and then held steady for the remainder of the test.

Work started 3/26 19 79 Completed 4/27 19 79

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief

SIGNED (Well Driller)
NAME Pierson Drilling (Person, firm, or corporation) (Typed or printed)
Address P.O.Box 1028
City Crestline Zip 92325
License No. 304075 Date of this report 5/8/79

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

NOW YVWD WELL # 70

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

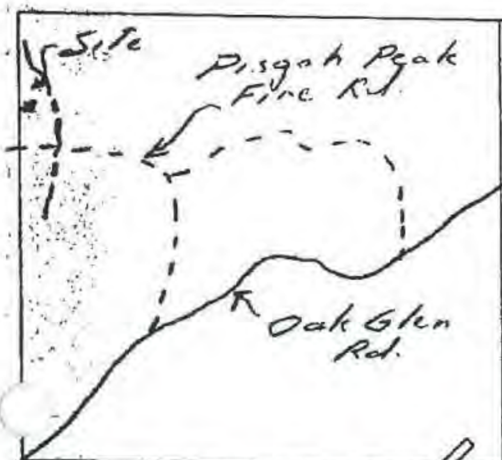
Do not fill in
No. 069452

Intent No. 193755
Local Permit No. or Date 01288601

State Well No. ____
Other Well No. ____

(1) OWNER: Name [redacted]
Address [redacted]
City Los Angeles Zip 90057

(2) LOCATION OF WELL (See instructions):
County San Berdo. Owner's Well Number 13
Well address if different from above ____
Township 2S Range 1W Section 2
Distance from cities, roads, railroads, fences, etc. In the westerly portion of the SW 1/4 of NW 1/4 of NW 1/4, Sec. 2



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [X]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic [ ]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Stock [ ]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:
Rotary [X] Reverse [ ]
Cable [ ] Air [ ]
Other Horizontal Bucket [ ]

(6) GRAVEL PACK:
Yes [ ] No [X] Size 0-273
Diameter of bore 2" 273-496
Packed from ____ to ____ ft.

(7) CASING INSTALLED:
Steel [X] Plastic [ ] Concrete [ ]

(8) PERFORATIONS:
1 1/2 galv. pipe
Type of perforation or size of screen ____

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	273	2"	std.	272	496	3/16"
galv. pipe				drilled holes		

(9) WELL SEAL:
Was surface sanitary seal provided? Yes [X] No [ ] If yes, to depth 273 ft.
Were strata sealed against pollution? Yes [ ] No [X] Interval ____ ft.
Method of sealing Grout under pressure

(10) WATER LEVELS: See note
Depth of first water, if known ____ ft.
Standing level after well completion ____ ft.

(11) WELL TESTS: See note
Was well test made? Yes [X] No [ ] If yes, by whom? Pierson Drlg.
Type of test Flow Pump [ ] Bailer [ ] Air lift [ ]
Depth to water at start of test ____ ft. At end of test ____ ft.
Discharge 38 gal/min after 72 hours Water temperature 60°
Chemical analysis made? Yes [ ] No [X] If yes, by whom? ____
Was electric log made? Yes [ ] No [X] If yes, attach copy to this report

(12) WELL LOG: Total depth 496 ft. Depth of completed well 496 ft.
from ft. to ft. Formation (Describe by color, character, size or material)

0 - 3 - overburden
3 - 70 - decomposed granite
70 - 128-6 - Med. rk.
128-6 - 129 - clay
129 - 272-6 - alt. Med. & hard rk.
272-6 - 273 - clay
273 - 330 - Med. rk.
330 - 410 - alt. Med. hard & hard rk.
410 - 456 - Med. rk.
456 - 467 - Fault zone
467 - 496 - alt. Med. & hard rk.

Water Pickups (Initial Flows)

From - To	Flow
0 - 273	0
273 - 370	2 gpm
374 - 456	2 gpm
456 - 467	28 gpm
467 - 480	13 gpm
480 - 496	-

Total Initial Flow - 45 gpm

Note: When capped, well will store water underground until the pressure at collar level reaches 214 psi.

** During drilling operations and after completion, well was allowed to flow unrestricted for periods of up to 72 hrs. Initial flow of 45 gpm drops to 42 gpm in 1 hr and 38 gpm after 24 hrs. then no further drop was noted.

Work started 1/27 1986 Completed 2/20 1986

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED Gene P. Nelson (Well Driller)
NAME Pierson Drilling (Person, firm, or corporation) (Typed or printed)
Address P.O. Box 1028
City Crestline Zip 92325
License No. 304075 Date of this report 3/4/86

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

YVWD # 71

TRIPLICATE
Owner's Copy

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

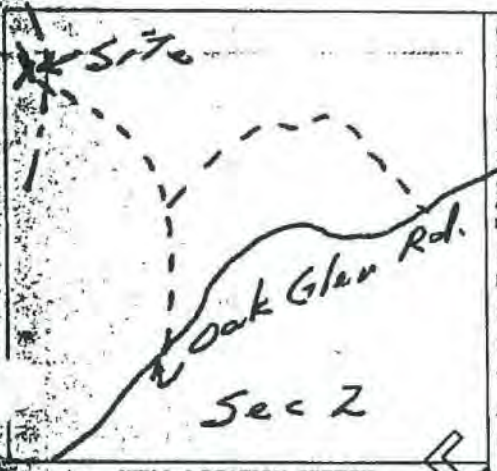
Do not fill in
No. 069445

s of Intent No. 193748
Local Permit No. or Date 030885O1

State Well No.
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City Los Angeles Zip 90057

(2) LOCATION OF WELL (See instructions):
County San Bernardino Owner's Well Number 12
Well address if different from above
Township 2N Range 1W Section 2
Distance from cities, roads, railroads, fences, etc. In SW¼ of NW¼ of NW¼, Sec. 2, T2S, R1W.



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☒
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☒
Other ☐

(5) EQUIPMENT:
Rotary ☒ Reverse ☐
Cable ☐ Air ☐
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☒ Size
Diameter of hole 3"-295 445
Packed from to ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☐ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	295	8	std.
	Galv. pipe		

(8) PERFORATIONS:
Type of perforation or size of screen: Factory galv. pipe

From ft.	To ft.	Slot size
294	394	none
399	445	3/16"
	drilled holes	

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 295 ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ft.
Method of sealing Grout under pressure

(10) WATER LEVELS: See note — *
Depth of first water, if known ft.
Standing level after well completion ft.

(11) WELL TESTS: See note — **
Was well test made? Yes ☐ No ☐ If yes, by whom? Pierson Drilling
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ft. At end of test ft.
Discharge 50 gal/min after 72 hours Water temperature 60°
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Was electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 445 ft. Depth of completed well 445 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	3	overburden
3	105	decomposed granite
105	291	alt. Med. & Med Hard rk.
291	294	clay (fault)
294	380	alt. Med & hard rk
380	400	med rk & unstable (fault)
400	445	Med hrs.

*Water Pick-ups (Initial Flows)

From	To	Flow
0	294	4 gpm (sealed off)
294	350	4 gpm
350	400	4 gpm
400	410	35 gpm
410	445	10 gpm

Total Initial Flow - 60 gpm

Note: When stopped, well will store water underground until the pressure at bottom level reaches 24 psi.

**After completion, well was allowed to flow unrestricted for 72 hrs. During first 12 hrs, initial flow dropped to 50 gpm. Then no further drop was noted.

Work started 3/10 19 85 Completed 3/31 19 85

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
SIGNED Gene P. Nelson (Well Driller)
NAME Pierson Drilling (Person, firm, or corporation) (Typed or printed)
Address P.O. Box 1028
City Crestline Zip 92325
License No. 304075 Date of this report 6/6/85

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

NOW YVWD WELL # 72

TRIPLICATE
Owner's Copy 2S/1W-3H1

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in
No. 322799

Notice of Intent No. _____
Local Permit No. or Date 02279013

State Well No. _____
Other Well No. _____

(1) OWNER: Name [redacted]
Address [redacted]
City LOS ANGELES, CA. ZIP 90004

(2) LOCATION OF WELL (See instructions):
County SAN BERNARDINO Owner's Well Number 28
Well address if different from above OFF OAK GLEN RD IN
Township 2S Range 1W Section 3
Distance from cities, roads, railroads, fences, etc. APP. 3 MILES OFF OAK GLEN RD. IN OAK GLEN CA.

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☒
Test Well ☐
Municipal ☐
Other ☐
(Describe)

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☒ No ☐ Size 3/8"
Diameter of bore 8"
Packed from 50 ft. 500 ft.

(7) CASING INSTALLED:
Steel ☒ Plastic ☒ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	10	8-5/8"	.250
0	500	5"	200

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size
300	500	.032

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval _____ ft.
Method of sealing STEEL & CONCRETE

(10) WATER LEVELS:
Depth of first water, if known 320 ft.
Standing level after well completion 300 ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom? DRILLER
Type of test Pump ☐ Bailer ☐ Air lift ☒
Depth to water at start of test _____ ft. At end of test _____ ft.
Discharge 60 gal/min after _____ hours Water temperature _____
Chemical analysis made? Yes ☐ No ☒ If yes, by whom? _____
Was electric log made Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 500 ft. Completed depth 500 ft.
from ft. 0 to 500 ft. Formation (Describe by color, character, size or material)

0-160' - FIRM BROWN DG
160-200' BROKENUP BLUE GRANITE
200-280' BROKENUP BLACK GRANITE
280-360' BROKENUP BLUE GRANITE/WATER
360-440' BROKENUP BLUE & BLACK GRANITE
440-460' BROKENUP BLUE/GREEN GRANITE/WATER
460-500' BROKENUP BLACK & BLUE GRANITE
500' - STOP

CONFIDENTIAL
NOT FOR PUBLIC USE
WATER CODE SEC. 13752

Work started 2-8 19 90 Completed 313-90 19

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Signed _____ (Well Driller)
NAME SAM CRUM WATER WELL DRILLING, INC.
(Person, firm, or corporation) (Typed or printed)
Address 1803 MARYVALE LN.
City HEMET, CA. ZIP 92344
License No. 534298 Date of this report 3-16-90

DWR 188 (REV. 12-86) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM 86 96355

#28

County of San Bernardino — Environmental Public Works Agency
ENVIRONMENTAL HEALTH SERVICES DEPARTMENT
385 North Arrowhead Avenue, San Bernardino, CA 92415-0160

Do Not Fill In
Permit No. 022 79013
Expiration 2-27-91
FF
FA
SN

WELL PERMIT

Well #72
2S/1W-3H1

PLEASE PRINT:

1. OWNER: Name [redacted]
Mailing Address [redacted]
City Los Angeles Zip 90004
Phone No. (213) 463-1181

2. DATE OF WORK *(approximate)*:
Start 3/1/90 Complete 3/6/90

3. WELL DRILLER *(Check One)*:
☐ Owner ☒ Contractor SAM CRUM WATER WELL DRILLING
Name

4. WELL USE *(check)*:
☐ Community ☐ Horizontal ☐ Other
☐ Individual ☒ Test
☐ Agricultural ☐ Monitoring
☐ Dairy ☐ Public Water Supply

5. TYPE OF WORK *(check)*:
☒ New ☐ Reconstruction ☐ Destruction

Items 6 through 10 to be estimated for new wells, and exact for all other wells.

6. ANNULAR SEAL: Seal Depth _____ ft.
Furnished by: ☐ Owner ☐ Contractor
☐ Driven Conductor Dia. _____ in., Wall (Gage) _____
☐ Sealing Material _____, Thickness _____ in.

7. DEPTH OF WELL *(feet)*:
Proposed 500 Existing _____
DIAMETER OF BORE *(in.)*: 8

8. CASING INSTALLED:
☐ Steel ☐ Plastic ☐ Other

From (ft.)	To (ft.)	Dia. (in.)	Wall (Gage)

GRAVEL PACK: ☐ Yes ☐ No
From _____ to _____ ft.

9. PERFORATIONS *(if applicable)*:
From _____ to _____ ft.

10. SEALED ZONES *(if applicable)*:
From _____ to _____ ft.

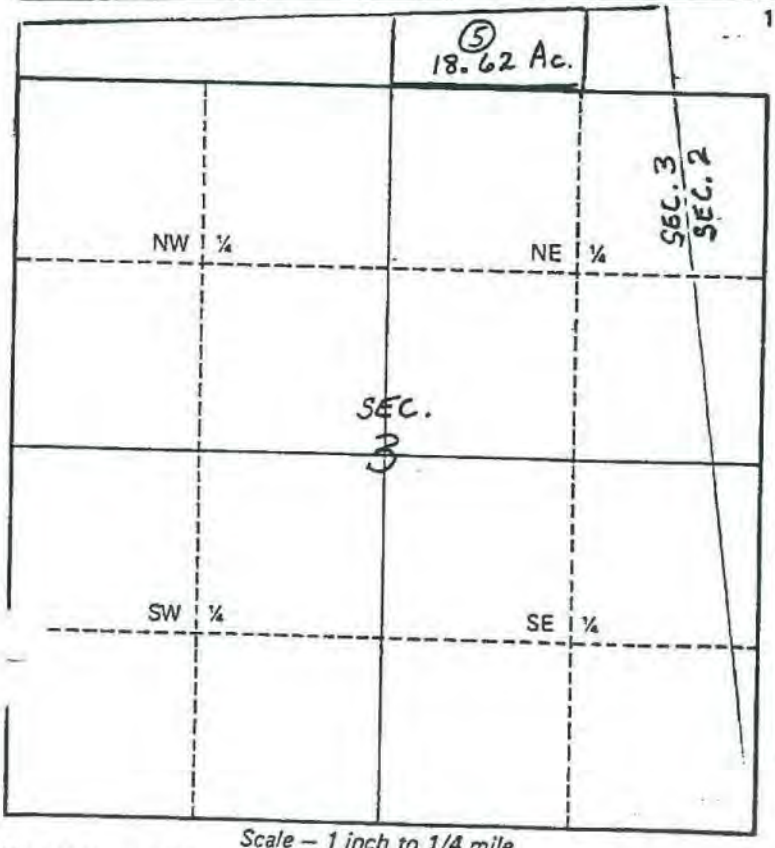
11. LOCATION INFORMATION: 20C-6D

(a) Township 2S N/S Range 1W E/W
Section 3

(b) Assessor's Parcel No. 325 011 05

(c) Solid or liquid waste disposal site within two miles?
☐ Yes ☒ No

Location: Gov. Lot #2 - Off Pisgah Peak Fire R



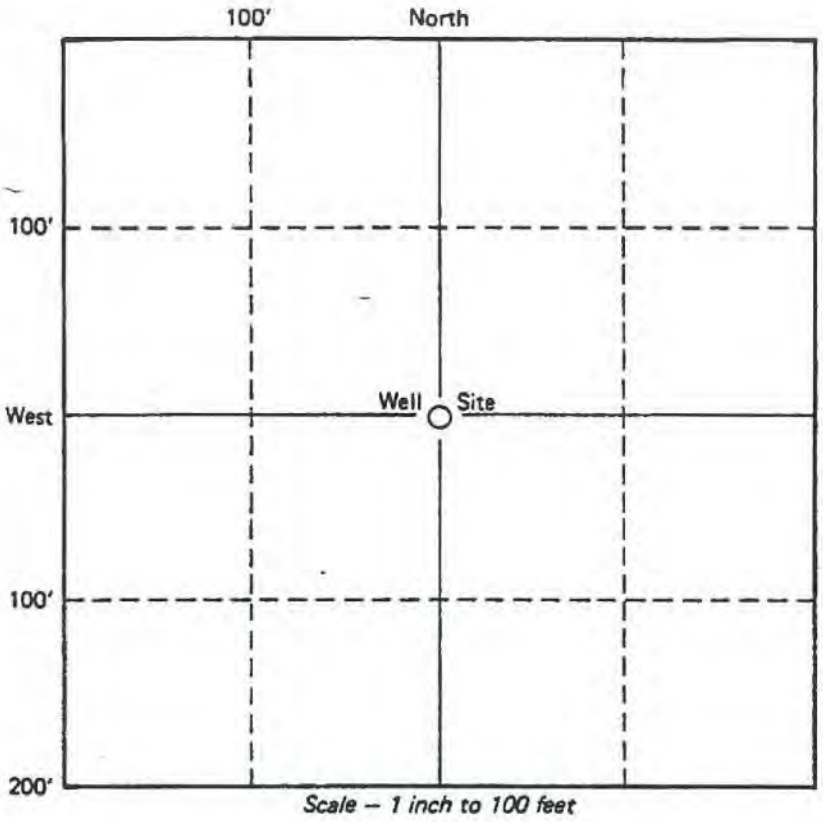
Scale – 1 inch to 1/4 mile

Do Not Fill In

SAN BERNARDINO CO.
LAND MANAGEMENT - E.P.W.A.
01 00027239 0045 CHR 02/20/90 15:01 F
005 ENV HEALTH SERV TOT PAID: 110.00
0 00000000
561 EHS 110.0

03-14785-631 Rev. 8/90

well #12 25/1 W-34J



Scale – 1 inch to 100 feet

12. PLOT PLAN:

(a) In perspective to the well site, sketch and label the following items: well lot property lines, other wells *(include abandoned wells)*, sewage disposal systems *(sewers, septic tanks, leaching fields, seepage pits, cesspools)*, lakes and ponds, water courses and animals or fowl kept.

(b) Indicate the distance in *feet*, of any of the following which are within 200 ft. of the well site:

Other wells	_____
Sewers	_____
Septic tanks	_____
Leaching fields	_____
Seepage pits	_____
Cesspools	_____
Lakes and ponds	_____
Water courses	_____
Animals or fowl kept	_____

(c) ☒ None of the above are within 200 feet of the well site.

13. I have read this application and agree to comply with all laws regulating the type of work being performed. The California Labor Code requires Workers' Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate:

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers' Compensation laws of California.

Owner's Signature _____ Date _____

☒ Contractor's Signature Sam Cuan Date 2/7/90 Reg. No. 134

DISPOSITION OF PERMIT

(Do Not Fill In)

☒ Approved subject to the following:

A. Notify the Department, Jon Tracey (714) 387-4666, twenty-four (24) hours in advance to make an inspection of the following operations:

☒ Prior to sealing of the annular space or filling of the conductor casing.

2/26/90 ☐ Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing.

