

**MOUNTAIN IRON CITY COUNCIL MEETING
COMMUNITY CENTER
MOUNTAIN IRON ROOM
MONDAY, MARCH 1, 2010 - 6:30 P.M.
A G E N D A**

- I. Roll Call
- II. Consent Agenda
 - A. Minutes of the February 17, 2010, Regular Meeting (#1-12)
 - B. Minutes of the February 17, 2010, Special Meeting (#13)
 - C. Minutes of the February 22, 2010, Committee of the Whole Meeting (#14-15)
 - D. Receipts
 - E. Bills and Payroll
 - F. Communications (#71-73)
- III. Public Forum
 - A. Wellhead Protection Plan Public Hearing (#16-58)
- IV. Committee and Staff Reports
 - A. Mayor's Report
 - 1. Labor Management Meeting (#59)
 - B. City Administrator's Report
 - C. Director of Public Works Report
 - D. Sheriff's Department Report
 - E. City Engineer's Report
 - 1. Pay Request Number 2 Waste Water Treatment Plant (#60-63)
 - F. Liaison Reports
- V. Unfinished Business
 - A. Marquette Catholic School Parents Association Request (#64)
- VI. New Business
 - A. Local Board of Review (#65-67)
 - B. Mesabi Family YMCA Request (#68-69)
 - C. Notification of all City Government Related Meetings (#70)
 - D. Communications (#71-73)
- VII. Announcements
- VIII. Closed Meeting – Consider Strategies for Labor Negotiations (#74)
- IX. Adjourn

Denotes page number in packet

MINUTES
MOUNTAIN IRON CITY COUNCIL
FEBRUARY 17, 2010

Mayor Skalko called the City Council meeting to order at 6:38 p.m. with the following members present: Joe Prebeg, Jr., Tony Zupancich, Alan Stanaway, Ed Roskoski, and Mayor Gary Skalko. Also present were: Craig J. Wainio, City Administrator; Jill M. Anderson, Municipal Services Secretary; Don Kleinschmidt, Director of Public Works; Sam Aluni, City Attorney; and Rod Flannigan, City Engineer.

The Mayor reminded all Council Members that the Council has a policy that all items must be on the agenda for the Council to act on them.

It was moved by Skalko and seconded by Zupancich that the consent agenda be approved as follows:

1. Approve the minutes of the February 1, 2010, regular meeting as submitted.
2. That the communications be accepted, placed on file, and those requiring further action by the City Council be acted upon during their proper sequence on the agenda.
3. To acknowledge the receipts for the period February 1-15, 2010, totaling \$379,165.91, (a list is attached and made a part of these minutes).
4. To authorize the payments of the bills and payroll for the period February 1-15, 2010, totaling \$309,092.27, (a list is attached and made a part of these minutes).

The motion carried on the following roll call vote: Prebeg, yes; Zupancich, yes; Stanaway, yes; Roskoski, abstain; and Skalko, yes.

No one spoke during the public forum.

The Mayor updated the Council on the following:

- Elizabeth Schur. The Mayor advised the Council that the City lost a very active community member. She was President of the Senior Citizen's Club. He offered his condolences to the family and said that she would be deeply missed.

It was moved by Skalko and seconded by Prebeg to direct City Staff to update the City Ordinance book and the on-line ordinance references as requested by the Planning and Zoning Commission. Councilor Roskoski amended the motion that when the updating project is completed that all City Council, who would like to have a book, and Planning and Zoning Commission members be given the updated book. After further discussion, Councilor Roskoski withdrew his amendment. The motion carried.

It was moved by Zupancich and seconded by Stanaway to authorize the non-audit services form for Walker, Giroux, and Hahne, Ltd. for the 2009 audit. The motion carried.

It was moved by Prebeg and seconded by Zupancich to authorize the execution of a ten year Lease Number 144-012-0594, for the Parkville Ball Field, with the Minnesota Department of Natural Resources, (a copy is attached and made a part of these minutes), at a total cost of \$600.00. The motion carried unanimously on a roll call vote.

The City Administrator updated the Council on the following:

- **Building Inspector.** The City is currently advertising for a Commercial Building Inspector and for First Responders.

It was moved by Zupancich and seconded by Roskoski to set a public informational meeting for the Wellhead Protection Plan on Monday, March 1, 2010. The motion carried.

It was moved by Prebeg and seconded by Stanaway to approve the West Two Rivers Caretaker Agreement with William Haapala for the 2010 season, (a copy is attached and made a part of these minutes). The motion carried.

It was moved by Prebeg and seconded by Zupancich to accept the recommendation of the Parks and Recreation Board and approve the conceptual plan and authorize City Staff to proceed with the preparation of plans and specification for the Locomotive Park Improvements on the East half as designed by the Frizzell Winter Associates. The motion carried with Roskoski voting no.

It was moved by Prebeg and seconded by Stanaway to approve the preparation of the plans and specifications for the West Virginia Park Improvements and the Wolf Ball Field upgrade. The motion carried.

It was moved by Stanaway and seconded by Zupancich to authorize the Fire Chief to attend the IAAI Conference in Saint Cloud, at City expense. The motion carried.

It was moved by Zupancich and seconded by Skalko to authorize City Staff to hire ARI to prepare the plans and specifications for the City garage improvements and authorize City Staff to look into financing for the project. The motion carried with Roskoski voting no.

It was moved by Stanaway and seconded by Skalko to accept the recommendation of the Buildings and Grounds Committee and authorize City Staff to seek quotes for the patching and painting of the Library basement. The motion carried with Roskoski voting no.

It was moved by Prebeg and seconded by Stanaway to authorize B.G.'s Bar and Grill to use their On-Sale Liquor License at the Mountain Iron Community Center on Saturday, February 20, 2010 for a wedding and the YMCA on Friday, April 23, 2010. The motion carried.

It was moved by Zupancich and seconded by Roskoski to waive the building rental fees for the Mountain Iron-Buhl All Night Chemical Free Graduation Party on May 28, 2010. The motion carried.

The Council reviewed the request of the Marquette Catholic School Parents Association requesting to have the Community Center building rental fees waived. The Council tabled the request and directed the City Attorney to review the request.

The following announcements were made:

- Committee-of-the-Whole meeting with the City Council and the Planning and Zoning Commission on Monday, February 22, 2010 at 6:00 p.m. to discuss developing a policy concerning rental regulations.
- Firearms Safety Class at the Mountain Iron Library beginning on March 2, 2010, two times per week, for three weeks.
- Closed meeting. No closed meeting and a mediation session was scheduled for March 15, 2010.

At 7:21 p.m., it was moved by Skalko and seconded by Roskoski that the meeting be adjourned. The motion carried.

Submitted by:



Jill M. Anderson, CMC/MMCA
Municipal Services Secretary

www.mtniron.com

Summary By Category And Distribution

Category	Distribution	Amount
UTILITY	UTILITY	140,230.91
BUILDING RENTALS	BUILDING RENTAL DEPOSITS	1,500.00
CHARGE FOR SERVICES	SEWER-CHARGE FOR SERVICES	61.68
MISCELLANEOUS	BLUE CROSS/BLUE SHIELD PAYABLE	110.08
FINES	PARKING VIOLATIONS	150.00
MISCELLANEOUS	ASSESSMENT SEARCHES	20.00
MISCELLANEOUS	CABLE TV FRANCHISE FEE	6,041.79
MISCELLANEOUS	COCA-COLA RECEIPTS-CITY HALL	33.80
CD INTEREST	CD INTEREST 301	870.55
MISCELLANEOUS	BAD DEBT-ELECTRIC	412.50
LICENSES	ANIMAL	10.00
METER DEPOSITS	ELECTRIC	1,200.00
CD INTEREST	CD INTEREST 101	593.93
CD INTEREST	CD INTEREST 378	254.80
CD INTEREST	CD INTEREST 603	84.93
BUILDING RENTALS	SENIOR CENTER	90.00
BUILDING RENTALS	COMMUNITY CENTER	200.00
INTERGOVERNMENTAL REVENUE	GRANTS RECEIVABLE	225,459.62
PERMITS	BUILDING	5.00
SPECIAL ASSESSMENTS	SPECIAL ASSESS.-BOND MONEY	292.50
SPECIAL ASSESSMENTS	INTEREST-SP.ASSESS.-BONDS ISSU	29.48
FINES	CRIMINAL	1,514.34
Summary Totals:		<u>379,165.91</u>

Per	Date	Check No	Vendor No	Payee	Check GL Acct	Amount
02/10	02/18/2010	139100	10056	A T & T MOBILITY	101-20200	1,135.84
02/10	02/18/2010	139101	10008	AIRGAS NORTH CENTRAL	101-20200	125.24
02/10	02/18/2010	139102	10051	APPLIED CONCEPTS INC	301-20200	109.01
02/10	02/18/2010	139103	220003	CITY OF VIRGINIA	101-20200	58.39
02/10	02/18/2010	139104	30072	CW TECHNOLOGY	301-20200	1,018.30
02/10	02/18/2010	139105	40002	DEPT NATURAL RESOURCES	101-20200	580.00
02/10	02/18/2010	139106	1075	EMILY ZEIDLER	101-20200	200.00
02/10	02/18/2010	139107	500012	ERA LABORATORIES INC	602-20200	533.50
02/10	02/18/2010	139108	50005	EXACT EYE CARE	101-20200	748.27
02/10	02/18/2010	139109	60006	FISHER PRINTING	603-20200	874.24
02/10	02/18/2010	139110	60038	FLEET SERVICES	101-20200	5,156.79
02/10	02/18/2010	139111	213	GARY NEWMAN	101-20200	200.00
02/10	02/18/2010	139112	212	GLENNYS GIORGI	604-20200	137.47
02/10	02/18/2010	139113	70016	GOPHER STATE ONE CALL INC	604-20200	113.05
02/10	02/18/2010	139114	70007	GOVERNMENT TRAINING SERVICE	101-20200	45.00
02/10	02/18/2010	139115	70004	GRANDE ACE HARDWARE	101-20200	138.86
02/10	02/18/2010	139116	70028	GREATER MINNESOTA AGENCY INC	101-20200	192.00
02/10	02/18/2010	139117	2017	HABITAT FOR HUMANITY	101-20200	200.00
02/10	02/18/2010	139118	215	INTERNATIONAL UNION OF	101-20200	200.00
02/10	02/18/2010	139119	90012	IREA SECRETARY/TREASURER	101-20200	50.00
02/10	02/18/2010	139120	120006	L & M SUPPLY	101-20200	5,846.88
02/10	02/18/2010	139121	120014	LUNDGREN MOTORS	101-20200	457.60
02/10	02/18/2010	139122	130153	M. D. PRODUCTS INC	101-20200	963.92
02/10	02/18/2010	139123	216	MARY SISKAR	604-20200	11.37
02/10	02/18/2010	139124	130060	MCCARTHY WELL COMPANY	601-20200	600.00
02/10	02/18/2010	139125	130004	MESABI DAILY NEWS	101-20200	967.54
02/10	02/18/2010	139126	130006	MESABI HUMANE SOCIETY	101-20200	1,500.00
02/10	02/18/2010	139127	130026	MESABI SIGN COMPANY	101-20200	3,794.06
02/10	02/18/2010	139128	140026	MINNESOTA ENERGY RESOURCES	101-20200	5,822.91
02/10	02/18/2010	139129	130009	MINNESOTA POWER	604-20200	98,552.75
02/10	02/18/2010	139130	130011	MOUNTAIN IRON POSTMASTER	604-20200	185.00
02/10	02/18/2010	139131	140052	NORTHEAST SERVICE COOPERATIVE	101-20200	47,209.00
02/10	02/18/2010	139132	1227	NORTHERN MN BUILDERS ASSOC	101-20200	50.00
02/10	02/18/2010	139133	140055	NORTHERN VISUAL SERVICES	101-20200	30.00
02/10	02/18/2010	139134	214	PAMERLA MCDOWELL	101-20200	100.00
02/10	02/18/2010	139135	160004	PITNEY BOWES INC	101-20200	261.59
02/10	02/18/2010	139136	170007	QUILL CORPORATION	101-20200	411.97
02/10	02/18/2010	139137	170001	QWEST	101-20200	351.48
02/10	02/18/2010	139138	180017	RELIABLE OFFICE SUPPLIES	101-20200	94.86
02/10	02/18/2010	139139	180045	RESERVE ACCOUNT	603-20200	1,000.00
02/10	02/18/2010	139140	190045	SERVICE SOLUTIONS	101-20200	22.34
02/10	02/18/2010	139141	1152	ST LOUIS COUNTY PHHS	604-20200	578.14
02/10	02/18/2010	139142	5003	STEVE NORVITCH	101-20200	14.43
02/10	02/18/2010	139143	200020	THE TRENTI LAW FIRM	101-20200	2,619.15
02/10	02/18/2010	139144	210001	UNITED ELECTRIC COMPANY	604-20200	603.39
02/10	02/18/2010	139145	210002	UNITED TRUCK BODY COMPANY INC	604-20200	160.59
02/10	02/18/2010	139146	210036	UNIVERSITY OF MINNESOTA	101-20200	35.00
02/10	02/18/2010	139147	220014	VIKING INDUSTRIAL NORTH	604-20200	257.75
02/10	02/18/2010	139148	220004	VIRGINIA DEPARTMENT OF PUBLIC	604-20200	49,013.07
02/10	02/18/2010	139149	220020	VISA OR AMERICAN BANK CC PMT	101-20200	6,974.75
02/10	02/18/2010	139150	230028	WISCONSIN ENERGY CONSERVATION	604-20200	145.00
02/10	02/18/2010	139151	240001	XEROX CORPORATION	101-20200	729.90

Totals:

241,180.40

Payroll-PP Ending 2/5/2010
Electronic Trans.-Sales Tax54,087.38
13,824.49

M = Manual Check, V = Void Check

TOTAL EXPENDITURES

\$309,092.27



CITY OF MOUNTAIN IRON

"TACONITE CAPITAL OF THE WORLD"

PHONE: 218-748-7570 • FAX: 218-748-7573 • www.mtniron.com
8586 ENTERPRISE DRIVE SOUTH • MOUNTAIN IRON, MN • 55768-8260

CITY OF MOUNTAIN IRON WEST TWO RIVERS CARETAKER AGREEMENT

WHEREAS, the City of Mountain Iron, St. Louis County, Minnesota, is the owner of the West Two Rivers Campground facility; and

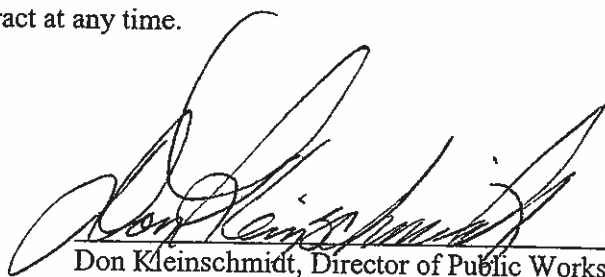
WHEREAS, William P. Haapala wishes to contract with the City of Mountain Iron to operate the said campground;

NOW, THEREFORE, be it agreed, by and between the parties hereto as follows:

1. William P. Haapala agrees to manage said West Two Rivers Campground for the period of Wednesday, May 12th, 2010 to Tuesday, September 7th, 2010.
2. The City of Mountain Iron agrees to pay William P. Haapala the sum of \$600.00 per week for operation of said facility for said 18-week period. Said compensation shall be paid bi-weekly. The manager agrees to staff the campground and/or office daily between the hours of 11:00 a.m. to 7:00 p.m., seven days per week and respond to requests for information or service from campground users at other times of the day. If necessary, the manager must inform the Director of Public Works or designee of any changes. If the manager is to be absent at any time, he must post this information on the Caretaker's Board outside of the building stating his departure and arrival.
3. William P. Haapala agrees to act as manager of the campground facility and to collect the fees for the campground and to transmit the same to the City of Mountain Iron on a as-needed basis, during office hours. The manager is to reside at the campground and must provide his own furnishings for the provided manager's quarters. The City of Mountain Iron will provide electrical service to this site.
4. William P. Haapala consents and agrees that the contractual duties of supervising the West Two Rivers Campground facility include, but are not limited to, those indicated on Exhibit "A" attached hereto and made a part of hereof.
5. William P. Haapala consents and agrees that services and duties of supervising the West Two Rivers Campground facility indicated on Exhibit "A" attached and other duties are required to be performed by him individually. William P. Haapala is prohibited from subcontracting and/or hiring out any of his responsibilities to any other individual or organization, without the express written consent of the City of Mountain Iron.
6. The City of Mountain Iron can terminate this contract at any time.

DATED this 19th day of FEB., 2010

William P. Haapala 2-19-10
William P. Haapala - Signature & Date


Don Kleinschmidt, Director of Public Works

2010
EXHIBIT "A"
WEST TWO RIVERS CAMPGROUD MAINTENANCE GUIDE

DAILY:

1. Clean bathrooms and fixtures, sweep and mop the control building.
2. Clean up camping areas and all other grounds.
3. Wipe off picnic tabletops at campsites and pavilions.
4. Pick-up litter on bench area, boat landings and fishing dock.
5. Collect fees as needed and turn in fees and receipts daily at the Mountain Iron City Hall.
6. Managers' residence and grounds must be kept clean and in order at all times.
7. Check bathrooms and shower stalls.
8. Perform daily inspections of all campsites each evening to ensure that payments have been made on all occupied sites and make appropriate arrangements for collection of unpaid fees.
9. Take reservations for campsites, and maintain camping and building rental records as required by the Owner.
10. Enforce campground rules and regulations, contact law enforcement when necessary.
11. Provide all campers with a copy of the campground rules and explain rules as necessary.
12. Maintain public information material as provided by the City at the campground office, answer questions and inquiries concerning the information and available services in and around Mountain Iron.
13. Inspect campground for safety-maintenance conditions and necessary repairs, and inform City personnel promptly if any repairs or other corrections are needed.
14. Clean, sweep and mop office, kitchen, dining room, pavilion, water fountain and concession buildings as needed, cleaning supplies to be furnished by Owner.

WEEKLY:

1. Cut the grass and do trimming of the campground.
2. Clean area around woodshed – rake all sticks, etc.
3. Wash windows and screens on all buildings as needed.
4. Pick up litter along County Road 761 (Campground Road) twice a week.
5. Clean/wash shower curtains.
6. Scrub out shower stalls. This includes walls and floors of shower stalls and bathrooms.

AS NEEDED:

1. Clear branches from campground area.
2. Clean and inventory storage area in control building.
3. Empty garbage cans.
4. Clean cabin after being used.
5. Perform duties as assigned by the Public Works Director as to the operation of the campground.
6. Notify portable toilet contractor of problems or additional servicing when required.

Lease Number 144-012-0594
Field Unit Region 1 234

MISCELLANEOUS LEASE

This lease, executed in duplicate by and between the State of Minnesota, under the authority and subject to the provisions of M.S., sec. 92.50, acting by and through its Commissioner of Natural Resources, hereinafter called LESSOR and; the LESSEE as named below.

