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SC V10-70      Copyright © Trimble Navigation Ltd, 1996-2003
              Serial no 4043      12-Oct-09 08:51
              Angle Degrees      Dist US Feet      Press inch Hg
              Temp Fahrenheit     Coord N-E-Elv      H.obs Right

JOB           Job ID FINAL-WASTE-ASB
              Atmos crn No      C and R crn Yes      Refrac cnst 0.20
              Elev Yes          Sea level crn No

NOTE        TS Time Date 01/30/2009 Time 17:08:46

LOCELL      KI Local Rad 20925604.474      Flat.      298.2572229329

SITE        KI Prj Lat <null>      Nrth Offset 0.000
              Prj Lng <null>      East Offset 0.000
              Prj Hgt 1645.000      Scale      1.0000000000

SHFTGRD    KI File name <no text>

PROJ        KI No Projection
              Orig Lat <null>      Orig Nrth <null>
              Orig Lng <null>      Orig East <null>
              Orig Hgt <null>      Orig Elev <null>
              Orient 1 <null>      Orient 2 <null>
              Scale <null>

DATUM       KI None
              Srce Rad 20925604.474      Srce Flat 298.2572229329
              Rotn X <null>      Rotn Y <null>
              Rotn Z <null>      Trans X <null>
              Trans Y <null>      Trans Z <null>
              Scale <null>

PLANE       KI Orig Nrth <null>      Orig East <null>
              Trans N <null>      Trans E <null>
              Rotation <null>      Scale <null>

HGTADJ     KI Inclined Plane
              Orig Nrth <null>      Slope N <null>
              Orig East <null>      Slope E <null>
              Hgt Const <null>
              Geoid <no text>

COORD       NM System Name <no text>
              Zone Name <no text>
              Datum Name <no text>
              Coord System Option <None>

F FILE      FC File <no text>      Used No
              ID 00000      Name

COGO        NM Azmth From North      Dir North-East

NOTE        NM Following data imported from 6-13-08-opus-obs.job

LOCELL      KI Local Rad 20925604.474      Flat.      298.2572229329

SITE        CB Prj Lat 36°03'01.84216"N      Nrth Offset 0.000
              Prj Lng 114°59'53.92840"W      East Offset 0.000
              Prj Hgt 1648.363      Scale      1.0000786812

SHFTGRD     CB File name <no text>

PROJ        CB Transverse Mercator
              Orig Lat 36°03'01.84216"N      Orig Nrth 18483.918
              Orig Lng 114°59'53.92840"W      Orig East 19186.597
              Orig Hgt 1643.256      Orig Elev 1738.580
              Orient 1 0°00'00"      Orient 2 0°00'00"
              Scale 1.0000000000

DATUM       CB Molodensky
              Srce Rad 20925604.474      Srce Flat 298.2572229329
              Rotn X 0°00'00"      Rotn Y 0°00'00"
              Rotn Z 0°00'00"      Trans X 0.000
              Trans Y 0.000      Trans Z 0.000
              Scale 0.0000000000

PLANE       CB Orig Nrth 18728.937      Orig East 15068.999
              Trans N -24.769      Trans E -1.419
              Rotation -0°20'39.273751"      Scale 1.0000000000

HGTADJ     CB Inclined Plane
              Orig Nrth 18483.893      Slope N -1.180
              Orig East 19186.576      Slope E 4.045
              Hgt Const 95.308
              Geoid <no text>

COORD       NM System Name <no text>
              Zone Name <no text>
              Datum Name <no text>
              Coord System Option Keyed in

COGO        NM Azmth From North      Dir North-East

NOTE        NM Following data imported from 6-13-08-opus-obs.job

NOTE        TS Time Date 01/30/2009 Time 15:55:57

COGO        NM Azmth From North      Dir North-East

SURVEY      KI Elev mask 10      PDOP mask 6.0

SURVEY      KI Elev mask 10      PDOP mask 6.0
    
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SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS SI Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1516
Init type On the fly seconds 518331.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213
NOTE NM Receiver firmware version=3.710
GPSANT KI Antenna ht 6.562 Measurement Uncorrected
GPSVEC SO Point ID Auto0057 DX -6175.665 DY 1205.103
Class Stake out DZ -2024.120 Code 106-1-30-09CHK
Obs L1 Fixed H.pr 0.020 V.pr 0.025
GPSQC1 NM Min SVs 9 PDOP max 1.0
Relative DOPs Yes HDOP max 0.7
Total GPS pos 3 VDOP max 0.8
Monitor status Not monitored RMS 12.3
Horz SD Vert SD
Start wk 1516 sec 518429.0 End wk 1516 sec 518454.0
GPSQC2 NM Ttl satellites 9 Err Scale 0.0099999998
VCV xx 0.0000153086 VCV xy 0.0000115193
VCV xz -0.0000102203 VCV yy 0.0000515362
VCV yz -0.0000091307 VCV zz 0.0000281475
PT DGN SO Name 106 To the Point
GRID D SO Delta N -0.014 Delta E -0.046
Delta Elv -0.043
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 01/30/2009 Time 17:01:35
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1516
Init type On the fly seconds 522121.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

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EQUIP NM Receiver SPS881 Serial no 4813149404
      Antenna R8 Model 2/SPS88x Internal
      Meas To Bottom of antenna mount
      Tape adj 0.000 Serial no <no text>
      H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 9.700 Measurement Uncorrected

GPSVEC SO Point ID Auto0058 DX -7029.868 DY 4145.283
      Class Stake out DZ 1039.198 Code 101-1-30-09CHK
      Obs L1 Fixed H.pr 0.024 V.pr 0.038

GPSQC1 NM Min SVs 12 PDOP max 1.4
      Relative DOPs Yes HDOP max 0.8
      Total GPS pos 4 VDOP max 1.2
      Monitor status Not monitored RMS 12.0
      Horz SD Vert SD
      Start wk 1516 sec 522174.0 End wk 1516 sec 522177.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
      VCV xx 0.0000606589 VCV xy 0.0000544312
      VCV xz -0.0000263995 VCV yy 0.0000885777
      VCV yz -0.0000315253 VCV zz 0.0000400671

PT DGN SO Name 101 To the Point

GRID D SO Delta N -0.074 Delta E -0.006
      Delta Elv 0.000

SURVEY EVENTKISurvey event Survey ended

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measurement True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
      Class Control Hgt 1645.648 Code 1_30_09_BASE
      Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
      Antenna Zephyr - Model 2
      Meas To Antenna Phase Center
      Tape adj 0.000 Serial no <no text>
      H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measurement True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1516
      Init type On the fly seconds 522487.0
      Init counter 1 Point ID <no text>
      Survey type Real Time Plate H.Dist <null>
      Plate V.Dist <null> Plate azimuth <null>

EQUIP NM Receiver SPS881 Serial no 4813149404
      Antenna R8 Model 2/SPS88x Internal
      Meas To Bottom of antenna mount
      Tape adj 0.000 Serial no <no text>
      H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 9.700 Measurement Uncorrected

GPSVEC SO Point ID Auto0059 DX -7594.793 DY 3076.144
      Class Stake out DZ -564.129 Code 102-1-30-09CHK
      Obs L1 Fixed H.pr 0.025 V.pr 0.041

GPSQC1 NM Min SVs 7 PDOP max 1.5
      Relative DOPs Yes HDOP max 0.8
      Total GPS pos 3 VDOP max 1.3
      Monitor status Not monitored RMS 11.9
      Horz SD Vert SD
      Start wk 1516 sec 522535.0 End wk 1516 sec 522538.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
      VCV xx 0.0000682628 VCV xy 0.0000617748
      VCV xz -0.0000322563 VCV yy 0.0000946383
      VCV yz -0.0000408528 VCV zz 0.000049765

PT DGN SO Name 102 To the Point

GRID D SO Delta N -0.024 Delta E -0.030
      Delta Elv -0.001

SURVEY EVENTKISurvey event Survey ended

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

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SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1516
Init type On the fly seconds 523108.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
SURVEY EVENTKISurvey event Survey ended
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1516
Init type On the fly seconds 523481.0
Init counter 3 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213
NOTE NM Receiver firmware version=3.710
GPSANT KI Antenna ht 9.700 Measurement Uncorrected
GPSVEC SO Point ID Auto0060 DX -4430.889 DY 2648.948
Class Stake out DZ 679.259 Code 107-1-30-09CHK
Obs L1 Fixed H.pr 0.020 V.pr 0.040
GPSQC1 NM Min SVs 11 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 4 VDOP max 1.3
Monitor status Not monitored RMS 18.3
Horz SD Vert SD
Start wk 1516 sec 523520.0 End wk 1516 sec 523523.0
GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000598084 VCV xy 0.0000569163
VCV xz -0.0000356114 VCV yy 0.0000798075
VCV yz -0.0000463645 VCV zz 0.0000480059
PT DGN SO Name 107 To the Point
GRID D SO Delta N -0.027 Delta E -0.003
Delta Elv -0.018
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 01/30/2009 Time 17:34:38
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started

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GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1516
Init type On the fly seconds 524112.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213
NOTE NM Receiver firmware version=3.710
GPSANT KI Antenna ht 9.700 Measurement Uncorrected
GPSVEC SO Point ID Auto0061 DX -1876.101 DY 316.357
Class Stake out DZ -689.516 Code 114-1-30-09CHK
Obs L1 Fixed H.pr 0.018 V.pr 0.041
GPSQC1 NM Min SVs 10 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 4 VDOP max 1.3
Monitor status Not monitored RMS 6.4
Horz SD Vert SD
Start wk 1516 sec 524185.0 End wk 1516 sec 524188.0
GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000547966 VCV xy 0.0000549887
VCV xz -0.000040623 VCV yy 0.0000745709
VCV yz -0.0000524861 VCV zz 0.0000537973
PT DGN SO Name 114 To the Point
GRID D SO Delta N 0.019 Delta E -0.012
Delta Elv -0.016
SURVEY EVENTKISurvey event Survey ended
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1516
Init type On the fly seconds 524691.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213
NOTE NM Receiver firmware version=3.710
GPSANT KI Antenna ht 9.700 Measurement Uncorrected
GPSVEC SO Point ID Auto0062 DX -5210.974 DY 2243.843
Class Stake out DZ -236.928 Code 434-1-30-09HK
Obs L1 Fixed H.pr 0.019 V.pr 0.039

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GPSQC1 NM Min SVs 11 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 4 VDOP max 1.2
Monitor status Not monitored RMS 15.6
Horz SD Vert SD
Start wk 1516 sec 524787.0 End wk 1516 sec 524790.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000443369 VCV xy 0.0000438598
VCV xz -0.0000319083 VCV yy 0.0000719584
VCV yz -0.0000506138 VCV zz 0.000059802

PT DGN SO Name 434 To the Point

GRID D SO Delta N 0.093 Delta E -0.124
Delta Elv -0.068

SURVEY EVENTKISurvey event Survey ended

SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measuremt True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measuremt True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1516
Init type On the fly seconds 525431.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 9.700 Measuremt Uncorrected

GPSVEC SO Point ID Auto0063 DX -6176.748 DY 1202.816
Class Stake out DZ -2022.263 Code 106-130-09RECHK-
Obs L1 Fixed H.pr 0.019 V.pr 0.036

F-CODE SO Code 106-130-09RECHK-TALL POLE

GPSQC1 NM Min SVs 11 PDOP max 1.3
Relative DOPs Yes HDOP max 0.6
Total GPS pos 4 VDOP max 1.1
Monitor status Not monitored RMS 16.6
Horz SD Vert SD
Start wk 1516 sec 525539.0 End wk 1516 sec 525542.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000342392 VCV xy 0.0000311803
VCV xz -0.0000237039 VCV yy 0.0000573259
VCV yz -0.0000428138 VCV zz 0.0000610667

PT DGN SO Name 106 To the Point

GRID D SO Delta N -0.026 Delta E -0.031
Delta Elv -0.043

GPSVEC SO Point ID Auto0064 DX -6101.761 DY 1541.958
Class Stake out DZ -1554.326 Code ABCS-CP420-1-30-
Obs L1 Fixed H.pr 0.020 V.pr 0.037

F-CODE SO Code ABCS-CP420-1-30-09CHK

GPSQC1 NM Min SVs 7 PDOP max 1.3
Relative DOPs Yes HDOP max 0.6
Total GPS pos 3 VDOP max 1.2
Monitor status Not monitored RMS 17.0
Horz SD Vert SD
Start wk 1516 sec 525768.0 End wk 1516 sec 525771.0

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
VCV xx 0.0000322694 VCV xy 0.0000303883
VCV xz -0.0000233197 VCV yy 0.0000614759
VCV yz -0.0000492575 VCV zz 0.0000735323

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PT DGN SO Name          420              To the Point
GRID D SO Delta N      -0.001          Delta E      -0.004
        Delta Ely     -0.014
NOTE   TS Time Date 01/30/2009 Time 18:06:59
SURVEY EVENTKISurvey event Survey ended
NOTE   TS Time Date 05/01/2009 Time 13:43:55
NOTE   TS Time Date 06/18/2009 Time 18:34:48
SURVEY KI Elev mask 10              PDOP mask 6.0
SURVEY KI Elev mask 10              PDOP mask 6.0
SURVEY KI Elev mask 10              PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000          Measuremt True
GPSPOS FD Point ID 44501          Lat 36°03'10.29917"N Lng 114°59'31.59480"W
        Class Control Hgt 1645.648          Code 1_30_09_BASE
        Obs User Input H.pr <null>          V.pr <null>
EQUIP SI Receiver SPS851          Serial no <no text>
        Antenna Zephyr - Model 2
        Meas To Antenna Phase Center
        Tape adj 0.000          Serial no <no text>
        H.Offset 0.000          V.Offset 0.000
NOTE   NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245          Measuremt True
GPSREF KI Reference 44501
INIT   KI Init event Gained          Week 1536
        Init type On the fly          seconds 437711.0
        Init counter 1          Point ID <no text>
        Survey type Real Time          Plate H.Dist <null>
        Plate V.Dist <null>          Plate azimuth <null>
NOTE   NM Following data imported from Phase 4 Stake.job
NOTE   NM Deleted 3:40:25 PM 7/17/2009
NOTE   NM Modified 6:28:16 PM 6/18/2009
NOTE   NM Old values
SURVEY EVENTKISurvey event Survey ended
NOTE   TS Time Date 07/17/2009 Time 15:41:25
NOTE   TS Time Date 08/20/2009 Time 15:57:35
NOTE   NM Following data imported from CAMU Controll1.CSV
NOTE   NM Following data imported from 8-19-09 Revised Waste PNTS.CSV
NOTE   NM Following data imported from PH-2+3A-IC-ASB.job
GPSANT KI Antenna ht 0.000          Measuremt True
GPSPOS CC Point ID 23204          Lat 36°02'52.08043"N Lng 115°00'56.30693"W
        Class Normal Hgt 1674.337          Code ph-1 temp cp
        Obs Copied H.pr <null>          V.pr <null>
SURVEY KI Elev mask 10              PDOP mask 6.0
SURVEY KI Elev mask 10              PDOP mask 6.0
SURVEY KI Elev mask 10              PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000          Measuremt True
GPSPOS FD Point ID 44501          Lat 36°03'10.29917"N Lng 114°59'31.59480"W
        Class Control Hgt 1645.648          Code 1_30_09_BASE
        Obs User Input H.pr <null>          V.pr <null>
EQUIP SI Receiver SPS851          Serial no <no text>
        Antenna Zephyr - Model 2
        Meas To Antenna Phase Center
        Tape adj 0.000          Serial no <no text>
        H.Offset 0.000          V.Offset 0.000
NOTE   NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245          Measuremt True
GPSREF KI Reference 44501
INIT   KI Init event Gained          Week 1545
        Init type On the fly          seconds 428524.0
        Init counter 1          Point ID <no text>
        Survey type Real Time          Plate H.Dist <null>
        Plate V.Dist <null>          Plate azimuth <null>

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EQUIP  NM Receiver SPS881          Serial no 4813149404
        Antenna R8 Model 2/SPS88x Internal
        Meas To Bottom of antenna mount
        Tape adj 0.000          Serial no <no text>
        H.Offset 0.000         V.Offset 0.213

NOTE    NM Receiver firmware version=3.710

GPSANT  KI Antenna ht 6.562          Measuremt Uncorrected

GPSVEC  SO Point ID Auto0065      DX -6773.869      DY 1934.959
        Class Stake out      DZ -1471.276      Code 8-20-09PRECHK
        Obs L1 Fixed         H.pr 0.021      V.pr 0.035

GPSQC1  NM Min SVs 12              PDOP max 1.3
        Relative DOPs Yes      HDOP max 0.7
        Total GPS pos 5        VDOP max 1.1
        Monitor status Not monitored RMS 12.9
        Horz SD                Vert SD
        Start wk 1545 sec 428538.0 End wk 1545 sec 428544.0

GPSQC2  NM Ttl satellites 12          Err Scale 0.0099999998
        VCV xx 0.0000489541      VCV xy 0.0000488933
        VCV xz -0.0000188354      VCV yy 0.0000821556
        VCV yz -0.0000290439      VCV zz 0.0000242419

PT DGN  SO Name 23204              To the Point

GRID D  SO Delta N 0.028          Delta E -0.040
        Delta Elv -0.025

NOTE    NM Following data imported from PH-2+3A-IC-ASB.job

GPSVEC  SO Point ID 23269          DX -6660.593      DY 1847.453
        Class Stake out      DZ -1516.828      Code toe
        Obs L1 Fixed         H.pr 0.021      V.pr 0.036

GPSQC1  NM Min SVs 12              PDOP max 1.3
        Relative DOPs Yes      HDOP max 0.7
        Total GPS pos 6        VDOP max 1.2
        Monitor status Not monitored RMS 8.5
        Horz SD                Vert SD
        Start wk 1545 sec 428669.0 End wk 1545 sec 428674.0

GPSQC2  NM Ttl satellites 12          Err Scale 0.0099999998
        VCV xx 0.0000493638      VCV xy 0.0000509759
        VCV xz -0.0000195054      VCV yy 0.0000872277
        VCV yz -0.0000322111      VCV zz 0.0000260214

PT DGN  SO Name 75165              To the Point

GRID D  SO Delta N 0.092          Delta E 0.658
        Delta Elv -0.217

GPSVEC  TP Point ID 23270          DX -6659.304      DY 1846.391
        Class Normal          DZ -1516.522      Code toe-1
        Obs L1 Fixed         H.pr 0.021      V.pr 0.036

GPSQC1  NM Min SVs 12              PDOP max 1.3
        Relative DOPs Yes      HDOP max 0.7
        Total GPS pos 6        VDOP max 1.2
        Monitor status Not monitored RMS 15.3
        Horz SD                Vert SD
        Start wk 1545 sec 428685.0 End wk 1545 sec 428690.0

GPSQC2  NM Ttl satellites 12          Err Scale 0.0099999998
        VCV xx 0.000049026        VCV xy 0.0000507132
        VCV xz -0.0000196483      VCV yy 0.0000869607
        VCV yz -0.0000323993      VCV zz 0.0000263721

GPSVEC  SO Point ID 23271          DX -6658.213      DY 1861.823
        Class Stake out      DZ -1498.081      Code toe
        Obs L1 Fixed         H.pr 0.021      V.pr 0.037

GPSQC1  NM Min SVs 12              PDOP max 1.3
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 6        VDOP max 1.1
        Monitor status Not monitored RMS 11.9
        Horz SD                Vert SD
        Start wk 1545 sec 428720.0 End wk 1545 sec 428725.0

GPSQC2  NM Ttl satellites 12          Err Scale 0.0099999998
        VCV xx 0.0000490094        VCV xy 0.00005089
        VCV xz -0.0000200786      VCV yy 0.0000874008
        VCV yz -0.0000330108      VCV zz 0.0000271148

PT DGN  SO Name 75164              To the Point

GRID D  SO Delta N -0.035          Delta E -0.064
        Delta Elv 0.009

GPSVEC  TP Point ID 23272          DX -6657.037      DY 1861.034
        Class Normal          DZ -1497.564      Code toe-1
        Obs L1 Fixed         H.pr 0.021      V.pr 0.037

GPSQC1  NM Min SVs 12              PDOP max 1.3
        Relative DOPs Yes      HDOP max 0.7
        Total GPS pos 6        VDOP max 1.2
        Monitor status Not monitored RMS 15.7
        Horz SD                Vert SD
        Start wk 1545 sec 428749.0 End wk 1545 sec 428754.0
    
