Pala Ditch Cap - over 500 Inches for ---
0.1 sec ← 30" 5' 3½ 100-125 acres -
replaced old ditch of Ranch →

— Green - Allotting Agt.

Contract - with Escondido - Dilik -
+ Rincon -

See Frank Salinas -

per Butler

9-212.

UNITED STATES GEOLOGICAL SURVEY
WATER RESOURCES BRANCH

Daily gage height, in feet, of Pala Indian Canal River at near Pala
....., for 19 12

Day.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.
1							.35					
2							.40					
3							.33					
4							.32					
5							.47					
6							.46					
7							.47		.42			
8												
9							.38	.42				
10							.50					
11												
12												
13												
14												
15								.46				
16												
17										.44		
18												
19									.29			
20							.58	.42				
21												
22												
23												
24									.33			
25												
26												
27							.52	.42				
28												
29												
30										.38		
31												

P.102

PAMO CONDUIT.

A description giving lands through which the proposed Pamo Conduit of the Volcan Land & Water Company, San Diego County, California passes from Pamo Reservoir to San Clemente Reservoir.

R. of W. Pamo Conduit

S.W.1/4 of N.E.1/4:
S.E.1/4 of N.W.1/4: Sec.27 T.12 S.,R.1 E. San Bernardino Meridian. Clev. Nat.
N. 1/2 of S.W.1/4:

E. 1/2 of S.E.1/4: Sec.28 Clev. Nat.
S.W.1/4 of S.E.1/4:

N.W.1/4 of N.E.1/4:
N. 1/2 of N.W.1/4: Sec.33 Clev. Nat.
S.W.1/4 of N.W.1/4:

S.E.1/4 of N.E.1/4:
N. 1/2 of S. 1/2: Sec.32 Clev. Nat.
S.E.1/4 of N.W.1/4:

E. 1/2 of S.E.1/4:
S.W.1/4 of S.E.1/4: Sec.31 T.12 S.,R.1 E. Clev. Nat.
S. 1/2 of S.W.1/4:

S. 1/2 of S. 1/2: Sec.36 T.12 S.,R.1 W. Clev. Nat. #
N.W.1/4 of S.E.1/4:

S.E.1/4 of S.E.1/4: Sec.35 T.12 S.,R.1 W. Clev. Nat. #
S. 1/2 of S.W.1/4:

N. 1/2 of N.W.1/4: Sec.1 T.13 S.,R.1 W. Clev. Nat.

N. 1/2 of N 1/2: Sec.2 T.13 S.,R.1 W. Clev. Nat. #

Long Tunnel.

S.W.1/4 of N.W.1/4: Sec.2T.13S., R.1W. Clev. Nat. #

E. 1/2 of N.E.1/4:
S.W.1/4 of N.E.1/4: Sec.3 T13S., R.1W. Clev. Nat.
S.E.1/4 :

E. 1/2 of S.E.1/4: Sec.9 " Clev. Nat.
S.W.1/4 of S.E.1/4:

N.W.1/4 of N.E.1/4:
N.E.1/4 of N.W.1/4: Sec.16 " Clev. Nat.
S. 1/2 of N.W.1/4:
N.W.1/4 of S.W.1/4:

N.E.1/4 of S.E.1/4:
W. 1/2 of S.E.1/4: Sec.17 " Clev. Nat.
S. 1/2 of S.W.1/4:

N. 1/2 of N. 1/2:
S.W.1/4 of N.W.1/4: Sec.10 T. 13 S., R.1 W. Clev. Nat.
N.W.1/4 of S.W.1/4:

Alternate Course for Ditch.

N. 1/2 of N.E.1/4:
S.E.1/4 of N.E.1/4: Sec.3 T.13S., R.1W. Clev. Nat. #
S. 1/2 of N.W.1/4:

S. 1/2 of N. 1/2: Sec.4 " Clev. Nat. #
N. 1/2 of S. 1/2:

S.E.1/4 Sec.5 " Clev. Nat. #

N. 1/2 of N. 1/2:
S.W.1/4 of N.W.1/4: Sec.8 Clev. Nat.
N.W.1/4 of S.W.1/4:

E. 1/2 of S.W.1/4: Sec.7 Clev. Nat. #

N.E.1/4 : Sec.18 Clev. Nat. #
N.E.1/4 of S.E.1/4:

S.W.1/4 : Sec.17 Clev. Nat.

