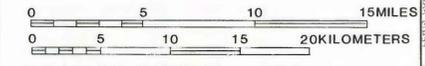


EXPLANATION

○¹ Well-number refers to the sequence number in the table

●² Well-trace-element determinations in addition to iron and manganese

■ Area of intensive ground water sampling in the vicinity of Marys Corner



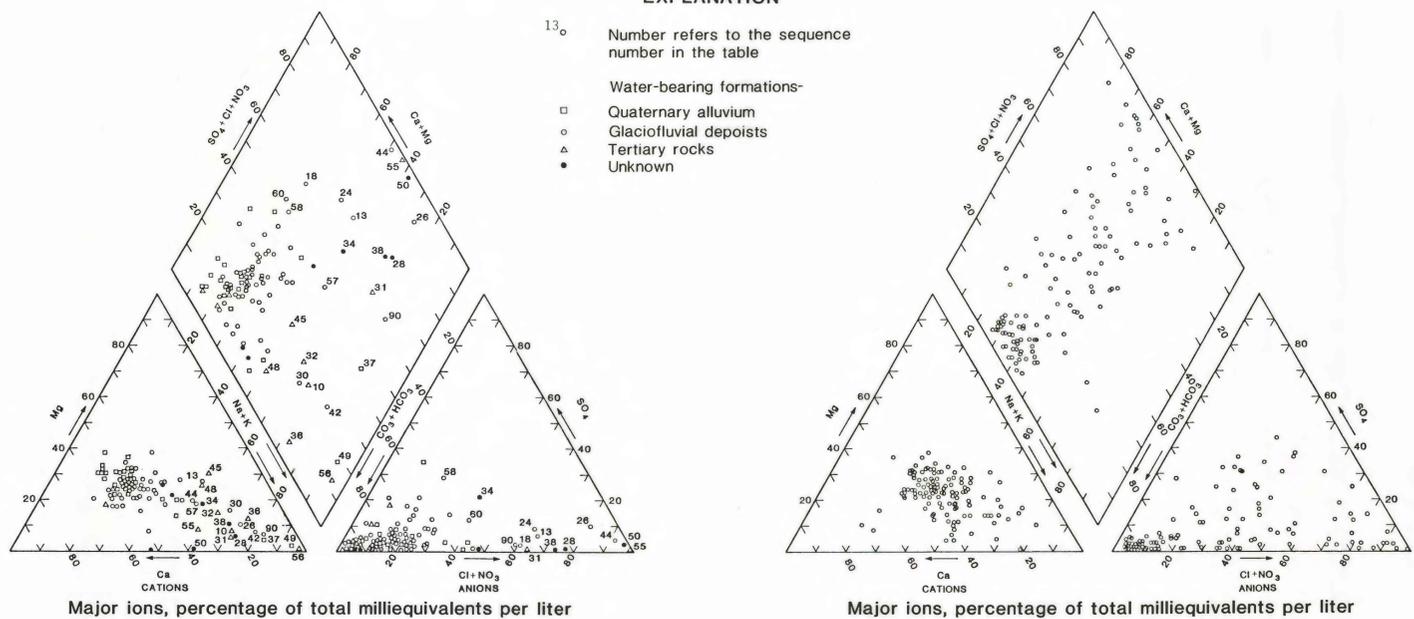
Base from U.S. Geological Survey quadrangles Seattle, Washington; Hoquiam, Washington-Oregon, 1974; 1:250,000

