The NGS Data Sheet

See file dsdata.pdf for more information about the datasheet.

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PROGRAM = datasheet95, VERSION = 8.12.3
1        National Geodetic Survey,   Retrieval Date = NOVEMBER 24, 2017
 PZ0717 ***********************************************************************
 PZ0717  DESIGNATION -  BROWN
 PZ0717  PID         -  PZ0717
 PZ0717  STATE/COUNTY-  MT/BEAVERHEAD
 PZ0717  COUNTRY     -  US
 PZ0717  USGS QUAD   -  GARFIELD CANYON (1965)
 PZ0717
 PZ0717                        *CURRENT SURVEY CONTROL
 PZ0717  ______________________________________________________________________
 PZ0717* NAD 83(1992) POSITION- 44 57 38.72494(N) 112 57 56.02161(W)   ADJUSTED
 PZ0717* NAVD 88 ORTHO HEIGHT -  2120.    (meters)     6955.    (feet) VERTCON
 PZ0717  ______________________________________________________________________
 PZ0717  GEOID HEIGHT    -        -11.248 (meters)                    GEOID12B
 PZ0717  LAPLACE CORR    -          1.00  (seconds)                   DEFLEC12B
 PZ0717  HORZ ORDER      -  THIRD
 PZ0717
 PZ0717.The horizontal coordinates were established by classical geodetic methods
 PZ0717.and adjusted by the National Geodetic Survey in July 1992.
 PZ0717.
 PZ0717.The NAVD 88 height was computed by applying the VERTCON shift value to
 PZ0717.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
 PZ0717
 PZ0717.Significant digits in the geoid height do not necessarily reflect accuracy.
 PZ0717.GEOID12B height accuracy estimate available here.
 PZ0717
 PZ0717.The Laplace correction was computed from DEFLEC12B derived deflections.
 PZ0717
 PZ0717. The following values were computed from the NAD 83(1992) position.
 PZ0717
 PZ0717;                    North         East     Units Scale Factor Converg.
 PZ0717;SPC MT       -    85,051.466   326,647.685   MT  1.00002378   -2 32 06.3
 PZ0717;SPC MT       -   279,040.24  1,071,678.76   iFT  1.00002378   -2 32 06.3
 PZ0717;UTM  12      - 4,980,470.327   344,977.883   MT  0.99989551   -1 23 21.1
 PZ0717
 PZ0717!             -  Elev Factor  x  Scale Factor =   Combined Factor
 PZ0717!SPC MT       -   0.99966943  x   1.00002378  =   0.99969321
 PZ0717!UTM  12      -   0.99966943  x   0.99989551  =   0.99956498
 PZ0717
 PZ0717:               Primary Azimuth Mark                    Grid Az
 PZ0717:SPC MT       -  PETERSON                               321 45 04.9
 PZ0717:UTM  12      -  PETERSON                               320 36 19.7
 PZ0717
 PZ0717_U.S. NATIONAL GRID SPATIAL ADDRESS: 12TUQ4497780470(NAD 83)
 PZ0717
 PZ0717|-----------------------------------------------------------------------|
 PZ0717| PID    Reference Object                    Distance      Geod. Az   |
 PZ0717|                                                          dddmmss.s  |
 PZ0717| PZ0718 PETERSON                          APPROX. 4.2 KM 3191258.6  |
 PZ0717|-----------------------------------------------------------------------|
 PZ0717
 PZ0717                          SUPERSEDED SURVEY CONTROL
 PZ0717
 PZ0717  NAD 83(1986)-  44 57 38.72255(N)    112 57 56.02017(W) AD(       ) 3
 PZ0717  NAD 27      -  44 57 39.00650(N)    112 57 52.87306(W) AD(       ) 3
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PZ0717  NGVD 29 (07/19/86) 2119.     (m)          6952.     (f) VERT ANG
PZ0717
PZ0717.Superseded values are not recommended for survey control.
PZ0717
PZ0717.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
PZ0717.See file dsdata.pdf to determine how the superseded data were derived.
PZ0717
PZ0717_MARKER: DD = SURVEY DISK
PZ0717_SETTING: 0 = UNSPECIFIED SETTING
PZ0717_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
PZ0717
PZ0717  HISTORY     - Date     Condition        Report By
PZ0717  HISTORY     - 1950     MONUMENTED       USGS
PZ0717
PZ0717                          STATION DESCRIPTION
PZ0717
PZ0717'DESCRIBED BY US GEOLOGICAL SURVEY 1950
PZ0717'STATION LOCATED ON FIRST PROMINENT RIDGE SSW. OF METLEN RANCH ABOUT
PZ0717'0.75 MI. S. OF SALMON, IDAHO ROAD ABOUT 5.5 MI. W. OF ARMSTEAD IN
PZ0717'SEC. 16, T 10 S, R 11 W.
PZ0717'
PZ0717'TO REACH FROM JUNCTION U.S. HIGHWAY 91 AND SALMON, IDAHO ROAD AT N.
