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SC V10-70      Copyright © Trimble Navigation Ltd, 1996-2003
              Serial no 4043      03-Aug-09 08:06
              Angle Degrees      Dist US Feet      Press inch Hg
              Temp Fahrenheit     Coord N-E-Elv      H.obs Right

JOB           Job ID PH-2+3A-IC-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          Measuremt 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 -0.00000315253   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      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 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          Measuremt 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 -0.00000408528   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 Modified 6:28:16 PM 6/18/2009
NOTE   NM Old values
SURVEY EVENTKISurvey event Survey ended
NOTE   TS Time Date 07/06/2009 Time 10:25:40
NOTE   NM Following data imported from CAMU Control.CSV
NOTE   NM Following data imported from 7-2-09 Phase 2 & 3A Waste
NOTE   NM pnts.csv
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 1539
        Init type On the fly          seconds 149284.0
        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          Measuremt Uncorrected

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GPSVEC SO Point ID 23001      DX -6797.885      DY 1569.154
        Class Stake out    DZ -1861.584      Code 7-6-09prechk
        Obs L1 Fixed       H.pr 0.022       V.pr 0.030

GPSQC1 NM Min SVs          7                PDOP max 1.2
        Relative DOPs Yes   HDOP max 0.7
        Total GPS pos 6     VDOP max 0.9
        Monitor status Not monitored RMS 11.6
        Horz SD              Vert SD
        Start wk 1539 sec 149350.0 End wk 1539 sec 149355.0

GPSQC2 NM Ttl satellites 7          Err Scale 0.0099999998
        VCV xx 0.0000309434 VCV xy 0.0000234574
        VCV xz -0.000008939 VCV yy 0.000006059
        VCV yz -0.0000232661 VCV zz 0.0000410562

PT DGN SO Name              23000          To the Point

GRID D SO Delta N           -0.068          Delta E 0.013
        Delta Elv          -0.033

GPSVEC SO Point ID 23002      DX -7172.137     DY 2080.821
        Class Stake out    DZ -1517.500     Code mid
        Obs L1 Fixed       H.pr 0.023       V.pr 0.029

GPSQC1 NM Min SVs          8                PDOP max 1.1
        Relative DOPs Yes   HDOP max 0.7
        Total GPS pos 5     VDOP max 0.9
        Monitor status Not monitored RMS 10.5
        Horz SD              Vert SD
        Start wk 1539 sec 149961.0 End wk 1539 sec 149966.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx 0.0000294999 VCV xy 0.0000198008
        VCV xz -0.0000081999 VCV yy 0.0000504452
        VCV yz -0.0000226629 VCV zz 0.0000470967

LIN DGN SO Name              34001-34051     To the Line
        Station            34.023          H.Offset <null>
        Elv                 <null>

LIN D SO D Station          <null>          D Offset 0.031
        D Elev             0.049          Grd to Line 1:0.627

GRID D SO Delta N           -0.029          Delta E -0.010
        Delta Elv          0.049

GPSVEC SO Point ID 23003      DX -7194.396     DY 2108.847
        Class Stake out    DZ -1514.768     Code toe-1
        Obs L1 Fixed       H.pr 0.022       V.pr 0.029

GPSQC1 NM Min SVs          8                PDOP max 1.1
        Relative DOPs Yes   HDOP max 0.7
        Total GPS pos 6     VDOP max 0.9
        Monitor status Not monitored RMS 18.5
        Horz SD              Vert SD
        Start wk 1539 sec 150084.0 End wk 1539 sec 150089.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx 0.0000292265 VCV xy 0.0000193977
        VCV xz -0.0000084086 VCV yy 0.0000480417
        VCV yz -0.0000213997 VCV zz 0.0000457343

PT DGN SO Name              34001          To the Point

GRID D SO Delta N           0.076          Delta E 0.071
        Delta Elv          0.037

GPSVEC TP Point ID 23004      DX -7196.128     DY 2109.411
        Class Normal       DZ -1513.952     Code toe-2
        Obs L1 Fixed       H.pr 0.022       V.pr 0.029

GPSQC1 NM Min SVs          8                PDOP max 1.1
        Relative DOPs Yes   HDOP max 0.7
        Total GPS pos 6     VDOP max 0.9
        Monitor status Not monitored RMS 14.6
        Horz SD              Vert SD
        Start wk 1539 sec 150112.0 End wk 1539 sec 150117.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx 0.000028863 VCV xy 0.0000191008
        VCV xz -0.0000082796 VCV yy 0.0000479713
        VCV yz -0.0000219781 VCV zz 0.0000466969

GPSVEC SO Point ID 23005      DX -7229.459     DY 2085.001
        Class Stake out    DZ -1562.898     Code toe-1
        Obs L1 Fixed       H.pr 0.023       V.pr 0.029

GPSQC1 NM Min SVs          8                PDOP max 1.2
        Relative DOPs Yes   HDOP max 0.7
        Total GPS pos 5     VDOP max 0.9
        Monitor status Not monitored RMS 11.0
        Horz SD              Vert SD
        Start wk 1539 sec 150205.0 End wk 1539 sec 150210.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx 0.0000288281 VCV xy 0.0000189228
        VCV xz -0.0000083183 VCV yy 0.0000486572
        VCV yz -0.0000236611 VCV zz 0.0000499583

PT DGN SO Name              34002          To the Point
    
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GRID D	SO	Delta N	0.115	Delta E	-0.768
		Delta Elv	0.027		
GPSVEC	TP	Point ID 23006	DX -7231.158	DY	2085.581
		Class Normal	DZ -1561.945	Code	toe-2
		Obs L1 Fixed	H.pr 0.023	V.pr	0.029
GPSQC1	NM	Min SVs	8	PDOP max	1.1
		Relative DOPs	Yes	HDOP max	0.7
		Total GPS pos	6	VDOP max	0.9
		Monitor status	Not monitored	RMS	17.6
		Horz SD		Vert SD	
		Start wk 1539	sec 150230.0	End wk 1539	sec 150235.0
GPSQC2	NM	Ttl satellites	8	Err Scale	0.0099999998
		VCV xx	0.0000285428	VCV xy	0.0000187026
		VCV xz	-0.0000082676	VCV yy	0.0000482326
		VCV yz	-0.0000237095	VCV zz	0.0000500561
GPSVEC	SO	Point ID 23007	DX -7205.822	DY	2054.581
		Class Stake out	DZ -1565.918	Code	mid
		Obs L1 Fixed	H.pr 0.023	V.pr	0.029
GPSQC1	NM	Min SVs	8	PDOP max	1.2
		Relative DOPs	Yes	HDOP max	0.7
		Total GPS pos	6	VDOP max	0.9
		Monitor status	Not monitored	RMS	12.5
		Horz SD		Vert SD	
		Start wk 1539	sec 150311.0	End wk 1539	sec 150316.0
GPSQC2	NM	Ttl satellites	8	Err Scale	0.0099999998
		VCV xx	0.0000283604	VCV xy	0.0000184896
		VCV xz	-0.0000083497	VCV yy	0.0000480019
		VCV yz	-0.0000243802	VCV zz	0.0000515132
LIN DGN	SO	Name	34002-34050	To the Line	
		Station	37.350	H.Offset	<null>
		Elv	<null>		
LIN D	SO	D Station	<null>	D Offset	-0.037
		D Elev	0.031	Grd to Line	1:1.178
GRID D	SO	Delta N	0.035	Delta E	0.012
		Delta Elv	0.031		
GPSVEC	SO	Point ID 23008	DX -7242.129	DY	2027.359
		Class Stake out	DZ -1617.302	Code	mid
		Obs L1 Fixed	H.pr 0.023	V.pr	0.030
GPSQC1	NM	Min SVs	8	PDOP max	1.2
		Relative DOPs	Yes	HDOP max	0.7
		Total GPS pos	5	VDOP max	0.9
		Monitor status	Not monitored	RMS	14.8
		Horz SD		Vert SD	
		Start wk 1539	sec 150441.0	End wk 1539	sec 150446.0
GPSQC2	NM	Ttl satellites	8	Err Scale	0.0099999998
		VCV xx	0.0000283771	VCV xy	0.0000184009
		VCV xz	-0.0000086384	VCV yy	0.0000480607
		VCV yz	-0.0000256047	VCV zz	0.0000541724
LIN DGN	SO	Name	34003-34049	To the Line	
		Station	40.092	H.Offset	<null>
		Elv	<null>		
LIN D	SO	D Station	<null>	D Offset	-0.004
		D Elev	0.020	Grd to Line	1:0.199
GRID D	SO	Delta N	0.004	Delta E	0.001
		Delta Elv	0.020		
GPSVEC	SO	Point ID 23009	DX -7268.072	DY	2060.349
		Class Stake out	DZ -1613.996	Code	toe-1
		Obs L1 Fixed	H.pr 0.022	V.pr	0.029
GPSQC1	NM	Min SVs	8	PDOP max	1.2
		Relative DOPs	Yes	HDOP max	0.7
		Total GPS pos	6	VDOP max	0.9
		Monitor status	Not monitored	RMS	10.9
		Horz SD		Vert SD	
		Start wk 1539	sec 150522.0	End wk 1539	sec 150527.0
GPSQC2	NM	Ttl satellites	8	Err Scale	0.0099999998
		VCV xx	0.0000282724	VCV xy	0.0000188592
		VCV xz	-0.0000096566	VCV yy	0.0000463068
		VCV yz	-0.0000233391	VCV zz	0.000050731
PT DGN	SO	Name	34003	To the Point	
GRID D	SO	Delta N	0.004	Delta E	-0.176
		Delta Elv	0.030		
GPSVEC	TP	Point ID 23010	DX -7269.748	DY	2060.936
		Class Normal	DZ -1612.834	Code	toe-2
		Obs L1 Fixed	H.pr 0.022	V.pr	0.029
GPSQC1	NM	Min SVs	8	PDOP max	1.2
		Relative DOPs	Yes	HDOP max	0.7
		Total GPS pos	5	VDOP max	0.9
		Monitor status	Not monitored	RMS	12.7
		Horz SD		Vert SD	
		Start wk 1539	sec 150544.0	End wk 1539	sec 150549.0

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GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
          VCV xx 0.0000281763 VCV xy 0.0000186354
          VCV xz -0.0000094525 VCV yy 0.0000466051
          VCV yz -0.0000242717 VCV zz 0.0000523266

GPSVEC SO Point ID 23011 DX -7302.618 DY 2037.853
          Class Stake out DZ -1660.250 Code toe-1
          Obs L1 Fixed H.pr 0.022 V.pr 0.029

GPSQC1 NM Min SVs 8 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.7
          Total GPS pos 6 VDOP max 0.9
          Monitor status Not monitored RMS 11.3
          Horz SD Vert SD
          Start wk 1539 sec 150644.0 End wk 1539 sec 150649.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
          VCV xx 0.0000281892 VCV xy 0.0000183254
          VCV xz -0.0000092931 VCV yy 0.0000463002
          VCV yz -0.0000243877 VCV zz 0.0000522536

PT DGN SO Name 34004 To the Point

GRID D SO Delta N 0.126 Delta E -0.001
          Delta Elv 0.035

GPSVEC TP Point ID 23012 DX -7304.383 DY 2038.347
          Class Normal DZ -1659.517 Code toe-2
          Obs L1 Fixed H.pr 0.023 V.pr 0.031

GPSQC1 NM Min SVs 8 PDOP max 1.2
          Relative DOPs Yes HDOP max 0.7
          Total GPS pos 5 VDOP max 1.0
          Monitor status Not monitored RMS 19.2
          Horz SD Vert SD
          Start wk 1539 sec 150827.0 End wk 1539 sec 150832.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
          VCV xx 0.000028218 VCV xy 0.0000183645
          VCV xz -0.0000098929 VCV yy 0.0000482163
          VCV yz -0.0000292651 VCV zz 0.0000613981

NOTE TS Time Date 07/06/2009 Time 10:56:18

GPSVEC SO Point ID 23013 DX -7275.304 DY 2003.331
          Class Stake out DZ -1663.651 Code mid
          Obs L1 Fixed H.pr 0.023 V.pr 0.031

GPSQC1 NM Min SVs 8 PDOP max 1.2
          Relative DOPs Yes HDOP max 0.7
          Total GPS pos 5 VDOP max 1.0
          Monitor status Not monitored RMS 21.1
          Horz SD Vert SD
          Start wk 1539 sec 150984.0 End wk 1539 sec 150989.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
          VCV xx 0.000027817 VCV xy 0.0000182876
          VCV xz -0.0000104846 VCV yy 0.0000480442
          VCV yz -0.0000307872 VCV zz 0.000063906

LIN DGN SO Name 34004-34048 To the Line
          Station 41.934 H.Offset <null>
          Elv <null>

LIN D SO D Station <null> D Offset -0.047
          D Elev 0.039 Grd to Line 1:1.19

GRID D SO Delta N 0.044 Delta E 0.016
          Delta Elv 0.039

GPSVEC SO Point ID 23014 DX -7311.074 DY 1970.354
          Class Stake out DZ -1719.027 Code mid
          Obs L1 Fixed H.pr 0.024 V.pr 0.034

GPSQC1 NM Min SVs 7 PDOP max 1.3
          Relative DOPs Yes HDOP max 0.7
          Total GPS pos 6 VDOP max 1.1
          Monitor status Not monitored RMS 13.8
          Horz SD Vert SD
          Start wk 1539 sec 151163.0 End wk 1539 sec 151168.0

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
          VCV xx 0.0000280753 VCV xy 0.0000191596
          VCV xz -0.0000123144 VCV yy 0.0000529373
          VCV yz -0.0000404227 VCV zz 0.0000812149

LIN DGN SO Name 34005-34047 To the Line
          Station 49.568 H.Offset <null>
          Elv <null>

LIN D SO D Station <null> D Offset 0.014
          D Elev 0.056 Grd to Line 1:0.247

GRID D SO Delta N -0.013 Delta E -0.005
          Delta Elv 0.056

GPSVEC SO Point ID 23015 DX -7343.297 DY 2011.146
          Class Stake out DZ -1714.943 Code toe-1
          Obs L1 Fixed H.pr 0.024 V.pr 0.034
    
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GPSQC1 NM Min SVs 7 PDOP max 1.3
Relative DOPs Yes HDOP max 0.8
Total GPS pos 6 VDOP max 1.1
Monitor status Not monitored RMS 12.7
Horz SD Vert SD
Start wk 1539 sec 151233.0 End wk 1539 sec 151238.0

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
VCV xx 0.0000283009 VCV xy 0.0000192029
VCV xz -0.0000127524 VCV yy 0.0000494912
VCV yz -0.0000389164 VCV zz 0.000081871

PT DGN SO Name 34005 To the Point

GRID D SO Delta N 0.025 Delta E -0.089
Delta Elv 0.025

GPSVEC TP Point ID 23016 DX -7344.743 DY 2011.500
Class Normal DZ -1714.155 Code toe-2
Obs L1 Fixed H.pr 0.024 V.pr 0.034

GPSQC1 NM Min SVs 7 PDOP max 1.3
Relative DOPs Yes HDOP max 0.8
Total GPS pos 5 VDOP max 1.1
Monitor status Not monitored RMS 13.9
Horz SD Vert SD
Start wk 1539 sec 151252.0 End wk 1539 sec 151257.0

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
VCV xx 0.0000282251 VCV xy 0.0000193074
VCV xz -0.0000129455 VCV yy 0.0000506012
VCV yz -0.0000399652 VCV zz 0.000082714

GPSVEC SO Point ID 23017 DX -7377.882 DY 1988.747
Class Stake out DZ -1761.081 Code toe-1
Obs L1 Fixed H.pr 0.024 V.pr 0.035

GPSQC1 NM Min SVs 7 PDOP max 1.3
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.1
Monitor status Not monitored RMS 8.8
Horz SD Vert SD
Start wk 1539 sec 151322.0 End wk 1539 sec 151327.0

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
VCV xx 0.0000283496 VCV xy 0.0000198123
VCV xz -0.0000137029 VCV yy 0.0000534983
VCV yz -0.0000428437 VCV zz 0.0000855516

PT DGN SO Name 34006 To the Point

GRID D SO Delta N 0.013 Delta E 0.164
Delta Elv 0.020

GPSVEC TP Point ID 23018 DX -7379.274 DY 1989.257
Class Normal DZ -1760.490 Code toe-2
Obs L1 Fixed H.pr 0.024 V.pr 0.035

GPSQC1 NM Min SVs 7 PDOP max 1.3
Relative DOPs Yes HDOP max 0.7
Total GPS pos 5 VDOP max 1.1
Monitor status Not monitored RMS 15.3
Horz SD Vert SD
Start wk 1539 sec 151343.0 End wk 1539 sec 151351.0

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
VCV xx 0.0000278679 VCV xy 0.0000195737
VCV xz -0.0000136681 VCV yy 0.000053006
VCV yz -0.0000426097 VCV zz 0.000084564

GPSVEC SO Point ID 23019 DX -7343.050 DY 1944.862
Class Stake out DZ -1765.555 Code mid
Obs L1 Fixed H.pr 0.024 V.pr 0.036

GPSQC1 NM Min SVs 7 PDOP max 1.3
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.1
Monitor status Not monitored RMS 18.6
Horz SD Vert SD
Start wk 1539 sec 151582.0 End wk 1539 sec 151587.0

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
VCV xx 0.0000285149 VCV xy 0.0000209746
VCV xz -0.0000159656 VCV yy 0.0000559193
VCV yz -0.0000464291 VCV zz 0.0000885005

LIN DGN SO Name 34006-34046 To the Line
Station 53.227 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.029
D Elev 0.033 Grd to Line 1:0.874

GRID D SO Delta N 0.027 Delta E 0.010
Delta Elv 0.033

GPSVEC SO Point ID 23020 DX -7353.691 DY 1932.359
Class Stake out DZ -1783.890 Code mid
Obs L1 Fixed H.pr 0.024 V.pr 0.037
    
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GPSQC1 NM Min SVs 7 PDOP max 1.4
Relative DOPs Yes HDOP max 0.7
Total GPS pos 5 VDOP max 1.2
Monitor status Not monitored RMS 9.0
Horz SD Vert SD
Start wk 1539 sec 151690.0 End wk 1539 sec 151695.0

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
VCV xx 0.000029345 VCV xy 0.0000220452
VCV xz -0.0000173534 VCV yy 0.0000579233
VCV yz -0.0000486258 VCV zz 0.0000911253

LIN DGN SO Name 34007-34045 To the Line
Station 57.593 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.013
D Elev 0.044 Grd to Line 1:0.303

GRID D SO Delta N -0.013 Delta E -0.005
Delta Elv 0.044

GPSVEC SO Point ID 23021 DX -7391.203 DY 1979.848
Class Stake out DZ -1779.177 Code toe-1
Obs L1 Fixed H.pr 0.023 V.pr 0.034

GPSQC1 NM Min SVs 8 PDOP max 1.3
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.1
Monitor status Not monitored RMS 13.8
Horz SD Vert SD
Start wk 1539 sec 151791.0 End wk 1539 sec 151796.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000295196 VCV xy 0.0000217965
VCV xz -0.0000169698 VCV yy 0.0000522073
VCV yz -0.0000396517 VCV zz 0.0000762578

PT DGN SO Name 34007 To the Point

GRID D SO Delta N 0.026 Delta E 0.001
Delta Elv 0.016

GPSVEC TP Point ID 23022 DX -7392.691 DY 1980.292
Class Normal DZ -1778.373 Code toe-2
Obs L1 Fixed H.pr 0.023 V.pr 0.034

GPSQC1 NM Min SVs 8 PDOP max 1.3
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.1
Monitor status Not monitored RMS 19.8
Horz SD Vert SD
Start wk 1539 sec 151811.0 End wk 1539 sec 151817.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000291722 VCV xy 0.0000216053
VCV xz -0.0000169038 VCV yy 0.0000515987
VCV yz -0.000039235 VCV zz 0.0000752352

GPSVEC SO Point ID 23023 DX -7420.004 DY 1960.350
Class Stake out DZ -1818.557 Code toe-1
Obs L1 Fixed H.pr 0.023 V.pr 0.035

GPSQC1 NM Min SVs 8 PDOP max 1.3
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.1
Monitor status Not monitored RMS 22.3
Horz SD Vert SD
Start wk 1539 sec 151909.0 End wk 1539 sec 151915.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000298791 VCV xy 0.0000224647
VCV xz -0.0000179487 VCV yy 0.000052732
VCV yz -0.0000402039 VCV zz 0.0000758495

PT DGN SO Name 34008 To the Point

GRID D SO Delta N 0.046 Delta E -0.590
Delta Elv -0.022

GPSVEC TP Point ID 23024 DX -7421.715 DY 1960.791
Class Normal DZ -1817.816 Code toe-2
Obs L1 Fixed H.pr 0.023 V.pr 0.035

GPSQC1 NM Min SVs 8 PDOP max 1.3
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.1
Monitor status Not monitored RMS 18.2
Horz SD Vert SD
Start wk 1539 sec 151929.0 End wk 1539 sec 151934.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000298875 VCV xy 0.0000225371
VCV xz -0.0000180772 VCV yy 0.0000527219
VCV yz -0.000040211 VCV zz 0.0000756335

GPSVEC SO Point ID 23025 DX -7387.996 DY 1919.579
Class Stake out DZ -1822.651 Code mid
Obs L1 Fixed H.pr 0.022 V.pr 0.035
    
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GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes       HDOP max  0.7
          Total GPS pos 6         VDOP max  1.1
          Monitor status Not monitored RMS       13.2
          Horz SD                               Vert SD
          Start wk 1539 sec 152026.0           End wk 1539  sec 152031.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000305055       VCV xy   0.0000233439
          VCV xz  -0.0000190446       VCV yy   0.0000536597
          VCV yz  -0.0000409483       VCV zz   0.0000756938

LIN DGN SO Name          34008-34044      To the Line
          Station      49.873          H.Offset  <null>
          Elv          <null>

LIN D SO D Station      <null>          D Offset  0.046
          D Elev       0.059          Grd to Line 1:0.785

GRID D SO Delta N       -0.044          Delta E   -0.016
          Delta Elv    0.059

GPSVEC SO Point ID 23026          DX   -7426.634          DY   1888.555
          Class Stake out          DZ   -1879.293          Code mid
          Obs L1 Fixed              H.pr 0.022          V.pr 0.035

GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes       HDOP max  0.7
          Total GPS pos 6         VDOP max  1.1
          Monitor status Not monitored RMS       13.2
          Horz SD                               Vert SD
          Start wk 1539 sec 152140.0           End wk 1539  sec 152146.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000308714       VCV xy   0.0000240296
          VCV xz  -0.0000199357       VCV yy   0.0000541513
          VCV yz  -0.0000412968       VCV zz   0.000074704

LIN DGN SO Name          34009-34043      To the Line
          Station      54.541          H.Offset  <null>
          Elv          <null>

LIN D SO D Station      <null>          D Offset  -0.042
          D Elev       0.038          Grd to Line 1:1.105

GRID D SO Delta N       0.040          Delta E   0.014
          Delta Elv    0.038

GPSVEC SO Point ID 23027          DX   -7461.316          DY   1933.219
          Class Stake out          DZ   -1874.609          Code toe-1
          Obs L1 Fixed              H.pr 0.022          V.pr 0.034

