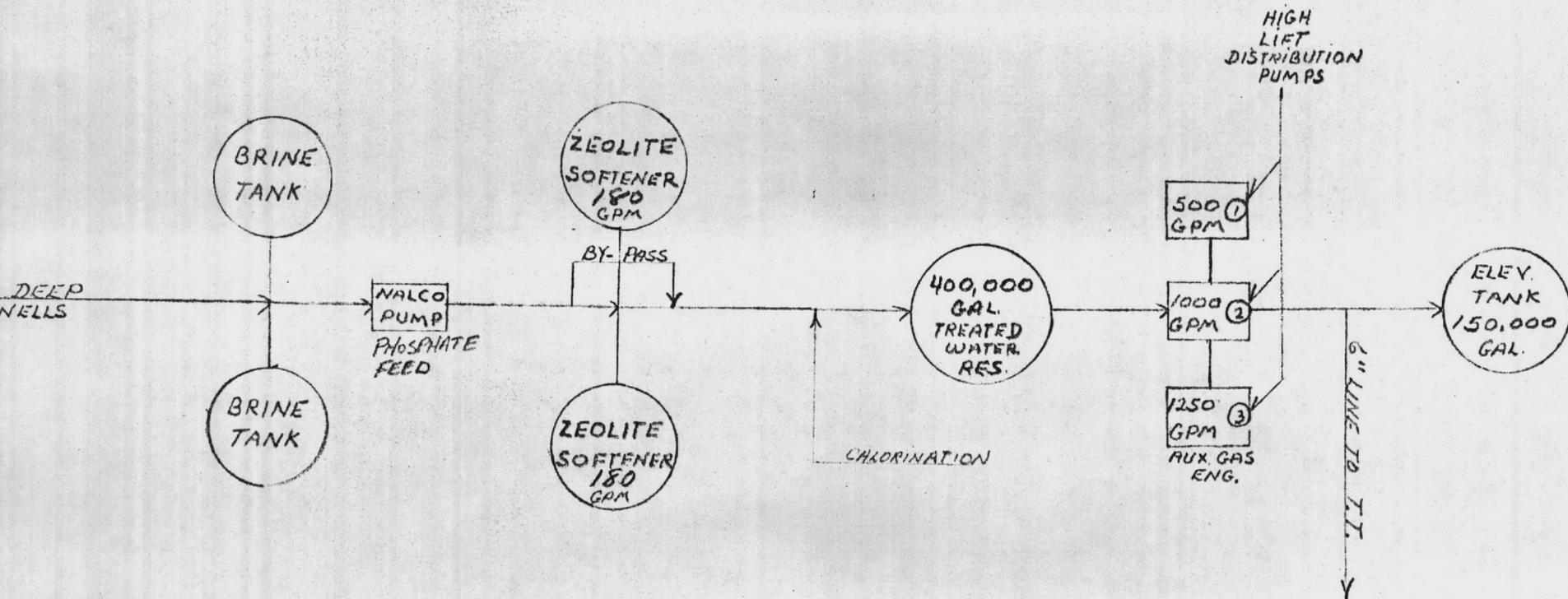


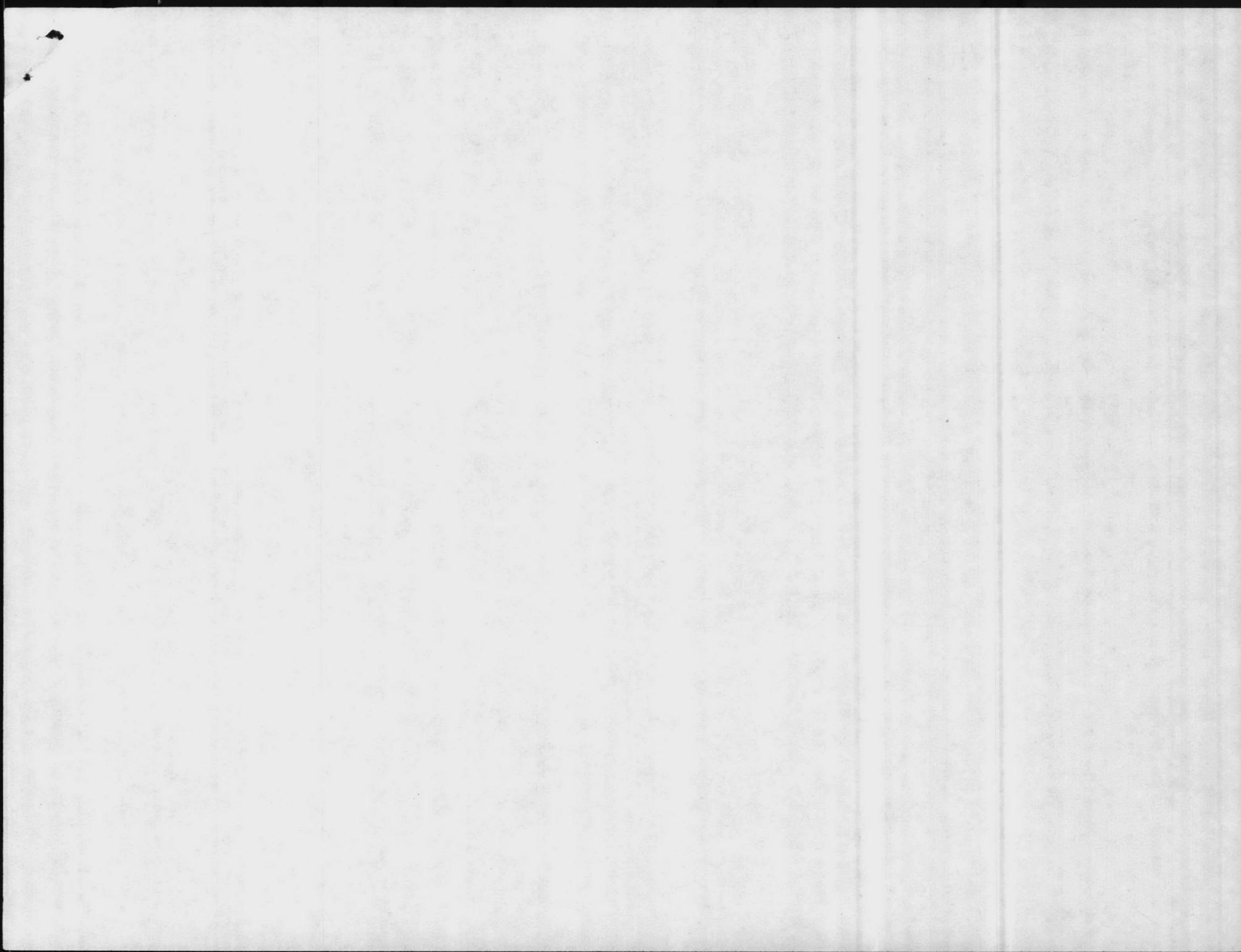
MONTFORD POINT BLDG. M-178

CAPACITY 750,000 GPD

WITH 7 DEEP WELLS

ZEOLITE SOFTENING PLANT



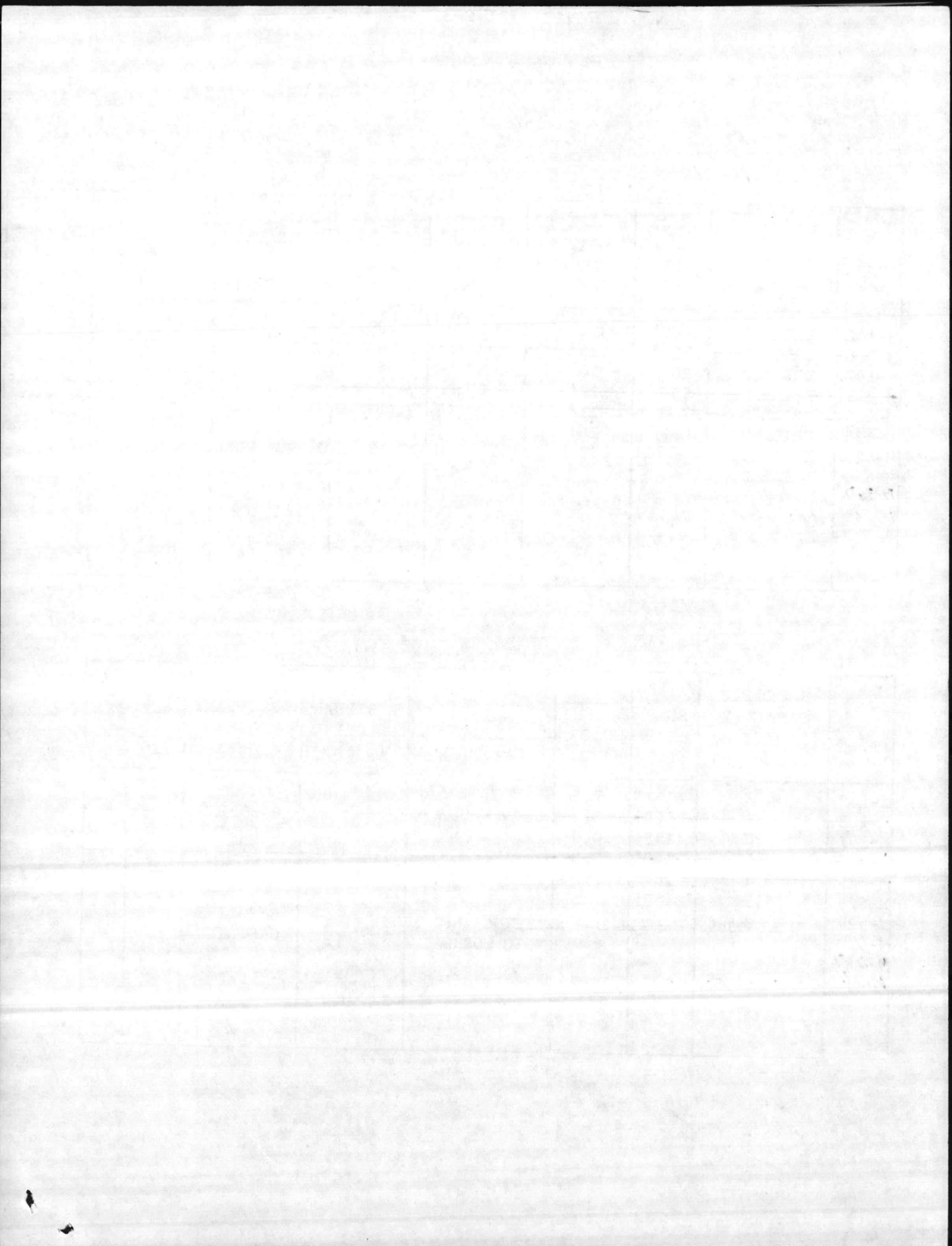


WELL SURVEY SHEET*

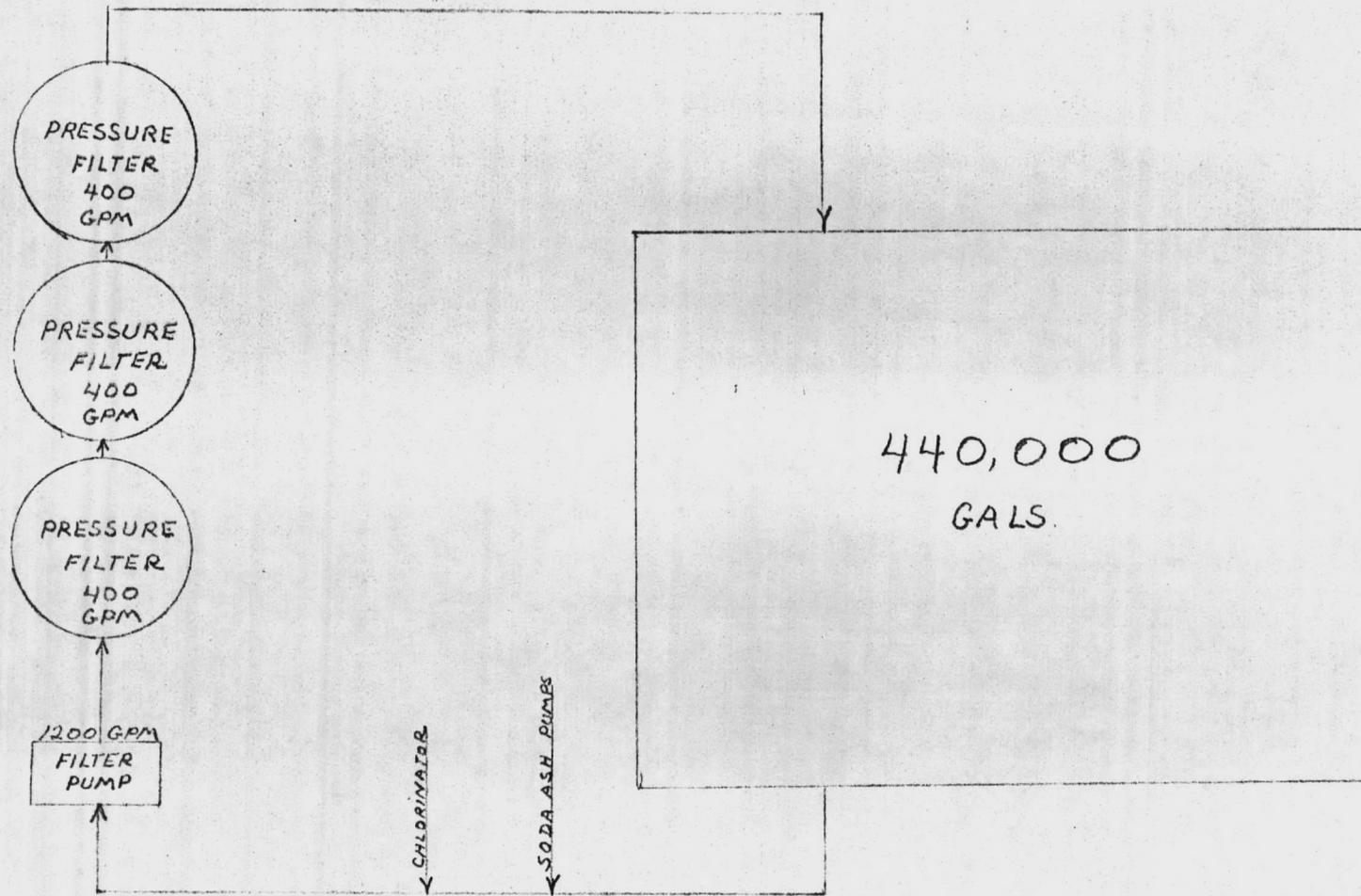
Sheet No. 6DATE: 3-3-77

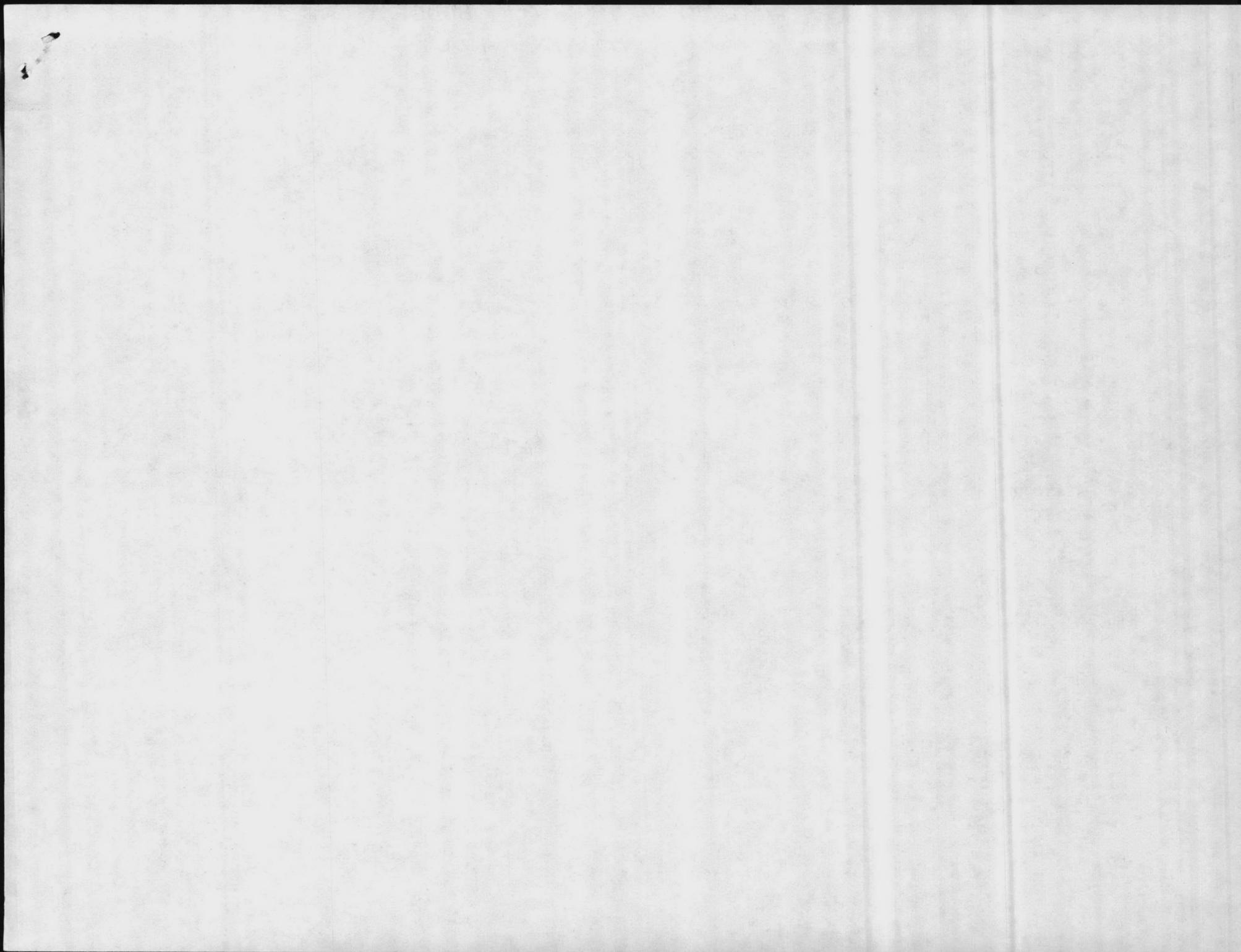
WELL NO.	WELL TYPE	DRILLED DEPTH ft.	STATIC LEVEL (ft)	CASING SIZE (in.)	STAGES	DRAWDOWN AT RATED CAPACITY (feet)	RATED CAPACITY (gpm)	PRESENT CAPACITY (GPM)	
M-142	DRILLED	69'	24'	8"	9	21'	100	75	
M-168	DRILLED	151'	24'	8"	4	35'	100	50	
M-197	DRILLED	200'	34'	8"	5	17'	155	100	
M-243	DRILLED	95'	27'	8"	7	21'	150	Cancelled	
M-627	DRILLED	100'	11'	8"	8	16'	150	Cancelled	
M-628	DRILLED	67'	14'	8"	5	17'	100	75	
M-629	DRILLED	WELLS JUST INSTALLED - AWAITING INFO FROM PUBLIC WORKS						100	100
M-630	DRILLED	WELLS JUST INSTALLED - AWAITING INFO FROM PUBLIC WORKS							125
M-267	"	WELLS JUST INSTALLED - AWAITING INFO FROM PUBLIC WORKS							
M-161	NO INFO.	WELLS JUST INSTALLED - AWAITING INFO FROM PUBLIC WORKS							

WELL NO.	SPECIFIC CAPACITY (gpm/ft of drawdown)	PUMP HEAD (ft)	MOTOR H. P.	CHLORINATION (AMOUNT)	RESIDUAL CHLORINE (ppm)	AUXILIARY POWER (type)	DD FORM		
							710	686	
M-142	4.8	147'	7.5						
M-168	2.8	105'	5.0			GASOLINE			
M-197	9.0	135'	10.0			GASOLINE			
M-243	7.1	148'	10.0						
M-627	9.4	164'	7.5						
M-628	5.9	150'	7.5						
M-629	WELLS JUST INSTALLED - AWAITING INFO FROM PUBLIC WORKS						GASOLINE		
M-630	WELLS JUST INSTALLED - AWAITING INFO FROM PUBLIC WORKS						GASOLINE		
M-267	WELLS JUST INSTALLED - AWAITING INFO FROM PUBLIC WORKS								
M-161	NO INFO	WELLS JUST INSTALLED - AWAITING INFO FROM PUBLIC WORKS							



MONTFORD POINT BLDG. M-139
SWIMMING POOL



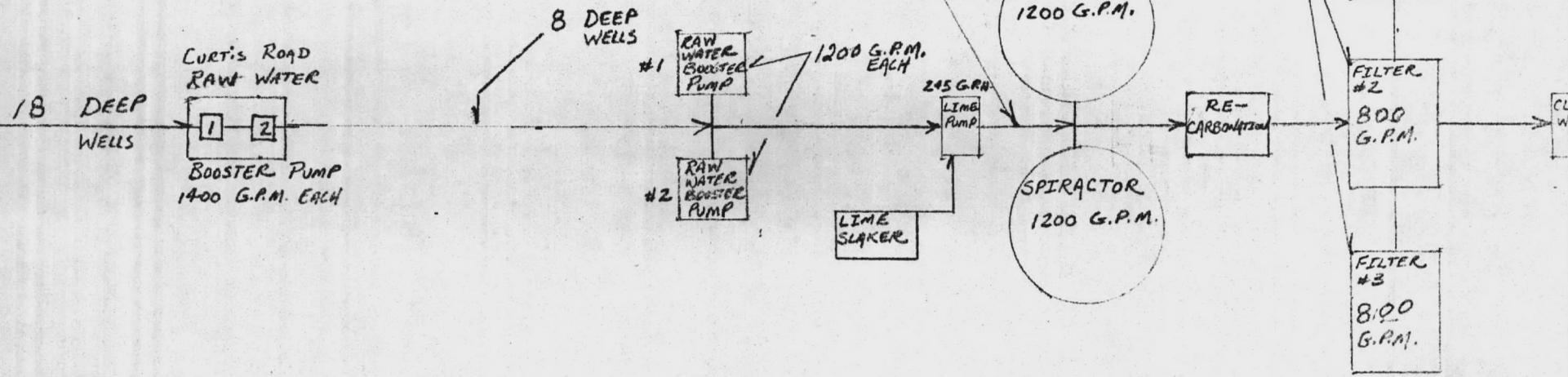


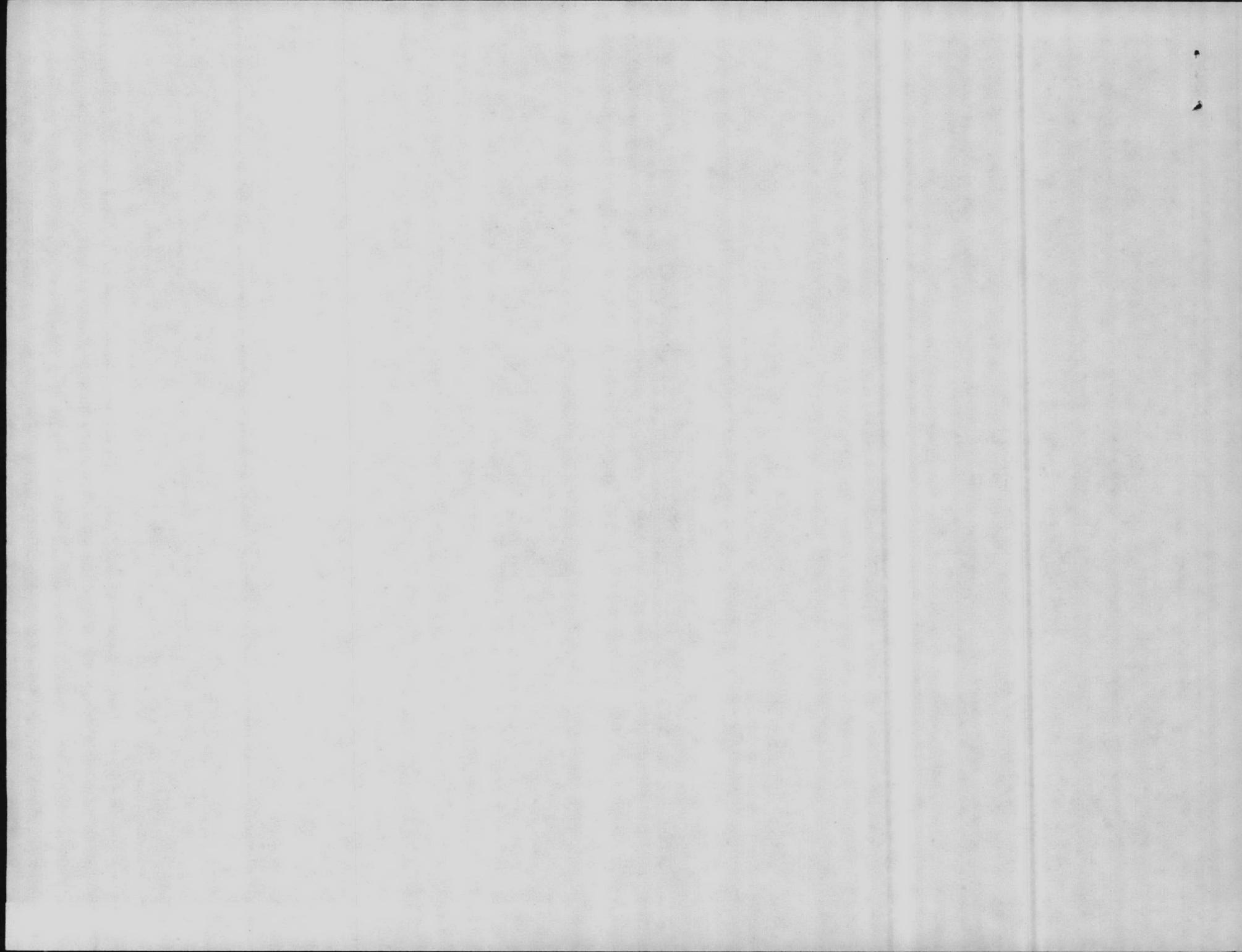
MARINE CORPS AIR
CAPACITY 3.5 M.G.
LIME SOFTENING

PRE-CHLORINATION

VARIABLE
DECLINING
RATE FILTERS

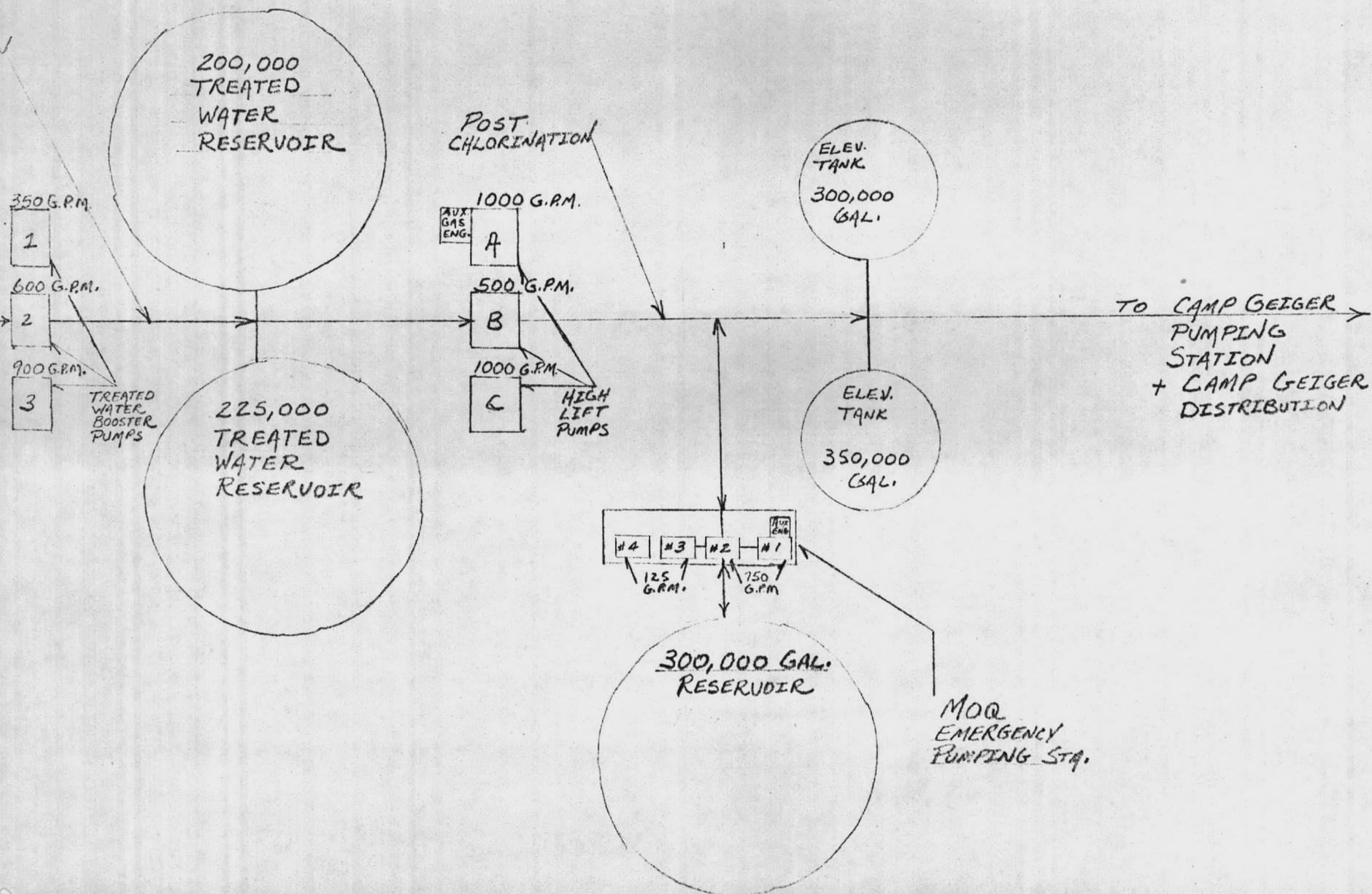
CHLORINATION

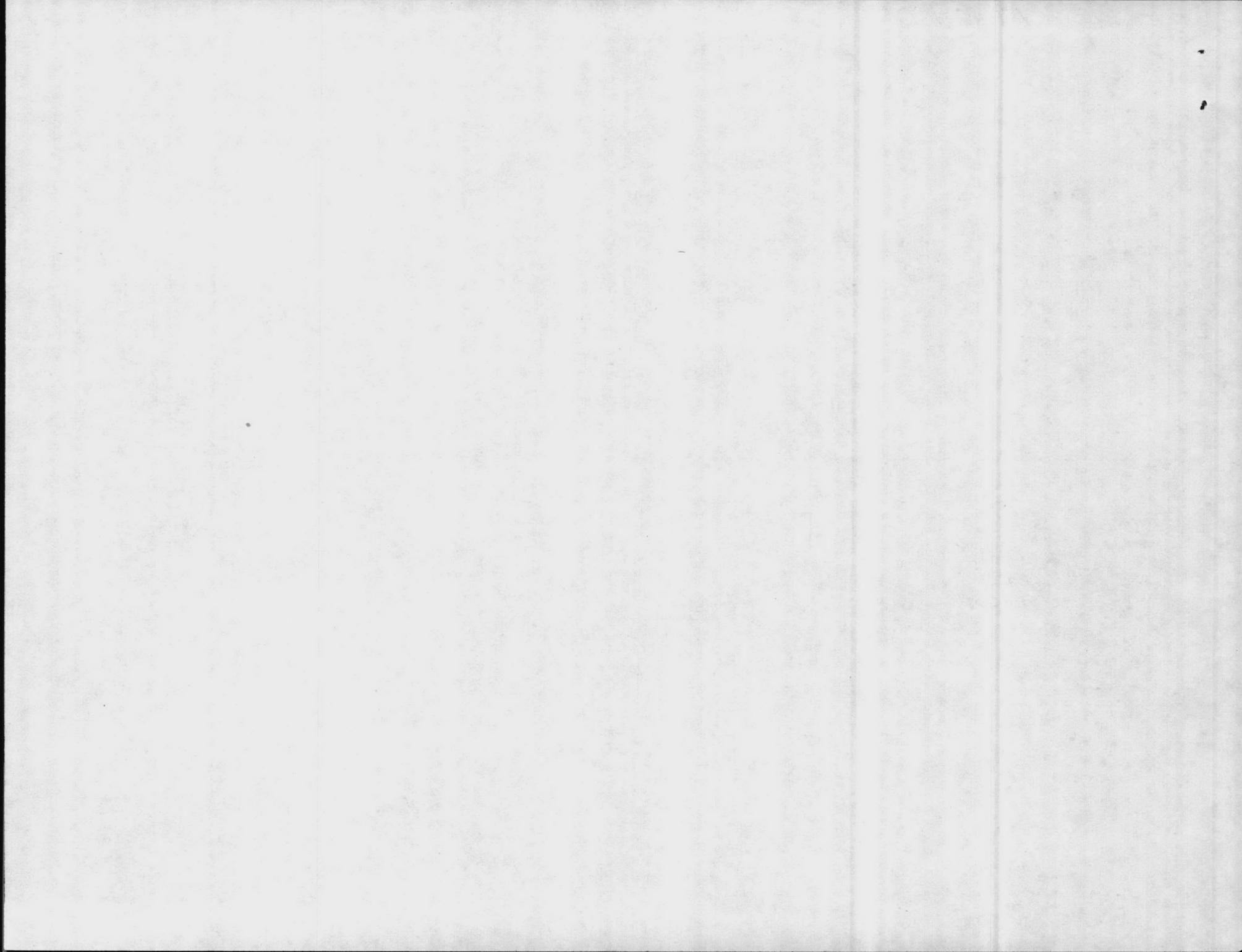




STATION - BLDG. MCAS-110

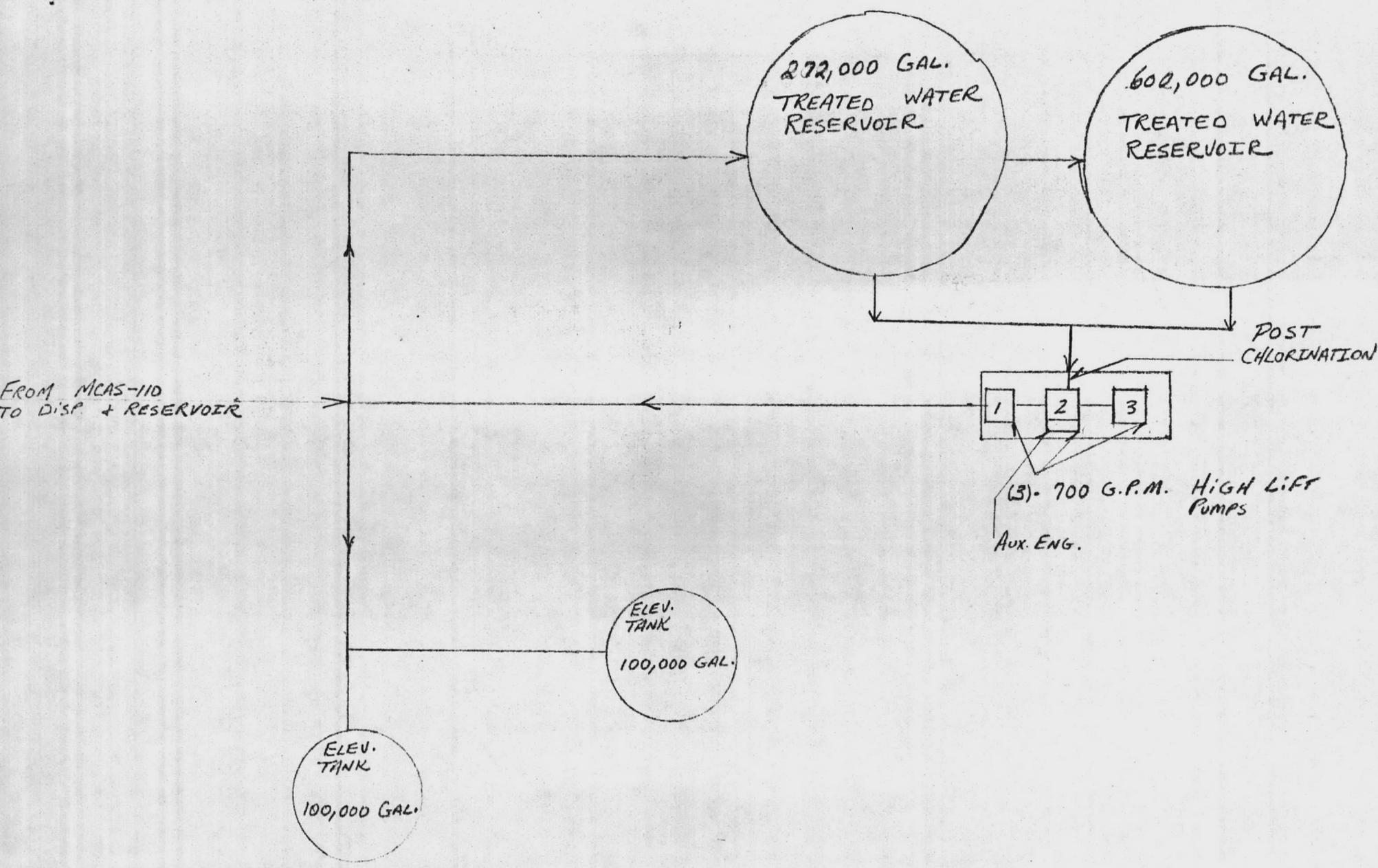
26 DEEP WELLS
PLT.

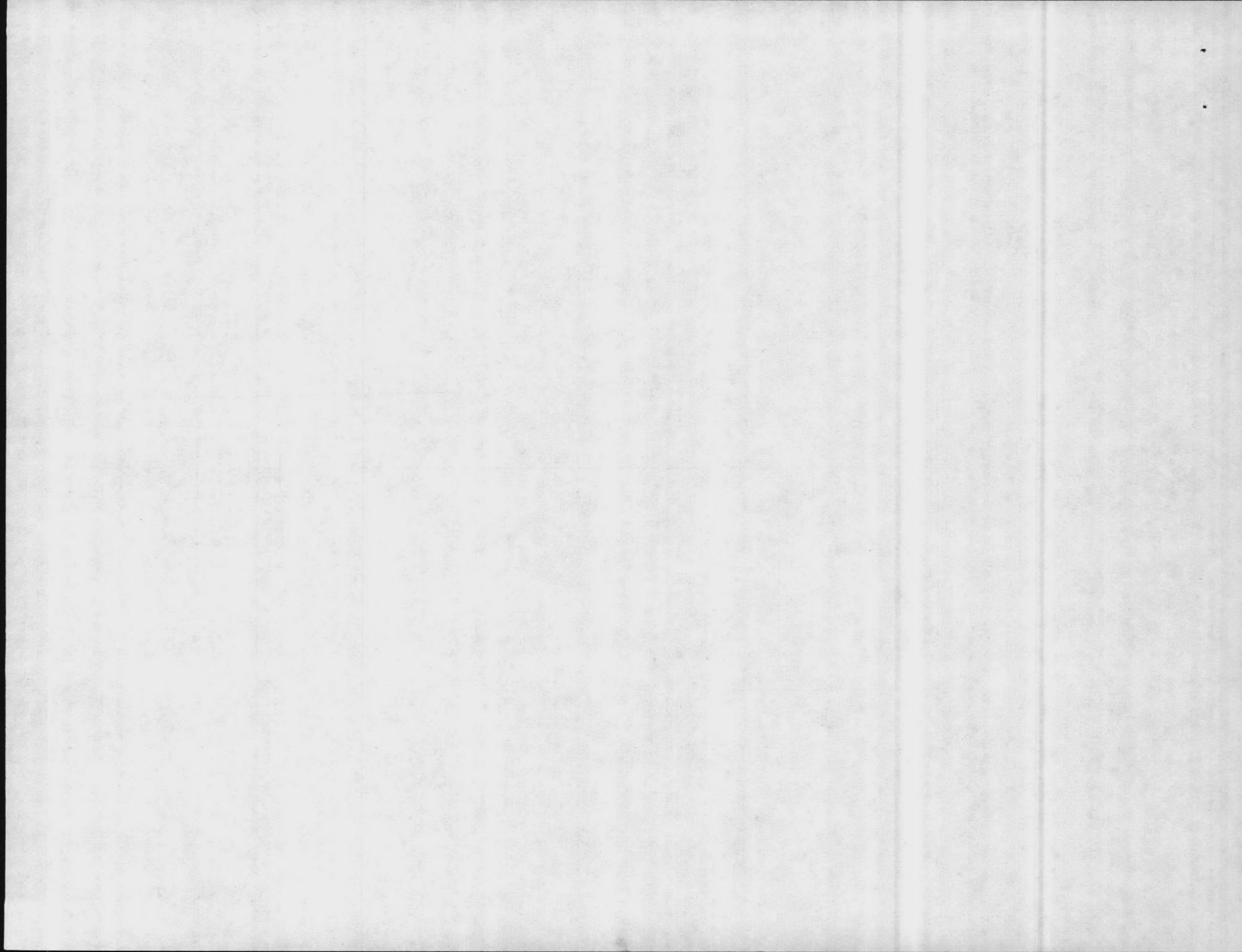




CAMP BEIGER PUMPING STATION
TC - 501

VERTICAL CAP
CONCRETE





WELL SURVEY SHEET*

Sheet No. 8DATE: 3-3-77

WELL NO.	WELL TYPE	DRILLED DEPTH ft.	STATIC LEVEL (ft)	CASING SIZE (in.)	STAGES	DRAWDOWN AT RATED CAPACITY (feet)	RATED CAPACITY (gpm)	PRESENT CAPACITY (GPM)
MCAS-106	DRILLED	174'	16'	8"	5	12'	178	125
203	DRILLED	173'	23'	8"	4	6'	100	75
131	DRILLED	189'	23'	8"	4	5'	250	200
4140	DRILLED	UNKNOWN		8"	UNKNOWN	UNKNOWN	150	100
4150	DRILLED			5"	UNKNOWN	UNKNOWN	150	100
5001	DRILLED	193'	44'	8"	3	10'	100	75
5009	DRILLED		34'	8"	3	16'	150	100
SAS								
161	"	200					200	200
163	"	240					200	100
164	"	220					200	150
165	"	220					200	150
166	"	230					200	150

WELL NO.	SPECIFIC CAPACITY (gpm/ft of drawdown)	PUMP HEAD (ft)	MOTOR H. P.	CHLORINATION (AMOUNT)	RESIDUAL CHLORINE (ppm)	AUXILIARY POWER (type)	DD FORM	
							710	686
MCAS-106	14.8		15.0					
203	16.7		7.5					
131	50.0		7.5					
4140			5.0					
4150	UNKNOWN	UNKNOWN	5.0					
5001	10.0	75'	5.0					
5009	9.4	75'	5.0					

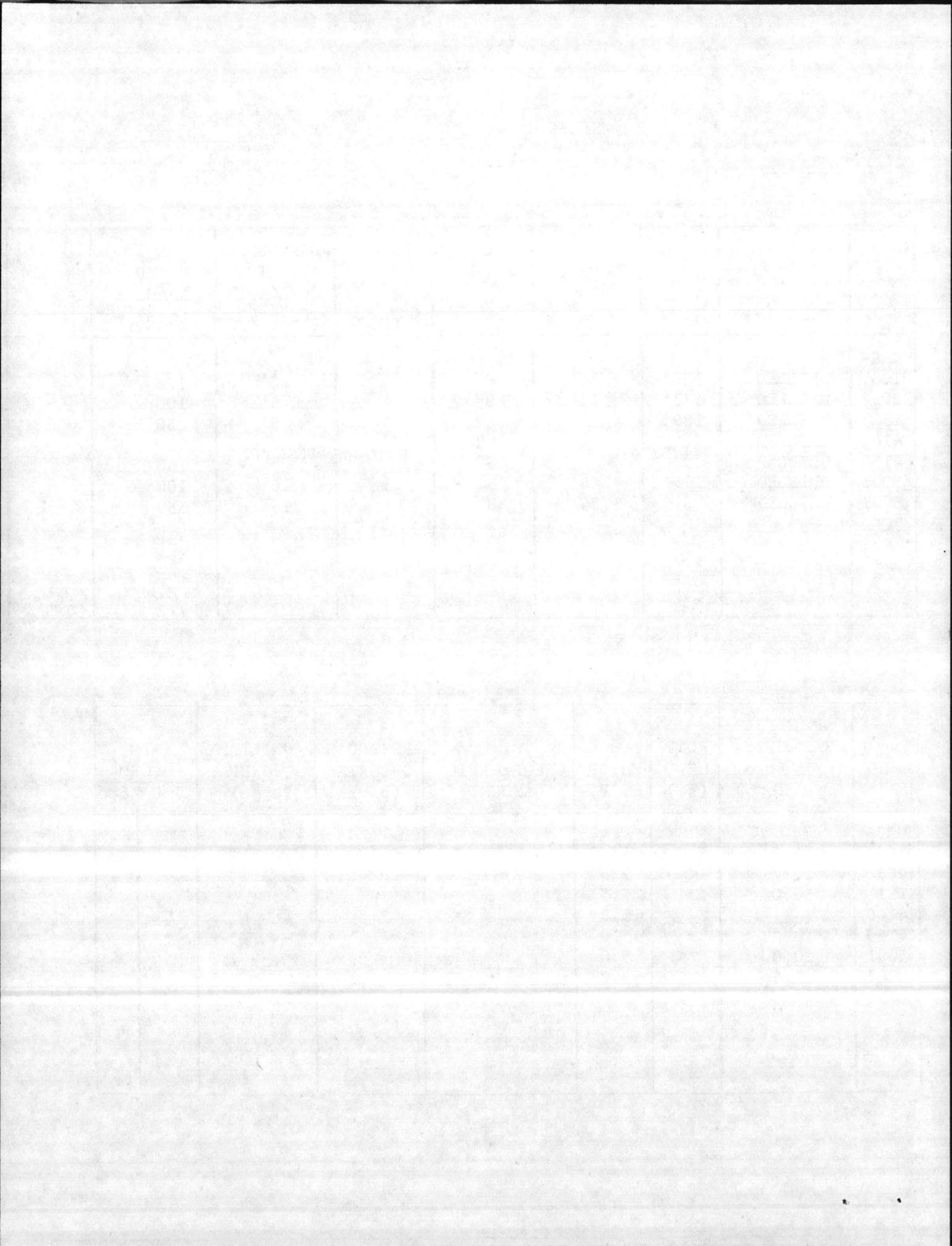


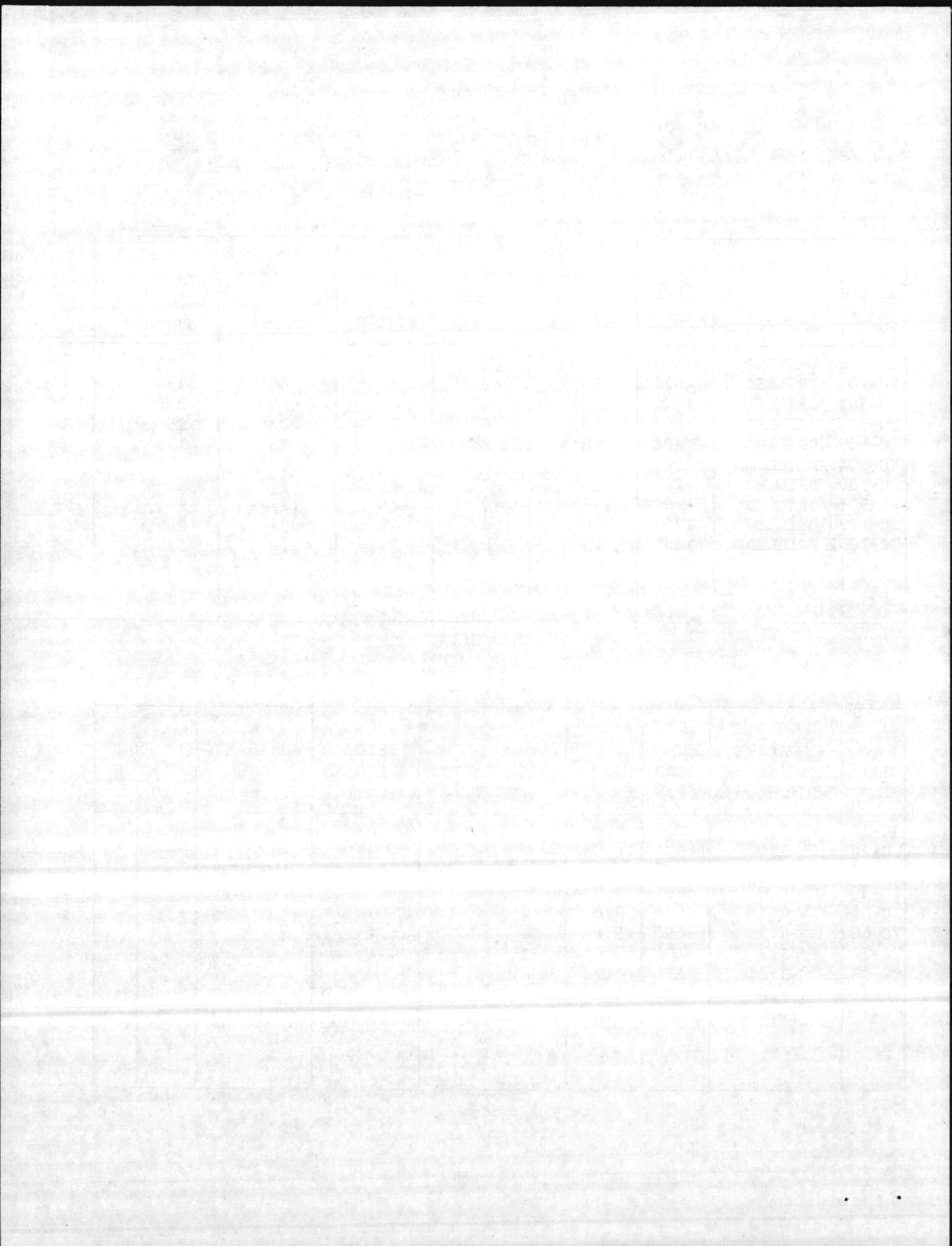
Table III-C 3

WELL SURVEY SHEET*

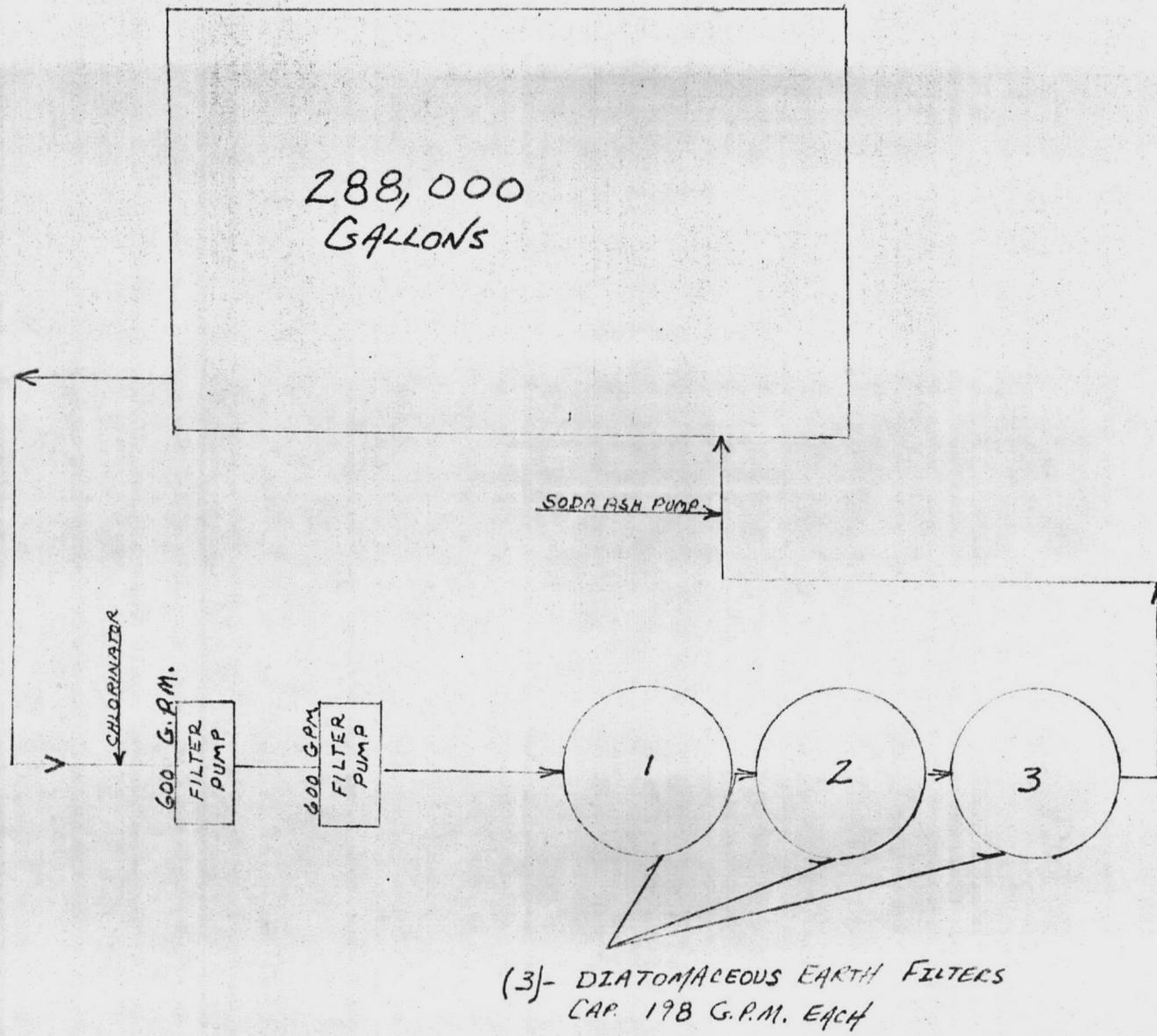
Sheet No. 7DATE: 3-3-77

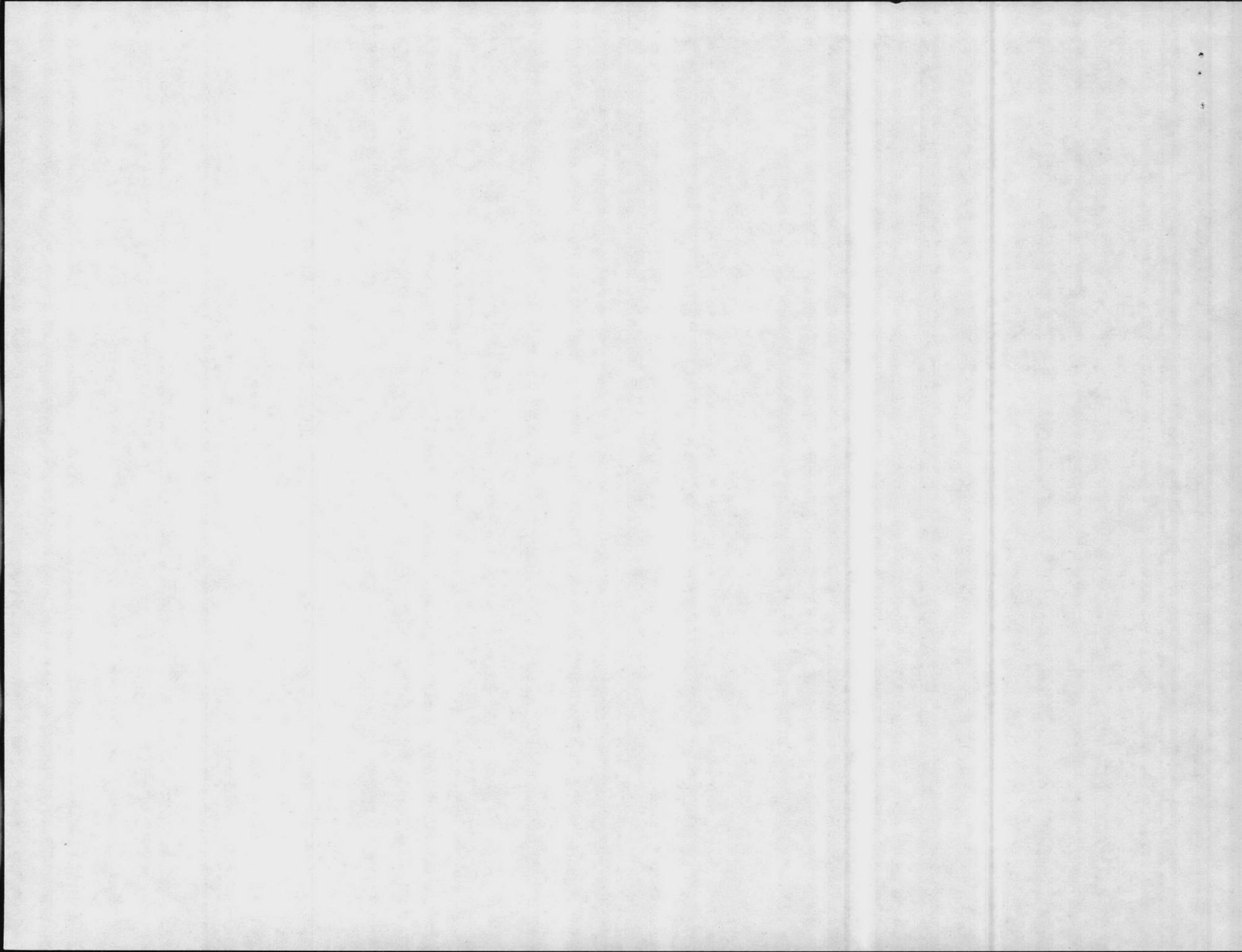
WELL NO.	WELL TYPE	DRILLED DEPTH ft.	STATIC LEVEL (ft)	CASING SIZE (in.)	STAGES	DRAWDOWN AT RATED CAPACITY (feet)	RATED CAPACITY (gpm)	PRESENT CAPACITY (GPM)
TC-100	DRILLED	66'	19'	8"	6	10'	75	75
TC-201	DRILLED	67'	15'	8"	3	44'	150	100
TC-502	DRILLED	184'	27'	8"	4	9"	300	250
TC-504	DRILLED	100'	22'	8"	3	38'	250	150
TC-600	DRILLED	70'	8'	8"	3	28'	130	75
TC-604	DRILLED	138'	17'	8"	4	35'	150	100
TC-700	DRILLED	76'	23'	8"	4	21'	125	75
TC-901	DRILLED	76'	9'	8"	7	26'	100	75
TC-1000	DRILLED	170'	10'	8"	4	37'	200	150
TC-1001	DRILLED	100'	25'	8"	5	20'	220	150

WELL NO.	SPECIFIC CAPACITY (gpm/ft of drawdown)	PUMP HEAD (ft)	MOTOR H. P.	CHLORINATION (AMOUNT)	RESIDUAL CHLORINE (ppm)	AUXILIARY POWER (type)	DD FORM	
							710	686
TC-100	7.5	80'	3.0					
TC-201	3.4	57'	5.0					
TC-502	33.3	112'	10.0			GASOLINE		
TC-504	6.6	66'	7.5			GASOLINE		
TC-600	4.6	58'	3.0					
TC-604	4.3	65'	5.0					
TC-700	5.9	70'	3.0					
TC-901	3.8	81'	3.0					
TC-1000	5.4	65'	5.0					
TC-1001	11.0	61'	5.0			GASOLINE		

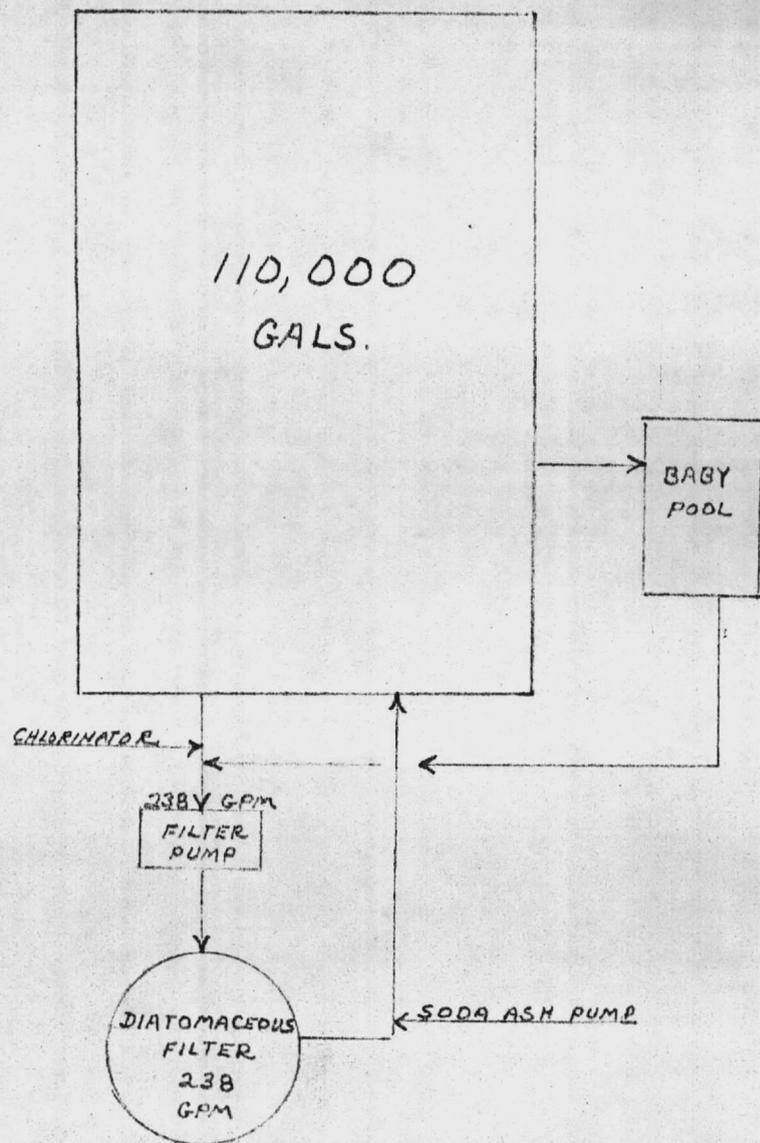


MCA'S ENLISTED POOL - BLDG. 204





MCAS OFFICERS POOL - BLDG. - 710

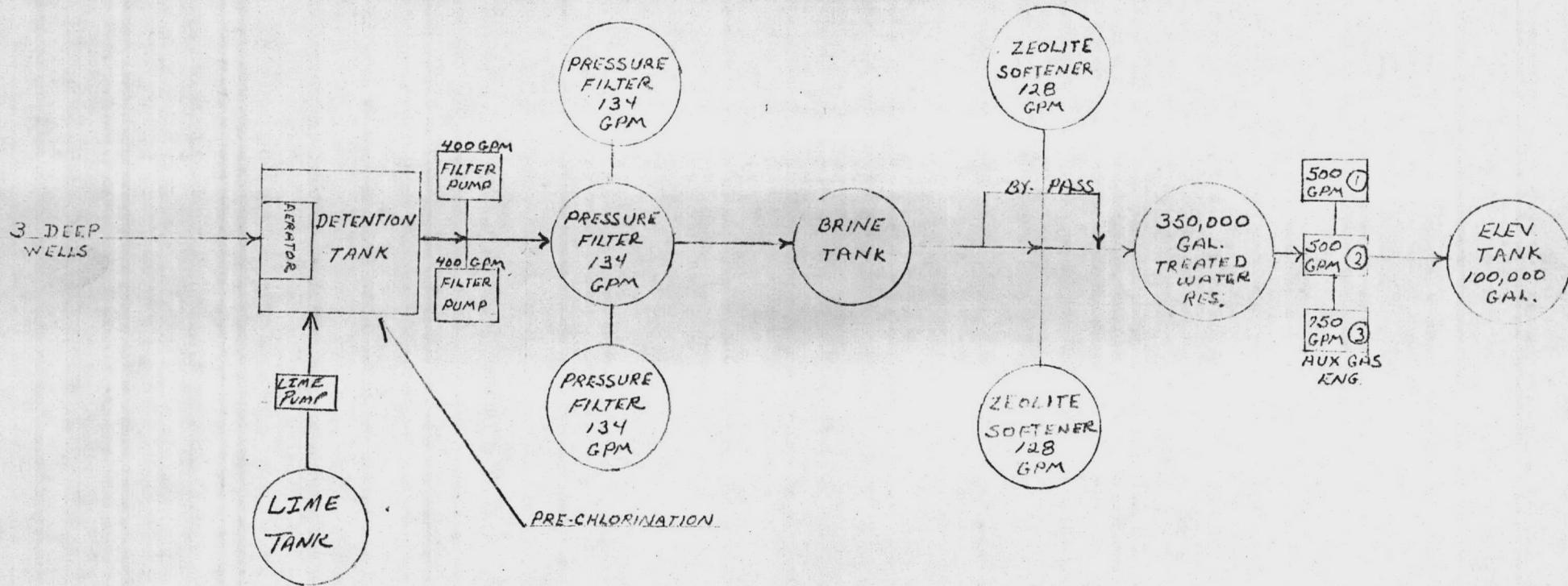


RIFLE RANGE BLDG. RR-85

CAPACITY 600,000 GPD

WITH 3 DEEP WELLS

ZEOLITE SOFTENING PLANT



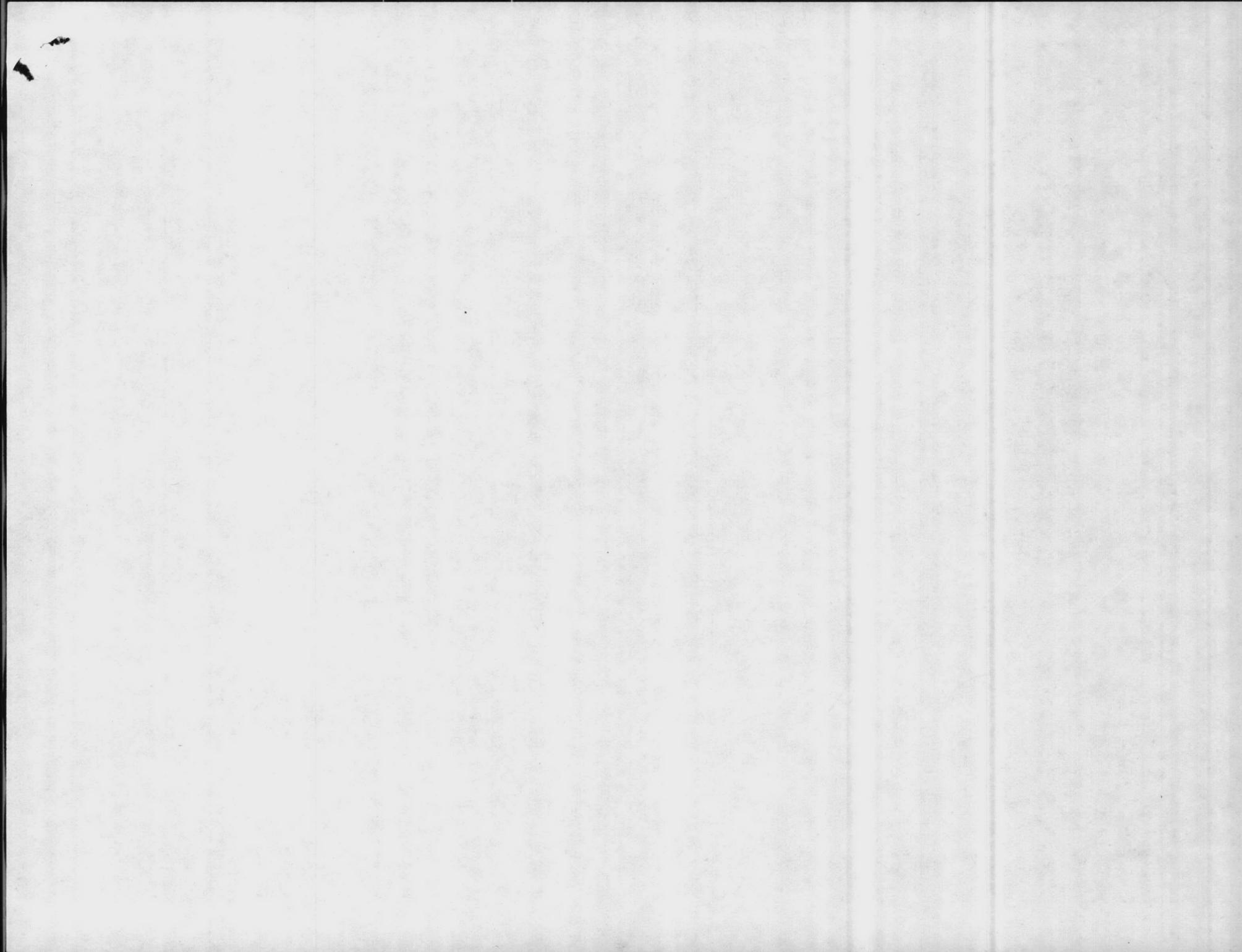


Table III C 3

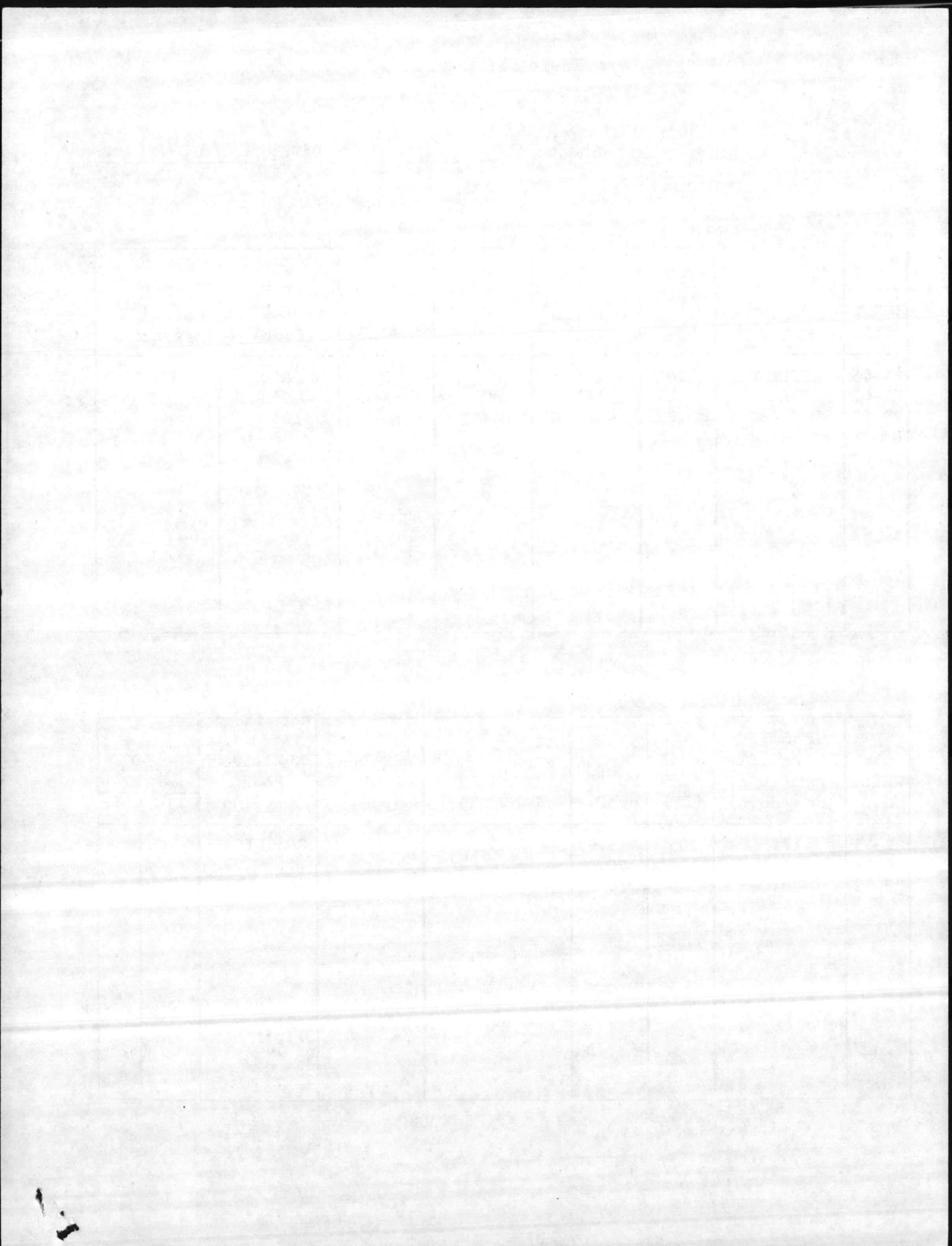
WELL SURVEY SHEET*

Sheet No. 9

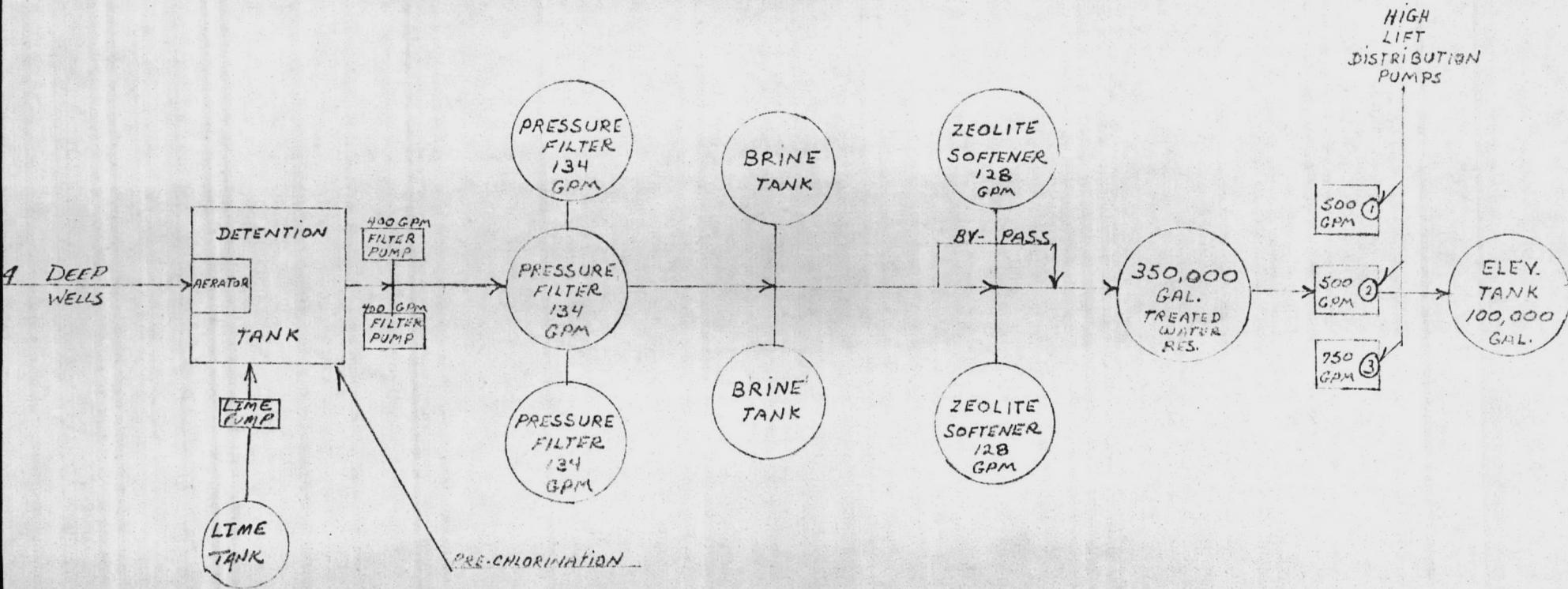
DATE: 3-3-77

WELL NO.	WELL TYPE	DRILLED DEPTH ft.	STATIC LEVEL (ft)	CASING SIZE (in.)	STAGES	DRAWDOWN AT RATED CAPACITY (feet)	RATED CAPACITY (gpm)	PRESENT CAPACITY (GPM)
RR-45	DRILLED	130'	27'	8"	10	8'	140	100
RR-47	DRILLED	85'	11'	8"	7	6'	250	175
RR-22 RR-99	DRILLED	77'	13'	8"	10	10'	200	50

WELL NO.	SPECIFIC CAPACITY (gpm/ft of drawdown)	PUMP HEAD (ft)	MOTOR H. P.	CHLORINATION (AMOUNT)	RESIDUAL CHLORINE (ppm)	AUXILIARY POWER (type)	DD FORM	
							710	686
RR-45	17.5	205'	15.0			GASOLINE		
RR-47	41.7	190'	20.0					
RR-22	20.0	190'	10.0			GASOLINE		