AB ☒ After installation of the surface protective slab and pumping equipment.

☐ During destruction of wells, prior to pouring the sealing material.

B. Submit to the Department within thirty (30) days after completion of work, a copy of:

☒ Water Well Driller's Report ☐ Bacteriological Analysis ☐ Inorganic Chemical Analysis

☐ Radiological Analysis ☐ General Mineral ☐ Organic Chemical Analysis ☐ General Physical

C. Other Test wells shall be amended or destroyed under permit within 24 hours of completion of test work.

☐ DENIED _____

Well #18 NOW YVWD WELL #73

TRIPLICATE
Owner's Copy 2S/1W-3B1

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

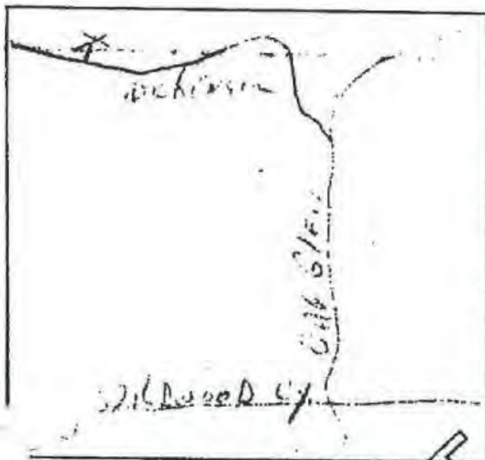
Do not fill in
No. 204467

Notice of Intent No. ______
Permit No. or Date ______

State Well No. ______
Other Well No. ______

(1) OWNER: Name [redacted]
Address [redacted]
City Los Angelds, CA Zip 90057

(2) LOCATION OF WELL (See instructions):
County San Bernadino Owner's Well Number 18
Well address if different from above Wildwood Cyan Rd.
Township ______ Range ______ Section ______
Distance from cities, roads, railroads, fences, etc. ______



WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☒
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☐

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size ______
Diameter of bore ______
Packed from ______ to ______ ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☒ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
0	400	8	

(8) PERFORATIONS:
Type of perforation or size of screen ______

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☐ Interval ______ ft.
Method of sealing Steel- cement

(10) WATER LEVELS:
Depth of first water, if known 240 XXXXXX ft.
Standing level after well completion 145 ft.

(11) WELL TESTS:
Was well test made? Yes ☐ No ☐ If yes, by whom? ______
Type of test Pump ☐ Bailer ☐ Air lift ☐
Depth to water at start of test ______ ft. At end of test ______ ft.
Discharge ______ gal/min after ______ hours Water temperature ______
Chemical analysis made? Yes ☐ No ☐ If yes, by whom? ______
Was electric log made? Yes ☐ No ☐ If yes, attach copy to this report

(12) WELL LOG: Total depth 400 ft. Depth of completed well 400 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	- 20	Broken brown DG
20	- 60	Broken to hard blue green roc
60	- 80	Broken up blue green rock
80	-120	clay brown white mix
1200	-140	Blck gran
140	-180	Broken up blue/green
180	-200	Bronw & green boke up
200	-240	water brown
240	-280	brown & green broken up
280	-320	water- green broken up
320	-340	green & brown broken up
340	-400	Black granite- STOP

NOT FOR PUBLIC USE WATER CODE SEC. 13752

Work started 1-18 19 88 Completed 1-26 19 88

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED ______ (Well Driller)

NAME Jack Jones WElls & Pumps
(Person, firm, or corporation) (Typed or printed)
Address P.O. Box 250
City Hemet, CA 92343
License No. 436011 Date of this report 3-18-88

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

2S/1W-3A1 NOW YVWD WELL # 74

ORIGINAL

File with DWR

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WATER WELL DRILLERS REPORT

Do not fill in

No. 217126

State Well No.

Other Well No.

Notice of Intent No.

Permit No. or Date 08158807

(1) OWNER: Name [redacted]

Address [redacted]

City Los Angeles, CA Zip 90004

(2) LOCATION OF WELL (See instructions):

County San Bernardino Owner's Well Number 20

Well address if different from above Parcel 325-011-08

Township 2S Range 1W Section 3

Distance from cities, roads, railroads, fences, etc.

WELL LOCATION SKETCH

(3) TYPE OF WORK:

New Well [X] Deepening [ ]
Reconstruction [ ]
Reconditioning [ ]
Horizontal Well [ ]
Destruction [ ] (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:

Domestic [X]
Irrigation [ ]
Industrial [ ]
Test Well [ ]
Stock [X]
Municipal [ ]
Other [ ]

(5) EQUIPMENT:

Rotary [ ] Reverse [ ]
Cable [ ] Air [X]
Other [ ] Bucket [ ]

(6) GRAVEL PACK:

Yes [X] No [ ] Size 614 Wall Rock

Diameter of bore 12½"

Packed from 50 to 583 ft.

(7) CASING INSTALLED:

Steel [X] Plastic [ ] Concrete [ ]

(8) PERFORATIONS:

Type of perforation or size of screen

From ft.	To ft.	Dia. in.	Gage or Wall	From ft.	To ft.	Slot size
0	200	8-5/8	.188	200	583	.100

(9) WELL SEAL:

Was surface sanitary seal provided? Yes [X] No [ ] If yes, to depth 50 ft.

Were strata sealed against pollution? Yes [X] No [ ] Interval ft.

Method of sealing

(10) WATER LEVELS:

Depth of first water, if known ft.

Standing level after well completion 232 ft.

(11) WELL TESTS:

Was well test made? Yes [X] No [ ] If yes, by whom?

Type of test Pump [ ] Bailer [ ] Air lift [ ]

Depth to water at start of test ft. At end of test ft

Discharge gal/min after hours Water temperature

Chemical analysis made? Yes [ ] No [ ] If yes, by whom?

Was electric log made? Yes [ ] No [ ] If yes, attach copy to this report

(12) WELL LOG: Total depth 0 ft. Depth of completed well 583 ft.

from ft. to ft. Formation (Describe by color, character, size or material)

0 - 18 - Fine sand & brown clay.
18 - 39 - Fine sand & shale.
39 - 78 - Fine sand & rock with shale mix.
78 - 129 - Fine & medium coarse sand with streaks of shale & granite.
129 - 318 - Decomposed granite - blue in color.
318 - 583 - Decomposed granite - solid formation - blue green in color.

Work started 19 Completed 19

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED William Steese (Well Driller)

NAME William Steese - SoCal Pump & Well Service (Person, firm, or corporation) (Typed or printed)

Address 585 W. Valley Blvd.

City Bloomington, CA Zip 92316

License No. 510836 Date of this report 11/29/88

DWR 188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Well #16 NOW YVWD WELL # 75

TRIPLICATE
Owner's Copy

1S/1W-34Q1

STATE OF CALIFORNIA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES
WATER WELL DRILLERS REPORT

Do not fill in
No. 193900

Notice of Intent No.
Permit No. or Date.

State Well No.
Other Well No.

(1) OWNER: Name [redacted]
Address [redacted]
City Los Angeles, Ca. Zip 90057

(2) LOCATION OF WELL (See instructions):
County San Bernadino Owner's Well Number
Well address if different from above
Township Range Section
Distance from cities, roads, railroads, fences, etc.

WELL LOCATION SKETCH

(3) TYPE OF WORK:
New Well ☒ Deepening ☐
Reconstruction ☐
Reconditioning ☐
Horizontal Well ☐
Destruction ☐ (Describe destruction materials and procedures in Item 12)

(4) PROPOSED USE:
Domestic ☐
Irrigation ☐
Industrial ☐
Test Well ☐
Stock ☐
Municipal ☐
Other ☐

(5) EQUIPMENT:
Rotary ☐ Reverse ☐
Cable ☐ Air ☒
Other ☐ Bucket ☐

(6) GRAVEL PACK:
Yes ☐ No ☐ Size
Diameter of bore
Packed from ft. to ft.

(7) CASING INSTALLED:
Steel ☐ Plastic ☒ Concrete ☐

From ft.	To ft.	Dia. in.	Gage or Wall
	420	8"	

(8) PERFORATIONS:
Type of perforation or size of screen

From ft.	To ft.	Slot size

(9) WELL SEAL:
Was surface sanitary seal provided? Yes ☒ No ☐ If yes, to depth 50 ft.
Were strata sealed against pollution? Yes ☐ No ☒ Interval ft.
Method of sealing Cement-Steel/10"

(10) WATER LEVELS:
Depth of first water, if known 240 ft.
Standing level after well completion 145 ft.

(11) WELL TESTS:
Was well test made? Yes ☒ No ☐ If yes, by whom?
Type of test Pump ☐ Bailer ☐ Air lift ☒
Depth to water at start of test ft. At end of test ft.
Discharge 150 gal/min after hours Water temperature
Chemical analysis made? Yes ☐ No ☒ If yes, by whom?
Electric log made? Yes ☐ No ☒ If yes, attach copy to this report

(12) WELL LOG: Total depth 420 ft. Depth of completed well 420 ft.

from ft.	to ft.	Formation (Describe by color, character, size or material)
0	20	Broke Up Brown DG
20	40	Broke Up blue/green rock
40	60	Hard blue/green rock
60	80	Broke Up Blue/green rock
80	100	Hard blue/green rock
100	120	Clay brown/white mix broke up
120	140	Black gran. & blue/green mix
140	160	Broke Up Blue/Green
160	180	Brke Up Blue/ Green
180	200	Broke Up blue/green rock
200	220	Brown & green broke up
220	240	" " water
240	260	water " "
260	280	" " water
280	300	" " water
300	320	" " water
320	340	" " water
340	360	" " water
360	380	" " water
380	400	" " water
400	420	Hard black granite

Work started 3-13 19 87 Completed 4-1 19 87

WELL DRILLER'S STATEMENT:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

SIGNED (Well Driller)

NAME Ron Engeldinger (Person, firm, or corporation) (Typed or printed)
Address P.O. Box 250
City Hemet, Ca. Zip 92343
License No. 294625 Date of this report 4-16-878

188 (REV. 7-76) IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

Well 106

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0107583

Page 1 of 1

Owner's Well Number MW-4

Date Work Began 11/18/2009 Date Work Ended 11/18/2009

Local Permit Agency Riverside County Department of Environmental Health

Permit Number WP 20441 Permit Date 11/10/09

DWR Use Only – Do Not Fill In

State Well Number/Site Number

N W

Latitude Longitude

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Hollow Stem Auger Drilling Fluid Air

Depth from Surface Feet	to Feet	Description (Describe material, grain size, color, etc)
0	4	Silty sand, fine to medium with gravel, light brown
4	9	Sand, fine to coarse with silt and gravel, brown
9	27	Silty sand, fine with medium and clay, brown
27	46	Silty sand, fine to medium with clay, brown
46	54	Silty sand, fine, gray brown
54	82	Sandy silt, fine with clay, brown

Total Depth of Boring 82 Feet

Total Depth of Completed Well 80 Feet

Well Owner

Name [redacted]

Mailing Address [redacted]

City Yucaipa State CA Zip 92399

Well Location

Address San Timoteo Canyon Road

City Calimesa County Riverside

Latitude 33 Deg. 59 Min. 15 Sec. N Longitude 117 Deg. 8 Min. 4 Sec. W

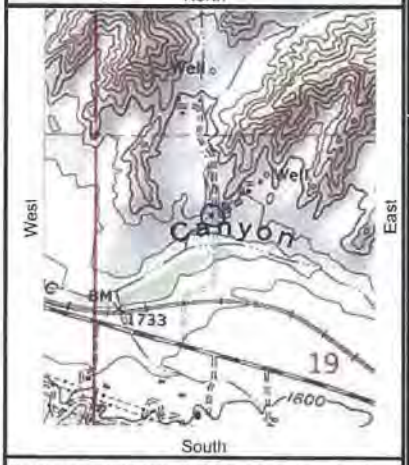
Datum NAD83 Decimal Lat. 33.987 Decimal Long. 117.134

APN Book 413 Page 380 Parcel 004

Township 2S Range 2W Section 19

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. **Please be accurate and complete.**

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
◉ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water 60 (Feet below surface)

Depth to Static Water Level (Feet) Date Measured

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	65	10	Blank	PVC Sch. 40		4		
65	80	10	Screen	PVC Sch. 40		4	Milled Slots	0.020

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	51	Cement	seal
51	55	Bentonite	seal
55	80	Filter Pack	sand

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Jay J. Martin for C.H.J., Incorporated, Vice President, CEG 1529
Person, Firm or Corporation

1355 E. Cooley Drive Colton CA 92324
Address City State Zip

Signed [signature] 3/18/2010 766402
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

DWR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

MONITORING WELL NO. MW-4

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 33.987°-117.134° Logged by: VJR Groundwater First Encountered (ft): 60.0

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES: DRIVE	SAMPLES: BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
		(SM) Silty Sand, fine to medium, gravel, light brown	Native	X		4 4 4			SPT
5		(SP-SM) Sand, fine to coarse with silt, gravel, brown		X		5 7 10			SPT
10		(SM) Silty Sand, fine with medium, clay, brown		X		5 8 13			SPT
15				X		6 9 13			SPT
20				X		6 10 18			SPT
25									
		(SM) Silty Sand, fine to medium, clay, brown							
30				X		9 15 19			SPT

MONITORING_WELL_09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-4a

MONITORING WELL NO. MW-4

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 33.987°-117.134° Logged by: VJR Groundwater First Encountered (ft): 60.0

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES: DRIVE	SAMPLES: BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
40				X		10 20 26			SPT
45		(SM) Silty Sand, fine, gray brown							
50				X		8 14 28			SPT
55		(ML) Sandy Silt, fine with clay, brown							
60			▼ Groundwater	X		9 16 24			SPT
65									

MONITORING_WELL 09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-4b

MONITORING WELL NO. MW-4

Date Drilled: 11/18/09 Client: [redacted]

Equipment: B-61 Hollow-Stem Auger Driving Weight / Drop: 140 lbs./30 in.

Coordinates: 33.987°-117.134° Logged by: VJR Groundwater First Encountered (ft): 60.0

DEPTH (ft)	GRAPHIC LOG	VISUAL CLASSIFICATION	SAMPLE NO.	SAMPLES: DRIVE	SAMPLES: BULK	BLOWS/FOOT (Equiv. SPT)	FIELD MOISTURE (%)	DRY UNIT WT. (pcf)	LAB/FIELD TESTS
				X		45 50/3"			SPT
75									
80				X		14 27 46			SPT
		END OF BORING	Refusal						
		REFUSAL AT 81.5', NO BEDROCK NO FILL, SLIGHT CAVING PERCHED LAYER OF GROUNDWATER ENCOUNTERED AT 60.0'							
85									
90									
95									
100									

MONITORING_WELL 09631-8.GPJ CHJ.GDT 11/24/09

C.H.J.

WELLS - SAN TIMOTEO & LIVE OAK CANYONS
RIVERSIDE COUNTY, CALIFORNIA

Job No. 09631-8

Enclosure B-4c

MW 107

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

Refer to Instruction Pamphlet

No. e0115380

Page 1 of 2

Owner's Well Number

Date Work Began 07/29/2010 Date Work Ended 8/4/2010

Local Permit Agency San Bernardino Department of Public Health

Permit Number 7010070342 Permit Date 7/23/10

DWR Use Only – Do Not Fill In

State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

Geologic Log

Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Reverse Rotary Drilling Fluid Fresh Water

Depth from Surface Feet	to Feet	Description Describe material, grain size, color, etc
35	90	Sand Gravel
90	120	Sand Clay
120	200	Sand Gravel
200	250	Sand Gravel Clay
250	310	Sand Gravel
310	340	Sand Gravel Clay
340	417	Sand Gravel

Total Depth of Boring 417 Feet

Total Depth of Completed Well 415 Feet

Well Owner

Name [redacted]

Mailing Address [redacted]

City [redacted] State CA. Zip 92399

Well Location

Address San Timoteo Canyon Road

City Yucaipa County San Bernardino

Latitude Deg. Min. Sec. N Longitude Deg. Min. Sec. W

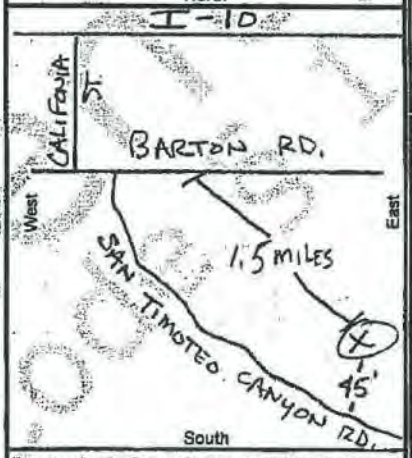
Datum Decimal Lat. Decimal Long.

APN Book 0175 Page 221 Parcel 06

Township 2S Range 3W Section 4

Location Sketch

(Sketch must be drawn by hand after form is printed.)



Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
◉ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level (Feet) Date Measured

Estimated Yield* (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
0	35	32	Conductor	Low Carbon Steel	.250	20		
0	340	17.5	Blank	PVC Sch. 80	.214	5		
340	360	17.5	Screen	PVC Sch. 80	.214	5		0.050
0	285	17.5	Blank	PVC Sch. 80	.214	5		
285	305	17.5	Screen	PVC Sch. 80	.214	5		0.050
0	120	17.7	Blank	PVC Sch. 80	.214	5		

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
0	225	Filter Pack	8x16 Midcal
225	230	Fill	Sand
230	250	Bentonite	Seal
250	255	Fill	Sand
255	310	Filter Pack	8x16 Gravel
310	315	Fill	Sand

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Bakersfield Well & Pump Co.
Person, Firm or Corporation

7212 Fruitvale Ave Address Bakersfield City CA State 93308 Zip

Signed C-57 Licensed Water Well Contractor

8/20/2010 Date Signed

440537 C-57 License Number

VR 188 REV. 1/2006

IF ADDITIONAL SPACE IS NEEDED, USE NEXT CONSECUTIVELY NUMBERED FORM

*The free Adobe Reader may be used to view and complete this form. However, software must be purchased to complete, save, and reuse a saved form.

File Original with DWR

State of California

Well Completion Report

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No. e0115380

Page 2 of 2

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State Well Number/Site Number

Latitude N Longitude W

APN/TRS/Other

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Orientation ◉ Vertical ○ Horizontal ○ Angle Specify

Drilling Method Reverse Rotary Drilling Fluid Fresh Water

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Latitude Deg. Min. Sec. N Longitude Deg. Min. Sec. W

Datum Decimal Lat. Decimal Long.

