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<td>BOUNDARY MONUMENT 130 MD PA</td>
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<td>BOUNDARY MONUMENT 131 MD PA MASON DIXON</td>
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<td>JX1874</td>
<td>BDRY MON GARRISON 1941 RM 2</td>
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<td>JX1865</td>
<td>BDRY MON WV PA NEAR THOMAS</td>
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<td>JX1871</td>
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**JU3841**  
**DESIGNATION** - BOUNDARY MON 87 DE MD PA=RM 2  
**PID** - JU3841  
**STATE/COUNTY** - MD/CECIL  
**USGS QUAD** - NEWARK WEST (1992)  
*CURRENT SURVEY CONTROL*  
**NAVD 88** - 78. (meters) 256. (feet) SCALED
The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992.

The NAVD 88 height was computed by applying the VERTCON shift value to the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

The Laplace correction was computed from DEFLEC99 derived deflections.

The geoid height was determined by GEOID99.
The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992.

The NAVD 88 height was computed by applying the VERTCON shift value to the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

The Laplace correction was computed from DEFLEC99 derived deflections.

The geoid height was determined by GEOID99.

The vertical order pertains to the superseded datum.
The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992.

The orthometric height was scaled from a topographic map.

The Laplace correction was computed from DEFLEC99 derived deflections.

The geoid height was determined by GEOID99.
JV4817
JV4817
*CURRENT SURVEY CONTROL
JV4817
JV4817* NAD 83(1991)- 39 43 16.89054(N) 076 09 15.17376(W) ADJUSTED
JV4817* NAVD 88 - 142.77 (+/-2cm) 468.4 (feet) VERTCON
JV4817
JV4817 LAPLACE CORR- -1.06 (seconds) DEFLEC99
JV4817 GEOID HEIGHT- -32.95 (meters) GEOID99
JV4817 HORZ ORDER - FIRST
JV4817 VERT ORDER - THIRD ? (See Below)
JV4817
The horizontal coordinates were established by classical geodetic methods
and adjusted by the National Geodetic Survey in January 1992.

JV4817 The NAVD 88 height was computed by applying the VERTCON shift value to
the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

JV4817 The vertical order pertains to the superseded datum.

JV4817 The Laplace correction was computed from DEFLEC99 derived deflections.

JV4817 The geoid height was determined by GEOID99.

JV4817
JV4817; SPC MD - 228,428.471 472,520.781 MT 1.00005875 +0 31 51.0
JV4817; SPC MD - 749,435.74 1,550,261.93 sFT 1.00005875 +0 31 51.0
JV4817; SPC PA S - 44,320.801 736,820.525 MT 1.00003991 +1 02 07.2
JV4817; UTM 18 - 4,397,468.285 401,076.028 MT 0.99972048 -0 44 15.6

JV6739 DESIGNATION - DIXON

JV6739 PID - JV6739
JV6739 STATE/COUNTY - MD/HARFORD
JV6739 USGS QUAD - DELTA (1990)
JV6739
*CURRENT SURVEY CONTROL
JV6739
JV6739* NAD 83(1991)- 39 43 16.23924(N) 076 15 38.70958(W) ADJUSTED
JV6739* NAVD 88 - 104.5 (meters) 343. (feet) VERTCON
JV6739
JV6739 X - 1,166,761.230 (meters) COMP
JV6739 Y - 4,772,038.434 (meters) COMP
JV6739 Z - 4,054,267.665 (meters) COMP
JV6739 LAPLACE CORR- -2.48 (seconds) DEFLEC99
JV6739 ELLIP HEIGHT- 71.63 (meters) GPS OBS
JV6739 GEOID HEIGHT- -32.90 (meters) GEOID99
JV6739
JV6739. The horizontal coordinates were established by GPS observations and adjusted by the National Geodetic Survey in January 1992.

JV6739. The NAVD 88 height was computed by applying the VERTCON shift value to the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

JV6739. The X, Y, and Z were computed from the position and the ellipsoidal ht.

JV6739. The Laplace correction was computed from DEFLEC99 derived deflections.

JV6739. The ellipsoidal height was determined by GPS observations and is referenced to NAD 83.

JV6739. The geoid height was determined by GEOID99.

JV6740. **DESIGNATION** - **DIXON AZ MK**

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<td>DELTA (1990)</td>
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<th>076 16 00.56293(W)</th>
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<tr>
<td>NAVD 88</td>
<td>128.7 (meters)</td>
<td>422. (feet)</td>
<td>VERTCON</td>
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| X             | 1,166,278.239 (meters) | COMP |
| Y             | -4,772,254.512 (meters) | COMP |
| Z             | 4,054,190.953 (meters)  | COMP |
| LAPLACE CORR  | -2.47 (seconds)        | DEFLEC99 |
| ELLIP HEIGHT  | 95.84 (meters)         | GPS OBS |
| GEOID HEIGHT  | -32.89 (meters)        | GEOID99 |

JV6740. The horizontal coordinates were established by GPS observations and adjusted by the National Geodetic Survey in January 1992.

JV6740. The NAVD 88 height was computed by applying the VERTCON shift value to
JV6740. The NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
JV6740
JV6740. The X, Y, and Z were computed from the position and the ellipsoidal ht.
JV6740
JV6740. The Laplace correction was computed from DEFLEC99 derived deflections.
JV6740
JV6740. The ellipsoidal height was determined by GPS observations
JV6740 and is referenced to NAD 83.
JV6740
JV6740. The geoid height was determined by GEOID99.
JV6740

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**JV6738 DESIGNATION - Delp AZ MK**

JV6738 PID - JV6738
JV6738 STATE/COUNTY - MD/HARFORD
JV6738 USGS QUAD - DELTA (1990)
JV6738

*CURRENT SURVEY CONTROL*

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<tr>
<td>Y</td>
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<tr>
<td>Z</td>
<td>4,054,227.422 (meters)</td>
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<tr>
<td>LAPLACE CORR-</td>
<td>-2.66 (seconds)</td>
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<td>ELLIP HEIGHT-</td>
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<td>GEOID HEIGHT-</td>
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<tr>
<td>ELLP ORDER</td>
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JV6738. The horizontal coordinates were established by GPS observations
JV6738 and adjusted by the National Geodetic Survey in January 1992.
JV6738
JV6738. The NAVD 88 height was computed by applying the VERTCON shift value to
JV6738. the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
JV6738
JV6738. The X, Y, and Z were computed from the position and the ellipsoidal ht.
JV6738
JV6738. The Laplace correction was computed from DEFLEC99 derived deflections.
JV6738
JV6738. The ellipsoidal height was determined by GPS observations.
JV6738. The geoid height was determined by GEOID99.

JV6738.