COURTHOUSE BAY BLDG. BB-190
CAPACITY 600,000 GPD
WITH 4 DEEP WELLS
ZEOLITE SOFTENING PLANT



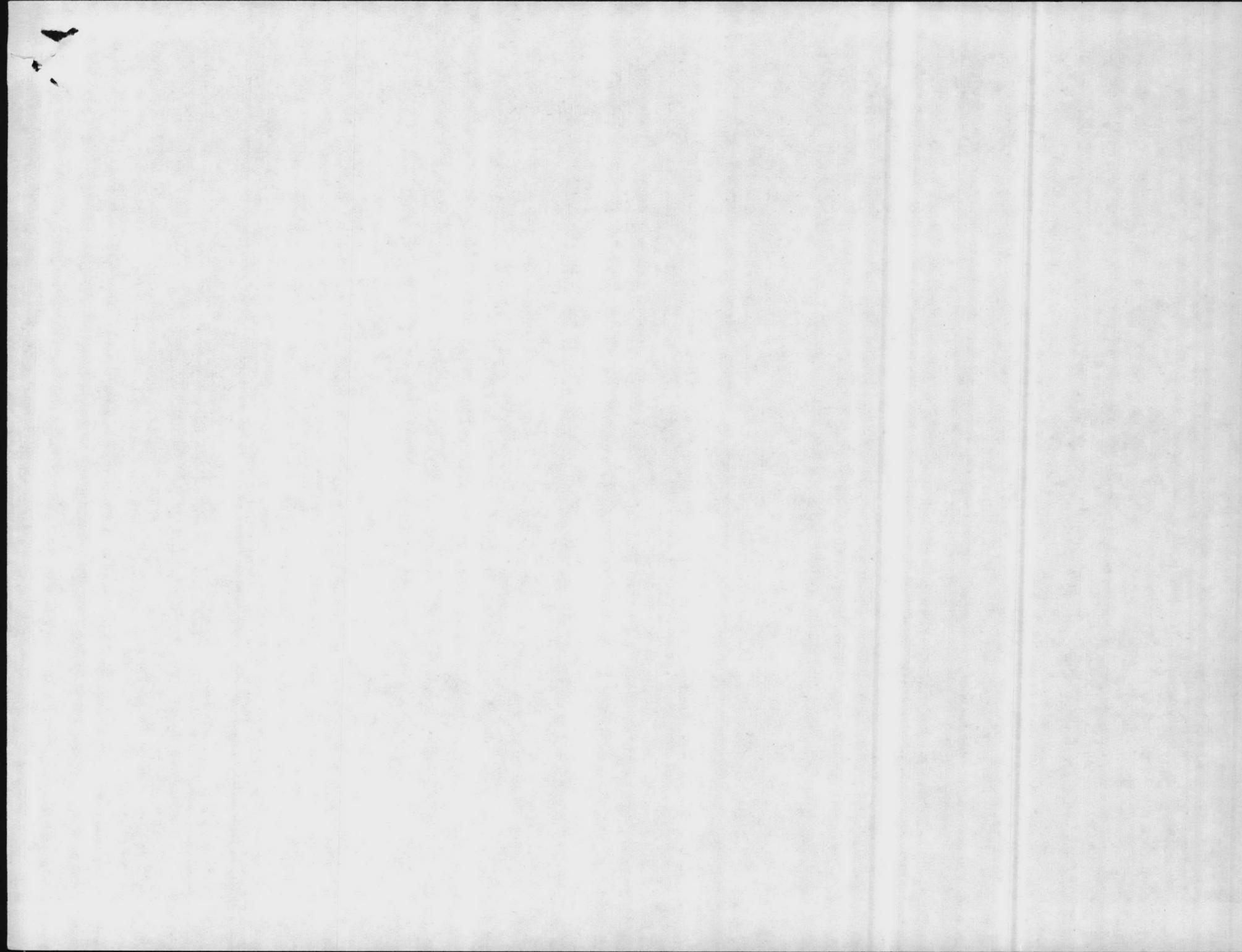


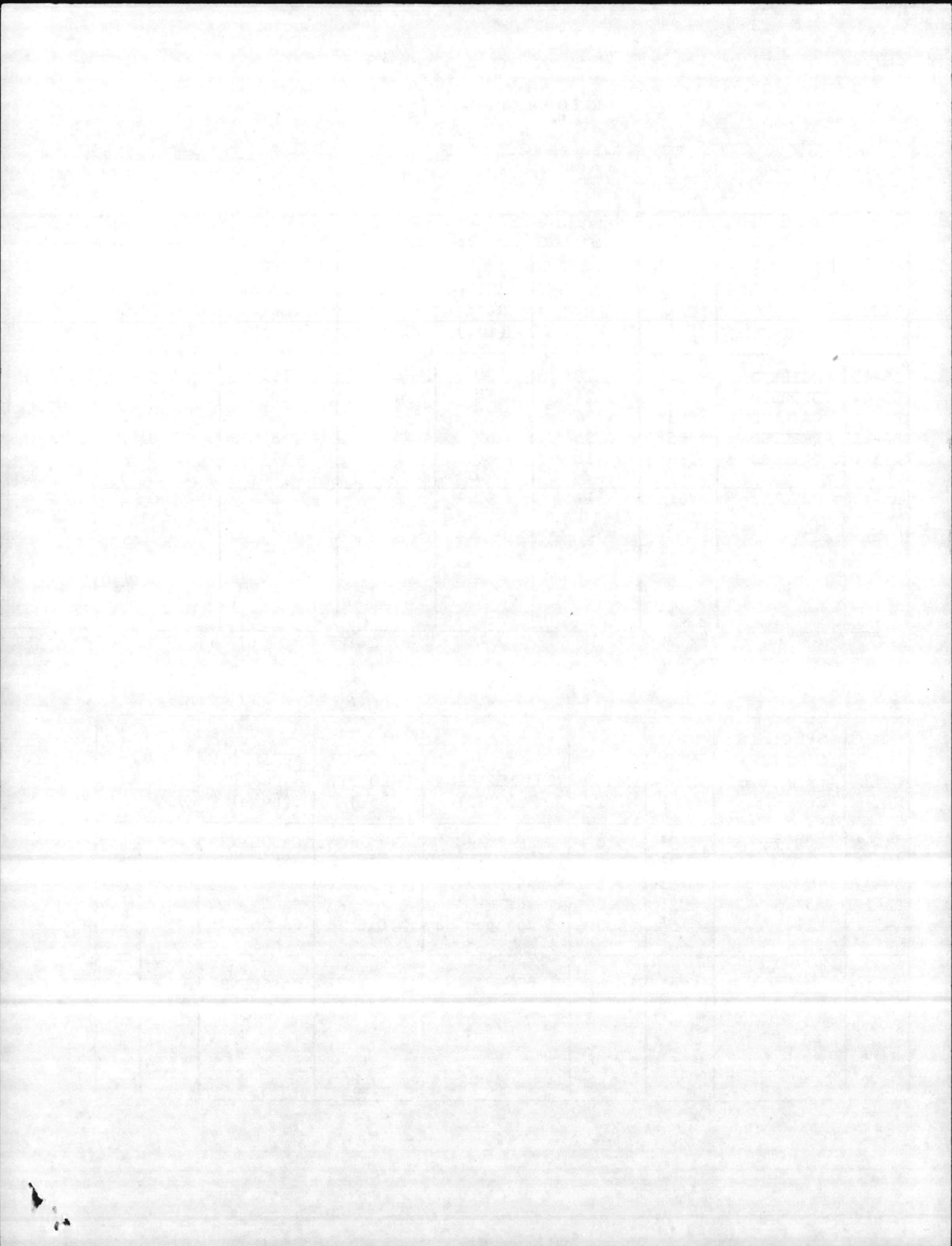
Table III C 3

WELL SURVEY SHEET*

Sheet No. 10DATE: 3-3-77

WELL NO.	WELL TYPE	DRILLED DEPTH ft.	STATIC LEVEL (ft)	CASING SIZE (in.)	STAGES	DRAWDOWN AT RATED CAPACITY (feet)	RATED CAPACITY (gpm)	PRESENT CAPACITY (GPM)
BB-43	DRILLED	54'	18'	8"	4	19'	175	100
BB-44	DRILLED	63'	24'	8"	4	10'	200	100
BB-220	DRILLED	63'	34'	6"	3	6'	150	150
BB-221	DRILLED	65'	35'	6"	3	8'	300	300
A-5	DRILLED	116'	18'	8"	4	14'	250	150
BA-164 <i>New well</i>	DRILLED	61'	17'	8"	8	8'	200 150	175

WELL NO.	SPECIFIC CAPACITY (gpm/ft of drawdown)	PUMP HEAD (ft)	MOTOR H. P.	CHLORINATION (AMOUNT)	RESIDUAL CHLORINE (ppm)	AUXILIARY POWER (type)	DD FORM	
							710	636
BB-43	9.2	63'	5.0	5 lbs per day	0.6	GASOLINE		
BB-44	20.0	60'	5.0					
BB-220	25.0	78'	7.5					
BB-221	37.5	82'	15.0					
A-5	17.9	75'	3.0					
BA-164	25.0	130'	10.0			GASOLINE		

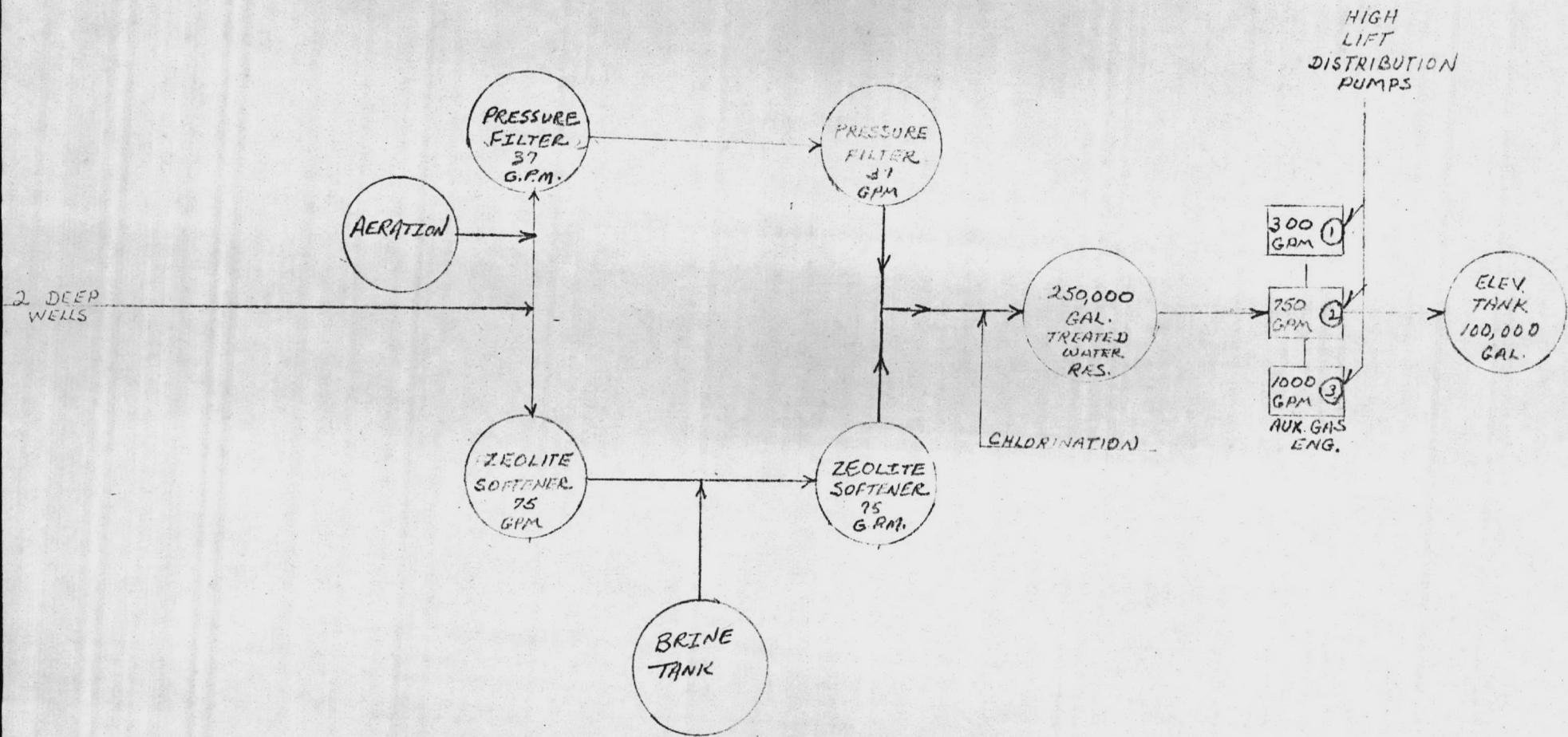


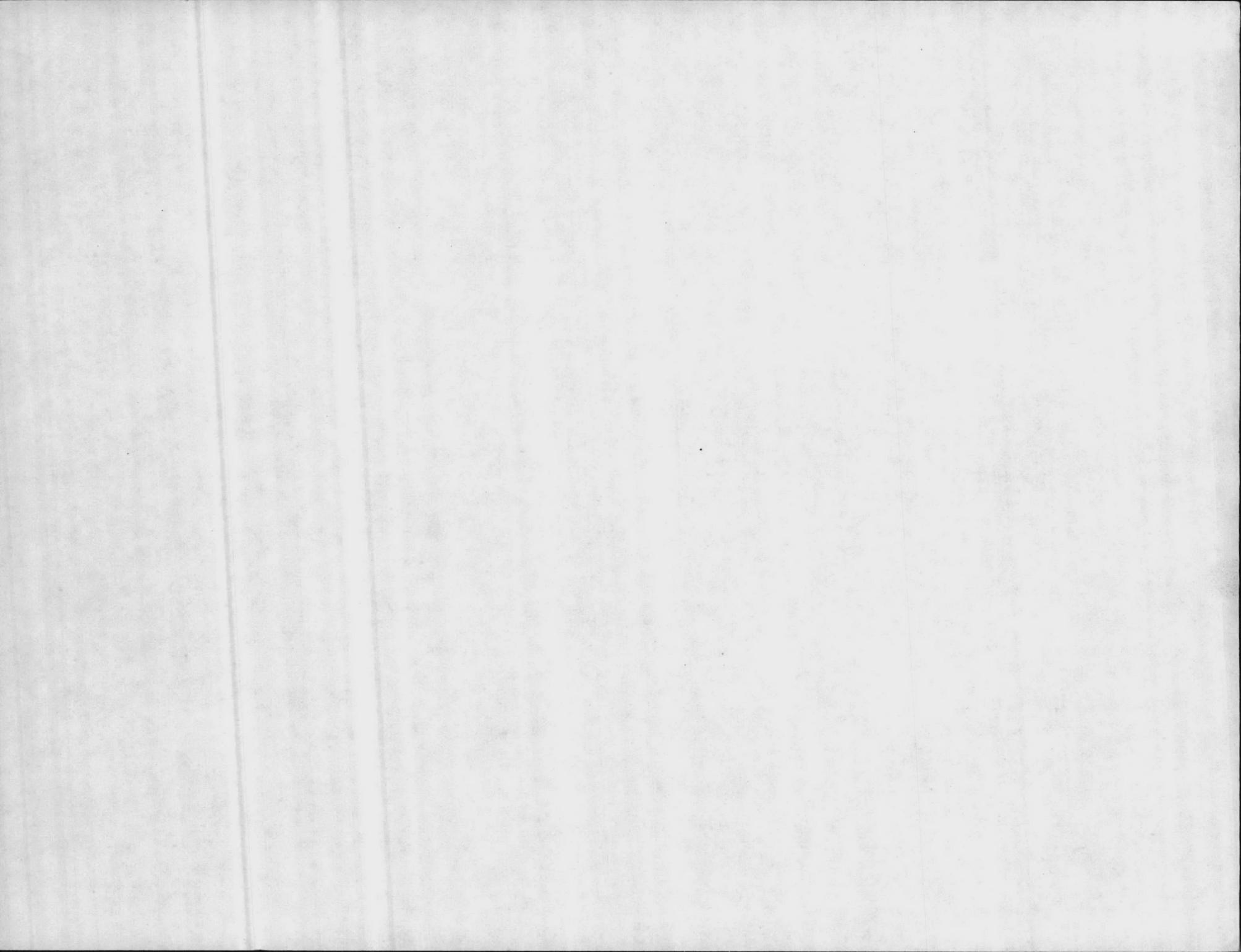
ON SLOW BEACH BLDG. BA-138

CAPACITY 250,000 GPD.

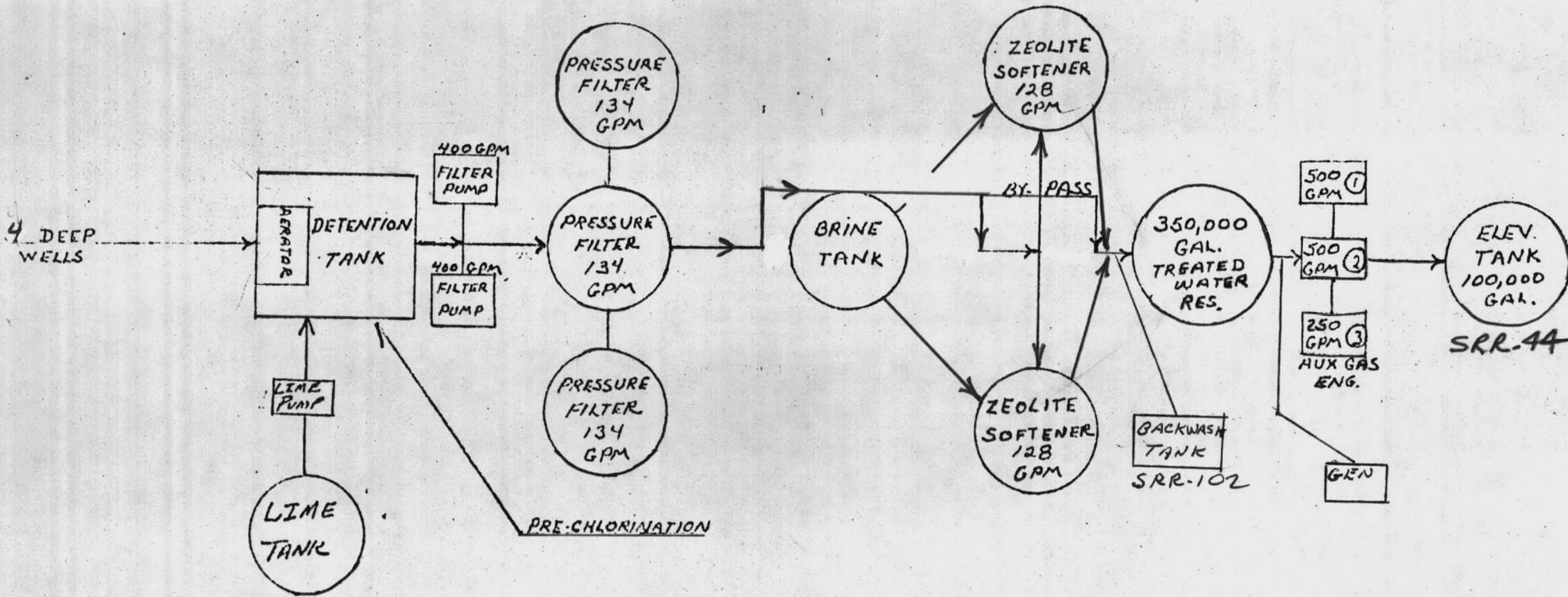
WITH 2 DEEP WELLS.

ZEOLITE SOFTENING PLANT





RIFLE RANGE BLDG. RR-83
CAPACITY 600,000 GPD
WITH 4 DEEP WELLS
ZEOLITE SOFTENING PLANT



100

100

100

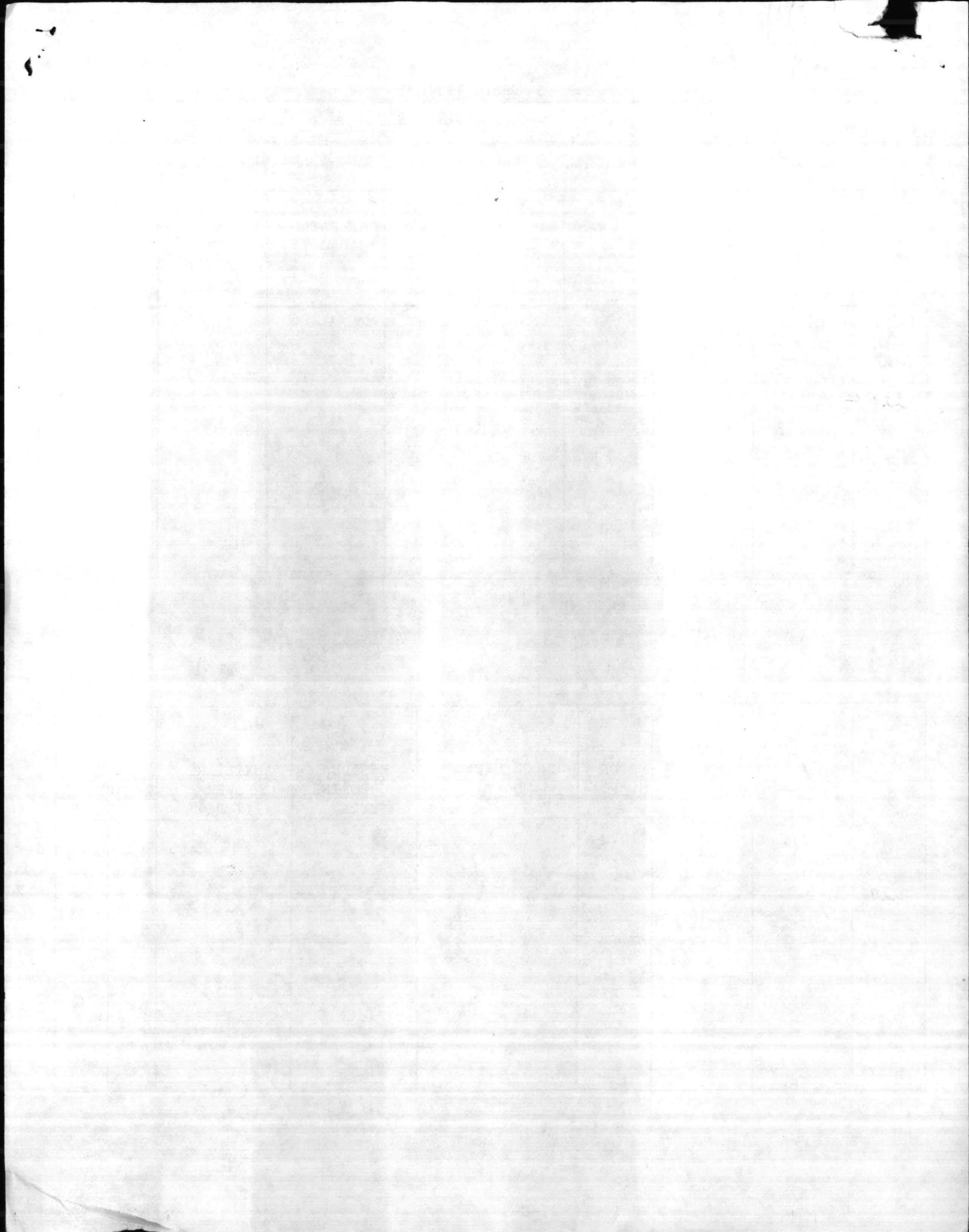
Table III C 3
WELL SURVEY SHEET

Sheet No. 9

DATE: 20 June 1984

WELL NO.	WELL TYPE	DRILLED DEPTH ft.	STATIC LEVEL (ft)	CASING SIZE (in.)	STAGES	DRAWDOWN AT RATED CAPACITY (feet)	RATED CAPACITY (gpm)	PRESENT CAPACITY (gpm)
RR-45	DRILLED	130'	27'	8"	10	8'	140	100
RR-47	DRILLED	85'	11'	8"	7	6'	250	175
RR-97	DRILLED	200'	52'	8"	13	14'	150	150
New well to replace 227 still under contract <i>229</i>								

WELL NO.	SPECIFIC CAPACITY (gpm/ft of drawdown)	PUMP HEAD (ft)	MOTOR H. P.	CHLORINATION (AMOUNT)	RESIDUAL CHLORINE (TYPE)	AUXILIARY POWER (TYPE)	DD FORM	
							710	636
RR-45	17.5	205'	15.0			GASOLINE		
RR-47	41.7	109'	20.0					
RR-97 <i>229</i>	10.7	180	10.0					

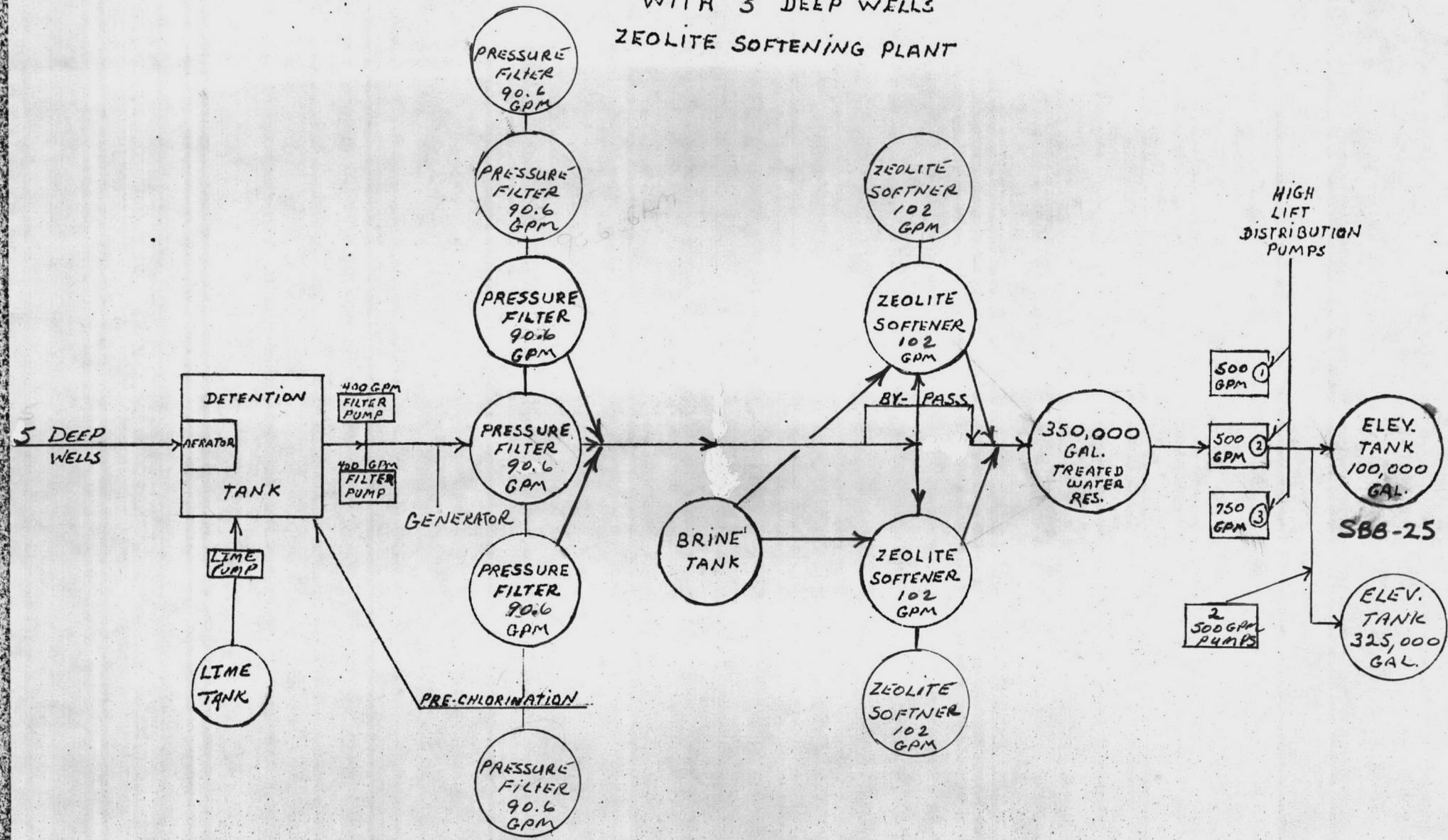


COURTHOUSE BAY BLDG. BB-190

CAPACITY 600,000 GPD

WITH 5 DEEP WELLS

ZEOLITE SOFTENING PLANT





1000-22

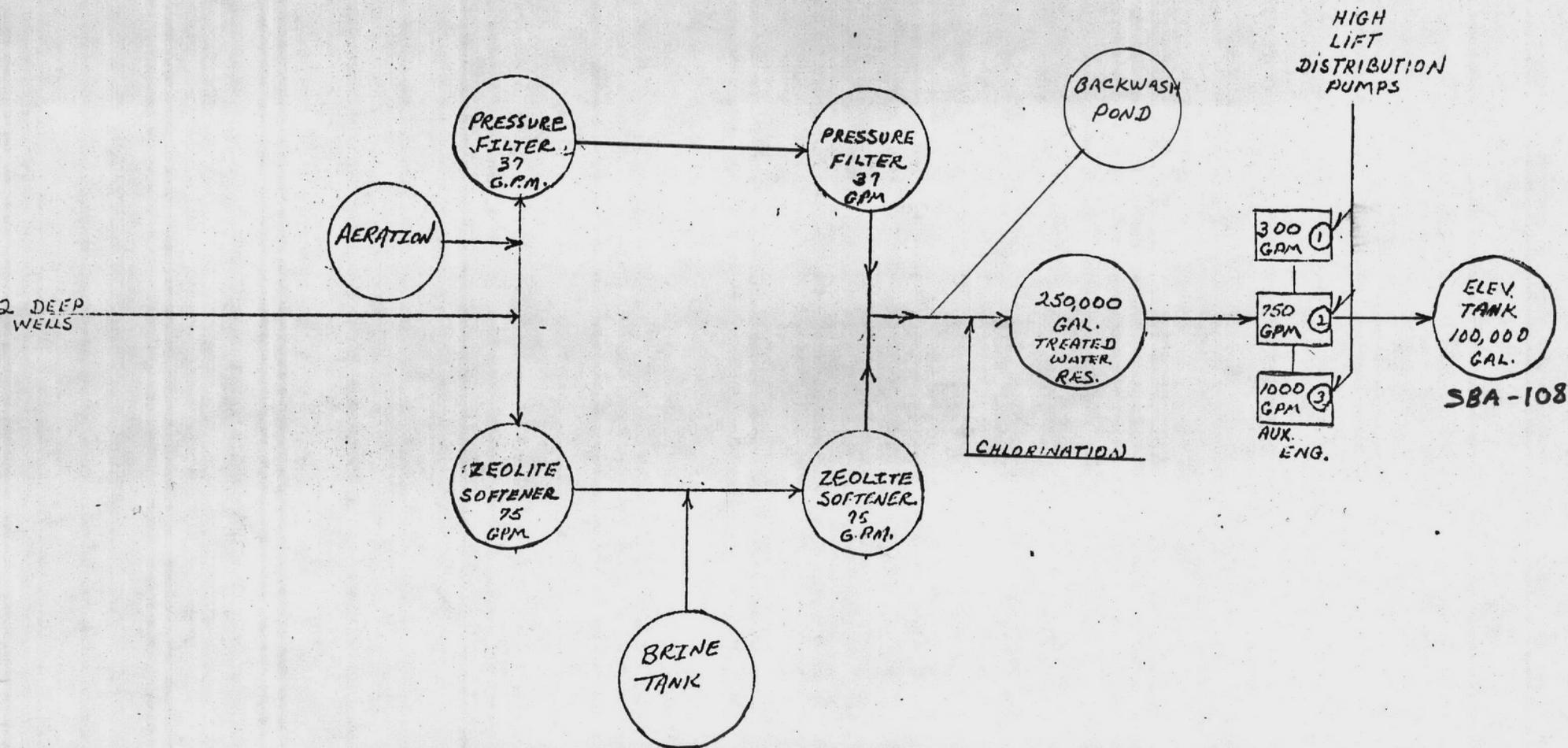


ON SLOW BEACH BLDG. BA-138

CAPACITY 250,000 GPD.

WITH 2 DEEP WELLS.

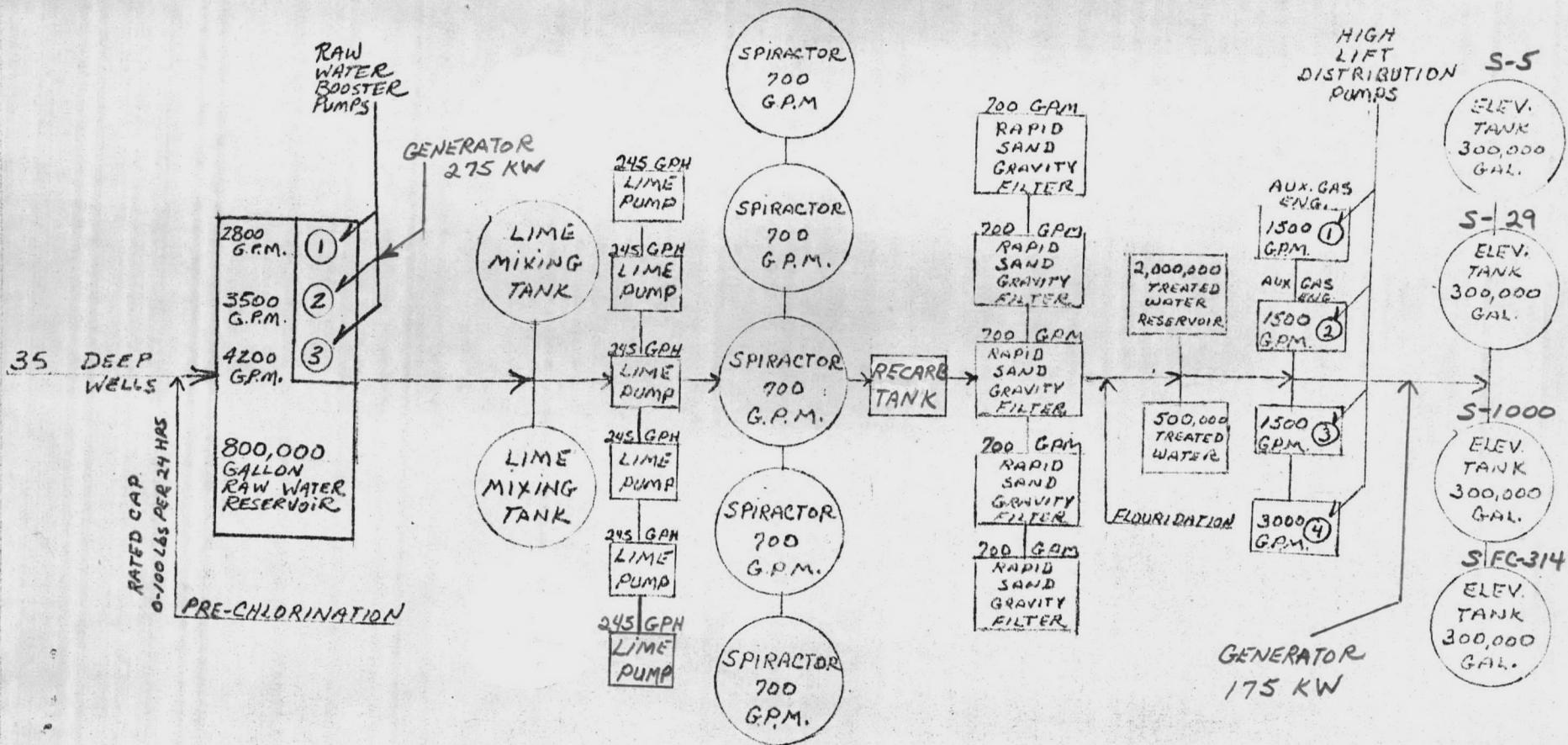
ZEOLITE SOFTENING PLANT

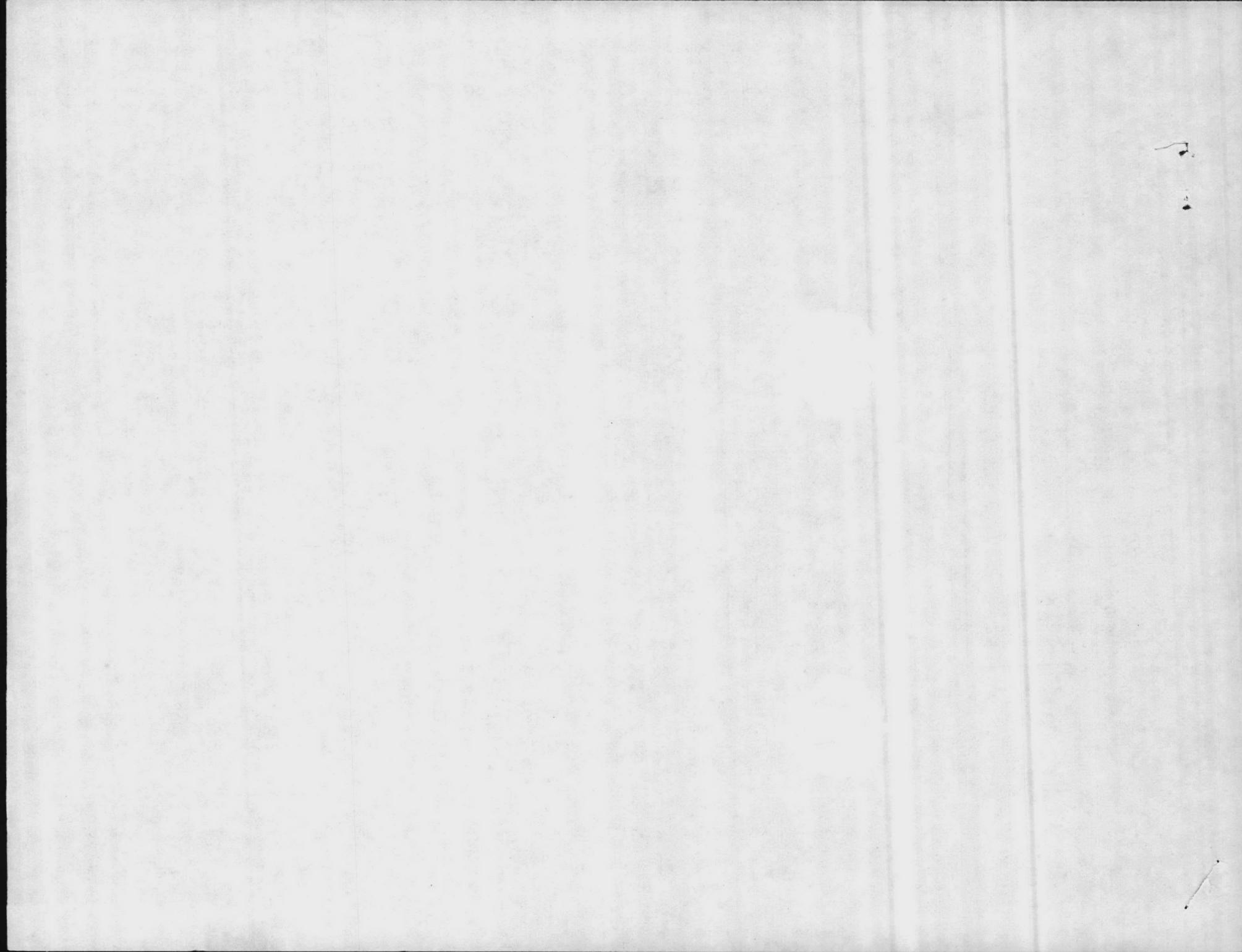


801-422

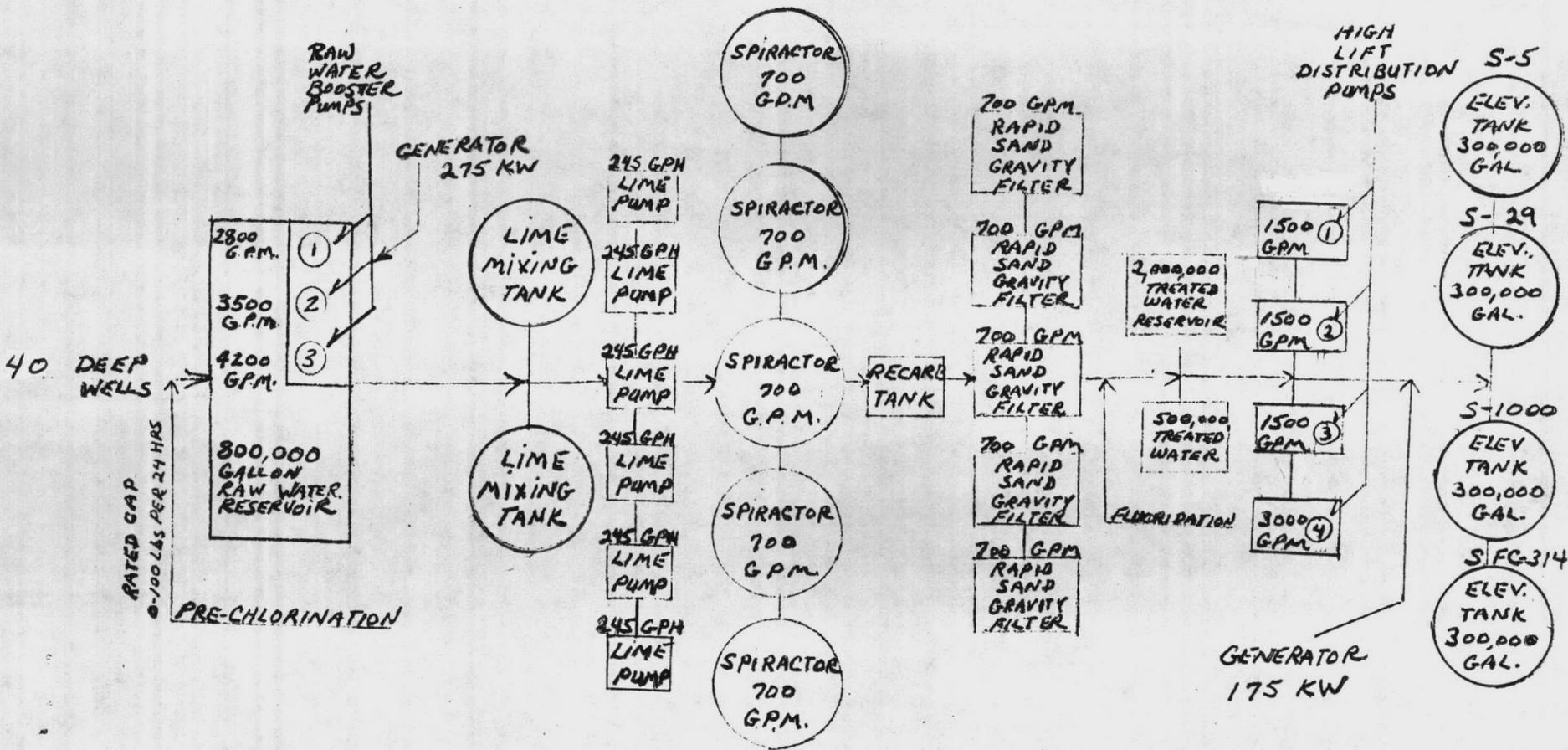
NEW YORK
JUN 19 1954

HADNOT POINT BLDG. #20
 CAPACITY 5 MGD. WITH 40 DEEP WELLS
 LIME SOFTENING PLANT





HAD NOT POINT BLDG. #20
 CAPACITY 5 MGD. WITH 40 DEEP WELLS
 LIME SOFTENING PLANT



Handwritten notes on the left side of the page, including the word "MAY" and other illegible scribbles.

Handwritten text inside a circle, possibly "MAY 1941".

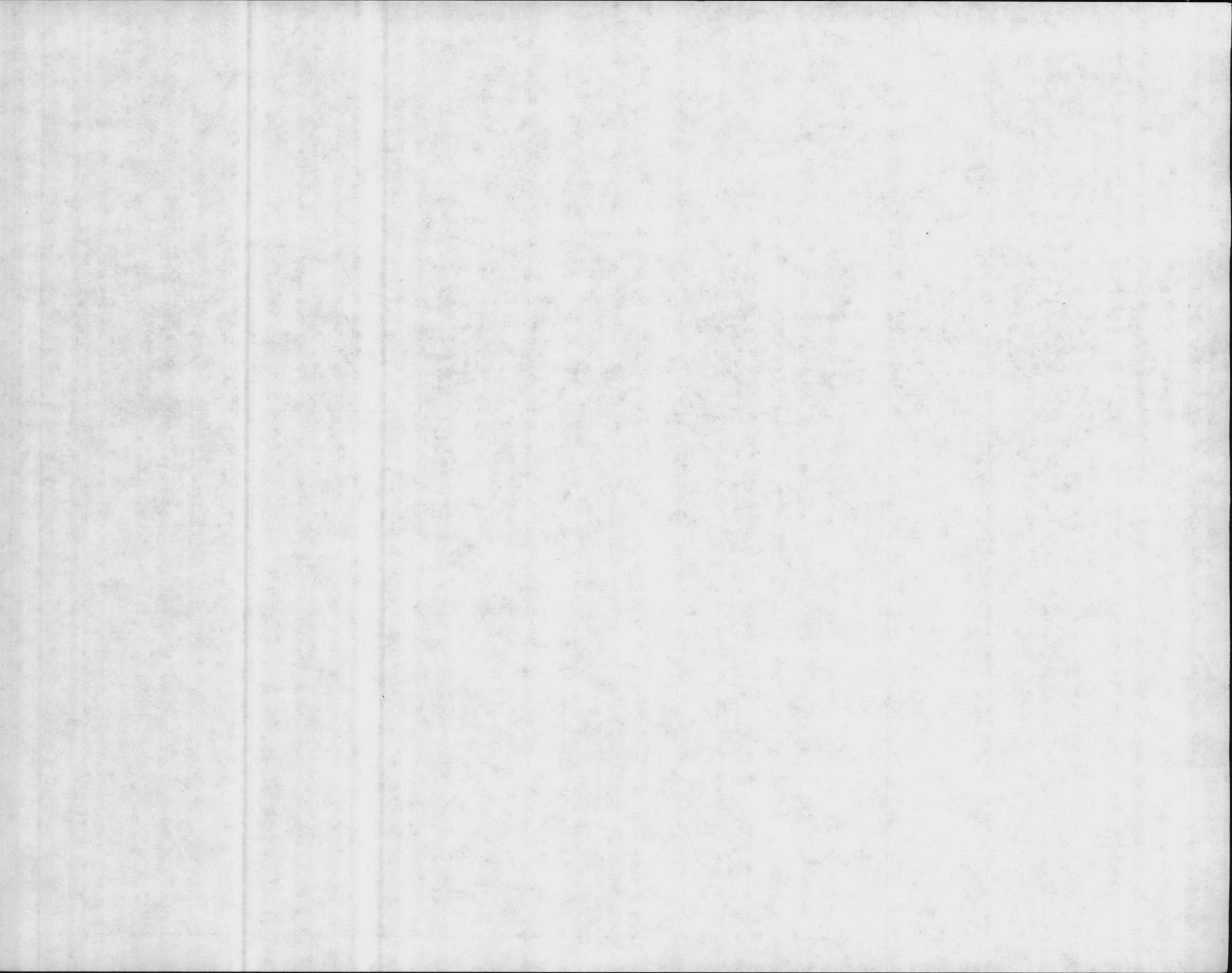
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Vertical column of handwritten text, possibly a list of names or dates, including "MAY 1941" and "MAY 1941".

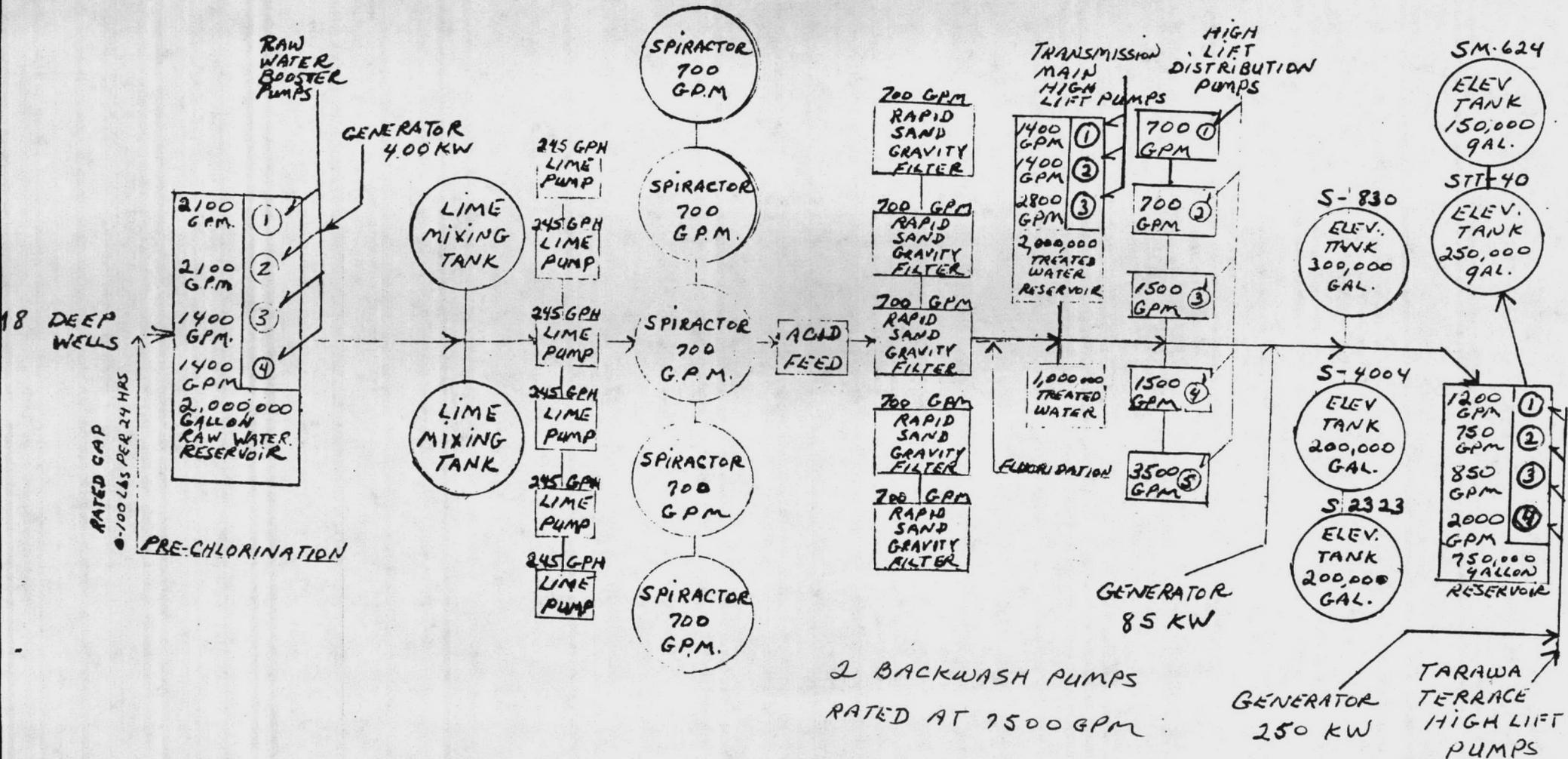
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Vertical column of handwritten text, possibly a list of names or dates, including "MAY 1941" and "MAY 1941".

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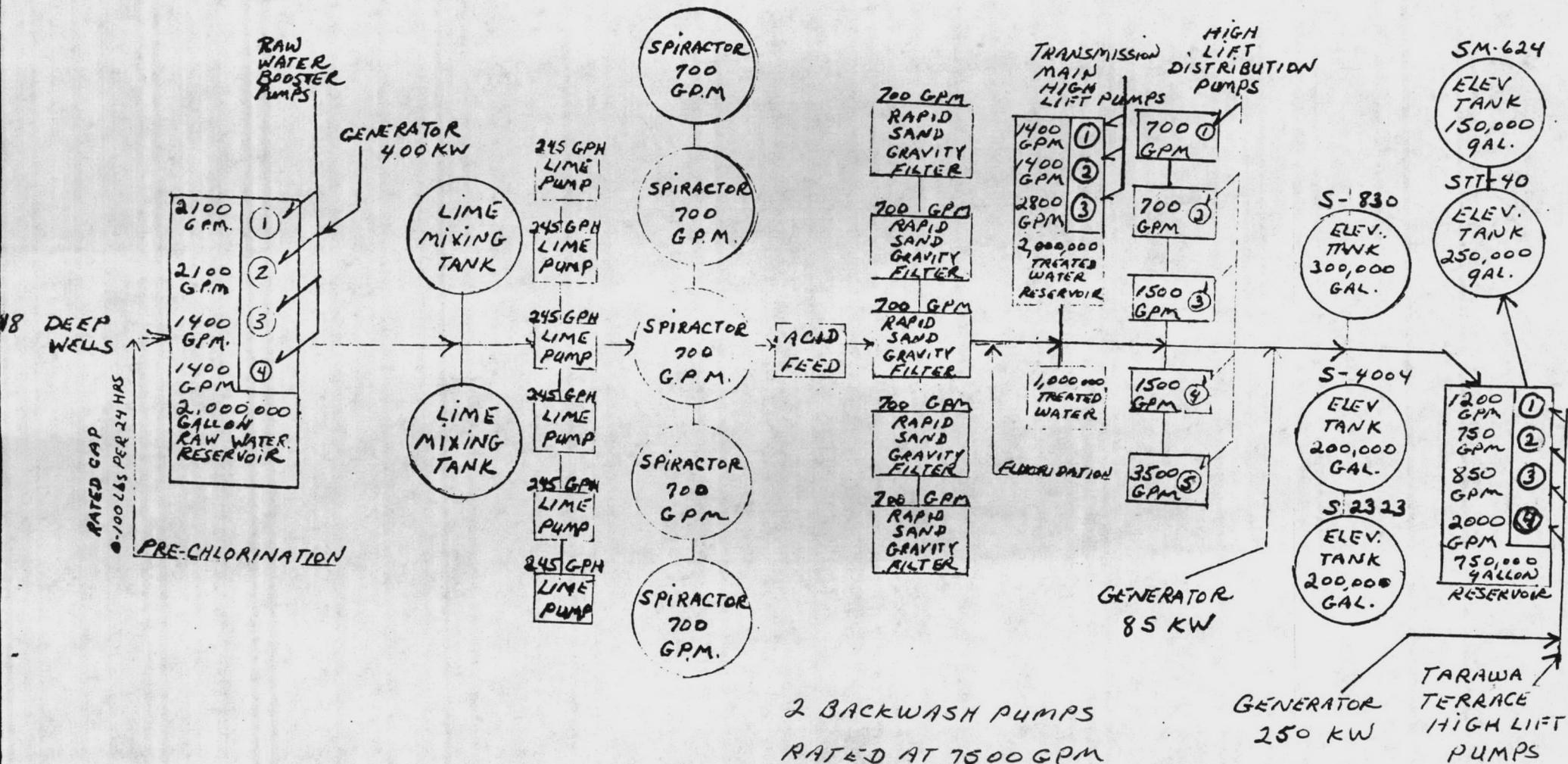
HOLCOMB BLVD BLDG 670
 CAPACITY 5 MGD WITH 18 DEEP WELLS
 LIME SOFTENING PLANT



1910 11 02 0 0 0

1910 11 02 0 0 0

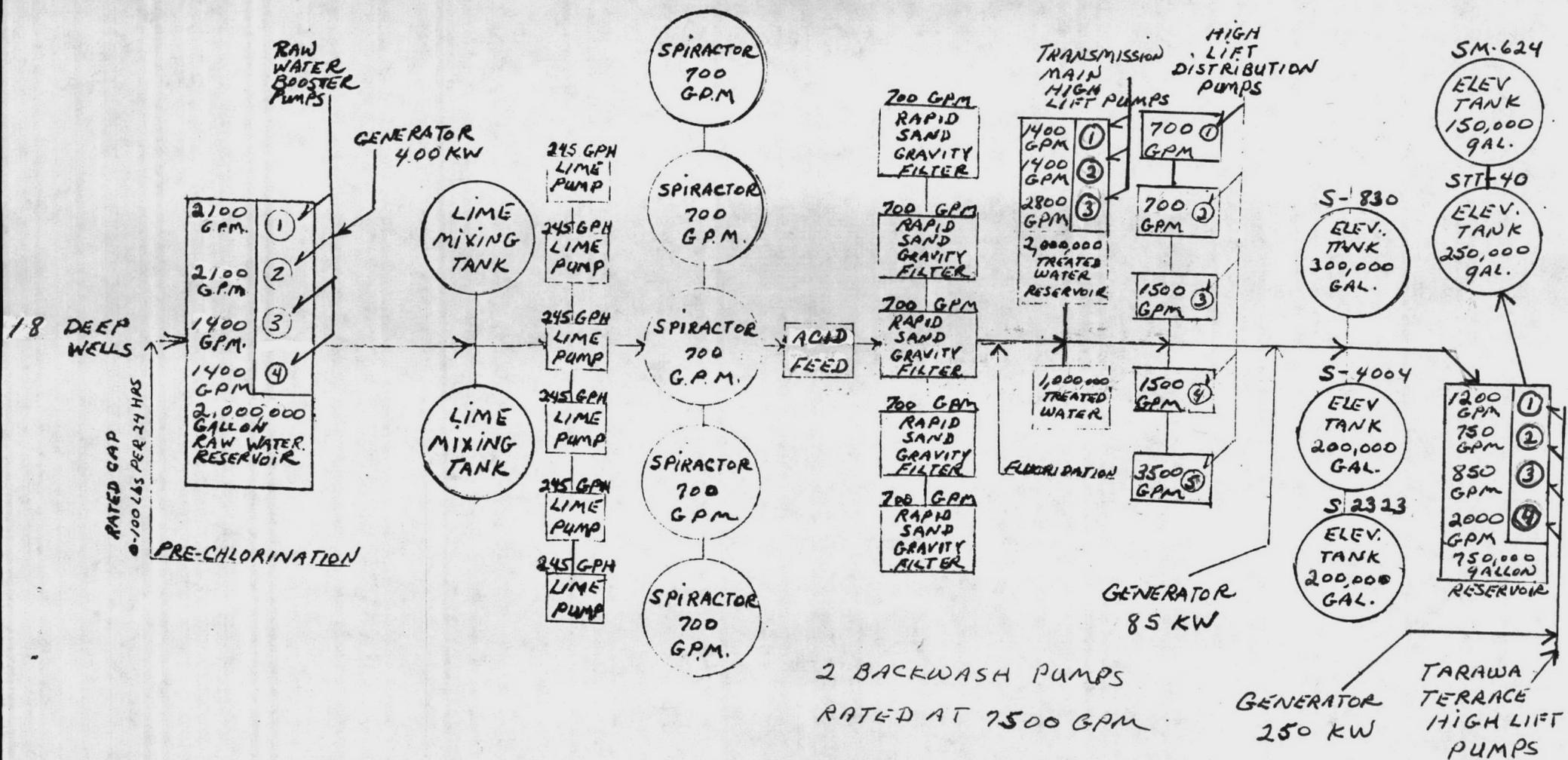
HOLCOMB BLVD BLDG 670
 CAPACITY 5 MGD WITH 18 DEEP WELLS
 LIME SOFTENING PLANT



MAILED BY POST OFFICE

BY THE POST OFFICE

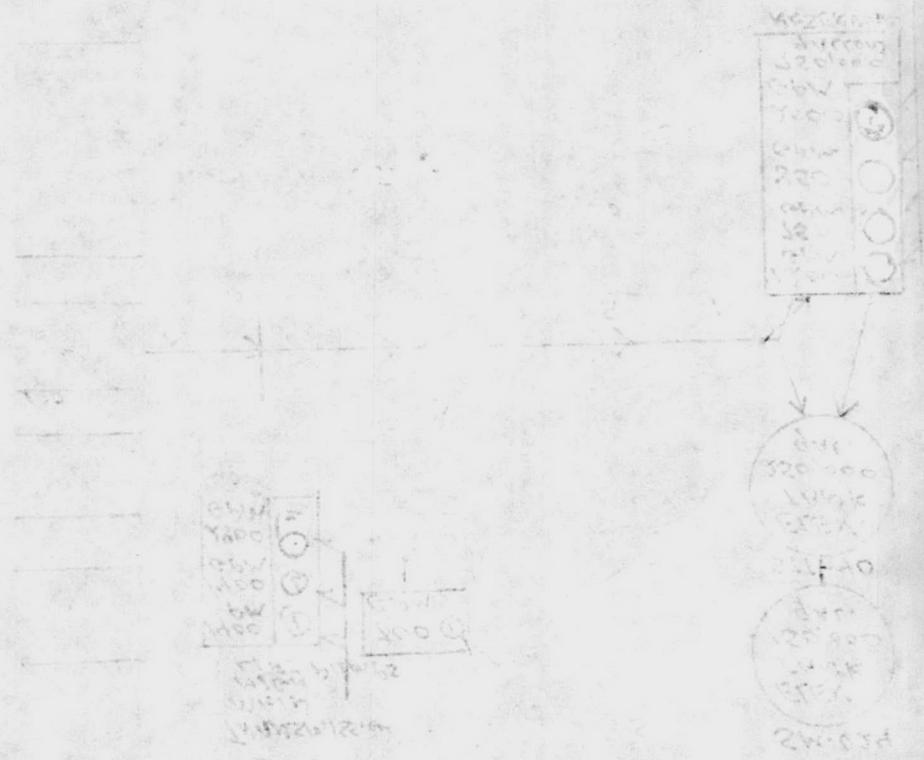
HOLCOMB BLVD BLDG. 670
 CAPACITY 5 MGD WITH 18 DEEP WELLS
 LIME SOFTENING PLANT



2000 1200 1200 1200
 2000 1200 1200 1200

120 120
 120 120
 120 120

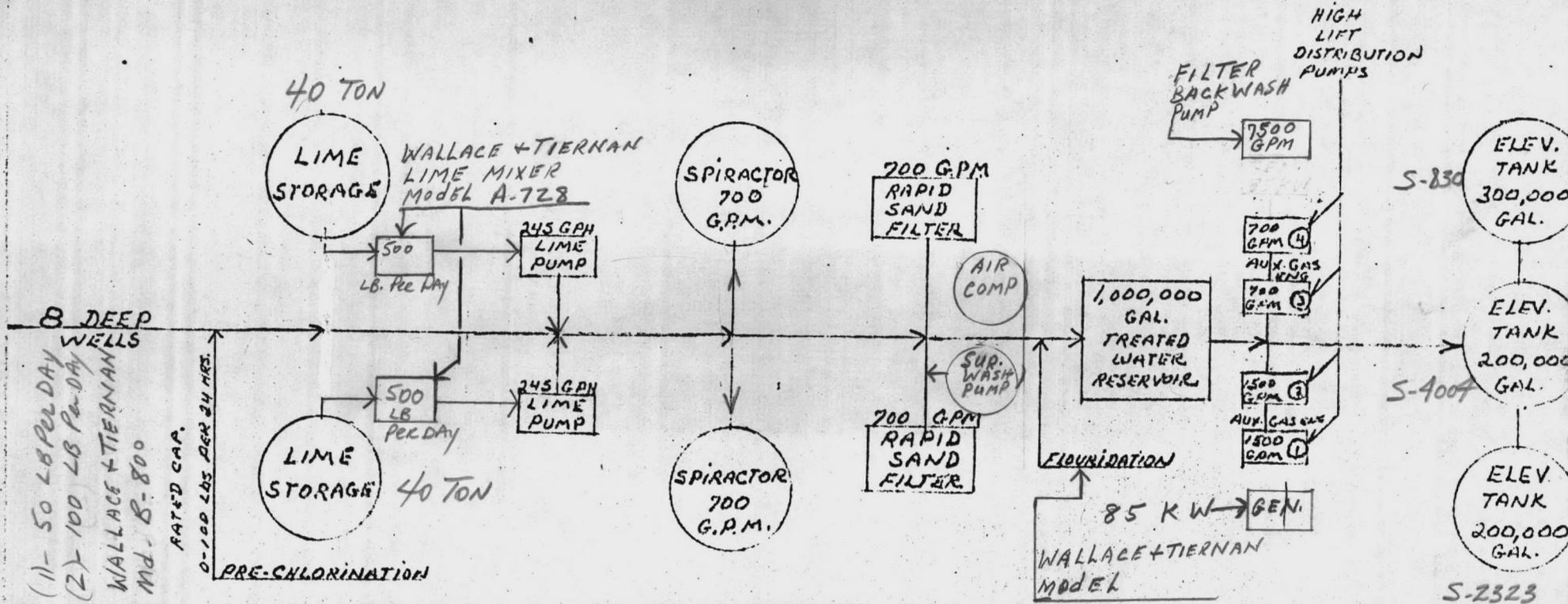
120 120
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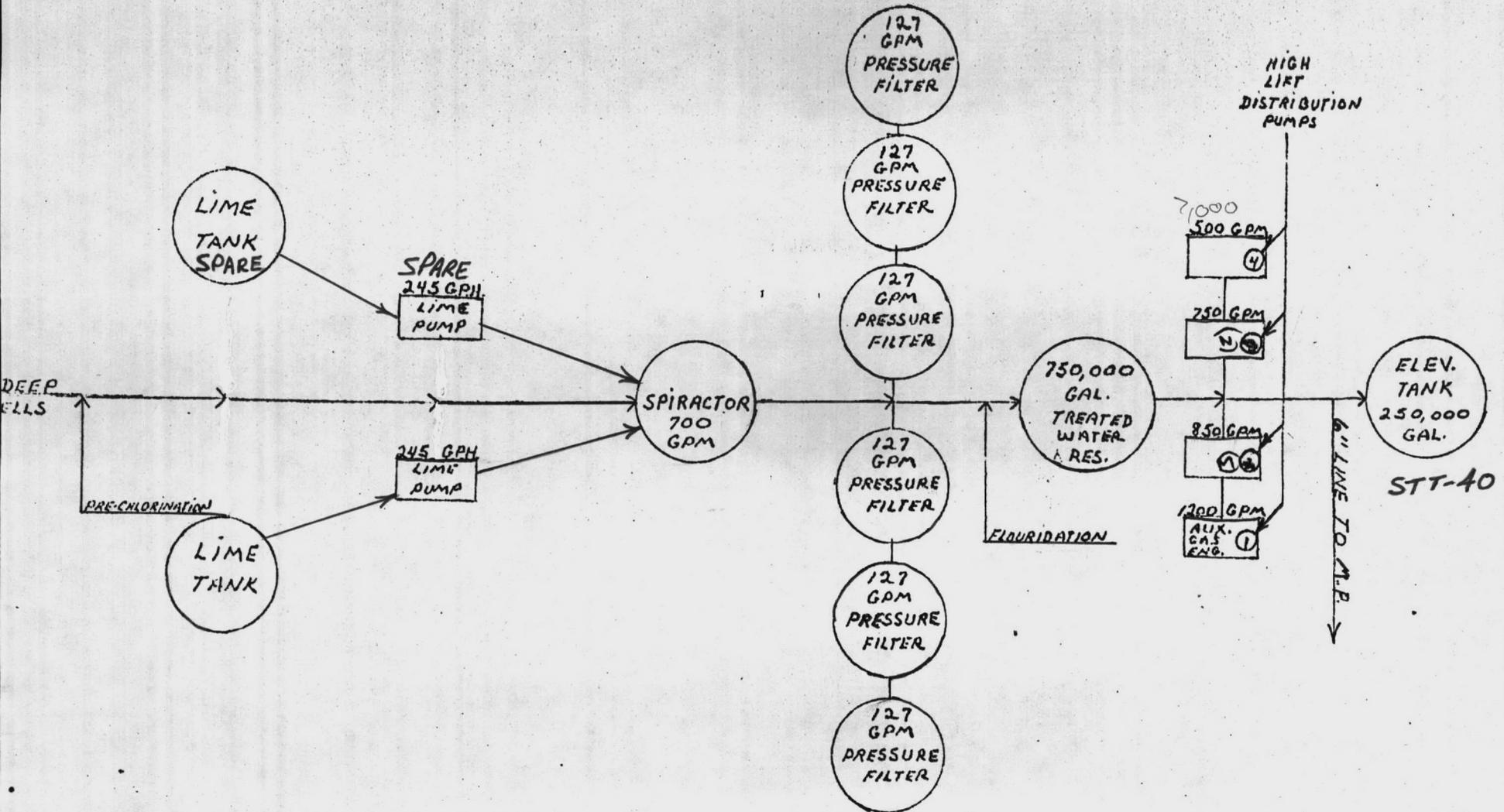
HOLCOMB BLVD. BLDG. 670

CAPACITY 2 MGD WITH 8 DEEP WELLS
LIME SOFTENING PLANT
WITH 85 KW GENERATOR





TARAWA TERRACE BLDG. TT-38
 CAPACITY 1 MGD
 WITH 7 DEEP WELLS
 LIME SOFTENING PLANT



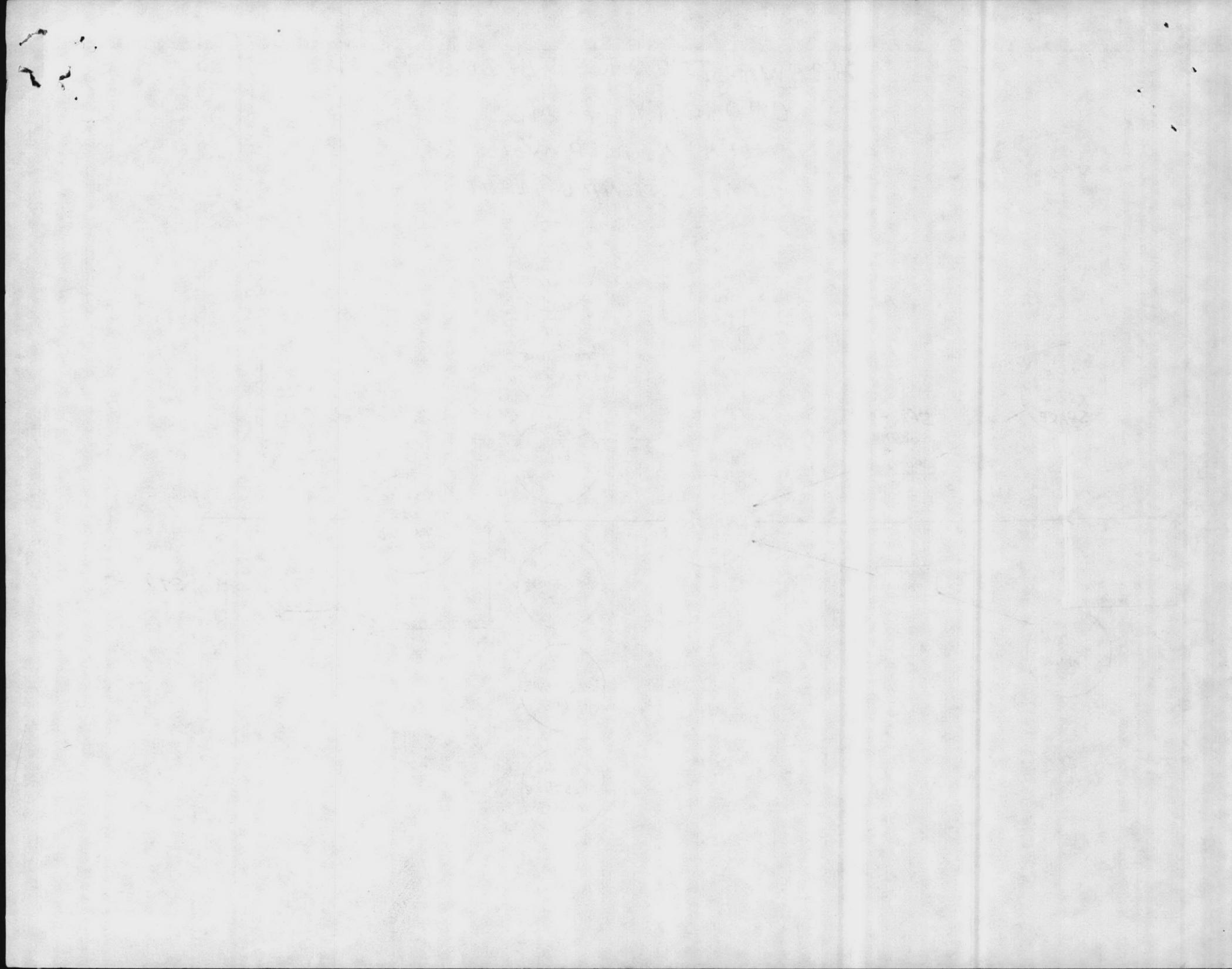


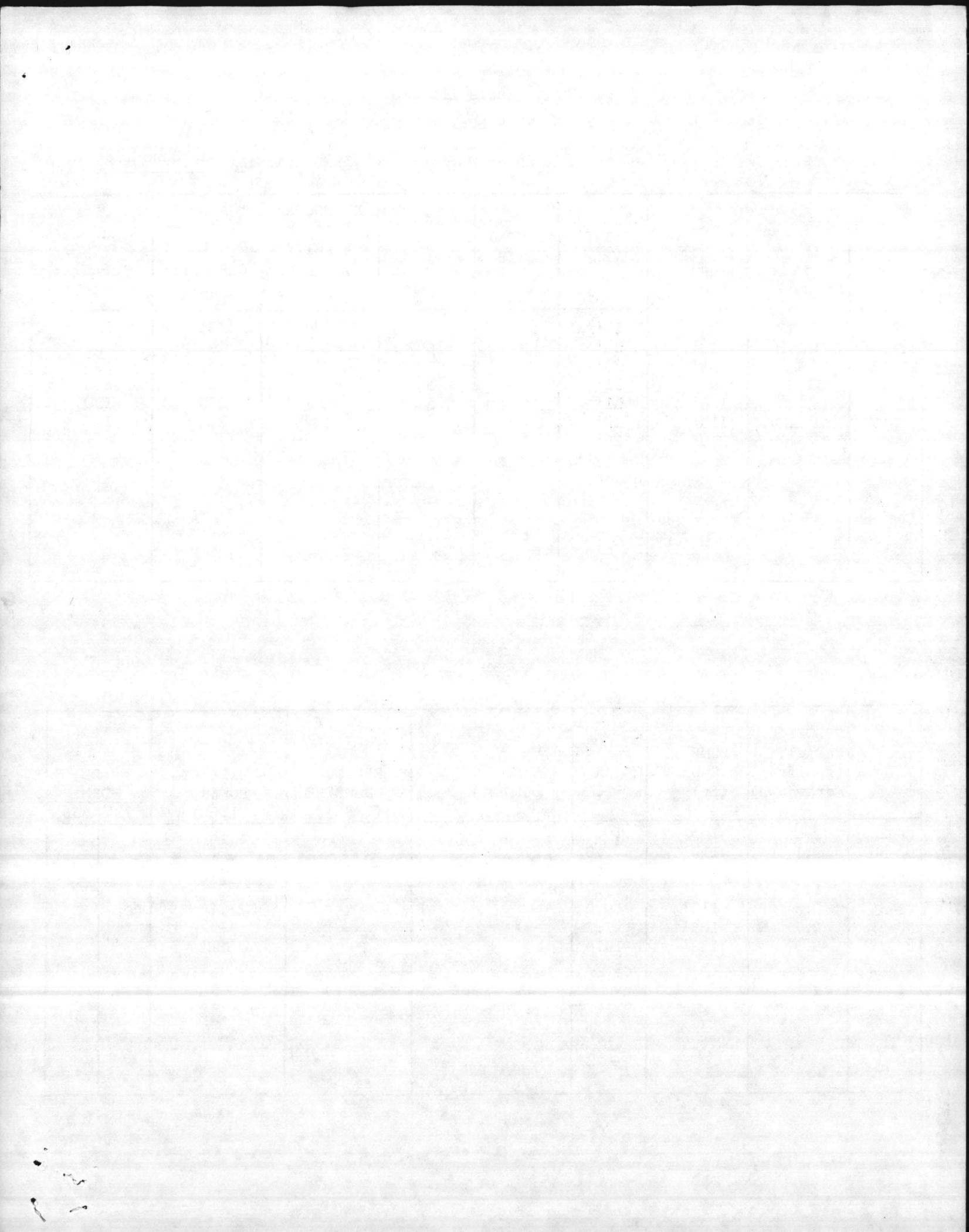
Table III C 3
WELL SURVEY SHEET

Sheet No. 5

DATE: 20 June 1984

WELL NO.	WELL TYPE	DRILLED DEPTH ft.	STATIC LEVEL (ft)	CASING SIZE (in.)	STAGES	DRAWDOWN AT RATED CAPACITY (feet)	RATED CAPACITY (gpm)	PRESENT CAPACITY (gpm)
TT-26	DRILLED	95'	16'	8"	4	51'	150	150
TT-30	DRILLED	98'	28'	8"	10	32'	100	50
TT-31	DRILLED	94'	26'	8"	4	10'	145	150
TT-52	DRILLED	98'	31'	8"	5	14'	300	200
TT-54	DRILLED	104'	31'	8"	5	31'	200	150
TT-67	DRILLED	110'	29'	8"	8	36'	168	100
TT-25	DRILLED	200'	26'	8"	?	34'	190	-
new well still under construction								

WELL NO.	SPECIFIC CAPACITY (gpm/ft of drawdown)	PUMP HEAD (ft)	MOTOR H. P.	CHLORINATION (AMOUNT)	RESIDUAL CHLORINE (TYPE)	AUXILIARY POWER (TYPE)	DD FORM	
							710	636
TT-26	2.2	105'	10.0					
TT-30	3.1	110'	5.0					
TT-31	1.5	95'	7.5					
TT-52	21.4	100'	15.0					
TT-54	6.5	112'	10.0			GASOLINE		
TT-67	4.7	105'	7.5					
TT-25	5.5	128'	10.0			DIESEL		
New well still under construction								