N.W.1/4 of N.W.1/4: Sec.20 T.13 S.,R.1 W. San Bernardino Meridian. Cleve. Nat.
W. 1/2 of S.W.1/4:

E. 1/2 of E. 1/2: Sec.19 T.13 S.,R.1 W. Cleve. Nat. #

E. 1/2 of N.E.1/4:
N. 1/2 of S.E.1/4: Sec.30 T.13S. ,R.1 W. Cleve. Nat #
S.W.1/4 of S.E.1/4:

W. 1/2 of N.E.1/4:
S.E.1/4 of N.W.1/4: Sec.31 T.13 S.,R.1 W. Cleve Nat, #
E. 1/2 of S.W.1/4:

N.E.1/4 of N.W.1/4:
N. 1/2 of N.E.1/4: Sec.6 T.14 S.,R.1 W. Cleve. Nat, #
S.E.1/4 of N.E.1/4:
E. 1/2 of S.E.1/4:

S.W.1/4 of S.W.1/4: Sec.5 T.14 S.,R.1 W. Cleve. Nat.

W. 1/2 of N.W.1/4: Sec.8 T.14 S.,R.1 W. Cleve. Nat, #

S.E.1/4 of N.E.1/4:
E. 1/2 of S.E.1/4: Sec.7 " Cleve. Nat. #
S.W.1/4 of S.E.1/4:

W. 1/2 of N.E.1/4:
S.E.1/4 of N.W.1/4: Sec.18 T.14 S.,R.1 W. Cleve. Nat. #
E. 1/2 of S.W.1/4:
S.W.1/4 of S.E.1/4:

E. 1/2 of N.W.1/4:
W. 1/2 of N.E.1/4: Sec.19 T.14 S.,R.1 W. Cleve. Nat. #
N. 1/2 of S.W.1/4:
S.W.1/4 of S.W.1/4:

S.E.1/4 of S.E.1/4: Sec.24 T.14 S.,R.2 W.

N.E.1/4 :
S.E.1/4 of N.W.1/4: Sec.25 T.14 S.,R.2 W.
S.W.1/4 :

N.W.1/4 of N.W.1/4: Sec.36 "

E. 1/2 of N.E.1/4:
N. 1/2 of S.E.1/4: Sec.35 "
S.W.1/4 of S.E.1/4:

Sec 2. Lieu 165 2 W
Sec. 3 " " " "
Sec. 10. " " " "
Sec. 11.

Right of Way. Pamo Conduit.

		Sec.27 T.12 S.,R.1 E. S.B.M.	Cleve.	Nat.	Forest.		4199
		Sec.28	"	"	"		
		Sec.28	"	"	"		2526
		Sec.33	"	"	"		5826
		Sec.32	"	"	"		6568
		Sec.31 T.12 S.,R.1 E. S.B.M.	"	"	"		7304
		Sec.36 T.12 S.,R.1 W. S.B.M.	"	"	"	#	5895
		Sec.35	"	"	"	#	1592
		Sec. 1 T.13 S.,R.1 W. S.B.M.	"	"	"		1075
~~S. 1/2~~		~~Sec. 2~~ 3	"	"	"		
N. 1/2		Sec. 2	"	"	"	#	5724
	(Long tunnel)						
N. 1/2		Sec. 3	"	"	"	#	2475
S. 1/2		Sec.3	"	"	"		2793
		Sec. 9	"	"	"		3006
		Sec.16	"	"	"		5014
		Sec.17	"	"	"		3770
		Sec.10	"	"	"		5396
N 1/2		" 2				#	1352
	(Alternate course for ditch)						
N. 1/2		Sec. 3	"	"	"	#	15760
S. 1/2		Sec. 3	"	"	"		200
N. 1/2		Sec.4	"	"	"	#	
S. 1/2		Sec. 4	"	"	"		6411
		Sec. 5	"	"	"	#	6490
		Sec. 8	"	"	"		2460
		Sec. 7	"	"	"	#	2310
		Sec.18	"	"	"	#	2600
		Sec.17	"	"	"		2910
	(Main course)						
		Sec.20	"	"	"		5824
		Sec.19	"	"	"	#	4615
		Sec.30	"	"	"	#	6721
		Sec.31	"	"	"	#	7073
		Sec. 6 T.14 S.,R.1 W. S.B.M.	"	"	"	#	8184
		Sec. 5	"	"	"		810
		Sec.8	"	"	"	#	2830
		Sec. 7	"	"	"	#	3512
		Sec.18	"	"	"	#	5453
		Sec.19	"	"	"	#	5742
		Sec.24 T.14 S.,R.2 W. Outside of	"	"	"		635
		Sec.25 "	"	"	"		9870
		Sec.36 "	"	"	"		2020
		Sec.35 "	"	"	"		386
							165325