GPSQC1 NM Min SVs      8          PDOP max  1.2
          Relative DOPs Yes       HDOP max  0.7
          Total GPS pos 5         VDOP max  1.1
          Monitor status Not monitored RMS       8.5
          Horz SD                               Vert SD
          Start wk 1539 sec 152212.0           End wk 1539  sec 152217.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000312483       VCV xy   0.0000240603
          VCV xz  -0.0000197839       VCV yy   0.0000514142
          VCV yz  -0.0000368707       VCV zz   0.0000675701

PT DGN SO Name          34009          To the Point

GRID D SO Delta N       -0.003          Delta E   -0.818
          Delta Elv    -0.002

GPSVEC TP Point ID 23028          DX   -7462.875          DY   1933.815
          Class Normal            DZ   -1873.754          Code toe-2
          Obs L1 Fixed              H.pr 0.022          V.pr 0.034

GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes       HDOP max  0.7
          Total GPS pos 5         VDOP max  1.1
          Monitor status Not monitored RMS       13.6
          Horz SD                               Vert SD
          Start wk 1539 sec 152234.0           End wk 1539  sec 152239.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000311344       VCV xy   0.0000241834
          VCV xz  -0.0000200358       VCV yy   0.0000520574
          VCV yz  -0.0000379683       VCV zz   0.0000687864

GPSVEC SO Point ID 23029          DX   -7496.100          DY   1910.721
          Class Stake out          DZ   -1921.880          Code toe-1
          Obs L1 Fixed              H.pr 0.022          V.pr 0.034

GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes       HDOP max  0.7
          Total GPS pos 5         VDOP max  1.1
          Monitor status Not monitored RMS       15.5
          Horz SD                               Vert SD
          Start wk 1539 sec 152316.0           End wk 1539  sec 152321.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000319494       VCV xy   0.0000250748
          VCV xz  -0.0000209232       VCV yy   0.0000530531
          VCV yz  -0.0000384753       VCV zz   0.000068634

PT DGN SO Name          34010          To the Point
    
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GRID D SO Delta N      0.917          Delta E      -0.465
        Delta Elv    -0.042

GPSVEC TP Point ID 23030      DX   -7497.586      DY   1911.217
        Class Normal  DZ   -1921.298      Code toe-2
        Obs L1 Fixed  H.pr 0.022          V.pr 0.035

GPSQC1 NM Min SVs          8          PDOP max    1.3
        Relative DOPs Yes      HDOP max    0.7
        Total GPS pos  5          VDOP max    1.1
        Monitor status Not monitored RMS          16.4
        Horz SD          Vert SD
        Start wk 1539 sec 152339.0 End wk 1539 sec 152345.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx  0.0000319146      VCV xy  0.0000252662
        VCV xz  -0.0000212179      VCV yy  0.000053779
        VCV yz  -0.0000395546      VCV zz  0.0000697528

GPSVEC SO Point ID 23031      DX   -7456.424      DY   1860.796
        Class Stake out DZ   -1926.375      Code mid
        Obs L1 Fixed  H.pr 0.021          V.pr 0.035

GPSQC1 NM Min SVs          8          PDOP max    1.3
        Relative DOPs Yes      HDOP max    0.7
        Total GPS pos  6          VDOP max    1.1
        Monitor status Not monitored RMS          17.9
        Horz SD          Vert SD
        Start wk 1539 sec 152465.0 End wk 1539 sec 152470.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx  0.0000311882      VCV xy  0.0000251617
        VCV xz  -0.0000221852      VCV yy  0.0000555817
        VCV yz  -0.0000423452      VCV zz  0.0000726229

LIN DGN SO Name          34010-34042      To the Line
        Station        61.343          H.Offset    <null>
        Elv            <null>

LIN D SO D Station      <null>          D Offset    0.002
        D Elev         0.022          Grd to Line 1:0.081

GRID D SO Delta N      -0.002          Delta E      -0.001
        Delta Elv     0.022

GPSVEC SO Point ID 23032      DX   -7482.832      DY   1843.057
        Class Stake out DZ   -1962.829      Code mid
        Obs L1 Fixed  H.pr 0.021          V.pr 0.036

GPSQC1 NM Min SVs          8          PDOP max    1.3
        Relative DOPs Yes      HDOP max    0.7
        Total GPS pos  6          VDOP max    1.1
        Monitor status Not monitored RMS          27.4
        Horz SD          Vert SD
        Start wk 1539 sec 152604.0 End wk 1539 sec 152609.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx  0.0000336965      VCV xy  0.0000280567
        VCV xz  -0.0000241865      VCV yy  0.0000587986
        VCV yz  -0.0000442007      VCV zz  0.0000723766

LIN DGN SO Name          34011-34041      To the Line
        Station        61.876          H.Offset    <null>
        Elv            <null>

LIN D SO D Station      <null>          D Offset    0.002
        D Elev         0.045          Grd to Line 1:0.045

GRID D SO Delta N      -0.002          Delta E      -0.001
        Delta Elv     0.045

GPSVEC SO Point ID 23033      DX   -7522.567      DY   1893.932
        Class Stake out DZ   -1957.552      Code toe-1
        Obs L1 Fixed  H.pr 0.021          V.pr 0.037

GPSQC1 NM Min SVs          8          PDOP max    1.3
        Relative DOPs Yes      HDOP max    0.7
        Total GPS pos  6          VDOP max    1.1
        Monitor status Not monitored RMS          24.9
        Horz SD          Vert SD
        Start wk 1539 sec 152768.0 End wk 1539 sec 152773.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx  0.0000350382      VCV xy  0.0000299131
        VCV xz  -0.0000257532      VCV yy  0.0000610309
        VCV yz  -0.0000454242      VCV zz  0.0000713469

PT DGN SO Name          34011          To the Point

GRID D SO Delta N      -0.023          Delta E      -0.504
        Delta Elv     0.005

NOTE TS Time Date 07/06/2009 Time 11:26:19

GPSVEC TP Point ID 23034      DX   -7523.981      DY   1894.212
        Class Normal  DZ   -1956.905      Code toe-2
        Obs L1 Fixed  H.pr 0.021          V.pr 0.037
    
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GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes      HDOP max  0.7
          Total GPS pos 5        VDOP max  1.1
          Monitor status Not monitored RMS      24.0
          Horz SD          Vert SD
          Start wk 1539 sec 152788.0 End wk 1539 sec 152793.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx 0.0000349163      VCV xy 0.0000298932
          VCV xz -0.0000257357     VCV yy 0.0000608314
          VCV yz -0.0000452273     VCV zz 0.000070709

GPSVEC SO Point ID 23035      DX -7564.861      DY 1866.540
          Class Stake out      DZ -2015.217      Code toe-1
          Obs L1 Fixed          H.pr 0.021        V.pr 0.037

GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes      HDOP max  0.7
          Total GPS pos 6        VDOP max  1.2
          Monitor status Not monitored RMS      12.0
          Horz SD          Vert SD
          Start wk 1539 sec 152852.0 End wk 1539 sec 152857.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx 0.000035857      VCV xy 0.0000309921
          VCV xz -0.0000266528     VCV yy 0.0000624941
          VCV yz -0.0000462662     VCV zz 0.0000711457

PT DGN SO Name          34012          To the Point

GRID D SO Delta N      -0.036          Delta E      -0.498
          Delta Elv      0.046

GPSVEC TP Point ID 23036      DX -7566.456      DY 1866.980
          Class Normal      DZ -2014.379      Code toe-2
          Obs L1 Fixed      H.pr 0.021        V.pr 0.037

GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes      HDOP max  0.6
          Total GPS pos 5        VDOP max  1.2
          Monitor status Not monitored RMS      25.2
          Horz SD          Vert SD
          Start wk 1539 sec 152871.0 End wk 1539 sec 152877.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx 0.000035456      VCV xy 0.0000307261
          VCV xz -0.0000264184     VCV yy 0.0000618244
          VCV yz -0.0000457206     VCV zz 0.0000699889

GPSVEC SO Point ID 23037      DX -7583.217      DY 1846.562
          Class Stake out      DZ -2050.014      Code toe-1
          Obs L1 Fixed      H.pr 0.021        V.pr 0.038

GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes      HDOP max  0.6
          Total GPS pos 6        VDOP max  1.2
          Monitor status Not monitored RMS      17.8
          Horz SD          Vert SD
          Start wk 1539 sec 153043.0 End wk 1539 sec 153048.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx 0.000036804      VCV xy 0.0000325546
          VCV xz -0.0000280562     VCV yy 0.0000649599
          VCV yz -0.0000475736     VCV zz 0.0000701086

PT DGN SO Name          34013          To the Point

GRID D SO Delta N      0.048          Delta E      -1.469
          Delta Elv      0.041

GPSVEC TP Point ID 23038      DX -7585.008      DY 1846.939
          Class Normal      DZ -2049.543      Code toe-2
          Obs L1 Fixed      H.pr 0.021        V.pr 0.038

GPSQC1 NM Min SVs      8          PDOP max  1.4
          Relative DOPs Yes      HDOP max  0.7
          Total GPS pos 5        VDOP max  1.2
          Monitor status Not monitored RMS      18.3
          Horz SD          Vert SD
          Start wk 1539 sec 153061.0 End wk 1539 sec 153068.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx 0.0000367163      VCV xy 0.0000325977
          VCV xz -0.0000280204     VCV yy 0.0000646838
          VCV yz -0.0000472749     VCV zz 0.0000692594

GPSVEC SO Point ID 23039      DX -7590.382      DY 1824.299
          Class Stake out      DZ -2081.163      Code toe-1
          Obs L1 Fixed      H.pr 0.021        V.pr 0.038

GPSQC1 NM Min SVs      8          PDOP max  1.4
          Relative DOPs Yes      HDOP max  0.6
          Total GPS pos 6        VDOP max  1.2
          Monitor status Not monitored RMS      12.3
          Horz SD          Vert SD
          Start wk 1539 sec 153166.0 End wk 1539 sec 153171.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx 0.0000385538      VCV xy 0.0000348546
          VCV xz -0.0000296187     VCV yy 0.0000678015
          VCV yz -0.0000490666     VCV zz 0.0000695501
    
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PT DGN	SO	Name	34014	To the Point	
GRID D	SO	Delta N	-0.119	Delta E	-1.037
		Delta Elv	-0.003		
GPSVEC	TP	Point ID 23040	DX -7592.551	DY 1824.441	
		Class Normal	DZ -2080.892	Code toe-2	
		Obs L1 Fixed	H.pr 0.020	V.pr 0.038	
GPSQC1	NM	Min SVs 8	PDOP max 1.4		
		Relative DOPs Yes	HDOP max 0.6		
		Total GPS pos 5	VDOP max 1.2		
		Monitor status Not monitored	RMS 16.4		
		Horz SD	Vert SD		
		Start wk 1539 sec 153185.0	End wk 1539 sec 153191.0		
GPSQC2	NM	Ttl satellites 8	Err Scale 0.0099999998		
		VCV xx 0.0000384871	VCV xy 0.0000348955		
		VCV xz -0.0000296151	VCV yy 0.0000677135		
		VCV yz -0.0000489292	VCV zz 0.000069015		
GPSVEC	SO	Point ID 23041	DX -7581.900	DY 1785.593	
		Class Stake out	DZ -2123.439	Code toe-1	
		Obs L1 Fixed	H.pr 0.020	V.pr 0.039	
GPSQC1	NM	Min SVs 8	PDOP max 1.4		
		Relative DOPs Yes	HDOP max 0.6		
		Total GPS pos 5	VDOP max 1.2		
		Monitor status Not monitored	RMS 10.8		
		Horz SD	Vert SD		
		Start wk 1539 sec 153266.0	End wk 1539 sec 153271.0		
GPSQC2	NM	Ttl satellites 8	Err Scale 0.0099999998		
		VCV xx 0.0000393787	VCV xy 0.0000361367		
		VCV xz -0.0000304727	VCV yy 0.0000694649		
		VCV yz -0.0000498403	VCV zz 0.0000687377		
PT DGN	SO	Name	34015	To the Point	
GRID D	SO	Delta N	-0.417	Delta E	-0.692
		Delta Elv	-0.002		
GPSVEC	TP	Point ID 23042	DX -7583.556	DY 1785.363	
		Class Normal	DZ -2123.742	Code toe-2	
		Obs L1 Fixed	H.pr 0.020	V.pr 0.039	
GPSQC1	NM	Min SVs 8	PDOP max 1.4		
		Relative DOPs Yes	HDOP max 0.6		
		Total GPS pos 5	VDOP max 1.2		
		Monitor status Not monitored	RMS 12.5		
		Horz SD	Vert SD		
		Start wk 1539 sec 153282.0	End wk 1539 sec 153290.0		
GPSQC2	NM	Ttl satellites 8	Err Scale 0.0099999998		
		VCV xx 0.0000389979	VCV xy 0.0000358783		
		VCV xz -0.0000302185	VCV yy 0.0000688611		
		VCV yz -0.0000493405	VCV zz 0.000067742		
GPSVEC	SO	Point ID 23043	DX -7564.642	DY 1759.861	
		Class Stake out	DZ -2145.096	Code toe-1	
		Obs L1 Fixed	H.pr 0.020	V.pr 0.039	
GPSQC1	NM	Min SVs 8	PDOP max 1.4		
		Relative DOPs Yes	HDOP max 0.6		
		Total GPS pos 6	VDOP max 1.2		
		Monitor status Not monitored	RMS 12.2		
		Horz SD	Vert SD		
		Start wk 1539 sec 153359.0	End wk 1539 sec 153364.0		
GPSQC2	NM	Ttl satellites 8	Err Scale 0.0099999998		
		VCV xx 0.0000401905	VCV xy 0.0000373899		
		VCV xz -0.0000312919	VCV yy 0.0000712195		
		VCV yz -0.0000506893	VCV zz 0.0000681517		
PT DGN	SO	Name	34016	To the Point	
GRID D	SO	Delta N	-0.785	Delta E	-0.491
		Delta Elv	-0.006		
GPSVEC	TP	Point ID 23044	DX -7566.361	DY 1759.201	
		Class Normal	DZ -2145.821	Code toe-2	
		Obs L1 Fixed	H.pr 0.020	V.pr 0.039	
GPSQC1	NM	Min SVs 8	PDOP max 1.4		
		Relative DOPs Yes	HDOP max 0.6		
		Total GPS pos 5	VDOP max 1.2		
		Monitor status Not monitored	RMS 12.8		
		Horz SD	Vert SD		
		Start wk 1539 sec 153388.0	End wk 1539 sec 153397.0		
GPSQC2	NM	Ttl satellites 8	Err Scale 0.0099999998		
		VCV xx 0.0000393957	VCV xy 0.0000368074		
		VCV xz -0.0000307318	VCV yy 0.0000699414		
		VCV yz -0.0000496528	VCV zz 0.000066242		
GPSVEC	SO	Point ID 23045	DX -7539.467	DY 1735.017	
		Class Stake out	DZ -2160.454	Code toe-1	
		Obs L1 Fixed	H.pr 0.020	V.pr 0.039	

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GPSQC1 NM Min SVs      8          PDOP max  1.4
          Relative DOPs Yes       HDOP max  0.6
          Total GPS pos 6         VDOP max  1.2
          Monitor status Not monitored RMS       18.5
          Horz SD              Vert SD
          Start wk 1539 sec 153458.0 End wk 1539 sec 153463.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000410311      VCV xy   0.0000387281
          VCV xz  -0.0000321291      VCV yy   0.0000731174
          VCV yz  -0.0000515788      VCV zz   0.000067513

PT DGN SO Name          34017          To the Point

GRID D SO Delta N      -0.817          Delta E      -0.219
          Delta Elv    -0.004

GPSVEC TP Point ID 23046      DX   -7540.501      DY   1733.977
          Class Normal      DZ   -2161.360      Code toe-2
          Obs L1 Fixed      H.pr 0.020      V.pr 0.039

GPSQC1 NM Min SVs      8          PDOP max  1.4
          Relative DOPs Yes       HDOP max  0.6
          Total GPS pos 6         VDOP max  1.2
          Monitor status Not monitored RMS       19.3
          Horz SD              Vert SD
          Start wk 1539 sec 153476.0 End wk 1539 sec 153481.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000408611      VCV xy   0.0000386638
          VCV xz  -0.0000320258      VCV yy   0.0000729028
          VCV yz  -0.0000513482      VCV zz   0.0000669024

GPSVEC SO Point ID 23047      DX   -7508.429      DY   1714.565
          Class Stake out      DZ   -2167.171      Code toe-1
          Obs L1 Fixed      H.pr 0.020      V.pr 0.040

GPSQC1 NM Min SVs      8          PDOP max  1.4
          Relative DOPs Yes       HDOP max  0.6
          Total GPS pos 6         VDOP max  1.2
          Monitor status Not monitored RMS       15.9
          Horz SD              Vert SD
          Start wk 1539 sec 153546.0 End wk 1539 sec 153551.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000417995      VCV xy   0.0000399651
          VCV xz  -0.0000328732      VCV yy   0.0000749285
          VCV yz  -0.0000524229      VCV zz   0.0000669868

PT DGN SO Name          34028          To the Point

GRID D SO Delta N      -1.505          Delta E      -0.409
          Delta Elv    -0.050

GPSVEC TP Point ID 23048      DX   -7508.987      DY   1713.636
          Class Normal      DZ   -2167.954      Code toe-2
          Obs L1 Fixed      H.pr 0.020      V.pr 0.040

GPSQC1 NM Min SVs      8          PDOP max  1.4
          Relative DOPs Yes       HDOP max  0.6
          Total GPS pos 6         VDOP max  1.2
          Monitor status Not monitored RMS       17.1
          Horz SD              Vert SD
          Start wk 1539 sec 153564.0 End wk 1539 sec 153569.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000416639      VCV xy   0.0000399356
          VCV xz  -0.0000327941      VCV yy   0.0000747846
          VCV yz  -0.0000522396      VCV zz   0.0000664497

GPSVEC SO Point ID 23049      DX   -7475.691      DY   1698.749
          Class Stake out      DZ   -2167.297      Code toe-1
          Obs L1 Fixed      H.pr 0.019      V.pr 0.038

GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes       HDOP max  0.6
          Total GPS pos 6         VDOP max  1.2
          Monitor status Not monitored RMS       12.5
          Horz SD              Vert SD
          Start wk 1539 sec 153620.0 End wk 1539 sec 153625.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000365498      VCV xy   0.0000343246
          VCV xz  -0.0000289126      VCV yy   0.0000688387
          VCV yz  -0.0000479197      VCV zz   0.0000629595

PT DGN SO Name          34029          To the Point

GRID D SO Delta N      -0.600          Delta E      0.334
          Delta Elv    -0.006

GPSVEC TP Point ID 23050      DX   -7476.194      DY   1697.403
          Class Normal      DZ   -2168.165      Code toe-2
          Obs L1 Fixed      H.pr 0.019      V.pr 0.038

GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes       HDOP max  0.6
          Total GPS pos 5         VDOP max  1.2
          Monitor status Not monitored RMS       21.3
          Horz SD              Vert SD
          Start wk 1539 sec 153641.0 End wk 1539 sec 153646.0
    
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GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000377495 VCV xy 0.0000358416
VCV xz -0.0000298688 VCV yy 0.0000703335
VCV yz -0.000048849 VCV zz 0.0000630497

GPSVEC SO Point ID 23051 DX -7423.381 DY 1679.164
Class Stake out DZ -2160.970 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.040

GPSQC1 NM Min SVs 8 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 18.8
Horz SD Vert SD
Start wk 1539 sec 153713.0 End wk 1539 sec 153718.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000417868 VCV xy 0.0000406982
VCV xz -0.0000331066 VCV yy 0.0000765545
VCV yz -0.0000527295 VCV zz 0.0000650842

PT DGN SO Name 34018 To the Point

GRID D SO Delta N 0.271 Delta E -0.098
Delta Elv 0.034

GPSVEC TP Point ID 23052 DX -7423.785 DY 1677.812
Class Normal DZ -2161.899 Code toe-2
Obs L1 Fixed H.pr 0.020 V.pr 0.040

GPSQC1 NM Min SVs 8 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.3
Monitor status Not monitored RMS 27.1
Horz SD Vert SD
Start wk 1539 sec 153730.0 End wk 1539 sec 153735.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000419965 VCV xy 0.0000410557
VCV xz -0.0000332886 VCV yy 0.0000768958
VCV yz -0.0000528755 VCV zz 0.000064836

GPSVEC SO Point ID 23053 DX -7372.608 DY 1661.056
Class Stake out DZ -2153.609 Code toe-1
Obs L1 Fixed H.pr 0.020 V.pr 0.041

GPSQC1 NM Min SVs 8 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 1.3
Monitor status Not monitored RMS 27.5
Horz SD Vert SD
Start wk 1539 sec 153820.0 End wk 1539 sec 153825.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000440381 VCV xy 0.0000437891
VCV xz -0.0000349877 VCV yy 0.0000808514
VCV yz -0.0000550576 VCV zz 0.000065454

PT DGN SO Name 34019 To the Point

GRID D SO Delta N -0.303 Delta E 0.163
Delta Elv 0.014

GPSVEC TP Point ID 23054 DX -7372.813 DY 1659.979
Class Normal DZ -2154.343 Code toe-2
Obs L1 Fixed H.pr 0.019 V.pr 0.041

GPSQC1 NM Min SVs 8 PDOP max 1.4
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.3
Monitor status Not monitored RMS 23.8
Horz SD Vert SD
Start wk 1539 sec 153838.0 End wk 1539 sec 153843.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000438573 VCV xy 0.0000437291
VCV xz -0.0000348595 VCV yy 0.0000806382
VCV yz -0.0000548163 VCV zz 0.0000648429

GPSVEC SO Point ID 23055 DX -7317.815 DY 1641.061
Class Stake out DZ -2146.248 Code toe-1
Obs L1 Fixed H.pr 0.019 V.pr 0.036

GPSQC1 NM Min SVs 8 PDOP max 1.3
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 1.1
Monitor status Not monitored RMS 17.6
Horz SD Vert SD
Start wk 1539 sec 153894.0 End wk 1539 sec 153899.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.000031156 VCV xy 0.0000290421
VCV xz -0.0000246011 VCV yy 0.0000639338
VCV yz -0.0000429359 VCV zz 0.0000561394

PT DGN SO Name 34020 To the Point

GRID D SO Delta N -0.245 Delta E 0.030
Delta Elv 0.003

GPSVEC TP Point ID 23056 DX -7318.298 DY 1639.737
Class Normal DZ -2147.078 Code toe-2
Obs L1 Fixed H.pr 0.019 V.pr 0.037
    
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GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes      HDOP max  0.6
          Total GPS pos 5        VDOP max  1.2
          Monitor status Not monitored RMS       20.7
          Horz SD              Vert SD
          Start wk 1539 sec 153910.0 End wk 1539 sec 153916.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000338667    VCV xy   0.0000323466
          VCV xz  -0.0000268148    VCV yy   0.0000675978
          VCV yz  -0.0000454043    VCV zz   0.0000574104