```

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GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000492794 VCV xy 0.0000513606
VCV xz -0.0000204483 VCV yy 0.0000881789
VCV yz -0.0000335551 VCV zz 0.0000276028

GPSVEC SO Point ID 23273 DX -6655.834 DY 1870.535
Class Stake out DZ -1485.902 Code toe
Obs L1 Fixed H.pr 0.021 V.pr 0.037

GPSQC1 NM Min SVs 12 PDOP max 1.3
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 12.3
Horz SD Vert SD
Start wk 1545 sec 428808.0 End wk 1545 sec 428813.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000495824 VCV xy 0.0000520813
VCV xz -0.0000210377 VCV yy 0.0000897412
VCV yz -0.0000345601 VCV zz 0.000028416

PT DGN SO Name 75163 To the Point

GRID D SO Delta N -0.006 Delta E -0.319
Delta Elv -0.014

GPSVEC TP Point ID 23274 DX -6654.493 DY 1869.510
Class Normal DZ -1485.475 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.037

GPSQC1 NM Min SVs 12 PDOP max 1.3
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 13.0
Horz SD Vert SD
Start wk 1545 sec 428827.0 End wk 1545 sec 428832.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.000048854 VCV xy 0.0000514534
VCV xz -0.0000208939 VCV yy 0.0000889799
VCV yz -0.0000343991 VCV zz 0.0000282865

GPSVEC SO Point ID 23275 DX -6652.151 DY 1878.893
Class Stake out DZ -1473.331 Code toe
Obs L1 Fixed H.pr 0.021 V.pr 0.038

GPSQC1 NM Min SVs 12 PDOP max 1.4
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 12.6
Horz SD Vert SD
Start wk 1545 sec 428875.0 End wk 1545 sec 428880.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000499584 VCV xy 0.0000529798
VCV xz -0.0000215987 VCV yy 0.0000914873
VCV yz -0.000035551 VCV zz 0.0000289991

PT DGN SO Name 75162 To the Point

GRID D SO Delta N -0.039 Delta E 0.176
Delta Elv -0.071

GPSVEC TP Point ID 23276 DX -6650.920 DY 1877.636
Class Normal DZ -1473.092 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.037

GPSQC1 NM Min SVs 12 PDOP max 1.3
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 14.2
Horz SD Vert SD
Start wk 1545 sec 428899.0 End wk 1545 sec 428904.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000491778 VCV xy 0.0000523244
VCV xz -0.0000214505 VCV yy 0.0000907812
VCV yz -0.0000354237 VCV zz 0.000028881

GPSVEC SO Point ID 23277 DX -6645.865 DY 1886.120
Class Stake out DZ -1460.772 Code toe
Obs L1 Fixed H.pr 0.021 V.pr 0.038

GPSQC1 NM Min SVs 12 PDOP max 1.4
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 10.2
Horz SD Vert SD
Start wk 1545 sec 428996.0 End wk 1545 sec 429001.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000504487 VCV xy 0.0000544346
VCV xz -0.000022548 VCV yy 0.0000948769
VCV yz -0.00003744 VCV zz 0.0000301052

PT DGN SO Name 75161 To the Point

GRID D SO Delta N 0.008 Delta E -0.032
Delta Elv -0.075

GPSVEC TP Point ID 23278 DX -6644.214 DY 1884.400
Class Normal DZ -1461.249 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.038
    
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GPSQC1 NM Min SVs 12 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 13.3
Horz SD Vert SD
Start wk 1545 sec 429016.0 End wk 1545 sec 429021.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000495264 VCV xy 0.000053583
VCV xz -0.0000223047 VCV yy 0.0000938733
VCV yz -0.0000371755 VCV zz 0.0000299028

GPSVEC SO Point ID 23279 DX -6638.409 DY 1892.579
Class Stake out DZ -1448.642 Code toe
Obs L1 Fixed H.pr 0.021 V.pr 0.038

GPSQC1 NM Min SVs 12 PDOP max 1.4
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 8.5
Horz SD Vert SD
Start wk 1545 sec 429060.0 End wk 1545 sec 429065.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000503869 VCV xy 0.0000548664
VCV xz -0.0000228545 VCV yy 0.0000958928
VCV yz -0.0000380862 VCV zz 0.0000303343

PT DGN SO Name 75160 To the Point

GRID D SO Delta N -0.103 Delta E 0.457
Delta Elv 0.018

GPSVEC TP Point ID 23280 DX -6637.312 DY 1890.910
Class Normal DZ -1448.998 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.038

GPSQC1 NM Min SVs 12 PDOP max 1.4
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 16.3
Horz SD Vert SD
Start wk 1545 sec 429086.0 End wk 1545 sec 429091.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000497209 VCV xy 0.0000543373
VCV xz -0.0000227647 VCV yy 0.0000954975
VCV yz -0.0000381027 VCV zz 0.0000303372

GPSVEC SO Point ID 23281 DX -6628.831 DY 1897.220
Class Stake out DZ -1437.333 Code toe
Obs L1 Fixed H.pr 0.020 V.pr 0.038

GPSQC1 NM Min SVs 12 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 8.5
Horz SD Vert SD
Start wk 1545 sec 429111.0 End wk 1545 sec 429116.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000491466 VCV xy 0.0000538902
VCV xz -0.0000226796 VCV yy 0.0000951258
VCV yz -0.0000380973 VCV zz 0.0000303042

PT DGN SO Name 75159 To the Point

GRID D SO Delta N -0.094 Delta E 0.149
Delta Elv -0.013

GPSVEC TP Point ID 23282 DX -6628.157 DY 1895.856
Class Normal DZ -1437.595 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.038

GPSQC1 NM Min SVs 12 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 18.9
Horz SD Vert SD
Start wk 1545 sec 429126.0 End wk 1545 sec 429131.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000485698 VCV xy 0.0000533669
VCV xz -0.0000225273 VCV yy 0.0000944972
VCV yz -0.0000379356 VCV zz 0.0000301697

GPSVEC SO Point ID 23283 DX -6617.718 DY 1900.767
Class Stake out DZ -1426.531 Code toe
Obs L1 Fixed H.pr 0.020 V.pr 0.039

GPSQC1 NM Min SVs 12 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 16.0
Horz SD Vert SD
Start wk 1545 sec 429174.0 End wk 1545 sec 429179.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000493568 VCV xy 0.0000546065
VCV xz -0.0000231155 VCV yy 0.0000966996
VCV yz -0.0000389963 VCV zz 0.0000307575
    
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PT DGN SO Name 75158 To the Point
GRID D SO Delta N -0.039 Delta E 0.074
Delta Elv -0.021
GPSVEC TP Point ID 23284 DX -6616.924 DY 1898.951
Class Normal DZ -1427.258 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.038
GPSQC1 NM Min SVs 12 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 14.2
Horz SD Vert SD
Start wk 1545 sec 429192.0 End wk 1545 sec 429197.0
GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000484121 VCV xy 0.0000536861
VCV xz -0.0000228336 VCV yy 0.0000955881
VCV yz -0.0000386806 VCV zz 0.0000305469
GPSVEC SO Point ID 23285 DX -6605.329 DY 1902.665
Class Stake out DZ -1417.027 Code toe
Obs L1 Fixed H.pr 0.020 V.pr 0.039
GPSQC1 NM Min SVs 11 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 12.5
Horz SD Vert SD
Start wk 1545 sec 429248.0 End wk 1545 sec 429253.0
GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000498901 VCV xy 0.0000558497
VCV xz -0.0000244117 VCV yy 0.000099164
VCV yz -0.0000410538 VCV zz 0.0000323294
PT DGN SO Name 75157 To the Point
GRID D SO Delta N 0.133 Delta E -0.237
Delta Elv -0.037
GPSVEC TP Point ID 23286 DX -6604.971 DY 1901.047
Class Normal DZ -1417.602 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.039
GPSQC1 NM Min SVs 11 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.3
Monitor status Not monitored RMS 21.8
Horz SD Vert SD
Start wk 1545 sec 429264.0 End wk 1545 sec 429269.0
GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000497862 VCV xy 0.0000558721
VCV xz -0.0000245482 VCV yy 0.000099336
VCV yz -0.0000413052 VCV zz 0.0000325209
GPSVEC SO Point ID 23287 DX -6773.882 DY 1934.928
Class Stake out DZ -1471.227 Code 8-20-09POSTCHK
Obs L1 Fixed H.pr 0.020 V.pr 0.039
GPSQC1 NM Min SVs 11 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.3
Monitor status Not monitored RMS 11.5
Horz SD Vert SD
Start wk 1545 sec 429344.0 End wk 1545 sec 429349.0
GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000509814 VCV xy 0.0000573339
VCV xz -0.000024832 VCV yy 0.0001010451
VCV yz -0.000039991 VCV zz 0.0000286546
PT DGN SO Name 23204 To the Point
GRID D SO Delta N 0.008 Delta E -0.041
Delta Elv -0.081
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 08/21/2009 Time 06:17:19
NOTE TS Time Date 08/21/2009 Time 06:59:35
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurmt True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>

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EQUIP SI Receiver SPS851 Serial no <no text>
      Antenna Zephyr - Model 2
      Meas To Antenna Phase Center
      Tape adj 0.000 Serial no <no text>
      H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measurement True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1545
      Init type On the fly seconds 482407.0
      Init counter 1 Point ID <no text>
      Survey type Real Time Plate H.Dist <null>
      Plate V.Dist <null> Plate azimuth <null>

EQUIP NM Receiver SPS881 Serial no 4813149404
      Antenna R8 Model 2/SPS88x Internal
      Meas To Bottom of antenna mount
      Tape adj 0.000 Serial no <no text>
      H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 6.562 Measurement Uncorrected

GPSVEK SO Point ID 23288 DX -6773.882 DY 1934.967
      Class Stake out DZ -1471.269 Code 8-21-09prechk
      Obs L1 Fixed H.pr 0.023 V.pr 0.035

GPSQC1 NM Min SVs 10 PDOP max 1.3
      Relative DOPs Yes HDOP max 0.7
      Total GPS pos 6 VDOP max 1.1
      Monitor status Not monitored RMS 10.7
      Horz SD Vert SD
      Start wk 1545 sec 482582.0 End wk 1545 sec 482587.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
      VCV xx 0.0000401457 VCV xy 0.0000447908
      VCV xz -0.000011687 VCV yy 0.0000965898
      VCV yz -0.000025792 VCV zz 0.0000293924

PT DGN SO Name 23204 To the Point

GRID D SO Delta N 0.021 Delta E -0.024
      Delta Elv -0.028

GPSVEK SO Point ID 23289 DX -6592.411 DY 1903.587
      Class Stake out DZ -1408.541 Code toe
      Obs L1 Fixed H.pr 0.022 V.pr 0.033

GPSQC1 NM Min SVs 10 PDOP max 1.2
      Relative DOPs Yes HDOP max 0.7
      Total GPS pos 6 VDOP max 1.0
      Monitor status Not monitored RMS 14.0
      Horz SD Vert SD
      Start wk 1545 sec 482917.0 End wk 1545 sec 482922.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
      VCV xx 0.0000327624 VCV xy 0.00003427
      VCV xz -0.0000101904 VCV yy 0.0000815937
      VCV yz -0.0000250415 VCV zz 0.0000293615

PT DGN SO Name 75156 To the Point

GRID D SO Delta N 0.033 Delta E 0.095
      Delta Elv 0.017

GPSVEK TP Point ID 23290 DX -6592.021 DY 1901.474
      Class Normal DZ -1409.731 Code toe-1
      Obs L1 Fixed H.pr 0.021 V.pr 0.033

GPSQC1 NM Min SVs 6 PDOP max 1.2
      Relative DOPs Yes HDOP max 0.7
      Total GPS pos 5 VDOP max 1.0
      Monitor status Not monitored RMS 17.4
      Horz SD Vert SD
      Start wk 1545 sec 482935.0 End wk 1545 sec 482941.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
      VCV xx 0.0000322441 VCV xy 0.0000335298
      VCV xz -0.0000099387 VCV yy 0.0000802701
      VCV yz -0.0000248094 VCV zz 0.0000292341

GPSVEK SO Point ID 23291 DX -6578.651 DY 1903.006
      Class Stake out DZ -1401.133 Code toe
      Obs L1 Fixed H.pr 0.021 V.pr 0.032

GPSQC1 NM Min SVs 10 PDOP max 1.2
      Relative DOPs Yes HDOP max 0.7
      Total GPS pos 6 VDOP max 1.0
      Monitor status Not monitored RMS 7.8
      Horz SD Vert SD
      Start wk 1545 sec 482975.0 End wk 1545 sec 482980.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
      VCV xx 0.0000314326 VCV xy 0.0000324274
      VCV xz -0.0000097465 VCV yy 0.000078545
      VCV yz -0.0000246406 VCV zz 0.0000291316
    
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PT DGN	SO	Name	75155	To the Point	
GRID D	SO	Delta N	-0.289	Delta E	0.346
		Delta Elv	-0.114		
GPSVEC	TP	Point ID 23292	DX -6578.161	DY	1901.205
		Class Normal	DZ -1402.046	Code toe-1	
		Obs L1 Fixed	H.pr 0.021	V.pr	0.032
GPSQC1	NM	Min SVs	6	PDOP max	1.2
		Relative DOPs	Yes	HDOP max	0.7
		Total GPS pos	6	VDOP max	1.0
		Monitor status	Not monitored	RMS	11.3
		Horz SD		Vert SD	
		Start wk 1545 sec	482993.0	End wk 1545 sec	482999.0
GPSQC2	NM	Ttl satellites	6	Err Scale	0.0099999998
		VCV xx	0.0000310789	VCV xy	0.0000318653
		VCV xz	-0.0000095786	VCV yy	0.0000775971
		VCV yz	-0.0000245304	VCV zz	0.0000291711
GPSVEC	SO	Point ID 23293	DX -6564.263	DY	1901.620
		Class Stake out	DZ -1394.344	Code toe	
		Obs L1 Fixed	H.pr 0.021	V.pr	0.032
GPSQC1	NM	Min SVs	10	PDOP max	1.2
		Relative DOPs	Yes	HDOP max	0.7
		Total GPS pos	6	VDOP max	1.0
		Monitor status	Not monitored	RMS	12.6
		Horz SD		Vert SD	
		Start wk 1545 sec	483061.0	End wk 1545 sec	483066.0
GPSQC2	NM	Ttl satellites	10	Err Scale	0.0099999998
		VCV xx	0.0000303926	VCV xy	0.0000305541
		VCV xz	-0.0000092553	VCV yy	0.0000761002
		VCV yz	-0.0000247336	VCV zz	0.0000297596
PT DGN	SO	Name	75154	To the Point	
GRID D	SO	Delta N	-1.683	Delta E	0.769
		Delta Elv	-0.263		
GPSVEC	TP	Point ID 23294	DX -6564.518	DY	1899.784
		Class Normal	DZ -1395.897	Code toe-1	
		Obs L1 Fixed	H.pr 0.021	V.pr	0.032
GPSQC1	NM	Min SVs	10	PDOP max	1.2
		Relative DOPs	Yes	HDOP max	0.7
		Total GPS pos	6	VDOP max	1.0
		Monitor status	Not monitored	RMS	12.3
		Horz SD		Vert SD	
		Start wk 1545 sec	483081.0	End wk 1545 sec	483086.0
GPSQC2	NM	Ttl satellites	10	Err Scale	0.0099999998
		VCV xx	0.0000299095	VCV xy	0.0000298929
		VCV xz	-0.0000090571	VCV yy	0.0000749479
		VCV yz	-0.0000245507	VCV zz	0.0000296283
GPSVEC	SO	Point ID 23295	DX -6549.445	DY	1898.016
		Class Stake out	DZ -1390.318	Code toe	
		Obs L1 Fixed	H.pr 0.021	V.pr	0.032
GPSQC1	NM	Min SVs	10	PDOP max	1.2
		Relative DOPs	Yes	HDOP max	0.6
		Total GPS pos	6	VDOP max	1.0
		Monitor status	Not monitored	RMS	11.9
		Horz SD		Vert SD	
		Start wk 1545 sec	483110.0	End wk 1545 sec	483115.0
GPSQC2	NM	Ttl satellites	10	Err Scale	0.0099999998
		VCV xx	0.0000294002	VCV xy	0.0000292078
		VCV xz	-0.0000089538	VCV yy	0.000073891
		VCV yz	-0.0000244716	VCV zz	0.0000295918
PT DGN	SO	Name	75153	To the Point	
GRID D	SO	Delta N	-1.717	Delta E	0.758
		Delta Elv	-0.247		
GPSVEC	TP	Point ID 23296	DX -6550.223	DY	1896.508
		Class Normal	DZ -1392.014	Code toe-1	
		Obs L1 Fixed	H.pr 0.021	V.pr	0.031
GPSQC1	NM	Min SVs	10	PDOP max	1.2
		Relative DOPs	Yes	HDOP max	0.6
		Total GPS pos	6	VDOP max	1.0
		Monitor status	Not monitored	RMS	13.9
		Horz SD		Vert SD	
		Start wk 1545 sec	483146.0	End wk 1545 sec	483151.0
GPSQC2	NM	Ttl satellites	10	Err Scale	0.0099999998
		VCV xx	0.0000288882	VCV xy	0.0000284796
		VCV xz	-0.0000088621	VCV yy	0.0000728704
		VCV yz	-0.0000244674	VCV zz	0.0000296722
GPSVEC	SO	Point ID 23297	DX -6538.010	DY	1893.864
		Class Stake out	DZ -1388.939	Code toe	
		Obs L1 Fixed	H.pr 0.021	V.pr	0.031

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GPSQC1 NM Min SVs 10 PDOP max 1.2
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 14.8
Horz SD Vert SD
Start wk 1545 sec 483178.0 End wk 1545 sec 483183.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000284174 VCV xy 0.0000278261
VCV xz -0.0000087719 VCV yy 0.0000719205
VCV yz -0.0000244414 VCV zz 0.0000297155

PT DGN SO Name 75152 To the Point

GRID D SO Delta N -1.582 Delta E 0.940
Delta Elv -0.232

GPSVEC TP Point ID 23298 DX -6539.094 DY 1892.090
Class Normal DZ -1391.036 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.031

GPSQC1 NM Min SVs 10 PDOP max 1.2
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 1.0
Monitor status Not monitored RMS 10.7
Horz SD Vert SD
Start wk 1545 sec 483198.0 End wk 1545 sec 483203.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000280586 VCV xy 0.0000273662
VCV xz -0.0000086934 VCV yy 0.0000711643
VCV yz -0.0000243615 VCV zz 0.0000296566

GPSVEC SO Point ID 23299 DX -6531.361 DY 1890.567
Class Stake out DZ -1388.947 Code toe
Obs L1 Fixed H.pr 0.020 V.pr 0.031

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 1.0
Monitor status Not monitored RMS 7.0
Horz SD Vert SD
Start wk 1545 sec 483225.0 End wk 1545 sec 483231.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000275023 VCV xy 0.0000266656
VCV xz -0.0000085574 VCV yy 0.0000699569
VCV yz -0.0000241921 VCV zz 0.0000295103

PT DGN SO Name 75151 To the Point

GRID D SO Delta N -0.942 Delta E 0.224
Delta Elv -0.370

GPSVEC TP Point ID 23300 DX -6531.946 DY 1889.310
Class Normal DZ -1390.424 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.031

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 13.5
Horz SD Vert SD
Start wk 1545 sec 483250.0 End wk 1545 sec 483255.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.000027142 VCV xy 0.0000261795
VCV xz -0.0000084771 VCV yy 0.0000692003
VCV yz -0.0000241451 VCV zz 0.0000295166

GPSVEC SO Point ID 23301 DX -6523.152 DY 1886.538
Class Stake out DZ -1389.267 Code toe
Obs L1 Fixed H.pr 0.020 V.pr 0.031

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 12.5
Horz SD Vert SD
Start wk 1545 sec 483287.0 End wk 1545 sec 483292.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000269734 VCV xy 0.0000256157
VCV xz -0.0000082686 VCV yy 0.0000687759
VCV yz -0.0000244371 VCV zz 0.0000301268

PT DGN SO Name 75150 To the Point

GRID D SO Delta N -0.415 Delta E 0.028
Delta Elv -0.408

GPSVEC TP Point ID 23302 DX -6523.902 DY 1885.255
Class Normal DZ -1390.726 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.031

GPSQC1 NM Min SVs 10 PDOP max 1.2
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 13.2
Horz SD Vert SD
Start wk 1545 sec 483307.0 End wk 1545 sec 483312.0

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GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.000026792 VCV xy 0.0000253264
VCV xz -0.0000082388 VCV yy 0.0000684413
VCV yz -0.0000245061 VCV zz 0.0000302682

GPSVEC SO Point ID 23303 DX -6516.618 DY 1883.231
Class Stake out DZ -1389.633 Code toe
Obs L1 Fixed H.pr 0.020 V.pr 0.031

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 1.0
Monitor status Not monitored RMS 14.2
Horz SD Vert SD
Start wk 1545 sec 483354.0 End wk 1545 sec 483360.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000262958 VCV xy 0.0000245729
VCV xz -0.0000081371 VCV yy 0.0000674845
VCV yz -0.0000246017 VCV zz 0.0000305247

PT DGN SO Name 75149 To the Point

GRID D SO Delta N -0.343 Delta E -0.080
Delta Elv -0.373

GPSVEC TP Point ID 23304 DX -6517.389 DY 1881.945
Class Normal DZ -1391.054 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.030

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 13.5
Horz SD Vert SD
Start wk 1545 sec 483378.0 End wk 1545 sec 483384.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000260219 VCV xy 0.0000241048
VCV xz -0.0000079817 VCV yy 0.0000668584
VCV yz -0.0000246414 VCV zz 0.0000306779

GPSVEC SO Point ID 23305 DX -6512.153 DY 1880.541
Class Stake out DZ -1390.319 Code toe
Obs L1 Fixed H.pr 0.020 V.pr 0.030

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 11.3
Horz SD Vert SD
Start wk 1545 sec 483414.0 End wk 1545 sec 483419.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000257162 VCV xy 0.0000236136
VCV xz -0.0000079211 VCV yy 0.0000662887
VCV yz -0.000024762 VCV zz 0.0000309368

PT DGN SO Name 75148 To the Point

GRID D SO Delta N 0.038 Delta E -0.068
Delta Elv -0.475

GPSVEC TP Point ID 23306 DX -6513.278 DY 1879.403
Class Normal DZ -1391.854 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.030

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 13.1
Horz SD Vert SD
Start wk 1545 sec 483452.0 End wk 1545 sec 483457.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000253591 VCV xy 0.0000230726
VCV xz -0.0000078459 VCV yy 0.0000656077
VCV yz -0.0000248593 VCV zz 0.0000311699

GPSVEC SO Point ID 23307 DX -6504.238 DY 1876.101
Class Stake out DZ -1391.536 Code toe
Obs L1 Fixed H.pr 0.020 V.pr 0.030

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 8.7
Horz SD Vert SD
Start wk 1545 sec 483491.0 End wk 1545 sec 483496.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000250532 VCV xy 0.0000225769
VCV xz -0.0000077853 VCV yy 0.0000650583
VCV yz -0.0000250171 VCV zz 0.0000314892

PT DGN SO Name 75147 To the Point

GRID D SO Delta N -0.045 Delta E -0.019
Delta Elv -0.320

GPSVEC TP Point ID 23308 DX -6505.464 DY 1875.299
Class Normal DZ -1392.727 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.030
    
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GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 12.8
Horz SD Vert SD
Start wk 1545 sec 483510.0 End wk 1545 sec 483515.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000248772 VCV xy 0.0000223192
VCV xz -0.000007748 VCV yy 0.0000647251
VCV yz -0.000025067 VCV zz 0.0000316045

GPSVEC SO Point ID 23309 DX -6495.038 DY 1870.225
Class Stake out DZ -1393.471 Code toe
Obs L1 Fixed H.pr 0.020 V.pr 0.030

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 11.0
Horz SD Vert SD
Start wk 1545 sec 483544.0 End wk 1545 sec 483549.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000246621 VCV xy 0.0000219357
VCV xz -0.0000077051 VCV yy 0.0000643647
VCV yz -0.0000252551 VCV zz 0.0000319602

PT DGN SO Name 75146 To the Point

GRID D SO Delta N -0.232 Delta E 0.013
Delta Elv -0.364

GPSVEC TP Point ID 23310 DX -6496.247 DY 1869.496
Class Normal DZ -1394.463 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.030

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 10.9
Horz SD Vert SD
Start wk 1545 sec 483564.0 End wk 1545 sec 483569.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000242741 VCV xy 0.000021492
VCV xz -0.0000075951 VCV yy 0.000063497
VCV yz -0.0000250881 VCV zz 0.000031783

GPSVEC SO Point ID 23311 DX -6482.759 DY 1861.967
Class Stake out DZ -1396.820 Code toe
Obs L1 Fixed H.pr 0.020 V.pr 0.030

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 10.0
Horz SD Vert SD
Start wk 1545 sec 483606.0 End wk 1545 sec 483611.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000241262 VCV xy 0.0000211247
VCV xz -0.0000075716 VCV yy 0.0000633364
VCV yz -0.0000254447 VCV zz 0.000032402

PT DGN SO Name 75145 To the Point

GRID D SO Delta N -0.757 Delta E 0.058
Delta Elv -0.343

GPSVEC TP Point ID 23312 DX -6484.030 DY 1861.178
Class Normal DZ -1397.823 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.030

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 12.1
Horz SD Vert SD
Start wk 1545 sec 483624.0 End wk 1545 sec 483629.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000239727 VCV xy 0.0000207839
VCV xz -0.0000074163 VCV yy 0.0000630044
VCV yz -0.0000255743 VCV zz 0.000032637

GPSVEC SO Point ID 23313 DX -6773.906 DY 1934.948
Class Stake out DZ -1471.283 Code 8-21-09postchk
Obs L1 Fixed H.pr 0.020 V.pr 0.029

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 10.8
Horz SD Vert SD
Start wk 1545 sec 483744.0 End wk 1545 sec 483749.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000240085 VCV xy 0.0000201317
VCV xz -0.0000075065 VCV yy 0.0000601303
VCV yz -0.0000230041 VCV zz 0.0000300802
    
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PT DGN SO Name          23204          To the Point
GRID D SO Delta N      0.048          Delta E      -0.011
        Delta Elev    -0.041

SURVEY EVENTKISurvey event Survey ended

NOTE   TS Time Date 08/21/2009 Time 08:08:09

NOTE   TS Time Date 09/09/2009 Time 09:21:42

SURVEY KI Elev mask 10          PDOP mask 6.0

SURVEY KI Elev mask 10          PDOP mask 6.0

SURVEY KI Elev mask 10          PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000          Measuremt True

GPSPOS FD Point ID 44501          Lat 36°03'10.29917"N Lng 114°59'31.59480"W
        Class Control          Hgt 1645.648          Code 1_30_09_BASE
        Obs User Input          H.pr <null>          V.pr <null>

EQUIP  SI Receiver SPS851          Serial no <no text>
        Antenna Zephyr - Model 2
        Meas To Antenna Phase Center
        Tape adj 0.000          Serial no <no text>
        H.Offset 0.000          V.Offset 0.000

NOTE   NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245          Measuremt True

GPSREF KI Reference 44501

INIT   KI Init event Gained          Week 1548
        Init type On the fly          seconds 318138.0
        Init counter 1          Point ID <no text>
        Survey type Real Time          Plate H.Distance <null>
        Plate V.Distance <null>          Plate azimuth <null>

NOTE   TS Time Date 09/09/2009 Time 09:52:29

LINE   KI Line Line0001          Code <no text>
        Start Pt 34012          End Pt 34040
        St North 16789.211          End North 16740.503
        St East 13385.264          End East 13527.484
        St Elev 1770.196          End Elev 1820.231
        Start Stn 0.000          Stn Int <null>

LINE   KI Line Line0002          Code <no text>
        Start Pt 34013          End Pt 34040
        St North 16745.893          End North 16740.503
        St East 13376.359          End East 13527.484
        St Elev 1770.629          End Elev 1820.231
        Start Stn 0.000          Stn Int <null>

LINE   KI Line Line0003          Code <no text>
        Start Pt 34040          End Pt 34014
        St North 16740.503          End North 16706.903
        St East 13527.484          End East 13379.940
        St Elev 1820.231          End Elev 1771.019
        Start Stn 0.000          Stn Int <null>

LINE   KI Line Line0004          Code <no text>
        Start Pt 34040          End Pt 34015
        St North 16740.503          End North 16654.036
        St East 13527.484          End East 13404.646
        St Elev 1820.231          End Elev 1771.602
        Start Stn 0.000          Stn Int <null>

LINE   KI Line Line0005          Code <no text>
        Start Pt 34040          End Pt 34016
        St North 16740.503          End North 16626.887
        St East 13527.484          End East 13431.523
        St Elev 1820.231          End Elev 1771.808
        Start Stn 0.000          Stn Int <null>

LINE   KI Line Line0006          Code <no text>
        Start Pt 34040          End Pt 34017
        St North 16740.503          End North 16607.648
        St East 13527.484          End East 13465.226
        St Elev 1820.231          End Elev 1772.368
        Start Stn 0.000          Stn Int <null>

LINE   KI Line Line0007          Code <no text>
        Start Pt 34040          End Pt 34028
        St North 16740.503          End North 16598.561
        St East 13527.484          End East 13501.862
        St Elev 1820.231          End Elev 1772.740
        Start Stn 0.000          Stn Int <null>

LINE   KI Line Line0008          Code <no text>
        Start Pt 34040          End Pt 34029
        St North 16740.503          End North 16599.288
        St East 13527.484          End East 13538.961
        St Elev 1820.231          End Elev 1773.105
        Start Stn 0.000          Stn Int <null>

SURVEY EVENTKISurvey event Communications error
    
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NOTE    TS    Time Date 09/09/2009 Time 10:31:41
SURVEY  EVENTKISurvey event Survey ended

NOTE    TS    Time Date 09/09/2009 Time 13:47:30

NOTE    TS    Time Date 09/12/2009 Time 15:31:24

SURVEY  KI    Elev mask 10                      PDOP mask 6.0
SURVEY  KI    Elev mask 10                      PDOP mask 6.0
SURVEY  KI    Elev mask 10                      PDOP mask 6.0

SURVEY  EVENTKISurvey event Rover survey started

GPSANT  KI    Antenna ht 0.000                  Measurement True

GPSPOS  FD    Point ID 44501                    Lat 36°03'10.29917"N Lng 114°59'31.59480"W
          Class Control                        Hgt 1645.648          Code 1_30_09_BASE
          Obs User Input                        H.pr <null>          V.pr <null>

EQUIP   SI    Receiver SPS851                  Serial no <no text>
          Antenna Zephyr - Model 2
          Meas To Antenna Phase Center
          Tape adj 0.000                        Serial no <no text>
          H.Offset 0.000                       V.Offset 0.000

NOTE    NM    Receiver firmware version=0.000

GPSANT  KI    Antenna ht 4.245                  Measurement True

GPSREF  KI    Reference 44501

INIT    KI    Init event Gained                  Week 1548
          Init type On the fly                  seconds 599511.0
          Init counter 1                        Point ID <no text>
          Survey type Real Time                 Plate H.Dist <null>
          Plate V.Dist <null>                   Plate azimuth <null>

SURVEY  EVENTKISurvey event Survey ended

NOTE    TS    Time Date 09/14/2009 Time 13:13:31

SURVEY  KI    Elev mask 10                      PDOP mask 6.0
SURVEY  KI    Elev mask 10                      PDOP mask 6.0
SURVEY  KI    Elev mask 10                      PDOP mask 6.0

SURVEY  EVENTKISurvey event Rover survey started

GPSANT  KI    Antenna ht 0.000                  Measurement True

GPSPOS  FD    Point ID 44501                    Lat 36°03'10.29917"N Lng 114°59'31.59480"W
          Class Control                        Hgt 1645.648          Code 1_30_09_BASE
          Obs User Input                        H.pr <null>          V.pr <null>

EQUIP   SI    Receiver SPS851                  Serial no <no text>
          Antenna Zephyr - Model 2
          Meas To Antenna Phase Center
          Tape adj 0.000                        Serial no <no text>
          H.Offset 0.000                       V.Offset 0.000

NOTE    NM    Receiver firmware version=0.000

GPSANT  KI    Antenna ht 4.245                  Measurement True

GPSREF  KI    Reference 44501

INIT    KI    Init event Gained                  Week 1549
          Init type On the fly                  seconds 159253.0
          Init counter 1                        Point ID <no text>
          Survey type Real Time                 Plate H.Dist <null>
          Plate V.Dist <null>                   Plate azimuth <null>

NOTE    TS    Time Date 09/14/2009 Time 14:29:32

SURVEY  EVENTKISurvey event Survey ended

NOTE    TS    Time Date 09/15/2009 Time 09:01:39

SURVEY  KI    Elev mask 10                      PDOP mask 6.0
SURVEY  KI    Elev mask 10                      PDOP mask 6.0
SURVEY  KI    Elev mask 10                      PDOP mask 6.0

SURVEY  EVENTKISurvey event Rover survey started

GPSANT  KI    Antenna ht 0.000                  Measurement True

GPSPOS  FD    Point ID 44501                    Lat 36°03'10.29917"N Lng 114°59'31.59480"W
          Class Control                        Hgt 1645.648          Code 1_30_09_BASE
          Obs User Input                        H.pr <null>          V.pr <null>

EQUIP   SI    Receiver SPS851                  Serial no <no text>
          Antenna Zephyr - Model 2
          Meas To Antenna Phase Center
          Tape adj 0.000                        Serial no <no text>
          H.Offset 0.000                       V.Offset 0.000

NOTE    NM    Receiver firmware version=0.000
    
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GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1549
Init type On the fly seconds 230523.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213
NOTE NM Receiver firmware version=3.710
GPSANT KI Antenna ht 6.562 Measurement Uncorrected
GPSVEC SO Point ID 23314 DX -6414.167 DY 2243.232
Class Stake out DZ -906.823 Code 9-15-09chk
Obs L1 Fixed H.pr 0.021 V.pr 0.028
GPSQC1 NM Min SVs 9 PDOP max 1.1
Relative DOPs Yes HDOP max 0.7
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 19.2
Horz SD Vert SD
Start wk 1549 sec 230621.0 End wk 1549 sec 230629.0
GPSQC2 NM Ttl satellites 9 Err Scale 0.0099999998
VCV xx 0.0000231561 VCV xy 0.0000222662
VCV xz 0.0000001693 VCV yy 0.000058832
VCV yz -0.00000186168 VCV zz 0.0000316063
PT DGN SO Name CP426 To the Point
GRID D SO Delta N -0.040 Delta E -0.076
Delta Elv -0.039
GPSVEC TP Point ID 23315 DX -6658.255 DY 2281.507
Class Normal DZ -993.129 Code tempbm
Obs L1 Fixed H.pr 0.019 V.pr 0.023
GPSQC1 NM Min SVs 14 PDOP max 0.9
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.7
Monitor status Not monitored RMS 18.3
Horz SD Vert SD
Start wk 1549 sec 230793.0 End wk 1549 sec 230798.0
GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000170691 VCV xy 0.0000131808
VCV xz 0.0000005128 VCV yy 0.0000372667
VCV yz -0.0000131702 VCV zz 0.0000280339
GPSVEC TP Point ID 23316 DX -6904.229 DY 2257.653
Class Del stake out DZ -1156.400 Code rd
Obs L1 Fixed H.pr 0.018 V.pr 0.024
GPSQC1 NM Min SVs 15 PDOP max 0.9
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.7
Monitor status Not monitored RMS 15.6
Horz SD Vert SD
Start wk 1549 sec 231912.0 End wk 1549 sec 231917.0
GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000179438 VCV xy 0.0000139255
VCV xz -0.0000040269 VCV yy 0.0000356974
VCV yz -0.0000147258 VCV zz 0.0000272411
PT DGN TP Name 75057 To the Point
GRID D TP Delta N -0.017 Delta E 0.036
Delta Elv -0.084
NOTE NM Deleted 9:26:46 AM 9/15/2009
GPSVEC SO Point ID 23317 DX -6887.530 DY 2247.246
Class Stake out DZ -1160.148 Code rd
Obs L1 Fixed H.pr 0.018 V.pr 0.024
GPSQC1 NM Min SVs 15 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.7
Monitor status Not monitored RMS 14.3
Horz SD Vert SD
Start wk 1549 sec 232003.0 End wk 1549 sec 232008.0
GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000178115 VCV xy 0.0000138833
VCV xz -0.0000040675 VCV yy 0.0000367594
VCV yz -0.0000155343 VCV zz 0.0000282562
PT DGN SO Name 75058 To the Point
GRID D SO Delta N 0.002 Delta E 0.012
Delta Elv 0.007

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GPSVEC SO Point ID 23318      DX -6904.167      DY 2257.741
        Class Stake out      DZ -1156.526      Code rd
        Obs L1 Fixed          H.pr 0.018       V.pr 0.024

GPSQC1 NM Min SVs          15                PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.7
        Monitor status Not monitored RMS 13.5
        Horz SD                Vert SD
        Start wk 1549 sec 232066.0 End wk 1549 sec 232071.0

GPSQC2 NM Ttl satellites 15      Err Scale 0.0099999998
        VCV xx 0.0000177082    VCV xy 0.0000138229
        VCV xz -0.0000042306   VCV yy 0.0000368733
        VCV yz -0.0000157561   VCV zz 0.0000285093

PT DGN SO Name              75057            To the Point

GRID D SO Delta N           0.022            Delta E 0.017
        Delta Elv           0.076

GPSVEC SO Point ID 23319      DX -6926.363      DY 2234.993
        Class Stake out      DZ -1192.547      Code rd
        Obs L1 Fixed          H.pr 0.018       V.pr 0.024

GPSQC1 NM Min SVs          15                PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 6        VDOP max 0.8
        Monitor status Not monitored RMS 20.2
        Horz SD                Vert SD
        Start wk 1549 sec 232132.0 End wk 1549 sec 232137.0

GPSQC2 NM Ttl satellites 15      Err Scale 0.0099999998
        VCV xx 0.0000176969    VCV xy 0.0000138295
        VCV xz -0.0000044611   VCV yy 0.0000368965
        VCV yz -0.0000159998   VCV zz 0.000028788

PT DGN SO Name              75055            To the Point

GRID D SO Delta N           0.007            Delta E -0.023
        Delta Elv           0.018

GPSVEC SO Point ID 23320      DX -6909.745      DY 2224.567
        Class Stake out      DZ -1196.226      Code rd
        Obs L1 Fixed          H.pr 0.017       V.pr 0.024

GPSQC1 NM Min SVs          16                PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.8
        Monitor status Not monitored RMS 14.8
        Horz SD                Vert SD
        Start wk 1549 sec 232235.0 End wk 1549 sec 232240.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000176266    VCV xy 0.0000138162
        VCV xz -0.0000050226   VCV yy 0.000036777
        VCV yz -0.0000162629   VCV zz 0.0000274125

PT DGN SO Name              75056            To the Point

GRID D SO Delta N           0.002            Delta E 0.018
        Delta Elv           0.026

GPSVEC SO Point ID 23321      DX -6931.922      DY 2201.881
        Class Stake out      DZ -1232.291      Code rd
        Obs L1 Fixed          H.pr 0.017       V.pr 0.024

GPSQC1 NM Min SVs          16                PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.8
        Monitor status Not monitored RMS 12.2
        Horz SD                Vert SD
        Start wk 1549 sec 232302.0 End wk 1549 sec 232307.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000175299    VCV xy 0.0000137543
        VCV xz -0.0000052115   VCV yy 0.0000365095
        VCV yz -0.0000163457   VCV zz 0.0000277397

PT DGN SO Name              75054            To the Point

GRID D SO Delta N           -0.016           Delta E -0.014
        Delta Elv           0.046

NOTE TS Time Date 09/15/2009 Time 09:32:59

GPSVEC SO Point ID 23322      DX -6948.612      DY 2212.313
        Class Stake out      DZ -1228.640      Code rd
        Obs L1 Fixed          H.pr 0.017       V.pr 0.024

GPSQC1 NM Min SVs          16                PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.7
        Monitor status Not monitored RMS 9.2
        Horz SD                Vert SD
        Start wk 1549 sec 232388.0 End wk 1549 sec 232393.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000174078    VCV xy 0.0000136783
        VCV xz -0.000005529    VCV yy 0.0000362939
        VCV yz -0.000016434    VCV zz 0.000027504
    
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PT DGN SO Name          75052          To the Point
GRID D SO Delta N      0.027          Delta E      0.013
        Delta Elv      0.034
GPSVEC SO Point ID 23323      DX -6970.825      DY 2189.617
        Class Stake out      DZ -1264.698      Code rd
        Obs L1 Fixed        H.pr 0.017      V.pr 0.024
GPSQC1 NM Min SVs          16          PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6      VDOP max 0.7
        Monitor status Not monitored      RMS 19.0
        Horz SD          Vert SD
        Start wk 1549 sec 232441.0      End wk 1549 sec 232447.0
GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000172764      VCV xy 0.0000135977
        VCV xz -0.0000056675      VCV yy 0.0000359729
        VCV yz -0.0000164429      VCV zz 0.0000276274
PT DGN SO Name          75050          To the Point
GRID D SO Delta N      -0.015          Delta E      0.002
        Delta Elv      0.030
GPSVEC SO Point ID 23324      DX -6954.224      DY 2179.173
        Class Stake out      DZ -1268.359      Code rd
        Obs L1 Fixed        H.pr 0.017      V.pr 0.024
GPSQC1 NM Min SVs          16          PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6      VDOP max 0.8
        Monitor status Not monitored      RMS 15.2
        Horz SD          Vert SD
        Start wk 1549 sec 232500.0      End wk 1549 sec 232505.0
GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000172703      VCV xy 0.0000136231
        VCV xz -0.000005875      VCV yy 0.0000358775
        VCV yz -0.0000165737      VCV zz 0.0000278444
PT DGN SO Name          75051          To the Point
GRID D SO Delta N      -0.022          Delta E      0.051
        Delta Elv      0.008
GPSVEC SO Point ID 23325      DX -6976.406      DY 2156.446
        Class Stake out      DZ -1304.468      Code rd
        Obs L1 Fixed        H.pr 0.017      V.pr 0.024
GPSQC1 NM Min SVs          16          PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6      VDOP max 0.8
        Monitor status Not monitored      RMS 12.6
        Horz SD          Vert SD
        Start wk 1549 sec 232564.0      End wk 1549 sec 232569.0
GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000172912      VCV xy 0.0000136798
        VCV xz -0.0000061203      VCV yy 0.0000358259
        VCV yz -0.0000167511      VCV zz 0.0000280612
PT DGN SO Name          75049          To the Point
GRID D SO Delta N      -0.014          Delta E      -0.001
        Delta Elv      0.022
GPSVEC SO Point ID 23326      DX -6993.057      DY 2166.891
        Class Stake out      DZ -1300.814      Code rd
        Obs L1 Fixed        H.pr 0.017      V.pr 0.024
GPSQC1 NM Min SVs          16          PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6      VDOP max 0.8
        Monitor status Not monitored      RMS 13.0
        Horz SD          Vert SD
        Start wk 1549 sec 232622.0      End wk 1549 sec 232627.0
GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000172941      VCV xy 0.0000137254
        VCV xz -0.0000063406      VCV yy 0.0000357564
        VCV yz -0.0000169026      VCV zz 0.0000282095
PT DGN SO Name          75048          To the Point
GRID D SO Delta N      0.010          Delta E      -0.004
        Delta Elv      0.031
SURVEY EVENTKISurvey event Error while setting receiver mode
SURVEY KI Elev mask 10          PDOP mask 6.0
SURVEY KI Elev mask 10          PDOP mask 6.0
SURVEY KI Elev mask 10          PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000          Measuremt True
    
```

