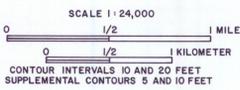


Base from U.S. Geological Survey Badger Creek, 1972; Goddard Lake, 1983; Long Creek East, 1983; and Poplar NE, 1972 quadrangles, 1:24,000



- EXPLANATION**
- TYPE 1 WATER (UNCONTAMINATED)—Based on water wells completed in Quaternary deposits that produce Type 1 water or subarea of low electromagnetic apparent conductivity
 - POSSIBLE TYPE 2 SALINE-WATER PLUME (MODERATELY CONTAMINATED)—Based on subarea of moderate electromagnetic apparent conductivity that does not contain water wells
 - POSSIBLE TYPE 3 SALINE-WATER PLUME (CONSIDERABLY CONTAMINATED)—Based on subarea of high electromagnetic apparent conductivity that does not contain water wells
 - CONFIRMED TYPE 2 SALINE-WATER PLUME (MODERATELY CONTAMINATED)—Based on subarea of moderate electromagnetic apparent conductivity that contains well(s) that produce Type 2 water
 - CONFIRMED TYPE 3 SALINE-WATER PLUME (CONSIDERABLY CONTAMINATED)—Based on subarea of high electromagnetic apparent conductivity that contains well(s) that produce Type 3 water
 - AREA OF SIGNIFICANTLY HIGH ELECTROMAGNETIC APPARENT CONDUCTIVITY—Probable specific sources of saline water may be located in or upgradient of these areas. These areas are delineated when electromagnetic apparent conductivities are ≥ 20 millimhos per meter than electromagnetic apparent conductivities used to delineate subarea 3 in figure 16.
 - APPROXIMATE BOUNDARY OF SALINE-WATER PLUME AND BOUNDARY OF AREA OF SIGNIFICANTLY HIGH ELECTROMAGNETIC APPARENT CONDUCTIVITY
 - PIPELINE FOR TRANSPORTING OIL-FIELD FLUIDS—Queried where location uncertain
 - BOUNDARY OF ELECTROMAGNETIC GEOPHYSICAL SURVEY
 - SURFACE-WATER DATA-COLLECTION SITE
 - WELL SITES—First line is the well name and site status (see abbreviations, below). Parentheses in well name designate lessee, owner, or previous operator. Second line is the geologic unit in which the well is completed (for brine-injection wells, the unit in parentheses is the source of the brine). Symbols -- indicates no data; (?) indicates well name or status not known
 - Brine-injection well
 - Oil well
 - Ashland-Lozar Tank Battery (Ab)
 - STORAGE-TANK FACILITY—Identified by site name if known. (?) indicates status not known
 - BRINE-EVAPORATION PIT OR PIT FOR STORAGE OF OIL OR OTHER FLUIDS—Pits associated with brine-injection wells are evaporation pits. Pits associated with individual oil wells may be for temporary storage of produced crude oil and any associated brine, or fluids associated with any redrilling or general well maintenance. (?) indicates status not known
- | | |
|--|--|
| <p>ABBREVIATIONS FOR SITE STATUS</p> <p>Ac Active
Ab Abandoned
Ia Inactive
SI Shut In
TA Temporarily abandoned
G Denotes a gas well</p> | <p>ABBREVIATIONS FOR GEOLOGIC UNITS</p> <p>Jr Judith River Formation (Upper Cretaceous)
Kd Dakota Sandstone (Lower Cretaceous)
Mh Madison Formation (Upper Mississippian)
Mm Madison Group (Mississippian)
Mc Charles Formation of Madison Group
Mmc Mission Canyon Limestone of Madison Group
Dn Nisku Formation (Upper Devonian)
Dd Dupero Formation (Upper Devonian)</p> |
|--|--|

MAP SHOWING LOCATION OF POSSIBLE AND CONFIRMED SALINE-WATER PLUMES, SURFACE-WATER DATA-COLLECTION SITES, KNOWN BRINE-INJECTION WELLS, OIL WELLS, PIPELINES, STORAGE-TANK FACILITIES, AND BRINE-EVAPORATION OR STORAGE PITS IN THE EAST POPLAR OIL FIELD STUDY AREA, NORTHEASTERN MONTANA

By
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