NOTE:- # Proposed eliminations from Cleveland National Forest Reserve.

PAMO CONDUIT.

GIVING TOTAL LENGTH OF RIGHT OF WAY THRU PRIVATE AND PUBLIC LANDS WITHIN AND WITHOUT THE CLEVELAND NATIONAL FOREST RESERVE (WITH BOUNDARIES AS ORIGINALLY GIVEN AND BOUNDARIES AMENDED AS A RESULT OF ELIMINATIONS.

1. WITH FOREST RESERVE BOUNDARIES AS PER 1910.

(a) Total length of conduit by way of long tunnel.

Public In Reserve	Private In Reserve.	Public Outside Reserve.	Private Outside Reserve.	Total Length.
6.94 miles	14.79 miles	0.4 miles	2.51 miles	24.64 miles

(b) Total length of Conduit using alternate route around tunnel.

6.85 miles	17.35 miles	0.4 miles	2.51 miles	27.11 miles

2. WITH ~~ELIMINATIONS~~ PROPOSED ELIMINATIONS OF FOREST RESERVE IN EFFECT.

(a) Total length of conduit by way of long tunnel.

Public In Reserve.	Private In Reserve.	Public Outside Reserve.	Private Outside Reserve.	Total Length
5.95 miles	4.11 miles	1.40 miles	13.18 miles	24.64 miles

(b) Total length of Conduit using alternate route around tunnel.

5.44 miles	4.27 miles	1.82 miles	15.58 miles	27.11 miles

PAMO CONDUIT.

GIVING TOTAL LENGTH OF RIGHT OF WAY THRU PRIVATE AND PUBLIC LANDS WITHIN AND WITHOUT THE CLEVELAND NATIONAL FOREST RESERVE (WITH BOUNDARIES AS ORIGINALLY GIVEN AND BOUNDARIES AMENDED AS A RESULT OF ELIMINATIONS.

1. WITH FOREST RESERVE BOUNDARIES AS PER 1910.

	Public in Reserve	Private In Reserve	Public Outside Reserve.	Private Outside Reserve
T.12 S.,R.1 E. S.B.M.				
Sec. 27	0	4049	0	0
28	2535	0	0	0
33	5826	0	0	0
31	7304	0	0	0
32	4741	1827	0	0
T.12 S.,R.1 W.				
36	0	5895	0	0
35	0	1592	0	0
T.13 S.,R.1 W.				
1	1075	0	0	0
2	0	5724	0	0
Long Tunnel.				
2	0	1582	0	0
3	0	2875	0	0
5	2795	0	0	0
9	1591	1415	0	0
10	2102	5294	0	0
16	2010	2870	0	0
17	690	5170	0	0
	30567'	34093'	0'	0'
Alternate Line.				
N 1/2 Sec.3.	0	5760	0	0
S 1/2 Sec.3	0	200	0	0
S " " 4	6411	0	0	0
5	1360	5130	0	0
8	0	8460	0	0
7	850	1480	0	0
18	0	4600	0	0
17	0	2210	0	0
	39168'	63633'		
	or	or		
	7.42 miles	11.86 miles		

Above is ~~total~~ length of line to Sec. 17 using alternate line.