JV6738; SPC MD - 228,222.232 460,420.347 MT 1.00005851 +0 26 32.1
JV6738; SPC MD - 748,759.11 1,510,562.42 sFT 1.00005851 +0 26 32.1
JV6738; UTM 18 - 4,397,530.125 388,977.901 MT 0.99975175 -0 49 40.3

JV6725 DESIGNATION - CARDIFF

JV6725. The horizontal coordinates were established by GPS observations and adjusted by the National Geodetic Survey in January 1992.

JV6725. The NAVD 88 height was computed by applying the VERTCON shift value to the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

JV6725. The X, Y, and Z were computed from the position and the ellipsoidal ht.

JV6725. The Laplace correction was computed from DEFLEC99 derived deflections.

JV6725. The ellipsoidal height was determined by GPS observations and is referenced to NAD 83.

JV6725. The geoid height was determined by GEOID99.

JV6725; SPC MD - 228,257.669 456,982.761 MT 1.00005865 +0 25 01.6
JV6725; SPC MD - 748,875.37 1,499,284.28 sFT 1.00005865 +0 25 01.6
JV6100 DESIGNATION - BOUNDARY MON 43 MD PA

JV6100 PID - JV6100
JV6100 STATE/COUNTY - MD/BALTIMORE
JV6100 USGS QUAD - NORRISVILLE (1984)

*CURRENT SURVEY CONTROL

NAD 83(1991) - 39 43 16.22929(N) 076 35 49.16917(W) ADJUSTED
NAVD 88 - 214. (meters) 702. (feet) SCALED

LAPLACE CORR - -1.74 (seconds)
GEOID HEIGHT - -32.45 (meters)

HORZ ORDER - FIRST

The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992.

The orthometric height was scaled from a topographic map.

The Laplace correction was computed from DEFLEC99 derived deflections.

The geoid height was determined by GEOID99.

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<tr>
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<td>BOUNDARY MON 43 RM 2</td>
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SUPERSEDED SURVEY CONTROL
JV1500

**DESIGNATION - BOUNDARY MON 46 MD PA**

**JV1500**  
**PID** - JV1500  
**STATE/COUNTY** - MD/BALTIMORE  
**USGS QUAD** - NEW FREEDOM (1974)  
**_________________________________________________________________**  
**JV1500**  
**076 39 21.59085 (W)**  
**ADJUSTED**  
**NAVD 88** - 265.080 (meters)  
**869.68 (feet)**  
**ADJUSTED**  
**_________________________________________________________________**  
**JV1500**  
**LAPLACE CORR** - -0.98 (seconds)  
**GEOID HEIGHT** - -32.40 (meters)  
**DYNAMIC HT** - 264.947 (meters)  
**869.25 (feet)**  
**COMP**  
**MODELED GRAV** - 980,117.1 (mgal)  
**NAVD 88**  

The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992. The orthometric height was determined by differential leveling and adjusted by the National Geodetic Survey in June 1991. The Laplace correction was computed from DEFLEC99 derived deflections. The geoid height was determined by GEOID99. The dynamic height is computed by dividing the NAVD 88 geopotential number by the normal gravity value computed on the Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45 degrees latitude (g = 980.6199 gals.). The modeled gravity was interpolated from observed gravity values.

**JV1500**

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<th>Units</th>
<th>Scale</th>
<th>Converg.</th>
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JV6120

**DESIGNATION - BOUNDARY MON 50 MD PA**

The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992. The orthometric height was determined by differential leveling and adjusted by the National Geodetic Survey in June 1991. The Laplace correction was computed from DEFLEC99 derived deflections. The geoid height was determined by GEOID99. The dynamic height is computed by dividing the NAVD 88 geopotential number by the normal gravity value computed on the Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45 degrees latitude (g = 980.6199 gals.). The modeled gravity was interpolated from observed gravity values.
### JV6120
- **PID:** JV6120
- **STATE/COUNTY:** MD/BALTIMORE
- **USGS QUAD:** NEW FREEDOM (1974)
- **CURRENT SURVEY CONTROL**

  | NAD 83(1991) | 39 43 15.36789(N) | 076 43 44.46393(W) | ADJUSTED |
  | NAVD 88 | 255. (meters) | 837. (feet) | SCALED |
  | LAPLACE CORR | 0.32 (seconds) | DEFLEC99 |
  | GEOID HEIGHT | -32.39 (meters) | GEOID99 |
  | HORZ ORDER | FIRST |

The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992. The orthometric height was scaled from a topographic map. The Laplace correction was computed from DEFLEC99 derived deflections. The geoid height was determined by GEOID99.

| SPC MD | 228,080.040 | 423,235.471 | MT | 1.00005864 | +0 10 12.3 |
| SPC MD | 748,292.60 | 1,388,565.04 | sFT | 1.00005864 | +0 10 12.3 |
| SPC PA S | 43,543.676 | 687,541.039 | MT | 1.00004000 | +0 39 44.7 |
| UTM 18 | 4,398,213.687 | 351,808.348 | MT | 0.99987037 | -1 06 18.5 |

### JV6123
- **DESIGNATION:** BOUNDARY MON 54 MD PA
- **PID:** JV6123
- **STATE/COUNTY:** MD/CARROLL
- **USGS QUAD:** LINEBORO (1984)
- **CURRENT SURVEY CONTROL**

  | NAVD 88 | 268. (meters) | 879. (feet) | SCALED |
  | LAPLACE CORR | 2.14 (seconds) | DEFLEC99 |
  | GEOID HEIGHT | -32.44 (meters) | GEOID99 |
  | HORZ ORDER | FIRST |

The horizontal coordinates were established by classical geodetic methods.
JV6123. and adjusted by the National Geodetic Survey in January 1992.
JV6123.
JV6123. The orthometric height was scaled from a topographic map.
JV6123.
JV6123. The Laplace correction was computed from DEFLEC99 derived deflections.
JV6123.
JV6123. The geoid height was determined by GEOID99.

<table>
<thead>
<tr>
<th>SPC MD</th>
<th>North</th>
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<th>Units</th>
<th>Scale</th>
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JV6569. The horizontal coordinates were established by classical geodetic methods.
JV6569. and adjusted by the National Geodetic Survey in January 1992.
JV6569.
JV6569. The orthometric height was scaled from a topographic map.
JV6569.
JV6569. The Laplace correction was computed from DEFLEC99 derived deflections.
JV6569.
JV6569. The geoid height was determined by GEOID99.

