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
 LK0529 ***********************************************************************
 LK0529  DESIGNATION -  BROWN
 LK0529  PID         -  LK0529
 LK0529  STATE/COUNTY-  CO/YUMA
 LK0529  COUNTRY     -  US
 LK0529  USGS QUAD   -  WRAY (1984)
 LK0529
 LK0529                        *CURRENT SURVEY CONTROL
 LK0529  ______________________________________________________________________
 LK0529* NAD 83(1992) POSITION- 40 00 12.04613(N) 102 14 27.45909(W)   ADJUSTED
 LK0529* NAVD 88 ORTHO HEIGHT -  1169.71  (+/-2cm)     3837.6   (feet) VERTCON
 LK0529  ______________________________________________________________________
 LK0529  GEOID HEIGHT    -        -22.084 (meters)                    GEOID12B
 LK0529  LAPLACE CORR    -         -3.69  (seconds)                   DEFLEC12B
 LK0529  HORZ ORDER      -  SECOND
 LK0529  VERT ORDER      -  THIRD ? (See Below)
 LK0529
 LK0529.The horizontal coordinates were established by classical geodetic methods
 LK0529.and adjusted by the National Geodetic Survey in January 1993.
 LK0529.
 LK0529.The NAVD 88 height was computed by applying the VERTCON shift value to
 LK0529.the NGVD 29 height (displayed under SUPERSEDED SURVEY CONTROL.)
 LK0529
 LK0529.Significant digits in the geoid height do not necessarily reflect accuracy.
 LK0529.GEOID12B height accuracy estimate available here.
 LK0529
 LK0529.The vertical order pertains to the NGVD 29 superseded value.
 LK0529
 LK0529.The Laplace correction was computed from DEFLEC12B derived deflections.
 LK0529
 LK0529. The following values were computed from the NAD 83(1992) position.
 LK0529
 LK0529;                    North         East     Units Scale Factor Converg.
 LK0529;SPC CO N     -   384,305.171 1,192,618.094   MT  0.99996612   +2 06 20.8
 LK0529;SPC CO N     - 1,260,841.22  3,912,781.20   sFT  0.99996612   +2 06 20.8
 LK0529;UTM  13      - 4,431,775.357   735,515.234   MT  1.00028289   +1 46 27.9
 LK0529
 LK0529!             -  Elev Factor  x  Scale Factor =   Combined Factor
 LK0529!SPC CO N     -   0.99981999  x   0.99996612  =   0.99978612
 LK0529!UTM  13      -   0.99981999  x   1.00028289  =   1.00010283
 LK0529
 LK0529:               Primary Azimuth Mark                    Grid Az
 LK0529:SPC CO N     -  GRIGSBY                                293 20 05.3
 LK0529:UTM  13      -  GRIGSBY                                293 39 58.2
 LK0529
 LK0529_U.S. NATIONAL GRID SPATIAL ADDRESS: 13TGE3551531775(NAD 83)
 LK0529
 LK0529|----------------------------------------------------------------------|
 LK0529| PID    Reference Object                    Distance      Geod. Az   |
 LK0529|                                                          dddmmss.s  |
 LK0529| CP6673 BROWN RM 1                          27.016 METERS 12429      |
 LK0529| KJ0403 FIELD ET                           APPROX. 7.7 KM 1863700.2  |
 LK0529| CP6672 BROWN AZ MK                                       1961633.3  |
 LK0529| CP6674 BROWN RM 2                          25.798 METERS 23344      |
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LK0529| LK0533 GRIGSBY                              APPROX. 7.5 KM 2952626.1 |
LK0529|-------------------------------------------------------------------------|
LK0529
LK0529                          SUPERSEDED SURVEY CONTROL
LK0529
LK0529  NAD 83(1986)-  40 00 12.04473(N)    102 14 27.45620(W) AD(       ) 2
LK0529  NAD 27      -  40 00 12.08200(N)    102 14 25.75500(W) AD(       ) 2
LK0529  NGVD 29            1169.23   (m)         3836.0    (f) LEVELING    3
LK0529
LK0529.Superseded values are not recommended for survey control.
LK0529
LK0529.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
LK0529.See file dsdata.pdf to determine how the superseded data were derived.
LK0529
LK0529_MARKER: DS = TRIANGULATION STATION DISK
LK0529_SETTING: 7 = SET IN TOP OF CONCRETE MONUMENT
LK0529_STAMPING: BROWN 1935
LK0529_MARK LOGO: CGS
LK0529_PROJECTION: RECESSED 51 CENTIMETERS
LK0529_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
LK0529+STABILITY: SURFACE MOTION
LK0529
LK0529  HISTORY     - Date     Condition        Report By
LK0529  HISTORY     - 1935     MONUMENTED       CGS
LK0529  HISTORY     - 1959     GOOD             USGS
LK0529  HISTORY     - 1968     GOOD             USGS
LK0529  HISTORY     - 19990707 GOOD             NGS
LK0529
LK0529                          STATION DESCRIPTION
LK0529
LK0529'DESCRIBED BY COAST AND GEODETIC SURVEY 1935 (WRP)
LK0529'STATION IS 5 MILES SOUTH AND 1 MILE WEST OF WRAY, IN THE SOUTHWEST
LK0529'QUARTER OF SEC. 36, T. 1 N., R. 44 W.  IT IS BESIDE STATE
LK0529'HIGHWAY 51, NORTH OF A LOCAL SUMMIT OF THE ROAD GRADE, 51