PAMO CONDUIT.

GIVING TOTAL LENGTH OF RIGHT OF WAY THRU PRIVATE AND PUBLIC LANDS WITHIN AND WITHOUT THE CLEVELAND NATIONAL FOREST RESERVE (WITH BOUNDARIES AS ORIGINALLY GIVEN AND BOUNDARIES AMENDED AS A RESULT OF ELIMINATIONS.

2. WITH FOREST RESERVE BOUNDARIES WITH ELIMINATIONS IN EFFECT.

	Public in Reserve	Private In Reserve	Public Outside Reserve	Private Outside Reserve.
T.12 S.,R.1 E. S.B.M.				
Sec. 27	0	4049	0	0
28	2525	0	0	0
33	5826	0	0	0
31	7304	0	0	0
32	4741	1827	0	0
T.12 S.,R.1 W.				
Sec 36	0	0	0	5895
35	0	0	0	1582
T.13 S.,R.1 W.				
Sec. 1	1075	0	0	0
2	0	0	0	5724
Long Tunnel.				
Sec.2	0	0	0	1582
3	0	0	0	2875
3	2793	0	0	0
9	1591	1415	0	0
10	2102	3294	0	0
16	2010	2870	0	0
17	600	3170	0	0
	30567'	16625'	0	17468'
A Alternate Line.				
N 1/2 Sec. 3	0	0	0	5760
S " " 3	0	200	0	0
S " " 4	6411	0	0	0
Sec. 5	0	0	1360	5130
8	0	8460	0	0
7	0	0	830	1480
18	0	0	0	4600
17	0	2910	0	0
	36978' or 7 miles	28195' or 5.34 miles	2190' or 0.42 miles	34458' or 6.52 miles

PAMO CONDUIT.

GIVING TOTAL LENGTH OF RIGHT OF WAY THRU PRIVATE AND PUBLIC LANDS WITHIN AND WITHOUT THE CLEVELAND NATIONAL FOREST RESERVE (WITH BOUNDARIES AS ORIGINALLY GIVEN AND BOUNDARIES AMENDED AS A RESULT OF ELIMINATIONS.

1. WITH FOREST RESERVE BOUNDARIES AS PER 1910.

	Public In Reserve.	Private In Reserve.	Public Outside Reserve.	Private Outside Reserve.
T.13 S., R.1 W.				
Sec. 17	0	1410	0	0
20	0	3684	0	0
19	1686	2929	0	0
30	1921	4800	0	0
31	0	7073	0	0
T.14 S., R.1 W.				
Sec. 6	1658	6526	0	0
5	814	0	0	0
8	0	2835	0	0
7	0	3514	0	0
18	0	5453	0	0
19	0	5742	0	0
T. 14 S.,2 W.				
24	0	0	0	635
25	0	0	1850	8020
36	0	0	0	1020
35	0	0	300	3560
	[redacted]' or 1.15 miles	43966'or 8.33 miles	2150'or 0.4 miles	13235' or 2.51 miles

2. ELIMINATIONS IN EFFECT.

T.13 S., R 1 W.				
Sec. 17	0	1410	0	0
20	0	3684	0	0
19	0	0	1686	2929
30	0	0	1921	4800
31	0	0	0	7073
T.14 S., R.1 W.				
Sec. 6	0	0	1658	6526
5	814	0	0	0
8	0	0	0	2835
7	0	0	0	3514
18	0	0	0	5453
19	0	0	0	5742
T.14 S., R.2 W.				
24	0	0	0	635
25	0	0	1850	8020
36	0	0	0	1020
35	0	0	300	[redacted]
	814' or 0.16 miles	5094' or 0.96 miles	7415' or 1.40 miles	52107' or 9.87 miles

Grand Total With Tunnel (1910)	[redacted] miles	14.79 miles	0.4 miles	2.51 miles	24.64 m.
Alternate Line	6.85 "	17.35 "	0.4 "	2.51 "	27.11 m.
with Tunnel (amended) Just Rec'd amended	5.95 "	4.11 "	1.40 "	13.18 "	24.64 m.
Alternate "	5.44 "	4.27 "	1.82 "	15.58 "	27.11 m.