GPSVEC SO Point ID 23057      DX  -7258.577    DY  1619.765
          Class Stake out      DZ  -2137.841    Code toe-1
          Obs L1 Fixed          H.pr 0.019      V.pr 0.039

GPSQC1 NM Min SVs      8          PDOP max  1.4
          Relative DOPs Yes      HDOP max  0.6
          Total GPS pos 5        VDOP max  1.2
          Monitor status Not monitored RMS       10.8
          Horz SD              Vert SD
          Start wk 1539 sec 154031.0 End wk 1539 sec 154037.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000397767    VCV xy   0.0000397793
          VCV xz  -0.0000316314    VCV yy   0.000077258
          VCV yz  -0.0000513028    VCV zz   0.0000602227

PT DGN SO Name              34021      To the Point

GRID D SO Delta N          -0.733      Delta E          -0.077
          Delta Elv        -0.040

GPSVEC TP Point ID 23058      DX  -7259.003    DY  1618.389
          Class Normal        DZ  -2138.879    Code toe-2
          Obs L1 Fixed          H.pr 0.019      V.pr 0.040

GPSQC1 NM Min SVs      8          PDOP max  1.4
          Relative DOPs Yes      HDOP max  0.6
          Total GPS pos 6        VDOP max  1.3
          Monitor status Not monitored RMS       25.5
          Horz SD              Vert SD
          Start wk 1539 sec 154049.0 End wk 1539 sec 154054.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000412007    VCV xy   0.0000415849
          VCV xz  -0.0000328063    VCV yy   0.0000794255
          VCV yz  -0.0000526893    VCV zz   0.0000609106

GPSVEC SO Point ID 23059      DX  -7203.277    DY  1599.469
          Class Stake out      DZ  -2130.572    Code toe-1
          Obs L1 Fixed          H.pr 0.019      V.pr 0.038

GPSQC1 NM Min SVs      8          PDOP max  1.4
          Relative DOPs Yes      HDOP max  0.6
          Total GPS pos 6        VDOP max  1.2
          Monitor status Not monitored RMS       25.2
          Horz SD              Vert SD
          Start wk 1539 sec 154163.0 End wk 1539 sec 154168.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000369385    VCV xy   0.0000368715
          VCV xz  -0.0000292343    VCV yy   0.0000747831
          VCV yz  -0.0000486954    VCV zz   0.0000570956

PT DGN SO Name              34022      To the Point

GRID D SO Delta N          -0.385      Delta E          0.354
          Delta Elv        -0.041

GPSVEC TP Point ID 23060      DX  -7203.784    DY  1597.809
          Class Normal        DZ  -2131.806    Code toe-2
          Obs L1 Fixed          H.pr 0.019      V.pr 0.039

GPSQC1 NM Min SVs      7          PDOP max  1.3
          Relative DOPs Yes      HDOP max  0.6
          Total GPS pos 5        VDOP max  1.2
          Monitor status Not monitored RMS       26.8
          Horz SD              Vert SD
          Start wk 1539 sec 154178.0 End wk 1539 sec 154187.0

GPSQC2 NM Ttl satellites 7          Err Scale 0.0099999998
          VCV xx  0.0000384557    VCV xy   0.0000389932
          VCV xz  -0.0000305359    VCV yy   0.0000766676
          VCV yz  -0.0000499534    VCV zz   0.0000571651

GPSVEC SO Point ID 23061      DX  -7151.981    DY  1580.433
          Class Stake out      DZ  -2124.206    Code toe-1
          Obs L1 Fixed          H.pr 0.020      V.pr 0.047

GPSQC1 NM Min SVs      7          PDOP max  1.6
          Relative DOPs Yes      HDOP max  0.6
          Total GPS pos 5        VDOP max  1.5
          Monitor status Not monitored RMS       11.8
          Horz SD              Vert SD
          Start wk 1539 sec 154259.0 End wk 1539 sec 154264.0

GPSQC2 NM Ttl satellites 7          Err Scale 0.0099999998
          VCV xx  0.0000588558    VCV xy   0.0000641833
          VCV xz  -0.0000475543    VCV yy   0.0001086494
          VCV yz  -0.0000711981    VCV zz   0.0000712934
    
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PT DGN SO Name 34023 To the Point
GRID D SO Delta N 0.232 Delta E -0.102
Delta Elv 0.024
GPSVEC SO Point ID 23062 DX -6797.882 DY 1569.181
Class Stake out DZ -1861.619 Code 7-6-09chk
Obs L1 Fixed H.pr 0.020 V.pr 0.049
GPSQC1 NM Min SVs 7 PDOP max 1.7
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 1.5
Monitor status Not monitored RMS 9.5
Horz SD Vert SD
Start wk 1539 sec 154422.0 End wk 1539 sec 154427.0
GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
VCV xx 0.00006462 VCV xy 0.0000728119
VCV xz -0.0000524387 VCV yy 0.0001208584
VCV yz -0.0000779385 VCV zz 0.0000735349
PT DGN SO Name 23000 To the Point
GRID D SO Delta N -0.056 Delta E 0.022
Delta Elv 0.008
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 07/06/2009 Time 13:20:16
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 1539
Init type On the fly seconds 159645.0
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 23063 DX -6797.876 DY 1569.187
Class Stake out DZ -1861.610 Code 7-6-09chk
Obs L1 Fixed H.pr 0.020 V.pr 0.026
GPSQC1 NM Min SVs 15 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 1539 sec 159678.0 End wk 1539 sec 159683.0
GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.000017251 VCV xy 0.0000162913
VCV xz 0.0000021133 VCV yy 0.000055408
VCV yz -0.0000164789 VCV zz 0.0000280137
PT DGN SO Name 23000 To the Point
GRID D SO Delta N -0.067 Delta E 0.020
Delta Elv 0.009
GPSVEC SO Point ID 23064 DX -7527.220 DY 1819.477
Class Stake out DZ -2019.338 Code mid
Obs L1 Fixed H.pr 0.022 V.pr 0.027
GPSQC1 NM Min SVs 15 PDOP max 1.1
Relative DOPs Yes HDOP max 0.7
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 12.9
Horz SD Vert SD
Start wk 1539 sec 160149.0 End wk 1539 sec 160154.0

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GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000225021 VCV xy 0.0000205967
VCV xz 0.00000294 VCV yy 0.0000591513
VCV yz -0.0000162901 VCV zz 0.0000336785

LIN DGN SO Name 34012-34040 To the Line
Station 57.736 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.003
D Elev 0.075 Grd to Line 1:0.043

GRID D SO Delta N 0.003 Delta E 0.001
Delta Elv 0.075

GPSVEC SO Point ID 23065 DX -7534.323 DY 1803.291
Class Stake out DZ -2039.760 Code mid
Obs L1 Fixed H.pr 0.023 V.pr 0.028

GPSQC1 NM Min SVs 15 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 11.1
Horz SD Vert SD
Start wk 1539 sec 160251.0 End wk 1539 sec 160256.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000229414 VCV xy 0.0000202606
VCV xz 0.0000041282 VCV yy 0.00000615192
VCV yz -0.00000184514 VCV zz 0.0000387302

LIN DGN SO Name 34040-34013 To the Line
Station 87.090 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.014
D Elev 0.056 Grd to Line 1:0.242

GRID D SO Delta N 0.014 Delta E 0.000
Delta Elv 0.056

GPSVEC SO Point ID 23066 DX -7535.135 DY 1788.307
Class Stake out DZ -2056.408 Code mid
Obs L1 Fixed H.pr 0.023 V.pr 0.028

GPSQC1 NM Min SVs 15 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 12.0
Horz SD Vert SD
Start wk 1539 sec 160305.0 End wk 1539 sec 160310.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000227923 VCV xy 0.000019926
VCV xz 0.0000043014 VCV yy 0.00000612025
VCV yz -0.000018778 VCV zz 0.0000394595

LIN DGN SO Name 34040-34014 To the Line
Station 83.394 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.013
D Elev 0.042 Grd to Line 1:0.305

GRID D SO Delta N 0.012 Delta E -0.003
Delta Elv 0.042

GPSVEC SO Point ID 23067 DX -7528.386 DY 1766.077
Class Stake out DZ -2078.240 Code mid
Obs L1 Fixed H.pr 0.023 V.pr 0.028

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.7
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 17.3
Horz SD Vert SD
Start wk 1539 sec 160384.0 End wk 1539 sec 160389.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000225451 VCV xy 0.0000199961
VCV xz 0.0000035564 VCV yy 0.00000608841
VCV yz -0.0000183684 VCV zz 0.0000362853

LIN DGN SO Name 34040-34015 To the Line
Station 80.299 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.055
D Elev 0.035 Grd to Line 1:1.574

GRID D SO Delta N 0.045 Delta E -0.032
Delta Elv 0.035

GPSVEC SO Point ID 23068 DX -7520.291 DY 1752.399
Class Stake out DZ -2091.311 Code mid
Obs L1 Fixed H.pr 0.023 V.pr 0.028

GPSQC1 NM Min SVs 15 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 18.5
Horz SD Vert SD
Start wk 1539 sec 160529.0 End wk 1539 sec 160534.0
    
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GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000225349 VCV xy 0.000019135
VCV xz 0.0000045185 VCV yy 0.0000603489
VCV yz -0.0000198161 VCV zz 0.0000411926

LIN DGN SO Name 34040-34016 To the Line
Station 81.217 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.018
D Elev 0.022 Grd to Line 1:0.798

GRID D SO Delta N -0.012 Delta E 0.014
Delta Elv 0.022

GPSVEC SO Point ID 23069 DX -7504.647 DY 1738.975
Class Stake out DZ -2096.518 Code mid
Obs L1 Fixed H.pr 0.023 V.pr 0.028

GPSQC1 NM Min SVs 15 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 12.0
Horz SD Vert SD
Start wk 1539 sec 160711.0 End wk 1539 sec 160716.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000222169 VCV xy 0.0000184461
VCV xz 0.000004562 VCV yy 0.0000595443
VCV yz -0.0000208357 VCV zz 0.000042788

LIN DGN SO Name 34017-34040 To the Line
Station 70.081 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.003
D Elev 0.043 Grd to Line 1:0.061

GRID D SO Delta N -0.001 Delta E 0.002
Delta Elv 0.043

GPSVEC SO Point ID 23070 DX -7488.514 DY 1728.248
Class Stake out DZ -2099.908 Code mid
Obs L1 Fixed H.pr 0.023 V.pr 0.028

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 19.5
Horz SD Vert SD
Start wk 1539 sec 160849.0 End wk 1539 sec 160854.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000217711 VCV xy 0.0000178319
VCV xz 0.0000044207 VCV yy 0.0000586474
VCV yz -0.0000215071 VCV zz 0.000043422

LIN DGN SO Name 34040-34028 To the Line
Station 74.928 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.032
D Elev 0.025 Grd to Line 1:1.267

GRID D SO Delta N -0.006 Delta E 0.031
Delta Elv 0.025

GPSVEC SO Point ID 23071 DX -7470.927 DY 1720.347
Class Stake out DZ -2098.874 Code mid
Obs L1 Fixed H.pr 0.024 V.pr 0.029

GPSQC1 NM Min SVs 14 PDOP max 1.2
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 1539 sec 160944.0 End wk 1539 sec 160949.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000217974 VCV xy 0.0000170134
VCV xz 0.0000056443 VCV yy 0.0000590692
VCV yz -0.0000244392 VCV zz 0.0000506782

LIN DGN SO Name 34040-34029 To the Line
Station 72.861 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.029
D Elev 0.076 Grd to Line 1:0.382

GRID D SO Delta N -0.002 Delta E -0.029
Delta Elv 0.076

GPSVEC SO Point ID 23072 DX -7423.972 DY 1702.687
Class Stake out DZ -2094.033 Code mid
Obs L1 Fixed H.pr 0.024 V.pr 0.030

GPSQC1 NM Min SVs 14 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 15.9
Horz SD Vert SD
Start wk 1539 sec 161089.0 End wk 1539 sec 161094.0
    
```

```

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000214529 VCV xy 0.0000165621
VCV xz 0.000005342 VCV yy 0.0000590362
VCV yz -0.0000259328 VCV zz 0.0000522363

LIN DGN SO Name 34018-34039 To the Line
Station 67.056 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.031
D Elev 0.032 Grd to Line 1:0.971

GRID D SO Delta N 0.005 Delta E 0.031
Delta Elv 0.032

GPSVEC SO Point ID 23073 DX -7373.045 DY 1683.356
Class Stake out DZ -2089.485 Code mid
Obs L1 Fixed H.pr 0.023 V.pr 0.030

GPSQC1 NM Min SVs 14 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 15.4
Horz SD Vert SD
Start wk 1539 sec 161208.0 End wk 1539 sec 161213.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000211128 VCV xy 0.0000163104
VCV xz 0.0000048023 VCV yy 0.0000587726
VCV yz -0.0000265333 VCV zz 0.0000519095

LIN DGN SO Name 34019-34038 To the Line
Station 64.710 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.005
D Elev 0.042 Grd to Line 1:0.13

GRID D SO Delta N -0.001 Delta E -0.005
Delta Elv 0.042

GPSVEC SO Point ID 23074 DX -7318.359 DY 1662.829
Class Stake out DZ -2083.853 Code mid
Obs L1 Fixed H.pr 0.022 V.pr 0.028

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 20.0
Horz SD Vert SD
Start wk 1539 sec 161420.0 End wk 1539 sec 161425.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000200943 VCV xy 0.0000171501
VCV xz 0.000001574 VCV yy 0.0000556121
VCV yz -0.0000221416 VCV zz 0.0000410135

LIN DGN SO Name 34020-34037 To the Line
Station 62.923 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.009
D Elev 0.025 Grd to Line 1:0.366

GRID D SO Delta N 0.002 Delta E 0.009
Delta Elv 0.025

NOTE TS Time Date 07/06/2009 Time 13:51:31

GPSVEC SO Point ID 23075 DX -7259.261 DY 1640.733
Class Stake out DZ -2077.622 Code mid
Obs L1 Fixed H.pr 0.021 V.pr 0.027

GPSQC1 NM Min SVs 15 PDOP max 1.1
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 17.7
Horz SD Vert SD
Start wk 1539 sec 161499.0 End wk 1539 sec 161504.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000183784 VCV xy 0.0000148785
VCV xz 0.0000013741 VCV yy 0.0000515006
VCV yz -0.0000215201 VCV zz 0.0000398025

LIN DGN SO Name 34021-34036 To the Line
Station 61.160 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.040
D Elev 0.043 Grd to Line 1:0.946

GRID D SO Delta N -0.006 Delta E -0.040
Delta Elv 0.043

GPSVEC SO Point ID 23076 DX -7203.498 DY 1619.947
Class Stake out DZ -2071.579 Code mid
Obs L1 Fixed H.pr 0.020 V.pr 0.027
    
```

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GPSQC1 NM Min SVs 15 PDOP max 1.0
          Relative DOPs Yes HDOP max 0.6
          Total GPS pos 5 VDOP max 0.8
          Monitor status Not monitored RMS 13.9
          Horz SD Vert SD
          Start wk 1539 sec 161588.0 End wk 1539 sec 161593.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
          VCV xx 0.000017361 VCV xy 0.0000135997
          VCV xz 0.0000010872 VCV yy 0.0000488946
          VCV yz -0.0000209843 VCV zz 0.0000386348

LIN DGN SO Name 34022-34035 To the Line
          Station 59.665 H.Offset <null>
          Elv <null>

LIN D SO D Station <null> D Offset -0.003
          D Elev 0.064 Grd to Line 1:0.04

GRID D SO Delta N 0.000 Delta E -0.002
          Delta Elv 0.064

GPSVEC SO Point ID 23077 DX -7152.463 DY 1601.417
          Class Stake out DZ -2064.471 Code mid
          Obs L1 Fixed H.pr 0.020 V.pr 0.027

GPSQC1 NM Min SVs 14 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.6
          Total GPS pos 6 VDOP max 0.9
          Monitor status Not monitored RMS 9.7
          Horz SD Vert SD
          Start wk 1539 sec 161722.0 End wk 1539 sec 161727.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
          VCV xx 0.0000188061 VCV xy 0.0000163311
          VCV xz -0.0000000671 VCV yy 0.0000522977
          VCV yz -0.0000212648 VCV zz 0.0000371842

LIN DGN SO Name 34023-34034 To the Line
          Station 59.848 H.Offset <null>
          Elv <null>

LIN D SO D Station <null> D Offset -0.033
          D Elev 0.034 Grd to Line 1:0.962

GRID D SO Delta N -0.005 Delta E -0.033
          Delta Elv 0.034

GPSVEC TP Point ID 23078 DX -7152.735 DY 1579.331
          Class Normal DZ -2125.024 Code toe-2
          Obs L1 Fixed H.pr 0.020 V.pr 0.028

GPSQC1 NM Min SVs 9 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 1539 sec 161774.0 End wk 1539 sec 161779.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
          VCV xx 0.0000198816 VCV xy 0.0000183037
          VCV xz -0.0000007287 VCV yy 0.000055459
          VCV yz -0.0000220067 VCV zz 0.0000368916

GPSVEC SO Point ID 23079 DX -7102.540 DY 1562.822
          Class Stake out DZ -2117.040 Code toe-1
          Obs L1 Fixed H.pr 0.020 V.pr 0.028

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 16.4
          Horz SD Vert SD
          Start wk 1539 sec 161828.0 End wk 1539 sec 161833.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
          VCV xx 0.0000176761 VCV xy 0.0000161502
          VCV xz -0.0000006746 VCV yy 0.0000531126
          VCV yz -0.000021692 VCV zz 0.0000363054

PT DGN SO Name 34024 To the Point

GRID D SO Delta N -0.375 Delta E -0.075
          Delta Elv 0.019

GPSVEC TP Point ID 23080 DX -7103.066 DY 1561.505
          Class Normal DZ -2117.959 Code toe-2
          Obs L1 Fixed H.pr 0.020 V.pr 0.028

GPSQC1 NM Min SVs 14 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 1539 sec 161845.0 End wk 1539 sec 161850.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
          VCV xx 0.0000181082 VCV xy 0.0000167396
          VCV xz -0.0000008964 VCV yy 0.0000535214
          VCV yz -0.0000217176 VCV zz 0.0000359535
    
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GPSVEC SO Point ID 23081      DX -7103.171      DY 1583.510
        Class Stake out      DZ -2057.745      Code mid
        Obs L1 Fixed          H.pr 0.020       V.pr 0.028

GPSQC1 NM Min SVs          14                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 1539 sec 161928.0 End wk 1539 sec 161933.0

GPSQC2 NM Ttl satellites 14      Err Scale 0.0099999998
        VCV xx 0.0000196938    VCV xy 0.0000186679
        VCV xz -0.0000016891    VCV yy 0.0000560987
        VCV yz -0.0000225383    VCV zz 0.0000360137

LIN DGN SO Name 34024-34033      To the Line
        Station 59.909          H.Offset <null>
        Elv <null>

LIN D SO D Station <null>        D Offset -0.009
        D Elev 0.041           Grd to Line 1:0.223

GRID D SO Delta N -0.001        Delta E -0.009
        Delta Elv 0.041

GPSVEC TP Point ID 23082      DX -7103.742      DY 1591.857
        Class Normal          DZ -2046.400      Code battery-swap
        Obs L1 Fixed          H.pr 0.020       V.pr 0.028

GPSQC1 NM Min SVs          14                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 1539 sec 161991.0 End wk 1539 sec 161996.0

GPSQC2 NM Ttl satellites 14      Err Scale 0.0099999998
        VCV xx 0.0000197451    VCV xy 0.0000188184
        VCV xz -0.0000020843    VCV yy 0.000056083
        VCV yz -0.0000226871    VCV zz 0.0000356701

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 1539
        Init type On the fly      seconds 162083.0
        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 23083      DX -7103.738      DY 1591.854
        Class Stake out      DZ -2046.388      Code battery-swap-chk
        Obs L1 Fixed          H.pr 0.020       V.pr 0.028

GPSQC1 NM Min SVs          14                PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 6        VDOP max 0.9
        Monitor status Not monitored RMS 11.8
        Horz SD                Vert SD
        Start wk 1539 sec 162101.0 End wk 1539 sec 162106.0

GPSQC2 NM Ttl satellites 14      Err Scale 0.0099999998
        VCV xx 0.0000200799    VCV xy 0.0000193707
        VCV xz -0.0000026321    VCV yy 0.0000560567
        VCV yz -0.0000223615    VCV zz 0.0000347416
    
```

PT DGN	SO	Name	23082		To the Point
GRID D	SO	Delta N	-0.009	Delta E	-0.005
		Delta Elv	-0.008		
GPSVEC	SO	Point ID 23084	DX -7038.015	DY	1560.797
		Class Stake out	DZ -2046.019	Code mid	
		Obs L1 Fixed	H.pr 0.019	V.pr	0.028
GPSQC1	NM	Min SVs	14	PDOP max	1.1
		Relative DOPs	Yes	HDOP max	0.6
		Total GPS pos	5	VDOP max	0.9
		Monitor status	Not monitored	RMS	14.5
		Horz SD		Vert SD	
		Start wk 1539 sec	162224.0	End wk 1539 sec	162230.0
GPSQC2	NM	Ttl satellites	14	Err Scale	0.0099999998
		VCV xx	0.0000192898	VCV xy	0.0000185805
		VCV xz	-0.000003171	VCV yy	0.0000543781
		VCV yz	-0.0000223417	VCV zz	0.0000339631
LIN DGN	SO	Name	34025-34032		To the Line
		Station	62.821	H.Offset	<null>
		Elv	<null>		
LIN D	SO	D Station	<null>	D Offset	-0.013
		D Elev	0.027	Grd to Line	1:0.468
GRID D	SO	Delta N	-0.002	Delta E	-0.013
		Delta Elv	0.027		
GPSVEC	SO	Point ID 23085	DX -7037.432	DY	1539.272
		Class Stake out	DZ -2108.080	Code toe-1	
		Obs L1 Fixed	H.pr 0.019	V.pr	0.028
GPSQC1	NM	Min SVs	9	PDOP max	1.1
		Relative DOPs	Yes	HDOP max	0.6
		Total GPS pos	5	VDOP max	0.9
		Monitor status	Not monitored	RMS	13.5
		Horz SD		Vert SD	
		Start wk 1539 sec	162354.0	End wk 1539 sec	162360.0
GPSQC2	NM	Ttl satellites	14	Err Scale	0.0099999998
		VCV xx	0.0000189125	VCV xy	0.0000182344
		VCV xz	-0.0000037271	VCV yy	0.0000534695
		VCV yz	-0.0000223638	VCV zz	0.0000333893
PT DGN	SO	Name	34025		To the Point
GRID D	SO	Delta N	-0.558	Delta E	0.055
		Delta Elv	0.033		
GPSVEC	TP	Point ID 23086	DX -7037.790	DY	1537.873
		Class Normal	DZ -2109.052	Code toe-2	
		Obs L1 Fixed	H.pr 0.019	V.pr	0.028
GPSQC1	NM	Min SVs	9	PDOP max	1.1
		Relative DOPs	Yes	HDOP max	0.6
		Total GPS pos	5	VDOP max	0.9
		Monitor status	Not monitored	RMS	14.5
		Horz SD		Vert SD	
		Start wk 1539 sec	162378.0	End wk 1539 sec	162383.0
GPSQC2	NM	Ttl satellites	14	Err Scale	0.0099999998
		VCV xx	0.0000188113	VCV xy	0.0000181352
		VCV xz	-0.0000038222	VCV yy	0.0000531569
		VCV yz	-0.0000222871	VCV zz	0.0000332135
GPSVEC	SO	Point ID 23087	DX -6989.441	DY	1521.840
		Class Stake out	DZ -2101.467	Code toe-1	
		Obs L1 Fixed	H.pr 0.019	V.pr	0.028
GPSQC1	NM	Min SVs	14	PDOP max	1.1
		Relative DOPs	Yes	HDOP max	0.6
		Total GPS pos	6	VDOP max	0.9
		Monitor status	Not monitored	RMS	14.5
		Horz SD		Vert SD	
		Start wk 1539 sec	162485.0	End wk 1539 sec	162490.0
GPSQC2	NM	Ttl satellites	14	Err Scale	0.0099999998
		VCV xx	0.0000179106	VCV xy	0.0000170697
		VCV xz	-0.0000040017	VCV yy	0.0000516444
		VCV yz	-0.0000221196	VCV zz	0.0000328847
PT DGN	SO	Name	34026		To the Point
GRID D	SO	Delta N	-0.617	Delta E	0.394
		Delta Elv	-0.024		
GPSVEC	TP	Point ID 23088	DX -6989.727	DY	1520.225
		Class Normal	DZ -2102.507	Code toe-2	
		Obs L1 Fixed	H.pr 0.018	V.pr	0.027
GPSQC1	NM	Min SVs	14	PDOP max	1.0
		Relative DOPs	Yes	HDOP max	0.6
		Total GPS pos	6	VDOP max	0.9
		Monitor status	Not monitored	RMS	15.3
		Horz SD		Vert SD	
		Start wk 1539 sec	162505.0	End wk 1539 sec	162511.0

