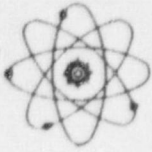


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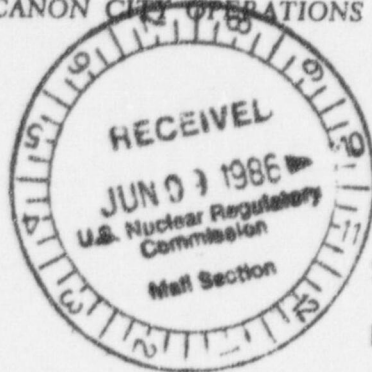


# COTTER CORPORATION

CANON CITY OPERATIONS

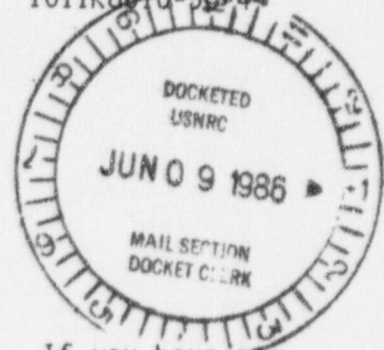
P.O. Box 751  
CANON CITY, COLORADO 81212

June 5, 1986



SUBJECT: WATER QUALITY REPORT  
FOR MARCH, 1986 (3-86)  
FILE NO: 1011K8610-524

Mr. Albert J. Hazle, Director  
Radiation Control Division  
Colorado Department of Health  
4210 East 11th Avenue  
Denver, CO 80220



Dear Mr. Hazle:

Attached please find the above captioned report(s). If you have any questions regarding the report(s), please contact me.

Sincerely,

COTTER CORPORATION

Jim Cain  
Environmental Coordinator/Radiation Safety Officer

JC:pd

Attachments

cc: Mr. J. E. Rothfleisch  
Mr. Tim Smith  
Mr. Larry Cox  
Attached List

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9801080164 860331  
PDR WASTE  
WM-3 PDR

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# Cotter Corporation

## WATER QUALITY REPORT DISTRIBUTION LIST

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Colorado Department of Health

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Colorado Department of Health  
720 North Main Street, Suite 300  
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Canon City Citizen's Committee  
c/o Mrs. Emily Tracy  
1031 Beech Avenue  
Canon City, Colorado 81212