PZ0717'END OF ARMSTEAD, GO W. ON SALMON ROAD 5.0 MI. TO ENTRANCE TO METLENS
PZ0717'RANCH, THENCE ON ROAD 0.2 MI., THENCE LEFT (S.) CROSS COUNTRY
PZ0717'APPROXIMATELY 1.0 MI. TO TOP OF NARROW RIDGE RUNNING NW-SE. AND
PZ0717'STATION SITE ON NEXT TO HIGHEST POINT OF RIDGE.  HIGHEST POINT IS
PZ0717'THE SE. END, STATION SITE ABOUT 1500 FT. NW.
PZ0717'
PZ0717'STATION MARK--STANDARD BRONZE TABLET SET IN DRILL HOLE ABOUT 5 FT. S.
PZ0717'OF N. EDGE AND STAMPED ---BROWN 1950---.
PZ0717'
PZ0717'REFERENCE MARK NO. 1--STANDARD BRONZE TABLET SET IN DRILL HOLE 8 FT.
PZ0717'LOWER THAN STATION AND STAMPED ---BROWN NO. 1 1950---, 11.00 FT. FROM
PZ0717'STATION, N 81 DEG 03 MIN W.
PZ0717'
PZ0717'REFERENCE MARK NO. 2--STANDARD BRONZE TABLET SET IN DRILL HOLE ON
PZ0717'RIDGE AND STAMPED ---BROWN NO. 2 1950---, 98.80 FT. FROM STATION,
PZ0717'N 37 DEG 21 MIN W.
1        National Geodetic Survey,   Retrieval Date = NOVEMBER 24, 2017
RV0716 ***********************************************************************
RV0716  DESIGNATION -  BROWN
RV0716  PID         -  RV0716
RV0716  STATE/COUNTY-  MT/YELLOWSTONE
RV0716  COUNTRY     -  US
RV0716  USGS QUAD   -  HAY BASIN NE (1979)
RV0716
RV0716                        *CURRENT SURVEY CONTROL
RV0716  ______________________________________________________________________
RV0716* NAD 83(1992) POSITION- 46 07 38.09550(N) 108 32 42.43391(W)   ADJUSTED
RV0716* NAVD 88 ORTHO HEIGHT -  1225.8   (meters)     4022.    (feet) VERTCON
RV0716  ______________________________________________________________________
RV0716  GEOID HEIGHT    -        -13.164 (meters)                    GEOID12B
RV0716  LAPLACE CORR    -         -6.97  (seconds)                   DEFLEC12B
RV0716  HORZ ORDER      -  FIRST
RV0716
RV0716.The horizontal coordinates were established by classical geodetic methods
RV0716.and adjusted by the National Geodetic Survey in July 1992.
RV0716.
RV0716.The NAVD 88 height was computed by applying the VERTCON shift value to
RV0716.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
RV0716
RV0716.Significant digits in the geoid height do not necessarily reflect accuracy.
RV0716.GEOID12B height accuracy estimate available here.
RV0716
RV0716.The Laplace correction was computed from DEFLEC12B derived deflections.
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RV0716
RV0716. The following values were computed from the NAD 83(1992) position.
RV0716
RV0716;                    North         East     Units Scale Factor Converg.
RV0716;SPC MT       -   209,065.007   673,760.450   MT  0.99951094   +0 41 54.6
RV0716;SPC MT       -   685,908.82  2,210,500.16   iFT  0.99951094   +0 41 54.6
RV0716;UTM  12      - 5,111,115.548   689,648.568   MT  1.00004216   +1 46 12.7
RV0716
RV0716!             -  Elev Factor  x  Scale Factor =   Combined Factor
RV0716!SPC MT       -   0.99980993  x   0.99951094  =   0.99932097
RV0716!UTM  12      -   0.99980993  x   1.00004216  =   0.99985209
RV0716
RV0716:                Primary Azimuth Mark                     Grid Az
RV0716:SPC MT       -  CONOVER                                  267 00 43.9
RV0716:UTM  12      -  CONOVER                                  265 56 25.8
RV0716
RV0716_U.S. NATIONAL GRID SPATIAL ADDRESS: 12TXS8964811115(NAD 83)
RV0716
RV0716|--------------------------------------------------------------------|
RV0716| PID    Reference Object                    Distance      Geod. Az  |
RV0716|                                                          dddmmss.s |
RV0716| CQ5193 BROWN RM 1                          12.859 METERS 09648     |
RV0716| RV0718 CONOVER                            APPROX.15.2 KM 2674238.5 |
RV0716| CQ5194 BROWN RM 2                          10.772 METERS 31605     |
RV0716|--------------------------------------------------------------------|
RV0716
RV0716                          SUPERSEDED SURVEY CONTROL
RV0716
RV0716  NAD 83(1986)-  46 07 38.08936(N)    108 32 42.40800(W) AD(       ) 1
RV0716  NAD 27      -  46 07 38.22991(N)    108 32 39.92088(W) AD(       ) 1
RV0716  NGVD 29 (07/19/86) 1225.0    (m)         4019.     (f) VERT ANG
RV0716
RV0716.Superseded values are not recommended for survey control.
RV0716
RV0716.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
RV0716.See file dsdata.pdf to determine how the superseded data were derived.
