

FILE COPY

W. S. POST.

PHYSICAL VALUATION OF CUYAMACA WATER CO.

June 1, 1912 to June 1, 1914.

(Values previous to June 1, 1912)
(taken from R.R.Comm.appraisement)
(of June 1, 1912 & corrected to)
(date June 1, 1914.)

By Philip E. Harroun,
Consulting Hydraulic Engineer,
San Francisco, California.

BEFORE THE RAILROAD COMMISSION
OF THE STATE OF CALIFORNIA

In the Matter of the Application of
JAMES A. MURRAY and ED FLETCHER
for order authorizing them to sell
and of CUYAMACA WATER COMPANY for
order authorizing it to buy a certain
water system situated in San Diego
County, and of said company to issue
stocks and bonds in payment therefor.)

Application No. 1130.

NOTICE OF HEARING

To James A. Murray
Monterey, California.

Cuyamaca Water Company,
San Diego, California.

Ed Fletcher,
San Diego, California.

T. B. Cosgrove, City Attorney,
San Diego, California.

A. H. Sweet, Attorney for applicants,
Union Building,
San Diego, California:

You and each of you are hereby notified that the Railroad Commission of the State of California has set a hearing in the above-entitled matter before Commissioner Eshleman, for Saturday, May 23, 1914, at 3 o'clock P.M., in the Federal Court Room at the Postoffice, in the city of San Diego, California, at which time and place you will be given an opportunity to be heard.

By order of the Railroad Commission.

Dated at San Francisco, California, this 15th day of
May 1914.

Charles R. Detrick
Secretary Railroad Commission
of the State of California.

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OF THE SERVICE OF CIVIL ENGINEERS
YOU AND BEHOLD THE HEAVENLY CREATION that the

Report
to
James A. Murray and Ed Fletcher
on the
Value of the Physical Items
of their Property
Cuyamaca Water Company
by
Philip E. Harroun,
Consulting Hydraulic Engineer.
May 21, 1914
San Francisco, California.

Report
to
James A. Murray and Ed Fletcher
on the
Value of the Physical Items
of their Property
Cuyamaca Water Company
by
Philip E. Harroun,
Consulting Hydraulic Engineer.
May 21, 1914.
San Francisco, California.

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Messrs. James A. Murray
and
Ed Fletcher,
San Diego,
California.

Gentlemen:-

I transmit you herewith my report upon the value of the physical items entering into and making up the water works property owned by you and operated under the name of the Cuyamaca Water Company.

The full details of this valuation follow.

This value is as of date June 1, 1914.

In arriving at the value of the property, I

have used that value determined by the Railroad Commission of California in its decision No.536 on Application No.118, as a starting point. The value there determined by the Commission was based upon the value presented by the writer at the hearing of the case in 1912, with the exception of the value of the lands. Mr. Eshleman, who heard the case, raised the values as estimated by the writer, and his determination of land values has been used. The value found by the Commission was as of date of June 1, 1912, and this has been brought down to June 1, 1914 through the application of accrued depreciation and also through the deduction of structures abandoned since June 1, 1912. The final summary sheet shows that this portion of the property has a reproduction cost of \$946,518.00 and a present value of \$522,743.00.

Within the last two years considerable new construction and replacement has been made to the system. In arriving at the value of these items, your cost records, as kept by Mr. William S. Post, your chief engineer and your book accounts have been analyzed. From this data the resulting valuation is determined.

Analysis of the accounts shows that the segregation of the amounts against the various items has not been correctly made, and in many cases charges which properly accrue against the property do not appear upon your books. This is especially true with relation to such items as interest during construction, and other overhead accounts.

On the other hand, certain units have apparently been debited with amounts in excess of their proper charge, to the credit of other items. The analysis presented in the appendix has corrected these matters so far as is possible, and it is believed that the resulting summary presents a true statement of the condition of the system.

The constructional items placed since June 1, 1912 have a reproduction cost of \$247,596.00 and a present value of \$239,578.00.

It will be noted in the final summary that there have been certain items "donated" to the Cuyamaca Water Company. The word "donated" is not used in its ordinary acceptance, but is here used to indicate those items which have been acquired by the Cuyamaca Water Company for which no voucher appears upon your books. These items aggregate \$58,016.00 as to reproduction cost and \$46,701.00 as to present value.

In determining the overhead expense chargeable against the system, it has been found that under the head of Engineering the charge upon your books aggregated 4.4% upon that portion of the property against which such charges have been made. As only a small portion of these charges have been entered into the accounts, I have placed against the entire property the corresponding percentage.

Interest during construction has been taken as 8% over the construction period for half the cost thereof.

8% has been used for the reason that this rate has been paid for such moneys as you have borrowed from the bank.

The other items entering into overhead consist of salaries of officers and clerks, contingencies and legal expense, for which little or no charge has been made on your books. These items make up the 21% which has been used in the final summary.

The entire property has a reproduction cost of \$1,252,130.00 and a present value of \$809,022.00 as of date June 1, 1914.

Respectfully presented,

/ P. E. HARROUN.

San Francisco,
May 21, 1914.

This estimate is made in two parts.

1st. The Railroad Commission's Valuation of June 1st, 1912, has been corrected to date. Properties shown therein which have since been abandoned are stricken out and depreciation for the remaining structures has been modified to provide for two additional years of age. In some instances the probable life of structures has been lengthened due to improvements calculated to increase life or due to demonstration that the former estimated life was too short.

2nd. A valuation of properties acquired or constructed between June 1st, 1912 and June 1st, 1914.

CUYAMACA WATER COMPANY

CORRECTION OF VALUATION OF RAILROAD
COMMISSION, DATED JUNE 1, 1912, TO
EXCLUDE STRUCTURES ABANDONED OR RE-
PLACED, AND TO ALLOW FOR ACCRUED
DEPRECIATION TO JUNE 1, 1914.

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**CUYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET**

COST TO REPRODUCE		PHYSICAL DEPRECIATION								
Item	Quantity	Unit	Cost	Sub Total	Total	Age Yrs.	Prob. Life	Dep. %	Sub Total	Total
PIPE DISTRIBUTION SYSTEM (Exclusive of Specials & Valves)										
Riveted Steel										
4 inch	5135	11n.ft.	\$0.28	\$1440.		14	17	82		\$1186.
4	2365		0.28	660.		6	14	43		283.
6	1200		0.40	480.		6	14	43		206.
8	5000		0.51	2550.		6	14	43		1093.
20	1114		1.27	1415.	6545.	10	16	63		884.
Screw Casing										\$3652.
3 inch	5666		0.24	1360.		14	16	88		1190.
4	3296		0.26	857.		19	24	79		678.
6 (second hand)	334		0.38	127.		4	20	20		25.
8 "	284		0.60	170.		4	20	20		34.
10 "	350		0.85	297.		4	25	16		48.
		Fwd		\$2811.	\$6545.			Fwd.		\$1975.
										\$3652.

**GUYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET.**

COST TO REPRODUCE		PHYSICAL DEPRECIATION								
Item	Quantity	Unit	Cost	Sub Total	Total	Age Yrs	Prob. Life	Dep. %	Sub Total	Total
<p align="center">PIPE DISTRIBUTION SYSTEM---Cont'd. (Exclusive of Specials & Valves) \$2811. \$6545.</p>										
Screw Casing-Cont'd.		Brot. Fwd.							\$1975.	\$3652.
1 1/2 inch (Second hand)	339	11n.ft.	1.02	346.		4	25	16	55.	
1 1/2 inch (second hand)	927		1.16	1075.	\$4232.	4	25	16	172.	\$2202.
Standard Screw										
1 1/2 inch	460		0.14	65.		3	20	15	10.	
2 " (2nd hd)	2000		0.16	320.		3	20	15	48.	
2 "	2500		0.19	475.		6	20	30	143.	
2 "	1500		0.19	285.		5	6	83	238.	
2 "	1682		0.19	320.	\$1465.	26	30	86	276.	\$ 715.
Wood Stave										
8 inch	400		0.51	204.		17	20	85	173.	
8 "	7200		0.51	3670.		13	16	81	2982.	
24 "	6345		1.55	9850.	\$13724.	18	25	72	7092.	\$10247.
Grand Total										\$25966.