<table>
<thead>
<tr>
<th>SPC MD</th>
<th>North</th>
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AB4727 DESIGNATION - COLE

AB4727 PID         - AB4727
AB4727 STATE/COUNTY- MD/CARROLL
AB4727 USGS QUAD   - MANCHESTER (1984)

*CURRENT SURVEY CONTROL

AB4727* NAD 83(1991) - 39 43 13.25108(N)    076 54 56.28699(W)     ADJUSTED
AB4727* NAVD 88     -       301.4    (meters)     989.     (feet)  GPS OBS

AB4727 X           -   1,112,190.140 (meters)                     COMP
AB4727 Y           -  -4,785,267.390 (meters)                     COMP
AB4727 Z           -   4,054,322.740 (meters)                     COMP
AB4727 LAPLACE CORR-           3.82  (seconds)                    DEFLEC99
AB4727 ELLIP HEIGHT-         268.74  (meters)                     GPS OBS
AB4727 GEOID HEIGHT-         -32.58  (meters)                     GEOID99

AB4727 The horizontal coordinates were established by GPS observations
AB4727 and adjusted by the National Geodetic Survey in July 1996.
AB4727
AB4727 The orthometric height was determined by GPS observations and a
AB4727 high-resolution geoid model.
AB4727
AB4727 The X, Y, and Z were computed from the position and the ellipsoidal ht.
AB4727
AB4727 The Laplace correction was computed from DEFLEC99 derived deflections.
AB4727
AB4727 The ellipsoidal height was determined by GPS observations
AB4727 and is referenced to NAD 83.
AB4727
AB4727 The geoid height was determined by GEOID99.
AB4727
AB4727;                North         East     Units   Scale      Converg.
AB4727;SPC MD       -   227,983.608   407,233.954   MT  1.00005849 +0 03 10.6
AB4727;SPC MD       -   747,976.22  1,336,066.73   sFT  1.00005849 +0 03 10.6
AB4727;UTM  18      - 4,398,473.651   335,811.180   MT  0.99993190 -1 13 28.0

AB4727 Primary Azimuth Mark
AB4727;SPC MD       -  COLE AZ MK                               181 29 13.5
AB4727;UTM  18      -  COLE AZ MK                               182 45 52.1

AB4727|---------------------------------------------------------------------|
AB4727| PID    Reference Object                     Distance      Geod. Az  |
AB4727|---------------------------------------------------------------------|
AB4727| AB4702 COLE AZ MK                          APPROX. 0.6 KM 1813224.1 |
AB4727. SUPERSEDED SURVEY CONTROL

AB4727. No superseded survey control is available for this station.

AB4727_MARKER: DD = SURVEY DISK
AB4727_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
AB4727_STAMPING: COLE 1995
AB4727_MARK LOGO: MD-013
AB4727_MAGNETIC: O = OTHER; SEE DESCRIPTION
AB4727_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AB4727+STABILITY: SURFACE MOTION
AB4727_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AB4727+SATELLITE: SATELLITE OBSERVATIONS - 1995

AB4727 HISTORY - Date Condition Report By
AB4727 HISTORY - 1995 MONUMENTED MD-013

AB4727' DESCRIBED BY CARROLL COUNTY MARYLAND 1995

AB4727' STATION IS LOCATED ABOUT 11.0 MI (17.7 KM) NORTHEAST OF THE CENTER OF AB4727' WESTMINSTER AND ABOUT 4.5 MI (7.2 KM) NORTHWEST OF MANCHESTER AT THE AB4727' MARYLAND/PENNSYLVANIA STATE LINE. STATION IS LOCATED ON THE EAST SIDE AB4727' OF MD ROUTE 30 (HANOVER PIKE) AT ITS INTERSECTION WITH THE AB4727' MARYLAND/PENNSYLVANIA STATE LINE. STATION MARK IS SET IN THE TOP OF 10 DA 1 METER CONCRETE MONUMENT SET FLUSH WITH THE GROUND. IT IS 55.5 FT
AB4727' (16.9 M) EAST OF THE CENTERLINE OF THE ROAD, 115.0 FT (35.1 M) NORTH
AB4727' OF THE THE CENTERLINE OF THE INTERSECTION OF THE ROAD WITH A DIRT
AB4727' DRIVEWAY LEADING TO HOUSE NO.3820, 46.6 FT (14.2 M) SOUTHWEST OF A
AB4727' MASON–DIXON LINE MARKER AND 42.0 FT (12.8 M) SOUTHEAST OF A
AB4727' MASON–DIXON LINE SIGN ALONG THE EAST SIDE OF THE ROAD.

JV3369 DESIGNATION - BOUNDARY MON 97 MD PA

JV3369 PID - JV3369
JV3369 STATE/COUNTY- MD/WASHINGTON
JV3369  USGS QUAD - SMITHSBURG (1994)

*CURRENT SURVEY CONTROL

JV3369* NAD 83(1991)-  39 43 13.85466(N)    077 36 58.33287(W)     ADJUSTED
JV3369* NAVD 88 - 196.432 (meters) 644.46 (feet) ADJUSTED

JV3369  LAPLACE CORR- 5.19 (seconds) DEFLEC99
JV3369  GEOID HEIGHT- -34.02 (meters) GEOID99
JV3369  DYNAMIC HT - 196.318 (meters) 644.09 (feet) COMP
JV3369  MODELED GRAV- 980,044.1 (mgal) NAVD 88

JV3369  HORZ ORDER - FIRST
JV3369  VERT ORDER - SECOND CLASS 0

The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992.

The orthometric height was determined by differential leveling and adjusted by the National Geodetic Survey in June 1991.

The Laplace correction was computed from DEFLEC99 derived deflections.

The geoid height was determined by GEOID99.

The dynamic height is computed by dividing the NAVD 88 geopotential number by the normal gravity value computed on the Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45 degrees latitude (g = 980.6199 gals.).

The modeled gravity was interpolated from observed gravity values.

JV3369;

JV3369; SPC MD - 228,177.207 347,163.410 MT 1.00005853 -0 23 12.3
JV3369; SPC MD - 748,611.39 1,138,985.29 sFT 1.00005853 -0 23 12.3
JV3369; SPC PA S - 42,999.650 611,472.292 MT 1.00004009 +0 05 12.5
JV3369; UTM 18 - 4,400,010.762 275,759.423 MT 1.00021911 -1 40 21.2

JW1390  DESIGNATION - BOUNDARY MONUMENT 130 MD PA

JW1390  PID - JW1390
JW1390  STATE/COUNTY- MD/WASHINGTON
JW1390  USGS QUAD - HANCOCK (1971)

*CURRENT SURVEY CONTROL

The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992. The orthometric height was scaled from a topographic map.

The Laplace correction was computed from DEFLEC99 derived deflections. The geoid height was determined by GEOID99.

The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992. The orthometric height was scaled from a topographic map.

The Laplace correction was computed from DEFLEC99 derived deflections. The geoid height was determined by GEOID99.