RV0716
RV0716_MARKER: DS = TRIANGULATION STATION DISK
RV0716_SETTING: 66 = SET IN ROCK OUTCROP
RV0716
RV0716  HISTORY     - Date     Condition        Report By
RV0716  HISTORY     - 1972     MONUMENTED       NGS
RV0716
RV0716                           STATION DESCRIPTION
RV0716
RV0716'DESCRIBED BY NATIONAL GEODETIC SURVEY 1972 (WMJ)
RV0716'THE STATION IS LOCATED 23.5 MILES NORTH OF BILLINGS, 21 MILES SOUTH
RV0716'OF ROUNDUP, 16 MILES EAST OF BROADVIEW, CLOSE TO THE EAST END OF A
RV0716'TIMBERED, ROCKY BLUFF OVERLOOKING THE VALLEY OF THE NORTH FORK OF
RV0716'CROOKED CREEK TO THE EAST AND SOUTH.  THERE IS A HIGHER AND
RV0716'SIMILAR BLUFF ABOUT ONE HALF MILE NORTH OF THE STATION POINT.  IT
RV0716'IS ON LAND OWNED BY MR. ALEX BROWN WHO CAN BE REACHED AT PHONE
RV0716'NUMBER 667-2733.
RV0716'
RV0716'TO REACH THE STATION FROM THE POST OFFICE ON THE CORNER OF NORTH
RV0716'FIRST STREET AND 26TH STREET IN DOWNTOWN BILLINGS GO NORTHEAST ON
RV0716'NORTH FIRST STREET FOR 1.3 MILES TO A FORK WHERE U.S. HIGHWAYS
RV0716'87 AND 312 TURN LEFT.  TURN LEFT AND GO NORTHERLY ON U.S. HIGHWAYS
RV0716'87 AND 312 FOR 3.45 MILES TO A FORK AND DIVISION OF HIGHWAYS.
RV0716'TAKE LEFT FORK AND CONTINUE NORTH ON U.S. HIGHWAY 87 FOR 15.8 MILES
RV0716'TO A GRADED CROSSROAD.  TURN LEFT AND GO WEST AND NORTH ON
RV0716'GRADED ROAD 6.6 MILES TO CATTLEGUARD AND CURVE TO WEST WITH TRACK
RV0716'ROAD ON THE SECTION LINE NORTH ON TOP OF THE BLUFF.  TURN RIGHT AND
RV0716'GO NORTH ON THE SECTION LINE TRACK ROAD 2.0 MILES TO A T
RV0716'INTERSECTION.  TURN RIGHT AND GO EAST ON TRACK ROAD 0.5 MILE TO A
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RV0716'GATE ON RIGHT. TURN RIGHT THROUGH GATE AND CONTINUE EAST ON THE
RV0716'SOUTH SIDE OF WIRE FENCE 0.4 MILE TO A CURVE RIGHT JUST BEFORE
RV0716'REACHING FENCE CORNER. TURN RIGHT AND GO SOUTH ON TRACK ROAD 0.25
RV0716'MILE TO A DIM FORK. TAKE LEFT FORK AND CONTINUE SOUTHEAST ON
RV0716'DIM TRACKS 0.25 MILE TO A WIRE GATE AND CATTLEGUARD. PASS
RV0716'THROUGH AND CONTINUE EAST-SOUTHEAST ON DIM TRACKS 0.3 MILE TO A
RV0716'TURN-AROUND AND END OF TRUCK TRAVEL. THE STATION IS ABOUT 200 FEET
RV0716'BEYOND ON TOP OF BLUFF.
RV0716'
RV0716'THE STATION MARK IS A STANDARD DISK STAMPED BROWN 1972 CEMENTED FLUSH
RV0716'IN A DRILL HOLE IN SANDSTONE BEDROCK WITH 4 FEET LONG BY 3 FEET WIDE
RV0716'EXPOSED. IT IS 19 FEET WEST OF A GNARLED 15-INCH PINE TREE WITH
RV0716'TRIANGLE BLAZE AND 8.5 FEET NORTH OF THE SOUTH EDGE OF THE CLIFF.
RV0716'
RV0716'REFERENCE MARK NUMBER 1 IS A STANDARD DISK STAMPED BROWN NO 1 1972
RV0716'CEMENTED IN A DRILL HOLE IN SANDSTONE BEDROCK NEAR THE EAST POINT OF
RV0716'THE CLIFF. IT IS 24 FEET EAST OF THE PINE TREE WITH TRIANGLE
RV0716'BLAZE, 2 FEET WEST OF A 1-FOOT CAIRN, AND AT THE SAME ELEVATION AS
RV0716'THE STATION.
RV0716'
RV0716'REFERENCE MARK NUMBER 2 IS A STANDARD DISK STAMPED BROWN NO 2 1972
RV0716'CEMENTED IN A DRILL HOLE IN SANDSTONE BEDROCK 10 FEET LONG AND 2
RV0716'FEET WIDE PROJECTING 3 FEET ON ITS LOWER SIDE. IT IS 29 FEET NORTH
RV0716'OF THE SOUTH EDGE OF THE CLIFF, 6 INCHES SOUTHEAST OF A 10-INCH
RV0716'CAIRN AND ABOUT 4 FEET LOWER THAN THE STATION.
RV0716'
RV0716'THE MEASUREMENT FROM R. M. 1 TO R. M. 2 WAS BLOCKED BY ROCKS.