CUYAMACA WATER COMPANY
PHYSICAL DEPRECIATION & PRESENT VALUE IN DETAIL

Item	Sub Total	Total	Age Yrs.	Prob. Life	PHYSICAL DEPRECIATION		PRESENT VALUE	
					Without over-head charges	With overhead Charges	Without over-head charges	With overhead Charges
					Annual Deprec.	Total Deprec.		
Riveted Steel								
4" diameter	\$1476.		14	17	\$87.	\$1218.	\$258.	\$518.
4"	677.		6	14	48.	290.	387.	477.
6"	492.		6	14	35.	211.	281.	346.
8"	2618.		6	14	187.	1112.	1506.	1855.
20"	1450.	\$6713.	10	16	91.	906.	544.	670.
Screw Casing								
3"	1393.		14	16	87.	1219.	174.	214.
4"	878.		19	24	37.	695.	183.	225.
6"	130.		4	20	7.	26.	104.	128.
8"	174.		4	20	9.	35.	139.	171.
10"	305.		4	25	12.	49.	256.	315.
11"	356.		4	25	14.	57.	299.	368.
12"	1100.	\$4836.	4	25	44.	176.	924.	1138.
Total		\$ 11049.			\$ 658.	\$5994.	\$6055.	\$6225.

CUYAMACA WATER COMPANY
PHYSICAL DEPRECIATION & PRESENT VALUE IN DETAIL.

Item	Sub Total	Total	PHYSICAL DEPRECIATION WITHOUT OVERHEAD CHARGES			PRESENT VALUE	
			Age Yrs.	Prob. Life	Annual Deprec.	Total Deprec.	Without overhead charges
Brot. Ford.		\$11049.			\$658.	\$5994.	\$6225.
Standard Screw							
1 1/2 inch	67.		3	20	3.	10.	70.
2	328.		3	20	16.	49.	344.
2	487.		6	20	24.	146.	420.
2	292.		5	6	49.	243.	60.
2	328.	1502.	26	30	12.	284.	54.
Wood Stave							
8 inch	210.		17	20	11.	179.	38.
8	3770.		15	16	236.	3064.	870.
24	10000.	13980.	18	25	400.	7200.	3450.
		\$ 26531.				\$ 17169.	\$11551.
						2800.	
							\$5055.

Pipe Distribution System --- Cont'd.
(Including specials & valves)

**QUYAMACA WATER COMPANY
PHYSICAL DEPRECIATION AND PRESENT VALUE**

COST TO REPRODUCE AND PHYSICAL DEPRECIATION.

Item	Age Yrs.	Prob. Life Yrs.	Annual Deprec. Deprec.	Total Deprec.	PRESENT VALUE	
					Without over- head charges	With overhead charges
Real Estate & Rights of way	\$148,342.		none	none	\$148,342.	+\$166,143.
<u>Buildings & Improvements</u>						
Quyamaco Reservoir	4,096.	26	36	113.	2,958.	1,138. ✓
La Mesa Reservoir	763.	20	36	21.	424.	339. 418.
Frame Dwelling end of flume	865.	12	35	25.	297.	568. 700. ✓
" " " "	250.	17	30	8.	142.	108. 153. ✓
Store supply	720.	22	30	24.	528.	192. 237. ✓
Fence	65.	26	36	2.	47.	18. 22. ✓
Heraltz	100.	4	30	3.	13.	87. 107.
Frame Dwelling, etc., Chocolate	550.	26	30	18.	477.	73. 90. ✓
Fence	65.	26	36	2.	47.	18. 22. ✓
Los Cochon Trestle	356.	12	15	24.	285.	71. 87. ✓
Fwd.	\$156,172.		240.	240.	5,218.	150,954. \$169,361.

**CUYAMACA WATER COMPANY
PHYSICAL DEPRECIATION AND PRESENT VALUE**

COST TO REPRODUCE AND PHYSICAL DEPRECIATION.

Item	Cost to Reproduce	Age Yrs.	Prob. Life Yrs.	Annual Deprec.	Total Deprec.	PRESENT VALUE	
						Without overhead charges	With overhead charges
Brot Fwd	\$156,172.			240.	6,218.	150,954.	169,361.
Los Cochos	430.	12	15	29.	344.	86.	106.
Section No 5	208.	2	36	6.	12.	196.	241.
Diverting Dam adobe house	1,848.	26	48	38.	1,001.	847.	1,044.
" " barn, etc.	181.	26	30	6.	156.	25.	51.
Stand Pipe	109.	14	30	4.	51.	58.	71.
Murray Hill	17.	3	30	1.	2.	15.	18.
South Fork	77.	3	5	15.	46.	51.	58.
CUYAMACA DAM	30,857.	27	100	309.	8,381.	22,526.	27,752.
DIVERTING DAM	<u>27,647.</u>	27	100	<u>276.</u>	<u>7,465.</u>	<u>20,182.</u>	<u>24,864.</u>
Fwd.	217,546.			924.	22,626.	194,920.	223,526.

CUYAMACA WATER COMPANY
PHYSICAL DEPRECIATION AND PRESENT VALUE

COST TO REPRODUCE AND PHYSICAL DEPRECIATION.

Item	Cost to Reproduce	Age. Yrs	Prob.	Vinc. Life	Annual Deprec.	Total Deprec.	PRESENT VALUE	
							Without over-head charges	With overhead charges
Brot Fwd	\$217,546.				\$ 924.	\$22,626.	\$194,920.	\$223,526.
Flume								
Wood structure	345,972.	26	34		10,176.	264,567.	81,405.	100,291.
Clearing	475.	26	100		5.	124.	351.	432.
Benching	59,445.	26	100		594.	15,456.	43,989.	54,194.
Tunnels	45,823.	26	100		458.	11,914.	33,909.	41,775.
Siphons	<u>10,503.</u>	4	20		<u>525.</u>	<u>2,101.</u>	<u>8,402.</u>	<u>10,351.</u>
Total	\$ 462,218.				11,758.	294,162.	168,056.	207,043.
Eucllyptus Dam	8,863.	22	100		89.	1,950.	6,913.	8,516.
La Mesa Dam	13,185.	19	100		132.	2,505.	10,680.	13,158.
La Mesa Ditch								
La Mesa Ditch	2,650.	20	100		27.	530.	2,120.	2,612.
Siphon	<u>3,110.</u>	20	25		<u>124.</u>	<u>2,488.</u>	<u>622.</u>	<u>766.</u>
Total	5,760.				151.	3,018.	2,742.	3,578.
Murray Hill Dam	<u>40,239.</u>	3	100		<u>402.</u>	<u>1,207.</u>	<u>39,032.</u>	<u>48,087.</u>
Fwd.	\$747,811.				13,456.	325,468.	422,343.	503,708.

CUYAMACA WATER COMPANY
PHYSICAL DEPRECIATION AND PRESENT VALUE

COST TO REPRODUCE AND PHYSICAL DEPRECIATION.

Item	Cost to Reproduce	Age Yrs	Prob. Life Yrs	Annual Deprec.	Total Deprec.	PRESENT VALUE	
						Without overhead charges	With overhead charges
Brought Fwd.	\$ 747,811.			13,456.	325,468.	422,343.	503,708.
PIPE LINES as per details on separate sheet	26,551.			1,409.	17,169.	9,362.	11,551.
Meters	684.						356.
Materials	3,481.						3,389.
Tools, etc	3,985.						3,322.
Telephone	807.	19	34	24.	452.	355.	437.
	\$783,299.			14,889.	343,089.	432,060.	522,743.

+ No contractor's profit; only 12% overhead charges.

CUYAMACA WATER COMPANY

With 10% Contractor's profit & 12% Overhead charge.

Basic Reproduction Basic Deprec. Repr. Cost Annual Deprec. Total Deprec. Present Value

SUMMARY OF REPRODUCTION COST, DEPRECIATION AND PRESENT VALUE.

Real Estate						
Rights of Way	148,342.	none	+166,143.	none	none	+166,143.
Buildings						
Improvements	10,700.	6,830.	13,182.	418.	8,415.	4,767.
Cuyamaca Dam	30,857.	8,331.	38,016.	381.	10,264.	27,752.
Diverting Dam	27,647.	7,465.	34,061.	340.	9,197.	24,864.
Flume	462,218.	294,162.	569,453.	14,486.	362,410.	207,043.
Eucalyptus Dam	8,863.	1,950.	10,919.	110.	2,403.	8,516.
La Mesa Dam	13,185.	2,505.	16,244.	163.	3,086.	13,158.
La Mesa Ditch	5,760.	3,018.	7,096.	186.	3,718.	3,378.
Murray Hill Dam	40,239.	1,207.	49,574.	495.	1,487.	48,087.
Pipe Lines	26,531.	17,169.	32,686.	1,733.	21,155.	11,531.
Meters			684.	14.	328.	356.
Materials on hand			3,481.		92.	3,389.
Tools, etc			3,985.		663.	3,322.
Telephone	<u>807.</u>	<u>452.</u>	<u>994.</u>	<u>30.</u>	<u>557.</u>	<u>437.</u>
	\$775,149.	343,089.	946,518.	18,356.	423,775.	522,743.