**JW1391 DESIGNATION - BOUNDARY MONUMENT 131 MD PA MASON DIXON**

**JW1391 PID** - JW1391
**JW1391 STATE/COUNTY** - PA/FULTON
**JW1391 USGS QUAD** - HANCOCK (1971)

**JW1391* NAVD 88 - 168. (meters) 551. (feet) SCALED**
**JW1391 LAPLACE CORR- -3.34 (seconds) DEFLEC99**
**JW1391 GEOID HEIGHT- -33.96 (meters) GEOID99**
**JW1391 HORZ ORDER - SECOND**

The horizontal coordinates were established by classical geodetic methods.
JV4731  DESIGNATION - CRAIG

**JV4731**  
**PID** - JV4731  
**STATE/COUNTY** - MD/WASHINGTON  
**USGS QUAD** - MASON-DIXON (1971)

*CURRENT SURVEY CONTROL*

| NAD 83(1991) | 39 43 18.43778(N) | 077 50 28.21554(W) | ADJUSTED |
| NAVD 88 | 165. (meters) | 541. (feet) | SCALED |
| LAPLACE CORR | -0.67 (seconds) | | DEFLEC99 |
| GEOID HEIGHT | -34.30 (meters) | | GEOID99 |

The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992.

The orthometric height was scaled from a topographic map.

The Laplace correction was computed from DEFLEC99 derived deflections.

The geoid height was determined by GEOID99.

| SPC PA S | North | East | Units | Scale | Converg. |
| SPC MD | - 228,472.536 | 327,875.276 | MT | 1.00005886 | -0 31 40.6 |
| SPC MD | - 749,580.31 | 1,075,704.13 | sFT | 1.00005886 | -0 31 40.6 |
| SPC WA S | - 43,136.351 | 592,182.744 | MT | 1.00003981 | -0 3 32.9 |
| SPC WV N | - 136,952.943 | 742,210.701 | MT | 0.99994214 | +1 03 28.6 |
| UTM 17 | - 4,400,739.467 | 256,478.643 | MT | 1.00033016 | -1 48 59.7 |

JV4745  DESIGNATION - DITTO

**JV4731**  
**PID** - JV4731  
**STATE/COUNTY** - MD/WASHINGTON  
**USGS QUAD** - MASON-DIXON (1971)
**JV4754**

<table>
<thead>
<tr>
<th>PID</th>
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<tbody>
<tr>
<td>STATE/COUNTY</td>
<td>MD/WASHINGTON</td>
</tr>
<tr>
<td>USGS QUAD</td>
<td>CLEAR SPRING (1971)</td>
</tr>
</tbody>
</table>

*CURRENT SURVEY CONTROL*

| NAD 83(1991) | 39 43 19.31659 (N) | 077 52 52.04716 (W) | ADJUSTED |
| NAVD 88     | 176. (meters) | 577. (feet) | SCALED |

**LAPLACE CORR** | -2.34 (seconds) | DEFLEC99

**GEOID HEIGHT** | -34.27 (meters) | GEOID99

**HORZ ORDER** | SECOND

The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992.

The orthometric height was scaled from a topographic map.

The Laplace correction was computed from DEFLEC99 derived deflections.

The geoid height was determined by GEOID99.

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**JW1407**

**DESIGNATION** | MARPENN

<table>
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<tr>
<th>PID</th>
<th>JW1407</th>
</tr>
</thead>
<tbody>
<tr>
<td>STATE/COUNTY</td>
<td>MD/ALLEGANY</td>
</tr>
<tr>
<td>USGS QUAD</td>
<td>ARTEMAS (1984)</td>
</tr>
</tbody>
</table>

*CURRENT SURVEY CONTROL*

| NAD 83(1991) | 39 43 21.29309 (N) | 078 22 52.46831 (W) | ADJUSTED |
| NAVD 88     | 482. (meters) | 1581. (feet) | SCALED |

**LAPLACE CORR** | -5.48 (seconds) | DEFLEC99

**GEOID HEIGHT** | -33.48 (meters) | GEOID99

**HORZ ORDER** | FIRST

The horizontal coordinates were established by classical geodetic methods.
JW1407 and adjusted by the National Geodetic Survey in January 1992.

JW1407 The orthometric height was scaled from a topographic map.

JW1407 The Laplace correction was computed from DEFLEC99 derived deflections.

JW1407 The geoid height was determined by GEOID99.

JW1407;                    North         East     Units   Scale      Converg.
JW1407;SPC MD       -   229,124.261   281,572.082   MT  1.00005907 -0 52 00.9
JW1407;SPC MD       -   751,718.51    923,791.07   sFT  1.00005907 -0 52 00.9
JW1407;SPC PA S     -   43,413.816   545,876.691   MT  1.00003964 -0 24 34.4
JW1407;SPC WV N     -   136,325.231   695,912.588   MT  0.99994216 +0 42 48.7
JW1407;UTM  17      - 4,400,246.526   724,452.916   MT  1.00022028 +1 40 27.4

JW1408 DESIGNATION - RAGGED

JW1408 PID         -  JW1408
JW1408 STATE/COUNTY-  MD/ALLEGANY
JW1408

JW1408                         *CURRENT SURVEY CONTROL
JW1408

JW1408* NAVD 88     -       500.     (meters)    1640.     (feet)  SCALED

JW1408 LAPLACE CORR-          -5.24  (seconds)                    DEFLEC99
JW1408 GEOID HEIGHT-         -33.19  (meters)                     GEOID99

JW1408 HORZ ORDER - FIRST

JW1408 The horizontal coordinates were established by classical geodetic methods
JW1408 and adjusted by the National Geodetic Survey in January 1992.
JW1408 The orthometric height was scaled from a topographic map.
JW1408 The Laplace correction was computed from DEFLEC99 derived deflections.
JW1408 The geoid height was determined by GEOID99.

JW1408;                    North         East     Units   Scale      Converg.
JW1408;SPC MD       -   229,289.283   271,940.206   MT  1.00005910 -0 56 14.7
JW1408;SPC MD       -   752,259.92   892,190.49   sFT  1.00005910 -0 56 14.7
JW1408;UTM  17      - 4,399,984.412   714,821.891   MT  1.00016819 +1 36 08.6
JV4719 DESIGNATION - STATE LINE MON SHANK 1935 RM 1

JV4719 PID - JV4719
JV4719 STATE/COUNTY - MD/WASHINGTON
JV4719 USGS QUAD - MASON-DIXON (1971)

*CURRENT SURVEY CONTROL

JV4719 NAD 83(1991) - 39 43 16.94510 (N) 077 46 00.54790 (W) ADJUSTED
JV4719 NAVD 88 - 165. (meters) 541. (feet) SCALED

JV4719 LAPLACE CORR - 1.67 (seconds) DEFLEC99
JV4719 GEOID HEIGHT - -34.28 (meters) GEOID99

HORZ ORDER - SECOND

The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992. The orthometric height was scaled from a topographic map. The Laplace correction was computed from DEFLEC99 derived deflections. The geoid height was determined by GEOID99.