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GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000178948 VCV xy 0.0000171231
VCV xz -0.0000041227 VCV yy 0.0000513054
VCV yz -0.0000219804 VCV zz 0.000032512

GPSVEC SO Point ID 23089 DX -6989.715 DY 1542.347
Class Stake out DZ -2042.013 Code mid
Obs L1 Fixed H.pr 0.018 V.pr 0.026

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 11.6
Horz SD Vert SD
Start wk 1539 sec 162687.0 End wk 1539 sec 162692.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000177083 VCV xy 0.0000159717
VCV xz -0.0000044136 VCV yy 0.0000450954
VCV yz -0.0000199326 VCV zz 0.0000310895

LIN DGN SO Name 34026-34031 To the Line
Station 60.280 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.005
D Elev 0.022 Grd to Line 1:0.204

GRID D SO Delta N 0.001 Delta E 0.004
Delta Elv 0.022

GPSVEC SO Point ID 23090 DX -6946.091 DY 1528.467
Class Stake out DZ -2030.365 Code mid
Obs L1 Fixed H.pr 0.018 V.pr 0.026

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 14.9
Horz SD Vert SD
Start wk 1539 sec 162839.0 End wk 1539 sec 162844.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000175145 VCV xy 0.0000158244
VCV xz -0.0000049777 VCV yy 0.0000442593
VCV yz -0.0000198991 VCV zz 0.0000306503

LIN DGN SO Name 34027-34030 To the Line
Station 66.049 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.028
D Elev 0.029 Grd to Line 1:0.977

GRID D SO Delta N -0.004 Delta E -0.028
Delta Elv 0.029

GPSVEC SO Point ID 23091 DX -6945.494 DY 1505.814
Class Stake out DZ -2095.621 Code toe-1
Obs L1 Fixed H.pr 0.018 V.pr 0.027

GPSQC1 NM Min SVs 9 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 8.9
Horz SD Vert SD
Start wk 1539 sec 162998.0 End wk 1539 sec 163003.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000177527 VCV xy 0.0000171088
VCV xz -0.0000061613 VCV yy 0.0000495811
VCV yz -0.0000224869 VCV zz 0.0000316016

PT DGN SO Name 34027 To the Point

GRID D SO Delta N -0.567 Delta E 0.058
Delta Elv 0.015

GPSVEC TP Point ID 23092 DX -6945.908 DY 1504.188
Class Normal DZ -2096.808 Code toe-2
Obs L1 Fixed H.pr 0.018 V.pr 0.027

GPSQC1 NM Min SVs 14 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 13.7
Horz SD Vert SD
Start wk 1539 sec 163019.0 End wk 1539 sec 163024.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000175697 VCV xy 0.0000170074
VCV xz -0.0000062254 VCV yy 0.000049372
VCV yz -0.0000224588 VCV zz 0.0000313595

GPSVEC SO Point ID 23093 DX -6931.571 DY 1500.462
Class Stake out DZ -2094.000 Code toe-1
Obs L1 Fixed H.pr 0.017 V.pr 0.027

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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 13.9  
 Horz SD Vert SD  
 Start wk 1539 sec 163163.0 End wk 1539 sec 163168.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998  
 VCV xx 0.0000174726 VCV xy 0.0000167592  
 VCV xz -0.0000064543 VCV yy 0.0000480906  
 VCV yz -0.0000219981 VCV zz 0.0000300964

DTM DGN SO DTM 7-2-09 PH2+3A Wa V.Offset 0.000

DTM DELTASO V.Distance 0.023

GPSVEC SO Point ID 23094 DX -6929.025 DY 1511.295  
 Class Stake out DZ -2059.660 Code mid  
 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 17.6  
 Horz SD Vert SD  
 Start wk 1539 sec 163240.0 End wk 1539 sec 163245.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998  
 VCV xx 0.0000169586 VCV xy 0.000014229  
 VCV xz -0.0000057464 VCV yy 0.0000365232  
 VCV yz -0.0000175588 VCV zz 0.000028547

DTM DGN SO DTM 7-2-09 PH2+3A Wa V.Offset 0.000

DTM DELTASO V.Distance 0.013

NOTE TS Time Date 07/06/2009 Time 14:23:18

GPSVEC SO Point ID 23095 DX -6889.144 DY 1498.623  
 Class Stake out DZ -2048.611 Code mid  
 Obs L1 Fixed H.pr 0.017 V.pr 0.026

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 14.6  
 Horz SD Vert SD  
 Start wk 1539 sec 163398.0 End wk 1539 sec 163403.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998  
 VCV xx 0.0000172774 VCV xy 0.0000156773  
 VCV xz -0.0000068347 VCV yy 0.0000420336  
 VCV yz -0.0000199758 VCV zz 0.0000293553

LIN DGN SO Name 33118-33000 To the Line  
 Station 40.301 H.Offset <null>  
 Elv <null>

LIN D SO D Station <null> D Offset 0.013  
 D Elev 0.024 Grd to Line 1:0.527

GRID D SO Delta N 0.002 Delta E 0.012  
 Delta Elv 0.024

GPSVEC SO Point ID 23096 DX -6849.495 DY 1484.452  
 Class Stake out DZ -2041.926 Code mid  
 Obs L1 Fixed H.pr 0.016 V.pr 0.026

GPSQC1 NM Min SVs 10 PDOP max 1.0  
 Relative DOPs Yes HDOP max 0.5  
 Total GPS pos 5 VDOP max 0.8  
 Monitor status Not monitored RMS 18.0  
 Horz SD Vert SD  
 Start wk 1539 sec 163491.0 End wk 1539 sec 163506.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998  
 VCV xx 0.0000165113 VCV xy 0.0000151193  
 VCV xz -0.0000068905 VCV yy 0.0000403644  
 VCV yz -0.000019379 VCV zz 0.0000280986

LIN DGN SO Name 33117-33001 To the Line  
 Station 42.151 H.Offset <null>  
 Elv <null>

LIN D SO D Station <null> D Offset 0.027  
 D Elev 0.050 Grd to Line 1:0.544

GRID D SO Delta N 0.004 Delta E 0.027  
 Delta Elv 0.050

GPSVEC SO Point ID 23097 DX -6802.736 DY 1468.477  
 Class Stake out DZ -2031.722 Code mid  
 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 9.4  
 Horz SD Vert SD  
 Start wk 1539 sec 163697.0 End wk 1539 sec 163702.0

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GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.00001714 VCV xy 0.00001579
VCV xz -0.0000077856 VCV yy 0.0000415095
VCV yz -0.0000202804 VCV zz 0.0000290411

LIN DGN SO Name 33116-33002 To the Line
Station 46.625 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.019
D Elev 0.020 Grd to Line 1:0.971

GRID D SO Delta N -0.003 Delta E -0.019
Delta Elv 0.020

GPSVEC SO Point ID 23098 DX -6767.381 DY 1455.077
Class Stake out DZ -2028.036 Code mid
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 6 VDOP max 0.8
Monitor status Not monitored RMS 9.8
Horz SD Vert SD
Start wk 1539 sec 163803.0 End wk 1539 sec 163808.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000171696 VCV xy 0.0000158699
VCV xz -0.0000081358 VCV yy 0.0000413682
VCV yz -0.0000204239 VCV zz 0.0000290623

LIN DGN SO Name 33115-33003 To the Line
Station 46.005 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.025
D Elev 0.065 Grd to Line 1:0.384

GRID D SO Delta N -0.003 Delta E -0.025
Delta Elv 0.065

GPSVEC SO Point ID 23099 DX -6731.905 DY 1440.821
Class Stake out DZ -2026.524 Code mid
Obs L1 Fixed H.pr 0.016 V.pr 0.026

GPSQC1 NM Min SVs 10 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 12.3
Horz SD Vert SD
Start wk 1539 sec 163938.0 End wk 1539 sec 163943.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000169912 VCV xy 0.0000158173
VCV xz -0.0000085455 VCV yy 0.000041105
VCV yz -0.0000206196 VCV zz 0.0000288244

LIN DGN SO Name 33114-33015 To the Line
Station 43.157 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.057
D Elev 0.059 Grd to Line 1:0.965

GRID D SO Delta N -0.008 Delta E -0.057
Delta Elv 0.059

GPSVEC SO Point ID 23100 DX -6683.961 DY 1422.078
Class Stake out DZ -2022.897 Code mid
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 6 VDOP max 0.8
Monitor status Not monitored RMS 12.3
Horz SD Vert SD
Start wk 1539 sec 164027.0 End wk 1539 sec 164032.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000168693 VCV xy 0.000015778
VCV xz -0.0000088276 VCV yy 0.0000407602
VCV yz -0.0000206741 VCV zz 0.0000289552

LIN DGN SO Name 33113-33054 To the Line
Station 40.882 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.037
D Elev 0.032 Grd to Line 1:1.157

GRID D SO Delta N -0.005 Delta E -0.037
Delta Elv 0.032

GPSVEC SO Point ID 23101 DX -6639.318 DY 1404.714
Class Stake out DZ -2019.321 Code mid
Obs L1 Fixed H.pr 0.016 V.pr 0.027

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 20.3
Horz SD Vert SD
Start wk 1539 sec 164163.0 End wk 1539 sec 164168.0
    
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GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000183365 VCV xy 0.0000176223
VCV xz -0.0000098921 VCV yy 0.0000427278
VCV yz -0.0000217604 VCV zz 0.0000293467

LIN DGN SO Name 33112-33053 To the Line
Station 38.975 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.063
D Elev 0.023 Grd to Line 1:2.769

GRID D SO Delta N -0.008 Delta E -0.062
Delta Elv 0.023

GPSVEC SO Point ID 23102 DX -6580.052 DY 1382.276
Class Stake out DZ -2013.027 Code mid
Obs L1 Fixed H.pr 0.015 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 8.1
Horz SD Vert SD
Start wk 1539 sec 164309.0 End wk 1539 sec 164315.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000157783 VCV xy 0.0000143641
VCV xz -0.0000088929 VCV yy 0.0000380334
VCV yz -0.0000200307 VCV zz 0.0000285712

LIN DGN SO Name 33111-33052 To the Line
Station 38.042 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.004
D Elev 0.052 Grd to Line 1:0.072

GRID D SO Delta N 0.001 Delta E 0.004
Delta Elv 0.052

GPSVEC SO Point ID 23103 DX -6529.448 DY 1363.895
Class Stake out DZ -2005.559 Code mid
Obs L1 Fixed H.pr 0.015 V.pr 0.027

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 11.3
Horz SD Vert SD
Start wk 1539 sec 164820.0 End wk 1539 sec 164825.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000178416 VCV xy 0.0000173887
VCV xz -0.000011499 VCV yy 0.0000419771
VCV yz -0.0000228818 VCV zz 0.0000307006

LIN DGN SO Name 33110-33051 To the Line
Station 39.335 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.062
D Elev 0.018 Grd to Line 1:3.446

GRID D SO Delta N -0.010 Delta E -0.061
Delta Elv 0.018

GPSVEC SO Point ID 23104 DX -6482.498 DY 1345.893
Class Stake out DZ -2002.304 Code mid
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 6 VDOP max 0.8
Monitor status Not monitored RMS 10.0
Horz SD Vert SD
Start wk 1539 sec 165186.0 End wk 1539 sec 165195.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000156092 VCV xy 0.0000148155
VCV xz -0.0000110647 VCV yy 0.0000383644
VCV yz -0.0000220067 VCV zz 0.0000305213

LIN DGN SO Name 33109-33050 To the Line
Station 36.892 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.011
D Elev 0.011 Grd to Line 1:0.997

GRID D SO Delta N 0.002 Delta E 0.011
Delta Elv 0.011

NOTE TS Time Date 07/06/2009 Time 14:56:08

GPSVEC SO Point ID 23105 DX -6433.782 DY 1328.349
Class Stake out DZ -1995.960 Code mid
Obs L1 Fixed H.pr 0.015 V.pr 0.027
    
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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 0.8
Monitor status Not monitored RMS 11.9
Horz SD Vert SD
Start wk 1539 sec 165372.0 End wk 1539 sec 165377.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000160328 VCV xy 0.0000153785
VCV xz -0.0000116817 VCV yy 0.0000394835
VCV yz -0.0000229172 VCV zz 0.0000315417

LIN DGN SO Name 33108-33049 To the Line
Station 37.397 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.040
D Elev 0.034 Grd to Line 1:1.183

GRID D SO Delta N 0.006 Delta E 0.040
Delta Elv 0.034

GPSVEC SO Point ID 23106 DX -6380.060 DY 1308.048
Class Stake out DZ -1991.839 Code mid
Obs L1 Fixed H.pr 0.015 V.pr 0.027

GPSQC1 NM Min SVs 10 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 10.5
Horz SD Vert SD
Start wk 1539 sec 165488.0 End wk 1539 sec 165494.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000158104 VCV xy 0.0000150452
VCV xz -0.0000116379 VCV yy 0.0000389162
VCV yz -0.0000227832 VCV zz 0.0000315487

LIN DGN SO Name 33107-33055 To the Line
Station 35.091 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.048
D Elev 0.063 Grd to Line 1:0.775

GRID D SO Delta N -0.008 Delta E -0.048
Delta Elv 0.063

GPSVEC SO Point ID 23107 DX -6340.078 DY 1293.394
Class Stake out DZ -1987.651 Code mid
Obs L1 Fixed H.pr 0.015 V.pr 0.029

GPSQC1 NM Min SVs 15 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 10.7
Horz SD Vert SD
Start wk 1539 sec 165609.0 End wk 1539 sec 165614.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000189824 VCV xy 0.0000198189
VCV xz -0.0000142861 VCV yy 0.0000460746
VCV yz -0.0000267071 VCV zz 0.0000338134

LIN DGN SO Name 33106-33076 To the Line
Station 34.330 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.020
D Elev 0.050 Grd to Line 1:0.412

GRID D SO Delta N 0.004 Delta E 0.020
Delta Elv 0.050

GPSVEC SO Point ID 23108 DX -6305.397 DY 1281.120
Class Stake out DZ -1983.116 Code mid
Obs L1 Fixed H.pr 0.015 V.pr 0.029

GPSQC1 NM Min SVs 15 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 9.7
Horz SD Vert SD
Start wk 1539 sec 165716.0 End wk 1539 sec 165721.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000193466 VCV xy 0.0000204797
VCV xz -0.0000148423 VCV yy 0.0000473722
VCV yz -0.0000276395 VCV zz 0.000034613

LIN DGN SO Name 33105-33075 To the Line
Station 34.553 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.077
D Elev 0.054 Grd to Line 1:1.416

GRID D SO Delta N -0.014 Delta E -0.075
Delta Elv 0.054

GPSVEC SO Point ID 23109 DX -6275.524 DY 1268.490
Class Stake out DZ -1985.128 Code mid
Obs L1 Fixed H.pr 0.015 V.pr 0.029

```

```

GPSQC1 NM Min SVs 15 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 16.1
Horz SD Vert SD
Start wk 1539 sec 165867.0 End wk 1539 sec 165872.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000189282 VCV xy 0.0000200536
VCV xz -0.0000148782 VCV yy 0.0000471425
VCV yz -0.0000278564 VCV zz 0.0000350905

LIN DGN SO Name 33104-33074 To the Line
Station 28.800 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.027
D Elev 0.051 Grd to Line 1:0.542

GRID D SO Delta N -0.005 Delta E -0.027
Delta Elv 0.051

GPSVEC SO Point ID 23110 DX -6274.902 DY 1258.305
Class Stake out DZ -2013.705 Code toe-1
Obs L1 Fixed H.pr 0.015 V.pr 0.031

GPSQC1 NM Min SVs 15 PDOP max 1.1
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 16.2
Horz SD Vert SD
Start wk 1539 sec 166006.0 End wk 1539 sec 166011.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000204847 VCV xy 0.000022685
VCV xz -0.0000165245 VCV yy 0.0000515591
VCV yz -0.0000305489 VCV zz 0.0000368559

PT DGN SO Name 33104 To the Point

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

GPSVEC TP Point ID 23111 DX -6275.610 DY 1256.239
Class Normal DZ -2015.143 Code toe-2
Obs L1 Fixed H.pr 0.015 V.pr 0.031

GPSQC1 NM Min SVs 15 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 1539 sec 166050.0 End wk 1539 sec 166055.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000206428 VCV xy 0.0000230026
VCV xz -0.0000167645 VCV yy 0.0000522203
VCV yz -0.0000310051 VCV zz 0.0000372075

GPSVEC SO Point ID 23112 DX -6797.866 DY 1569.159
Class Stake out DZ -1861.635 Code 7-6-09postchk
Obs L1 Fixed H.pr 0.016 V.pr 0.032

GPSQC1 NM Min SVs 10 PDOP max 1.1
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 1.0
Monitor status Not monitored RMS 11.9
Horz SD Vert SD
Start wk 1539 sec 166468.0 End wk 1539 sec 166475.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000215617 VCV xy 0.000024043
VCV xz -0.0000181178 VCV yy 0.000053421
VCV yz -0.0000326173 VCV zz 0.0000402116

PT DGN SO Name 23000 To the Point

GRID D SO Delta N -0.035 Delta E -0.002
Delta Elv 0.007

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 07/06/2009 Time 15:27:39

NOTE TS Time Date 07/27/2009 Time 09:25:30

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 1542
      Init type On the fly seconds 145565.0
      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 23113 DX -6175.681 DY 1205.130
      Class Stake out DZ -2024.119 Code 7-27-09prechk
      Obs L1 Fixed H.pr 0.020 V.pr 0.026

GPSQC1 NM Min SVs 8 PDOP max 1.0
      Relative DOPs Yes HDOP max 0.6
      Total GPS pos 5 VDOP max 0.8
      Monitor status Not monitored RMS 13.3
      Horz SD Vert SD
      Start wk 1542 sec 145650.0 End wk 1542 sec 145658.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
      VCV xx 0.0000217242 VCV xy 0.0000139579
      VCV xz -0.0000080526 VCV yy 0.000032629
      VCV yz -0.0000200997 VCV zz 0.0000463433

PT DGN SO Name 106 To the Point

GRID D SO Delta N -0.025 Delta E -0.019
      Delta Elv -0.029

GPSVEC SO Point ID 23114 DX -6380.203 DY 1310.824
      Class Stake out DZ -1983.865 Code 1st Toe
      Obs L1 Fixed H.pr 0.020 V.pr 0.029

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 13.4
      Horz SD Vert SD
      Start wk 1542 sec 145953.0 End wk 1542 sec 145958.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
      VCV xx 0.0000222985 VCV xy 0.0000149639
      VCV xz -0.0000106793 VCV yy 0.0000363091
      VCV yz -0.0000279572 VCV zz 0.0000582294

PT DGN SO Name 33055 To the Point

GRID D SO Delta N 0.030 Delta E 0.007
      Delta Elv 0.023

GPSVEC TP Point ID 23115 DX -6368.967 DY 1308.313
      Class Normal DZ -1980.090 Code 1st Toe
      Obs L1 Fixed H.pr 0.020 V.pr 0.030

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 18.0
      Horz SD Vert SD
      Start wk 1542 sec 146075.0 End wk 1542 sec 146080.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
      VCV xx 0.000022256 VCV xy 0.0000153117
      VCV xz -0.0000113414 VCV yy 0.0000378233
      VCV yz -0.0000304125 VCV zz 0.0000612785

GPSVEC SO Point ID 23116 DX -6340.228 DY 1296.843
      Class Stake out DZ -1977.956 Code 1st Top
      Obs L1 Fixed H.pr 0.020 V.pr 0.030

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 29.7
      Horz SD Vert SD
      Start wk 1542 sec 146208.0 End wk 1542 sec 146214.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
      VCV xx 0.0000220246 VCV xy 0.0000154583
      VCV xz -0.0000117771 VCV yy 0.0000380133
      VCV yz -0.0000311443 VCV zz 0.0000611216
    