1   National Geodetic Survey,   Retrieval Date = NOVEMBER 24, 2017
SQ0547 ***
SQ0547 DESIGNATION - BROWN
SQ0547 PID   - SQ0547
SQ0547 STATE/COUNTY- MT/GARFIELD
SQ0547 COUNTRY   - US
SQ0547 USGS QUAD   - FROEHLICH BUTTE (1967)
SQ0547
SQ0547   *CURRENT SURVEY CONTROL
SQ0547 ____
SQ0547* NAD 83(1992) POSITION- 47 02 47.83003(N) 107 38 26.76143(W)   ADJUSTED
SQ0547* NAVD 88 ORTHO HEIGHT -   938.5   (meters)   3079.   (feet) VERTCON
SQ0547 ____
SQ0547 GEOID HEIGHT   -   -14.521 (meters)   GEOID12B
SQ0547 LAPLACE CORR   -   0.54 (seconds)   DEFLEC12B
SQ0547 HORZ ORDER   - SECOND
SQ0547
SQ0547.The horizontal coordinates were established by classical geodetic methods
SQ0547.and adjusted by the National Geodetic Survey in July 1992.
SQ0547.
SQ0547.The NAVD 88 height was computed by applying the VERTCON shift value to
SQ0547.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
SQ0547
SQ0547.Significant digits in the geoid height do not necessarily reflect accuracy.
SQ0547.GEOID12B height accuracy estimate available here.
SQ0547
SQ0547.The Laplace correction was computed from DEFLEC12B derived deflections.
SQ0547
SQ0547. The following values were computed from the NAD 83(1992) position.
SQ0547
SQ0547;   North   East   Units Scale Factor Converg.
SQ0547;SPC MT   -   312,432.734   741,183.728   MT 0.99939281   +1 21 36.1
SQ0547;SPC MT   - 1,025,041.78 2,431,705.14   iFT 0.99939281   +1 21 36.1
SQ0547;UTM 13   - 5,213,729.202   299,413.850   MT 1.00009452   -1 56 00.4
SQ0547
SQ0547!   - Elev Factor x Scale Factor =   Combined Factor
SQ0547!SPC MT   -   0.99985519 x   0.99939281 =   0.99924809
SQ0547!UTM 13   -   0.99985519 x   1.00009452 =   0.99994970

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SQ0547
SQ0547:                Primary Azimuth Mark                     Grid Az
SQ0547:SPC MT       -  WET                                      052 53 52.0
SQ0547:UTM  13      -  WET                                      056 11 28.5
SQ0547
SQ0547_U.S. NATIONAL GRID SPATIAL ADDRESS: 13TBN9941313729(NAD 83)
SQ0547
SQ0547|---------------------------------------------------------------------|
SQ0547| PID    Reference Object                    Distance      Geod. Az   |
SQ0547|                                                          dddmmss.s |
SQ0547| SQ0546 WET                                APPROX. 5.6 KM 0541528.1 |
SQ0547| CQ5195 BROWN RM 1                           9.030 METERS 26803     |
SQ0547| CQ5196 BROWN RM 2                          11.659 METERS 35750     |
SQ0547|---------------------------------------------------------------------|
SQ0547
SQ0547                          SUPERSEDED SURVEY CONTROL
SQ0547
SQ0547  NAD 83(1986)-  47 02 47.82718(N)    107 38 26.74087(W) AD(       ) 2
SQ0547  NAD 27      -  47 02 47.84749(N)    107 38 24.37530(W) AD(       ) 2
SQ0547  NGVD 29 (07/19/86)  937.8    (m)         3077.     (f) VERT ANG
SQ0547
SQ0547.Superseded values are not recommended for survey control.
SQ0547
SQ0547.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
SQ0547.See file dsdata.pdf to determine how the superseded data were derived.
SQ0547
SQ0547_MARKER: DD = SURVEY DISK
SQ0547_SETTING: 0 = UNSPECIFIED SETTING
SQ0547
SQ0547  HISTORY     - Date     Condition        Report By
SQ0547  HISTORY     - 1967     MONUMENTED       USGS
SQ0547
SQ0547                          STATION DESCRIPTION
SQ0547
SQ0547'DESCRIBED BY US GEOLOGICAL SURVEY 1967 (EGE)
SQ0547'THE STATION IS LOCATED N. 73 DEG E., ABOUT 12 MI. (AIRLINE)
SQ0547'FROM MOSBY, MONTANA.  S. 62 DEG W., ABOUT 8 MI. (AIRLINE) FROM
SQ0547'SAND SPRINGS, MONTANA.  IN THE SE 1/4 OF SECTION 22, T.16N.,
SQ0547'R.32E.  THE STATION IS ON A PROMINENT HILL ABOUT 1 MI. E. OF THE
SQ0547'BRIDGE ON HIGHWAY 20 OVER CALF CREEK, ON LAND OWNED BY
SQ0547'MR. W. J. BROWN, AND ON THE S. SIDE OF THE HIGHWAY, ABOUT 100
SQ0547'YDS. SE. OF MILE POST 172.  THE STATION IS REACHED BY TWO-WHEEL
SQ0547'DRIVE VEHICLE FROM SAND SPRINGS, MONTANA.  STATION CAN BE
SQ0547'LOCATED FROM THE JORDAN (NL 13-1) 1--250,000 SERIES MAP.