JV4719; SPC MD - 228,370.351 334,249.924 MT 1.00005875 -0 28 52.6
JV4719; SPC MD - 749,245.06 1,096,618.29 sFT 1.00005875 -0 28 52.6
JV4719; SPC PA S - 43,086.414 598,557.895 MT 1.00003990 -0 00 39.3
JV4719; SPC WV N - 137,027.253 748,584.991 MT 0.99994212 +1 06 19.4
JV4719; UTM 18 - 4,400,493.939 262,850.991 MT 1.00029245 -1 46 08.3

JV4729 DESIGNATION - VACANT

JV4729 PID - JV4729
JV4729 STATE/COUNTY - MD/WASHINGTON
JV4729 USGS QUAD - MASON-DIXON (1971)

*CURRENT SURVEY CONTROL

JV4729 NAD 83(1991) - 39 43 16.26329 (N) 077 47 09.43549 (W) ADJUSTED
JV4729 NAVD 88 - 172. (meters) 564. (feet) SCALED

JV4729 LAPLACE CORR - 1.11 (seconds) DEFLEC99
JV4729 GEOID HEIGHT - -34.28 (meters) GEOID99
The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in January 1992. The orthometric height was scaled from a topographic map. The Laplace correction was computed from DEFLEC99 derived deflections. The geoid height was determined by GEOID99.

<table>
<thead>
<tr>
<th>Primary Azimuth Mark</th>
<th>Grid Az</th>
</tr>
</thead>
<tbody>
<tr>
<td>VACANT RM 1</td>
<td>03517</td>
</tr>
<tr>
<td>VACANT AZ MK</td>
<td></td>
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</table>

<table>
<thead>
<tr>
<th>PID</th>
<th>Reference Object</th>
<th>Distance</th>
<th>Geod. Az</th>
</tr>
</thead>
<tbody>
<tr>
<td>VACANT RM 1</td>
<td>43.629 METERS</td>
<td>03517</td>
<td>2570030.8</td>
</tr>
</tbody>
</table>

SUPERSEDED SURVEY CONTROL

NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums. See file dsdata.txt to determine how the superseded data were derived.

MARKER: DS = TRIANGULATION STATION DISK
SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

HISTORY - Date Condition Report By
1935 MONUMENTED CGS
JV4729
JV4729'DESCRIBED BY COAST AND GEODETIC SURVEY 1935 (JB)
JV4729'THIS STATION IS LOCATED ABOUT 6 MILES NW FROM HAGERSTOWN ON
JV4729'PROPERTY BELONGING TO MRS. HERBERT, AND OCCUPIED BY JOHN
JV4729'CRAWFORD. IT IS ON A HIGH HILL ABOUT 0.2 MILE E FROM CONOCOCHEAGUE
JV4729'CREEK AND 0.6 MILE NE FROM MACADAM ROAD BETWEEN HAGERSTOWN AND
JV4729'WELCH RUN IN REAR OF HOUSE. IT IS 13.7 FEET NW FROM THE SW
JV4729'CORNER OF SHED, 29.4 FEET N FROM THE CHIMNEY OF HOUSE, AND 19.5
JV4729'FEET S FROM FENCE CORNER. MARK 4 INCHES BELOW SURFACE.
JV4729'
JV4729'STATION, UNDERGROUND, REFERENCE AND AZIMUTH MARKS ARE STANDARD
JV4729'BRONZE DISKS SET IN CONCRETE, AS DESCRIBED IN NOTES 1A, 7A AND 11A.
JV4729'
**JV4729'REFERENCE MARK NO. 1 IS SET IN THE TOP OF A STATE BOUNDARY
MONUMENT**

JV4729'143.14 FEET N FROM THE STATION.

JV4729'THE AZIMUTH MARK IS LOCATED ABOUT 0.6 MILE SW FROM THE STATION
JV4729'ON THE PROPERTY OF GEORGE FAULDER. IT IS 23 PACES NNW FROM THE NW
JV4729'CORNER OF A LARGE BARN, 15 PACES N FROM CENTER LINE OF MACADAM ROAD
JV4729'NEAR GATE TO APPLE ORCHARD.

JV4729'
JV4729'TO REACH FROM THE STATION, GO S TO MACADAM ROAD. TURN RIGHT AND
JV4729'GO TO 0.7 MILE TO MARK ON N SIDE OF ROAD.

JV4729'
JV4729'TO REACH FROM MIDDLEBURG OR STATE LINE, ON U.S. 11, GO W ON STATE
JV4729'LINE ROAD FOR 2.4 MILES TO T-ROAD, TURN LEFT AND GO ABOUT 200 YARDS
JV4729'AND THEN TURN RIGHT ON DIRT ROAD AND GO 1.0 MILE TO THE STATION ON
JV4729'RIGHT SIDE OF ROAD.

JV4729'
JV4729'A 37-FOOT TOWER USED FOR 1935 OBSERVATIONS.

1 National Geodetic Survey, Retrieval Date = JANUARY 28, 2002

**JV1491**********************************************************************

**JV1491 DESIGNATION - WILLS RM A AMS 1968**

<table>
<thead>
<tr>
<th>PID</th>
<th>JW1491</th>
</tr>
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<tbody>
<tr>
<td>STATE/COUNTY-</td>
<td>MD/ALLEGANY</td>
</tr>
<tr>
<td>USGS QUAD-</td>
<td>EVITTS CREEK (1974)</td>
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</tbody>
</table>

*CURRENT SURVEY CONTROL*

<table>
<thead>
<tr>
<th>NAD 83(1991)-</th>
<th>39 43 21.83904(N) 078 44 34.06206(W)</th>
<th>ADJUSTED</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAVD 88-</td>
<td>595.0 (meters) 1952. (feet)</td>
<td>VERTCON</td>
</tr>
<tr>
<td>LAPLACE CORR-</td>
<td>-4.52 (seconds)</td>
<td>DEFLEC99</td>
</tr>
<tr>
<td>GEOID HEIGHT-</td>
<td>-32.62 (meters)</td>
<td>GEOID99</td>
</tr>
</tbody>
</table>
The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in April 1998. The NAVD 88 height was computed by applying the VERTCON shift value to the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.). The Laplace correction was computed from DEFLEC99 derived deflections. The geoid height was determined by GEOID99.