Lessee City of MT Iron		
Lessee Address (No. & Street, RFD, Box No., City, State, Zip Code) Box 505 MT. Iron, MN 55768		
Lease Fee \$ 600.00	Fee Payment Schedule \$300.00 due upon execution and \$300.00 on or before July 1, 2013	
Term Ten (10) Years	Effective Date July 1, 2008	Termination Date June 30, 2018
Purpose of Lease Recreation Use-Ballfield		County St. Louis County

IT IS AGREED AS FOLLOWS:

- PREMISES:** The LESSOR in consideration of the terms, conditions and agreements contained herein, and the payment of the Lease Fee to be paid by the LESSEE, hereby leases to the LESSEE, subject at all times to sale, lease and use for mineral or other purposes the following described premises to wit:

That part of an area 220 feet in width and 300 feet in length within the Northeast corner of the Southeast ¼ of the Southeast ¼; Section 2, Township 58 North, Range 18 West; St Louis , containing 1.67 acres more or less and as approximately shown on the attached map which is made part of this lease.

and herein referred to as the "Premises".
- TERMS:** The terms LESSOR, LESSEE, LESSEE ADDRESS, LEASE FEE, FEE PAYMENT SCHEDULE, TERM, EFFECTIVE DATE, TERMINATION DATE, PURPOSE OF LEASE AND STATUTORY AUTHORITY, use herein shall be described above and are incorporated herein.
- LEASE PERIOD:** This lease shall be in effect for the TERM, beginning on the EFFECTIVE DATE and ending on the TERMINATION DATE, unless terminated earlier under provisions of this lease.
- USE OF PREMISES:** LESSEE shall use the Premises only for PURPOSE OF LEASE.
- LEGAL OBLIGATIONS:** This lease is not to be construed to relieve the LESSEE of any obligations imposed by law.
- ENCUMBRANCE:** This lease is subject to all existing easements, right-of-ways, licenses, leases and other encumbrance upon the Premises and LESSOR shall not be liable to LESSEE for any damages resulting from any action taken by a holder of an interest pursuant to the rights of that holder thereunder.
- MAINTENANCE:** The LESSEE shall maintain the Premises in good repair, keeping them safe and clean, removing all refuses and debris that may accumulate. LESSEE shall comply with all laws affecting the Premises, including local ordinances and state regulations. No timber shall be cut, used, removed or destroyed by the LESSEE without first obtaining written permission from the LESSOR.
- TERMINATION:** This lease may be terminated at any time by mutual agreement. A lease entered pursuant to Minn. Stat. section 92.50 may be canceled for just cause at anytime by LESSOR upon six months written notice.

LESSEE shall, on the TERMINATION DATE, or earlier as provided for in this lease, peacefully and quietly surrender the Premises to the LESSOR in as good condition and repair as on the EFFECTIVE DATE. If the LESSEE fails to surrender the Premises on the termination of this lease, the LESSOR may eject or remove the LESSEE from the Premises and LESSEE shall indemnify the LESSOR for all expenses incurred by the LESSOR. In addition, LESSEE shall remove all LESSEE'S property from the Premises upon termination and any property remaining shall be considered abandoned and shall be disposed of by the LESSOR according to law. If this lease is terminated prior to the TERMINATION DATE, the LESSEE shall not be relieved of any obligation incurred prior to termination.

9. HOLDOVER: LESSEE shall pay to the LESSOR a sum equal to the monthly rent plus fifty (50) percent of the monthly rent for each month that LESSEE holds the Premises after termination of this lease without authorization by LESSOR. This sum shall be liquidated damages for the wrongful holding over. LESSEE acquires no additional rights by holding the Premises after termination and shall be subject to legal action for removal.
10. LEASE PAYMENTS: The LESSEE shall pay to the Minnesota State Treasurer through the LESSOR the LEASE FEE, which is due and payable according to the FEE PAYMENT SCHEDULE. The LESSOR may assess penalties and interest as provided for by law or in this lease on any payments over thirty (30) days past due.
11. UTILITIES: LESSEE shall pay for all utilities furnished on the Premises for the term of this lease, including electric, gas, oil, water, sewer and telephone.
12. ALTERATIONS: The LESSEE shall make no changes, alterations nor improvements to the Premises or to any structure thereon without the prior written consent of the LESSOR. Any changes, alterations or improvements in or to the Premises shall be at LESSEE sole expense.
13. NO WAIVER: No delay on the part of the LESSOR in enforcing any conditions in this lease, including termination for violation of the terms of this lease, shall operate as a waiver of any of the rights of the LESSOR.
14. TAXES: The LESSEE shall pay, when due, all taxes assessed against or levied upon the Premises or upon the fixtures, improvements, furnishings, equipment and other personal property of the LESSEE located on the Premises during the TERM of this lease.
15. LIABILITY: This lease shall not be construed as imposing any liability on the LESSOR for injury or damage to the person or property of the LESSEE or to any other persons or property, arising out of any use of the Premises, or under any other easement, right-of-way, license, lease or other incumbrance now in effect. The LESSEE shall indemnify and hold harmless the LESSOR from all claims arising out of the use of the Premises whether such claims are asserted by civil action or otherwise.
16. NOTICES: Any notice given under this lease shall be in writing and served upon the other party either personally or by depositing such notice in the United States mail with the proper first class postage and address. Service shall be effective upon the depositing of the notice in the United States mails. The proper mailing address for the purposes of serving notice on the LESSOR shall be the Commissioner, Department of Natural Resources, 500 Lafayette Road, St. Paul, Minnesota 55155-4045, and on the LESSEE it shall be as stated in the LESSEE'S ADDRESS.
17. TRANSFERS: This lease shall extend to, and bind the successors, heirs, legal representative and assigns of the LESSOR and LESSEE. In addition, the LESSEE shall not without the LESSOR'S prior written consent: a) assign, convey, mortgage, pledge, encumber or otherwise transfer this lease or any interest under it; b) allow any transfer or any lien upon the LESSEE'S interest by operation of law; c) sublet the Premises or any part thereof; d) permit the use or occupancy of the Premises or any part thereof by anyone other than the LESSEE.
18. PUBLIC RECREATION USE: The LESSEE agrees and understands that the public land leased herein shall be open to public recreational uses, as defined by M.S. 604A.21, not inconsistent with the purposes of this lease. The LESSEE shall not unreasonably refuse permission to any person to enter upon the lands leased herein for reasonable public recreational use without first obtaining the written permission of the LESSOR. If the LESSOR authorizes the prohibition of any public recreational uses, the prohibition shall apply to all persons including the LESSEE.
19. CONSTRUCTION OF LEASE: If any clause or provision of this lease is or becomes illegal, invalid or unenforceable because of present or future laws or any rule or regulation of any governmental body, the intentions of the LESSOR and LESSEE here is that the remaining parts of this lease shall not be affected thereby.

20. ADDITIONAL TERMS:
See attached Exhibit A

TESTIMONY WHEREOF, the parties have set their hands in duplicate.

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES

By	Date

KATHY A. LEWIS
ASSISTANT DIRECTOR
DIVISION OF LANDS AND MINERALS

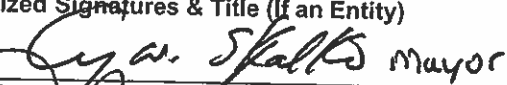
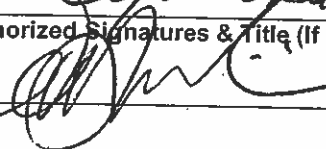
Lessee (Individual's Name or Name of Entity) City of MT. Iron	
Authorized Signatures & Title (If an Entity)  Mayor	Date 2/18/10
Authorized Signatures & Title (If an Entity)  City Administrator	Date 2/18/10

EXHIBIT A
Additional Terms & Conditions
City of Mt. Iron – Baseball Field
Lease #144-012-0594

1. LESSEE shall agree that any improvements made to the site such as buildings or other structures must be approved by the LESSOR.
2. LESSEE shall agree that at termination of the lease, all exposed mineral soil will be seeded to grass or legumes.
3. LESSEE shall agree that the site area, must be maintained and kept clean in order to present an orderly and complimentary appearance to the surrounding area.
4. LESSEE shall agree that any use of the site other than as a ball field must be approved by the LESSOR.
5. LESSEE shall procure liability insurance, naming the State as additional insured in the amount of at least \$500,000 per individual and \$1,500,000 per occurrence from an insurance carrier licensed to do business in Minnesota. Upon execution of this lease, the LESSEE shall provide the LESSOR with a certificate of insurance indicating the required coverage and the LESSEE shall periodically provide the LESSOR with evidence of insurance as the LESSOR may request. The policy shall provide that the LESSOR be notified ten days prior to the cancellation or termination of the policy. The LESSEE shall be required to maintain such insurance to the full extent of the amounts specified in Minnesota Statutes, Section 3.736 which amounts shall be incorporated herein by reference. If those amounts are changed following execution of this lease, the LESSEE shall provide whatever amount of insurance is required by that change within 30 days after the LESSOR notifies the LESSEE of the change.



Ball Field
1.5 ac

300 ft

220 ft

SESE

MINUTES
MOUNTAIN IRON CITY COUNCIL
SPECIAL MEETING
FEBRUARY 17, 2010

The meeting was called to order at 5:37 p.m. with the following members present: Ed Roskoski, Joe Prebeg, Tony Zupancich, Alan Stanaway, and Mayor Gary Skalko. Also present were: Craig J. Wainio, City Administrator; Don Kleinschmidt, Director of Public Works; and Sam Aluni, City Attorney.

At 5:38 p.m., it was moved by Zupancich and seconded by Skalko to recess the regular meeting and go into a closed session to discuss the Procedures and Service of the Mountain Iron Fire Department. The motion carried.

At 6:31 p.m., it was moved by Zupancich and seconded by Skalko to adjourn the closed session of the Special Meeting. The motion carried.

At 6:32 p.m., it was moved by Zupancich and seconded by Skalko that the meeting be adjourned. The motion carried.

Submitted by:


Craig J. Wainio
City Administrator

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MINUTES
MOUNTAIN IRON CITY COUNCIL,
MOUNTAIN IRON PLANNING AND ZONING COMMISSION, AND
PUBLIC SAFETY AND HEALTH BOARD
COMMITTEE-OF-THE-WHOLE MEETING
FEBRUARY 22, 2010

Mayor Skalko called the joint meeting to order at 6:02 p.m. with the following present:

City Council members present: Joe Prebeg, Jr., Tony Zupancich, Alan Stanaway, Ed Roskoski, and Mayor Gary Skalko.

Planning and Zoning Commission members present: Stephen Skogman, Jim Giorgi, Vicki Juntunen, Barb Fivecoate, Margaret Soyring, and Joe Piersig.

Absent Planning and Zoning Commission member: Ray Saari.

Public Safety and Health Board members: Gary Skalko, Alan Stanaway, and Stephen Skogman.

Absent Public Safety and Health Board members: Holly Holmes and Allen Nelson.

Also present were: Craig J. Wainio, City Administrator; Jill M. Anderson, Municipal Services Secretary; and Jerry D. Kujala, Zoning Administrator.

The Mayor stated that the purpose of the meeting was to consider developing an ordinance regulating rental housing.

Steve Skogman advised the Council that the Planning and Zoning Commission would like Council input on developing an ordinance to license rental property. He said that this would be a way to protect the renters and property owners in Mountain Iron with regard to safety issues regarding rental properties. He said that there are numerous rental properties in Mountain Iron and they should be regulated and inspected on a regular basis.

The following issues were raised during the discussion:

- What the current regulations for rental property were through Saint Louis County.
- What the current regulations for rental property were through the State, as far as the building and fire codes.
- To provide protection for renters.
- To provide support and assistance to the renters.
- To have a safe, livable, and a good environment for the renters.
- The requirement of inspections and who would conduct the inspections.
- The possibilities of having the next Commercial Building Inspector complete the inspections.

- How often the inspections would need to be completed and how the inspector would be paid.
- To have the license fee charged, pay for the inspection fee.
- To provide a mandate for property owners to allow an inspector to inspect their property.
- Set up minimum standards for rental properties.
- Concerns regarding the sale of tax forfeited property, condition of the forfeited property, and turning the property into a rental.
- Seeking samples of ordinances from other towns and the League of Minnesota Cities.
- To wait until the City hires a Commercial Building Inspector and have his/her guidance on establishing an inspection policy.
- The need for definite enforcement.
- To seek input from the City Attorney so the ordinance would be enforceable.
- To recommend to the Personal Committee to have the new Commercial Building Inspector complete rental inspections as part of his/her job duties.
- To put the burden of inspections on the owner, not the city. No current inspection, no renters.
- Seek direction from the Saint Louis County Health Department regarding their jurisdiction with regard to rental properties.
- That it would take the Planning and Zoning Commission several months to develop an ordinance.

It was the consensus of the Council to move forward with developing an ordinance for rental property.

The Mayor thanked the members in attendance for participating in the meeting.

At 6:53 p.m., the Mayor adjourned the meeting.

Submitted by:



Jill M. Anderson, CMC/MMCA
Municipal Services Secretary

www.mtniron.com

Wellhead Protection Plan

Part I

**Wellhead Protection Area Delineation
Drinking Water Supply Management Area Delineation
Well and Aquifer Vulnerability Assessment**

For

The City of Mountain Iron

November, 2009

James F. Walsh

Minnesota Department of Health

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Glossary of Terms

Emergency Response Area (ERA): The part of the wellhead protection area that is defined by a one-year time of travel within the aquifer that is used by the public water supply well (Minnesota Rules 4720.5250, subpart 3). It is used to set priorities for managing potential contamination sources within the DWSMA.

Drinking Water Supply Management Area (DWSMA): The area delineated using identifiable land marks, defined in this report, that reflects the scientifically calculated wellhead protection area boundaries as closely as possible (Minnesota Rules 4720.5100, subpart 13).

Inner Wellhead Management Zone (IWMZ): The land that is within 200 feet of a public water supply well (Minnesota Rules 4720.5100, subpart 19). The public water supplier must manage the IWMZ to help protect it from sources of pathogen or chemical contamination that may cause an acute health effect.

Wellhead Protection Area (WHPA): The surface and subsurface area surrounding a well or well field that supplies a public water system, through which contaminants are likely to move toward and reach the well or well field (Minnesota Statutes, Part 103I.005, subdivision 24).

Executive Summary

This report documents the technical information necessary to prepare Part I of a wellhead protection plan that will help ensure an adequate and safe drinking water supply for the city of Mountain Iron (public water supply identification number 1690035). It documents the delineation of the wellhead protection area (WHPA), the drinking water supply management area (DWSMA), and the vulnerability assessments for the public water supply wells and DWSMA. Definitions explaining the differences between these terms are provided in the “Glossary of Terms” at the beginning of this report.

This delineation was performed in accordance with Minnesota Rules 4720.5100-4720.5590 for preparing and implementing wellhead protection plans for public water supply wells. The Minnesota Department of Health (MDH) prepared this report at the request of the public water supplier.

The public water supplier operates two primary water supply wells, termed Well No. 1 (Unique No. 150524) and Well No. 2 (Unique No. 150526). The wells are located in Section 10 of Township 58 North, Range 18 West in St. Louis County. Table 1 in Appendix A presents some of the key information about these wells that affects their vulnerability assessments.

The WHPA for the city wells was determined using a modified volumetric analysis recommended by the MDH for fractured rock aquifers (MDH, 2005). In addition, a surface water contribution area was added because isotope analyses indicate that the city wells derive a significant amount of water from the Iroquois Mine Pit Lake. The DWSMA boundaries were determined using U.S. Public Land Survey boundaries, portions of a railroad and U.S. Highway 169, and city streets. Figure 1 shows the boundaries for the WHPA and the DWSMA.

In addition, this report documents the vulnerability assessments for the city of Mountain Iron wells and DWSMA. The vulnerability of the DWSMA to contamination by activities occurring at the land surface ranges from moderate to very high. Both wells exhibit a high vulnerability because of the presence of tritium in water sampled from them.

Wellhead Protection Plan Part I

1. Introduction

This report documents the delineation of the wellhead protection areas and drinking water supply management areas for the drinking water supply wells operated by the city of Mountain Iron, PWSID No. 1690035. The delineation was performed in accordance with Minnesota Rules 4720.5100 to 4720.5590 for preparing and implementing wellhead protection measures for public water supply wells. The rules are administered by the Minnesota Department of Health (MDH).

2. General Description

2.1 Description of the Water Supply System

The city of Mountain Iron obtains its drinking water supply from two primary wells. Table 1 summarizes information regarding the city of Mountain Iron wells, and construction records are provided in Appendix A. Both wells are completed in the Biwabik Iron Formation Aquifer.

The city of Mountain Iron is located in western St. Louis County. The city wells are located in Section 10 of Township 58 North, Range 18 West.

The city of Mountain Iron maintains approximately 1.5 million gallons of total storage. The system serves 944 connections, approximately 3,000 residential customers, as well as several commercial customers.

2.2 Geomorphic Setting

The city of Mountain Iron is located on the Mesabi Iron Range and is surrounded by features associated with a more than 100-year history of iron mining. These features include tailings ponds, waste rock stockpiles, and both active and abandoned mine pits, the latter having filled with water. The nearest mine pit lakes are the Iroquois, Wacootah, and Mott (Figure 2).

2.3 Hydrogeologic Setting

Glacial deposits near Mountain Iron range in thickness from zero, at bedrock outcrops along the crest of the Giants Range north of town, to greater than 150 feet at the city well field (Figure 3). Surficial glacial deposits generally consist of 10 feet or less of red, clay-rich till deposited by the St. Louis sublobe (Jennings and Reynolds, 2005). These sediments form a thin mantle over Rainy Lobe till, whose glacial landforms, such as buried drumlins, dominate the landscape where unaltered by mining (Figure 3). The till of the Rainy Lobe is grey to pinkish-grey, non-calcareous, and has a matrix texture of 48-87 percent sand, 9-40 percent silt, and 0-13 percent clay (Jennings and Reynolds, 2005). Collapsed deltaic sediments that have been identified south of Mountain Iron appear to align with obscure, north-trending topographic escarpments that probably represent glacial drainage features.

The bedrock geology of the Mountain Iron area is shown in Figure 4. The uppermost bedrock beneath the city of Mountain Iron consists of the Coleraine Formation, a Cretaceous sequence of conglomerate, hematite-cemented sandstone and blue-green shale (Jirsa and others, 2005). These sediments locally hosted rich iron ores where they incorporated fragments of the underlying Biwabik Iron Formation.

The uppermost Precambrian bedrock consists of a conformable sequence of Paleoproterozoic marine sedimentary rocks that constitute the Animikie Group. Uppermost of these is the Virginia Formation, which consists predominantly of argillite, siltstone and shale. This unit is absent north of the city wells, but thickens steadily to the south (down-dip) where thicknesses exceed 1,000 feet. It is generally not used for water supply wells and is considered a confining unit.

Underlying the Virginia Formation is the Biwabik Iron Formation, which is a ferruginous chert whose full thickness is on the order of 650 feet near Mountain Iron (Pfleider, et. al., 1968). The Biwabik Iron Formation is the primary source of iron ore on the Mesabi Iron Range and is also considered a productive aquifer, especially where its permeability has been enhanced by fracturing and solution weathering in its subcrop area. These same factors have accounted for the development of so-called "natural ores," portions of the iron formation where magnetite has been oxidized to hematite, thereby enriching the iron content. These leached and oxidized horizons are evident as magnetic lows and generally correspond with relatively permeable stratigraphic horizons and/or geologic structures, such as folds or faults, that enhanced groundwater movement (Figure 4). Natural ore mines dominated production on the Mesabi Range through the 1950s, after which most natural ore inventories were depleted and mining activity focused on the relatively unaltered iron formation, or "taconite." Several natural ore mines, such as the Mountain Iron, Mott, Iroquois and Wacootah, existed in the Mountain Iron area. Currently, taconite mining occurs in the Minntac East and West Pits (Figure 4).

The Biwabik Iron Formation has been subdivided into four members based on subtle textural and mineralogical differences. From top to bottom, these members include the Upper Slaty (approximately 130-feet thick near Mountain Iron), Upper Cherty (approximately 160-feet thick), Lower Slaty (approximately 150-feet thick) and Lower Cherty (approximately 200-feet thick). The cherty members consist largely of thick-bedded, granular chert, iron silicates, magnetite and hematite; whereas, the slaty members are predominantly thin-bedded iron silicates and carbonates, plus magnetite and hematite (Jirsa and others, 2005). A distinct carbonaceous marker horizon, known as the Intermediate Slate, or "paint rock," separates the Lower Slaty and Lower Cherty members (Figures 4-7). The Mountain Iron city wells are open from the Upper Slaty to the Lower Slaty members of the Biwabik Iron Formation (Cotter and others, 1965).