SQ0547'
SQ0547'STATION MARK--A STANDARD USGS BRONZE TABLET CRIMPED TO A COPPER
SQ0547'WELD ROD DRIVEN TO REFUSAL, (8 FT.), CENTERED IN A 6 IN. DIAMETER
SQ0547'BLACK TILE, 12 IN. LONG, FILLED WITH GRAVEL, AND STAMPED BROWN
SQ0547'ET 1967.
SQ0547'
SQ0547'REFERENCE MARK NO. 1--A STANDARD USGS BRONZE REFERENCE MARK
SQ0547'TABLET CRIMPED TO A COPPERWELD ROD DRIVEN TO REFUSAL (8 FT.),
SQ0547'CENTERED IN A 6 IN. DIAMETER BLACK TILE, 12 INCHES LONG, STAMPED
SQ0547'BROWN ET 1967 RM NO. 1.
SQ0547'
SQ0547'REFERENCE MARK NO. 2--A STANDARD USGS BRONZE REFERENCE MARK
SQ0547'TABLET CRIMPED TO A 1 FT. COPPERWELD ROD, CEMENTED IN DRILL HOLE
SQ0547'IN ROCKY OUTCROP., STAMPED BROWN ET 1967 RM NO. 2.
SQ0547'
SQ0547'THE DISTANCE BETWEEN RM NO. 1 AND RM NO. 2 IS 48.27 FT. (14.713
SQ0547'METERS).
SQ0547'
SQ0547'STATION WET ET 1967 IS VISIBLE FROM THE GROUND AND WILL SERVE
SQ0547'AS THE AZIMUTH MARK.
 1        National Geodetic Survey,   Retrieval Date = NOVEMBER 24, 2017
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TJ0657 ***********************************************************************
TJ0657  DESIGNATION -  BROWN
TJ0657  PID         -  TJ0657
TJ0657  STATE/COUNTY-  MT/PHILLIPS
TJ0657  COUNTRY     -  US
TJ0657  USGS QUAD   -  GUSTIN COULEE (1984)
TJ0657
TJ0657                         *CURRENT SURVEY CONTROL
TJ0657 _______________________________________________________________________
TJ0657* NAD 83(1992) POSITION- 48 56 17.39895(N) 107 43 49.05539(W)   ADJUSTED
TJ0657* NAVD 88 ORTHO HEIGHT -   878.4   (meters)     2882.    (feet) VERTCON
TJ0657 _______________________________________________________________________
TJ0657  GEOID HEIGHT    -        -17.070 (meters)                    GEOID12B
TJ0657  LAPLACE CORR    -         -0.96  (seconds)                   DEFLEC12B
TJ0657  HORZ ORDER      -  FIRST
TJ0657
TJ0657.The horizontal coordinates were established by classical geodetic methods
TJ0657.and adjusted by the National Geodetic Survey in July 1992.
TJ0657.
TJ0657.The NAVD 88 height was computed by applying the VERTCON shift value to
TJ0657.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
TJ0657
TJ0657.Significant digits in the geoid height do not necessarily reflect accuracy.
TJ0657.GEOID12B height accuracy estimate available here.
TJ0657
TJ0657.The Laplace correction was computed from DEFLEC12B derived deflections.
TJ0657
TJ0657. The following values were computed from the NAD 83(1992) position.
TJ0657
TJ0657;                    North         East     Units Scale Factor Converg.
TJ0657;SPC MT       -   522,455.799   729,636.957   MT  0.99996254   +1 17 40.4
TJ0657;SPC MT       - 1,714,093.83  2,393,822.04   iFT  0.99996254   +1 17 40.4
TJ0657;UTM  13      - 5,424,175.226   300,062.678   MT  1.00009111   -2 03 33.6
TJ0657
TJ0657!             -  Elev Factor  x  Scale Factor =   Combined Factor
TJ0657!SPC MT       -   0.99986503  x   0.99996254  =   0.99982757
TJ0657!UTM  13      -   0.99986503  x   1.00009111  =   0.99995613
TJ0657
TJ0657:                Primary Azimuth Mark                    Grid Az
TJ0657:SPC MT       -  BROWN AZ MK                            155 00 46.0
TJ0657:UTM  13      -  BROWN AZ MK                            158 22 00.0
TJ0657
TJ0657_U.S. NATIONAL GRID SPATIAL ADDRESS: 13UCQ0006224175(NAD 83)
TJ0657
TJ0657|----------------------------------------------------------------------|
TJ0657| PID    Reference Object                   Distance      Geod. Az   |
TJ0657|                                                         dddmmss.s  |
TJ0657| CQ5191 BROWN RM 1                         15.340 METERS 03351      |
TJ0657| CQ5190 BROWN AZ MK                                      1561826.4  |
TJ0657| CQ5192 BROWN RM 2                         26.830 METERS 27659      |
TJ0657|----------------------------------------------------------------------|
TJ0657
TJ0657                          SUPERSEDED SURVEY CONTROL
TJ0657
TJ0657  NAD 83(1986)-  48 56 17.39889(N)    107 43 49.05336(W) AD(       ) 1
TJ0657  NAD 27      -  48 56 17.34500(N)    107 43 46.70900(W) AD(       ) 1
TJ0657  NGVD 29 (07/19/86)  877.7    (m)          2880.     (f) VERT ANG
TJ0657
TJ0657.Superseded values are not recommended for survey control.