+12% overhead charges are added; no contractor's profits.

CUYAMACA WATER COMPANY

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Cost</u>	<u>Sub-Total</u>	<u>Total</u>
<u>REAL ESTATE AND RIGHTS OF WAY</u>					
Rights of Way	229.4	Acres	\$25.	\$5735.	
Cuyamaca Lands	1675	"	76.75	128571.	
La Mesa Reservoir	96.7	"	100.	9670.	
Eucalyptus Reservoir	4.36	"	100.	436.	
Murray Hill Reservoir	26.2	"	150.	<u>3930.</u>	
					\$148,342.

CUYAMACA WATER COMPANY

VALUATION OF PROPERTY CONSTRUCTED

OR ACQUIRED

BETWEEN

JUNE 1st, 1912,

and

JUNE 1st, 1914.

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CUYAMACA WATER COMPANYREPRODUCTION COST

Item	Quantity	Unit	Unit Cost	Sub-total	Total
<u>LANDS & RIGHTS OF WAY PURCHASED BY CUYAMACA WATER CO.</u>					
Site for Chocolate Pumping Plant	160	acres	39.17	\$6268.00	\$6268.00

LANDS & RIGHTS OF WAY DONATED TO CUYAMACA WATER CO.

Site for Webster Reservoir	0.14	acres	1428.57	200.00	
Site for Miles Reser- voir No. 1	$\frac{3}{4}$	"	333.33	1000.00	
Site for Miles Reser- voir No. 2	$\frac{1}{2}$	"	400.00	200.00	
Right of Way for 4" Pipe Line from Webster Reservoir to Chase and San Diego Ave.	$\frac{1}{4}$	"	320.00	80.00	
Right of Way for 4" Pipe Line from Miles Re- servoir No. 1 to Miles Reservoir No. 2	$\frac{1}{4}$	"	320.00	<u>80.00</u>	
					\$1560.00

CUYAMACA WATER COMPANYREPRODUCTION COST

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>SLUICE GATES FOR DIVERTING DAM</u>					
24" x 24" Steel Gate	1	each	197.50	\$198.00	
30" x 30" " "	1	"	269.50	269.00	
36" x 24" " "	2	"	221.00	442.00	
Cartage & Freight	1	lot	12.42	<u>12.00</u>	\$ 921.00
<u>FLUME FOR BY-PASSING WATER</u>					
Lumber	27	MBM	35.00	945.00	945.00
<u>TEMPORARY DIVERTING DAM</u>					
Lumber	6	MBM	35.00	210.00	
Wet Excavation	140	cu.yds.	1.50	210.00	
Back filling and Placing Sand Bags	1	lot	75.00	<u>75.00</u>	495.00
<u>INSTALLING GATES</u>					
Wet Excavation	60	cu.yds.	1.50	90.00	
Labor and material	1	lot	150.00	150.00	<u>240.00</u>
					\$2601.00

CUYAMACA WATER COMPANYREPRODUCTION COST

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>MEASURING STATIONS</u>					
<u>BOULDER CREEK WEIR</u>					
Concrete	1	lot	120.00	\$120.00	
Lumber	1	"	15.00	15.00	
Blasting, excavation & erection	1	"	307.00	<u>307.00</u>	\$ 442.00
<u>MEASURING STATION BELOW DIVERTING DAM</u>					
Concrete in Anchors and piers	1	lot	65.00	65.00	
Cables and Timber frames	1	"	35.00	35.00	
Labor erecting	1	"	103.00	<u>103.00</u>	203.00
<u>OLD MISSION DAM STATION</u>					
Cables	1	lot	26.35	26.00	
Automatic Register Bristol Gage	1	each	57.00	57.00	
Erecting cables and gage	1	lot	100.00	<u>100.00</u>	<u>183.00</u>
					\$ 828.00

OUYAMACA WATER COMPANYREPRODUCTION COST

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>LA MESA PUMPING PLANT</u>					
150 H.P. G.E. Motor, 60 cycle, 178 amperes, 440 volts, speed 1200 R.P.M. including com- pensator, oil switch, etc. Weight 3800 lbs.F.O.B. Los Angeles	1	each	950.00	\$950.00	
7 inch 2 stage Byron- Jackson Pump, Cap'y 1200 G.P.M. at 170 to 220 foot head. Weight 3300 lbs.F.O.B. West Berkeley	1	"	596.00	596.00	
Excavation for Foundation	1	"	5.00	5.00	
Concrete Foundation	7	cu.yds.	11.13	78.00	
Tubes, Bolts, etc.	1	lot	15.00	15.00	
Freight on Machinery	1	"	35.00	35.00	
Haul to plant	1	"	25.00	25.00	
Belt 14" x 55' double leather	1	each	184.00	184.00	
Suction and Discharge lines including valves, specials and fittings	1	lot	101.00	101.00	
Installing, testing and adjusting motor and pump	1	"	75.00	75.00	
Pump House	3000	cu.ft.	0.03	90.00	
General Expense				<u>163.00</u>	

\$2317.00

CUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>CHOCOLATE CANYON PUMPING PLANT</u>					
50 H.P. Fairbanks-Morse Gas Engine, Weight 15200 lbs. F.O.B. Los Angeles	1	each	1650.00	\$1650.00	
4 inch 3 stage Byron-Jack- son Pump, Weight 2150 lbs. F.O.B. West Berkeley	1	"	416.00	416.00	
Belt and Accessories	1	lot	146.00	146.00	
Freight on Engine & Pump	1	"	88.00	88.00	
Haul, 8.7 tons, 12 miles, 45¢ ton mile plus \$15. for handling	1	"	62.00	62.00	
Concrete Pump Pit, Engine Foundation & Belt Way- Excavation, mostly wet, and heavily timbered	150	cu. yds.	1.50	225.00	
Concrete	70	"	13.00	910.00	
Tubes and Bolts	1	lot	15.00	15.00	
Reinforcement	50	cwt.	4.50	225.00	
Lumber	2.6	MBM	50.00	130.00	
Roofing	1	lot	30.00	30.00	
Discharge Pipe-8" O.D. casing	900	lin. ft.	1.36	1224.00	
Suction Pipe-6" Std. Screw	375	"	1.24	465.00	
4" " "	300	"	0.87	261.00	
4" Q.D. Casing	150	"	0.74	111.00	
Valves, Specials & Fitt- ings	1	lot	236.00	<u>236.00</u>	

Carried forward.....\$6194.00

OUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>CHOCOLATE CANYON PUMPING PLANT (Continued)</u>					
Brought forward					\$6194.00
Installing, adjusting & testing engine & pump	1	lot	150.00	\$150.00	
<u>WELL NO.1 - 10" diam.</u> Casing stuck and aband- oned	17	lin.ft.	8.94	152.00	
<u>WELL NO.2 - 10" diam.</u> drilled, cased and perforated	46	"	5.58	257.00	
<u>WELL NO.3 - 24" diam.</u> drilled, cased and perforated	47	"	20.65	973.00	
<u>WELL NO.4 - 24" diam.</u> drilled, cased and perforated	42	"	22.40	<u>940.00</u>	2322.00
<u>SHAFT "A"</u>					
42 inch Concrete Pipe	20	lin.ft.	4.30	86.00	
Haul & Handling Pipe	1	lot	78.00	78.00	
Excavation, wet	50	cu.yds.	5.00	250.00	
Timbering	1	MBM	35.00	35.00	
Pumping out shaft	1	job	100.00	<u>100.00</u>	549.00
<u>SHAFT "B"</u>					
38" Steel Shaft 12 Lin.ft.	650	lbs.	0.06	39.00	
Excavation, wet	30	cu.yds.	5.00	150.00	
Timbering	1	MBM	35.00	35.00	
Pumping out shaft	1	job	100.00	<u>100.00</u>	<u>324.00</u>
Carried forward.....					\$9389.00

CUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>CHOCOLATE CANYON PUMPING PLANT (Continued)</u>					
Brought forward					\$9389.00
<u>TRENCH</u>					
Excavation	750	cu.yds.	1.20	\$900.00	900.00
<u>TIMBER GALLERY</u>					
Excavation	100	cu.yds.	1.20	120.00	
Timbering	4	MBM	35.00	<u>140.00</u>	240.00
General Expense +				788.00	788.00
Pump House, corrugated iron	3840	cu.ft.	0.06½	250.00	<u>250.00</u>
					\$11717.00

CUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>PUMPING PLANT NO. 3 - NEAR SCHOOL HOUSE ON INDIAN RESERVATION.</u>					
15 H.P. Fairbanks-Morse Gas Engine, Weight 4750# F.O.B. Los Angeles	1	each	650.00	\$650.00	
Dean Vertical Triplex Pump, 8"x8", Weight 7600# F.O.B. Los Angeles	1	"	646.00	646.00	
Freight on Engine & Pump	1	lot	62.00	62.00	
Haul- 6.2 tons, 15 miles @ 45¢ ton mile plus \$10. for handling	1	"	52.00	52.00	
Installing, adjusting & testing engine & pump	1	"	40.00	40.00	
Excavation for Foundations	1	"	5.00	5.00	
Concrete Foundations	10	cu. yds.	11.00	110.00	
Preparation of Site, level- ing, clearing, etc.	1	lot	113.00	113.00	
Belts, Pulleys, check valves, specials & fittings- estimated	1	"	150.00	150.00	
Discharge Pipe -6" O.D. Casing	340	lin. ft.	1.02	347.00	
Suction Pipe-4" O.D. Casing	275	"	0.74	204.00	
" " 3" Std. Screw	227	"	0.72	163.00	
5 Wells- 10" Diameter cased and drilled	225	"	4.07	916.00	
Pump House	1900	cu. ft.	0.03	57.00	
General Expense				<u>238.00</u>	<u>\$3753.00</u>

OUYAMAOA WATER COMPANY

REPRODUCTION COST					
Item	Quantity	Unit	UnitCost	Sub-total	Total
<u>PUMPING PLANT NO.4 - BELOW DIVERTING DAM</u>					
7 H.P. Gas Engine, Weight 2550 $\frac{1}{2}$ F.O.B. Los Angeles	1	each	\$410.00	\$410.00	
3 $\frac{1}{2}$ inch Byron-Jackson single stage Pump - Weight 375 $\frac{1}{2}$ F.O.B. West Berkeley	1	"	68.00	68.00	
Freight on Engine & Pump	1	lot	16.00	16.00	
Haul - 1.5 tons, 18 miles, 45¢ ton mile, plus \$5. for handling	1	"	17.00	17.00	
Excavation for foundation	1	"	5.00	5.00	
Concrete Foundation	7	cu.yds.	11.00	77.00	
Tubes & Bolts	1	lot	10.00	10.00	
Shaft 6'x6'x20' deep - heavily timbered - in wet excavation	75	cu.yds.	3.00	225.00	
Belt, Pulleys, Suction and Discharge Pipe, specials, valves & fittings	1	lot	90.00	90.00	
Installing, adjusting and testing pump & engine	1	"	25.00	25.00	
General Expense				<u>62.00</u>	\$1005.00

OUYAMACA WATER COMPANYREPRODUCTION COST.

Item	Quantity	Unit	Unit Cost	Sub-total	Total
<u>SAND CREEK SIPHON</u>					
Excavation & Backfill	2450	cu.yds.	\$ 0.75	\$1838.00	
42" Reinforced Concrete Pipe	1227	lin.ft.	4.29	5267.00	
<u>INLET & OUTLET STRUCTURES</u>					
Concrete	20	cu.yds.	13.50	270.00	
Reinforcement	2.5	cwt.	4.50	11.00	
Timber Screens	2	each	5.00	10.00	
Excavation & Backfill	50	cu.yds.	1.00	<u>50.00</u>	\$7446.00

CONCRETE CONDUIT "A"

Bottom Width 3', depth 4',
side slopes $\frac{1}{2}$ to 1, prob-
able thickness 5", length
1100' -

Excavation	1600	cu.yds.	1.50	\$2400.00	
Concrete	205	"	13.50	2768.00	
Reinforcement wire netting	154	squares	1.00	<u>154.00</u>	\$5322.00

CONCRETE CONDUIT "B"

Concrete Flume - width
3'-8", depth 3'-2", side
walls 3" thick, bottom
3" to 6" thick-Clinton
Mesh Reinforcement, length
250 feet -

Excavation	25	cu.yds.	1.50	43.00	
Concrete	35	"	13.50	473.00	
Reinforcement	60	cwt.	5.00	300.00	
Brace Bars	1.7	"	4.00	<u>7.00</u>	\$823.00

OUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>CONCRETE CONDUIT "C"</u>					
Semi-Circular Concrete Lined Channel- diam. 6' Depth 3'-6", Reinforce- ment wire mesh. "Cement Gun" process. Length 212 feet -					
Excavation	145	cu.yds.	1.50	\$218.00	
Cement Lining & Re- inforcement- Contract work	212	lin.ft.	2.20	466.00	\$684.00

OUYAMAGA WATER COMPANY

REPRODUCTION COST.					
Item	Quantity	Unit	Unit Cost	Sub-total	Total
<u>STEEL FLUMES</u>					
Excavation, actual cost	1	lot	\$1467.00	\$1467.00	
Concrete Piers	105	cu.yds.	13.50	1418.00	
Lumber, second hand	91	MBM	35.00	3225.00	
Steel Flume - 5'-8 3/4" diam.F.O.B.Lakeside	2530	lin.ft.	2.00	5060.00	
Steel Flume - 3'-2 1/2' diam.F.O.B. Lakeside	2500	"	.95	2375.00	
Hauling and distribut- ing flume	1	lot	356.00	356.00	
Erection of steel flume 5'-8 3/4" diam.	2530	lin.ft.	.50	1265.00	
Erection of Steel flume 3'-2 1/2" diam.	2500	"	.30	750.00	
Steel Angles & Stiffen- ers for flume posts	1	lot	487.00	487.00	
Road Construction	1	"	230.00	<u>230.00</u>	
					\$16,663.00

OUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>LINING WOOD FLUMES</u>					
<u>PREPARING FLUME FOR LINING</u>					
Mopping with asphalt	133855	square	\$.027	\$ 361.00	
Nails & Felt	13355	"	.027	361.00	
Freight on material	13355	"	.108	1442.00	
Labor mopping, applying felt, etc.	13355	"	.416	5556.00	
Miscellaneous	13355	"	<u>.028</u>	<u>374.00</u>	
			.606		\$8084.00
<u>LINING FLUME</u>					
Flume 6' wide, 1' to 4' high- Length 163,862'					
2-ply Roofing Material in place	12132	square	2.52	30656.00	
Felt, asphalt and 1-ply Roofing material in place	<u>1223</u>	"	<u>3.95</u>	<u>4831.00</u>	<u>35487.00</u>
	13179		2.66		\$43571.00
<u>RAISING SIDE BOARDS ON FLUMES</u>					
Sides of flumes were raised 12" to 14" by placing additional boards -					
Lumber, Second-hand	83.3	MBM	\$35.00	\$2916.00	\$2916.00

CUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>STRENGTHENING FLUME STRUCTURES</u>					
Extra Trestle Bents, Posts & Sills - Lumber- Second Hand	69	MBM	35.00	\$2415.00	\$2415.00

MEASURING BOXES

Measuring Boxes	49	each	18.50	907.00	907.00
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CUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>TUNNELS</u>					
<u>LANKERSHIM TUNNEL LINING</u>					
400 lin. ft. of roof, lined with concrete slabs and back filled with lean concrete - Forms for making slabs	1	set	\$ 84.00	\$84.00	
Cement	45	bbls.	2.50	113.00	
Sand	13	cu.yds.	1.00	13.00	
Broken Stone	26	"	4.00	104.00	
Labor making slabs	1	lot	129.00	129.00	
Hauling Slabs and back- fill material to tunnel	1	"	165.00	165.00	
Labor placing slabs in tunnel & backfilling	1	"	516.00	<u>516.00</u>	
					\$1124.00

