



Mn/DOT Name: 39 SEM

NGS Name: 39 SEM

County: AITKIN, MN (Sheet 2)

NGS ACRN: [DF7374](#) [Get Map](#)
 NGS Quad / Sta Num : 46093142/
 USGS Quad: LIBBY

<u>1/4</u>	<u>Sec</u>	<u>Twp</u>	<u>Rng</u>	<u>Reference</u> <u>Latitude</u>	<u>Reference</u> <u>Longitude</u>	<u>Vert</u> <u>Order</u>	<u>Horz</u> <u>Order</u>
NE	15	50 N	24 W	464931.22	932139.81		C

<u>Year Set</u>	<u>Last Recovery</u>	<u>Condition</u>	<u>Geodetic Usability</u>	<u>Photos</u>	<u>Bridge Num</u>	<u>F/P/R</u>	<u>Magnetic Properties</u>
1967	2020	GOOD	Horz=YES Vert=YES	YES		FLUSH	BAR MAG IN DRILL HOLE

<u>Monument Type</u>	<u>Disk Type</u>	<u>Mon. Agency</u>
COPPER CLAD ROD (NO SLEEVE)	SURVEY DISK	USGS

Description: (2020) Stamping: 39 SEM 1967

9.64 MILES NORTHEAST OF PALISADE, 11.0 MILES NORTHEAST ALONG COUNTY ROAD 10 FROM THE JUNCTION OF COUNTY ROAD 10 AND COUNTY ROAD 3 IN PALISADE, 85.8 FEET NORTHWEST OF COUNTY ROAD 10 (GREAT RIVER ROAD), 47.7 FEET NORTHEAST OF COUNTY ROAD 18 (560TH STREET), 1.0 FOOT NORTHEAST OF A WITNESS POST.

Leveling-Derived Orthometric Heights (Feet)

<u>Orthometric Height</u>			<u>Ellipsoid (NAD83)</u>			<u>Determination Method</u>		<u>Project Info</u>	
<u>Height</u>	<u>Acc</u>	<u>Order (/Class)</u>	<u>Height</u>	<u>Acc</u>	<u>Adj</u>	<u>Year</u>	<u>Reference</u>	<u>Year</u>	<u>Reference</u>
1222.101	.033	3				VERTICAL CONTROL SURVEY		1968	USGS-VERT

Non Leveling-Derived Orthometric and Ellipsoid Heights (Feet)

<u>Orthometric Height</u>			<u>Ellipsoid (NAD83)</u>			<u>Determination Method</u>		<u>Project Info</u>	
<u>Height</u>	<u>Acc</u>	<u>Order (/Class)</u>	<u>Height</u>	<u>Acc</u>	<u>Adj</u>	<u>Year</u>	<u>Reference</u>	<u>Year</u>	<u>Reference</u>
1222.416	.262		1128.518	.197	2011	GPS - OPUS		2020	GPSBM
1222.435	.262		1128.538	.197	2011	GPS - OPUS		2020	GPSBM
1222.612	.262		1128.725	.197	2011	GPS - RTRN		2020	RTRN2020
			1128.672	.012	2011	HORIZONTAL ADJUSTMENT		2012	GPS2800
			1128.767	.013	2007	HORIZONTAL ADJUSTMENT		2007	GPS2300
1222.570	.131		1128.840	.066	1996	HORIZONTAL ADJUSTMENT		2003	GPS1892
1222.570	.131		1128.840	.066	1996	GPS - STATIC		2002	HAITK

Geoid Separations(ft): GEOID18 = -93.897 12B = -93.888 09 = -93.773 03 = -93.743

Lat/Lon and County Coordinates (Feet)

<u>Geodetic Position</u>		<u>Aitkin County</u>				<u>Determination Method</u>		<u>Project Info</u>	
<u>Latitude</u>	<u>Longitude</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Year</u>	<u>Reference</u>	<u>Year</u>	<u>Reference</u>
46 49 31.22216	93 21 39.81222	517915.118	344805.476	.131	3	GPS - OPUS		2020	GPSBM
46 49 31.22224	93 21 39.81197	517915.135	344805.485	.131	3	GPS - OPUS		2020	GPSBM
46 49 31.22185	93 21 39.81185	517915.143	344805.445	.131	3	GPS - RTRN		2020	RTRN2020
46 49 31.22217	93 21 39.81264	517915.089	344805.477	.013		ADJUSTMENT		2012	GPS2800

<u>Geodetic Position</u>		<u>Aitkin County</u>				<u>Determination Method</u>		<u>Project Info</u>	
<u>Latitude</u>	<u>Longitude</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Year</u>	<u>Reference</u>	<u>Year</u>	<u>Reference</u>
46 49 31.22221	93 21 39.81364	517915.019	344805.481	.013		ADJUSTMENT		2007	GPS2300

<u>Geodetic Position</u>		<u>Aitkin County</u>				<u>Determination Method</u>		<u>Project Info</u>	
<u>Latitude</u>	<u>Longitude</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Year</u>	<u>Reference</u>	<u>Year</u>	<u>Reference</u>
46 49 31.22197	93 21 39.81328	517915.044	344805.457	.033	C	ADJUSTMENT		2003	GPS1892
46 49 31.22197	93 21 39.81328	517915.044	344805.459	.033	C	GPS - STATIC		2002	HAITK

State Plane and UTM Coordinates (Feet)

NAD83(2011)

MN State Plane - Central Zone		UTM - Zone 15				Project Info		
<u>X</u>	<u>Y</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Determination Method</u>	<u>Year</u>	<u>Reference</u>
2847189.444	994960.383	1550065.707	17013805.534	.131	3	GPS - OPUS	2020	GPSBM
2847189.461	994960.392	1550065.724	17013805.542	.131	3	GPS - OPUS	2020	GPSBM
2847189.470	994960.352	1550065.733	17013805.502	.131	3	GPS - RTRN	2020	RTRN2020
2847189.415	994960.384	1550065.678	17013805.535	.013		ADJUSTMENT	2012	GPS2800

NAD83(2007)

MN State Plane - Central Zone		UTM - Zone 15				Project Info		
<u>X</u>	<u>Y</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Determination Method</u>	<u>Year</u>	<u>Reference</u>
2847189.345	994960.387	1550065.608	17013805.539	.013		ADJUSTMENT	2007	GPS2300

NAD83(1996)

MN State Plane - Central Zone		UTM - Zone 15				Project Info		
<u>X</u>	<u>Y</u>	<u>X</u>	<u>Y</u>	<u>Acc</u>	<u>Order</u>	<u>Determination Method</u>	<u>Year</u>	<u>Reference</u>
2847189.370	994960.363	1550065.633	17013805.515	.033	C	ADJUSTMENT	2003	GPS1892
2847189.370	994960.363	1550065.633	17013805.515	.033	C	GPS - STATIC	2002	HAITK

Station Photos

<u>Type</u>	<u>File Name</u>	<u>Dir</u>	<u>Date</u>
Location:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/aitkin/39_SEM-DF7374-3NE-21JAN2020.jpg	NE	Jan 21, 2020
Monument:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/aitkin/39_SEM-DF7374-2-21JAN2020.jpg		Jan 21, 2020
Disk:	https://www.olmweb.dot.state.mn.us/geod/StationPhotos/aitkin/39_SEM-DF7374-1-21JAN2020.jpg		Jan 21, 2020

** All station images can be viewed at: <ftp://ftp.olmweb.dot.state.mn.us/geod/StationPhotos> **