<table>
<thead>
<tr>
<th>PID</th>
<th>Reference Object</th>
<th>Distance</th>
<th>Geod. Az</th>
</tr>
</thead>
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<td>PITTSBURGH WASH AWY BN 10</td>
<td>APPROX. 7.1 KM</td>
<td>0920736.3</td>
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<tr>
<td>JW1484</td>
<td>WILLS</td>
<td>28.471 METERS</td>
<td>33813</td>
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</table>

SUPERSEDED SURVEY CONTROL

Superseded values are not recommended for survey control. NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums. See file dsdata.txt to determine how the superseded data were derived.
JW1491 HISTORY - 1968 MONUMENTED DMA
JW1491 HISTORY - 1968 GOOD CGS
JW1491
JW1491 STATION DESCRIPTION
JW1491
JW1491 DESCRIBED BY DEFENSE MAP AGENCY 1968 (WOK)
JW1491 THE STATION IS LOCATED AT THE SITE OF TRIANGULATION STATION
JW1491 WILLS (USC AND GS).
JW1491 TO REACH FROM THE MARYLAND-PENNSYLVANIA STATE LINE ON U.S. HIGHWAY
JW1491 220, ABOUT 5.5 MILES NORTH OF CUMBERLAND, MARYLAND, GO NORTHERLY ON
JW1491 U.S. HIGHWAY 220 FOR 1.25 MILES TO A SIDE ROAD LEFT AT SIGN HAY
JW1491 RIDES ON RIGHT. TURN LEFT ON NARROW MACADAM ROAD AND GO WEST FOR
JW1491 0.1 MILE TO THE NORTH SIDE OF MR. BERNARD ANDERSONS HOUSE. STOP
JW1491 AND CHECK WITH PROPERTY OWNER FOR ACCESS TO STATION. CONTINUE
JW1491 WEST, PAST HOUSE, ON PRIVATE ROAD FOR 0.1 MILE TO A FORK. KEEP LEFT
JW1491 AND GO 0.1 MILE TO ANOTHER FORK. TAKE RIGHT FORK AND GO WESTERLY
JW1491 FOR 0.2 MILE TO A WOODEN GATE. PASS THROUGH GATE KEEPING LEFT ON
JW1491 NARROW WOODS ROAD AND GO 0.6 MILE TO WHERE ROAD SPLITS THREE
JW1491 WAYS. TAKE LEFT MOST ROAD AND GO 1.1 MILES (PASSING A CAMP
JW1491 SITE WITH AN OPEN SHED) TO A EAST-WEST PIPELINE CLEARING. CROSS
JW1491 THIS CLEARING TO SECOND CLEARING (SECOND PIPELINE) AND TURN
JW1491 RIGHT FOR 0.05 MILE TO STATION SITE IN WOODS ON THE LEFT.
JW1491
JW1491 THE STATION IS A CORPS OF ENGINEERS, U.S. ARMY DISK STAMPED
JW1491 WILLS RM A 1968 ARMY MAP SERVICE, AND IS SET IN THE TOP OF A
JW1491 SQUARE CONCRETE MONUMENT THAT IS FLUSH WITH THE SURFACE OF THE
JW1491 GROUND. A SUB-SURFACE MARK IN A BLOCK OF CONCRETE WAS SET AND
JW1491 STAMPED THE SAME AS THE SURFACE DISK.
JW1491
JW1491 A TRAVERSE CONNECTION WAS MADE TO STATION WILLS USC AND GS,
JW1491 DISTANCE BEING 28.470 METERS OR 93.40 FEET SOUTH.
JW1491
JW1491 STATION RECOVERY (1968)
JW1491
JW1491 RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1968 (WOK)
JW1491 THE STATION AND REFERENCE MARKS WERE RECOVERED IN GOOD CONDITION. A
JW1491 SATISFACTORY HORIZONTAL CHECK WAS MADE. DISTANCES TO THE REFERENCE
JW1491 MARKS VARIED FROM THE ORIGINAL SURVEY AND WERE DOUBLE MEASURED FOR
JW1491 CHECK ON ACCURACY. THE 1955 AZIMUTH MARK WAS DESTROYED. DUE TO
JW1491 LIMITATIONS IN VISIBILITY BECAUSE OF TREES AND BRUSH AN AZIMUTH
JW1491 MARK WAS NOT RE-ESTABLISHED FOR THIS STATION.
JW1491
JW1491 THE ROAD USED TO REACH THIS STATION IS ON THE PROPERTY OF MR. BERNARD
JW1491 ANDERSON. THIS ROAD IS PERSONALLY MAINTAINED BY MR. ANDERSON AND
JW1491 HAS PREVIOUSLY BEEN RUTTED AND DAMAGED DUE TO USE IN INCLEMENT
JW1491 WEATHER. MR. ANDERSON NOW CHARGES 5.00 DOLLARS PER TRIP FOR ACCESS
JW1491 TO STATION SITE, UNLESS OTHER ARRANGEMENTS CAN BE MADE. A COMPLETE
JW1491 DESCRIPTION FOLLOWS--
JW1491

file:///K|m_valeriano/FinalCD/Library/The%20NGS%20Data%20Sheets%20for%20line%20data%20only.htm (24 of 33) [10/15/2002 1:40:52 PM]
The station is located on a summit of Wills Mountain, about 5 miles north-northeast of Cumberland, Maryland and 6.5 miles south-southwest of Hyndman, Pennsylvania. It is 1.8 miles west of U.S. Highway 220 and 1.8 miles east of Pennsylvania State Highway 96, on the Maryland-Pennsylvania state line.

To reach from the Maryland-Pennsylvania state line on U.S. Highway 220, about 5.5 miles north of Cumberland, Maryland, go northerly on U.S. Highway 220 for 1.25 miles to a side road left at sign Hay

Rides on right. Turn left on narrow macadam road and go west for 0.1 mile to the north side of Mr. Bernard Anderson's house. Stop and check with property owner for access to station. Continue west, past house, on private road for 0.1 mile to a fork. Keep left and go 0.1 mile to another fork. Take right fork and go westly for 0.2 mile to a wooden gate. Pass through gate keeping left on narrow woods road and go 0.6 mile to where road splits three ways. Take left most road and go 1.1 miles (passing a camp site with an open shed) to a east-west pipeline clearing. Cross this clearing to second clearing (second pipeline) and turn right for 0.05 mile to station site in woods on the left.

The station mark is a standard disk stamped Wills 1955, cemented in a drill hole atop an 8 inch x 8 inch sandstone post which is an original marker for the Mason-Dixon line. The post projects 2.5 feet and is also the Maryland-Pennsylvania state line monument.

It is 58 feet south of the centerline of the east-west pipeline clearing, 7 feet southeast of a 14 inch ash tree, 7.5 feet northeast of a metal witness post and 19 feet west of a 12 inch ash tree.

Reference mark 1 is stamped Wills No 1 1955 and projects 0.3 foot. It is 12 feet northeast of the centerline of the most southern pipeline of two, 20 feet east-southeast of an 8 inch oak tree and 60 feet south of the centerline of the north most pipeline clearing of two. The mark is also an AMS Astro ECC.

Reference mark 2 is stamped Wills No 2 1955 and projects 0.3 foot. It is 9.3 feet northwest of an old telephone pole and 70 feet south of the centerline of the north most pipeline clearing of two.

A traverse tie was made to station Wills RM A (AMS).

Airline distance and direction from nearest town--5 miles north of Cumberland.