LK0529'FEET NORTH OF THE NORTH RIGHT-OF-WAY FENCE, AND 82 FEET NORTH
LK0529'OF THE CENTERLINE OF THE HIGHWAY.  THE LAND IS OWNED BY THE L.D.
LK0529'BROWN ESTATE.  THE MARK IS SET EIGHTEEN INCHES
LK0529'BELOW THE SURFACE.
LK0529'
LK0529'REFERENCE MARK NO. 1 IS SOUTHEAST OF THE STATION,
LK0529'1 FOOT NORTH OF THE NORTH RIGHT-OF-WAY FENCE, AND 31 FEET NORTH
LK0529'OF CENTER OF STATE HIGHWAY 51.  MARK PROJECTS 4 INCHES.
LK0529'
LK0529'REFERENCE MARK NO. 2 IS SOUTHWEST OF STATION, 1
LK0529'FOOT NORTH OF NORTH RIGHT-OF-WAY FENCE, 31 FEET NORTH OF THE
LK0529'CENTER OF THE HIGHWAY.  MARK PROJECTS 4 INCHES.
LK0529'
LK0529'THE AZIMUTH MARK IS SOUTH-SOUTHWEST OF STATION,
LK0529'30 FEET WEST OF CENTER OF HIGHWAY 51, IN THE WEST RIGHT-OF-WAY
LK0529'FENCE, 200 FEET NORTH OF A WHITE HOUSE, AND PROJECTS 8 INCHES.
LK0529
LK0529                          STATION RECOVERY (1959)
LK0529
LK0529'RECOVERY NOTE BY US GEOLOGICAL SURVEY 1959
LK0529'STATION IS 5 MILES SOUTH AND 1 MILE WEST OF WRAY, IN THE SOUTHWEST
LK0529'QUARTER OF SEC. 36, T 1 N, R 44 W.  IT IS 80 FEET NORTH AND
LK0529'610 FEET EAST OF T-ROAD SOUTH, 31 FEET NORTH OF NORTH RIGHT-OF-WAY
LK0529'FENCE AND 32 FEET WEST OF A POWER POLE, IN CONCRETE POST A
LK0529'STANDARD U.S.C. AND G.S. DISC STAMPED BROWN 1935 AND SET ABOUT 18
LK0529'INCHES BELOW SURFACE OF GROUND.
LK0529'
LK0529'REFERENCE MARK 1 IS 18 FEET SOUTH OF NORTH RIGHT-OF-WAY FENCE.
LK0529'
LK0529'REFERENCE MARK 2 LEANS 30 DEGREES WEST-NORTHWEST.
LK0529
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LK0529                          STATION RECOVERY (1968)
LK0529
LK0529'RECOVERY NOTE BY US GEOLOGICAL SURVEY 1968 (IGT)
LK0529'THE STATION IS LOCATED SOUTH 8 DEG WEST ABOUT 5.3 MILES AIRLINE
LK0529'FROM WRAY, COLORADO 82 FEET NORTH AND 1560 FEET EAST OF SOUTHWEST
LK0529'CORNER OF SECTION 36, T.1N., R. 44W.
LK0529'
LK0529'TO REACH FROM THE JUNCTION OF U.S. HIGHWAYS 34 AND 385 IN
LK0529'WRAY, GO 5.8 MILES SOUTH ON U.S. HIGHWAY 385 TO START OF A CURVE
LK0529'FROM WEST TO SOUTH, CONTINUE STRAIGHT AHEAD 0.05 MILE WEST ON
LK0529'GRADED ROAD TO THE STATION SITE ON THE RIGHT.  THE STATION IS
LK0529'82 FEET NORTH OF GRADED ROAD, 32 FEET NORTH OF RIGHT OF WAY
LK0529'FENCE.
LK0529'
LK0529'STATION MARK--A USC AND GS BRONZE DISK SET IN A CONCRETE
LK0529'POST 20 INCHES UNDERGROUND.  THE DISK IS STAMPED BROWN 1935.
LK0529'
LK0529'REFERENCE MARK NO. 1--THE REFERENCE MARK IS 31 FEET NORTH OF
LK0529'THE ROAD ON A MOUND IN THE BORROW DITCH.  A USC AND GS BRONZE
LK0529'REFERENCE MARK DISK SET IN A CONCRETE POST PROJECTING 1 FOOT.
LK0529'THE DISK IS STAMPED BROWN 1935 R.M. NO. 1.
LK0529'
LK0529'REFERENCE MARK NO. 2--THE REFERENCE MARK IS 31 FEET NORTH OF
LK0529'THE ROAD ON A MOUND IN THE BORROW DITCH.  A USC AND GS BRONZE
LK0529'REFERENCE MARK DISK SET IN A CONCRETE POST PROJECTING 1 FOOT.
LK0529'THE DISK IS STAMPED BROWN 1935 R.M. NO. 2.
LK0529'
LK0529'NOTE--REFERENCE MARK NO. 2 WAS FOUND LEANING.  THE POST WAS
LK0529'RIGHTED AND SET AT THE ORIGINAL DISTANCE.
LK0529'
LK0529'THE AZIMUTH MARK IS DESTROYED.  MARK WAS FOUND LYING IN THE ROW
LK0529'DITCH.
LK0529'
LK0529'STATION GRIBSBY 1935 IS VISIBLE FROM THE GROUND AND WILL SERVE
LK0529'AS THE AZIMUTH MARK.
LK0529
LK0529                          STATION RECOVERY (1999)
LK0529
LK0529'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1999 (RSC)
LK0529'REFERENCE MARK NUMBER 2 WAS RECOVERED DESTROYED. IT WAS STAMPED BROWN
LK0529'NO 2 1935.
1        National Geodetic Survey,   Retrieval Date = NOVEMBER 24, 2017
LK0631 ***********************************************************************
LK0631  DESIGNATION -  BROWN
LK0631  PID         -  LK0631
LK0631  STATE/COUNTY-  CO/LOGAN
LK0631  COUNTRY     -  US
LK0631  USGS QUAD   -  REIRADON HILL (1951)
LK0631
LK0631                        *CURRENT SURVEY CONTROL
LK0631  ______________________________________________________________________
LK0631* NAD 83(1992) POSITION- 40 35 13.54420(N) 103 00 01.84757(W)   ADJUSTED
LK0631* NAVD 88 ORTHO HEIGHT -  1367.    (meters)     4485.    (feet) SCALED
LK0631  ______________________________________________________________________
LK0631  GEOID HEIGHT    -        -20.028 (meters)                    GEOID12B
LK0631  LAPLACE CORR    -         -2.56  (seconds)                   DEFLEC12B
LK0631  HORZ ORDER      -  THIRD
LK0631
LK0631.The horizontal coordinates were established by classical geodetic methods
LK0631.and adjusted by the National Geodetic Survey in January 1993.
LK0631.
LK0631.The orthometric height was scaled from a topographic map.
LK0631
LK0631.Significant digits in the geoid height do not necessarily reflect accuracy.
LK0631.GEOID12B height accuracy estimate available here.