EXPLANATION

○¹³ Number refers to the sequence number in the table

Water-bearing formations-

- Quaternary alluvium
- Glaciofluvial deposits
- △ Tertiary rocks
- Unknown



MARYS CORNER AREA

| Point number | Local well number | Depth of well (ft) | Water-bearing material or formation | Year(s) sampled | Nitrate (NO ₃ -N) (mg/L) | Dissolved solids (mg/L) | Constituent concentrations exceeding maximum contaminant levels ¹ |
|----------------------------|-------------------|--------------------|--|-----------------|-------------------------------------|-------------------------|--|
| Lewis County | | | | | | | |
| 1 | 11/1W-7H1 | 62 | Lacamas Creek unit | 1980 | 1.1 | 109 | |
| 2 | 11/1W-8E2 | 79 | Newaukum terrace unit | 1953 | .02 | 126 | |
| 3 | 11/1W-12F2 | 116 | Layton Prairie unit | 1980 | 2.5 | 90 | |
| 4 | 11/1W-14L2 | 58 | --do-- | 1953 | .86 | 114 | |
| 5 | 11/1W-18K1 | 24 | Alluvium | 1980 | 1.3 | 89 | |
| 6 | 11/2W-4C1 | 143 | Logan Hill Formation | 1980 | .00 | 106 | |
| 7 | 11/2W-9P2 | 142 | Unknown | 1971 | .07 | 74 | 2T-iron, 2,900 ug/L. |
| 8 | 11/2W-24G1 | 41 | Alluvium | 1980 | .00 | 148 | 2D-iron, 3,100 ug/L; D-manganese, 240 ug/L. |
| 9 | 11/2W-29P1 | 186 | Sandstone | 1952 | -- | 138 | T-iron, 10,000 ug/L. |
| 10 | 11/2W-32C1 | 220 | Unknown | 1948, 1962 | .32 | 222 | T-iron, 1,200 ug/L; T-manganese, 200 ug/L. |
| 11 | 11/2W-32D1 | 75 | Unknown | 1948 | -- | 139 | T-iron, 900 ug/L. |
| 12 | 11/2W-34R3 | 79 | Sandstone | 1980 | .00 | 139 | D-iron, 3,600 ug/L; D-manganese, 150 ug/L. |
| 13 | 12/1E-9O1 | 142 | Lacamas Creek unit | 1953 | 6.3 | 75 | |
| 14 | 12/1E-10P2 | 209 | --do-- | 1980 | .86 | 120 | |
| 15 | 12/1E-13F1 | 161 | Newaukum terrace unit | 1980 | 2.6 | 99 | |
| 16 | 12/1E-23B1 | 172 | Terrace deposits | 1980 | .07 | 116 | |
| 17 | 12/1W-22D1 | 16 | Lacamas Creek unit | 1963 | .23 | 161 | |
| 18 | 12/1W-26E1 | 21 | --do-- | 1963 | 6.1 | 126 | |
| 19 | 12/1W-26L1 | 35 | --do-- | 1963 | .27 | 135 | T-iron, 440 ug/L. |
| 20 | 12/1W-36E2 | 60 | --do-- | 1963 | 2.5 | 121 | |
| 21 | 12/2E-13H2 | 103 | Layton Prairie unit | 1980 | 1.5 | 112 | |
| 22 | 12/2E-17F1 | 140 | Terrace deposits | 1980 | 2.0 | 102 | |
| 23 | 12/2W-10M1 | 100 | Logan Hill Formation | 1953 | .02 | 81 | T-iron, 1,600 ug/L. |
| 24 | 12/2W-24G1 | 36 | --do-- | 1963 | 2.5 | 43 | |
| 25 | 12/2W-24N3 | 14 | --do-- | 1963 | .29 | 111 | |
| 26 | 12/2W-27J1 | 52 | --do-- | 1963 | 1.3 | 173 | |
| 27 | 13/1E-19K2 | 182 | --do-- | 1954 | .07 | 111 | |
| 28 | 13/1W-17K1 | 1,595 | Unknown | 1959 | .02 | 594 | |
| 29 | 13/1W-25B1 | 101 | Logan Hill Formation | 1963 | .09 | 53 | T-iron, 800 ug/L. |