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GPSPOS  FD  Point ID 44501      Lat 36°03'10.29917"N Lng 114°59'31.59480"W
          Class Control      Hgt 1645.648          Code 1_30_09_BASE
          Obs User Input      H.pr <null>          V.pr <null>

EQUIP   SI  Receiver SPS851          Serial no <no text>
          Antenna Zephyr - Model 2
          Meas To Antenna Phase Center
          Tape adj 0.000          Serial no <no text>
          H.Offset 0.000          V.Offset 0.000

NOTE    NM  Receiver firmware version=0.000

GPSANT  KI  Antenna ht 4.245          Measuremt True

GPSREF  KI  Reference 44501

INIT    KI  Init event Gained          Week 1549
          Init type On the fly      seconds 232779.0
          Init counter 1          Point ID <no text>
          Survey type Real Time      Plate H.Dist <null>
          Plate V.Dist <null>        Plate azimuth <null>

EQUIP   NM  Receiver SPS881          Serial no 4813149404
          Antenna R8 Model 2/SPS88x Internal
          Meas To Bottom of antenna mount
          Tape adj 0.000          Serial no <no text>
          H.Offset 0.000          V.Offset 0.213

NOTE    NM  Receiver firmware version=3.710

GPSANT  KI  Antenna ht 6.562          Measuremt Uncorrected

GPSVEC  SO  Point ID 23327          DX -7015.292          DY 2144.186
          Class Stake out      DZ -1336.883          Code rd
          Obs L1 Fixed          H.pr 0.017          V.pr 0.025

GPSQC1  NM  Min SVs 16          PDOP max 0.9
          Relative DOPs Yes      HDOP max 0.5
          Total GPS pos 6          VDOP max 0.8
          Monitor status Not monitored RMS 11.3
          Horz SD          Vert SD
          Start wk 1549 sec 232866.0 End wk 1549 sec 232871.0

GPSQC2  NM  Ttl satellites 16          Err Scale 0.0099999998
          VCV xx 0.0000173698      VCV xy 0.0000139747
          VCV xz -0.0000072999      VCV yy 0.000035775
          VCV yz -0.0000176111      VCV zz 0.0000288878

PT DGN  SO  Name 75046          To the Point

GRID D  SO  Delta N -0.017          Delta E 0.005
          Delta Elv 0.018

GPSVEC  SO  Point ID 23328          DX -6998.655          DY 2133.726
          Class Stake out      DZ -1340.575          Code rd
          Obs L1 Fixed          H.pr 0.017          V.pr 0.025

GPSQC1  NM  Min SVs 16          PDOP max 0.9
          Relative DOPs Yes      HDOP max 0.5
          Total GPS pos 6          VDOP max 0.8
          Monitor status Not monitored RMS 12.0
          Horz SD          Vert SD
          Start wk 1549 sec 232918.0 End wk 1549 sec 232923.0

GPSQC2  NM  Ttl satellites 16          Err Scale 0.0099999998
          VCV xx 0.0000172096      VCV xy 0.0000138993
          VCV xz -0.0000074254      VCV yy 0.000035421
          VCV yz -0.0000175917      VCV zz 0.0000287471

PT DGN  SO  Name 75047          To the Point

GRID D  SO  Delta N 0.003          Delta E 0.015
          Delta Elv 0.016

GPSVEC  SO  Point ID 23329          DX -7020.944          DY 2111.043
          Class Stake out      DZ -1376.671          Code rd
          Obs L1 Fixed          H.pr 0.016          V.pr 0.025

GPSQC1  NM  Min SVs 16          PDOP max 0.9
          Relative DOPs Yes      HDOP max 0.5
          Total GPS pos 6          VDOP max 0.8
          Monitor status Not monitored RMS 16.6
          Horz SD          Vert SD
          Start wk 1549 sec 232974.0 End wk 1549 sec 232979.0