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LK0631
LK0631.The Laplace correction was computed from DEFLEC12B derived deflections.
LK0631
LK0631. The following values were computed from the NAD 83(1992) position.
LK0631
LK0631;                    North         East     Units Scale Factor Converg.
LK0631;SPC CO N     -   446,991.166 1,125,969.968   MT  0.99997404   +1 36 54.0
LK0631;SPC CO N     - 1,466,503.52  3,694,119.80   sFT  0.99997404   +1 36 54.0
LK0631;UTM  13      - 4,494,843.744   669,210.262   MT  0.99995244   +1 18 04.3
LK0631
LK0631!             -  Elev Factor  x  Scale Factor =   Combined Factor
LK0631!SPC CO N     -   0.99978881  x   0.99997404  =   0.99976286
LK0631!UTM  13      -   0.99978881  x   0.99995244  =   0.99974126
LK0631
LK0631:                Primary Azimuth Mark                    Grid Az
LK0631:SPC CO N     -  KNOLL                                   316 43 23.1
LK0631:UTM  13      -  KNOLL                                   317 02 12.8
LK0631
LK0631_U.S. NATIONAL GRID SPATIAL ADDRESS: 13TFE6921094843(NAD 83)
LK0631
LK0631|-----------------------------------------------------------------------|
LK0631| PID    Reference Object                    Distance      Geod. Az   |
LK0631|                                                          dddmmss.s  |
LK0631| LK0632 KNOLL                             APPROX. 4.2 KM 3182017.1  |
LK0631|-----------------------------------------------------------------------|
LK0631
LK0631                          SUPERSEDED SURVEY CONTROL
LK0631
LK0631  NAD 83(1986)-  40 35 13.53812(N)    103 00 01.84662(W) AD(       ) 3
LK0631  NAD 27      -  40 35 13.58972(N)    103 00 00.15178(W) AD(       ) 3
LK0631
LK0631.Superseded values are not recommended for survey control.
LK0631
LK0631.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
LK0631.See file dsdata.pdf to determine how the superseded data were derived.
LK0631
LK0631_MARKER: DD = SURVEY DISK
LK0631_SETTING: 0 = UNSPECIFIED SETTING
LK0631_STABILITY: D = MARK OF QUESTIONABLE OR UNKNOWN STABILITY
LK0631
LK0631  HISTORY     - Date     Condition        Report By
LK0631  HISTORY     - 1949     MONUMENTED       USGS
LK0631
LK0631                          STATION DESCRIPTION
LK0631
LK0631'DESCRIBED BY US GEOLOGICAL SURVEY 1949
LK0631'STATION IS LOCATED ABOUT 12.3 MI. E. OF STERLING, COLORADO, ON TOP
LK0631'OF HILL, S. OF CENTER OF SEC. 7, T 8 N, R 50 W, ABOUT 1120 FT. N.
LK0631'OF CENTER OF COLORADO STATE HIGHWAY 124.
LK0631'
LK0631'TO REACH FROM POST OFFICE AT STERLING, GO N. 1 BLOCK, THEN E. ALONG
LK0631'U.S. HIGHWAY 6 ABOUT 1.8 MI. TO JUNCTION WITH COLORADO STATE HIGHWAY
LK0631'154, TURN RIGHT AND GO E. ALONG STATE HIGHWAY 154 ABOUT 10.5 MI. TO
LK0631'FENCE N., LEAVE RD. AND GO N. ALONG FENCE LINE ABOUT 0.2 MI. TO TOP OF
LK0631'HILL AND STATION.  STATION IS ABOUT 1118 FT. N. OF CENTERLINE OF RD.
LK0631'AND ABOUT 1.0 FT. W. OF FENCE.
LK0631'
LK0631'STATION MARK--STANDARD TABLET, SET IN TOP OF CONCRETE POST, STAMPED
LK0631'---BROWN 1949---.
LK0631'
LK0631'REFERENCE MARK NO. 1--STANDARD REFERENCE MARK TABLET, STAMPED
LK0631'---BROWN NO. 1 1949---, SET IN TOP OF CONCRETE POST, ABOUT 100.7 FT.
LK0631'S. OF STATION AND ABOUT 1.0 FT. W. OF FENCE, N 00 DEG 29 MIN E.
LK0631'
LK0631'REFERENCE MARK NO. 2--STANDARD REFERENCE MARK TABLET, STAMPED
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LK0631'---BROWN NO. 2 1949---, SET IN TOP OF CONCRETE POST, ABOUT 102.6 FT.
LK0631'N. OF STATION AND ABOUT 1.0 FT. W. OF FENCE, S 00 DEG 42 MIN E.
1 National Geodetic Survey, Retrieval Date = NOVEMBER 24, 2017
KL0829 **********
KL0829 CBN - This is a Cooperative Base Network Control Station.
KL0829 PACS - This is a Primary Airport Control Station.
KL0829 DESIGNATION - BROWN
KL0829 PID - KL0829
KL0829 STATE/COUNTY- CO/EAGLE
KL0829 COUNTRY - US
KL0829 USGS QUAD - GYPSUM (1987)
KL0829
KL0829 *CURRENT SURVEY CONTROL
KL0829 ______
KL0829* NAD 83(2011) POSITION- 39 38 38.13873(N) 106 54 58.03270(W) ADJUSTED
KL0829* NAD 83(2011) ELLIP HT- 1963.662 (meters) (06/27/12) ADJUSTED
KL0829* NAD 83(2011) EPOCH - 2010.00
KL0829* NAVD 88 ORTHO HEIGHT - 1977.46 (meters) 6487.7 (feet) N HEIGHT
KL0829 ______
KL0829 GEOID HEIGHT - -13.782 (meters) GEOID12B
KL0829 NAD 83(2011) X - -1,431,444.804 (meters) COMP
KL0829 NAD 83(2011) Y - -4,706,678.345 (meters) COMP
KL0829 NAD 83(2011) Z - 4,048,873.950 (meters) COMP
KL0829 LAPLACE CORR - 2.59 (seconds) DEFLEC12B
KL0829 DYNAMIC HEIGHT - 1975.32 (meters) 6480.7 (feet) COMP
KL0829 MODELED GRAVITY - 979,477.5 (mgal) NAVD 88
KL0829
KL0829 VERT ORDER - THIRD
KL0829
KL0829 Network accuracy estimates per FGDC Geospatial Positioning Accuracy
KL0829 Standards:

	FGDC (95% conf, cm)		Standard deviation (cm)			CorrNE
	Horiz	Ellip	SD_N	SD_E	SD_h	(unitless)
NETWORK	0.49	0.76	0.22	0.18	0.39	0.08985102

KL0829 Click here for local accuracies and other accuracy information.
KL0829
KL0829
KL0829.This mark is at Eagle Co Regional Airport (EGE)
KL0829
KL0829.The horizontal coordinates were established by GPS observations
KL0829.and adjusted by the National Geodetic Survey in June 2012.
KL0829
KL0829.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
KL0829.been affixed to the stable North American tectonic plate. See
KL0829.NA2011 for more information.
KL0829
KL0829.The horizontal coordinates are valid at the epoch date displayed above
KL0829.which is a decimal equivalence of Year/Month/Day.
KL0829
KL0829.The orthometric height was determined by differential leveling
KL0829.and adjusted by the NATIONAL GEODETIC SURVEY in August 1995.
KL0829
KL0829.The height was determined by precise leveling from only one NSRS
KL0829.bench mark. This was not adequate "tie leveling" to NSRS and was
KL0829.allowed ONLY to validate the GPS-derived height.
KL0829
KL0829.Significant digits in the geoid height do not necessarily reflect accuracy.
KL0829.GEOID12B height accuracy estimate available here.
KL0829
KL0829.The X, Y, and Z were computed from the position and the ellipsoidal ht.
KL0829
KL0829.The Laplace correction was computed from DEFLEC12B derived deflections.
KL0829