DATE 06/05/86  
 REPORT FOR MONTH OF MAR 1986

CERTIFICATE OF WATER ANALYSIS  
 COTTER CORPORATION  
 P.O. BOX 751  
 CANON CITY, COLORADO 81212

PAGE 1  
 TIME 9:41:40  
 PROGRAM - LAB017

| LOG NO. | DATE | WATER DEPTH MP | TEMP. C | PH   | CM COND. | U      | MO     | V     | SE     | CL  | SD4   | CO3 | TDS1  | RA226 | TH230 | PB210 | PO2101 | MG/L |      | PCT/L |     |
|---------|------|----------------|---------|------|----------|--------|--------|-------|--------|-----|-------|-----|-------|-------|-------|-------|--------|------|------|-------|-----|
|         |      |                |         |      |          |        |        |       |        |     |       |     |       |       |       |       |        | 5.6  | 22.2 | 0.117 | 295 |
| 0106    | 3/24 | 74.25          | 14.5    | 6.50 | 2900     | 0.0024 | 0.041  | <0.05 | <0.005 | 73  | 1260  | <10 | 2740  | 0.8   | 0.1   | 0.0   | 0.8    |      |      |       |     |
| 0111    | 3/27 | NA             | 12.0    | 7.0  | 255      | 0.007  | <0.005 | <0.05 | <0.005 | 13  | 56    | <10 | 370   | 0.1   | 0.2   | -0.2  | 0.5    |      |      |       |     |
| 0119    | 3/25 | 24.85          | 13.5    | 7.40 | 1000     | 0.381  | 2.6    | <0.05 | 0.042  | 28  | 400   | <10 | 900   | 0.2   | 0.0   | 0.4   | 0.2    |      |      |       |     |
| 0122    | 3/25 | NA             | 13.5    | 7.05 | 550      | 0.103  | 0.38   | <0.05 | <0.005 | 9   | 71    | <10 | 420   | 0.1   | 0.0   | 0.3   | 0.3    |      |      |       |     |
| 0124    | 3/27 | NA             | 14.5    | 7.10 | 550      | 0.12   | 0.37   | <0.05 | <0.005 | 6   | 57    | <10 | 420   | 0.1   | 0.1   | -0.2  | 0.4    |      |      |       |     |
| 0129    | 3/31 | NA             | 14.5    | 7.20 | 550      | 0.061  | 0.29   | <0.05 | 0.007  | 11  | 53    | <10 | 400   | 0.1   | 0.3   | -0.1  | 0.1    |      |      |       |     |
| 0135    | 3/05 | 37.95          | 13.5    | 7.55 | 3800     | 0.005  | <0.005 | <0.05 | <0.005 | 125 | 1970  | 20  | 3640  | 0.8   | 0.0   | 0.1   | 0.7    |      |      |       |     |
| 0137    | 3/25 | 36.20          | 13.0    | 7.70 | 650      | 0.032  | 0.006  | <0.05 | <0.005 | 28  | 78    | <10 | 560   | 0.2   | 0.0   | 0.2   | 0.5    |      |      |       |     |
| 0138    | 3/24 | 45.55          | 12.5    | 7.50 | 3150     | 1.1    | 11.7   | <0.05 | 0.020  | 140 | 1990  | <10 | 3640  | 0.3   | 0.0   | 0.5   | 0.8    |      |      |       |     |
| 0139    | 3/25 | 42.40          | 13.0    | 7.3  | 2300     | 0.53   | 5.5    | <0.05 | 0.032  | 138 | 1230  | <10 | 2070  | 0.2   | 0.0   | 0.2   | 0.3    |      |      |       |     |
| 0140    | 3/24 | 43.8           | 12.5    | 7.35 | 1700     | 0.52   | 4.1    | <0.05 | 0.009  | 67  | 780   | <10 | 1700  | 0.5   | 0.0   | 0.4   | 0.9    |      |      |       |     |
| 0141    | 3/24 | 70.25          | 13.5    | 7.75 | 1550     | 0.004  | 0.052  | <0.05 | <0.005 | 41  | 430   | 20  | 1340  | 0.2   | 0.0   | 0.4   | 0.1    |      |      |       |     |
| 0153    | 3/03 | NA             | 19.0    | 7.0  | 3600     | 0.0004 | 0.009  | <0.05 | <0.005 | 18  | <10   | 120 | 2670  | 0.3   | 0.0   | 0.1   | 0.0    |      |      |       |     |
| 0303    | 3/24 | 15.65          | 13.0    | 7.65 | 20500    | 42     | 200    | <0.05 | 0.09   | 450 | 15960 | <10 | 25450 | 0.6   | 0.8   | 0.3   | 6.9    |      |      |       |     |
| 0312    | 3/07 | 13.35          | 12.5    | 8.25 | 6500     | 5.6    | 22.2   | <0.05 | 0.117  | 295 | 3850  | <10 | 7370  | 0.2   | 0.2   | 0.6   | 0.5    |      |      |       |     |

COLLECTED BY TOM McDOWELL JR.  
 MARK CURREY

REPORT NO. 03-86

ANALYSTS

MIKE KRAUTH, MIKE GUFF  
 LARRY SWOPE  
 DENNIS HULSEY, RON VIOLA  
 ACCU-CABS RESEARCH, INC.