GPSQC2  NM  Ttl satellites 16          Err Scale 0.0099999998
          VCV xx 0.0000171538      VCV xy 0.0000139136
          VCV xz -0.0000076088      VCV yy 0.0000352721
          VCV yz -0.0000176828      VCV zz 0.0000287858

PT DGN  SO  Name 75045          To the Point

GRID D  SO  Delta N 0.000          Delta E 0.083
          Delta Elv 0.018

GPSVEC  SO  Point ID 23330          DX -7037.548          DY 2121.462
          Class Stake out      DZ -1373.015          Code rd
          Obs L1 Fixed          H.pr 0.016          V.pr 0.025
    
```

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GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 17.7
Horz SD Vert SD
Start wk 1549 sec 233011.0 End wk 1549 sec 233016.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.000017101 VCV xy 0.0000139124
VCV xz -0.0000077215 VCV yy 0.00003515
VCV yz -0.0000177289 VCV zz 0.0000287881

PT DGN SO Name 75044 To the Point

GRID D SO Delta N 0.022 Delta E 0.026
Delta Elv 0.022

GPSVEC SO Point ID 23331 DX -7059.755 DY 2098.752
Class Stake out DZ -1409.107 Code rd
Obs L1 Fixed H.pr 0.016 V.pr 0.025

GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 17.8
Horz SD Vert SD
Start wk 1549 sec 233065.0 End wk 1549 sec 233070.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000172172 VCV xy 0.0000140333
VCV xz -0.0000079744 VCV yy 0.0000354713
VCV yz -0.0000179933 VCV zz 0.0000290988

PT DGN SO Name 75042 To the Point

GRID D SO Delta N 0.004 Delta E 0.006
Delta Elv 0.029

GPSVEC SO Point ID 23332 DX -7043.155 DY 2088.347
Class Stake out DZ -1412.761 Code rd
Obs L1 Fixed H.pr 0.016 V.pr 0.025

GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 19.5
Horz SD Vert SD
Start wk 1549 sec 233133.0 End wk 1549 sec 233138.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000172432 VCV xy 0.0000141283
VCV xz -0.0000082356 VCV yy 0.0000355075
VCV yz -0.0000182076 VCV zz 0.0000293103

PT DGN SO Name 75043 To the Point

GRID D SO Delta N -0.028 Delta E 0.073
Delta Elv 0.032

GPSVEC SO Point ID 23333 DX -7065.352 DY 2065.572
Class Stake out DZ -1448.912 Code rd
Obs L1 Fixed H.pr 0.016 V.pr 0.025

GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 23.8
Horz SD Vert SD
Start wk 1549 sec 233248.0 End wk 1549 sec 233253.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000174033 VCV xy 0.0000143656
VCV xz -0.0000087344 VCV yy 0.0000359184
VCV yz -0.0000187105 VCV zz 0.0000298652

PT DGN SO Name 75041 To the Point

GRID D SO Delta N 0.031 Delta E 0.015
Delta Elv 0.029

GPSVEC SO Point ID 23334 DX -7081.988 DY 2076.011
Class Stake out DZ -1445.210 Code rd
Obs L1 Fixed H.pr 0.016 V.pr 0.025

GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 16.5
Horz SD Vert SD
Start wk 1549 sec 233297.0 End wk 1549 sec 233302.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000174597 VCV xy 0.0000144485
VCV xz -0.000008941 VCV yy 0.000036126
VCV yz -0.000018927 VCV zz 0.0000300845

PT DGN SO Name 75040 To the Point

GRID D SO Delta N 0.014 Delta E -0.004
Delta Elv 0.011
    
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GPSVEC SO Point ID 23335 DX -7097.545 DY 2060.178
 Class Stake out DZ -1470.411 Code top/rd
 Obs L1 Fixed H.pr 0.016 V.pr 0.025

GPSQC1 NM Min SVs 16 PDOP max 0.9
 Relative DOPs Yes HDOP max 0.5
 Total GPS pos 6 VDOP max 0.8
 Monitor status Not monitored RMS 10.6
 Horz SD Vert SD
 Start wk 1549 sec 233361.0 End wk 1549 sec 233366.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
 VCV xx 0.0000175284 VCV xy 0.0000145905
 VCV xz -0.0000092088 VCV yy 0.0000362715
 VCV yz -0.0000191889 VCV zz 0.0000303744

PT DGN SO Name 34052 To the Point

GRID D SO Delta N 0.060 Delta E 0.046
 Delta Elv 0.005

GPSVEC SO Point ID 23336 DX -7080.915 DY 2049.799
 Class Stake out DZ -1474.084 Code rd
 Obs L1 Fixed H.pr 0.016 V.pr 0.026

GPSQC1 NM Min SVs 16 PDOP max 0.9
 Relative DOPs Yes HDOP max 0.5
 Total GPS pos 5 VDOP max 0.8
 Monitor status Not monitored RMS 14.8
 Horz SD Vert SD
 Start wk 1549 sec 233435.0 End wk 1549 sec 233440.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
 VCV xx 0.0000176514 VCV xy 0.00001477
 VCV xz -0.0000095407 VCV yy 0.0000366128
 VCV yz -0.0000195618 VCV zz 0.0000307838

PT DGN SO Name 34060 To the Point

GRID D SO Delta N 0.019 Delta E 0.096
 Delta Elv 0.053

GPSVEC SO Point ID 23337 DX -6658.224 DY 2281.558
 Class Stake out DZ -993.141 Code 9-15-09chk
 Obs L1 Fixed H.pr 0.015 V.pr 0.023

GPSQC1 NM Min SVs 16 PDOP max 0.9
 Relative DOPs Yes HDOP max 0.5
 Total GPS pos 6 VDOP max 0.7
 Monitor status Not monitored RMS 13.7
 Horz SD Vert SD
 Start wk 1549 sec 233856.0 End wk 1549 sec 233861.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
 VCV xx 0.0000123444 VCV xy 0.0000089449
 VCV xz -0.000007917 VCV yy 0.0000290104
 VCV yz -0.0000171347 VCV zz 0.0000296827

PT DGN SO Name 23315 To the Point

GRID D SO Delta N -0.026 Delta E -0.006
 Delta Elv 0.054

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 09/16/2009 Time 09:11:04

NOTE TS Time Date 09/18/2009 Time 06:42:23

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measuremt True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
 Class Control Hgt 1645.648 Code 1_30_09_BASE
 Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
 Antenna Zephyr - Model 2
 Meas To Antenna Phase Center
 Tape adj 0.000 Serial no <no text>
 H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measuremt True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1549
 Init type On the fly seconds 481378.0
 Init counter 1 Point ID <no text>
 Survey type Real Time Plate H.Dist <null>
 Plate V.Dist <null> Plate azimuth <null>

NOTE TS Time Date 09/18/2009 Time 07:30:05

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NOTE    TS    Time Date 09/18/2009 Time 08:41:44
SURVEY  EVENTKISurvey event Survey ended

NOTE    TS    Time Date 09/19/2009 Time 06:31:26
SURVEY  KI    Elev mask 10                PDOP mask 6.0
SURVEY  KI    Elev mask 10                PDOP mask 6.0
SURVEY  KI    Elev mask 10                PDOP mask 6.0
SURVEY  EVENTKISurvey event Rover survey started

GPSANT  KI    Antenna ht 0.000            Measuremt True
GPSPOS  FD    Point ID 44501              Lat 36°03'10.29917"N Lng 114°59'31.59480"W
          Class Control                    Hgt 1645.648          Code 1_30_09_BASE
          Obs User Input                    H.pr <null>          V.pr <null>

EQUIP   SI    Receiver SPS851              Serial no <no text>
          Antenna Zephyr - Model 2
          Meas To Antenna Phase Center
          Tape adj 0.000                    Serial no <no text>
          H.Offsets 0.000                  V.Offsets 0.000

NOTE    NM    Receiver firmware version=0.000

GPSANT  KI    Antenna ht 4.245            Measuremt True
GPSREF  KI    Reference 44501

INIT    KI    Init event Gained              Week 1549
          Init type On the fly              seconds 567120.0
          Init counter 1                    Point ID <no text>
          Survey type Real Time              Plate H.Dist <null>
          Plate V.Dist <null>                Plate azimuth <null>

LINE    KI    Line Line0009                Code <no text>
          Start Pt 75144                    End Pt 85132
          St North 17553.176                End North 17641.460
          St East 14389.506                 End East 14413.593
          St Elev 1766.947                  End Elev 1797.447
          Start Stn 0.000                    Stn Int <null>

LINE    KI    Line Line0010                Code <no text>
          Start Pt 75145                    End Pt 85131
          St North 17561.026                End North 17648.550
          St East 14363.858                 End East 14387.737
          St Elev 1767.075                  End Elev 1797.346
          Start Stn 0.000                    Stn Int <null>

LINE    KI    Line Line0011                Code <no text>
          Start Pt 75146                    End Pt 85130
          St North 17565.521                End North 17653.521
          St East 14349.170                 End East 14369.608
          St Elev 1767.172                  End Elev 1797.275
          Start Stn 0.000                    Stn Int <null>

LINE    KI    Line Line0012                Code <no text>
          Start Pt 75147                    End Pt 85129
          St North 17568.053                End North 17656.297
          St East 14338.303                 End East 14354.057
          St Elev 1767.194                  End Elev 1797.281
          Start Stn 0.000                    Stn Int <null>

LINE    KI    Line Line0013                Code <no text>
          Start Pt 75148                    End Pt 85128
          St North 17569.466                End North 17659.216
          St East 14329.196                 End East 14337.693
          St Elev 1767.209                  End Elev 1797.287
          Start Stn 0.000                    Stn Int <null>

LINE    KI    Line Line0014                Code <no text>
          Start Pt 85127                    End Pt 75149
          St North 17659.646                End North 17569.933
          St East 14327.891                 End East 14323.994
          St Elev 1797.284                  End Elev 1767.270
          Start Stn 0.000                    Stn Int <null>

LINE    KI    Line Line0015                Code <no text>
          Start Pt 75150                    End Pt 85126
          St North 17570.252                End North 17660.170
          St East 14316.782                 End East 14315.852
          St Elev 1767.261                  End Elev 1797.281
          Start Stn 0.000                    Stn Int <null>

LINE    KI    Line Line0016                Code <no text>
          Start Pt 75151                    End Pt 85125
          St North 17570.035                End North 17659.746
          St East 14307.833                 End East 14301.431
          St Elev 1767.343                  End Elev 1797.299
          Start Stn 0.000                    Stn Int <null>

LINE    KI    Line Line0017                Code <no text>
          Start Pt 75152                    End Pt 85124
          St North 17569.463                End North 17658.119
          St East 14301.129                 End East 14285.806
          St Elev 1767.342                  End Elev 1797.363
          Start Stn 0.000                    Stn Int <null>

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LINE	KI	Line	Line0018	Code	<no text>
		Start Pt	85123	End Pt	75153
		St North	17654.945	End North	17567.510
		St East	14265.630	End East	14288.839
		St Elev	1797.488	End Elev	1767.383
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0019	Code	<no text>
		Start Pt	75154	End Pt	85122
		St North	17562.437	End North	17646.801
		St East	14273.928	End East	14242.960
		St Elev	1767.424	End Elev	1797.376
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0020	Code	<no text>
		Start Pt	75155	End Pt	85121
		St North	17555.421	End North	17631.391
		St East	14259.929	End East	14212.029
		St Elev	1767.480	End Elev	1797.366
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0021	Code	<no text>
		Start Pt	75156	End Pt	85120
		St North	17546.565	End North	17615.834
		St East	14247.016	End East	14189.477
		St Elev	1767.531	End Elev	1797.500
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0022	Code	<no text>
		Start Pt	75157	End Pt	85119
		St North	17536.033	End North	17601.795
		St East	14235.430	End East	14173.461
		St Elev	1767.575	End Elev	1797.693
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0023	Code	<no text>
		Start Pt	75158	End Pt	85118
		St North	17524.021	End North	17577.071
		St East	14225.386	End East	14150.629
		St Elev	1767.625	End Elev	1798.105
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0024	Code	<no text>
		Start Pt	75159	End Pt	85117
		St North	17510.525	End North	17556.742
		St East	14216.969	End East	14137.596
		St Elev	1767.675	End Elev	1798.319
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0025	Code	<no text>
		Start Pt	75160	End Pt	85116
		St North	17496.476	End North	17532.717
		St East	14210.641	End East	14125.224
		St Elev	1767.726	End Elev	1798.651
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0026	Code	<no text>
		Start Pt	75161	End Pt	85115
		St North	17481.457	End North	17501.212
		St East	14206.215	End East	14113.749
		St Elev	1767.776	End Elev	1799.222
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0027	Code	<no text>
		Start Pt	75162	End Pt	85114
		St North	17465.823	End North	17467.114
		St East	14203.873	End East	14107.473
		St Elev	1767.834	End Elev	1800.015
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0028	Code	<no text>
		Start Pt	75113	End Pt	75163
		St North	17443.046	End North	17450.318
		St East	14105.468	End East	14203.666
		St Elev	1800.644	End Elev	1767.877
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0029	Code	<no text>
		Start Pt	75164	End Pt	75111
		St North	17435.215	End North	17417.701
		St East	14205.537	End East	14106.916
		St Elev	1767.929	End Elev	1801.409
		Start Stn	0.000	Stn Int	<null>
LINE	KI	Line	Line0030	Code	<no text>
		Start Pt	75165	End Pt	75110
		St North	17411.953	End North	17391.415
		St East	14210.315	End East	14109.716
		St Elev	1768.014	End Elev	1802.239
		Start Stn	0.000	Stn Int	<null>

NOTE TS Time Date 09/19/2009 Time 07:34:54

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 09/19/2009 Time 08:51:23

NOTE TS Time Date 09/21/2009 Time 06:50:02

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

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SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1550
Init type On the fly seconds 136243.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
NOTE TS Time Date 09/21/2009 Time 07:27:59
SURVEY EVENTKISurvey event Communications error
NOTE TS Time Date 09/21/2009 Time 08:19:35
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 09/22/2009 Time 06:45:19
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1550
Init type On the fly seconds 222348.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
NOTE TS Time Date 09/22/2009 Time 07:43:27
SURVEY EVENTKISurvey event Communications error
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 09/23/2009 Time 06:01:17
NOTE NM Following data imported from 9-19-09 Waste Points.csv
NOTE TS Time Date 09/23/2009 Time 06:36:01
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000

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GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1550
      Init type On the fly seconds 308188.0
      Init counter 1 Point ID <no text>
      Survey type Real Time Plate H.Dist <null>
      Plate V.Dist <null> Plate azimuth <null>
NOTE TS Time Date 09/23/2009 Time 07:14:58
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 09/23/2009 Time 08:24:25
NOTE TS Time Date 09/24/2009 Time 07:09:25
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
      Class Control Hgt 1645.648 Code 1_30_09_BASE
      Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
      Antenna Zephyr - Model 2
      Meas To Antenna Phase Center
      Tape adj 0.000 Serial no <no text>
      H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1550
      Init type On the fly seconds 396600.0
      Init counter 1 Point ID <no text>
      Survey type Real Time Plate H.Dist <null>
      Plate V.Dist <null> Plate azimuth <null>
NOTE TS Time Date 09/24/2009 Time 08:42:19
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 09/25/2009 Time 07:57:23
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
      Class Control Hgt 1645.648 Code 1_30_09_BASE
      Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
      Antenna Zephyr - Model 2
      Meas To Antenna Phase Center
      Tape adj 0.000 Serial no <no text>
      H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1550
      Init type On the fly seconds 485875.0
      Init counter 1 Point ID <no text>
      Survey type Real Time Plate H.Dist <null>
      Plate V.Dist <null> Plate azimuth <null>
NOTE TS Time Date 09/25/2009 Time 08:40:22
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 09/26/2009 Time 07:05:25
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True

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GPSPOS  FD  Point ID 44501      Lat 36°03'10.29917"N Lng 114°59'31.59480"W
          Class Control      Hgt 1645.648          Code 1_30_09_BASE
          Obs User Input      H.pr <null>          V.pr <null>

EQUIP   SI  Receiver SPS851          Serial no <no text>
          Antenna Zephyr - Model 2
          Meas To Antenna Phase Center
          Tape adj 0.000          Serial no <no text>
          H.Offset 0.000          V.Offset 0.000

NOTE    NM  Receiver firmware version=0.000

GPSANT  KI  Antenna ht 4.245          Measuremt True

GPSREF  KI  Reference 44501

INIT    KI  Init event Gained          Week 1550
          Init type On the fly      seconds 569160.0
          Init counter 1          Point ID <no text>
          Survey type Real Time      Plate H.Dist <null>
          Plate V.Dist <null>        Plate azimuth <null>

EQUIP   NM  Receiver SPS881          Serial no 4813149404
          Antenna R8 Model 2/SPS88x Internal
          Meas To Bottom of antenna mount
          Tape adj 0.000          Serial no <no text>
          H.Offset 0.000          V.Offset 0.213

NOTE    NM  Receiver firmware version=3.710

GPSANT  KI  Antenna ht 6.562          Measuremt Uncorrected

GPSVEC  SO  Point ID 23338      DX -6658.262      DY 2281.506
          Class Stake out      DZ -993.100       Code 9-26-09chk
          Obs L1 Fixed          H.pr 0.017       V.pr 0.030

GPSQC1  NM  Min SVs 15          PDOP max 1.1
          Relative DOPs Yes      HDOP max 0.5
          Total GPS pos 6        VDOP max 0.9
          Monitor status Not monitored RMS 8.8
          Horz SD                Vert SD
          Start wk 1550 sec 569203.0 End wk 1550 sec 569208.0

GPSQC2  NM  Ttl satellites 15          Err Scale 0.0099999998
          VCV xx 0.0000174698      VCV xy 0.0000205053
          VCV xz -0.0000066471     VCV yy 0.0000691316
          VCV yz -0.0000253653     VCV zz 0.0000240972

PT DGN  SO  Name 23315          To the Point

GRID D  SO  Delta N -0.021          Delta E 0.006
          Delta Elv -0.021

GPSVEC  SO  Point ID 23339      DX -6946.581      DY 1549.011
          Class Stake out      DZ -1971.646      Code top
          Obs L1 Fixed          H.pr 0.018       V.pr 0.029

GPSQC1  NM  Min SVs 16          PDOP max 1.1
          Relative DOPs Yes      HDOP max 0.6
          Total GPS pos 6        VDOP max 0.9
          Monitor status Not monitored RMS 17.8
          Horz SD                Vert SD
          Start wk 1550 sec 569681.0 End wk 1550 sec 569686.0

GPSQC2  NM  Ttl satellites 16          Err Scale 0.0099999998
          VCV xx 0.0000177254      VCV xy 0.0000204846
          VCV xz -0.0000059968     VCV yy 0.0000660138
          VCV yz -0.0000235987     VCV zz 0.0000239409

PT DGN  SO  Name 34030          To the Point

GRID D  SO  Delta N -0.002          Delta E -0.014
          Delta Elv 0.038

GPSVEC  SO  Point ID 23340      DX -6990.186      DY 1564.809
          Class Stake out      DZ -1977.694      Code top
          Obs L1 Fixed          H.pr 0.018       V.pr 0.029

GPSQC1  NM  Min SVs 16          PDOP max 1.0
          Relative DOPs Yes      HDOP max 0.6
          Total GPS pos 6        VDOP max 0.9
          Monitor status Not monitored RMS 12.0
          Horz SD                Vert SD
          Start wk 1550 sec 569744.0 End wk 1550 sec 569749.0

GPSQC2  NM  Ttl satellites 16          Err Scale 0.0099999998
          VCV xx 0.000018151       VCV xy 0.0000206038
          VCV xz -0.000005592      VCV yy 0.000064251
          VCV yz -0.0000218943     VCV zz 0.0000236785

PT DGN  SO  Name 34031          To the Point

GRID D  SO  Delta N 0.013          Delta E -0.051
          Delta Elv 0.027

GPSVEC  SO  Point ID 23341      DX -6999.065      DY 1568.625
          Class Stake out      DZ -1978.354      Code top
          Obs L1 Fixed          H.pr 0.018       V.pr 0.029
    
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GPSQC1 NM Min SVs 17 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 7.1
Horz SD Vert SD
Start wk 1550 sec 569813.0 End wk 1550 sec 569818.0

GPSQC2 NM Ttl satellites 17 Err Scale 0.0099999998
VCV xx 0.0000181044 VCV xy 0.000020468
VCV xz -0.0000049138 VCV yy 0.000062158
VCV yz -0.0000223448 VCV zz 0.0000238352

PT DGN SO Name 34067 To the Point

GRID D SO Delta N 0.056 Delta E -0.003
Delta Elv 0.039

GPSVEC SO Point ID 23342 DX -7038.529 DY 1583.968
Class Stake out DZ -1979.786 Code top
Obs L1 Fixed H.pr 0.018 V.pr 0.027

GPSQC1 NM Min SVs 17 PDOP max 1.0
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 13.2
Horz SD Vert SD
Start wk 1550 sec 569862.0 End wk 1550 sec 569867.0

GPSQC2 NM Ttl satellites 17 Err Scale 0.0099999998
VCV xx 0.00001564 VCV xy 0.0000175949
VCV xz -0.0000036118 VCV yy 0.0000594498
VCV yz -0.0000189044 VCV zz 0.0000219987

PT DGN SO Name 34032 To the Point

GRID D SO Delta N 0.015 Delta E -0.025
Delta Elv 0.054

GPSVEC SO Point ID 23343 DX -7103.792 DY 1609.275
Class Stake out DZ -1984.061 Code top
Obs L1 Fixed H.pr 0.018 V.pr 0.028

GPSQC1 NM Min SVs 17 PDOP max 1.0
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 15.0
Horz SD Vert SD
Start wk 1550 sec 569931.0 End wk 1550 sec 569936.0

GPSQC2 NM Ttl satellites 17 Err Scale 0.0099999998
VCV xx 0.0000172473 VCV xy 0.0000191829
VCV xz -0.0000042055 VCV yy 0.0000621064
VCV yz -0.0000201803 VCV zz 0.0000230898

PT DGN SO Name 34033 To the Point

GRID D SO Delta N -0.031 Delta E 0.019
Delta Elv 0.022

GPSVEC SO Point ID 23344 DX -7153.064 DY 1627.745
Class Stake out DZ -1989.201 Code top
Obs L1 Fixed H.pr 0.018 V.pr 0.028

GPSQC1 NM Min SVs 17 PDOP max 1.0
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 18.2
Horz SD Vert SD