KL0829.The ellipsoidal height was determined by GPS observations
KL0829.and is referenced to NAD 83.
KL0829
KL0829.The dynamic height is computed by dividing the NAVD 88
KL0829.geopotential number by the normal gravity value computed on the
KL0829.Geodetic Reference System of 1980 (GRS 80) ellipsoid at 45
KL0829.degrees latitude (g = 980.6199 gals.).
KL0829
KL0829.The modeled gravity was interpolated from observed gravity values.
KL0829
KL0829. The following values were computed from the NAD 83(2011) position.
KL0829

		North	East	Units	Scale Factor	Converg.
KL0829;SPC CO C	-	506,742.360	792,855.358	MT	0.99998074	-0 53 35.3
KL0829;SPC CO C	-	1,662,537.23	2,601,226.29	sFT	0.99998074	-0 53 35.3
KL0829;UTM 13	-	4,389,992.237	335,588.415	MT	0.99993281	-1 13 22.0

KL0829

		Elev Factor	x	Scale Factor	=	Combined Factor
KL0829!SPC CO C	-	0.99969203	x	0.99998074	=	0.99967277
KL0829!UTM 13	-	0.99969203	x	0.99993281	=	0.99962486

KL0829

		Primary Azimuth Mark	Grid Az
KL0829:SPC CO C	-	K 280	055 14 54.8
KL0829:UTM 13	-	K 280	055 34 41.5

KL0829
KL0829_U.S. NATIONAL GRID SPATIAL ADDRESS: 13SCD3558889992(NAD 83)
KL0829

PID	Reference Object	Distance	Geod. Az dddmmss.s
KL0435	K 280	417.423 METERS	0542119.5
KL0434	J 280	431.102 METERS	3540800.4

KL0829
KL0829 SUPERSEDED SURVEY CONTROL
KL0829

KL0829 NAD 83(2007)-	39 38 38.13848(N)	106 54 58.03301(W)	AD(2002.00)	0	
KL0829 ELLIP H (02/10/07)	1963.691 (m)		GP(2002.00)		
KL0829 ELLIP H (10/21/02)	1963.673 (m)		GP( )	5	1
KL0829 NAD 83(1986)-	39 38 38.13035(N)	106 54 58.02911(W)	AD( )	3	
KL0829 NAD 83(1992)-	39 38 38.13823(N)	106 54 58.03249(W)	AD( )	B	
KL0829 ELLIP H (05/26/92)	1963.697 (m)		GP( )	4	1
KL0829 NAVD 88	1977.46 (m)	6487.7 (f)	LEVELING	3	
KL0829 NAVD 88 (03/05/99)	1977.46 (m)	UNKNOWN model used	GPS OBS		
KL0829 NAVD 88 (06/12/98)	1977.40 (m)	GEOID96 model used	GPS OBS		
KL0829 NAVD 88	1977.46 (m)	6487.7 (f)	LEVELING	3	
KL0829 NGVD 29 (??/??/??)	1976.14 (m)	6483.4 (f)	N HEIGHT	3	
KL0829 NGVD 29	1976.14 (m)	6483.4 (f)	LEVELING	3	

KL0829
KL0829.Superseded values are not recommended for survey control.
KL0829
KL0829.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
KL0829.See file dsdata.pdf to determine how the superseded data were derived.
KL0829
KL0829_MARKER: I = METAL ROD
KL0829_SETTING: 49 = STAINLESS STEEL ROD W/O SLEEVE (10 FT.+)
KL0829_STAMPING: BROWN 1991
KL0829_MARK LOGO: NGS
KL0829_PROJECTION: FLUSH
KL0829_MAGNETIC: N = NO MAGNETIC MATERIAL
KL0829_STABILITY: B = PROBABLY HOLD POSITION/ELEVATION WELL
KL0829_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
KL0829+SATELLITE: SATELLITE OBSERVATIONS - June 26, 2000
KL0829_ROD/PIPE-DEPTH: 4.3 meters
KL0829_SLEEVE-DEPTH : 0.9 meters