Down-hole chemical and flow logging conducted by the MDH and Minnesota Geological Survey (MGS) at Marble, Keewatin and Hibbing suggests that the cherty members appear to be more permeable than the slaty members, at least in the west-central portion of the Mesabi Range. The logging results further suggest that only discrete portions of the cherty members are responsible for most of the flow within a borehole. For example, it appears that the upper 30-50 feet of the Upper Cherty Member likely constitutes a preferred flow horizon. This horizon appears to straddle the contact with the overlying Upper Slaty member, and may be related to structural factors associated with the contrast between the slaty and cherty textures during deformation. A similar, though even more pronounced, relationship is noted at the Lower Slaty-Lower Cherty contact. The overall thickness of preferred flow horizons within the Lower Cherty Member appears to be greater than those in the Upper Cherty, often exceeding 100 feet.

This is commensurate with the greater overall thickness of the Lower Cherty Member. No down-hole logging of this type has yet been conducted at Mountain Iron, so for the purposes of this delineation it is assumed that the wells draw most of their water from the Upper Cherty Member, which is approximately 160-feet thick on average in the area. It is recommended that downhole logging be conducted on these wells in the future to more accurately discern the productive horizons at this location.

The Biwabik Iron Formation is thought to have little primary porosity, and groundwater flow through this unit is likely controlled by faults, joints (both high-angle and bedding-plane), zones of solution-weathering and man-made mining structures such as drifts and shafts. Natural ore bodies were likely formed by interaction between the iron formation and groundwater. As a result, it is useful to analyze the geometry of these ore bodies for possible insights into current groundwater flow patterns. Natural ore bodies in the Mountain Iron area tend to be of the “trough” type, which are generally tabular with steep and sharply-defined walls. These sometimes form blanket-like shapes that more or less parallel the orientation of bedding, and which may be separated from one another by fissures or small troughs of ore that transect bedding (Morey, 1999). These relationships suggest movement of groundwater was influenced both by favorable stratigraphic horizons and by steeply-dipping fractures or faults that cut bedding. In fact, about 80 percent of the ore bodies on the Mesabi Range are related to faults (Morey, 1999).

In the Mountain Iron area, two major fault and joint sets have been mapped (Figure 4). One set trends northwesterly with a compass orientation of approximately 30 degrees west of north, roughly perpendicular to the strike of the iron formation. The most prominent example is the fault that cuts through the Mountain Iron and Iroquois Mines and extends just east of the city wells. The other set trends northeasterly, sub-parallel to the strike of bedding (Jirsa and others, 2005). Faults are of the normal variety, dip steeply, and displacements are poorly known but probably minor.

Jirsa and others (2005) identified dominant jointing orientations in the Biwabik Iron Formation from mapping conducted in mine pits. They found that the dominant jointing orientations were roughly coincident with the faulting described above (Figure 4). All mapped joints plunge deeply, with dips ranging from 81-90 degrees. Some are mineralized with iron oxides.

To summarize, it is likely that groundwater flow through the Biwabik Iron Formation in the Mountain Iron area is controlled by features such as 1) bedding plane joints and stratigraphic contacts, which generally dip from 7-10 degrees in a southeasterly direction and 2) a conjugate set of high-angle faults and joints that strike northwesterly (approximately 30 degrees west of north) or northeasterly (5-40 degrees east of north). Underground mining structures, such as shafts and drifts, may also exist in the area and be important for the movement of groundwater, but have not been documented.

Underlying the Biwabik Iron Formation is the Pokegama Formation, which consists predominantly of quartzose sandstone and siltstone and ranges in thickness from 0 to 50 feet near Mountain Iron (Jirsa and others, 2005, Pfleider, et. al., 1968). Like the Virginia Formation, the Pokegama Formation is generally not used for water supply purposes. The Pokegama Formation rests unconformably on Archean rocks that form the backbone of the Giants Range, which is the topographic high ground north of Mountain Iron that forms a portion of the Laurentian Divide.

In summary, within the geographic area that includes the WHPA, the Biwabik Iron Formation has the following characteristics:

- It is composed of ferruginous chert and is approximately 650 feet thick, although the open intervals for the wells range from 215 to 265 feet and the thickness of the apparent productive zone is only 160 feet.
- It exhibits a porosity that is estimated to be in the range of 1-10 percent; a value of 10 percent was used for the WHPA delineation because it is based on a refined aquifer thickness derived from downhole investigations conducted elsewhere on the Mesabi Iron Range.
- The productive zone exhibits a base elevation of approximately 1,096 feet above sea level at the wells. The elevation of this zone varies throughout the WHPA due to the dip of the formation.
- The productive zone exhibits a top elevation of approximately 1,256 feet above sea level. The elevation of this zone varies throughout the WHPA due to the dip of the formation.
- It does exhibit changes in composition or thickness that would constitute a flow boundary (Figures 6-7).
- It is covered by till except where exposed in mine pits. The till thickness varies from less than 30 feet to more than 150 feet and is primarily of Rainy Lobe origin with interbedded lenses of sand and gravel. The Virginia Formation also serves to function as a confining unit south of the city wells.
- It overlies relatively impermeable geologic materials, including the Pokegama Formation and Giants Range granite, that retard the vertical movement of water.

The groundwater flow field is strongly influenced by water appropriations at U.S. Steel-Minntac. The taconite pits are strong sinks for surface and groundwater, and appropriations at the Administration Building Well (249410) are also relatively constant but of small quantity. However, the Mountain Iron Mine Pit Lake can span a wide range in water levels depending on operational needs at the mine. U.S. Steel-Minntac records from the preceding four-year period show a range of 1,377-1,439 feet above sea level. At levels of approximately 1,400-1,410 feet above sea level, which represents the most common operating range as well as the most recent data from July 7, 2009, the resulting groundwater flow field should include an east-west trending flow divide running between the Mountain Iron Pit Lake and the city well field (Figure 8). With this configuration, the ambient flow field in the aquifer is currently oriented to the south (approximately 156-176 degrees), with an hydraulic gradient of approximately 0.003. It is likely that the flow field changes through time depending on the stage in the Mountain Iron Pit Lake.

The aquifer exhibits unconfined hydraulic conditions from the Iroquois Mine to the northern extent of its subcrop area. In this area, the aquifer is either exposed or is covered by a thin mantle of glacial deposits, and the potentiometric surface is in the iron formation. In contrast, the aquifer exhibits confined hydraulic conditions south of the Iroquois Mine. Here, the aquifer is covered by significant thicknesses of till and Virginia Formation, and the potentiometric surface is in the till.

3. Delineation of the Wellhead Protection Area

3.1 Identification and Sources of Data Used to Prepare this Plan (Assessment of Data Elements)

The following discussion identifies sources of information used to delineate the WHPA and DWSMA or designate well and DWSMA vulnerability. The formal assessment of data elements used to prepare this WHP plan is presented in Appendix B, which documents how the data elements specified under Minnesota Rules 4720.5400 were used to describe the physical environment. The primary information used for the Part I report concerns: geology, soils, and groundwater quantity and quality. Information describing the surface water resources, land use, surface water quantity and quality were considered for the delineation and vulnerability assessments.

Geology: The subsurface data used in this report and the determination of subsurface stratigraphic relationships were derived almost entirely from the construction records of water wells or exploratory borings. The level of detail describing subsurface geologic conditions encountered during drilling varies between water well contractors. This variability affects the quality of the interpretations made in correlating subsurface units described in wells. Other challenges encountered were: 1) not all wells are drilled to the same depth or aquifer, and 2) the distribution of wells throughout the city is not uniform. In addition, static water levels (as reported on well records) are measured at different times and may affect the interpretation of ambient groundwater flow.

Geologic cross-sections (Figures 6 and 7) show the distribution of the geologic materials beneath the land surface and their stratigraphic relationships. They were prepared using well record data that is contained in the County Well Index (CWI) database. The geological maps and studies that were used to further define local hydrogeologic conditions are provided in the "Selected References" section of this report. In particular, information provided in Miscellaneous Map Series M-163 and M-164 (2005) was important for this project.

Soils: Soils data used in this report were derived from the St. Louis County-Virginia soil survey (NRCS, 2008). In general, the soils in the Mountain Iron area are loams of the Hibbing-Mountain Iron complex. However, much of the native soil in the area has been disturbed by mining. Therefore, the soils data were of limited usefulness for determining subsurface conditions.

Water Resources: Land surface elevations obtained from the Minnesota Department of Natural Resources (DNR) were used to delineate surface watershed boundaries for the Iroquois Mine Pit Lake. These watershed boundaries were used to define the surface water contribution area component of the Mountain Iron WHPA.

Land Use: Public land survey coordinates, highways and city streets were used to define the boundaries of the DWSMA.

Public Utility Services: City records were used to determine the amount of water pumped by their wells for the preceding five-year period. These water use values were used to calculate the wellhead protection area. No significant increase in water use is anticipated by the city for the coming five-year period.

Surface Water Quantity: Mine pit lake water elevations were obtained from U.S. Steel- Minntac and the Minnesota DNR to construct a potentiometric surface for the city's aquifer.

Groundwater Quantity: The DNR permits high-capacity wells and documents their pumping volumes in the State Water Use Database System (SWUDS). U.S. Steel- Minntac appropriates water from the

Mountain Iron Mine Pit Lake, pumps a well at its Administration Building (249410), and operates dewatering sumps in the taconite pits. Each of these affects the potentiometric surface and resulting flow divide that was used to limit the northern extent of the city's WHPA.

Surface Water Quality: MDH generated surface water quality data for this project through the collection and analysis of water samples. These data were used to assess 1) the degree of hydraulic connection between surface hydrologic features and the aquifer used by the city of Mountain Iron, and 2) whether a conjunctive delineation was needed for the WHPA.

Groundwater Quality: Water quality information was obtained from the MDH database for the Mountain Iron water system, and some additional chemical and isotopic data were gathered during the delineation process. Groundwater quality information was used to 1) characterize the rate of recharge to the aquifer used by the city of Mountain Iron and the degree of hydraulic connection between it and surface hydrologic features, and 2) assess vulnerability.

3.2 Criteria Used to Delineate the Wellhead Protection Area

The criteria for delineating the WHPA, as required in Minnesota Rules 4720.5510, were addressed as follows.

3.2.1 Time of Travel

A 20-year time of travel was used to characterize groundwater movement in the aquifer and the pumping of the water supply wells (10-year time of travel base calculation, with additional 10-year time of travel up-gradient extension). Also, a one-year time of travel was used to define the emergency response area, as specified under Minnesota Rules 4720.5250. The 1- and 20-year capture zone boundaries are shown in Figure 1.

3.2.2 Daily Volume of Water Pumped

Information provided by the city of Mountain Iron was used to identify the maximum volume of water pumped annually by their wells over the previous five-year period, as shown in Table 2. These values have been reported to the DNR as required by the city's Groundwater Appropriation Permit No. 1980-2122.

The city estimates that it will not significantly increase pumping over the next five years. As a result, the daily volume of discharge used as an input parameter in the WHPA delineation was calculated by dividing the greatest annual pumping volume by 365 days. The resulting value is displayed in Table 3.

3.2.3 Groundwater Flow Field

The groundwater flow field was determined by compiling static water level elevations from wells and mine pit lakes that are open to the Biwabik Iron Formation (Figure 8). The angle of ambient groundwater flow toward the city wells is nearly due south, with a compass direction of approximately 166 degrees (measured range is 156-176 degrees) and an hydraulic gradient of 0.003.

3.2.4 Flow Boundaries

To accurately delineate the WHPA, it is necessary to assess the effects that nearby wells, streams, lakes, and variations in geologic conditions may have on groundwater flow directions and velocities in

the Biwabik Iron Formation. The following conditions define the extent to which flow boundaries must be considered:

- Geologic boundaries that must be considered include 1) the stratigraphic top and bottom of the hydraulically conductive portion of the Biwabik Iron Formation, and 2) the orientation of dominant geologic structures, such as faults and joints.
- Hydrologic boundaries that must be considered include dewatered taconite mine pits and surface water features that at least partially penetrate the aquifer, including the Mountain Iron, Mott, Iroquois and Wacootah Mine Pit Lakes.

The State Water Use Database System maintained by the DNR was accessed and it was determined that U.S. Steel- Minntac appropriates water from the Mountain Iron Mine Pit Lake, pumps a well at its Administration Building (249410), and operates dewatering sumps in the taconite pits. Each of these affects the potentiometric surface and the resulting groundwater flow divide that was used to limit the northern extent of the city’s WHPA.

3.2.5 Aquifer Transmissivity

Because of the fractured nature of the Biwabik Iron Formation Aquifer, transmissivity was not used to delineate the WHPA. This is consistent with the MDH document entitled “Guidance for Delineating Wellhead Protection Areas in Fractured and Solution-Weathered Bedrock in Minnesota” (2005). However, specific capacity tests conducted at the time of well construction suggest a transmissivity on the order of 1,000 ft²/d.

3.3 Method Used to Delineate the Wellhead Protection Area

3.3.1 Delineation Method

In aquifers influenced by flow-through secondary porosity, groundwater may move at a much faster and more unpredictable rate to supply a pumping well than in porous media aquifers. In addition, groundwater flow directions may be considerably more variable in aquifer settings influenced by fractures or conduit flow. Therefore, numerical and analytical methods that traditionally are used to designate capture zones for wells completed in porous media aquifers may not apply to fractured and solution-weathered bedrock aquifers. To account for this, MDH has developed the document entitled “Guidance for Delineating Wellhead Protection Areas in Fractured and Solution-Weathered Bedrock in Minnesota” (MDH, 2005).

According to the guidance, a fracture flow analysis is required when the aquifer exhibits flow-through secondary porosity features, as is presumed for the Biwabik Iron Formation. Of the various delineation methods specified in the guidance document, Delineation Technique 2 is the most appropriate.

This technique is specific to fractured or solution-weathered aquifers that 1) are hydraulically unconfined, or 2) have a horizontal hydraulic gradient of greater than 0.001, and 3) possess a well discharge to discharge vector ratio of less than 3,000 (MDH, 2005).

The formula and values used for calculating the ratio of the well discharge to the discharge vector are presented below.

$$Q/Q_s = \frac{(Q \text{ in } gpm) \left(\frac{1 \text{ ft}^3}{7.48 \text{ gal}} \right) \left(\frac{1440 \text{ min}}{1 \text{ day}} \right) \left(\frac{0.0283 \text{ m}^3}{1 \text{ ft}^3} \right)}{(\text{thickness in ft})(0.3048 \text{ m/ft})(\text{hydraulic conductivity in m/d})(\text{hydraulic gradient})}$$

Q = Well Discharge (L^3/T)

Q_s = Discharge Vector (L^2/T) = $(H) (K) i$

Where: H = Aquifer Thickness (L)

K = Hydraulic Conductivity (L/T)

i = Hydraulic Gradient

For Mountain Iron Well 1 (150524): 1) the well discharge was determined from the annual water use figures to be 689 m³/d; 2) the aquifer thickness was determined to be 49 m, which represents the cumulative thickness of likely hydraulically conductive horizons; 3) the hydraulic conductivity was estimated to be approximately 2 m/day, based on specific capacity data; and 4) the hydraulic gradient was estimated to be 0.003. The resulting well discharge to discharge vector ratio is 2,343.

Delineation Technique 2 uses a calculated fixed radius to represent the volume of aquifer material needed to supply water to the city wells over a 10-year time period. The calculated fixed radius was then modified to account for 1) upgradient groundwater flow, 2) uncertainty in the groundwater flow direction, and 3) the effects of secondary porosity features, such as fractures, faults and mine workings. Details of this approach are presented below.

The calculated fixed radius (CFR) is a simple volumetric calculation for a cylinder that would supply the discharge amount for the well based on 1) the highest pumping rate in the last five years, 2) the cumulative thickness of the productive aquifer horizons open to the well, and 3) the effective porosity of the aquifer.

$$R = \sqrt{\frac{Q}{nL\pi}}$$

Where: R = Radius of the Capture Area

Q = Well Discharge = (well pumping rate)(pumping time period)

n = Effective Porosity

L = Cumulative Thickness of Productive Aquifer Horizons

π = 3.14159

The CFR calculations for the city of Mountain Iron were based on the following:

- 10 years of pumping.
- $Q = 1,194,560,070$ gallons (see Table 2). This is a system total, as only a single CFR was calculated owing to the proximity of the two wells.
- $n = 0.10$. This value represents the upper end of the estimated range shown in the MDH guidance document (2005) for dolomite and limestone. No specific category exists for an iron formation and limestone is considered to be a reasonable equivalent, given that both are marine chemical sediments. The high-end value was used because it is being applied to only the hydraulically conductive portions of the aquifer, as determined from borehole logging conducted elsewhere on the Mesabi Iron Range.
- $L = 160$ feet. This is the thickness of the Upper Cherty Member, which is thought to be the productive aquifer horizon. Using this value rather than the entire thickness of the Biwabik Iron Formation (approximately 650 feet) results in a more conservative well capture zone.

Using the values noted above, the CFR for the Mountain Iron wells is 1,782 feet.

In order to account for up-gradient groundwater flow, the CFR noted above was projected in the dominant up-gradient flow direction. The fracture flow guidance document (MDH, 2005) indicates that, for unconfined conditions, the CFR should be extended in the up-gradient direction until a major flow boundary is encountered. Examples of flow boundaries include geologic contacts, groundwater flow divides, or surface water bodies. Although confined conditions exist at the city wells, unconfined conditions likely predominate from the Iroquois Mine Pit Lake north to the limits of the Biwabik Iron Formation Aquifer (Figures 6 and 7).

Chemical and isotopic data were collected from area pit lakes and wells to determine the presence and strength of hydrologic boundaries. These data show that city Well 1 (150524) receives a large contribution of recharge from nearby surface water, with a much smaller impact noted at Well 2 (150526). Based on similarities in water level, water chemistry and sulfate isotopes, the Iroquois Mine Pit Lake is the most likely source of surface water recharge to the city wells (Figure 9). Mass-balance mixing models show that approximately 35-55 percent of the water from Well 1 (150524) and 10-15 percent of the water from Well 2 (150526) likely originated from the Iroquois Mine Pit Lake. It is assumed that the difference between wells is related primarily to usage (Well 1 is more productive), although differences in open hole length may also play a factor. As a result of the strong influence of the Iroquois Mine Pit Lake on the city wells, the lake and its surface watershed were included in the WHPA (Figure 10). Finally, the CFR was projected an additional 10-year pumping volume up-gradient along the dominant trend of linear bedrock structural features, such as faults and joints, until intersecting the postulated flow divide south of the U.S. Steel- Minntac mine pits (Figure 10). It is likely that the position of this divide changes in response to operations at U.S Steel-Minntac, especially concerning variable water levels at the Mountain Iron Mine Pit Lake, and should be re-evaluated accordingly in the future.

3.4 Results of Model Calibration and Sensitivity Analysis

Using computer models or numerical calculations to simulate groundwater flow necessarily involves representing a complicated natural system in a simplified manner. Local geologic conditions may vary within the capture area of the Mountain Iron wells, but existing information is not sufficiently detailed to define this degree of variability. Performing an uncertainty analysis is a common approach used to evaluate uncertainties in the hydrogeologic data that may affect the size and shape of well capture zones.

Model calibration is a procedure that compares the results of a groundwater flow model based on estimated input values to measured or “known” values. The fracture flow delineation procedure that was used for this delineation cannot be calibrated because it is a simple calculation of an aquifer volume based on well discharge, aquifer thickness, and effective porosity.