```

PT DGN	SO	Name	33076	To the Point
GRID D	SO	Delta N	-0.021	Delta E
		Delta Elv	0.073	-0.043
GPSVEC	SO	Point ID 23117	DX -6305.734	DY 1284.863
		Class Stake out	DZ -1972.567	Code 1st Top
		Obs L1 Fixed	H.pr 0.020	V.pr 0.030
GPSQC1	NM	Min SVs	11	PDOP max
		Relative DOPs	Yes	HDOP max
		Total GPS pos	5	VDOP max
		Monitor status	Not monitored	RMS
		Horz SD		Vert SD
		Start wk 1542 sec	146246.0	End wk 1542 sec
				146251.0
GPSQC2	NM	Ttl satellites	11	Err Scale
		VCV xx	0.0000221613	VCV xy
		VCV xz	-0.0000119089	VCV yy
		VCV yz	-0.0000315337	VCV zz
				0.0000617224
PT DGN	SO	Name	33075	To the Point
GRID D	SO	Delta N	0.026	Delta E
		Delta Elv	0.020	0.001
GPSVEC	SO	Point ID 23118	DX -6275.941	DY 1274.609
		Class Stake out	DZ -1967.896	Code 1st Top
		Obs L1 Fixed	H.pr 0.020	V.pr 0.030
GPSQC1	NM	Min SVs	11	PDOP max
		Relative DOPs	Yes	HDOP max
		Total GPS pos	5	VDOP max
		Monitor status	Not monitored	RMS
		Horz SD		Vert SD
		Start wk 1542 sec	146309.0	End wk 1542 sec
				146314.0
GPSQC2	NM	Ttl satellites	11	Err Scale
		VCV xx	0.0000221442	VCV xy
		VCV xz	-0.0000121313	VCV yy
		VCV yz	-0.000031852	VCV zz
				0.0000615493
PT DGN	SO	Name	33074	To the Point
GRID D	SO	Delta N	-0.014	Delta E
		Delta Elv	0.032	-0.014
GPSVEC	SO	Point ID 23119	DX -6246.264	DY 1264.337
		Class Stake out	DZ -1963.263	Code 1st Top
		Obs L1 Fixed	H.pr 0.020	V.pr 0.030
GPSQC1	NM	Min SVs	11	PDOP max
		Relative DOPs	Yes	HDOP max
		Total GPS pos	5	VDOP max
		Monitor status	Not monitored	RMS
		Horz SD		Vert SD
		Start wk 1542 sec	146386.0	End wk 1542 sec
				146391.0
GPSQC2	NM	Ttl satellites	11	Err Scale
		VCV xx	0.0000222082	VCV xy
		VCV xz	-0.0000124334	VCV yy
		VCV yz	-0.0000322995	VCV zz
				0.0000614763
PT DGN	SO	Name	33073	To the Point
GRID D	SO	Delta N	-0.003	Delta E
		Delta Elv	0.015	-0.040
GPSVEC	SO	Point ID 23120	DX -6242.511	DY 1256.516
		Class Stake out	DZ -1981.644	Code mid
		Obs L1 Fixed	H.pr 0.020	V.pr 0.031
GPSQC1	NM	Min SVs	11	PDOP max
		Relative DOPs	Yes	HDOP max
		Total GPS pos	6	VDOP max
		Monitor status	Not monitored	RMS
		Horz SD		Vert SD
		Start wk 1542 sec	146469.0	End wk 1542 sec
				146474.0
GPSQC2	NM	Ttl satellites	11	Err Scale
		VCV xx	0.0000223956	VCV xy
		VCV xz	-0.0000128317	VCV yy
		VCV yz	-0.0000328981	VCV zz
				0.0000615221
LIN DGN	SO	Name	33073-33103	To the Line
		Station	19.312	H.Offset
		Elv	<null>	<null>
LIN D	SO	D Station	<null>	D Offset
		D Elev	0.052	Grd to Line
				-0.051
				1:0.976
GRID D	SO	Delta N	0.018	Delta E
		Delta Elv	0.052	0.047
GPSVEC	SO	Point ID 23121	DX -6236.765	DY 1244.727
		Class Stake out	DZ -2008.975	Code toe-1
		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 21.8
Horz SD Vert SD
Start wk 1542 sec 146583.0 End wk 1542 sec 146588.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.000022617 VCV xy 0.0000163155
VCV xz -0.0000125619 VCV yy 0.0000365386
VCV yz -0.0000279546 VCV zz 0.0000527726

PT DGN SO Name 33103 To the Point

GRID D SO Delta N 0.003 Delta E -0.008
Delta Elv 0.016

NOTE NM Modified 9:44:13 AM 7/27/2009

NOTE NM Old values toe

GPSVEC TP Point ID 23122 DX -6236.498 DY 1243.043
Class Normal DZ -2009.658 Code toe-2
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 14.3
Horz SD Vert SD
Start wk 1542 sec 146680.0 End wk 1542 sec 146685.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000228291 VCV xy 0.0000167072
VCV xz -0.0000129824 VCV yy 0.0000370178
VCV yz -0.0000283086 VCV zz 0.0000521791

GPSVEC SO Point ID 23123 DX -6188.298 DY 1238.922
Class Stake out DZ -1989.163 Code toe-1
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 5 VDOP max 0.9
Monitor status Not monitored RMS 13.1
Horz SD Vert SD
Start wk 1542 sec 146758.0 End wk 1542 sec 146763.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000228831 VCV xy 0.0000169264
VCV xz -0.0000132013 VCV yy 0.0000371354
VCV yz -0.0000283097 VCV zz 0.0000513106

PT DGN SO Name 33102 To the Point

GRID D SO Delta N 0.009 Delta E -0.015
Delta Elv -0.295

GPSVEC TP Point ID 23124 DX -6187.790 DY 1237.947
Class Normal DZ -1989.389 Code toe-2
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 18.8
Horz SD Vert SD
Start wk 1542 sec 146779.0 End wk 1542 sec 146784.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000227666 VCV xy 0.000016888
VCV xz -0.0000131838 VCV yy 0.0000369488
VCV yz -0.0000281365 VCV zz 0.0000507501

GPSVEC SO Point ID 23125 DX -6207.443 DY 1250.766
Class Stake out DZ -1971.921 Code mid
Obs L1 Fixed H.pr 0.018 V.pr 0.028

GPSQC1 NM Min SVs 12 PDOP max 1.0
Relative DOPs Yes HDOP max 0.6
Total GPS pos 9 VDOP max 0.9
Monitor status Not monitored RMS 14.9
Horz SD Vert SD
Start wk 1542 sec 146852.0 End wk 1542 sec 146860.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000224417 VCV xy 0.0000165295
VCV xz -0.0000127344 VCV yy 0.0000342916
VCV yz -0.0000244753 VCV zz 0.000044316

LIN DGN SO Name 33102-33072 To the Line
Station 27.183 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.024
D Elev 0.006 Grd to Line 1:4.03

GRID D SO Delta N -0.020 Delta E -0.014
Delta Elv 0.006

GPSVEC SO Point ID 23126 DX -6227.729 DY 1262.933
Class Stake out DZ -1953.702 Code 1st Top
Obs L1 Fixed H.pr 0.018 V.pr 0.029
    
```

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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 14.3
Horz SD Vert SD
Start wk 1542 sec 146952.0 End wk 1542 sec 146957.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000231944 VCV xy 0.0000175551
VCV xz -0.0000137167 VCV yy 0.0000371695
VCV yz -0.0000276559 VCV zz 0.0000481133

PT DGN SO Name 33072 To the Point

GRID D SO Delta N 0.073 Delta E 0.000
Delta Elv 0.009

GPSVEC SO Point ID 23127 DX -6222.568 DY 1271.910
Class Stake out DZ -1938.616 Code 1st crown
Obs L1 Fixed H.pr 0.018 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 10.3
Horz SD Vert SD
Start wk 1542 sec 147001.0 End wk 1542 sec 147006.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000234376 VCV xy 0.0000179052
VCV xz -0.0000140296 VCV yy 0.0000378485
VCV yz -0.0000282269 VCV zz 0.0000483651

PT DGN SO Name 33071 To the Point

GRID D SO Delta N 0.017 Delta E 0.049
Delta Elv 0.020

GPSVEC SO Point ID 23128 DX -6196.404 DY 1264.809
Class Stake out DZ -1947.340 Code mid
Obs L1 Fixed H.pr 0.018 V.pr 0.029

GPSQC1 NM Min SVs 12 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 19.2
Horz SD Vert SD
Start wk 1542 sec 147094.0 End wk 1542 sec 147099.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000238288 VCV xy 0.0000184821
VCV xz -0.0000145019 VCV yy 0.0000387284
VCV yz -0.0000287712 VCV zz 0.0000480005

LIN DGN SO Name 33071-33101 To the Line
Station 27.015 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.022
D Elev 0.040 Grd to Line 1:0.552

GRID D SO Delta N 0.022 Delta E 0.003
Delta Elv 0.040

GPSVEC SO Point ID 23129 DX -6168.394 DY 1256.861
Class Stake out DZ -1956.415 Code toe-1
Obs L1 Fixed H.pr 0.018 V.pr 0.029

GPSQC1 NM Min SVs 8 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 15.0
Horz SD Vert SD
Start wk 1542 sec 147154.0 End wk 1542 sec 147159.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000238775 VCV xy 0.0000186798
VCV xz -0.0000146403 VCV yy 0.0000388859
VCV yz -0.00002877 VCV zz 0.0000472907

PT DGN SO Name 33101 To the Point

GRID D SO Delta N -0.036 Delta E 0.022
Delta Elv -0.418

GPSVEC TP Point ID 23130 DX -6167.542 DY 1256.197
Class Normal DZ -1956.299 Code toe-2
Obs L1 Fixed H.pr 0.018 V.pr 0.029

GPSQC1 NM Min SVs 12 PDOP max 1.1
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 21.4
Horz SD Vert SD
Start wk 1542 sec 147179.0 End wk 1542 sec 147184.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000237596 VCV xy 0.0000186575
VCV xz -0.0000146201 VCV yy 0.0000387121
VCV yz -0.0000285668 VCV zz 0.000046611
    
```

```

GPSVEC SO Point ID 23131      DX -6159.200      DY 1275.466
        Class Stake out      DZ -1929.637      Code toe-1
        Obs L1 Fixed          H.pr 0.018       V.pr 0.030

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 16.9
        Horz SD                Vert SD
        Start wk 1542 sec 147295.0 End wk 1542 sec 147300.0

GPSQC2 NM Ttl satellites 12      Err Scale 0.0099999998
        VCV xx 0.0000244249    VCV xy 0.0000195251
        VCV xz -0.0000152725    VCV yy 0.000039933
        VCV yz -0.000029135     VCV zz 0.00004602

PT DGN SO Name              33100              To the Point

GRID D SO Delta N           -0.029              Delta E -0.003
        Delta Elv 0.035

GPSVEC TP Point ID 23132      DX -6157.537      DY 1274.057
        Class Normal          DZ -1929.279      Code toe-2
        Obs L1 Fixed          H.pr 0.018       V.pr 0.029

GPSQC1 NM Min SVs          12                PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 5        VDOP max 0.9
        Monitor status Not monitored RMS 23.4
        Horz SD                Vert SD
        Start wk 1542 sec 147317.0 End wk 1542 sec 147324.0

GPSQC2 NM Ttl satellites 12      Err Scale 0.0099999998
        VCV xx 0.0000241872    VCV xy 0.0000193961
        VCV xz -0.0000151494    VCV yy 0.000039563
        VCV yz -0.0000287995    VCV zz 0.0000452112

NOTE TS Time Date 07/27/2009 Time 09:56:30

GPSVEC SO Point ID 23133      DX -6193.081      DY 1280.485
        Class Stake out      DZ -1924.411      Code mid
        Obs L1 Fixed          H.pr 0.017       V.pr 0.030

GPSQC1 NM Min SVs          12                PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.9
        Monitor status Not monitored RMS 14.1
        Horz SD                Vert SD
        Start wk 1542 sec 147394.0 End wk 1542 sec 147399.0

GPSQC2 NM Ttl satellites 12      Err Scale 0.0099999998
        VCV xx 0.0000246796    VCV xy 0.0000200217
        VCV xz -0.0000156024    VCV yy 0.0000404643
        VCV yz -0.0000292176    VCV zz 0.0000448906

LIN DGN SO Name              33100-33070        To the Line
        Station 32.857          H.Offset <null>
        Elv <null>

LIN D SO D Station          <null>              D Offset 0.033
        D Elev 0.009            Grd to Line 1:3.59

GRID D SO Delta N           0.033              Delta E -0.002
        Delta Elv 0.009

GPSVEC SO Point ID 23134      DX -6215.735      DY 1283.927
        Class Stake out      DZ -1920.877      Code 1st Top
        Obs L1 Fixed          H.pr 0.017       V.pr 0.030

GPSQC1 NM Min SVs          8                 PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.6
        Total GPS pos 6        VDOP max 0.9
        Monitor status Not monitored RMS 9.7
        Horz SD                Vert SD
        Start wk 1542 sec 147443.0 End wk 1542 sec 147449.0

GPSQC2 NM Ttl satellites 8        Err Scale 0.0099999998
        VCV xx 0.0000249712    VCV xy 0.0000204115
        VCV xz -0.0000158937    VCV yy 0.0000410349
        VCV yz -0.000029498     VCV zz 0.000044754

PT DGN SO Name              33070              To the Point

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

GPSVEC SO Point ID 23135      DX -6188.333      DY 1285.093
        Class Stake out      DZ -1917.591      Code mid
        Obs L1 Fixed          H.pr 0.017       V.pr 0.030

GPSQC1 NM Min SVs          12                PDOP max 1.1
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.9
        Monitor status Not monitored RMS 17.8
        Horz SD                Vert SD
        Start wk 1542 sec 147532.0 End wk 1542 sec 147537.0

GPSQC2 NM Ttl satellites 12      Err Scale 0.0099999998
        VCV xx 0.0000254504    VCV xy 0.000021087
        VCV xz -0.0000163212    VCV yy 0.0000419462
        VCV yz -0.0000298311    VCV zz 0.0000440479
    
```

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LIN DGN SO Name 33070-33099 To the Line
          Station 26.348 H.Offset <null>
          Elv <null>

LIN D SO D Station <null> D Offset -0.008
        D Elev 0.058 Grd to Line 1:0.138

GRID D SO Delta N 0.007 Delta E -0.003
        Delta Elv 0.058

GPSVEC SO Point ID 23136 DX -6197.297 DY 1294.222
        Class Stake out DZ -1908.858 Code mid
        Obs L1 Fixed H.pr 0.017 V.pr 0.030

GPSQC1 NM Min SVs 8 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.0
          Monitor status Not monitored RMS 16.6
          Horz SD Vert SD
          Start wk 1542 sec 147639.0 End wk 1542 sec 147645.0

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
          VCV xx 0.0000261745 VCV xy 0.0000220568
          VCV xz -0.0000170018 VCV yy 0.0000433837
          VCV yz -0.0000305071 VCV zz 0.000043715

LIN DGN SO Name 33070-33098 To the Line
          Station 23.336 H.Offset <null>
          Elv <null>

LIN D SO D Station <null> D Offset -0.083
        D Elev 0.065 Grd to Line 1:1.285

GRID D SO Delta N 0.043 Delta E -0.071
        Delta Elv 0.065

GPSVEC SO Point ID 23137 DX -6206.000 DY 1302.923
        Class Stake out DZ -1905.650 Code mid
        Obs L1 Fixed H.pr 0.017 V.pr 0.031

GPSQC1 NM Min SVs 12 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 0.9
          Monitor status Not monitored RMS 19.8
          Horz SD Vert SD
          Start wk 1542 sec 147757.0 End wk 1542 sec 147762.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
          VCV xx 0.00002668 VCV xy 0.0000228945
          VCV xz -0.0000174676 VCV yy 0.000044486
          VCV yz -0.0000308292 VCV zz 0.0000426046

LIN DGN SO Name 33070-33097 To the Line
          Station 24.880 H.Offset <null>
          Elv <null>

LIN D SO D Station <null> D Offset 0.020
        D Elev 0.034 Grd to Line 1:0.582

GRID D SO Delta N -0.001 Delta E 0.020
        Delta Elv 0.034

GPSVEC SO Point ID 23138 DX -6193.062 DY 1328.067
        Class Stake out DZ -1885.176 Code toe-1
        Obs L1 Fixed H.pr 0.017 V.pr 0.031

GPSQC1 NM Min SVs 12 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.0
          Monitor status Not monitored RMS 21.1
          Horz SD Vert SD
          Start wk 1542 sec 147819.0 End wk 1542 sec 147824.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
          VCV xx 0.0000270239 VCV xy 0.0000234177
          VCV xz -0.0000177916 VCV yy 0.0000452284
          VCV yz -0.000031115 VCV zz 0.000042229

PT DGN SO Name 33097 To the Point

GRID D SO Delta N 0.010 Delta E 0.000
        Delta Elv -0.241

GPSVEC TP Point ID 23139 DX -6192.926 DY 1328.381
        Class Normal DZ -1883.885 Code toe-2
        Obs L1 Fixed H.pr 0.017 V.pr 0.031

GPSQC1 NM Min SVs 12 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.0
          Monitor status Not monitored RMS 18.5
          Horz SD Vert SD
          Start wk 1542 sec 147843.0 End wk 1542 sec 147848.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
          VCV xx 0.0000269513 VCV xy 0.0000234392
          VCV xz -0.0000177749 VCV yy 0.0000451674
          VCV yz -0.0000309817 VCV zz 0.0000417634

GPSVEC SO Point ID 23140 DX -6221.276 DY 1342.694
        Class Stake out DZ -1884.042 Code toe-1
        Obs L1 Fixed H.pr 0.017 V.pr 0.031
    
```

GPSQC1 NM Min SVs 12 PDOP max 1.1  
 Relative DOPs Yes HDOP max 0.5  
 Total GPS pos 6 VDOP max 1.0  
 Monitor status Not monitored RMS 13.2  
 Horz SD Vert SD  
 Start wk 1542 sec 147985.0 End wk 1542 sec 147990.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998  
 VCV xx 0.00002807 VCV xy 0.0000246826  
 VCV xz -0.0000184028 VCV yy 0.0000456891  
 VCV yz -0.0000301234 VCV zz 0.0000394482

PT DGN SO Name 33096 To the Point

GRID D SO Delta N -0.021 Delta E 0.009  
 Delta Elv -0.049

GPSVEC TP Point ID 23141 DX -6220.948 DY 1343.248  
 Class Normal DZ -1882.286 Code toe-2  
 Obs L1 Fixed H.pr 0.016 V.pr 0.029

GPSQC1 NM Min SVs 12 PDOP max 1.0  
 Relative DOPs Yes HDOP max 0.5  
 Total GPS pos 6 VDOP max 0.9  
 Monitor status Not monitored RMS 22.5  
 Horz SD Vert SD  
 Start wk 1542 sec 148007.0 End wk 1542 sec 148012.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998  
 VCV xx 0.0000278005 VCV xy 0.0000239955  
 VCV xz -0.0000176571 VCV yy 0.0000420884  
 VCV yz -0.0000263308 VCV zz 0.0000351532

GPSVEC SO Point ID 23142 DX -6233.879 DY 1318.118  
 Class Stake out DZ -1903.819 Code mid  
 Obs L1 Fixed H.pr 0.017 V.pr 0.030

GPSQC1 NM Min SVs 12 PDOP max 1.1  
 Relative DOPs Yes HDOP max 0.5  
 Total GPS pos 6 VDOP max 0.9  
 Monitor status Not monitored RMS 16.7  
 Horz SD Vert SD  
 Start wk 1542 sec 148068.0 End wk 1542 sec 148073.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998  
 VCV xx 0.0000283187 VCV xy 0.0000248853  
 VCV xz -0.0000182936 VCV yy 0.0000442868  
 VCV yz -0.000028107 VCV zz 0.0000365358

LIN DGN SO Name 33096-33069 To the Line  
 Station 32.228 H.Offset <null>  
 Elv <null>

LIN D SO D Station <null> D Offset 0.005  
 D Elev 0.021 Grd to Line 1:0.234

GRID D SO Delta N 0.000 Delta E -0.005  
 Delta Elv 0.021

GPSVEC SO Point ID 23143 DX -6244.112 DY 1298.212  
 Class Stake out DZ -1919.802 Code 1st Top  
 Obs L1 Fixed H.pr 0.017 V.pr 0.031

GPSQC1 NM Min SVs 12 PDOP max 1.1  
 Relative DOPs Yes HDOP max 0.5  
 Total GPS pos 6 VDOP max 1.0  
 Monitor status Not monitored RMS 17.7  
 Horz SD Vert SD  
 Start wk 1542 sec 148127.0 End wk 1542 sec 148133.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998  
 VCV xx 0.0000286394 VCV xy 0.0000257711  
 VCV xz -0.0000189443 VCV yy 0.0000473417  
 VCV yz -0.0000307537 VCV zz 0.0000385851

PT DGN SO Name 33069 To the Point

GRID D SO Delta N -0.010 Delta E 0.007  
 Delta Elv 0.049

GPSVEC SO Point ID 23144 DX -6270.862 DY 1311.697  
 Class Stake out DZ -1918.766 Code 1st Top  
 Obs L1 Fixed H.pr 0.016 V.pr 0.031

GPSQC1 NM Min SVs 12 PDOP max 1.1  
 Relative DOPs Yes HDOP max 0.5  
 Total GPS pos 6 VDOP max 1.0  
 Monitor status Not monitored RMS 21.2  
 Horz SD Vert SD  
 Start wk 1542 sec 148198.0 End wk 1542 sec 148203.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998  
 VCV xx 0.0000290102 VCV xy 0.00002583  
 VCV xz -0.0000192957 VCV yy 0.0000458915  
 VCV yz -0.0000312139 VCV zz 0.0000392795

PT DGN SO Name 33068 To the Point

GRID D SO Delta N 0.027 Delta E -0.003  
 Delta Elv 0.055

NOTE TS Time Date 07/27/2009 Time 10:31:49

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GPSVEC SO Point ID 23145      DX  -6262.800      DY  1327.349
        Class Stake out      DZ  -1906.191      Code mid
        Obs L1 Fixed         H.pr 0.017       V.pr 0.042

GPSQC1 NM Min SVs          11                PDOP max  1.4
        Relative DOPs Yes    HDOP max  0.5
        Total GPS pos 6      VDOP max  1.3
        Monitor status Not monitored RMS        15.5
        Horz SD              Vert SD
        Start wk 1542 sec 149513.0 End wk 1542 sec 149518.0

GPSQC2 NM Ttl satellites 11          Err Scale 0.0099999998
        VCV xx 0.000049006 VCV xy 0.0000570884
        VCV xz -0.0000358307 VCV yy 0.0000987005
        VCV yz -0.0000563804 VCV zz 0.0000462748

LIN DGN SO Name            33068-33095      To the Line
        Station            20.505      H.Offset  <null>
        Elv                <null>

LIN D SO D Station        <null>          D Offset  0.021
        D Elev            0.036      Grd to Line 1:0.586

GRID D SO Delta N         -0.001          Delta E   0.021
        Delta Elv        0.036

GPSVEC SO Point ID 23146      DX  -6301.072      DY  1346.918
        Class Stake out      DZ  -1904.424      Code mid
        Obs L1 Fixed         H.pr 0.017       V.pr 0.042

GPSQC1 NM Min SVs          11                PDOP max  1.4
        Relative DOPs Yes    HDOP max  0.5
        Total GPS pos 6      VDOP max  1.3
        Monitor status Not monitored RMS        11.6
        Horz SD              Vert SD
        Start wk 1542 sec 149606.0 End wk 1542 sec 149611.0

GPSQC2 NM Ttl satellites 11          Err Scale 0.0099999998
        VCV xx 0.0000485633 VCV xy 0.0000571439
        VCV xz -0.0000355664 VCV yy 0.0000999912
        VCV yz -0.0000565179 VCV zz 0.0000458516

LIN DGN SO Name            33094-33067      To the Line
        Station            38.078      H.Offset  <null>
        Elv                <null>

LIN D SO D Station        <null>          D Offset  0.015
        D Elev            0.040      Grd to Line 1:0.382

GRID D SO Delta N         0.001          Delta E   -0.015
        Delta Elv        0.040

GPSVEC SO Point ID 23147      DX  -6309.482      DY  1331.338
        Class Stake out      DZ  -1916.990      Code 1st Top
        Obs L1 Fixed         H.pr 0.017       V.pr 0.042