Height of light above station mark 70.3 feet.
JX1874  DESIGNATION -  BDRY MON GARRISON 1941 RM 2

JX1874  DESIGNATION -  BDRY MON WV PA NEAR THOMAS

The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in April 1998. The orthometric height was scaled from a topographic map. The Laplace correction was computed from DEFLEC99 derived deflections. The geoid height was determined by GEOID99.

North  East  Units  Scale  Converg.
SPC WV N    -  135,988.439  521,014.913  MT  0.99994212 -0 35 15.3
SPC PA S    -  46,539.663  370,989.678  MT  1.00003992 -1 43 59.2
UTM 17     -  4,396,982.758  549,599.318  MT  0.99963029 +0 22 11.4
methods
JX1865 and adjusted by the National Geodetic Survey in April 1998.
JX1865
JX1865 The orthometric height was scaled from a topographic map.
JX1865
JX1865 The Laplace correction was computed from DEFLEC99 derived deflections.
JX1865
JX1865 The geoid height was determined by GEOID99.
JX1865
JX1865
JX1865;                    North         East     Units   Scale      Converg.
JX1865;SPC WV N     -   135,914.055   528,064.357   MT  0.99994212 -0 32 06.5
JX1865;SPC PA S     -    46,324.395   378,036.916   MT  1.00003993 -1 40 47.1
JX1865;UTM  17      - 4,397,026.168   556,646.854   MT  0.99963950 +0 25 20.6
JX1865
JX1865 SUPERSEDED SURVEY CONTROL
JX1865
JX1865 NAD 83(1986)-  39 43 16.43699(N)    080 20 20.61258(W) AD(       ) 2
JX1865 NAD 27      -  39 43 16.14620(N)    080 20 21.34150(W) AD(       ) 2
JX1865
JX1865 Superseded values are not recommended for survey control.
JX1865 NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
JX1865 See file dsdata.txt to determine how the superseded data were derived.
JX1865
JX1865 MARKER: U = CONCRETE POST
JX1865_SETTING: 0 = UNSPECIFIED SETTING
JX1865_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
JX1865
JX1865 HISTORY     - Date     Condition        Report By
JX1865 HISTORY     - 1941     MONUMENTED       CGS
JX1865
JX1865 STATION DESCRIPTION
JX1865
JX1865 DESCRIBED BY COAST AND GEODETIC SURVEY 1941 (GWL)
JX1865 THE STATION IS ABOUT 7 MILES
JX1865 OF THE SMALL
JX1865 TOWN OF BLACKSVILLE AT THE HOME OF MR. THOMAS. IT
JX1865 IS A FOOT SQUARE CONCRETE POST
JX1865 PROJECTING ABOUT 4 FEET AND LOCATED
JX1865 ABOUT 50 YARDS W OF MR. THOMAS HOUSE AND WITHIN A
JX1865 FEW FEET OF THE
JX1865 MOST WESTERLY OF HIS BARNs. IT IS 277.819 METERS OR 911.48 FEET N
JX1865 OF STATION
JX1865 THOMAS. IT IS NOW UNSTABLE.
JX1865
JX1865 TO REACH FROM THE INTERSECTION OF PENNSYLVANIA STATE HIGHWAY 218
JX1865 AND WEST VIRGINIA
JX1865 STATE HIGHWAY 7 IN THE CENTER OF BLACKSVILLE, GO
JX1865 WESTERLY ON HIGHWAY 7 FOR 5.7 MILES
TO THE BRIDGE OVER DUNKARD
CREEK AT THE VILLAGE OF WANA, THENCE CONTINUE STRAIGHT
AHEAD 1.4
MILES AND TURN RIGHT ONTO A GRADED ROAD, THENCE NORTHERLY 2.3
MILES TO THE TOP OF
THE RIDGE AND TURN RIGHT, THENCE ALONG THE
RIDGE 0.4 MILE TO A WARPED-CROSS
CROSSROADS AND TAKE THE LEFT
FORK, THENCE 0.4 MILE TO SEVERAL BARNs AND THE
STATION ON THE LEFT.

THIS STATION WAS LOCATED BY TRAVERSE FROM STATION THOMAS.

DESIGNATION - BOUNDARY MONUMENT WV PA 1941

<table>
<thead>
<tr>
<th>PID</th>
<th>JX1871</th>
<th>STATE/COUNTY</th>
<th>WV/WETZEL</th>
<th>USGS QUAD</th>
<th>HUNDRED (1976)</th>
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<tbody>
<tr>
<td>NAVD 88</td>
<td>500. (meters)</td>
<td>1640. (feet)</td>
<td>SCALED</td>
<td></td>
<td></td>
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<tr>
<td>LAPLACE CORR</td>
<td>2.54 (seconds)</td>
<td>DEFLEC99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GEOID HEIGHT</td>
<td>-33.16 (meters)</td>
<td>GEOID99</td>
<td></td>
<td></td>
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</table>

The horizontal coordinates were established by classical geodetic methods
and adjusted by the National Geodetic Survey in April 1998.
The orthometric height was scaled from a topographic map.
The Laplace correction was computed from DEFLEC99 derived deflections.
The geoid height was determined by GEOID99.

| SPC WV N | 136,049.006 | 515,444.357 | MT | 0.99994212 | -0 37 44.4 |
| SPC PA S | 46,711.637 | 365,420.902 | MT | 1.00003992 | -1 46 31.0 |
| UTM 17 | 4,396,950.252 | 544,030.283 | MT | 0.99962387 | +0 19 41.9 |

DESIGNATION - FORDYCE

<table>
<thead>
<tr>
<th>PID</th>
<th>JX1870</th>
<th>STATE/COUNTY</th>
<th>WV/WETZEL</th>
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</table>

file:///K|/m_valeriano/FinalCD/Library/The%20NGS%20Data%20Sheets%20for%20line%20data%20only.htm (28 of 33) [10/15/2002 1:40:52 PM]
The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in April 1998.

The orthometric height was scaled from a topographic map.

The Laplace correction was computed from DEFLEC99 derived deflections.

The geoid height was determined by GEOID99.

<table>
<thead>
<tr>
<th>PID</th>
<th>Reference Object</th>
<th>Distance</th>
<th>Geod. Az</th>
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</thead>
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<td>JX1871</td>
<td>BOUNDARY MONUMENT WV PA 1941</td>
<td>41.861 METERS</td>
<td>02033</td>
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<tr>
<td>JX1870</td>
<td>FORDYCE AZ MK</td>
<td>035931.0</td>
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<tr>
<td>JX1870</td>
<td>FORDYCE RM 1</td>
<td>4.942 METERS</td>
<td>11053</td>
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<td>JX1870</td>
<td>HUNDRED MICROWAVE TOWER</td>
<td>APPROX. 6.8 KM</td>
<td>1393501.3</td>
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<tr>
<td>JX1870</td>
<td>FORDYCE RM 2</td>
<td>4.970 METERS</td>
<td>20605</td>
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</table>

Superseded values are not recommended for survey control.
JX1870.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
JX1870 See file dsdata.txt to determine how the superseded data were derived.