TARAWA TERRACE POOL - TT-20

298,800 GALLONS

POOL EQUIPPED WITH
IFRS PERIMETER
RIM FLOW

SURGE TANK

800 G.P.M.
FILTER PUMP

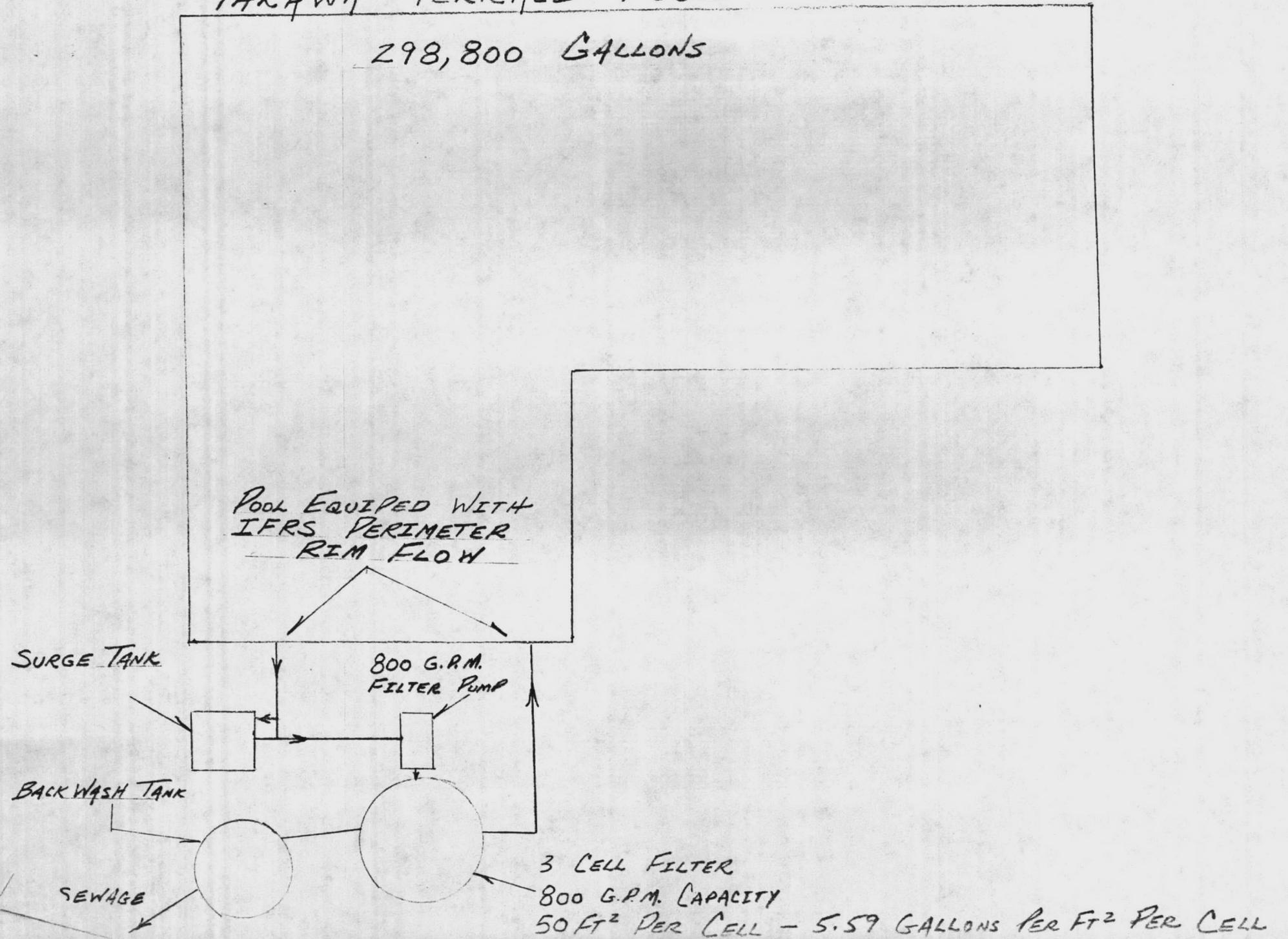
BACK WASH TANK

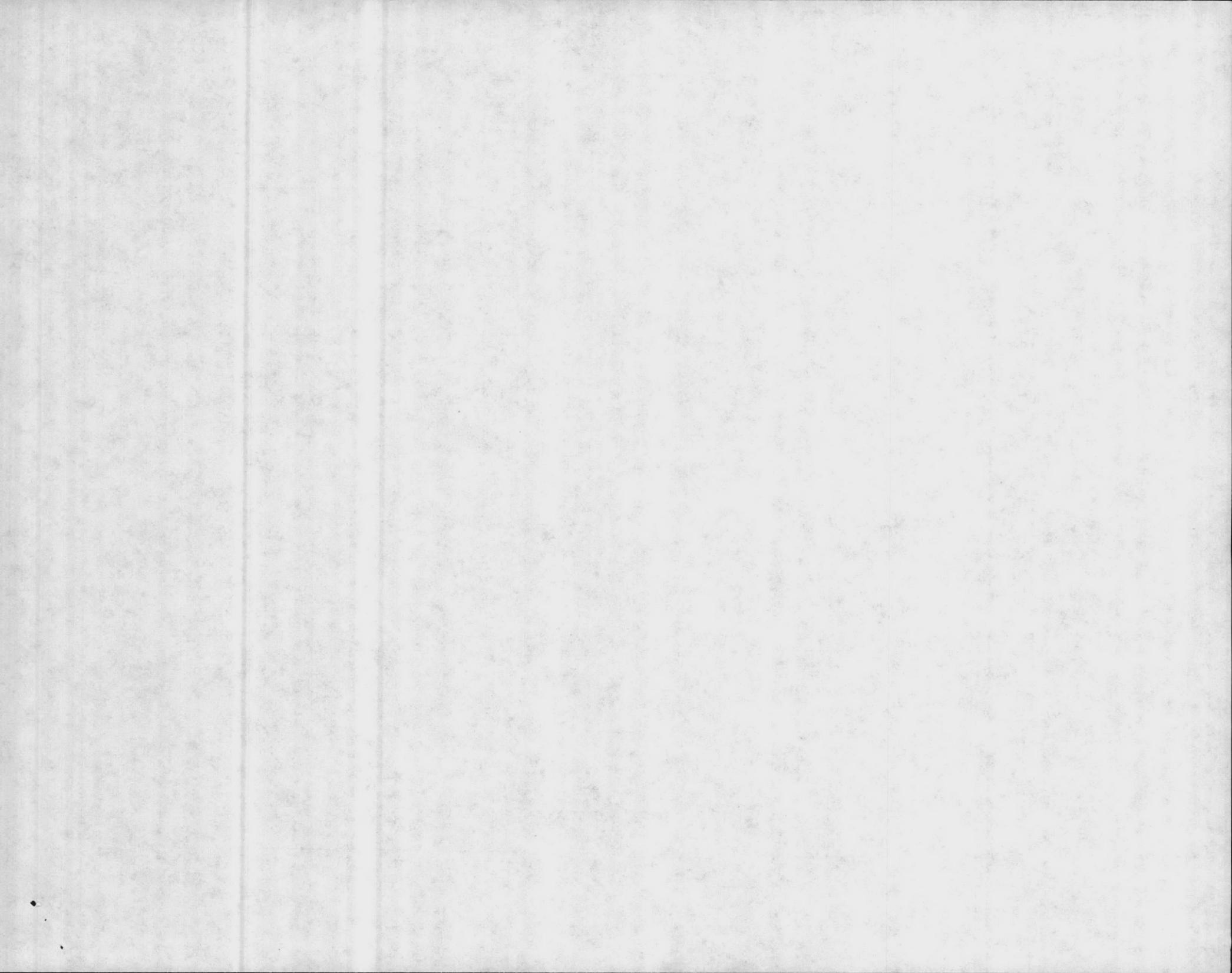
3 CELL FILTER

800 G.P.M. CAPACITY

50 FT² PER CELL - 5.59 GALLONS PER FT² PER CELL

SEWAGE





TARAWA TERRACE POOL - TT-20

298,800 GALLONS

POOL EQUIPPED WITH
IFRS PERIMETER
RIM FLOW

SURGE TANK

800 G.P.M.
FILTER PUMP

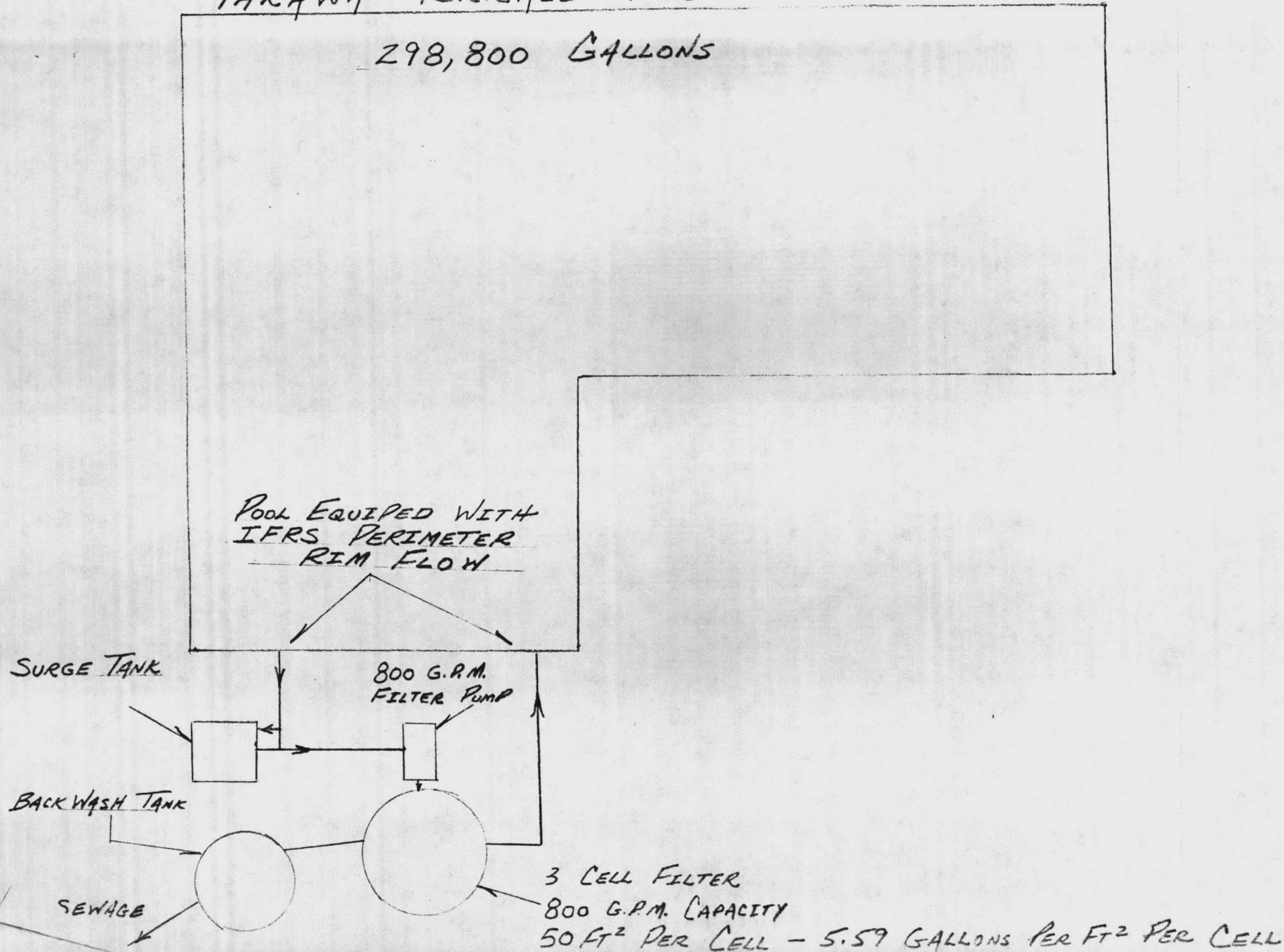
BACK WASH TANK

SEWAGE

3 CELL FILTER

800 G.P.M. CAPACITY

50 FT² PER CELL - 5.59 GALLONS PER FT² PER CELL





TARAWA TERRACE POOL - TT-20

298,800 GALLONS

POOL EQUIPPED WITH
IFRS PERIMETER
RIM FLOW

SURGE TANK

800 G.P.M.
FILTER PUMP

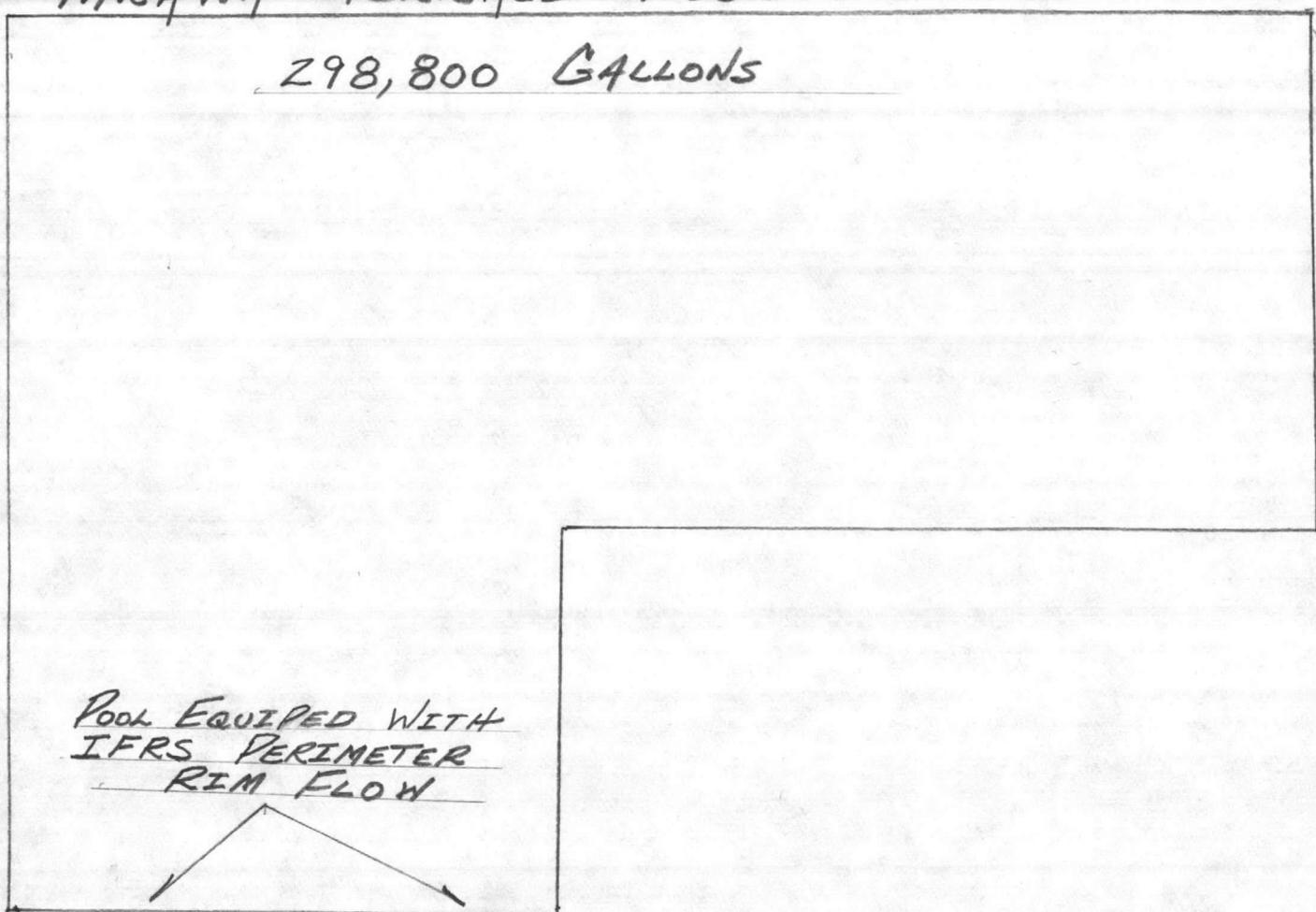
BACK WASH TANK

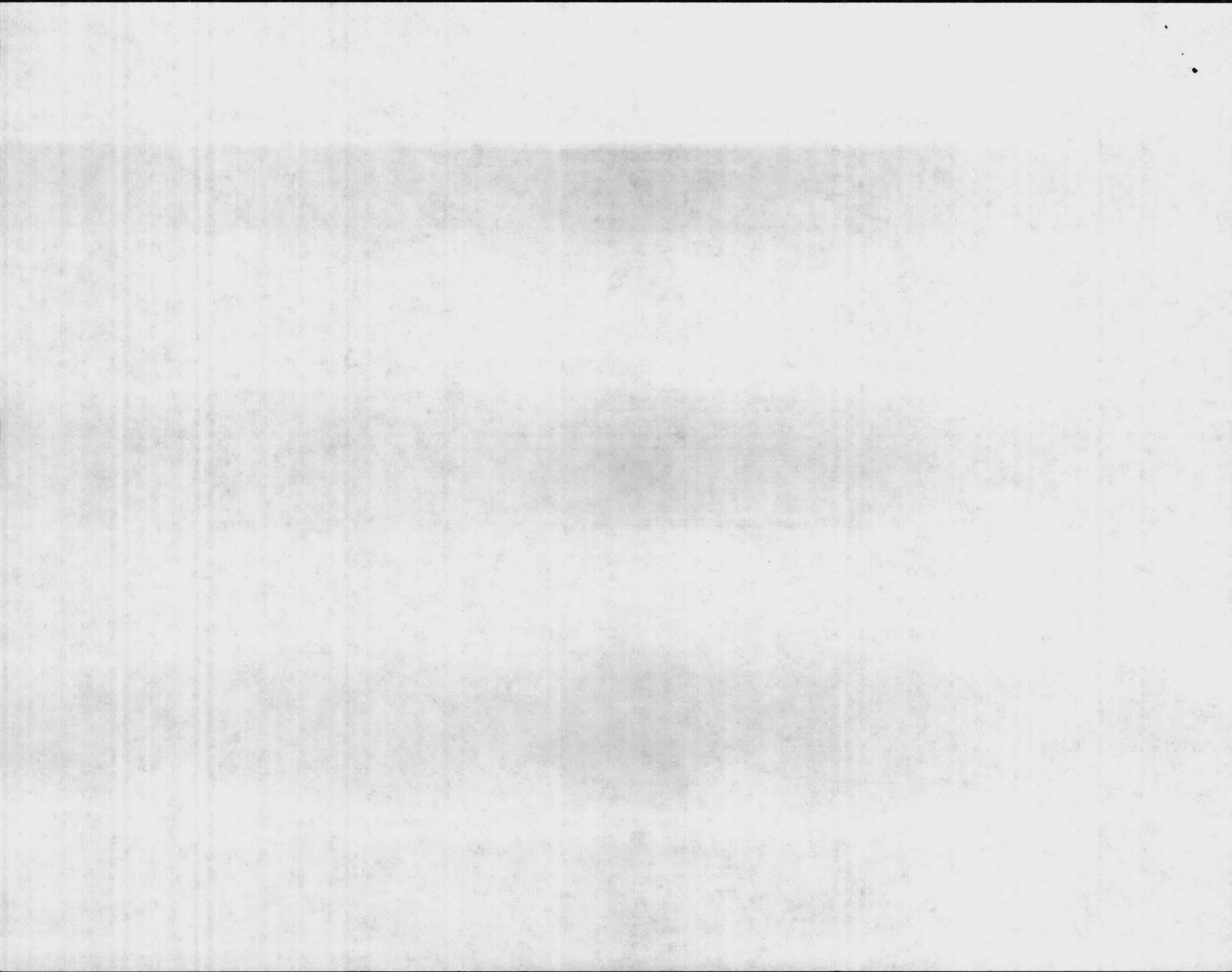
3 CELL FILTER

800 G.P.M. CAPACITY

50 FT² PER CELL - 5.59 GALLONS PER FT² PER CELL

TO SEWAGE
SYSTEM



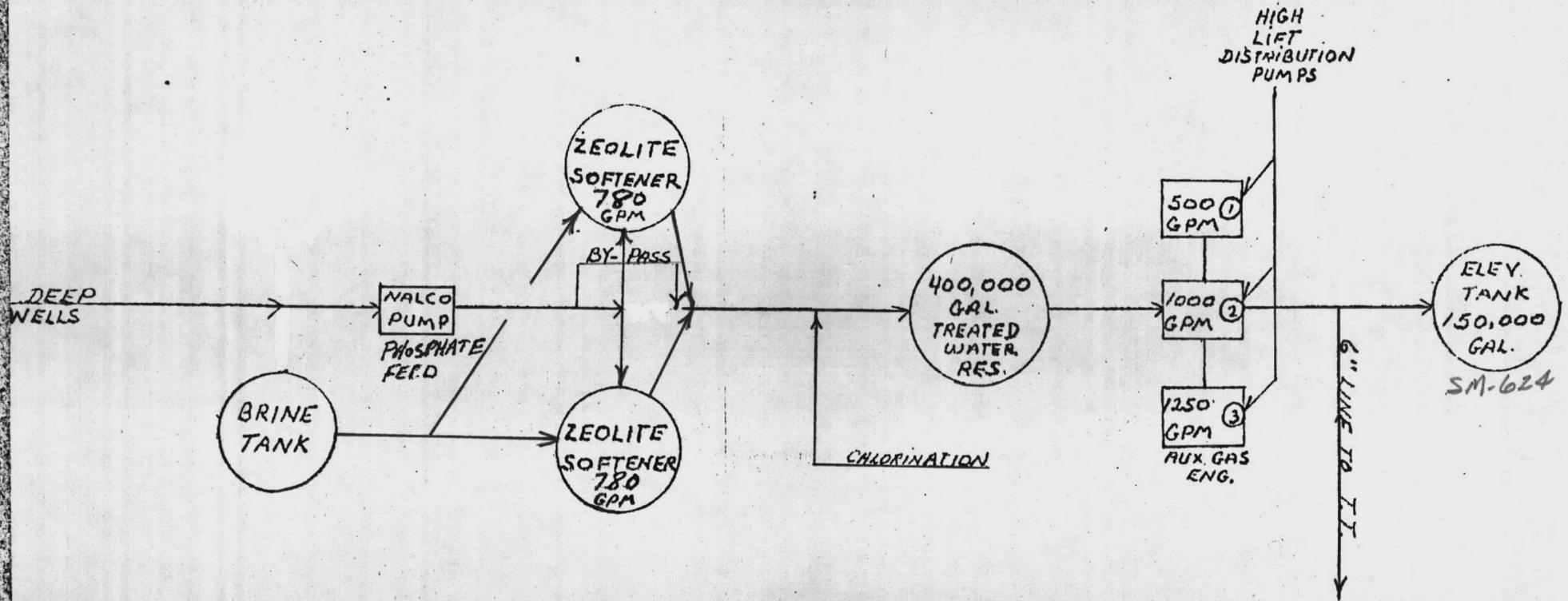


MONTFORD POINT BLDG. M-178

CAPACITY 750,000 GPD

WITH 7 DEEP WELLS

ZEOLITE SOFTENING PLANT



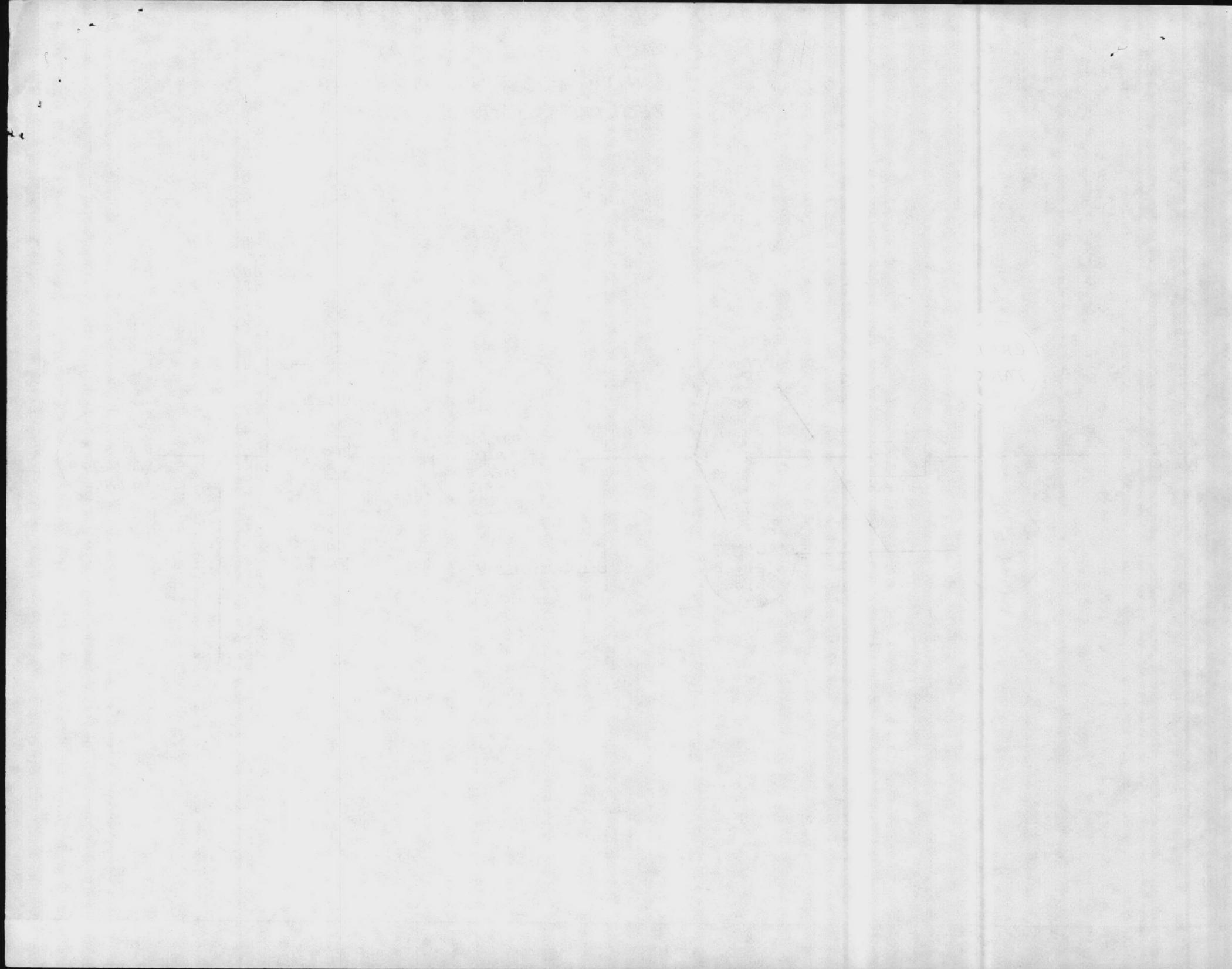


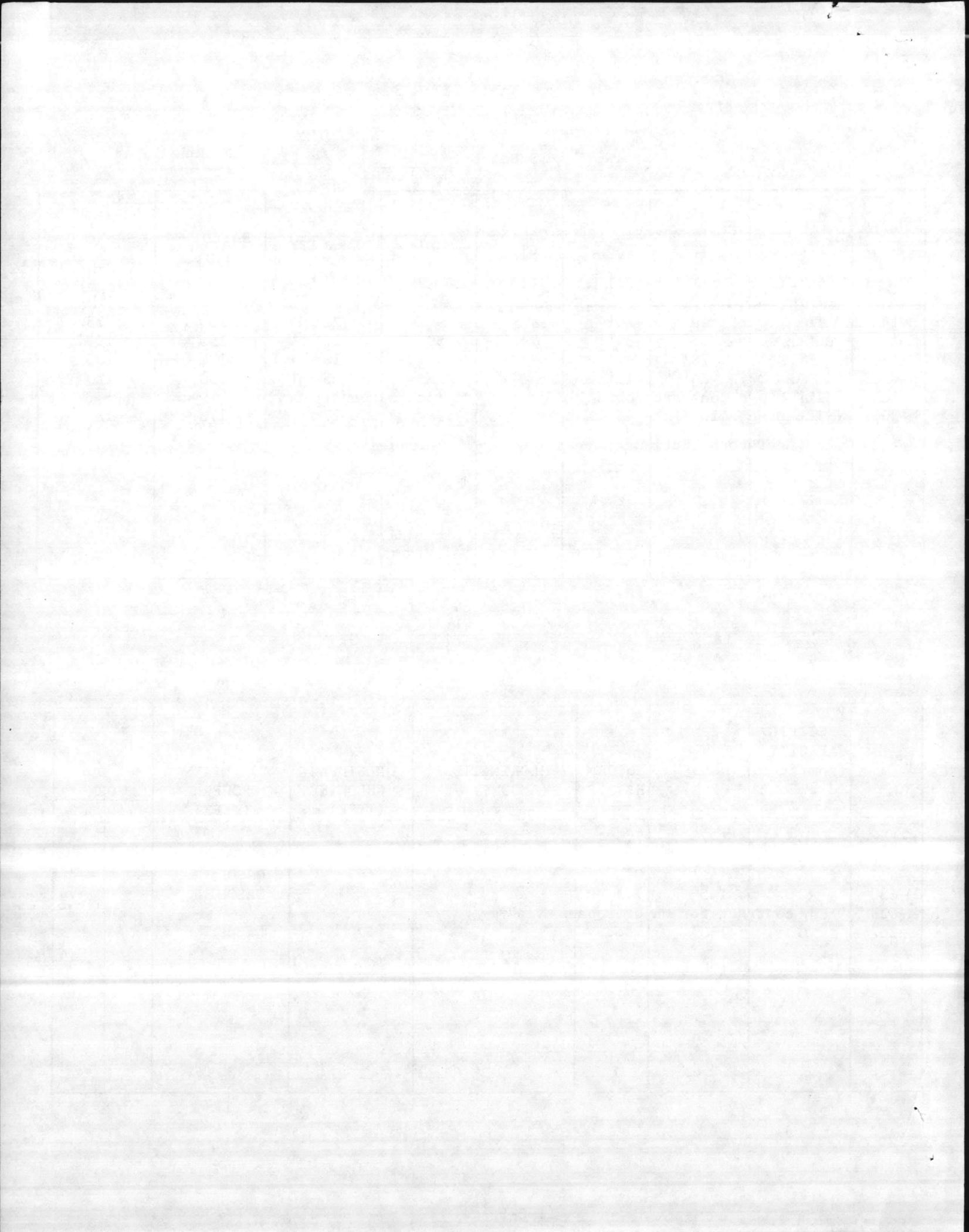
Table III C 3
WELL SURVEY SHEET

Sheet No. 6

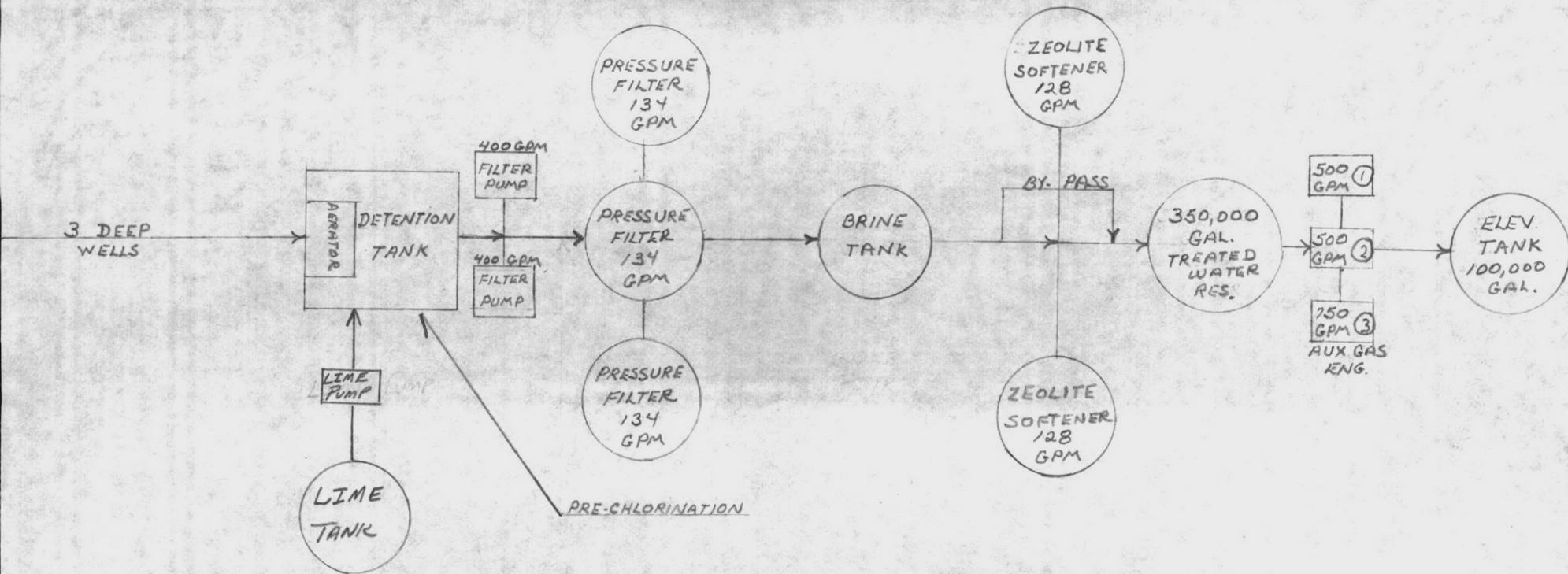
DATE: 20 June 1984

WELL NO.	WELL TYPE	DRILLED DEPTH ft.	STATIC LEVEL (ft)	CASING SIZE (in.)	STAGES	DRAWDOWN AT RATED CAPACITY (feet)	RATED CAPACITY (gpm)	PRESENT CAPACITY (gpm)
M-142	DRILLED	69'	24'	8"	9	21'	100	75
M-107	DRILLED	200'	34'	8"	5	17'	155	100
M-629	DRILLED	70'	27'	8"	5	18'	150	100
M-630	DRILLED	84'	19'	8"	5	25	150	125
M-628	DRILLED	on contract for major repair (replace screens, etc.)						
M-267	DRILLED	100'	45'	8"	?	17'	175	130
	New well under construction							

WELL NO.	SPECIFIC CAPACITY (gpm/ft of drawdown)	PUMP HEAD (ft)	MOTOR H. P.	CHLORINATION (AMOUNT)	RESIDUAL CHLORINE (TYPE)	AUXILIARY POWER (TYPE)	DD FORM	
							710	636
M-142	4.8	147'	7.5					
M-197	9.0	135'	10.0			GASOLINE		
M-629	8.3	140'	7.5			GASOLINE		
M-630	6.0	145	7.5			GASOLINE		
M-628	On contract for major repair							
M-267	10.3	143'	10.0			DIESEL		
	New well under construction to replace M-168							



RIFLE RANGE BLDG. RR-85
CAPACITY 600,000 GPD
WITH 4 DEEP WELLS
ZEOLITE SOFTENING PLANT



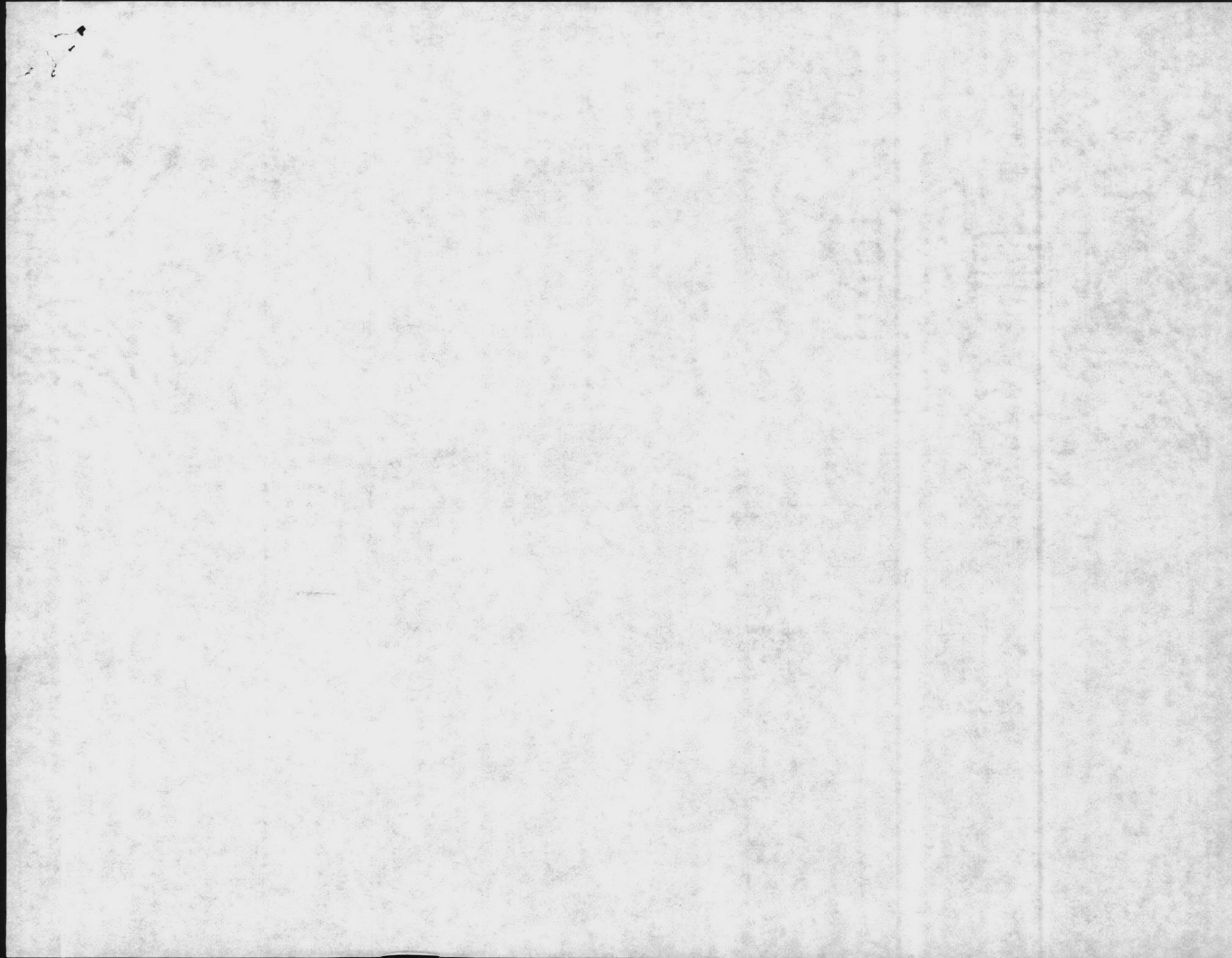


Table III C 3

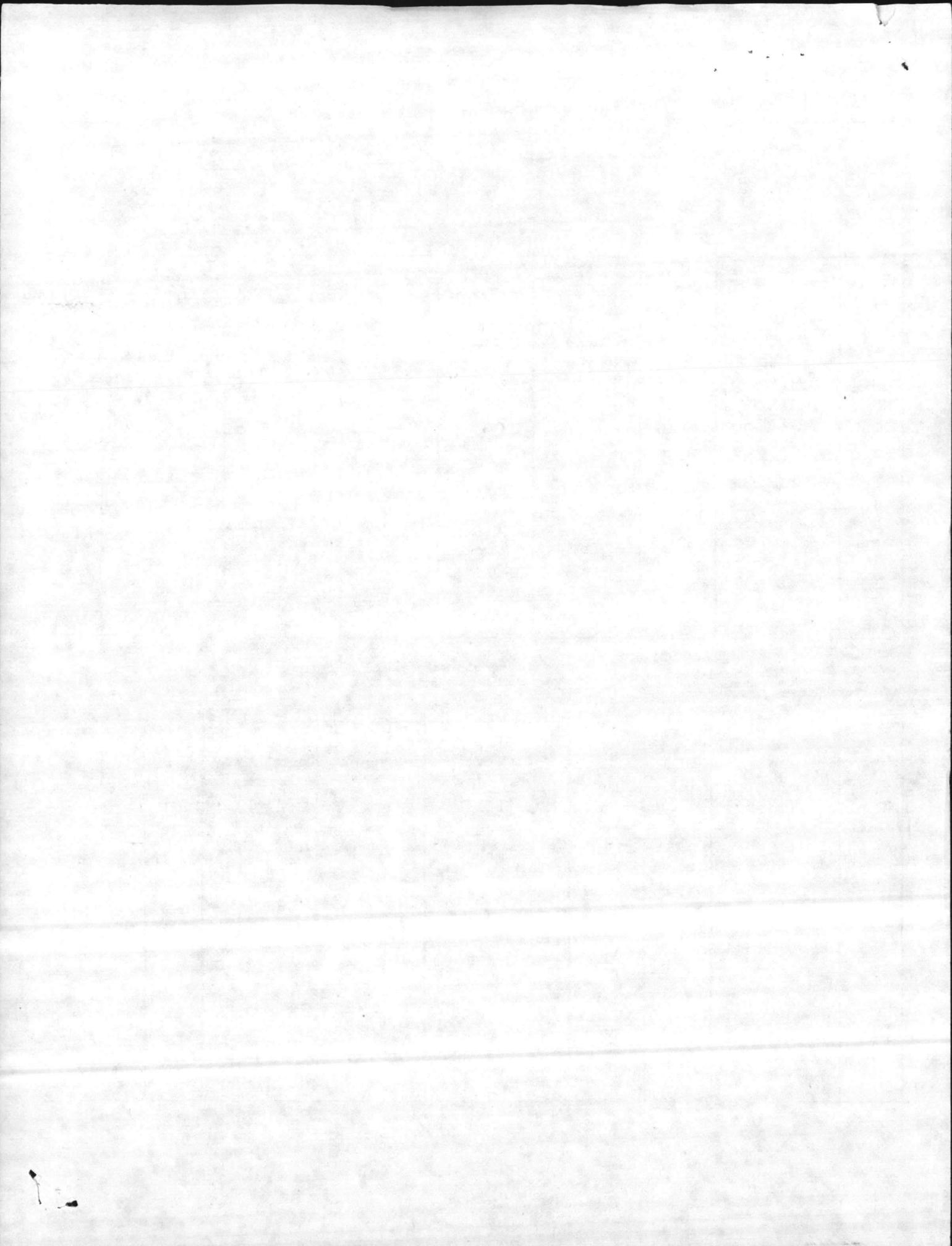
WELL SURVEY SHEET*

Sheet No. 9

DATE: 3-3-77

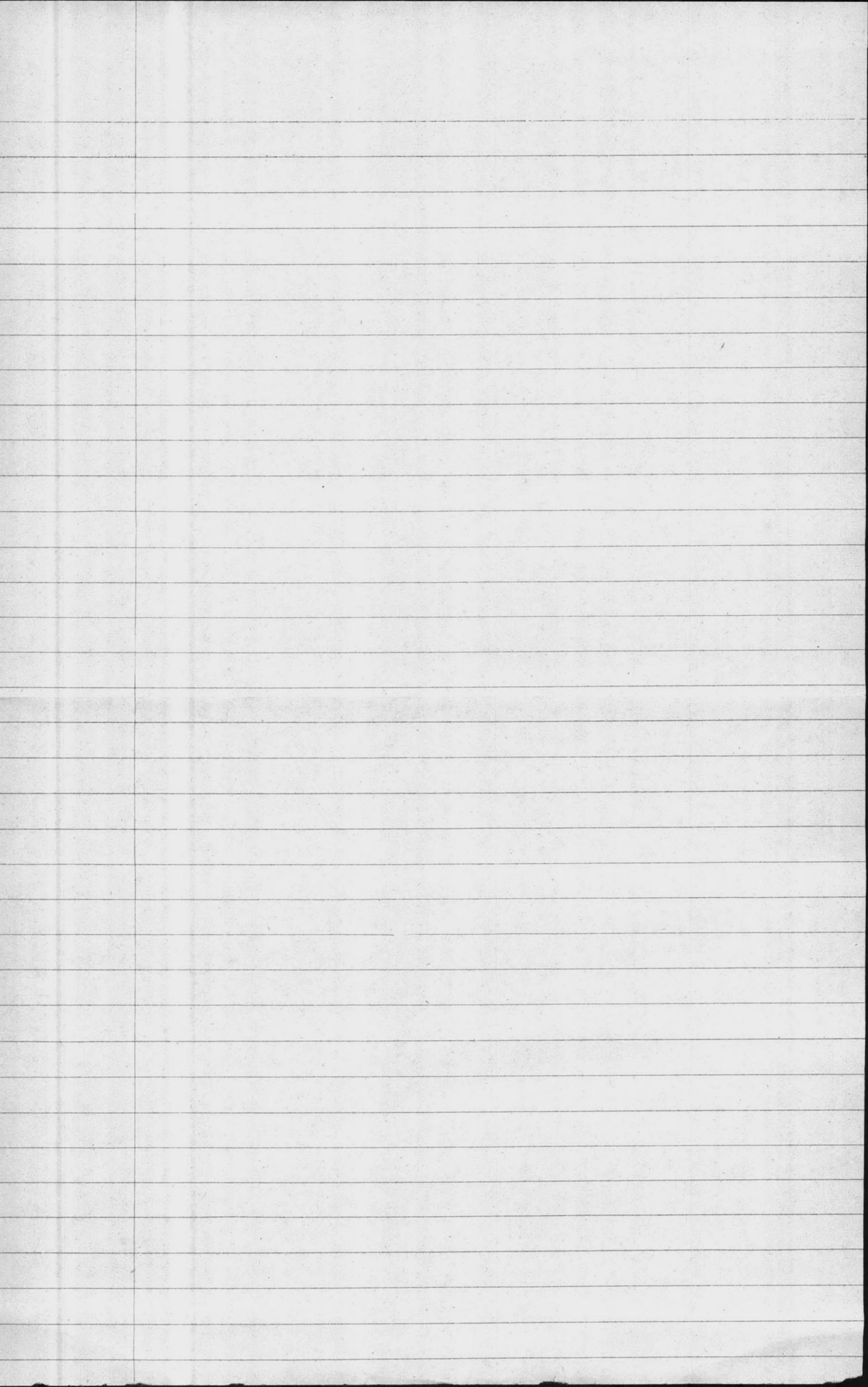
WELL NO.	WELL TYPE	DRILLED DEPTH ft.	STATIC LEVEL (ft)	CASING SIZE (in.)	STAGES	DRAWDOWN AT RATED CAPACITY (feet)	RATED CAPACITY (gpm)	PRESENT CAPACITY (GPM)
RR-45	DRILLED	130'	27'	8"	10	8'	140	100
RR-47	DRILLED	85'	11'	8"	7	6'	250	125
RR-227	DRILLED	77'	13'	8"	10	10'	200	50
RR-97								

WELL NO.	SPECIFIC CAPACITY (gpm/ft of drawdown)	PUMP HEAD (ft)	MOTOR H. P.	CHLORINATION (AMOUNT)	RESIDUAL CHLORINE (ppm)	AUXILIARY POWER (type)	DD FORM	
							710	686
RR-45	17.5	205'	15.0			GASOLINE		
RR-47	41.7	190'	20.0					
RR-227	20.0	190'	10.0			GASOLINE		
RR-97								



Jan 1979 R. Fle Range Water

1	162,000
2	163,000
3	185,200
4	170,800
5	178,000
6	142,600
7	210,100
8	210,100
9	190,000
10	260,700
11	270,100
12	226,000
13	253,000
14	273,400
15	278,300
16	276,000
17	266,800
18	259,200
19	251,300
20	261,100
21	271,100
22	251,000
23	281,000
24	260,000
25	234,000
26	201,800
27	181,000
28	184,100
29	210,100
30	190,000
31	197,400



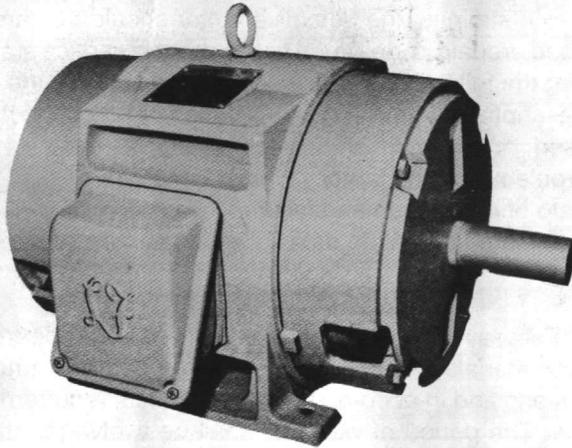
*RR 85 Aerator
Motor*

**LELAND
ELECTRIC**



**FARADAY
COMPANY**

*Installed - 6-20-84
Shaft 1" shorter than
old one.*



**AUTHORIZED SALES
AND
SERVICE STATIONS**



LELAND FARADAY

AUTHORIZED SALES AND SERVICE STATIONS

Leland Faraday Electric Co. offer complete authorized service through any of the service stations listed in this bulletin. These centers have complete testing and repair facilities and are capable of doing any necessary service work required on Leland Faraday motors.

SERVICE

To obtain prompt, warranty and non-warranty service from any of the listed service stations, the defective motor should be carefully packed and shipped prepaid or delivered to the nearest service station. It is necessary that the following information be included with the motor.

1. Description of product or application in which the motor is being used
2. Problem with the motor
3. Date of installation and failure
4. Complete nameplate data if nameplate has been removed

LIMITED WARRANTY

Leland Faraday Electric Co. warrants its motor to be free from defects in materials and workmanship when operated under normal conditions and in accordance with electrical requirements on nameplate. The period of warranty shall be twelve months from date of installation but in no event more than twenty four months from date of manufacture. Leland Faraday Electric Co. is not responsible for damage to the motor caused by: unauthorized repairs or adjustments, defects in the driven equipment or device, improper handling or storage prior to use, misapplication of the motor or the driven equipment or for any consequential damages arising out of or connected with the operation of Leland Faraday electric motors.

Leland Faraday Electric Company's liability under this warranty shall be solely limited to repair or replacement of the motor within the warranty period. Under no circumstances will Leland Faraday Electric be responsible for any expense in connection with repairs made by anyone other than an authorized service station unless previously approved in writing.

ALABAMA

Alexander City —Nelson Electric Motor Service, 202 Washington Street	(205) 234-3000
Anniston —Snow Electric Motors Inc., 921 Industrial Avenue	(205) 237-5831
Athens —Tennessee Valley Electric Motors, 105 East Bryan Street	(205) 232-7346
Decatur —Electro Motors Inc., Highway 20 West	(205) 355-3243
Demopolis —Mills Electric Motor Service, 1806 Highway 80 East	(205) 289-1908
Huntsville —Kelsey Electric Motor Service, 4644 Commercial Dr.	(205) 837-6150
Jackson —Standard Electric Machinery Service Inc., 1534 North College	(205) 246-9061
Jasper —Martin Electric Motor and Repair, 508 18th Street	(205) 221-9852
Madison —Madison Industrial Electric Motor Service, 402 Celtic Drive	(205) 772-0605
Montgomery —Ed's Electric Motor Service, 513 North Hull	(205) 262-5271
Muscle Shoals —B&E Electric Motor Service Inc., 102 Broadway	(205) 386-7252
North Albertville —Hood Electric Co., Inc., 1001 Highway 431	(205) 878-2481
Russellville —Strickland Electric Service Inc., 306 South Coffee Avenue	(205) 332-1919
Sheffield —Alabama Electric Motor Service Inc., 1714 Wall Street	(205) 383-1490
Sylacauga —Tess Electric Co., 20 North Eastern Avenue	(205) 245-3181
Sylacauga —Williams Electric Co., 604 E. Third Street	(205) 245-5334
Talladega —Talladega Electrical Service & Supply Co., Inc., 157 17th Street	(205) 362-3190

CALIFORNIA

Baldwin Park —Excel Electric Motors, 14710 Arrow Hwy.	(213) 962-3207
Burbank —Nichols Electric Motor Serv. Inc., 2319 No. San Fernando Blvd.	(213) 849-4934
City of Industry —Prime Power, 18457 Railroad St.	(213) 912-3582
Glendale —Marcus Electric Co., 647 W. Broadway	(213) 245-3898
Glendale —V-V-V Electric Motors, 531 W. Galfield Ave.	(213) 241-0883
Glendale —Vanis Electric Motor Service, 918 Ruberta Ave	(213) 247-9430
Glendora —Lans Electric Motor & Tool Inc., 438 W. Carter Dr.	(213) 963-9457
Hollywood —Arbuckle Electric Inc., 7548 Santa Monica	(213) 876-7100
Hollywood —Steves Electric, 4429 Fountain Ave.	(213) 666-6972
Long Beach —Ando Electric Motors, 1999 W. Anaheim St.	(213) 437-0445
Long Beach —D&S Electric, 2040 E. 4th St.	(213) 439-6444
Long Beach —Delta Electric Motors Co., 2492 Brayton	(213) 424-2824
Long Beach —Vonnie Electric Co., 2734 Dawson St.	(213) 424-3927
Long Beach —Walters Electric Motor Co., 2170 Gundry	(213) 424-7807
Los Angeles —Gory Electric, 2015 San Fernando Blvd.	(213) 221-3169
Montclair —G. P. Electric, 5460 Brooks St.	(714) 983-0406
Ontario —Ontario Electric Motors, Inc., 1304 W. Holt Blvd.	(714) 984-5810
Oxnard —Electric Motor Service, 200 E. 5th St.	(805) 483-4233
Oxnard —Industrial Electric Motors, Inc., 811 Mercantile	(805) 487-1711
Pamona —Bill's Motor Shop, 10964 Kadota St.	(714) 622-8010
Pasadena —Pompey Electric, 25 E. Union Ave.	(213) 681-7777
San Fernando —H. C. Stroud Electric Motors & Tools, 1811 1st St.	(213) 365-1183
San Luis Obispo —Electric Motor Works, 195 Suburban Rd.	(805) 544-5577
San Luis Obispo —Electric Rewind Inc., 3430C Sacramento Dr.	(805) 541-2858
Santa Barbara —Craviotto Electric Service Co., 520 E. Haley St.	(805) 965-0514
Santa Barbara —Electric Motor Rewinding, 824 E. Haley St.	(805) 962-4746
Santa Maria —Lahr Electric Motors, 119 W. Mill	(805) 925-2864
Santa Maria —Perry's Electric Motors & Control, 414 So. Western Ave.	(805) 925-8761
Ventura —Oilfield Electric Co., 1801 No. Ventura Ave.	(805) 648-3131
Westlake Village —Conejo Electric Motors Inc., 31200 Labaya Dr.	(213) 991-1178
Wilmington —Powers and Larsen, 311 West D St.	(213) 830-7100
Wilmington —Seaboard Electric Corp., 214 No. Marine Ave.	(213) 834-2653

CONNECTICUT

Cos Cob —Greenwich Motor Repair, 105 River Road	(203) 869-2441
So. Norwalk —Phillips Electric Motor Repair Co., Inc., 123 Water Street	(203) 866-9863
Torrington —Torrington Electric Motor Repair Inc., 820 Main Street	(203) 489-8849
Winsted —Francis B. Whitman, 207 Walnut Street	(203) 379-5073

FLORIDA

Clearwater —American International Motors Inc., 5150 Ulmerton Rd.	(813) 938-4069
Crystal River —Crystal River Electric Motor Service, 139 N.E. 9th Street	(904) 795-2230
Dade City —Pasco Electric Motor Service, 3683 S. 301	(904) 567-1855
Daytona Beach —Electric Motor Service, 537 No. Beach Street	(904) 255-6722
Deland —Deland Armature Works, 1441 N. Amelia Avenue	(904) 734-3622
Haines City —Lake Ridge Electric Motor Works, 212 N. 12th Street	(813) 422-6333
Ocala —Links Electric Motor Service Inc., 1720 S.W. 15th Avenue	(904) 629-2478
Orlando —Star Delta Electric Motors Inc., 1604 W. Princeton Street	(305) 843-0146
Orlando —Stewart's Electric Motor Works Inc., 315 J West Grant Street	(305) 423-9422
Pensacola —Electric Motor Service Inc., 3810 Hopkins Street	(904) 433-5492
Pensacola —Gulfcoast Electric Motor Service, 124 S De Villers	(904) 433-5134
Pensacola —M&W Electric Motor Service Inc., 1250 Barrancas Avenue	(904) 433-0400
Tallahassee —Donaldson Electric Motor Service Inc., 1235 Airport Drive	(904) 576-2161
Tarpon Springs —Electric Motor Rebuilders Inc., 911 Live Oak St. 2122A	(813) 938-4069

GEORGIA

Albany —Deese Electric Motor Works, Cordele Rd.	(912) 439-2333
Athens —Cartey Electric Motors, 396 Oconee	(404) 543-1190
Atlanta —Bearden-Thompson Electric Co., Inc., 1085 Bankhead Avenue	(404) 876-6721
Calhoun —Lacey Electric Co., 366 South Piedmont Street	(404) 629-4012
Carrollton —Johnson Electric Motor Shop Inc., 213 Avenue C	(404) 834-7722
Columbus —Georgia Electric Motor Service Inc., 1517 51st Street	(404) 323-1666
Columbus —P&M Electric Co., 2717 2nd Avenue	(404) 324-2000
Dalton —Bearden Electric Motor Service, 926 Elk Street	(404) 278-0411
Dalton —Dewitts Electric Motors, 208 Easterling Street	(404) 278-5152
Dalton —Lance Electric Motor Service, 1216 So. Hamilton	(404) 226-3911
Dalton —Whitfield Electric Motors, 926 E. Morris Street	(404) 226-6943
Hazelhurst —Courson's Electric Motor Works, 700 S. Williams St.	(912) 375-4671
Lafayette —Pruetts Electric Motors Inc., Highway 27 South	(404) 638-3909
La Grange —Horne Electric Motor Co., Inc., 3000 Youngs Mill Road	(404) 884-7781
Macon —Reliable Electric Motor Co., 423 Astor Street	(912) 745-3396
Moultrie —Moultrie Electric Motor Service, Route 8 Tifton Hwy.	(912) 985-4727
Rome —Branton Electric Motors Inc., 1221 E. 2nd Avenue	(404) 232-5534
Rome —Griffin Electric Motor Co., 517/519 E. 2nd Avenue	(404) 295-5759
Rossville —Tucker Electric Inc., 118 Walnut Street	(404) 866-3085
Valdosta —Electric Motor Specialists, 1403 So. Patterson St.	(912) 242-7012
Winston —Bill's Electric Motor Repair, 7940 Highway 78	(404) 942-2584

ILLINOIS

Danville —Koerner Electric Motors Inc., 19 Withner Avenue	(217) 431-2800
Joliet —Pohlers Industrial Electric Inc., 508 Ruby Street	(815) 726-5919
Kankakee —Woody's Electrical Motor Service, 154 West Water	(815) 932-6363
Montgomery —Industrial Motor Service Corp., 2000 Albright	(312) 892-9133
Villa Park —DuPage Electric Motors, 211 So. Villa	(312) 834-4176

INDIANA

- Evansville**—Service Electric of Evansville Inc., 1635 Third Avenue (812) 425-3507
Hammond—Mills Electric Co., Inc., 4828 Calumet (219) 931-3114
Jasper—Jasper Electric Motors, 342 Third Avenue (812) 482-1660

KENTUCKY

- Bowling Green**—Covington Electric Inc., 433 Woodford (502) 842-7147
Flemingsburg—Motor Sales & Service Co., Inc., 203 High Street (606) 845-2061
Hopkinsville—Knight Electric Motor Service, 1220 Skyline Dr. (502) 886-9386
Lexington—City Electric Motor Co., 631 Kennedy Road (606) 252-4751
Lexington—Kentucky Service Co., Inc., 622 South Mill Street (606) 254-6310
Lexington—Lexington Industrial Service Co., Inc., 1151 Floyd Dr. (606) 255-0818
Louisville—Gatterdam & Goemmer Electric Motor Repair, 114 N. 30th St. (502) 776-3931
Louisville—Wesley Electric & Supply Inc., 829 Jefferson (502) 585-3301
Louisville—Quality Electric Motor Service Inc., 8020 Vinecrest (502) 426-3396
Loyall—Herren Electric & Supply Inc., (606) 573-4585
Owensboro—Owensboro Armature Works Inc., 609 E. 14th Street (502) 683-9855
Owensboro—Shermans Electric Motors, 813 W. 3rd (502) 685-1915
Owensboro—V&S Electric, 902 W. 9th (502) 926-3226
Princeton—Bowles Electric Motors, 110 West Market (502) 365-9922

LOUISIANA

- Baton Rouge**—Ace Armature Works, 2143 Plank Rd. (504) 356-6175
Brollsard—S&W Electric Inc., 221 Thru-Way Park Road (318) 837-2546
Eunice—Millers Electric, 541 N. 4th St. (318) 457-8688
Lafayette—Jeff's Electric Motor Sales & Service, 225 Bellot St. (318) 232-8601
Lawtell—Thibodeaux Electric Service, Hwy. 190 (318) 543-2362

MICHIGAN

- Jackson**—Kent Motors, 204 Homewild (517) 789-8131

MISSISSIPPI

- Gulfport**—B&H Electric Service, 2418 22nd Avenue (601) 863-5662
Hattiesburg—Cameron Electric Motor Co., Inc., 115 West Red St. (601) 544-5512
Laurel—Garick Electric Motor Service, 316 E. Kingston Street (601) 649-1422
Pascagoula—Gibson Electric Motor Service Inc., 3320 Old Mobile Hwy. (601) 762-4923
Waynesboro—Jones Electric Co., 136 Russell Dr. (601) 735-4536

NEW JERSEY

- Camden**—Jarvis Electric Motors Inc., 3710 Federal St. (609) 365-0513
Hackensack—Lovatt Electric Service, 180 Central Avenue (201) 487-1479
Hightstown—Hights Electric Motor Service Inc., 156 Stockton St. (609) 448-2298
Linden—Goodwin-Pray Co., 1625 Penn Avenue (201) 925-2900
Lodi—Universal Electric Motor, 126 Essex St. (201) 845-7820
Neptune—Pilot Electric Co., Inc., 1300 Hwy. 35 (201) 775-0121
New Brunswick—Bishop Electric Motor Exchange Inc., 318 Commercial Avenue (201) 545-6446
Passaic—National Electric Motor Repair, 296 Broadway (201) 473-8743
Prospect Park—Empire Motor & Pump, 2 Short St. (201) 942-8484
Trenton—Electric Motor Repair Co., 809 E. State Street (609) 392-6149
Wildwood—Thermal Ent. Inc. T/A Rems Motors, 137 West Davis Ave. (609) 522-5653

NEW YORK

Brewster —D&S Motors Inc., Sodom Rd.	(914) 279-4403
Bronx —Huntspoint Motor Sales & Service, Inc., 1320 Oak Point Avenue	(212) 328-3600
Bronx —Normandy Repair Inc., 447 E 167th Street	(212) 665-2550
Bronx —W&S Electric Motor Corp, 300 E. 149th St.	(212) 585-6500
Elmsford —A&C Electric Motors Inc., 18 Sawmill River Rd.	(914) 949-5085
Hudson —Auto Electric Repair, 757 Columbia St.	(518) 828-1618
Kingston —P.J. Gallagher, 404 Chester St.	(914) 338-3817
Middletown —Middletown Electric Motor Repair, 5 John St.	(914) 343-4171
New York City —Electrical Motor Maintenance Inc., 442 E. 13th St.	(212) 777-1200
New York City —Harbor State Electric Co., 129 W. 22nd St.	(212) 777-5060
New York City —John's Electric, 126 W. 18th St.	(212) 255-0300
Peekskill —Peekskill Electric Motor Repair Service Inc., 13 So. Broad Street	(914) 737-4141
Rochester —Preferred Electric Motors, 42 Fernwood Ave.	(716) 342-5080
Staten Island —Jedco Electric, 60 Van	(212) 447-3191
West Nyack —Empire Bearing & Transmission Corp., 39 Western Hwy.	(914) 358-0544

NORTH CAROLINA

Concord —Purser's Central Rewinding Co., 805 Hwy. 29	(704) 786-3131
Durham —Charlies Electric Motor Repair, 2504 W. Main St.	(919) 286-9211
Durham —Southern Electric Motor Co., Inc., 812 North Mangun St.	(919) 688-7879
Elizabeth City —Electric Motor Rewinding Co., 407 N. Pinderxter St.	(919) 338-8856
Elizabeth City —KWIK Electric Motor Sales & Service, 511 C Street	(919) 335-2524
Goldsboro —Electric Motor Co., 301 So. George St.	(919) 736-7373
Goldsboro —Live Wire Electric Co., 1007 So. John St.	(919) 735-1117
Hickory —Canipe And Lynn Electric Motor Repair Inc., 1852 First Ave. S.W.	(704) 322-9052
Kingston —Aldridge Electric Inc., 525 S. Queen St.	(919) 527-0335
Kitty Hawk —Caroon Electric Motor Service, Mile Post 4½	(919) 261-2991
Mooreville —Qualified Electric Motor Sales & Service, Rt. 5 Salisbury Hwy.	(704) 663-1991
Mt. Airy —Mt. Airy Industrial Service, 713-C Willow Street	(919) 786-2941
New Bern —Dewey Banks Electric Motor Repair, 2402 County Club Rd.	(919) 637-2119
Rocky Mount —Bowden Electric Motor Service, 1426 Raleigh Rd.	(919) 446-4203
Rocky Mount —Rocky Mount Electric Service, 1215 So. Church St.	(919) 446-1510
Rocky Mount —United Electric Motor Service, 413 So. Church St.	(919) 446-4173
Salisbury —Delta Electric Co., 1205 Lincolnton Rd.	(704) 633-3709
Shelby —Cleveland Electric Motor Co., 2536 W. Dickson Blvd.	(704) 484-0186
Winston-Salem —Henry's Electric Motor Service, 182 Waightown St.	(919) 788-0845

OHIO

Canton —Jackson-Bayley Electric Co., 825 Navarre Rd. S.W.	(216) 455-7032
Youngstown —Youngstown Electric Service Inc., 948 Poland Avenue	(216) 743-1128

PENNSYLVANIA

Bridgeport —Deckman Electric, Bridgeport Ind. Park	(215) 272-6944
Carlisle —Estep Electrical, 501 E. Louther St.	(717) 249-2698
Danville —Edmeads Electric Motor Service Inc., RD. 3 Box 356	(717) 275-0869
Ephrata —Arnold F. Witmer & Son, RD. 3	(215) 445-6371
Frackville —Silicon Power Control Inc., 2nd and High St.	(717) 874-0662
Harrisburg —General Electrical Service & Sales Co., Inc., 2430 Raleigh St.	(717) 564-6311
Harrisburg —Motors & Control Systems, Inc., 3989 Sunnycrest Dr.	(717) 564-7021

PENNSYLVANIA

Hazleton —Peregrin Electric Motor Service, 628-30 West 20th St.	(717) 455-0293
Lancaster —Multielectric Inc., 70 Pitney Rd.	(717) 392-2128
Philadelphia —Penn Electric Motor Co., 3080 Emerald St.	(215) 426-9920
Pine Grove —Heinbach Inc. Electrical Apparatus Sales & Service, RD 2 Box 600	(717) 345-8134
Pittsburgh —Snyder Electric Motors, 1500 Chateau St.	(412) 231-3100
Pittsburgh —United Electric Motors Co., Inc., 5739 Centre Avenue	(412) 362-4424
Pleasant Gap —Breon's Inc., 330 S. Main St.	(814) 359-2947
Shamokin —Krebs Electric Inc., 337 W. Water St.	(717) 648-6830
Stroudsburg —Stroudsburg Electric Motor Service, 756 Phillip St.	(717) 421-8909
Warren —Von's Electrical Apparatus Service, 15 Bauer St.	(814) 723-1226
W. Wyoming —Yates Electric Motor Service Inc., 481 Shoemaker Ave.	(717) 693-3330
Williamsport —G.I. Electric Co., Inc., 944 Sheridan St.	(717) 323-6147
York —Harmon Szitas, 54 Broad St.	(717) 848-2920
York New Salem —Sipes Electric Motor Repair, 48 E. George St.	(717) 792-1450

TENNESSEE

Athens —Electric Motor Service, 700 Decatur Pike	(615) 745-4182
Bristol —Bristol Electric Motor Works, 1846 Holston Dr.	(615) 968-3160
Chattanooga —Dixie Industrial Service Inc., 2108 E. Main St.	(615) 698-8063
Cleveland —Jerry's Electric Motor Service, 460 Broad S.W.	(615) 472-5959
Cookeville —Cookeville Electric Motor Service Inc., 228 West Spring	(615) 526-5461
Cookeville —Mid State Electric Motor Service, 108 N. Cedar	(615) 528-6574
Franklin —Cathern Electric Motor Repair, 117 1st Ave. No.	(615) 794-4312
Kingsport —American Armature & Electric Co., 525 W. Center St.	(615) 246-6666
Kingsport —Kingsport Armature & Electric Co., Inc., 323-325 E. Market	(615) 247-7189
Knoxville —Electric Service Co. Armature & Motor Div., 3914 McCalla Avenue	(615) 524-8607
Knoxville —Industrial Service Electric Co., Inc., 611 Depot Ave.	(615) 523-1217
Knoxville —Southern Armature Works Inc., 1721 Potter St.	(615) 522-8638
Lebanon —Lebanon Electric Motor Service, 126 High St.	(615) 444-3892
Maryville —Associated Electric Motor Service Inc., Route 15 Big Springs	(615) 983-2367
Morristown —Morristown Electric Motor Service Inc., Route 8 New Brights Pike	(615) 581-1126
Nashville —Electric Service Inc., 301 5th Ave. So.	(615) 244-4950
Nashville —Power Electric Co., 1227 Third Ave. No.	(615) 255-0307
Sparta —Sparta Electric Motors, 522 W. Bockman Way	(615) 836-2813
Springfield —Powell Electric Co., 200 22nd Ave.	(615) 384-9239

TEXAS

Corpus Christi —C-D Electric Motor Service, 617 High Starr St.	(512) 888-4133
Dallas —A-1 Electric Motor Service, 8247 Scyene Rd.	(214) 381-3388
Dallas —T. Gray Electric Co., 3404 Jane Ln.	(214) 631-1188
Garland —M&M Electric Motors Inc., 234 E. Garland Avenue	(214) 276-5740
Houston —Hydro-Dyne Electric, 4301 Laura Koppe	(713) 631-0770
Houston —Northside Electric Motor, 923 East 25th St.	(713) 869-2111
McAllen —Valley Armature & Electric Co., N. McColl & Trenton	(512) 687-7178
Pasadena —Grayson Armature Works/Small Motor Div., 1203 Center St.	(713) 473-4404
Victoria —Cano Electric Co., 707 S. Moody	(512) 573-3204
White Oak —Advance Electric Inc., 401 Old Hwy. 80	(214) 759-9439
Winnsboro —Wray Warren Electric Motor Service Inc., 415 W. Broadway	(214) 342-5671

VIRGINIA

- Ashland**—Industrial Electric Co., Inc. of VA., 305 So. Leadbeta Rd. (804) 798-9000
Bristol—Electric Motor Repair & Sales, 1 Goodson St. (703) 669-9428
Bristol—Quality Electric Motor Sales & Service, 512 Oakview Ave. (703) 466-6181
Farmsville—Brinkley Electric Co., Inc., 1004 E. 3rd St. (804) 392-3182
Harrisonburg—Electric Motor Sales & Service Inc., Rt. 6 Box 1 (703) 434-6466
Lynchburg—Industrial Electric Corporation, 700 5th St. (804) 845-5923
Lynchburg—McDaniel Kelly Co., 1218 12th St. (804) 845-4593
Martinsville—Electric Service & Sales Inc., Old Dye Rd. (703) 632-2086
Newport News—Peninsula Electric Motor Service of Va. Inc., 742 Bluecrab Rd. (804) 874-3273
- Norfolk**—Caddell Electric Co., Inc., 1250 Bolton St. (804) 625-4261
Richmond—Roys Electric Motor Service, 3201 Norfolk St. (804) 355-5713
Roanoke—Lloyd Electric Company, 605 3rd St. S.E. (703) 982-0135

WEST VIRGINIA

- Clarksburg**—Malone Electric & Machine Co. (304) 624-5906
Fairmont—Davis Electric Co., Inc., 309 Mound Ave. (304) 363-8730
Huntington—Lawter Electric Motor Co., 202 Adams Ave. (304) 522-8297
Morgantown—Riverside Electric Co., Inc., 400 Wheeling St. (304) 296-5267

LELAND  FARADAY
ELECTRIC COMPANY
NEW YORK, N.Y. 10011

REFINITE WATER CONDITIONING CO.
ROCK HILL, SC 29730

PROJECT NO. RF910
CAMP LEJEUNE, NC

G.E. SERIES 1
PROGRAMMABLE CONTROLLER

AS BUILT CONDITIONS
LOGIC

SATISFACTORY TO AROICC:	DATE
_____	_____
SATISFACTORY TO INSPECTOR:	DATE
<i>Ray Hunt</i>	<i>12/31/86</i>
<i>CWE Inc</i>	_____
CONTRACTOR	<i>87-1454</i>

ELECTRICAL SYSTEMS
P. O. BOX 10427
ROCK HILL, S. C. 29730

JOB No. 86-004
18 FEB 86

REVISED AS BUILT 23 DEC 86

AS BUILT CONDITIONS

SATISFACTORY TO ARCHITECT

DATE

12/21/82

SATISFACTORY TO INSPECTOR

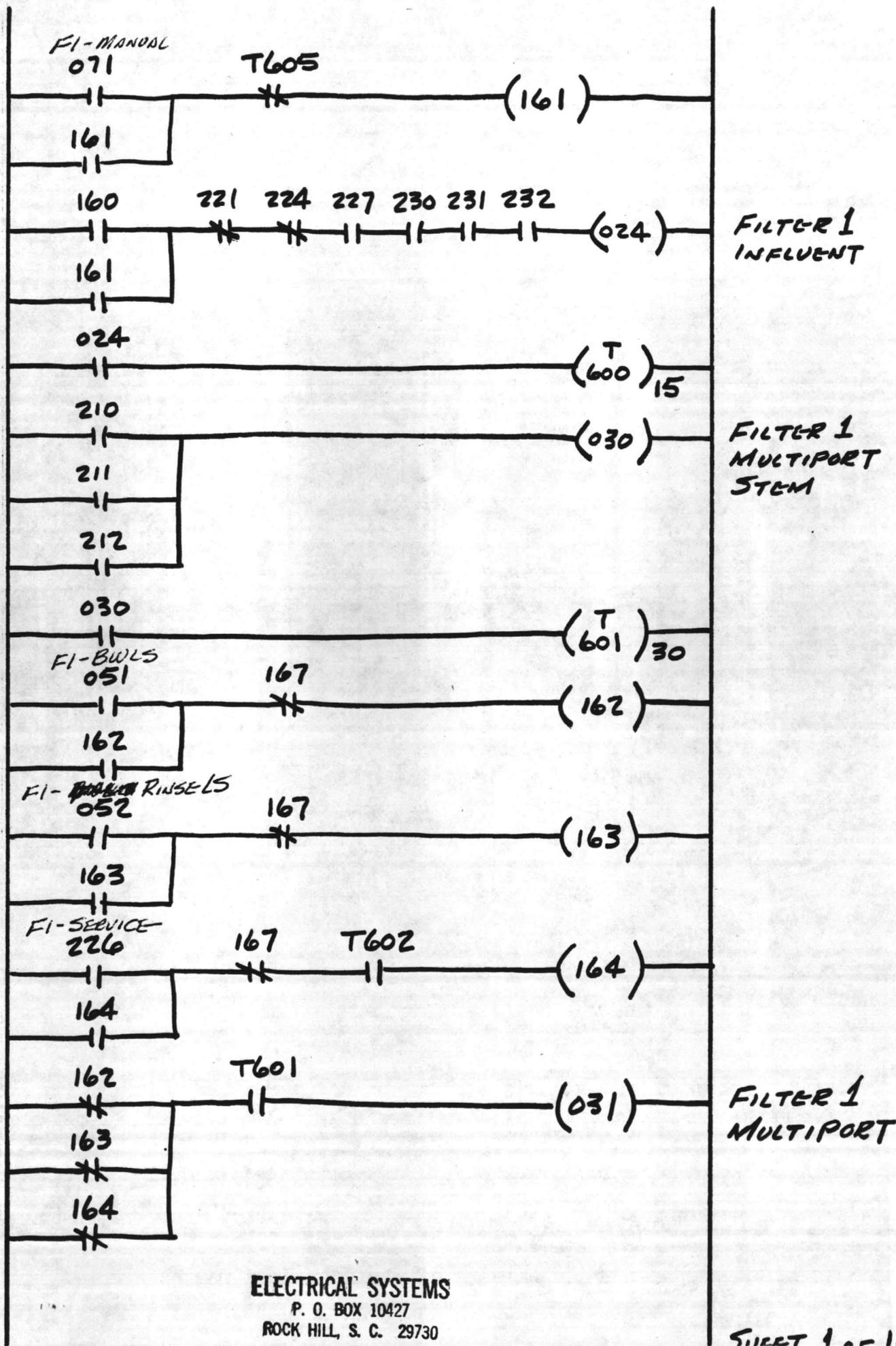
DATE

12/21/82

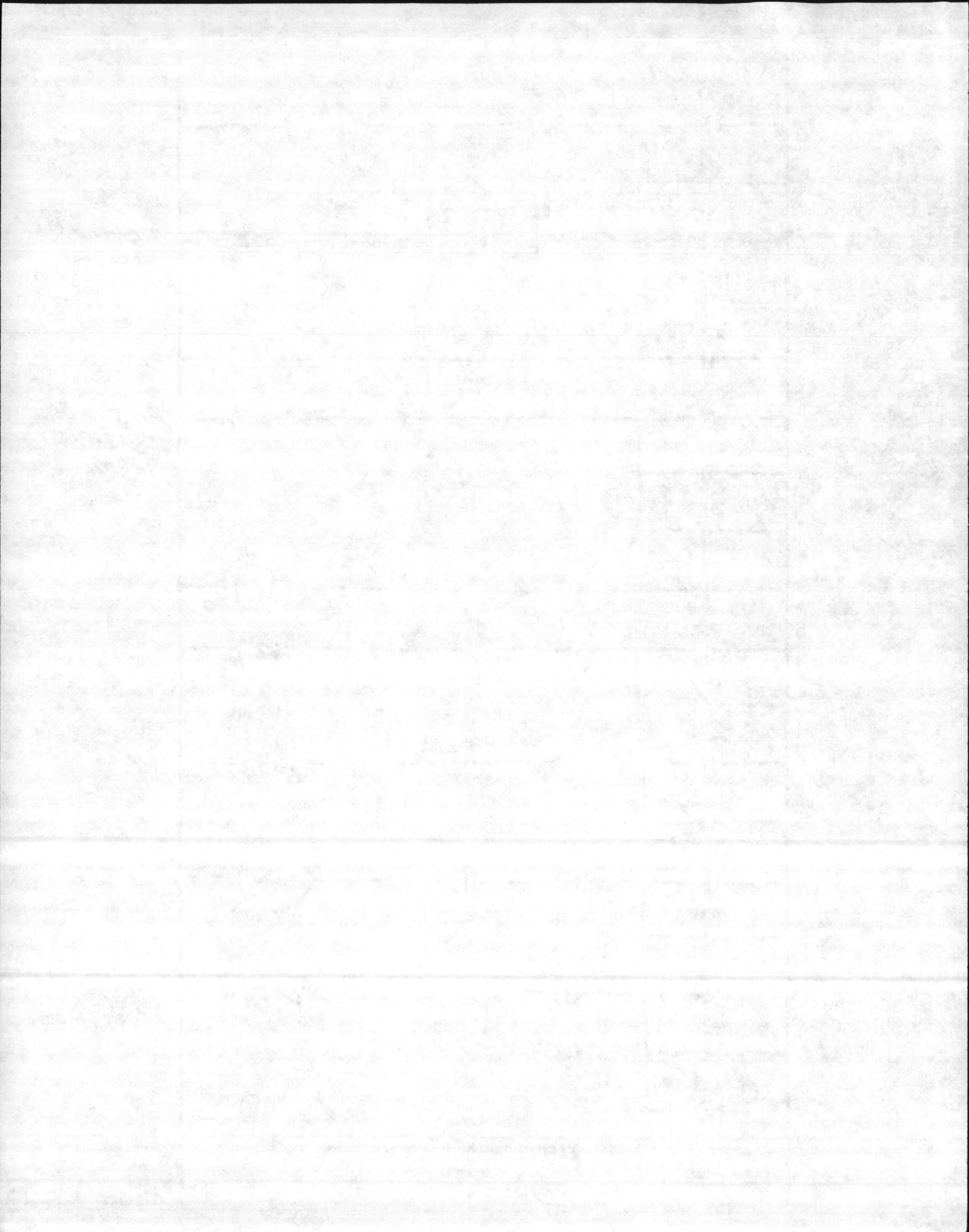
G.W.C. Inc.