Rights of Way Pamo Ls.

	Reserve	Reserve Amended	Private Ownership	Public
T.12 S. 1E				
	1.11			1
Sec 27	4049		4049	0
" 28	2525		0	2525
" 33	5826		0	5826
" 31	7304		0	7304
" 32	6568		1827	4741
T12.S. 1W.				
" 36 X	5895	5895	5895	0
" 35	1592	1592	1592	0
T13S.1W.				
Sec. 1	1075	0	0	1075
Sec. 2.	5724	5724	5724	0
Longitude				
Sec. 2	1382	1382	1382	0
Sec. 3	2875	2875	2875	0
Sec. 3	2793		0	2793
Sec. 9	3006		1415	1591
Sec. 10	5396		3294	2102
	4880		2870	2010
Sec. 15	~~5704~~		~~5704~~	~~0~~
Sec. 17	3770		3170	600
Alternate Line				
N½ Sec 3	5760	5760	5760	
S½ " 3	200		200	
S½ 4	6411			6411
Sec 5	6490	6490	5130	1360
Sec 8	8460		8460	
" 7	2310	2310	1480	830
" 18	4600	4600	4600	38108
" 17	2910	36628	2910	
	102935		63467	

6490 − 1360 = 5130
5770 − 600 = 5170

75 + 106 + 108 + 104 + 90 = 1029 35

18 + 51 + 51 + 31 = 36628

5014 − 2530 = 2484

47 + 82 + 86 + 54 = 63467

28 + 48 + 66 + 31 = 38108

4440 − 3820 = 1020
3820 + 950 = 2870
950 + 1060 = 0

	Reserve	Reserve Amended	Private	Public
	Main Line Out. from Junction of Alternate Line			
Sec 17	1410		1410	
" 20	3684		3684	
" 19	4615	4615	2929	1686
" 30	6721	6721	4800	1921
" 31	7073	7073	7073	
T14SR1W				
Sec 6	8184	8184	6526	1658
" 5	814			814
" 8	2835	2835	2835	
" 7	3514	3514	3514	
" 18	5453	5453	5453	
" 19	5742	5742	5742	
T14SR2W				
" 24	50045	44137	635	
" 25	102935	36628	8020	1850
" 36			1020	
" 35			3560	300
			57201	7415
			63467	38108
Grand Total	152980	80765	120668	45523

4600 − 3270 = 1330
1330 − 530 = 1850

41 + 46 + 67 + 50 = 204
32 + 4 = 7415
57201

27 + 31 + 38 + 40 = 137
44137

PAMO CONDUIT Nov.30,1914.

Maximum Flow from Warners	15.million gallons	
Sutherland	5.9 " "	
Pamo	2.1 " "	
Total	23.0 " "	per day
	= 36 c.f.s.	

Consequently use same size conduit as for Warner Conduit (54.2 Sec. Ft) use Warner's costs and Post's Pamo quantities

47951 lin.ft. Concrete Lined Canal	@ $2.45	$117,480.00
37080 lin.ft. Steel flume on bench	@ 3.86	143,129.00
6576 " " " " trestle	@ 5.76	37,978.00
24386 ft. Concreting tunnel	@ 16.50	402,369.00
8737 " low head syphons	@ 6.70	58,538.00
5990 " high " "	@ 7.90	47,321.00
130710 lin.ft = 24.8 miles		$806,815.00
Add 25% for engineering and contingencies		201,704.00
		$1,008,519.00
Interest during Construction 8% for 6 months (½ period)		40,341.00
		$1,048,860.00

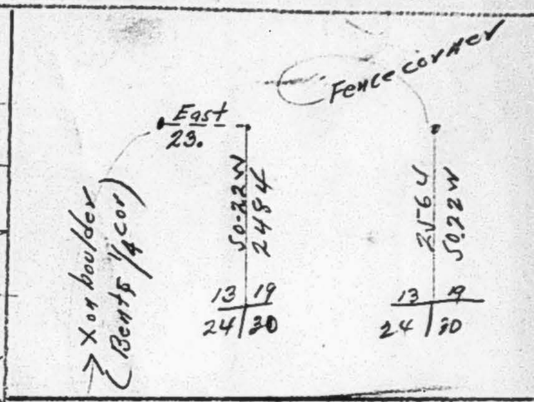
Stadia Traverse around Sec 19 & 30

Azimuth by Solar Observation Dec 18-19 Hamilton

Dec 18-& 19 - check by 2'.