JX1870
JX1870 MARKER: DS = TRIANGULATION STATION DISK
JX1870 SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT

JX1870 HISTORY
- Date  Condition  Report By
JX1870 1941  MONUMENTED  CGS
JX1870 1963  GOOD  CGS

JX1870 STATION DESCRIPTION

JX1870 DESCRIBED BY COAST AND GEODETIC SURVEY 1941 (GWL)
JX1870 THE STATION IS
JX1870 LOCATED ABOUT 5 MILES W BY S OF THE VILLAGE OF GARRISON. IT IS
JX1870 ON THE HIGHEST POINT OF A PASTURE
JX1870 KNOLL OWNED BY J.A. FORDYCE
JX1870 WHO LIVES 0.05 MILE W OF THE STATION. IT IS 145
JX1870 FEET S OF A
JX1870 FENCE LINE WHICH IS THE WEST VIRGINIA-PENNSYLVANIA STATE LINE.
JX1870 IT IS STAMPED
JX1870 FORDYCE 1941 AND PROJECTS 4 INCHES.
JX1870 SURFACE, UNDERGROUND, AND REFERENCE MARKS ARE STANDARD BRONZE
JX1870 DISKS SET IN CONCRETE.
JX1870 REFERENCE MARK NO. 1 IS STAMPED FORDYCE NO. 1 1941 AND PROJECTS
JX1870 6 INCHES.
JX1870 REFERENCE MARK NO. 2 IS STAMPED FORDYCE NO. 2 1941 AND PROJECTS
JX1870 6 INCHES.
JX1870 THE AZIMUTH MARK IS 130 FEET E OF A ROAD FORK, 10 FEET N OF
JX1870 THE CENTER OF THE
JX1870 ROAD. IT IS A STANDARD COAST AND GEODETIC SURVEY
JX1870 AZIMUTH MARK DISK SET FLUSH IN THE
JX1870 TOP AND W END OF A 1- BY 5-FOOT
JX1870 CONCRETE CULVERT HEAD ON THE N SIDE OF THE ROAD AND
JX1870 IS STAMPED FORDYCE 1941.

JX1870 A TRAVERSE CONNECTION WAS MADE AND THE DIRECTION OBSERVED TO

JX1870 A WEST VIRGINIA
JX1870 PENNSYLVANIA BOUNDARY MONUMENT. IT IS A SANDSTONE
JX1870 POST 12 INCHES SQUARE WITH A
JX1870 PYRAMIDAL TOP HAVING A 4-INCH SQUARE
**JX1870' TOP AND PROJECTING 2 FEET. INCISED ON THE S**

**JX1870' SIDE OF THE MONUMENT**

**JX1870' ARE THE LETTERS W V, ON THE N SIDE P AND ON THE W SIDE THE**

**JX1870' NUMERALS 1883.**

**JX1870' TO REACH THE STATION FROM THE POST OFFICE IN GARRISON, GO**
**JX1870' WESTERLY ON A**
**JX1870' MACADAM ROAD FOR 0.7 MILE TO A SIDE ROAD RIGHT, TURN**
**JX1870' LEFT AND GO 0.6 MILE TO A FORKS,**
**JX1870' TAKE THE RIGHT FORK AND FOLLOW FOR**
**JX1870' 1.3 MILES TO A FORKS. FOLLOW THE LEFT FORK FOR 0.9**
**JX1870' MILE TO A CROSS**
**JX1870' ROAD, CONTINUE STRAIGHT AHEAD FOR 0.3 MILE TO A FORKS (THE AZIMUTH**
**JX1870' MARK IS 130 FEET E**
**JX1870' OF THIS ROAD FORK) TAKE THE LEFT FORK AND GO**
**JX1870' 0.75 MILE TO A T ROAD LEFT TURN LEFT**
**JX1870' AND GO 0.25 MILE TO THE J.A.**
**JX1870' FORDYCE FARMHOUSE AND THE END OF TRUCK TRAVEL. FROM**
**JX1870' HERE PROCEED**
**JX1870' ON FOOT EASTERNLY FOR ABOUT 0.05 MILE TO THE HIGHEST POINT OF THE**
**JX1870' HILL AND THE STATION.**

**JX1870' STATION RECOVERY (1963)**

**JX1870' RECOVERY NOTE BY COAST AND GEODETIC SURVEY 1963 (VBM)**

**JX1870' THE STATION, AND ALL MARKS WAS RECOVERED AND FOUND IN GOOD CONDITION.**
**JX1870' THE DISTANCE TO REFERENCE MARKS**
**JX1870' 1, 2 AND THE AZIMUTH MARK CHECKED. THE DISTANCE TO THE BOUNDARY**
**JX1870' MONUMENT DID NOT CHECK BY 0.143 METERS**
**JX1870' AND 0.47 FEET. THE DIRECTION TO THE BOUNDARY MONUMENT**
**JX1870' DID NOT CHECK BY 25.3 SECONDS. THE DIRECTION TO**
**JX1870' REFERENCE MARK 2 DID NOT CHECK**
**JX1870' BY 3 MINUTES AND 06 SECONDS. THE DIRECTION TO REFERENCE MARK 1 AND**
**JX1870' THE AZIMUTH MARK CHECKED. THE**
**JX1870' DESCRIPTIONS ARE ADEQUATE.**

**JX1870' HEIGHT OF LIGHT ABOVE STATION MARK 1 METERS.**

---

**JW1242 DESIGNATION - MAUST**

**JW1242 PID - JW1242**
**JW1242 STATE/COUNTY - PA/SOMERSET**
**JW1242 USGS QUAD - AVILTON (1981)**
**JW1242 *CURRENT SURVEY CONTROL**
The horizontal coordinates were established by classical geodetic methods and adjusted by the National Geodetic Survey in April 1998.

The NAVD 88 height was computed by applying the VERTCON shift value to the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)

The Laplace correction was computed from DEFLEC99 derived deflections.

The geoid height was determined by GEOID99.

---

The horizontal coordinates were established by classical geodetic methods.
The methods JX1871. and adjusted by the National Geodetic Survey in April 1998.

The orthometric height was scaled from a topographic map.

The Laplace correction was computed from DEFLEC99 derived deflections.

The geoid height was determined by GEOID99.

<table>
<thead>
<tr>
<th></th>
<th>North</th>
<th>East</th>
<th>Units</th>
<th>Scale</th>
<th>Converg.</th>
</tr>
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<tbody>
<tr>
<td>SPC WV N</td>
<td>136,049.006</td>
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