EXCAVATION AT PORTALS OF TUNNEL #1½

Excavation as per payrolls	1	job	\$1080.00	\$1080.00	\$1080.00
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CUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>TELEPHONE LINE</u>					
<u>42 Miles Telephone Line</u>					
<u>2 Wires -</u>					
1890 poles @ 14 F.B.M. each	2.65	MBM	\$30.00	\$795.00	
Digging holes, placing poles, backfilling & tamping	1890	each	0.40	756.00	
Brackets	3.78	M	17.75	67.00	
Insulators	3.78	M	22.00	83.00	
No. 14 Wire	84	owt.	5.20	437.00	
Freight to Lakeside	1	lot	54.00	54.00	
Haul and distribution	1	"	66.00	66.00	
Stringing wire	42	miles	7.50	<u>630.00</u>	
					\$2888.00

CUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>PIPE LINES CONSTRUCTED BY CUYAMACA WATER CO.</u>					
1" Standard Screw Pipe	1262	lin.ft.	0.1944	\$ 245.00	
2" " " "	11606	"	0.2649	3074.00	
3" " " "	5070	"	0.3840	1947.00	
Valves, Specials & Fittings 5%				<u>263.00</u>	\$5529.00
4" Cast Iron Pipe	24	lin.ft.	0.7046	17.00	
Valves, Specials & Fittings, 5%				<u>1.00</u>	18.00
10" and 12" Cast Iron Pipe, mostly valves, fittings and specials	51	lin.ft.	9.00	<u>459.00</u>	459.00
14" Riveted Steel Pipe 14 gage Spirally wrapped with Malthodd Roofing material, including valves, specials and fittings	15920	lin.ft.	1.217	19378.00	
16" - ditto -	24760	"	1.555	<u>38511.00</u>	<u>57889.00</u>
					\$63895.00

CUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
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PIPE LINES DONATED TO CUYAMACA WATER CO.

3/4" Standard Screw Pipe	10809	lin.ft.	0.1836	\$1984.00	
1" " " "	8636	"	0.1944	1680.00	
1 1/2" " " "	1935	"	0.2334	452.00	
2" " " "	69531	"	0.2649	18418.00	
3" " " "	4972	"	0.3840	1909.00	
4" " " "	4516	"	0.5197	2347.00	
3" O.D. Casing Pipe	300	"	0.3498	105.00	
Valves, Specials and fittings, 5%				<u>1345.00</u>	
					\$28240.00
4" Cast Iron Pipe	1657	lin.ft.	0.7046	1168.00	
6" " " "	7422	"	0.9649	7151.00	
Valves, Specials and fittings, 5%				<u>416.00</u>	
					<u>8745.00</u>
					\$36985.00

CUYAMACA WATER COMPANYREPRODUCTION COST.

Items	Quantity	Unit	Unit Cost	Sub-total	Total
<u>METERS AND SERVICES DONATED TO CUYAMACA WATER CO.</u>					
3/4" Connections and 5/8" Meter	242	each	\$ 16.00	\$3872.00	\$3872.00

METERS AND SERVICES INSTALLED BY CUYAMACA WATER CO.

3/4" Connection & 1/2" Meter	7	each	\$ 15.00	\$ 105.00	
3/4" " & 5/8" " * 405*		"	16.00	6480.00	
3/4" " & 3/4" "	18	"	20.00	360.00	
1" " & 1" "	97	"	26.00	2522.00	
1 1/2" " & 1 1/2" Disc Meter	29	"	47.00	1363.00	
1 1/2" " & 1 1/2" Crest "	3	"	42.00	126.00	
2" " & 2" Disc "	9	"	68.00	612.00	
2" " & 2" Crest "	2	"	53.00	106.00	
3" " & 3" " "	4	"	98.00	392.00	
4" " & 4" " "	4	"	188.00	752.00	
6" Compound Meter	1	"	501.00	501.00	
10" Crest	1	"	751.00	751.00	
				<u>751.00</u>	\$14070.00
Deduct Meters shown on R.R. Commission's Val- uation of June 1, 1912					<u>556.00</u>
					<u>\$13514.00</u>

* 50 of these meters not yet entirely installed
but work of placing is now in progress. *

CUYAMACA WATER COMPANYREPRODUCTION COST.

Items	Quantity	Unit	Unit Cost	Sub-total	Total
<u>WEBSTER RESERVOIR - DONATED TO CUYAMACA WATER CO.</u>					
Embankment	300	cu.yds.	\$ 0.50	\$ 150.00	
4 inch Gate Valve in place	1	each	8.00	<u>8.00</u>	\$ 158.00

MILES RESERVOIR NO. 1 - DONATED TO CUYAMACA WATER CO.

Embankment	4190	cu.yds.	\$ 0.45	\$1885.00	
Riprap	2500	sq.ft.	0.11	275.00	
6" Std. Screw Pipe	175	lin.ft.	0.785	137.00	
6" Gate Valve in place	1	each	12.00	12.00	
Inlet Flume	1	"	30.00	30.00	
Earth Ditch	1	"	50.00	<u>50.00</u>	\$2389.00

MILES RESERVOIR NO. 2 - DONATED TO CUYAMACA WATER CO.

Embankment	1700	cu.yds.	0.45	765.00	
Riprap	7500	sq.ft.	0.11	825.00	
6" Std. Screw Pipe	70	lin.ft.	0.785	55.00	
6" Gate Valve in place	1	each	12.00	<u>12.00</u>	\$ 1657.00

CUYAMACA WATER COMPANYREPRODUCTION COST.

<u>Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Sub-total</u>	<u>Total</u>
<u>PUMPING PLANT NO. 5 - DONATED TO CUYAMACA WATER CO.</u>					
15 H.P. Otto Gas Engine	1	each	\$650.00	\$ 650.00	
7" x 8" Gould Triplex Pump	1	"	400.00	400.00	
Freight on Engine & Pump	1	lot	48.00	48.00	
Haul " " " "	1	"	26.00	26.00	
Connections & Foundations	1	"	100.00	100.00	
Pump House Frame	3400	cu.ft.	0.03	<u>102.00</u>	\$1326.00

OUYAMACA WATER COMPANYREPRODUCTION COST.

Items	Quantity	Unit	Unit Cost	Sub-total	Total
<u>TOOLS, MATERIALS, ETC., ON HAND</u>					
Materials as per Inventory	1	lot	\$4289.00	\$4289.00	
Supplies " " "	1	"	273.00	273.00	
Tools & Equipment "	1	"	2500.00	2500.00	
Construction Plant	1	"	726.00	726.00	
Camp Equipment	1	"	1017.00	1017.00	
Office Equipment, furniture & Supplies	1	"	2784.00	<u>2784.00</u>	
					\$11589.00
Deduct Tools and Materials shown on R.R. Commission's Valuation of 1912					<u>6711.00</u>
					\$ 4878.00

EXPENDITURES FOR INVESTIGATIONS OF RESERVOIR SITES ETC. AS SHOWN BY COMPANY'S BOOKS TO MAY 1st, 1914.

El Capitan Reservoir	\$3002.00
Conejos	1212.00
Poverty Gulch	1687.00
Boulder Creek Reservoir & Canal Line to Tule Reservoir	<u>2141.00</u>
TOTAL - - - - -	-\$ 8042.00

VALUATION AND DEPRECIATION DETAIL SHEET
(Without overhead.)

Item	REPRODUCTION COST		DEPRECIATION			PRESENT VALUE
	Quantity	Unit	Cost	Age Yrs. Yrs. Life	% Y Annual Amt	
Site for Chocolate Pump Plant	160	acres	\$6268.			\$6268.
Site for Webster Reservoir	0.14	"	200.			200.
" " Miles " No 1	3	"	1000.			1000.
" " " " No 2	1/2	"	200.			200.
Right of way for pipe line from Webster Reservoir	1/2	"	80.			80.
Right of way for pipe line between Miles Reservoirs	1/2	"	80.			80.
			<u>\$ 7828.</u>			<u>\$ 7828.</u>

SLUICE GATES FOR DIVERTING DAM.

24" x 24" Steel Gates	1	each	\$ 198.	2	50	2	\$4.	\$8.
30" x 30" " "	1	"	269.	2	50	2	5.	11.
36" x 24" " "	2	"	442.	2	50	2	9.	18.
Cartage & freight			12.	2	50	2	0	--
Installing gates including temporary flume and dam for bypassing water	1	lot	<u>1680.</u>	2	50	2	<u>34.</u>	<u>67.</u>
			\$ 2601.				\$ 52.	\$ 104.
								\$ 2497.

VALUATION AND DEPRECIATION DETAIL SHEET.
(Without overhead.)

REPRODUCTION COST

DEPRECIATION

PRESENT VALUE

Item	Quantity	Unit	Cost	Age Yrs.	Life Yrs.	Annual		Total	Present Value
						%	Amt		

BOULDER CREEK MEASURING WKIR.