APN Book 0175 Page 221 Parcel 06

Township 2S Range 3W Section 4

Location Sketch

(Sketch must be drawn by hand after form is printed.)

Illustrate or describe distance of well from roads, buildings, fences, rivers, etc. and attach a map. Use additional paper if necessary. Please be accurate and complete.

Activity

◉ New Well
○ Modification/Repair
○ Deepen
○ Other
○ Destroy
Describe procedures and materials under "GEOLOGIC LOG"

Planned Uses

○ Water Supply
☐ Domestic ☐ Public
☐ Irrigation ☐ Industrial
○ Cathodic Protection
○ Dewatering
○ Heat Exchange
○ Injection
◉ Monitoring
○ Remediation
○ Sparging
○ Test Well
○ Vapor Extraction
○ Other

Water Level and Yield of Completed Well

Depth to first water (Feet below surface)

Depth to Static Water Level (Feet) Date Measured

Estimated Yield * (GPM) Test Type

Test Length (Hours) Total Drawdown (Feet)

*May not be representative of a well's long term yield.

Casings

Depth from Surface Feet	to Feet	Borehole Diameter (Inches)	Type	Material	Wall Thickness (Inches)	Outside Diameter (Inches)	Screen Type	Slot Size if Any (Inches)
120	140	17.5	Screen	PVC Sch. 80	.214	5		0.050

Annular Material

Depth from Surface Feet	to Feet	Fill	Description
315	330	Bentonite	Seal
330	335	Fill	Sand
335	415	Filter Pack	8x16 Midcal

Attachments

☐ Geologic Log
☐ Well Construction Diagram
☐ Geophysical Log(s)
☐ Soil/Water Chemical Analyses
☐ Other

Attach additional information, if it exists.

Certification Statement

I, the undersigned, certify that this report is complete and accurate to the best of my knowledge and belief

Name Bakersfield Well & Pump Co.
Person, Firm or Corporation

7212 Fruitvale Ave Bakersfield CA 93308
Address City State Zip

Signed Kevin Dewalt 8/20/2010 440537
C-57 Licensed Water Well Contractor Date Signed C-57 License Number

Appendix 3-B

Monitoring Forms and Protocols

WATER-LEVEL MEASUREMENT FIELD FORM

Date (YYYY/MM/DD): Site ID:

Well Type: Production / Monitoring / Private Measuring Agency/Entity:

Well Pumping? Is Water Level Static?

Method of Water Level Measurement (see below): Site Status (see below):

Measuring Equipment ID: Measuring Point Elevation (ft NAVD88):

WATER LEVEL DATA

Time of Measurement					
Measurement (feet)					
Tape Correction (feet)					
Water Level below MP (feet)					
Measuring Point Correction					
Water Level below Land Surface					
Water Elevation (ft NAVD88)					

Measured by: Comments:*

*Comments should include quality concerns and changes that affect the representativeness of the measurements (e.g., changes in MP elevation, ownership, well operations, access to measure DTW, etc.)

Site Status: D = dry; O = obstructed; P = pumping; R = recently pumped and recovering; NP = nearby pumping; V = foreign substance; WD = well destroyed; SW = surface water effects; Z = other; S = Static

Method of Water Level Measurement: A = airline; B = analog; C = calibrated airline; E = estimated; G = pressure gauge; H = calibrated pressure gage; M = manometer; R = reported; S = steel tape; T = electric tape; V = calibrated electric tape; Z = other.

NOTES:

Measuring Protocol:

1. Check circuitry of electrical tape before lowering the probe into the well by dipping probe into tap water.
2. Make all readings using the same indicator for consistency (light intensity or sound).
3. Lower electrode probe slowly into the well until the indicator shows that the circuit is closed and contact with the water surface is made. Place the nail of the index finger on the insulated wire at the MP (Measuring Point) and read the depth-to-water.
4. Record time of measurement. Record depth to water in the row “Measurement (feet)”. If the tape has been repaired and spliced or has a calibration correction, subtract the “Tape Correction” value from the “Measurement” value and record the difference in the row “Water Level below MP”.
5. Pull the tape up and make a check measurement by repeating steps 3-4. Record the check measurement in column 2. If check measurement does not agree with the original measurement within 0.02 foot, continue to make measurements until the reason of lack of agreement is determined or the results are shown to be reliable. If more than 2 measurements are made, use best judgment to select measurement most representative of field conditions.
6. Disinfect and rinse that part of tape that was submerged below water. Dry tape and rewind.

Format instructions and notes:

Site ID:	Well identified or State Well No.
MP:	measuring point
ft NAVD88:	feet above the National Vertical Datum of 1988.
Measuring Equipment ID:	serial number or identifier of measuring equipment

WELL PRODUCTION RECORD

Date	Time	Well ID	Totalizer Reading (Gallons)	Instantaneous Pumping Rate (GPM)	Estimated Pumping Rate (GPM)	Model and Make of Totalizer

WATER QUALITY FIELD FORM

Date (YYYY/MM/DD): Site ID:

Well Type: Production / Monitoring / Private Measuring Agency/Entity:

Well Pumping? If so, how long? Is Initial Water Level Static?

Method of Well Purging (see below): Site Status (see below):

Purging Equipment ID: Water Quality Meter ID:

Purge Volume Calculation:

[A] Total depth of well casing (ft bls): [C] Well Casing Inside Diameter (inches):

[B] Static depth to water, if not pumping (ft bls): [D] Length of Water Column, [A] - [B] (ft):

Purge Volume (3 Casing Volumes), ([D] * π/4 * ([C]/12)^2) * 3 =

WATER QUALITY PARAMETERS

Time	Purge Rate	Temperature (^{o}C)	pH	Conductivity ( )	Oxidation-Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)

Measured by: Comments:*

WATER QUALITY FIELD FORM

*Comments should include quality concerns and changes that affect the representativeness of the measurements (e.g., changes in pump placement, ownership, well operations, access to sampling port, etc.)

Site Status: D = dry; O = obstructed; P = pumping; R = recently pumped and recovering; NP = nearby pumping; V = foreign substance; WD = well destroyed; SW = surface water effects; Z = other; S = Static

Method of Well Purging: B = bailer; D = dedicated submersible pump; P = portable submersible pump; T = dedicated turbine pump; S = peristaltic pump.

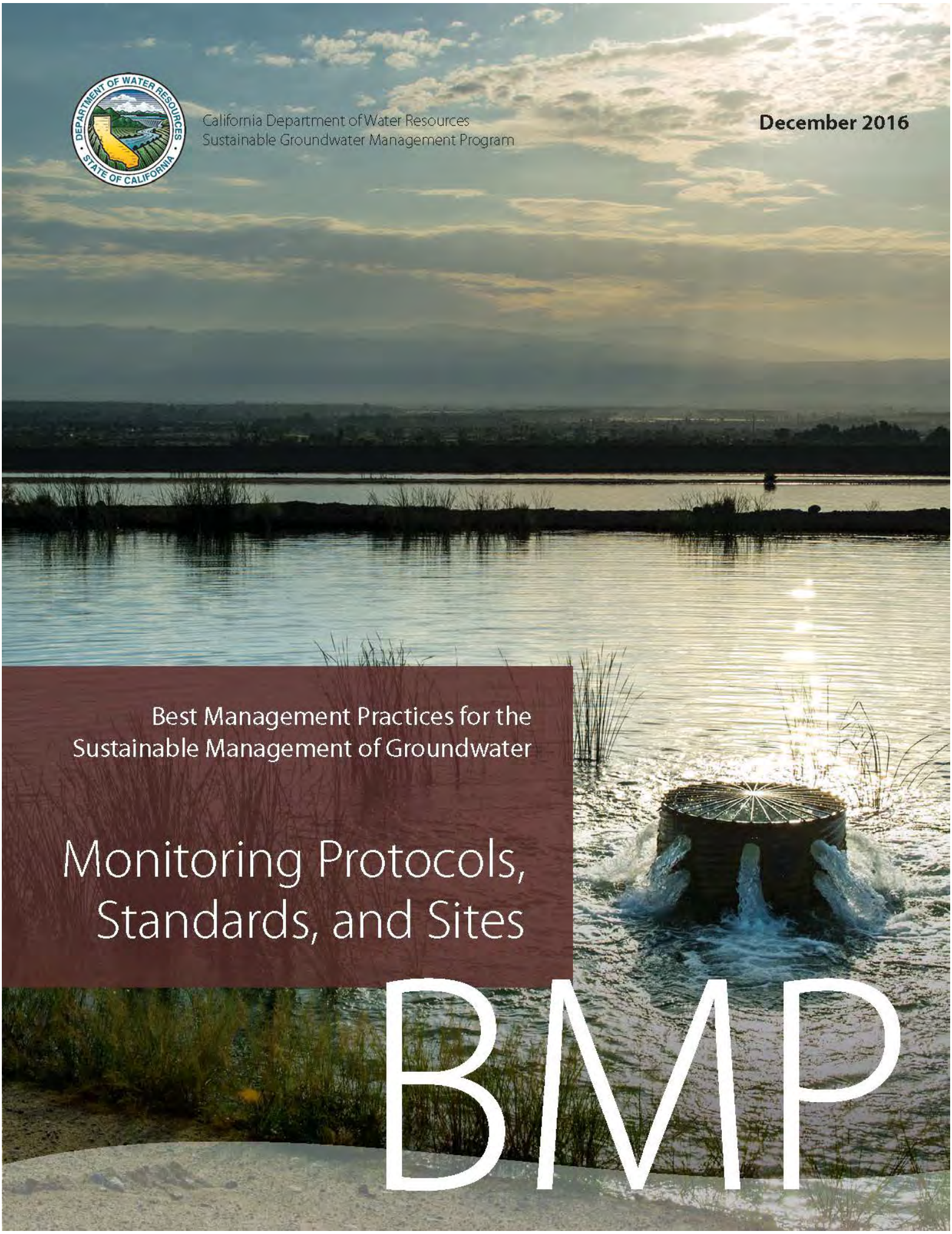
NOTES:

Purging and Sampling Protocol:

1	If the well has a dedicated pump and it is operating, ensure that it has been operating consistently and at least three (3) casing volumes have been pumped. If not, note pumping rate and time to purge 3 casing volumes before collecting representative samples. Measure and record water quality parameters through purging process.
2	If the well does not have a dedicate pump, then use purging equipment (e.g., portable submersible pump, bailer) to purge well. If using a portable submersible pump, lower pump to depth (consistent with previous smapling events) that ensures pump will not draw water level down to intake and, if possible, is positioned above the top of the well screen.
3	Ensure that portable purging equipment is properly decontaminated prior to use. Any decontamination must be documented (e.g., material used to decontaminate equipment, rinsing method, containment of waste, waste disposal).
4	Measure and/or record purge rate periodically. Collect purge sample to measure parameters periodically. Parameters should stablize (within 10% of previous three readings) before collecting the water quality sample.
5	Use the appropriate sample containers provided by the analytical laboratory. Sample containers shoud be labeled prior to sample collection. The sample label should include: Sample ID (often well ID), sample date and time of collection, sampling personnel, preservative used (if any), and the analytical method to be used on the sample.
6	All samples should be preserved as soon as possible in an ice chest containing ice. The samples should be chilled and maintained at 4 ^{o}C.
7	The Chain-of-Custory form should be filled out as the sample is collected and preserved.

Format instructions and notes:

Site ID:	Well identifier or State Well No.
ft bls:	feet below land surface
Purging Equipment ID/description:	serial number or identifier of measuring equipment



California Department of Water Resources
Sustainable Groundwater Management Program

December 2016

Best Management Practices for the Sustainable Management of Groundwater

Monitoring Protocols, Standards, and Sites

BMP

State of California
Edmund G. Brown Jr., Governor

California Natural Resources Agency
John Laird, Secretary for Natural Resources

Department of Water Resources
Mark W. Cowin, Director

Carl A. Torgersen, Chief Deputy Director

Office of the Chief Counsel Spencer Kenner	Public Affairs Office Ed Wilson	Government and Community Liaison Anecita S. Agustinez
Office of Workforce Equality Stephanie Varrelman	Policy Advisor Waiman Yip	Legislative Affairs Office Kasey Schimke, Ass't Dir.

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Division of Integrated Regional Water Management

Arthur Hinojosa Jr., Chief

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With assistance from:

DWR Region Office Staff

Groundwater Monitoring Protocols, Standards, and Sites Best Management Practice

1. OBJECTIVE

The objective of this *Best Management Practice* (BMP) is to assist in the development of Monitoring Protocols. The California Department of Water Resources (the Department or DWR) has developed this document as part of the obligation in the Technical Assistance chapter (Chapter 7) of the Sustainable Groundwater Management Act (SGMA) to support the long-term sustainability of California's groundwater *basins*. Information provided in this BMP provides technical assistance to Groundwater Sustainability Agencies (GSAs) and other stakeholders to aid in the establishment of consistent data collection processes and procedures. In addition, this BMP can be used by GSAs to adopt a set of sampling and measuring procedures that will yield similar data regardless of the monitoring personnel. Finally, this BMP identifies available resources to support the development of monitoring protocols.

This BMP includes the following sections:

1. Objective. A brief description of how and where monitoring protocols are required under SGMA and the overall objective of this BMP.
2. Use and Limitations. A brief description of the use and limitations of this BMP.
3. Monitoring Protocol Fundamentals. A description of the general approach and background of groundwater monitoring protocols.
4. Relationship of Monitoring Protocols to other BMPs. A description of how this BMP is connected with other BMPS.
5. Technical Assistance. Technical content providing guidance for regulatory sections.
6. Key Definitions. Descriptions of definitions identified in the GSP Regulations or SGMA.
7. Related Materials. References and other materials that provide supporting information related to the development of Groundwater Monitoring Protocols.

2. USE AND LIMITATIONS

BMPs developed by the Department provide technical guidance to GSAs and other stakeholders. Practices described in these BMPs do not replace the GSP Regulations, nor do they create new requirements or obligations for GSAs or other stakeholders. In addition, using this BMP to develop a GSP does not equate to an approval determination by the Department. All references to GSP Regulations relate to Title 23 of the California Code of Regulations (CCR), Division 2, Chapter 1.5, and Subchapter 2. All references to SGMA relate to California Water Code sections in Division 6, Part 2.74.

3. MONITORING PROTOCOL FUNDAMENTALS

Establishing data collection protocols that are based on best available scientific methods is essential. Protocols that can be applied consistently across all basins will likely yield comparable data. Consistency of data collection methods reduces uncertainty in the comparison of data and facilitates more accurate communication within basins as well as between basins.

Basic minimum technical standards of accuracy lead to quality data that will better support implementation of GSPs.

4. RELATIONSHIP OF MONITORING PROTOCOL TO OTHER BMPS

Groundwater monitoring is a fundamental component of SGMA, as each GSP must include a sufficient network of data that demonstrates measured progress toward the achievement of the sustainability goal for each basin. For this reason, a standard set of protocols need to be developed and utilized.

It is important that data is developed in a manner consistent with the basin setting, planning, and projects/management actions steps identified on **Figure 1** and the GSP Regulations. The inclusion of monitoring protocols in the GSP Regulations also emphasizes the importance of quality empirical data to support GSPs and provide comparable information from basin to basin.

Figure 1 provides a logical progression for the development of a GSP and illustrates how monitoring protocols are linked to other related BMPs. This figure also shows the context of the BMPs as they relate to various steps to sustainability as outlined in the GSP Regulations. The monitoring protocol BMP is part of the Monitoring step identified in **Figure 1**.

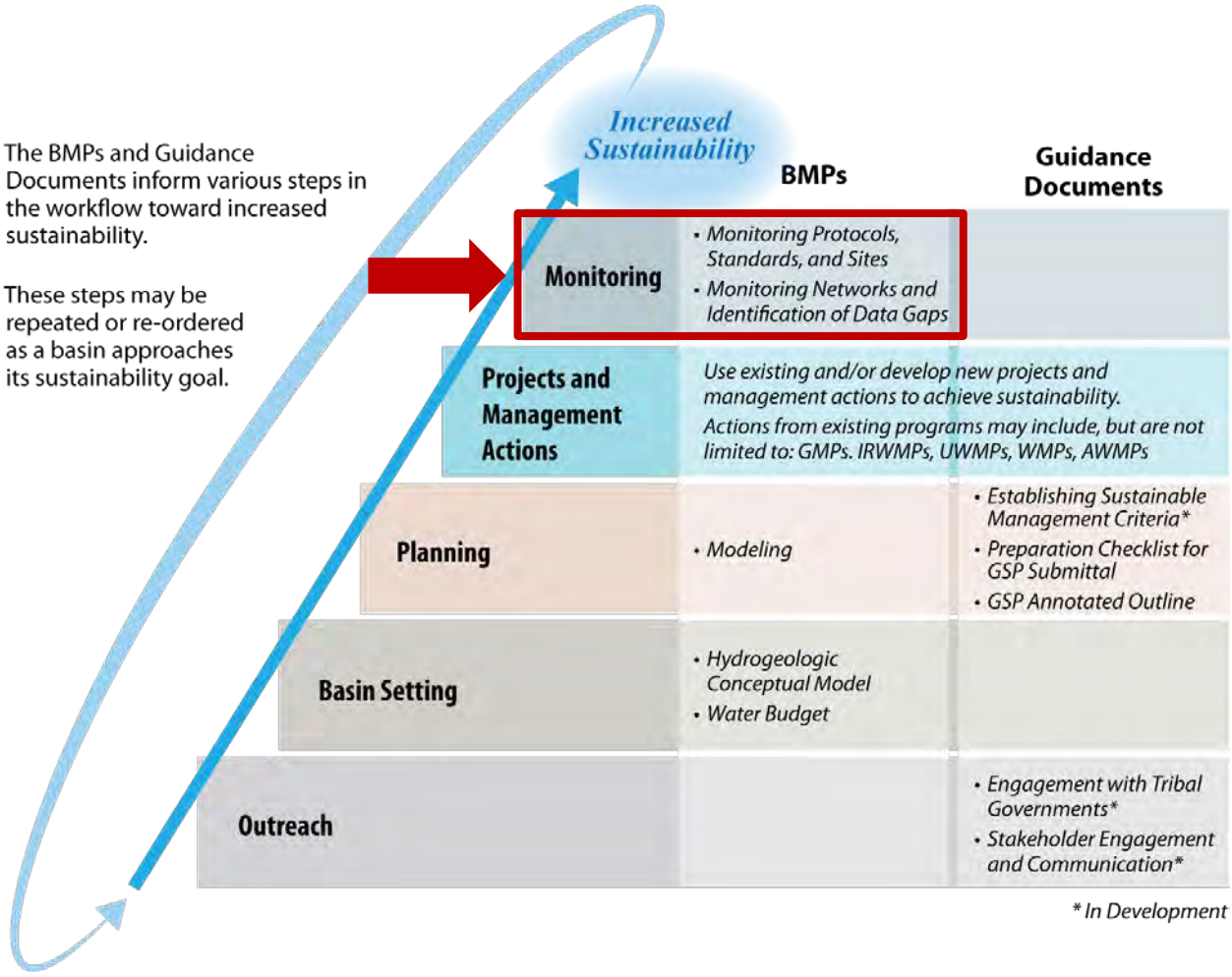

Figure 1 – Logical Progression of Basin Activities Needed to Increase Basin Sustainability

5. TECHNICAL ASSISTANCE

23 CCR §352.2. Monitoring Protocols. Each Plan shall include monitoring protocols adopted by the Agency for data collection and management, as follows:
(a) Monitoring protocols shall be developed according to best management practices.
(b) The Agency may rely on monitoring protocols included as part of the best management practices developed by the Department, or may adopt similar monitoring protocols that will yield comparable data.
(c) Monitoring protocols shall be reviewed at least every five years as part of the periodic evaluation of the Plan, and modified as necessary.