Model sensitivity is the amount of change in model results caused by the variation of a particular input parameter. Because of the fractured nature of the Biwabik Iron Formation, a porous-media groundwater flow model was not used to delineate the WHPA. As a result, no model sensitivity analysis was performed. However, an effort was made to assess the sensitivity of the WHPA to the input parameters used in the CFR calculation and extrapolation.

The CFR calculation is sensitive to the pumping rate of the well, in addition to aquifer thickness and porosity. The well pumping rate used in the CFR calculation is prescribed in the state’s wellhead protection rule (Minnesota Rules 4720.5510, subpart 4) and is a conservative value because it is based on the highest recorded value for the wells. The use of any smaller value in the CFR calculation would result in a reduced CFR and WHPA.

Aquifer thickness and porosity are indirectly proportional to the resulting CFR; larger values result in smaller CFRs and vice-versa. The aquifer thickness used in the CFR calculations was based on the thickness of the Upper Cherty member, which is presumed to be the productive aquifer horizon. Using this value (160 feet) rather than the entire thickness of the Biwabik Iron Formation (approximately 650 feet) results in a more conservative well capture zone. The porosity of the Biwabik Iron Formation is unknown. A relatively high value of 0.10 was used in the calculation because it is being applied to only the hydraulically conductive portions of the aquifer. For comparison, a porosity value of 0.05 would yield a CFR of 2,520 feet.

The extrapolation of the CFR is sensitive to the 1) ambient groundwater flow direction, and 2) orientation of dominant permeable geologic features. Uncertainty in the groundwater flow field was accounted for by creating a composite of capture zones from angles of flow that were 10 degrees greater and 10 degrees lesser than the representative angle of ambient flow (Minnesota Rule 4720.5510, subpart 5 B(2)). The orientation of dominant geologic structural features was based on the geologic mapping of Jirsa and others (2005).

4. Delineation of the Drinking Water Supply Management Area

Figure 1 illustrates the Drinking Water Supply Management Area (DWSMA), which is the area surrounding the capture zones that can be identified by recognizable landmarks. The boundaries of the DWSMA were determined with the assistance of the public water supplier and use:

- Center-lines of highways, streets and railroad rights-of-way; and
- Public Land Survey coordinates.

5. Vulnerability Assessment

The wellhead protection plan Part I report documents the vulnerability assessments for the public water supply wells and DWSMA, in addition to delineating the WHPA and DWSMA. These vulnerability assessments are used to help select appropriate measures for managing potential contamination sources within the DWSMA.

5.1 Assessment of Well Vulnerability

Minnesota Rule 4720.5210 requires a vulnerability assessment of the wells used by the public water supplier. The protocol for determining well vulnerability is described in the MDH document entitled Methodology for Phasing Wells into Minnesota's Wellhead Protection Program (1993), which was approved by the U.S. EPA as part of its review of Minnesota's wellhead protection program description. The MDH uses the protocol to maintain a database defining the potential vulnerability of community and noncommunity public water supply wells. A score is calculated for each well using 1) construction criteria defined in the State Well Code, 2) geologic sensitivity, and 3) the results of water quality monitoring conducted by the MDH. A numeric score is assigned to each well based on the results of the three areas of evaluation. A cutoff score is used to define wells that are most likely to be vulnerable based on their construction, geologic setting, and sampling history. The printouts of the vulnerability ratings for each well are presented in Appendix A.

The DNR has developed a procedure for determining geologic sensitivity that is based on an "L" score. The "L" score increases 1 point for every 10 feet of clay overlying the aquifer. If the "L score" is 0 and the static water level is 20 feet or less, the geologic sensitivity is very high. If the "L score" is 0

and the static water level is greater than 20 feet, the geologic sensitivity is high. If the “L score is 0, but there are 20 or more feet of silty or sandy shale or silty or sandy clay overlying the aquifer, the geologic sensitivity is moderate. An “L” score of 1 to 4 indicates that the aquifer exhibits a low geologic sensitivity and a direct influence from the vertical movement of surface water is likely to be small. An “L” score of 5 or greater indicates that the aquifer exhibits a very low geologic sensitivity and is likely to exhibit a high degree of hydraulic separation from surface water.

The wells used by the city of Mountain Iron exhibit the following conditions:

- 1) The construction records for both city wells suggest that they meet current state Well Code specifications (Minnesota Rule 4725).
- 2) The geologic logs for the wells show that around 150 feet of glacial deposits sit atop bedrock in this area. Much of this material is described as till. Rainy Lobe till is known to be relatively sandy, so the geologic sensitivity assigned to these materials is moderate.
- 3) Tritium was detected in water samples taken from Well 1 (150524) and Well 2 (150526) on July 31, 2008, at 7.1 and 8.5 tritium units. Tritium indicates a short time period over which surface water recharges the aquifer used by the wells. Therefore, the wells may be impacted by human activities and are considered potentially vulnerable to contamination.

This combination of factors suggests that both wells are vulnerable to contamination.

5.2 Vulnerability Assessment for the Drinking Water Supply Management Area

Review of geologic information and groundwater quality data for the aquifer within the DWSMA indicate the following:

- 1) Isotopic and water chemistry data from wells located within the DWSMA show that the aquifer contains water with levels of tritium that suggest relatively rapid recharge to the aquifer and a hydraulic connection with nearby mine pit lakes.
- 2) Review of the geologic logs contained in the CWI and geological maps and reports indicate that the aquifer exhibits a geologic sensitivity that ranges from very high to moderate throughout the DWSMA and is not isolated from the direct vertical recharge of surface water. A geologic sensitivity rating of very high is assigned to the Iroquois, Mott and Wacootah Mine Pit Lakes, where the aquifer is exposed (Figure 11). Elsewhere the aquifer is covered by varying thicknesses of till and also by the Virginia Formation south of the city wells. In these areas, the geologic sensitivity is rated as moderate and implies at least some measure of geologic protection from rapid recharge.

Therefore, the vulnerability of the DWSMA has been determined to be very high at the mine pit lakes and moderate elsewhere, as shown on Figure 11.

6. Recommendations

The WHPA for the city of Mountain Iron is sensitive to a variety of input parameters. The least well known of these parameters are aquifer thickness, porosity, and groundwater flow field. MDH staff recommend that the following work be conducted to decrease the uncertainty associated with the delineation and vulnerability assessment.

Item 1 - Addressing deficiencies in the distribution and quality of subsurface geologic information.

- Aquifer thickness

The aquifer thickness estimate used in the CFR calculation was based on the thickness of the Upper Cherty Member, as derived from local borehole records. Greater confidence could be placed in that thickness estimate if it was verified using logging equipment, such as a down-hole flow meter, water quality probes or video. The Minnesota Geological Survey and the MDH currently possess such equipment and would likely consent to its use at the Mountain Iron city wells under appropriate conditions. The minimum conditions required for successful deployment of this equipment include 1) the wells must be accessible and open (no pumps or related equipment in the well), and 2) adequate notice must be provided so the equipment can be mobilized. If the city of Mountain Iron plans to conduct maintenance or repair on either of its wells that would involve short-term removal of the well pump, it should contact the MDH to arrange for this type of borehole investigation. The results should allow for a more accurate determination of the thickness of the water-producing horizons penetrated by the wells. With that information in hand, the CFR and resulting WHPA could be refined using the appropriate aquifer thickness.

- Groundwater flow field

The city of Mountain Iron should work with the MDH so that, every five years, the locations of new wells that are constructed within one mile of their wells can be verified and accurate elevations obtained. This information may help address uncertainties related to the distribution of hydraulic head in the Biwabik Iron Formation Aquifer.

The city of Mountain Iron should continue to measure the static water level at the city wells on an annual basis. This information can be used in conjunction with water level data from the nearby mine pit lakes to verify 1) the local horizontal hydraulic gradient, 2) the position of the flow divide between the city wells and U.S. Steel-Minntac operations, and 3) the presence of confining conditions within the aquifer. If significant changes in these conditions are observed, then a different delineation technique may be warranted for the city's WHPA in the future.

Item 2 - Addressing surface water/groundwater exchange.

- Chemical and isotopic data

Existing isotopic data suggest that the Mountain Iron city wells capture a significant component of Iroquois Mine Pit Lake water. It is possible that this relationship could change through time, either because of changes in 1) water use by the city, or 2) water level elevations within nearby mine pit lakes. In order to track whether such changes may be occurring and verify the accuracy of the currently delineated WHPA, the MDH recommends that the city wells and the Iroquois Mine Pit Lake be sampled for the stable isotopes of water, chloride, bromide and sulfate prior to plan amendment. The city will be responsible for the sampling, but MDH will pay for the analyses using funding that is dedicated for this work. There would be no cost to the city for the analyses and MDH staff time. If it becomes

apparent that significant changes are occurring in the chemical and isotopic makeup of the well water, the delineation of the WHPA for the city of Mountain Iron may need to be revisited. If the changes cannot be traced to the Iroquois Mine Pit Lake, then adjacent pit lakes should be included in the sampling study to gain a more complete picture of the degree of interaction between these water bodies.

Item 3 - Hydraulic conductivity.

Although this parameter is not used directly in the calculation of the city of Mountain Iron's WHPA, it does factor into determining the appropriate delineation technique because of its impact on the well discharge to discharge vector calculation (MDH, 2005). For this delineation, hydraulic conductivity was estimated using existing specific capacity tests. This method of estimating hydraulic conductivity is less accurate than a 24-hour aquifer test conducted for determining aquifer transmissivity. It would be beneficial for the city of Mountain Iron to conduct a longer-term aquifer test at some point in the future so that the hydraulic conductivity of the Biwabik Iron Formation Aquifer can be more accurately determined. The MDH can assist the city with planning and conducting such a test.

Item 4 - Water use considerations.

The following water use factors should be monitored to determine if a revision of the WHPA or DWSMA is required: 1) the installation of any new high-capacity wells or mine dewatering sumps within one mile of the city well field, and 2) increased discharge from the city wells over the values used in this report. The MDH can assist with tracking the installation of new high-capacity wells, whereas the city should take the lead in tracking the water use of their wells.

7. Selected References

Cotter, R.D., Young, H.L., Petri, L.R., and Prior, C.H. (1965), *Water resources in the vicinity of municipalities on the Central Mesabi Iron Range, northeastern Minnesota*, Water Supply Paper 1759-D, U.S. Geological Survey, St. Paul, Minn.

Geologic Sensitivity Project Workgroup (1991), *Criteria and guidelines for assessing geologic sensitivity of ground water resources in Minnesota*, Minnesota Department of Natural Resources, Division of Waters, St. Paul, Minn., 122 p.

Herr, E.S., and Gleason, J.M. (2007), *Central Mesabi Iron Range hydrology study*, Minnesota Department of Natural Resources, Division of Waters, St. Paul, Minn., 53 p.

Jennings, C.E., and Reynolds, W.K. (2005), *Surficial geology of the Mesabi Iron Range, Minnesota*, Miscellaneous Map Series, M-164, Minnesota Geological Survey, St. Paul, Minn., 1 sheet, scale 1:100,000.

Jirsa, M.A., Chandler, V.W., and Lively, R.S. (2005), *Bedrock geology of the Mesabi Iron Range, Minnesota*, Miscellaneous Map Series, M-163, Minnesota Geological Survey, St. Paul, Minn., 1 sheet, scale 1:100,000.

Minnesota Department of Health (1996), *Methodology for phasing wells into Minnesota's wellhead protection program*, Minnesota Department of Health, St. Paul, Minn., 18 p.

Minnesota Department of Health (2005), *Guidance for delineating wellhead protection areas in fractured and solution-weathered bedrock in Minnesota*, St. Paul, Minn., 80 p.

Minnesota Department of Natural Resources (2008), *Unpublished electronic GIS files containing information on mine shafts and underground workings on the central Mesabi Iron Range*.

Pfleider, E.P., Morey, G.B., and Bleifuss, R.L. (1968), *Mesabi deep drilling project, progress report no. 1*, Minnesota Geological Survey, St. Paul, Minn.

Morey, G.B. (1999), *High-grade iron ore deposits of the Mesabi Range, Minnesota - Product of a continental-scale Proterozoic ground-water flow system*, *Economic Geology*, Vol. 94, p. 133-141.

Natural Resource Conservation Service (2008), *Soil survey of St. Louis County – Virginia part, Minnesota*, Soil Survey, U.S. Department of Agriculture, Soil Conservation Service, Fort Worth, Tex.

Tables

**Table 1
Water Supply Well Information**

Local Well Name	Unique Number	Use/Status ¹	Casing Diameter (inches)	Casing Depth (feet)	Well Depth (feet)	Date Constructed/Reconstructed	Well Vulnerability	DWSMA Vulnerability
1	150524	P	12	160	375	1981	Vulnerable	Variable
2	150526	P	12	160	425	1981	Vulnerable	Variable

Note: Primary (P) Well

**Table 2
Annual Volume of Water Discharged from Mountain Iron Water Supply Wells**

Well No.	Unique No.	2004	2005	2006	2007	2008	Future Pumping
1	150524	69,300,000	60,400,000	58,150,000	66,468,000	64,049,200	No Increase Expected
2	150526	46,200,000	40,200,000	48,938,000	52,986,000	50,796,700	No Increase Expected
System Total	NA	115,502,004	100,602,005	107,090,006	119,456,007	114,847,908	No Increase Expected

(Expressed in gallons. Bolding indicates greatest annual pumping volume.)

**Table 3
Pumping Rate Used for WHPA Delineation**

Well Number	Equivalent Annual Volume (gallons)	Input Value (cubic meters/day)
2 (150526)	119,456,007	1239

Figures

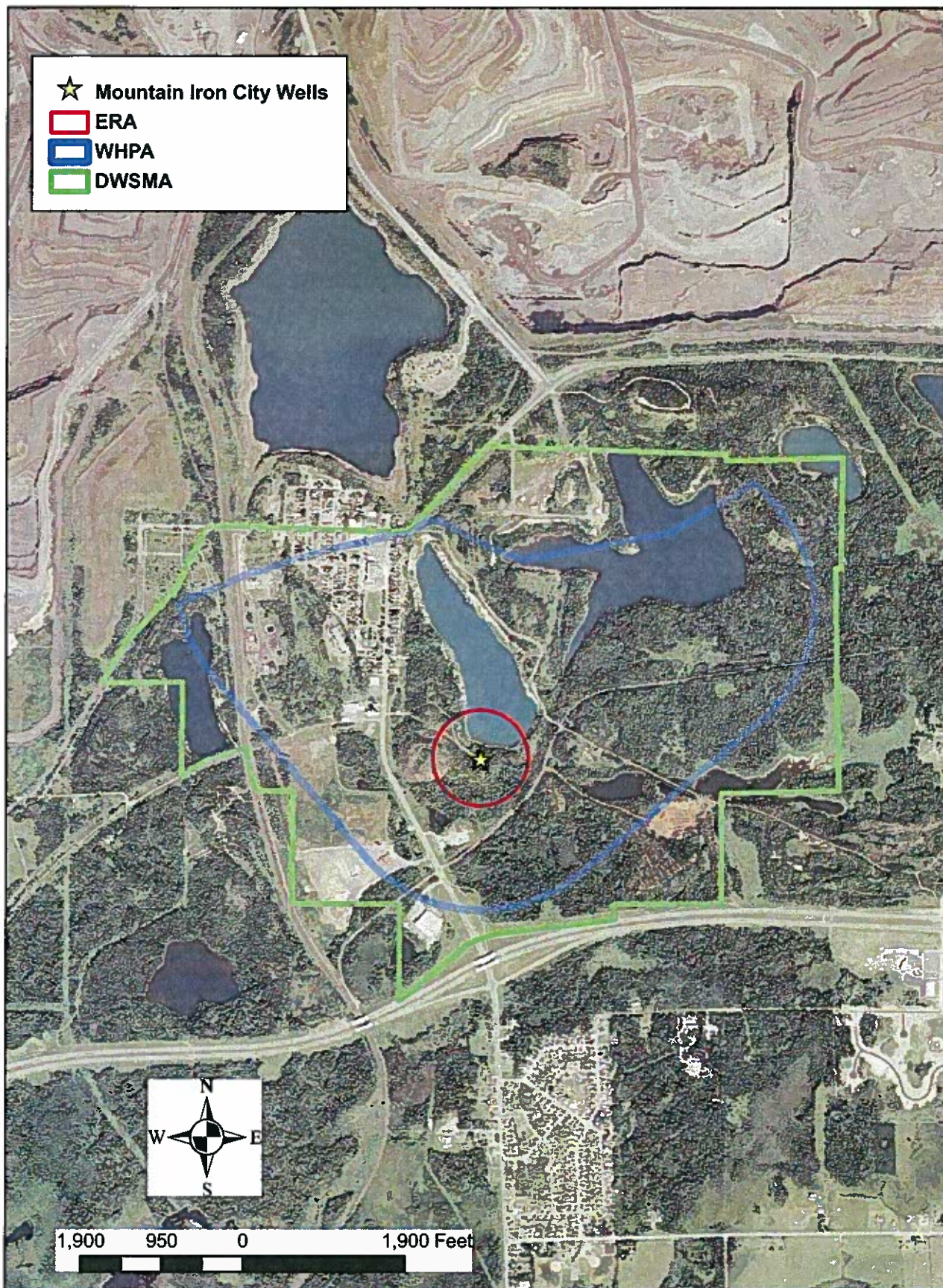


Figure 1 Emergency Response Area (ERA), Wellhead Protection Area (WHPA) and Drinking Water Supply Management Area (DWSMA) for the city of Mountain Iron.

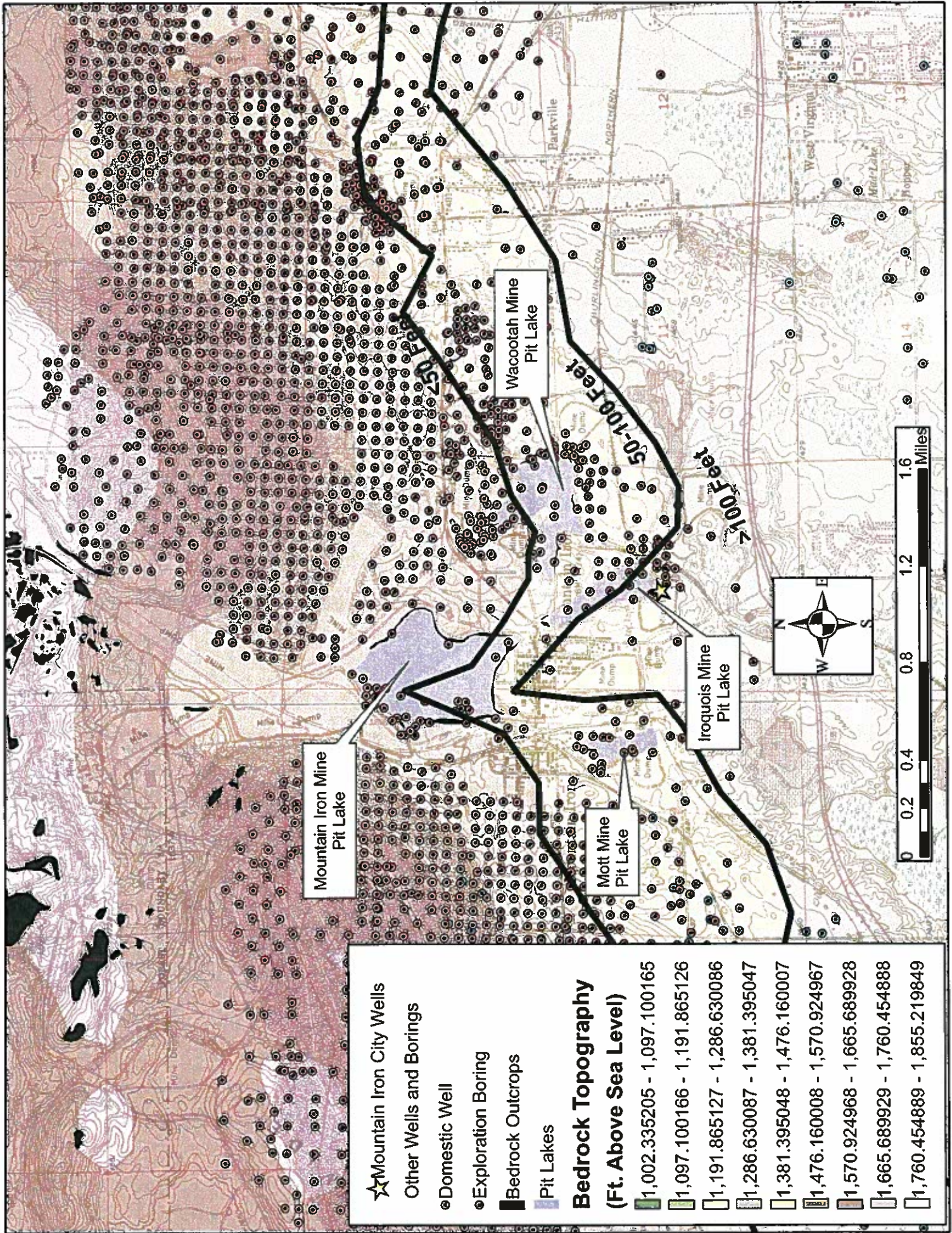


Figure 2. Database map and bedrock topography of the Mountain Iron area. Contour lines represent total thickness of glacial drift in feet.