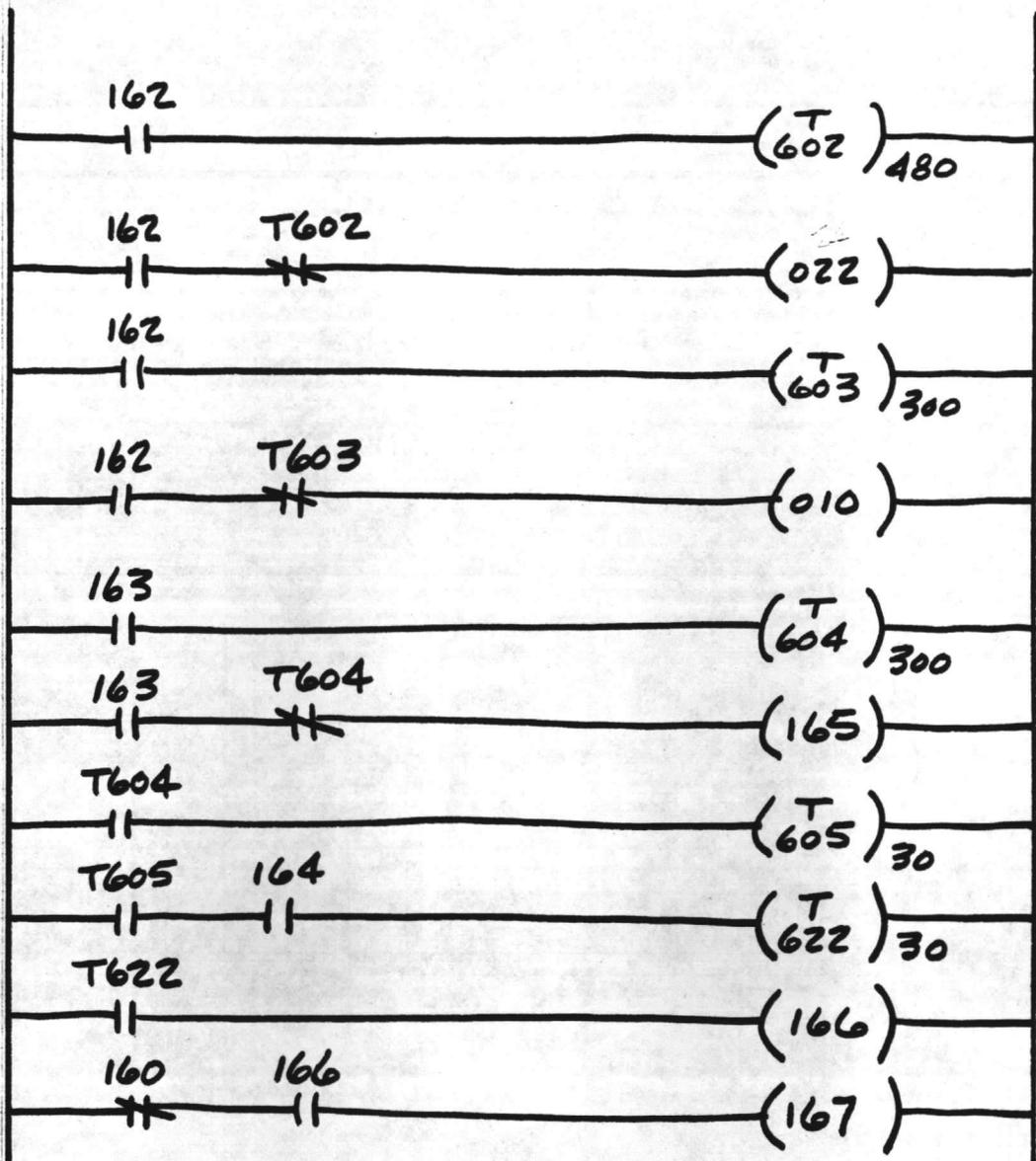
CONTRACTOR

85-1424



ELECTRICAL SYSTEMS
 P. O. BOX 10427
 ROCK HILL, S. C. 29730





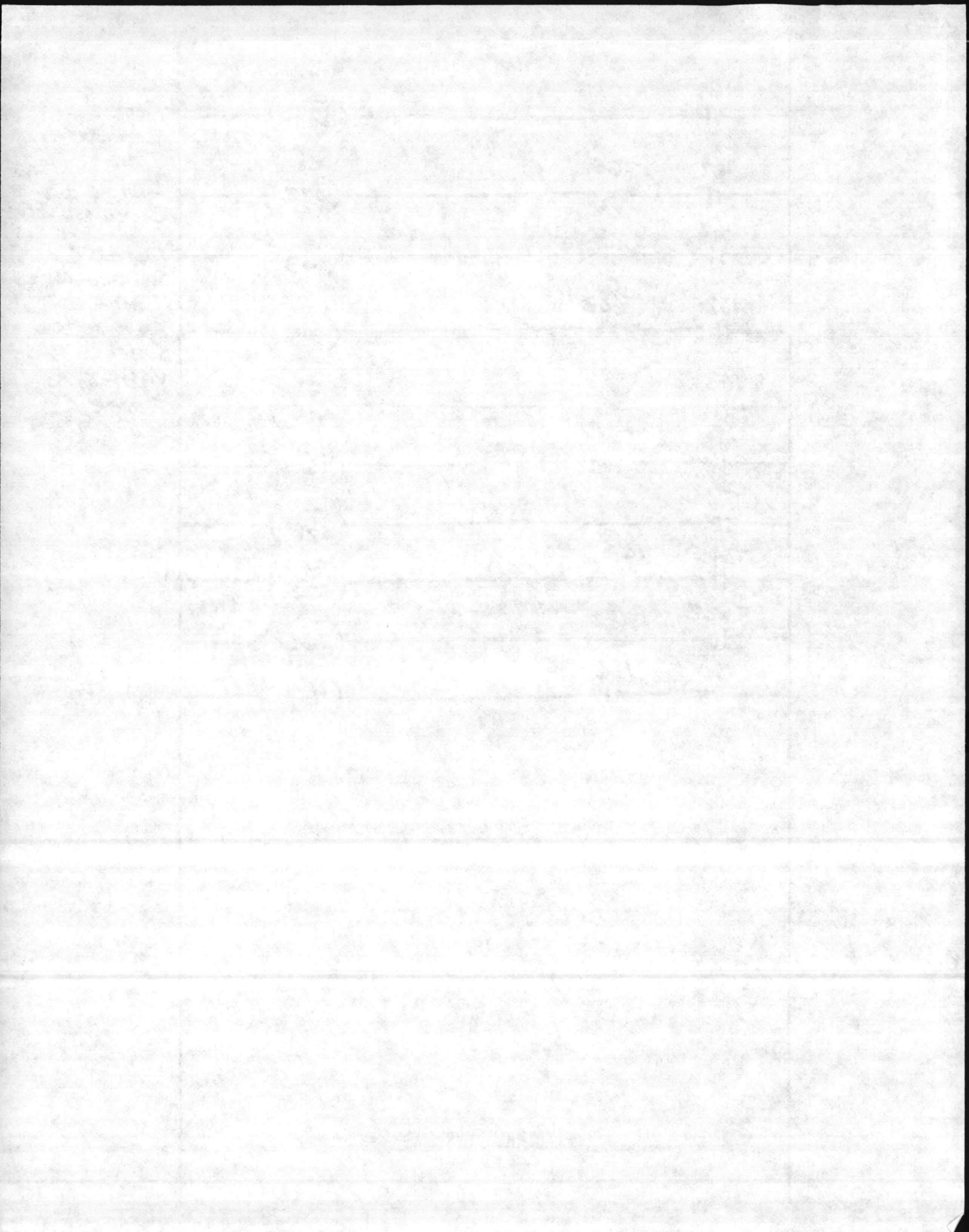
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BACKWASH
TIME

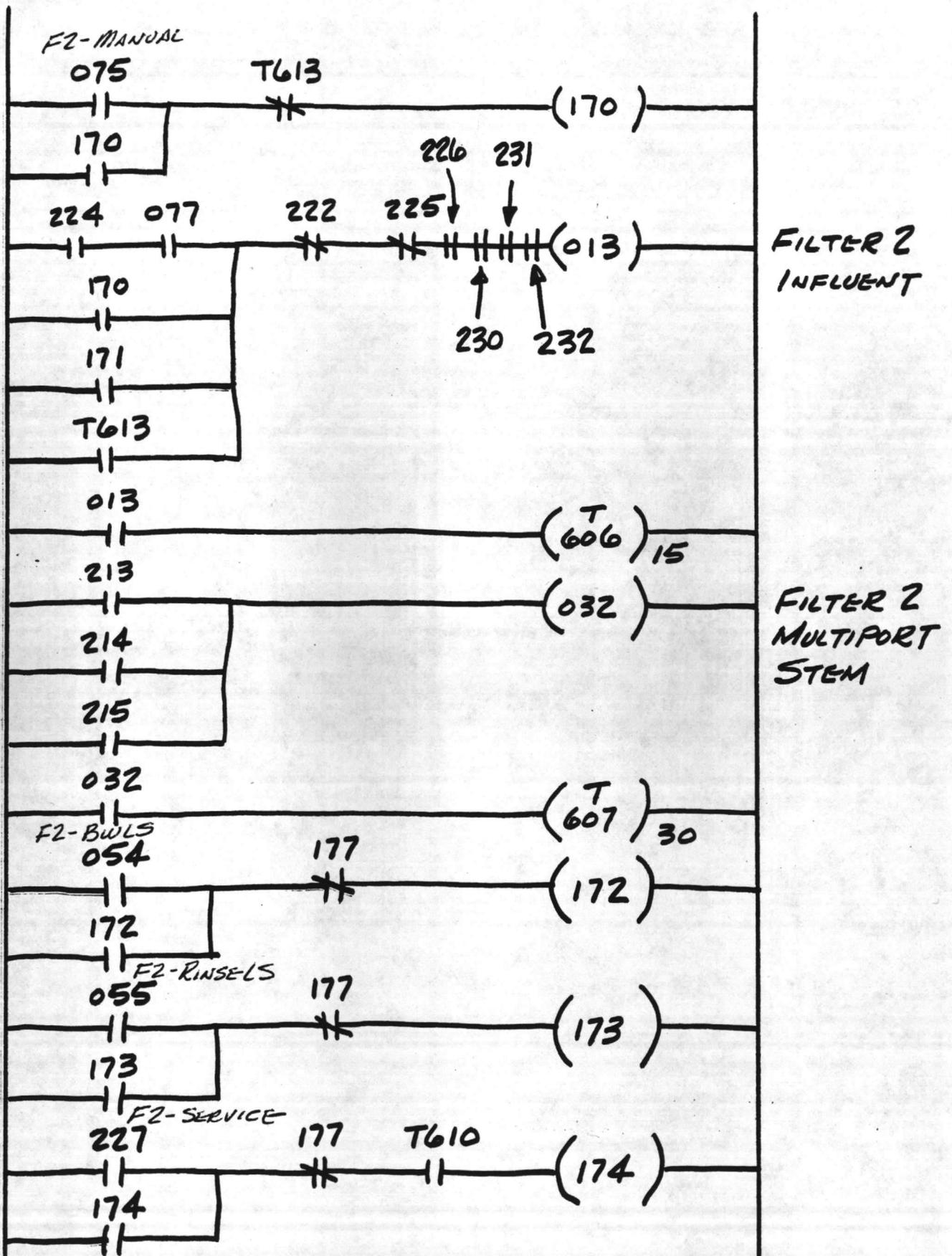
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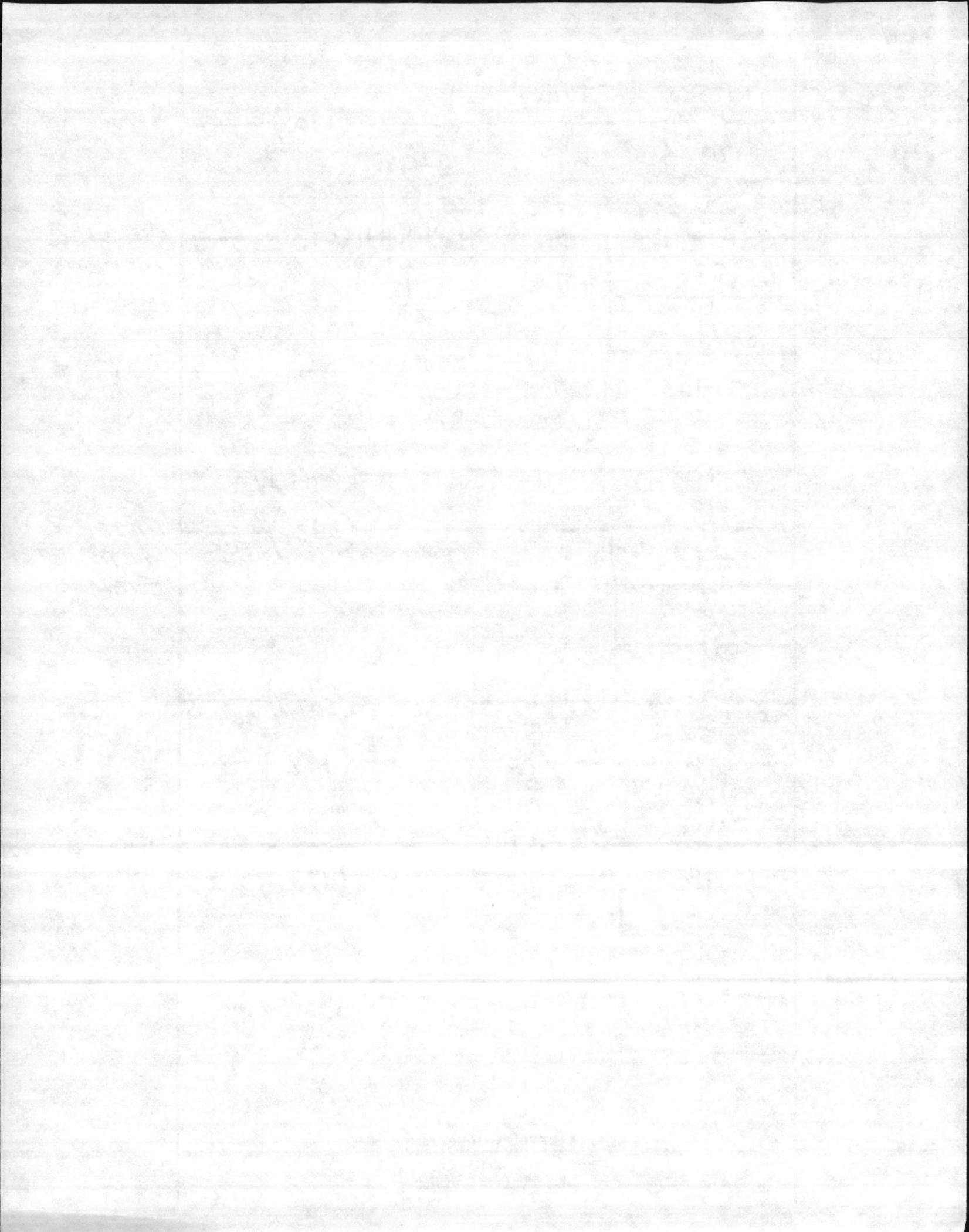
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SURFACE WASH
TIME

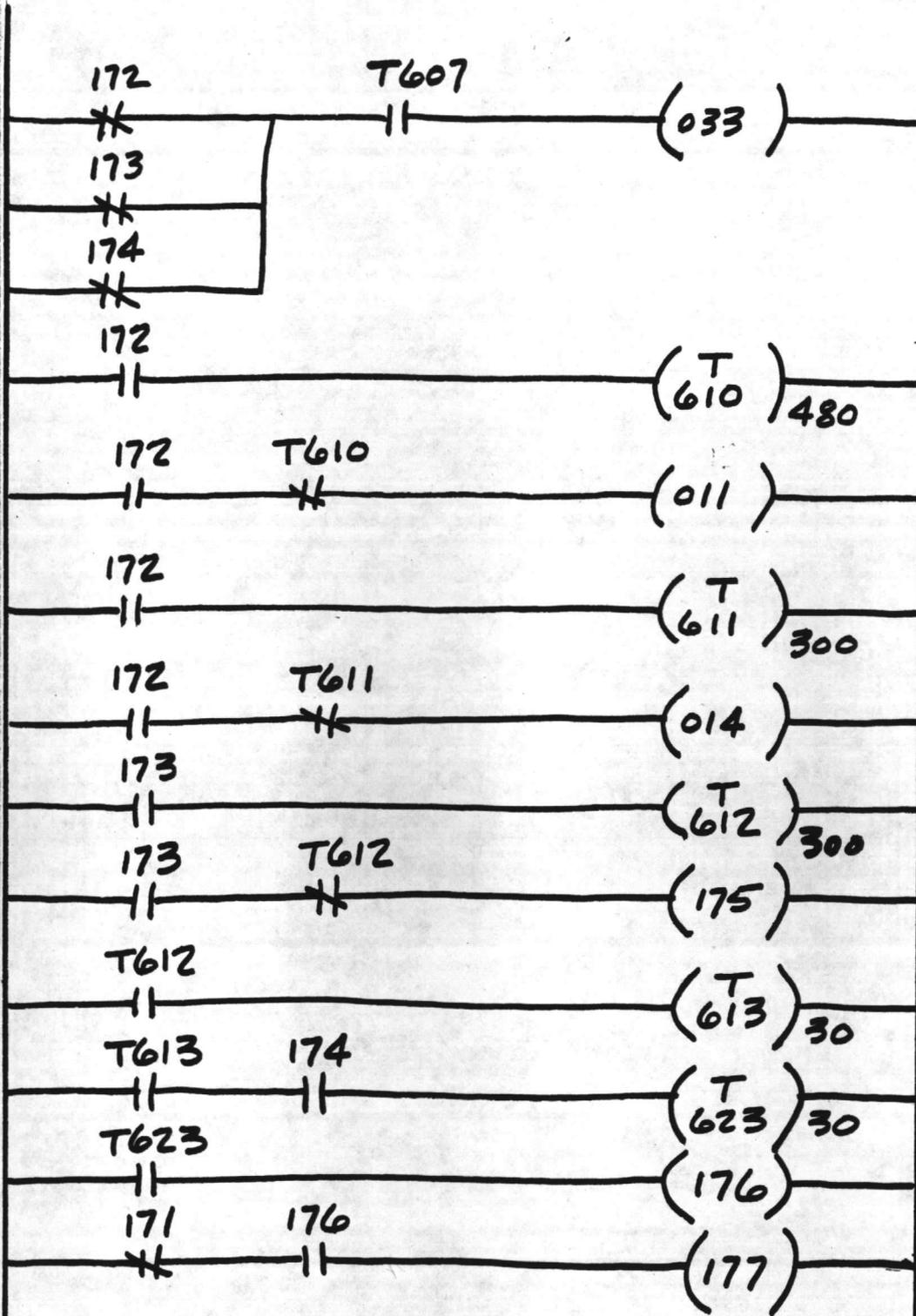
FILTER 1
SURFACE WASH
VALVE

FILTER 1
RINSE TIME









FILTER 2
MULTIPOINT

FILTER 2
BACKWASH
TIME

FILTER 2
BACKWASH
VALVE

FILTER 2
SURFACE WASH
TIME

FILTER 2
SURFACE WASH
VALVE

FILTER 2
RINSE TIME

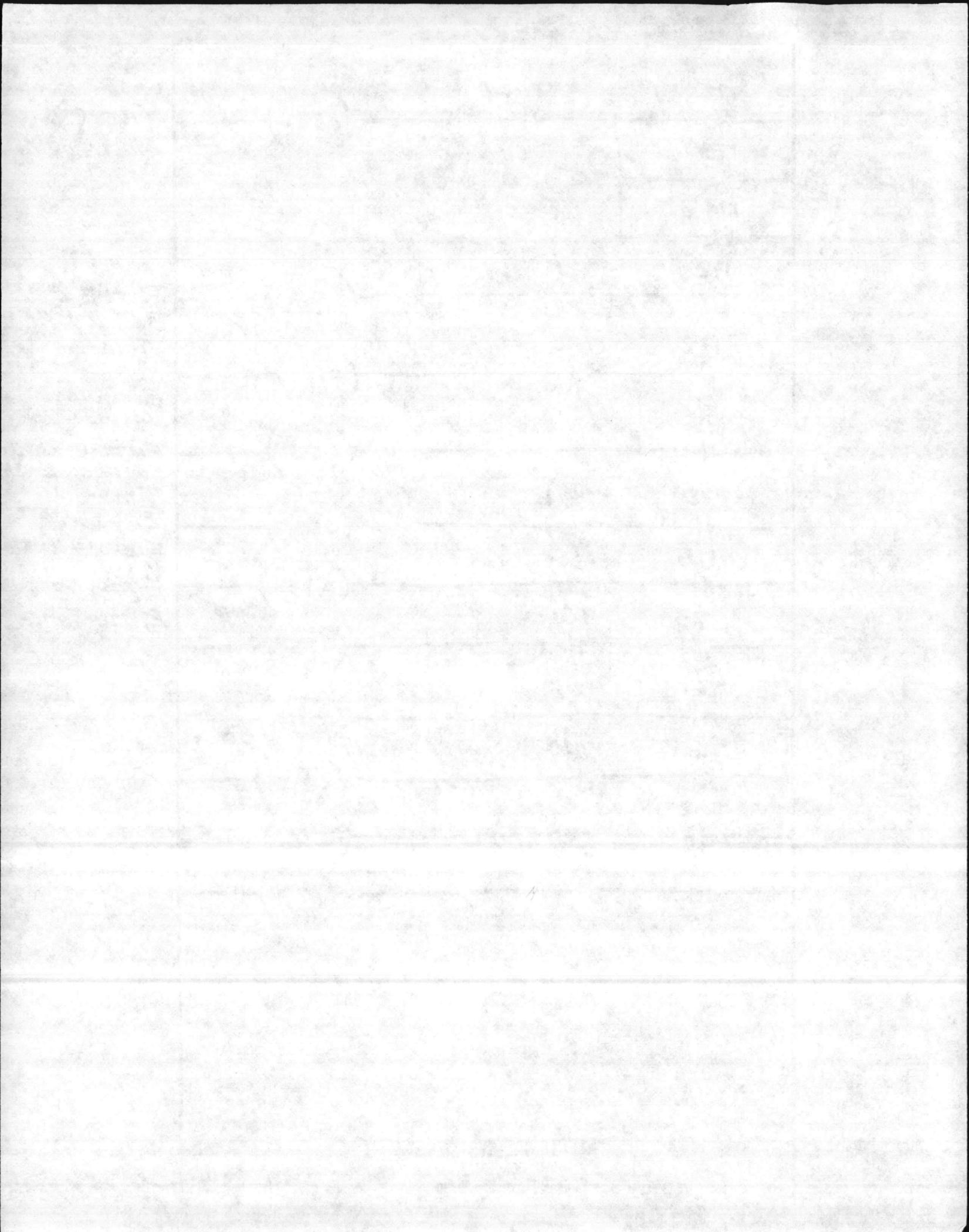
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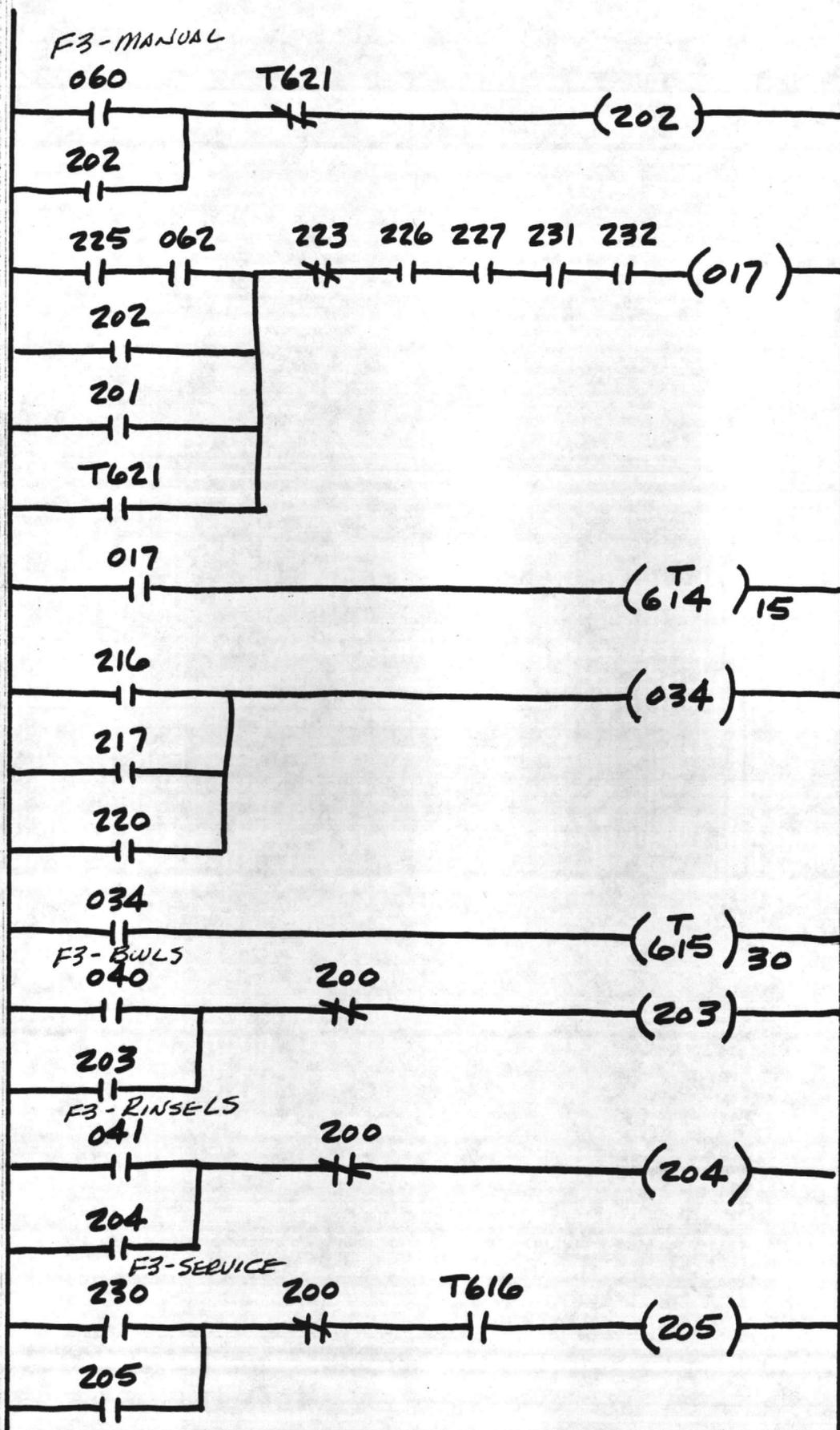
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300

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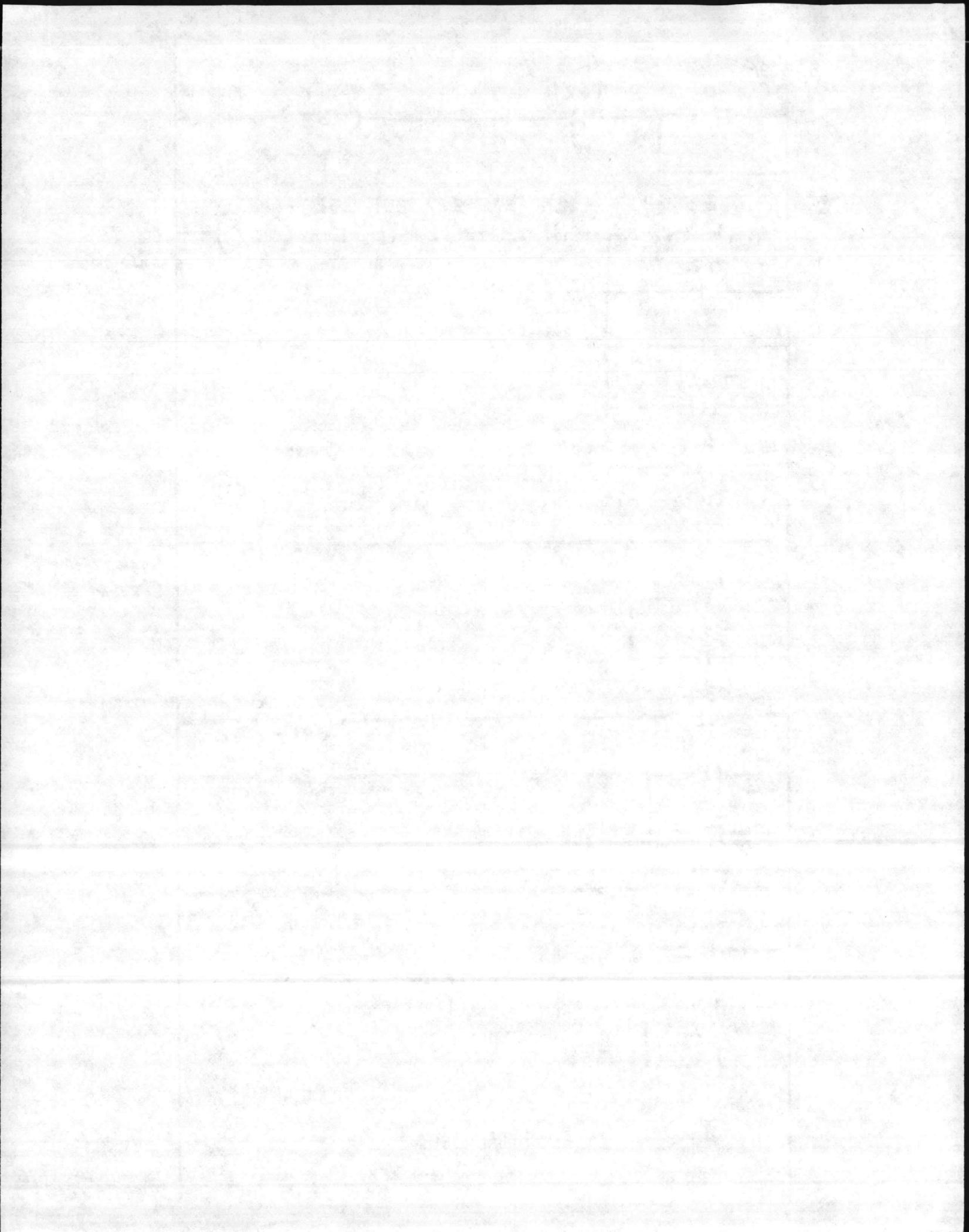
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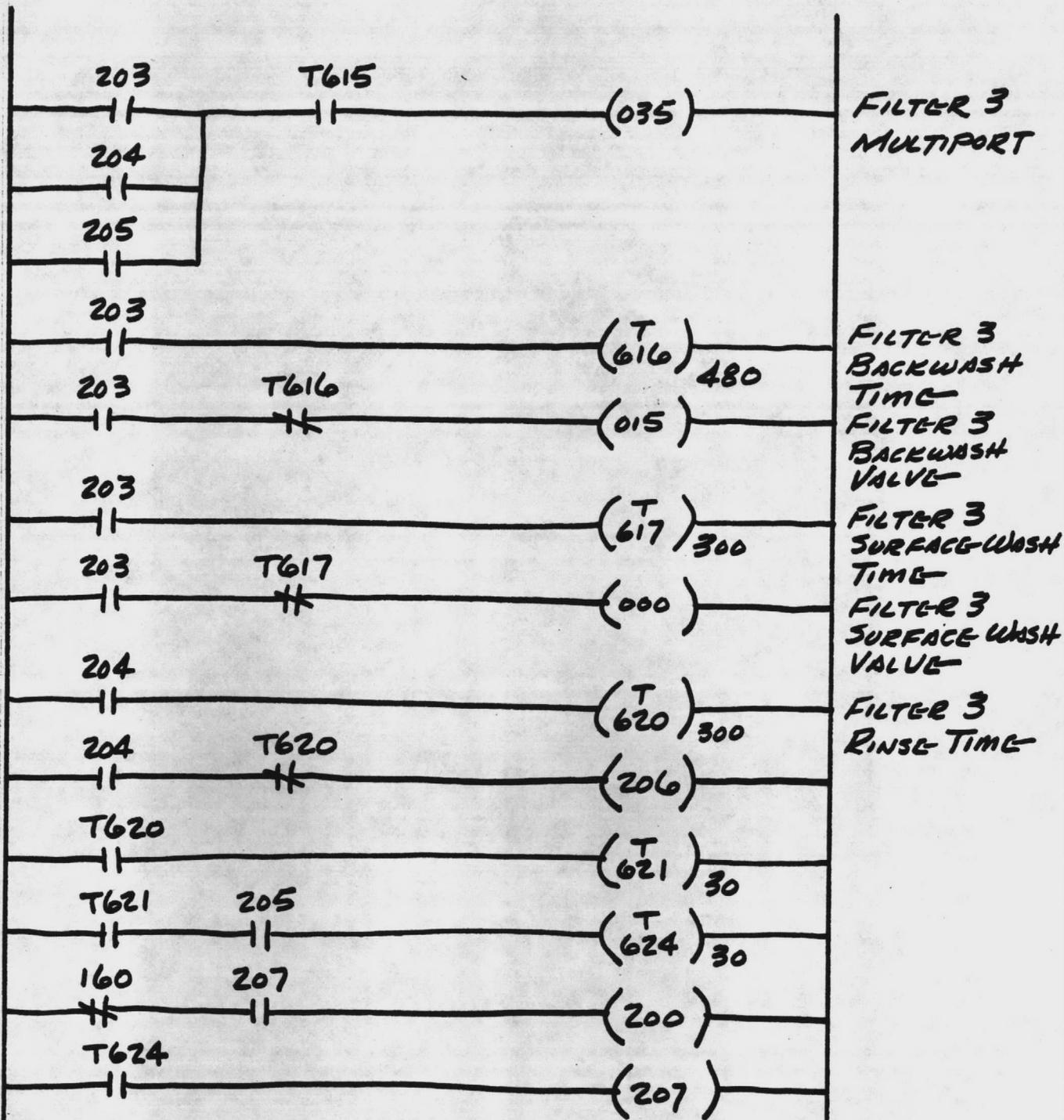


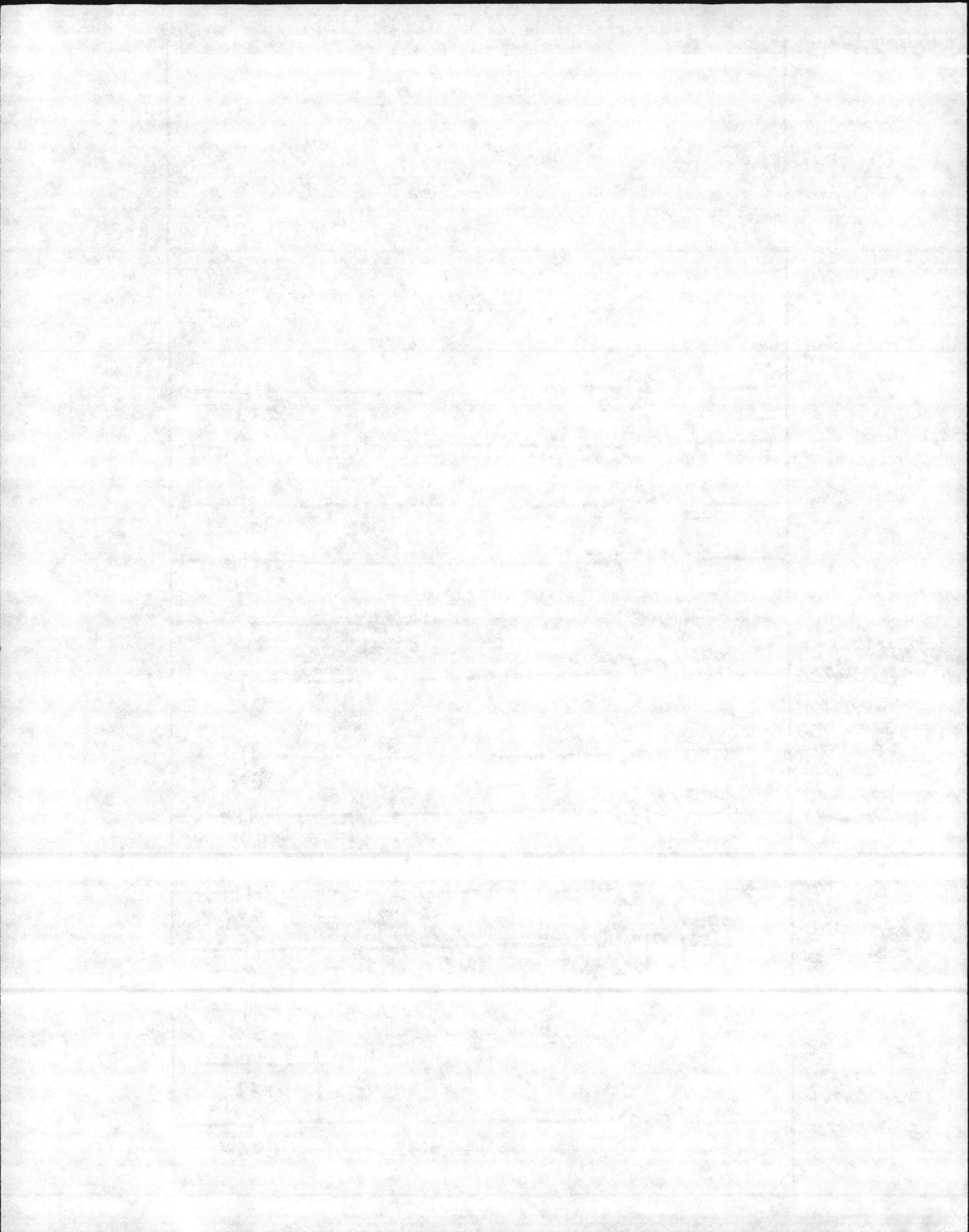


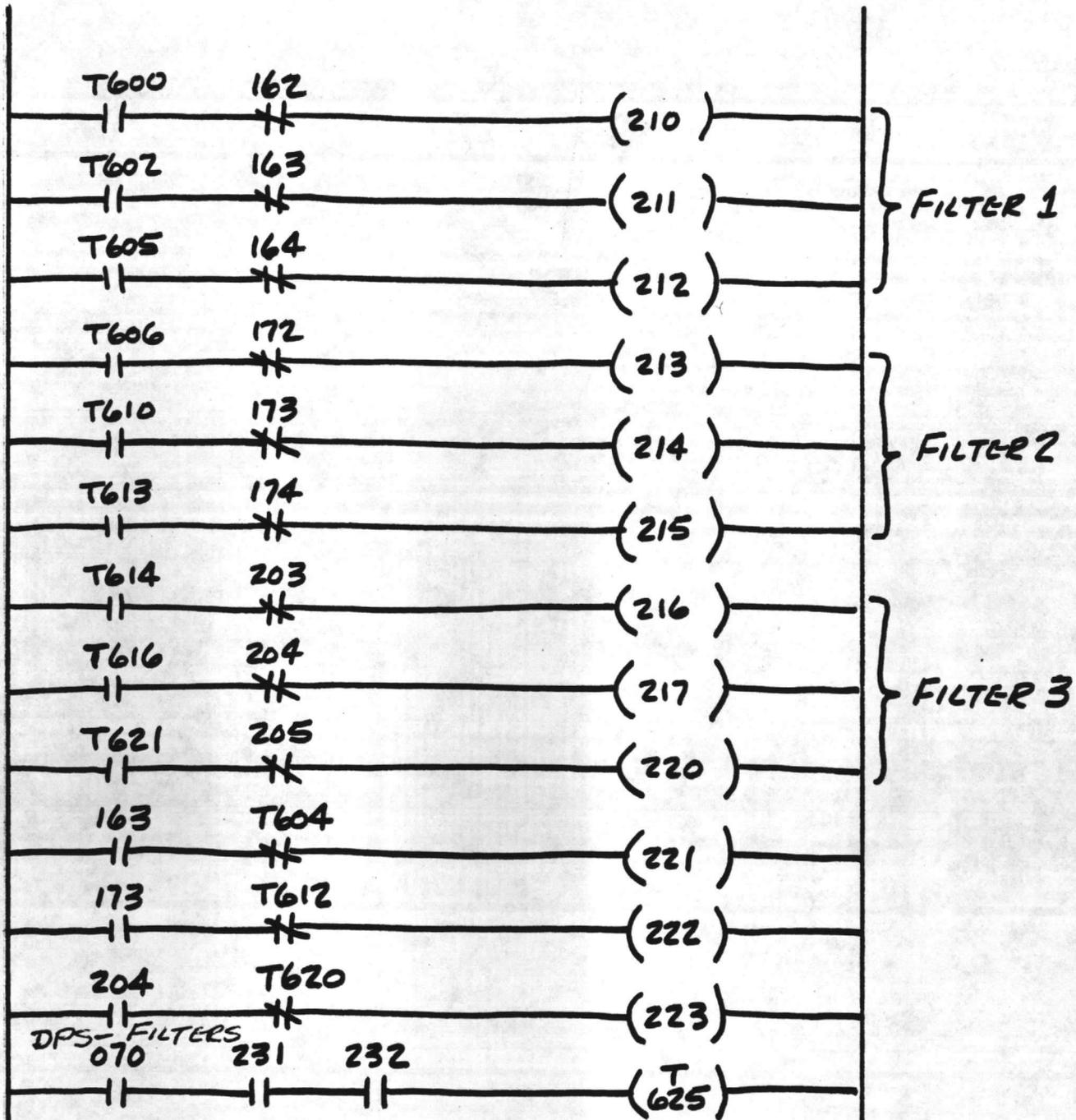
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FILTER 3
MULTIPOINT
STEM

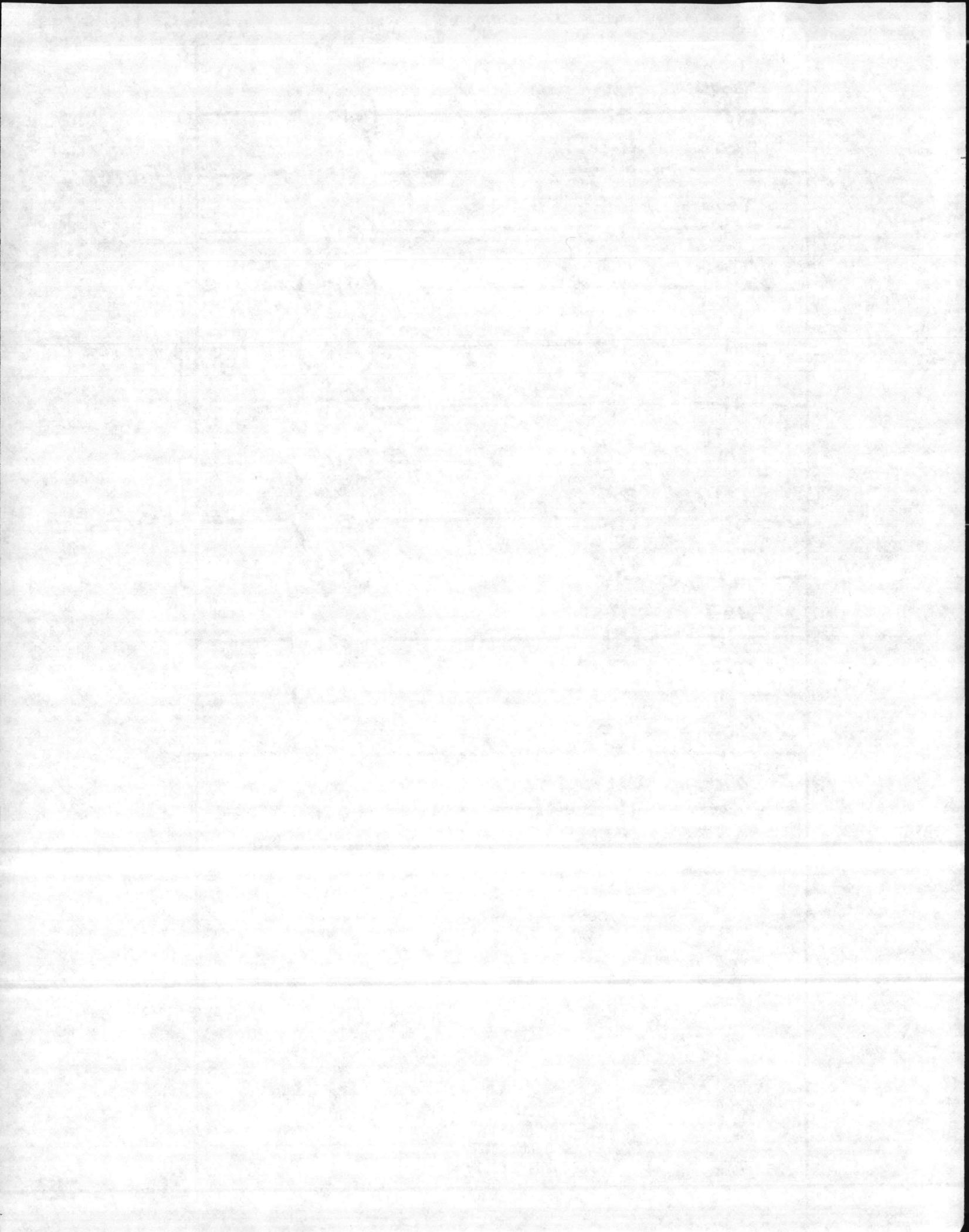


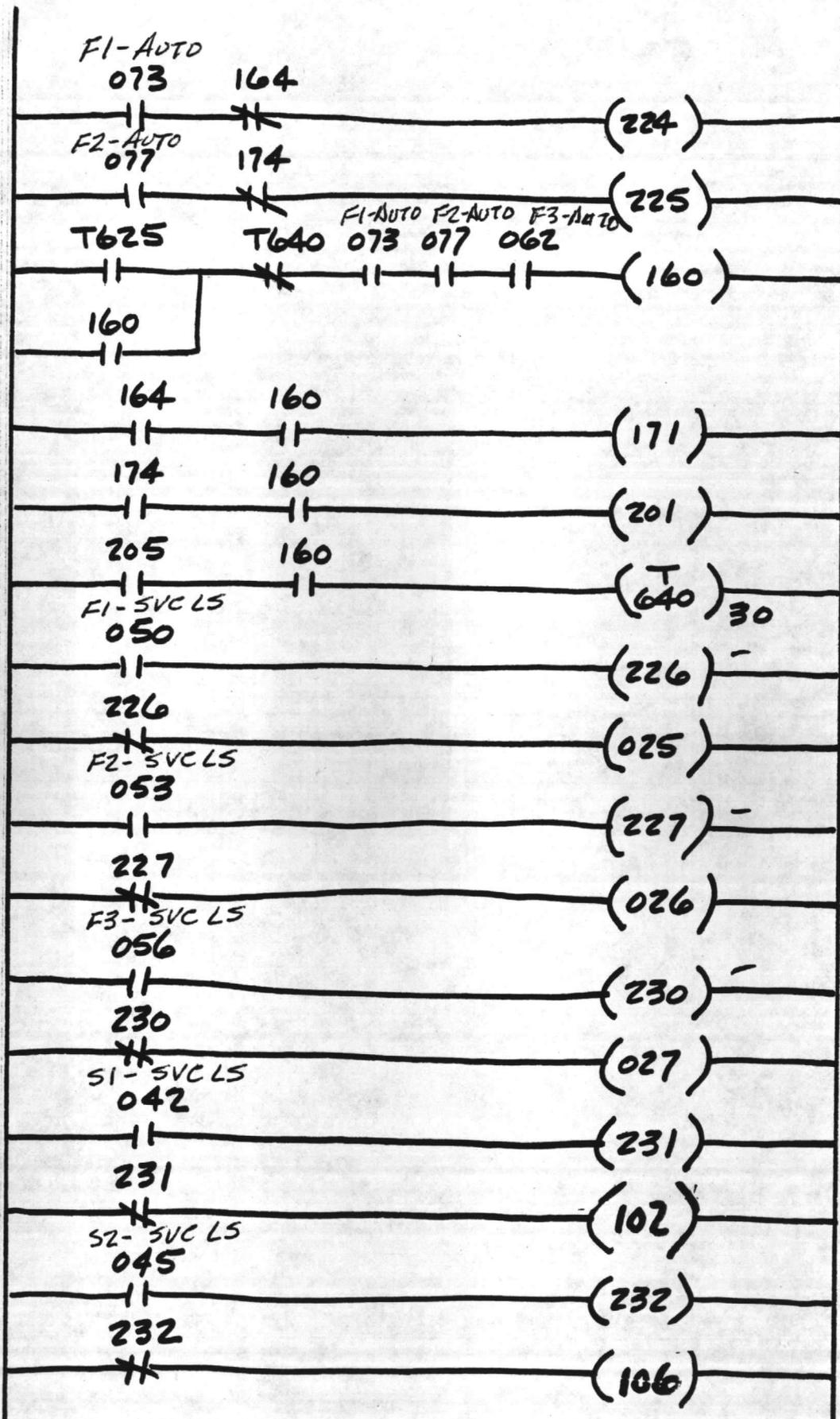






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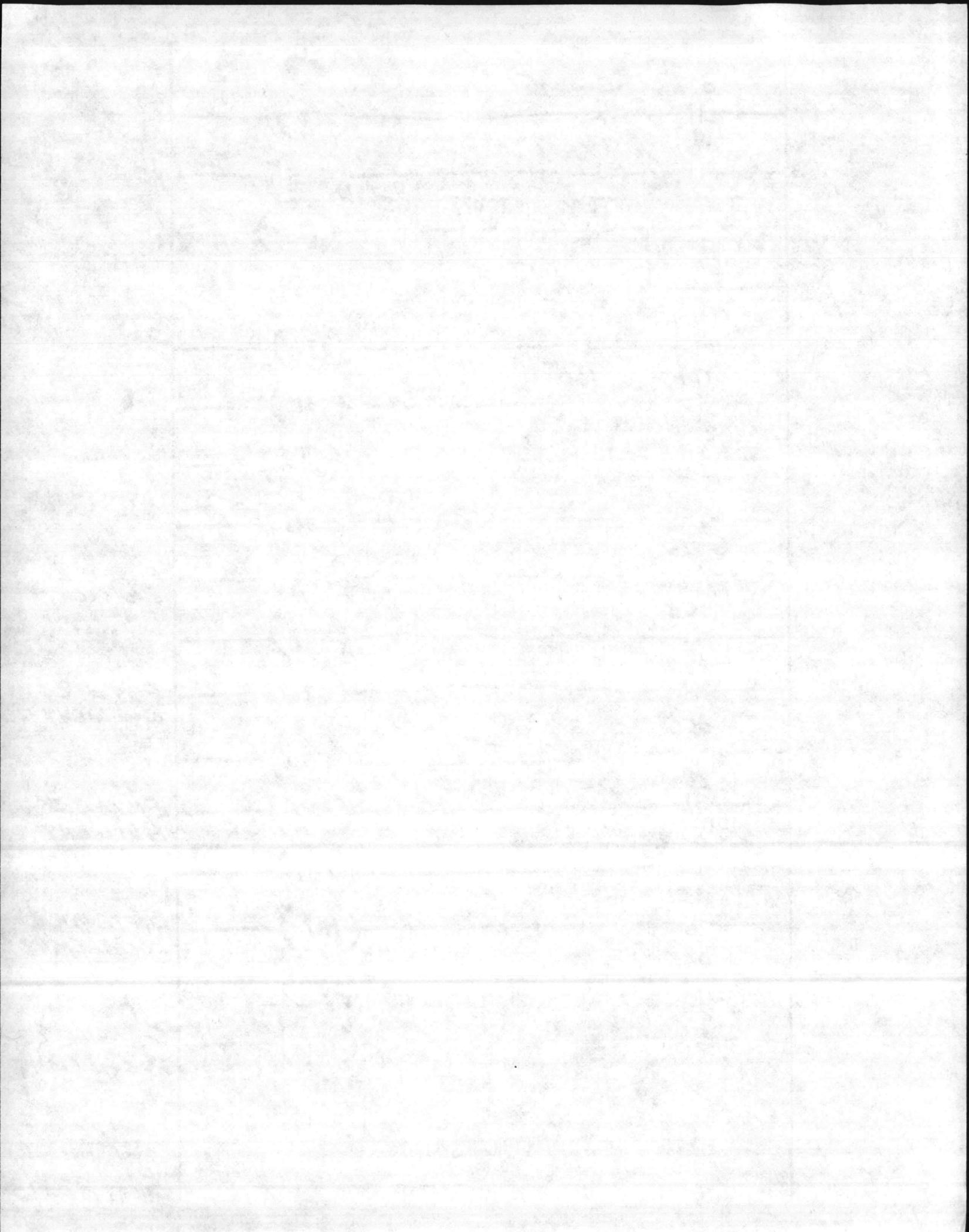
FILTER 1
BW LIGHT

FILTER 2
BW LIGHT

FILTER 3
BW LIGHT

SOFTENER 1
REGEN LIGHT

SOFTENER 2
REGEN LIGHT



F1-OFF

072

||
F2-OFF

076

||
F3-OFF

061

||

(233)

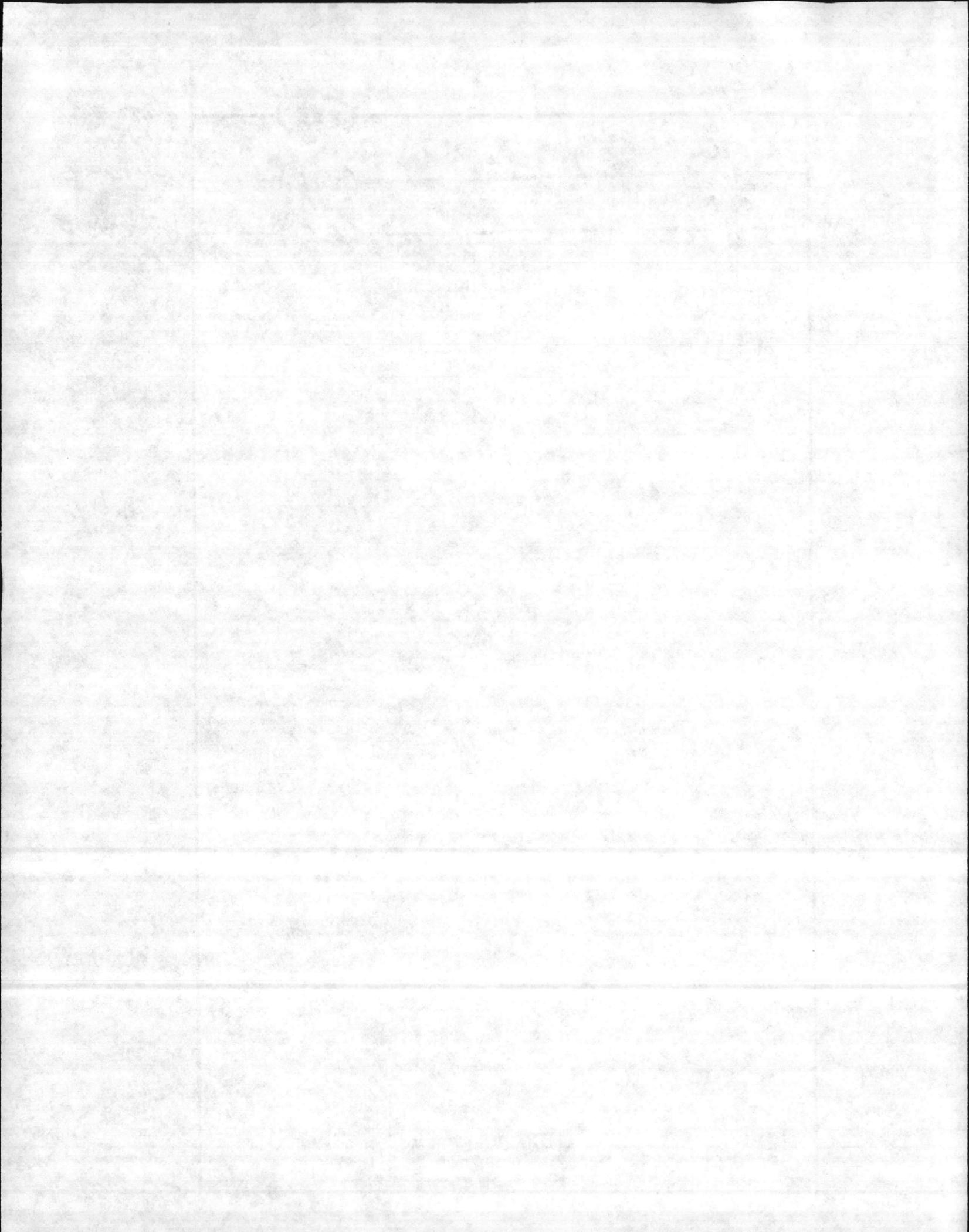
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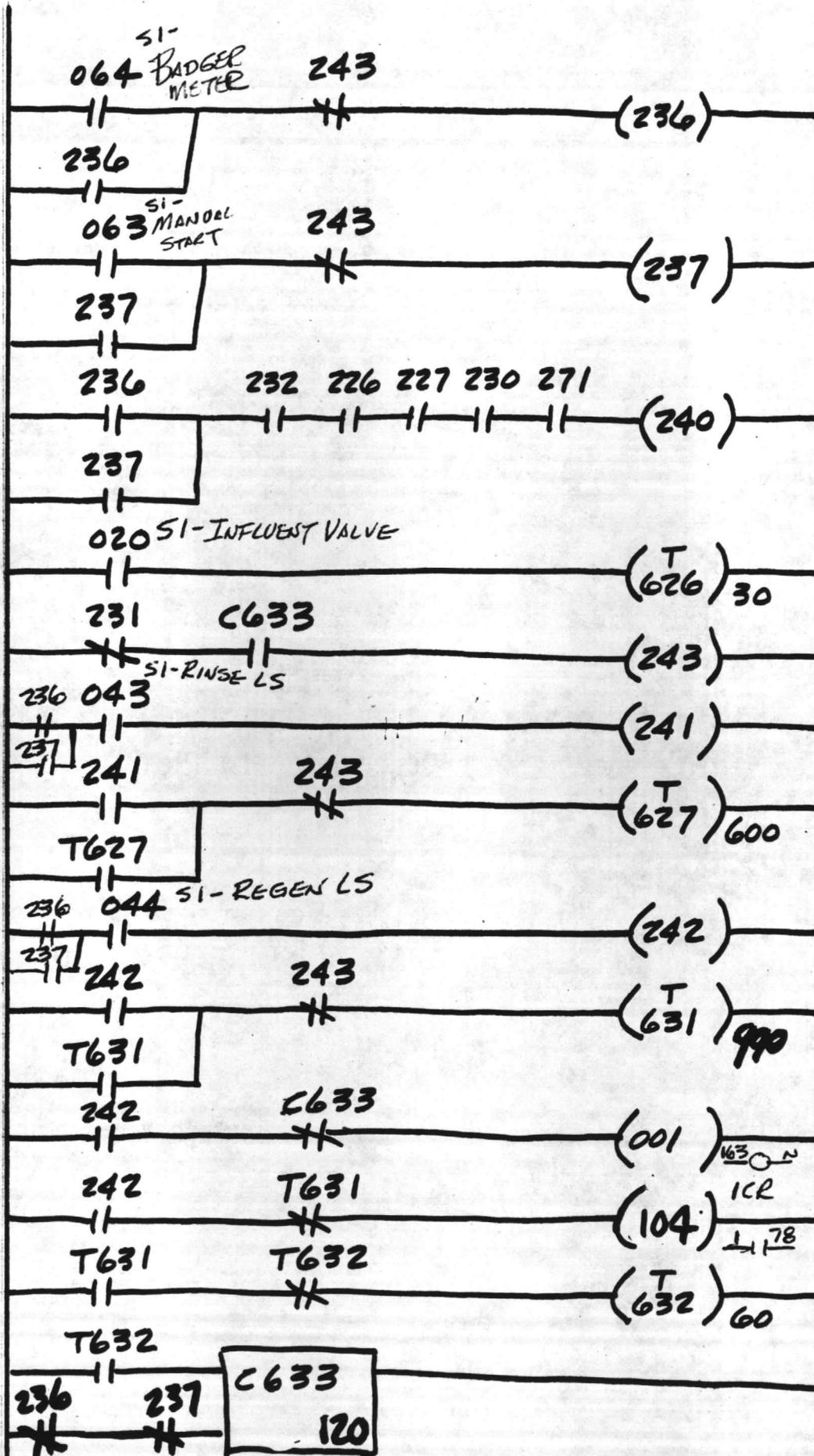
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FILTER 1
OFF

FILTER 2
OFF

FILTER 3
OFF



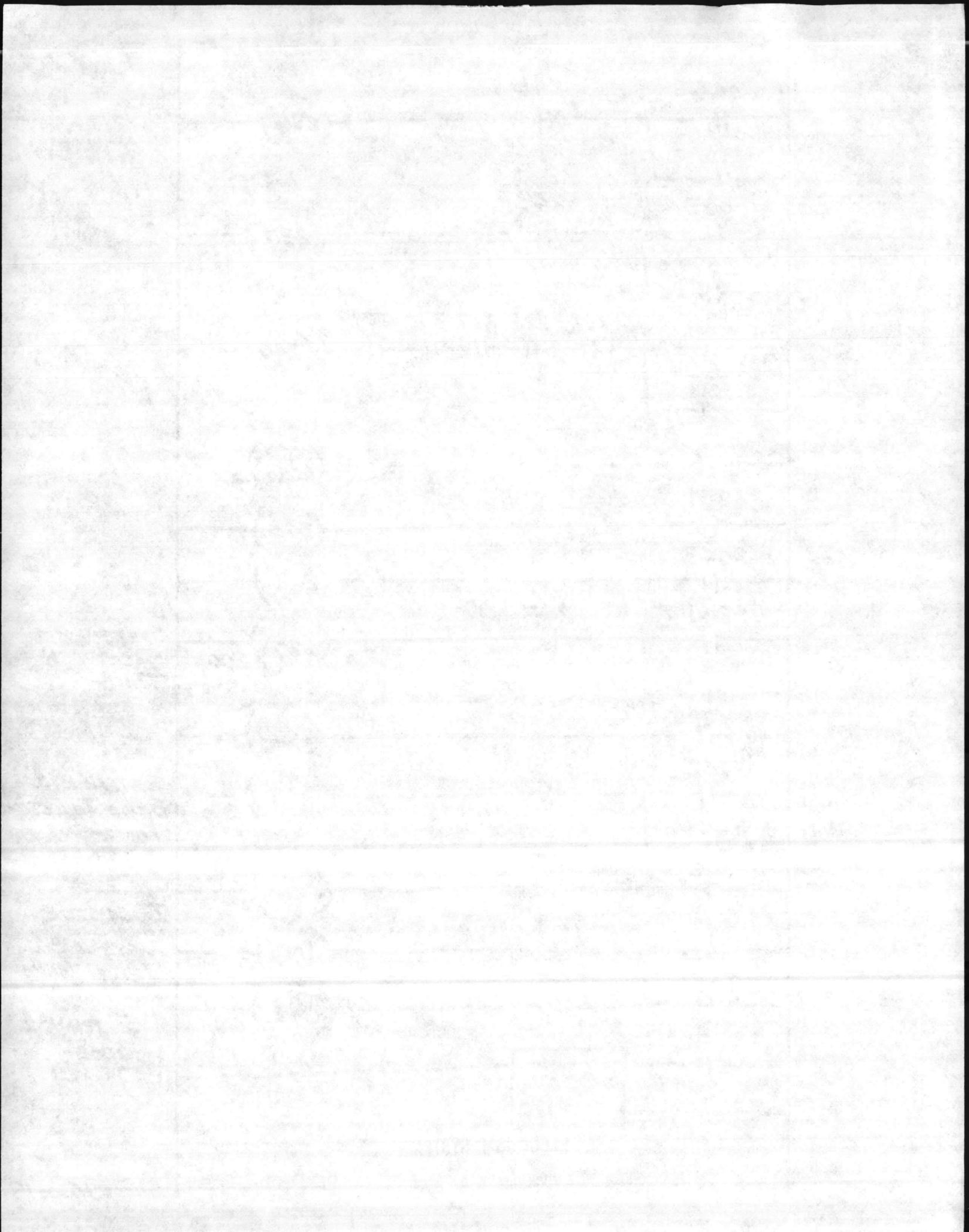


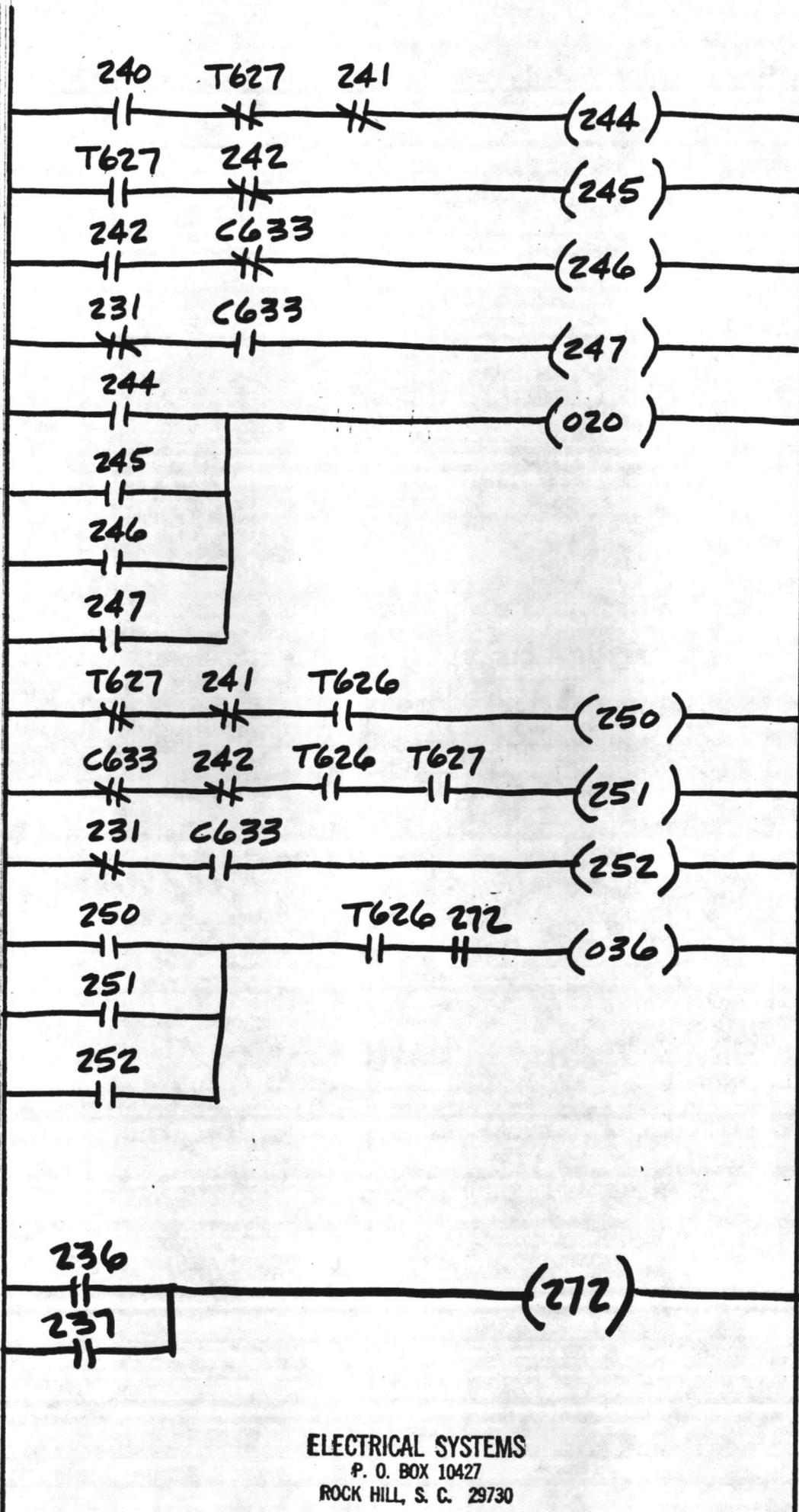
SOFTENER 1
BACKWASH
TIME

SOFTENER 1
BRINE INJECTION
TIME

SOFTENER 1
INJECTOR
SOFTENER 1
BRINE VALVE

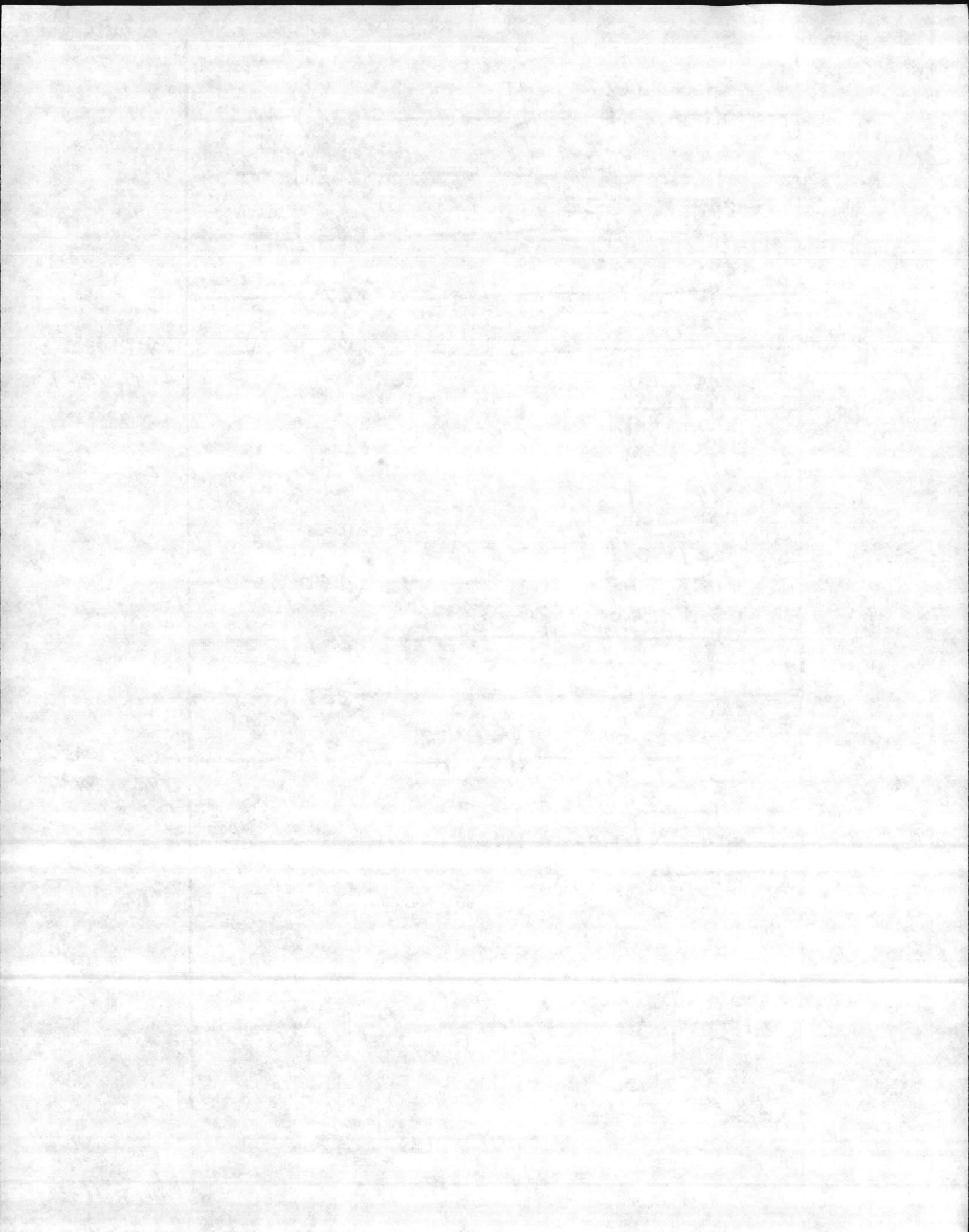
SOFTENER 1
RINSE
TIME

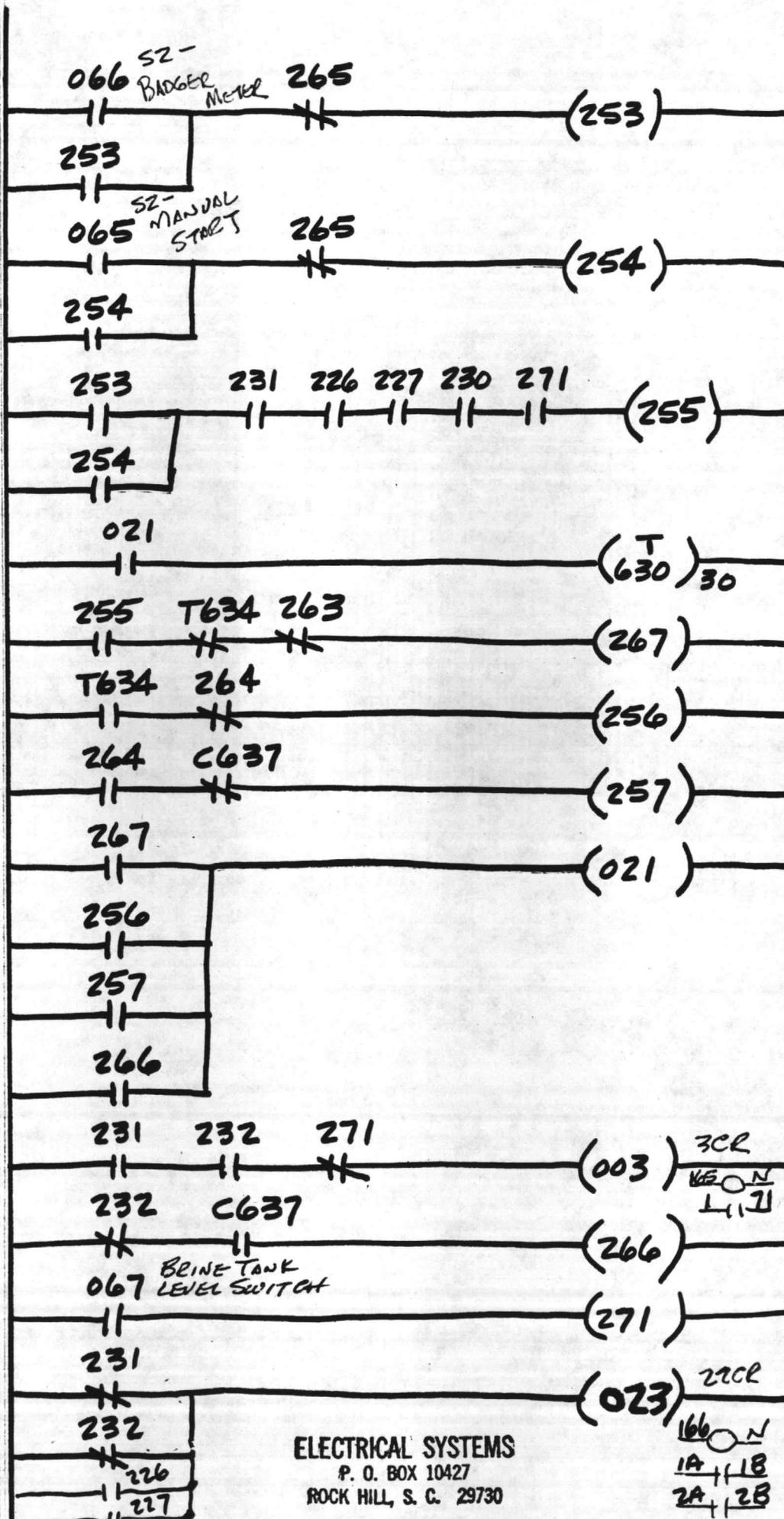




SOFTENER 1
INFLUENT

SOFTENER 1
MULTIPOINT





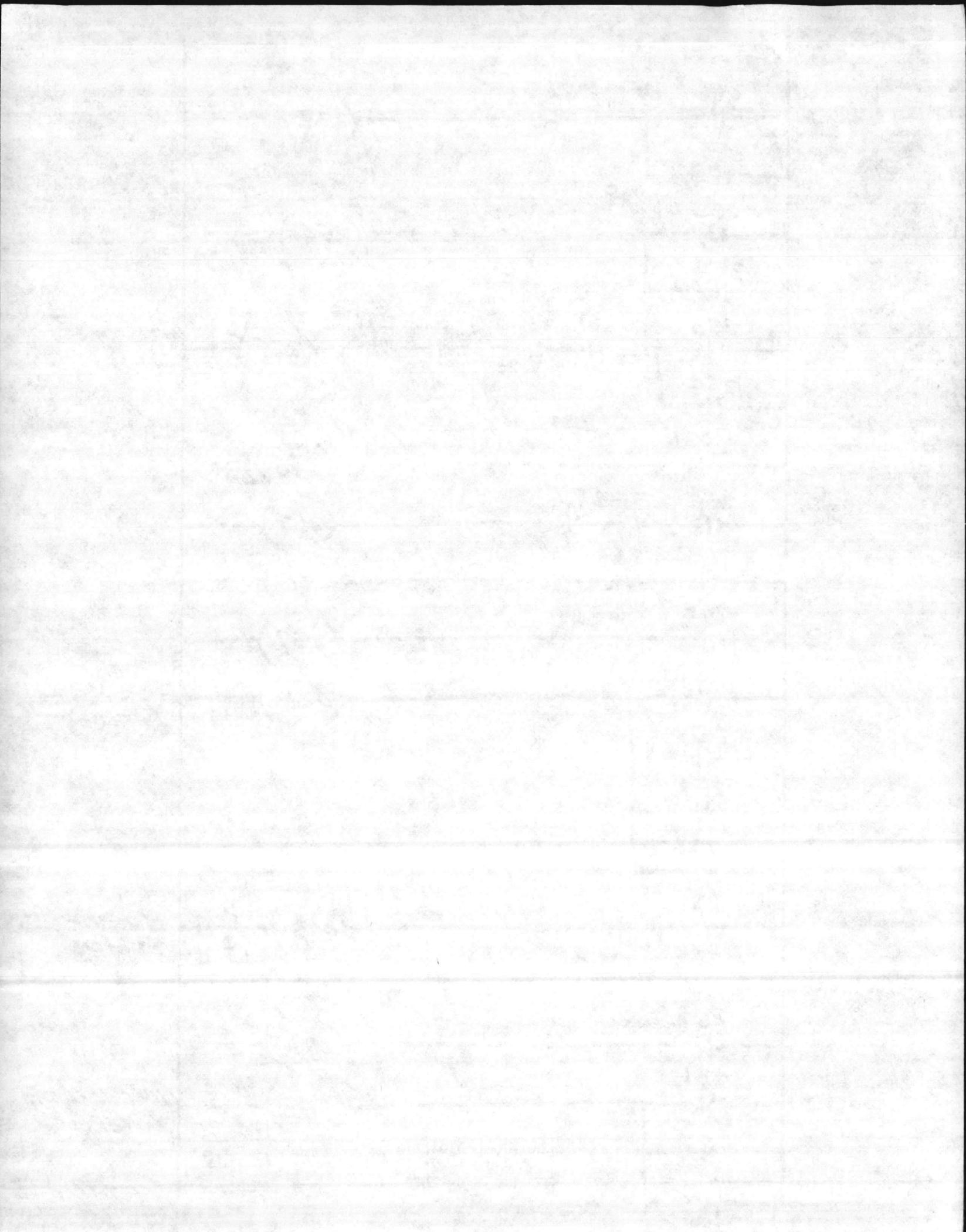
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INFLUENT