Concrete	1	lot	\$120.	2	100		\$1.	\$2.	\$118.
Lumber	1	"	15.	2	25		1.	1.	14.
Blasting, Excavation, etc	1	"	307.	2	100		3.	6.	301.
			\$442.				\$5.	\$9.	\$455.

MEASURING STATION BELOW DIVERTING DAM.

Concrete	1	lot	\$ 65.	2	100		\$1.	\$1.	\$ 64.
Cables & Timber frames	1	"	35.	2	25		1.	3.	32.
Labor erecting	1	"	103.	2	25		4.	8.	95.
			\$203.				\$6.	\$12.	\$191.

MEASURING STATION AT OLD MISSION DAM

Cables	1	lot	\$26.	2	25		\$1.	\$2.	\$24.
Bristol gage	1	each	57.	2	20		3.	6.	51.
Erecting	1	lot	100.	2	25		4.	8.	92.
			\$183.				\$8.	\$16.	\$167.

VALUATION AND DEPRECIATION DETAIL SHEET
(Without overhead.)

REPRODUCTION COST		DEPRECIATION			PRESENT VALUE			
Item	Quantity	Unit	Cost	Age Yrs.	Life Yrs.	% Annual Amt	Total	Present Value
<u>LA MESA PUMPING PLANT</u>								
150 horse power G E Motor	1	each	\$950.	3	20	5	\$143.	\$807.
7" 2 stage B J Pump	1	"	596.	0	20	5	---	596.
Foundation	1	"	98.	0	20	5	---	98.
Fredght	1	lot	35.	2	20	5	4.	31.
Haul	1	"	35.	2	20	5	1.	22.
Belt	1	each	184.	1	20	5	9.	175.
Suction & discharge pipes	1	lot	101.	1	20	5	5.	96.
Installation	1	"	75.	0	20	5	---	75.
Pump House	1	each	90.	0	33-1/3	3	---	90.
General expense	1	lot	163.	1	20	5	8.	155.
			<u>\$2517.</u>				<u>\$115.</u>	<u>\$172.</u>
								<u>\$2145.</u>

CUYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET
 (Without overhead.)

REPRODUCTION COST	DEPRECIATION				PRESENT VALUE					
	Items	Quantity	Unit	Cost	Age Yrs	Life Yrs	% Annual	Amt	Total.	Present Value
<u>CHOCOLATE CANYON PUMPING PLANT</u>										
50 horse power gas engine	1	each	\$1650.	1	20	5		\$83.	\$83.	\$1567.
4" 3 stage B J pump	1	"	416.	1	20	5		21.	21.	395.
Belt and accessories	1	lot	146.	1	20	5		7.	7.	139.
Freight and haul	1	"	150.	1	20	5		8.	8.	142.
Concrete pump pit	1	each	1375.	1	100	1		14.	14.	1361.
Roof of pump pit	1	"	160.	1	33-1/3	3		5.	5.	155.
Suction and discharge pipe	1	lot	2061.	1	20	5		103.	103.	1958.
Valves, specials & fittings	1	"	236.	1	20	5		12.	12.	224.
Installing, adjusting and testing engine and pump	1	"	150.	1	20	5		7.	7.	143.
Fwd. - - - - -			--\$6344.					\$260.	\$260.	\$6084.

CUYAHOGA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET
 (Without overhead)

Item	Quantity	Unit	Cost	Age Yrs	Life Yrs	%	DEPRECIATION		Total Present Value	PRESENT VALUE
							Annual Amt	Amt		
CHOCOLATE CANYON PUMPING PLANT-- Cont'd.										
			\$6344.				\$260.	\$260.		\$6084.
Wells	1	lot	2322.	1	25	4	93.	93.		2229.
Shaft "A"	1	each	549.	1	25	4	22.	22.		527.
Shaft "B"	1	"	324.	1	25	4	13.	13.		311.
Trench	1	"	900.	1	25	4	36.	36.		864.
Timber Gallery	1	"	240.	1	25	4	10.	10.		230.
General expense	1	lot	788.	1	25	4	32.	32.		756.
Pump House	1	each	<u>250.</u>	1	33-1/3	3	<u>8.</u>	<u>8.</u>		<u>242.</u>
			\$11717.				\$ 474.	\$ 474.		\$11243.

Brot Fwd

CUYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET
 (Without overhead.)

Item	Quantity	Unit	Cost	Age Yrs	Life Yrs	DEPRECIATION		Total Present Value	PRESENT VALUE
						%	Annual Amt		
PUMPING PLANT NO. 3 - NEAR SCHOOL HOUSE ON INDIAN RESERVATION.									
15 H P Gas engine	1	each	\$650.	2	20	5	\$33.	\$65.	\$585.
8" x 8" Dean triplex pump	1	"	646.	1	20	5	32.	32.	614.
Freight and haul	1	lot	114.	1	20	5	6.	6.	108.
Installing, testing and adjusting engine and pump	1	"	40.	1	20	5	2.	2.	38.
Foundations	1	each	115.	1	20	5	6.	6.	109.
Preparation of site, etc	1	"	113.	1	25	4	5.	5.	108.
Belts, pulleys, valves, etc	1	lot	150.	1	20	5	7.1	7.	143.
Suction and discharge pipes	1	"	714.	1	20	5	35.	35.	679.
Wells	1	"	916.	1	25	4	37.	37.	879.
Pump House	1	each	57.	1	33-1/3	3	2.	2.	55.
General expense	1	lot	<u>238.</u>	1	25	4	<u>11.</u>	<u>11.</u>	<u>227.</u>
			\$3753.				\$176.	\$208.	\$3545.

UYAMA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET
 (Without overhead)

Item	Quantity	Unit	REPRODUCTION COST			DEPRECIATION			PRESENT VALUE	
			Cost	Age Yrs	Life Yrs	% Annual	Am't	Total	Present Value	
PUMPING PLANT NO. 4 BELOW DIVERTING DAM										
7 H P Gas Engine	1	each	\$410.	5	20	5	\$21.	\$103.	\$307.	
3 1/2" Single stage B J Pump	1	"	68.	1	20	5	3.	63.	65.	
Freight and Haul	1	lot	33.	3	20	5	2.	5.	28.	
Foundation	1	"	92.	1	20	5	5.	5.	87.	
Shaft	1	each	225.	1	20	5	11.	11.	214.	
Belt, Pulleys, suction and discharge pipes, etc.	1	lot	90.	1	20	5	4.	4.	86.	
Installing, testing and adjusting engine and pump	1	"	25.	1	20	5	1.	1.	24.	
General Expense	1	"	62.	1	20	5	3.	3.	59.	
			\$ 1005.				\$ 40.	\$ 135.	\$ 870.	

CUYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET.
 (Without overhead.)

Item	REPRODUCTION COST		DEPRECIATION			Total Present Value	
	Quantity	Unit	Cost	Age Yrs	Life Yrs		Annual Amt
SAND CREEK SIPHON							
Excavation and backfill	2450	cu yd	\$1838.	1	100	\$18.	\$1820.
42R reinforced concrete pipe installed	1227	lin.ft.	5267.	1	100	53.	5214.
Inlet and Outlet structures	2	each	341.	1	100	3.	338.
			\$ 7446.			\$ 74.	\$ 7372.

CONCRETE CONDUITS

EXCAVATION			\$2661.	1	100	\$27.	\$2634.
Reinforced concrete			4168.	1	100	42.	4126.
			\$6829.			\$69.	\$6760.