Start wk 1550 sec 570007.0 End wk 1550 sec 570012.0

GPSQC2 NM Ttl satellites 17 Err Scale 0.0099999998
VCV xx 0.0000177429 VCV xy 0.0000194942
VCV xz -0.0000043424 VCV yy 0.0000623145
VCV yz -0.0000204459 VCV zz 0.0000235034

PT DGN SO Name 34034 To the Point

GRID D SO Delta N -0.056 Delta E -0.031
Delta Elv 0.030

GPSVEC SO Point ID 23345 DX -7204.118 DY 1646.484
Class Stake out DZ -1995.638 Code top
Obs L1 Fixed H.pr 0.019 V.pr 0.029

GPSQC1 NM Min SVs 11 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 19.7
Horz SD Vert SD
Start wk 1550 sec 570161.0 End wk 1550 sec 570170.0

GPSQC2 NM Ttl satellites 17 Err Scale 0.0099999998
VCV xx 0.0000182467 VCV xy 0.0000200206
VCV xz -0.000003762 VCV yy 0.0000665968
VCV yz -0.0000223452 VCV zz 0.0000252008

PT DGN SO Name 34035 To the Point

GRID D SO Delta N -0.054 Delta E 0.005
Delta Elv 0.029
    
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GPSVEC SO Point ID 23346      DX -7259.877      DY 1666.785
        Class Stake out      DZ -2003.122      Code top
        Obs L1 Fixed         H.pr 0.019      V.pr 0.029

GPSQC1 NM Min SVs          16                PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 5        VDOP max 0.9
        Monitor status Not monitored RMS 14.4
        Horz SD                Vert SD
        Start wk 1550 sec 570277.0 End wk 1550 sec 570282.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000181863    VCV xy 0.0000197289
        VCV xz -0.0000040871   VCV yy 0.00000673917
        VCV yz -0.0000239116   VCV zz 0.0000268722

PT DGN SO Name              34036            To the Point

GRID D SO Delta N           -0.057            Delta E -0.019
        Delta Elv           0.023

GPSVEC SO Point ID 23347      DX -7318.926      DY 1688.240
        Class Stake out      DZ -2011.150      Code top
        Obs L1 Fixed         H.pr 0.019      V.pr 0.028

GPSQC1 NM Min SVs          16                PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 5        VDOP max 0.9
        Monitor status Not monitored RMS 12.5
        Horz SD                Vert SD
        Start wk 1550 sec 570340.0 End wk 1550 sec 570347.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.000018076    VCV xy 0.0000194231
        VCV xz -0.000003926   VCV yy 0.00000629078
        VCV yz -0.0000213661   VCV zz 0.0000255004

PT DGN SO Name              34037            To the Point

GRID D SO Delta N           -0.027            Delta E -0.011
        Delta Elv           0.017

GPSVEC SO Point ID 23348      DX -7342.410      DY 1696.922
        Class Stake out      DZ -2013.898      Code top
        Obs L1 Fixed         H.pr 0.019      V.pr 0.029

GPSQC1 NM Min SVs          11                PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 5        VDOP max 0.9
        Monitor status Not monitored RMS 16.2
        Horz SD                Vert SD
        Start wk 1550 sec 570395.0 End wk 1550 sec 570400.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000183065    VCV xy 0.0000196897
        VCV xz -0.0000037742   VCV yy 0.00000654514
        VCV yz -0.0000227301   VCV zz 0.0000267504

PT DGN SO Name              34068            To the Point

GRID D SO Delta N           -0.011            Delta E -0.024
        Delta Elv           0.013

GPSVEC SO Point ID 23349      DX -7373.641      DY 1708.618
        Class Stake out      DZ -2017.170      Code top
        Obs L1 Fixed         H.pr 0.019      V.pr 0.029

GPSQC1 NM Min SVs          16                PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 6        VDOP max 0.9
        Monitor status Not monitored RMS 26.1
        Horz SD                Vert SD
        Start wk 1550 sec 570490.0 End wk 1550 sec 570495.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000182652    VCV xy 0.0000194635
        VCV xz -0.0000035568   VCV yy 0.00000641202
        VCV yz -0.0000220816   VCV zz 0.0000266637

PT DGN SO Name              34038            To the Point

GRID D SO Delta N           -0.022            Delta E -0.001
        Delta Elv           0.010

GPSVEC SO Point ID 23350      DX -7424.517      DY 1727.883
        Class Stake out      DZ -2021.964      Code top
        Obs L1 Fixed         H.pr 0.019      V.pr 0.029

GPSQC1 NM Min SVs          16                PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 6        VDOP max 0.9
        Monitor status Not monitored RMS 19.7
        Horz SD                Vert SD
        Start wk 1550 sec 570553.0 End wk 1550 sec 570559.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000184757    VCV xy 0.0000196219
        VCV xz -0.0000034037   VCV yy 0.00000663839
        VCV yz -0.0000233752   VCV zz 0.0000278779

PT DGN SO Name              34039            To the Point
    
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GRID D SO Delta N      -0.055          Delta E      0.001
        Delta Elv    0.026

GPSVEC SO Point ID 23351      DX  -7466.171      DY  1743.688
        Class Stake out  DZ  -2025.854      Code top
        Obs L1 Fixed     H.pr 0.019          V.pr 0.029

GPSQC1 NM Min SVs          11          PDOP max    1.1
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos 6        VDOP max    0.9
        Monitor status Not monitored RMS          18.9
        Horz SD              Vert SD
        Start wk 1550 sec 570672.0 End wk 1550 sec 570680.0

GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000183839      VCV xy 0.0000192897
        VCV xz -0.0000030835      VCV yy 0.0000667527
        VCV yz -0.0000237116      VCV zz 0.0000280675

PT DGN SO Name          34040          To the Point

GRID D SO Delta N      -0.017          Delta E      0.052
        Delta Elv    0.073

SURVEY EVENTKISurvey event Communications error

GPSVEC SO Point ID 23352      DX  -7426.680      DY  1771.604
        Class Stake out  DZ  -1970.135      Code top
        Obs L1 Fixed     H.pr 0.020          V.pr 0.029

GPSQC1 NM Min SVs          15          PDOP max    1.1
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos 5        VDOP max    0.9
        Monitor status Not monitored RMS          11.9
        Horz SD              Vert SD
        Start wk 1550 sec 570785.0 End wk 1550 sec 570794.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000187369      VCV xy 0.0000195575
        VCV xz -0.0000025658      VCV yy 0.0000674557
        VCV yz -0.0000243116      VCV zz 0.0000303797

PT DGN SO Name          34041          To the Point

GRID D SO Delta N      0.006          Delta E      -0.020
        Delta Elv    0.012

GPSVEC SO Point ID 23353      DX  -7401.014      DY  1790.318
        Class Stake out  DZ  -1933.622      Code top
        Obs L1 Fixed     H.pr 0.020          V.pr 0.030

GPSQC1 NM Min SVs          10          PDOP max    1.1
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos 5        VDOP max    0.9
        Monitor status Not monitored RMS          13.0
        Horz SD              Vert SD
        Start wk 1550 sec 570883.0 End wk 1550 sec 570889.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000185583      VCV xy 0.0000192214
        VCV xz -0.0000025256      VCV yy 0.0000673052
        VCV yz -0.0000250157      VCV zz 0.0000314788

PT DGN SO Name          34042          To the Point

GRID D SO Delta N      0.019          Delta E      -0.002
        Delta Elv    0.014

NOTE TS Time Date 09/26/2009 Time 07:37:21

GPSVEC SO Point ID 23354      DX  -7368.192      DY  1814.291
        Class Stake out  DZ  -1886.921      Code top
        Obs L1 Fixed     H.pr 0.020          V.pr 0.030

GPSQC1 NM Min SVs          15          PDOP max    1.1
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos 6        VDOP max    0.9
        Monitor status Not monitored RMS          14.4
        Horz SD              Vert SD
        Start wk 1550 sec 571047.0 End wk 1550 sec 571053.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000186137      VCV xy 0.0000190477
        VCV xz -0.0000021412      VCV yy 0.0000669605
        VCV yz -0.0000249871      VCV zz 0.0000318814

PT DGN SO Name          34043          To the Point

GRID D SO Delta N      0.021          Delta E      0.042
        Delta Elv    0.042

GPSVEC SO Point ID 23355      DX  -7326.523      DY  1841.647
        Class Stake out  DZ  -1830.466      Code top
        Obs L1 Fixed     H.pr 0.020          V.pr 0.030

GPSQC1 NM Min SVs          15          PDOP max    1.1
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos 6        VDOP max    0.9
        Monitor status Not monitored RMS          17.4
        Horz SD              Vert SD
        Start wk 1550 sec 571112.0 End wk 1550 sec 571117.0
    
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GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
          VCV xx 0.0000186104 VCV xy 0.0000189549
          VCV xz -0.0000020317 VCV yy 0.0000667908
          VCV yz -0.0000249461 VCV zz 0.0000318899

PT DGN SO Name 34044 To the Point

GRID D SO Delta N -0.010 Delta E 0.021
          Delta Elv 0.022

GPSVEC SO Point ID 23356 DX -7296.914 DY 1860.343
          Class Stake out DZ -1791.077 Code top
          Obs L1 Fixed H.pr 0.020 V.pr 0.029

GPSQC1 NM Min SVs 15 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.6
          Total GPS pos 6 VDOP max 0.9
          Monitor status Not monitored RMS 22.9
          Horz SD Vert SD
          Start wk 1550 sec 571185.0 End wk 1550 sec 571190.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
          VCV xx 0.0000186486 VCV xy 0.0000188936
          VCV xz -0.0000018259 VCV yy 0.0000664891
          VCV yz -0.0000024735 VCV zz 0.0000318533

PT DGN SO Name 34045 To the Point

GRID D SO Delta N 0.027 Delta E -0.022
          Delta Elv 0.035

GPSVEC SO Point ID 23357 DX -7283.299 DY 1869.410
          Class Stake out DZ -1773.199 Code top/rd
          Obs L1 Fixed H.pr 0.020 V.pr 0.029

GPSQC1 NM Min SVs 10 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.6
          Total GPS pos 6 VDOP max 0.9
          Monitor status Not monitored RMS 19.3
          Horz SD Vert SD
          Start wk 1550 sec 571240.0 End wk 1550 sec 571245.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000181091 VCV xy 0.0000181463
          VCV xz -0.0000010139 VCV yy 0.0000649263
          VCV yz -0.0000234496 VCV zz 0.0000302922

PT DGN SO Name 34046 To the Point

GRID D SO Delta N 0.011 Delta E -0.031
          Delta Elv 0.016

GPSVEC SO Point ID 23358 DX -7254.954 DY 1899.274
          Class Stake out DZ -1726.150 Code top/rd
          Obs L1 Fixed H.pr 0.020 V.pr 0.028

GPSQC1 NM Min SVs 16 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.6
          Total GPS pos 6 VDOP max 0.9
          Monitor status Not monitored RMS 33.5
          Horz SD Vert SD
          Start wk 1550 sec 572089.0 End wk 1550 sec 572094.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000197301 VCV xy 0.0000187232
          VCV xz 0.0000011008 VCV yy 0.0000618411
          VCV yz -0.0000207142 VCV zz 0.0000293248

PT DGN SO Name 34047 To the Point

GRID D SO Delta N -0.008 Delta E 0.006
          Delta Elv 0.047

GPSVEC SO Point ID 23359 DX -7220.699 DY 1934.291
          Class Stake out DZ -1670.518 Code top/rd
          Obs L1 Fixed H.pr 0.021 V.pr 0.028

GPSQC1 NM Min SVs 10 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.7
          Total GPS pos 6 VDOP max 0.9
          Monitor status Not monitored RMS 16.6
          Horz SD Vert SD
          Start wk 1550 sec 572211.0 End wk 1550 sec 572216.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000203578 VCV xy 0.0000192177
          VCV xz 0.0000008744 VCV yy 0.0000627231
          VCV yz -0.0000214341 VCV zz 0.0000312243

PT DGN SO Name 34048 To the Point

GRID D SO Delta N -0.028 Delta E -0.033
          Delta Elv 0.044

GPSVEC SO Point ID 23360 DX -7191.880 DY 1963.765
          Class Stake out DZ -1623.643 Code top/rd
          Obs L1 Fixed H.pr 0.021 V.pr 0.028
    
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GPSQC1 NM Min SVs 16 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 15.7
Horz SD Vert SD
Start wk 1550 sec 572303.0 End wk 1550 sec 572308.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000202932 VCV xy 0.0000190803
VCV xz 0.0000008399 VCV yy 0.0000621811
VCV yz -0.0000214108 VCV zz 0.0000312641

PT DGN SO Name 34049 To the Point

GRID D SO Delta N -0.031 Delta E -0.015
Delta Elv 0.013

GPSVEC SO Point ID 23361 DX -7159.877 DY 1996.495
Class Stake out DZ -1571.668 Code top/rd
Obs L1 Fixed H.pr 0.020 V.pr 0.027

GPSQC1 NM Min SVs 10 PDOP max 1.0
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 13.6
Horz SD Vert SD
Start wk 1550 sec 572373.0 End wk 1550 sec 572379.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000185038 VCV xy 0.0000165814
VCV xz 0.0000005545 VCV yy 0.0000563086
VCV yz -0.0000185481 VCV zz 0.0000267436

PT DGN SO Name 34050 To the Point

GRID D SO Delta N -0.056 Delta E -0.006
Delta Elv 0.033

GPSVEC SO Point ID 23362 DX -7129.840 DY 2027.208
Class Stake out DZ -1522.889 Code top/rd
Obs L1 Fixed H.pr 0.019 V.pr 0.026

GPSQC1 NM Min SVs 16 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 14.6
Horz SD Vert SD
Start wk 1550 sec 572426.0 End wk 1550 sec 572431.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0097469296
VCV xx 0.0000194207 VCV xy 0.0000181232
VCV xz 0.0000002863 VCV yy 0.000058483
VCV yz -0.0000186549 VCV zz 0.0000263351

PT DGN SO Name 34051 To the Point

GRID D SO Delta N -0.001 Delta E 0.021
Delta Elv 0.047

GPSVEC SO Point ID 23363 DX -7113.178 DY 2016.722
Class Stake out DZ -1526.529 Code rd
Obs L1 Fixed H.pr 0.020 V.pr 0.028

GPSQC1 NM Min SVs 16 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 14.7
Horz SD Vert SD
Start wk 1550 sec 572482.0 End wk 1550 sec 572487.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000199224 VCV xy 0.0000184943
VCV xz 0.0000007611 VCV yy 0.0000598193
VCV yz -0.0000199694 VCV zz 0.000029164

PT DGN SO Name 34059 To the Point

GRID D SO Delta N -0.022 Delta E -0.003
Delta Elv 0.005

NOTE TS Time Date 09/26/2009 Time 08:10:47

GPSVEC SO Point ID 23364 DX -7143.223 DY 1985.991
Class Stake out DZ -1575.361 Code rd
Obs L1 Fixed H.pr 0.021 V.pr 0.029

GPSQC1 NM Min SVs 15 PDOP max 1.1
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 21.0
Horz SD Vert SD
Start wk 1550 sec 573055.0 End wk 1550 sec 573060.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000208839 VCV xy 0.0000185442
VCV xz 0.0000015611 VCV yy 0.0000622332
VCV yz -0.0000240324 VCV zz 0.0000363622

PT DGN SO Name 34058 To the Point

GRID D SO Delta N -0.017 Delta E -0.030
Delta Elv 0.008
    
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GPSVEC SO Point ID 23365      DX -7238.281      DY 1888.818
        Class Stake out      DZ -1729.752      Code rd
        Obs L1 Fixed          H.pr 0.017       V.pr 0.025

GPSQC1 NM Min SVs          10                PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 5        VDOP max 0.8
        Monitor status Not monitored RMS 15.9
        Horz SD                Vert SD
        Start wk 1550 sec 574705.0 End wk 1550 sec 574710.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000182707    VCV xy 0.000016339
        VCV xz -0.0000046562    VCV yy 0.0000440741
        VCV yz -0.0000155803    VCV zz 0.0000229335

PT DGN SO Name              34055            To the Point

GRID D SO Delta N           -0.061           Delta E -0.012
        Delta Elv           0.010

NOTE TS Time Date 09/26/2009 Time 08:41:39

GPSVEC SO Point ID 23366      DX -7235.105      DY 1841.853
        Class Stake out      DZ -1782.438      Code <no text>
        Obs L1 Fixed          H.pr 0.018       V.pr 0.025

GPSQC1 NM Min SVs          16                PDOP max 1.0
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 6        VDOP max 0.8
        Monitor status Not monitored RMS 16.1
        Horz SD                Vert SD
        Start wk 1550 sec 574907.0 End wk 1550 sec 574912.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000185698    VCV xy 0.0000158276
        VCV xz -0.0000043328    VCV yy 0.0000449108
        VCV yz -0.000017619     VCV zz 0.0000262392

PT DGN SO Name              50124            To the Point

GRID D SO Delta N           -0.032           Delta E -0.005
        Delta Elv           0.034

GPSVEC SO Point ID 23367      DX -7261.814      DY 1821.593
        Class Stake out      DZ -1820.614      Code <no text>
        Obs L1 Fixed          H.pr 0.018       V.pr 0.025

GPSQC1 NM Min SVs          16                PDOP max 1.0
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 6        VDOP max 0.8
        Monitor status Not monitored RMS 16.6
        Horz SD                Vert SD
        Start wk 1550 sec 574994.0 End wk 1550 sec 574999.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000184519    VCV xy 0.0000157656
        VCV xz -0.0000047911    VCV yy 0.0000446381
        VCV yz -0.0000176244    VCV zz 0.0000258509

PT DGN SO Name              50125            To the Point

GRID D SO Delta N           -0.053           Delta E 0.005
        Delta Elv           0.015

GPSVEC SO Point ID 23368      DX -7288.391      DY 1801.510
        Class Stake out      DZ -1859.020      Code <no text>
        Obs L1 Fixed          H.pr 0.018       V.pr 0.025

GPSQC1 NM Min SVs          16                PDOP max 1.0
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 5        VDOP max 0.8
        Monitor status Not monitored RMS 18.8
        Horz SD                Vert SD
        Start wk 1550 sec 575136.0 End wk 1550 sec 575141.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000182234    VCV xy 0.0000153947
        VCV xz -0.0000049868    VCV yy 0.0000437846
        VCV yz -0.0000178679    VCV zz 0.0000266169

PT DGN SO Name              50126            To the Point

GRID D SO Delta N           -0.016           Delta E -0.030
        Delta Elv           0.029

GPSVEC SO Point ID 23369      DX -7314.907      DY 1781.781
        Class Stake out      DZ -1897.620      Code <no text>
        Obs L1 Fixed          H.pr 0.017       V.pr 0.025

GPSQC1 NM Min SVs          16                PDOP max 1.0
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.8
        Monitor status Not monitored RMS 12.4
        Horz SD                Vert SD
        Start wk 1550 sec 575188.0 End wk 1550 sec 575193.0

GPSQC2 NM Ttl satellites 16      Err Scale 0.0099999998
        VCV xx 0.0000181618    VCV xy 0.0000154033
        VCV xz -0.0000053185    VCV yy 0.0000435636
        VCV yz -0.0000177586    VCV zz 0.0000261418
    
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PT DGN SO Name          50127          To the Point
GRID D SO Delta N      -0.025          Delta E      0.030
        Delta Elv      0.029
GPSVEC SO Point ID 23370      DX   -7341.560      DY   1761.646
        Class Stake out  DZ   -1936.026      Code <no text>
        Obs L1 Fixed     H.pr 0.018          V.pr 0.026
GPSQC1 NM Min SVs          16          PDOP max    1.0
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos  6          VDOP max    0.8
        Monitor status Not monitored RMS          26.9
        Horz SD          Vert SD
        Start wk 1550 sec 575285.0 End wk 1550 sec 575290.0
GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000183757      VCV xy 0.0000154681
        VCV xz -0.0000055741     VCV yy 0.0000439264
        VCV yz -0.0000183741     VCV zz 0.0000273722
PT DGN SO Name          50167          To the Point
GRID D SO Delta N      0.059          Delta E      0.041
        Delta Elv      0.011
GPSVEC SO Point ID 23371      DX   -7368.099      DY   1741.637
        Class Stake out  DZ   -1974.399      Code <no text>
        Obs L1 Fixed     H.pr 0.017          V.pr 0.024
GPSQC1 NM Min SVs          15          PDOP max    0.9
        Relative DOPs Yes      HDOP max    0.5
        Total GPS pos  5          VDOP max    0.8
        Monitor status Not monitored RMS          13.0
        Horz SD          Vert SD
        Start wk 1550 sec 575383.0 End wk 1550 sec 575388.0
GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000176661      VCV xy 0.0000156337
        VCV xz -0.0000065484     VCV yy 0.0000378114
        VCV yz -0.0000161466     VCV zz 0.0000256563
PT DGN SO Name          50166          To the Point
GRID D SO Delta N      0.020          Delta E      0.004
        Delta Elv      0.027
GPSVEC SO Point ID 23372      DX   -7319.897      DY   1714.287
        Class Stake out  DZ   -1981.155      Code main fl
        Obs L1 Fixed     H.pr 0.017          V.pr 0.026
GPSQC1 NM Min SVs          15          PDOP max    1.0
        Relative DOPs Yes      HDOP max    0.5
        Total GPS pos  6          VDOP max    0.8
        Monitor status Not monitored RMS          12.9
        Horz SD          Vert SD
        Start wk 1550 sec 575487.0 End wk 1550 sec 575492.0
GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000180694      VCV xy 0.0000152706
        VCV xz -0.000006246      VCV yy 0.000042229
        VCV yz -0.0000186131     VCV zz 0.000028506
PT DGN SO Name          50164          To the Point
GRID D SO Delta N      0.005          Delta E      0.022
        Delta Elv      0.012
GPSVEC SO Point ID 23373      DX   -7294.261      DY   1735.365
        Class Stake out  DZ   -1942.239      Code main fl
        Obs L1 Fixed     H.pr 0.017          V.pr 0.025
GPSQC1 NM Min SVs          11          PDOP max    1.0
        Relative DOPs Yes      HDOP max    0.5
        Total GPS pos  5          VDOP max    0.8
        Monitor status Not monitored RMS          12.0
        Horz SD          Vert SD
        Start wk 1550 sec 575590.0 End wk 1550 sec 575598.0
GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000178182      VCV xy 0.0000142502
        VCV xz -0.0000061822     VCV yy 0.0000392653
        VCV yz -0.0000179259     VCV zz 0.0000287245
PT DGN SO Name          50163          To the Point
GRID D SO Delta N      0.001          Delta E      0.046