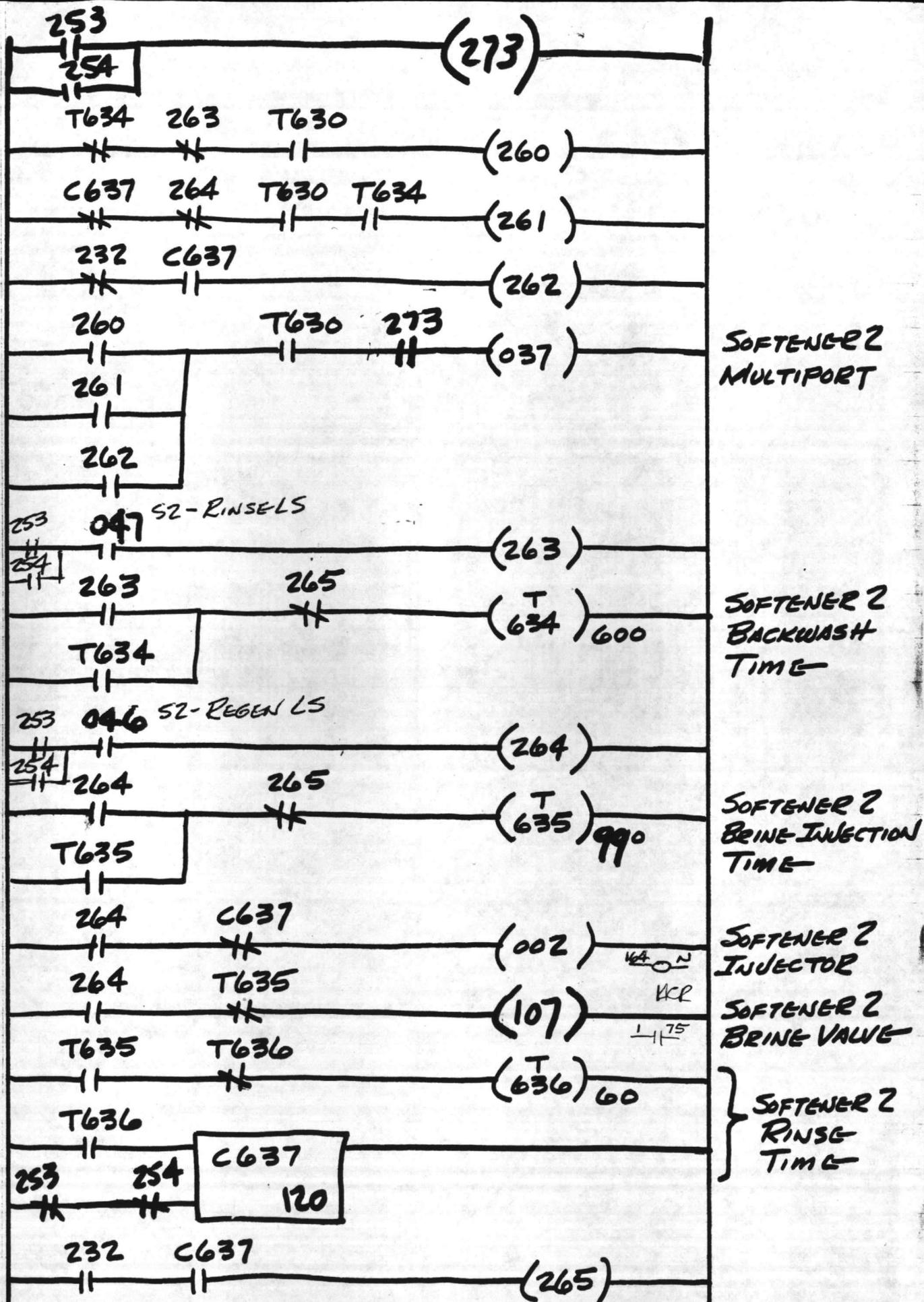
BRINE
PUMPS

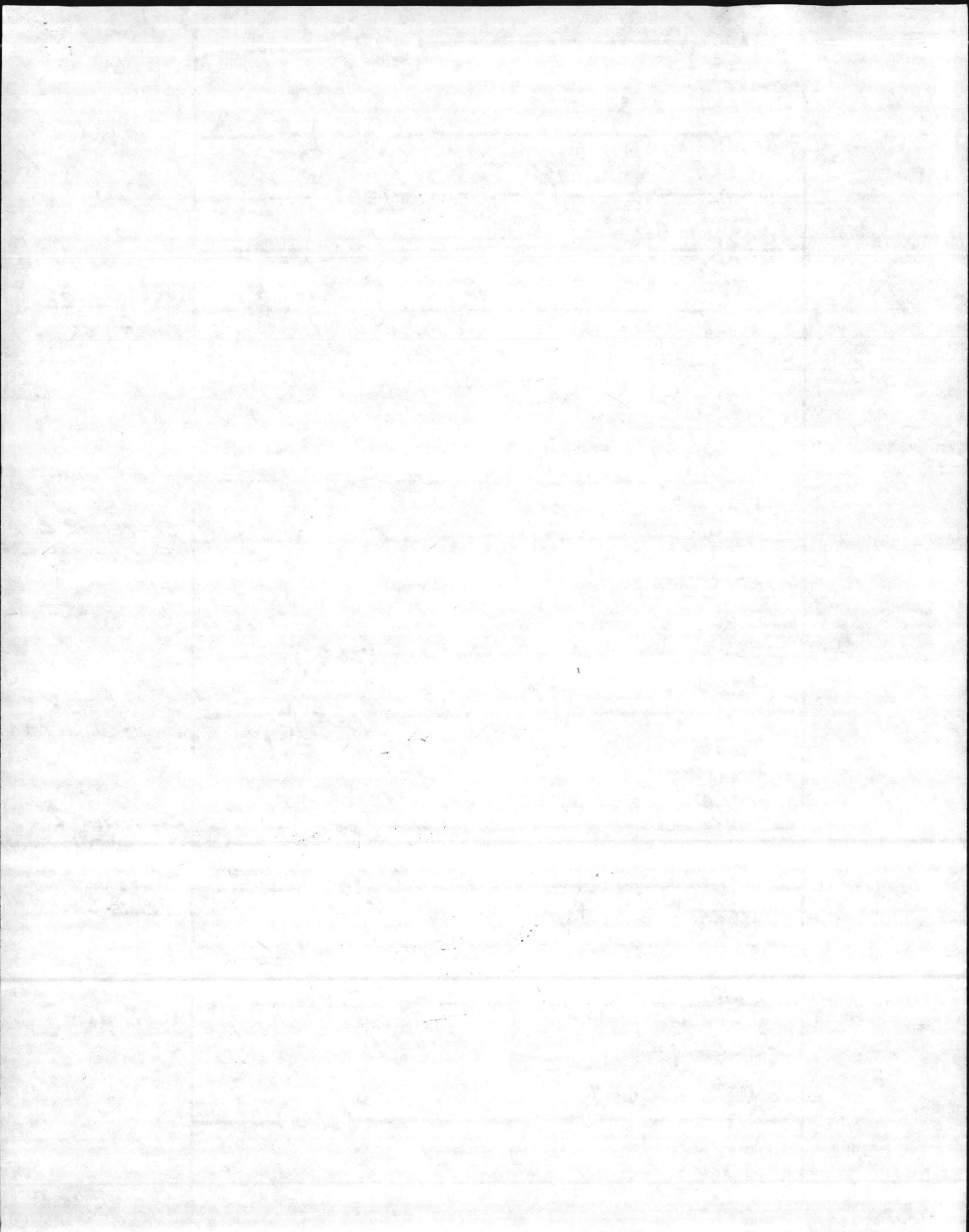
WATER PUMP
INTERLOCK

ELECTRICAL SYSTEMS
P. O. BOX 10427
ROCK HILL, S. C. 29730

SHEET NO. 13







957500



**HORIZONTAL
SPLIT CASE
CENTRIFUGAL PUMPS**

ATLANTA 21-41042
Proposal Number or District Office Number

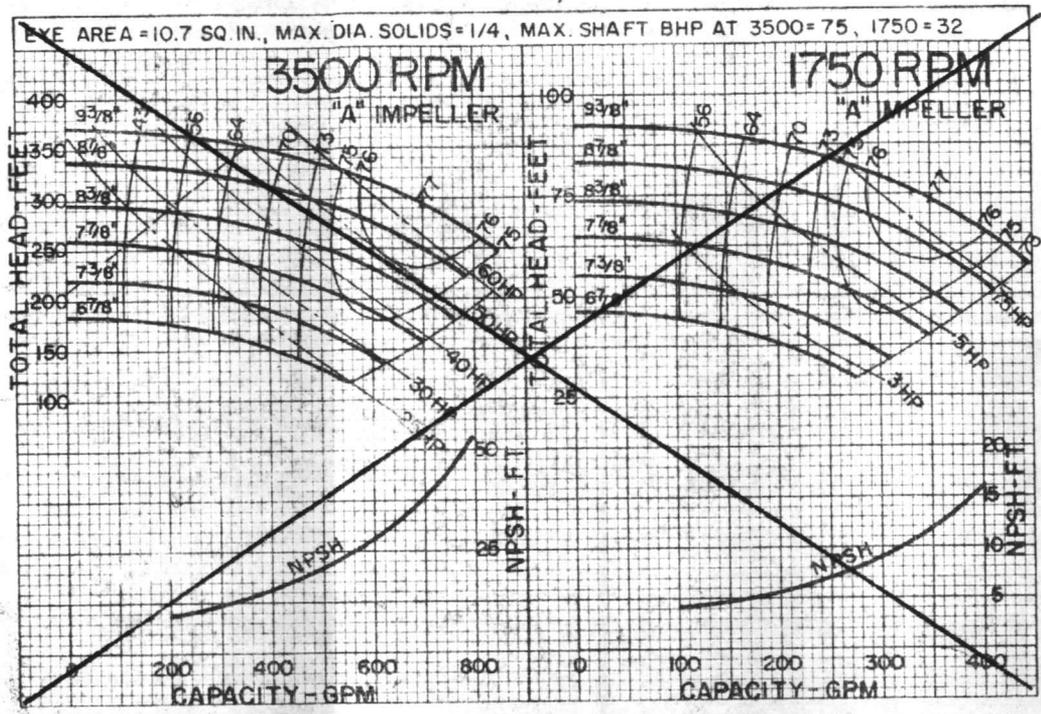
ITEM NO. C Date 4.6.64

BAHNN CONSTRUCTION CO. 15-12
Customer Name and Reference

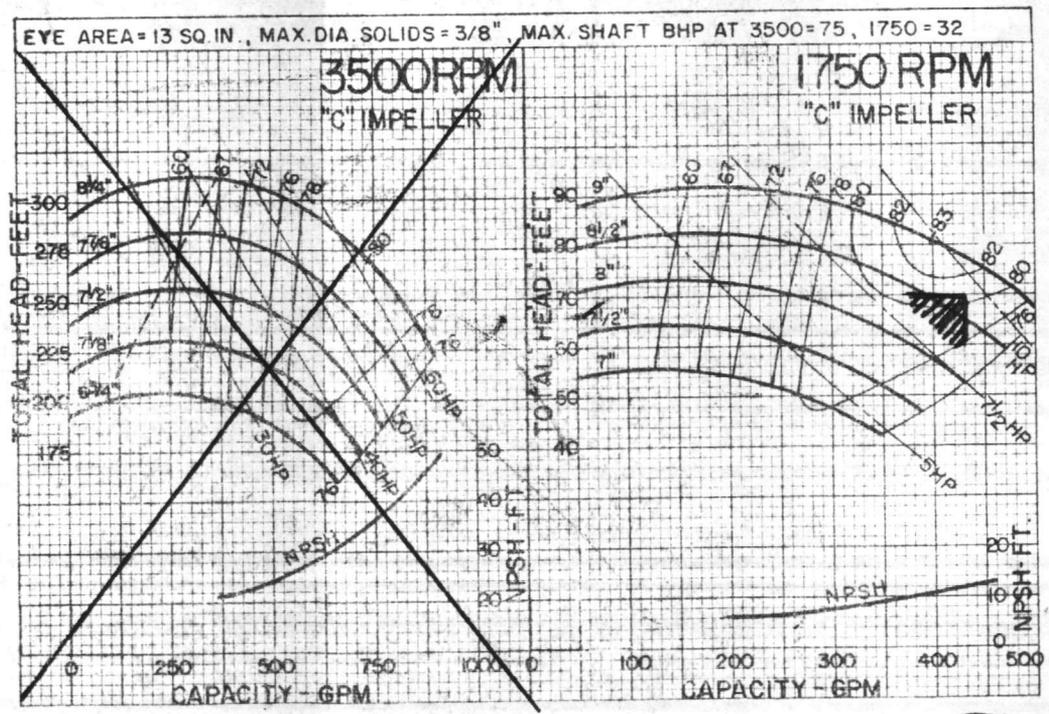
Y-273704
SERVICE FILTERED WATER PUMPS #102
DATE-
BY- G. COPPOLA
ITEM
OFFICE

This pump is guaranteed for one set of design conditions. Other points shown on this curve are approximate and not guaranteed. The design capacity and head are based on shop tests when handling clear, cold water.

DESIGN CONDITIONS
CAPACITY 430 GPM
TOTAL HEAD 70 FT.
8 1/2" DIA
C. INT.



Minimum recommended flow - sustained operation to the left of the slanted broken line could possibly result in shaft breakage due to fatigue.



3 LR-9 "C"

A-7228

Minimum recommended flow - sustained operation to the left of the slanted broken line could possibly result in shaft breakage due to fatigue.

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED:

SUBJECT TO THE REQUIREMENTS OF
CONTRACT NBY 54077 SPEC 54077/63
APPROVAL OF MATERIALS AND/OR EQUIPMENT
INDICATES COMPLIANCE WITH SPECIFICATION
REQUIREMENTS ONLY — THE CONTRACTOR
SHALL BE RESPONSIBLE FOR PROVIDING
PROPER PHYSICAL DIMENSIONS & WEIGHTS,
COORDINATION OF TRADES, ETC., AS REQUIRED.

Date 5/12/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS

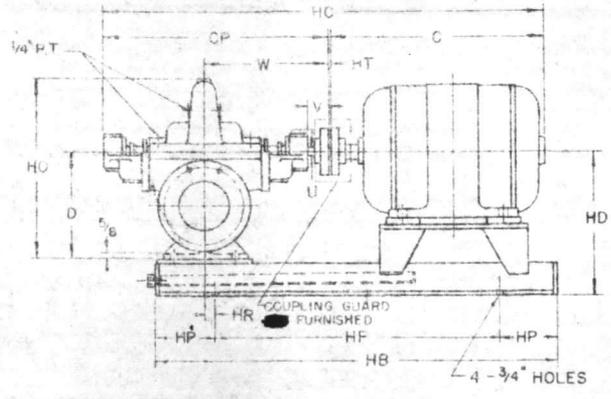
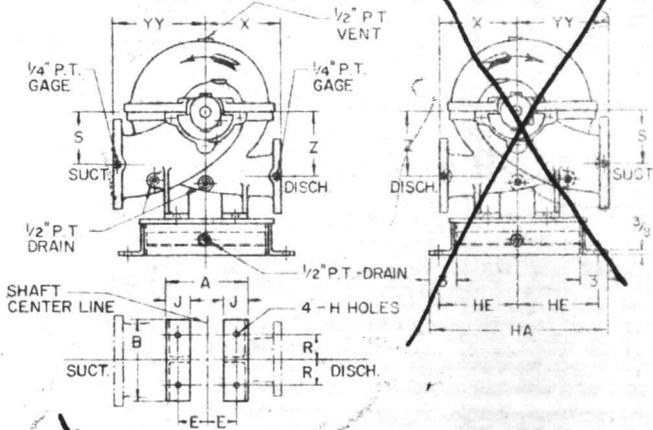
W.C.G.



LR VOLUTE PUMPS DOUBLE SUCTION FILTERED WATER PUMPS #1 + #2

COUNTER-CLOCKWISE ROTATION
DETERMINED FROM OUTBOARD END OF PUMP

CLOCKWISE ROTATION
DETERMINED FROM OUTBOARD END OF PUMP



ALL DIMENSIONS ARE IN INCHES

PLAN VIEW OF PUMP FEET

FRAME SIZE	3LR-9	3LR-12	4LR-10	4LR-12	4LR-14	5LR-10	4LR-13	5LR-15	6LR-10	6LR-13	6LR-16
	LINE HD										
182/184											
213											
215			6	16							
256 U											
286 U											
324 U	15										
324 S											
326 U		16									
326 S					17 1/2						
364 U											
364 US											
365 U						17 1/2					
365 US											
404 U											
404 US											
405 U	15 1/4										
405 US											
444 U			2								
444 US	16 1/4		2	16 1/4							
445 U											
445 US											
504											
504 S											
504 U											
505											
505 S											
8144											
505 US											20
5005S											5

LINE	WEIGHT #	HA	HB	HE	HF	HP	DWG NO.
0	190	24	54 1/2	11	40 1/2	7	W-63497
1	185	24	54 1/2	11	40 1/2	7	W-63494
3	231 1/2	24	54 1/2	11	40 1/2	7	W-63492
4	244 1/2	24	64 1/4	11	50 1/4	7	W-63482
5	181	24	64 1/4	11	50 1/4	7	W-63479

LINE	WEIGHT #	HA	HB	HE	HF	HP	DWG NO.
6	195	24	41 3/4	11	27 3/4	7	W-65532
7	204	24	41 3/4	11	27 3/4	7	Y-65766

PUMP	125# STD. FLG. SUCTION	125# STD. FLG. DISCHARGE	A	B	D	E	J	HR	R	S	U .0000 - .0005	KEYWAY	V	W	X	Z	CP	H	HO	YY	APPR WT. OF PUMP
3LR-9	4	3	10	10	10 1/2	3 1/2	3	1 1/4	3 3/8	5 1/4	.9830	1/4 x 1/8	2 1/2	14 5/8	7 1/2	5 3/4	26 3/4	5/8	17 1/4	9	220 #
3LR-12	5	3	10	10	11 1/2	3 1/2	3	1 1/4	3 3/8	5 3/4	.9830	1/4 x 1/8	2 1/2	14 5/8	8 3/8	7 1/4	26 3/4	5/8	19 3/4	10 1/2	380 #
4LR-10	5	4	10	10	11 1/2	3 1/2	3	1 1/4	3 3/8	5 3/4	.9830	1/4 x 1/8	2 1/2	14 5/8	9	6 1/4	26 3/4	5/8	19 3/4	11	280 #
4LR-12	6	4	10	10	13	3 1/2	3	1 1/4	3 3/8	6 3/8	.9830	1/4 x 1/8	2 1/2	14 3/4	9	7 3/4	27	5/8	21 3/4	11	320 #
4LR-14	6	4	14	13	13	5 1/4	3 1/4	-	5 3/16	6 3/8	1.1250	1/4 x 1/8	4	17	12	7 9/8	30	3/4	22 1/4	12 1/2	400 #
5LR-10	6	5	14	13	13	5 1/4	3 1/4	-	5 3/16	6 1/2	.9830	1/4 x 1/8	2 1/2	14 3/4	9 1/2	7	27	3/4	22 1/8	13	320 #
5LR-13	6	5	14	13	13	5 1/4	3 1/4	-	5 3/16	6 1/2	1.1250	1/4 x 1/8	4	17	10 1/2	7 1/4	30	3/4	22 5/8	13	425 #
5LR-15	6	5	14	13	13	5 1/4	3 1/4	-	5 3/16	6 1/2	1.5000	3/8 x 3/16	4 1/2	19 1/4	13	7 1/4	34	3/4	23 1/2	13 1/2	540 #
6LR-10	8	6	14	13	15 1/2	5 1/4	3 1/4	-	5 3/16	7 3/4	.9830	1/4 x 1/8	2 3/8	15 1/4	10	7 1/2	28 1/8	3/4	25 1/4	14	425 #
6LR-13	8	6	14	13	15 1/2	5 1/4	3 1/4	-	5 3/16	7 1/2	1.5000	3/8 x 3/16	4 1/2	19 1/4	11	9	34	3/4	25 3/4	14	580 #
6LR-16	8	6	14	13	15 1/2	5 1/4	3 1/4	-	5 3/16	7 9/8	1.5000	3/8 x 3/16	4 1/2	19 1/4	14	8 1/2	34	3/4	27	15	650 #

C 22 HD 15 HT 1/8 HC 48 7/8 COUPLING FALK

MOTOR MOTOR VS FRAME 256-V H.P. 10 R.P.M. 1800 WT.
DATA TYPE ODP PH. 3 CY. 60 VOLTS 208

CUSTOMER BROWN CONSTRUCTION CO. CUSTOMERS ORDER 15-12 ITEM C
DISTRICT OFFICE ATLANTA 21-41042 OUR SHOP ORDER Y-273704 CERTIFIED BY G. COPPOLA DATE 4.6.64

THIS PRINT IS LOANED SUBJECT TO RETURN ON DEMAND AND UNDER CONDITION THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTEREST. DO NOT SCALE, ADDITIONAL DIMENSIONS WILL BE FURNISHED UPON REQUEST. THIS PRINT IS FOR PRELIMINARY USE UNLESS ABOVE SPACES ARE FILLED. DIMENSIONS ARE FROM DRAWINGS, CASTINGS MAY VARY SLIGHTLY. FOUNDATION BOLTS MUST NOT BE FIXED RIGIDLY UNTIL MACHINE IS IN PLACE.

REVISED 12-16-63



WORTHINGTON CORPORATION
AMPERE STATION, EAST ORANGE, NEW JERSEY

DIMENSION SHEET
W-63577

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED:

SUBJECT TO THE REQUIREMENTS OF

CONTRACT NBy 54077 SPEC 54077/63
APPROVAL OF MATERIALS AND/OR EQUIPMENT
INDICATES COMPLIANCE WITH SPECIFICATION
REQUIREMENTS ONLY — THE CONTRACTOR
SHALL BE RESPONSIBLE FOR PROVIDING
PROPER PHYSICAL DIMENSIONS & WEIGHTS,
COORDINATION OF TRADES, ETC., AS REQUIRED.

Date 5/12/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS

W.C.G.



HORIZONTAL
SPLIT CASE
CENTRIFUGAL PUMPS

ATLANTA 21-41042

Proposal Number or District Office Number

ITEM NO. B

4-6-54

Date

BROWN CONSTRUCTION CO. 15-12

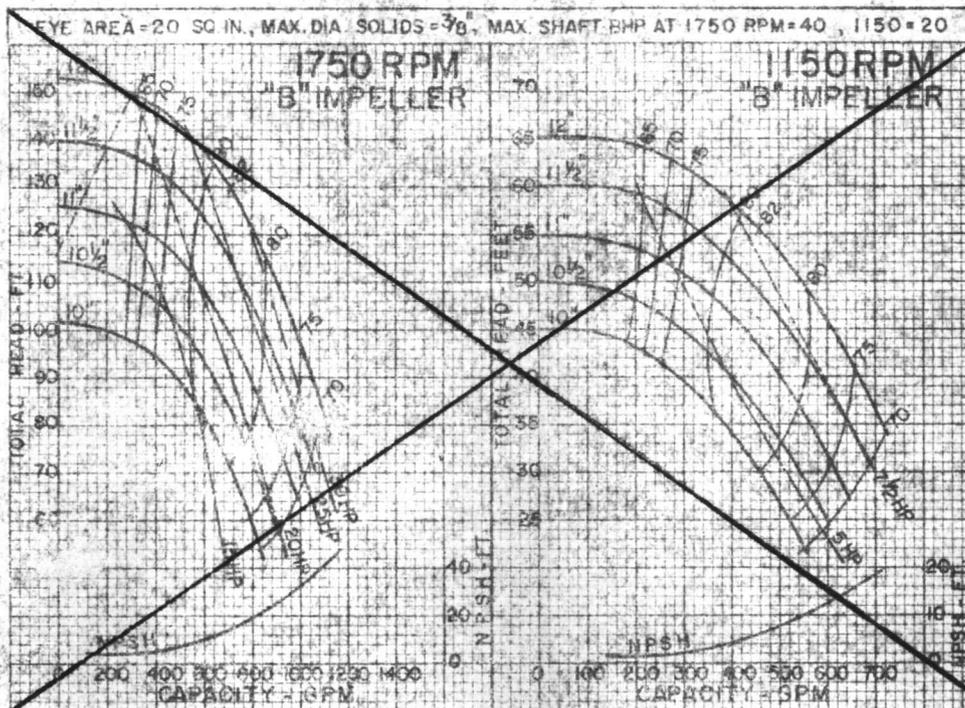
Customer Name and Reference

957500

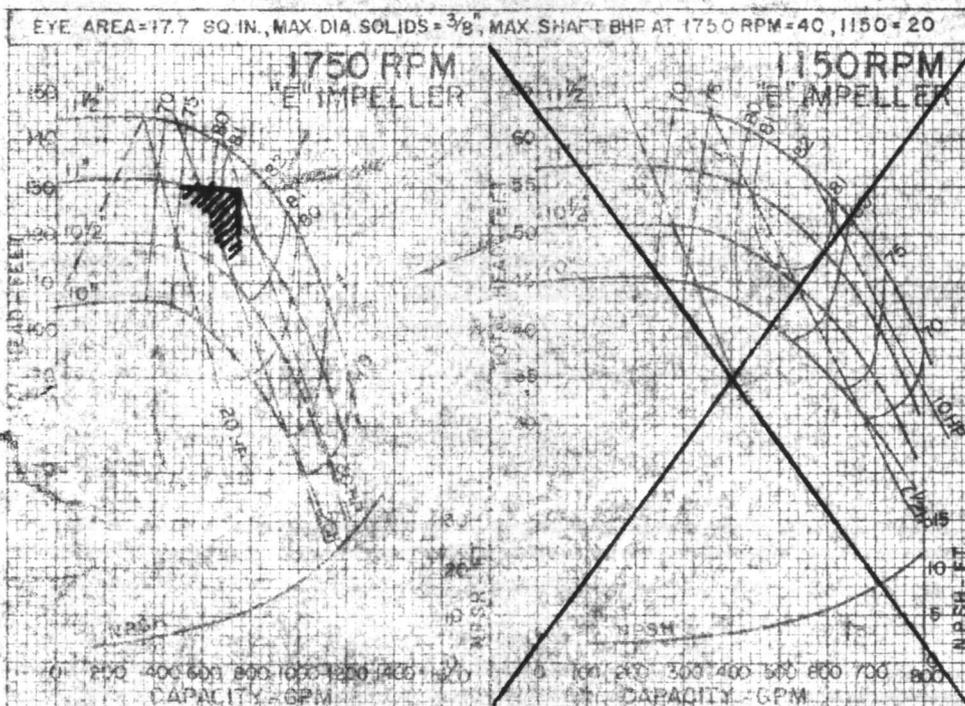
Y. 273703
SERVICE WATER PUMP #3
DATE -
BY - G. C. APPLIN
OFFICE

This pump is guaranteed for one set of design conditions. Other points shown on this curve are approximate and not guaranteed. The design capacity and head are based on shop tests when handling clear, cold water.

DESIGN CONDITIONS
CAPACITY 750 GPM
TOTAL HEAD 130 FT.
1 3/8" DIA
6" IMP



Minimum recommended flow - sustained operation to the left of the slanted broken line could possibly result in shaft breakage due to fatigue.



4-LR-12 "E"

Minimum recommended flow - sustained operation to the left of the slanted broken line could possibly result in shaft breakage due to fatigue.

A-7299

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED:

SUBJECT TO THE REQUIREMENTS OF

CONTRACT NBy 54077 SPEC 54077/63
APPROVAL OF MATERIALS AND/OR EQUIPMENT
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PROPER PHYSICAL DIMENSIONS & WEIGHTS.
COORDINATION OF TRADES, ETC., AS REQUIRED.

Date 5/12/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS

W.C.G.

957500



HORIZONTAL
SPLIT CASE
CENTRIFUGAL PUMPS

ATLANTA 21-41042

Proposal Number or District Office Number

ITEM NO. B

4-6-64

Date

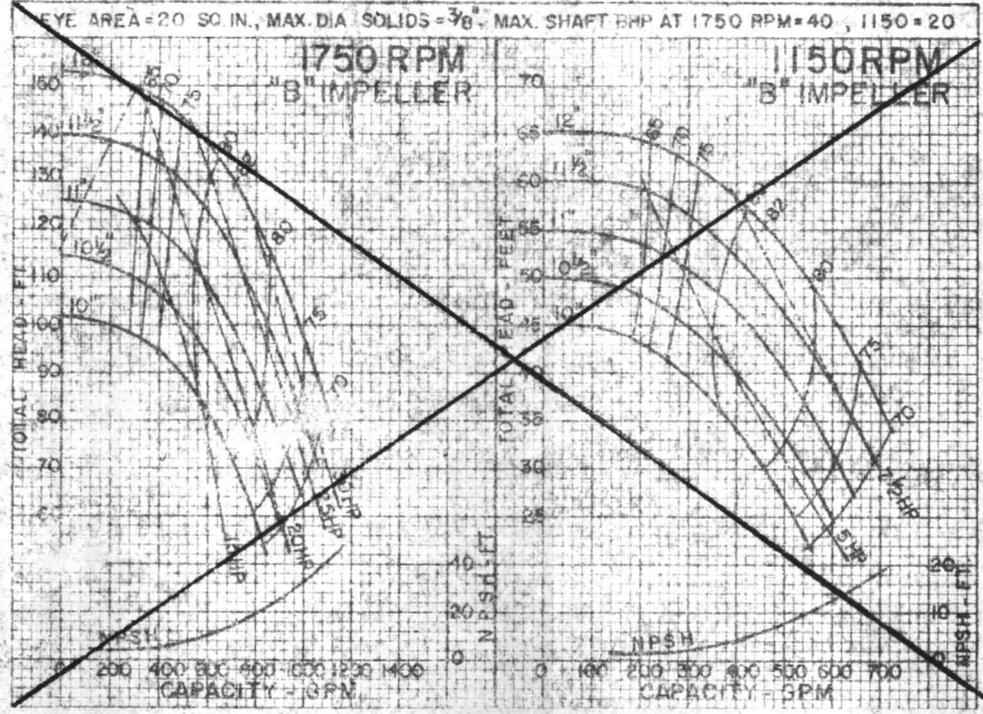
BROWN CONSTRUCTION CO. 15-12

Customer Name and Reference

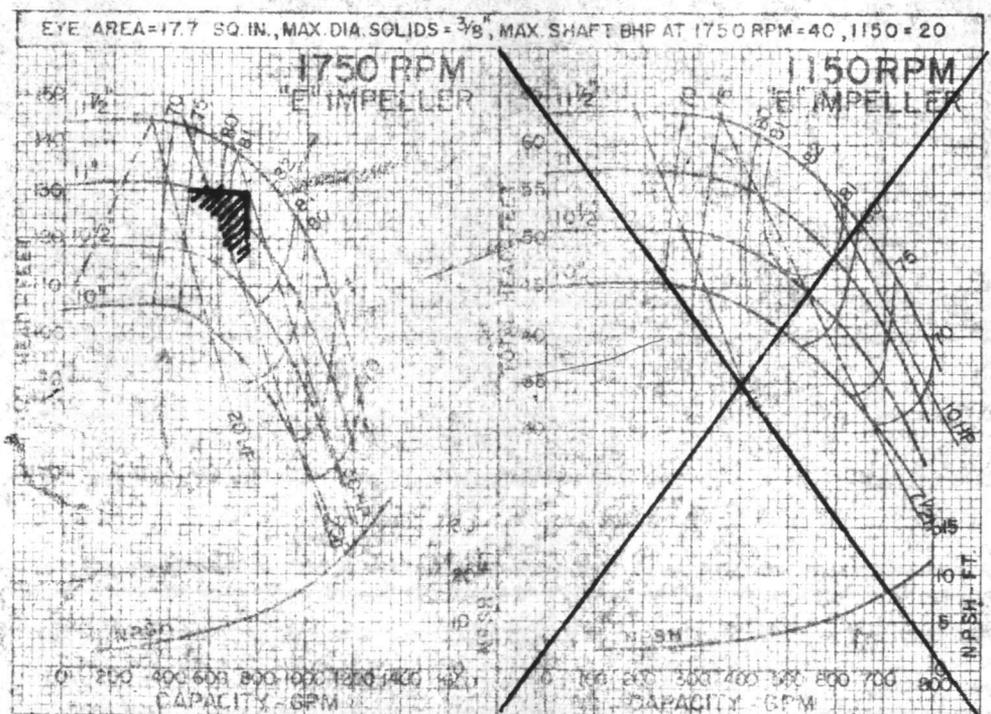
SERVICE **Y. 273703**
SERVICE WATER PUMP #3
 ITEM _____ DATE _____
 OFFICE _____ BY **G. CAPPOLA**

This pump is guaranteed for one set of design conditions. Other points shown on this curve are approximate and not guaranteed. The design capacity and head are based on shop tests when handling clear, cold water.

DESIGN CONDITIONS
 CAPACITY **750** GPM
 TOTAL HEAD **130** FT.
11 3/8" DIA
5" Imp



Minimum recommended flow - sustained operation to the left of the slanted broken line could possibly result in shaft breakage due to fatigue.



4-LR-12 "E"
 Minimum recommended flow - sustained operation to the left of the slanted broken line could possibly result in shaft breakage due to fatigue.

Order Forms from Stationery & Printing Section, Harrison. Use Form No. D0662-B.

A-7299

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED:

SUBJECT TO THE REQUIREMENTS OF

CONTRACT NBy 54077 SPEC 54077/63
APPROVAL OF MATERIALS AND/OR EQUIPMENT
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REQUIREMENTS ONLY — THE CONTRACTOR
SHALL BE RESPONSIBLE FOR PROVIDING
PROPER PHYSICAL DIMENSIONS & WEIGHTS.
COORDINATION OF TRADES, ETC., AS REQUIRED.

Date 5/12/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS

W.C.G.

957500

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED:
SUBJECT TO THE REQUIREMENTS OF

CONTRACT NO. 54077 SPEC 54077/63
APPROVAL OF MATERIALS AND/OR EQUIPMENT
INDICATES COMPLIANCE WITH SPECIFICATION
REQUIREMENTS ONLY — THE CONTRACTOR
SHALL BE RESPONSIBLE FOR PROVIDING
PROPER PHYSICAL DIMENSIONS & WEIGHTS,
COORDINATION OF TRADES, ETC., AS REQUIRED.

Date 5/12/64

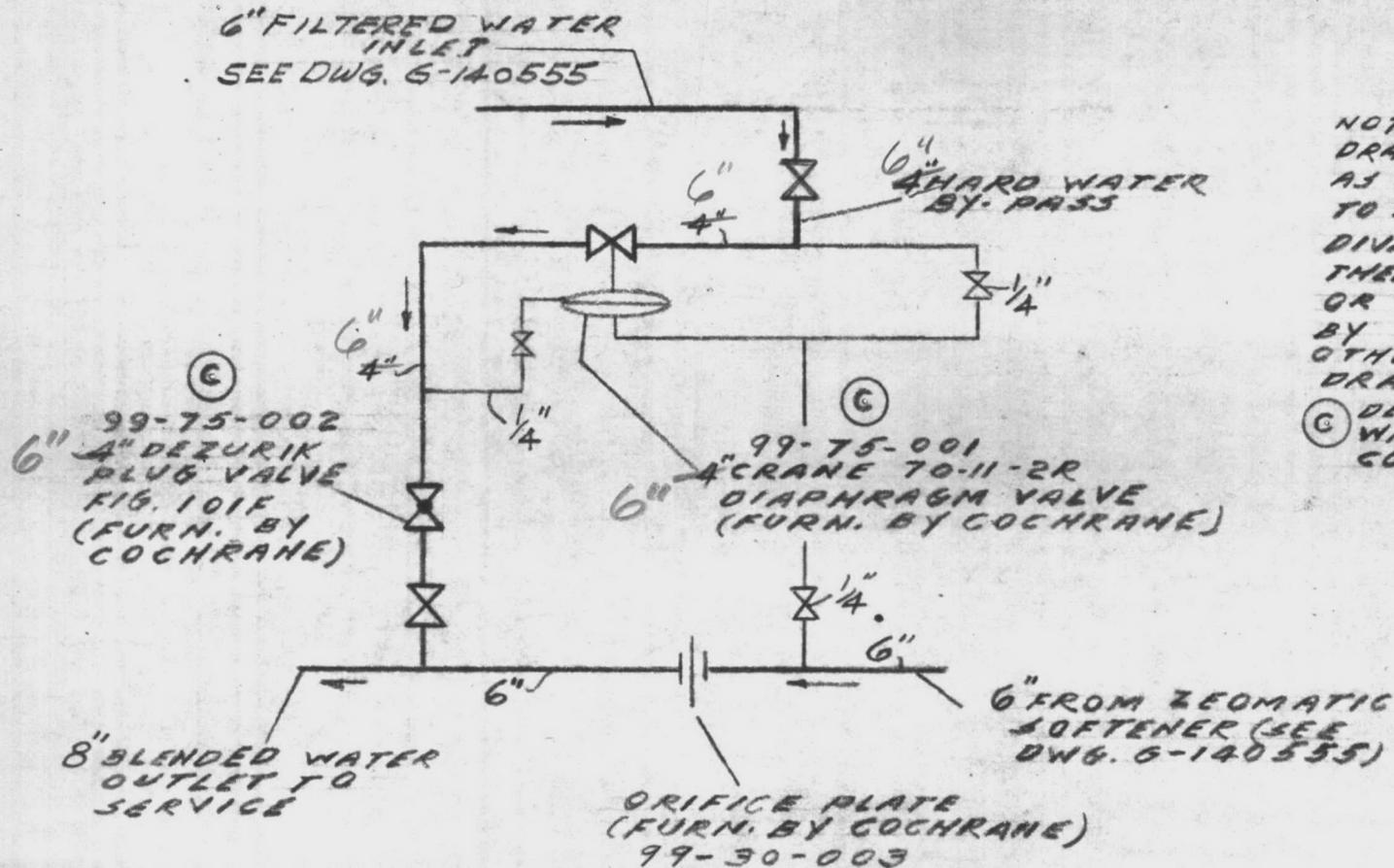
W. C. G. CHURCH
ADM. CEC, USN
DURHAM DOCKS



SCALE ~	DRAWN H.B.	DATE 4-7-64	CHKD. [Signature]	FIRST USED ON S.O. 1172-64	APPD. [Signature]	LTR.	DATE	REVISION	ENG. APP.
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COCHRANE DIVISION - CRANE CO.



NOTHING SHOWN ON THIS DRAWING IS TO BE CONSTRUED AS INCREASING THE MATERIAL TO BE SUPPLIED BY COCHRANE DIV. OVER THAT SPECIFIED IN THEIR CONTRACT. NO PIPING OR EQUIPMENT FURNISHED BY COCHRANE DIV. UNLESS OTHERWISE SPECIFIED ON DRAWING.

Ⓢ DENOTES CERTIFIED PRINTS WILL BE FURNISHED BY COCHRANE DIV., CRANE CO.

THIS DRAWING IS FOR APPROVAL
RETURN ONE PRINT IMMEDIATELY TO AVOID DELAY IN FABRICATION

APR 23 1964

COCHRANE DIVISION CRANE CO. PHILADELPHIA 32, PA.	ASSEMBLY HARDWATER BY-PASS	SIZE	NUMBER	CHG. LTR.
		C	140571	
S.O.	1172 64			

957500

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED: AS NOTED

SUBJECT TO THE REQUIREMENTS OF

CONTRACT NBY 54077 SPEC 54077/63
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COORDINATION OF TRADES, ETC., AS REQUIRED.

Date 5/19/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS

[Handwritten signature]

957500



HORIZONTAL
SPLIT CASE
CENTRIFUGAL PUMPS

ATLANTA 21-41042

Proposal Number or District Office Number

ITEM NO. A

4-6-64

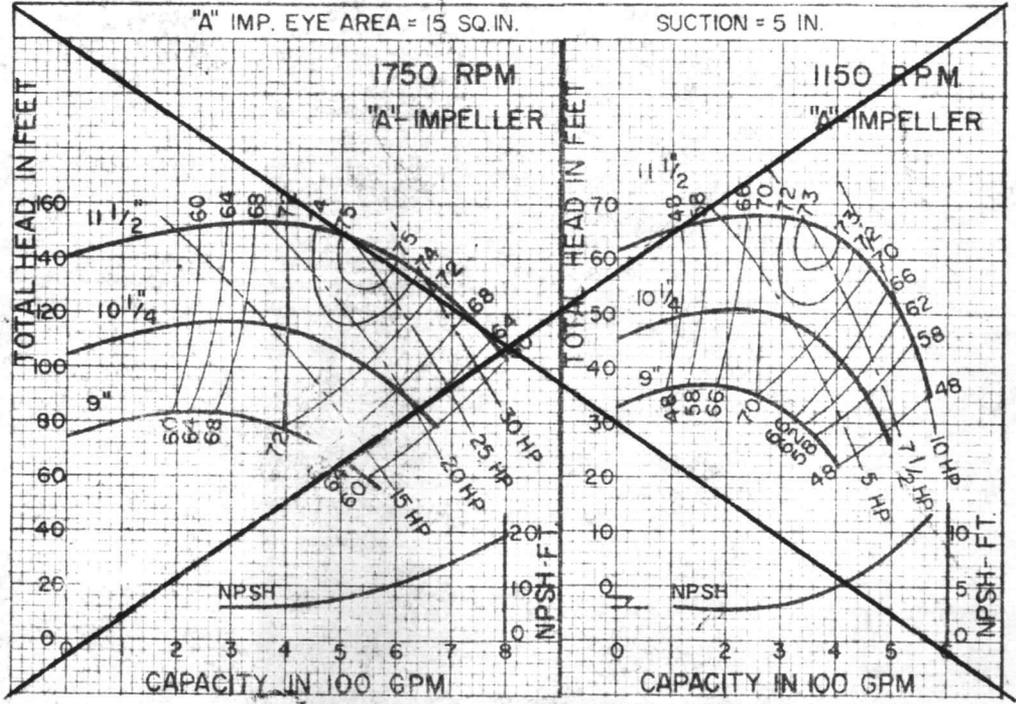
Date

BROWN CONSTRUCTION CO.

15-12

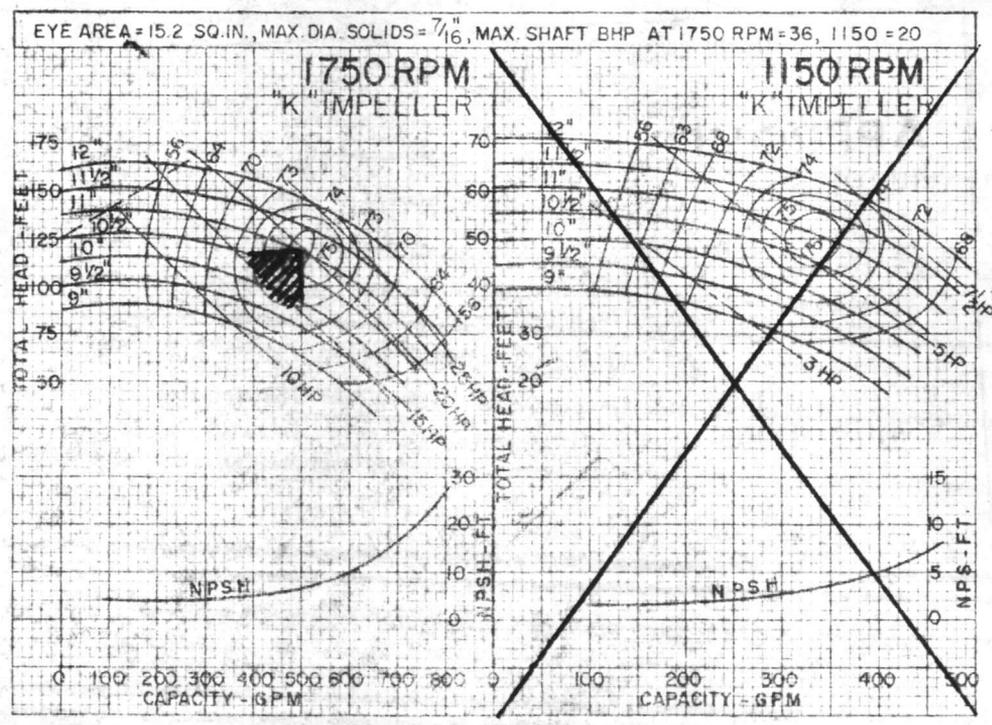
Customer Name and Reference

Y. 273702
 SERVICE WATER PUMPS #1 x 02
 DATE-
 BY- G. CAPPOLA
 ITEM
 OFFICE



This pump is guaranteed for one set of design conditions. Other points shown on this curve are approximate and not guaranteed. The design capacity and head are based on shop tests when handling clear, cold water.

DESIGN CONDITIONS
 CAPACITY 500 GPM
 TOTAL HEAD 118 FT.
 1 1/4" DIA
 1/2" NPS



Order Forms from:
 Stationery & Printing
 Section, Harrison.
 Use Form No. D0662-6

3 LR-12 "K"

A-7294

Minimum recommended flow - sustained operation to the left of the slanted broken line could possibly result in shaft breakage due to fatigue.

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED:

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Date

5/12/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS

W.C.G.

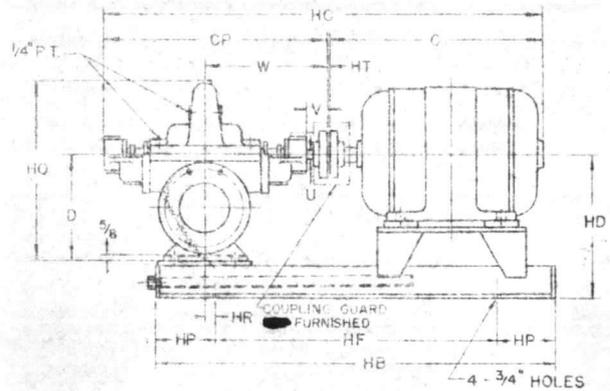
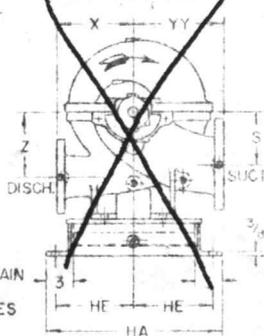
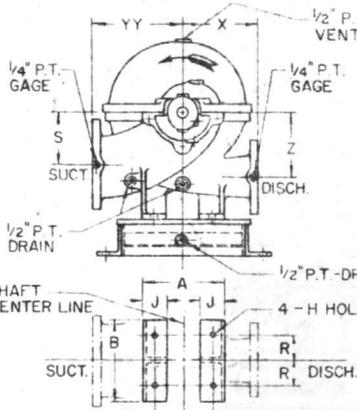


LR VOLUTE PUMPS DOUBLE SUCTION

SERVICE WATER PUMPS #1 & #2

COUNTER-CLOCKWISE ROTATION
DETERMINED FROM OUTBOARD END OF PUMP

CLOCKWISE ROTATION
DETERMINED FROM OUTBOARD END OF PUMP



PLAN VIEW OF PUMP FEET

ALL DIMENSIONS ARE IN INCHES

FRAME SIZE	3LR-9	3LR-12	4LR-10	4LR-12	4LR-14	5LR-10	5LR-13	5LR-15	6LR-10	6LR-13	6LR-16
LINE	HD	LINE	HD	LINE	HD	LINE	HD	LINE	HD	LINE	HD
182/184											
213											
215			6	16							
254 U											
256 U											
284 U											
324 U	15										
326 U		16									
326 S											
364 U			16	17 1/2							
364 US											
365 U											
365 US					17 1/2						
404 U	2										
404 US		15 1/4									
405 U	2										
405 US								17 1/2			
444 U	2	16 1/4									
444 US			2	16 1/4							
445 U											20
445 US											
504											
504 S											
504 U								17 1/4			
505											
505 S											
8144											
505 US											
5005S											5

LINE	WEIGHT #	HA	HB	HE	HF	HP	DWG NO.
190	24	54 1/2	11	40 1/2	7	W-63497	
185	24	54 1/2	11	40 1/2	7	W-63494	
3	23 1/2	24	54 1/2	11	40 1/2	7	W-63492
4	24 1/2	24	64 1/4	11	50 1/4	7	W-63482
5	181	24	64 1/4	11	50 1/4	7	W-63479

LINE	WEIGHT #	HA	HB	HE	HF	HP	DWG NO.
6	195	24	41 3/4	11	27 3/4	7	W-65532
7	204	24	41 3/4	11	27 3/4	7	Y-65766

PUMP	125# STD. FLG. SUCTION	125# STD. FLG. DISCHARGE	A	B	D	E	J	HR	R	S	U .0000	KEYWAY	V	W	X	Z	CP	H	HO	YY	APPR. WT. OF PUMP
3LR-9	4	3	10	10	10 1/2	3 1/2	3	1 1/4	3 3/8	5 1/4	.9830	1/4 x 1/8	2 1/2	14 5/8	7 1/2	5 3/4	26 3/4	5/8	17 1/4	9	220 #
3LR-12	5	3	10	10	11 1/2	3 1/2	3	1 1/4	3 3/8	5 3/4	.9830	1/4 x 1/8	2 1/2	14 5/8	8 3/8	7 1/4	26 3/4	5/8	19 3/4	10 1/2	380 #
4LR-10	5	4	10	10	11 1/2	3 1/2	3	1 1/4	3 3/8	5 3/4	.9830	1/4 x 1/8	2 1/2	14 5/8	9	5 1/4	26 3/4	5/8	19 3/4	11	280 #
4LR-12	6	4	10	10	13	3 1/2	3	1 1/4	3 3/8	6 3/8	.9830	1/4 x 1/8	2 1/2	14 5/8	9	7 3/4	27	5/8	21 3/4	11	320 #
4LR-14	6	4	14	13	13	5 1/4	3 1/4	-	5 3/16	6 3/8	1.1250	1/4 x 1/8	4	17	12	7 9/8	30	3/4	22 3/4	12 1/2	400 #
5LR-10	6	5	14	13	13	5 1/4	3 1/4	-	5 3/16	6 1/2	.9830	1/4 x 1/8	2 1/2	14 3/4	9 1/2	7	27	3/4	22 1/8	13	320 #
5LR-13	6	5	14	13	13	5 1/4	3 1/4	-	5 3/16	6 1/2	1.1250	1/4 x 1/8	4	17	10 1/2	7 1/4	30	3/4	22 5/8	13	425 #
5LR-15	6	5	14	13	13	5 1/4	3 1/4	-	5 3/16	6 1/2	1.5000	3/8 x 3/16	4 1/2	19 1/4	13	7 1/4	34	3/4	23 1/2	13 1/2	540 #
6LR-10	8	6	14	13	15 1/2	5 1/4	3 1/4	-	5 3/16	7 3/4	.9830	1/4 x 1/8	2 3/8	15 1/4	10	7 1/2	28 1/8	3/4	25 1/4	14	425 #
6LR-13	8	6	14	13	15 1/2	5 1/4	3 1/4	-	5 3/16	7 1/2	1.5000	3/8 x 3/16	4 1/2	19 1/4	11	9	34	3/4	25 3/4	14	580 #
6LR-16	8	6	14	13	15 1/2	5 1/4	3 1/4	-	5 3/16	7 3/8	1.5000	3/8 x 3/16	4 1/2	19 1/4	14	8 1/2	34	3/4	27	15	650 #

C **24** HD **16** HT **1/8** HC **50 7/8** COUPLING **FALK**

MQTOR MOTOR **V-S** FRAME **324 U** H.P. **25** R.P.M. **1800** WT.
 DATA TYPE **ODP** PH. **3** CY. **60** VOLTS **208**

CUSTOMER **BROWN CONSTRUCTION CO** CUSTOMERS ORDER **15-12** ITEM **A**

DISTRICT OFFICE **ATLANTA 21-41042** OUR SHOP ORDER **Y-273702** CERTIFIED BY **G. COPPOLA** DATE **4-6-64**

THIS PRINT IS LOANED SUBJECT TO RETURN ON DEMAND AND UNDER CONDITION THAT IT IS NOT TO BE USED IN ANY WAY DETRIMENTAL TO OUR INTEREST. DO NOT SCALE. ADDITIONAL DIMENSIONS WILL BE FURNISHED UPON REQUEST. THIS PRINT IS FOR PRELIMINARY USE UNLESS ABOVE SPACES ARE FILLED. DIMENSIONS ARE FROM DRAWINGS. CASTINGS MAY VARY SLIGHTLY. FOUNDATION BOLTS MUST NOT BE FIXED RIGIDLY UNTIL MACHINE IS IN PLACE.

REVISED 12-16-63



WORTHINGTON CORPORATION
AMPERE STATION, EAST ORANGE, NEW JERSEY

DIMENSION SHEET
W-63577

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED:

SUBJECT TO THE REQUIREMENTS OF

CONTRACT NBy 54077 SPEC 54077/63
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COORDINATION OF TRADES, ETC., AS REQUIRED.

Date 5/13/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS

W.C.G.

957500



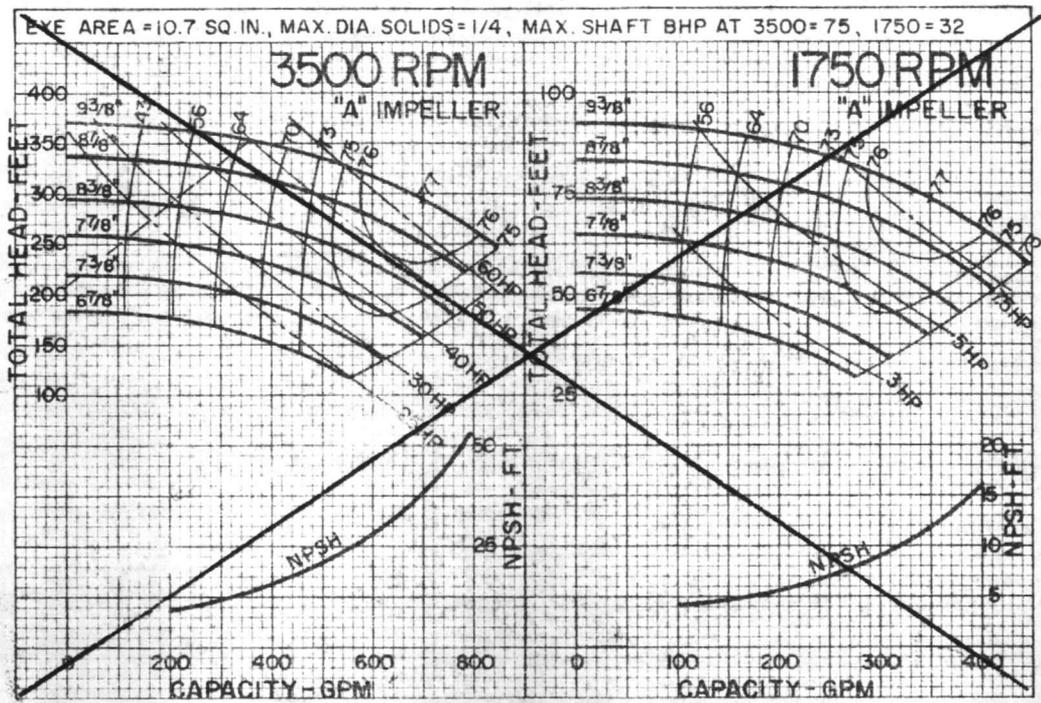
HORIZONTAL SPLIT CASE CENTRIFUGAL PUMPS

ATLANTA 21-41042
Proposal Number or District Office Number

ITEM NO. C Date 4-6-64

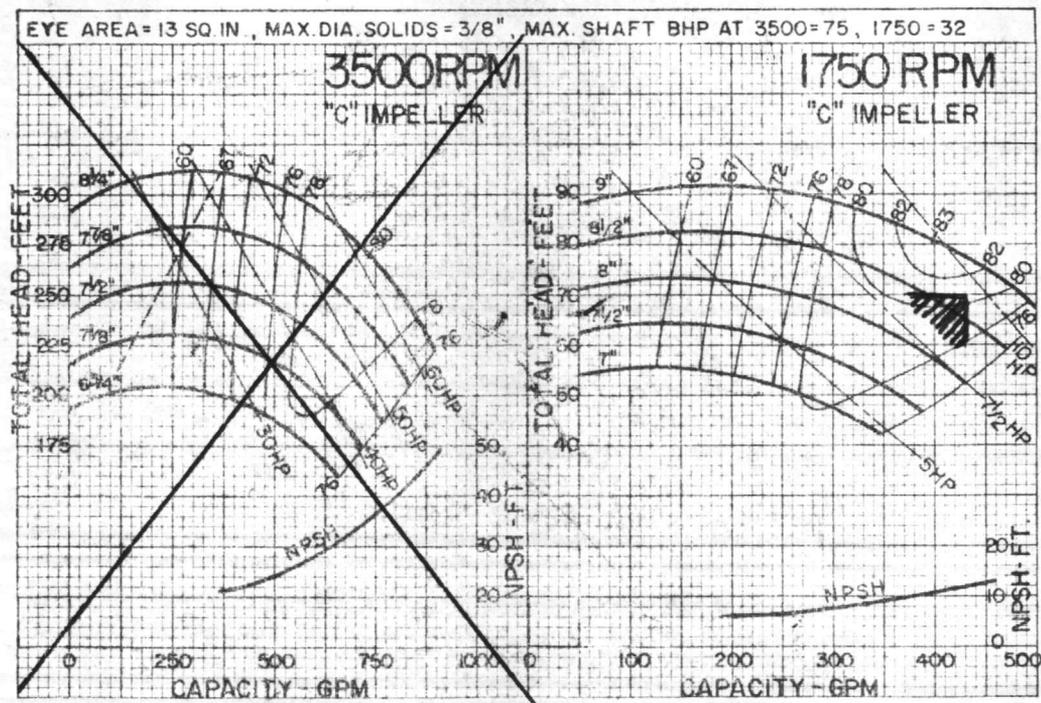
BAHNN CONSTRUCTION CO. 15-12
Customer Name and Reference

Y-273704
SERVICE FILTERED WATER PUMPS #102
DATE-
BY- G. COPPOLA
ITEM OFFICE



Minimum recommended flow - sustained operation to the left of the slanted broken line could possibly result in shaft breakage due to fatigue.

This pump is guaranteed for one set of design conditions. Other points shown on this curve are approximate and not guaranteed. The design capacity and head are based on shop tests when handling clear, cold water.



3 LR-9 "C"

4-7228

Minimum recommended flow - sustained operation to the left of the slanted broken line could possibly result in shaft breakage due to fatigue.

Order Forms from Stationery & Printing Section, Harrison. Use Form No. D0662-5

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

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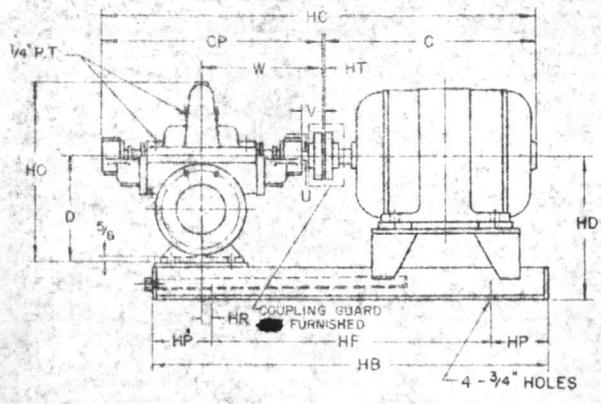
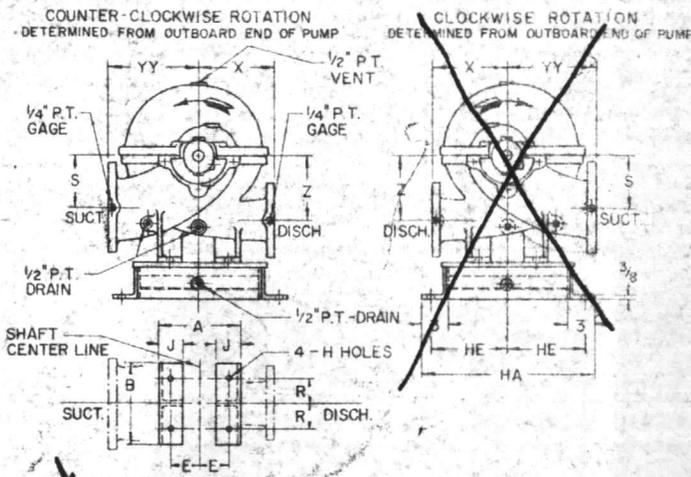
Date 5/12/64

W. C. G. CHURCH
RADM CEC, USN
DIRLANTDOCKS

W.C.G.



LR VOLUTE PUMPS DOUBLE SUCTION FILTERED WATER PUMPS #1 + #2



ALL DIMENSIONS ARE IN INCHES

FRAME SIZE	3LR-9		3LR-12		4LR-10		4LR-12		4LR-14		5LR-10		5LR-13		5LR-15		6LR-10		6LR-13		6LR-16		
	LINE	HD	LINE	HD	LINE	HD	LINE	HD	LINE	HD	LINE	HD	LINE	HD	LINE	HD	LINE	HD	LINE	HD	LINE	HD	
182/184																							
213																							
215					6	16																	
256 U																							
286 U																							
324 U																							
324 S																							
326 U																							
326 S																							
364 U																							
364 US																							
365 U																							
365 US																							
404 U																							
404 US	2																						
405 U	2	15 1/4																					
405 US	2																						
444 U	2																						
444 US	2	16 1/4			2	16 1/4																	20
445 U																							
445 US																							
504																							
504 S																							
504 U																							
505																							
505 S																							
8144																							
505 US																							
5006 S																							5

LINE	WEIGHT #	HA	HB	HE	HF	HP	DWG NO.
0	190	24	54 1/2	11	40 1/2	7	W-63497
2	185	24	54 1/2	11	40 1/2	7	W-63494
3	231 1/2	24	54 1/2	11	40 1/2	7	W-63492
4	244 1/2	24	64 1/4	11	50 1/4	7	W-63482
5	181	24	64 1/4	11	50 1/4	7	W-63479

LINE	WEIGHT #	HA	HB	HE	HF	HP	DWG NO.
6	195	24	41 3/4	11	27 3/4	7	W-65532
7	204	24	41 3/4	11	27 3/4	7	Y-65766

PUMP	125# STD. FLG. SUCTION	125# STD. FLG. DISCHARGE	A	B	D	E	J	HR	R	S	U .0000	KEYWAY	V	W	X	Z	CP	H	HO	YY	APPR. WT. OF PUMP
3LR-9	4	3	10	10	10 1/2	3 1/2	3	1 1/2	3 3/8	5 1/4	.9830	1/4 x 1/8	2 1/2	14 3/8	7 1/2	5 3/4	26 3/4	5 3/8	17 1/4	9	220 *
3LR-12	5	3	10	10	11 1/2	3 1/2	3	1 1/4	3 3/8	5 3/4	.9830	1/4 x 1/8	2 1/2	14 3/8	8 3/8	7 1/4	26 3/4	5 3/8	19 3/4	10 1/2	380 *
4LR-10	5	4	10	10	11 1/2	3 1/2	3	1 1/4	3 3/8	5 3/4	.9830	1/4 x 1/8	2 1/2	14 3/8	9	6 1/4	26 3/4	5 3/8	19 3/4	11	280 *
4LR-12	6	4	10	10	13	3 1/2	3	1 1/4	3 3/8	6 3/8	.9830	1/4 x 1/8	2 1/2	14 3/8	9	7 3/4	27	5 3/8	21 3/4	11	320 *
4LR-14	6	4	14	13	13	5 1/4	3 1/4	-	5 3/16	6 3/8	1.1250	1/4 x 1/8	4	17	12	7 3/8	30	3/4	22 3/4	12 1/2	400 *
5LR-10	6	5	14	13	13	5 1/4	3 1/4	-	5 3/16	6 3/8	.9830	1/4 x 1/8	2 1/2	14 3/8	9 1/2	7	27	3/4	22 1/8	13	320 *
5LR-13	6	5	14	13	13	5 1/4	3 1/4	-	5 3/16	6 1/2	1.1250	1/4 x 1/8	4	17	10 1/2	7 1/4	30	3/4	22 3/8	13	425 *
5LR-15	6	5	14	13	13	5 1/4	3 1/4	-	5 3/16	6 1/2	1.5000	3/8 x 3/16	4 1/2	19 1/4	13	7 1/4	34	3/4	23 1/2	13 1/2	540 *
6LR-10	8	6	14	13	15 1/2	5 1/4	3 1/4	-	5 3/16	7 3/4	.9830	1/4 x 1/8	2 3/8	15 1/4	10	7 1/2	28 1/8	3/4	25 1/4	14	425 *
6LR-13	8	6	14	13	15 1/2	5 1/4	3 1/4	-	5 3/16	7 1/2	1.5000	3/8 x 3/16	4 1/2	19 1/4	11	9	34	3/4	25 3/4	14	580 *
6LR-16	8	6	14	13	15 1/2	5 1/4	3 1/4	-	5 3/16	7 3/8	1.5000	3/8 x 3/16	4 1/2	19 1/4	14	8 1/2	34	3/4	27	15	650 *

C **22** HD **15** HT **1/8** HC **48 7/8** COUPLING **FALK**
 MOTOR MOTOR **V S** FRAME **256-U** H.P. **10** R.P.M. **1800** WT.
 DATA TYPE **ODP** PH. **3** CY. **60** VOLTS **208**

CUSTOMER **BROWN CONSTRUCTION CO.** CUSTOMERS ORDER **15-12** ITEM **C**
 DISTRICT OFFICE **ATLANTA 21-41042** OUR SHOP ORDER **Y-273704** CERTIFIED BY **G. COPPOLA** DATE **4.6.64**

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ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED:

SUBJECT TO THE REQUIREMENTS OF
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Date 5/12/64

W. C. G. CHURCH
RADM CEC, USN
DIRLANTDOCKS

W.C.G.

#1 Filter Pump

RR85

7-3368
Water

Pump 3LR-9
FALK SHAFT COUPLING # 30T10 \$65.00 @

Serial # A97825

Impeller 8 $\frac{13}{16}$ C

#2 Filter Pump

A97826

#1 + 2 High Left Pump

3LR-12

Serial # A97823

FALK SHAFT COUPLING

50T10 #2

11 $\frac{1}{8}$ K

A97822

Letter at RR

Dear

Back pressure
value RR.

957500

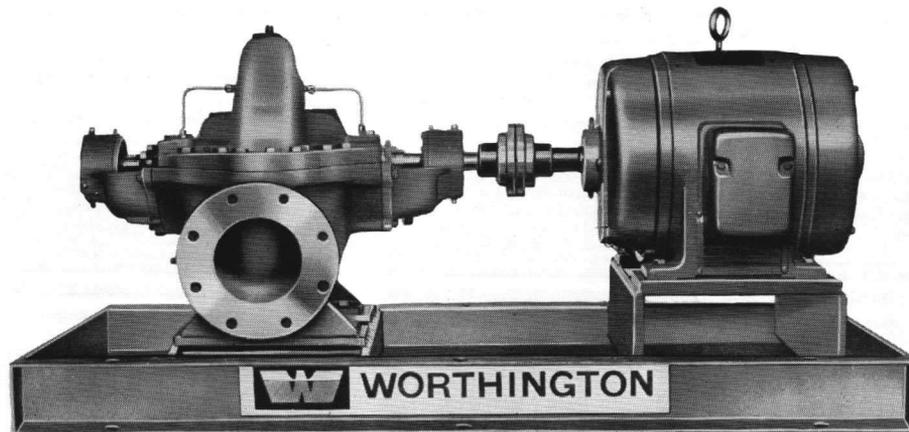


CENTRIFUGAL PUMPS

HORIZONTALLY SPLIT • SINGLE STAGE

TYPE LR • SIZES 3" to 6"

PR 85



20F-16622

FEATURES . . .

- 1 Initial investment and maintenance costs are reduced by eliminating all unnecessary parts and concentration on sound hydraulic and mechanical design.
- 2 Modern, precise machining techniques and quality control insure that perfect internal alignment is maintained—and that all parts fit perfectly.
- 3 Maintenance costs are reduced by utilizing standard parts—available at competitive prices. This pump line features a high degree of interchangeability. Parts are readily available from stock as well as through Worthington's vast distributor organization.
- 4 Removable bearing brackets allow simplified bearing inspection and insure accurate rotor alignment. They are precisely machined and dowelled to the casing by the use of straight dowel pins.
- 5 This double suction enclosed impeller is hydraulically balanced by its inherent design. It has "built-in" maximum efficiency, and it requires minimum horsepower.
- 6 Case wearing rings are positively secured, to insure lowest maintenance costs. Double-ring construction is available for specific applications.
- 7 Grease or oil lubricated ball bearings are available. This allows you to choose the best type of lubrication for your specific application.
- 8 This pump is available with either packed stuffing box or mechanical seal. Obsolescence is eliminated: you may easily and inexpensively convert packing to mechanical seal—or vice versa. Stock parts are readily available (machining is not required). Field conversion can be fast and simple.
- 9 Backed by Worthington's world-wide engineering and service organization.

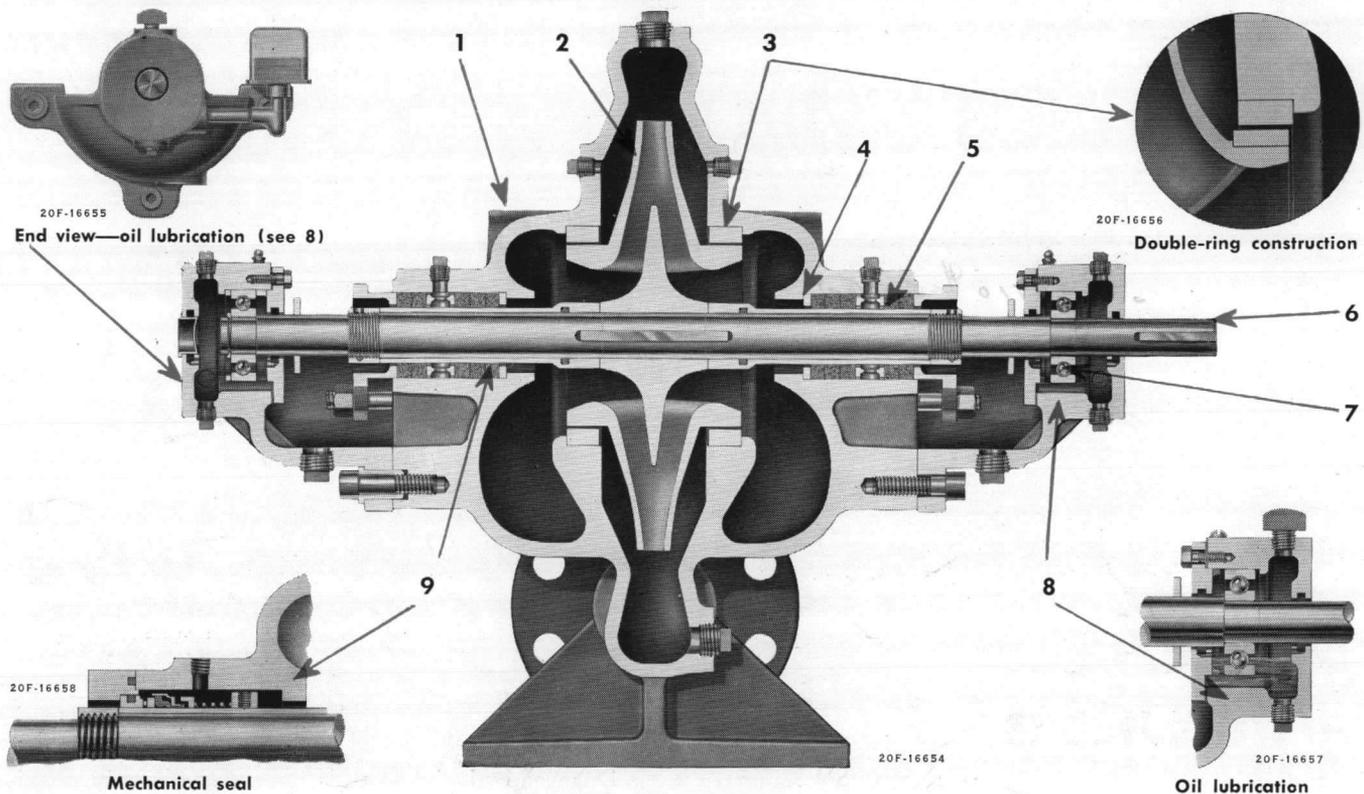
NOTE: Vertical mounting is available with standard pump and vertical baseplate.

MATERIALS OF CONSTRUCTION

PART	STANDARD FITTED PUMP		ALL IRON PUMP		ALL BRONZE PUMPS	
	MATERIALS	ASTM NO.	MATERIALS	ASTM NO.	MATERIALS	ASTM NO.
Casing	Cast Iron	A48-56	Cast Iron	A48-56	Bronze	SAE-65
Bearing Bracket	Cast Iron	A48-56	Cast Iron	A48-56	Cast Iron	A48-56
Bearing Cover	Cast Iron	A48-56	Cast Iron	A48-56	Cast Iron	A48-56
Impeller	Bronze	B62-52	Cast Iron	A48-56	Bronze	SAE-65
Casing Ring	Bronze	B144-52,3D	Cast Iron	A48-56	Bronze	B144-52,3D
Shaft Sleeves	Bronze	B144-52,3B	Steel	A107-59T	Bronze	B-139
Shaft	Steel	A-107-59T SAE C-1035	Steel	A107-59T SAE C-1035	Steel	A107-59T SAE C-1035
Shaft Nut	Bronze	B144-52,3B	Steel	A-107-59T	Bronze	B-139
Stuffing Box Bushing	Bronze	B144-52,3D	Steel	A-107-59T	Bronze	B144-52,3D
Gland	Cast Iron	A48-56	Cast Iron	A48-56	Bronze	SAE-65
Seal Cage	Lead & Antimony	B23-49,7	Lead & Antimony	B23-49,7	Lead & Antimony	B23-49,7



TYPICAL SECTION OF TYPE LR DOUBLE-SUCTION SINGLE-STAGE CENTRIFUGAL PUMP, SIZES 3" TO 6"



SPECIFICATIONS

1-Casing—The casing is of the volute type and is designed to produce a smooth flow with gradual changes in velocity. It is split on the horizontal center line with the suction and discharge nozzles cast integral with the lower half. The interior of the pump may be easily inspected by removing the upper half of the casing. This may be done without disturbing the pipe connections or pump alignment. The flanges between the halves are sealed by a pre-cut gasket. The upper and lower halves of the casing are accurately located by the use of straight dowel pins. This eliminates the possibility of mismatch between the upper and lower halves which would impair both hydraulic and mechanical performance. The suction and discharge flanges are tested at the specified hydrostatic test pressure in all cases, and in addition contain drilled and tapped gage connections.

2-Impeller—The impeller is a double-suction enclosed type. It is hydraulically balanced by its inherent design. The impeller is firmly secured to the shaft by a key and by external shaft nuts.

3-Renewable Case Rings—Renewable case rings are locked in place and protected against rotation by 2 Monel pins. **Impeller Rings**—Securely held impeller rings can be supplied as an option.

4-Stuffing Box Bushing—A renewable stuffing box bushing is provided which insures freedom from packing trouble.

5-Shaft Sleeve—Renewable shaft sleeves are provided which extend through the stuffing box. They are securely keyed and held in place with shaft nuts incorporating Nylon inserts for locking purposes.

6-Shaft—The shaft is of heat-treated steel, ground to accurate

dimensions and polished to a smooth surface. The shaft sleeves protect the shaft at the stuffing boxes. The sleeves are secured in lateral position by external shaft nuts. The impeller keys are extended into the hub of the shaft sleeve to prevent slippage between the shaft and the sleeves. Sealing to protect against leakage under the shaft sleeve is accomplished by the use of "O" ring type seals, located between the sleeve and the shaft. It is adequately sized and designed to minimize deflection. The maximum run-out of the shaft, at the stuffing box face, will not exceed .002".

7-Bearings—The bearings are single row, deep-groove type ball bearings. They are designed and sized for at least 80,000 hours average bearing life. Each bearing is capable of carrying both line and thrust type loads. They are securely held to the shaft by an easily installed snap ring.

8-Bearing Brackets—The bearing brackets are separate from the pump casing and are accurately machined, and doweled to the casing. Perfect alignment between housing and casing results in accurate alignment between rotor and casing. Either oil or grease lubrication is available to best suit the application. Grease gun fittings are standard on grease-lubricated pumps and a constant-level oiler is standard on oil-lubricated pumps. Conversion from grease to oil is easily accomplished by simply removing the grease fitting and installing a constant-level oiler and vent.

9-Packing—Mechanical Seals—As a standard, stuffing boxes will be packed with the best quality graphited asbestos packing. Die-moulded packing is supplied, as a standard, insuring both a perfect seal and an easy installation. Mechanical seals are available, if desired, and are easily interchangeable with packing.