The GSP Regulations specifically call out the need to utilize protocols identified in this BMP, or develop similar protocols. The following technical protocols provide guidance based upon existing professional standards and are commonly adopted in various groundwater-related programs. They provide clear techniques that yield quality data for use in the various components of the GSP. They can be further elaborated on by individual GSAs in the form of standard operating procedures which reflect specific local requirements and conditions. While many methodologies are suggested in this BMP, it should be understood that qualified professional judgment should be used to meet the specific monitoring needs.

The following BMPs may be incorporated into a GSP's monitoring protocols section for collecting groundwater elevation data. A GSP that adopts protocols that deviate from these BMPs must demonstrate that they will yield comparable data.

PROTOCOLS FOR ESTABLISHING A MONITORING PROGRAM

The protocol for establishment of a monitoring program should be evaluated in conjunction with the *Monitoring Network and Identification of Data Gaps* BMP and other BMPs. Monitoring protocols must take into consideration the *Hydrogeologic Conceptual Model, Water Budget, and Modeling* BMPs when considering the data needs to meet GSP objectives and the sustainability goal.

It is suggested that each GSP incorporate the Data Quality Objective (DQO) process following the U.S. EPA *Guidance on Systematic Planning Using the Data Quality Objectives Process* (EPA, 2006). Although strict adherence to this method is not required, it does provide a robust approach to consider and assures that data is collected with a specific purpose in mind, and efforts for monitoring are as efficient as possible to achieve the objectives of the GSP and compliance with the GSP Regulations.

The DQO process presents a method that can be applied directly to the sustainability criteria quantitative requirements through the following steps.

1. State the problem – Define sustainability indicators and planning considerations of the GSP and sustainability goal.
2. Identify the goal – Describe the quantitative measurable objectives and minimum thresholds for each of the sustainability indicators.
3. Identify the inputs – Describe the data necessary to evaluate the sustainability indicators and other GSP requirements (i.e. water budget).
4. Define the boundaries of the study – This is commonly the extent of the Bulletin 118 groundwater basin or subbasin, unless multiple GSPs are prepared for a given basin. In that case, evaluation of the coordination plan and specifically how the monitoring will be comparable and meet the sustainability goals for the entire basin.
5. Develop an analytical approach – Determine how the quantitative sustainability indicators will be evaluated (i.e. are special analytical methods required that have specific data needs).
6. Specify performance or acceptance criteria – Determine what quality the data must have to achieve the objective and provide some assurance that the analysis is accurate and reliable.
7. Develop a plan for obtaining data – Once the objectives are known determine how these data should be collected. Existing data sources should be used to the greatest extent possible.

These steps of the DQO process should be used to guide GSAs to develop the most efficient monitoring process to meet the measurable objectives of the GSP and the sustainability goal. The DQO process is an iterative process and should be evaluated regularly to improve monitoring efficiencies and meet changing planning and project needs. Following the DQO process, GSAs should also include a data quality control and quality assurance plan to guide the collection of data.

Many monitoring programs already exist as part of ongoing groundwater management or other programs. To the extent possible, the use of existing monitoring data and programs should be utilized to meet the needs for characterization, historical record documentation, and continued monitoring for the SGMA program. However, an evaluation of the existing monitoring data should be performed to assure the data being collected meets the DQOs, regulatory requirements, and data collection protocol described in this BMP. While this BMP provides guidance for collection of various

regulatory based requirements, there is flexibility among the various methodologies available to meet the DQOs based upon professional judgment (local conditions or project needs).

At a minimum, for each monitoring site, the following information or procedure should be collected and documented:

- Long-term access agreements. Access agreements should include year-round site access to allow for increased monitoring frequency.
- A unique identifier that includes a general written description of the site location, date established, access instructions and point of contact (if necessary), type of information to be collected, latitude, longitude, and elevation. Each monitoring location should also track all modifications to the site in a modification log.

PROTOCOLS FOR MEASURING GROUNDWATER LEVELS

This section presents considerations for the methodology of collection of groundwater level data such that it meets the requirements of the GSP Regulations and the DQOs of the specific GSP. Groundwater levels are a fundamental measure of the status of groundwater conditions within a basin. In many cases, relationships of the sustainability indicators may be able to be correlated with groundwater levels. The quality of this data must consider the specific aquifer being monitored and the methodology for collecting these levels.

The following considerations for groundwater level measuring protocols should ensure the following:

- Groundwater level data are taken from the correct location, well ID, and screen interval depth
- Groundwater level data are accurate and reproducible
- Groundwater level data represent conditions that inform appropriate basin management DQOs
- All salient information is recorded to correct, if necessary, and compare data
- Data are handled in a way that ensures data integrity

General Well Monitoring Information

The following presents considerations for collection of water level data that include regulatory required components as well as those which are recommended.

- Groundwater elevation data will form the basis of basin-wide water-table and piezometric maps, and should approximate conditions at a discrete period in time. Therefore, all groundwater levels in a basin should be collected within as short a time as possible, preferably within a 1 to 2 week period.
- Depth to groundwater must be measured relative to an established Reference Point (RP) on the well casing. The RP is usually identified with a permanent marker, paint spot, or a notch in the lip of the well casing. By convention in open casing monitoring wells, the RP reference point is located on the north side of the well casing. If no mark is apparent, the person performing the measurement should measure the depth to groundwater from the north side of the top of the well casing.
- The elevation of the RP of each well must be surveyed to the North American Vertical Datum of 1988 (NAVD88), or a local datum that can be converted to NAVD88. The elevation of the RP must be accurate to within 0.5 foot. It is preferable for the RP elevation to be accurate to 0.1 foot or less. Survey grade global navigation satellite system (GNSS) global positioning system (GPS) equipment can achieve similar vertical accuracy when corrected. Guidance for use of GPS can be found at USGS http://water.usgs.gov/osw/gps/. Hand-held GPS units likely will not produce reliable vertical elevation measurement accurate enough for the casing elevation consistent with the DQOs and regulatory requirements.
- The sampler should remove the appropriate cap, lid, or plug that covers the monitoring access point listening for pressure release. If a release is observed, the measurement should follow a period of time to allow the water level to equilibrate.
- Depth to groundwater must be measured to an accuracy of 0.1 foot below the RP. It is preferable to measure depth to groundwater to an accuracy of 0.01 foot. Air lines and acoustic sounders may not provide the required accuracy of 0.1 foot.
- The water level meter should be decontaminated after measuring each well.

Where existing wells do not meet the base standard as described in the GSP Regulations or the considerations provided above, new monitoring wells may need to be constructed to meet the DQOs of the GSP. The design, installation, and documentation of new monitoring wells must consider the following:

- Construction consistent with California Well Standards as described in Bulletins 74-81 and 74-90, and local permitting agency standards of practice.
- Logging of borehole cuttings under the supervision of a California Professional Geologist and described consistent with the Unified Soil Classification System methods according to ASTM standard D2487-11.
- Written criteria for logging of borehole cuttings for comparison to known geologic formations, principal aquifers and aquitards/aquicludes, or specific marker beds to aid in consistent stratigraphic correlation within and across basins.
- Geophysical surveys of boreholes to aid in consistency of logging practices. Methodologies should include resistivity, spontaneous potential, spectral gamma, or other methods as appropriate for the conditions. Selection of geophysical methods should be based upon the opinion of a professional geologist or professional engineer, and address the DQOs for the specific borehole and characterization needs.
- Prepare and submit State well completion reports according to the requirements of §13752. Well completion report documentation should include geophysical logs, detailed geologic log, and formation identification as attachments. An example well completion as-built log is illustrated in **Figure 2.** DWR well completion reports can be filed directly at the Online System for Well Completion Reports (OSWCR) http://water.ca.gov/oswcr/index.cfm.

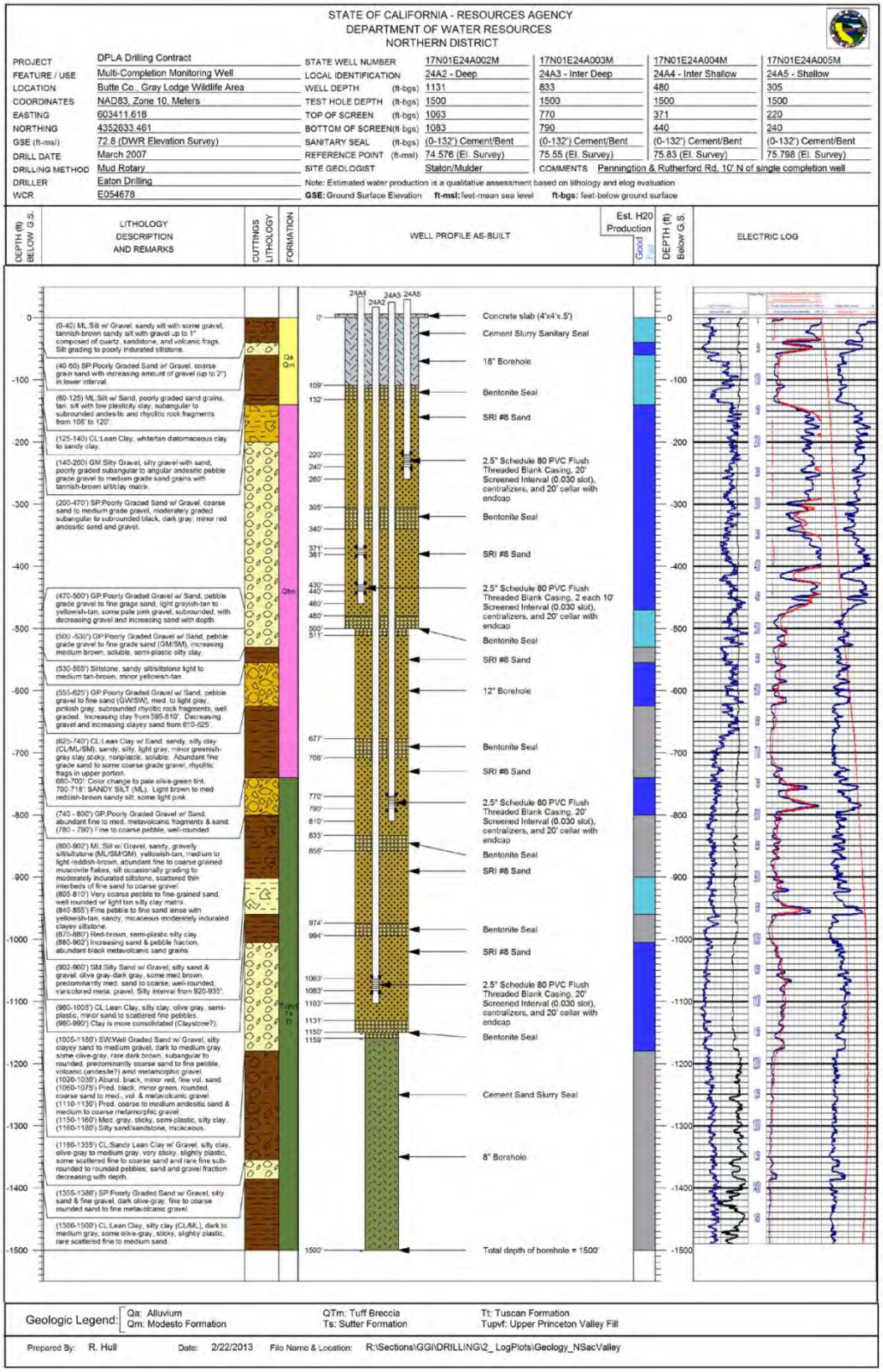

Figure 2 – Example As-Built Multi-Completion Monitoring Well Log

Measuring Groundwater Levels

Well construction, anticipated groundwater level, groundwater level measuring equipment, field conditions, and well operations should be considered prior collection of the groundwater level measurement. The USGS *Groundwater Technical Procedures* (Cunningham and Schalk, 2011) provide a thorough set of procedures which can be used to establish specific Standard Operating Procedures (SOPs) for a local agency. **Figure 3** illustrates a typical groundwater level measuring event and simultaneous pressure transducer download.

Figure 3 – Collection of Water Level Measurement and Pressure Transducer Download

The following points provide a general approach for collecting groundwater level measurements:

- Measure depth to water in the well using procedures appropriate for the measuring device. Equipment must be operated and maintained in accordance with manufacturer's instructions. Groundwater levels should be measured to the nearest 0.01 foot relative to the RP.
- For measuring wells that are under pressure, allow a period of time for the groundwater levels to stabilize. In these cases, multiple measurements should be collected to ensure the well has reached equilibrium such that no significant changes in water level are observed. Every effort should be made to ensure that a representative stable depth to groundwater is recorded. If a well does not stabilize, the quality of the value should be appropriately qualified as a

questionable measurement. In the event that a well is artesian, site specific procedures should be developed to collect accurate information and be protective of safety conditions associated with a pressurized well. In many cases, an extension pipe may be adequate to stabilize head in the well. Record the dimension of the extension and document measurements and configuration.

- The sampler should calculate the groundwater elevation as:

$$GWE = RPE - DTW$$

Where:

GWE = Groundwater Elevation
RPE = Reference Point Elevation
DTW = Depth to Water

The sampler must ensure that all measurements are in consistent units of feet, tenths of feet, and hundredths of feet. Measurements and RPEs should not be recorded in feet and inches.

Recording Groundwater Levels

- The sampler should record the well identifier, date, time (24-hour format), RPE, height of RP above or below ground surface, DTW, GWE, and comments regarding any factors that may influence the depth to water readings such as weather, nearby irrigation, flooding, potential for tidal influence, or well condition. If there is a questionable measurement or the measurement cannot be obtained, it should be noted. An example of a field sheet with the required information is shown in **Figure 4**. It includes questionable measurement and no measurement codes that should be noted. This field sheet is provided as an example. Standardized field forms should be used for all data collection. The aforementioned USGS *Groundwater Technical Procedures* offers a number of example forms.
- The sampler should replace any well caps or plugs, and lock any well buildings or covers.
- All data should be entered into the GSA data management system (DMS) as soon as possible. Care should be taken to avoid data entry mistakes and the entries should be checked by a second person for compliance with the DQOs.

STATE OF CALIFORNA
THE RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

WELL DATA

STATE WELL NUMBER	COUNTY	REFERENCE POINT ELEV.	MEASURING AGENCY
			DWR

NO MEASUREMENT	QUESTIONABLE MEASUREMENT
0. Measurement discontinued	0. Caved or deepened
1. Pumping	1. Pumping
2. Pump house locked	2. Nearby pump operating
3. Tape hung up	3. Casing leaky or wet
4. Can't get tape in casing	4. Pumped recently
5. Unable to locate well	5. Air or pressure gauge measurement
6. Well has been destroyed	6. Other
7. Special	7. Recharge operation at or nearby well
8. Casing leaky or wet	8. Oil in casing
9. Temporarily inaccessible	

DATE	N M	Q M	TAPE AT RP	TAPE AT WS	RP to WS	OBSR VR	COMMENTS

DWR 1213

Figure 4 – Example of Water Level Well Data Field Collection Form

Pressure Transducers

Groundwater levels and/or calculated groundwater elevations may be recorded using pressure transducers equipped with data loggers installed in monitoring wells. When installing pressure transducers, care must be exercised to ensure that the data recorded by the transducers is confirmed with hand measurements.

The following general protocols must be followed when installing a pressure transducer in a monitoring well:

- The sampler must use an electronic sounder or chalked steel tape and follow the protocols listed above to measure the groundwater level and calculate the groundwater elevation in the monitoring well to properly program and reference the installation. It is recommended that transducers record measured groundwater level to conserve data capacity; groundwater elevations can be calculated at a later time after downloading.
- The sampler must note the well identifier, the associated transducer serial number, transducer range, transducer accuracy, and cable serial number.
- Transducers must be able to record groundwater levels with an accuracy of at least 0.1 foot. Professional judgment should be exercised to ensure that the data being collected is meeting the DQO and that the instrument is capable. Consideration of the battery life, data storage capacity, range of groundwater level fluctuations, and natural pressure drift of the transducers should be included in the evaluation.
- The sampler must note whether the pressure transducer uses a vented or non-vented cable for barometric compensation. Vented cables are preferred, but non-vented units provide accurate data if properly corrected for natural barometric pressure changes. This requires the consistent logging of barometric pressures to coincide with measurement intervals.
- Follow manufacturer specifications for installation, calibration, data logging intervals, battery life, correction procedure (if non-vented cables used), and anticipated life expectancy to assure that DQOs are being met for the GSP.
- Secure the cable to the well head with a well dock or another reliable method. Mark the cable at the elevation of the reference point with tape or an indelible marker. This will allow estimates of future cable slippage.
- The transducer data should periodically be checked against hand measured groundwater levels to monitor electronic drift or cable movement. This should happen during routine site visits, at least annually or as necessary to maintain data integrity.