        Delta Elv      0.022
GPSVEC SO Point ID 23374      DX   -7268.927      DY   1756.359
        Class Stake out  DZ   -1903.803      Code main fl
        Obs L1 Fixed     H.pr 0.017          V.pr 0.025
GPSQC1 NM Min SVs          16          PDOP max    0.9
        Relative DOPs Yes      HDOP max    0.5
        Total GPS pos  6          VDOP max    0.8
        Monitor status Not monitored RMS          15.8
        Horz SD          Vert SD
        Start wk 1550 sec 575654.0 End wk 1550 sec 575659.0
    
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GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000177007 VCV xy 0.0000138115
VCV xz -0.0000062399 VCV yy 0.0000370394
VCV yz -0.0000173521 VCV zz 0.0000286951

PT DGN SO Name 50000 To the Point

GRID D SO Delta N -0.023 Delta E 0.016
Delta Elv 0.007

GPSVEC SO Point ID 23375 DX -7228.510 DY 1696.630
Class Stake out DZ -1949.672 Code <no text>
Obs L1 Fixed H.pr 0.017 V.pr 0.025

GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 9.1
Horz SD Vert SD
Start wk 1550 sec 575747.0 End wk 1550 sec 575752.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000164451 VCV xy 0.0000126863
VCV xz -0.0000062945 VCV yy 0.0000369368
VCV yz -0.0000176397 VCV zz 0.0000290394

PT DGN SO Name 50168 To the Point

GRID D SO Delta N 0.003 Delta E -0.005
Delta Elv 0.034

GPSVEC SO Point ID 23376 DX -7184.485 DY 1671.121
Class Stake out DZ -1954.879 Code <no text>
Obs L1 Fixed H.pr 0.017 V.pr 0.025

GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 15.2
Horz SD Vert SD
Start wk 1550 sec 575803.0 End wk 1550 sec 575809.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000170035 VCV xy 0.0000134445
VCV xz -0.0000067405 VCV yy 0.0000376242
VCV yz -0.0000180009 VCV zz 0.0000291119

PT DGN SO Name 50169 To the Point

GRID D SO Delta N -0.022 Delta E 0.028
Delta Elv 0.013

GPSVEC SO Point ID 23377 DX -7141.623 DY 1646.381
Class Stake out DZ -1960.015 Code crest
Obs L1 Fixed H.pr 0.017 V.pr 0.025

GPSQC1 NM Min SVs 11 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 14.9
Horz SD Vert SD
Start wk 1550 sec 575941.0 End wk 1550 sec 575948.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000173558 VCV xy 0.0000139934
VCV xz -0.0000074608 VCV yy 0.0000379427
VCV yz -0.0000184441 VCV zz 0.0000294377

PT DGN SO Name 50162 To the Point

GRID D SO Delta N -0.030 Delta E 0.007
Delta Elv 0.006

GPSVEC SO Point ID 23378 DX -7124.921 DY 1671.584
Class Stake out DZ -1920.167 Code crest
Obs L1 Fixed H.pr 0.017 V.pr 0.025

GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 17.2
Horz SD Vert SD
Start wk 1550 sec 576019.0 End wk 1550 sec 576029.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000170888 VCV xy 0.0000138586
VCV xz -0.0000076749 VCV yy 0.0000372804
VCV yz -0.0000183416 VCV zz 0.0000292025

PT DGN SO Name 50042 To the Point

GRID D SO Delta N 0.006 Delta E 0.019
Delta Elv 0.038

GPSVEC SO Point ID 23379 DX -7078.370 DY 1645.735
Class Stake out DZ -1926.358 Code <no text>
Obs L1 Fixed H.pr 0.017 V.pr 0.025

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GPSQC1 NM Min SVs 11 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 23.5
Horz SD Vert SD
Start wk 1550 sec 576084.0 End wk 1550 sec 576089.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000172476 VCV xy 0.0000140611
VCV xz -0.0000080115 VCV yy 0.0000374845
VCV yz -0.0000186439 VCV zz 0.0000296741

PT DGN SO Name 50066 To the Point

GRID D SO Delta N 0.009 Delta E -0.027
Delta Elv 0.029

GPSVEC SO Point ID 23380 DX -7097.146 DY 1621.353
Class Stake out DZ -1965.773 Code <no text>
Obs L1 Fixed H.pr 0.017 V.pr 0.025

GPSQC1 NM Min SVs 11 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 15.5
Horz SD Vert SD
Start wk 1550 sec 576157.0 End wk 1550 sec 576162.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000173314 VCV xy 0.0000141896
VCV xz -0.0000083628 VCV yy 0.0000376257
VCV yz -0.0000189257 VCV zz 0.0000300917

PT DGN SO Name 50170 To the Point

GRID D SO Delta N 0.005 Delta E -0.046
Delta Elv 0.004

GPSVEC SO Point ID 23381 DX -7036.475 DY 1623.021
Class Stake out DZ -1932.272 Code <no text>
Obs L1 Fixed H.pr 0.016 V.pr 0.025

GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 10.5
Horz SD Vert SD
Start wk 1550 sec 576303.0 End wk 1550 sec 576311.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000169696 VCV xy 0.0000139091
VCV xz -0.0000087477 VCV yy 0.0000361712
VCV yz -0.0000186872 VCV zz 0.000029968

PT DGN SO Name 50067 To the Point

GRID D SO Delta N 0.019 Delta E -0.004
Delta Elv 0.007

GPSVEC SO Point ID 23382 DX -6983.709 DY 1594.479
Class Stake out DZ -1939.725 Code main fl
Obs L1 Fixed H.pr 0.016 V.pr 0.026

GPSQC1 NM Min SVs 16 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 18.4
Horz SD Vert SD
Start wk 1550 sec 576447.0 End wk 1550 sec 576452.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000173268 VCV xy 0.000014483
VCV xz -0.0000095739 VCV yy 0.0000373737
VCV yz -0.0000196828 VCV zz 0.0000312292

PT DGN SO Name 50041 To the Point

GRID D SO Delta N 0.005 Delta E 0.017
Delta Elv 0.029

GPSVEC SO Point ID 23383 DX -6990.783 DY 1579.655
Class Stake out DZ -1960.945 Code main fl
Obs L1 Fixed H.pr 0.016 V.pr 0.026

GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 11.8
Horz SD Vert SD
Start wk 1550 sec 576536.0 End wk 1550 sec 576541.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000172767 VCV xy 0.0000145892
VCV xz -0.0000099175 VCV yy 0.0000372941
VCV yz -0.0000199173 VCV zz 0.0000315285

PT DGN SO Name 50165 To the Point

GRID D SO Delta N -0.031 Delta E 0.002
Delta Elv 0.004
    
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GPSVEC SO Point ID 23384      DX  -6970.404      DY  1622.283
        Class Stake out      DZ  -1899.808      Code main fl
        Obs L1 Fixed          H.pr 0.016        V.pr 0.026

GPSQC1 NM Min SVs          11                PDOP max 1.0
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 5        VDOP max 0.8
        Monitor status Not monitored RMS 14.9
        Horz SD                Vert SD
        Start wk 1550 sec 576674.0 End wk 1550 sec 576679.0

GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000175615      VCV xy 0.0000148427
        VCV xz -0.0000105932     VCV yy 0.000036769
        VCV yz -0.0000201655     VCV zz 0.0000324263

PT DGN SO Name              50040          To the Point

GRID D SO Delta N           0.013          Delta E 0.011
        Delta Elv 0.022

NOTE TS Time Date 09/26/2009 Time 09:12:05

GPSVEC SO Point ID 23385      DX  -6906.283      DY  1584.291
        Class Stake out      DZ  -1906.891      Code <no text>
        Obs L1 Fixed          H.pr 0.016        V.pr 0.026

GPSQC1 NM Min SVs          16                PDOP max 1.0
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 5        VDOP max 0.8
        Monitor status Not monitored RMS 18.3
        Horz SD                Vert SD
        Start wk 1550 sec 576732.0 End wk 1550 sec 576739.0

GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000170229      VCV xy 0.0000142893
        VCV xz -0.0000105432     VCV yy 0.0000362224
        VCV yz -0.0000201032     VCV zz 0.0000323519

PT DGN SO Name              50129          To the Point

GRID D SO Delta N           -0.024         Delta E 0.024
        Delta Elv 0.034

GPSVEC SO Point ID 23386      DX  -6916.908      DY  1555.399
        Class Stake out      DZ  -1947.374      Code <no text>
        Obs L1 Fixed          H.pr 0.016        V.pr 0.026

GPSQC1 NM Min SVs          11                PDOP max 1.0
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 5        VDOP max 0.8
        Monitor status Not monitored RMS 23.7
        Horz SD                Vert SD
        Start wk 1550 sec 576843.0 End wk 1550 sec 576848.0

GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000175759      VCV xy 0.0000151501
        VCV xz -0.0000113225     VCV yy 0.0000379703
        VCV yz -0.0000211754     VCV zz 0.0000334305

PT DGN SO Name              50128          To the Point

GRID D SO Delta N           -0.047         Delta E -0.015
        Delta Elv 0.011

NOTE TS Time Date 09/26/2009 Time 10:54:21

GPSVEC SO Point ID 23387      DX  -6710.304      DY  1850.602
        Class Stake out      DZ  -1515.025      Code mid
        Obs L1 Fixed          H.pr 0.018        V.pr 0.029

GPSQC1 NM Min SVs          13                PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 6        VDOP max 0.9
        Monitor status Not monitored RMS 17.6
        Horz SD                Vert SD
        Start wk 1550 sec 582864.0 End wk 1550 sec 582869.0

GPSQC2 NM Ttl satellites 13          Err Scale 0.0099999998
        VCV xx 0.0000174304      VCV xy 0.0000147589
        VCV xz -0.000003678      VCV yy 0.0000659673
        VCV yz -0.000025711      VCV zz 0.0000243552

LIN DGN SO Name              Line0030         To the Line
        Station 47.953          H.Offset <null>
        Elv <null>

LIN D SO D Station          <null>          D Offset 0.004
        D Elev 0.019           Grd to Line 1:0.202

GRID D SO Delta N           0.004          Delta E -0.001
        Delta Elv 0.019

GPSVEC SO Point ID 23388      DX  -6707.711      DY  1865.683
        Class Stake out      DZ  -1495.292      Code mid
        Obs L1 Fixed          H.pr 0.018        V.pr 0.029

GPSQC1 NM Min SVs          13                PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 6        VDOP max 0.9
        Monitor status Not monitored RMS 14.4
        Horz SD                Vert SD
        Start wk 1550 sec 582916.0 End wk 1550 sec 582921.0
    
```

```

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000178578 VCV xy 0.0000150927
VCV xz -0.0000038633 VCV yy 0.0000673227
VCV yz -0.0000271651 VCV zz 0.0000263865

LIN DGN SO Name Line0029 To the Line
Station 47.102 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.005
D Elev 0.017 Grd to Line 1:0.264

GRID D SO Delta N 0.004 Delta E -0.001
Delta Elv 0.017

GPSVEC SO Point ID 23389 DX -6703.890 DY 1877.291
Class Stake out DZ -1479.407 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.030

GPSQC1 NM Min SVs 13 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 13.0
Horz SD Vert SD
Start wk 1550 sec 582982.0 End wk 1550 sec 582987.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000180809 VCV xy 0.0000151409
VCV xz -0.0000039038 VCV yy 0.0000678891
VCV yz -0.0000279677 VCV zz 0.0000276154

LIN DGN SO Name Line0028 To the Line
Station 46.190 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.044
D Elev 0.055 Grd to Line 1:0.788

GRID D SO Delta N -0.043 Delta E 0.003
Delta Elv 0.055

GPSVEC SO Point ID 23390 DX -6697.795 DY 1887.357
Class Stake out DZ -1463.843 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.030

GPSQC1 NM Min SVs 13 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 21.4
Horz SD Vert SD
Start wk 1550 sec 583026.0 End wk 1550 sec 583031.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000181014 VCV xy 0.0000150108
VCV xz -0.0000038552 VCV yy 0.000067628
VCV yz -0.0000280879 VCV zz 0.0000279522

LIN DGN SO Name Line0027 To the Line
Station 45.125 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.001
D Elev 0.004 Grd to Line 1:0.264

GRID D SO Delta N 0.001 Delta E 0.000
Delta Elv 0.004

GPSVEC SO Point ID 23391 DX -6687.720 DY 1898.768
Class Stake out DZ -1444.492 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.030

GPSQC1 NM Min SVs 13 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 12.4
Horz SD Vert SD
Start wk 1550 sec 583096.0 End wk 1550 sec 583101.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000181667 VCV xy 0.0000147211
VCV xz -0.0000037327 VCV yy 0.0000667984
VCV yz -0.0000280952 VCV zz 0.0000282871

LIN DGN SO Name Line0026 To the Line
Station 44.272 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.019
D Elev 0.025 Grd to Line 1:0.747

GRID D SO Delta N 0.018 Delta E 0.004
Delta Elv 0.025

GPSVEC SO Point ID 23392 DX -6674.020 DY 1907.449
Class Stake out DZ -1426.788 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.029

GPSQC1 NM Min SVs 13 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 16.7
Horz SD Vert SD
Start wk 1550 sec 583144.0 End wk 1550 sec 583149.0
    
```

```

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000181201 VCV xy 0.0000144472
VCV xz -0.0000036255 VCV yy 0.000065877
VCV yz -0.0000279178 VCV zz 0.000028308

LIN DGN SO Name Line0025 To the Line
Station 42.495 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.019
D Elev 0.042 Grd to Line 1:0.453

GRID D SO Delta N -0.017 Delta E -0.007
Delta Elv 0.042

GPSVEC SO Point ID 23393 DX -6660.173 DY 1913.153
Class Stake out DZ -1412.536 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.029

GPSQC1 NM Min SVs 13 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 9.8
Horz SD Vert SD
Start wk 1550 sec 583200.0 End wk 1550 sec 583205.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000181696 VCV xy 0.0000142568
VCV xz -0.0000035163 VCV yy 0.0000653412
VCV yz -0.000027831 VCV zz 0.0000284422

LIN DGN SO Name Line0024 To the Line
Station 40.983 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.015
D Elev 0.027 Grd to Line 1:0.555

GRID D SO Delta N -0.013 Delta E -0.008
Delta Elv 0.027

GPSVEC SO Point ID 23394 DX -6645.766 DY 1917.144
Class Stake out DZ -1399.958 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.029

GPSQC1 NM Min SVs 13 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 19.5
Horz SD Vert SD
Start wk 1550 sec 583262.0 End wk 1550 sec 583267.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000182664 VCV xy 0.000014037
VCV xz -0.0000033998 VCV yy 0.0000646633
VCV yz -0.0000277591 VCV zz 0.0000286175

LIN DGN SO Name Line0023 To the Line
Station 39.909 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.009
D Elev 0.022 Grd to Line 1:0.405

GRID D SO Delta N 0.007 Delta E 0.005
Delta Elv 0.022

GPSVEC SO Point ID 23395 DX -6627.263 DY 1920.090
Class Stake out DZ -1385.794 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.029

GPSQC1 NM Min SVs 13 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 10.4
Horz SD Vert SD
Start wk 1550 sec 583313.0 End wk 1550 sec 583318.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000182168 VCV xy 0.0000137667
VCV xz -0.0000032914 VCV yy 0.0000637018
VCV yz -0.0000275386 VCV zz 0.0000285756

LIN DGN SO Name Line0022 To the Line
Station 39.594 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.031
D Elev 0.049 Grd to Line 1:0.644

GRID D SO Delta N 0.021 Delta E 0.023
Delta Elv 0.049

GPSVEC SO Point ID 23396 DX -6612.009 DY 1920.892
Class Stake out DZ -1375.960 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.029

GPSQC1 NM Min SVs 9 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 15.9
Horz SD Vert SD
Start wk 1550 sec 583360.0 End wk 1550 sec 583366.0
    
```

```

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000182271 VCV xy 0.0000136133
VCV xz -0.0000031956 VCV yy 0.0000631674
VCV yz -0.0000273808 VCV zz 0.0000285914

LIN DGN SO Name Line0021 To the Line
Station 39.671 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.003
D Elev 0.026 Grd to Line 1:0.115

GRID D SO Delta N 0.002 Delta E 0.002
Delta Elv 0.026

GPSVEC SO Point ID 23397 DX -6592.877 DY 1919.274
Class Stake out DZ -1367.813 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.029

GPSQC1 NM Min SVs 13 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 15.4
Horz SD Vert SD
Start wk 1550 sec 583402.0 End wk 1550 sec 583407.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000181879 VCV xy 0.000013412
VCV xz -0.0000031152 VCV yy 0.0000624331
VCV yz -0.000027198 VCV zz 0.0000285486

LIN DGN SO Name Line0020 To the Line
Station 38.107 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.025
D Elev 0.014 Grd to Line 1:1.745

GRID D SO Delta N -0.013 Delta E -0.021
Delta Elv 0.014

GPSVEC SO Point ID 23398 DX -6570.919 DY 1915.640
Class Stake out DZ -1359.933 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.029

GPSQC1 NM Min SVs 13 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 15.4
Horz SD Vert SD
Start wk 1550 sec 583447.0 End wk 1550 sec 583453.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000181845 VCV xy 0.000013225
VCV xz -0.0000030331 VCV yy 0.0000617382
VCV yz -0.0000270429 VCV zz 0.0000285475

LIN DGN SO Name Line0019 To the Line
Station 37.550 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.015
D Elev 0.000 Grd to Line 1:-37.707

GRID D SO Delta N -0.005 Delta E -0.014
Delta Elv 0.000

GPSVEC SO Point ID 23399 DX -6552.706 DY 1910.642
Class Stake out DZ -1356.536 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.029

GPSQC1 NM Min SVs 12 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 11.9
Horz SD Vert SD
Start wk 1550 sec 583504.0 End wk 1550 sec 583509.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000183207 VCV xy 0.0000131441
VCV xz -0.0000030327 VCV yy 0.0000617102
VCV yz -0.0000277838 VCV zz 0.0000296736

LIN DGN SO Name Line0018 To the Line
Station 36.107 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.018
D Elev 0.026 Grd to Line 1:0.707

GRID D SO Delta N -0.005 Delta E -0.018
Delta Elv 0.026

GPSVEC SO Point ID 23400 DX -6538.082 DY 1905.072
Class Stake out DZ -1355.647 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.028

GPSQC1 NM Min SVs 13 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 14.7
Horz SD Vert SD
Start wk 1550 sec 583553.0 End wk 1550 sec 583558.0
    
```

```

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000183632 VCV xy 0.0000128973
VCV xz -0.0000027478 VCV yy 0.0000598016
VCV yz -0.0000255677 VCV zz 0.0000269898

LIN DGN SO Name Line0017 To the Line
Station 34.938 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.013
D Elev 0.022 Grd to Line 1:0.584

GRID D SO Delta N -0.002 Delta E -0.013
Delta Elv 0.022

GPSVEC SO Point ID 23401 DX -6720.144 DY 1824.191
Class Stake out DZ -1549.659 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.028

GPSQC1 NM Min SVs 12 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 13.9
Horz SD Vert SD
Start wk 1550 sec 583685.0 End wk 1550 sec 583690.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000185172 VCV xy 0.0000119346
VCV xz -0.0000023973 VCV yy 0.0000582857
VCV yz -0.0000254596 VCV zz 0.000027586

LIN DGN SO Name 34141-34131 To the Line
Station 54.452 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.008
D Elev 0.013 Grd to Line 1:0.627

GRID D SO Delta N 0.008 Delta E -0.002
Delta Elv 0.013

GPSVEC SO Point ID 23402 DX -6734.018 DY 1786.731
Class Stake out DZ -1598.807 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.029

GPSQC1 NM Min SVs 12 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 9.6
Horz SD Vert SD
Start wk 1550 sec 583734.0 End wk 1550 sec 583739.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000189409 VCV xy 0.0000125289
VCV xz -0.0000027077 VCV yy 0.0000605688
VCV yz -0.0000278951 VCV zz 0.0000305632

LIN DGN SO Name 34140-34132 To the Line
Station 63.641 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.023
D Elev 0.050 Grd to Line 1:0.467

GRID D SO Delta N 0.023 Delta E -0.005
Delta Elv 0.050

GPSVEC SO Point ID 23403 DX -6750.621 DY 1746.724
Class Stake out DZ -1651.097 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.029

GPSQC1 NM Min SVs 12 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 15.0
Horz SD Vert SD
Start wk 1550 sec 583810.0 End wk 1550 sec 583815.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000192983 VCV xy 0.0000128312
VCV xz -0.0000028773 VCV yy 0.0000618829
VCV yz -0.0000295418 VCV zz 0.0000326275

LIN DGN SO Name 34139-34133 To the Line
Station 75.362 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.002
D Elev 0.000 Grd to Line 1:-4.606

GRID D SO Delta N -0.002 Delta E 0.000
Delta Elv 0.000

GPSVEC SO Point ID 23404 DX -7265.808 DY 1859.241
Class Stake out DZ -1776.675 Code rd
Obs L1 Fixed H.pr 0.020 V.pr 0.030

GPSQC1 NM Min SVs 7 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 14.8
Horz SD Vert SD
Start wk 1550 sec 584231.0 End wk 1550 sec 584236.0
    
```

```

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
VCV xx 0.0000222695 VCV xy 0.00001477
VCV xz -0.0000030259 VCV yy 0.0000651957
VCV yz -0.0000317177 VCV zz 0.0000357944

PT DGN SO Name 34054 To the Point

GRID D SO Delta N 0.020 Delta E 0.027
Delta Elv 0.015

GPSVEC SO Point ID 23405 DX -7204.096 DY 1923.816
Class Stake out DZ -1674.173 Code rd
Obs L1 Fixed H.pr 0.016 V.pr 0.024

GPSQC1 NM Min SVs 11 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 11.2
Horz SD Vert SD
Start wk 1550 sec 584339.0 End wk 1550 sec 584344.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.007939022
VCV xx 0.0000237008 VCV xy 0.0000160852
VCV xz -0.0000037396 VCV yy 0.0000614267
VCV yz -0.0000301894 VCV zz 0.0000356591

PT DGN SO Name 34056 To the Point

GRID D SO Delta N -0.010 Delta E 0.004
Delta Elv 0.001

GPSVEC SO Point ID 23406 DX -7175.290 DY 1953.319
Class Stake out DZ -1627.326 Code rd
Obs L1 Fixed H.pr 0.020 V.pr 0.031

GPSQC1 NM Min SVs 11 PDOP max 1.2
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 15.0
Horz SD Vert SD
Start wk 1550 sec 584403.0 End wk 1550 sec 584408.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000241421 VCV xy 0.0000166634
VCV xz -0.0000039951 VCV yy 0.000066779
VCV yz -0.0000324787 VCV zz 0.0000369478

PT DGN SO Name 34057 To the Point

GRID D SO Delta N -0.013 Delta E 0.044
Delta Elv 0.004

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 09/26/2009 Time 13:18:18

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measurement True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measurement True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1550
Init type On the fly seconds 591524.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 6.562 Measurement Uncorrected

GPSVEC SO Point ID 23407 DX -6175.668 DY 1205.121
Class Stake out DZ -2024.100 Code 9-26-09chk
Obs L1 Fixed H.pr 0.017 V.pr 0.026
    
```