WORTHINGTON CORPORATION STANDARD PUMP DIVISION, EAST ORANGE, NEW JERSEY

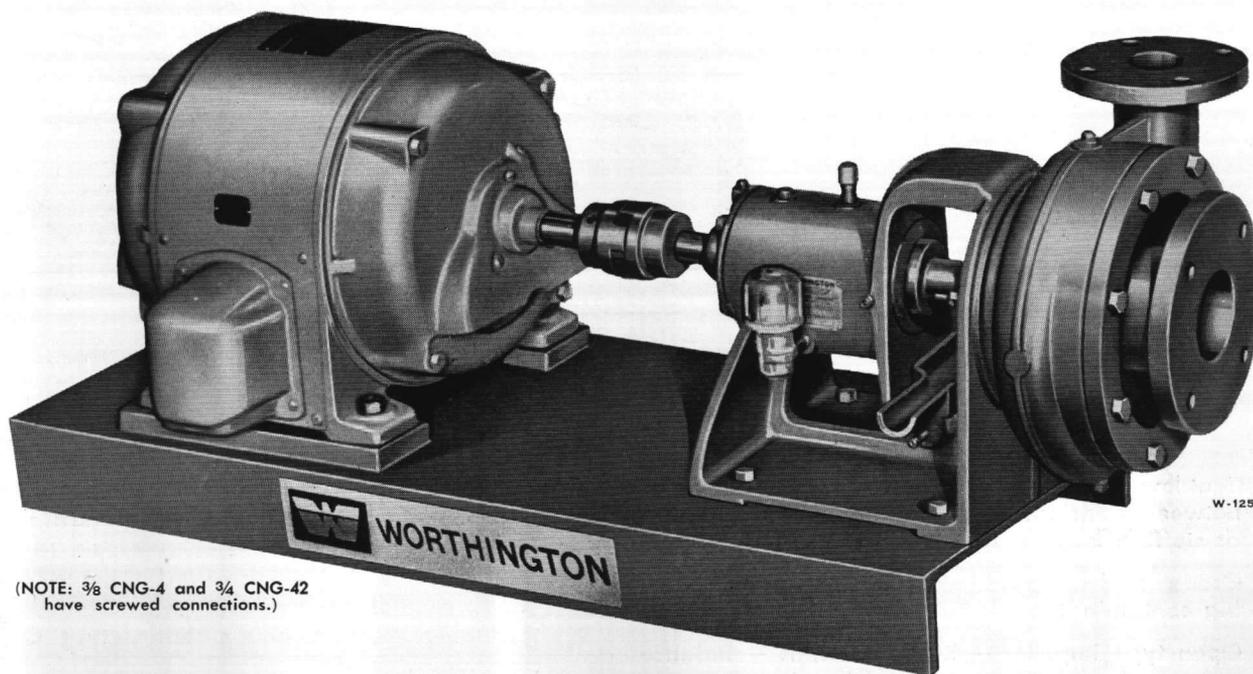
General Offices: HARRISON, NEW JERSEY

District and Branch Offices: AMARILLO ATLANTA BALTIMORE BATON ROUGE BEAUMONT, TEX. BIRMINGHAM BOSTON BUFFALO CHARLESTON, W. VA. CHARLOTTE CHICAGO CINCINNATI CLEVELAND CORPUS CHRISTI DALLAS DENVER DETROIT EL PASO FORT WORTH HOUSTON INDIANAPOLIS JACKSON, MISS. KANSAS CITY KNOXVILLE LAKE CHARLES, LA. LOS ANGELES MIDLAND, TEX. MILWAUKEE MINNEAPOLIS MOBILE MONROE, LA. NEW ORLEANS NEW YORK NEWARK (Located at Harrison, N. J.) OMAHA PHILADELPHIA (Located at Bala-Cynwyd, Pa.) PITTSBURGH PORTLAND, ORE. ROCHESTER ST. LOUIS SALT LAKE CITY SAN ANTONIO SAN DIEGO SAN FRANCISCO SEATTLE SHREVEPORT SPRINGFIELD, MASS. SYRACUSE TULSA WASHINGTON, D. C. WILMINGTON, DEL.



CENTRIFUGAL PUMPS

TYPE CNG • END SUCTION



(NOTE: $\frac{3}{8}$ CNG-4 and $\frac{3}{4}$ CNG-42 have screwed connections.)

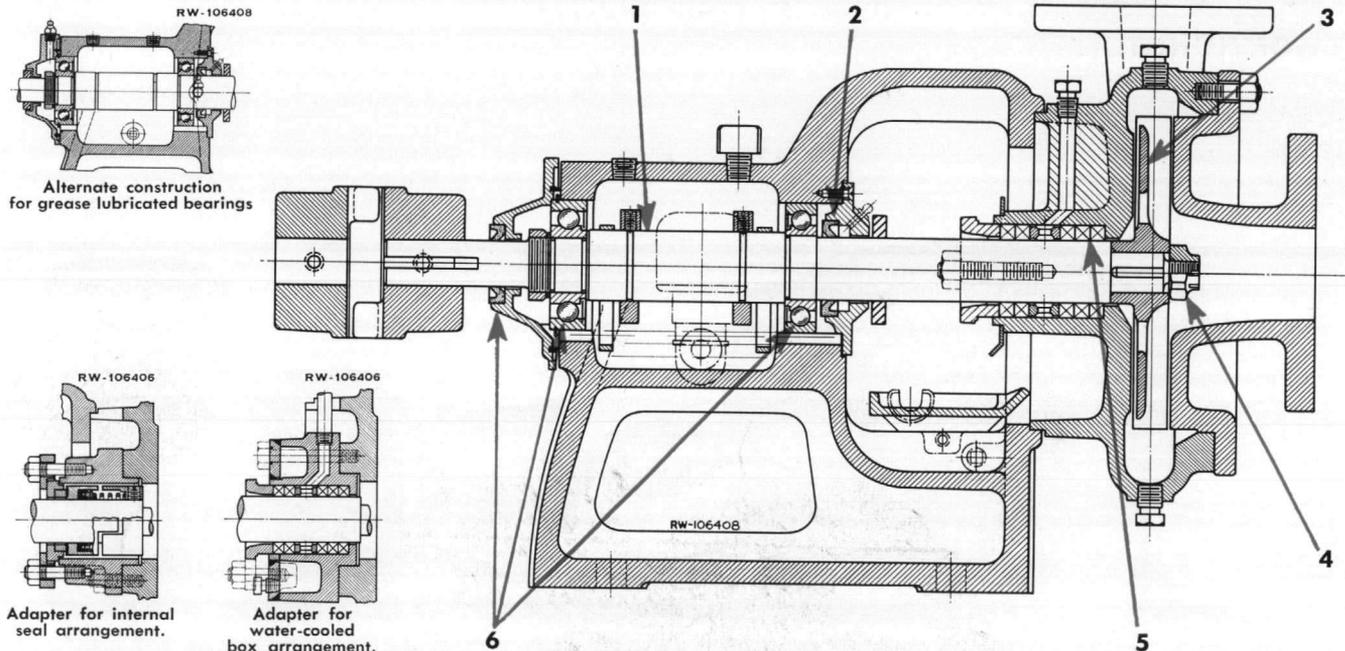
FEATURES . . .

- 1 Reduced initial investment by selecting the right unit from a large standardized line. Hydraulically and mechanically superior; specially designed for chemical service.
- 2 With the use of Worthite*, this pump can handle almost any commercial chemical. Because of standardization, this alloy costs only pennies more per pound than less highly alloyed, less corrosion resistant materials.
- 3 A semi-open impeller assures long operating life even when used with abrasive or corrosive liquids. This eliminates the need for wearing rings and close running clearances.
- 4 Shaft sealing problems are minimized by maintaining lowest pressure on stuffing box and by the use of an extra stiff shaft to resist bending.
- 5 Maintenance costs are reduced by utilizing standardized parts which are available at competitive prices from stocking points throughout the country as well as through a vast distributor organization.
- 6 The liquid end is mounted on wide based, heavy sectioned, box type bearing frame which gives rigid support. This helps to resist misalignment or damage due to inadvertently applied pipe strains.
- 7 Repairs are easy with straightforward design which is easily understood, and doesn't require special tools.
- 8 Pump failures are reduced by sizing bearings for at least 80,000 hours average life. Most Worthington pumps exceed this many times over. Shaft deflection is limited by incorporating an extra heavy cantilever shaft.
- 9 Maintenance costs are minimized by the use of ball bearings lubricated with oil supplied by constant level oiler. No periodic greasing required, just refill oil reservoir when necessary.
- 10 Requires least driver power and eliminates mismatch of pump to system by having a pump size available to best fit each operating condition.
- 11 A perfect fit of all repair parts and accurate alignment between related parts is assured through modern machining techniques and quality control.
- 12 Obsolescence is eliminated by allowing easy conversion between packing and mechanical seal.
- 13 Backed by Worthington's world wide application, engineering and service organization.

*Worthite is a highly alloyed austenitic stainless steel containing 20% chromium, 24% nickel, 3% molybdenum and 0.07% carbon max.



TYPICAL SECTION OF TYPE CNG CENTRIFUGAL PUMP, SIZES 3/8 TO 6"



- 1 Cantilever type Worthite shaft — Largest diameter between bearings results in minimum deflection at stuffing box
- 2 Grease seal gives added protection against bearing contamination
- 3 Open type impeller — Keyed to shaft — Balance ports and back vanes maintain suction pressure on the stuffing box
- 4 Castellated Worthite impeller nut with Worthite pin assures positive locking of impeller to shaft

- 5 Packed box with Teflon seal cage arranged for independent sealing liquid — No shaft sleeve to give leakage, expansion or corrosion troubles — Stuffing box easily converted to most commercially available chemical-type mechanical seals, including Worthington's standard type EA or EB mechanical seals
- 6 Oil lubricated ball bearings with constant level oiler — Positive circulation at all times — Housing closures keep oil in, foreign material out

MATERIALS OF CONSTRUCTION

PART	MATERIAL	PART	MATERIAL
Casing	Worthite	Impeller Nut	Worthite
Suction Head	Worthite	Impeller Nut Pin	Worthite
Shaft	Worthite	Slinger	Neoprene
Impeller	Worthite	Tap Bolts, Studs and Nuts	Worthite
Gland	Worthite	Casing Gasket	Durabla
Packing	Blue African Ash.	Bearings	Ball
Seal Cage	Teflon	Bearing Frame	Cast Iron

MOTORS AND STARTERS

Worthington will furnish any type of suitable motor or starter selected. The motor will be mounted on the base and connected with the pump.

If the purchaser elects to furnish the motor, it should be shipped to Worthington Corporation, East Orange,

N. J. It should be marked with factory order number for quick identification.

Baseplates cannot be drilled at the factory when motors are mounted in the field.

WORTHINGTON CORPORATION

PUMP AND HEAT TRANSFER DIVISION
STANDARD PUMP SALES DEPARTMENT, EAST ORANGE, NEW JERSEY

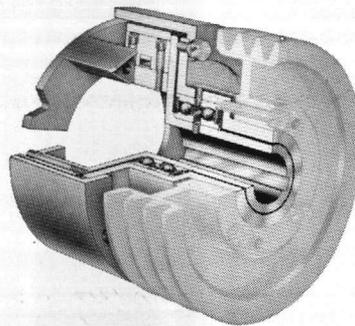
General Offices: HARRISON, NEW JERSEY

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2026-PS-3 638° RP

Supersedes W-350-S4

Printed in U.S.A.



AUTOMATIC CENTRIFUGAL CLUTCHES...

**Solve
starting problems
and protect
against overloads**

This clutch applies high-inertia loads to a motor gradually. Use standard torque motors and in many cases, across-the-line starting. Each clutch transmits a definite load at a given speed. Overload causes the clutch to slip automatically, protecting driver. Unique construction is ideally suited for over-running on dual or standby applications. Exclusive features include replaceable lining to reduce maintenance costs; QD hubs for quick, positive installation; V notches for lining inspection; and removable working mechanism for repair without disturbing drive alignment. Two types available: clutch sheaves for belt drives (illustrated) and clutch couplings for direct drives. Sizes 1 to 200 hp in stock; to 3,000 hp available. See your Worthington distributor or write us today for free Clutch Bulletin.

WORTHINGTON CORPORATION
M.P.T. Sales Dept., Oil City, Pa.



AD No. 79-48—This advertisement appears in the April, June, and October, 1962, issues of Industrial Equipment News.

Prepared by Needham, Louis and Brorby, Inc., N. Y.

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED:

SUBJECT TO THE REQUIREMENTS OF _____

CONTRACT NBv 54077 SPEC 54077/63
APPROVAL OF MATERIALS AND/OR EQUIPMENT
INDICATES COMPLIANCE WITH SPECIFICATION
REQUIREMENTS ONLY — THE CONTRACTOR
SHALL BE RESPONSIBLE FOR PROVIDING
PROPER PHYSICAL DIMENSIONS & WEIGHTS,
COORDINATION OF TRADES, ETC., AS REQUIRED.

Date 5/13/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS



CHECKED BOX APPLIES	<input checked="" type="checkbox"/> ORDER FOR SUPPLIES OR SERVICES	<input type="checkbox"/> REQUEST FOR QUOTATIONS NO. RETURN COPY(IES) OF THIS QUOTE BY <i>(THIS IS NOT AN ORDER. See DD Form 1155r)</i>	PAGE 1 OF 2																												
1. CONTRACT/PURCH ORDER NO. M67001-68-M-1869	2. DELIVERY ORDER NO.	3. DATE OF ORDER 21 NOV.67	4. REQUISITION/PURCH REQUEST NO. SEE SCHEDULE																												
6. ISSUED BY: Purchasing & Contracting Branch BMB, Bldg 1211, P.O. Box 15, MCB., Camp Lejeune, N. Carolina 28542		7. ADMINISTERED BY: (If other than 6)	8. DELIVERY FOB <input type="checkbox"/> DESTINATION PRIORITY:19 <input checked="" type="checkbox"/> OTHER <i>(See Schedule if other)</i>																												
9. CONTRACTOR/QUOTER NAME AND ADDRESS L WORTHINGTON CORPORATION 1409 EAST BOULEVARD CHARLOTTE, N.C. 28203		FACILITY CODE HS/tmh	10. DELIVER TO FOB POINT BY: 7 DECEMBER 67																												
14. SHIP TO: Freight Traffic Branch Bldg 1011, Camp Lejeune, N.Carolina M67001-68-M-1869		15. PAYMENT WILL BE MADE BY: Base Disbursing Officer MCB, Camp Lejeune, North Carolina 28542	11. CHECK IF SMALL BUSINESS <input type="checkbox"/>																												
12. DISCOUNT TERMS NET, 30 days																															
13. MAIL INVOICES TO: <i>(In sextuplicate)</i> SAME AS BLOCK 14																															
16. TYPE OF ORDER DELIVERY <input type="checkbox"/> This delivery order is subject to instructions contained on this side of form only and is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract. PURCHASE <input checked="" type="checkbox"/> Reference your telequote 15 NOV.67 , furnish the following on terms specified herein, including; for U. S. purchases, General Provisions of Purchase Order on DD Form 1155r (Except CLAUSE NO. 13 APPLIES ONLY IF THIS BOX <input type="checkbox"/> IS CHECKED, and NO. 15 IF THIS BOX <input type="checkbox"/> IS CHECKED); special provisions 10 USC 2304(a)(3) or as specified in the schedule if within the U. S., its possessions or Puerto Rico; if otherwise, under 2304(a)(6). <input type="checkbox"/> If checked, Additional General Provisions apply; Supplier shall sign "Acceptance" on DD Form 1155r and return copies.																															
ACCOUNTING AND APPROPRIATION DATA - ACCOUNTING CLASSIFICATION (REV. 7-65)																															
ITEM NO.	APPROPRIATION SYMBOL AND SUBHEAD	OBJECT CLASS	BUREAU CONT. NO.	SUB-ALLOT.	AUTH'N ACCT'G ACTY	TRANS. TYPE	PROPERTY ACCT'G ACTY	COUN-TRY	COST CODE	AMOUNT																					
all	1781106.2710		13002-		67001	2D			8C1500P01500	PLUS TRANS \$346.00																					
18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICES					20. QUANTITY ORDERED/ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT																						
<p>FAILURE TO COMPLY WITH SHIPPING INSTRUCTIONS MAY RESULT IN REJECTION OF MATERIAL. NO PARTIAL SHIPMENTS WILL BE ACCEPTED UNLESS SPECIFICALLY AUTHORIZED HEREIN.</p> <p>M93058-7304-6510 PARTS F/CENTRIFUGAL PUMP, SIZE 3LR-9, SER.#A97825, IMPELLER 8 13/16C:</p> <table style="width:100%; border-collapse: collapse;"> <tr> <td style="width:5%;">1.</td> <td style="width:15%;">P/N 455B</td> <td style="width:45%;">Shaft rotating assy., complete.</td> <td style="width:10%; text-align:center;">①</td> <td style="width:10%;">ea</td> <td style="width:15%;">298.00</td> <td style="width:10%;">\$298.00</td> </tr> <tr> <td>2.</td> <td>P/N</td> <td>Ball thrust bearing x 6305-2</td> <td style="text-align:center;">②</td> <td>ea</td> <td>Incl.in</td> <td>Item#1</td> </tr> <tr> <td>3.</td> <td>P/N</td> <td>Line Ball Bearing <i>short 2 bearing</i></td> <td style="text-align:center;">②</td> <td>ea</td> <td>Incl.in</td> <td>Item#1</td> </tr> </table>											1.	P/N 455B	Shaft rotating assy., complete.	①	ea	298.00	\$298.00	2.	P/N	Ball thrust bearing x 6305-2	②	ea	Incl.in	Item#1	3.	P/N	Line Ball Bearing <i>short 2 bearing</i>	②	ea	Incl.in	Item#1
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* If quantity accepted by the Government is same as quantity ordered, indicate by ✓ mark. If different, enter actual quantity accepted below quantity ordered and encircle.									25. TOTAL	\$346.00																					
26. QUANTITY IN COLUMN 20 HAS BEEN: <input type="checkbox"/> RECEIVED <input type="checkbox"/> INSPECTED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED									29. DIFFERENCES																						
27. SHIP NO. 10									30. INITIALS																						
28. D.O. VOUCHER NO.									33. AMOUNT VERIFIED CORRECT FOR																						
29. PAID BY 67001-SYM #5190 MCB CLNC									34. CHECK NUMBER																						
31. PAYMENT <input type="checkbox"/> FINAL <input type="checkbox"/> PARTIAL									35. BILL OF LADING NO.																						
32. I CERTIFY that this account is correct and proper for payment <i>(Signature and title of Certifying Officer)</i>									42. S/R VOUCHER NO.																						
37. RECEIVED AT	38. RECEIVED BY <i>Hennis</i>	39. DATE RECEIVED <i>1/28/68</i>	40. TOTAL CONTAINERS <i>10</i>	41. S/R ACCOUNT NUMBER <i>27-35592</i>																											

THIS PARAGRAPH APPLIES ONLY TO QUOTATIONS OBTAINED: Supplies are of domestic origin unless otherwise indicated by quotation. The Government reserves the right to consider quotations or modifications thereof received after the date indicated should such action be in the interest of the Government. This is a request for information and quotations furnished are not offers. When quoting, complete blocks 11, 12, 22, 23, 25. If you are unable to quote, please advise. This request does not commit the Government to pay any cost incurred in preparation or the submission of this quotation or to procure or contract for supplies or services.

GENERAL PROVISIONS

1. **INSPECTION AND ACCEPTANCE** - Inspection and acceptance will be at destination, unless otherwise provided. Until delivery and acceptance, and after any rejections, risk of loss will be on the contractor unless loss results from negligence of the Government.
2. **VARIATION IN QUANTITY** - No variation in the quantity of any item called for by this contract will be accepted unless such variation has been caused by conditions of loading, shipping, or packing, or allowances in manufacturing processes, and then only to the extent, if any, specified elsewhere in this contract.
3. **PAYMENTS** - Invoices shall be submitted in quadruplicate (*one copy shall be marked "Original"*) unless otherwise specified, and shall contain the following information: Contract or Order number, Item number, contract description of supplies or services, sizes, quantities, unit prices and extended totals. Bill of lading number and weight of shipment will be shown for shipments on Government Bills of Lading. Unless otherwise specified, payment will be made on partial deliveries accepted by the Government when the amount due on such deliveries so warrants.
4. **DISCOUNTS** - Discount time will be computed from date of delivery at place of acceptance or from receipt of correct invoice at the office specified by the Government, whichever is later. Payment is made, for discount purposes, when check is mailed.
5. **DISPUTES** - (a) Except as otherwise provided in this contract, any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Contracting Officer, who shall mail or otherwise furnish a copy thereof to the Contractor. This decision shall be final and conclusive unless, within 30 days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to the Contracting Officer a written appeal addressed to the Secretary. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. The Contractor shall be afforded an opportunity to be heard and to offer evidence in support of his appeal. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the contract and in accordance with the Contracting Officer's decision. (b) This "Disputes" clause does not preclude consideration of law questions in connection with decisions provided for in (a) above, provided that nothing in this contract shall be construed as making final the decision of any administrative official, representative, or board on a question of law.
6. **FOREIGN SUPPLIES** - This contract is subject to the Buy American Act (41 U.S.C. 101-104) as implemented by Executive Order 10582 of December 17, 1954, and any restrictions in appropriation acts on the procurement of foreign supplies.
7. **CONVICT LABOR** - The Contractor agrees not to employ for work under this contract any person undergoing sentence of imprisonment at hard labor.
8. **OFFICIALS NOT TO BENEFIT** - No member of or Delegate to Congress or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.
9. **COVENANT AGAINST CONTINGENT FEES** - The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty the Government shall have the right to annul this contract without liability or in its discretion to deduct from the contract price or consideration or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.
10. **GRATUITIES** - (a) The Government may, by written notice to the Contractor, terminate the right of the Contractor to proceed under this contract if it is found after notice and hearing, by the Secretary or his duly authorized representative, that gratuities (*in the form of entertainment, gifts or otherwise*) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the Government with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such contract, provided that the existence of the facts upon which the Secretary or his duly authorized representative makes such findings shall be in issue and may be reviewed in any competent court. (b) In the event this contract is terminated as provided in paragraph (a) hereof the Government shall be entitled (i) to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the contract by the Contractor and (ii) as a penalty in addition to any other damages to which it may be entitled by law to exemplary damages in an amount (*as determined by the Secretary or his duly authorized representative*) which shall be not less than three nor more than ten times the costs incurred by the Contractor in providing any such gratuities to any such officer or employee. (c) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.
11. **RENEGOTIATION** - This contract, and any subcontract hereunder, is subject to the Renegotiation Act of 1951, as amended (50 U.S.C. App. 1211 et seq.) and shall be deemed to contain all the provisions required by Section 104 thereof, and is subject to any subsequent act of Congress providing for the renegotiation of contracts.
12. **CONDITION FOR ASSIGNMENT** - This Purchase Order may not be assigned pursuant to the Assignment of Claims Act of 1940, as amended (31 U.S.C. 203, 41 U.S.C. 15), unless or until the supplier has been requested and has accepted this order by executing the Acceptance hereon.
13. **COMMERCIAL WARRANTY** - The Contractor agrees that the supplies or services furnished under this contract shall be covered by the most favorable commercial warranties the contractor gives to any customer for such supplies or services and that the rights and remedies provided herein are in addition to and do not limit any rights afforded to the Government by any other cause of this contract.
14. **PRIORITIES, ALLOCATIONS AND ALLOTMENTS DEFENSE MATERIALS SYSTEM** - When the amount of the order is \$500 or more the Contractor shall follow the provisions of DMS Reg. 1 and all other applicable regulations and orders of the Business and Defense Services Administration in obtaining controlled materials and other products and materials needed to fill this order.

15. FAST PAYMENT PROCEDURE -

- a. **GENERAL** - This is a fast payment order. Invoices will be paid on the basis of the Contractor's certification thereon that articles listed on the order were delivered on a specified date to a post office, common carrier, or, in shipment by other means, to the point of first receipt by the Government.
- b. **RESPONSIBILITY FOR SUPPLIES** - Title to the supplies shall vest in the Government upon delivery to a post office or common carrier for shipment to the specified destination. If shipment is by means other than post office or common carrier, title to the supplies shall vest in the Government upon delivery to the point of first receipt by the Government. Notwithstanding any other provision of the purchase order, the Contractor shall assume all responsibility and risk of loss for supplies (i) not received at destination, (ii) damaged in transit, or (iii) not conforming to purchase requirements. The Contractor shall either replace, repair, or correct such supplies promptly at his expense, provided instructions to do so are furnished by the Contracting Officer within ninety (90) days from the date these supplies were delivered by the Contractor to a post office or common carrier. For supplies delivered by means other than post office or common carrier, such ninety (90) day period shall commence from the date these supplies were delivered to the point of first receipt by the Government.
- c. **PREPARATION OF INVOICE** -

(1) Upon delivery of supplies to a post office, common carrier, or in shipments by other means, the point of first receipt by the Government, the Contractor shall prepare an invoice in accordance with Clause 3 of the General Provisions of Purchase Order, except that invoices under a blanket purchase agreement shall be prepared in accordance with the provisions of the agreement. In shipments by either post office or common carrier, the Contractor shall either (A) cite on his invoice the date of shipment, name and address of post office or carrier, bill of lading number or other shipment document number, or (B) attach copies of such documents to his invoices as evidence of shipment. In the case of delivery by other than post office or common carrier, a receipted copy of the Contractor's delivery document shall be attached to the invoice as evidence of delivery. Regardless of delivery method the invoice shall include the following signed certification.

"I hereby certify that I did ship on (date) via (the method of shipment) or deliver on (date) in accordance with shipping instructions issued by the ordering officer, supplies in the quantities shown hereon and that such supplies are in the quantity and of the quality designated by the cited purchase order. This statement is furnished to support payment of invoice."

(2) If the purchase price excludes the cost of transportation, the Contractor shall enter the prepaid shipping cost on the invoice as a separate item. The cost of parcel post insurance will not be paid by the Government.

OUTER SHIPPING CONTAINERS SHALL BE MARKED "FAST PAY"

16. (*This clause applies if this contract is for services and is not exempted by applicable regulations of the Department of Labor*) **SERVICE CONTRACT ACT OF 1965** - The Contractor and any subcontract hereunder shall pay all of their employees engaged in performing work on the contract not less than the minimum wage specified under Section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended (*\$1.25 per hour as of January 20, 1966*) and are subject to the regulations of the Secretary of Labor thereunder (29 C.F.R. Part 4).

ADDITIONAL GENERAL PROVISIONS

17. **CHANGES** - The Contracting Officer may at any time, by a written order, and without notice to the sureties, make changes, within the general scope of this contract, in (i) drawings, designs, or specifications, where the supplies to be furnished are to be specially manufactured for the Government in accordance therewith; (ii) method of shipment or packing; and (iii) place of delivery. If any such change causes an increase or decrease in the cost of, or the time required for performance of this contract, whether changed or not changed by any such order, an equitable adjustment shall be made by written modification of this contract. Any claim by the Contractor for adjustment under this clause must be asserted within 30 days from the date of receipt by the Contractor of the notification of change provided that the Contracting Officer, if he decides that the facts justify such action, may receive and act upon any such claim if asserted prior to final payment, under this contract. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes." However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.
18. **TERMINATION FOR DEFAULT** - The Contracting Officer, by written notice, may terminate this contract, in whole or in part, for failure of the Contractor to perform any of the provisions hereof. In such event, the contractor shall be liable for damages, including the excess cost of reprocurring similar supplies or services; provided that, if (i) it is determined for any reason that the Contractor was not in default or (ii) the Contractor's failure to perform is without his or his subcontractor's control, fault or negligence, the termination shall be deemed to be a termination for convenience under paragraph 19.
19. **TERMINATION FOR CONVENIENCE** - The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the best interest of the Government. If this contract is for supplies and is so terminated, the Contractor shall be compensated in accordance with Section VIII of the Armed Services Procurement Regulation, in effect on this Contract's date. To the extent that this contract is for services and is so terminated, the Government shall be liable for payment in accordance with the payment provisions of this contract for services rendered prior to the effective date of termination.
20. **ASSIGNMENT OF CLAIMS** - Claims for monies due or to become due under this contract shall be assigned only pursuant to the Assignment of Claims Act of 1940, as amended (31 U.S.C. 203, 41 U.S.C. 15). However, payments to an assignee of monies under this contract shall not, to the extent provided in said Act, as amended, be subject to reduction or set-off. (*See clause 12*)

ACCEPTANCE

The Contractor hereby accepts the offer represented by this numbered purchase order as it may previously have been or is now modified, subject to all of the terms and conditions set forth, and agrees to perform the same.

NAME OF CONTRACTOR

SIGNATURE

TYPED NAME AND TITLE

DATE SIGNED

REMARKS

CONTINUATION SHEET
 (SUPPLY CONTRACT)

CONTRACT, ORDER, OR INVITATION NO.
 (As applicable)

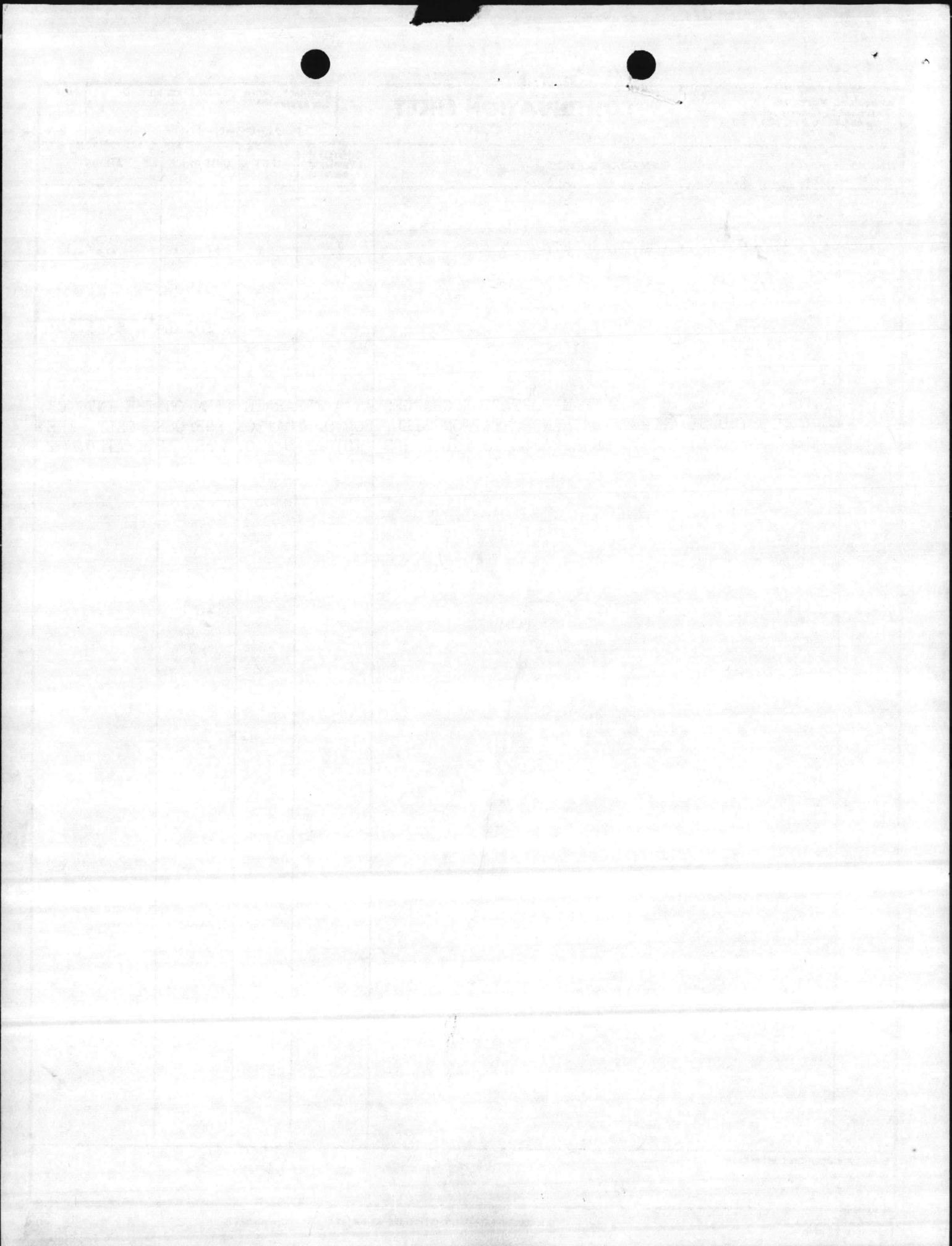
N67001-68-M-1869

PAGE
 NO.

2

ITEM NO.	SUPPLIES OR SERVICES	QUANTITY (Number of units)	UNIT	UNIT PRICE	AMOUNT
4	P/N 52648 Impeller Guide Rings <i>ph</i>	1	se	37.00	\$37.00
5	P/N 52741 Shaft Nut <i>1 of 2</i>	2	ea	5.50	11.00
				TOTAL	\$346.00
<p>FOB: AMPERE, N.J. SHOW TRANSPORTATION CHARGES AS A SEPARATE ITEM ON THE INVOICE, SUPPORTED BY A PREPAID TRANSPORTATION BILL. FOR OBLIGATION PURPOSES ONLY, THE TRANSPORTATION COSTS CHARGEABLE TO THE FUNDS INDICATED ABOVE ARE ESTIMATED NOT TO EXCEED <u>(\$10.00)</u>.</p>					

NAME OF BIDDER OR CONTRACTOR



CHECKED BOX APPLIES		<input checked="" type="checkbox"/> ORDER FOR SUPPLIES OR SERVICES		<input type="checkbox"/> REQUEST FOR QUOTATIONS NO. RETURN COPY(IES) OF THIS QUOTE BY <small>(THIS IS NOT AN ORDER. See DD Form 1155r)</small>		PAGE 1 OF 2				
1. CONTRACT/PURCH ORDER NO. M67001-68-M-1869		2. DELIVERY ORDER NO.		3. DATE OF ORDER 21 NOV.67		4. REQUISITION/PURCH REQUEST NO. SEE SCHEDULE				
6. ISSUED BY: CODE		7. ADMINISTERED BY: (If other than 6) CODE		8. DELIVERY FOB		<input type="checkbox"/> DESTINATION PRIORITY: 19 <input checked="" type="checkbox"/> OTHER <small>(See Schedule if other)</small>				
9. CONTRACTOR/QUOTER CODE		FACILITY CODE		10. DELIVER TO FOB POINT BY: 7 DECEMBER 67		11. CHECK IF SMALL BUSINESS <input type="checkbox"/>				
NAME AND ADDRESS L WORTHINGTON CORPORATION 1409 EAST BOULEVARD CHARLOTTE, N.C. 28203		12. DISCOUNT TERMS NET, 30 days		13. MAIL INVOICES TO: (In sextuplicate) SAME AS BLOCK 14						
14. SHIP TO: CODE		15. PAYMENT WILL BE MADE BY: CODE		MARK ALL PACKAGES AND PAPERS WITH CONTRACT OR ORDER NUMBER						
Freight Traffic Branch Bldg 1011, Camp Lejeune, N.Carolina M67001-68-M-1869		Base Disbursing Officer MCB, Camp Lejeune, North Carolina 28542								
16. TYPE OF ORDER		This delivery order is subject to instructions contained on this side of form only and is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract.								
DELIVERY		Reference your <u>telequote 15 NOV.67</u> , furnish the following on terms specified herein, including; for U. S. purchases, General Provisions of Purchase Order on DD Form 1155r (Except CLAUSE NO. 13 APPLIES ONLY IF THIS BOX <input type="checkbox"/> IS CHECKED, and NO. 15 IF THIS BOX <input checked="" type="checkbox"/> IS CHECKED); special provisions 10 USC 2304(a)(3) or as specified in the schedule if within the U. S., its possessions or Puerto Rico; if otherwise, under 2304(a)(6). <input type="checkbox"/> If checked, Additional General Provisions apply; Supplier shall sign "Acceptance" on DD Form 1155r and return copies.								
PURCHASE <input checked="" type="checkbox"/>										
17. ACCOUNTING AND APPROPRIATION DATA - ACCOUNTING CLASSIFICATION (REV. 7-65)										
ITEM NO.	APPROPRIATION SYMBOL AND SUBHEAD	OBJECT CLASS	BUREAU CONT. NO.	SUB-ALLOT.	AUTH'N ACCT'G ACTY	TRANS. TYPE	PROPERTY ACCT'G ACTY	COUNTRY	COST CODE	AMOUNT
all	1781106.2710		13002-		67001	2D			8CI500P01500	PLUS TRANS \$346.00
18. ITEM NO.	19. SCHEDULE OF SUPPLIES/SERVICES	20. QUANTITY ORDERED/ACCEPTED*	21. UNIT	22. UNIT PRICE	23. AMOUNT					
FAILURE TO COMPLY WITH SHIPPING INSTRUCTIONS MAY RESULT IN REJECTION OF MATERIAL. NO PARTIAL SHIPMENTS WILL BE ACCEPTED UNLESS SPECIFICALLY AUTHORIZED HEREIN.										
	M93058-7304-6510 PARTS F/CENTRIFUGAL PUMP, SIZE 3LR-9, SER.#A97825, IMPELLER 8 13/16C:									
1.	P/N 455B Shaft rotating assy., complete.	1	ea	298.00	\$298.00					
2.	P/N Ball thrust bearing	2	ea	Incl.in	Item#1					
3.	P/N Line Ball Bearing	2	ea	Incl.in	Item#1					
* If quantity accepted by the Government is same as quantity ordered, indicate by ✓ mark. If different, enter actual quantity accepted below quantity ordered and encircle.					25. TOTAL	\$346.00				
24. UNITED STATES OF AMERICA <i>Roger L. Batts</i> BY: ROGER L. BATTIS CONTRACTING/ORDERING OFFICER					29. DIFFERENCES					
26. QUANTITY IN COLUMN 20 HAS BEEN: <input type="checkbox"/> RECEIVED <input type="checkbox"/> INSPECTED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED					30. INITIALS					
27. SHIP NO. <i>16</i>					32. PAID BY 67001-SYM #5190 MCB CLNC	33. AMOUNT VERIFIED CORRECT FOR				
28. D.O. VOUCHER NO.					34. CHECK NUMBER					
29. PAYMENT <input type="checkbox"/> FINAL <input type="checkbox"/> PARTIAL <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL					35. BILL OF LADING NO.					
36. I CERTIFY that this account is correct and proper for payment (Signature and title of Certifying Officer)					40. TOTAL CONTAINERS	42. S/R VOUCHER NO.				
37. RECEIVED AT	38. RECEIVED BY	39. DATE RECEIVED	41. S/R ACCOUNT NUMBER							

THIS PARAGRAPH APPLIES ONLY TO QUOTATIONS SUBMITTED: Supplies are of domestic origin unless otherwise indicated by quotation. Government reserves the right to consider quotations or modifications thereof received after the date indicated should such action be in the interest of the Government. This is a request for information and quotations furnished are not offers. When quoting, complete blocks 11, 12, 22, 23, 25. If you are unable to quote, please advise. This request does not commit the Government to pay any cost incurred in preparation or the submission of this quotation or to procure or contract for supplies or services.

GENERAL PROVISIONS

1. **INSPECTION AND ACCEPTANCE** - Inspection and acceptance will be at destination, unless otherwise provided. Until delivery and acceptance, and after any rejections, risk of loss will be on the contractor unless loss results from negligence of the Government.
2. **VARIATION IN QUANTITY** - No variation in the quantity of any item called for by this contract will be accepted unless such variation has been caused by conditions of loading, shipping, or packing, or allowances in manufacturing processes, and then only to the extent, if any, specified elsewhere in this contract.
3. **PAYMENTS** - Invoices shall be submitted in quadruplicate (one copy shall be marked "Original") unless otherwise specified, and shall contain the following information: Contract or Order number, Item number, contract description of supplies or services, sizes, quantities, unit prices and extended totals. Bill of lading number and weight of shipment will be shown for shipments on Government Bills of Lading. Unless otherwise specified, payment will be made on partial deliveries accepted by the Government when the amount due on such deliveries so warrants.
4. **DISCOUNTS** - Discount time will be computed from date of delivery at place of acceptance from receipt of correct invoice at the office specified by the Government, whichever is later. Payment is made, for discount purposes, when check is mailed.
5. **DISPUTES** - (a) Except as otherwise provided in this contract, any dispute concerning a question of fact arising under this contract which is not disposed of by agreement shall be decided by the Contracting Officer, who shall mail or otherwise furnish a copy thereof to the Contractor. This decision shall be final and conclusive unless, within 30 days from the date of receipt of such copy, the Contractor mails or otherwise furnishes to the Contracting Officer a written appeal addressed to the Secretary. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. The Contractor shall be afforded an opportunity to be heard and to offer evidence in support of his appeal. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with the performance of the contract and in accordance with the Contracting Officer's decision. (b) This "Disputes" clause does not preclude consideration of law questions in connection with decisions provided for in (a) above, provided, that nothing in this contract shall be construed as making final the decision of any administrative official, representative, or board on a question of law.
6. **FOREIGN SUPPLIES** - This contract is subject to the Buy American Act (41 U.S.C. 10 a-d) as implemented by Executive Order 10582 of December 17, 1954, and any restrictions in appropriation acts on the procurement of foreign supplies.
7. **CONVICT LABOR** - The Contractor agrees not to employ for work under this contract any person undergoing sentence of imprisonment at hard labor.
8. **OFFICIALS NOT TO BENEFIT** - No member of or Delegate to Congress or resident commissioner, shall be admitted to any share or part of this contract, or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.
9. **COVENANT AGAINST CONTINGENT FEES** - The Contractor warrants that no person or selling agency has been employed or retained to solicit or secure this contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty the Government shall have the right to annul this contract without liability or in its discretion to deduct from the contract price or consideration or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.
10. **GRATUITIES** - (a) The Government may, by written notice to the Contractor, terminate the right of the Contractor to proceed under this contract if it is found after notice and hearing, by the Secretary or his duly authorized representative, that gratuities (in the form of entertainment, gifts or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer or employee of the Government with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such contract, provided, that the existence of the facts upon which the Secretary or his duly authorized representative makes such findings shall be in issue and may be reviewed in any competent court. (b) In the event this contract is terminated as provided in paragraph (a) hereof the Government shall be entitled (i) to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the contract by the Contractor and (ii) as a penalty in addition to any other damages to which it may be entitled by law to exemplary damages in an amount (as determined by the Secretary or his duly authorized representative) which shall be not less than three nor more than ten times the costs incurred by the Contractor in providing any such gratuities to any such officer or employee. (c) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this contract.
11. **RENEGOTIATION** - This contract, and any subcontract hereunder, is subject to the Renegotiation Act of 1951, as amended (50 U.S.C. App. 1211 et seq.) and shall be deemed to contain all the provisions required by Section 104 thereof, and is subject to any subsequent act of Congress providing for the renegotiation of contracts.
12. **CONDITION FOR ASSIGNMENT** - This Purchase Order may not be assigned pursuant to the Assignment of Claims Act of 1940, as amended (31 U.S.C. 203, 41 U.S.C. 15), unless or until the supplier has been requested and has accepted this order by executing the Acceptance hereon.
13. **COMMERCIAL WARRANTY** - The Contractor agrees that the supplies or services furnished under this contract shall be covered by the most favorable commercial warranties the contractor gives to any customer for such supplies or services and that the rights and remedies provided herein are in addition to and do not limit any rights afforded to the Government by any other cause of this contract.
14. **PRIORITIES, ALLOCATIONS AND ALLOTMENTS DEFENSE MATERIALS SYSTEM** - When the amount of the order is \$500 or more the Contractor shall follow the provisions of DMS Reg. 1 and all other applicable regulations and orders of the Business and Defense Services Administration in obtaining controlled materials and other products and materials needed to fill this order.

15. FAST PAYMENT PROCEDURE -

- a. **GENERAL** - This contract is subject to fast payment order. Invoices will be paid on the basis of the Contractor's certification thereon that articles listed on the order were delivered on a specified date to a post office, common carrier, or, in shipment by other means, to the point of first receipt by the Government.
- b. **RESPONSIBILITY FOR SUPPLIES** - Title to the supplies shall vest in the Government upon delivery to a post office or common carrier for shipment to the specified destination. If shipment is by means other than post office or common carrier, title to the supplies shall vest in the Government upon delivery to the point of first receipt by the Government. Notwithstanding any other provision of the purchase order, the Contractor shall assume all responsibility and risk of loss for supplies (i) not received at destination, (ii) damaged in transit, or (iii) not conforming to purchase requirements. The Contractor shall either replace, repair, or correct such supplies promptly at his expense, provided instructions to do so are furnished by the Contracting Officer within ninety (90) days from the date these supplies were delivered by the Contractor to a post office or common carrier. For supplies delivered by means other than post office or common carrier, such ninety (90) day period shall commence from the date these supplies were delivered to the point of first receipt by the Government.

c. PREPARATION OF INVOICE -

- (1) Upon delivery of supplies to a post office, common carrier, or in shipments by other means, the point of first receipt by the Government, the Contractor shall prepare an invoice in accordance with Clause 3 of the General Provisions of Purchase Order, except that invoices under a blanket purchase agreement shall be prepared in accordance with the provisions of the agreement. In shipments by either post office or common carrier, the Contractor shall either (A) cite on his invoice the date of shipment, name and address of post office or carrier, bill of lading number or other shipment document number, or (B) attach copies of such documents to his invoices as evidence of shipment. In the case of delivery by other than post office or common carrier, a receipted copy of the Contractor's delivery document shall be attached to the invoice as evidence of delivery. Regardless of delivery method the invoice shall include the following signed certification.

"I hereby certify that I did ship on (date) via the (method of shipment) or deliver on (date) in accordance with shipping instructions issued by the ordering officer, supplies in the quantities shown hereon and that such supplies are in the quantity and of the quality designated by the cited purchase order. This statement is furnished to support payment of invoice."
- (2) If the purchase price excludes the cost of transportation, the Contractor shall enter the prepaid shipping cost on the invoice as a separate item. The cost of parcel post insurance will not be paid by the Government.

OUTER SHIPPING CONTAINERS SHALL BE MARKED "FAST PAY"

16. (This clause applies if this contract is for services and is not exempted by applicable regulations of the Department of Labor)
SERVICE CONTRACT ACT OF 1965 - The Contractor and any subcontractor hereunder shall pay all of their employees engaged in performing work on the contract not less than the minimum wage specified under Section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended (\$1.25 per hour as of January 20, 1966) and are subject to the regulations of the Secretary of Labor thereunder (29 C.F.R. Part 4).

ADDITIONAL GENERAL PROVISIONS

17. **CHANGES** - The Contracting Officer may at any time, by a written order, and without notice to the sureties, make changes, within the general scope of this contract, in (i) drawings, designs, or specifications, where the supplies to be furnished are to be specially manufactured for the Government in accordance therewith; (ii) method of shipment or packing; and (iii) place of delivery. If any such change causes an increase or decrease in the cost of, or the time required for performance of this contract, whether changed or not changed by any such order, an equitable adjustment shall be made by written modification of this contract. Any claim by the Contractor for adjustment under this clause must be asserted within 30 days from the date of receipt by the Contractor of the notification of change provided that the Contracting Officer, if he decides that the facts justify such action, may receive and act upon any such claim if asserted prior to final payment, under this contract. Failure to agree to any adjustment shall be a dispute concerning a question of fact within the meaning of the clause of this contract entitled "Disputes." However, nothing in this clause shall excuse the Contractor from proceeding with the contract as changed.
18. **TERMINATION FOR DEFAULT** - The Contracting Officer, by written notice, may terminate this contract, in whole or in part, for failure of the Contractor to perform any of the provisions hereof. In such event, the contractor shall be liable for damages, including the excess cost of reprocurring similar supplies or services; provided that, if (i) it is determined for any reason that the Contractor was not in default or (ii) the Contractor's failure to perform is without his or his subcontractor's control, fault or negligence, the termination shall be deemed to be a termination for convenience under paragraph 19.
19. **TERMINATION FOR CONVENIENCE** - The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the best interest of the Government. If this contract is for supplies and is so terminated, the Contractor shall be compensated in accordance with Section VIII of the Armed Services Procurement Regulation, in effect on this Contract's date. To the extent that this contract is for services and is so terminated, the Government shall be liable only for payment in accordance with the payment provisions of this contract for services rendered prior to the effective date of termination.
20. **ASSIGNMENT OF CLAIMS** - Claims for monies due or to become due under this contract shall be assigned only pursuant to the Assignment of Claims Act of 1940, as amended (31 U.S.C. 203, 41 U.S.C. 15). However, payments to an assignee of monies under this contract shall not, to the extent provided in said Act, as amended, be subject to reduction or set-off. (See clause 12)

REMARKS	
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ACCEPTANCE	
<i>The Contractor hereby accepts the offer represented by this numbered purchase order as it may previously have been or is now modified, subject to all of the terms and conditions set forth, and agrees to perform the same.</i>	
NAME OF CONTRACTOR	
SIGNATURE	
TYPED NAME AND TITLE	DATE SIGNED

CONTINUATION SHEET
 (SUPPLY CONTRACT)

CONTRACT, ORDER, OR INVITATION NO.
 (As applicable)

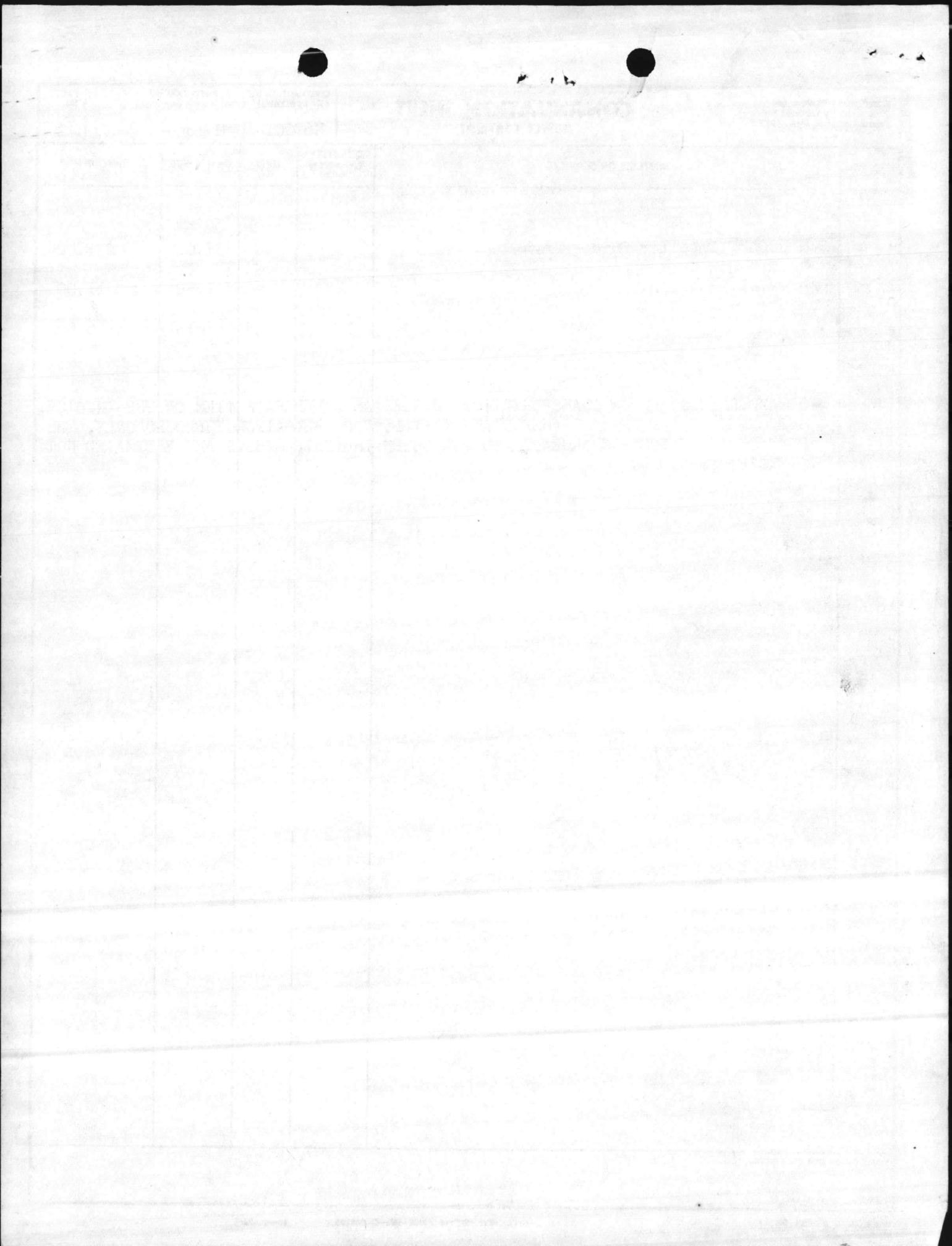
N67001-68-M-1869

PAGE
 NO.

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ITEM NO.	SUPPLIES OR SERVICES	QUANTITY (Number of units)	UNIT	UNIT PRICE	AMOUNT
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5	P/N 52741 Shaft Nut	2	ea	5.50	11.00
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<p>FOB: AMPERE, N.J. SHOW TRANSPORTATION CHARGES AS A SEPARATE ITEM ON THE INVOICE, SUPPORTED BY A PREPAID TRANSPORTATION BILL. FOR OBLIGATION PURPOSES ONLY, THE TRANSPORTATION COSTS CHARGEABLE TO THE FUNDS INDICATED ABOVE ARE ESTIMATED NOT TO EXCEED <u>(\$10.00)</u>.</p>					

NAME OF BIDDER OR CONTRACTOR



ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED:

SUBJECT TO THE REQUIREMENTS OF

CONTRACT NBy 54077 SPEC 54077/63
APPROVAL OF MATERIALS AND/OR EQUIPMENT
INDICATES COMPLIANCE WITH SPECIFICATION
REQUIREMENTS ONLY — THE CONTRACTOR
SHALL BE RESPONSIBLE FOR PROVIDING
PROPER PHYSICAL DIMENSIONS & WEIGHTS.
COORDINATION OF TRADES, ETC., AS REQUIRED.

Date 4/27/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS

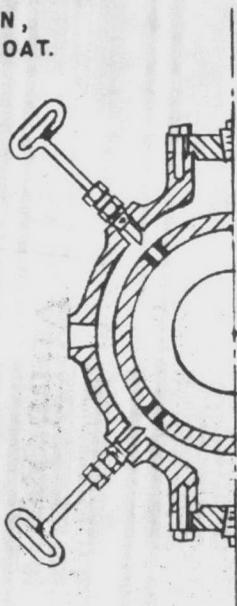


9-62

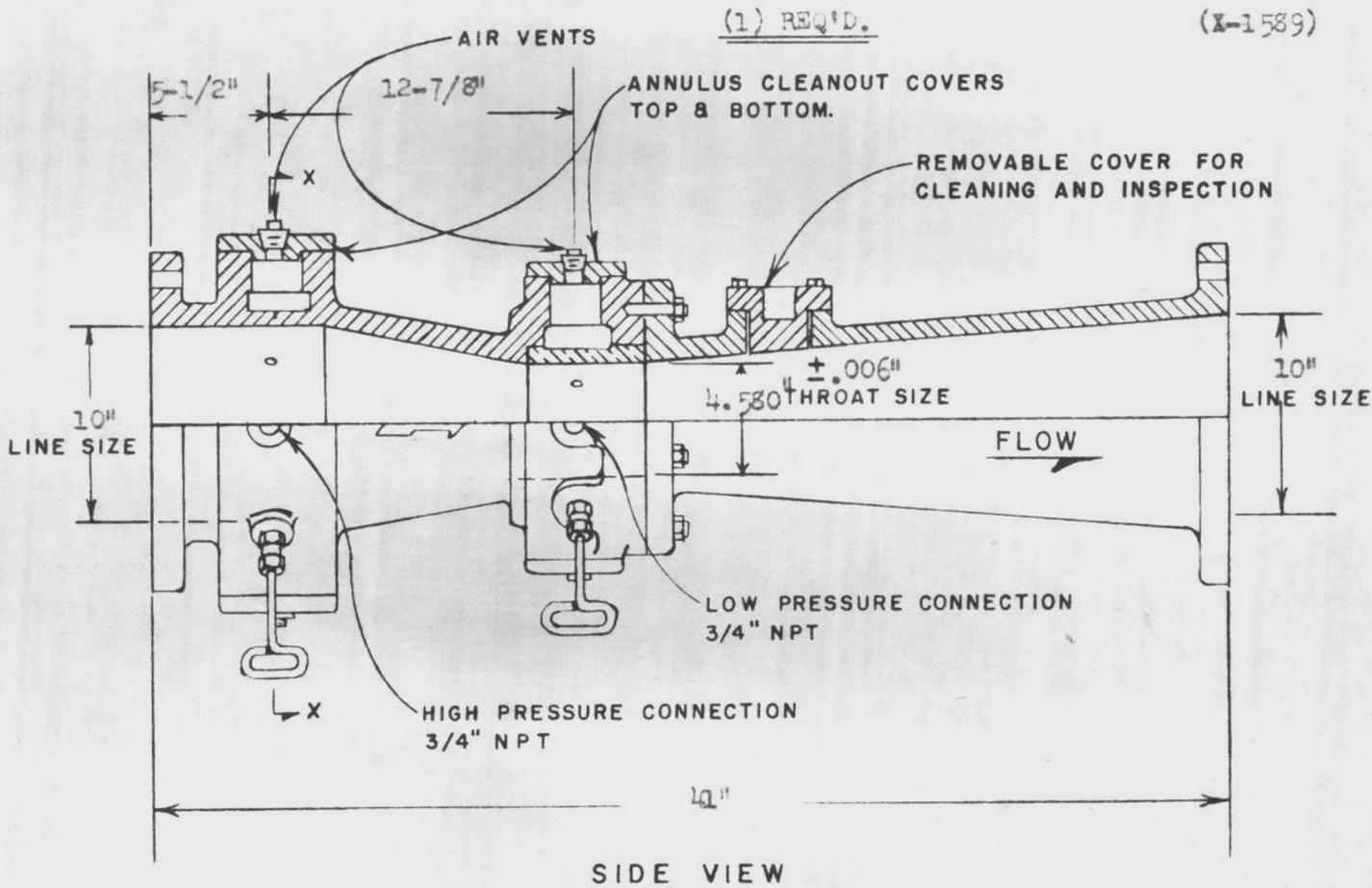
Z-8977

DATE	REVISION	APPRD.	DATE	REVISION	APPRD.	Penn Meter Company			DRAWING NUMBER
						PHILADELPHIA, PA. U. S. A.			Z-11974
						DRAWN D.C.H.	DATE 4-15-64	APPROVED <i>Jus</i>	SCALE -
						TRACED	CHECKED		
MATERIAL	AS SHOWN		TOOL NO.			NAME	VENTURI TUBE - TYPE PVS		
FINISH	" "		LIMITS	± 1/16" EXCEPT AS NOTED		USED ON	S.O. 29593	10" x 4.580"	

MANUAL VENT CLEANERS
IN EACH ANNULUS
4 AT MAIN,
4 AT THROAT.



VIEW X-X



FLUID CLEAR WATER @ 60°F.

DIFFERENTIAL 24.98 "H₂O at

(FLOW RATE) 600 GPM

APPROX. HEADLOSS _____ % DIFF.

DIMENSION TABLE DWG.

NOTE: FLANGE BOLT HOLES
STRADDLE HORIZONTAL
& VERTICAL CENTER-
LINES.

CERTIFIED CORRECT
DATE 4-15-64 SIGNED *Jus*

MATERIAL:

BODY - CAST IRON

THROAT - BRONZE

FLANGE RATING 125 LB.

FINISH - BITUMASTIC PAINT
KOPPER'S #50 TANK SOLUTION

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

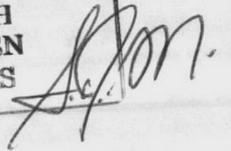
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SUBJECT TO THE REQUIREMENTS OF

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COORDINATION OF TRADES, ETC., AS REQUIRED.

Date 4/27/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS



ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

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Date 4/27/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS

W.C.G.

9-62

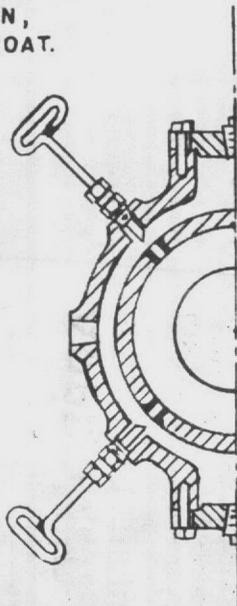
Z-8977

DATE	REVISION	APPRD.	DATE	REVISION	APPRD.	Penn Meter Company			DRAWING NUMBER
						PHILADELPHIA, PA. U. S. A.			Z-11975
						DRAWN D.C.H.	DATE 4-15-64	APPROVED <i>Jus</i>	SCALE -
						TRACED	CHECKED		
MATERIAL	AS SHOWN	TOOL NO.				NAME VENTURI TUBE - TYPE PVS			
FINISH	" "	LIMITS $\pm 1/16"$ EXCEPT AS NOTED				USED ON S.O. 29593		12" x 5.300"	

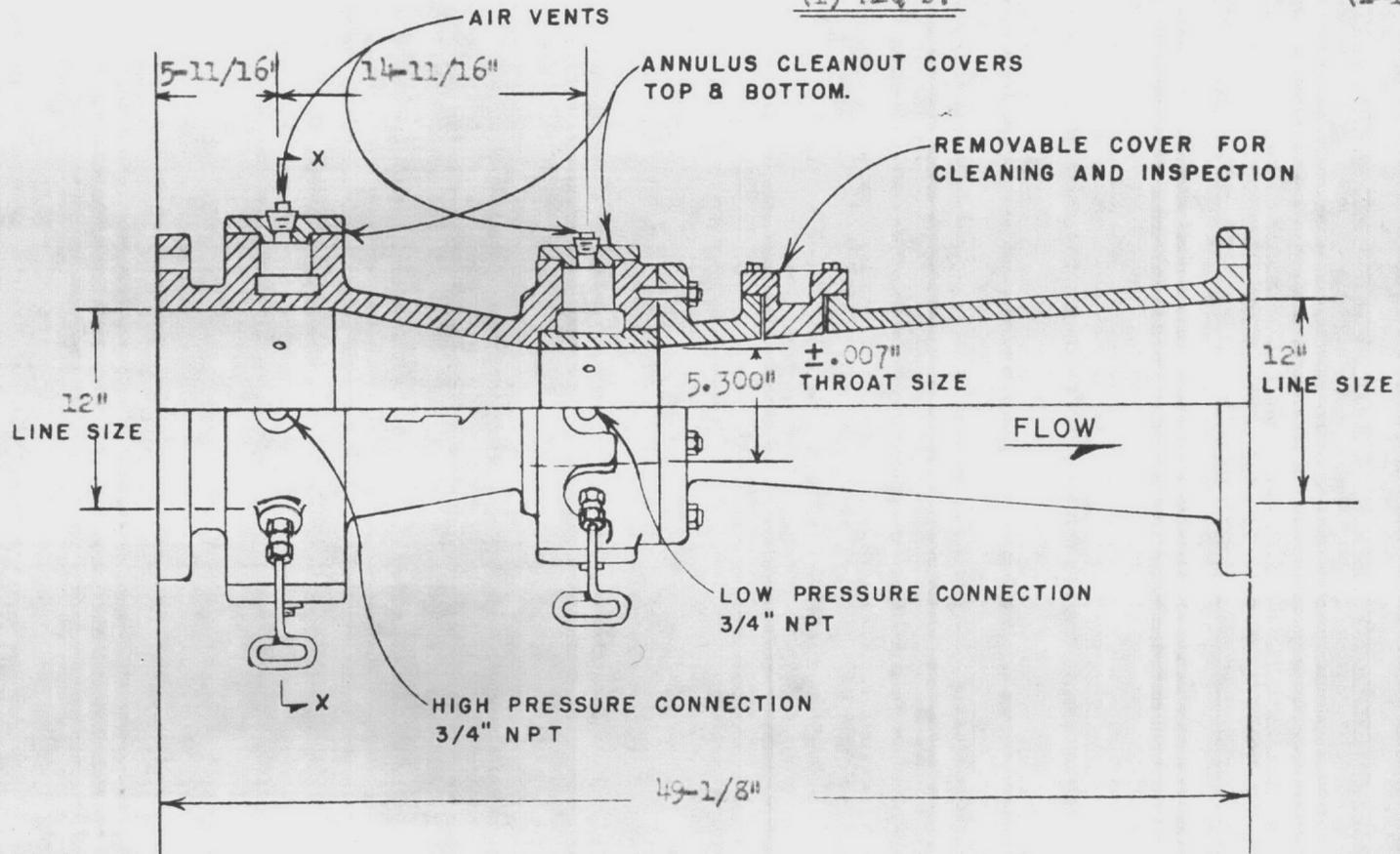
(1) REQ'D.

(X-1134)

MANUAL VENT CLEANERS
IN EACH ANNULUS
4 AT MAIN,
4 AT THROAT.



VIEW X-X



SIDE VIEW

FLUID CLEAR WATER @ 60°F.

DIFFERENTIAL 87.62 "H₂O at

(FLOW RATE) 1500 GPM

APPROX. HEADLOSS _____ % DIFF.

DIMENSION TABLE DWG.

NOTE: FLANGE BOLT HOLES
STRADDLE HORIZONTAL
& VERTICAL CENTER-
LINES.

CERTIFIED CORRECT
DATE 4-15-64 SIGNED *Jus*

MATERIAL:

BODY - CAST IRON

THROAT - BRONZE

FLANGE RATING 125 LB.

FINISH - BITUMASTIC PAINT
KOPPER'S TANK SOLUTION #50

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.

APPROVED:

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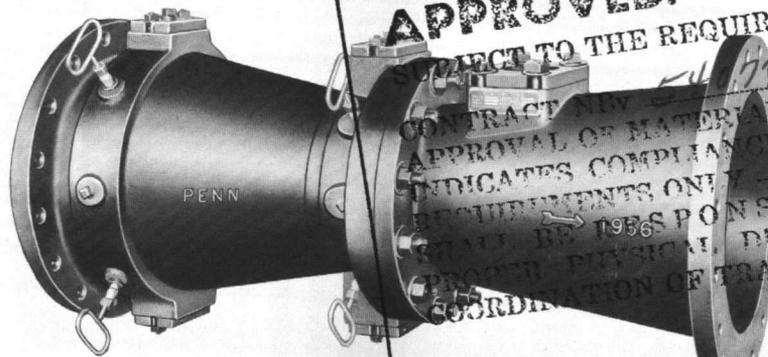
W. C. G. CHURCH
RADM, CEC, USN
DIRLANTDOCKS

W.C.G.

PENN

CAST VENTURI TUBES

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 11, VA.



APPROVED:

SUBJECT TO THE REQUIREMENTS OF
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APPROVAL OF MATERIALS AND/OR EQUIPMENT
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W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS

TYPE PVS-VENTURI

For industrial and municipal application, the Venturi type of differential producer has been long recognized for its enduring accuracy, dependable coefficient, and high recovery of head. Water, sewage, sludge, slurry, gas, etc., can be metered with equal accuracy by appropriate selection of material and construction style.

CONSTRUCTION:

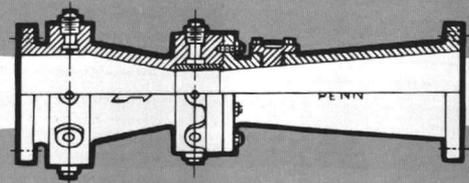
Materials used, most commonly, are high tensile cast iron for the bodies and high grade bronze for the throat and vent bushings. Steel castings may be used when conditions warrant.

Ends may be flanged, bell and spigot, or plain for mechanical coupling, as selected. For economy reasons, in larger size tubes, cones may be constructed of steel plate.

An inspection opening with bolted, gasketed cover is located in the recovery cone near the throat on tubes over 8" pipe size. This opening allows access for cleaning of the throat.

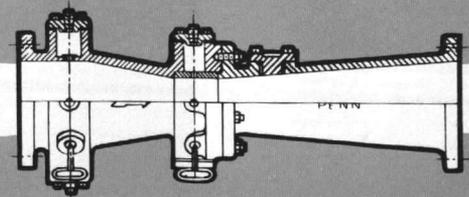
ACCURACY:

Standard designed accuracy is within plus or minus $\frac{3}{4}$ of 1% of actual flow rate. A hydraulic laboratory flow calibration to establish precise discharge coefficient will improve accuracy to within plus or minus $\frac{1}{4}$ of 1%.



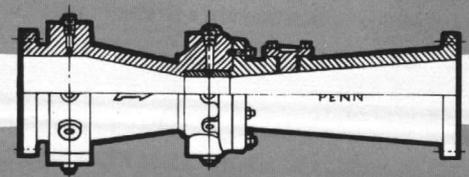
TYPE PWV

For metering clear fluids, the type PWV has bronze bushed multiple piezometer holes at the main and throat section which are connected to their respective annular chambers. Each piezometer bushing is carefully machined and reamed square with the axis and finished flush with the internal tube surfaces.



TYPE PVS

The type PVS with annular chambers and multi taps is recommended for metering raw water and sewage. Piezometer cleanout rods, continuous purge and/or disconnect flushing plus the inspection openings, serve to keep the metering connections clear.



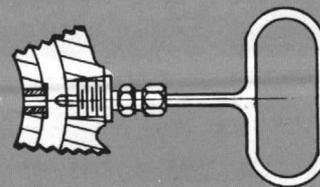
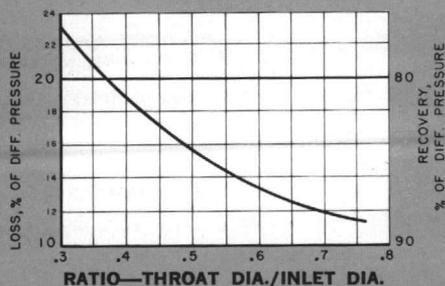
TYPE PVSL

When metering slurries, sludges and other solids-bearing fluids with the type PVSL single tap, the annular chambers are omitted. Manually operated stainless steel cleanout rods are used to clean the piezometer openings. Continuous clear water purge is also used to keep the piezometers clear.

DIMENSION AND CAPACITY TABLE

PIPE I. D. INCHES	THROAT DIAMETER	LAYING LENGTH	CAPACITIES IN MILLION GALLONS PER DAY							
			MAX. DIFFERENTIAL IN INCHES OF WATER							
			18.84"	42.39"	75.36"	117.75"	169.56"	230.79"	301.44"	471.00"
4	1.87	18"	0.125	0.1875	0.250	0.3125	0.375	0.4375	0.500	0.625
	2.55	18"	0.250	0.375	0.500	0.625	0.750	0.875	1.000	1.250
	2.98	18"	0.375	0.5625	0.750	0.9375	1.125	1.3125	1.500	1.875
6	2.65	26"	0.250	0.375	0.500	0.625	0.750	0.875	1.000	1.125
	3.64	24"	0.500	0.750	1.000	1.250	1.500	1.750	2.000	2.500
	4.29	22"	0.750	1.125	1.500	1.875	2.250	2.625	3.000	3.750
8	3.74	33 1/8"	0.500	0.750	1.000	1.250	1.500	1.750	2.000	2.500
	4.51	30 1/8"	0.750	1.125	1.500	1.875	2.250	2.625	3.000	3.750
	5.96	25"	1.500	2.250	3.000	3.750	4.500	5.250	6.000	7.500
10	4.58	41"	0.750	1.125	1.500	1.875	2.250	2.625	3.000	3.750
	6.27	36"	1.500	2.250	3.000	3.750	4.500	5.250	6.000	7.500
	7.04	31 1/2"	2.000	3.000	4.000	5.000	6.000	7.000	8.000	10.000
12	5.30	49 1/8"	1.000	1.500	2.000	2.500	3.000	3.500	4.000	5.000
	7.29	41 1/2"	2.000	3.000	4.000	5.000	6.000	7.000	8.000	10.000
	8.57	36 3/8"	3.000	4.500	6.000	7.500	9.000	10.500	12.000	15.000
14	6.47	54 7/8"	1.500	2.250	3.000	3.750	4.500	5.250	6.000	7.500
	7.41	51"	2.000	3.000	4.000	5.000	6.000	7.000	8.000	10.000
	8.86	45"	3.000	4.500	6.000	7.500	9.000	10.500	12.000	15.000
16	9.93	43 1/2"	4.000	6.000	8.000	10.000	12.000	14.000	16.000	20.000
	7.47	60"	2.000	3.000	4.000	5.000	6.000	7.000	8.000	10.000
	9.02	52 3/4"	3.000	4.500	6.000	7.500	9.000	10.500	12.000	15.000
18	10.21	51 1/8"	4.000	6.000	8.000	10.000	12.000	14.000	16.000	20.000
	11.16	47"	5.000	7.500	10.000	12.500	15.000	17.500	20.000	25.000
	8.35	74"	2.500	3.750	5.000	6.250	7.500	8.750	10.000	12.500
20	10.09	63"	3.750	5.625	7.500	9.375	11.250	13.125	15.000	18.750
	11.43	58"	5.000	7.500	10.000	12.500	15.000	17.500	20.000	25.000
	12.30	54 1/8"	6.000	9.000	12.000	15.000	18.000	21.000	24.000	30.000
24	9.16	76"	3.000	4.500	6.000	7.500	9.000	10.500	12.000	15.000
	10.48	70"	4.000	6.000	8.000	10.000	12.000	14.000	16.000	20.000
	12.55	62"	6.000	9.000	12.000	15.000	18.000	21.000	24.000	30.000
30	14.39	54"	8.500	12.750	17.000	21.250	25.500	29.750	34.000	42.500
	10.59	95"	4.000	6.000	8.000	10.000	12.000	14.000	16.000	20.000
	14.17	79 1/4"	7.500	11.250	15.000	18.750	22.500	26.250	30.000	37.500
36	15.99	74"	10.000	15.000	20.000	25.000	30.000	35.000	40.000	50.000
	17.41	65 7/8"	12.500	18.750	25.000	31.250	37.500	43.750	50.000	62.500
	11.88	126"	5.000	7.500	10.000	12.500	15.000	17.500	20.000	25.000
42	16.51	106 1/2"	10.000	15.000	20.000	25.000	30.000	35.000	40.000	50.000
	19.67	94 1/8"	15.000	22.500	30.000	37.500	45.000	52.500	60.000	75.000
	20.88	89 1/4"	17.500	26.250	35.000	43.750	52.500	61.250	70.000	87.500
48	14.54	145 1/2"	7.500	11.250	15.000	18.750	22.500	26.250	30.000	37.500
	18.56	129 3/4"	12.500	18.750	25.000	31.250	37.500	43.750	50.000	62.500
	22.86	113 3/4"	20.000	30.000	40.000	50.000	60.000	70.000	80.000	100.000
42	24.98	104"	25.000	37.500	50.000	62.500	75.000	87.500	100.000	125.000
	18.71	163"	12.500	18.750	25.000	31.250	37.500	43.750	50.000	62.500
	23.32	146 1/2"	20.000	30.000	40.000	50.000	60.000	70.000	80.000	100.000
48	25.72	128"	25.000	37.500	50.000	62.500	75.000	87.500	100.000	125.000
	27.73	128"	30.000	45.000	60.000	75.000	90.000	105.000	120.000	150.000
	23.54	176 1/2"	20.000	30.000	40.000	50.000	60.000	70.000	80.000	100.000
48	26.12	167"	25.000	37.500	50.000	62.500	75.000	87.500	100.000	125.000
	30.28	151 1/4"	35.000	52.500	70.000	87.500	105.000	122.500	140.000	175.000
	31.96	142 3/4"	40.000	60.000	80.000	100.000	120.000	140.000	160.000	200.000

Additional Sizes Available Upon Request



MANUAL PIEZOMETER CLEAN-OUT



PENN METER COMPANY

Engineering *FLOW* Manufacturing

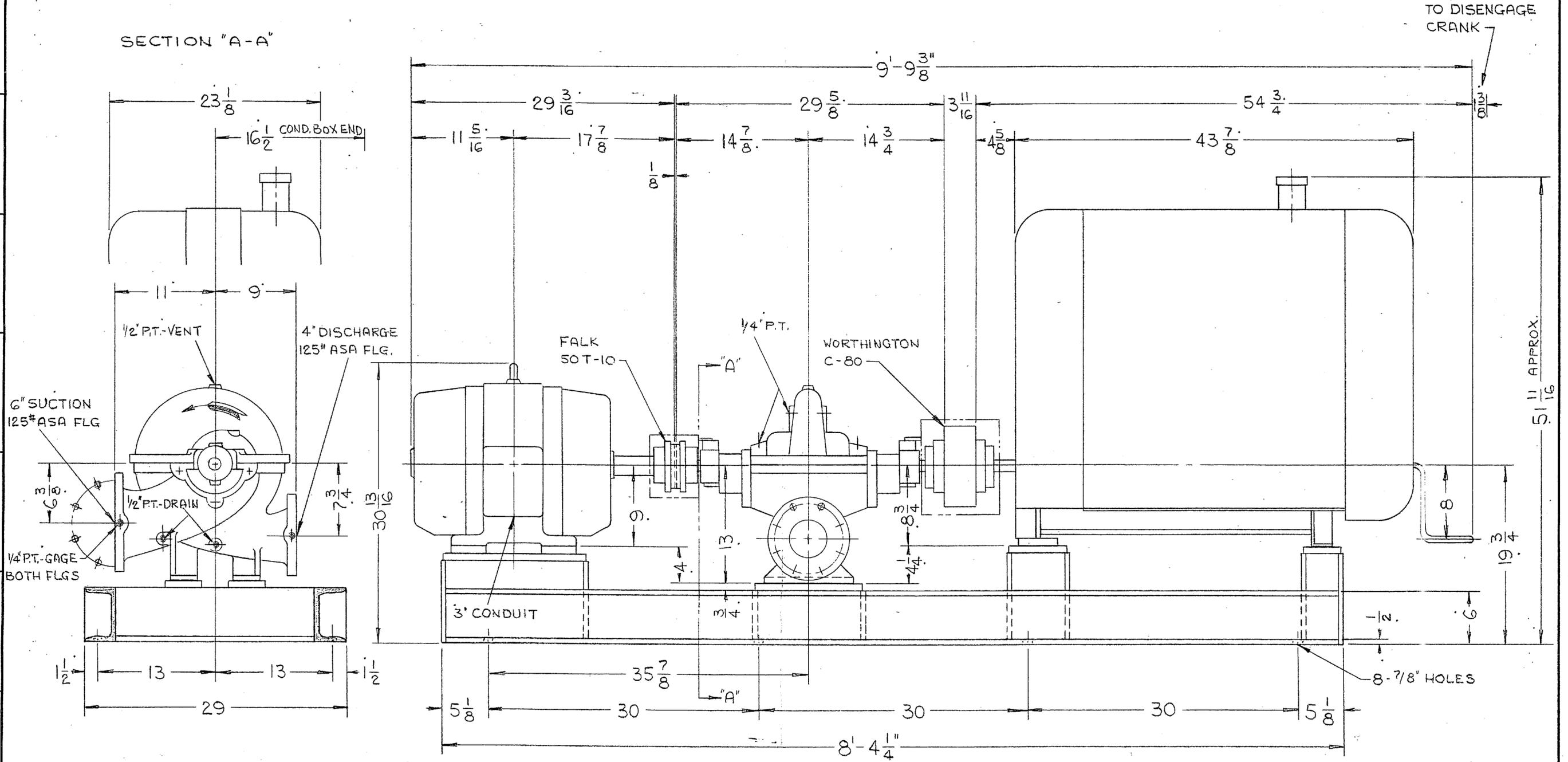
4110 HAVERFORD AVE.
PHILADELPHIA 4, PA.
EVergreen 6-1001

COUNTER-CLOCKWISE ROTATION
DETERMINED FROM MOTOR END OF PUMP

MAKE U.S. ENCL. DRIP-PROOF FRAME 364-U
40 H.P. 1800 R.P.M. 3 PH. 60 CY. 208/220/440 VOLTS

CONTINENTAL ENGINE
MODEL F-244
45 HP, 1750 RPM

SECTION "A-A"



TO DISENGAGE
CRANK

51 11/16" APPROX.