GPSQC1 NM Min SVs          11                PDOP max  1.4
        Relative DOPs Yes    HDOP max  0.5
        Total GPS pos 5      VDOP max  1.3
        Monitor status Not monitored RMS        11.6
        Horz SD              Vert SD
        Start wk 1542 sec 149674.0 End wk 1542 sec 149681.0

GPSQC2 NM Ttl satellites 11          Err Scale 0.0099999998
        VCV xx 0.0000479617 VCV xy 0.0000568445
        VCV xz -0.0000351549 VCV yy 0.00010042
        VCV yz -0.0000563016 VCV zz 0.0000453015

PT DGN SO Name            33067          To the Point

GRID D SO Delta N         0.018          Delta E   -0.011
        Delta Elv        0.017

GPSVEC SO Point ID 23148      DX  -6339.618      DY  1346.839
        Class Stake out      DZ  -1915.476      Code 1st Top
        Obs L1 Fixed         H.pr 0.017       V.pr 0.039

GPSQC1 NM Min SVs          12                PDOP max  1.3
        Relative DOPs Yes    HDOP max  0.5
        Total GPS pos 6      VDOP max  1.2
        Monitor status Not monitored RMS        9.5
        Horz SD              Vert SD
        Start wk 1542 sec 149757.0 End wk 1542 sec 149762.0

GPSQC2 NM Ttl satellites 12          Err Scale 0.0099999998
        VCV xx 0.0000406055 VCV xy 0.0000480342
        VCV xz -0.0000279977 VCV yy 0.0000905886
        VCV yz -0.0000477545 VCV zz 0.0000382432

PT DGN SO Name            33066          To the Point

GRID D SO Delta N         0.067          Delta E   -0.025
        Delta Elv        0.031

GPSVEC SO Point ID 23149      DX  -6331.227      DY  1362.513
        Class Stake out      DZ  -1902.819      Code mid
        Obs L1 Fixed         H.pr 0.017       V.pr 0.039
    
```

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GPSQC1 NM Min SVs 12 PDOP max 1.3
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 1.2
Monitor status Not monitored RMS 15.5
Horz SD Vert SD
Start wk 1542 sec 149846.0 End wk 1542 sec 149851.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000400572 VCV xy 0.0000478309
VCV xz -0.0000275944 VCV yy 0.000091604
VCV yz -0.0000477013 VCV zz 0.0000378116

LIN DGN SO Name 33066-33093 To the Line
Station 20.636 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.037
D Elev 0.055 Grd to Line 1:0.674

GRID D SO Delta N -0.002 Delta E 0.037
Delta Elv 0.055

GPSVEC SO Point ID 23150 DX -6346.495 DY 1371.306
Class Stake out DZ -1901.310 Code mid
Obs L1 Fixed H.pr 0.016 V.pr 0.036

GPSQC1 NM Min SVs 13 PDOP max 1.2
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 1.1
Monitor status Not monitored RMS 17.6
Horz SD Vert SD
Start wk 1542 sec 149937.0 End wk 1542 sec 149944.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000333095 VCV xy 0.0000399324
VCV xz -0.0000217219 VCV yy 0.0000828937
VCV yz -0.0000407659 VCV zz 0.0000324125

LIN DGN SO Name 33092-33064 To the Line
Station 37.419 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.033
D Elev 0.045 Grd to Line 1:0.723

GRID D SO Delta N 0.006 Delta E -0.032
Delta Elv 0.045

GPSVEC SO Point ID 23151 DX -6358.013 DY 1356.655
Class Stake out DZ -1914.146 Code 1st Toe
Obs L1 Fixed H.pr 0.016 V.pr 0.036

GPSQC1 NM Min SVs 12 PDOP max 1.3
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 1.1
Monitor status Not monitored RMS 17.8
Horz SD Vert SD
Start wk 1542 sec 150023.0 End wk 1542 sec 150028.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000318238 VCV xy 0.0000384452
VCV xz -0.0000204582 VCV yy 0.0000824129
VCV yz -0.0000396596 VCV zz 0.0000313945

PT DGN SO Name 33064 To the Point

GRID D SO Delta N -0.004 Delta E -0.006
Delta Elv 0.050

GPSVEC SO Point ID 23152 DX -6349.887 DY 1350.041
Class Stake out DZ -1917.368 Code 1st Toe
Obs L1 Fixed H.pr 0.016 V.pr 0.035

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 19.2
Horz SD Vert SD
Start wk 1542 sec 150100.0 End wk 1542 sec 150105.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000284074 VCV xy 0.0000345087
VCV xz -0.0000175216 VCV yy 0.0000783127
VCV yz -0.0000362295 VCV zz 0.0000286601

PT DGN SO Name 33063 To the Point

GRID D SO Delta N 0.036 Delta E -0.070
Delta Elv 0.027

GPSVEC SO Point ID 23153 DX -6344.634 DY 1343.393
Class Stake out DZ -1922.269 Code 1st Toe
Obs L1 Fixed H.pr 0.016 V.pr 0.036

GPSQC1 NM Min SVs 13 PDOP max 1.2
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 1.1
Monitor status Not monitored RMS 17.0
Horz SD Vert SD
Start wk 1542 sec 150163.0 End wk 1542 sec 150168.0
    
```

```

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.0000300945 VCV xy 0.0000369152
          VCV xz -0.0000191277 VCV yy 0.000082123
          VCV yz -0.0000384974 VCV zz 0.0000300689

PT DGN SO Name 33062 To the Point

GRID D SO Delta N -0.017 Delta E 0.011
          Delta Elv 0.046

GPSVEC SO Point ID 23154 DX -6341.652 DY 1335.312
          Class Stake out DZ -1930.025 Code 1st Toe
          Obs L1 Fixed H.pr 0.017 V.pr 0.036

GPSQC1 NM Min SVs 13 PDOP max 1.2
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 5 VDOP max 1.1
          Monitor status Not monitored RMS 8.3
          Horz SD Vert SD
          Start wk 1542 sec 150308.0 End wk 1542 sec 150313.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.0000303543 VCV xy 0.0000378163
          VCV xz -0.0000194487 VCV yy 0.0000853302
          VCV yz -0.0000395622 VCV zz 0.0000304111

PT DGN SO Name 33065 To the Point

GRID D SO Delta N 0.025 Delta E -0.033
          Delta Elv 0.022

GPSVEC SO Point ID 23155 DX -6343.371 DY 1327.502
          Class Stake out DZ -1940.177 Code 1st Toe
          Obs L1 Fixed H.pr 0.016 V.pr 0.036

GPSQC1 NM Min SVs 13 PDOP max 1.2
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 5 VDOP max 1.1
          Monitor status Not monitored RMS 12.9
          Horz SD Vert SD
          Start wk 1542 sec 150361.0 End wk 1542 sec 150367.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.0000297483 VCV xy 0.000037203
          VCV xz -0.0000190042 VCV yy 0.0000848026
          VCV yz -0.0000390319 VCV zz 0.0000299036

PT DGN SO Name 33060 To the Point

GRID D SO Delta N -0.018 Delta E -0.007
          Delta Elv 0.080

GPSVEC SO Point ID 23156 DX -6346.669 DY 1322.324
          Class Stake out DZ -1948.012 Code 1st Toe-crown
          Obs L1 Fixed H.pr 0.016 V.pr 0.035

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 18.8
          Horz SD Vert SD
          Start wk 1542 sec 150435.0 End wk 1542 sec 150440.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.000027861 VCV xy 0.0000350892
          VCV xz -0.0000172159 VCV yy 0.0000831681
          VCV yz -0.0000371058 VCV zz 0.0000282249

PT DGN SO Name 33059 To the Point

GRID D SO Delta N 0.001 Delta E -0.030
          Delta Elv 0.062

GPSVEC SO Point ID 23157 DX -6348.283 DY 1317.334
          Class Stake out DZ -1955.605 Code 1st Toe
          Obs L1 Fixed H.pr 0.017 V.pr 0.035

GPSQC1 NM Min SVs 13 PDOP max 1.2
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 5 VDOP max 1.1
          Monitor status Not monitored RMS 13.2
          Horz SD Vert SD
          Start wk 1542 sec 150493.0 End wk 1542 sec 150498.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
          VCV xx 0.0000283383 VCV xy 0.0000359173
          VCV xz -0.000017782 VCV yy 0.0000850585
          VCV yz -0.000038087 VCV zz 0.0000288704

PT DGN SO Name 33058 To the Point

GRID D SO Delta N 0.005 Delta E 0.028
          Delta Elv 0.045

GPSVEC SO Point ID 23158 DX -6352.086 DY 1311.363
          Class Stake out DZ -1965.914 Code 1st Toe
          Obs L1 Fixed H.pr 0.016 V.pr 0.033
    
```

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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       14.9
          Horz SD                               Vert SD
          Start wk 1542 sec 150543.0        End wk 1542   sec 150548.0

GPSQC2 NM Ttl satellites 13          Err Scale 0.0099999998
          VCV xx  0.0000239331        VCV xy   0.0000301222
          VCV xz  -0.0000144188        VCV yy   0.0000776121
          VCV yz  -0.0000336918        VCV zz   0.0000262166

PT DGN SO Name          33057          To the Point

GRID D SO Delta N      0.043          Delta E    -0.047
          Delta Elv    0.062

GPSVEC SO Point ID 23159          DX  -6361.223          DY  1308.056
          Class Stake out          DZ  -1975.948          Code 1st Toe
          Obs L1 Fixed              H.pr 0.016          V.pr 0.033

GPSQC1 NM Min SVs      14          PDOP max  1.2
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos 6          VDOP max  1.0
          Monitor status Not monitored RMS       13.3
          Horz SD                               Vert SD
          Start wk 1542 sec 150589.0        End wk 1542   sec 150594.0

GPSQC2 NM Ttl satellites 14          Err Scale 0.0099999998
          VCV xx  0.0000225513        VCV xy   0.0000281446
          VCV xz  -0.000013679        VCV yy   0.0000751755
          VCV yz  -0.0000326705        VCV zz   0.0000258929

PT DGN SO Name          33056          To the Point

GRID D SO Delta N      0.045          Delta E    -0.047
          Delta Elv    0.070

GPSVEC SO Point ID 23160          DX  -6304.493          DY  1305.163
          Class Stake out          DZ  -1944.823          Code 1st crown
          Obs L1 Fixed              H.pr 0.016          V.pr 0.034

GPSQC1 NM Min SVs      9          PDOP max  1.2
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos 5          VDOP max  1.1
          Monitor status Not monitored RMS       14.8
          Horz SD                               Vert SD
          Start wk 1542 sec 150810.0        End wk 1542   sec 150816.0

GPSQC2 NM Ttl satellites 14          Err Scale 0.0099999998
          VCV xx  0.0000237053        VCV xy   0.0000303209
          VCV xz  -0.0000145179        VCV yy   0.0000802369
          VCV yz  -0.0000343914        VCV zz   0.0000264454

PT DGN SO Name          33077          To the Point

GRID D SO Delta N      0.049          Delta E     0.019
          Delta Elv    0.030

GPSVEC SO Point ID 23161          DX  -6276.485          DY  1293.806
          Class Stake out          DZ  -1942.733          Code 1st crown
          Obs L1 Fixed              H.pr 0.016          V.pr 0.033

GPSQC1 NM Min SVs      14          PDOP max  1.2
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos 5          VDOP max  1.0
          Monitor status Not monitored RMS       13.4
          Horz SD                               Vert SD
          Start wk 1542 sec 150876.0        End wk 1542   sec 150881.0

GPSQC2 NM Ttl satellites 14          Err Scale 0.0099999998
          VCV xx  0.000021909          VCV xy   0.0000282426
          VCV xz  -0.0000129764        VCV yy   0.0000781129
          VCV yz  -0.0000326074        VCV zz   0.0000250802

PT DGN SO Name          33078          To the Point

GRID D SO Delta N      0.058          Delta E     0.014
          Delta Elv    0.053

GPSVEC SO Point ID 23162          DX  -6245.438          DY  1281.223
          Class Stake out          DZ  -1940.351          Code 1st crown
          Obs L1 Fixed              H.pr 0.016          V.pr 0.033

GPSQC1 NM Min SVs      9          PDOP max  1.2
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos 5          VDOP max  1.1
          Monitor status Not monitored RMS       19.4
          Horz SD                               Vert SD
          Start wk 1542 sec 150936.0        End wk 1542   sec 150943.0

GPSQC2 NM Ttl satellites 14          Err Scale 0.0099999998
          VCV xx  0.0000221827        VCV xy   0.0000287119
          VCV xz  -0.0000133244        VCV yy   0.0000789178
          VCV yz  -0.0000330388        VCV zz   0.0000252894

PT DGN SO Name          33079          To the Point

GRID D SO Delta N      0.029          Delta E     0.011
          Delta Elv    0.046
    
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GPSVEC SO Point ID 23163      DX  -6378.545      DY  1322.852
        Class Stake out      DZ  -1949.429      Code 2nd Top
        Obs L1 Fixed          H.pr 0.017        V.pr 0.033

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 15.4
        Horz SD                Vert SD
        Start wk 1542 sec 151107.0 End wk 1542 sec 151112.0

GPSQC2 NM Ttl satellites 14      Err Scale 0.0099999998
        VCV xx 0.0000222111    VCV xy 0.0000288114
        VCV xz -0.0000132235   VCV yy 0.0000811888
        VCV yz -0.000033541    VCV zz 0.000025724

PT DGN SO Name              33046            To the Point

GRID D SO Delta N           0.007            Delta E -0.010
        Delta Elv           0.038

GPSVEC SO Point ID 23164      DX  -6379.069      DY  1321.892
        Class Stake out      DZ  -1951.069      Code 2nd Top
        Obs L1 Fixed          H.pr 0.017        V.pr 0.033

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 10.7
        Horz SD                Vert SD
        Start wk 1542 sec 151176.0 End wk 1542 sec 151181.0

GPSQC2 NM Ttl satellites 14      Err Scale 0.0099999998
        VCV xx 0.000021837     VCV xy 0.0000283858
        VCV xz -0.000012912    VCV yy 0.0000811068
        VCV yz -0.000033256    VCV zz 0.0000255242

PT DGN SO Name              33047            To the Point

GRID D SO Delta N           0.026            Delta E 0.077
        Delta Elv           0.055

GPSVEC SO Point ID 23165      DX  -6380.607      DY  1322.285
        Class Stake out      DZ  -1951.553      Code 2nd Top
        Obs L1 Fixed          H.pr 0.017        V.pr 0.033

GPSQC1 NM Min SVs          14                PDOP max 1.2
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 1.0
        Monitor status Not monitored RMS 20.1
        Horz SD                Vert SD
        Start wk 1542 sec 151221.0 End wk 1542 sec 151226.0

GPSQC2 NM Ttl satellites 14      Err Scale 0.0099999998
        VCV xx 0.0000215475    VCV xy 0.0000280324
        VCV xz -0.000012677    VCV yy 0.0000808208
        VCV yz -0.0000329841    VCV zz 0.0000253439

PT DGN SO Name              33048            To the Point

GRID D SO Delta N           -0.008           Delta E 0.000
        Delta Elv           0.076

GPSVEC SO Point ID 23166      DX  -6376.185      DY  1328.951
        Class Stake out      DZ  -1939.830      Code 2nd Crown
        Obs L1 Fixed          H.pr 0.017        V.pr 0.033

GPSQC1 NM Min SVs          14                PDOP max 1.2
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 1.0
        Monitor status Not monitored RMS 13.9
        Horz SD                Vert SD
        Start wk 1542 sec 151304.0 End wk 1542 sec 151309.0

GPSQC2 NM Ttl satellites 14      Err Scale 0.0099999998
        VCV xx 0.0000211753    VCV xy 0.0000276484
        VCV xz -0.0000123485    VCV yy 0.0000810427
        VCV yz -0.0000327578    VCV zz 0.0000251862

PT DGN SO Name              33035            To the Point

GRID D SO Delta N           -0.024           Delta E 0.035
        Delta Elv           0.011

NOTE TS Time Date 07/27/2009 Time 11:02:24

GPSVEC SO Point ID 23167      DX  -6374.435      DY  1332.497
        Class Stake out      DZ  -1934.829      Code 2nd Top
        Obs L1 Fixed          H.pr 0.017        V.pr 0.033

GPSQC1 NM Min SVs          14                PDOP max 1.2
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 1.0
        Monitor status Not monitored RMS 18.0
        Horz SD                Vert SD
        Start wk 1542 sec 151352.0 End wk 1542 sec 151357.0

GPSQC2 NM Ttl satellites 14      Err Scale 0.0099999998
        VCV xx 0.0000208504    VCV xy 0.0000272224
        VCV xz -0.0000120842    VCV yy 0.0000805386
        VCV yz -0.0000324087    VCV zz 0.0000249749
    
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PT DGN SO Name 33045 To the Point
GRID D SO Delta N 0.010 Delta E 0.051
Delta Elv 0.067
GPSVEC SO Point ID 23168 DX -6378.651 DY 1335.722
Class Stake out DZ -1933.289 Code 2nd Top
Obs L1 Fixed H.pr 0.017 V.pr 0.033
GPSQC1 NM Min SVs 14 PDOP max 1.2
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 15.6
Horz SD Vert SD
Start wk 1542 sec 151497.0 End wk 1542 sec 151502.0
GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000200677 VCV xy 0.00002618
VCV xz -0.0000114056 VCV yy 0.0000796123
VCV yz -0.0000316252 VCV zz 0.0000245666
PT DGN SO Name 33044 To the Point
GRID D SO Delta N -0.038 Delta E 0.013
Delta Elv 0.019
GPSVEC SO Point ID 23169 DX -6175.653 DY 1205.151
Class Stake out DZ -2024.131 Code 7-27-09postchk
Obs L1 Fixed H.pr 0.015 V.pr 0.028
GPSQC1 NM Min SVs 9 PDOP max 1.1
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS
Horz SD Vert SD
Start wk 1542 sec 151962.0 End wk 1542 sec 152016.0
GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.000013009 VCV xy 0.0000171474
VCV xz -0.0000062729 VCV yy 0.0000630462
VCV yz -0.0000229335 VCV zz 0.0000185801
PT DGN SO Name 106 To the Point
GRID D SO Delta N -0.034 Delta E -0.036
Delta Elv 0.003
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 07/27/2009 Time 11:34:05
NOTE TS Time Date 07/28/2009 Time 08:20:04
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 1542
Init type On the fly seconds 228039.0
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 23170 DX -6797.845 DY 1569.201
Class Stake out DZ -1861.647 Code 7-28-09prechk
Obs L1 Fixed H.pr 0.026 V.pr 0.036

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GPSQC1 NM Min SVs 11 PDOP max 1.4
Relative DOPs Yes HDOP max 0.8
Total GPS pos 6 VDOP max 1.1
Monitor status Not monitored RMS 20.5
Horz SD Vert SD
Start wk 1542 sec 228102.0 End wk 1542 sec 228107.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.000047002 VCV xy 0.0000573972
VCV xz -0.0000087994 VCV yy 0.0001122821
VCV yz -0.0000157092 VCV zz 0.0000264621

PT DGN SO Name 23000 To the Point

GRID D SO Delta N -0.053 Delta E -0.003
Delta Elv 0.052

GPSVEC SO Point ID 23171 DX -6433.983 DY 1340.953
Class Stake out DZ -1959.715 Code 2nd Top
Obs L1 Fixed H.pr 0.024 V.pr 0.032

GPSQC1 NM Min SVs 11 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 19.2
Horz SD Vert SD
Start wk 1542 sec 228299.0 End wk 1542 sec 228304.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000328065 VCV xy 0.0000387366
VCV xz -0.0000072815 VCV yy 0.0000886681
VCV yz -0.0000145065 VCV zz 0.000024734

PT DGN SO Name 33049 To the Point

GRID D SO Delta N 0.014 Delta E -0.049
Delta Elv 0.012

GPSVEC SO Point ID 23172 DX -6482.774 DY 1358.274
Class Stake out DZ -1966.953 Code 2nd Top
Obs L1 Fixed H.pr 0.023 V.pr 0.032

GPSQC1 NM Min SVs 11 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 14.9
Horz SD Vert SD
Start wk 1542 sec 228389.0 End wk 1542 sec 228394.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000323902 VCV xy 0.0000380465
VCV xz -0.0000073345 VCV yy 0.0000877207
VCV yz -0.0000149618 VCV zz 0.0000245664

PT DGN SO Name 33050 To the Point

GRID D SO Delta N -0.051 Delta E 0.041
Delta Elv 0.017

GPSVEC SO Point ID 23173 DX -6529.601 DY 1375.096
Class Stake out DZ -1973.680 Code 2nd Top
Obs L1 Fixed H.pr 0.024 V.pr 0.034

GPSQC1 NM Min SVs 11 PDOP max 1.3
Relative DOPs Yes HDOP max 0.8
Total GPS pos 6 VDOP max 1.1
Monitor status Not monitored RMS 16.6
Horz SD Vert SD
Start wk 1542 sec 228481.0 End wk 1542 sec 228486.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000384414 VCV xy 0.0000454584
VCV xz -0.0000096645 VCV yy 0.0000973692
VCV yz -0.0000183582 VCV zz 0.0000256361

PT DGN SO Name 33051 To the Point

GRID D SO Delta N -0.048 Delta E -0.049
Delta Elv 0.048

GPSVEC SO Point ID 23174 DX -6579.430 DY 1393.422
Class Stake out DZ -1980.227 Code 2nd Top
Obs L1 Fixed H.pr 0.024 V.pr 0.035

GPSQC1 NM Min SVs 10 PDOP max 1.4
Relative DOPs Yes HDOP max 0.8
Total GPS pos 5 VDOP max 1.1
Monitor status Not monitored RMS 9.1
Horz SD Vert SD
Start wk 1542 sec 228537.0 End wk 1542 sec 228542.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000420275 VCV xy 0.0000498342
VCV xz -0.000011068 VCV yy 0.0001030273
VCV yz -0.00002044 VCV zz 0.0000262324

PT DGN SO Name 33052 To the Point

GRID D SO Delta N -0.021 Delta E 0.000
Delta Elv 0.055
    
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GPSVEC SO Point ID 23175      DX -6638.823      DY 1415.495
        Class Stake out      DZ -1987.697      Code 2nd Top
        Obs L1 Fixed         H.pr 0.025       V.pr 0.037

GPSQC1 NM Min SVs          6                PDOP max 1.4
        Relative DOPs Yes     HDOP max 0.8
        Total GPS pos 5       VDOP max 1.1
        Monitor status Not monitored RMS 10.6
        Horz SD              Vert SD
        Start wk 1542 sec 228591.0 End wk 1542 sec 228596.0

GPSQC2 NM Ttl satellites 10      Err Scale 0.0099999998
        VCV xx 0.0000465035    VCV xy 0.0000553174
        VCV xz -0.0000131896   VCV yy 0.0001100853
        VCV yz -0.0000234249   VCV zz 0.0000270624

PT DGN SO Name              33053          To the Point

GRID D SO Delta N           -0.012          Delta E 0.001
        Delta Elv 0.047

GPSVEC SO Point ID 23176      DX -6683.422      DY 1432.139
        Class Stake out      DZ -1993.164      Code 2nd Top
        Obs L1 Fixed         H.pr 0.025       V.pr 0.038