GPSQC1 NM Min SVs 8 PDOP max 1.0
 Relative DOPs Yes HDOP max 0.5
 Total GPS pos 6 VDOP max 0.8
 Monitor status Not monitored RMS 11.9
 Horz SD Vert SD
 Start wk 1550 sec 591568.0 End wk 1550 sec 591573.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
 VCV xx 0.0000271947 VCV xy 0.0000209322
 VCV xz -0.0000119615 VCV yy 0.0000394161
 VCV yz -0.000018664 VCV zz 0.0000240816

PT DGN SO Name 106 To the Point

GRID D SO Delta N -0.039 Delta E -0.035
 Delta Elv -0.042

GPSVEC SO Point ID 23408 DX -6850.263 DY 1470.140
 Class Stake out DZ -2084.011 Code 733117
 Obs L1 Fixed H.pr 0.018 V.pr 0.036

GPSQC1 NM Min SVs 13 PDOP max 1.2
 Relative DOPs Yes HDOP max 0.6
 Total GPS pos 5 VDOP max 1.1
 Monitor status Not monitored RMS 10.8
 Horz SD Vert SD
 Start wk 1550 sec 592694.0 End wk 1550 sec 592699.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
 VCV xx 0.0000422187 VCV xy 0.0000424031
 VCV xz -0.0000220962 VCV yy 0.0000745706
 VCV yz -0.0000361947 VCV zz 0.0000325467

PT DGN SO Name 33117 To the Point

GRID D SO Delta N 0.040 Delta E -0.008
 Delta Elv 0.013

NOTE NM Modified 8:43:14 AM 10/8/2009

NOTE NM Old values 933117

GPSVEC SO Point ID 23409 DX -6803.612 DY 1452.744
 Class Stake out DZ -2078.223 Code 733116
 Obs L1 Fixed H.pr 0.018 V.pr 0.036

GPSQC1 NM Min SVs 13 PDOP max 1.3
 Relative DOPs Yes HDOP max 0.6
 Total GPS pos 6 VDOP max 1.1
 Monitor status Not monitored RMS 11.8
 Horz SD Vert SD
 Start wk 1550 sec 592896.0 End wk 1550 sec 592901.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
 VCV xx 0.0000415798 VCV xy 0.0000432448
 VCV xz -0.000022378 VCV yy 0.0000781379
 VCV yz -0.0000380141 VCV zz 0.0000329736

PT DGN SO Name 33116 To the Point

GRID D SO Delta N -0.049 Delta E 0.007
 Delta Elv 0.011

NOTE NM Modified 8:43:01 AM 10/8/2009

NOTE NM Old values 933116

GPSVEC SO Point ID 23410 DX -6732.753 DY 1426.212
 Class Stake out DZ -2069.580 Code 733114
 Obs L1 Fixed H.pr 0.018 V.pr 0.037

GPSQC1 NM Min SVs 13 PDOP max 1.3
 Relative DOPs Yes HDOP max 0.6
 Total GPS pos 6 VDOP max 1.1
 Monitor status Not monitored RMS 8.9
 Horz SD Vert SD
 Start wk 1550 sec 593068.0 End wk 1550 sec 593073.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
 VCV xx 0.000040682 VCV xy 0.0000437491
 VCV xz -0.0000224639 VCV yy 0.0000810727
 VCV yz -0.0000395938 VCV zz 0.0000333288

PT DGN SO Name 33114 To the Point

GRID D SO Delta N -0.002 Delta E 0.007
 Delta Elv 0.013

NOTE NM Modified 8:40:48 AM 10/8/2009

NOTE NM Old values 933114

GPSVEC SO Point ID 23411 DX -6684.811 DY 1408.204
 Class Stake out DZ -2063.729 Code 733113
 Obs L1 Fixed H.pr 0.018 V.pr 0.037

GPSQC1 NM Min SVs 13 PDOP max 1.3
 Relative DOPs Yes HDOP max 0.6
 Total GPS pos 6 VDOP max 1.1
 Monitor status Not monitored RMS 25.0
 Horz SD Vert SD
 Start wk 1550 sec 593128.0 End wk 1550 sec 593133.0

```

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.0000401769 VCV xy 0.0000436483
          VCV xz -0.0000225196 VCV yy 0.0000815679
          VCV yz -0.0000400512 VCV zz 0.0000335674

PT DGN SO Name 33113 To the Point

GRID D SO Delta N 0.064 Delta E 0.026
          Delta Elv -0.024

NOTE NM Modified 8:40:32 AM 10/8/2009

NOTE NM Old values 933113

GPSVEEC SO Point ID 23412 DX -6640.041 DY 1391.533
          Class Stake out DZ -2058.245 Code 733112
          Obs L1 Fixed H.pr 0.018 V.pr 0.037

GPSQC1 NM Min SVs 13 PDOP max 1.3
          Relative DOPs Yes HDOP max 0.6
          Total GPS pos 6 VDOP max 1.2
          Monitor status Not monitored RMS 14.4
          Horz SD Vert SD
          Start wk 1550 sec 593248.0 End wk 1550 sec 593253.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.0000394785 VCV xy 0.0000437714
          VCV xz -0.0000226299 VCV yy 0.0000833476
          VCV yz -0.0000411522 VCV zz 0.0000340651

PT DGN SO Name 33112 To the Point

GRID D SO Delta N 0.017 Delta E -0.004
          Delta Elv 0.032

NOTE NM Modified 8:40:15 AM 10/8/2009

NOTE NM Old values 933112

NOTE TS Time Date 09/26/2009 Time 13:48:58

GPSVEEC SO Point ID 23413 DX -6580.782 DY 1369.320
          Class Stake out DZ -2050.943 Code 733111
          Obs L1 Fixed H.pr 0.018 V.pr 0.037

GPSQC1 NM Min SVs 13 PDOP max 1.3
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.2
          Monitor status Not monitored RMS 22.1
          Horz SD Vert SD
          Start wk 1550 sec 593347.0 End wk 1550 sec 593352.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.000038783 VCV xy 0.0000437615
          VCV xz -0.0000226503 VCV yy 0.0000846886
          VCV yz -0.0000419934 VCV zz 0.000034379

PT DGN SO Name 33111 To the Point

GRID D SO Delta N 0.010 Delta E -0.005
          Delta Elv -0.026

NOTE NM Modified 8:39:58 AM 10/8/2009

NOTE NM Old values 933111

GPSVEEC SO Point ID 23414 DX -6529.278 DY 1350.219
          Class Stake out DZ -2044.680 Code 733110
          Obs L1 Fixed H.pr 0.017 V.pr 0.038

GPSQC1 NM Min SVs 13 PDOP max 1.3
          Relative DOPs Yes HDOP max 0.6
          Total GPS pos 6 VDOP max 1.2
          Monitor status Not monitored RMS 15.6
          Horz SD Vert SD
          Start wk 1550 sec 593482.0 End wk 1550 sec 593487.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.0000380977 VCV xy 0.0000440418
          VCV xz -0.0000228448 VCV yy 0.0000872544
          VCV yz -0.0000435367 VCV zz 0.0000351489

PT DGN SO Name 33110 To the Point

GRID D SO Delta N -0.008 Delta E -0.028
          Delta Elv 0.022

NOTE NM Modified 8:39:42 AM 10/8/2009

NOTE NM Old values 933110

GPSVEEC SO Point ID 23415 DX -6433.408 DY 1315.328
          Class Stake out DZ -2033.133 Code 733108
          Obs L1 Fixed H.pr 0.017 V.pr 0.038

GPSQC1 NM Min SVs 13 PDOP max 1.3
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.2
          Monitor status Not monitored RMS 17.7
          Horz SD Vert SD
          Start wk 1550 sec 593703.0 End wk 1550 sec 593708.0
    
```

```

GPSQC2 NM Ttl satellites 13 Err Scale 0.0098723806
          VCV xx 0.0000366784 VCV xy 0.000043984
          VCV xz -0.0000229073 VCV yy 0.000089356
          VCV yz -0.0000445779 VCV zz 0.0000352582

PT DGN SO Name 33108 To the Point

GRID D SO Delta N -0.041 Delta E -0.055
          Delta Elv 0.029

NOTE NM Modified 8:37:48 AM 10/8/2009

NOTE NM Old values 933108

GPSVEC SO Point ID 23416 DX -6379.882 DY 1295.756
          Class Stake out DZ -2026.685 Code 733107
          Obs L1 Fixed H.pr 0.017 V.pr 0.038

GPSQC1 NM Min SVs 13 PDOP max 1.3
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.2
          Monitor status Not monitored RMS 13.2
          Horz SD Vert SD
          Start wk 1550 sec 593783.0 End wk 1550 sec 593788.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.0000354902 VCV xy 0.00004313
          VCV xz -0.0000225524 VCV yy 0.0000901829
          VCV yz -0.0000455454 VCV zz 0.0000359541

PT DGN SO Name 33107 To the Point

GRID D SO Delta N 0.013 Delta E 0.051
          Delta Elv -0.040

NOTE NM Modified 8:37:35 AM 10/8/2009

NOTE NM Old values 933107

INIT KI Init event Lost Week 1550
          Init type On the fly seconds 594029.0
          Init counter 1 Point ID <no text>
          Survey type Real Time Plate H.Dist <null>
          Plate V.Dist <null> Plate azimuth <null>

INIT KI Init event Gained Week 1550
          Init type On the fly seconds 594031.0
          Init counter 2 Point ID <no text>
          Survey type Real Time Plate H.Dist <null>
          Plate V.Dist <null> Plate azimuth <null>

GPSVEC SO Point ID 23417 DX -6175.667 DY 1205.118
          Class Stake out DZ -2024.095 Code 9-26-09chk
          Obs L1 Fixed H.pr 0.016 V.pr 0.034

GPSQC1 NM Min SVs 14 PDOP max 1.2
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.1
          Monitor status Not monitored RMS 12.9
          Horz SD Vert SD
          Start wk 1550 sec 594194.0 End wk 1550 sec 594199.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
          VCV xx 0.000028285 VCV xy 0.000031848
          VCV xz -0.0000180232 VCV yy 0.0000686519
          VCV yz -0.0000371253 VCV zz 0.0000329248

PT DGN SO Name 106 To the Point

GRID D SO Delta N -0.042 Delta E -0.037
          Delta Elv -0.047

GPSVEC SO Point ID 23418 DX -6154.021 DY 1286.483
          Class Stake out DZ -1913.368 Code 933099
          Obs L1 Fixed H.pr 0.015 V.pr 0.031

GPSQC1 NM Min SVs 14 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.0
          Monitor status Not monitored RMS 23.2
          Horz SD Vert SD
          Start wk 1550 sec 594308.0 End wk 1550 sec 594313.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
          VCV xx 0.0000257524 VCV xy 0.0000265509
          VCV xz -0.000015443 VCV yy 0.0000561173
          VCV yz -0.0000309084 VCV zz 0.0000299027

PT DGN SO Name 33099 To the Point

GRID D SO Delta N -0.003 Delta E 0.016
          Delta Elv -0.059

GPSVEC SO Point ID 23419 DX -6163.611 DY 1313.204
          Class Stake out DZ -1886.615 Code 933098
          Obs L1 Fixed H.pr 0.016 V.pr 0.033

GPSQC1 NM Min SVs 7 PDOP max 1.2
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.0
          Monitor status Not monitored RMS 23.3
          Horz SD Vert SD
          Start wk 1550 sec 594434.0 End wk 1550 sec 594440.0
    
```

```

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
          VCV xx 0.0000261021 VCV xy 0.0000289712
          VCV xz -0.0000166189 VCV yy 0.0000645528
          VCV yz -0.0000353431 VCV zz 0.0000322697

PT DGN SO Name 33098 To the Point

GRID D SO Delta N 0.041 Delta E 0.008
          Delta Elv -0.018

GPSVEC SO Point ID 23420 DX -6467.134 DY 1490.094
          Class Stake out DZ -1845.643 Code 933088
          Obs L1 Fixed H.pr 0.016 V.pr 0.032

GPSQC1 NM Min SVs 8 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 5 VDOP max 1.0
          Monitor status Not monitored RMS 14.7
          Horz SD Vert SD
          Start wk 1550 sec 595008.0 End wk 1550 sec 595013.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
          VCV xx 0.0000225148 VCV xy 0.000024202
          VCV xz -0.0000143277 VCV yy 0.0000616999
          VCV yz -0.0000351857 VCV zz 0.0000342322

PT DGN SO Name 33088 To the Point

GRID D SO Delta N 0.001 Delta E -0.018
          Delta Elv -0.076

NOTE TS Time Date 09/26/2009 Time 14:19:45

GPSVEC SO Point ID 23421 DX -6548.710 DY 1533.605
          Class Stake out DZ -1839.641 Code 933086
          Obs L1 Fixed H.pr 0.016 V.pr 0.034

GPSQC1 NM Min SVs 13 PDOP max 1.2
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.1
          Monitor status Not monitored RMS 17.7
          Horz SD Vert SD
          Start wk 1550 sec 595193.0 End wk 1550 sec 595198.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.0000218207 VCV xy 0.0000242682
          VCV xz -0.0000148121 VCV yy 0.0000682396
          VCV yz -0.0000411512 VCV zz 0.0000399102

PT DGN SO Name 33086 To the Point

GRID D SO Delta N 0.010 Delta E 0.020
          Delta Elv 0.026

GPSVEC SO Point ID 23422 DX -6633.873 DY 1604.944
          Class Stake out DZ -1801.059 Code 933082
          Obs L1 Fixed H.pr 0.016 V.pr 0.031

GPSQC1 NM Min SVs 13 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.0
          Monitor status Not monitored RMS 16.3
          Horz SD Vert SD
          Start wk 1550 sec 595688.0 End wk 1550 sec 595693.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.0000194195 VCV xy 0.0000194872
          VCV xz -0.0000125663 VCV yy 0.0000561691
          VCV yz -0.0000356985 VCV zz 0.0000391739

PT DGN SO Name 33082 To the Point

GRID D SO Delta N 0.017 Delta E -0.015
          Delta Elv 0.012

GPSVEC SO Point ID 23423 DX -6655.281 DY 1636.245
          Class Stake out DZ -1774.741 Code 933081
          Obs L1 Fixed H.pr 0.016 V.pr 0.032

GPSQC1 NM Min SVs 13 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.0
          Monitor status Not monitored RMS 14.5
          Horz SD Vert SD
          Start wk 1550 sec 595788.0 End wk 1550 sec 595793.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.0000192096 VCV xy 0.0000199836
          VCV xz -0.0000129144 VCV yy 0.0000611601
          VCV yz -0.0000385785 VCV zz 0.0000411411

PT DGN SO Name 33081 To the Point

GRID D SO Delta N -0.016 Delta E -0.015
          Delta Elv -0.035

GPSVEC SO Point ID 23424 DX -6175.662 DY 1205.148
          Class Stake out DZ -2024.129 Code 9-26-09postchk
          Obs L1 Fixed H.pr 0.016 V.pr 0.031
    
```

```

GPSQC1 NM Min SVs 13 PDOP max 1.1
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 14.7
Horz SD Vert SD
Start wk 1550 sec 596324.0 End wk 1550 sec 596329.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000165821 VCV xy 0.0000166913
VCV xz -0.0000116679 VCV yy 0.0000544534
VCV yz -0.0000359582 VCV zz 0.0000414886

PT DGN SO Name 106 To the Point

GRID D SO Delta N -0.031 Delta E -0.029
Delta Elv -0.003

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 09/28/2009 Time 09:58:10

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measurement True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measurement True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1551
Init type On the fly seconds 147516.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 6.562 Measurement Uncorrected

GPSVEC SO Point ID 23425 DX -6658.239 DY 2281.503
Class Stake out DZ -993.097 Code 9-28-09chk
Obs L1 Fixed H.pr 0.016 V.pr 0.029

GPSQC1 NM Min SVs 17 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 19.5
Horz SD Vert SD
Start wk 1551 sec 147599.0 End wk 1551 sec 147604.0

GPSQC2 NM Ttl satellites 17 Err Scale 0.0099999998
VCV xx 0.00001796 VCV xy 0.0000197291
VCV xz -0.0000113562 VCV yy 0.0000525225
VCV yz -0.0000254628 VCV zz 0.0000296126

PT DGN SO Name 23315 To the Point

GRID D SO Delta N -0.028 Delta E -0.016
Delta Elv -0.016

INIT KI Init event High RMS Week 1551
Init type On the fly seconds 147740.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

INIT KI Init event Good RMS Week 1551
Init type On the fly seconds 147741.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

GPSVEC SO Point ID 23426 DX -6895.664 DY 1613.086
Class Stake out DZ -1866.400 Code 950130
Obs L1 Fixed H.pr 0.016 V.pr 0.029

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```

GPSQC1 NM Min SVs 16 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 15.4
Horz SD Vert SD
Start wk 1551 sec 148006.0 End wk 1551 sec 148011.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000183355 VCV xy 0.000020299
VCV xz -0.0000095737 VCV yy 0.0000573827
VCV yz -0.0000244126 VCV zz 0.0000251551

PT DGN SO Name 50130 To the Point

GRID D SO Delta N 0.045 Delta E 0.026
Delta Elv 0.042

GPSVEC SO Point ID 23427 DX -6851.960 DY 1587.492
Class Stake out DZ -1871.400 Code 950172
Obs L1 Fixed H.pr 0.017 V.pr 0.030

GPSQC1 NM Min SVs 16 PDOP max 1.1
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 13.3
Horz SD Vert SD
Start wk 1551 sec 148083.0 End wk 1551 sec 148088.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000188279 VCV xy 0.0000212501
VCV xz -0.0000098066 VCV yy 0.0000610783
VCV yz -0.0000258467 VCV zz 0.0000273077

PT DGN SO Name 50172 To the Point

GRID D SO Delta N 0.019 Delta E 0.006
Delta Elv 0.010

GPSVEC SO Point ID 23428 DX -6841.360 DY 1616.225
Class Stake out DZ -1830.737 Code 950171
Obs L1 Fixed H.pr 0.017 V.pr 0.028

GPSQC1 NM Min SVs 16 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 20.6
Horz SD Vert SD
Start wk 1551 sec 148137.0 End wk 1551 sec 148142.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000186148 VCV xy 0.0000203161
VCV xz -0.000009211 VCV yy 0.0000560065
VCV yz -0.0000231468 VCV zz 0.0000263245

PT DGN SO Name 50171 To the Point

GRID D SO Delta N -0.013 Delta E -0.001
Delta Elv 0.019

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 09/30/2009 Time 09:30:02

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measurement True

GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>

EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measurement True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1551
Init type On the fly seconds 318666.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

INIT KI Init event Lost Week 1551
Init type On the fly seconds 320138.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

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INIT   KI   Init event   Gained           Week           1551
        Init type    On the fly       seconds        320210.0
        Init counter  2               Point ID       <no text>
        Survey type  Real Time       Plate H.Dist   <null>
        Plate V.Dist <null>         Plate azimuth  <null>

SURVEY EVENTKISurvey event Survey ended

NOTE   TS   Time Date 10/02/2009 Time 13:23:47

SURVEY KI   Elev mask 10                PDOP mask 6.0

SURVEY KI   Elev mask 10                PDOP mask 6.0

SURVEY KI   Elev mask 10                PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI   Antenna ht 0.000             Measuremt True

GPSPOS FD   Point ID 44501             Lat 36°03'10.29917"N Lng 114°59'31.59480"W
        Class Control Hgt 1645.648             Code 1_30_09_BASE
        Obs User Input H.pr <null>             V.pr <null>

EQUIP  SI   Receiver SPS851             Serial no <no text>
        Antenna Zephyr - Model 2
        Meas To Antenna Phase Center
        Tape adj 0.000             Serial no <no text>
        H.Offset 0.000             V.Offset 0.000

NOTE   NM   Receiver firmware version=0.000

GPSANT KI   Antenna ht 4.245             Measuremt True

GPSREF KI   Reference 44501

INIT   KI   Init event   Gained           Week           1551
        Init type    On the fly       seconds        505460.0
        Init counter  1               Point ID       <no text>
        Survey type  Real Time       Plate H.Dist   <null>
        Plate V.Dist <null>         Plate azimuth  <null>

NOTE   TS   Time Date 10/02/2009 Time 16:00:05

SURVEY EVENTKISurvey event Survey ended

NOTE   TS   Time Date 10/06/2009 Time 13:46:18

SURVEY KI   Elev mask 10                PDOP mask 6.0

SURVEY KI   Elev mask 10                PDOP mask 6.0

SURVEY KI   Elev mask 10                PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI   Antenna ht 0.000             Measuremt True

GPSPOS FD   Point ID 44501             Lat 36°03'10.29917"N Lng 114°59'31.59480"W
        Class Control Hgt 1645.648             Code 1_30_09_BASE
        Obs User Input H.pr <null>             V.pr <null>

EQUIP  SI   Receiver SPS851             Serial no <no text>
        Antenna Zephyr - Model 2
        Meas To Antenna Phase Center
        Tape adj 0.000             Serial no <no text>
        H.Offset 0.000             V.Offset 0.000

NOTE   NM   Receiver firmware version=0.000

GPSANT KI   Antenna ht 4.245             Measuremt True

GPSREF KI   Reference 44501

INIT   KI   Init event   Gained           Week           1552
        Init type    On the fly       seconds        247605.0
        Init counter  1               Point ID       <no text>
        Survey type  Real Time       Plate H.Dist   <null>
        Plate V.Dist <null>         Plate azimuth  <null>

NOTE   NM   Following data imported from 10-5-09 Additional 3MM Waste

NOTE   NM   Top Points.csv

SURVEY EVENTKISurvey event Survey ended

NOTE   TS   Time Date 10/08/2009 Time 07:55:06

SURVEY KI   Elev mask 10                PDOP mask 6.0

SURVEY KI   Elev mask 10                PDOP mask 6.0

SURVEY KI   Elev mask 10                PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

SURVEY EVENTKISurvey event Survey ended

SURVEY KI   Elev mask 10                PDOP mask 6.0

SURVEY KI   Elev mask 10                PDOP mask 6.0

SURVEY KI   Elev mask 10                PDOP mask 6.0

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SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1552
Init type On the fly seconds 399360.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213
NOTE NM Receiver firmware version=3.710
GPSANT KI Antenna ht 6.562 Measurement Uncorrected
GPSVEC SO Point ID 23429 DX -6175.669 DY 1205.123
Class Stake out DZ -2024.085 Code 10-8-09chk
Obs L1 Fixed H.pr 0.016 V.pr 0.023
GPSQC1 NM Min SVs 15 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.7
Monitor status Not monitored RMS 14.9
Horz SD Vert SD
Start wk 1552 sec 399422.0 End wk 1552 sec 399427.0
GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000158865 VCV xy 0.000012381
VCV xz -0.000003535 VCV yy 0.0000377553
VCV yz -0.0000157299 VCV zz 0.0000224712
PT DGN SO Name 106 To the Point
GRID D SO Delta N -0.053 Delta E -0.034
Delta Elv -0.050
GPSVEC SO Point ID 23430 DX -6188.399 DY 1239.210
Class Stake out DZ -1989.260 Code 733102
Obs L1 Fixed H.pr 0.016 V.pr 0.023
GPSQC1 NM Min SVs 11 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.7
Monitor status Not monitored RMS 17.5
Horz SD Vert SD
Start wk 1552 sec 399935.0 End wk 1552 sec 399940.0
GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000155401 VCV xy 0.0000114028
VCV xz -0.0000053335 VCV yy 0.0000329297
VCV yz -0.0000152695 VCV zz 0.0000228408
PT DGN SO Name 133102 To the Point
GRID D SO Delta N 0.009 Delta E 0.062
Delta Elv -0.023
GPSVEC SO Point ID 23431 DX -6168.536 DY 1257.320
Class Stake out DZ -1956.674 Code 733101
Obs L1 Fixed H.pr 0.015 V.pr 0.023
GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.7
Monitor status Not monitored RMS 14.1
Horz SD Vert SD
Start wk 1552 sec 400105.0 End wk 1552 sec 400112.0
GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000154581 VCV xy 0.0000114023
VCV xz -0.0000059004 VCV yy 0.0000324646
VCV yz -0.0000154669 VCV zz 0.0000229047
PT DGN SO Name 133101 To the Point
GRID D SO Delta N 0.000 Delta E 0.117
Delta Elv 0.097
GPSVEC SO Point ID 23432 DX -6154.308 DY 1286.546
Class Stake out DZ -1913.432 Code 733099
Obs L1 Fixed H.pr 0.015 V.pr 0.023

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GPSQC1 NM Min SVs 11 PDOP max 0.9
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 5 VDOP max 0.7
          Monitor status Not monitored RMS 12.6
          Horz SD Vert SD
          Start wk 1552 sec 400275.0 End wk 1552 sec 400280.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000155603 VCV xy 0.0000115782
          VCV xz -0.000006531 VCV yy 0.0000324305
          VCV yz -0.0000158682 VCV zz 0.0000232897

PT DGN SO Name 133099 To the Point

GRID D SO Delta N 0.005 Delta E 0.129
          Delta Elv -0.009

GPSVEC SO Point ID 23433 DX -6164.523 DY 1312.745
          Class Stake out DZ -1887.245 Code 733098
          Obs L1 Fixed H.pr 0.015 V.pr 0.023

GPSQC1 NM Min SVs 16 PDOP max 0.9
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 0.7
          Monitor status Not monitored RMS 14.0
          Horz SD Vert SD
          Start wk 1552 sec 400405.0 End wk 1552 sec 400410.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000156268 VCV xy 0.0000117061
          VCV xz -0.0000070058 VCV yy 0.0000324165
          VCV yz -0.0000161886 VCV zz 0.0000236549

PT DGN SO Name 133098 To the Point

GRID D SO Delta N 0.038 Delta E 0.046
          Delta Elv 0.045

GPSVEC SO Point ID 23434 DX -6193.093 DY 1327.849
          Class Stake out DZ -1885.619 Code 733097
          Obs L1 Fixed H.pr 0.015 V.pr 0.024

GPSQC1 NM Min SVs 16 PDOP max 0.9
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 5 VDOP max 0.7
          Monitor status Not monitored RMS 16.7
          Horz SD Vert SD
          Start wk 1552 sec 400568.0 End wk 1552 sec 400573.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000158365 VCV xy 0.000011995
          VCV xz -0.000007658 VCV yy 0.000032687
          VCV yz -0.000016738 VCV zz 0.0000242988

PT DGN SO Name 133097 To the Point

GRID D SO Delta N 0.018 Delta E -0.043
          Delta Elv 0.006

GPSVEC SO Point ID 23435 DX -6221.270 DY 1342.674
          Class Stake out DZ -1884.193 Code 733096
          Obs L1 Fixed H.pr 0.015 V.pr 0.024

GPSQC1 NM Min SVs 11 PDOP max 0.9
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 5 VDOP max 0.7
          Monitor status Not monitored RMS 13.6
          Horz SD Vert SD
          Start wk 1552 sec 400794.0 End wk 1552 sec 400800.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000160859 VCV xy 0.0000124276
          VCV xz -0.0000085592 VCV yy 0.0000331288
          VCV yz -0.0000175689 VCV zz 0.0000252309

PT DGN SO Name 33096 To the Point

GRID D SO Delta N 0.110 Delta E -0.007
          Delta Elv 0.027

GPSVEC SO Point ID 23436 DX -6247.833 DY 1356.220
          Class Stake out DZ -1882.995 Code 733095
          Obs L1 Fixed H.pr 0.015 V.pr 0.024

GPSQC1 NM Min SVs 16 PDOP max 0.9
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 5 VDOP max 0.8
          Monitor status Not monitored RMS 18.4
          Horz SD Vert SD
          Start wk 1552 sec 400910.0 End wk 1552 sec 400916.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000162892 VCV xy 0.0000127247
          VCV xz -0.0000090563 VCV yy 0.0000335628
          VCV yz -0.0000180968 VCV zz 0.0000258604

PT DGN SO Name 33095 To the Point

GRID D SO Delta N 0.092 Delta E -0.017
          Delta Elv -0.023
    
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GPSVEC SO Point ID 23437      DX  -6285.619      DY  1375.647
        Class Stake out      DZ  -1881.190      Code 733094
        Obs L1 Fixed          H.pr 0.015       V.pr 0.024

GPSQC1 NM Min SVs          16                PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.8
        Monitor status Not monitored RMS 13.7
        Horz SD                Vert SD
        Start wk 1552 sec 401015.0 End wk 1552 sec 401020.0

GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000165907    VCV xy 0.0000129655
        VCV xz -0.0000095297   VCV yy 0.000033126
        VCV yz -0.0000182745   VCV zz 0.0000264809

PT DGN SO Name              33094          To the Point

GRID D SO Delta N           0.081          Delta E 0.033
        Delta Elv          -0.022

NOTE TS Time Date 10/08/2009 Time 08:27:31

GPSVEC SO Point ID 23438      DX  -6315.624      DY  1391.261
        Class Stake out      DZ  -1879.532      Code 733093
        Obs L1 Fixed          H.pr 0.015       V.pr 0.026

GPSQC1 NM Min SVs          14                PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 5        VDOP max 0.8
        Monitor status Not monitored RMS 27.4
        Horz SD                Vert SD
        Start wk 1552 sec 401254.0 End wk 1552 sec 401262.0

GPSQC2 NM Ttl satellites 14          Err Scale 0.0099999998
        VCV xx 0.0000171773    VCV xy 0.0000139622
        VCV xz -0.0000112563   VCV yy 0.0000352083
        VCV yz -0.0000204187   VCV zz 0.0000302688

PT DGN SO Name              33093          To the Point

GRID D SO Delta N           0.002          Delta E -0.028
        Delta Elv          0.047

GPSVEC SO Point ID 23439      DX  -6159.222      DY  1275.413
        Class Stake out      DZ  -1929.637      Code 733100
        Obs L1 Fixed          H.pr 0.015       V.pr 0.025

GPSQC1 NM Min SVs          15                PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.8
        Monitor status Not monitored RMS 16.0
        Horz SD                Vert SD
        Start wk 1552 sec 401492.0 End wk 1552 sec 401497.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000165863    VCV xy 0.0000136066
        VCV xz -0.0000106364   VCV yy 0.0000343948
        VCV yz -0.0000196362   VCV zz 0.0000272022

PT DGN SO Name              33100          To the Point

GRID D SO Delta N           0.005          Delta E -0.006
        Delta Elv          -0.012

GPSVEC SO Point ID 23440      DX  -6236.851      DY  1244.830
        Class Stake out      DZ  -2008.930      Code 733103
        Obs L1 Fixed          H.pr 0.015       V.pr 0.025

GPSQC1 NM Min SVs          11                PDOP max 0.9
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 5        VDOP max 0.8
        Monitor status Not monitored RMS 14.7
        Horz SD                Vert SD
        Start wk 1552 sec 401591.0 End wk 1552 sec 401597.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000175534    VCV xy 0.0000147319
        VCV xz -0.000011977    VCV yy 0.0000339298
        VCV yz -0.0000202878   VCV zz 0.0000291765

PT DGN SO Name              33103          To the Point

GRID D SO Delta N           -0.066         Delta E 0.114
        Delta Elv          0.034

GPSVEC SO Point ID 23441      DX  -6274.892      DY  1258.315
        Class Stake out      DZ  -2013.733      Code 733104
        Obs L1 Fixed          H.pr 0.015       V.pr 0.026

GPSQC1 NM Min SVs          11                PDOP max 1.0
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 5        VDOP max 0.8
        Monitor status Not monitored RMS 15.4
        Horz SD                Vert SD
        Start wk 1552 sec 401666.0 End wk 1552 sec 401671.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000179913    VCV xy 0.0000154151
        VCV xz -0.0000126462   VCV yy 0.0000367893
        VCV yz -0.0000219972   VCV zz 0.0000306773
    
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PT DGN SO Name 33104 To the Point
GRID D SO Delta N 0.013 Delta E 0.003
Delta Elv 0.041
GPSVEC SO Point ID 23442 DX -6304.667 DY 1268.895
Class Stake out DZ -2017.414 Code 733105
Obs L1 Fixed H.pr 0.015 V.pr 0.027
GPSQC1 NM Min SVs 11 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 16.2
Horz SD Vert SD
Start wk 1552 sec 401765.0 End wk 1552 sec 401771.0
GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000182462 VCV xy 0.0000158966
VCV xz -0.0000131791 VCV yy 0.0000383322
VCV yz -0.0000230637 VCV zz 0.0000316722
PT DGN SO Name 33105 To the Point
GRID D SO Delta N 0.007 Delta E -0.021
Delta Elv 0.007
GPSVEC SO Point ID 23443 DX -6339.279 DY 1281.213
Class Stake out DZ -2021.707 Code 733106
Obs L1 Fixed H.pr 0.015 V.pr 0.026
GPSQC1 NM Min SVs 15 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 15.5
Horz SD Vert SD
Start wk 1552 sec 401838.0 End wk 1552 sec 401848.0
GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000181325 VCV xy 0.0000157683
VCV xz -0.0000132345 VCV yy 0.0000356254
VCV yz -0.000021916 VCV zz 0.0000311522
PT DGN SO Name 33106 To the Point
GRID D SO Delta N 0.004 Delta E -0.023
Delta Elv -0.012
GPSVEC SO Point ID 23444 DX -6482.263 DY 1333.166
Class Stake out DZ -2038.926 Code 733109
Obs L1 Fixed H.pr 0.015 V.pr 0.027
GPSQC1 NM Min SVs 11 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 14.1
Horz SD Vert SD
Start wk 1552 sec 401972.0 End wk 1552 sec 401978.0
GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000189958 VCV xy 0.0000167322
VCV xz -0.0000142198 VCV yy 0.0000364533
VCV yz -0.0000228458 VCV zz 0.0000329736
PT DGN SO Name 33109 To the Point
GRID D SO Delta N -0.112 Delta E 0.090
Delta Elv 0.017
GPSVEC SO Point ID 23445 DX -6175.679 DY 1205.136
Class Stake out DZ -2024.105 Code 10-8-09chk
Obs L1 Fixed H.pr 0.015 V.pr 0.026
GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 17.7
Horz SD Vert SD
Start wk 1552 sec 402477.0 End wk 1552 sec 402482.0
GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000172472 VCV xy 0.0000155379
VCV xz -0.0000140638 VCV yy 0.0000335598
VCV yz -0.0000221198 VCV zz 0.0000338942
PT DGN SO Name 106 To the Point
GRID D SO Delta N -0.040 Delta E -0.019
Delta Elv -0.032

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SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 10/08/2009 Time 10:06:47
NOTE TS Time Date 10/12/2009 Time 07:29:50
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started