DATE 06/05/86  
 REPORT FOR MONTH OF MAR 1986

CERTIFICATE OF WATER ANALYSIS  
 COTTER CORPORATION  
 P.O. BOX 751  
 CANON CITY, COLORADO 81212

PAGE 2  
 TIME 9:41:40  
 PROGRAM - LAB017

| LOC NO. | DATE | DEPTH MP | TEMP. C | PH   | CM COND. | U      | MO     | V     | SE     | CL  | SO4  | CO3 | TD51 | RA225 | TH230 | PB210 | PC210 | MG/L |   |   |   |
|---------|------|----------|---------|------|----------|--------|--------|-------|--------|-----|------|-----|------|-------|-------|-------|-------|------|---|---|---|
|         |      |          |         |      |          |        |        |       |        |     |      |     |      |       |       |       |       | 1    | 2 | 3 | 4 |
| 0313    | 3/07 | 13.25    | 13.0    | 7.90 | 1000     | 5.5    | 32.4   | <0.05 | 0.132  | 290 | 4020 | <10 | 7390 | 0.1   | 0.4   | 0.3   | 0.4   |      |   |   |   |
| 0314    | 3/07 | 19.15    | 13.5    | 7.80 | 1250     | 0.004  | 0.74   | <0.05 | 0.008  | 29  | 570  | <10 | 1090 | 1.1   | 0.0   | 0.3   | 0.5   |      |   |   |   |
| 0315    | 3/11 | NA       | 13.0    | 9.85 | 950      | 0.003  | 0.56   | <0.05 | <0.005 | 20  | 210  | 140 | 690  | 0.0   | 0.1   | -0.1  | 0.9   |      |   |   |   |
| 0317    | 3/11 | NA       | 12.5    | 9.55 | 350      | 0.004  | <0.005 | <0.05 | <0.005 | 22  | 2170 | 40  | 3520 | 0.4   | 0.1   | 0.1   | 0.0   |      |   |   |   |
| 0324    | 3/24 | 111.25   | 15.0    | 7.15 | 800      | 0.004  | 0.008  | <0.05 | <0.005 | 13  | 230  | <10 | 660  | 0.5   | 0.0   | 0.5   | 0.5   |      |   |   |   |
| 0325    | 3/24 | 36.05    | 14.0    | 7.30 | 3150     | 0.023  | 0.021  | <0.05 | 0.107  | 110 | 1610 | <10 | 3620 | 0.5   | 0.0   | -0.3  | 0.1   |      |   |   |   |
| 0327    | 3/11 | NA       | 13.0    | 8.35 | 1200     | 0.009  | 0.33   | <0.05 | <0.005 | 39  | 410  | 20  | 990  | 0.2   | 0.3   | 0.2   | 0.5   |      |   |   |   |
| 0328    | 3/11 | NA       | 13.5    | 9.25 | 1150     | 0.009  | 0.027  | <0.05 | <0.005 | 70  | 20   | 70  | 900  | 0.4   | 0.1   | 0.5   | 0.5   |      |   |   |   |
| 0329    | 3/05 | 20.30    | 14.0    | 7.0  | 2400     | 0.34   | <0.005 | <0.05 | 0.018  | 115 | 1340 | <10 | 2580 | 1.3   | 0.0   | 0.8   | 0.5   |      |   |   |   |
| 0330    | 3/05 | 20.45    | 13.0    | 7.25 | 4850     | 3.5    | 15.0   | <0.05 | 0.054  | 195 | 3040 | <10 | 5350 | 0.1   | 0.0   | 0.9   | 0.3   |      |   |   |   |
| 0331    | 3/05 | 25.85    | 14.0    | 7.75 | 4750     | 2.7    | 18.8   | <0.05 | 0.058  | 175 | 2860 | <10 | 4970 | 0.5   | 0.0   | 0.3   | 0.4   |      |   |   |   |
| 0333    | 3/24 | 17.05    | 13.0    | 7.35 | 4900     | 6.5    | 13.6   | <0.05 | 0.089  | 275 | 2870 | <10 | 5570 | 0.1   | 0.1   | 0.4   | 0.5   |      |   |   |   |
| 0334    | 3/03 | 9.50     | 13.5    | 7.25 | 1150     | 0.0027 | <0.005 | <0.05 | <0.005 | 58  | 420  | <10 | 1010 | 0.3   | 0.0   | 0.2   | 0.4   |      |   |   |   |
| 0335    | 3/05 | 89.65    | 14.0    | 7.40 | 1950     | 0.0025 | 0.007  | <0.05 | <0.005 | 30  | 1020 | <10 | 1800 | 0.9   | 0.0   | 0.5   | 0.9   |      |   |   |   |
| 0336    | 3/04 | 38.95    | 15.0    | 7.75 | 1900     | 0.11   | 0.025  | <0.05 | <0.005 | 81  | 870  | <10 | 1700 | 0.3   | 0.1   | 0.1   | 0.4   |      |   |   |   |

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 MARK CURREY

REPORT NO. 03-86

ANALYSTS  
 MIKE KRAUTH, MIKE GOFF  
 LARRY SWOPE  
 DENNIS HULSEY, RON VIOLA  
 ACCU-LABS RESEARCH, INC.