| 30 | 13/1W-28P1 | 135 | Newaukum terrace unit | 1953 | .98 | 180 | T-iron, 420 ug/L. |
| 31 | 13/1W-29D1 | 490 | Nonmarine unit of the Newaukum artesian basin | 1980 | .44 | 438 | D-manganese, 50 ug/L. |
| 32 | 13/1W-33C2 | 130 | --do-- | 1980 | 1.3 | 184 | D-manganese, 50 ug/L. |
| 33 | 13/1W-33R1 | 73 | Logan Hill Formation | 1963 | .32 | 82 | |
| 34 | 13/1W-34H1 | 30 | Unknown | 1963 | .66 | 36 | |
| 35 | 13/1W-34N1 | 54 | --do-- | 1963 | .47 | 21 | T-iron, 880 ug/L. |
| 36 | 13/1W-35B1 | 183 | Nonmarine unit of the Newaukum artesian basin | 1963 | .05 | 206 | T-iron, 390 ug/L. |
| 37 | 13/2W-8A3 | 35 | Alluvium | 1980 | .02 | 268 | D-iron, 530 ug/L. |
| 38 | 13/2W-15M1 | 244 | Clay and sand | 1953 | .09 | 572 | T-iron, 320 ug/L. |
| 39 | 13/2W-23N2 | 68 | Newaukum Terrace unit | 1963 | .36 | 54 | |
| 40 | 13/2W-24P3 | 70 | --do-- | 1980 | .63 | 70 | |
| 41 | 13/2W-26K1 | 22 | Unknown | 1963 | .09 | 136 | |
| 42 | 13/2W-27B1 | 330 | Sand and gravel at the base of the Newaukum terrace unit | 1980 | .01 | 197 | D-iron, 370 ug/L. |
| 43 | 13/2W-34A3 | 101 | Logan Hill Formation | 1957, 1960 | .29 | 147 | |
| 44 | 13/2W-36D1 | 40 | --do-- | 1963 | 16.9 | 163 | |
| 45 | 13/3W-2F1 | 90 | Basalt | 1953 | .00 | 104 | T-iron, 460 ug/L. |
| 46 | 13/3W-382 | 72 | Alluvium | 1960 | .45 | 163 | |
| 47 | 13/3W-9G4 | 37 | --do-- | 1960 | 7.9 | 145 | |
| 48 | 13/3W-16E1 | 190 | Nonmarine sedimentary | 1980 | .03 | 184 | D-iron, 1,500 ug/L; D-manganese, 120 ug/L. |
| 49 | 13/4W-3L1 | 81 | Alluvium | 1960 | .07 | 298 | |
| 50 | 13/5W-33J2 | 270 | Unknown | 1958 | .02 | 1,550 | T-iron, 1,000 ug/L. |
| 51 | 14/2W-4E1 | 53 | Glacial outwash | 1952 | -- | 67 | 2T-iron, 1,000 ug/L. |
| 52 | 14/2W-5G2 | 88 | --do-- | 1960 | 1.6 | 160 | T-iron, 3,100 ug/L. |
| 53 | 14/2W-5M1 | 78 | --do-- | 1980 | .98 | 149 | |
| 54 | 14/2W-17D2 | 63 | Alluvium | 1960 | .00 | 185 | T-iron, 1,800 ug/L. |
| 55 | 14/2W-22H1 | 1,200 | Shale and sand | 1958 | 18.1 | 45,500 | T-iron, 65,000 ug/L. |
| 56 | 14/4W-6G1 | 80 | Shale | 1960 | .07 | 426 | T-iron, 740 ug/L. |
| 57 | 15/2W-29R1 | 70 | Glacial outwash | 1980 | .16 | 272 | 2D-iron, 7,600 ug/L; D-manganese, 420 ug/L. |
| 58 | 15/2W-31E1O | 60 | --do-- | 1980 | 1.1 | 43 | |
| 59 | 15/3W-36R4 | 51 | --do-- | 1980 | 2.4 | 109 | |
| 60 | 15/3W-36K2 | 54 | --do-- | 1954 | 2.9 | 96 | |
| Thurston County | | | | | | | |
| 61 | 15/1W-6A1 | 45 | Glacial outwash | 1960 | 2.0 | 66 | |
| 62 | 15/1W-7E1 | 60 | --do-- | 1959, 1960 | .85 | 77 | |
| 63 | 15/2W-5E1 | 62 | --do-- | 1960 | 1.4 | 84 | T-iron, 1,900 ug/L. |
| 64 | 15/2W-15R1 | 50 | --do-- | 1960 | 1.4 | 92 | |
| 65 | 15/3W-1K1 | 65 | --do-- | 1971 | 1.2 | 79 | |