- The data should be downloaded as necessary to ensure no data is lost and entered into the basin's DMS following the QA/QC program established for the GSP. Data collected with non-vented data logger cables should be corrected for atmospheric barometric pressure changes, as appropriate. After the sampler is confident that the transducer data have been safely downloaded and stored, the data should be deleted from the data logger to ensure that adequate data logger memory remains.

PROTOCOLS FOR SAMPLING GROUNDWATER QUALITY

The following protocols can be incorporated into a GSP's monitoring protocols for collecting groundwater quality data. More detailed sampling procedures and protocols are included in the standards and guidance documents listed at the end of this BMP. A GSP that adopts protocols that deviate from these BMPs must demonstrate that the adopted protocols will yield comparable data.

In general, the use of existing water quality data within the basin should be done to the greatest extent possible if it achieves the DQOs for the GSP. In some cases it may be necessary to collect additional water quality data to support monitoring programs or evaluate specific projects. The USGS *National Field Manual for the Collection of Water Quality Data* (Wilde, 2005) should be used to guide the collection of reliable data. **Figure 5** illustrates a typical groundwater quality sampling setup.

Figure 5 – Typical Groundwater Quality Sampling Event

All analyses should be performed by a laboratory certified under the State Environmental Laboratory Accreditation Program. The specific analytical methods are beyond the scope of this BMP, but should be commiserate with other programs evaluating water quality within the basin for comparative purposes.

Groundwater quality sampling protocols should ensure that:

- Groundwater quality data are taken from the correct location
- Groundwater quality data are accurate and reproducible
- Groundwater quality data represent conditions that inform appropriate basin management and are consistent with the DQOs
- All salient information is recorded to normalize, if necessary, and compare data
- Data are handled in a way that ensures data integrity

The following points are general guidance in addition to the techniques presented in the previously mentioned USGS *National Field Manual for the Collection of Water Quality Data.*

Standardized protocols include the following:

- Prior to sampling, the sampler must contact the laboratory to schedule laboratory time, obtain appropriate sample containers, and clarify any sample holding times or sample preservation requirements.
- Each well used for groundwater quality monitoring must have a unique identifier. This identifier must appear on the well housing or the well casing to avoid confusion.
- In the case of wells with dedicated pumps, samples should be collected at or near the wellhead. Samples should not be collected from storage tanks, at the end of long pipe runs, or after any water treatment.
- The sampler should clean the sampling port and/or sampling equipment and the sampling port and/or sampling equipment must be free of any contaminants. The sampler must decontaminate sampling equipment between sampling locations or wells to avoid cross-contamination between samples.
- The groundwater elevation in the well should be measured following appropriate protocols described above in the groundwater level measuring protocols.
- For any well not equipped with low-flow or passive sampling equipment, an adequate volume of water should be purged from the well to ensure that the groundwater sample is representative of ambient groundwater and not stagnant water in the well casing. Purging three well casing volumes is generally

considered adequate. Professional judgment should be used to determine the proper configuration of the sampling equipment with respect to well construction such that a representative ambient groundwater sample is collected. If pumping causes a well to be evacuated (go dry), document the condition and allow well to recover to within 90% of original level prior to sampling. Professional judgment should be exercised as to whether the sample will meet the DQOs and adjusted as necessary.

- Field parameters of pH, electrical conductivity, and temperature should be collected for each sample. Field parameters should be evaluated during the purging of the well and should stabilize prior to sampling. Measurements of pH should only be measured in the field, lab pH analysis are typically unachievable due to short hold times. Other parameters, such as oxidation-reduction potential (ORP), dissolved oxygen (DO) (in situ measurements preferable), or turbidity, may also be useful for meeting DQOs of GSP and assessing purge conditions. All field instruments should be calibrated daily and evaluated for drift throughout the day.
- Sample containers should be labeled prior to sample collection. The sample label must include: sample ID (often well ID), sample date and time, sample personnel, sample location, preservative used, and analytes and analytical method.
- Samples should be collected under laminar flow conditions. This may require reducing pumping rates prior to sample collection.
- Samples should be collected according to appropriate standards such as those listed in the *Standard Methods for the Examination of Water and Wastewater*, USGS *National Field Manual for the Collection of Water Quality Data*, or other appropriate guidance. The specific sample collection procedure should reflect the type of analysis to be performed and DQOs.
- All samples requiring preservation must be preserved as soon as practically possible, ideally at the time of sample collection. Ensure that samples are appropriately filtered as recommended for the specific analyte. Entrained solids can be dissolved by preservative leading to inconsistent results of dissolve analytes. Specifically, samples to be analyzed for metals should be field-filtered prior to preservation; do not collect an unfiltered sample in a preserved container.
- Samples should be chilled and maintained at 4 °C to prevent degradation of the sample. The laboratory's Quality Assurance Management Plan should detail appropriate chilling and shipping requirements.

- Samples must be shipped under chain of custody documentation to the appropriate laboratory promptly to avoid violating holding time restrictions.
- Instruct the laboratory to use reporting limits that are equal to or less than the applicable DQOs or regional water quality objectives/screening levels.

Special protocols for low-flow sampling equipment

In addition to the protocols listed above, sampling using low-flow sample equipment should adopt the following protocols derived from EPA's *Low-flow (minimal drawdown) ground-water sampling procedures* (Puls and Barcelona, 1996). These protocols apply to low-flow sampling equipment that generally pumps between 0.1 and 0.5 liters per minute. These protocols are not intended for bailers.

Special protocols for passive sampling equipment

In addition to the protocols listed above, passive diffusion samplers should follow protocols set forth in USGS Fact Sheet 088-00.

PROTOCOLS FOR MONITORING SEAWATER INTRUSION

Monitoring seawater intrusion requires analysis of the chloride concentrations within groundwater of each principal aquifer subject to seawater intrusion. While no significant standardized approach exists, the methodologies described above for degraded water quality can be applied for the collection of groundwater samples. In addition to the protocol described above, the following protocols should be followed:

- Water quality samples should be collected and analyzed at least semi-annually. Samples will be analyzed for dissolved chloride at a minimum. It may be beneficial to include analyses of iodide and bromide to aid in determination of salinity source. More frequent sampling may be necessary to meet DQOs of GSP. The development of surrogate measures of chloride concentration may facilitate cost-effective means to monitor more frequently to observe the range of conditions and variability of the flow dynamics controlling seawater intrusion.
- Groundwater levels will be collected at a frequency adequate to characterize changes in head in the vicinity of the leading edge of degraded water quality in each principal aquifer. Frequency may need to be increased in areas of known preferential pathways, groundwater pumping, or efficacy evaluation of mitigation projects.
- The use of geophysical surveys, electrical resistivity, or other methods may provide for identification of preferential pathways and optimize monitoring well placement and evaluation of the seawater intrusion front. Professional judgment

should be exercised to determine the appropriate methodology and whether the DQOs for the GSP would be met.

PROTOCOLS FOR MEASURING STREAMFLOW

Monitoring of streamflow is necessary for incorporation into water budget analysis and for use in evaluation of stream depletions associated with groundwater extractions. The use of existing monitoring locations should be incorporated to the greatest extent possible. Many of these streamflow monitoring locations currently follow the protocol described below.

Establishment of new streamflow discharge sites should consider the existing network and the objectives of the new location. Professional judgment should be used to determine the appropriate permitting that may be necessary for the installation of any monitoring locations along surface water bodies. Regular frequent access will be necessary to these sites for the development of ratings curves and maintenance of equipment.

To establish a new streamflow monitoring station special consideration must be made in the field to select an appropriate location for measuring discharge. Once a site is selected, development of a relationship of stream stage to discharge will be necessary to provide continuous estimates of streamflow. Several measurements of discharge at a variety of stream stages will be necessary to develop the ratings curve correlating stage to discharge. The use of Acoustic Doppler Current Profilers (ADCPs) can provide accurate estimates of discharge in the correct settings. Professional judgment must be exercised to determine the appropriate methodology. Following development of the ratings curve a simple stilling well and pressure transducer with data logger can be used to evaluate stage on a frequent basis. A simple stilling well and staff gage is illustrated in **Figure 6**.

Streamflow measurements should be collected, analyzed, and reported in accordance with the procedures outlined in USGS Water Supply Paper 2175, *Volume 1. – Measurement of Stage Discharge* and *Volume 2. – Computation of Discharge.* This methodology is currently being used by both the USGS and DWR for existing streamflow monitoring throughout the State.

Figure 6 – Simple Stilling Well and Staff Gage Setup

PROTOCOLS FOR MEASURING SUBSIDENCE

Evaluating and monitoring inelastic land subsidence can utilize multiple data sources to evaluate the specific conditions and associated causes. To the extent possible, the use of existing data should be utilized. Subsidence can be estimated from numerous techniques, they include: level surveying tied to known stable benchmarks or benchmarks located outside the area being studied for possible subsidence; installing and tracking changes in borehole extensometers; obtaining data from continuous GPS (CGPS) locations, static GPS surveys or Real-Time-Kinematic (RTK) surveys; or analyzing Interferometric Synthetic Aperture Radar (InSAR) data. No standard procedures exist for collecting data from the potential subsidence monitoring approaches. However, an approach may include:

- Identification of land subsidence conditions.
    - Evaluate existing regional long-term leveling surveys of regional infrastructure, i.e. roadways, railroads, canals, and levees.
    - Inspect existing county and State well records where collapse has been noted for well repairs or replacement.
    - Determine if significant fine-grained layers are present such that the potential for collapse of the units could occur should there be significant depressurization of the aquifer system.

  - Inspect geologic logs and the hydrogeologic conceptual model to aid in identification of specific units of concern.
  - Collect regional remote-sensing information such as InSAR, commonly provided by USGS and NASA. Data availability is currently limited, but future resources are being developed.
- Monitor regions of suspected subsidence where potential exists.
  - Establish CGPS network to evaluate changes in land surface elevation.
  - Establish leveling surveys transects to observe changes in land surface elevation.
  - Establish extensometer network to observe land subsidence. An example of a typical extensometer design is illustrated in **Figure 7**. There are a variety of extensometer designs and they should be selected based on the specific DQOs.

Various standards and guidance documents for collecting data include:

- Leveling surveys must follow surveying standards set out in the California Department of Transportation's Caltrans Surveys Manual.
- GPS surveys must follow surveying standards set out in the California Department of Transportation's Caltrans Surveys Manual.
- USGS has been performing subsidence surveys within several areas of California. These studies are sound examples for appropriate methods and should be utilized to the extent possible and where available:
  - http://ca.water.usgs.gov/land_subsidence/california-subsidence-measuring.html
- Instruments installed in borehole extensometers must follow the manufacturer's instructions for installation, care, and calibration.
- Availability of InSAR data is improving and will increase as programs are developed. This method requires expertise in analysis of the raw data and will likely be made available as an interpretative report for specific regions.

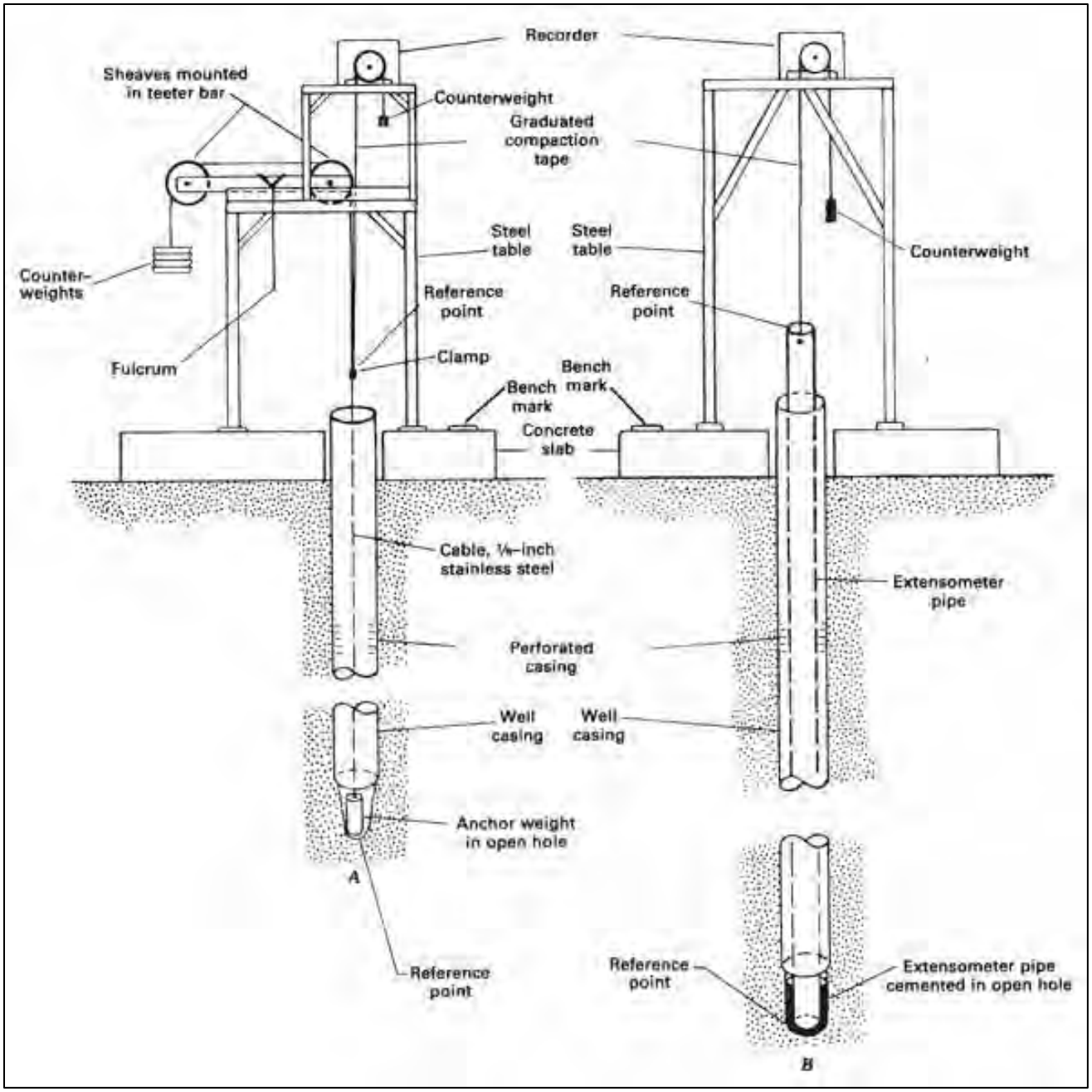

Figure 7 – Simplified Extensometer Diagram

6. KEY DEFINITIONS

The key definitions and sections related to Groundwater Monitoring Protocols, Standards, and Sites outlined in applicable SGMA code and regulations are provided below for reference.

Groundwater Sustainability Plan Regulations (California Code of Regulations §351)

- §351(h) "Best available science" refers to the use of sufficient and credible information and data, specific to the decision being made and the time frame available for making that decision, that is consistent with scientific and engineering professional standards of practice.
- §351(i) "Best management practice" refers to a practice, or combination of practices, that are designed to achieve sustainable groundwater management and have been determined to be technologically and economically effective, practicable, and based on best available science.

Monitoring Protocols Reference

§352.2. Monitoring Protocols

Each Plan shall include monitoring protocols adopted by the Agency for data collection and management, as follows:

(a) Monitoring protocols shall be developed according to best management practices.

(b) The Agency may rely on monitoring protocols included as part of the best management practices developed by the Department, or may adopt similar monitoring protocols that will yield comparable data.

(c) Monitoring protocols shall be reviewed at least every five years as part of the periodic evaluation of the Plan, and modified as necessary.

SGMA Reference

§10727.2. Required Plan Elements

(f) Monitoring protocols that are designed to detect changes in groundwater levels, groundwater quality, inelastic surface subsidence for basins for which subsidence has been identified as a potential problem, and flow and quality of surface water that directly affect groundwater levels or quality or are caused by groundwater extraction in the basin. The monitoring protocols shall be designed to generate information that promotes efficient and effective groundwater management.

7. Related Materials

CASE STUDIES

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ONLINE RESOURCES

Online System for Well Completion Reports (OSWCR). California Department of Water Resources. http://water.ca.gov/oswcr/index.cfm

Measuring Land Subsidence web page. U.S. Geological Survey. http://ca.water.usgs.gov/land_subsidence/california-subsidence-measuring.html

USGS Global Positioning Application and Practice web page. U.S. Geological Survey. http://water.usgs.gov/osw/gps/

California Statewide Groundwater Elevation Monitoring (CASGEM) Program

Procedures for Monitoring Entity Reporting

December 2010

Department of Water Resources (DWR) will use the internet as the primary communication tool to notify interested parties and groundwater Monitoring Entities of the status of the CASGEM program on an ongoing basis. Information will be posted at the following website: http://www.water.ca.gov/groundwater/casgem

In addition to the above-referenced website, DWR will distribute information via email. In order to be placed on the CASGEM contact list, please register your contact information at the following website: http://www.water.ca.gov/groundwater/casgem/register/

For questions about the Reporting Procedures, or other technical issues, please contact:

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Mary Scruggs
901 P Street
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(916) 654-1324
mscruggs@water.ca.gov

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INTRODUCTION TO CASGEM PROGRAM

In November 2009 Part 2.11 (Groundwater Monitoring) was added to Division 6 of the Water Code by Senate Bill 6 (7th Extraordinary Session) (SB 6), a copy of which is included in the Appendix. (All statutory references in this document are to the Water Code.) The new law directs that groundwater elevations in all basins and subbasins in California be regularly and systematically monitored, preferably by local entities, with the goal of demonstrating seasonal and long-term trends in groundwater elevations. The Department of Water Resources (DWR) is directed to make the resulting information readily and widely available.

DWR developed the California Statewide Groundwater Elevation Monitoring (CASGEM) program in accordance with SB 6 to establish a permanent, locally-managed system to monitor groundwater elevation in California's alluvial groundwater basins and subbasins identified in DWR Bulletin 118. The CASGEM program will rely and build on the many, established local long-term groundwater monitoring and management programs. DWR's role is to coordinate information collected locally through the CASGEM program and to maintain the collected groundwater elevation data in a readily and widely available public database. DWR will also continue measuring its current network of groundwater monitoring wells as funding allows.