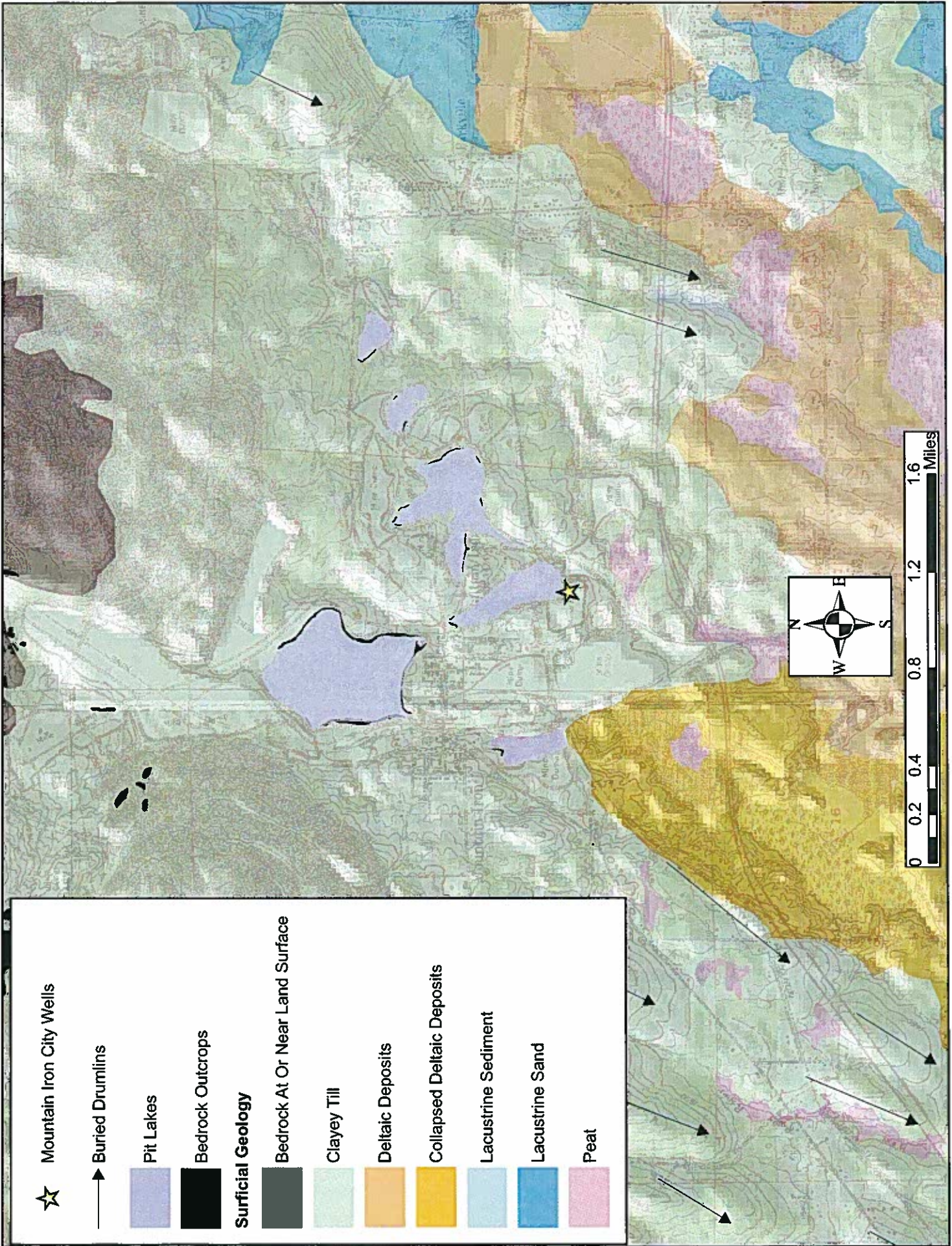


Figure 3. Surficial geology of the Mountain Iron area (compiled from MGS Miscellaneous Map Series M-164, DNR Central Mesabi Range Hydrology Study and Soil Survey of St. Louis County - Virginia Part).

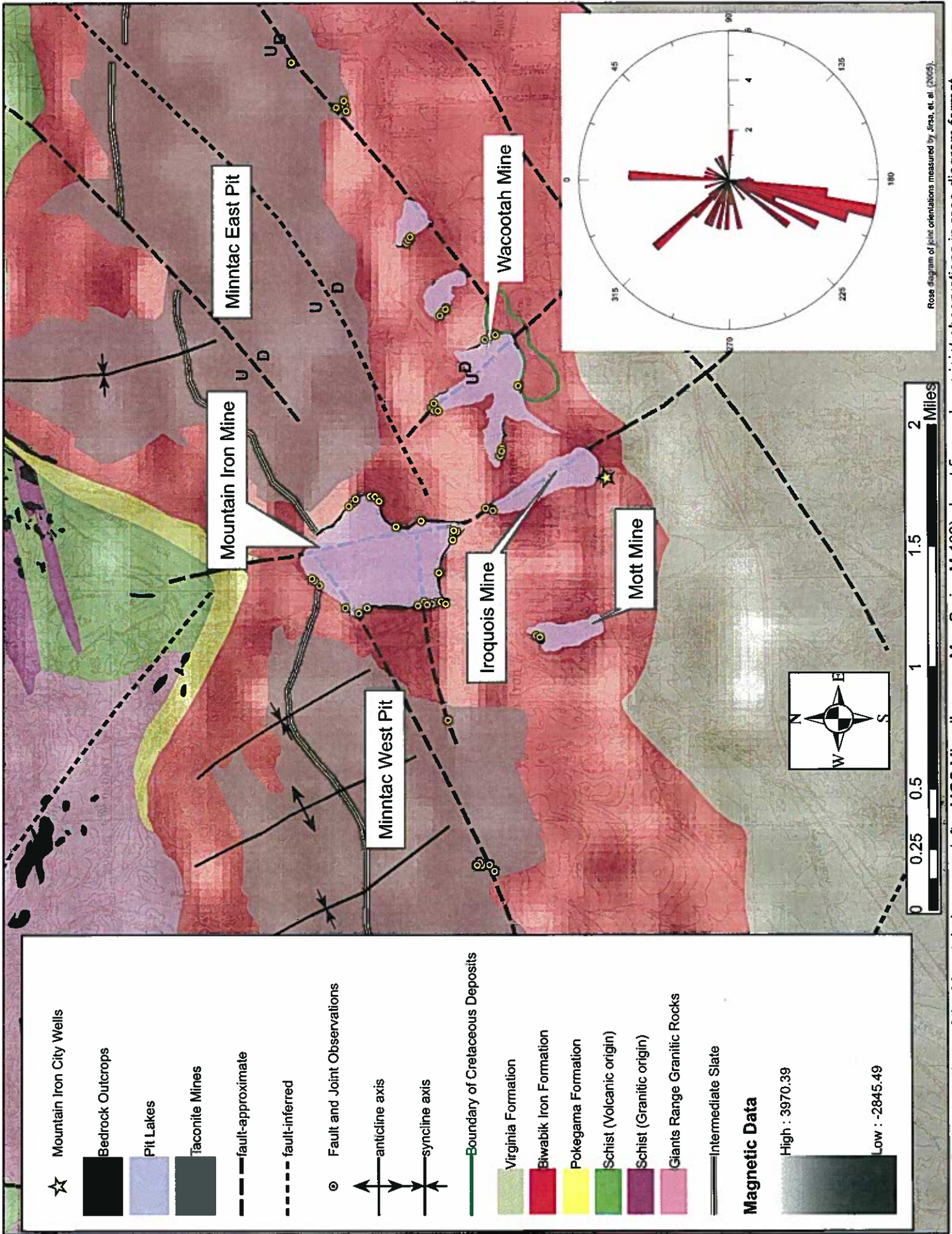


Figure 4. Bedrock geology of the Mountain Iron area (after MGS Miscellaneous Map Series M-163). Inset figure shows joint observations in rose diagram format.

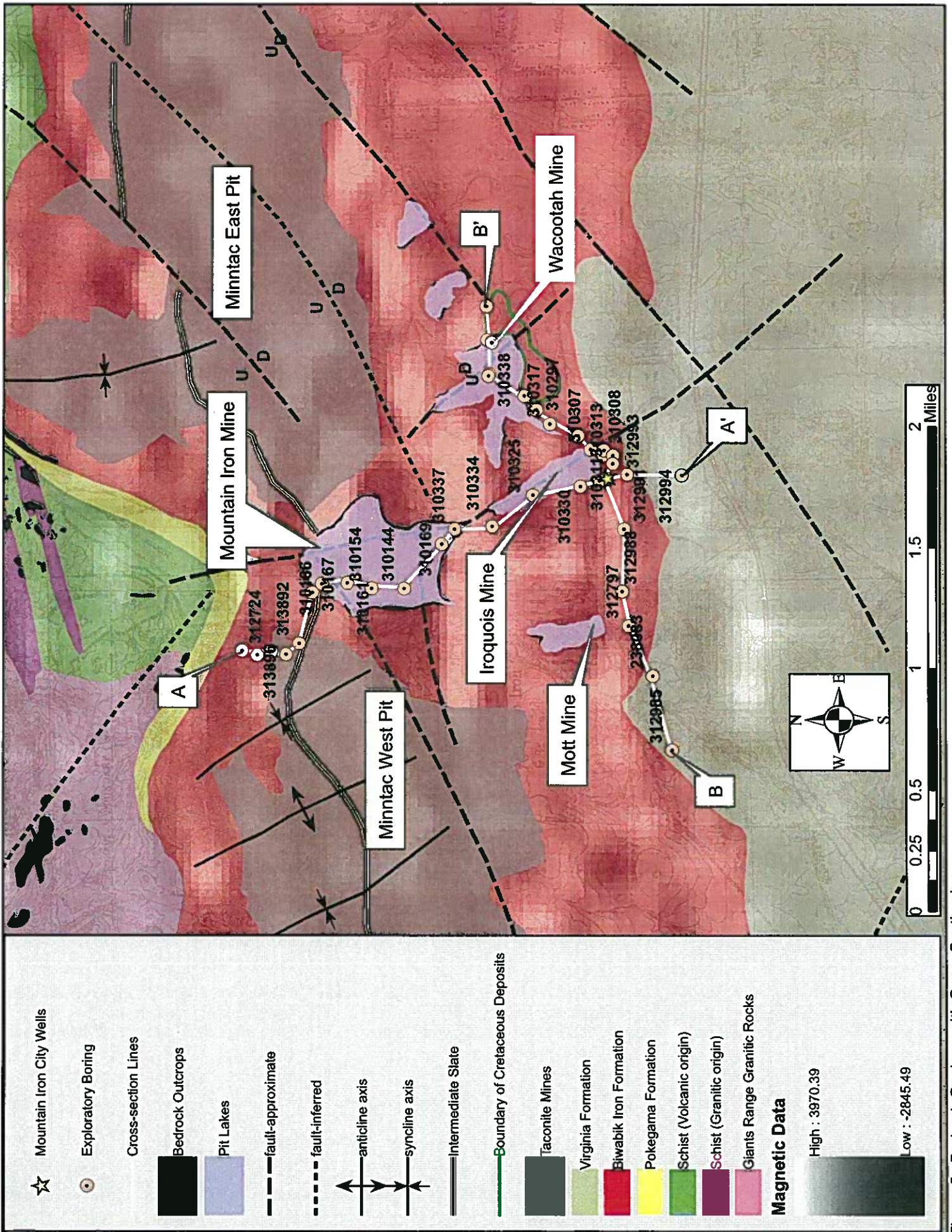


Figure 5. Bedrock Geology with Cross-Section Lines.

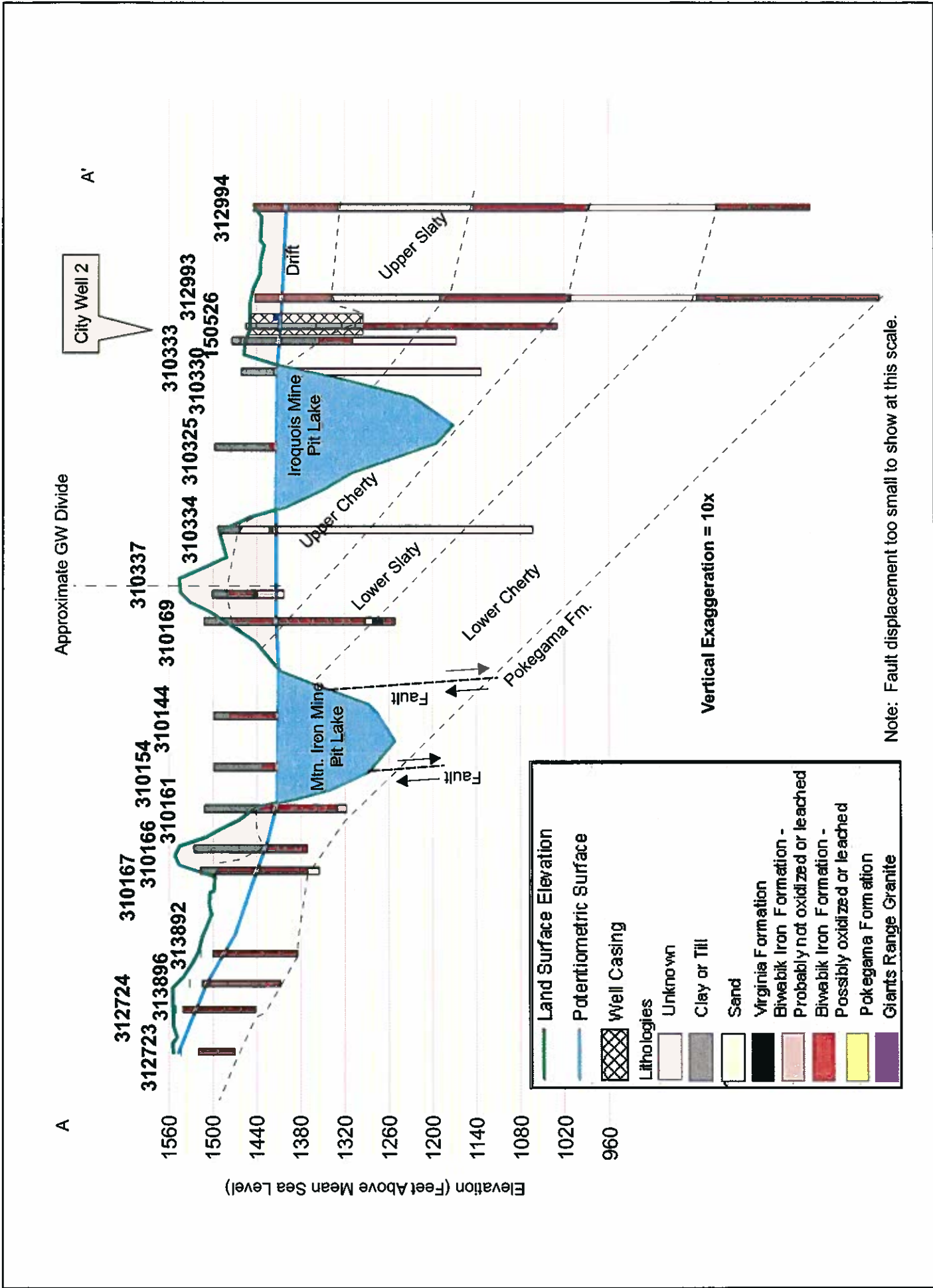
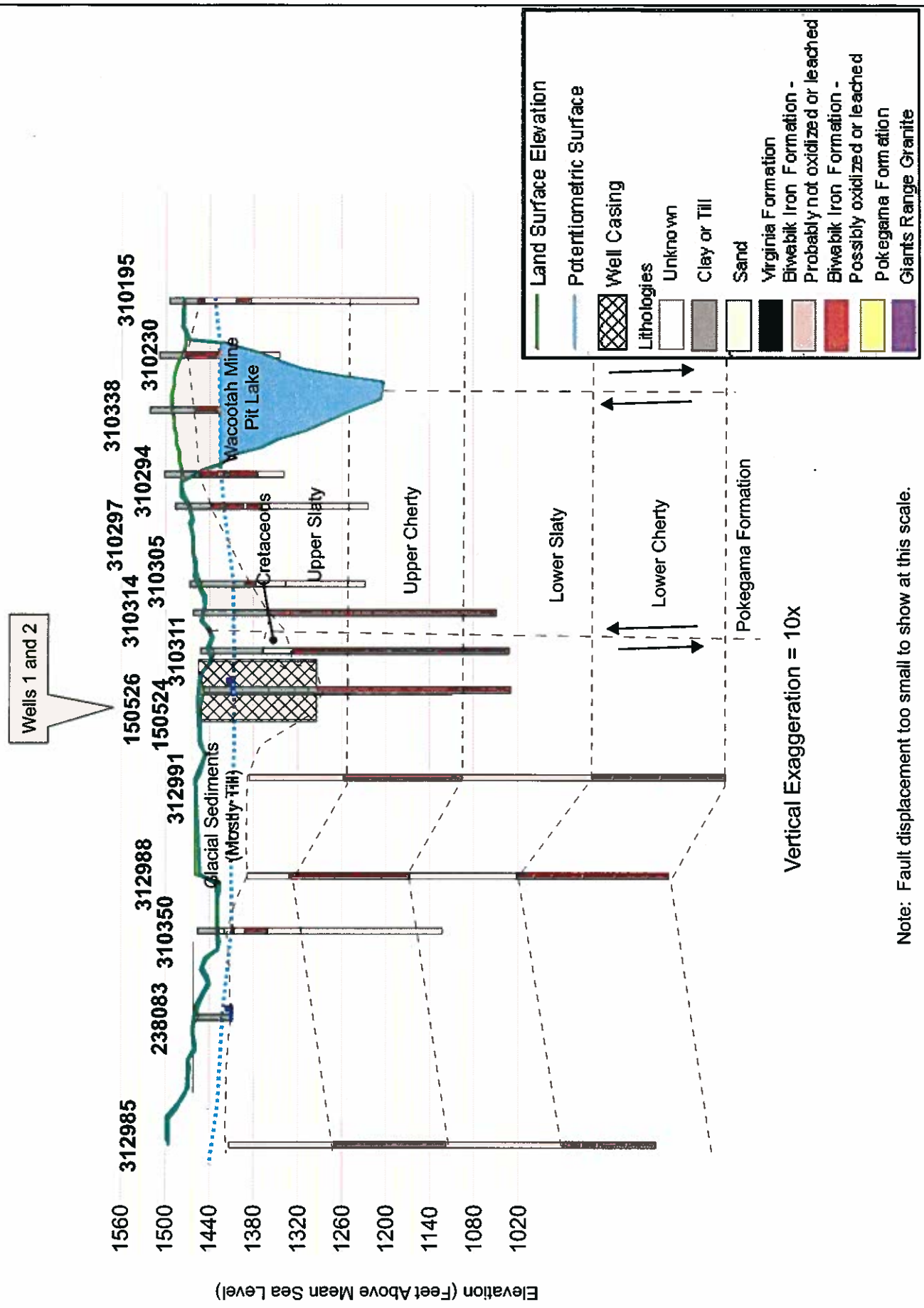


Figure 6. Geologic Cross-Section A-A'.