TJ0657
TJ0657.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
TJ0657.See file dsdata.pdf to determine how the superseded data were derived.
TJ0657
TJ0657_MARKER: DS = TRIANGULATION STATION DISK
TJ0657_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
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TJ0657
TJ0657 HISTORY - Date Condition Report By
TJ0657 HISTORY - 1934 MONUMENTED CGS
TJ0657 HISTORY - 1963 GOOD CGS
TJ0657
TJ0657 STATION DESCRIPTION
TJ0657
TJ0657'DESCRIBED BY COAST AND GEODETIC SURVEY 1934 (WRP)
TJ0657'LOCALITY--SEC. 25, T. 37 N., R. 30 E. (APPROX.). THE STATION
TJ0657'IS 41 MILES, AIRLINE, NORTH OF MALTA AND 4 MILES, AIRLINE,
TJ0657'SOUTH OF THE CANADA-UNITED STATES INTERNATIONAL BOUNDARY ON
TJ0657'A HIGH GRASSY HILL OF THE DIVIDE BETWEEN WHITEWATER AND WHITEWATER
TJ0657'EAST FORK CREEKS. IT IS AT THE SOUTH END OF THE HIGHER PART
TJ0657'OF THE DIVIDE (HILLS ONE MILE TO THE NORTH ARE SOMEWHAT HIGHER).
TJ0657'THE STATION IS ON THE HIGHEST HILL IN THE VICINITY 1/2 MILE
TJ0657'SOUTHWEST OF AL. BROWNS RANCH, 1/2 MILE NORTH OF AN EAST-WEST
TJ0657'FENCE AND 60 FEET EAST OF A NORTH-SOUTH SECTION-LINE FENCE.
TJ0657'MARK DESCRIBED IN CONCRETE.
TJ0657'
TJ0657'REFERENCE MARK NO. 1, IS NORTH-NORTHEAST OF THE
TJ0657'STATION.
TJ0657'
TJ0657'REFERENCE MARK NO. 2, IS WEST OF THE STATION.
TJ0657'
TJ0657'THE AZIMUTH MARK, IS SOUTH OF THE STATION AND
TJ0657'EAST OF A RANCH ROAD ON THE TOP OF A SMALL KNOLL WHICH HAS
TJ0657'SEVERAL SCATTERED BOULDERS ON THE TOP.
TJ0657'
TJ0657'THE STATION MAY BE REACHED FROM THE D-Y TRAIL AT THE POINT
TJ0657'WHERE IT TERMINATES AT THE INTERNATIONAL BOUNDARY, BY GOING
TJ0657'SOUTH ON THIS HIGHWAY 2.1 MILES. LEAVE THE MAIN ROAD AND
TJ0657'TURN EAST ONTO SECTION-LINE ROAD AND GO 2.1 MILES, TURN SOUTH
TJ0657'AND GO 2.2 MILES, TURN EAST AND GO 1.0 MILE TO THE CORNER
TJ0657'OF SECTIONS 22, 23, 26 AND 27. PASS THROUGH WIRE GATE AND GO
TJ0657'EASTERLY ON A WINDING ROAD THROUGH THE HILLS 1.1 MILES TO A
TJ0657'FENCE, PASS THROUGH WIRE GATE AND TURN ALONG FENCE LINE ABOUT
TJ0657'0.3 MILE TO TOP OF HIGHEST HILL AND THE STATION.
TJ0657
TJ0657 STATION RECOVERY (1963)
TJ0657
TJ0657'RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1963 (LBO)
TJ0657'PREVIOUS DESCRIPTION IS IN QUAD. 481074 STATION 1003.
TJ0657'
TJ0657'STATION, REFERENCE AND AZIMUTH MARK RECOVERED AND FOUND TO BE IN
TJ0657'GOOD CONDITION. STATION IS ON LAND OWNED AND OCCUPIED BY MR. A. D.
TJ0657'BROWN.
TJ0657'
TJ0657'TO REACH THE AZIMUTH MARK FROM THE STATION GO SOUTH-SOUTHEAST
TJ0657'ABOUT 0.35 MILE TO A GATE IN THE EAST-WEST FENCE LINE, PASS THROUGH
TJ0657'GATE AND FOLLOW TRACK ROAD SOUTHERLY ABOUT 0.2 MILE TO MARK ON THE
TJ0657'LEFT AS DESCRIBED.
TJ0657'
TJ0657'TO REACH THE STATION FROM THE ROAD AND RAILROAD CROSSING IN LORING,
TJ0657'GO NORTH ON STATE HIGHWAY 242 GRAVELED ROAD FOR 1.9 MILES TO A FORK,
TJ0657'TAKE RIGHT FORK AND CONTINUE ON HIGHWAY NORTHEAST AND NORTH FOR
TJ0657'7.8 MILES TO A SIDE ROAD RIGHT AND SIGN WHITEWATER. TURN RIGHT
TJ0657'AND GO EAST ON GRADED ROAD FOR 2.0 MILES TO A SIDE ROAD LEFT
TJ0657'BEFORE REACHING A CATTLE GUARD, TURN LEFT AND GO NORTH ON
TJ0657'GRADED ROAD FOR 2.25 MILES TO A SIDE ROAD RIGHT AT CATTLE GUARD,
TJ0657'TURN RIGHT AND FOLLOW GRADED ROAD EAST TOWARD THE HOME OF MR.