DATE 06/05/96  
 REPORT FOR MONTH OF MAR 1995

CERTIFICATE OF WATER ANALYSIS  
 COTTER CORPORATION  
 P.O. BOX 751  
 CANON CITY, COLORADO 81212

PAGE 3  
 TIME 9:41:40  
 PROGRAM - LAB017

| LOC NO. | DATE | DEPTH MP | TEMP. C | PH   | COND. U | MO     | V      | SE     | CL     | SO4  | CO3  | TDS1 | RA225 | TH230 | PB210 | POL101 | MG/L |   | PC/L |      |
|---------|------|----------|---------|------|---------|--------|--------|--------|--------|------|------|------|-------|-------|-------|--------|------|---|------|------|
|         |      |          |         |      |         |        |        |        |        |      |      |      |       |       |       |        | UMHD | U | MG/L | PC/L |
| 0337    | 3/04 | 37.45    | 13.0    | 7.10 | 2950    | 0.013  | <0.005 | 0.008  | 250    | 1990 | <10  | 3970 | 0.8   | 0.7   | 0.6   | 0.7    |      |   |      |      |
| 0338    | 3/05 | 32.45    | 13.5    | 7.45 | 2350    | 0.032  | 0.006  | <0.05  | 0.052  | 105  | 1420 | <10  | 2630  | 0.2   | 0.1   | 0.2    | 0.3  |   |      |      |
| 0339    | 3/06 | NA       | 19.0    | 5.50 | 10500   | 0.010  | <0.005 | <0.05  | <0.005 | 20   | 7520 | <10  | 11440 | 0.4   | 0.3   | 0.2    | 0.6  |   |      |      |
| 0340    | 3/03 | 14.20    | 14.0    | 7.30 | 4200    | 5.2    | 10.3   | <0.05  | 0.012  | 230  | 2290 | <10  | 4370  | 0.4   | 0.1   | -0.2   | 0.7  |   |      |      |
| 0341    | 3/03 | 17.85    | 14.0    | 7.30 | 4200    | 5.2    | 10.3   | <0.05  | 0.012  | 230  | 2290 | <10  | 4370  | 0.4   | 0.1   | -0.2   | 0.7  |   |      |      |
| 0342    | 3/04 | 61.15    | 14.5    | 7.25 | 2500    | 0.0025 | <0.005 | <0.05  | <0.005 | 32   | 1290 | <10  | 2330  | 0.4   | 0.2   | 0.5    | 0.4  |   |      |      |
| 0344    | 3/24 | 30.15    | 13.5    | 7.15 | 3500    | 9.2    | 23.4   | <0.05  | 0.079  | 133  | 4120 | <10  | 7700  | 0.2   | 0.3   | -0.3   | 0.9  |   |      |      |
| 0502    | 3/03 | NA       | 7.5     | 8.15 | 205     | 0.006  | <0.005 | <0.05  | <0.005 | 13   | 40   | <10  | 220   | 0.0   | 0.1   | 0.0    | 0.3  |   |      |      |
| 0504    | 3/03 | NA       | 7.5     | 8.10 | 260     | 0.006  | 0.005  | <0.05  | <0.005 | 14   | 70   | <10  | 290   | 0.1   | 0.0   | 0.1    | 0.1  |   |      |      |
| 0505    | 3/12 | NA       | 9.0     | 7.70 | 2900    | 3.4    | 5.3    | <0.05  | 0.049  | 70   | 1910 | <10  | 3670  | 0.7   | 0.0   | 0.1    | 10.3 |   |      |      |
| 0505    | 3/25 | NA       | 12.5    | 7.85 | 3400    | 3.2    | 6.1    | <0.05  | 0.058  | 190  | 1910 | <10  | 3660  | 2.6   | 0.1   | 0.5    | 10.9 |   |      |      |
| 0519    | 3/03 | NA       | 11.0    | 9.25 | 3050    | 0.0009 | 0.009  | <0.005 | <0.005 | 16   | 30   | 360  | 3230  | 0.4   | 0.0   | 0.2    | 0.2  |   |      |      |
| 0521    | 3/03 | NA       | 10.5    | 9.10 | 1450    | 0.12   | 0.015  | <0.05  | <0.005 | 88   | 850  | <10  | 1380  | 0.3   | 0.0   | 0.2    | 0.7  |   |      |      |
| 0553    | 3/03 | NA       | 14.0    | 8.45 | 2950    | 3.2    | 3.7    | <0.05  | 0.009  | 170  | 1520 | <10  | 3030  | 0.4   | 0.0   | 0.0    | 0.7  |   |      |      |
| 0555    | 3/03 | NA       | 12.5    | 7.80 | 550     | 0.015  | 0.005  | <0.05  | <0.005 | 11   | 90   | <10  | 410   | 0.2   | 0.0   | -0.1   | 0.4  |   |      |      |

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 MARK CURREY

REPORT NO. 03-96

ANALYSTS MIKE KRAUTH, MIKE GOFF  
 LARRY SMOPE  
 DENNIS HULCEY, RON VIOLA  
 ACCU-CABS RESEARCH, INC.