Note: Fault displacement too small to show at this scale.

Figure 7. Geologic Cross-Section B-B'.

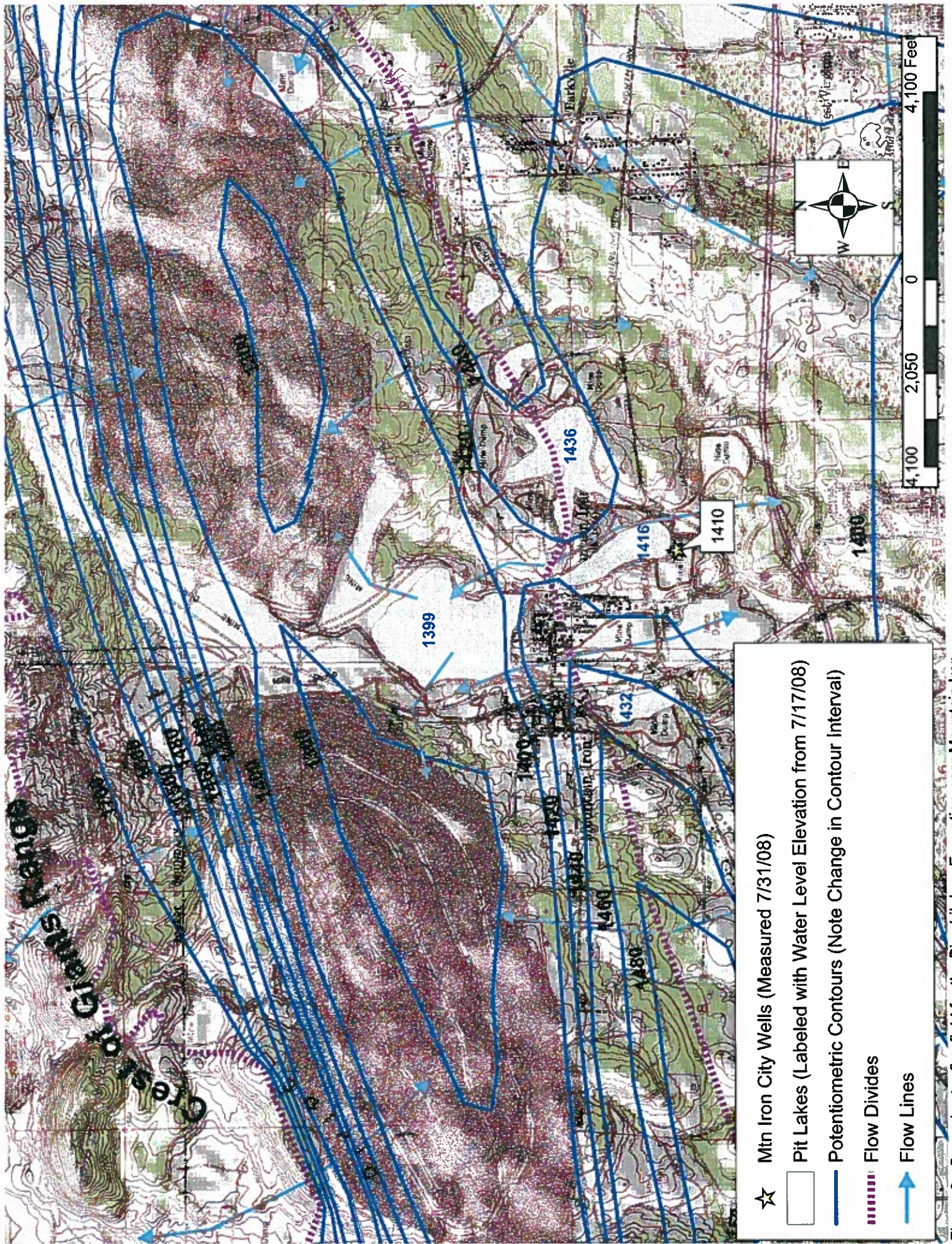


Figure 8. Groundwater flowfield for the Biwabik Iron Formation near Mountain Iron.

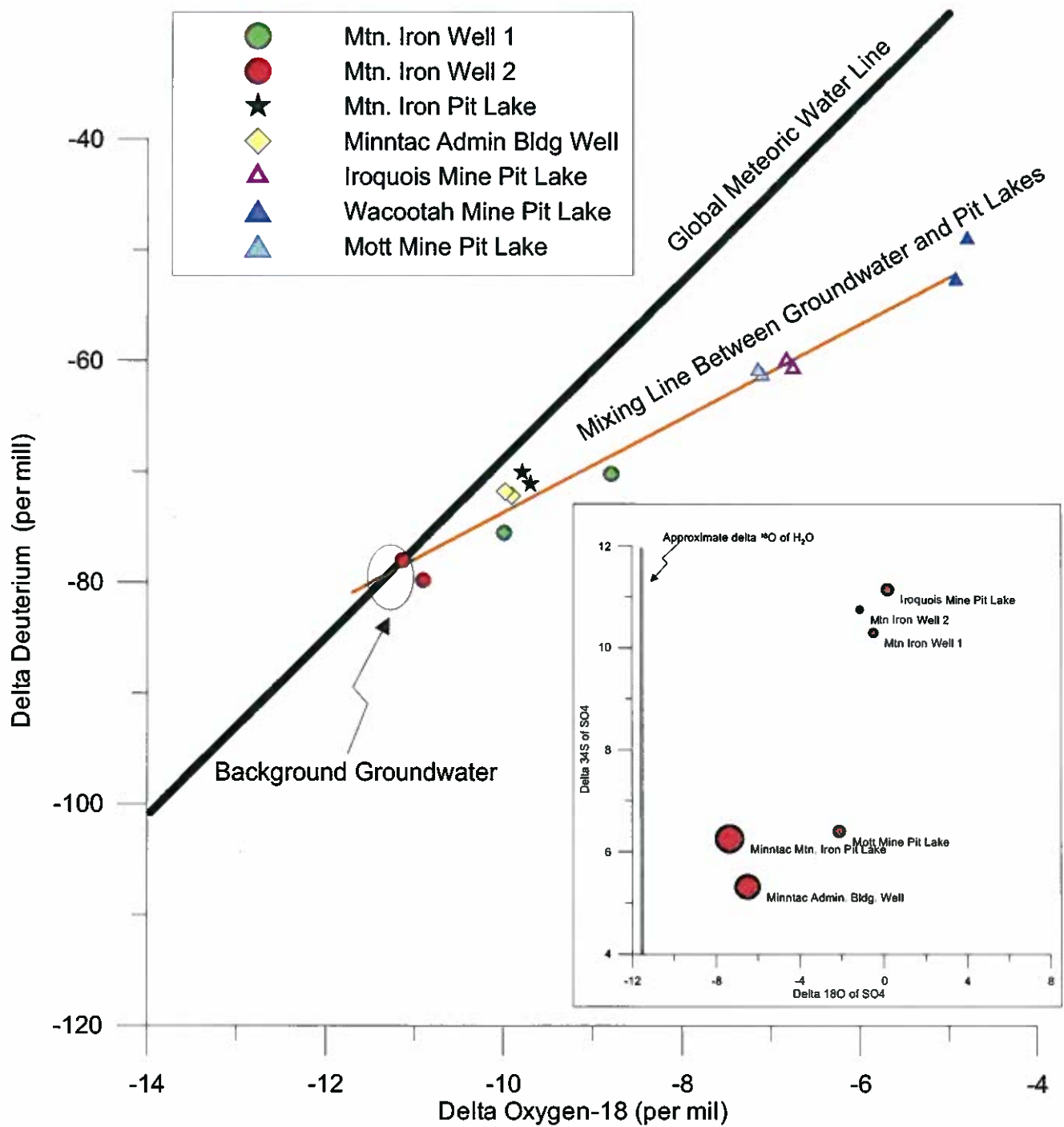


Figure 9. Stable isotopes of water. Inset graph shows stable isotopes of sulfate.

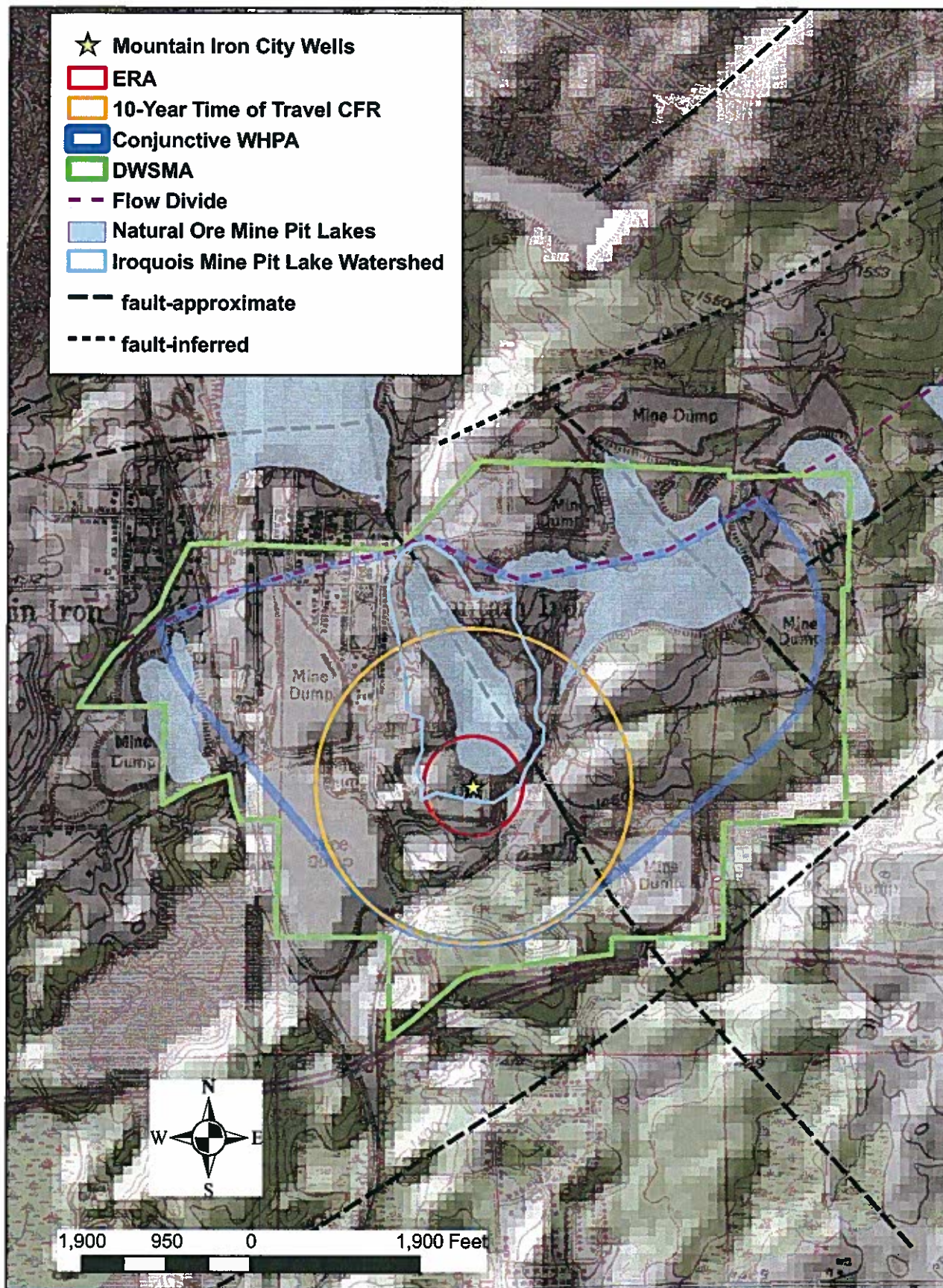


Figure 10. Components of conjunctive WHPA delineation for the city of Mountain Iron.

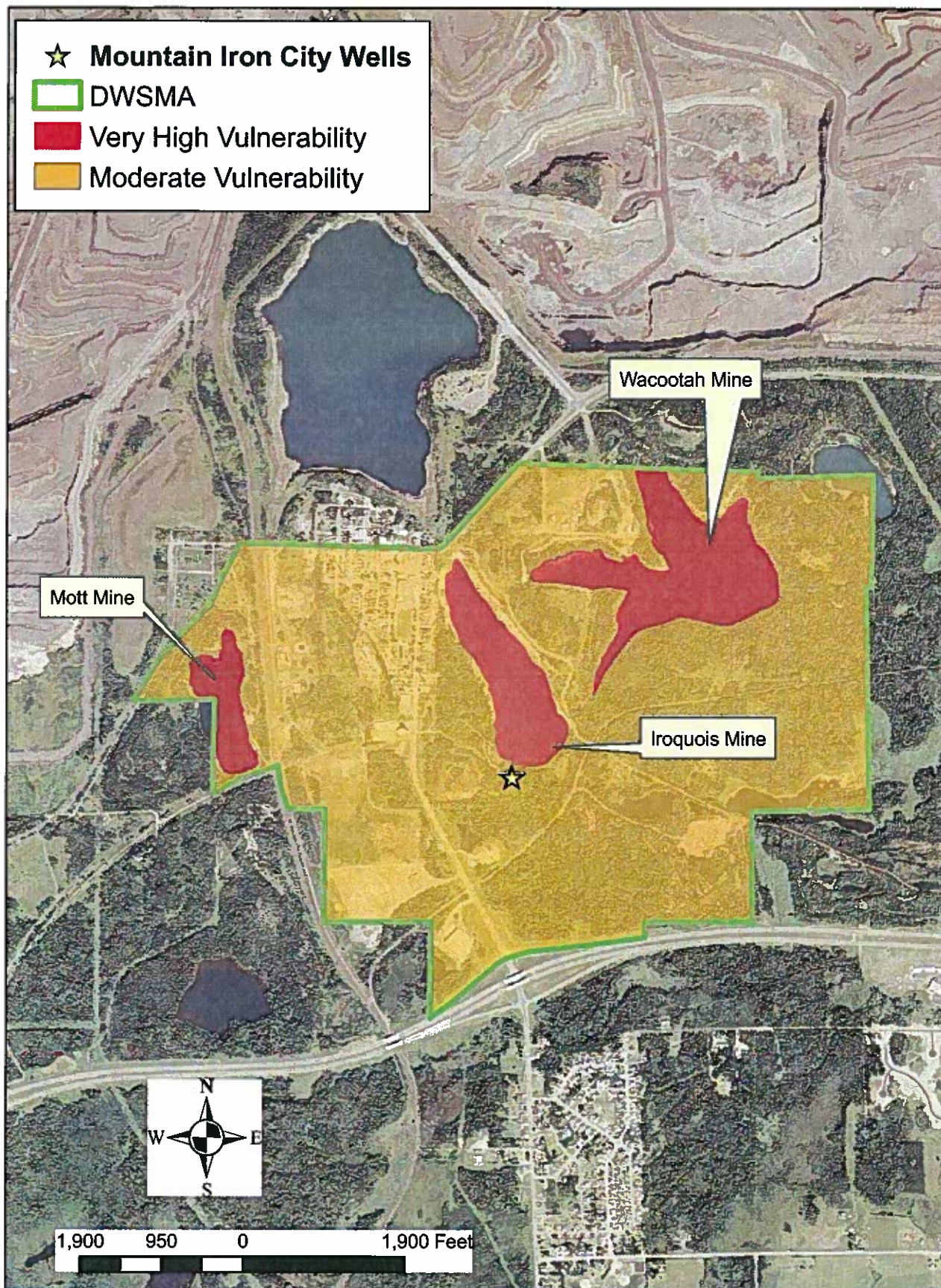


Figure 11. Vulnerability of the Mountain Iron DWSMA.

Appendix A

Well Vulnerability Worksheets and Well Records



**MINNESOTA DEPARTMENT OF HEALTH
SECTION OF DRINKING WATER PROTECTION
SWP Vulnerability Rating**



625 Robert St. N. St. Paul MN 55155
P.O. Box 64975 St. Paul MN 55164 - 0975

PWSID: 1690035
SYSTEM NAME: Mountain Iron
WELL NAME: Well #1

TIER: 1
WHP RANK:
UNIQUE WELL #: 00150524

COUNTY: St. Louis TOWNSHIP NUMBER: 58 RANGE: 18 W SECTION: 10 QUARTERS: BDDA

<u>CRITERIA</u>	<u>DESCRIPTION</u>	<u>POINTS</u>
Aquifer Name(s)	: Biwabik Iron-Formation	
DNR Geologic Sensitivity Rating	: Medium	25
L Score	: 0	
Geologic Data From	: Well Record	
Year Constructed	: 1981	
Construction Method	: Rotary/Drilled	0
Casing Depth	: 160	10
Well Depth	: 375	
Casing grouted into borehole?	: Yes	0
Cement grout between casings?	: Not applicable	0
All casings extend to land surface?	: Yes	0
Gravel - packed casings?	: No	0
Wood or masonry casing?	: No	0
Holes or cracks in casing?	: Unknown	0
Isolation distance violations?		0
Pumping Rate	: 800	10
Pathogen Detected?		0
Surface Water Characteristics?		0
Maximum nitrate detected	: Unknown	0
Maximum tritium detected	: 7.1 07/31/2008	VULNERABLE
Non-THMS VOCs detected?		0
Pesticides detected?		0
Carbon 14 age	: Unknown	0
Wellhead Protection Score		45
Wellhead Protection Vulnerability Rating		VULNERABLE
Vulnerability Overridden		Jim Walsh 9/29/2005 14:19:16

COMMENTS



**MINNESOTA DEPARTMENT OF HEALTH
SECTION OF DRINKING WATER PROTECTION
SWP Vulnerability Rating**



625 Robert St. N. St. Paul MN 55155
P.O. Box 64975 St. Paul MN 55164 - 0975

PWSID: 1690035
SYSTEM NAME: Mountain Iron
WELL NAME: Well #2

TIER: 1
WHP RANK:
UNIQUE WELL #: 00150526

COUNTY: St. Louis TOWNSHIP NUMBER: 58 RANGE: 18 W SECTION: 10 QUARTERS: BDDA

<u>CRITERIA</u>	<u>DESCRIPTION</u>	<u>POINTS</u>
Aquifer Name(s) :	Biwabik Iron-Formation	
DNR Geologic Sensitivity Rating :	Medium	25
L Score :	0	
Geologic Data From :	Well Record	
Year Constructed :	1981	
Construction Method :	Rotary/Drilled	0
Casing Depth :	160	10
Well Depth :	425	
Casing grouted into borehole?	Yes	0
Cement grout between casings?	Not applicable	0
All casings extend to land surface?	Yes	0
Gravel - packed casings?	No	0
Wood or masonry casing?	No	0
Holes or cracks in casing?	Unknown	0
Isolation distance violations?		0
Pumping Rate :	250	5
Pathogen Detected?		0
Surface Water Characteristics?		0
Maximum nitrate detected :	Unknown	0
Maximum tritium detected :	8.5 07/31/2008	VULNERABLE
Non-THMS VOCs detected?		0
Pesticides detected?		0
Carbon 14 age :	Unknown	0
Wellhead Protection Score :		40
Wellhead Protection Vulnerability Rating :		VULNERABLE
Vulnerability Overridden :		

COMMENTS

Previous tritium result of 13.8 TU on 05/06/1998.