13/19 24/30	S0-22W	5293.	Stone in Mound of rocks
24/30 25/31	S89-38E	5277	Fence corner, Mound of rocks No evidence of original cor.
29/30 31/32	N0-22E	5327	In line between 2 fences - in line with N+S fence
A	N6-31E	3135	cross on boulder bears N-24-18 W - 160'
B	N	2203	
17/18 19/20	S78-30W	366	Stone in Mound of rock at fence cor (Corner in good condition)
C	W	5289	
D 13/19 24/30	S	5269	No evidences of cor.

N	S	E	W
	5293		34
	34	5277	
5327		34	
3135		364	
2203			359
			5289
	5269		
10665	10669	5675	5682
	+4		+7



1.3617 28
3.3957 44
1.9665 7 6

29/30
31/32 N0-22E 3172

L - 30 - 0 5 ft bent

Save

Hanner Pano Conduit

FILE

Value of 1 ft. of conduit.

Take 1000ft. of conduit for convenience of estimating.

1000 ft. conduit dissipates, 1 ft head.

Q = 44.6 c.f.s. = average discharge.
for 77% eff. H. P. = $\frac{1 \times 44.6 \times 62.5 \times .77}{550}$ = 3.9 H.P.

3.9 H.P. = 2.9 K. W.
less 10% for transmission and transformer losses
2.61 K.W. at $55.00 = ---------- $ 143.50

Evaporation Loss - Power Value.
assuming that we have 5.0 ft. evaporation
8x 1000 x 5.0 = .915 ac. ft. per year
.0025 ac. ft. 24 hrs = .00125 c.f.s.
$\frac{.00125 \times 1500 \times 62.5 \times .77}{550}$ = .162 H.P. = .121 K.W.
less 10% for transmission and transformer losses =
.109 K.W. at $55.00 = ---------- 6.00

Seepage Loss - Power Value.
From tests made by Agr. Exp. Station at University of California, I conclude the rate of percolation through a 3" canal lining under 3' 6" head is about .0043 ft. per hour.
= .103 ft. per 24 hours.
$\frac{(8 \times 1000)}{43560} \times .103$ = .0188 ac.ft. 24 hrs. = .0094 c.f.s.

$\frac{.0094 \times 1500 \times 62.5 \times .77}{550}$ = 1.23 H.P. = .92 K.W.
less 10% = .828 K.W. at $55.00 = ---------- 45.50

Total Annual Power Loss -------- $ 195.00
Capitalized at 10% ---------- $1,950.00
or per foot ---------- $ 1.95

V. L. & W. CO.

Estimated Aug 15 1913

1756
847
2603

826
913
404
2153

Evaporation Loss - Irrigation Value.

.0025 ac.ft. 24 hrs. from above =
.00125 c.f.s. =
.0625 M.I.
assume 25% loss before delivery to consumer
.047 M.I. at 40¢ per day = per annum $ 6.86

Seepage Loss - Irrigation Value.
.0188 ac.ft. 24 hrs. from above
= .0094 c.f.s.
= .47 M.I.
25% loss = .353 M.I. at 40¢ per day = per year 51.64

Total Annual Irrigation Loss -------- $ 58.50

Capitalized at 10% ---------- 585.00

or per foot ---------- .585

Resumé:

Power Loss per foot ----------	$ 1.95
Irrigation Loss per foot ------	.585
Total Loss per foot ----------	$ 2.535

This applies for conduit above power house. For irrigation conduit from Pamo down use the Irrigation Loss only.

Farm

Discription of Pamo Dairy and Stock. Ramona Cal.