The goals of the CASGEM program are to:

- Establish procedures for notification and data reporting by prospective Monitoring Entities (this document)
- Verify local Monitoring Entities in accordance with the Water Code
- Develop an interface for local entities to enter data into a database compatible with DWR's Water Data Library
- Maintain the database and make it easily accessible to the public and local entities for use in water supply planning and management

If no local entities volunteer to monitor groundwater elevations in a basin or part of a basin, DWR may be required to develop a monitoring program for that part. If DWR takes over monitoring of a basin, certain entities in the basin may not be eligible for water grants or loans administered by the state.

During August and September 2010, DWR held 10 workshops throughout the state in cooperation with Association of California Water Agencies (ACWA) to introduce the CASGEM program and explain the purpose and process of the program to local agencies and stakeholders. A copy of the DWR presentation is available on the CASGEM website (http://www.water.ca.gov/groundwater/casgem). A summary of

Frequently Asked Questions (FAQs), primarily from the workshops, is provided in on the CASGEM website.

DWR's main role is to administer the CASGEM program through providing public outreach; creating and maintaining the CASGEM website and online data submittal system; and, supporting local entities through the process of becoming a Monitoring Entity and preparing Monitoring Plans. DWR will use the CASGEM website to provide up-to-date information on the program. The website will also be the access point for the online notification and data submittal systems.

Staff from the DWR regional offices will be available to assist potential Monitoring Entities with the online notification submittal process. After receiving notification from prospective Monitoring Entities, DWR will review them for completeness, verify the authority of the applying entity under Section 10927, and check for overlapping monitoring areas. DWR will advise each party on the status of their notification within three months of submittal and will work with entities to address any deficiencies in their submittals.

DWR encourages local agencies and groups to collaborate to determine who will serve as the Monitoring Entity for the area. However, if more than one party seeks to become the Monitoring Entity for the same area and overlapping monitoring area issues cannot be resolved locally, DWR will make a final determination of the Monitoring Entity for the area. DWR's determinations will consider the order in which entities are identified in Section 10927 and other factors as described in the Water Code.

DWR will post the selection of each Monitoring Entity and its monitoring area on the CASGEM website and will notify each Monitoring Entity in writing. A map-based interface will be available for users to identify the Monitoring Entity for each basin in the state.

DWR will prepare the first status report on the CASGEM program for the Governor and Legislature by January 1, 2012. In this initial report, DWR will report on the extent of groundwater elevation monitoring within each basin. This report will include a statewide prioritization of basins based on water supply, water demand, and other factors identified in Section 10933. DWR will explore options for basins without identified monitoring, with a focus on identifying options for local monitoring. Future status reports on the CASGEM program will be prepared by DWR in years ending in 5 or 0.

PURPOSE OF MONITORING ENTITY REPORTING PROCEDURES

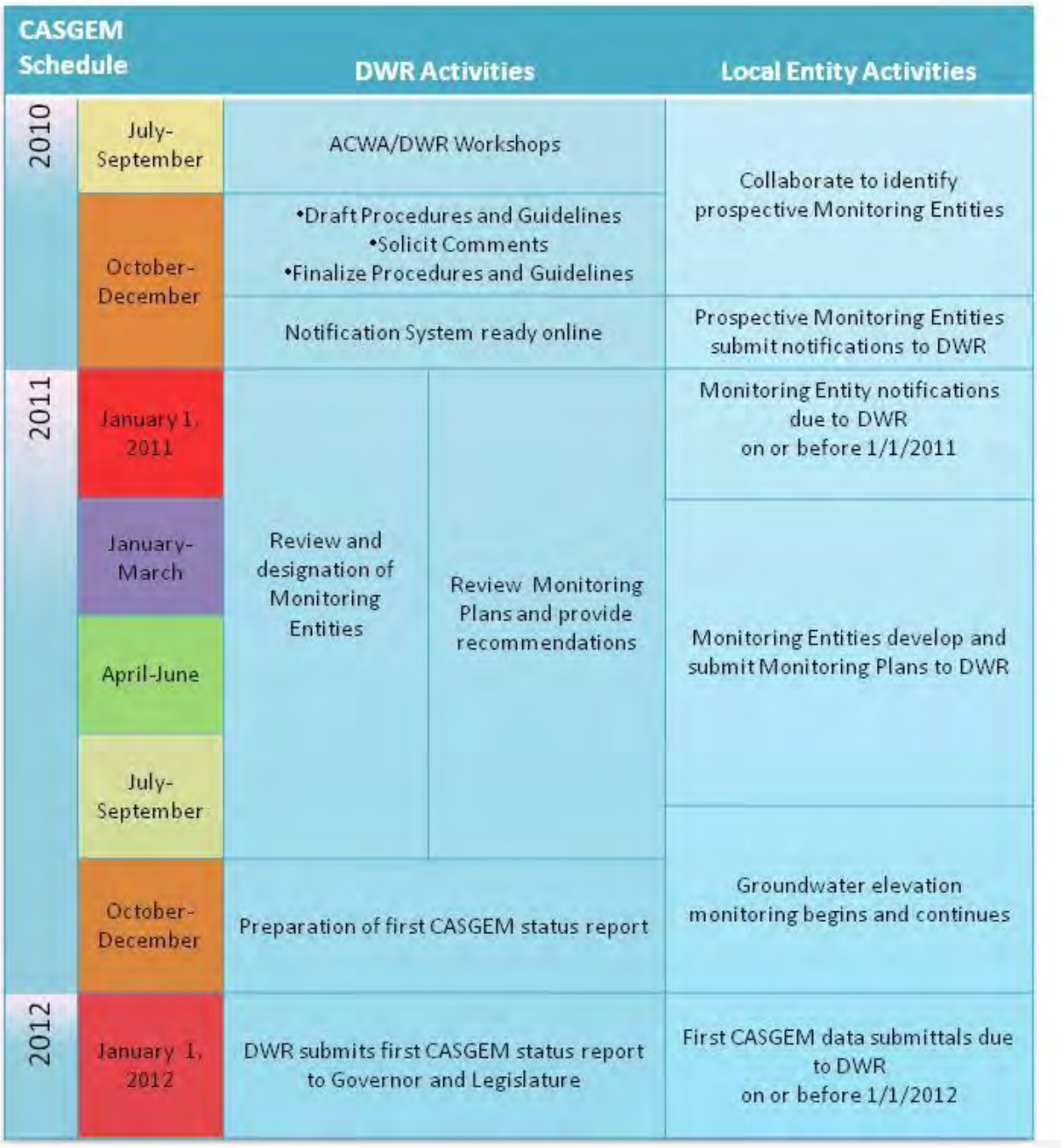
The purpose of these procedures is to introduce the CASGEM program and its components as the framework for implementing SB 6, with particular emphasis on the initial step of establishing Monitoring Entities for each Bulletin 118 basin in the state.

A summary of the requirements of local entities to comply with the CASGEM program is presented in Table 1.

Table 1. Quick Guide for Local Entities

- Determine whether you qualify as a potential Monitoring Entity (see "Requirements to become Monitoring Entity" on pages 9-13)
- Identify the basins within your area (see Bulletin 118)
- Collaborate with other local entities to identify and choose the prospective Monitoring Entity (or Entities) for your area
- Submit Monitoring Entity notification to DWR through CASGEM website (http://www.water.ca.gov/groundwater/casgem) on or before January 1, 2011
- DWR will review the notification and advise the prospective Monitoring Entity of the status of the notification within 3 months of submittal
- Work with staff of the DWR regional office to address any deficiencies in the submittal
- If more than one party seeks to become the Monitoring Entity for the same area, work with staff of the DWR regional office to resolve
- Check the CASGEM website for a listing of the selected Monitoring Entities
- Develop and submit a Monitoring Plan to DWR through the CASGEM website
- Staff from the DWR regional office are available to assist with the Monitoring Plan and to recommend changes
- Submit monitoring data to DWR through the CASGEM website on or before January 1, 2012

CASGEM SCHEDULE



CASGEM Schedule		DWR Activities		Local Entity Activities
2010	July-September	ACWA/DWR Workshops		Collaborate to identify prospective Monitoring Entities
	October-December	•Draft Procedures and Guidelines •Solicit Comments •Finalize Procedures and Guidelines		
		Notification System ready online		Prospective Monitoring Entities submit notifications to DWR
2011	January 1, 2011	Review and designation of Monitoring Entities	Review Monitoring Plans and provide recommendations	Monitoring Entity notifications due to DWR on or before 1/1/2011
	January-March			Monitoring Entities develop and submit Monitoring Plans to DWR
	April-June			
	July-September			
	October-December	Preparation of first CASGEM status report		Groundwater elevation monitoring begins and continues
2012	January 1, 2012	DWR submits first CASGEM status report to Governor and Legislature		First CASGEM data submittals due to DWR on or before 1/1/2012

A timetable for implementing the CASGEM schedule is shown above.

MONITORING ENTITIES

The CASGEM program establishes the framework for collaboration between local monitoring parties and DWR to collect groundwater elevation data throughout the state's 515 basins as defined in Bulletin 118. A Monitoring Entity is a local agency or group that voluntarily takes responsibility for conducting or coordinating groundwater elevation monitoring and reporting for all or part of a groundwater basin.

To determine if you are within a Bulletin 118 basin, please refer to maps and descriptions in Bulletin 118, available online at: http://www.water.ca.gov/groundwater/bulletin118/gwbasin_maps_descriptions.cfm. Geographic Information System (GIS) shapefiles of the basins are also available at this website. DWR can assist in identifying other potential local monitoring parties in each basin.

ROLES AND RESPONSIBILITIES OF MONITORING ENTITIES

Through the CASGEM program, local entities with appropriate authority may notify DWR of their intent to be a Monitoring Entity. Monitoring Entities will have specific responsibilities, including:

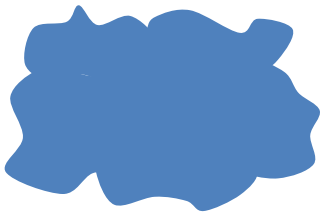
- Coordinate with DWR to establish a Monitoring Plan
- Conduct or coordinate the regular and systematic monitoring of groundwater elevations as specified in the Monitoring Plan
- Submit monitoring data to DWR in a timely manner

A Monitoring Entity can perform monitoring for any number of basins or portions thereof, but no area can have more than one Monitoring Entity. While the Monitoring Entity is responsible for compiling the data and submitting it to DWR for a particular area, the actual measurements can be taken by any number of agencies that would work under the direction of the Monitoring Entity. (Cooperating agencies would submit data to the Monitoring Entity, not to DWR.) Thus, assuming there are no overlapping areas or gaps in basin coverage for a given area, there are three possible basic scenarios, illustrated in Figure 1:

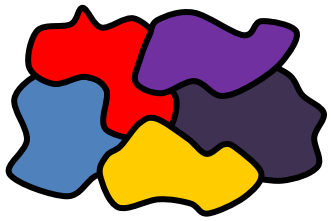
- A single Monitoring Entity that collects and reports groundwater elevation data for the entire basin (Scenario A);
- Multiple Monitoring Entities that collect and report groundwater elevation data for their portion of the basin (Scenario B); or

- An umbrella Monitoring Entity that coordinates and reports groundwater elevation data collected by multiple agencies within the basin (Scenario C).

Scenario A. One Monitoring Entity collects and reports data for entire basin



Scenario B. One basin, several Monitoring Entities collecting and submitting data



Scenario C. One basin, one Monitoring Entity coordinating and submitting data collected by several agencies

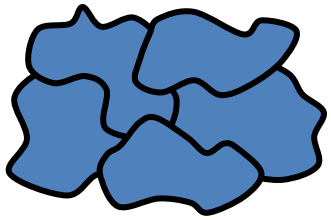


Figure 1. Illustration of possible Monitoring Entity scenarios for a monitored basin.

DWR currently monitors water elevations in about 4,000 wells statewide and cooperates with local and federal agencies to monitor roughly an additional 6,000 wells. DWR plans to continue monitoring groundwater elevations, contingent upon available funding. In some basins DWR currently does most, if not all, of the water-elevation monitoring. In these basins, a local entity still needs to notify DWR of their intent to become the Monitoring Entity. The Monitoring Entity must determine which DWR wells will be included in their CASGEM monitoring network. As long as DWR continues its monitoring program, the department will transmit its groundwater elevation data to the CASGEM system. However, if DWR is unable to continue monitoring for any reason, the Monitoring Entity will be required to re-evaluate its monitoring network to determine which wells to retain in its monitoring network.

REQUIREMENTS TO BECOME MONITORING ENTITY

Section 10927 of the Water Code defines the types of entities that may assume responsibility for monitoring and reporting groundwater elevations as part of the CASGEM program.

A summary list of eligible entities, in order of priority, and notification requirements for each entity is provided below:

1. A **watermaster or water management engineer** appointed by a court or pursuant to statute to administer a final judgment determining rights to groundwater [Section 10927(a)].
   Notification Requirements:
   - Name of Agency
   - Agency Contact Name
   - Address
   - Telephone Number
   - Email Address
   - Any other relevant contact information
   - Authority (as listed in Section 10927)
   - Name and number of basin to be monitored (from Bulletin 118)
   - Map and shapefile showing area to be monitored (Shapefiles do not need to be submitted by the initial January 1, 2011 notification date; Regional Offices can provide assistance to potential Monitoring Entities with shapefiles.)
   - Statement that the entity will comply with the requirements of Water Code Part 2.11
   - Additional information deemed necessary by DWR to identify monitoring area or qualifications of the Monitoring Entity

2. A **groundwater management agency** with statutory authority to manage groundwater pursuant to its principal act that is monitoring groundwater elevations in all or a part of a groundwater basin on or before January 1, 2010 [Section 10927(b)(1)].
   Notification Requirements:
   - Name of Agency
   - Agency Contact Name
   - Address
   - Telephone Number
   - Email Address
   - Any other relevant contact information
   - Authority (as listed in Section 10927)

- Name and number of basin to be monitored (from Bulletin 118)
- Map and shapefile showing area to be monitored (Shapefiles do not need to be submitted by the initial January 1, 2011 notification date; Regional Offices can provide assistance to potential Monitoring Entities with shapefiles.)
- Statement that the entity will comply with the requirements of Water Code Part 2.11
- Additional information deemed necessary by DWR to identify monitoring area or qualifications of the Monitoring Entity

3. A **water replenishment district** established pursuant to Water Code Division 18 (commencing with Section 60000). This part does not expand or otherwise affect the authority of a water replenishment district relating to monitoring elevations [Section 10927(b)(2)].

   Notification Requirements:
   - Name of Agency
   - Agency Contact Name
   - Address
   - Telephone Number
   - Email Address
   - Any other relevant contact information
   - Authority (as listed in Section 10927)
   - Name and number of basin to be monitored (from Bulletin 118)
   - Map and shapefile showing area to be monitored (Shapefiles do not need to be submitted by the initial January 1, 2011 notification date; Regional Offices can provide assistance to potential Monitoring Entities with shapefiles.)
   - Statement that the entity will comply with the requirements of Water Code Part 2.11
   - Additional information deemed necessary by DWR to identify monitoring area or qualifications of the Monitoring Entity

4. A **local agency that is managing all or part of a groundwater basin pursuant to Water Code Part 2.75** (commencing with Section 10750) and that was monitoring groundwater elevations in all or part of a groundwater basin on or before January 1, 2010, or a local agency or county that is managing all or part of a groundwater basin pursuant to any other legally enforceable groundwater management plan with provisions that are substantively similar to those described in that part and that was monitoring groundwater elevations in all or a part of a groundwater basin on or before January 1, 2010 [Section 10927(c)].

Notification Requirements:

- Name of Agency
- Agency Contact Name
- Address
- Telephone Number
- Email Address
- Any other relevant contact information
- Authority (as listed in Section 10927)
- Name and number of basin to be monitored (from Bulletin 118)
- Map and shapefile showing area to be monitored (Shapefiles do not need to be submitted by the initial January 1, 2011 notification date; Regional Offices can provide assistance to potential Monitoring Entities with shapefiles.)
- Statement that the entity will comply with the requirements of Water Code Part 2.11
- Copy of current groundwater management plan
- Statement describing the ability or qualifications of the entity to conduct the groundwater monitoring functions required
- Additional information deemed necessary by DWR to identify monitoring area or qualifications of the Monitoring Entity

5. A **local agency that is managing all or part of a groundwater basin pursuant to an integrated regional water management plan** prepared pursuant to Water Code Part 2.2 (commencing with Section 10530) that includes a groundwater management component that complies with the requirements of Section 10753.7 [Section 10927(d)].

   Notification Requirements:

   - Name of Agency
   - Agency Contact Name
   - Address
   - Telephone Number
   - Email Address
   - Any other relevant contact information
   - Authority (as listed in Section 10927)
   - Name and number of basin to be monitored (from Bulletin 118)
   - Map and shapefile showing area to be monitored (Shapefiles do not need to be submitted by the initial January 1, 2011 notification date; Regional Offices can provide assistance to potential Monitoring Entities with shapefiles.)
   - Statement that the entity will comply with the requirements of Water Code Part 2.11
   - Copy of current groundwater component of integrated regional water management plan
   - Statement describing the ability or qualifications of the entity to conduct the groundwater monitoring functions required

- Additional information deemed necessary by DWR to identify monitoring area or qualifications of the Monitoring Entity

6. A **county** that is not managing all or a part of a groundwater basin pursuant to a legally enforceable groundwater management plan with provisions that are substantively similar to those described in Water Code Part 2.75 (commencing with Section 10750) [Section 10927(e)].
   Notification Requirements:
   - Name of County
   - County Contact Name
   - Address
   - Telephone Number
   - Email Address
   - Any other relevant contact information
   - Authority (as listed in Section 10927)
   - Name and number of basin to be monitored (from Bulletin 118)
   - Map and shapefile showing area to be monitored (Shapefiles do not need to be submitted by the initial January 1, 2011 notification date; Regional Offices can provide assistance to potential Monitoring Entities with shapefiles.)
   - Statement that the entity will comply with the requirements of Water Code Part 2.11
   - Statement describing the ability or qualifications of the entity to conduct the groundwater monitoring functions required
   - Additional information deemed necessary by DWR to identify monitoring area or qualifications of the Monitoring Entity

7. A **voluntary cooperative groundwater monitoring association** formed pursuant to Section 10935 [Section 10927(f)]. As described in the Water Code Section 10935, the voluntary associations may be established by contract, a joint powers agreement, a memorandum of agreement, or other form of agreement deemed acceptable by DWR, so long as it contains: the names of the participants; the boundaries of the area covered by the agreement; the name or names of the parties responsible for meeting the requirements; the method of recovering the costs associated with meeting the requirements; and other provisions that may be required by DWR. Entities seeking to form a voluntary association should notify DWR, which will work cooperatively with the interested parties to facilitate the formation of the association.