KL0829
KL0829 HISTORY - Date Condition Report By
KL0829 HISTORY - 1991 MONUMENTED NGS
KL0829 HISTORY - 19910615 GOOD NGS
KL0829 HISTORY - 19941121 GOOD LOCENG
KL0829 HISTORY - 19971007 GOOD CODOT
KL0829 HISTORY - 19980923 GOOD MSI
KL0829 HISTORY - 19990510 GOOD NGS
KL0829 HISTORY - 20000626 GOOD NGS
KL0829
KL0829 STATION DESCRIPTION
KL0829
KL0829'DESCRIBED BY NATIONAL GEODETIC SURVEY 1991
KL0829'STATION IS LOCATED ABOUT 8 KM (5.0 MI) WEST OF EAGLE, 3 KM (1.9 MI)
KL0829'EAST OF GYPSUM, AT THE EAGLE COUNTY REGIONAL AIRPORT, BETWEEN RUNWAYS
KL0829'8-26 AND 7-25, ON THE WEST SIDE OF THE MOST WESTERLY TAXI, ON THE
KL0829'EAST SIDE OF A WINDSOCK AND SYMMETRICAL CIRCLE, NEAR THE WEST CENTRAL
KL0829'EDGE OF SECTION 3, T 5 S, R 85 W. OWNERSHIP--EAGLE COUNTY REGIONAL
KL0829'AIRPORT, PO BOX 850, EAGLE, CO 81631. AIRPORT MANAGER IS DAN
KL0829'REYNOLDS. PHONE IS 303-524-9490. MANAGERS OFFICE IS IN THE NATIONAL
KL0829'GUARD HANGAR BUILDING ON THE NORTH SIDE OF THE FIELD.
KL0829'TO REACH FROM THE GYPSUM EXIT OF INTERSTATE HIGHWAY 70 (EXIT 140), GO
KL0829'SOUTH ON OLD HIGHWAY 6 FOR 0.9 MI (1.4 KM) TO A STATE MAINTAINANCE
KL0829'YARD ENTRANCE ON THE LEFT. CONTINUE EAST FOR 1.5 MI (2.4 KM) TO A
KL0829'PAVED ROAD RIGHT AT BASE OF MESA AT SIGN -NORTH RAMP-. TURN SHARP
KL0829'RIGHT, SOUTHWEST, UPGRADE, THEN WEST FOR 0.5 MI (0.8 KM) TO ROAD END
KL0829'AT FAA BUILDING AND PAVED PARKING LOT. BEAR LEFT, NORTHEAST, FOR
KL0829'0.05 MI (0.08 KM) ACROSS PARKING LOT, THEN SHARP RIGHT, SOUTH,
KL0829'ALONGSIDE NATIONAL GUARD BUILDING TO THE APRON. TURN RIGHT, WEST, ON
KL0829'APRON FOR 0.15 MI (0.24 KM) TO END OF APRON AND TAXI ON THE LEFT.
KL0829'BEAR LEFT, SOUTHWEST, ON TAXI (CROSSING RUNWAY 8-26) FOR 0.15 MI
KL0829'(0.24 KM) TO THE WINDSOCK AND STATION ON THE RIGHT, ABOUT 75 M
KL0829'(246.1 FT) BEFORE REACHING RUNWAY.
KL0829'STATION MARK IS A PUNCH HOLE TOP CENTER IN A STEEL ROD ENCASED IN A
KL0829'PVC PIPE WITH LOGO CAP SET IN AN 0.5 M (1.6 FT) ROUND CONCRETE POST
KL0829'FLUSH WITH THE GROUND. IT IS 62.5 M (205.1 FT) NORTHWEST OF THE TAXI
KL0829'CENTER, 19.8 M (65.0 FT) EAST OF THE WINDSOCK POLE, 34.4 M
KL0829'(112.9 FT) NORTH OF THE TOP CENTER OF A CONCRETE DRAIN PIPE IN A
KL0829'ROCK-FILLED CATCH BASIN, 2.6 M (8.5 FT) SOUTHEAST OF THE ANGLE FORMED
KL0829'BY THE TRAFFIC PATTERN INDICATOR, 1.3 M (4.3 FT) EAST OF A FIBERGLASS
KL0829'WITNESS POST AND 1.4 M (4.6 FT) NORTH OF A FIBERGLASS WITNESS POST.
KL0829'DESCRIBED BY G.R.HEID
KL0829
KL0829 STATION RECOVERY (1991)
KL0829
KL0829'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1991
KL0829'THE STATION IS LOCATED AT THE EAGLE COUNTY REGOINAL AIRPORT NEAR THE
KL0829'MIDFIELD WINDSOCK. IT IS 66 FT (20.1 M) EAST OF THE WINDSOCK AND SET
KL0829'WITHIN THE EAST WING OF THE SEGMENTED CIRCLE. THE STATION IS A
KL0829'STAINLESS STEEL ROD SET WITHIN A NGS LOGO CAP STAMPED BROWN 1991 ON
KL0829'THE RIM.
KL0829
KL0829 STATION RECOVERY (1994)
KL0829
KL0829'RECOVERY NOTE BY LOCAL ENGINEER (INDIVIDUAL OR FIRM) 1994 (FH)
KL0829'RECOVERED AS DESCRIBED.
KL0829
KL0829 STATION RECOVERY (1997)
KL0829
KL0829'RECOVERY NOTE BY COLORADO DEPARTMENT OF TRANSPORTATION 1997 (RSC)
KL0829'RECOVERED AS DESCRIBED.
KL0829
KL0829 STATION RECOVERY (1998)
KL0829
KL0829'RECOVERY NOTE BY MEASUREMENT SCIENCE INCORPORATED 1998 (PD)