Minnesota Unique Well No.

150524

County **St Louis**
 Quad **Virginia**
 Quad ID **320D**

MINNESOTA DEPARTMENT OF HEALTH
**WELL AND BORING
 RECORD**

Entry Date **02/22/1988**
 Update Date **11/13/2009**
 Received Date

Minnesota Statutes Chapter 103I

Well Name MOUNTAIN IRON 1 Township Range Dir Section Subsections Elevation 1455 ft 58 18 W 10 BDDACA Elevation Method 7.5 minute topographic map (+/- 5 feet)		Well Depth 395 ft. Depth Completed 375 ft. Date Well Completed 10/19/1981
Well Address MOUNTAIN IRON MN 55768		Drilling Method Non-specified Rotary
Geological Material CLAY-FEW ROCKS SANDY CLAY REDDISH CLAY CLAY REDDISH CLAY FRACTURED ROCK & LEDGE FRACTURED ROCK & LEDGE		Color Hardness From To 0 14 14 72 72 130 130 150 150 180 180 205 205 375
Use Community Supply PWS ID 1690035 Source S01		Drilling Fluid - Well Hydrofractured? <input type="checkbox"/> Yes <input type="checkbox"/> No From Ft. to Ft.
Casing Type Joint No Information Drive Shoes? <input type="checkbox"/> Yes <input type="checkbox"/> No No Above/Below 1 ft.		Casing Diameter 12 in. to 160 ft. Weight 51.15 lbs./ft. Hole Diameter 12 in. to 375 ft.
Open Hole from 160 ft. to 375 ft.		Screen NO Make Type Diameter Slot/Gauze Length Set Between
Static Water Level 47 ft. from Land surface Date Measured 10/19/1981		PUMPING LEVEL (below land surface) 196 ft. after 20 hrs. pumping 900 g.p.m.
Well Head Completion Pitless adapter manufacturer Model <input type="checkbox"/> Casing Protection <input checked="" type="checkbox"/> 12 in. above grade <input type="checkbox"/> At-grade (Environmental Wells and Borings ONLY)		Grouting Information Well Grouted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Grout Material: Bentonite from 0 to 160 ft.
NO REMARKS Located by: Minnesota Geological Survey Method: Digitized - scale 1:24,000 or larger (Digitizing Table) Unique Number Verification: Information from owner Input Date: 01/01/1990 System: UTM - Nad83, Zone 15, Meters X: 528957 Y: 5263586		Nearest Known Source of Contamination 1000 feet direction type Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
First Bedrock Biwabik Iron-Formation Aquifer Biwabik Iron-Formation Last Strat Biwabik Iron-Formation Depth to Bedrock 160 ft.		Pump <input type="checkbox"/> Not Installed Date Installed 12/00/1982 Manufacturer's name JACUZZI Model number 2AS-22051 HP 50 Volts Length of drop Pipe 180 ft. Capacity 800 g.p.m. Type Material Steel (black or low carbon)
Abandoned Wells Does property have any not in use and not sealed well(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No		Variance Was a variance granted from the MDH for this well? <input type="checkbox"/> Yes <input type="checkbox"/> No
Well Contractor Certification North Star Drilling 48038 BACKOWSKI, M. License Business Name Lic. Or Reg. No. Name of Driller		Printed 11/13/2009 HE-01205-07
County Well Index Online Report		150524

Minnesota Unique Well No.

150526

County St. Louis
 Quad Virginia
 Quad ID 320D

MINNESOTA DEPARTMENT OF HEALTH
**WELL AND BORING
 RECORD**

Entry Date 02/22/1988
 Update Date 03/11/2005
 Received Date

Minnesota Statutes Chapter 103f

Well Name MOUNTAIN IRON 2 Township Range Dir Section Subsections Elevation 1455 ft. 58 18 W 10 BODACA Elevation Method 7.5 minute topographic map (+/- 5 feet)		Well Depth 425 ft. Depth Completed 425 ft. Date Well Completed 10/03/1981
Well Address MOUNTAIN IRON MN 55768		Drilling Method Non-specified Rotary Drilling Fluid - Well Hydrofractured? <input type="checkbox"/> Yes <input type="checkbox"/> No From Ft. to Ft. Use Community Supply PWS ID 1690035 Source S02
Geological Material Color Hardness From To CLAY & ROCKS 0 15 CLAY 15 96 ROCKS & CLAY 96 131 ROCKS 131 149 ROCKS & CLAY 149 160 FRACTURED ROCK 160 215 FRACTURED LEDGE 215 425		Casing Type Joint No Information Drive Shoe? <input type="checkbox"/> Yes <input type="checkbox"/> No No Above/Below 1 ft. Casing Diameter Weight Hole Diameter 12 in. to 160 ft. 51.15 lbs./ft. 12 in. to 425 ft.
		Open Hole from 160 ft. to 425 ft. Screen NO Make Type Diameter Slot/Gauze Length Set Between
		Static Water Level 46 ft. from Land surface Date Measured 10/03/1981 PUMPING LEVEL (below land surface) 163 ft. after 20 hrs.pumping 460 g.p.m.
		Well Head Completion Pitless adapter manufacturer Model <input type="checkbox"/> Casing Protection <input checked="" type="checkbox"/> 12 in. above grade <input type="checkbox"/> At-grade (Environmental Wells and Borings ONLY)
NO REMARKS		Grouting Information Well Grouted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Grout Material: Bentonite from 0 to 160 ft.
Located by: Minnesota Geological Survey Method: Digitized - scale 1:24,000 or larger (Digitizing Table) Unique Number Verification: Information from owner Input Date: 01/01/1990 System: UTM - Nad83, Zone15, Meters X: 528960 Y: 5263585		Nearest Known Source of Contamination 1000 feet _direction_ _type Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Pump <input type="checkbox"/> Not Installed Date Installed 03/19/1982 Manufacturer's name PIONEER Model number Z32534M HP 1.5 Volts 460 Length of drop Pipe 180 ft. Capacity 300 g.p.m Type Submersible Material Steel (black or low carbon)
		Abandoned Wells Does property have any not in use and not sealed well(s)? <input type="checkbox"/> Yes <input type="checkbox"/> No
		Variance Was a variance granted from the MDH for this well? <input type="checkbox"/> Yes <input type="checkbox"/> No
First Bedrock Biwabik Iron-Formation Aquifer Biwabik Iron-Formation Last Strat Biwabik Iron-Formation Depth to Bedrock 160 ft.		Well Contractor Certification North Star Drilling 48038 BACKOWSKI, M. License Business Name Lic. Or Reg. No. Name of Driller
County Well Index Online Report		150526 Printed 9/30/2009 HE-01205-07

Appendix B

Assessment of the Data Elements Used to Prepare the Plan

Assessment of Data Elements

The following data elements were identified by the MDH to be used in the WHP plan and were specified in the scoping decision notices that were presented to the public water supplier. The selection of a data element for inclusion in the plan is based on 1) the hydrogeological setting, 2) vulnerability of the wells used by the public water supplier, and 3) vulnerability of the DWSMA known at the time that each scoping meeting was held. Each data element is assessed for its impact on 1) the use of the public water supply well, 2) delineation of the WHPA, 3) the quality and quantity of water supplying the public water supply well, and 4) land and groundwater uses within the DWSMA.

Physical Environment

Geologic information was obtained from 1) **existing maps, reports, and studies** that are listed in the “Selected References” section of this report, 2) the **records of wells, test borings, and well sealing records** that are on file at the MDH and stored in the County Well Index (CWI) database, and 3) the **county soil survey** that is listed in the “Selected References” section of this report.

Geologic information was used to determine 1) the extent and composition of the aquifer used by the city wells, 2) the vulnerability of the aquifer at the location of each well used by the public water supplier, and 3) the vulnerability of the DWSMA. Geologic information affects the delineation of the WHPA because it is used to address the aquifer transmissivity and hydrologic boundaries delineation criteria. Second, geologic information provides insight into the pathways that recharging water takes to enter the aquifer, which impacts 1) the use of the well and 2) the quality and quantity of water that is pumped. Finally, it is the principal information that is used to assess DWSMA vulnerability, which impacts land and groundwater uses within the DWSMA.

Water resources information was obtained from the map shown in Figure 10, which displays the nearby mine pit lakes and their associated **minor watershed units**. Water resources information affects the use of land and water resources within the DWSMA because it defines regulations that are in-place to assist with managing 1) the uses for surface water and 2) potential contamination sources that may contribute contaminants to the aquifers used by the public water supplier. This information is also used to identify surface water hydrologic features that define hydrologic boundaries impacting delineation of the WHPA and the vulnerability of the DWSMA.

Shoreland classifications affect the management of the DWSMA because they are required to be adopted by local governments and regulate land use within specified distances of surface water features, including lakes, rivers, and streams. The public water supplier or another local governmental unit may use this authority to restrict or prohibit future potential contamination sources that may introduce contamination into groundwater by recharge from surface water features.

Land Use

Parcel boundaries and public land survey coordinates were used in defining DWSMA boundaries. DWSMA boundaries impact land and groundwater uses because they define where the WHP plan will be implemented. They have no direct impact on 1) the use of the public water supply well(s), 2) delineation of the WHP area, and 3) the quantity and quality of the well water used by the public water supply.

The record of the construction and maintenance of the public water supply wells is presented in Table 1 and their use is presented in Table 2. Whether the well serves as a primary source of drinking water or as an emergency standby source determines how often it is pumped. This affects the delineation of its WHPA because the pumping amount is a delineation criterion. Emergency backup wells only have an IWMZ because they are only pumped to supply water when primary water supply wells cannot meet water demands. In addition, pumping may affect the movement of contamination toward a well and the one- and ten-year capture areas are used to establish priorities for managing potential contamination sources within the DWSMA. The construction and maintenance of a public water supply well affect the well vulnerability assessment and the focus of the potential contamination source inventory. Sealing an improperly constructed or maintained well may be a priority action step for protecting other wells because such wells may become conduits for contamination to enter the aquifer.

Water Quantity Information

Water quantity information was obtained for both surface and groundwater resources. The DNR is the principal source of water quantity information, although studies and reports that are available from other state and federal agencies or from the public water supplier are described in the "Selected References" section of this report. Water quantity information affects the 1) delineation of the WHPA because the pumping amounts are used to calculate the daily well discharge, which is a WHPA delineation criterion, 2) use of the public water supply well because a maximum annual amount for the public water supply system is specified under the DNR appropriations permit, and 3) land and water use within the DWSMA because pumping may impact whether other wells or existing land uses may cause contamination of the aquifer or contamination to move toward the public water supply wells. It may indirectly affect the future quantity and quality of the water from the public water supply well.

Surface water features affect the delineation of the WHPA because hydraulic boundaries are a delineation criterion and recharge or discharge to groundwater from these features was used to delineate the WHPA.

A list of wells covered by state appropriations permits, including the amounts of water appropriated, type of use, and aquifer source were assessed as follows. The public water supplier provided information describing pumping for the water supply over the previous five years and the projected pumping for the first five years of plan implementation (Table 2). Pumping affects the delineation of the WHPA because the annual amount of water pumped by each well is a delineation criterion. Emergency backup wells only have an IWMZ because they are only pumped during water supply emergencies. In addition, pumping may affect the movement of contamination toward a well within the one- and ten-year capture areas that are used to establish priorities for managing potential contamination sources within the DWSMA.

This may impact how much a contaminated well can be used or an uncontaminated well can be pumped before it affects the movement of contamination to other wells. Also, pumping may impact groundwater levels when recharge is less than withdrawal, such as during times of drought. Therefore, pumping may impact water use within the DWSMA and may impact land uses, such as agricultural purposes or minerals extraction.

Water Quality Information

Water quality information was obtained from the Public Water Supply Program at MDH, the public water supplier, and from reports and studies that are listed in the “Selected References” section of this report.

Information about surface water quality includes a **map or list of the state water quality management classification for each stream and lake** that is used to determine the priority for protecting each within the DWSMA as it relates to beneficial use. Waters classified with a higher priority use will likely receive higher priority by local, state, and federal governments to improve or protect their water quality. As a result, pumping of the public water supply well may be restricted if it impacts a surface water feature with a high priority water use. Also, surface water use priority may be used to support land and groundwater use practices within the DWSMA if they reduce contaminant loading to surface water features that are interconnected with the source water aquifer. This information has no impact on the delineation of the WHPA or the DWSMA vulnerability assessment.

Information that summarizes **land and stream water quality monitoring** is used to assess the impacts that land and groundwater uses are having on water quality in surface waters that recharge the source water aquifer. As such, this information provides a basis for evaluating the interconnectivity between surface water and the aquifer by comparing contaminants that are found in the surface water and aquifer. Positive results require that the delineation of the WHPA include a surface water contribution area. The extent to which surface water contaminants are present in the aquifer or the public water supply well affects 1) the vulnerability assessment of the public water supply well and the DWSMA and 2) whether the well is under the direct influence of surface water and should be treated as a source of surface water. Management of a surface water feature must be addressed in the WHP plan when the well and DWSMA vulnerability assessments indicate a strong interconnectivity between it and the public water supply well.

Information that summarizes **groundwater quality** is used to assess the pathways that recharge takes to the aquifer; this may impact the selection of methods that are used to delineate the WHPA and to assess well and DWSMA vulnerability. The presence of human-made contaminants is used to 1) calibrate a WHPA delineation by providing a means of checking travel time distance from the source of a contaminant to a public water supply well and 2) assess the vulnerability of the well and the DWSMA. The presence of naturally occurring contaminants is used to assess the extent that the source water aquifer is isolated from surface water recharge. The presence of either human-made or naturally occurring contaminants may influence pumping of the public water supply well because pumping may impact the rate at which contamination may be moving into the aquifer. Also, the level of contamination may require that the water be treated for potable use or that the contaminated water be blended with other water to reduce contaminant levels to drinking water standards.

The presence of human-made contaminants is used to identify potential sources of the contamination that should receive a high priority for inventory and for supporting the priority that is assigned to objectives and actions in the plan that manage these sources. This affects the focus of land and water use management practices within the DWSMA.

A list of water chemistry and isotopic data from wells, springs, or other groundwater sampling points and reports of groundwater tracer studies are used to determine the 1) time needed for surface water or precipitation to travel from the surface to the source water aquifer and 2) degree to which the source water aquifer is impacted by recharge from surface water features. This assessment affects the delineation of the WHPA because it helps define the degree of hydraulic confinement and whether a surface water feature comprises a hydraulic boundary that must be included. Also, this information is used to determine the sustainability of the aquifer and any surface water features that may be impacted by increased pumping within the DWSMA. This information has no direct impact on land and groundwater uses within the DWSMA but may be used to support the development of local controls needed to protect vulnerable areas.

Site studies and water quality analyses of known areas of groundwater contamination, property audit results, reports of contamination spills and releases by the MPCA and Minnesota Department of Agriculture provide basic information that is used to determine the extent that groundwater quality may already be impaired by previous land and groundwater use practices. This information is used to assess the vulnerability of the well and the DWSMA, which affects 1) the scope, and direction of the inventory of potential contamination sources and 2) the resulting priorities that are assigned to objectives and actions for managing land and groundwater uses within the DWSMA. Also, the hydrogeologic information contained in the reports is used to refine the understanding of local groundwater conditions that affects the delineation of the WHPA.

COUNCIL LETTER 030110-IVA1

MAYOR SKALKO

LABOR/MANAGEMENT MEETING

DATE: February 24, 2010

FROM: Mayor Gary Skalko

Background information provided by Mayor Skalko:

Set for Thursday, March 18, 2010 at 2:00 p.m.



BENCHMARK ENGINEERING, INC.

CIVIL AND ENVIRONMENTAL ENGINEERING • PLANNING
MINING • LAND SURVEYING • LAND DATA BASE MAPPING

8878 Main Street ▪ P.O. Box 261
Mt. Iron, MN 55768-0261
tel: 218-735-8914 ▪ fax: 218-735-8923
email: info@bm-eng.com

February 17, 2010

Mr. Craig Wainio, City Administrator
City of Mountain Iron
8586 Enterprise Drive South
Mountain Iron, MN 55768

Re: City of Mountain Iron, MN
WWTP Facility Upgrade
Project No. MI09-02 (Walker Process Equipment Contract)

Dear Mr. Wainio:

Enclosed please find final Pay Request No. 2 for the City of Mountain Iron Wastewater Treatment Plant Facility project in the amount of **\$12,465.00** for approval at your next scheduled City Council meeting. All work has been completed in accordance with the contract documents. Please refer to the enclosed pay request breakdown for a summary of items completed. This is the final payment for this project.

The Contractor is not required to complete IC-134 forms for this project. Please see the letter from the supplier enclosed. Keep this for your records.

If you have any questions or need additional information please do not hesitate to contact me.

Sincerely,
Benchmark Engineering, Inc.


Joseph Palo, P.E.

Enclosure

pc: Walker Process Equipment

RECOMMENDATION OF PAYMENT

No. 2-Final

Owner's Project No.: _____

(Equipment)
Engineer's Project No.: MI09-02

Project: Mountain Iron Wastewater Treatment Plant Equipment

CONTRACTOR: Walker Process Equipment, 840 N. Russell Ave, Aurora, IL 60506

For Period Ending: February 17, 2010

To City of Mountain Iron
Owner

Attached hereto is the CONTRACTOR's Application for Payment for Work accomplished under the Contract through the date indicated above. The application meets the requirements of the Contract Documents for the payment or work completed as of the date of this Application.

In accordance with the Contract the undersigned recommends payment to the CONTRACTOR of the amount due as shown below.

BENCHMARK ENGINEERING, INC.

Dated February 17, 2010

By _____


STATEMENT OF WORK

Original Contract Price	\$ <u>149,300.00</u>	Work & Materials to Date	\$ <u>149,300.00</u>
Net Change Orders	\$ _____	Amount Retained	\$ <u>0.00</u>
Current Contract Price	\$ <u>149,300.00</u>	Subtotal	\$ <u>136,835.00</u>
		Previous Payments	\$ <u>136,835.00</u>
		Amount Due this Payment	\$ <u>12,465.00</u>



Division of McNish Corporation

**Dedicated to the
Water and Wastewater
Industry**

Walker Process Equipment

840 North Russell Avenue

Aurora, Illinois 60506-2853

Phone - (630) 892-7921

Sales/Admin. - Fax - (630) 892-7951

Engineering - Fax - (630) 844-9590

Purchasing - Fax - (630) 892-7998

February 16, 2010

Benchmark Engineering, Inc.
8878 Main Street
P.O. Box 261
Mountain Iron, MN 55768

Attention: Alan J. Johnson

RE: City of Mountain Iron, MN
WWTP Facility Upgrade
Project No. MI09-02
WPE Contract P90650A

Mr. Johnson:

Walker Process Equipment is only an equipment supplier, not a Contractor or Sub Contractor or do we have employees in Minnesota, therefore, we believe that we are not required to complete the form IC134.

Sincerely,

WALKER PROCESS EQUIPMENT
DIVISION OF MCNISH CORPORATION

A handwritten signature in cursive script, appearing to read "Lori Rock".