Notification Requirements:

- Name of Association
- Association Contact Name
- Address
- Telephone Number
- Email Address
- Any other relevant contact information
- Authority (as listed in Section 10927)
- Name and number of basin to be monitored (from Bulletin 118)
- Map and shapefile showing area to be monitored (Shapefiles do not need to be submitted by the initial January 1, 2011 notification date; Regional Offices can provide assistance to potential Monitoring Entities with shapefiles.)
- Statement that the entity will comply with the requirements of Water Code Part 2.11
- Statement describing the ability or qualifications of the entity to conduct the groundwater monitoring functions required
- Statement of intent to meet the association formation requirements described in Section 10935
- Additional information deemed necessary by DWR to identify monitoring area or qualifications of the Monitoring Entity

Local agencies are encouraged to coordinate among themselves to determine the proposed Monitoring Entity or Entities that best suits their area. The resulting interested entity (or entities) should notify DWR of its intent to become a groundwater Monitoring Entity for one or more basins, or portions thereof by the January 1, 2011 deadline. Certain basic information is required for notification, including contact information and additional details depending on the authority of the entity desiring to monitor groundwater (Section 10928), as listed above. This notification information will be submitted to DWR using an online system that will be available by mid-December 2010.

MONITORING PLANS

Monitoring Entities will each develop a Monitoring Plan that includes the following sections: Monitoring Sites and Timing, Field Methods, and Data Reporting. Monitoring Plans should be completed and submitted to DWR by summer 2011. Staff from the DWR regional offices will be available to assist Monitoring Entities with the development of Monitoring Plans, if needed. In determining what information should be reported to DWR, the department will defer to existing monitoring programs if those programs result in information that demonstrates seasonal (annual high and low groundwater elevations) and long-term trends in groundwater elevations. Staff from the DWR regional offices will assist Monitoring Entities to address any gaps in basin coverage

(see below) and other monitoring issues and may make recommendations for the location of additional wells. However, the department has no authority to require a Monitoring Entity to install additional wells unless funds are provided for that purpose. Once a Monitoring Plan is established with DWR, Monitoring Entities should notify DWR of any changes to the plan.

Key Components of Monitoring Plans

Submit to DWR by summer 2011

- Monitoring Sites and Timing
  - Well Network Design
  - Selected wells (current)
  - Planned (future) wells
  - Frequency to capture seasonal highs and lows
  - Map and shapefile of monitoring area and well locations

Field Methods for groundwater monitoring

- Methods for measuring
  - Reference Point
  - Static water level
  - Depth to water
  - Standardized form for data collection

Data Reporting

- Online data submittal, minimum July & January each year

Data Gaps

A data gap refers to a basin or portion of a basin that is not included in any of the Monitoring Plans submitted to DWR. This is essentially an area that lacks the density of monitoring wells that would allow seasonal and long-term trends in groundwater elevations to be determined for the basin, subbasin, or a portion thereof. Among the 515 basins defined by Bulletin 118, data gaps may exist for a variety of reasons, including a lack of suitable monitoring wells, lack of groundwater use, access issues, and jurisdictional issues, among others.

If no local entity is able and/or willing to fill a data gap, the department may be required to perform groundwater monitoring functions. If DWR performs this monitoring, local agencies and the county that have the authority under Section 10927 to monitor the area of the data gap would be potentially ineligible for a water grant or loan awarded or administered by the state. The Monitoring Entity or entities with the authority to monitor the area of the data gap should provide detailed information regarding the nature of and reason for the data gap so that DWR may include such information in the prioritization of groundwater basins and subbasins as appropriate.

Agencies and counties that are eligible to be designated Monitoring Entities but choose not participate in the CASGEM program will not lose their state water grant and loan eligibility if their entire service area qualifies as a disadvantaged community (Water Code Section 10933.7(b)). It will be the responsibility of the local agency or county applying for a state water grant or loan to demonstrate their disadvantaged community status at the time they are applying for the grant or loan.

MONITORING SITES AND TIMING

The Monitoring Plan will identify the wells to be monitored and the frequency with which they will be monitored. The Monitoring Plan should explain how proposed monitoring will be sufficient to demonstrate the seasonal and long-term groundwater elevation trends in the monitored area. The density of monitoring locations will depend on the complexity of the basin.

Because of security concerns, the California Department of Public Health (DPH) routinely limits the disclosure of detailed public water supply well location information. Pursuant to Water Code Section 10931, the DWR is required to collaborate with DPH to ensure that the information reported to the CASGEM program will not result in the inappropriate disclosure of information of concern to DPH. At this time, DWR has reached no agreement with DPH regarding the appropriate treatment of public water supply well data. As a result, CASGEM does not currently plan to use such well information in its database.

The Monitoring Plan should contain a table identifying the wells to be monitored and the timing of that monitoring. Because the law specifies that information should demonstrate seasonal and long-term trends in groundwater elevations, at a minimum monitoring should be conducted at each location for the yearly high and low for the basin. The yearly high and low groundwater elevations typically occur in spring and fall, but this may vary from basin to basin. It is very important that the timing of all the measurements in the basin is coordinated. Rationale for selection of the timing (seasonal highs and lows) should be included in the Monitoring Plan.

The information on the monitoring sites and timing to be submitted in the online system should include:

- Well identification number
- State well number
- Location (decimal latitude and longitude, North American Datum (NAD) 83)
- Reference point elevation (feet, North American Vertical Datum (NAVD) 88)
- Land surface datum (feet, NAVD88)
- Map and shapefile with monitoring locations, Bulletin 118 groundwater basin boundary, and boundary of monitoring area
- Frequency and timing of measurements

FIELD METHODS

The consistent and documented collection of groundwater elevation data is important for ensuring that the data can be used across the state, regardless of the Monitoring Entity. The field methods should meet a common set of basic requirements; however, the methods do not have to be exactly the same. Many entities already have in place monitoring efforts that are successful in meeting local needs and that can meet the needs for this program, either as-is or with the incorporation of individual components. The CASGEM program wishes to maintain, to the greatest extent possible, the procedures of high-quality local groundwater elevation monitoring programs, so long as they meet the overall program goals and policies. Of particular concern are the following basic requirements:

- Method(s) to establish the Reference Point, including step-by-step instructions
- Method(s) to ensure static groundwater elevation
- Method(s) to measure depth to water, including step-by-step instructions
- Method(s) and form(s) for recording measurements

It is the responsibility of each Monitoring Entity to develop and implement monitoring protocols that are appropriate to local groundwater basin conditions, protect the water quality of its monitoring wells, and maintain the quality of the data that it submits to the CASGEM Program. DWR has developed field guidelines (Department of Water Resources Groundwater Elevation Monitoring Guidelines) based on a review of existing field methods from DWR and other organizations, which is available on the CASGEM website. Monitoring Entities are welcome to refer to these guidelines when developing field methods for their own Monitoring Plans. However, the DWR guidelines are for internal use in the event that the Department is required to perform groundwater monitoring functions pursuant to Section 10933.5 and are not binding on any other agency. The core of the CASGEM program will rely and build on the many, established local long-term groundwater monitoring and management programs. The department will defer to existing monitoring programs that result in information that demonstrates seasonal and long-term trends in groundwater elevations.

DATA REPORTING

DWR will develop an online data submittal system for Monitoring Entities to submit their groundwater elevation data. Several methods of submitting data will be available, such as direct online data entry, or upload of data files for batch entry. Initial groundwater elevation data should be submitted to DWR by January 1, 2012. Thereafter, data

should be submitted as soon as possible after collection, but no later than January 1st and July 1st of each year, at the minimum. Historical data can also be submitted via the DWR data system to aid in data interpretation. All submitted data will be available to the public, except for confidential data.

Each groundwater elevation data measurement submitted to the online system should include:

- Well identification number
- Measurement date
- Reference point and land surface elevation
- Depth to water
- Method of measuring water depth
- Measurement quality codes

The Monitoring Entity information, well information, and groundwater elevation information is to be provided by the Monitoring Entity. Items labeled as required must be submitted to DWR to report groundwater elevations. Items labeled as recommended should be submitted to DWR if they are available, as they assist in fully evaluating the quality of measurements. DWR will provide standard form(s) for Monitoring Entities to submit groundwater elevation data online. However, if Monitoring Entities cannot use the standard form(s) or provide the data elements listed below, DWR will work cooperatively with Monitoring Entities to develop alternate methods of submitting data.

Entity Information

All entities assuming groundwater monitoring functions as delineated in Section 10927 (a)-(f) are required to submit the following information:

- Monitoring Entity's name, address, telephone number, contact person name and email address, and any other relevant contact information (Section 10928 (a) (1), 10928 (b) (1))
- Name, address, telephone number, email address and any other relevant contact information for entities collecting data that is submitted by a designated submitting entity (Monitoring Entity)
- Groundwater basins being monitored
    - Identify entire basins monitored
    - Identify partial basins monitored

Well Information

The following information about each well is required for the CASGEM online system:

- Unique well identification number. Agencies may use an existing State Well Number, an existing local well designation, or develop their own identification name, using the following protocol:
    - Agency name, abbreviation, or acronym followed by a sequential number (e.g., SGA 01)
    - Groundwater basin – followed by a sequential number (e.g., Llagas 03)
    - Geographic name – followed by a sequential number (e.g., Yolo 12)
    - Well names should be 15 characters long or less
    - Avoid using owner/business names or specific locational information for privacy and security
- Decimal latitude/longitude coordinates of well, using horizontal datum NAD83, and the method of determining coordinates (Actual coordinates are preferred; however, Monitoring Entities may submit approximate locations, as needed, to protect the privacy of well owners. For example, to protect the privacy of a well owner, a Monitoring Entity may submit well coordinate locations that are only within 1000-feet of the actual well location.)
- Groundwater basin or sub-basin
- Reference point elevation of the well (feet) using NAVD88 vertical datum
- Elevation of land surface datum at the well (feet) using NAVD88 vertical datum
- Use of well (e.g., dedicated monitoring, irrigation, domestic, etc)
- Well completion type (e.g. single well, nested, or multi-completion wells)
- Depth of screened interval(s) and total well depth of well, if available (feet)
- Well Completion Report number (DWR Form 188), if available

The following information about each well is recommended for the CASGEM online system:

- State Well Number – assigned by DWR in most cases
- Method by which land surface elevation was determined (for example, topographic map, GPS, etc.)
- Written description of location of well, including distance from nearby landmarks and location of reference point in relation to well appurtenances (DWR Form 429)
- Well information comments

Groundwater Elevation Information

The following information for each groundwater elevation measurement is required for the CASGEM online system:

- Well identification number (see Well Information, above)
- Measurement date
- Reference point elevation of the well (feet) using NAVD88 vertical datum
- Elevation of land surface datum at the well (feet) using NAVD88 vertical datum
- Depth to water below reference point (feet) (unless no measurement was taken)
- Method of measuring water depth
- Measurement Quality Codes

    - If no measurement is taken, a specified “no measurement” code, must be recorded. Standard codes will be provided by the online system. If a measurement is taken, a “no measurement” code is not recorded.)
    - If the quality of a measurement is uncertain, a “questionable measurement” code can be recorded. Standard codes will be provided by the online system. If no measurement is taken, a “questionable measurement” code is not recorded.)
- Measuring agency identification

The following information for each groundwater elevation measurement is recommended for the CASGEM online system:

- Measurement time (PST/PDT with military time/24 hour format)
- Comments about measurement, if applicable

Groundwater elevation data shall be submitted electronically to DWR’s online system. DWR will develop electronic data transmittal (EDT) alternatives and data standards to permit bulk data transfer and assist Monitoring Entities in EDT reporting to DWR. As stated above, if Monitoring Entities cannot use the standard form(s) or provide the necessary groundwater elevation data elements, DWR will work cooperatively with Monitoring Entities to develop alternate methods of submitting data.

The CASGEM online data submittal system will be compatible with the Water Data Library (WDL) (http://www.water.ca.gov/waterdatalibrary/), DWR’s existing groundwater elevation database. The CASGEM system will include data reporting options similar to those in WDL, such as hydrographs, seasonal contour data, and data downloads. The combined accessibility of the WDL and the CASGEM system will be a significant resource for local agencies in making sound groundwater management decisions.

REFERENCES

California Departement of Water Resources. (2003). *California's Groundwater, Bulletin 118-03.*

California Department of Water Resources. (2009). *California Water Plan Update 2009, Bulletin 160-09.*

APPENDIX – SENATE BILL 6 (7TH EXTRAORDINARY SESSION) - GROUNDWATER MONITORING

Senate Bill No. 6

CHAPTER 1

An act to add Part 2.11 (commencing with Section 10920) to Division 6 of, and to repeal and add Section 12924 of, the Water Code, relating to groundwater.

[Approved by Governor November 6, 2009. Filed with Secretary of State November 6, 2009.]

Legislative Counsel's Digest

SB 6, Steinberg. Groundwater.

(1) Existing law authorizes a local agency whose service area includes a groundwater basin that is not subject to groundwater management to adopt and implement a groundwater management plan pursuant to certain provisions of law. Existing law requires a groundwater management plan to include certain components to qualify as a plan for the purposes of those provisions, including a provision that establishes funding requirements for the construction of certain groundwater projects.

This bill would establish a groundwater monitoring program pursuant to which specified entities, in accordance with prescribed procedures, may propose to be designated by the Department of Water Resources as groundwater monitoring entities, as defined, for the purposes of monitoring and reporting with regard to groundwater elevations in all or part of a basin or subbasin, as defined. The bill would require the department to work cooperatively with each monitoring entity to determine the manner in which groundwater elevation information should be reported to the department. The bill would authorize the department to make recommendations for improving an existing monitoring program, and to require additional monitoring wells under certain circumstances. Under certain circumstances, the department would be required to perform groundwater monitoring functions. In that event, prescribed entities with authority to assume groundwater monitoring functions with regard to a basin or subbasin for which the department has assumed those functions would not be eligible for a water grant or loan awarded or administered by the state.

(2) Existing law requires the department to conduct an investigation of the state's groundwater basins and to report its findings to the Governor and the Legislature not later than January 1, 1980.

This bill would repeal that provision. The department would be required to conduct an investigation of the state's groundwater basins and to report its findings to the Governor and the Legislature not later than January 1, 2012, and thereafter in years ending in 5 or 0.

(3) The bill would take effect only if SB 1 and SB 7 of the 2009–10 7th Extraordinary Session of the Legislature are enacted and become effective.

The people of the State of California do enact as follows:

SECTION 1. Part 2.11 (commencing with Section 10920) is added to Division 6 of the Water Code, to read:

PART 2.11. GROUNDWATER MONITORING

Chapter 1. General Provisions

10920. (a) It is the intent of the Legislature that on or before January 1, 2012, groundwater elevations in all groundwater basins and subbasins be regularly and systematically monitored locally and that the resulting groundwater information be made readily and widely available.

(b) It is further the intent of the Legislature that the department continue to maintain its current network of monitoring wells, including groundwater elevation and groundwater quality monitoring wells, and that the department continue to coordinate monitoring with local entities.

10921. This part does not require the monitoring of groundwater elevations in an area that is not within a basin or subbasin.

10922. This part does not expand or otherwise affect the powers or duties of the department relating to groundwater beyond those expressly granted by this part.

Chapter 2. Definitions

10925. Unless the context otherwise requires, the definitions set forth in this section govern the construction of this part.

(a) “Basin” or “subbasin” means a groundwater basin or subbasin identified and defined in the department’s Bulletin No. 118.

(b) “Bulletin No. 118” means the department’s report entitled “California’s Groundwater: Bulletin 118” updated in 2003, or as it may be subsequently updated or revised in accordance with Section 12924.

(c) “Monitoring entity” means a party conducting or coordinating the monitoring of groundwater elevations pursuant to this part.

(d) “Monitoring functions” and “groundwater monitoring functions” means the monitoring of groundwater elevations, the reporting of those elevations to the department, and other related actions required by this part.

(e) “Monitoring groundwater elevations” means monitoring groundwater elevations, coordinating the monitoring of groundwater elevations, or both.

(f) “Voluntary cooperative groundwater monitoring association” means an association formed for the purposes of monitoring groundwater elevations pursuant to Section 10935.

Chapter 3. Groundwater Monitoring Program

10927. Any of the following entities may assume responsibility for monitoring and reporting groundwater elevations in all or a part of a basin or subbasin in accordance with this part:

(a) A watermaster or water management engineer appointed by a court or pursuant to statute to administer a final judgment determining rights to groundwater.

(b) (1) A groundwater management agency with statutory authority to manage groundwater pursuant to its principal act that is monitoring groundwater elevations in all or a part of a groundwater basin or subbasin on or before January 1, 2010.

(2) A water replenishment district established pursuant to Division 18 (commencing with Section 60000). This part does not expand or otherwise affect the authority of a water replenishment district relating to monitoring groundwater elevations.

(c) A local agency that is managing all or part of a groundwater basin or subbasin pursuant to Part 2.75 (commencing with Section 10750) and that was monitoring

groundwater elevations in all or a part of a groundwater basin or subbasin on or before January 1, 2010, or a local agency or county that is managing all or part of a groundwater basin or subbasin pursuant to any other legally enforceable groundwater management plan with provisions that are substantively similar to those described in that part and that was monitoring groundwater elevations in all or a part of a groundwater basin or subbasin on or before January 1, 2010.

(d) A local agency that is managing all or part of a groundwater basin or subbasin pursuant to an integrated regional water management plan prepared pursuant to Part 2.2 (commencing with Section 10530) that includes a groundwater management component that complies with the requirements of Section 10753.7.