| 66 | 15/3W-5B1 | 85 | --do-- | 1960 | .09 | 105 | T-iron, 2,200 ug/L. |
| 67 | 15/3W-10L1 | 62 | --do-- | 1980 | 2.3 | 89 | |
| 68 | 15/3W-11H3 | 50 | --do-- | 1980 | 2.1 | 100 | |
| 69 | 15/3W-14C1 | 74 | --do-- | 1958 | .25 | 66 | |
| 70 | 15/3W-14C2 | 80 | --do-- | 1959 | .56 | 76 | |
| 71 | 15/3W-24E1 | 61 | Alluvium | 1980 | 2.0 | 168 | |
| 72 | 16/3W-16L2 | 98 | Glacial outwash | 1960 | .14 | 56 | |
| 73 | 16/3W-31G2 | 65 | --do-- | 1980 | 1.8 | 75 | |
| 74 | 16/3W-32B1 | 60 | --do-- | 1980 | 1.3 | 82 | |
| 75 | 16/4W-36R1 | 33 | --do-- | 1980 | 1.6 | 91 | |
| Grays Harbor County | | | | | | | |
| 76 | 15/4W-3J1 | 64 | Glacial outwash | 1980 | 4.7 | 123 | |
| 77 | 15/4W-3R1 | 62 | --do-- | 1975 | 2.1 | 94 | |
| 78 | 15/4W-4G1 | 62 | Alluvium | 1975 | .60 | 88 | |
| 79 | 15/4W-5B1 | 28 | --do-- | 1975 | .91 | 96 | |
| 80 | 15/4W-10G2 | 26 | --do-- | 1960 | .61 | 90 | |
| 81 | 16/4W-31F1 | 62 | --do-- | 1975 | .53 | 87 | |
| 82 | 16/4W-32R1 | 34 | --do-- | 1975 | .59 | 85 | |
| 83 | 16/4W-33F1 | 48 | --do-- | 1971 | 1.6 | 117 | T-iron, 850 ug/L. |
| 84 | 16/4W-33F2 | 82 | --do-- | 1971 | .80 | 106 | T-iron, 490 ug/L. |
| 85 | 16/5W-22F1 | 54 | Glacial outwash | 1980 | .70 | 65 | |
| 86 | 17/5W-29P1 | 80 | --do-- | 1960 | .38 | 82 | |
| 87 | 17/5W-33F1 | 54 | Alluvium | 1980 | .60 | 87 | |
| 88 | 17/6W-01C1 | 76 | Glacial outwash | 1960 | .79 | 67 | |
| 89 | 17/6W-4D1 | 40 | Alluvium | 1959 | .43 | 58 | |
| 90 | 17/7W-2F1 | 55 | Glacial outwash | 1980 | .00 | 217 | D-manganese, 50 ug/L. |
| 91 | 17/7W-11B1 | 50 | Alluvium | 1961 | .16 | 106 | T-iron, 2,400 ug/L. |
| 92 | 17/7W-11E1 | 36 | --do-- | 1961 | .05 | 119 | T-iron, 730 ug/L. |
| 93 | 17/7W-11H1 | 10 | --do-- | 1961 | .79 | 93 | |
| 94 | 17/7W-11K1 | 51 | --do-- | 1960 | .62 | 114 | |
| 95 | 17/8W-12L2 | 155 | --do-- | 1980 | .00 | 149 | D-manganese, 100 ug/L. |
| 96 | 17/8W-15D1 | 100 | --do-- | 1971 | .30 | 178 | T-iron, 600 ug/L; T-manganese, 500 ug/L. |
| 97 | 17/8W-16F1 | 46 | Glacial outwash | 1980 | 3.4 | 115 | |
| 98 | 18/6W-27P1 | 100 | --do-- | 1971 | 1.1 | 108 | |
| 99 | 18/6W-29E1 | 105 | Sandstone | 1980 | .00 | 138 | D-iron, 300 ug/L; D-manganese, 130 ug/L. |
| 100 | 18/6W-31H1 | 98 | Alluvium | 1960 | .02 | 100 | |
| 101 | 18/6W-31K1 | 48 | Glacial outwash | 1980 | 4.3 | 100 | |
| 102 | 18/6W-33H1 | 61 | --do-- | 1980 | 1.4 | 79 | |

¹U.S. Environmental Agency, 1976, 1977b.
²T, total; D, dissolved.

PLATE 3.--Data collection sites; ion-distribution diagrams; and tables listing well depths, water-bearing formations, and selected water-quality data for Lewis County and areas adjacent to the Chehalis River, Thurston and Grays Harbor Counties, Washington.