GPSQC1 NM Min SVs          10               PDOP max 1.4
        Relative DOPs Yes     HDOP max 0.8
        Total GPS pos 6       VDOP max 1.2
        Monitor status Not monitored RMS 10.1
        Horz SD              Vert SD
        Start wk 1542 sec 228683.0 End wk 1542 sec 228688.0

GPSQC2 NM Ttl satellites 10      Err Scale 0.0099999998
        VCV xx 0.0000479023    VCV xy 0.0000568024
        VCV xz -0.0000142317   VCV yy 0.0001124521
        VCV yz -0.0000253059   VCV zz 0.0000277935

PT DGN SO Name              33054          To the Point

GRID D SO Delta N           -0.026          Delta E -0.027
        Delta Elv 0.011

GPSVEC SO Point ID 23177      DX -6731.437      DY 1450.150
        Class Stake out      DZ -1999.065      Code 3rd Toe
        Obs L1 Fixed         H.pr 0.025       V.pr 0.037

GPSQC1 NM Min SVs          10               PDOP max 1.4
        Relative DOPs Yes     HDOP max 0.8
        Total GPS pos 5       VDOP max 1.2
        Monitor status Not monitored RMS 13.2
        Horz SD              Vert SD
        Start wk 1542 sec 228738.0 End wk 1542 sec 228743.0

GPSQC2 NM Ttl satellites 10      Err Scale 0.0099999998
        VCV xx 0.0000471914    VCV xy 0.0000557348
        VCV xz -0.0000140942   VCV yy 0.0001109942
        VCV yz -0.000025398    VCV zz 0.0000278224

PT DGN SO Name              33015          To the Point

GRID D SO Delta N           -0.068          Delta E -0.018
        Delta Elv 0.050

GPSVEC SO Point ID 23178      DX -6672.715      DY 1520.500
        Class Stake out      DZ -1877.699      Code 3rd Toe
        Obs L1 Fixed         H.pr 0.024       V.pr 0.037

GPSQC1 NM Min SVs          6                PDOP max 1.4
        Relative DOPs Yes     HDOP max 0.8
        Total GPS pos 6       VDOP max 1.2
        Monitor status Not monitored RMS 21.4
        Horz SD              Vert SD
        Start wk 1542 sec 228837.0 End wk 1542 sec 228842.0

GPSQC2 NM Ttl satellites 10      Err Scale 0.0099999998
        VCV xx 0.0000454221    VCV xy 0.0000530433
        VCV xz -0.0000137333   VCV yy 0.0001076126
        VCV yz -0.0000254504   VCV zz 0.0000280378

PT DGN SO Name              33024          To the Point

GRID D SO Delta N           -0.061          Delta E 0.027
        Delta Elv 0.054

GPSVEC SO Point ID 23179      DX -6643.723      DY 1496.353
        Class Stake out      DZ -1890.074      Code 2nd Top
        Obs L1 Fixed         H.pr 0.024       V.pr 0.036

GPSQC1 NM Min SVs          10               PDOP max 1.4
        Relative DOPs Yes     HDOP max 0.7
        Total GPS pos 6       VDOP max 1.1
        Monitor status Not monitored RMS 5.9
        Horz SD              Vert SD
        Start wk 1542 sec 228921.0 End wk 1542 sec 228926.0

GPSQC2 NM Ttl satellites 10      Err Scale 0.0099999998
        VCV xx 0.0000433954    VCV xy 0.0000501193
        VCV xz -0.0000131648   VCV yy 0.0001034391
        VCV yz -0.0000250775   VCV zz 0.0000278958

PT DGN SO Name              33036          To the Point
    
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GRID D	SO	Delta N	0.008	Delta E	-0.022
		Delta Elv	0.021		
GPSVEC	SO	Point ID 23180	DX -6635.793	DY	1491.387
		Class Stake out	DZ -1891.536	Code	2nd Top
		Obs L1 Fixed	H.pr 0.023	V.pr	0.036
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	7.6
		Horz SD		Vert SD	
		Start wk 1542 sec	228967.0	End wk 1542 sec	228972.0
GPSQC2	NM	Ttl satellites	10	Err Scale	0.0099999998
		VCV xx	0.0000419437	VCV xy	0.0000481456
		VCV xz	-0.000012805	VCV yy	0.0001004062
		VCV yz	-0.0000247324	VCV zz	0.0000275945
PT DGN	SO	Name	33037	To the Point	
GRID D	SO	Delta N	0.007	Delta E	0.008
		Delta Elv	0.010		
GPSVEC	SO	Point ID 23181	DX -6587.564	DY	1465.859
		Class Stake out	DZ -1895.090	Code	2nd Top
		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	9.0
		Horz SD		Vert SD	
		Start wk 1542 sec	229023.0	End wk 1542 sec	229028.0
GPSQC2	NM	Ttl satellites	10	Err Scale	0.0099999998
		VCV xx	0.0000406588	VCV xy	0.000046237
		VCV xz	-0.0000123749	VCV yy	0.0000975469
		VCV yz	-0.0000244011	VCV zz	0.0000275264
PT DGN	SO	Name	33038	To the Point	
GRID D	SO	Delta N	-0.015	Delta E	0.021
		Delta Elv	0.021		
GPSVEC	SO	Point ID 23182	DX -6543.014	DY	1442.323
		Class Stake out	DZ -1898.311	Code	2nd Top
		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	9.9
		Horz SD		Vert SD	
		Start wk 1542 sec	229087.0	End wk 1542 sec	229092.0
GPSQC2	NM	Ttl satellites	10	Err Scale	0.0099999998
		VCV xx	0.0000392471	VCV xy	0.0000441442
		VCV xz	-0.000011967	VCV yy	0.0000945009
		VCV yz	-0.0000241394	VCV zz	0.0000274869
PT DGN	SO	Name	33039	To the Point	
GRID D	SO	Delta N	-0.013	Delta E	-0.003
		Delta Elv	0.024		
GPSVEC	SO	Point ID 23183	DX -6505.821	DY	1422.700
		Class Stake out	DZ -1900.982	Code	2nd Top
		Obs L1 Fixed	H.pr 0.023	V.pr	0.034
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	9.3
		Horz SD		Vert SD	
		Start wk 1542 sec	229151.0	End wk 1542 sec	229156.0
GPSQC2	NM	Ttl satellites	10	Err Scale	0.0099999998
		VCV xx	0.0000377779	VCV xy	0.0000420005
		VCV xz	-0.0000115541	VCV yy	0.0000912973
		VCV yz	-0.0000238408	VCV zz	0.0000273886
PT DGN	SO	Name	33040	To the Point	
GRID D	SO	Delta N	-0.018	Delta E	0.027
		Delta Elv	0.035		
GPSVEC	SO	Point ID 23184	DX -6468.474	DY	1402.940
		Class Stake out	DZ -1903.698	Code	2nd Top
		Obs L1 Fixed	H.pr 0.022	V.pr	0.034
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	17.4
		Horz SD		Vert SD	
		Start wk 1542 sec	229241.0	End wk 1542 sec	229246.0
GPSQC2	NM	Ttl satellites	10	Err Scale	0.0099999998
		VCV xx	0.0000360346	VCV xy	0.0000393401
		VCV xz	-0.0000109993	VCV yy	0.0000873835
		VCV yz	-0.0000235182	VCV zz	0.000027431

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PT DGN SO Name 33041 To the Point
GRID D SO Delta N 0.013 Delta E -0.016
Delta Elv 0.025
GPSVEC SO Point ID 23185 DX -6437.660 DY 1379.899
Class Stake out DZ -1913.802 Code 2nd Top
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 5.6
Horz SD Vert SD
Start wk 1542 sec 229327.0 End wk 1542 sec 229332.0
GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000344396 VCV xy 0.0000369132
VCV xz -0.0000104964 VCV yy 0.0000837855
VCV yz -0.000023243 VCV zz 0.0000274766
PT DGN SO Name 33042 To the Point
GRID D SO Delta N -0.060 Delta E 0.038
Delta Elv 0.008
GPSVEC SO Point ID 23186 DX -6408.013 DY 1357.695
Class Stake out DZ -1923.625 Code 2nd Top
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 5 VDOP max 1.0
Monitor status Not monitored RMS 13.9
Horz SD Vert SD
Start wk 1542 sec 229378.0 End wk 1542 sec 229383.0
GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
VCV xx 0.0000333112 VCV xy 0.000035321
VCV xz -0.0000101613 VCV yy 0.0000812453
VCV yz -0.0000229573 VCV zz 0.0000273103
PT DGN SO Name 33043 To the Point
GRID D SO Delta N -0.007 Delta E -0.004
Delta Elv 0.026
GPSVEC SO Point ID 23187 DX -6431.083 DY 1354.623
Class Stake out DZ -1939.850 Code 2nd Crown
Obs L1 Fixed H.pr 0.017 V.pr 0.025
GPSQC1 NM Min SVs 11 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 12.9
Horz SD Vert SD
Start wk 1542 sec 229520.0 End wk 1542 sec 229525.0
GPSQC2 NM Ttl satellites 11 Err Scale 0.0079710977
VCV xx 0.0000314769 VCV xy 0.000032124
VCV xz -0.0000094388 VCV yy 0.0000745037
VCV yz -0.0000203659 VCV zz 0.0000253307
PT DGN SO Name 33034 To the Point
GRID D SO Delta N -0.032 Delta E -0.005
Delta Elv 0.065
GPSVEC SO Point ID 23188 DX -6478.744 DY 1376.794
Class Stake out DZ -1939.839 Code 2nd Crown
Obs L1 Fixed H.pr 0.021 V.pr 0.030
GPSQC1 NM Min SVs 11 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 5 VDOP max 1.0
Monitor status Not monitored RMS 9.1
Horz SD Vert SD
Start wk 1542 sec 229606.0 End wk 1542 sec 229611.0
GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000305622 VCV xy 0.0000304731
VCV xz -0.0000090609 VCV yy 0.0000713632
VCV yz -0.0000194734 VCV zz 0.0000248573
PT DGN SO Name 33033 To the Point
GRID D SO Delta N 0.001 Delta E -0.053
Delta Elv 0.009
GPSVEC SO Point ID 23189 DX -6523.247 DY 1397.585
Class Stake out DZ -1939.842 Code 2nd Crown
Obs L1 Fixed H.pr 0.021 V.pr 0.030
GPSQC1 NM Min SVs 11 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 10.8
Horz SD Vert SD
Start wk 1542 sec 229671.0 End wk 1542 sec 229676.0

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GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000299004 VCV xy 0.0000293697
VCV xz -0.0000088937 VCV yy 0.0000702529
VCV yz -0.0000199011 VCV zz 0.0000254976

PT DGN SO Name 33032 To the Point

GRID D SO Delta N -0.005 Delta E -0.010
Delta Elv 0.029

GPSVEC SO Point ID 23190 DX -6572.648 DY 1420.636
Class Stake out DZ -1939.820 Code 2nd Crown
Obs L1 Fixed H.pr 0.021 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 15.3
Horz SD Vert SD
Start wk 1542 sec 229740.0 End wk 1542 sec 229745.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000292226 VCV xy 0.0000282263
VCV xz -0.0000087182 VCV yy 0.0000687895
VCV yz -0.0000200326 VCV zz 0.000025872

PT DGN SO Name 33031 To the Point

GRID D SO Delta N -0.018 Delta E 0.046
Delta Elv 0.017

NOTE TS Time Date 07/28/2009 Time 08:50:20

GPSVEC SO Point ID 23191 DX -6631.342 DY 1448.043
Class Stake out DZ -1939.820 Code 2nd Crown
Obs L1 Fixed H.pr 0.021 V.pr 0.030

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 9.7
Horz SD Vert SD
Start wk 1542 sec 229829.0 End wk 1542 sec 229834.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000286337 VCV xy 0.0000270674
VCV xz -0.0000085831 VCV yy 0.0000674749
VCV yz -0.0000202453 VCV zz 0.0000264062

PT DGN SO Name 33030 To the Point

GRID D SO Delta N -0.021 Delta E 0.065
Delta Elv 0.032

GPSVEC SO Point ID 23192 DX -6639.549 DY 1547.273
Class Stake out DZ -1851.846 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.028

GPSQC1 NM Min SVs 11 PDOP max 1.0
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 7.7
Horz SD Vert SD
Start wk 1542 sec 230355.0 End wk 1542 sec 230361.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
VCV xx 0.0000242688 VCV xy 0.0000200051
VCV xz -0.0000074733 VCV yy 0.0000550315
VCV yz -0.0000184937 VCV zz 0.0000265239

LIN DGN SO Name 33024-33084 To the Line
Station 47.347 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.006
D Elev 0.025 Grd to Line 1:0.231

GRID D SO Delta N 0.002 Delta E -0.005
Delta Elv 0.025

GPSVEC SO Point ID 23193 DX -6614.636 DY 1530.378
Class Stake out DZ -1859.814 Code mid
Obs L1 Fixed H.pr 0.019 V.pr 0.026

GPSQC1 NM Min SVs 12 PDOP max 1.0
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 9.2
Horz SD Vert SD
Start wk 1542 sec 230458.0 End wk 1542 sec 230463.0

GPSQC2 NM Ttl satellites 12 Err Scale 0.0099999998
VCV xx 0.0000235223 VCV xy 0.0000181828
VCV xz -0.0000069117 VCV yy 0.000049029
VCV yz -0.0000171352 VCV zz 0.0000269876

LIN DGN SO Name 33036-33085 To the Line
Station 51.262 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.006
D Elev 0.018 Grd to Line 1:0.331
    
```

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GRID D SO Delta N      -0.001          Delta E      0.006
        Delta Elv    0.018

GPSVEC SO Point ID 23194      DX  -6611.115      DY  1528.331
        Class Stake out  DZ  -1860.361      Code mid
        Obs L1 Fixed      H.pr 0.019          V.pr 0.026

GPSQC1 NM Min SVs          12          PDOP max    1.0
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos 6        VDOP max    0.8
        Monitor status Not monitored RMS          14.9
        Horz SD              Vert SD
        Start wk 1542 sec 230521.0 End wk 1542 sec 230526.0

GPSQC2 NM Ttl satellites 12          Err Scale 0.0099999998
        VCV xx 0.0000230706      VCV xy 0.000017547
        VCV xz -0.0000068128      VCV yy 0.0000480655
        VCV yz -0.0000172594      VCV zz 0.0000273293

LIN DGN SO Name          33085-33037      To the Line
        Station          39.606          H.Offset    <null>
        Elv              <null>

LIN D SO D Station      <null>          D Offset    -0.036
        D Elev          0.017          Grd to Line 1:2.061

GRID D SO Delta N      -0.004          Delta E      0.035
        Delta Elv    0.017

GPSVEC SO Point ID 23195      DX  -6566.357      DY  1502.695
        Class Stake out  DZ  -1864.926      Code mid
        Obs L1 Fixed      H.pr 0.019          V.pr 0.026

GPSQC1 NM Min SVs          12          PDOP max    1.0
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos 6        VDOP max    0.8
        Monitor status Not monitored RMS          11.0
        Horz SD              Vert SD
        Start wk 1542 sec 230678.0 End wk 1542 sec 230683.0

GPSQC2 NM Ttl satellites 12          Err Scale 0.0099999998
        VCV xx 0.000022422      VCV xy 0.0000163777
        VCV xz -0.0000067302      VCV yy 0.0000461824
        VCV yz -0.0000175403      VCV zz 0.000028415

LIN DGN SO Name          33038-33086      To the Line
        Station          49.456          H.Offset    <null>
        Elv              <null>

LIN D SO D Station      <null>          D Offset    -0.050
        D Elev          0.030          Grd to Line 1:1.69

GRID D SO Delta N      0.003          Delta E      -0.050
        Delta Elv    0.030

NOTE NM Modified 9:06:04 AM 7/28/2009

NOTE NM Old values

GPSVEC SO Point ID 23196      DX  -6522.031      DY  1478.791
        Class Stake out  DZ  -1868.414      Code mid
        Obs L1 Fixed      H.pr 0.019          V.pr 0.025

GPSQC1 NM Min SVs          12          PDOP max    1.0
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos 7        VDOP max    0.8
        Monitor status Not monitored RMS          12.4
        Horz SD              Vert SD
        Start wk 1542 sec 230752.0 End wk 1542 sec 230758.0

GPSQC2 NM Ttl satellites 12          Err Scale 0.0099999998
        VCV xx 0.0000218014      VCV xy 0.0000154081
        VCV xz -0.0000064956      VCV yy 0.0000421448
        VCV yz -0.0000161566      VCV zz 0.0000278862

LIN DGN SO Name          33039-33087      To the Line
        Station          48.985          H.Offset    <null>
        Elv              <null>

LIN D SO D Station      <null>          D Offset    -0.039
        D Elev          0.010          Grd to Line 1:3.873

GRID D SO Delta N      0.003          Delta E      -0.039
        Delta Elv    0.010

GPSVEC SO Point ID 23197      DX  -6483.673      DY  1461.268
        Class Stake out  DZ  -1869.378      Code mid
        Obs L1 Fixed      H.pr 0.019          V.pr 0.025

GPSQC1 NM Min SVs          12          PDOP max    1.0
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos 5        VDOP max    0.8
        Monitor status Not monitored RMS          12.8
        Horz SD              Vert SD
        Start wk 1542 sec 230889.0 End wk 1542 sec 230895.0

GPSQC2 NM Ttl satellites 12          Err Scale 0.0099999998
        VCV xx 0.0000210495      VCV xy 0.0000145841
        VCV xz -0.0000064917      VCV yy 0.0000422521
        VCV yz -0.0000172311      VCV zz 0.0000289659
    
```

LIN DGN	SO	Name	33040-33088	To the Line	
		Station	51.784	H.Offset	<null>
		Elv	<null>		
LIN D	SO	D Station	<null>	D Offset	-0.010
		D Elev	0.026	Grd to Line	1:0.361
GRID D	SO	Delta N	0.001	Delta E	-0.009
		Delta Elv	0.026		
GPSVEC	SO	Point ID 23198	DX -6441.751	DY	1437.947
		Class Stake out	DZ -1873.219	Code mid	
		Obs L1 Fixed	H.pr 0.019	V.pr	0.025
GPSQC1	NM	Min SVs	12	PDOP max	1.0
		Relative DOPs	Yes	HDOP max	0.6
		Total GPS pos	5	VDOP max	0.8
		Monitor status	Not monitored	RMS	12.7
		Horz SD		Vert SD	
		Start wk 1542 sec 230994.0		End wk 1542 sec 230999.0	
GPSQC2	NM	Ttl satellites	12	Err Scale	0.0099999998
		VCV xx	0.0000206219	VCV xy	0.0000140171
		VCV xz	-0.000006511	VCV yy	0.0000413158
		VCV yz	-0.0000174806	VCV zz	0.000029655
LIN DGN	SO	Name	33041-33089	To the Line	
		Station	50.830	H.Offset	<null>
		Elv	<null>		
LIN D	SO	D Station	<null>	D Offset	0.021
		D Elev	0.037	Grd to Line	1:0.561
GRID D	SO	Delta N	-0.004	Delta E	0.021
		Delta Elv	0.037		
GPSVEC	SO	Point ID 23199	DX -6405.949	DY	1412.000
		Class Stake out	DZ -1884.415	Code mid	
		Obs L1 Fixed	H.pr 0.018	V.pr	0.025
GPSQC1	NM	Min SVs	12	PDOP max	1.0
		Relative DOPs	Yes	HDOP max	0.6
		Total GPS pos	6	VDOP max	0.8
		Monitor status	Not monitored	RMS	11.9
		Horz SD		Vert SD	
		Start wk 1542 sec 231099.0		End wk 1542 sec 231104.0	
GPSQC2	NM	Ttl satellites	12	Err Scale	0.0099999998
		VCV xx	0.0000201502	VCV xy	0.0000133467
		VCV xz	-0.0000064792	VCV yy	0.0000382819
		VCV yz	-0.0000166517	VCV zz	0.0000297556
LIN DGN	SO	Name	33042-33090	To the Line	
		Station	51.118	H.Offset	<null>
		Elv	<null>		
LIN D	SO	D Station	<null>	D Offset	0.012
		D Elev	0.038	Grd to Line	1:0.318
GRID D	SO	Delta N	-0.004	Delta E	0.012
		Delta Elv	0.038		
GPSVEC	SO	Point ID 23200	DX -6374.731	DY	1391.529
		Class Stake out	DZ -1892.609	Code mid	
		Obs L1 Fixed	H.pr 0.018	V.pr	0.025
GPSQC1	NM	Min SVs	12	PDOP max	1.0
		Relative DOPs	Yes	HDOP max	0.6
		Total GPS pos	6	VDOP max	0.8
		Monitor status	Not monitored	RMS	13.8
		Horz SD		Vert SD	
		Start wk 1542 sec 231229.0		End wk 1542 sec 231234.0	
GPSQC2	NM	Ttl satellites	12	Err Scale	0.0099999998
		VCV xx	0.00001965	VCV xy	0.0000129646
		VCV xz	-0.0000066793	VCV yy	0.0000385919
		VCV yz	-0.0000176775	VCV zz	0.0000310462
LIN DGN	SO	Name	33043-33091	To the Line	
		Station	53.798	H.Offset	<null>
		Elv	<null>		
LIN D	SO	D Station	<null>	D Offset	0.019
		D Elev	0.011	Grd to Line	1:1.778
GRID D	SO	Delta N	-0.006	Delta E	0.018
		Delta Elv	0.011		
GPSVEC	SO	Point ID 23201	DX -6797.856	DY	1569.187
		Class Stake out	DZ -1861.671	Code	7-28-09postchk
		Obs L1 Fixed	H.pr 0.018	V.pr	0.025
GPSQC1	NM	Min SVs	12	PDOP max	1.0
		Relative DOPs	Yes	HDOP max	0.6
		Total GPS pos	5	VDOP max	0.8
		Monitor status	Not monitored	RMS	16.2
		Horz SD		Vert SD	
		Start wk 1542 sec 231393.0		End wk 1542 sec 231398.0	
GPSQC2	NM	Ttl satellites	12	Err Scale	0.0099999998
		VCV xx	0.0000202985	VCV xy	0.0000128445
		VCV xz	-0.0000071092	VCV yy	0.0000359274
		VCV yz	-0.0000169306	VCV zz	0.0000321844