East one half of the North East Quarter, Section 13, North West Quarter of the North East Quarter and the South East Quarter of the North West Quarter and the North East Quarter of the South West Quarter and the West half of the South West Quarter, Section 24, and the West half of the East half Section 25. All in Township 11, South Range 1 East. S.B.M.; also East one half of the South East one Quarter Section 2, and North one half of the North East one Quarter and the North three Quarters of the South one half of the North East one Quarter Section 11, and the South West Quarter of the South East one Quarter and the North West one Quarter. and the North half of the South West Quarter, Section 2, and the East half of the South East Quarter, Section 3. All in Township 12 South Range 1 East S.B.M. The West one half of the North East Quarter and the South one half of the North West Quarter, Section 35, the South East Quarter of the South East Quarter, Section 34, Township 11 South 1 East; Also the West half of the South East Quarter and the North West Quarter of the North East Quarter and the East one half of the South East Quarter, Section 4, and the east one half of the North East one Quarter and the North West one Quarter of the North East one Quarter, Section 10, and the West half of North West Quarter, Section 11, All in Township 12 South Range 1 East; also the North West Quarter of the South West Quarter, and the East half of the South West one Quarter, and the South West Quarter of South West one half, Section 35, Township 11 South Rangel East; also the North East one Quarter of the North West one Quarter and the North Three fourths of the South East one fourth of the North West Quarter, Section 11, Township 12 South Range 1 East, S.B.M; containing in all 1930 acres.

P 1.01
JUN 11 1912
P 101

Right of Way.

V. L. & W. CO.

FILE

John B. Judson, et al

In consideration of the benefits to accrue from the building of the works of the Pamo Water Company upon the Bernardo or Isabel River in the County of San Diego, State of California, and of One Dollar ($1.00) to us paid, we hereby grant individually and collectively unto said company, a Corporation existing under the laws of California, and doing business at San Diego, California, all our rights of every description, both joint and several, either as riparian owners, or appropriators, or grantees of appropriators in and to the waters of the said stream or appertaining to the following described lands lying in the valley known as San Pasqual upon said River and in said County and State, to wit: All lands owned by us in Sections 35 and 36, Tp. 12 South, Range 1 East, S.B.M.

This grant is to include all our rights under an appropriation of thirteen hundred and fifty (1350) miners inches of water, measured under a four (4) inch pressure, made under the laws of California in the year 1876, by John Judson, A.F. Brown, W. B. Stewart, John Clevinger, and Archibald Clevinger, and is to operate as a perpetual right to impound, divert and carry away the waters of said stream, at point on said stream within two miles of the lower end of Pamo Valley on said stream. And the said Company is hereby constituted the sole and perpetual * of ourselves and of the land above described and of its future owners, tenants, or possessors, to impound and divert the same, and all damages therefor are hereby expressly waived and released. And said grant and said agency shall be and run with the land in the nature of a covenant forever.

And in further consideration of the premises, we grant unto the said company a strip of land fifty (50) feet wide, for a perpetual right of way, with right of ingress and egress across said land or any of our lands adjoining the same, upon such line as it may hereafter locate the same. Said right of way to be for the aqueduct of said Company and ingress and egress to be for building, maintenance and repairs.

By its acceptance hereof, said Company binds itself to allow the occupants or owners of said lands to take and use on and after January the first, and until June fifteenth of each year after the aqueduct is constructed and in operation, a sufficient amount of water to irrigate the lands heretofore irrigated by the several parties signing this instrument, or their assigns, from such points on its aqueduct above said lands, and in such quantities as they may select, but with connections to be made under the direction of said Company's Chief Engineer, and on and after the fifteenth day of June, and until January first of each and every year, ten (10) miners inches of water measured under a four inch pressure, above center of gravity, for use upon said lands, and taken from such points on its aqueduct above said lands, and in such quantities within the hereinafter mentioned limits as the said owners and occupants or their assigns may select. Said water to be the equivalent of ten (10) miners inches steady flow from June fifteenth to January first of each and every year, but is not to be taken in quantities of less than one inch or more than two hundred inches at once, unless convenient for said Company.

All of the grants, covenants, obligations, rights, liabilities, etc., herein specified, are to be binding upon and

enure to the benefit of the heirs, representatives, grantees and lessees of the grantors, and the successors, and assigns of said Corporation forever.