VALUATION AND DEPRECIATION DETAIL SHEET
(Without overhead)

Item	REPRODUCTION COST			DEPRECIATION		PRESENT VALUE
	Quantity	Unit	Cost	% Annual	Total Present Value	
STEEL FLUMES						
Excavation	1	lot	\$1467.	1	100	\$15.
Concrete piers	1	"	1418.	1	100	14.
Lumber - 2nd hand	91	MBM	3285.	1	20	161.
Steel flume erected	1	lot	9806.	1	33-1/3	294.
Angles & stiffeners	1	"	487.	1	20	24.
Road construction	1	each	230.	1	100	2.
			<u>\$15688.</u>			<u>\$610.</u>
						<u>228.</u>
						<u>\$16123.</u>
LINING WOOD FLUMES						
Preparing flumes for lining	13,355	squares	\$8084.	0	8	124
2 ply roofing material in place	12,132	"	30656.	0	8	124
Felt, asphalt and 1 ply roofing material in place	1,223	"	<u>4831.</u>	0	8	<u>604.</u>
			<u>\$43571.</u>			<u>\$5447.</u>
						<u>\$8084.</u>
						<u>30656.</u>
						<u>4831.</u>
						<u>\$43571.</u>

CUYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET
 (Without overhead)

Item	Quantity	Unit	Cost	Age Yrs	Life Yrs	DEPRECIATION		Total	Present Value
						%	Annual Amt		

RAISING SIDE BOARDS OF FLUMES

Lumber 2nd hand	83.8	MBM	\$2916.	1	9	11	\$324.	\$324.	\$2592.
-----------------	------	-----	---------	---	---	----	--------	--------	---------

STRENGTHENING FLUME STRUCTURES

Lumber 2nd hand	69	MBM	\$2415.	1	9	11	\$268.	\$268.	\$2147.
-----------------	----	-----	---------	---	---	----	--------	--------	---------

LANKERSHIM TUNNEL LINING

Concrete roof slabs and backfilling in place	1	lot	\$1124.	1	100	1	\$11.	\$11.	\$1113.
---	---	-----	---------	---	-----	---	-------	-------	---------

EXCAVATION AT PORTALS OF TUNNEL NO. 14

Excavation	1	lot	\$1080.	1	100	1	\$11.	\$11.	\$1069.
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VALUATION AND DEPRECIATION DETAIL SHEET
(Without overhead)

REPRODUCTION COST

DEPRECIATION

N PRESENT VALUE

Item	Quantity	Unit	Cost	Age Yrs	Life Yrs	%	Annual Amt	Total	Present Value
<u>MEASURING BOXES</u>									
Measuring boxes	42	each	\$777.	23	26	4	\$30.	\$688.	\$89.
"	7	"	<u>150.</u>	0	26	4	<u>5.</u>	<u>---</u>	<u>130.</u>
			\$907.				\$35.	\$688.	\$219.

TELEPHONE LINE

Poles in place	2.65	MBM	\$1551.	1	33-1/3	3	\$46.	\$46.	\$1505.
Brackets and insulators	3.78	M	150.	1	33-1/3	3	5.	5.	145.
Wire in place	84	OWT	1067.	1	33-1/3	3	32.	32.	1035.
Freight and haul	1	lot	<u>120.</u>	1	33-1/3	3	<u>4.</u>	<u>4.</u>	<u>116.</u>
			\$2888/				\$87.	\$87.	\$2801.

**UYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET
(Without overhead.)**

Item	REPRODUCTION COST		DEPRECIATION			Total	PRESENT VALUE
	Quantity	Unit Cost	Age Yrs	Life Yrs	% Annual Amt		

PIPE LINES CONSTRUCTED BY UYAMACA WATER COMPANY

Standard Screw Pipe

1 inch	160	11n.ft.	\$51.	14	20	5	\$2.	\$22.	\$ 9.
	225		44.	6	20	5	2.	13.	51.
	877		170.	0	20	5	9.	--	170.
2 inch	2745		727.	10	20	5	56.	363.	364.
	8861		2347.	0	20	5	117.	--	2347.
3 inch	1056		406.	10	20	5	20.	203.	203.
	4014		1541.	0	20	5	97.	--	1541.
Valves, specials & fittings 5%			263.	6	20	5	14.	85.	178.
4 in. Cast Iron pipe	24		17.	0	75	1-1/3	--	--	17.
Valves, specials & fittings 5%			1.	0	75	1-1/3	--	--	1.
Fwd.							\$297.	\$586.	\$4861.

**CUYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET
(Without Overhead.)**

Item	REPRODUCTION COST		DEPRECIATION			Total	Present Value
	Quantity	Unit	Cost	AGE YRS	Like YRS		

PIPE LINES CONSTRUCTED BY CUYAMACA WATER COMPANY - Cont'd.							
			\$5547.			\$297.	\$4861.
Brt Fwd							
10" and 12" Cast Iron Pipe mostly Valves, Specials, and fittings	51	11n. ft.	459.	0	75	1-1/3	459.
14" Riveted Steel Pipe 14 gage. Spirally wrapped with Malthoid roofing material, including Valves, specials and fittings	15920	11n. ft.	19378.	0	33-1/3	3	581.
16" (Same as 14")	24760		<u>38511</u>	0	33-1/3	3	<u>1155.</u>
			\$ 63895.			\$2039.	\$686.
							<u>38511.</u>
							\$63209.

**CUYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET
(Without overhead.)**

Item	Quantity	Unit	Cost	Age		Life Yrs	%	DEPRECIATION		Total	Present Value
				Yrs	Yrs			Annual	Amt		
Brot Pwd			\$3664.					\$181.	\$885.	\$2779.	
Standard Screw											
1-1/2 inch	1186	1 1/2 in. ft.	277.	10	20	5		14.	139.	138.	
	750		175.	5	20	5		9.	44.	131.	
	186		49.	15	20	5		2.	37.	12.	
	440		117.	14	20	5		6.	83.	34.	
	1220		323.	13	20	5		16.	210.	113.	
	13352		3537.	11	20	5		177.	1945.	1592.	
	7160	1 1/2	1897.	10	20	5		95.	949.	948.	
	376		100.	8	20	5		5.	40.	60.	
	823		218.	7	20	5		11.	76.	142.	
	3403		901.	6	20	5		45.	270.	631.	
	13693		3627.	5	20	5		181.	907.	2720.	
	3036		804.	4	20	5		40.	161.	643.	
	5195		1376.	3	20	5		69.	206.	1170.	
	14811		3923.	1	20	5		196.	196.	3727.	
	5836		1546.	0	20	5		78.	---	1546.	
	Pwd		\$22534.					\$1125.	\$6148.	\$16386.	

VALUATION AND DEPRECIATION DETAIL SHEET.
(Without Overhead.)

Item	REPRODUCTION COST			DEPRECIATION			PRESENT VALUE	
	Quantity	Unit Cost	Age Yrs	Life Yrs	% Annual	Amt Cont'd.	Total	Present Value
PIPE LINES DONATED TO OUYAMAQA WATER COMPANY								
		\$22534.				\$1125.	\$6148.	\$16386.
Standard Screw								
3 inch	2260	11n.ft.	2	20	5	43.	87.	781.
	2712		1	20	5	52.	52.	989.
4 inch	670		14	20	5	17.	244.	104.
	1000		4	20	5	26.	104.	416.
	1226		2	20	5	32.	64.	573.
	970		1	20	5	25.	25.	479.
	650		0	20	5	17.	---	338.
3" O.D. Casing pipe	300		13	20	5	5.	68.	37.
Specials & fittings for all the above listed pipe	1	lot	6	20	5	67.	404.	941.
		\$28240.				\$1409.	\$7196.	\$21044.

GUYAMACA WATER COMPANY

VALUATION AND DEPRECIATION DETAIL SHEET

(Without overhead.)

Item	REPRODUCTION COST			DEPRECIATION			PRESENT VALUE	
	Quantity	Unit	Cost	Age Yrs.	Life Yrs.	% Annual Amt	Total	Present Value

METERS AND SERVICES INSTALLED BY GUYAMACA WATER COMPANY - - Cont'd.

			\$5689.				\$287.	\$274.	\$5415.
	Brot Fwd								
3/4"	connection & 5/8" meter	13	each	2	20	5	10.	21.	187.
3/4"	" & 5/8"	10	"	4	20	5	8.	32.	128.
3/4"	" & 5/8"	33	"	8	20	5	26.	211.	317.
3/4"	" & 3/4"	1	"	1	20	5	1.	1.	19.
3/4"	" & 3/4"	17	"	8	20	5	17.	126.	214.
1"	" & 1"	1	"	1	20	5	1.	1.	25.
1"	" & 1"	96	"	8	20	5	125.	998.	1498.
1 1/2"	" & 1 1/2" disc meter	29	"	8	20	5	68.	545.	818.
1 1/2"	" & 1 1/2" Crest	3	"	8	20	5	6.	50.	76.
2"	" & 2" Disc	9	"	8	20	5	31.	255.	357.
2"	" & 2" Crest	2	"	8	20	5	5.	42.	64.
	Fwd. -----		\$11674.				\$585.	\$2556.	\$9118.

**UYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET
(Without Overhead)**

REPRODUCTION COST		DEPRECIATION			PRESENT VALUE			
Item	Quantity	Unit	Cost	Age: YRS.	Life: YRS.	% Annual Amt	Total	Present Value
METERS AND SERVICES INSTALLED BY UYAMACA WATER COMPANY - Cont'd.								
Brot Fwd			\$ 11674.				\$2556.	\$9118.
3" connection & 3" Crest meter	4	each	592.	8	20	5	157.	235.
4" " & 4" " "	4	"	752.	8	20	5	301.	451.
6" Compound meter	1	"	501.	0	20	5	---	501.
10" Crest "	1	"	751.	0	20	5	---	751.
			\$14070.				\$3014.	\$11056.
			556.				11.	512.
			\$13514.				\$2770.	\$10744.

Deduct meters shown on R.R.Com. 's valuation of 1912

WEBSTER RESERVOIR - DONATED TO UYAMACA WATER COMPANY

Embarkment	300	cu yd	\$150.	2	100	1	\$4.	\$146.
4 inch gate valve	1	each	8.	2	75	1-1/8	---	8.
			\$ 158.				\$ 2.	\$ 154.

**CUYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET**

Item	Quantity	Unit	Cost	Age Yrs.	Life Yrs.	DEPRECIATION		Total	Present Value
						% Annual	Amt.		

MILES RESERVOIR NO 1 - DONATED TO CUYAMACA WATER COMPANY

Embankment	4190	cu yd	\$1885.	14	100	1	\$19.	\$264.	\$1621.
Riprap	2500	sq ft	275.	14	100	1	3.	39.	236.
6" Standard Screw pipe	175	11n ft	137.	14	20	5	7.	96.	41.
6" Gate valve	1	each	12.	14	75	1	-	2.	10.
Inlet Flue	1	"	30.	14	25	4	1.	17.	13.
Earth Ditch	1	"	50.	14	50	2	1.	14.	36.
			\$2389.				\$51.	\$432.	\$1957.

MILES RESERVOIR NO 2 - DONATED TO CUYAMACA WATER COMPANY

Embankment	1700	cu yd	\$765.	14	100	1	\$3.	\$107.	\$658.
Riprap	7500	sq ft	825.	14	100	1	8.	116.	709.
6" Standard screw pipe	70	11n ft	55.	14	20	5	3.	39.	16.
6" Gate valve	1	each	12.	14	75	1-1/3	-	2.	10.
			\$1657.				\$ 19.	\$264.	\$1393.

**CUYAMACA WATER COMPANY
VALUATION AND DEPRECIATION DETAIL SHEET**

Item	Quantity	Unit	Cost	Age Yrs.	Life Yrs.	DEPRECIATION		Total	Present Value
						% Annual	Am't.		

PUMPING PLANT NO. 5 - DONATED TO CUYAMACA WATER COMPANY

15 H P Gas Engine	1	each	\$ 650.	14	20	5	\$33.	\$455.	\$195.
7" x 8" Gould Triplex pump	1	"	400.	10	20	5	20.	200.	200.
Freight and haul	1	lot	74.	13	20	5	4.	48.	26.
Connections & foundations	1	"	100.	18	20	5	5.	65.	35.
Pump house frame	3400	sq ft	<u>102.</u>	10	33-1/3	3	<u>3.</u>	<u>51.</u>	<u>71.</u>
			\$1326.				\$ 65.	\$799.	\$527.

SUMMARY

With 21% overhead.

	Reprod. Cost	Annual Deprec.	Total Deprec.	Present Value	Reprod. Cost	Annual Deprec.	Total Deprec.	Present Value
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PROPERTIES PURCHASED OR CONSTRUCTED BY THE COMPANY

Lands & rights of way	\$6,268.	-----	-----	\$6,268.	\$7,584.	-----	-----	\$7,584.
Sluice Gates for Diverting Dam	2,601.	52.	104.	2,497	3,147.	63.	126.	3,021.
Boulder Creek Measuring Weir	442.	5.	9.	433.	535.	6.	11.	524.
Measuring Station below Diverting Dam	203.	6.	12.	191.	246.	7.	14.	232.
Measuring Station at Old Mission Dam	183.	8.	16.	167.	221.	10.	19.	202.
La Mesa Pumping Plant	2,517.	115.	172.	2,145.	2,804.	139.	208.	2,596.
Chocolate " "	11,717.	474.	474.	11,243.	14,177.	573.	573.	13,604.
Pumping Plant No 3	3,753.	176.	208.	3,545.	4,541.	213.	252.	4,289.
" " No 4	1,005.	40.	135.	870.	1,216.	48.	163.	1,053.
Sand Creek Siphon	7,446.	74.	74.	7,372.	9,010.	90.	90.	8,920.
Concrete Conduits	6,829.	69.	69.	6,760.	8,263.	84.	84.	8,179.
Steel Flumes	16,633.	510.	510.	16,123.	20,125.	617.	617.	19,508.

	59,397.	\$1,529.	\$1,783.	\$57,614.	\$71,869.	\$2,157.	\$2,157.	\$69,712.
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SUMMARY

With 21% Overhead.

Items	Reprod. Cost	Annual Deprec.	Total Deprec.	Present Value	Reprod. Cost	Annual Deprec.	Total Deprec.	Present Value
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PROPERTIES PURCHASED OR CONSTRUCTED BY THE COMPANY -- Cont'd.

Prep't Fwd Lining (knelted)	\$59,397.	\$1,529.	\$1,783.	\$57,614.	\$71,869.	\$1,850.	\$2,157.	\$69,712.
Lining Wood Flumes	8,084	5,447.	-----	48,571.	52,721.	6,591.	-----	52,721.
Raising Side Boards on flume	2,916.	324.	324.	2,592.	3,528.	392.	392.	3,136.
Strengthening Flume Structures	2,415.	268.	268.	2,147.	2,922.	324.	324.	2,598.
Lanekershim Tunnel Lining	1,124.	11.	11.	1,113.	1,360.	13.	13.	1,347.
Excavation at Portals of Tunnel No. 14	1,080.	11.	11.	1,069.	1,307.	13.	13.	1,294.
Measuring Boxes	907.	35.	688.	219.	1,097.	42.	832.	265.
Telephone Line	2,888.	87.	87.	2,801.	3,494.	105.	105.	3,389.
Pipe Lines	63,895.	2,039.	686.	63,209.	77,513.	2,467.	830.	76,483.
Meters & Services	13,514.	695.	2,770.	10,744.	16,352.	841.	3,352.	13,000.
Tools, equipment, materials, etc.	4,878.	-----	-----	4,878.	5,902.	-----	-----	5,902.
Investigations for future Reservoirs, etc.	8,042.	-----	-----	8,042.	9,751.	-----	-----	9,751.

\$204,627. \$10,446. \$6,628. \$197,999. \$247,596. \$12,638. \$8,018. \$239,578.

SUMMARY

With 21% Overhead.

Present Value

Total Dep.

Annual Deprec.

Reprod. Cost

Total Dep.

Annual Deprec.

Reprod. Cost

Items

PROPERTIES DONATED TO THE COMPANY

Lands & Rights of Way	\$1,560.	-----	\$1,888.	-----	\$1,888.
Pipe Lines	36,985.	1,526.	29,323.	1,846.	35,481.
Meters & Services	3,072.	190.	3,682.	230.	4,455.
Webster Reservoir	158.	2.	154.	2.	186.
Millon Reservoir No.1	2,299.	21.	1,957.	38.	2,368.
" " No.2	1,657.	19.	1,393.	23.	1,686.
Pumping Plant No.5	1,326.	65.	527.	79.	637.
	\$47,947.	\$1,833.	\$38,596.	\$2,218.	\$46,701.

CUYAMAQA WATER COMPANY

FINAL SUMMARY

Items	Reprod. Cost	Annual Deprec.	Total Dep.	Present Value	With 21% Overhead.		Present Value
					Reprod. Cost	Annual Deprec.	
Properties purchased or constructed by the Cuyamaqa Water Company since June 1st, 1912.	\$204,627.	\$10,446.	\$6,628.	\$197,999.	\$247,596.	\$8,018.	\$239,578.
Properties secured to Cuyamaqa Water Company since June 1st, 1912.	47,947.	1,855.	9,351.	38,596.	2,218.	11,515.	46,701.
Properties owned by Cuyamaqa Water Company on June 1st, 1912, as shown by R.R.Com's Valuation, but corrected to show accrued depreciation	252,574.	12,279.	15,979.	236,595.	305,612.	19,353.	286,279.
					946,518.	425,775.	522,743.
Grand Totals					\$1,252,130.	\$335,212.	\$443,108.

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Physical Valuation of Cuyamaca Water Co."**



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