TJ0657'BROWN FOR 2.15 MILES TO A FORK ABOUT 125 FEET WEST OF A POWER LINE
TJ0657'POLE AT ANGLE IN LINE OF POWER LINE POLES. HERE TAKE RIGHT FORK
TJ0657'AND GO ABOUT 75 FEET TO TOP OF RIDGE, TURN SHARP RIGHT AND FOLLOW
TJ0657'TRACK ROAD ALONG TOP OF RIDGE SOUTHERLY FOR 0.35 MILE TO THE
TJ0657'HIGHEST POINT AND STATION.

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 1        National Geodetic Survey,   Retrieval Date = NOVEMBER 24, 2017
  TK0517 ***********************************************************************
  TK0517  DESIGNATION -  BROWN
  TK0517  PID         -  TK0517
  TK0517  STATE/COUNTY-  MT/HILL
  TK0517  COUNTRY     -  US
  TK0517  USGS QUAD   -  KIEHNS COULEE (1970)
  TK0517
  TK0517                         *CURRENT SURVEY CONTROL
  TK0517  ______________________________________________________________________
  TK0517* NAD 83(1992) POSITION- 48 44 24.01056(N) 109 57 13.48256(W)   ADJUSTED
  TK0517* NAVD 88 ORTHO HEIGHT -   885.    (meters)     2904.    (feet) SCALED
  TK0517  ______________________________________________________________________
  TK0517  GEOID HEIGHT    -        -16.361 (meters)                    GEOID12B
  TK0517  LAPLACE CORR    -         -0.57  (seconds)                   DEFLEC12B
  TK0517  HORZ ORDER      -  THIRD
  TK0517
  TK0517.The horizontal coordinates were established by classical geodetic methods
  TK0517.and adjusted by the National Geodetic Survey in July 1992.
  TK0517.
  TK0517.The orthometric height was scaled from a topographic map.
  TK0517
  TK0517.Significant digits in the geoid height do not necessarily reflect accuracy.
  TK0517.GEOID12B height accuracy estimate available here.
  TK0517
  TK0517.The Laplace correction was computed from DEFLEC12B derived deflections.
  TK0517
  TK0517. The following values were computed from the NAD 83(1992) position.
  TK0517
  TK0517;                    North         East     Units Scale Factor Converg.
  TK0517;SPC MT       -   499,052.868   566,631.355   MT  0.99985064   -0 19 54.9
  TK0517;SPC MT       - 1,637,312.56  1,859,026.76   iFT  0.99985064   -0 19 54.9
  TK0517;UTM  12      - 5,399,081.780   576,922.694   MT  0.99967269   +0 47 11.5
  TK0517
  TK0517!             -  Elev Factor  x  Scale Factor =   Combined Factor
  TK0517!SPC MT       -   0.99986391  x   0.99985064  =   0.99971457
  TK0517!UTM  12      -   0.99986391  x   0.99967269  =   0.99953665
  TK0517
  TK0517:                Primary Azimuth Mark                     Grid Az
  TK0517:SPC MT       -  CHAIN                                    203 22 58.6
  TK0517:UTM  12      -  CHAIN                                    202 15 52.2
  TK0517
  TK0517_U.S. NATIONAL GRID SPATIAL ADDRESS: 12UWU7692299081(NAD 83)
  TK0517
  TK0517|----------------------------------------------------------------------|
  TK0517| PID    Reference Object                   Distance      Geod. Az   |
  TK0517|                                                         dddmmss.s  |
  TK0517| TL0616 CHAIN                            APPROX.11.4 KM 2030303.7  |
  TK0517|----------------------------------------------------------------------|
  TK0517
  TK0517                          SUPERSEDED SURVEY CONTROL
  TK0517
  TK0517  NAD 83(1986)-  48 44 24.01254(N)    109 57 13.47025(W) AD(       ) 3
  TK0517  NAD 27      -  48 44 24.00496(N)    109 57 10.66506(W) AD(       ) 3
  TK0517
  TK0517.Superseded values are not recommended for survey control.
  TK0517
  TK0517.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
  TK0517.See file dsdata.pdf to determine how the superseded data were derived.
  TK0517
  TK0517_MARKER: Z = SEE DESCRIPTION
  TK0517_SETTING: 0 = UNSPECIFIED SETTING
  TK0517_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
  TK0517
  TK0517  HISTORY     - Date     Condition        Report By
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 TK0517  HISTORY     - 1904     MONUMENTED       USGS
 TK0517
 TK0517                          STATION DESCRIPTION
 TK0517
 TK0517'DESCRIBED BY US GEOLOGICAL SURVEY 1904
 TK0517'ON A FLAT HILL 12 MI. N. OF BURNHAM RAILROAD STATION, NEAR HEAD OF
 TK0517'BROWNS COULEE JUST W. OF COTTONWOOD COULEE.
 TK0517'
 TK0517'STATION MARK - IRON BENCH MARK POST SET 36 IN. IN GROUND.
 TK0517'
 TK0517'REFERENCE MARKS - NONE.