```

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GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1553
Init type On the fly seconds 138616.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
INIT KI Init event Lost Week 1553
Init type On the fly seconds 138890.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
INIT KI Init event Gained Week 1553
Init type On the fly seconds 138907.0
Init counter 2 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213
NOTE NM Receiver firmware version=3.710
GPSANT KI Antenna ht 6.562 Measurement Uncorrected
GPSVEC SO Point ID 23446 DX -6889.975 DY 1485.015
Class Stake out DZ -2088.889 Code 733118
Obs L1 Fixed H.pr 0.018 V.pr 0.025
GPSQC1 NM Min SVs 13 PDOP max 1.0
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 19.6
Horz SD Vert SD
Start wk 1553 sec 138965.0 End wk 1553 sec 138970.0
GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000164341 VCV xy 0.0000140503
VCV xz -0.000004051 VCV yy 0.0000299844
VCV yz -0.0000119949 VCV zz 0.0000200181
PT DGN SO Name 33118 To the Point
GRID D SO Delta N 0.053 Delta E 0.099
Delta Elv 0.035
INIT KI Init event Lost Week 1553
Init type On the fly seconds 138991.0
Init counter 2 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
INIT KI Init event Gained Week 1553
Init type On the fly seconds 138993.0
Init counter 3 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
GPSVEC SO Point ID 23447 DX -6945.596 DY 1505.539
Class Stake out DZ -2095.954 Code 734027
Obs L1 Fixed H.pr 0.016 V.pr 0.022
GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.7
Monitor status Not monitored RMS 8.6
Horz SD Vert SD
Start wk 1553 sec 139082.0 End wk 1553 sec 139089.0
GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000144473 VCV xy 0.0000121855
VCV xz -0.0000039083 VCV yy 0.0000342613
VCV yz -0.0000136976 VCV zz 0.000021235
PT DGN SO Name 34027 To the Point
GRID D SO Delta N -0.127 Delta E 0.032
Delta Elv -0.026
GPSVEC SO Point ID 23448 DX -6326.520 DY 1396.822
Class Stake out DZ -1878.883 Code 733092
Obs L1 Fixed H.pr 0.015 V.pr 0.022

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GPSQC1 NM Min SVs 10 PDOP max 0.8
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.7
Monitor status Not monitored RMS 12.3
Horz SD Vert SD
Start wk 1553 sec 139479.0 End wk 1553 sec 139487.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000144377 VCV xy 0.0000120063
VCV xz -0.0000054914 VCV yy 0.0000315785
VCV yz -0.0000137025 VCV zz 0.0000213235

PT DGN SO Name 33092 To the Point

GRID D SO Delta N -0.012 Delta E -0.003
Delta Elv -0.036

INIT KI Init event High RMS Week 1553
Init type On the fly seconds 139516.0
Init counter 3 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

INIT KI Init event Good RMS Week 1553
Init type On the fly seconds 139517.0
Init counter 3 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

GPSVEC SO Point ID 23449 DX -6351.590 DY 1415.030
Class Stake out DZ -1871.047 Code 733091
Obs L1 Fixed H.pr 0.014 V.pr 0.020

GPSQC1 NM Min SVs 11 PDOP max 0.7
Relative DOPs Yes HDOP max 0.4
Total GPS pos 6 VDOP max 0.6
Monitor status Not monitored RMS 10.6
Horz SD Vert SD
Start wk 1553 sec 139593.0 End wk 1553 sec 139599.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000118411 VCV xy 0.000009032
VCV xz -0.0000039563 VCV yy 0.0000226853
VCV yz -0.0000110921 VCV zz 0.0000184411

PT DGN SO Name 33091 To the Point

GRID D SO Delta N -0.001 Delta E 0.021
Delta Elv -0.011

GPSVEC SO Point ID 23450 DX -6381.459 DY 1436.747
Class Stake out DZ -1861.681 Code 733090
Obs L1 Fixed H.pr 0.015 V.pr 0.022

GPSQC1 NM Min SVs 16 PDOP max 0.8
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.7
Monitor status Not monitored RMS 12.1
Horz SD Vert SD
Start wk 1553 sec 139684.0 End wk 1553 sec 139689.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000142155 VCV xy 0.0000109204
VCV xz -0.0000050299 VCV yy 0.0000278798
VCV yz -0.0000133412 VCV zz 0.0000227651

PT DGN SO Name 33090 To the Point

GRID D SO Delta N 0.004 Delta E -0.035
Delta Elv 0.015

GPSVEC SO Point ID 23451 DX -6420.799 DY 1465.320
Class Stake out DZ -1849.368 Code 733089
Obs L1 Fixed H.pr 0.015 V.pr 0.023

GPSQC1 NM Min SVs 16 PDOP max 0.8
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.7
Monitor status Not monitored RMS 9.9
Horz SD Vert SD
Start wk 1553 sec 139795.0 End wk 1553 sec 139801.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000138269 VCV xy 0.0000107458
VCV xz -0.0000054481 VCV yy 0.0000309012
VCV yz -0.0000149222 VCV zz 0.0000245824

PT DGN SO Name 33089 To the Point

GRID D SO Delta N 0.004 Delta E 0.008
Delta Elv 0.038

GPSVEC SO Point ID 23452 DX -6504.212 DY 1509.917
Class Stake out DZ -1842.912 Code 733087
Obs L1 Fixed H.pr 0.016 V.pr 0.024

GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.7
Monitor status Not monitored RMS 12.4
Horz SD Vert SD
Start wk 1553 sec 139921.0 End wk 1553 sec 139926.0

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GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000153589 VCV xy 0.0000122737
VCV xz -0.00000641 VCV yy 0.0000333923
VCV yz -0.0000161742 VCV zz 0.0000258989

PT DGN SO Name 33087 To the Point

GRID D SO Delta N -0.014 Delta E 0.008
Delta Elv -0.001

INIT KI Init event High RMS Week 1553
Init type On the fly seconds 140056.0
Init counter 3 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

INIT KI Init event Good RMS Week 1553
Init type On the fly seconds 140059.0
Init counter 3 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

INIT KI Init event Lost Week 1553
Init type On the fly seconds 140060.0
Init counter 3 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

INIT KI Init event Gained Week 1553
Init type On the fly seconds 140080.0
Init counter 4 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>

GPSVEC SO Point ID 23453 DX -6592.121 DY 1556.705
Class Stake out DZ -1836.265 Code 733085
Obs L1 Fixed H.pr 0.015 V.pr 0.022

GPSQC1 NM Min SVs 13 PDOP max 0.8
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.7
Monitor status Not monitored RMS 18.7
Horz SD Vert SD
Start wk 1553 sec 140116.0 End wk 1553 sec 140121.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000121328 VCV xy 0.0000084118
VCV xz -0.000005658 VCV yy 0.0000289353
VCV yz -0.0000138282 VCV zz 0.0000217897

PT DGN SO Name 33085 To the Point

GRID D SO Delta N -0.081 Delta E 0.029
Delta Elv -0.075

GPSVEC SO Point ID 23454 DX -6612.075 DY 1573.163
Class Stake out DZ -1827.594 Code 733083
Obs L1 Fixed H.pr 0.015 V.pr 0.023

GPSQC1 NM Min SVs 16 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.7
Monitor status Not monitored RMS 13.3
Horz SD Vert SD
Start wk 1553 sec 140231.0 End wk 1553 sec 140237.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000107282 VCV xy 0.0000091069
VCV xz -0.000004662 VCV yy 0.0000228449
VCV yz -0.0000117671 VCV zz 0.0000177631

PT DGN SO Name 33083 To the Point

GRID D SO Delta N -0.141 Delta E 0.028
Delta Elv 0.001

GPSVEC SO Point ID 23455 DX -6609.823 DY 1571.229
Class Stake out DZ -1828.755 Code 733084
Obs L1 Fixed H.pr 0.014 V.pr 0.023

GPSQC1 NM Min SVs 8 PDOP max 0.9
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 19.8
Horz SD Vert SD
Start wk 1553 sec 140340.0 End wk 1553 sec 140346.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000134778 VCV xy 0.0000125649
VCV xz -0.00000736 VCV yy 0.0000293237
VCV yz -0.0000159656 VCV zz 0.0000238978

PT DGN SO Name 33084 To the Point

GRID D SO Delta N 0.083 Delta E -0.076
Delta Elv 0.041

NOTE TS Time Date 10/12/2009 Time 08:01:28

GPSVEC SO Point ID 23456 DX -6672.155 DY 1661.587
Class Stake out DZ -1753.423 Code 733080
Obs L1 Fixed H.pr 0.019 V.pr 0.030
    
```

GPSQC1 NM Min SVs 12 PDOP max 1.2
 Relative DOPs Yes HDOP max 0.6
 Total GPS pos 5 VDOP max 1.0
 Monitor status Not monitored RMS 11.7
 Horz SD Vert SD
 Start wk 1553 sec 140495.0 End wk 1553 sec 140502.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
 VCV xx 0.0000138383 VCV xy 0.0000126734
 VCV xz -0.0000083859 VCV yy 0.0000300293
 VCV yz -0.0000173908 VCV zz 0.000030053

PT DGN SO Name 33080 To the Point

GRID D SO Delta N -0.032 Delta E -0.030
 Delta Elv 0.075

GPSVEC SO Point ID 23457 DX -6678.808 DY 1671.255
 Class Stake out DZ -1745.115 Code 734137
 Obs L1 Fixed H.pr 0.016 V.pr 0.026

GPSQC1 NM Min SVs 15 PDOP max 0.9
 Relative DOPs Yes HDOP max 0.5
 Total GPS pos 6 VDOP max 0.8
 Monitor status Not monitored RMS 12.4
 Horz SD Vert SD
 Start wk 1553 sec 140625.0 End wk 1553 sec 140630.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
 VCV xx 0.0000144563 VCV xy 0.0000125634
 VCV xz -0.0000081643 VCV yy 0.0000317006
 VCV yz -0.0000171997 VCV zz 0.0000273679

PT DGN SO Name 34137 To the Point

GRID D SO Delta N 0.017 Delta E 0.019
 Delta Elv -0.024

GPSVEC SO Point ID 23458 DX -6175.623 DY 1205.158
 Class Stake out DZ -2024.139 Code 10-12-09chk
 Obs L1 Fixed H.pr 0.015 V.pr 0.024

GPSQC1 NM Min SVs 16 PDOP max 0.9
 Relative DOPs Yes HDOP max 0.5
 Total GPS pos 6 VDOP max 0.8
 Monitor status Not monitored RMS 13.9
 Horz SD Vert SD
 Start wk 1553 sec 140920.0 End wk 1553 sec 140925.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
 VCV xx 0.0000146682 VCV xy 0.0000124029
 VCV xz -0.0000089946 VCV yy 0.000032424
 VCV yz -0.000017726 VCV zz 0.0000270739

PT DGN SO Name 106 To the Point

GRID D SO Delta N -0.038 Delta E -0.060
 Delta Elv 0.023

SURVEY EVENTKISurvey event Survey ended