#DATE 06/05/86  
 REPORT FOR MONTH OF MAR 1986

CERTIFICATE OF WATER ANALYSIS  
 COTTER CORPORATION  
 P.O. BOX 751  
 CANON CITY, COLORADO 81212

PAGE 4  
 TIME 9:41:40  
 PROGRAM - LAB017

| LOC NO. | DATE | WATER DEPTH<br>BELOW MP | TEMP.<br>C | PH   | UMHD<br>CH<br>COND. | U    | MO   | V     | SE    | MG/L |       |     |       | PC/L  |       |       |       |
|---------|------|-------------------------|------------|------|---------------------|------|------|-------|-------|------|-------|-----|-------|-------|-------|-------|-------|
|         |      |                         |            |      |                     |      |      |       |       | CL   | SO4   | CO3 | TDS1  | RA226 | TH230 | PR210 | PO210 |
| 0701    | 3/10 | NA                      | 10.5       | 7.95 | 20500               | 102  | 220  | <0.05 | 0.31  | 820  | 17400 | <10 | 29750 | 0.0   | 0.1   | 2.0   | 6.5   |
| 0701    | 3/25 | NA                      | 11.0       | 7.60 | 21000               | 97   | 220  | <0.05 | 0.30  | 860  | 17500 | <10 | 30700 | -0.1  | -0.2  | 1.0   | 7.1   |
| 0703    | 3/10 | NA                      | 10.5       | 8.00 | 19500               | 33   | 140  | <0.05 | 0.36  | 860  | 14840 | <10 | 27410 | 0.2   | 0.0   | 0.6   | 4.3   |
| 0702    | 3/22 | NA                      | 11.0       | 7.90 | 19500               | 33   | 130  | <0.05 | 0.34  | 840  | 16000 | <10 | 28100 | 0.1   | 0.4   | 0.9   | 4.7   |
| 0710    | 3/10 | NA                      | 12.5       | 7.40 | 5000                | 0.56 | 1.0  | <0.05 | 0.50  | 760  | 2050  | <10 | 5750  | 0.0   | 0.1   | 0.6   | 0.7   |
| 0710    | 3/19 | NA                      | 11.5       | 7.05 | 4950                | 0.63 | 1.0  | <0.05 | 0.55  | 760  | 2100  | <10 | 5790  | 0.3   | 0.0   | 0.1   | 0.9   |
| 0712    | 3/10 | NA                      | 12.5       | 7.30 | 7800                | 6.5  | 18.5 | <0.05 | 0.45  | 820  | 2990  | <10 | 9500  | 0.2   | 0.1   | 0.8   | 0.9   |
| 0712    | 3/19 | NA                      | 11.0       | 7.25 | 7200                | 6.3  | 16.4 | <0.05 | 0.51  | 840  | 3780  | <10 | 9090  | 0.2   | 0.1   | 0.2   | 1.0   |
| 0714    | 3/10 | NA                      | 10.0       | 7.60 | 3950                | 3.1  | 9.3  | <0.05 | 0.086 | 240  | 2360  | <10 | 4500  | 0.2   | 0.1   | 0.4   | 0.4   |
| 0714    | 3/25 | NA                      | 13.5       | 7.55 | 4200                | 3.1  | 8.7  | <0.05 | 0.074 | 230  | 2260  | <10 | 4390  | 0.0   | 0.1   | 0.2   | 0.9   |
| 0715    | 3/10 | NA                      | 11.0       | 7.95 | 2350                | 2.2  | 2.4  | <0.05 | 0.037 | 135  | 1280  | <10 | 2630  | 0.1   | 0.0   | 0.6   | 0.5   |
| 0715    | 3/25 | NA                      | 11.5       | 7.80 | 2400                | 2.2  | 2.3  | <0.05 | 0.045 | 130  | 1260  | <10 | 2620  | 0.2   | 0.1   | -0.3  | 0.5   |
| 0716    | 3/10 | NA                      | 12.0       | 7.55 | 2250                | 1.4  | 1.3  | <0.05 | 0.038 | 120  | 1140  | <10 | 2340  | 0.1   | 0.0   | 0.5   | 1.1   |
| 0716    | 3/25 | NA                      | 13.0       | 7.40 | 2250                | 1.2  | 1.2  | <0.05 | 0.038 | 110  | 2260  | <10 | 1180  | 0.1   | 0.1   | 0.3   | 0.6   |

COLLECTED BY TOM HODDOWELL JR.  
 MARK CURREY

REPORT NO. 03-86

ANALYSTS MIKE KRAUTH, MIKE GOFF  
 ERRT SWOFFE  
 DENNIS HULSEY, RON VIOLA  
 ACCU-LABS RESEARCH, INC.