SERVICE WATER PUMP #3

CORRECT FOR CUSTOMER'S ORDER	15-12
CUSTOMER	BROWN CONSTRUCTION Co.
DISTRICT OFFICE ORDER	ATLANTA 21-41042
WORKS ORDER	Y 273703
CERTIFIED BY	G. COPPOLA
DATE	4-29-64

ALT. DATES

Dimensions are from drawings, castings may vary slightly. Foundation bolts must not be fixed rigidly until machine is in place. This print is loaned subject to return on demand and under condition that it is not to be used in any way detrimental to our interests. Do not scale; additional dimensions will be furnished upon request.

4LR-12 VOLUTE PUMP ELEVATION			
WORTHINGTON CORPORATION AMPERE STATION EAST ORANGE, NEW JERSEY			
ORDER 4-273703 DATE 4-28-64 SCALE 1/2" = 1 FOOT			
DRAWN	CHECKED	APPROVED	RX-139249
N.K.			

957500

ATLANTIC DIVISION, BUREAU OF YARDS & DOCKS
NORFOLK 17, VA.

APPROVED:

SUBJECT TO THE REQUIREMENTS OF _____

CONTRACT NBY 54077 SPEC 54077/63
APPROVAL OF MATERIALS AND/OR EQUIPMENT
INDICATES COMPLIANCE WITH SPECIFICATION
REQUIREMENTS ONLY — THE CONTRACTOR
SHALL BE RESPONSIBLE FOR PROVIDING
PROPER PHYSICAL DIMENSIONS & WEIGHTS.
COORDINATION OF TRADES, ETC., AS REQUIRED.

Date 5/12/64

W. C. G. CHURCH
RADM. CEC, USN
DIRLANTDOCKS

W.C.G.

RR 85

FILTER OPERATION

I. MANUAL

A. TURN ALL FILTER SWITCHES TO "H" POSITION.

B. FILTER 1

1. PRESS MANUAL START PUSHBUTTON.
2. INFLUENT VALVE CLOSES.
3. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
4. MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
5. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
6. BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
7. SURFACE WASH VALVE CLOSES AFTER 5 MINUTES.
8. BACKWASH VALVE CLOSES AFTER 8 MINUTES.
9. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
10. MULTIPOINT VALVE ROTATES TO RINSE POSITION.
11. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
12. INFLUENT VALVE OPENS.
13. INFLUENT VALVE CLOSES AFTER 5 MINUTES.
14. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
15. MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
16. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
17. INFLUENT VALVE OPENS.

AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

SATISFACTORY TO INSPECTOR:

12/31/86
DATE

Ray Hunt

CWC Inc

CONTRACTOR

81-1454

C. FILTER 2

1. PRESS MANUAL START PUSHBUTTON.
2. INFLUENT VALVE CLOSES.
3. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
4. MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
5. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
6. BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
7. SURFACE WASH VALVE CLOSES AFTER 5 MINUTES.
8. BACKWASH VALVE CLOSES AFTER 8 MINUTES.
9. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
10. MULTIPOINT VALVE ROTATES TO RINSE POSITION.
11. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
12. INFLUENT VALVE OPENS.
13. INFLUENT VALVE CLOSES AFTER 5 MINUTES.
14. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
15. MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
16. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
17. INFLUENT VALVE OPENS.

21011000 - 1108 2A
SALVAGE TO PROD
FOR THE USE OF THE
CONTRACTOR
1241-18

AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

SATISFACTORY TO INSPECTOR:

12/31/86

Ray Hunt

DATE

ewe Inc

CONTRACTOR

81-1454

D. FILTER 3

1. PRESS MANUAL START PUSHBUTTON.
2. INFLUENT VALVE CLOSSES.
3. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
4. MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
5. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
6. BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
7. SURFACE WASH VALVE CLOSSES AFTER 5 MINUTES.
8. BACKWASH VALVE CLOSSES AFTER 8 MINUTES.
9. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
10. MULTIPOINT VALVE ROTATES TO RINSE POSITION.
11. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
12. INFLUENT VALVE OPENS.
13. INFLUENT VALVE CLOSSES AFTER 5 MINUTES.
14. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
15. MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
16. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
17. INFLUENT VALVE OPENS.

AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

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Ewe Inc

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81-1454

II. AUTOMATIC

1. TURN ALL FILTER SWITCHES TO "A" POSITION.
2. DIFFERENTIAL PRESSURE CLOSES.
3. FILTER 1 INFLUENT VALVE CLOSES.
4. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
5. FILTER 1 MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
6. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
7. FILTER 1 BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
8. FILTER 1 SURFACE WASH VALVE CLOSES AFTER 5 MINUTES.
9. FILTER 1 BACKWASH VALVE CLOSES AFTER 8 MINUTES.
10. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
11. FILTER 1 MULTIPOINT VALVE ROTATES TO RINSE POSITION.
12. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
13. FILTER 1 INFLUENT VALVE OPENS.
14. FILTER 1 INFLUENT VALVE CLOSES AFTER 5 MINUTES.
15. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
16. FILTER 1 MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
17. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
18. FILTER 1 INFLUENT VALVE OPENS.
19. FILTER 2 INFLUENT VALVE CLOSES.
20. FILTER 2 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
21. FILTER 2 MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
22. FILTER 2 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
23. FILTER 2 BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
24. FILTER 2 SURFACE WASH VALVE CLOSES AFTER 5 MINUTES.
25. FILTER 2 BACKWASH VALVE CLOSES AFTER 8 MINUTES.
26. FILTER 2 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
27. FILTER 2 MULTIPOINT VALVE ROTATES TO RINSE POSITION.
28. FILTER 2 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
29. FILTER 2 INFLUENT VALVE OPENS.
30. FILTER 2 INFLUENT VALVE CLOSES AFTER 5 MINUTES.

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31. FILTER 2 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
32. FILTER 2 MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
33. FILTER 2 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
34. FILTER 2 INFLUENT VALVE OPENS.
35. FILTER 3 INFLUENT VALVE CLOSES.
36. FILTER 3 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
37. FILTER 3 MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
38. FILTER 3 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
39. FILTER 3 BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
40. FILTER 3 SURFACE WASH VALVE CLOSES AFTER 5 MINUTES.
41. FILTER 3 BACKWASH VALVE CLOSES AFTER 8 MINUTES.
42. FILTER 3 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
43. FILTER 3 MULTIPOINT VALVE ROTATES TO RINSE POSITION.
44. FILTER 3 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
45. FILTER 3 INFLUENT VALVE OPENS.
46. FILTER 3 INFLUENT VALVE CLOSES AFTER 5 MINUTES.
47. FILTER 3 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
48. FILTER 3 MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
49. FILTER 3 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
50. FILTER 3 INFLUENT VALVE OPENS.

NOTES:

1. FILTERS WILL NOT BACKWASH IF A SOFTNER IS REGENERATING.
2. IF FILTER PUMPS ARE OFF AT START OF BACKWASH CYCLE, THEY WILL START AUTOMATICALLY AND RUN UNTIL BACKWASH CYCLE IS COMPLETED. FILTER PUMP/S SWITCH MUST BE IN "AUTO" POSITION.

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SOFTNER OPERATION

1. MANUAL PUSHBUTTON WITH SWITCH IN "H" POSITION OR BADGER METER WITH SWITCH IN "A" POSITION INITIATES REGEN CYCLE
2. BRINE LEVEL MUST BE AT LEVEL SWITCH.
3. INFLUENT VALVE CLOSES.
4. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
5. MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
6. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
7. INFLUENT VALVE OPENS.
8. SOFTNER BACKWASHES FOR 10 MINUTES.
9. INFLUENT VALVE CLOSES.
10. MULTIPOINT RELIEF VALVES OPEN.
11. MULTIPOINT VALVE ROTATES TO BRINE/RINSE POSITION.
12. MULTIPOINT RELIEF VALVES CLOSE.
13. INJECTOR SOLENOID VALVE AND BRINE SOLENOID VALVE OPEN.
14. BRINE IS INJECTED FOR 16.5 MINUTES AND BRINE SOLENOID VALVE CLOSES.
15. INJECTOR SOLENOID VALVE REMAINS OPEN FOR 120 MINUTE RINSE CYCLE THEN CLOSES.
16. MULTIPOINT RELIEF VALVES OPEN.
17. MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
18. MULTIPOINT RELIEF VALVES CLOSE.
19. INFLUENT VALVE OPENS.

NOTES:

1. ONLY ONE (1) SOFTNER WILL REGEN AT A TIME.
2. SOFTNER WILL NOT REGEN IF A FILTER IS IN BACKWASH.
3. IF FILTER PUMPS ARE OFF AT START OF REGEN CYCLE, THEY WILL START AUTOMATICALLY AND RUN UNTIL REGEN CYCLE IS COMPLETED. FILTER PUMP/S SWITCH MUST BE IN "AUTO" POSITION.

AS BUILT CONDITIONS

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DATE

SATISFACTORY TO INSPECTOR:

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DATE

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CWE Inc

CONTRACTOR

81-1454

FILTER/SOFTNER
POWER FAILURE INSTRUCTIONS

- I. IF FILTERS AND SOFTNERS WERE ALL IN SERVICE AT TIME OF POWER FAILURE, NO ACTION IS REQUIRED.
- II. FILTER IN BACKWASH AT TIME OF POWER FAILURE.
- A. TURN ALL FILTER SWITCHES TO "O" POSITION.
 - B. MANUALLY REPOSITION MULTIPOINT VALVE OF FILTER THAT WAS IN BACKWASH TO SERVICE POSITION.
 - C. TURN "OFF" MAIN POWER DISCONNECT SWITCH ON CONTROL PANEL AND TURN BACK "ON" TO RESET CONTROLLER.
 - D. TURN ALL FILTER SWITCHES TO "H" POSITION.
 - E. BACKWASH FILTERS INDIVIDUALLY USING MANUAL START PUSHBUTTONS.
 - F. TURN ALL FILTER SWITCHES TO "A" POSITION.
- III. SOFTNER IN REGEN AT TIME OF POWER FAILURE.
- A. CLOSE RED HANDLED MANUAL EFFLUENT VALVE.
 - B. TURN SOFTNER SWITCH TO "O" POSITION.
 - C. TURN "OFF" FILTER PUMPS.
 - D. MANUALLY REPOSITION MULTIPOINT VALVE TO SERVICE POSITION.
 - E. TURN FILTER PUMP SWITCHES TO "AUTO" POSITION.
 - F. TURN SOFTNER SWITCH TO "H" POSITION.
 - G. REGEN SOFTNER USING MANUAL START PUSHBUTTON.
 - H. OPEN RED HANDLED MANUAL EFFLUENT VALVE AFTER REGEN CYCLE IS COMPLETED.
 - I. TURN SOFTNER SWITCH TO "A" POSITION.

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2

AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

SATISFACTORY TO INSPECTOR:

12/31/86

Ray Hunt

DATE

CWC Inc
CONTRACTOR

81-1454

FILTER OPERATION

I. MANUAL

A. TURN ALL FILTER SWITCHES TO "H" POSITION.

B. FILTER 1

1. PRESS MANUAL START PUSHBUTTON.
2. INFLUENT VALVE CLOSSES.
3. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
4. MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
5. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
6. BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
7. SURFACE WASH VALVE CLOSSES AFTER 5 MINUTES.
8. BACKWASH VALVE CLOSSES AFTER 8 MINUTES.
9. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
10. MULTIPOINT VALVE ROTATES TO RINSE POSITION.
11. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
12. INFLUENT VALVE OPENS.
13. INFLUENT VALVE CLOSSES AFTER 5 MINUTES.
14. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
15. MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
16. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
17. INFLUENT VALVE OPENS.

AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

SATISFACTORY TO INSPECTOR:

12/31/86
DATE

Ray Hunt

Cwe Inc

CONTRACTOR

81-1454

C. FILTER 2

1. PRESS MANUAL START PUSHBUTTON.
2. INFLUENT VALVE CLOSES.
3. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
4. MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
5. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
6. BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
7. SURFACE WASH VALVE CLOSES AFTER 5 MINUTES.
8. BACKWASH VALVE CLOSES AFTER 8 MINUTES.
9. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
10. MULTIPOINT VALVE ROTATES TO RINSE POSITION.
11. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
12. INFLUENT VALVE OPENS.
13. INFLUENT VALVE CLOSES AFTER 5 MINUTES.
14. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
15. MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
16. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
17. INFLUENT VALVE OPENS.

AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

SATISFACTORY TO INSPECTOR:

DATE

Ray Hunter

12/21/86

EWC Inc.

CONTRACTOR

81-1454

D. FILTER 3

1. PRESS MANUAL START PUSHBUTTON.
2. INFLUENT VALVE CLOSES.
3. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
4. MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
5. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
6. BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
7. SURFACE WASH VALVE CLOSES AFTER 5 MINUTES.
8. BACKWASH VALVE CLOSES AFTER 8 MINUTES.
9. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
10. MULTIPOINT VALVE ROTATES TO RINSE POSITION.
11. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
12. INFLUENT VALVE OPENS.
13. INFLUENT VALVE CLOSES AFTER 5 MINUTES.
14. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
15. MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
16. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
17. INFLUENT VALVE OPENS.

AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

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DATE

Ray Hunter

CWC Inc.

CONTRACTOR

81-1454

II. AUTOMATIC

1. TURN ALL FILTER SWITCHES TO "A" POSITION.
2. DIFFERENTIAL PRESSURE CLOSSES.
3. FILTER 1 INFLUENT VALVE CLOSSES.
4. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
5. FILTER 1 MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
6. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
7. FILTER 1 BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
8. FILTER 1 SURFACE WASH VALVE CLOSSES AFTER 5 MINUTES.
9. FILTER 1 BACKWASH VALVE CLOSSES AFTER 8 MINUTES.
10. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
11. FILTER 1 MULTIPOINT VALVE ROTATES TO RINSE POSITION.
12. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
13. FILTER 1 INFLUENT VALVE OPENS.
14. FILTER 1 INFLUENT VALVE CLOSSES AFTER 5 MINUTES.
15. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
16. FILTER 1 MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
17. FILTER 1 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
18. FILTER 1 INFLUENT VALVE OPENS.
19. FILTER 2 INFLUENT VALVE CLOSSES.
20. FILTER 2 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
21. FILTER 2 MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
22. FILTER 2 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
23. FILTER 2 BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
24. FILTER 2 SURFACE WASH VALVE CLOSSES AFTER 5 MINUTES.
25. FILTER 2 BACKWASH VALVE CLOSSES AFTER 8 MINUTES.
26. FILTER 2 MULTIPOINT RELIEF SOLENOID VALVES OPEN.
27. FILTER 2 MULTIPOINT VALVE ROTATES TO RINSE POSITION.
28. FILTER 2 MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
29. FILTER 2 INFLUENT VALVE OPENS.
30. FILTER 2 INFLUENT VALVE CLOSSES AFTER 5 MINUTES.

AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

SATISFACTORY TO INSPECTOR:

12/31/86
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81-1454

31. FILTER 2 MULTIPORT RELIEF SOLENOID VALVES OPEN.
32. FILTER 2 MULTIPORT VALVE ROTATES TO SERVICE POSITION.
33. FILTER 2 MULTIPORT RELIEF SOLENOID VALVES CLOSE.
34. FILTER 2 INFLUENT VALVE OPENS.
35. FILTER 3 INFLUENT VALVE CLOSES.
36. FILTER 3 MULTIPORT RELIEF SOLENOID VALVES OPEN.
37. FILTER 3 MULTIPORT VALVE ROTATES TO BACKWASH POSITION.
38. FILTER 3 MULTIPORT RELIEF SOLENOID VALVES CLOSE.
39. FILTER 3 BACKWASH VALVE AND SURFACE WASH VALVE OPEN.
40. FILTER 3 SURFACE WASH VALVE CLOSES AFTER 5 MINUTES.
41. FILTER 3 BACKWASH VALVE CLOSES AFTER 8 MINUTES.
42. FILTER 3 MULTIPORT RELIEF SOLENOID VALVES OPEN.
43. FILTER 3 MULTIPORT VALVE ROTATES TO RINSE POSITION.
44. FILTER 3 MULTIPORT RELIEF SOLENOID VALVES CLOSE.
45. FILTER 3 INFLUENT VALVE OPENS.
46. FILTER 3 INFLUENT VALVE CLOSES AFTER 5 MINUTES.
47. FILTER 3 MULTIPORT RELIEF SOLENOID VALVES OPEN.
48. FILTER 3 MULTIPORT VALVE ROTATES TO SERVICE POSITION.
49. FILTER 3 MULTIPORT RELIEF SOLENOID VALVES CLOSE.
50. FILTER 3 INFLUENT VALVE OPENS.

NOTES:

1. FILTERS WILL NOT BACKWASH IF A SOFTNER IS REGENERATING.
2. IF FILTER PUMPS ARE OFF AT START OF BACKWASH CYCLE, THEY WILL START AUTOMATICALLY AND RUN UNTIL BACKWASH CYCLE IS COMPLETED. FILTER PUMP/S SWITCH MUST BE IN "AUTO" POSITION.

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AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

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SATISFACTORY TO INSPECTOR:

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Ray Thomas

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81-1454

SOFTNER OPERATION

1. MANUAL PUSHBUTTON WITH SWITCH IN "H" POSITION OR BADGER METER WITH SWITCH IN "A" POSITION INITIATES REGEN CYCLE
2. BRINE LEVEL MUST BE AT LEVEL SWITCH.
3. INFLUENT VALVE CLOSES.
4. MULTIPOINT RELIEF SOLENOID VALVES OPEN.
5. MULTIPOINT VALVE ROTATES TO BACKWASH POSITION.
6. MULTIPOINT RELIEF SOLENOID VALVES CLOSE.
7. INFLUENT VALVE OPENS.
8. SOFTNER BACKWASHES FOR 10 MINUTES.
9. INFLUENT VALVE CLOSES.
10. MULTIPOINT RELIEF VALVES OPEN.
11. MULTIPOINT VALVE ROTATES TO BRINE/RINSE POSITION.
12. MULTIPOINT RELIEF VALVES CLOSE.
13. INJECTOR SOLENOID VALVE AND BRINE SOLENOID VALVE OPEN.
14. BRINE IS INJECTED FOR 16.5 MINUTES AND BRINE SOLENOID VALVE CLOSES.
15. INJECTOR SOLENOID VALVE REMAINS OPEN FOR 120 MINUTE RINSE CYCLE THEN CLOSES.
16. MULTIPOINT RELIEF VALVES OPEN.
17. MULTIPOINT VALVE ROTATES TO SERVICE POSITION.
18. MULTIPOINT RELIEF VALVES CLOSE.
19. INFLUENT VALVE OPENS.

NOTES:

1. ONLY ONE (1) SOFTNER WILL REGEN AT A TIME.
2. SOFTNER WILL NOT REGEN IF A FILTER IS IN BACKWASH.
3. IF FILTER PUMPS ARE OFF AT START OF REGEN CYCLE, THEY WILL START AUTOMATICALLY AND RUN UNTIL REGEN CYCLE IS COMPLETED. FILTER PUMP/S SWITCH MUST BE IN "AUTO" POSITION.

AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

SATISFACTORY TO INSPECTOR:

12/31/86
DATE

Ray Hunt

CWC Inc

CONTRACTOR

81-1454

FILTER/SOFTNER
POWER FAILURE INSTRUCTIONS

- I. IF FILTERS AND SOFTNERS WERE ALL IN SERVICE AT TIME OF POWER FAILURE, NO ACTION IS REQUIRED.

- II. FILTER IN BACKWASH AT TIME OF POWER FAILURE.
 - A. TURN ALL FILTER SWITCHES TO "O" POSITION.
 - B. MANUALLY REPOSITION MULTIPOINT VALVE OF FILTER THAT WAS IN BACKWASH TO SERVICE POSITION.
 - C. TURN "OFF" MAIN POWER DISCONNECT SWITCH ON CONTROL PANEL AND TURN BACK "ON" TO RESET CONTROLLER.
 - D. TURN ALL FILTER SWITCHES TO "H" POSITION.
 - E. BACKWASH FILTERS INDIVIDUALLY USING MANUAL START PUSHBUTTONS.
 - F. TURN ALL FILTER SWITCHES TO "A" POSITION.

- III. SOFTNER IN REGEN AT TIME OF POWER FAILURE.
 - A. CLOSE RED HANDLED MANUAL EFFLUENT VALVE.
 - B. TURN SOFTNER SWITCH TO "O" POSITION.
 - C. TURN "OFF" FILTER PUMPS.
 - D. MANUALLY REPOSITION MULTIPOINT VALVE TO SERVICE POSITION.
 - E. TURN FILTER PUMP SWITCHES TO "AUTO" POSITION.
 - F. TURN SOFTNER SWITCH TO "H" POSITION.
 - G. REGEN SOFTNER USING MANUAL START PUSHBUTTON.
 - H. OPEN RED HANDLED MANUAL EFFLUENT VALVE AFTER REGEN CYCLE IS COMPLETED.
 - I. TURN SOFTNER SWITCH TO "A" POSITION.

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AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

SATISFACTORY TO INSPECTOR:

12/31/86

DATE

Ray Hunt

CWC Inc

CONTRACTOR

81-1454

CONTROL PANEL SPARE PARTS FOR CAMP LEJEUNE RR-85

QTY.

25 SCBA LAMP #A-948-99
1 IDEC RELAY #RH2B-U-120AC
1 IDEC RELAY #RR3B-U-120AC
1 GE INPUT MODULE #IC610MDL125A
1 GE OUTPUT MODULE #IC610MDL180A
1 GE CPU #IC610CPU101C WITH 2K IC
1 GE RACK WITH POWER SUPPLY #IC610CHS120A
1 ARTISAN TIME CAPSULE #438USA
1 CORCOMEMI FILTER #6A,115/250V,50/BOH2 (6W1?)
5 BUSS FUSE #FNM10
5 GE FUSE #E-03B/S1

FILTER AND SOFTENER SPARE PARTS FOR CAMP LEJEUNE RR-85

1 TELEMECANIQUE XCN-L W/ZCK-L1 MICRO SW (SELECTOR VALVE)
2 1½" ASCD MAGNETIC VALVE CAT #8210B56 120 VOLT (BRINE)
1 1" ASCO MAGNETIC VALVE CAT #821004 (DRAIN)
1 COIL ONLY 120 VOLT FOR ASCO CAT #8344A72 (SELECTOR VALVE)

AS BUILT CONDITIONS
DATE
CONTRACT NO.
14517

AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

SATISFACTORY TO INSPECTOR:

DATE

Ray Harris

12/31/86

CWC Inc

CONTRACTOR

81-1454

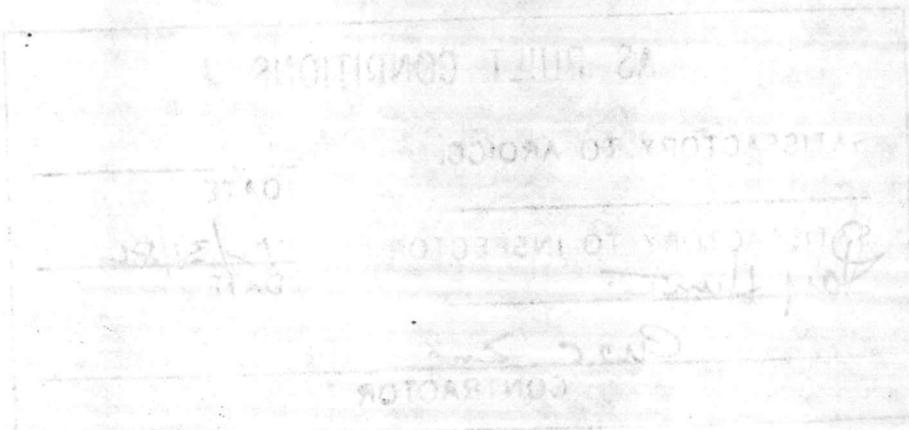
CONTROL PANEL SPARE PARTS FOR CAMP LEJEUNE RR-85

QTY.

25 SCBA LAMP #A-948-99
1 IDEC RELAY #RH2B-U-120AC
1 IDEC RELAY #RR3B-U-120AC
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1 COIL ONLY 120 VOLT FOR ASCO CAT #8344A72 (SELECTOR VALVE)



AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

SATISFACTORY TO INSPECTOR:

12/31/86

Paul Hunter

DATE

CWC Inc

CONTRACTOR

81-1454

REFINITE WATER CONDITIONING Co.
ROCK HILL, SC 29730

PROJECT No. RF 910
CAMP LEJEUNE, NC

G.E. SERIES 1
PROGRAMMABLE CONTROLLER
LOGIC

AS BUILT CONDITIONS

SATISFACTORY TO AROICC:

DATE

SATISFACTORY TO INSPECTOR:

DATE

Ray Hunt

12/31/86

CWC Inc.

CONTRACTOR

81-1454

ELECTRICAL SYSTEMS
P. O. BOX 10427
ROCK HILL, S. C. 29730

JOB No. 86-004
18 FEB 86

REVISED AS BUILT 23 DEC 86

AS-BUILT CONDITIONS

SATISFACTORY TO ARCHITECT

DATE

12/31/82

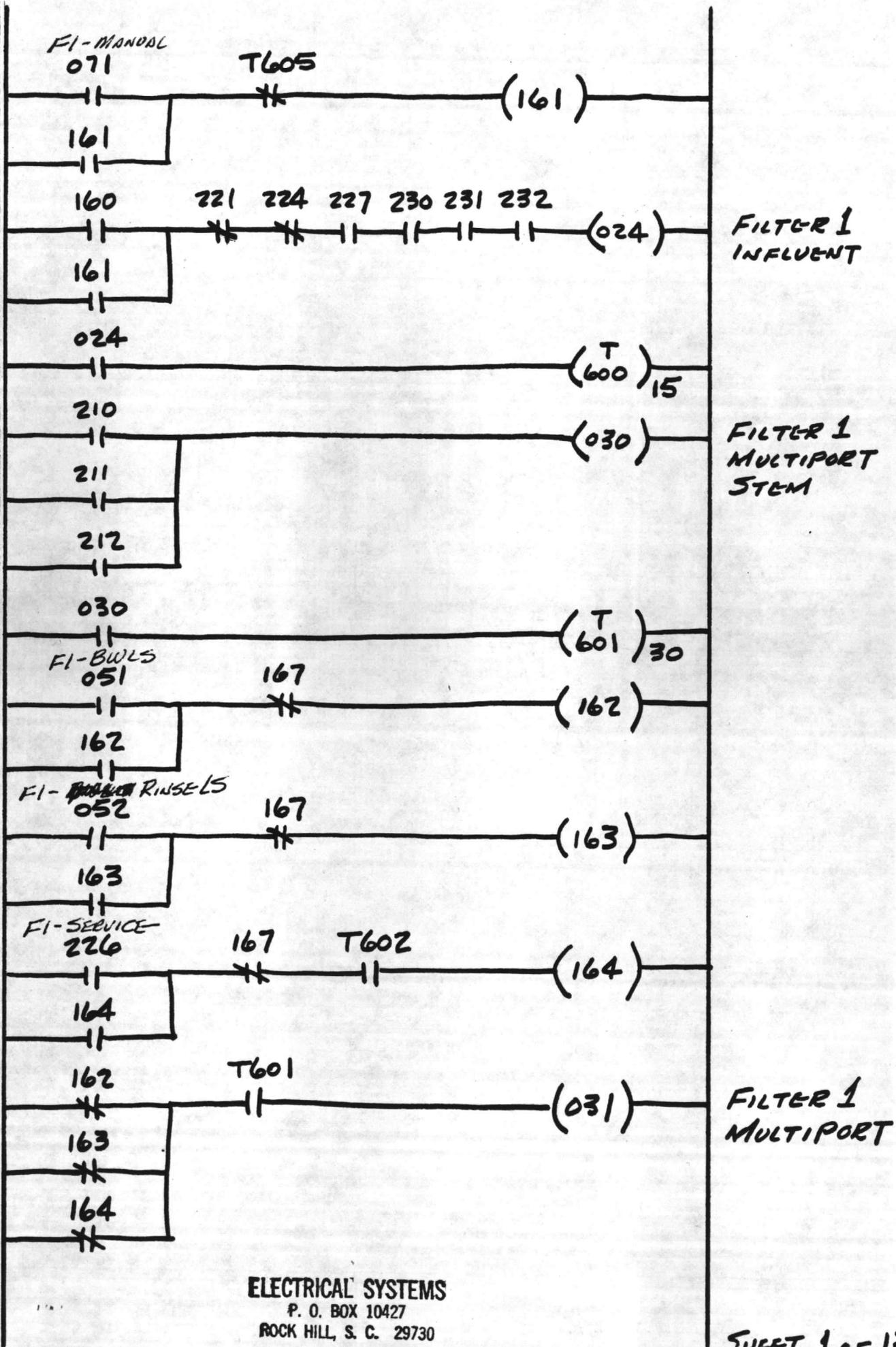
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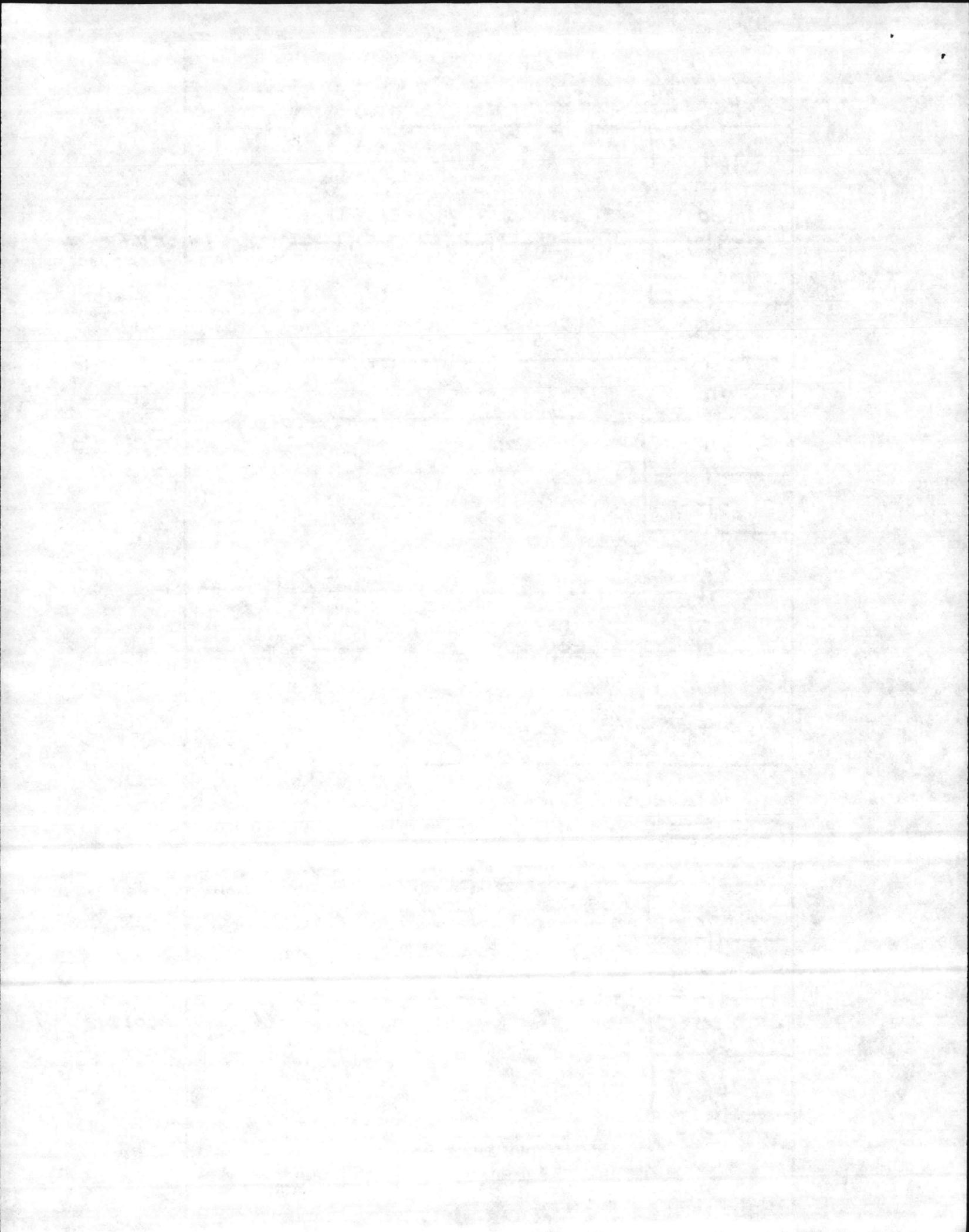
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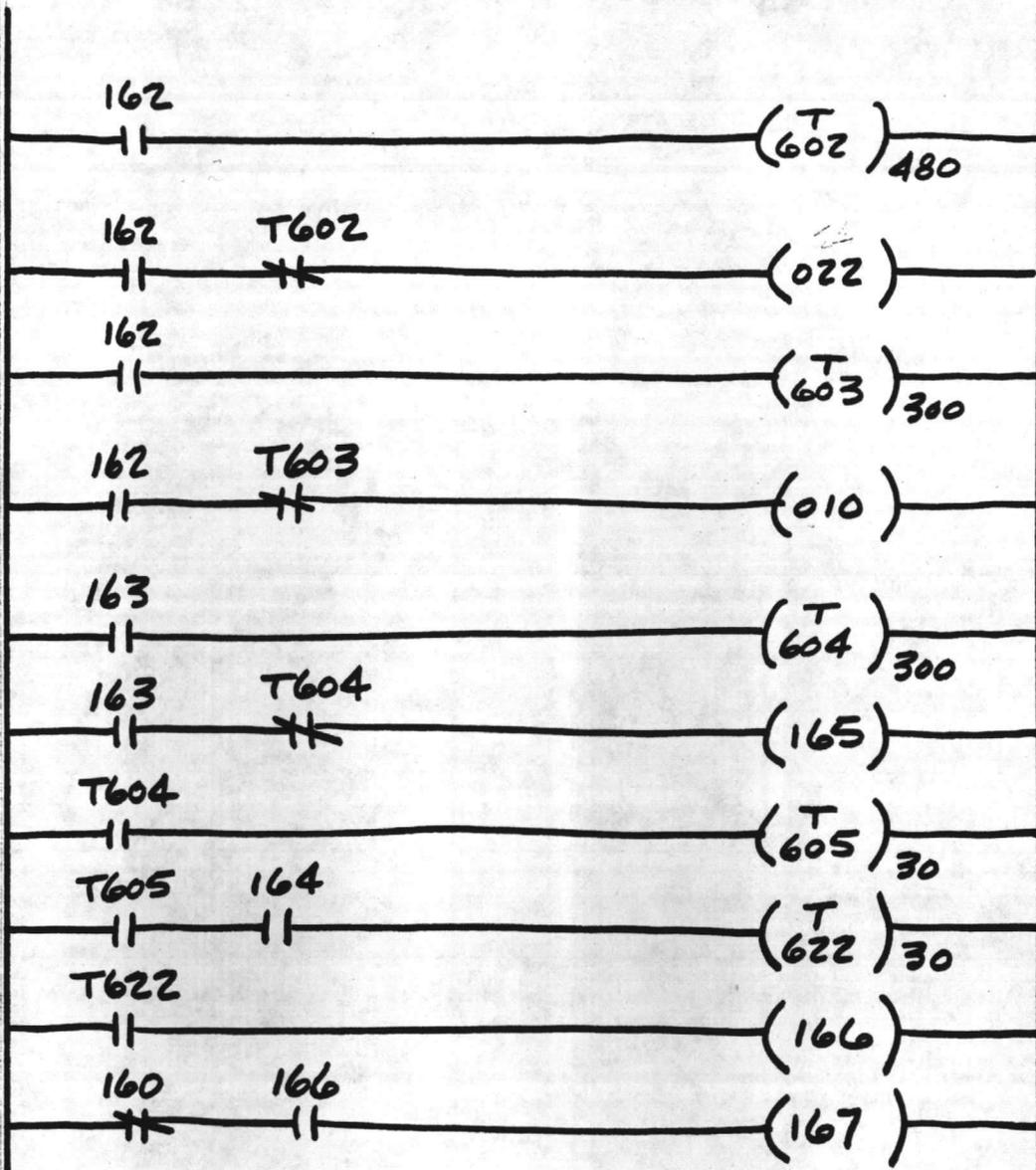
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CONTRACTOR

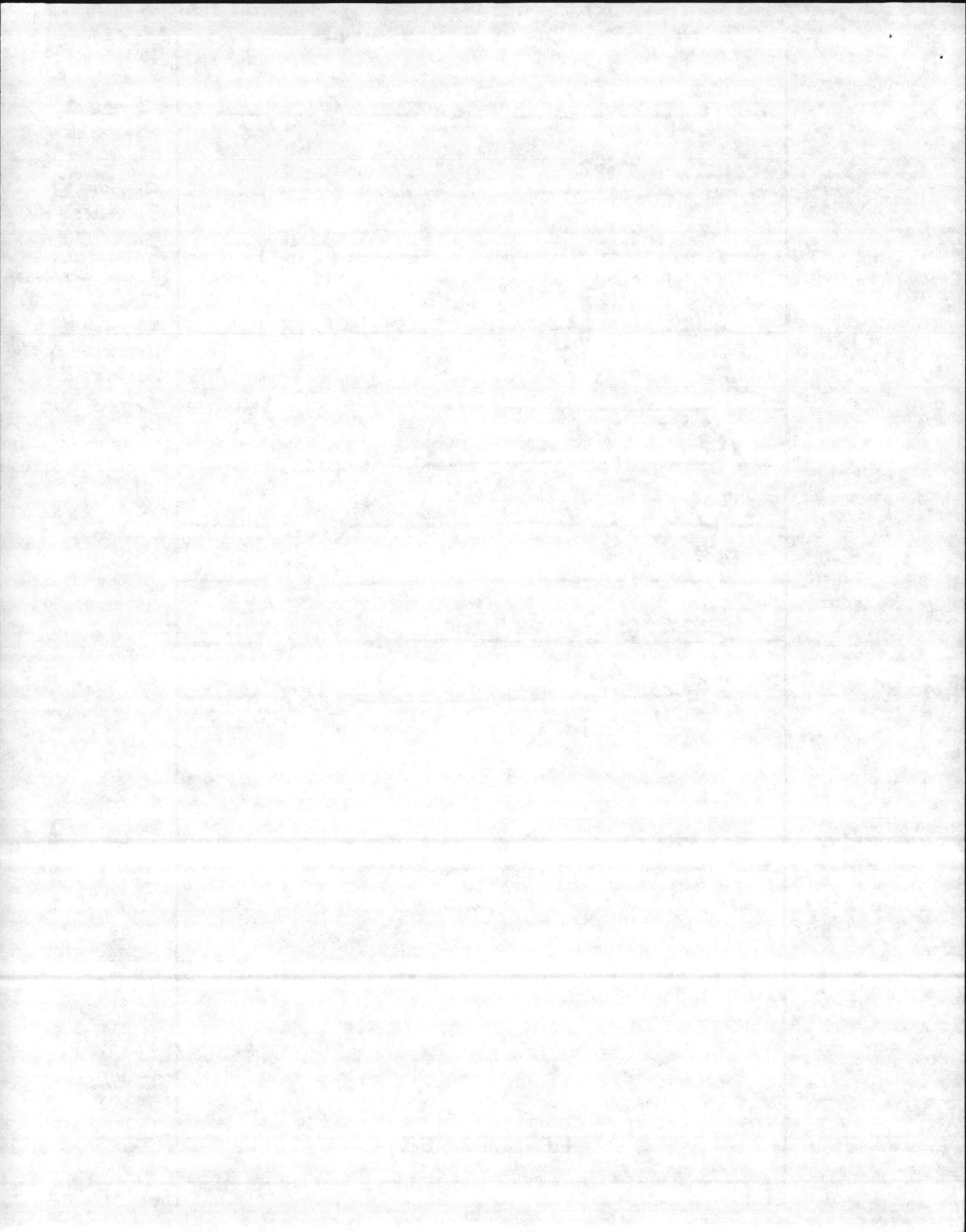
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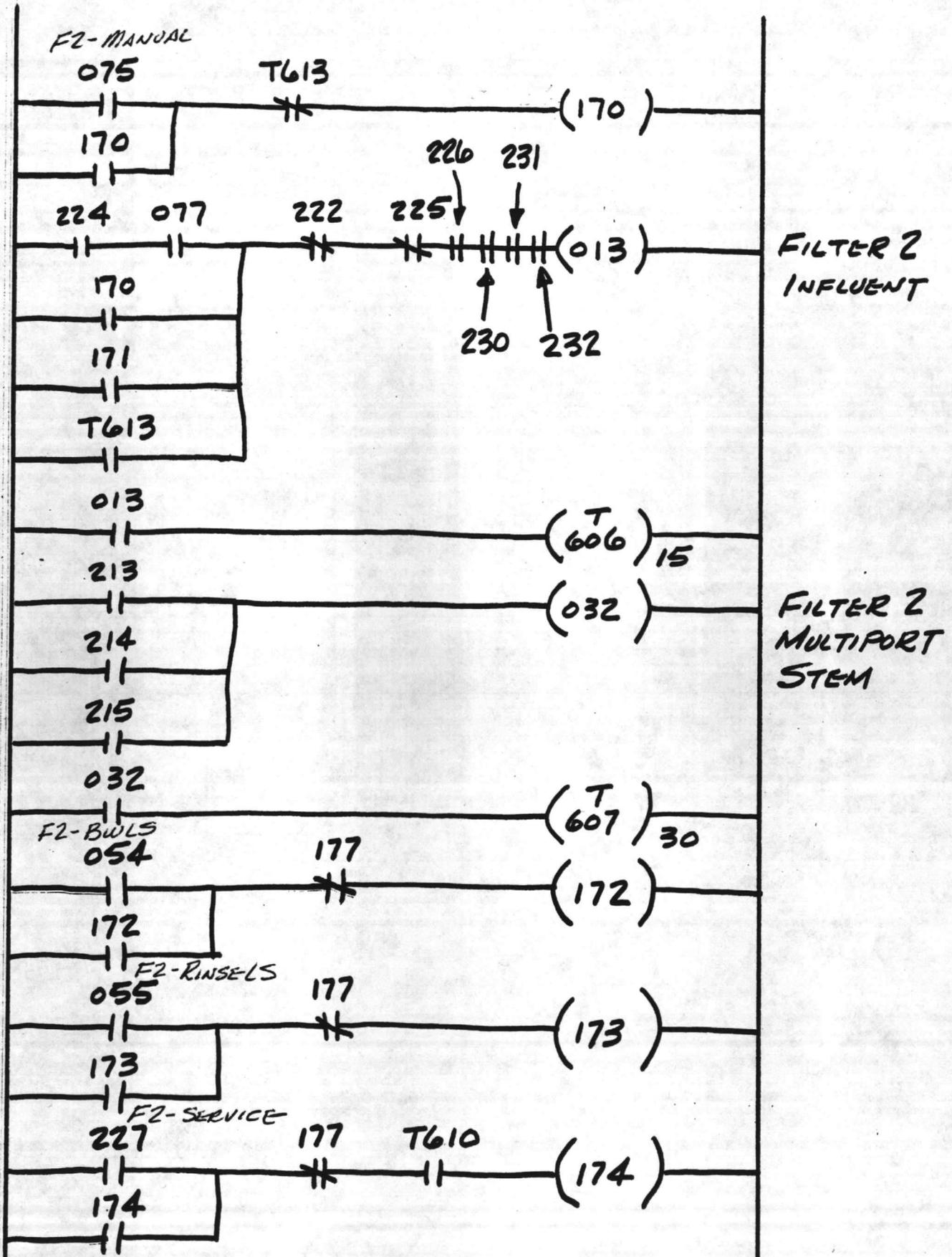




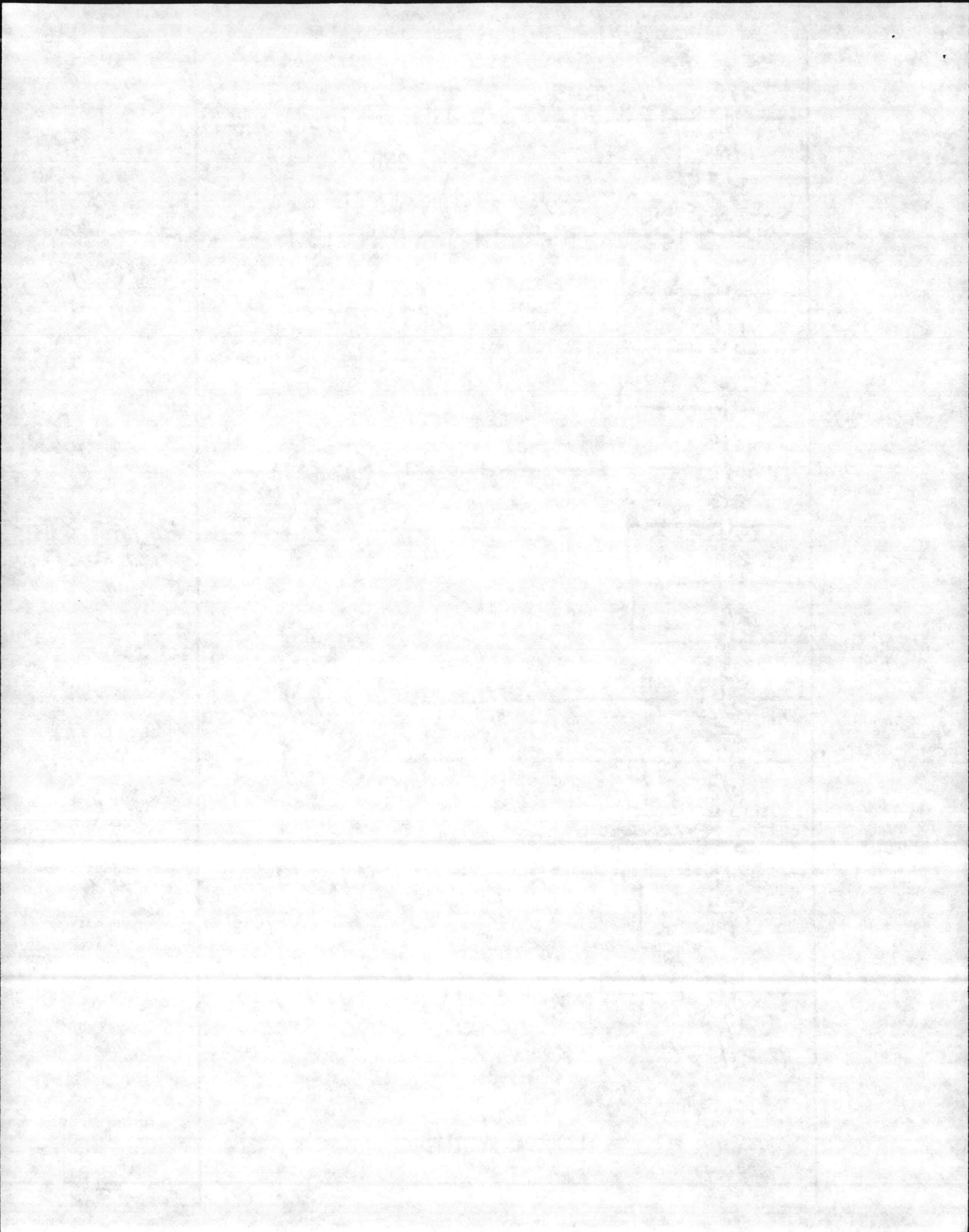


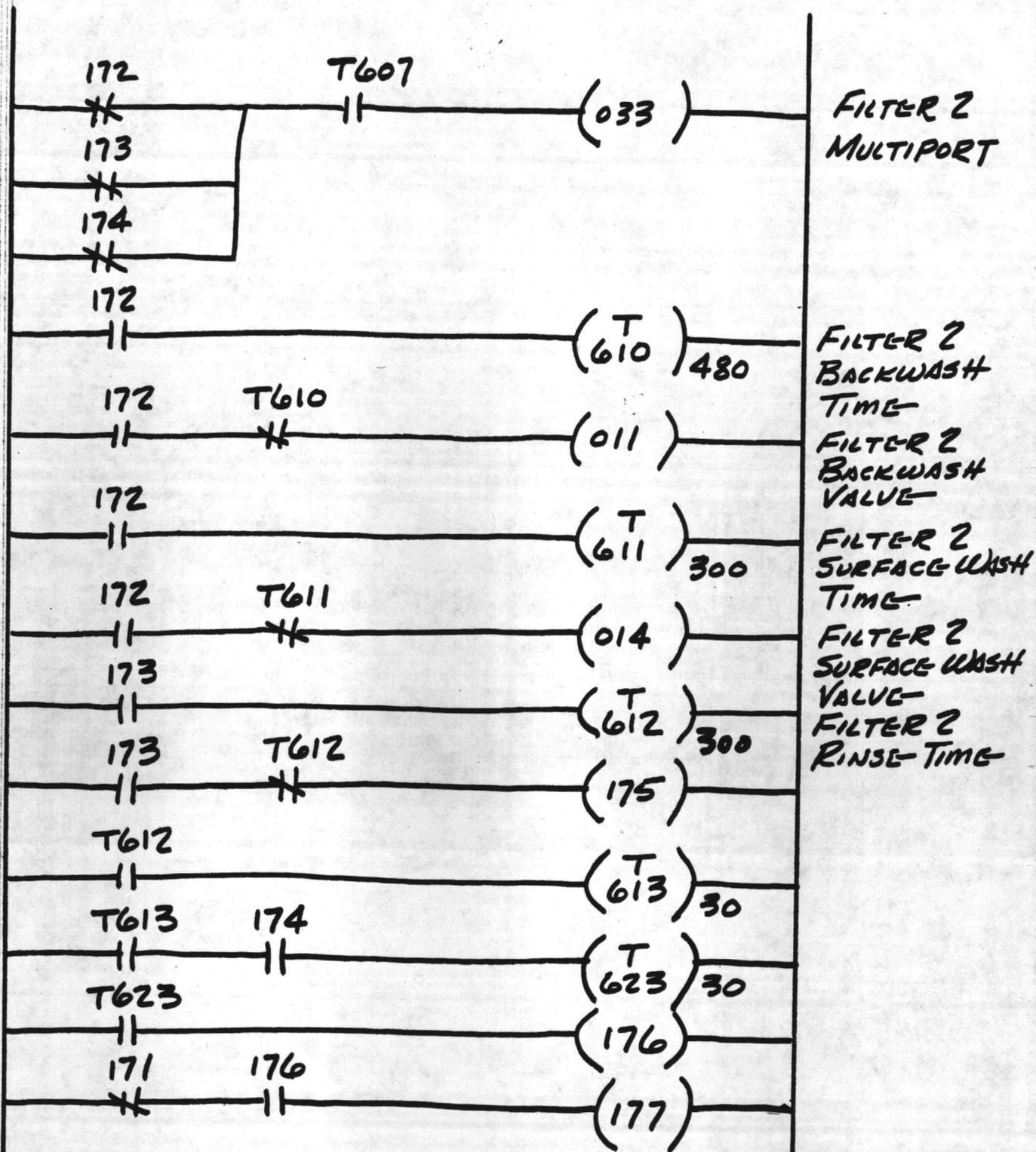
FILTER 1
 BACKWASH
 TIME
 FILTER 1
 BACKWASH VALVE
 FILTER 1
 SURFACE WASH
 TIME
 FILTER 1
 SURFACE WASH
 VALVE
 FILTER 1
 RINSE TIME

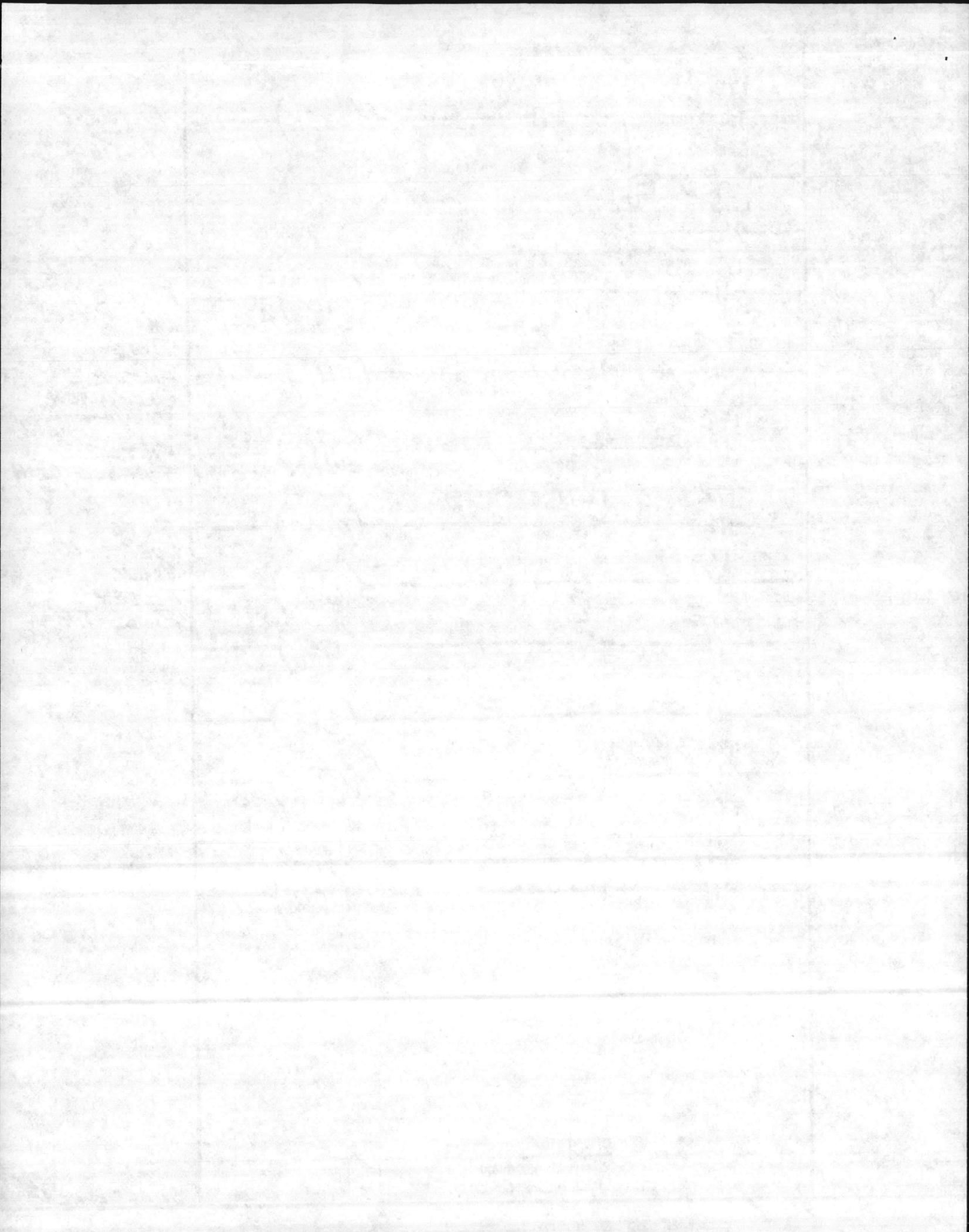


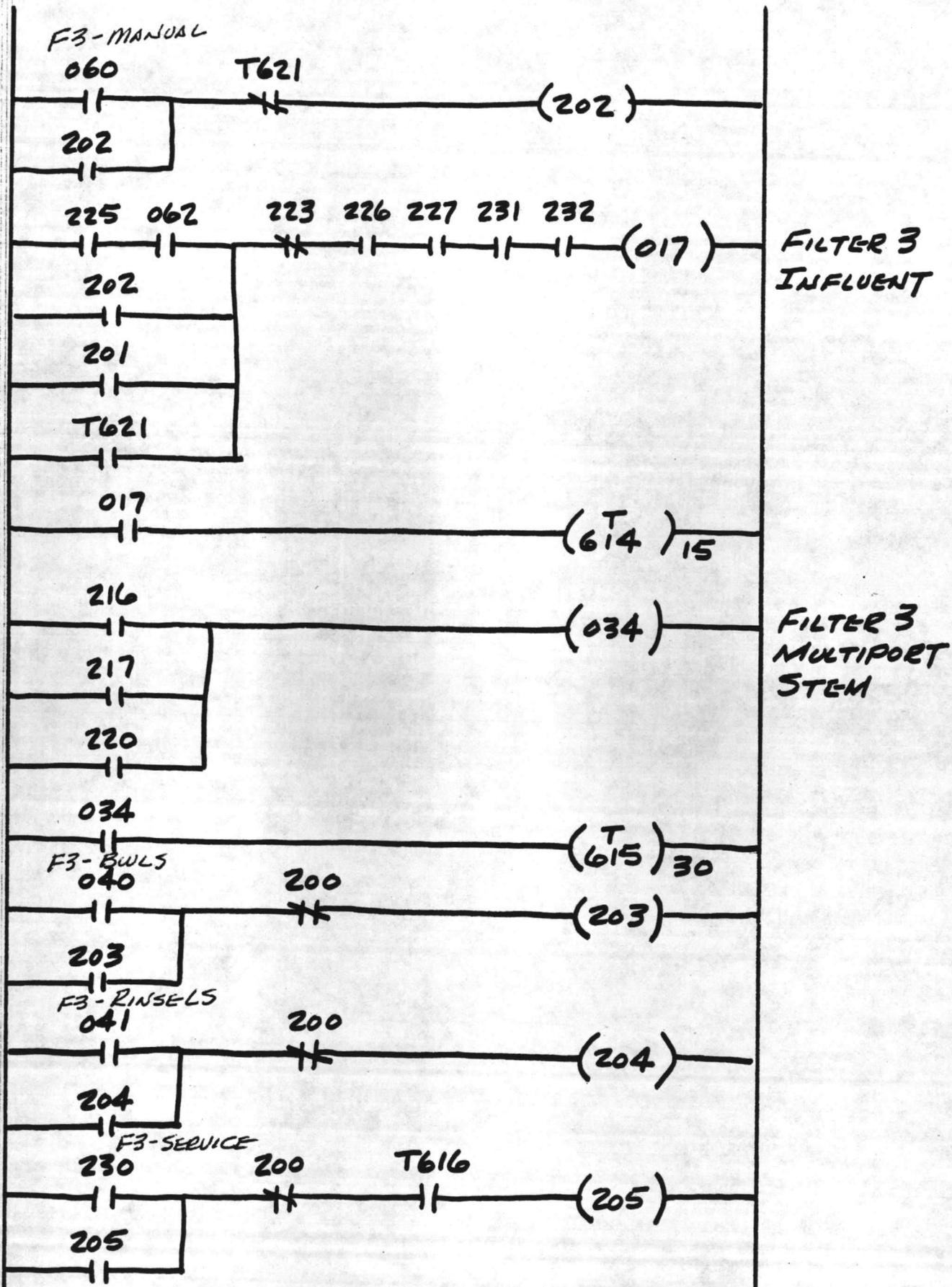


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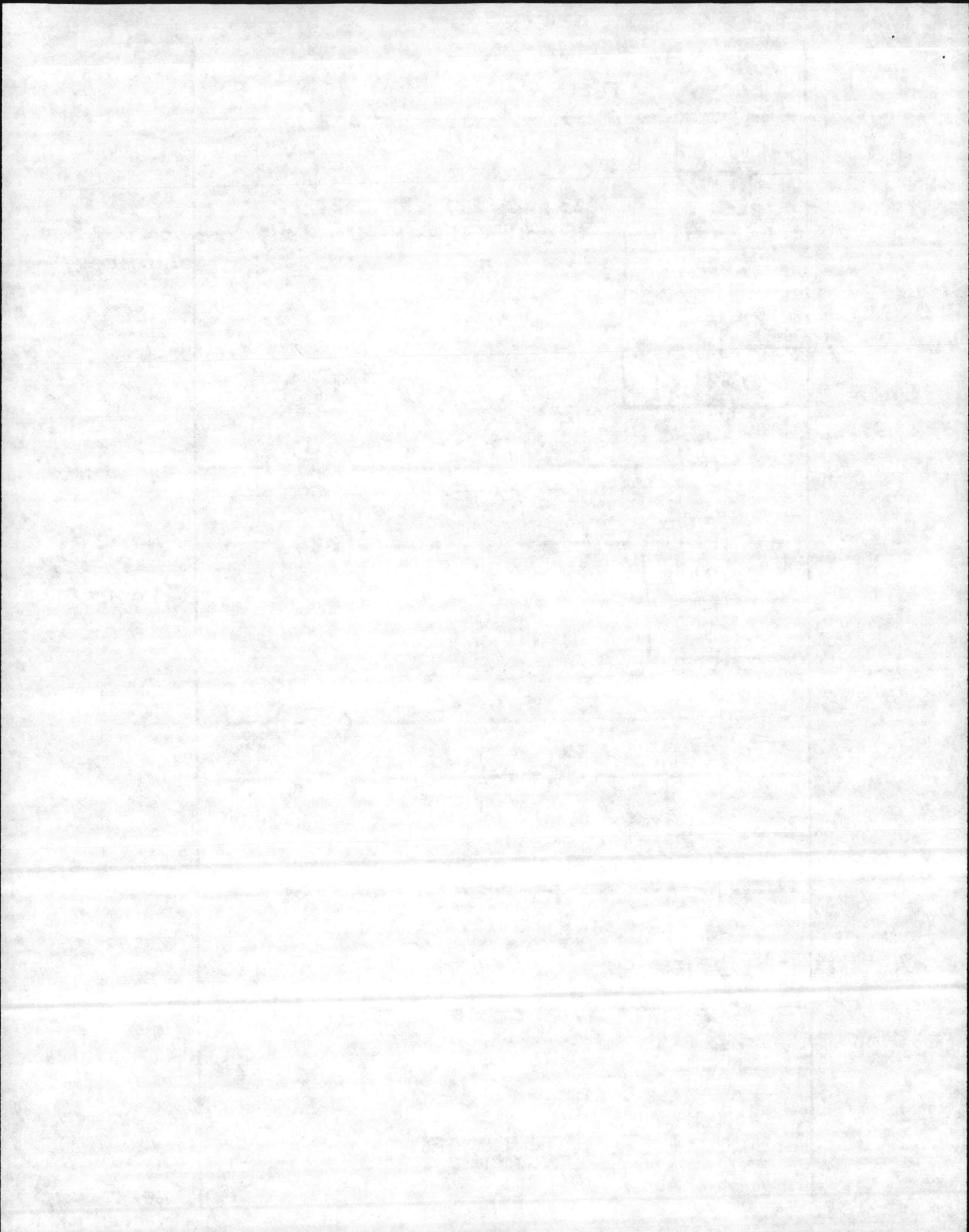


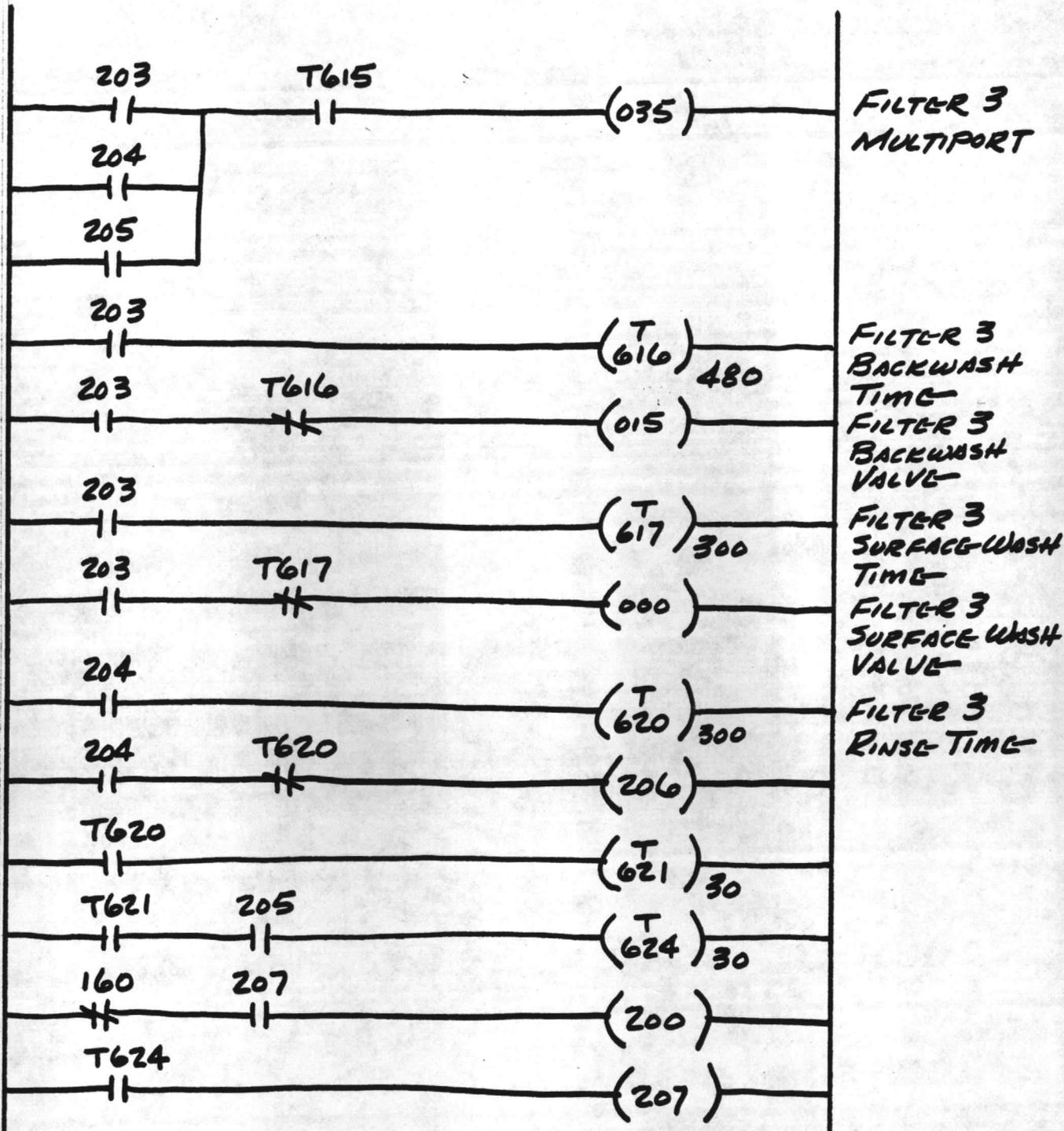


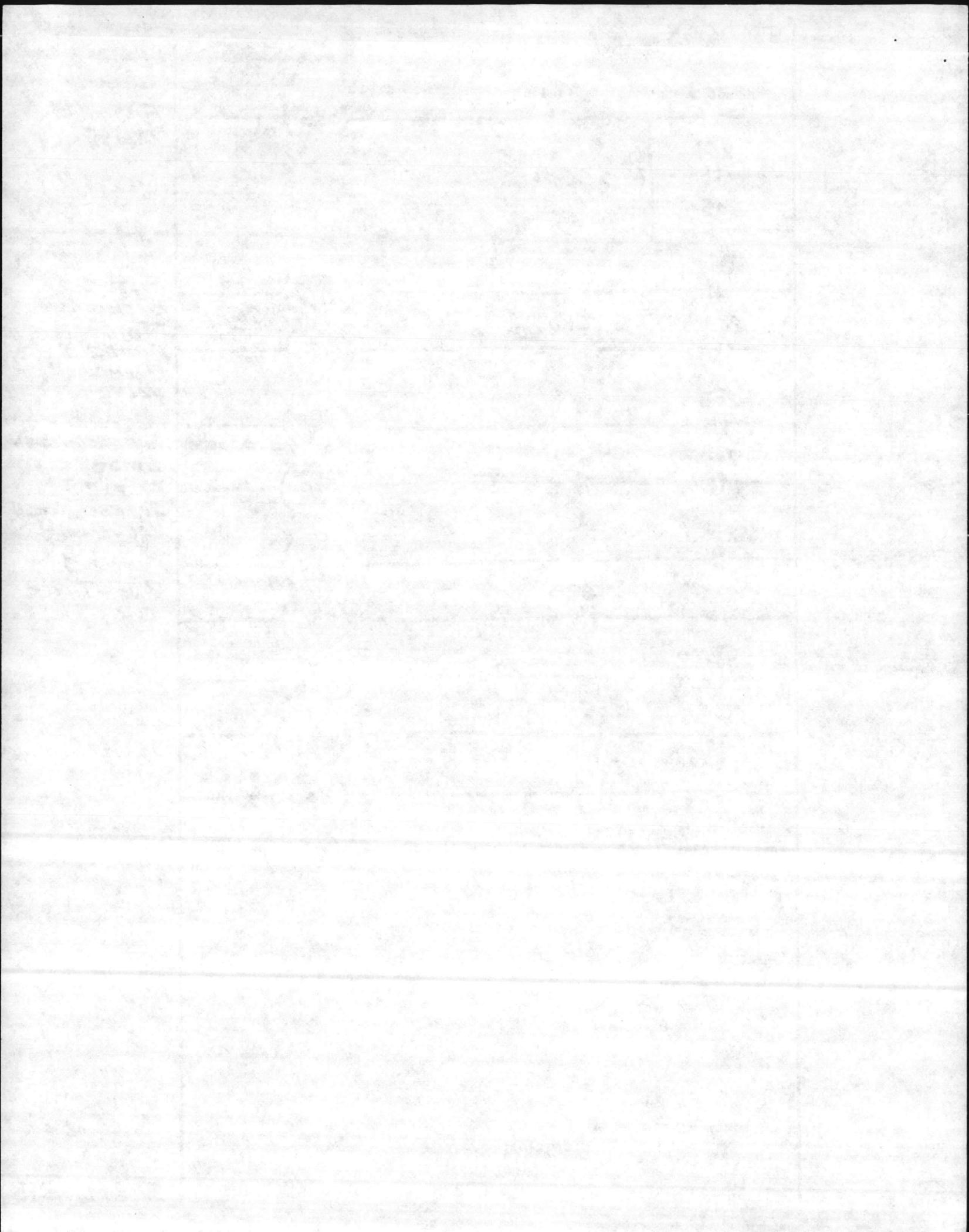


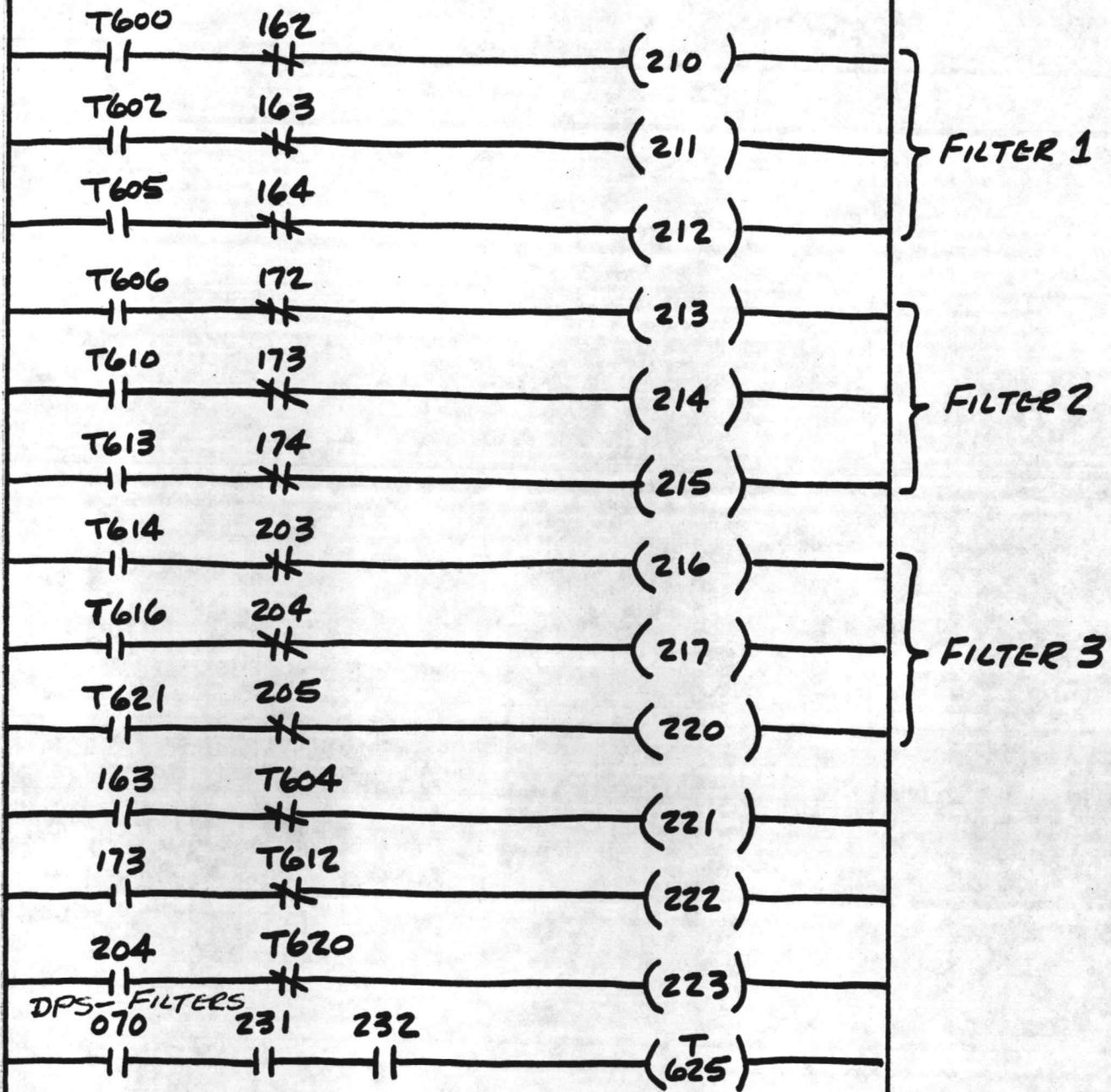


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 P. O. BOX 10427
 ROCK HILL, S. C. 29720