Upon failure to commence work within ninety days and to prosecute the same in good faith and with due diligence, the rights herein granted are to revert to the grantors until the works are completed, the rights of the grantors are to remain as they now are.

In witness whereof, we have hereunto set our hands and seal this 18th day of Sept., 1889.

JOHN B. JUDSON
HENRY JOHNSON
JEUS OESON
A. M. STRIPLIN
A. D. TRUSSELL.

Recorded in Book of Deeds 155, page 106

I, C. A. Bradley, the grantor herein, in consideration of the sum of $_____ do hereby grant to the Volcan Land and Water Company, a corporation organized and existing under the laws of the State of Arizona, its successors and assigns, a perpetual easement and right of way twenty-five feet wide, excepting where the nature of the ground requires an additional width not to exceed fifty feet in width in, over and across the following described lands belonging to me, situated in the County of San Diego, State of California, to-wit:

The SW¼ of SW¼ Section 14, SW¼ of NE¼ Section 13, NW¼ of SE¼ Section 13, the NW¼ of the SE¼ of Section thirteen (13), the S½ of the SE¼, except the SE¼ of the SE¼ of Section thirteen (13), the E½ of the SE¼ of the SW¼ of Section 13, the SW¼ of the SE¼ of Section Fourteen (14), the SE¼ of the SW¼ of Section fourteen (14) excepting a piece of ground four rods square in the west part of the said SE¼ of the SW¼ of section fourteen, formerly deeded to the trustees of the Baptist Church, the SE¼ of the NE¼ of said section twenty-two, the SE¼ of the NW¼ of Section twenty-three, the SW¼ of the NE¼ of section twenty-three, the NW¼ of the SE¼ of section twenty-three, the NE¼ of the SW¼ of Section twenty-three, the N½ of the NE¼ of Section twenty-three, the SW¼ of the NW¼ and the W½ of the SW¼ of Section twenty-three, the NE¼ of the NW¼ of section twenty-three, the SE¼ of the SW¼ of section twenty-three, the SW¼ of the SE¼ of section twenty-three, the E½ of the SE¼ of section twenty-three, the W½ of the NE¼ and the NW¼ of the SE¼ of section twenty-four, the NW¼ of section twenty-four the E½ of the SE¼ of section fourteen, the SW¼ of the SE¼ and the SE¼ of the SE¼ of section fifteen, the NE¼ of the NE¼ and the NW¼ of the NE¼ of section twenty-two, the NW¼ of the NW¼ of section twenty-three, all being in township fourteen south, range two west, San Bernardino Meridian, being about fourteen hundred acres, known as the Poway Ranch.

and also the perpetual right to enter upon said strip of land and thereon to construct, use, maintain, repair and replace a pipe line, conduit and water way and way for the conducting and carrying of water; the center line of said twenty-five foot right of way to be surveyed and established by the said Volcan Land and Water Company within one year from the date of this instrument.

And it is covenanted and agreed by the parties hereto that the said corporation may enter upon said lands to survey and lay out said twenty-five foot strip and thereafter it shall, within said period of one year, make a map of such strip, showing the location and boundaries of the same, and the parties hereto will execute and acknowledge the said map and do such other things as may be necessary to entitle said map to be filed for record in the County Recorder's

office of said county and said parties will co-operate in doing such acts and things and procuring said map to be certified as required by law so that it may be filed and thereafter to be filed in said office and upon the making of said map the said twenty-five foot right of way and easement shall be deemed to be the right of way and easement shown upon said map.

IN WITNESS WHEREOF I have hereunto set my hand this _____ day of _____ 1914.

_____

K

A Summary of the total Expense of the Pamo Water Project For the Month of November.

For Services ----------	$759.95
For Expenses ----------	346.55
Total Expense for month -------	$1106.50

Ed Fletcher Papers

1870-1955

MSS.81

Box: 48 Folder: 6

Business Records - Water Companies - Volcan Land and Water Company - San Dieguito System - San Dieguito Mutual Water Company - San Dieguito/Pamo Dam - Pamo Conduit: rights-of-way and cost notes

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