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KL0829'RECOVERED AS DESCRIBED
KL0829
KL0829                          STATION RECOVERY (1999)
KL0829
KL0829'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 1999 (RSC)
KL0829'THE STATION IS LOCATED ABOUT 4.5 MI (7.2 KM) WEST OF EAGLE, 2 MI (3.2
KL0829'KM) EAST OF GYPSUM AND 0.75 MI (1.21 KM) SOUTH OF INTERSTATE 70, IN
KL0829'THE SOUTHWEST 1/4 OF SECTION 3, T 5 S, R 85 W.  ACCESS TO THE AIRPORT
KL0829'IS CONTROLLED.  PERMISSION TO USE THIS STATION MUST BE OBTAINED FROM
KL0829'THE AIRPORT MANAGER.  OWNERSHIP--EAGLE COUNTY REGIONAL AIRPORT, P.O.
KL0829'BOX 850, EAGLE, CO 81631, AIRPORT MANAGER--JAMES P. ELWOOD,
KL0829'TELEPHONE--970-524-8246
KL0829'TO REACH THE STATION FROM INTERSTATE 70 EXIT 140, THE GYPSUM EXIT, GO
KL0829'SOUTHEAST ON OLD U.S.  HIGHWAY 6 FOR 0.65 MI (1.05 KM) TO A SIDE ROAD
KL0829'RIGHT, COTTONWOOD PASS ROAD.  TURN RIGHT, SOUTH, ON THE COTTONWOOD
KL0829'PASS WOOD FOR 0.45 MI (0.72 KM) TO A SIDE ROAD LEFT, COOLEY MESA ROAD.
KL0829'TURN LEFT, EAST, ON COOLEY MESA ROAD FOR 1.9 MI (3.1 KM) TO A SIDE
KL0829'ROAD LEFT, THE WESTERN ENTRANCE TO THE EAGLE COUNTY REGIONAL AIRPORT.
KL0829'TURN LEFT, NORTH, THAN NORTHWEST TO THE ARFF/SRE BUILDING. CONTACT
KL0829'AIRPORT OPERATION BEFORE GOING TO THE FLIGHT OPERATIONS AREA.  PASS
KL0829'THROUGH THE GATE AND ON TO THE TERMINAL RAMP, NORTH-NORTHWEST, FOR 0.1
KL0829'MI (0.2 KM) TO TAXIWAY A.  CROSS TAXIWAY A ON TO RAMP A/3,
KL0829'NORTH-NORTHWEST, FOR 0.1 MI (0.2 KM) TO RUNWAY 7/25. CROSS THE RUNWAY,
KL0829'NORTH, ON RAMP B/3 FOR 0.1 MI (0.2 KM) TO THE STATION NEAR THE
KL0829'WINDSOCK ON THE LEFT
KL0829'THE MARK IS A PUNCH HOLE, TOP CENTER ON A 4.3 M (14.1 FT) STAINLESS
KL0829'STEEL ROD DRIVEN TO REFUSAL, ENCASED IN A 0.9 M (3.0 FT) LONG GREASED
KL0829'PVC PIPE, ENCLOSED IN A 5-INCH PVC PIPE WITH LOGO LID, SURROUNDED BY A
KL0829'CONCRETE COLLAR FLUSH WITH THE GROUND.  IT IS 62.5 M (205.1 FT)
KL0829'NORTHWEST FROM RAMP B/3, 19.8 M (65.0 FT) EAST FROM THE WINDSOCK POLE,
KL0829'2.6 M (8.5 FT) SOUTHEAST FROM THE ANGLE FORMED BY THE TRAFFIC PATTERN
KL0829'INDICATOR, 1.3 M (4.3 FT) EAST FROM A WITNESS POST AND 1.4 M (4.6 FT)
KL0829'NORTH FROM A WITNESS POST.  THIS STATION IS DESIGNATED A PRIMARY
KL0829'AIRPORT CONTROL STATION FOR THE ANA PROJECT.
KL0829
KL0829                          STATION RECOVERY (2000)
KL0829
KL0829'RECOVERY NOTE BY NATIONAL GEODETIC SURVEY 2000 (DRL)
KL0829'RECOVERED AS DESCRIBED.
1        National Geodetic Survey,   Retrieval Date = NOVEMBER 24, 2017
AE4292 ***********************************************************************
AE4292  DESIGNATION -  BROWN
AE4292  PID         -  AE4292
AE4292  STATE/COUNTY-  CO/EL PASO
AE4292  COUNTRY     -  US
AE4292  USGS QUAD   -  MANITOU SPRINGS (1994)
AE4292
AE4292                        *CURRENT SURVEY CONTROL
AE4292  ______________________________________________________________________
AE4292* NAD 83(2011) POSITION- 38 47 26.16707(N) 104 54 13.98301(W)   ADJUSTED
AE4292* NAD 83(2011) ELLIP HT-  2272.979 (meters)        (06/27/12)   ADJUSTED
AE4292* NAD 83(2011) EPOCH   -  2010.00
AE4292* NAVD 88 ORTHO HEIGHT -  2289.1   (meters)     7510.    (feet) GPS OBS
AE4292  ______________________________________________________________________
AE4292  NAVD 88 orthometric height was determined with geoid model    GEOID96
AE4292  GEOID HEIGHT    -        -16.163 (meters)                     GEOID96
AE4292  GEOID HEIGHT    -        -16.171 (meters)                     GEOID12B
AE4292  NAD 83(2011) X  - -1,280,769.146 (meters)                     COMP
AE4292  NAD 83(2011) Y  - -4,812,171.444 (meters)                     COMP
AE4292  NAD 83(2011) Z  -  3,975,648.758 (meters)                     COMP
AE4292  LAPLACE CORR    -        -26.83  (seconds)                    DEFLEC12B
AE4292
AE4292  Network accuracy estimates per FGDC Geospatial Positioning Accuracy
AE4292  Standards:
AE4292         FGDC (95% conf, cm)     Standard deviation (cm)     CorrNE
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AE4292            Horiz  Ellip           SD_N   SD_E   SD_h      (unitless)
AE4292  ------------------------------------------------------------------
AE4292  NETWORK    1.75   6.37           0.78   0.63   3.25      0.14708151
AE4292  ------------------------------------------------------------------
AE4292  Click here for local accuracies and other accuracy information.
AE4292
AE4292
AE4292.The horizontal coordinates were established by GPS observations
AE4292.and adjusted by the National Geodetic Survey in June 2012.
AE4292