Lori Rock
Corporate Collections

CC: City of Mountain Iron, MN



Walker Process Equipment
 840 N. Russell Ave
 Aurora, IL 60506
 (630) 892-7921

Invoice Number **INV000667-1**
 Invoice Date **1/15/2010**
 Order Number **P90650A**

Bill To: **4MOU001**
MOUNTAIN IRON, CITY OF (TOM DYE)
C/O BONESTROO
2335 HIGHWAY 36W
ST. PAUL, MN 55133

Ship To:
MOUNTAIN IRON, CITY OF
C/O WWTP
GRANT DRIVE
MOUNTAIN IRON, MN 55768
USA

USA
 Phone: (651)967-4651
 Fax: (651)636-1311

PO Number	Proposal	Sales Rep	Ship Method	Payment Terms
AGREEMENT	09-0042S			N30

Consulting Engineer	Job Name	Sales Mgr
BONESTROO	MOUNTAIN IRON, MN	

START-UP OWNER TRAINING	\$5,000.00
RETENTION	\$7,465.00

	Subtotal:	\$12,465.00
	Tax	\$0.00
	Total	\$12,465.00



February 1, 2010

Mayor Gary Skalko
Members of the Mt. Iron City Council
8586 Enterprise Dr. South
Mt. Iron MN 55768

Dear Mayor and Council Members:

On behalf of the Marquette Catholic School parents association, we are writing to you regarding our upcoming fundraiser for Marquette School. On April 30, 2010, we will be hosting an annual dinner dance that serves as one of the major fundraisers for Marquette School. This event has traditionally been held at the Virginia Elks Club but the parent association was very interested in switching to Mt. Iron Community Center. The group can get catering at a much better price at the center and the parents like the look of the community center for the event.

We would like to ask if the council could waive or discount the cost of the community center for this event. We did not pay for use of the Elks Club since they make a profit from the alcohol sales. We are hoping that to make the switch to Mt. Iron that we could avoid an increase in our event costs.

The proceeds from this event help in covering cost for school programs not covered by tuition. Marquette has been an institution in this community for 91 years and many Mt. Iron residents are graduates of Marquette School. We hope that you will consider this request.

If you have any questions, feel free to contact me at 218-780-5800.

Sincerely,

A handwritten signature in black ink, appearing to read 'K Murray', is written over the typed name and title.

Kathleen Murray
Dinner Dance Chair



Saint Louis County

Assessor's Department • 100 N 5th Ave West, RM 212 • Duluth, MN 55802-1291
Phone: (218)726-2304 • Long Distance in St. Louis County (800)450-9777
Web Site: <http://www.co.st-louis.mn.us/AssessorsOfficeNew/assessor.html>

David L. Sipila
County Assessor

Kerry W. Welsh
Assistant County Assessor

February 11, 2010

Dear Clerk:

PART ONE:

It is each jurisdiction's responsibility to ensure compliance with training requirements for your LBAE. To assist you, we have enclosed a listing of Minnesota Revenue's LBAE attendance list. Training is being offered in St. Louis County at Cotton Town Hall on Tuesday, March 30th from 5:30 to 8:30 PM. REGISTRATION IS REQUIRED and we will accept calls March 10th through 23rd. Contact Annie at (218) 726-2304 and give her your name, city or township and phone number. Calls after March 23rd will require a \$20 registration fee. This is a "catch-up" session intended to accommodate jurisdictions that were in compliance as of 12/1/09 but lost their trained member due to elections, resignations, etc., but other interested board members are welcome. Further training sessions will be offered throughout the state between June and November.

PART TWO:

Please review the date, time and place of your **tentatively** scheduled 2010 LBAE meeting. If a change is necessary, please contact Kerry Welsh at (218) 733-2700 by February 26, 2010. If your jurisdiction has a local assessor, please discuss any change with that individual. A schedule has been sent to all local assessors with instructions to contact their board/council if a change is desired.

The Notice of Valuation & Classification allows us to list the name and address of the clerk for correspondence to the LBAE. **Please review the name and address on the envelope you received this letter in. This is what will be on the notices. If you wish to have anything different, please contact me at (218) 726-2304.**

This year we again have the option that if the LBAE meeting and/or reconvened meeting is scheduled beyond normal working hours, the taxing district will be charged a flat \$70 fee. All other meetings begin between 10 AM and 4 PM. If you requested an evening meeting last year, we have tentatively scheduled you for a similar time this year. The majority of meetings have been scheduled for one hour unless previous experience indicates that a longer meeting may be required. Posting notices, instructions, confirmation of meeting date and time, etc., will be sent at a later date.

Sincerely,

Lana Anderson
County Assessor's Office
Enclosures

c:\myfiles\wpdocs\lana\bor\townclks.let

✓ 100 North 5th Avenue West
Courthouse-Room 212
Duluth, Minnesota 55802-1291
(218)726-2304

☐ 118 South 4th Avenue East
Government Services Center-Room 3
Ely, Minnesota 55731-1402
(218)365-8206

☐ 102 US Bank Place
230 1st Street South
Virginia, Minnesota 55792-2666
(218)749-7147

An Equal Opportunity Employer

Local Board of Appeal and Equalization Training Attendance List

Updated to include all courses offered through November 30, 2009

#	Name	Title/Position	City Twp	Date Attended	Expires
4436	Halverson Philip	Supervisor	Lakewood Twp	7/27/2007	07/27/2011
4437	Larson Gerald A.	Supervisor	Lakewood Twp	7/27/2007	07/27/2011
4438	Musick Timothy A.	Supervisor	Lakewood Twp	7/27/2007	07/27/2011
4439	Campbell Charles W.	Supervisor	Lakewood Twp	7/28/2006	07/28/2010
4440	Anderson Wes	Supervisor	Lavell Twp	7/31/2009	11/30/2013
4441	Hewenway Barbara	Clerk	Lavell Twp	1/19/2006	01/19/2010
4442	Sarff James	Supervisor	Lavell Twp	7/28/2006	07/28/2010
4444	Tinker Warren	Supervisor	Lavell Twp	7/28/2006	07/28/2010
4445	Tinkler Warren A	Supervisor	Lavell Twp	8/1/2008	08/01/2012
4446	Christensen Phil	Supervisor	Leiding Twp	1/19/2006	01/19/2010
4447	Glowaski Peter	Supervisor	Leiding Twp	7/31/2009	11/30/2013
4448	Maduti Elsie	Chair	Leiding Twp	1/19/2006	01/19/2010
4449	Poczekaj John	Supervisor	Leiding Twp	3/25/2009	11/30/2012
4450	Mannikko Joanne	Clerk	Leonidas City	11/4/2009	11/30/2013
4451	Medved Paula	Treasurer	Leonidas City	1/17/2007	01/17/2011
4453	Trach David	Mayor	Leonidas City	11/4/2009	11/30/2013
4454	Hess John	Supervisor	Linden Grove Twp	1/23/2008	01/23/2012
4455	Ojanen Lisa	Supervisor	Linden Grove Twp	1/17/2007	01/17/2011
4456	Lamb Rebecca	Clerk	McDavitt Twp	1/17/2007	01/17/2011
4457	Nickelson Keith	Supervisor	McDavitt Twp	3/18/2009	11/30/2012
4458	Zinter Dennis	Supervisor	McDavitt Twp	3/18/2009	11/30/2012
4459	Duravec Mary Ann	Cncl Mbr	Meadowlands City	3/18/2009	11/30/2012
4460	Korasek Mary	Cncl Mbr	Meadowlands City	3/18/2009	11/30/2012
4461	Taray Ann	Mayor	Meadowlands City	3/18/2009	11/30/2012
4462	Bergin Carl	Supervisor	Meadowlands Twp	11/4/2009	11/30/2013
4463	Kucera Steve	Supervisor	Meadowlands Twp	1/19/2006	01/19/2010
4464	Prodhomme Charles	Supervisor	Meadowlands Twp	1/19/2006	01/19/2010
4465	Robison Barbara J.	Supervisor	Meadowlands Twp	7/27/2007	07/27/2011
4467	Aird James	Supervisor	Midway Twp	7/31/2009	11/30/2013
4468	Elde Earl	Supervisor	Midway Twp	7/31/2009	11/30/2013
4470	Taylor Margaret	Supervisor	Midway Twp	7/31/2009	11/30/2013
4474	Karels Ron	Supervisor	Morcom Twp	1/17/2007	01/17/2011
4475	Sandberg Leon	Supervisor	Morcom Twp	7/28/2006	07/28/2010
4476	Holm Les	Supervisor	Morcom Twp	8/1/2008	08/01/2012
4477	Berrlxi Robert T	Supervisor	Morse Twp	8/1/2008	08/01/2012
4478	Cersine Leonard M	Supervisor	Morse Twp	8/1/2008	08/01/2012
4479	Soderberg Terry J	Supervisor	Morse Twp	8/1/2008	08/01/2012
4480	Skalko Gary W.	Mayor	Mountain Iron City	1/17/2007	01/17/2011
4481	Stanaway Alan	Cncl Mbr	Mountain Iron City	1/23/2008	11/30/2012
4483	Maly Craig		Ness Twp	3/18/2009	11/30/2012
4484	Ralidak Shannon	Supervisor	Ness Twp	1/17/2007	01/17/2011
4485	Rautio Dan	Supervisor	Ness Twp	11/4/2009	11/30/2013
4486	Johnson Kurtis	Supervisor	New Ind Twp	1/19/2006	01/19/2010
4487	Olson Bernard L.	Supervisor	New Ind Twp	7/28/2006	07/28/2010
4488	Maish Michael H	Supervisor	New Ind Twp	8/1/2008	08/01/2012
4489	Sundquist Sean W	Supervisor	New Ind Twp	8/1/2008	08/01/2012
4490	Johnson Daniel	Supervisor	Normanna Twp	7/31/2009	11/30/2013
4492	Dillon Dick	Supervisor	North Star Twp	7/31/2009	11/30/2013
4493	Keough Jan	Supervisor	North Star Twp	7/31/2009	11/30/2013
4494	Mantay Gary	Supervisor	North Star Twp	7/31/2009	11/30/2013
4495	Pagel William	Supervisor	North Star Twp	7/28/2006	07/28/2010
4496	Burton Brian	Supervisor	Northland Twp	3/18/2009	11/30/2012

2010 LOCAL BOARD OF APPEAL & EQUALIZATION and OPEN BOOK MEETINGS

2/11/10

CVT	CITIES	DATE	TIME	LOCATION
100	Aurora	April 27	1-2 PM	City Town Government Center
105	Babbitt	April 19	5-6 PM	Babbitt Municipal Center
015	Biwabik	May 3	5:15 to 6:15 PM	City Hall
110	BROOKSTON OPEN BOOK MTG	April 21	2-3 PM	County Assessor's Office/Duluth
115	Buhl	May 4	10-11 AM	City Hall
020	Chisholm	May 10	4-5 PM	City Hall
120	COOK OPEN BOOK MTG	April 7	10-11 AM	County Assessor's Office/Virginia
030	Ely	April 29	5-6 PM	City Hall
040	Eveleth	April 7	3-4 PM	City Hall
125	Floodwood	April 13	1-2 PM	City Hall
060	Gilbert	May 6	5-6 PM	City Hall
395	Hermantown	May 4	2-3 PM	5105 Maple Grove Road
140	Hibbing	May 11	1-3 PM	City Hall
142	Hoyt Lakes	April 7	6:30 -7:30 PM	City Hall
145	Iron Junction	April 8	2-3 PM	4141 Merritt Ave
150	Kinney	May 11	11 AM-Noon	Town Hall
156	LEONIDAS OPEN BOOK MTG	April 7	10-11 AM	County Assessor's Office/Virginia
160	MCKINLEY OPEN BOOK MTG	April 7	10-11 AM	County Assessor's Office/Virginia
165	Meadowlands	April 14	10-11 AM	Community Center
175	Mt. Iron	April 27	6:30-7:30 PM	City Hall
180	Orr	April 29	3-4 PM	City Hall
185	Proctor	April 22	2-3 PM	Community Ctr, Council Chambers
080	Tower	May 4	6-7 PM	City Hall
090	Virginia	April 20	10 AM-Noon	City Hall (call 748-7500 for appt)
190	Winton	April 13	10-11 AM	Winton Community Church

CVT	TOWNSHIPS	DATE	TIME	LOCATION
200	Alango	April 22	5-6 PM	St. Paul's Luth Ch @ 9808 Hwy 22
205	Alborn	April 6	1-2 PM	Town Hall
210	Alden	May 13	2-3 PM	Town Hall
215	Angora	April 8	7-8 PM	Town Hall
225	Arrowhead	April 22	6-7 PM	Town Hall
230	Ault	April 28	9-10 AM	Town Hall
235	Balkan	May 5	10-11 AM	Community Center
240	Bassett	April 28	Noon-1 PM	Town Hall
250	Beatty	May 7	10 AM-Noon	Town Hall
260	Biwabik	April 6	1-2 PM	Town Hall
270	Breitung	April 29	1-2 PM	Soudan Fire Hall
275	Brevator	April 15	10-11 AM	East Brevator Town Hall
278	Camp Five	May 12	10-11 AM	Town Hall
280	Canosia	April 8	10-11 AM	Town Hall
285	Cedar Valley	April 6	10-11 AM	Town Hall
290	Cherry	May 6	6-7 PM	Community Center
295	Clinton	May 13	1-2 PM	Town Hall
300	Colvin	April 15	3-4 PM	Town Hall
305	Cotton	April 6	2-3 PM	Town Hall
308	Crane Lake	April 21	4-5 PM	Fellowship Hall
310	Culver	April 13	6-7 PM	Town Meeting Room
315	Duluth	April 20	6-7 PM	Town Hall



Mesabi Family YMCA

"We build strong kids, strong families, strong communities."

February 18, 2010

Mt. Iron City Council
City of Mt. Iron
8586 Enterprise Drive South
Mt. Iron, MN 55768

Dear Council,

The Mesabi Family YMCA is preparing its annual Strong Kids' Auction to be held at the Mt. Iron Community Center on Friday, April 23rd. Contributions received from the auction support the membership and program assistance effort, youth programs, and new program initiatives. Please see attached fundraising description.

Through our membership and program assistance at the YMCA, no one is turned away due to an inability to pay. It's only through the generous support of individuals and businesses that the YMCA is able to offer financial assistance. Recipients of assistance offer their thanks for the opportunity provided by the Strong Kids Campaign and Auction:

"Thank you so much for the assistance with membership costs. It allows my son & me to be able to spend time together, while benefiting our health. He really enjoys the swimming lessons he's been in. This is greatly appreciated, without this membership assistance; we would not be able to attend. We enjoy the services you provide." - Single mom & son

"With your support the many programs that are offered are made accessible to our family that would otherwise be out of reach for us financially. Everyone in the family will benefit from this generosity. I have diabetes & it is important for me physically to stay in shape. The kids will use the facilities & we are grateful for them to have the chance to have a place to go that is fun and safe." - Family of Five

Our event will take place at the Mt. Iron Community Center. We ask that you will consider waiving the user fee for our event fundraiser.

Thank you for your consideration.

Nancy Henderson-Korpi
Nancy Henderson-Korpi
Executive Director

Mesabi Family YMCA 2010 Strong Kids Auction

2010 Goal: \$15,000

Funds raised enable your YMCA:

- to keep the door open to all no matter one's financial circumstance
- to keep all programs strong, growing, and affordable across the Iron Range
- to make a difference in peoples' lives with programs that build self esteem, improve well-being, restore a positive outlook, create relationships, and strengthen the communities we live in
- to be of service to others – helping people help themselves
- to collaborate and partner with other agencies, schools, and communities in healthy community activities

Keeping the Door Open to All:

No one is ever turned away from the YMCA due to an inability to pay; anyone facing financial challenge is eligible to apply for financial assistance. In 2009, 600 individuals and families have been able to participate in programs, membership, and activities at the YMCA valued at \$54,502.

About the YMCA and Who We Serve:

The Mesabi Family YMCA is a mission-based, 501c3 non-profit organization that has been in existence for 27 years located in Virginia/Mt. Iron, MN. We are chartered by the National YMCA. Our service area includes the quad-cities and beyond extending up to 60 miles ... Virginia, Mt Iron, Gilbert, Eveleth, Biwabik, Aurora, Hoyt Lakes, Cook, Orr, Nett Lake, Babbitt, Tower-Soudan, Buhl, Cherry, Iron, Forbes, Cotton, and in between. In 2009 we served 5516 people across the East Iron Range through membership services and programs including youth sports, swimming, child care, day camp, school's out programs, health and wellness, instructional programs, training opportunities, open houses, active older adult activities, collaborative programming, and more for all ages cradle to grave.

Mission:

To put Christian principles into practice through programs that build healthy spirit, mind, and body for all. We strive to build strong kids, strong families, and strong communities by emphasizing the four core values of caring, honesty, respect and responsibility.

Everyone who is touched by the YMCA is impacted by the four core values. Often for a child who has a challenging home life, the YMCA may be one of the only places where they are treated with respect and helped to feel that they truly have worth and value. Often for a family, senior citizen, or an individual with disabilities who is facing financial challenges the opportunity to come to the YMCA to exercise and socialize can enhance their self worth both physically and mentally and help them feel more a part of their community. The Mesabi Family YMCA truly touches everyone we serve, and through the ability to offer financial assistance we can especially serve those in the greatest need.

Please think about how you can help make a difference in the lives of others...

Give, Volunteer, Serve ... you'll be forever changed!



COUNCIL LETTER 030110-VIC

ED ROSKOSKI

**NOTIFICATION OF ALL GOVERNMENT
RELATED MEETINGS**

DATE: February 24, 2010

FROM: Ed Roskoski
City Councilor

Councilor Roskoski requested this item be placed on the agenda with this background information:

Notification of all Mountain Iron City Council, Board, Commission, Advisory and Research Group meeting should be done through Range Pulse in the Mesabi Daily News and on our Channel 7 Public Announcement section.

COMMUNICATIONS
MARCH 1, 2010

1. Habitat for Humanity, a thank you for the use of the Community Center.
2. MediaCom, notification of the addition of the Sprout Channel.

How wonderful it is that nobody need wait a single moment
before starting to improve the world.

-Anne Frank

YOUR FACILITY IS PERFECT FOR OUR EVENT!
IT IS A PRIVILEGE TO BE ABLE TO USE THE
FACILITY. THANKS FOR PARTNERING WITH US,
NATHAN THOMPSON
Executive Director

Dear Mt. Iron Community Center -
Thanks so much for again working with
Habitat for Humanity to put on a successful
fundraising dinner. Working with the
Community Center reduces so much stress
because we know we are able to count
on you!

Thanks so much for your continued support.

Building homes...building hope...together.

Megan Betters
Habitat*VISTA



North St. Louis County

Habitat
for Humanity®

PO Box 24 • Virginia, MN 55792 • 866.749.8910
Visit us at our new office!: 65 Midway Drive



Tom Bordwell
Senior Manager of Government Relations

February 17, 2010

Subject: Channel Updates

Dear Community Official:

Mediacom will add the Sprout channel to the digital line-up in your community on or about March 22, 2010.

Sprout Channel: 197

The Sprout channel combines a variety of gold standard, curriculum based children's programming with short-form original programming including shows such as *Sesame Street*, *Bob the Builder*, and *Thomas & Friends*.

Additionally, Mediacom will be dropping the Game Show Network, currently on channel 258, from the digital plus line-up on or about March 29th.

If there are any questions please email me at tbordwell@mediacomcc.com.

Sincerely,

Tom Bordwell

Mediacom Communications Corporation
2831 Wilshire Blvd Mound MN 55364
Email: tbordwell@mediacomcc.com

COUNCIL LETTER 030110-VIII
NEGOTIATIONS COMMITTEE
CLOSED MEETING

DATE: February 24, 2010

FROM: Negotiations Committee

Craig J. Wainio
City Administrator

The City Council may enter into a Closed Meeting to discuss contract negotiations strategies with AFSCME Local Union #453.