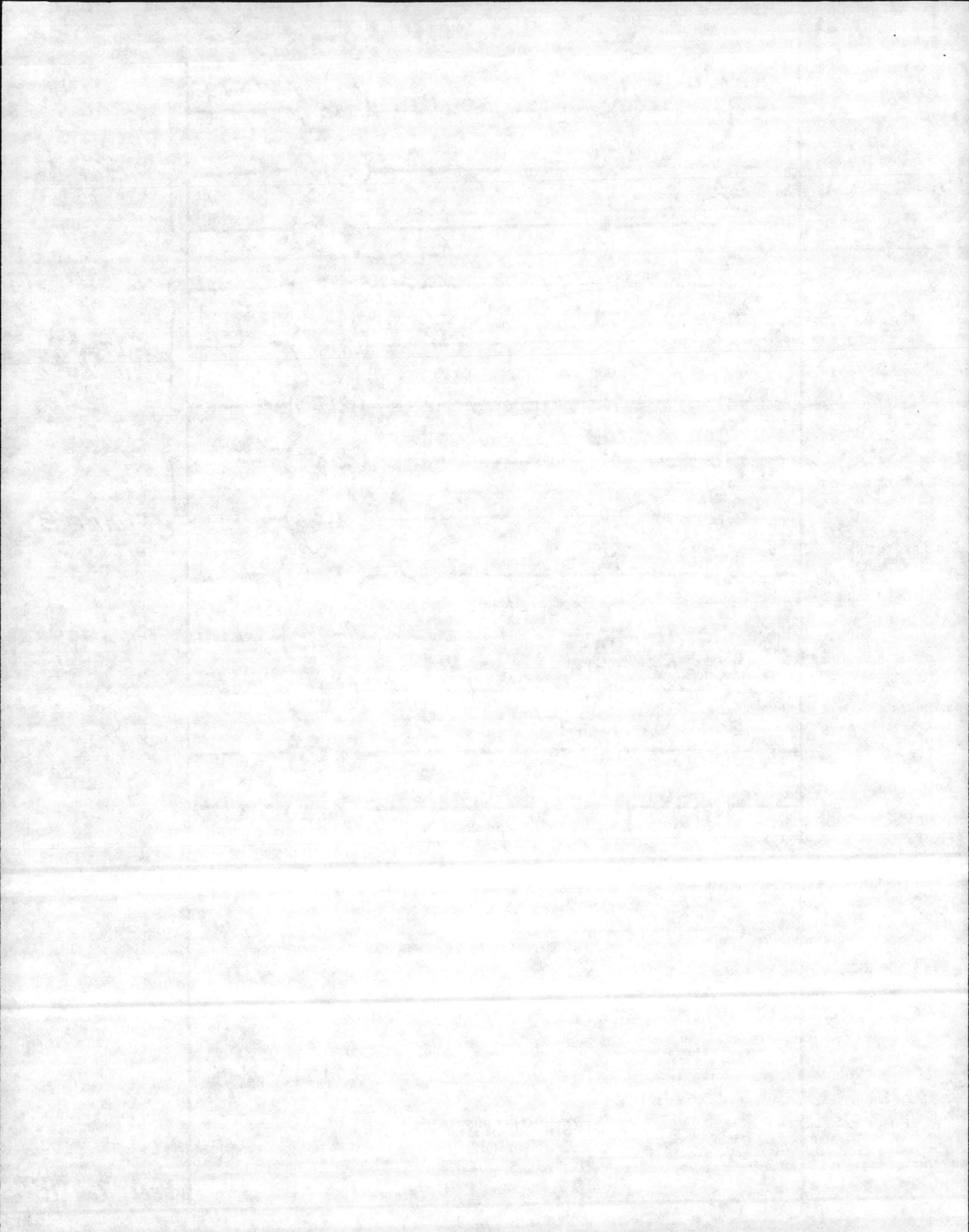


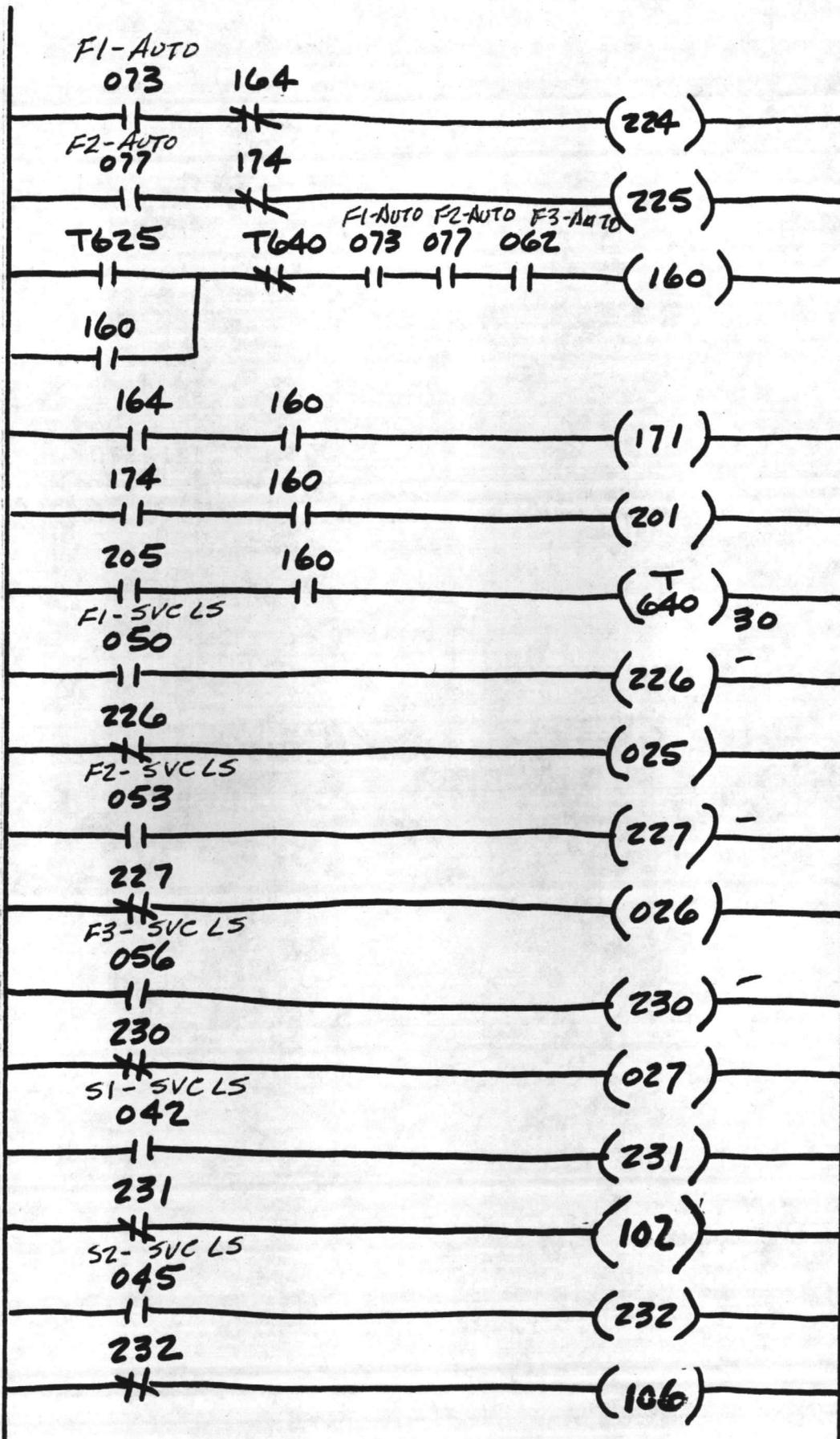






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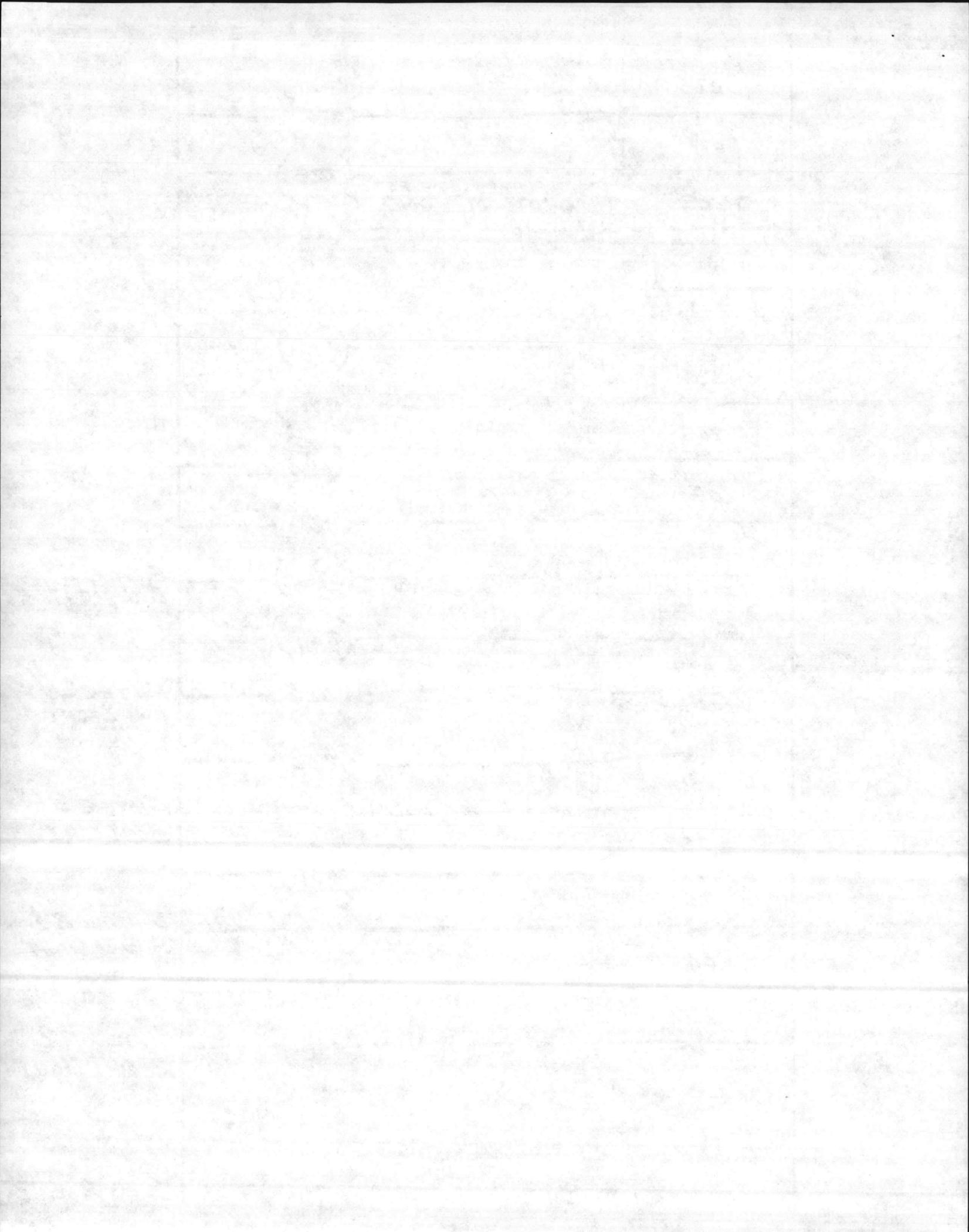
FILTER 1
BW LIGHT

FILTER 2
BW LIGHT

FILTER 3
BW LIGHT

SOFTENER 1
REGEN LIGHT

SOFTENER 2
REGEN LIGHT



F1-OFF
072

||
F2-OFF
076

||
F3-OFF
061

||

(233)

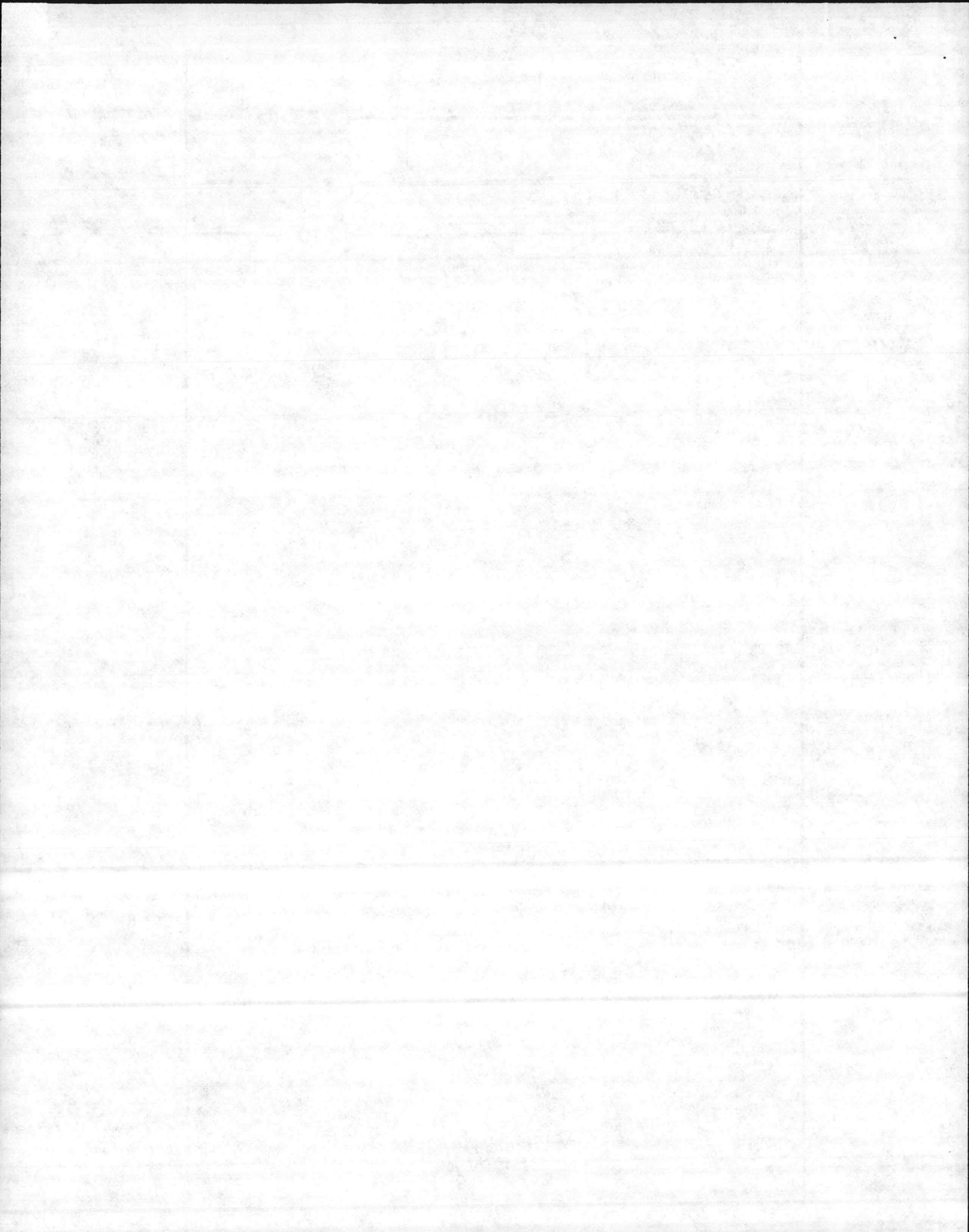
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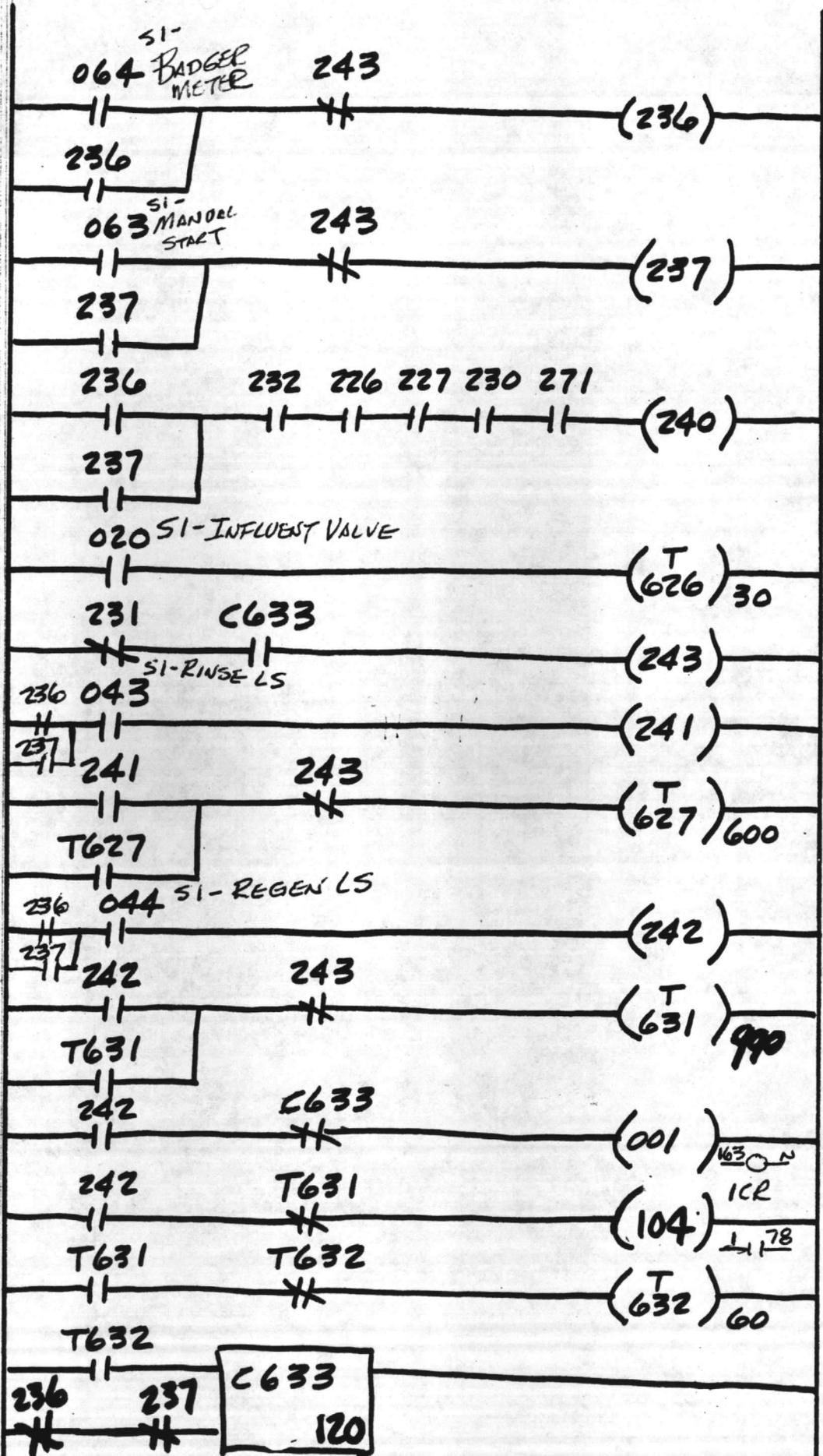
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FILTER 1
OFF

FILTER 2
OFF

FILTER 3
OFF





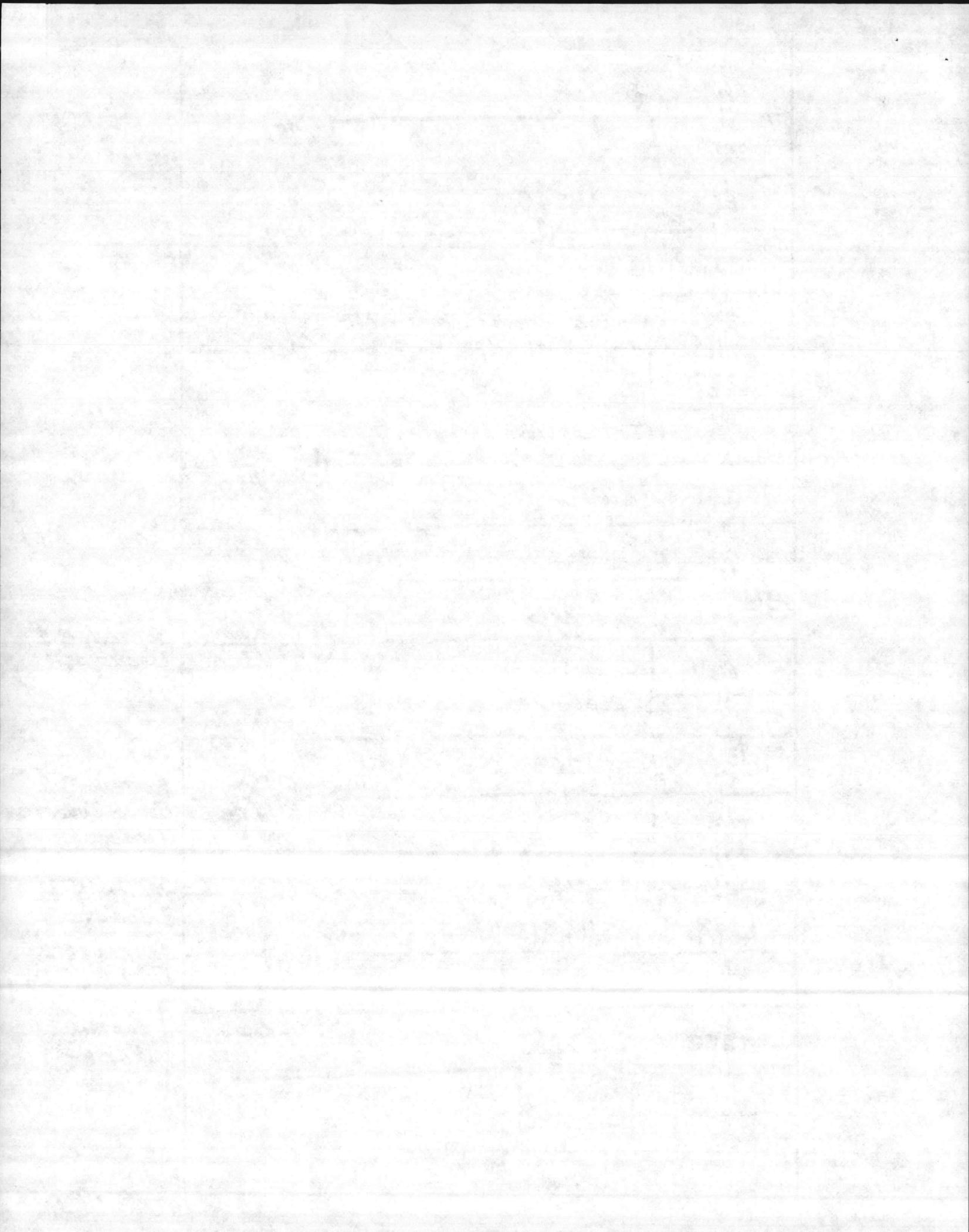
SOFTENER 1
BACKWASH
TIME

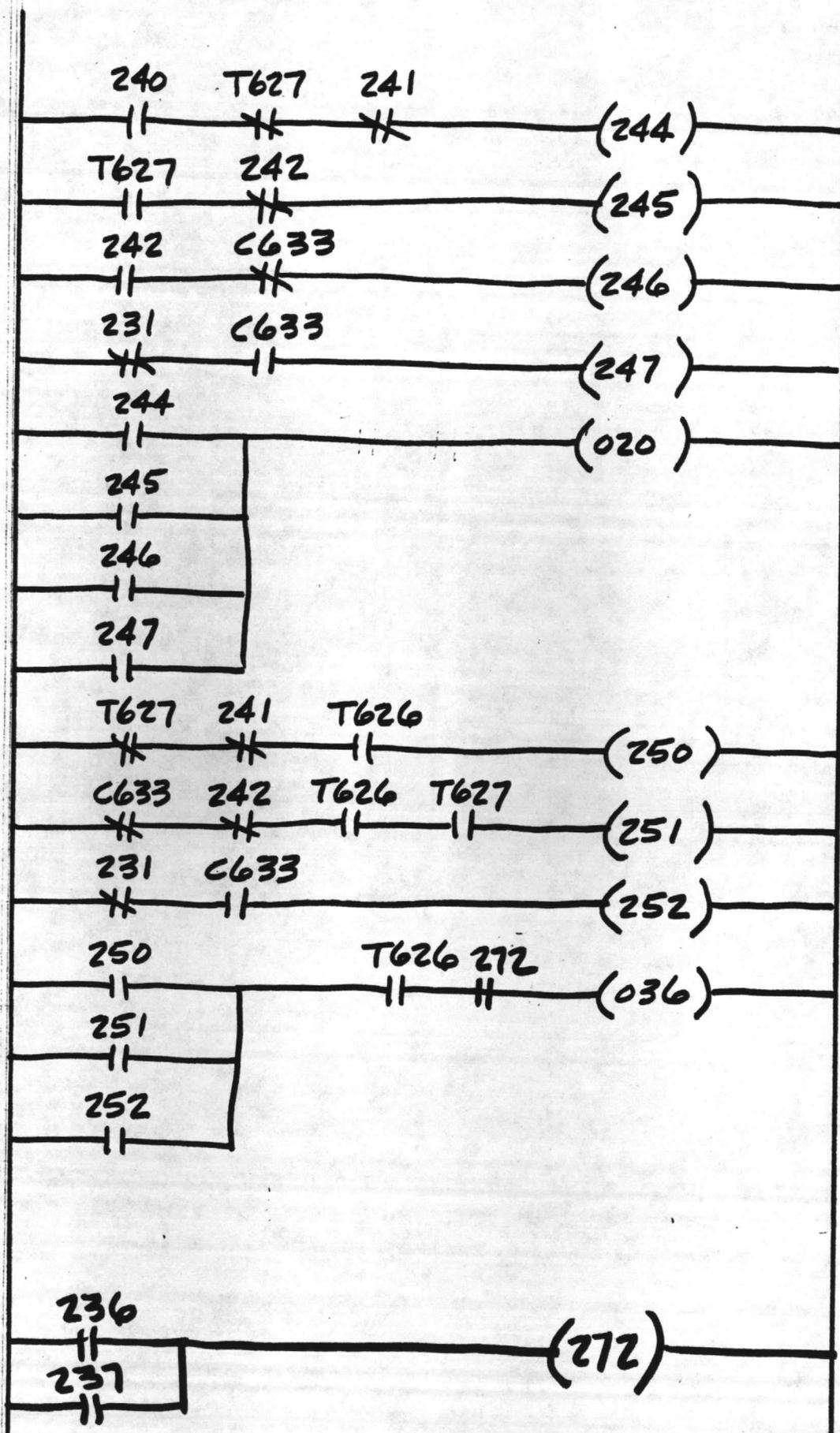
SOFTENER 1
BRINE INJECTION
TIME

SOFTENER 1
INJECTOR

SOFTENER 1
BRINE VALVE

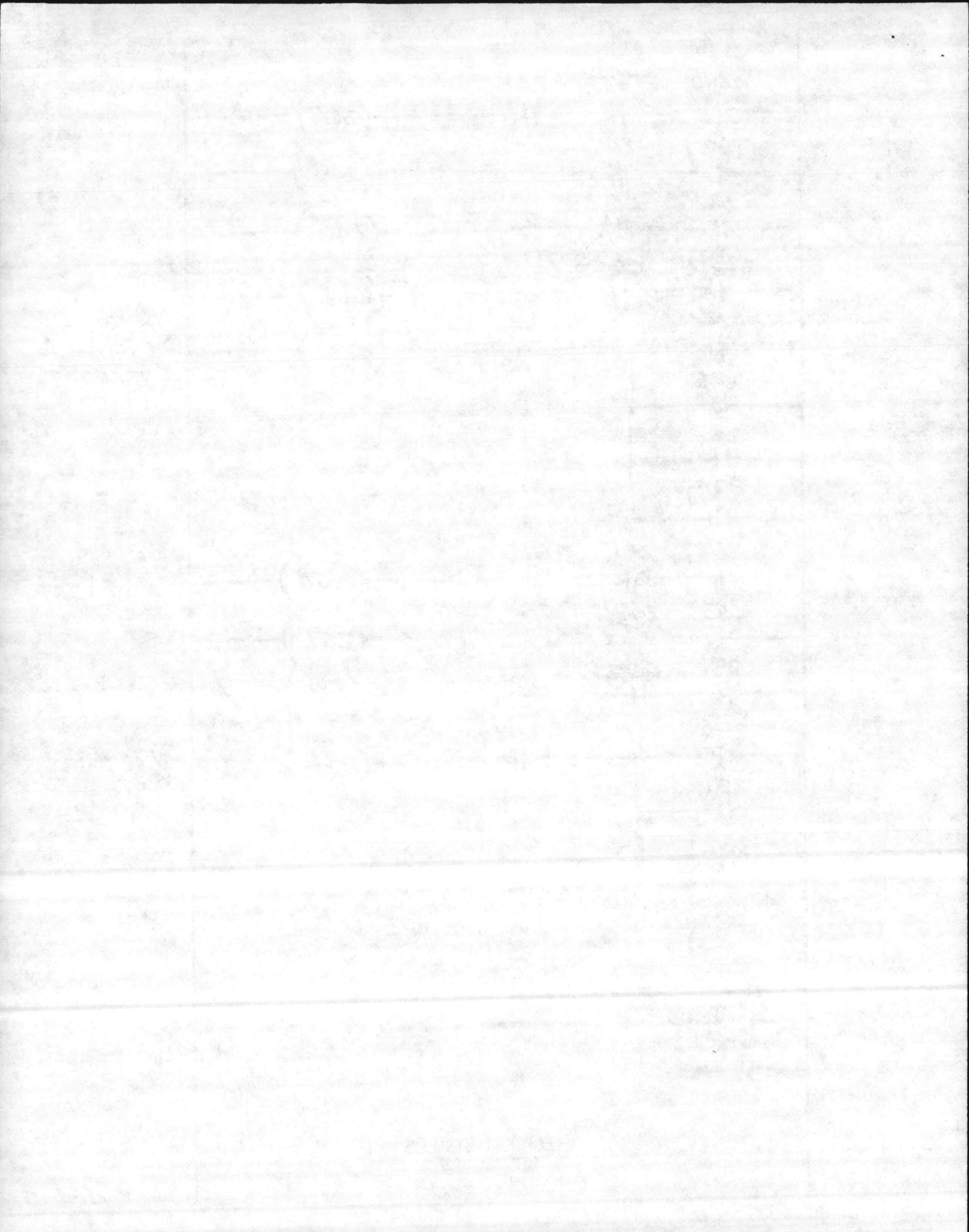
SOFTENER 1
RINSE
TIME

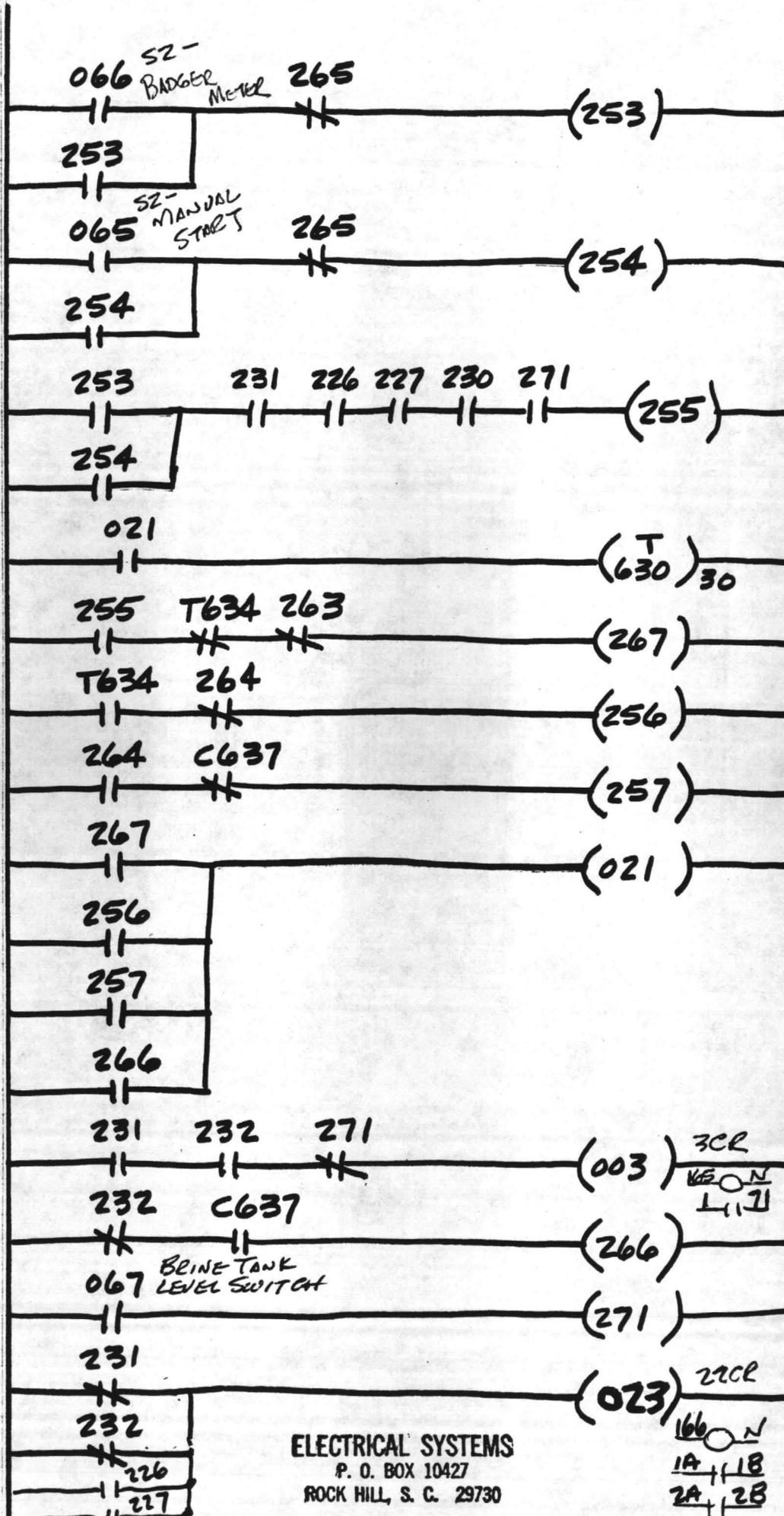




SOFTENER 1
INFLUENT

SOFTENER 1
MULTIPORT





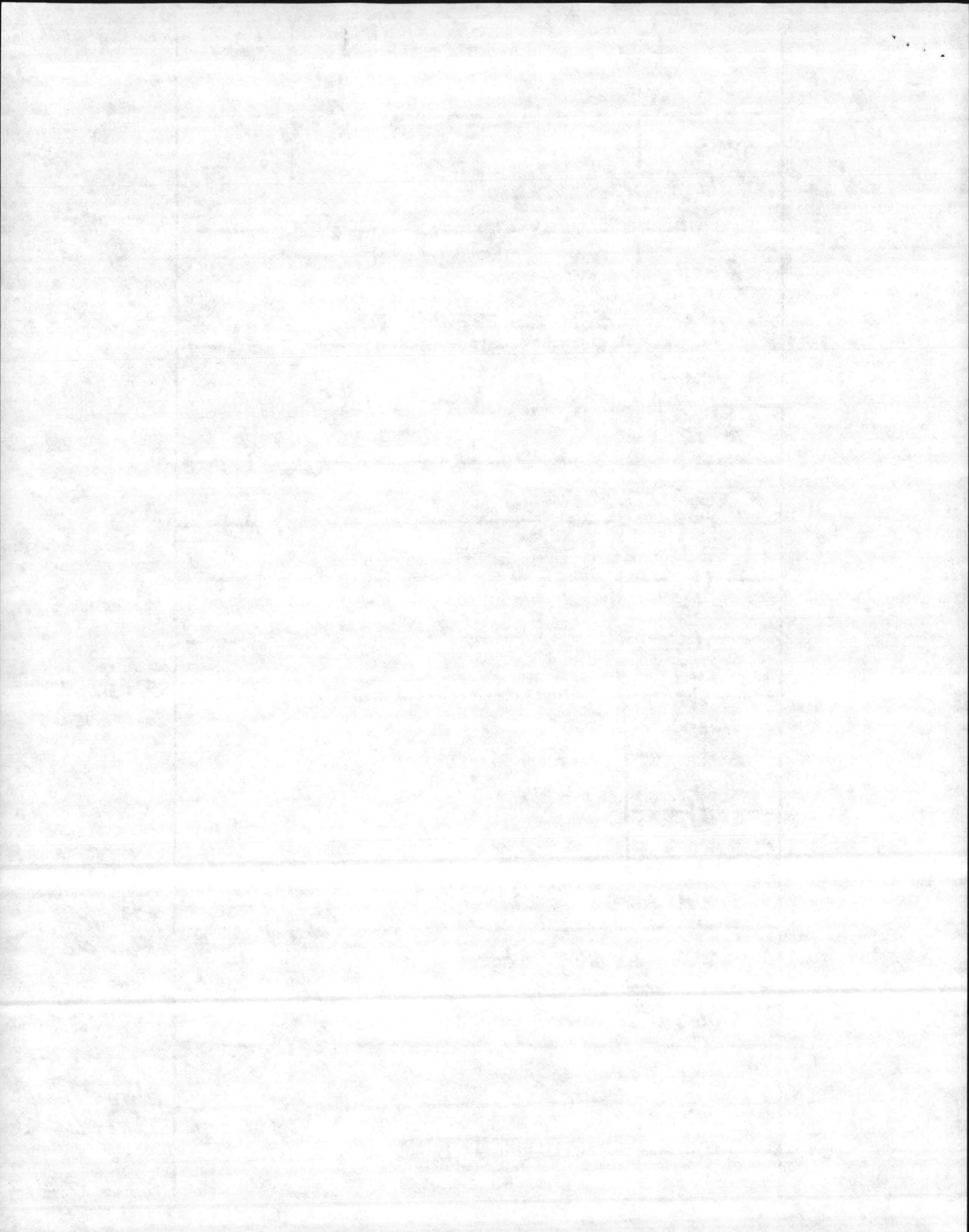
SOFTENER 2
INFLUENT

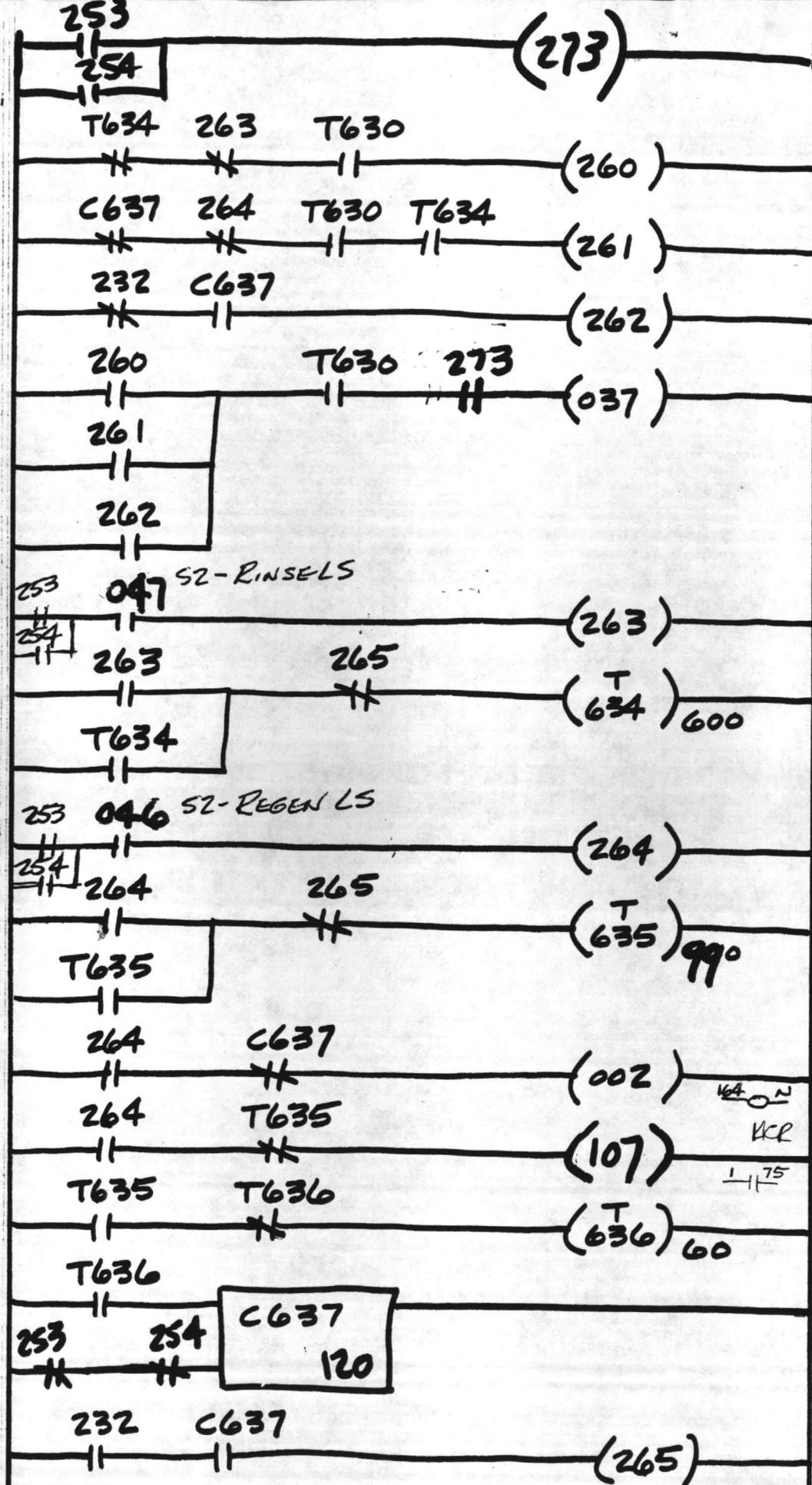
BRINE
PUMPS

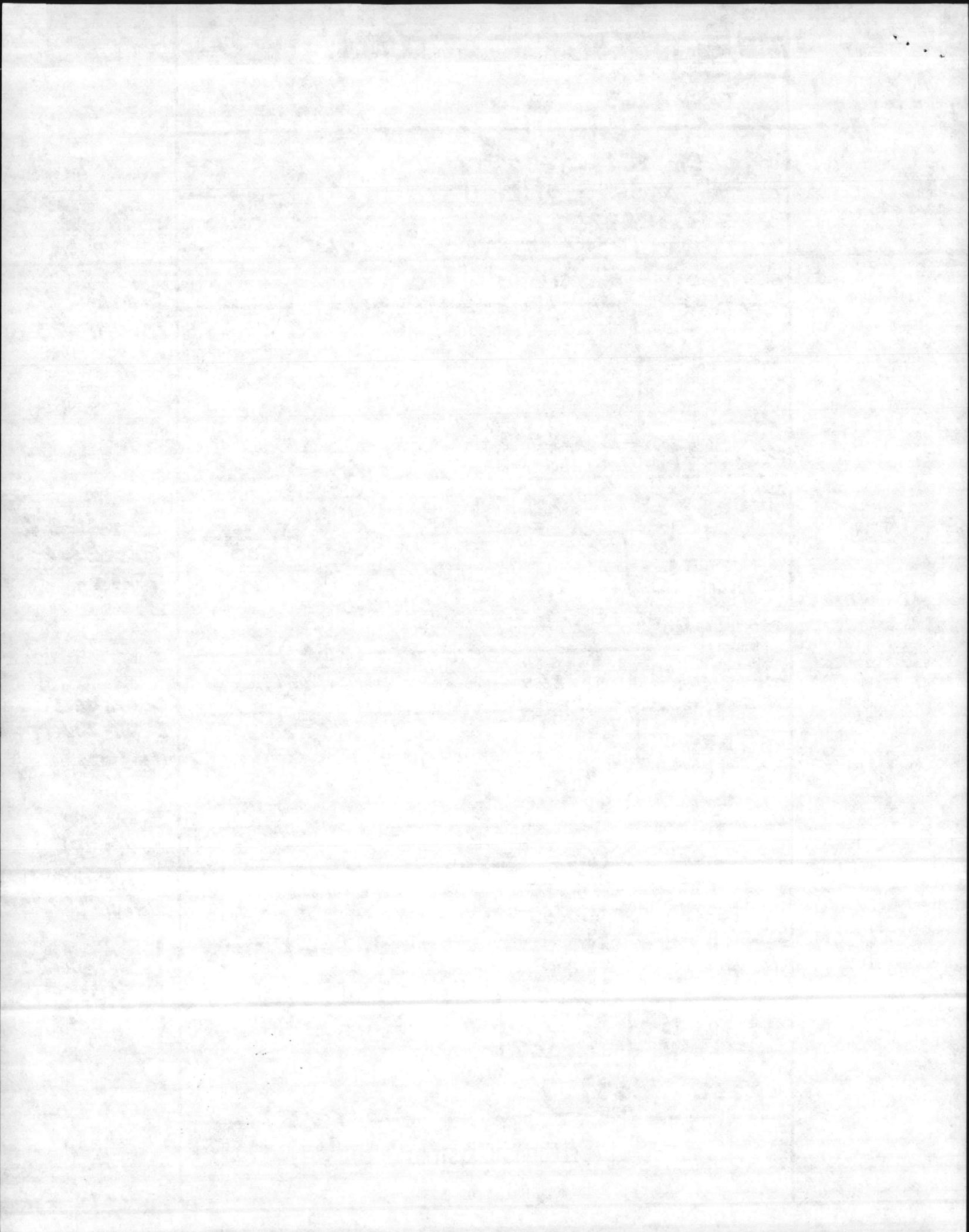
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INTERLOCK

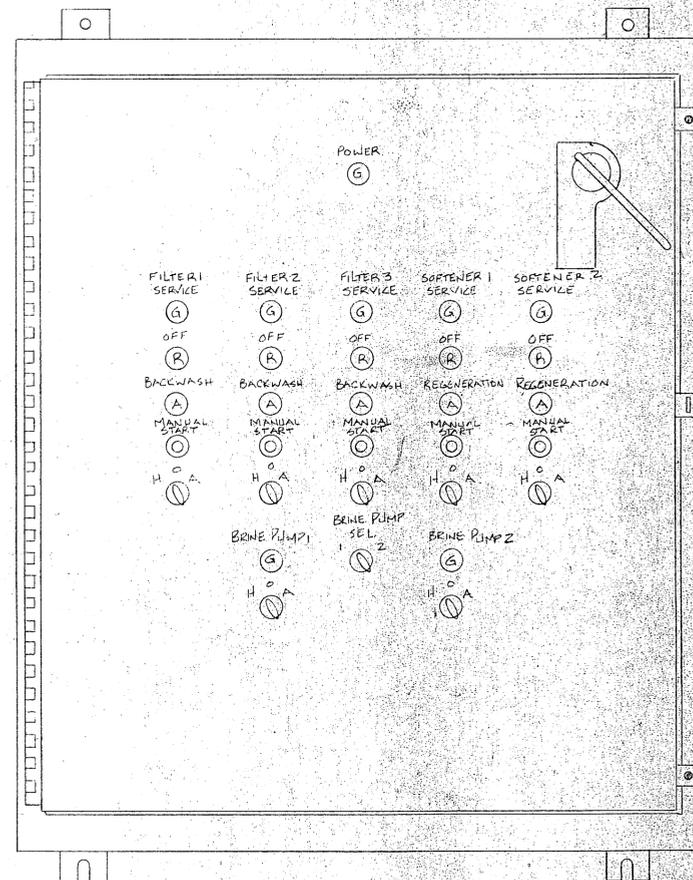
ELECTRICAL SYSTEMS
P. O. BOX 10427
ROCK HILL, S. C. 29730

SHEET No. 13

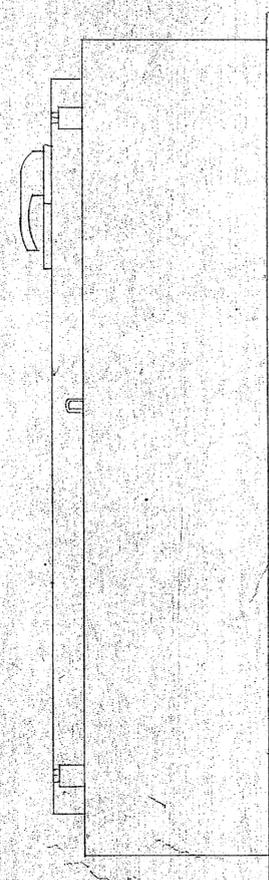




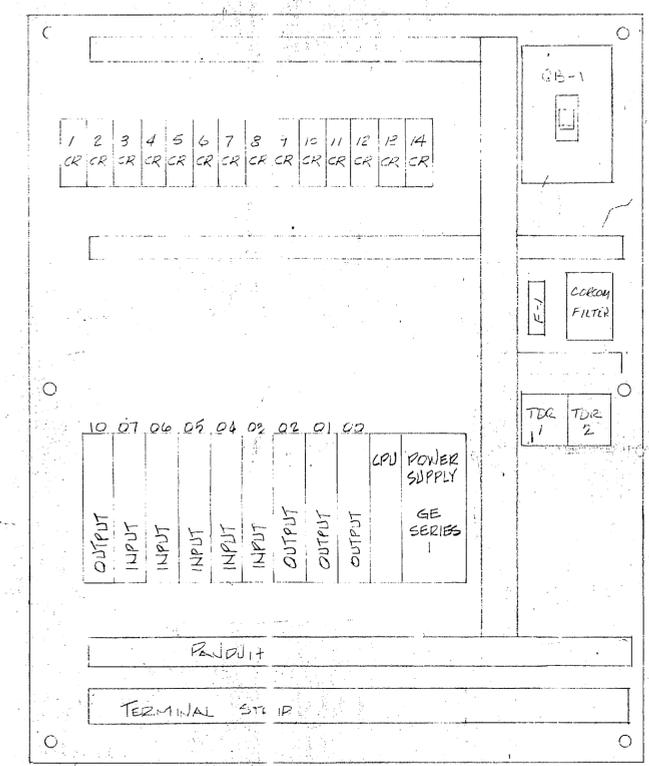




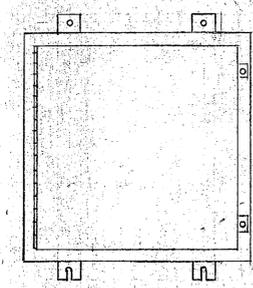
Main CP - FRONT



Main CP - SIDE



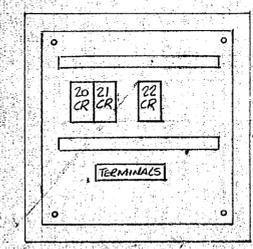
Main CP - INTERIOR



Auxiliary CP - FRONT



Auxiliary CP - SIDE



Auxiliary CP - INTERIOR

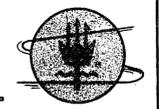
AS BUILT CONDITIONS

SATISFACTORY TO AROICC: _____ DATE _____

SATISFACTORY TO INSPECTOR: Ray Hunt DATE 12/31/86

CWC Inc
CONTRACTOR
81-1454

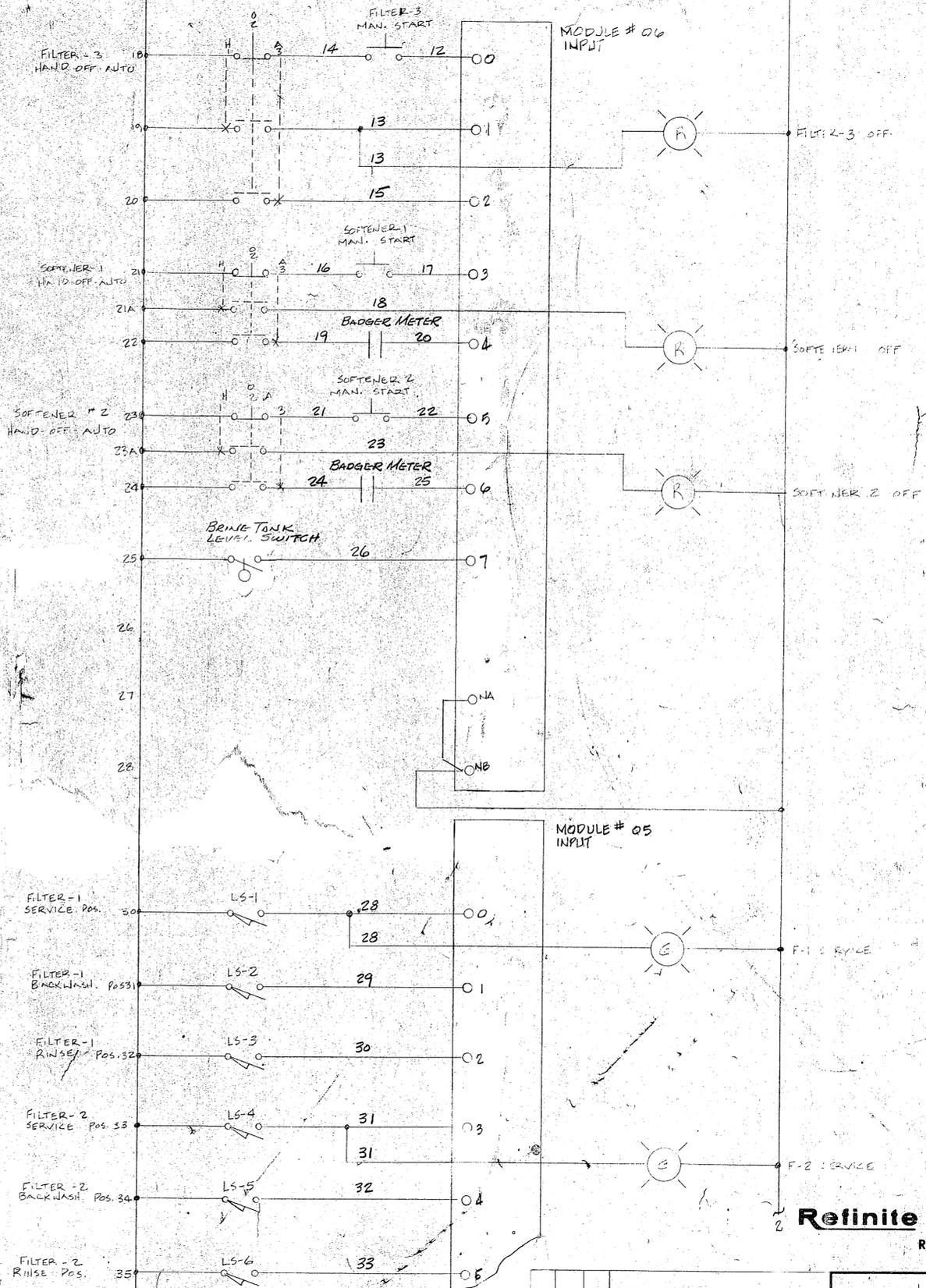
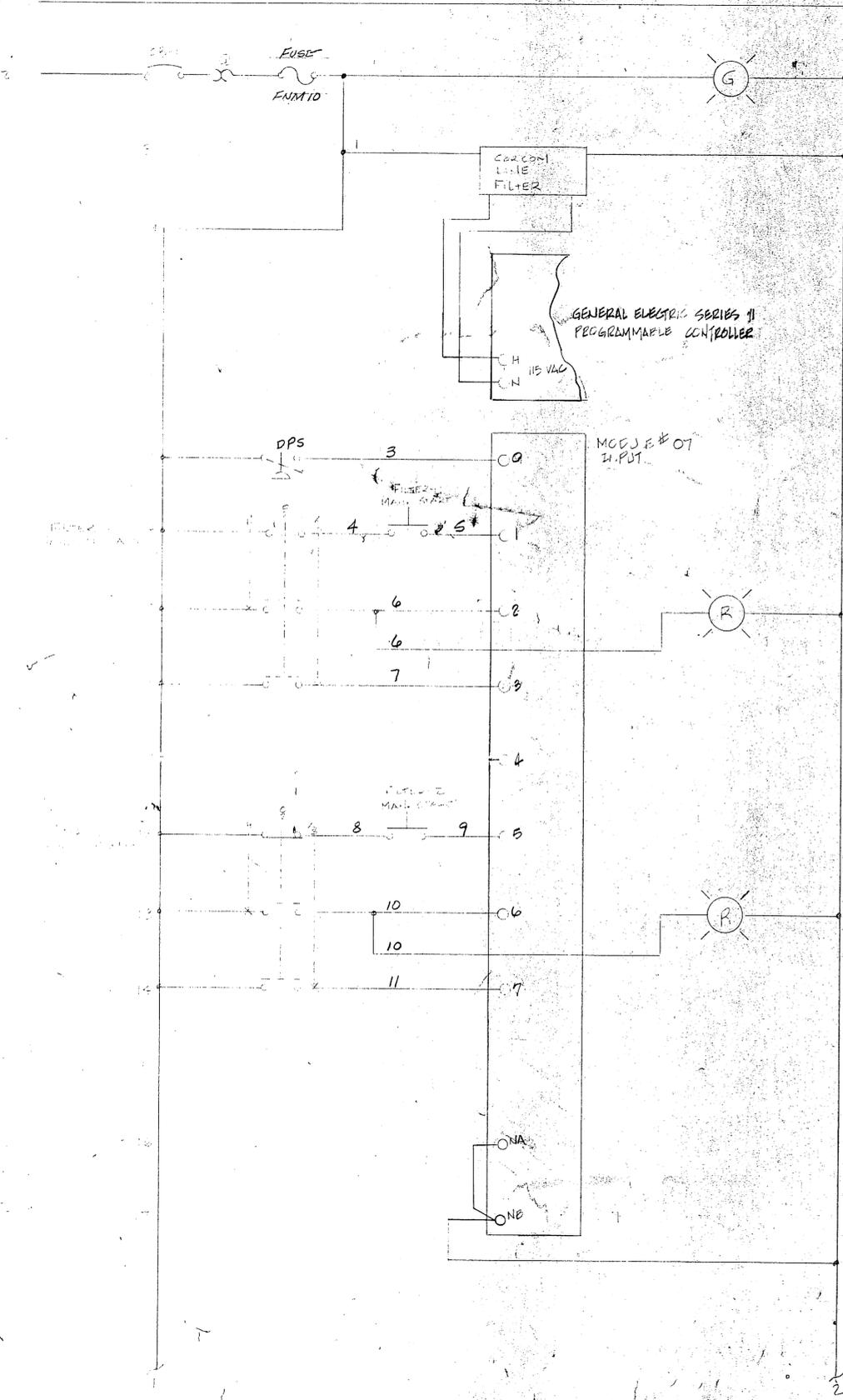
Refinite Water Conditioning Co.
ROCK HILL, SOUTH CAROLINA 29730



ENCLOSURE & SUB PANEL LAYOUT MAIN & AUXILIARY CONTROL PANEL		DRAWN BY RB
CAMP LE JEUNE, N.C.		DATE 7-25-83
P.O. BOX 11676 (803)-324-7600 555 PADDOCK PARKWAY		DRAWING NO. RF 0.10-26
NO	DATE	BY
1	7/25/83	CCB
REPLACED MICRO 04 WITH GE SERIES 1		
REVISION		

1877
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1900

Line # No.



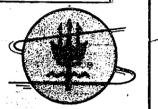
AS BUILT CONDITIONS

SATISFACTORY TO AROICC: _____ DATE _____

SATISFACTORY TO INSPECTOR: Ray Hunt DATE 12/31/86

GWC Inc
CONTRACTOR

Refinite Water Conditioning Co.
ROCK HILL, SOUTH CAROLINA 29730



NO	DATE	BY	REVISION
1	7/22/83	EX/RB	REPLACED MICRO BLD WITH GE SERIES

Wiring Diagram

CAMP LEJUNNE, S.C.

WORLD WIDE

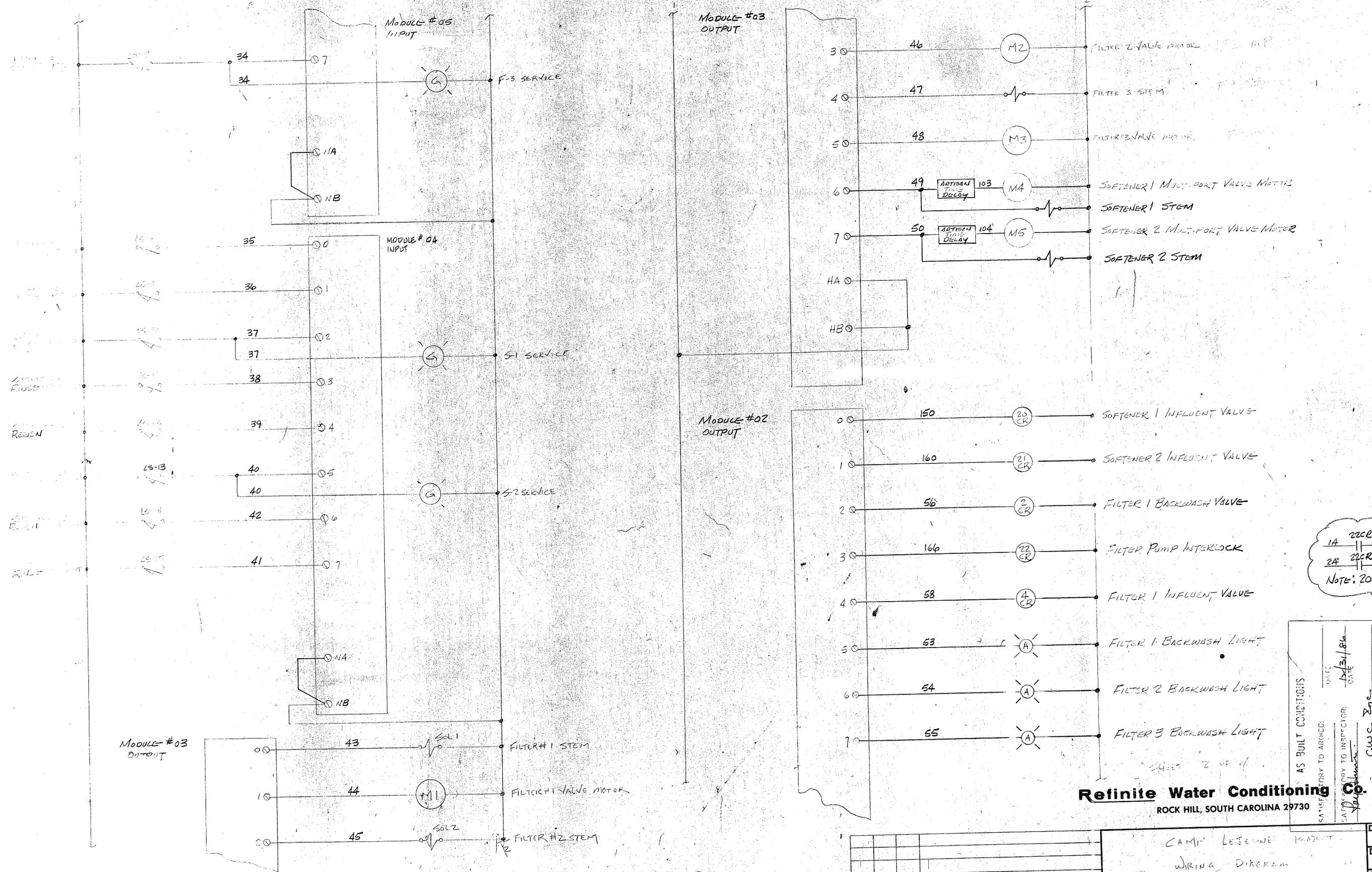
DRAWN BY: EX/RB

DATE: 7-22-83

DRAWING NO.: RF 910-27

P.O. BOX 11676 (803) 324-7600 555 PADDOCK PARKWAY





1A 22CR 1B FILTER PUMP 1
 2A 22CR 2B FILTER PUMP 2
 Note: 208V

Refinite Water Conditioning Co.
 ROCK HILL, SOUTH CAROLINA 29730

AS BUILT CONDITIONS
 SATISFACTORY TO ARCHITECT
 DATE: 12/31/86
 CWC Zinc CONTRACTOR
 81-1454

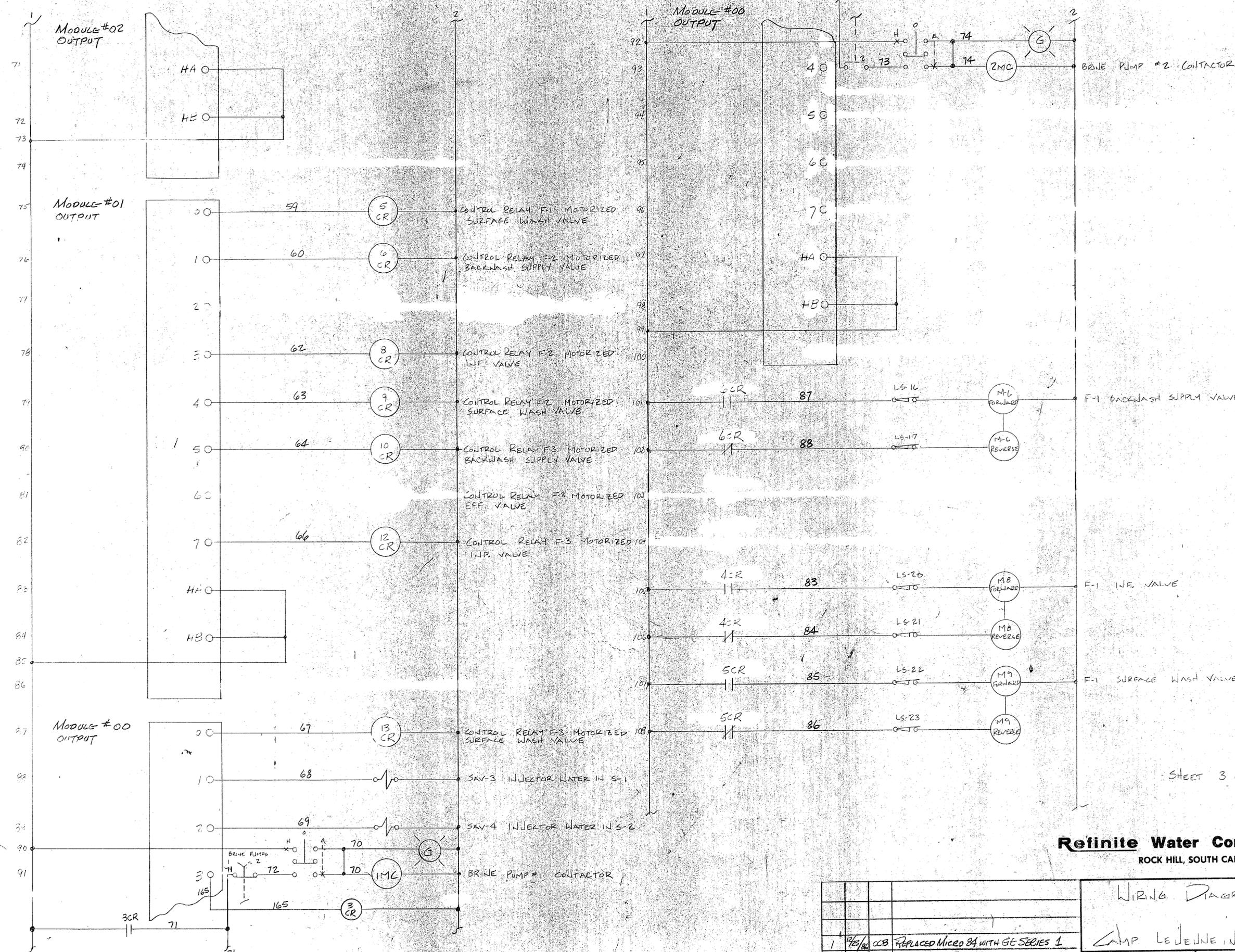
DRAWN BY SKY/AB		
DATE 7-22-82		
DRAWING NO. RT 91028		
P.O. BOX 11676 (803)-324-7600 555 PADDOCK PARKWAY		

No.	DATE	BY	REVISION
1	12/23/86	CB	REPLACED MICRO 84 WITH GE-SERIES 1

CAMP LEJEWEL PROJECT
 WIRING DIAGRAM

SHEET 2 OF 4





SHEET 3 OF 4

AS BUILT CONDITIONS
SATISFACTORY TO ARBCC:

SATISFACTORY TO INSPECTOR:
DATE: 12/31/86
DATE: 12/31/86

CONTRACTOR: C.W. BAC
81-1454

Refinite Water Conditioning Co.
ROCK HILL, SOUTH CAROLINA 29730

WORLD WIDE

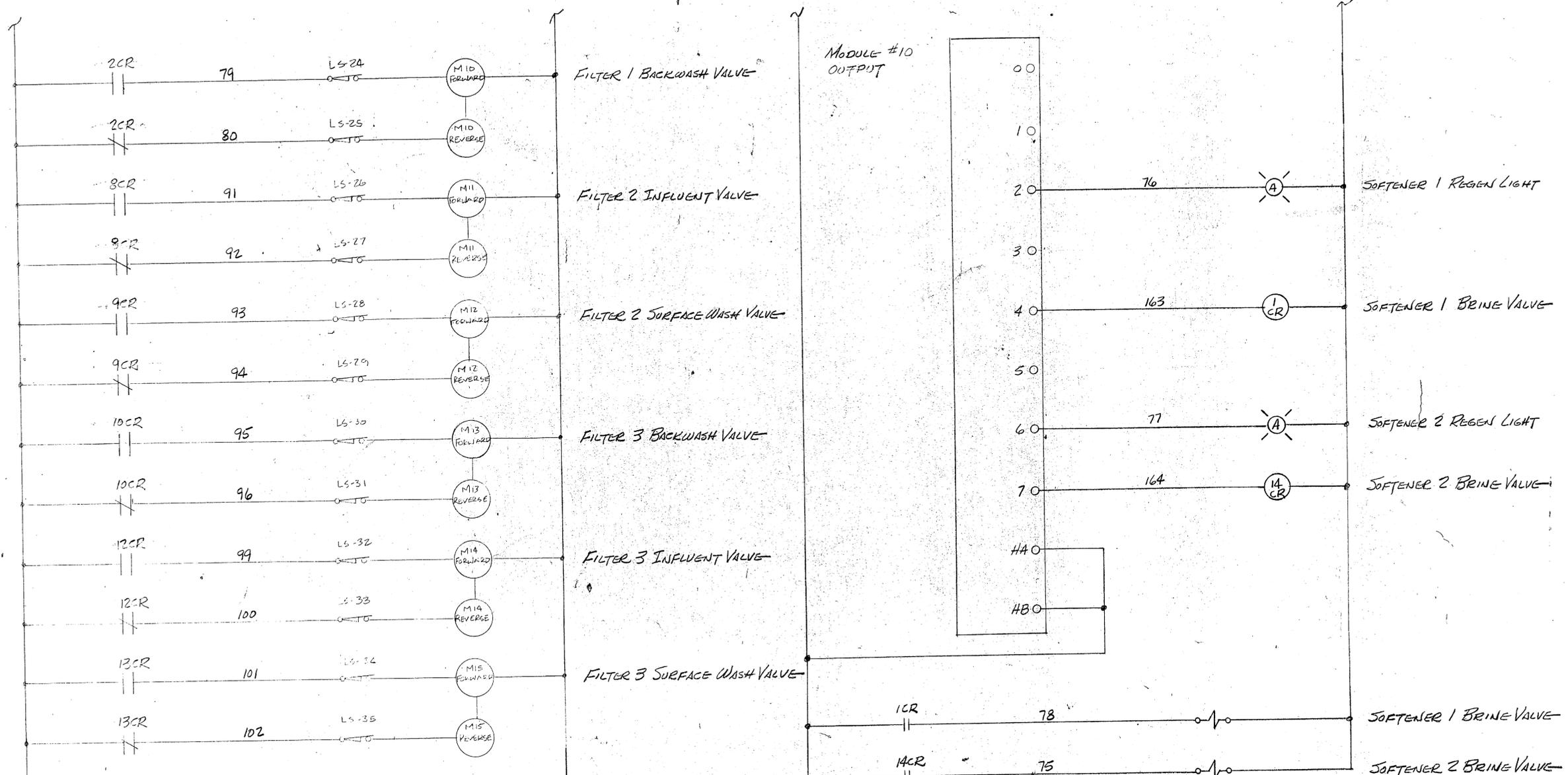
No.	DATE	BY	REVISION
1	1/25/86	CCB	REPLACED MICRO 84 WITH GE SERIES 1

WIRING DIAGRAM

CAMP LEJUNE, N.C.

P.O. BOX 11676 (803)-324-7600 555 PADDOCK PARKWAY

DRAWN BY: B.K.
DATE:
DRAWING NO.: R0910-29



SHEET 4 OF 4

AS BUILT CONDITIONS

SATISFACTORY TO AROICC: DATE 12/31/86

SATISFACTORY TO INSPECTOR: DATE 1/2/87

By: [Signature]

Contractor: [Signature]

81-1454

Refinite Water Conditioning Co.
 ROCK HILL, SOUTH CAROLINA 29730

WORLD WIDE

DRAWN BY BK

DATE

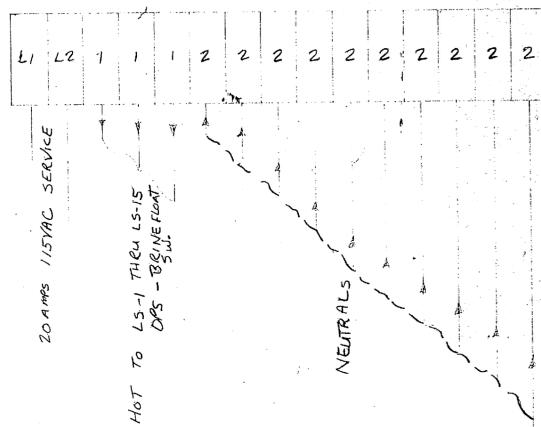
DRAWING NO. RFD-107-30

No.	DATE	BY	REVISION
1	12/86	CB	REPLACED MICRO 84 WITH GE SERIES 1

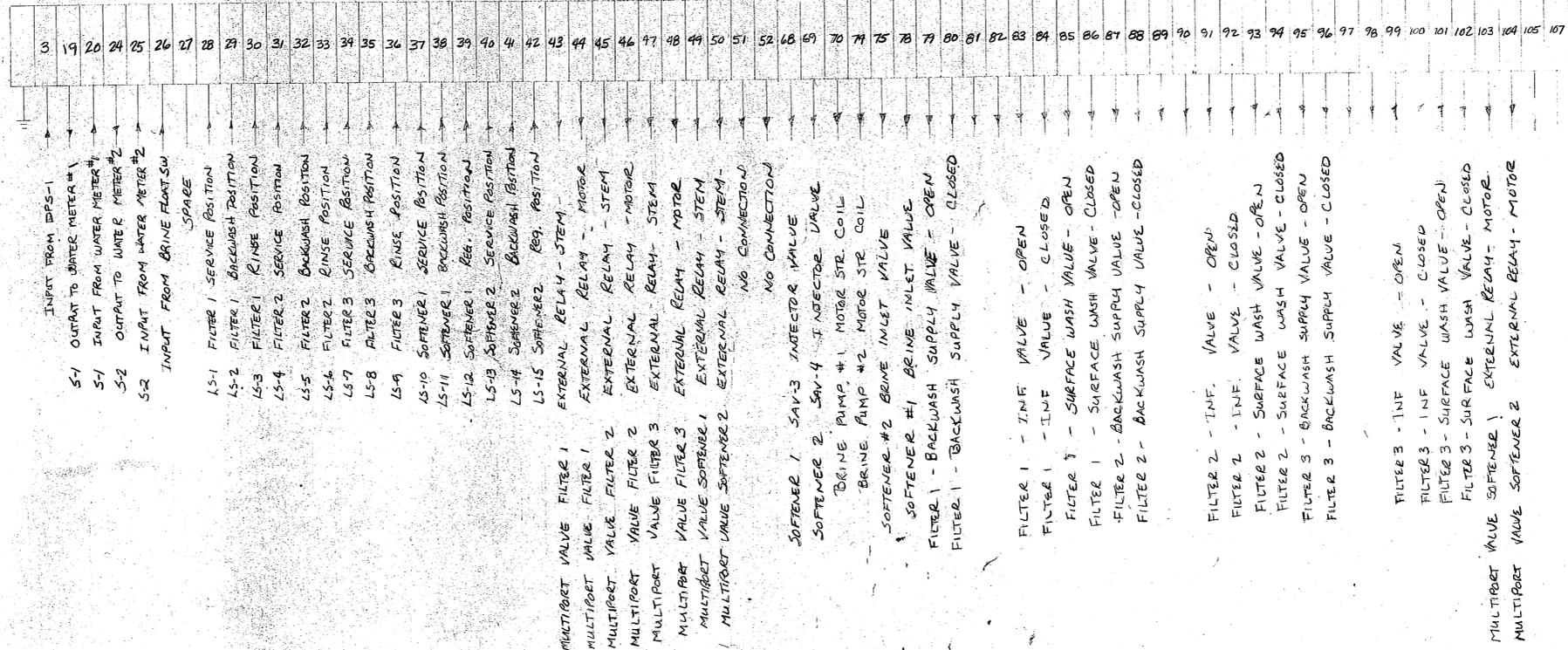
Wiring Diagram
 CAMP LEWIS, N.C.
 P.O. BOX 11676 (803)-324-7600 555 PADDOCK PARKWAY



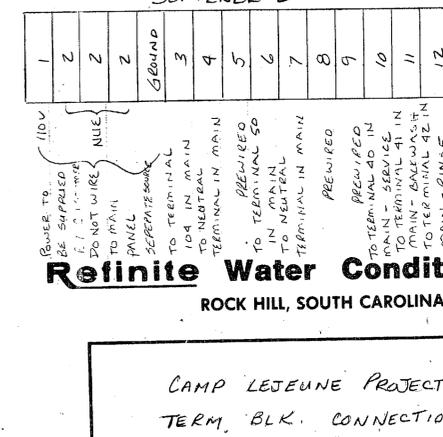
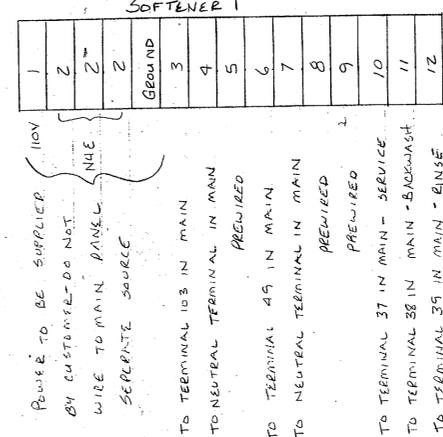
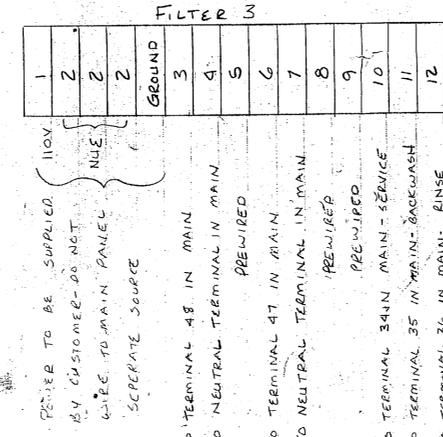
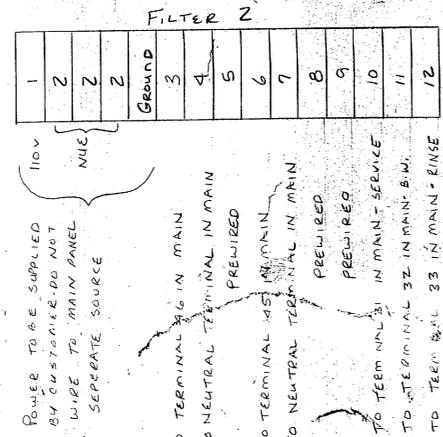
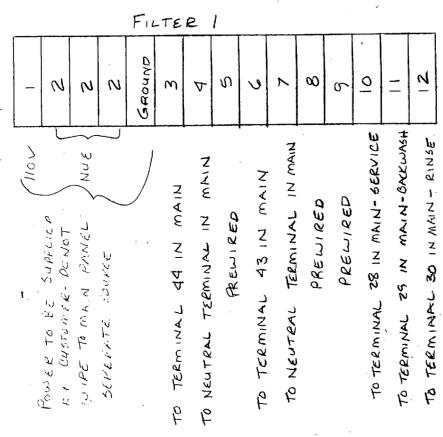
TB-1 POWER TERM. BLK.



TB-2



ARROW INDICATES POWER FLOW



1	9/23/86	CLB	REVISED AS BUILT
NO.	DATE	BY	REVISION

AS BUILT CONDITIONS

SATISFACTORY TO AROICO:

SATISFACTORY TO INSPECTOR:

DATE: 12/31/86

DATE:

CONTRACTOR: B1-1454

Refinite Water Conditioning Co.

ROCK HILL, SOUTH CAROLINA 29730

WORLD WIDE

CAMP LEJEUNE PROJECT

TERM. BLK. CONNECTIONS

DRAWN BY: [Signature]

DATE: 7-20-86

DRAWING NO. AF-910-31

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