AE4292.NAD 83(2011) refers to NAD 83 coordinates where the reference frame has
AE4292.been affixed to the stable North American tectonic plate. See
AE4292.NA2011 for more information.
AE4292
AE4292.The horizontal coordinates are valid at the epoch date displayed above
AE4292.which is a decimal equivalence of Year/Month/Day.
AE4292
AE4292.The orthometric height was determined by GPS observations and a
AE4292.high-resolution geoid model.
AE4292
AE4292.Significant digits in the geoid height do not necessarily reflect accuracy.
AE4292.GEOID12B height accuracy estimate available here.
AE4292
AE4292.Photographs are available for this station.
AE4292
AE4292.The X, Y, and Z were computed from the position and the ellipsoidal ht.
AE4292
AE4292.The Laplace correction was computed from DEFLEC12B derived deflections.
AE4292
AE4292.The ellipsoidal height was determined by GPS observations
AE4292.and is referenced to NAD 83.
AE4292
AE4292. The following values were computed from the NAD 83(2011) position.
AE4292
AE4292;                    North         East     Units Scale Factor Converg.
AE4292;SPC CO C     -   411,234.038   966,190.125   MT  0.99995050   +0 22 33.5
AE4292;SPC CO C     - 1,349,190.34  3,169,908.77   sFT  0.99995050   +0 22 33.5
AE4292;UTM  13      - 4,293,544.262   508,347.315   MT  0.99960086   +0 03 36.8
AE4292
AE4292!             -  Elev Factor  x  Scale Factor =   Combined Factor
AE4292!SPC CO C     -   0.99964350  x   0.99995050  =   0.99959401
AE4292!UTM  13      -   0.99964350  x   0.99960086  =   0.99924450
AE4292
AE4292_U.S. NATIONAL GRID SPATIAL ADDRESS: 13SEC0834793544(NAD 83)
AE4292
AE4292                          SUPERSEDED SURVEY CONTROL
AE4292
AE4292  NAD 83(2007)-  38 47 26.16687(N)    104 54 13.98335(W) AD(2002.00) 0
AE4292  ELLIP H (02/10/07) 2273.027  (m)                       GP(2002.00)
AE4292  ELLIP H (12/03/02) 2273.030  (m)                       GP(       ) 4 2
AE4292  NAD 83(1992)-  38 47 26.16654(N)    104 54 13.98288(W) AD(       ) 1
AE4292  ELLIP H (10/31/97) 2273.042  (m)                       GP(       ) 4 1
AE4292
AE4292.Superseded values are not recommended for survey control.
AE4292
AE4292.NGS no longer adjusts projects to the NAD 27 or NGVD 29 datums.
AE4292.See file dsdata.pdf to determine how the superseded data were derived.
AE4292
AE4292_MARKER: DH = HORIZONTAL CONTROL DISK
AE4292_SETTING: 80 = SET IN A BOULDER
AE4292_STAMPING: BROWN 1996
AE4292_MARK LOGO: NGS
AE4292_MAGNETIC: O = OTHER; SEE DESCRIPTION
AE4292_STABILITY: C = MAY HOLD, BUT OF TYPE COMMONLY SUBJECT TO
AE4292+STABILITY: SURFACE MOTION
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AE4292_SATELLITE: THE SITE LOCATION WAS REPORTED AS SUITABLE FOR
AE4292+SATELLITE: SATELLITE OBSERVATIONS - January 25, 2004
AE4292
AE4292 HISTORY   - Date   Condition   Report By
AE4292 HISTORY   - 1996   MONUMENTED   NGS
AE4292 HISTORY   - 20040125 GOOD   GEOCAC
AE4292
AE4292   STATION DESCRIPTION
AE4292
AE4292'DESCRIBED BY NATIONAL GEODETIC SURVEY 1996 (RSC)
AE4292'THE STATION IS LOCATED ABOUT 6 MI (9.7 KM) WEST-NORTHWEST OF THE NORTH
AE4292'GATE TO FORT CARSON, 5 MI (8.0 KM) WEST-SOUTHWEST OF COLORADO SPRINGS
AE4292'AND 4.5 MI (7.2 KM) SOUTH OF MANITOU SPRINGS, IN THE NORTHWEST 1/4 OF
AE4292'SECTION 33, T 14 S, R 67 W. OWNERSHIP--CITY OF COLORADO SPRINGS PARKS
AE4292'DEPT TO REACH THE STATION FROM THE INTERSECTION OF CHEYENNE BLVD.
AE4292'AND CRESTA ROAD IN WESTERN COLORADO SPRINGS, GO WEST ON CHEYENNE BLVD.
AE4292'FOR 1.0 MI (1.6 KM) TO THE INTERSECTION OF NORTH CHEYENNE CANYON ROAD,
AE4292'EVANS ROAD AND SOUTH CHEYENNE CANYON ROAD. THE STARSMORE DISCOVERY
AE4292'CENTER IS JUST WEST OF THIS INTERSECTION. CONTINUE AHEAD, WEST, UP
AE4292'NORTH CHEYENNE CANYON ROAD FOR 3.3 MI, (5.3 KM) PAST HELEN HUNT FALLS,
AE4292'TO THE END OF PAVEMENT AND A PARKING AREA WHERE THE STATION IS LOCATED
AE4292'THE MARK IS A STANDARD DISK SET IN A DRILL HOLE IN THE TOP OF A
AE4292'GRANITE BOULDER, 2.7 M (8.9 FT) BY 1.5 M (4.9 FT) BY 0.8 M (2.6 FT)
AE4292'HIGH, IN THE MIDDLE OF THE PARKING LOT. IT IS 48.0 M (157.5 FT)
AE4292'NORTHWEST FROM THE NORTH POST HINGE FOR A GATE TO A ROAD GOING UPHILL
AE4292'(HIGH ROAD) , 43.4 M (142.4 FT) NORTHWEST FROM THE TIP OF THE GORE
AE4292'BETWEEN TWO ROADS GOING EAST OUT OF THE PARKING LOT AND 31.5 M (103.3
AE4292'FT) NORTH FROM THE HINGE ON THE GATE POST TO THE PARKING LOT.
AE4292
AE4292   STATION RECOVERY (2004)
AE4292
AE4292'RECOVERY NOTE BY GEOCACHING 2004 (CMD)
AE4292'RECOVERED AS DESCRIBED IN GOOD CONDITION

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