1        National Geodetic Survey,   Retrieval Date = NOVEMBER 24, 2017
 QV0420 ***********************************************************************
 QV0420  DESIGNATION -  BROWN
 QV0420  PID         -  QV0420
 QV0420  STATE/COUNTY-  MT/BIG HORN
 QV0420  COUNTRY     -  US
 QV0420  USGS QUAD   -  TAINTOR DESERT (1967)
 QV0420
 QV0420                         *CURRENT SURVEY CONTROL
 QV0420  ______________________________________________________________________
 QV0420* NAD 83(1993) POSITION- 45 20 45.49372(N) 106 46 47.92955(W)   ADJUSTED
 QV0420* NAVD 88 ORTHO HEIGHT -  1333.6   (meters)     4375.    (feet) VERTCON
 QV0420  ______________________________________________________________________
 QV0420  GEOID HEIGHT    -        -14.732 (meters)                    GEOID12B
 QV0420  LAPLACE CORR    -         -3.98  (seconds)                   DEFLEC12B
 QV0420  HORZ ORDER      -  THIRD
 QV0420
 QV0420.The horizontal coordinates were established by classical geodetic methods
 QV0420.and adjusted by the National Geodetic Survey in January 1997.
 QV0420.
 QV0420.The NAVD 88 height was computed by applying the VERTCON shift value to
 QV0420.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
 QV0420
 QV0420.Significant digits in the geoid height do not necessarily reflect accuracy.
 QV0420.GEOID12B height accuracy estimate available here.
 QV0420
 QV0420.The Laplace correction was computed from DEFLEC12B derived deflections.
 QV0420
 QV0420. The following values were computed from the NAD 83(1993) position.
 QV0420
 QV0420;                    North         East     Units Scale Factor Converg.
 QV0420;SPC MT       -   125,510.397   813,086.998   MT  0.99980995   +1 59 22.9
 QV0420;SPC MT       -   411,779.52  2,667,608.26   iFT  0.99980995   +1 59 22.9
 QV0420;UTM  13      - 5,022,925.564   360,557.391   MT  0.99983907   -1 15 59.1
 QV0420
 QV0420!             -  Elev Factor  x  Scale Factor =   Combined Factor
 QV0420!SPC MT       -   0.99979327  x   0.99980995  =   0.99960326
 QV0420!UTM  13      -   0.99979327  x   0.99983907  =   0.99963238
 QV0420
 QV0420_U.S. NATIONAL GRID SPATIAL ADDRESS: 13TCL6055722925(NAD 83)
 QV0420
 QV0420                         SUPERSEDED SURVEY CONTROL
 QV0420
 QV0420  NAD 83(1992)-  45 20 45.49358(N)    106 46 47.92827(W) AD(       ) 3
 QV0420  NAD 83(1986)-  45 20 45.47560(N)    106 46 47.91034(W) AD(       ) 3
 QV0420  NGVD 29 (02/04/91) 1332.8    (m)         4373.     (f) VERT ANG
 QV0420
 QV0420.Superseded values are not recommended for survey control.
 QV0420
 QV0420.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
 QV0420.See file dsdata.pdf to determine how the superseded data were derived.
 QV0420
 QV0420_MARKER: DS = TRIANGULATION STATION DISK
 QV0420_SETTING: 66 = SET IN ROCK OUTCROP
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QV0420_STABILITY: A = MOST RELIABLE AND EXPECTED TO HOLD
QV0420+STABILITY: POSITION/ELEVATION WELL
QV0420
QV0420 HISTORY   - Date   Condition   Report By
QV0420 HISTORY   - 1966   MONUMENTED   USGS
QV0420
QV0420   STATION DESCRIPTION
QV0420
QV0420'DESCRIBED BY US GEOLOGICAL SURVEY 1966
QV0420'ABOUT 11 MI. S. AND 8 MI. E. OF BUSBY, MONTANA, AND ABOUT 13 MI. W.
QV0420'OF BIRNEY, MONTANA, IN BIG HORN COUNTY.
QV0420'
QV0420'STATION IS LOCATED ON THE RIDGE BETWEEN BULL CREEK AND PRAIRIE DOG
QV0420'CREEK, ON THE S. END OF A SMALL BUTTE.
QV0420'
QV0420'TO REACH FROM BUSBY POST OFFICE, MONTANA, PROCEED W. ON U.S. HIGHWAY
QV0420'212 1.5 MI. TO PAVED RD. S. PROCEED S. 7.3 MI. TO DIRT RD. E. UP
QV0420'TRAIL CREEK (THIS IS ROAD NO. 212). PROCEED E. 6.6 MI. TO T-RD. AT
QV0420'CORRAL. TURN LEFT AND PROCEED E. 2.1 MI. TO TRACK RD. S. PROCEED S.
QV0420'0.4 MI. TO WIRE GATE. PASS THRU GATE AND PROCEED ON E. SIDE OF FENCE
QV0420'2.7 MI. TO Y-RD. TURN LEFT AND PROCEED E. 3.0 MI. TO SMALL TOP ON
QV0420'RIGHT. LEAVE RD. AND GO S. CROSS COUNTRY 0.1 MI. TO S. END OF TOP AND
QV0420'STATION.
QV0420'
QV0420'STATION MARK--STANDARD TABLET SET IN ROCK, STAMPED---BROWN ET
QV0420'1966---.

*** retrieval complete.
Elapsed Time = 00:00:07