(e) A county that is not managing all or a part of a groundwater basin or subbasin pursuant to a legally enforceable groundwater management plan with provisions that are substantively similar to those described in Part 2.75 (commencing with Section 10750).

(f) A voluntary cooperative groundwater monitoring association formed pursuant to Section 10935.

10928. (a) Any entity described in subdivision (a) or (b) of Section 10927 that seeks to assume groundwater monitoring functions in accordance with this part shall notify the department, in writing, on or before January 1, 2011. The notification shall include all of the following information:

(1) The entity's name, address, telephone number, and any other relevant contact information.

(2) The specific authority described in Section 10927 pursuant to which the entity qualifies to assume the groundwater monitoring functions.

(3) A map showing the area for which the entity is requesting to perform the groundwater monitoring functions.

(4) A statement that the entity will comply with all of the requirements of this part.

(b) Any entity described in subdivision (c), (d), (e), or (f) of Section 10927 that seeks to assume groundwater monitoring functions in accordance with this part shall notify the department, in writing, by January 1, 2011. The information provided in the notification shall include all of the following:

(1) The entity's name, address, telephone number, and any other relevant contact information.

(2) The specific authority described in Section 10927 pursuant to which the entity qualifies to assume the groundwater monitoring functions.

(3) For entities that seek to qualify pursuant to subdivision (c) or (d) of Section 10927, the notification shall also include a copy of the current groundwater management plan or the groundwater component of the integrated regional water management plan, as appropriate.

(4) For entities that seek to qualify pursuant to subdivision (f) of Section 10927, the notification shall include a statement of intention to meet the requirements of Section 10935.

(5) A map showing the area for which the entity is proposing to perform the groundwater monitoring functions.

(6) A statement that the entity will comply with all of the requirements of this part.

(7) A statement describing the ability and qualifications of the entity to conduct the groundwater monitoring functions required by this part.
(c) The department may request additional information that it deems necessary for the purposes of determining the area that is proposed to be monitored or the qualifications of the entity to perform the groundwater monitoring functions.

10929. (a) (1) The department shall review all notifications received pursuant to Section 10928.

(2) Upon the receipt of a notification pursuant to subdivision (a) of Section 10928, the department shall verify that the notifying entity has the appropriate authority under subdivision (a) or (b) of Section 10927.

(3) Upon the receipt of a notification pursuant to subdivision (b) of Section 10928, the department shall do both of the following:

(A) Verify that each notification is complete.

(B) Assess the qualifications of the notifying party.

(b) If the department has questions about the completeness or accuracy of a notification, or the qualifications of a party, the department shall contact the party to resolve any deficiencies. If the department is unable to resolve the deficiencies, the department shall notify the party in writing that the notification will not be considered further until the deficiencies are corrected.

(c) If the department determines that more than one party seeks to become the monitoring entity for the same portion of a basin or subbasin, the department shall consult with the interested parties to determine which party will perform the monitoring functions. In determining which party will perform the monitoring functions under this part, the department shall follow the order in which entities are identified in Section 10927.

(d) The department shall advise each party on the status of its notification within three months of receiving the notification.

10930. Upon completion of each review pursuant to Section 10929, the department shall do both of the following if it determines that a party will perform monitoring functions under this part:

(a) Notify the party in writing that it is a monitoring entity and the specific portion of the basin or subbasin for which it shall assume groundwater monitoring functions.

(b) Post on the department's Internet Web site information that identifies the monitoring entity and the portion of the basin or subbasin for which the monitoring entity will be responsible.

10931. (a) The department shall work cooperatively with each monitoring entity to determine the manner in which groundwater elevation information should be reported to the department pursuant to this part. In determining what information should be reported to the department, the department shall defer to existing monitoring programs if those programs result in information that demonstrates seasonal and long-term trends in groundwater elevations. The department shall collaborate with the State Department of Public Health to ensure that the information reported to the department will not result in the inappropriate disclosure of the physical address or geographical location of drinking water sources, storage facilities, pumping operational data, or treatment facilities.

(b) (1) For the purposes of this part, the department may recommend improvements to an existing monitoring program, including recommendations for additional monitoring wells.

(2) The department may not require additional monitoring wells unless funds are provided for that purpose.

10932. Monitoring entities shall commence monitoring and reporting groundwater elevations pursuant to this part on or before January 1, 2012.

10933. (a) On or before January 1, 2012, the department shall commence to identify the extent of monitoring of groundwater elevations that is being undertaken within each basin and subbasin.

(b) The department shall prioritize groundwater basins and subbasins for the purpose of implementing this section. In prioritizing the basins and subbasins, the department shall, to the extent data are available, consider all of the following:

(1) The population overlying the basin or subbasin.

(2) The rate of current and projected growth of the population overlying the basin or subbasin.

(3) The number of public supply wells that draw from the basin or subbasin.

(4) The total number of wells that draw from the basin or subbasin.

(5) The irrigated acreage overlying the basin or subbasin.

(6) The degree to which persons overlying the basin or subbasin rely on groundwater as their primary source of water.

(7) Any documented impacts on the groundwater within the basin or subbasin, including overdraft, subsidence, saline intrusion, and other water quality degradation.

(8) Any other information determined to be relevant by the department.

(c) If the department determines that all or part of a basin or subbasin is not being monitored pursuant to this part, the department shall do all of the following:

(1) Attempt to contact all well owners within the area not being monitored.

(2) Determine if there is an interest in establishing any of the following:

(A) A groundwater management plan pursuant to Part 2.75 (commencing with Section 10750).

(B) An integrated regional water management plan pursuant to Part 2.2 (commencing with Section 10530) that includes a groundwater management component that complies with the requirements of Section 10753.7.

(C) A voluntary groundwater monitoring association pursuant to Section 10935.

(d) If the department determines that there is sufficient interest in establishing a plan or association described in paragraph (2) of subdivision (c), or if the county agrees to perform the groundwater monitoring functions in accordance with this part, the department shall work cooperatively with the interested parties to comply with the requirements of this part within two years.

(e) If the department determines, with regard to a basin or subbasin, that there is insufficient interest in establishing a plan or association described in paragraph (2) of subdivision (c), and if the county decides not to perform the groundwater monitoring and reporting functions of this part, the department shall do all of the following:

(1) Identify any existing monitoring wells that overlie the basin or subbasin that are owned or operated by the department or any other state or federal agency.

(2) Determine whether the monitoring wells identified pursuant to paragraph (1) provide sufficient information to demonstrate seasonal and long-term trends in groundwater elevations.

(3) If the department determines that the monitoring wells identified pursuant to paragraph (1) provide sufficient information to demonstrate seasonal and long-term trends in groundwater elevations, the department shall not perform groundwater monitoring functions pursuant to Section 10934.

(4) If the department determines that the monitoring wells identified pursuant to paragraph (1) provide insufficient information to demonstrate seasonal and long-term trends in groundwater elevations, and the State Mining and Geology Board concurs with

that determination, the department shall perform groundwater monitoring functions pursuant to Section 10934.[1]

10933.5. (a) Consistent with Section 10933, the department shall perform the groundwater monitoring functions for those portions of a basin or subbasin for which no monitoring entity has agreed to perform the groundwater monitoring functions.

(b) Upon determining that it is required to perform groundwater monitoring functions, the department shall notify both of the following entities that it is forming the groundwater monitoring district:

(1) Each well owner within the affected area.

(2) Each county that contains all or a part of the affected area.

(c) The department shall not assess a fee or charge to recover the costs for carrying out its power and duties under this part.

(d) The department may establish regulations to implement this section.

10933.7. (a) If the department is required to perform groundwater monitoring functions pursuant to Section 10933.5, the county and the entities described in subdivisions (a) to (d), inclusive, of Section 10927 shall not be eligible for a water grant or loan awarded or administered by the state.

(b) Notwithstanding subdivision (a), the department shall determine that an entity described in subdivision (a) is eligible for a water grant or loan under the circumstances described in subdivision (a) if the entity has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.

10934. (a) For purposes of this part, neither any entity described in Section 10927, nor the department, shall have the authority to do either of the following:

(1) To enter private property without the consent of the property owner.

[1] The reference in Section 10933(e)(4) to Section 10934 has been amended by Stats. 2010, Ch. 328, sec. 237 (S.B. 1330). The new reference will be to Section 10933.5.

(2) To require a private property owner to submit groundwater monitoring information to the entity.

(b) This section does not apply to a county or an entity described in subdivisions (a) to (d), inclusive, of Section 10927 that assumed responsibility for monitoring and reporting groundwater elevations prior to the effective date of this part.

10935. (a) A voluntary cooperative groundwater monitoring association may be formed for the purposes of monitoring groundwater elevations in accordance with this part. The association may be established by contract, a joint powers agreement, a memorandum of agreement, or other form of agreement deemed acceptable by the department.

(b) Upon notification to the department by one or more entities that seek to form a voluntary cooperative groundwater monitoring association, the department shall work cooperatively with the interested parties to facilitate the formation of the association.

(c) The contract or agreement shall include all of the following:

(1) The names of the participants.

(2) The boundaries of the area covered by the agreement.

(3) The name or names of the parties responsible for meeting the requirements of this part.

(4) The method of recovering the costs associated with meeting the requirements of this part.

(5) Other provisions that may be required by the department.

10936. Costs incurred by the department pursuant to this chapter may be funded from unallocated bond revenues pursuant to paragraph (12) of subdivision (a) of Section 75027 of the Public Resources Code, to the extent those funds are available for those purposes.

SEC. 2. Section 12924 of the Water Code is repealed.

SEC. 3. Section 12924 is added to the Water Code, to read:

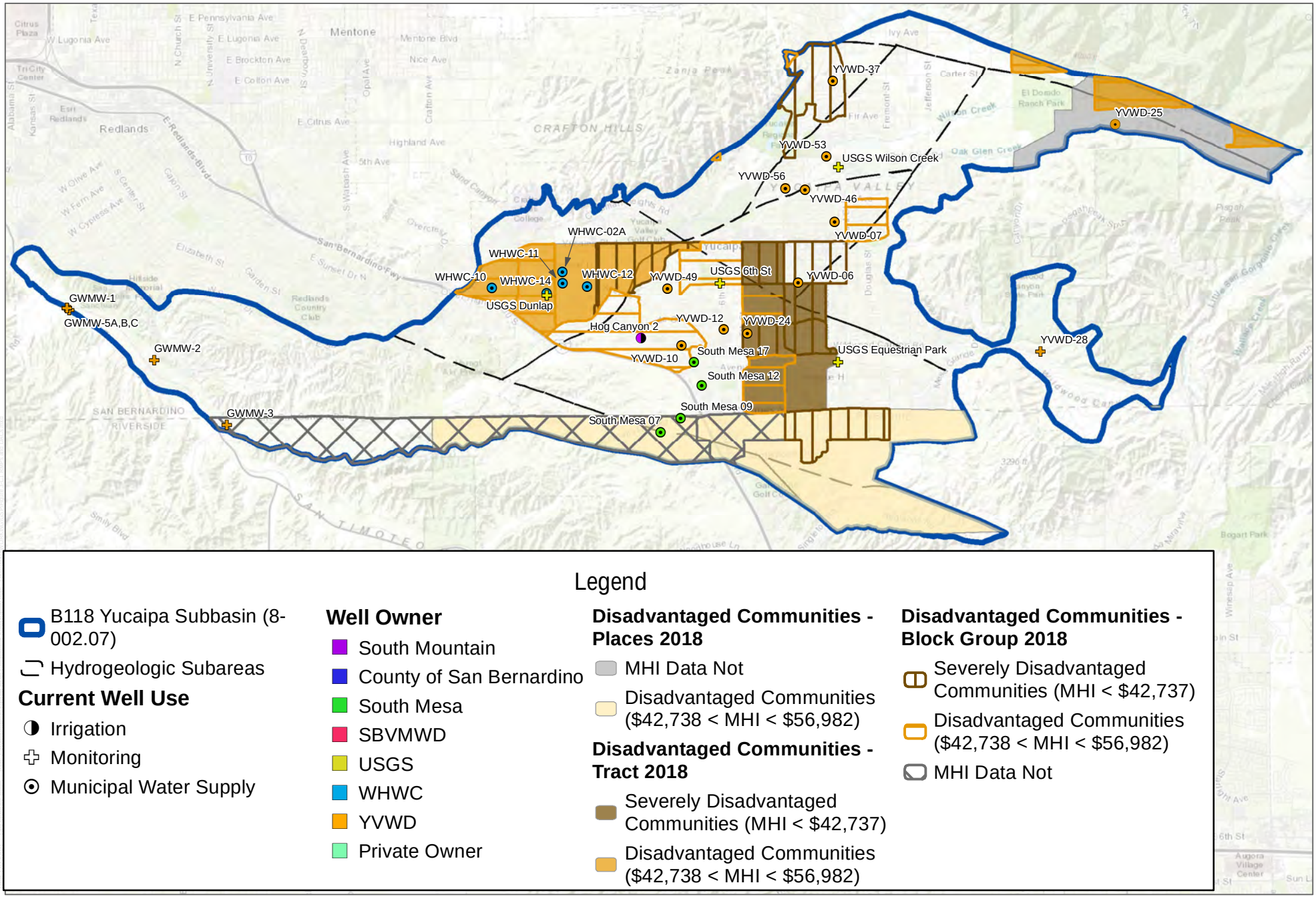
12924. (a) The department, in conjunction with other public agencies, shall conduct an investigation of the state's groundwater basins. The department shall identify the state's groundwater basins on the basis of geological and hydrological conditions and consideration of political boundary lines whenever practical. The department shall also investigate existing general patterns of groundwater pumping and groundwater recharge within those basins to the extent necessary to identify basins that are subject to critical conditions of overdraft.

(b) The department shall report its findings to the Governor and the Legislature not later than January 1, 2012, and thereafter in years ending in 5 or 0.

SEC. 4. This act shall take effect only if Senate Bill 1 and Senate Bill 7 of the 2009–10 Seventh Extraordinary Session of the Legislature are enacted and become effective.

Appendix 3-C

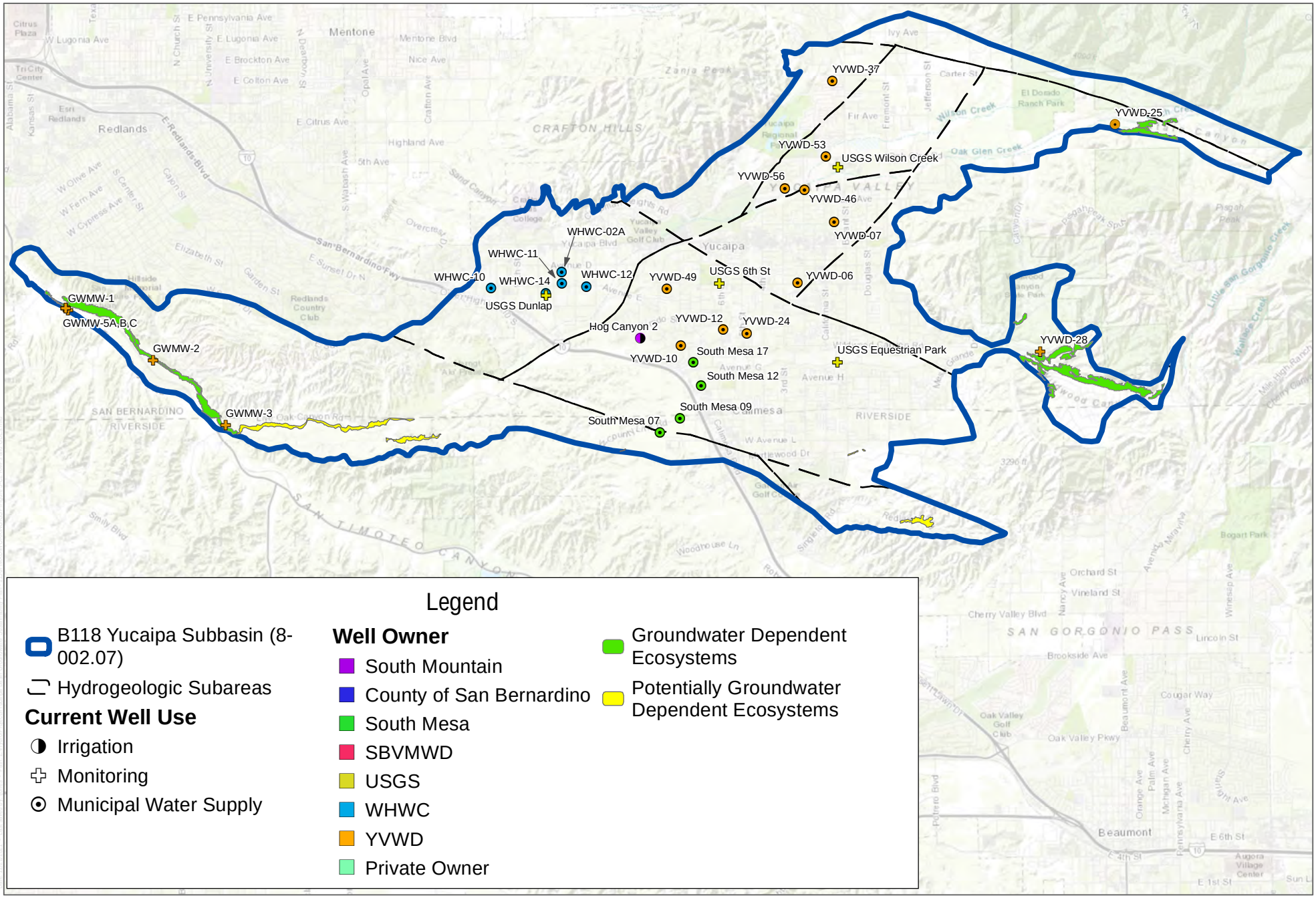
Representative Monitoring Points, Disadvantaged Communities, and Groundwater Dependent Ecosystems



SOURCE: SBVMWD, YVWD, WHWC, SMWC, City of Redlands, USGS

FIGURE 3-C1

Representative Monitoring Points, Disadvantaged, and Severely Disadvantaged Communities in the Plan Area



SOURCE: SBVMWD, YVWD, WHWC, SMWC, City of Redlands, USGS

DUDEK

0 0.5 1 Miles

FIGURE 3-C2

Representative Monitoring Points and Groundwater Dependent Ecosystems in the Plan Area

Yucaipa Subbasin Groundwater Sustainability Plan