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PT DGN SO Name          23000          To the Point
GRID D SO Delta N      -0.024          Delta E          0.001
        Delta Elv      0.052
SURVEY EVENTKISurvey event Survey ended
NOTE   TS Time Date 07/28/2009 Time 09:27:56
NOTE   TS Time Date 08/01/2009 Time 11:19:25
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          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 1542
        Init type On the fly          seconds 584392.0
        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 23202          DX -6414.113          DY 2243.232
        Class Stake out          DZ -906.864          Code 8-1-09prechk
        Obs L1 Fixed          H.pr 0.019          V.pr 0.027
GPSQC1 NM Min SVs 15          PDOP max 1.0
        Relative DOPs Yes          HDOP max 0.6
        Total GPS pos 5          VDOP max 0.9
        Monitor status Not monitored          RMS 17.5
        Horz SD          Vert SD
        Start wk 1542 sec 584444.0          End wk 1542 sec 584449.0
GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000167166          VCV xy 0.0000183331
        VCV xz -0.0000018709          VCV yy 0.0000587095
        VCV yz -0.0000198782          VCV zz 0.0000277472
PT DGN SO Name          CP426          To the Point
GRID D SO Delta N      -0.020          Delta E          -0.125
        Delta Elv      0.004
GPSVEC SO Point ID 23203          DX -6175.689          DY 1205.065
        Class Stake out          DZ -2024.150          Code 8-1-09prechk
        Obs L1 Fixed          H.pr 0.017          V.pr 0.024
GPSQC1 NM Min SVs 17          PDOP max 0.9
        Relative DOPs Yes          HDOP max 0.5
        Total GPS pos 5          VDOP max 0.8
        Monitor status Not monitored          RMS 17.1
        Horz SD          Vert SD
        Start wk 1542 sec 585019.0          End wk 1542 sec 585025.0
GPSQC2 NM Ttl satellites 17          Err Scale 0.0099999998
        VCV xx 0.0000129472          VCV xy 0.000011876
        VCV xz 0.0000001498          VCV yy 0.0000463631
        VCV yz -0.0000165659          VCV zz 0.000022309
PT DGN SO Name          106          To the Point
GRID D SO Delta N      0.036          Delta E          -0.040
        Delta Elv      -0.062
GPSVEC TP Point ID 23204          DX -6773.889          DY 1935.009
        Class Normal          DZ -1471.268          Code ph-1 temp cp
        Obs L1 Fixed          H.pr 0.019          V.pr 0.025
    
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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 16.3
Horz SD Vert SD
Start wk 1542 sec 585279.0 End wk 1542 sec 585284.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000155749 VCV xy 0.000014327
VCV xz 0.0000010582 VCV yy 0.0000493998
VCV yz -0.0000168545 VCV zz 0.0000254676

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 08/01/2009 Time 12:48:54

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 1542
Init type On the fly seconds 590554.0
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 23205 DX -6773.916 DY 1934.961
Class Stake out DZ -1471.268 Code 8-1-09prechk
Obs L1 Fixed H.pr 0.015 V.pr 0.027

GPSQC1 NM Min SVs 16 PDOP max 1.2
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 1.1
Monitor status Not monitored RMS 21.7
Horz SD Vert SD
Start wk 1542 sec 590601.0 End wk 1542 sec 590606.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000176941 VCV xy 0.0000167174
VCV xz -0.0000115478 VCV yy 0.0000416097
VCV yz -0.0000227804 VCV zz 0.0000303279

PT DGN SO Name 23204 To the Point

GRID D SO Delta N 0.032 Delta E 0.003
Delta Elv -0.044

GPSVEC SO Point ID 23206 DX -6661.483 DY 1506.956
Class Stake out DZ -1887.398 Code 3rd Toe
Obs L1 Fixed H.pr 0.015 V.pr 0.027

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 13.9
Horz SD Vert SD
Start wk 1542 sec 590863.0 End wk 1542 sec 590868.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
VCV xx 0.0000174993 VCV xy 0.00001704
VCV xz -0.0000123891 VCV yy 0.0000422915
VCV yz -0.0000239636 VCV zz 0.0000316008

PT DGN SO Name 33023 To the Point

GRID D SO Delta N 0.044 Delta E -0.035
Delta Elv 0.046

GPSVEC SO Point ID 23207 DX -6657.216 DY 1494.250
Class Stake out DZ -1899.884 Code 3rd Toe
Obs L1 Fixed H.pr 0.015 V.pr 0.028

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GPSQC1 NM Min SVs      15          PDOP max  1.0
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos 6          VDOP max  0.9
          Monitor status Not monitored RMS       21.0
          Horz SD                               Vert SD
          Start wk 1542 sec 590923.0          End wk 1542 sec 590929.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
          VCV xx  0.0000176978        VCV xy  0.0000173297
          VCV xz  -0.0000127014       VCV yy  0.0000423275
          VCV yz  -0.0000241165       VCV zz  0.000031597

PT DGN SO Name          33022          To the Point

GRID D SO Delta N      -0.027         Delta E      0.003
          Delta Elv    0.024

GPSVEC SO Point ID 23208          DX  -6659.074          DY  1483.478
          Class Stake out          DZ  -1913.500          Code 3rd Toe
          Obs L1 Fixed              H.pr 0.015          V.pr 0.028

GPSQC1 NM Min SVs      15          PDOP max  1.0
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos 6          VDOP max  0.9
          Monitor status Not monitored RMS       13.5
          Horz SD                               Vert SD
          Start wk 1542 sec 590971.0          End wk 1542 sec 590976.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
          VCV xx  0.0000179819        VCV xy  0.0000177337
          VCV xz  -0.0000131096       VCV yy  0.0000428805
          VCV yz  -0.0000246066       VCV zz  0.0000320748

PT DGN SO Name          33021          To the Point

GRID D SO Delta N      0.063          Delta E      -0.070
          Delta Elv    0.027

GPSVEC SO Point ID 23209          DX  -6665.006          DY  1476.609
          Class Stake out          DZ  -1924.748          Code 3rd Toe
          Obs L1 Fixed              H.pr 0.015          V.pr 0.028

GPSQC1 NM Min SVs      10          PDOP max  1.0
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos 6          VDOP max  0.9
          Monitor status Not monitored RMS       10.0
          Horz SD                               Vert SD
          Start wk 1542 sec 591036.0          End wk 1542 sec 591041.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
          VCV xx  0.0000182817        VCV xy  0.0000182
          VCV xz  -0.0000135996       VCV yy  0.000043675
          VCV yz  -0.000025298        VCV zz  0.0000328229

PT DGN SO Name          33020          To the Point

GRID D SO Delta N      -0.031         Delta E      0.032
          Delta Elv    0.017

GPSVEC SO Point ID 23210          DX  -6675.055          DY  1468.548
          Class Stake out          DZ  -1939.664          Code 3rd Toe-crown
          Obs L1 Fixed              H.pr 0.015          V.pr 0.028

GPSQC1 NM Min SVs      15          PDOP max  1.0
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos 6          VDOP max  0.9
          Monitor status Not monitored RMS       21.7
          Horz SD                               Vert SD
          Start wk 1542 sec 591075.0          End wk 1542 sec 591080.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
          VCV xx  0.000018362          VCV xy  0.0000183844
          VCV xz  -0.0000138141       VCV yy  0.0000439633
          VCV yz  -0.0000255776       VCV zz  0.0000330903

PT DGN SO Name          33019          To the Point

GRID D SO Delta N      -0.065         Delta E      -0.064
          Delta Elv    0.020

GPSVEC SO Point ID 23211          DX  -6681.583          DY  1460.200
          Class Stake out          DZ  -1954.803          Code 3rd Toe
          Obs L1 Fixed              H.pr 0.015          V.pr 0.029

GPSQC1 NM Min SVs      15          PDOP max  1.0
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos 5          VDOP max  0.9
          Monitor status Not monitored RMS       8.7
          Horz SD                               Vert SD
          Start wk 1542 sec 591143.0          End wk 1542 sec 591148.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
          VCV xx  0.0000186129        VCV xy  0.0000188111
          VCV xz  -0.0000142612       VCV yy  0.0000447867
          VCV yz  -0.0000262589       VCV zz  0.0000338433

PT DGN SO Name          33018          To the Point

GRID D SO Delta N      0.041          Delta E      0.020
          Delta Elv    0.036
    
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GPSVEC SO Point ID 23212      DX  -6686.073      DY  1452.881
        Class Stake out      DZ  -1967.314      Code 3rd Toe
        Obs L1 Fixed          H.pr 0.015        V.pr 0.029

GPSQC1 NM Min SVs          15                PDOP max 1.0
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.9
        Monitor status Not monitored RMS 12.1
        Horz SD                Vert SD
        Start wk 1542 sec 591226.0 End wk 1542 sec 591231.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000188797    VCV xy 0.0000192974
        VCV xz -0.000014773    VCV yy 0.0000457443
        VCV yz -0.000027047    VCV zz 0.0000347008

PT DGN SO Name              33017          To the Point

GRID D SO Delta N           0.029          Delta E -0.032
        Delta Elv          0.044

GPSVEC SO Point ID 23213      DX  -6702.099      DY  1446.022
        Class Stake out      DZ  -1986.323      Code 3rd Toe
        Obs L1 Fixed          H.pr 0.015        V.pr 0.029

GPSQC1 NM Min SVs          15                PDOP max 1.0
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.9
        Monitor status Not monitored RMS 16.6
        Horz SD                Vert SD
        Start wk 1542 sec 591271.0 End wk 1542 sec 591278.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000187959    VCV xy 0.0000193302
        VCV xz -0.0000148692    VCV yy 0.000045734
        VCV yz -0.0000271683    VCV zz 0.0000347904

PT DGN SO Name              33016          To the Point

GRID D SO Delta N           -0.027         Delta E 0.033
        Delta Elv          0.025

GPSVEC SO Point ID 23214      DX  -6715.753      DY  1446.182
        Class Stake out      DZ  -1994.579      Code 3rd Toe
        Obs L1 Fixed          H.pr 0.015        V.pr 0.030

GPSQC1 NM Min SVs          15                PDOP max 1.0
        Relative DOPs Yes      HDOP max 0.5
        Total GPS pos 6        VDOP max 0.9
        Monitor status Not monitored RMS 16.7
        Horz SD                Vert SD
        Start wk 1542 sec 591390.0 End wk 1542 sec 591395.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
        VCV xx 0.0000192918    VCV xy 0.0000201631
        VCV xz -0.0000156857    VCV yy 0.0000474666
        VCV yz -0.0000285069    VCV zz 0.0000362852

PT DGN SO Name              33025          To the Point

GRID D SO Delta N           0.006          Delta E 0.007
        Delta Elv          0.031

GPSVEC SO Point ID 23215      DX  -6731.423      DY  1468.461
        Class Stake out      DZ  -1945.953      Code 3rd Top
        Obs L1 Fixed          H.pr 0.015        V.pr 0.029

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 16.1
        Horz SD                Vert SD
        Start wk 1542 sec 591463.0 End wk 1542 sec 591468.0

GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000193044    VCV xy 0.0000197725
        VCV xz -0.0000157608    VCV yy 0.0000452954
        VCV yz -0.0000278438    VCV zz 0.0000364305

PT DGN SO Name              33004          To the Point

GRID D SO Delta N           0.002          Delta E -0.065
        Delta Elv          0.001

GPSVEC SO Point ID 23216      DX  -6727.280      DY  1473.050
        Class Stake out      DZ  -1938.318      Code 3rd FL
        Obs L1 Fixed          H.pr 0.015        V.pr 0.030

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 20.7
        Horz SD                Vert SD
        Start wk 1542 sec 591528.0 End wk 1542 sec 591535.0

GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx 0.0000193223    VCV xy 0.0000201142
        VCV xz -0.0000160492    VCV yy 0.0000462402
        VCV yz -0.0000284772    VCV zz 0.0000368188

PT DGN SO Name              33029          To the Point
    
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GRID D SO Delta N      0.025          Delta E      0.030
        Delta Elv    0.004
NOTE   TS Time Date 08/01/2009 Time 13:19:36
GPSVEC SO Point ID 23217      DX   -6719.414      DY   1481.225
        Class Stake out    DZ   -1923.383      Code 3rd Top
        Obs L1 Fixed       H.pr 0.015          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       12.5
        Horz SD          Vert SD
        Start wk 1542 sec 591584.0 End wk 1542 sec 591589.0
GPSQC2 NM Ttl satellites 16              Err Scale 0.0099999998
        VCV xx    0.0000195713 VCV xy    0.0000205668
        VCV xz   -0.0000164457 VCV yy    0.0000472996
        VCV yz   -0.0000291946 VCV zz    0.0000375803
PT DGN SO Name          33005          To the Point
GRID D SO Delta N      -0.076          Delta E      -0.032
        Delta Elv    0.025
GPSVEC SO Point ID 23218      DX   -6710.891      DY   1490.208
        Class Stake out    DZ   -1907.040      Code 3rd Top
        Obs L1 Fixed       H.pr 0.015          V.pr 0.030
GPSQC1 NM Min SVs          10              PDOP max  1.0
        Relative DOPs Yes      HDOP max  0.5
        Total GPS pos  5        VDOP max  0.9
        Monitor status Not monitored RMS       22.3
        Horz SD          Vert SD
        Start wk 1542 sec 591639.0 End wk 1542 sec 591644.0
GPSQC2 NM Ttl satellites 10              Err Scale 0.0099999998
        VCV xx    0.0000196995 VCV xy    0.0000208634
        VCV xz   -0.0000167254 VCV yy    0.0000479679
        VCV yz   -0.0000296924 VCV zz    0.0000380969
PT DGN SO Name          33006          To the Point
GRID D SO Delta N      -0.019          Delta E      0.026
        Delta Elv    0.047
GPSVEC SO Point ID 23219      DX   -6721.125      DY   1498.778
        Class Stake out    DZ   -1902.497      Code 3rd Top
        Obs L1 Fixed       H.pr 0.015          V.pr 0.030
GPSQC1 NM Min SVs          16              PDOP max  1.1
        Relative DOPs Yes      HDOP max  0.5
        Total GPS pos  6        VDOP max  1.0
        Monitor status Not monitored RMS       20.9
        Horz SD          Vert SD
        Start wk 1542 sec 591709.0 End wk 1542 sec 591714.0
GPSQC2 NM Ttl satellites 16              Err Scale 0.0099999998
        VCV xx    0.0000199778 VCV xy    0.0000213706
        VCV xz   -0.0000171919 VCV yy    0.000049008
        VCV yz   -0.0000304835 VCV zz    0.0000389734
PT DGN SO Name          33007          To the Point
GRID D SO Delta N      0.004          Delta E      0.086
        Delta Elv    0.042
GPSVEC SO Point ID 23220      DX   -6738.647      DY   1518.238
        Class Stake out    DZ   -1888.757      Code 3rd Top
        Obs L1 Fixed       H.pr 0.015          V.pr 0.031
GPSQC1 NM Min SVs          10              PDOP max  1.1
        Relative DOPs Yes      HDOP max  0.5
        Total GPS pos  5        VDOP max  0.9
        Monitor status Not monitored RMS       12.8
        Horz SD          Vert SD
        Start wk 1542 sec 591754.0 End wk 1542 sec 591759.0
GPSQC2 NM Ttl satellites 16              Err Scale 0.0099999998
        VCV xx    0.0000199868 VCV xy    0.0000215044
        VCV xz   -0.0000173305 VCV yy    0.0000492545
        VCV yz   -0.0000307162 VCV zz    0.0000392386
PT DGN SO Name          33008          To the Point
GRID D SO Delta N      -0.063          Delta E      -0.009
        Delta Elv    0.037
GPSVEC SO Point ID 23221      DX   -6766.159      DY   1559.107
        Class Stake out    DZ   -1854.413      Code 3rd Top
        Obs L1 Fixed       H.pr 0.015          V.pr 0.030
GPSQC1 NM Min SVs          16              PDOP max  1.1
        Relative DOPs Yes      HDOP max  0.5
        Total GPS pos  6        VDOP max  0.9
        Monitor status Not monitored RMS       10.3
        Horz SD          Vert SD
        Start wk 1542 sec 591854.0 End wk 1542 sec 591859.0

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GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.000020315 VCV xy 0.0000216436
          VCV xz -0.0000176904 VCV yy 0.0000476374
          VCV yz -0.0000301945 VCV zz 0.0000395756

PT DGN SO Name 33009 To the Point

GRID D SO Delta N -0.100 Delta E -0.077
          Delta Elv 0.010

GPSVEC SO Point ID 23222 DX -6785.602 DY 1590.731
          Class Stake out DZ -1827.740 Code 3rd Top
          Obs L1 Fixed H.pr 0.015 V.pr 0.029

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 17.9
          Horz SD Vert SD
          Start wk 1542 sec 591898.0 End wk 1542 sec 591903.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000202509 VCV xy 0.0000208405
          VCV xz -0.0000173523 VCV yy 0.000042829
          VCV yz -0.0000276773 VCV zz 0.0000384519

PT DGN SO Name 33010 To the Point

GRID D SO Delta N -0.023 Delta E -0.007
          Delta Elv 0.071

GPSVEC SO Point ID 23223 DX -6800.227 DY 1617.215
          Class Stake out DZ -1805.374 Code 3rd Top
          Obs L1 Fixed H.pr 0.015 V.pr 0.030

GPSQC1 NM Min SVs 10 PDOP max 1.0
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 5 VDOP max 0.9
          Monitor status Not monitored RMS 20.1
          Horz SD Vert SD
          Start wk 1542 sec 591952.0 End wk 1542 sec 591958.0

GPSQC2 NM Ttl satellites 10 Err Scale 0.0099999998
          VCV xx 0.0000191644 VCV xy 0.000019922
          VCV xz -0.0000168904 VCV yy 0.0000450794
          VCV yz -0.0000289336 VCV zz 0.0000394209

PT DGN SO Name 33011 To the Point

GRID D SO Delta N 0.018 Delta E -0.018
          Delta Elv 0.030

GPSVEC SO Point ID 23224 DX -6814.470 DY 1604.624
          Class Stake out DZ -1828.445 Code 3rd Top
          Obs L1 Fixed H.pr 0.015 V.pr 0.031

GPSQC1 NM Min SVs 16 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.0
          Monitor status Not monitored RMS 12.3
          Horz SD Vert SD
          Start wk 1542 sec 591992.0 End wk 1542 sec 591997.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000199712 VCV xy 0.0000214686
          VCV xz -0.0000178412 VCV yy 0.0000487286
          VCV yz -0.0000310714 VCV zz 0.0000407947

PT DGN SO Name 33012 To the Point

GRID D SO Delta N -0.003 Delta E 0.023
          Delta Elv 0.015

GPSVEC SO Point ID 23225 DX -6833.060 DY 1584.930
          Class Stake out DZ -1863.430 Code 3rd Top
          Obs L1 Fixed H.pr 0.015 V.pr 0.030

GPSQC1 NM Min SVs 16 PDOP max 1.1
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 1.0
          Monitor status Not monitored RMS 11.2
          Horz SD Vert SD
          Start wk 1542 sec 592045.0 End wk 1542 sec 592050.0

GPSQC2 NM Ttl satellites 16 Err Scale 0.0099999998
          VCV xx 0.0000197285 VCV xy 0.0000214594
          VCV xz -0.0000166255 VCV yy 0.000050025
          VCV yz -0.0000300927 VCV zz 0.000037687

PT DGN SO Name 33013 To the Point

GRID D SO Delta N -0.036 Delta E -0.073
          Delta Elv 0.040

GPSVEC SO Point ID 23226 DX -6861.156 DY 1555.224
          Class Stake out DZ -1915.754 Code 3rd Top
          Obs L1 Fixed H.pr 0.015 V.pr 0.029
    
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GPSQC1 NM Min SVs      10          PDOP max  1.0
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos  6          VDOP max  0.9
          Monitor status Not monitored RMS       22.3
          Horz SD
          Start wk 1542 sec 592106.0 End wk 1542 sec 592112.0

GPSQC2 NM Ttl satellites 10          Err Scale 0.0099999998
          VCV xx  0.0000188784      VCV xy   0.0000204471
          VCV xz -0.0000143597      VCV yy   0.0000494544
          VCV yz -0.0000272952      VCV zz   0.000032632

PT DGN SO Name          33014          To the Point

GRID D SO Delta N      0.038          Delta E    -0.075
          Delta Elv    0.026

GPSVEC SO Point ID 23227      DX  -6887.554      DY  1527.224
          Class Stake out      DZ  -1964.094      Code 3rd Top
          Obs L1 Fixed          H.pr 0.015      V.pr 0.029

GPSQC1 NM Min SVs      15          PDOP max  1.0
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos  5          VDOP max  0.9
          Monitor status Not monitored RMS       14.4
          Horz SD
          Start wk 1542 sec 592157.0 End wk 1542 sec 592163.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
          VCV xx  0.0000188019      VCV xy   0.0000200579
          VCV xz -0.0000140166      VCV yy   0.0000464102
          VCV yz -0.0000255977      VCV zz   0.0000315161

PT DGN SO Name          33000          To the Point

GRID D SO Delta N      -0.021          Delta E    -0.018
          Delta Elv    0.007

GPSVEC SO Point ID 23228      DX  -6847.902      DY  1512.387
          Class Stake out      DZ  -1959.392      Code 3rd Top
          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       16.6
          Horz SD
          Start wk 1542 sec 592205.0 End wk 1542 sec 592210.0

GPSQC2 NM Ttl satellites 14          Err Scale 0.0099999998
          VCV xx  0.0000209675      VCV xy   0.0000237185
          VCV xz -0.0000178923      VCV yy   0.0000539091
          VCV yz -0.0000322414      VCV zz   0.0000391475

PT DGN SO Name          33001          To the Point

GRID D SO Delta N      -0.037          Delta E    -0.036
          Delta Elv    0.049

GPSVEC SO Point ID 23229      DX  -6801.314      DY  1494.863
          Class Stake out      DZ  -1953.962      Code 3rd Top
          Obs L1 Fixed          H.pr 0.015      V.pr 0.029

GPSQC1 NM Min SVs      15          PDOP max  1.0
          Relative DOPs Yes        HDOP max  0.5
          Total GPS pos  5          VDOP max  0.9
          Monitor status Not monitored RMS       16.7
          Horz SD
          Start wk 1542 sec 592251.0 End wk 1542 sec 592257.0

GPSQC2 NM Ttl satellites 15          Err Scale 0.0099999998
          VCV xx  0.0000177114      VCV xy   0.0000185284
          VCV xz -0.0000154509      VCV yy   0.0000460055
          VCV yz -0.0000283712      VCV zz   0.0000383232

PT DGN SO Name          33002          To the Point

GRID D SO Delta N      0.035          Delta E     0.010
          Delta Elv    0.071

GPSVEC SO Point ID 23230      DX  -6766.010      DY  1481.623
          Class Stake out      DZ  -1949.746      Code 3rd Top
          Obs L1 Fixed          H.pr 0.016      V.pr 0.032

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       17.7
          Horz SD
          Start wk 1542 sec 592292.0 End wk 1542 sec 592297.0

GPSQC2 NM Ttl satellites 14          Err Scale 0.0099999998
          VCV xx  0.0000205223      VCV xy   0.000023256
          VCV xz -0.0000186272      VCV yy   0.0000541302
          VCV yz -0.0000336994      VCV zz   0.0000423038

PT DGN SO Name          33003          To the Point

GRID D SO Delta N      -0.013          Delta E     0.057
          Delta Elv    0.057
    
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GPSVEC SO Point ID 23231      DX  -6755.912      DY  1491.983
        Class Stake out    DZ  -1931.968      Code 3rd FL
        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 17.4
        Horz SD              Vert SD
        Start wk 1542 sec 592353.0 End wk 1542 sec 592358.0

GPSQC2 NM Ttl satellites 14          Err Scale 0.0099999998
        VCV xx 0.0000232986 VCV xy 0.0000279435
        VCV xz -0.0000217714 VCV yy 0.0000623418
        VCV yz -0.0000390635 VCV zz 0.0000463388

PT DGN SO Name              33028          To the Point

GRID D SO Delta N           -0.006          Delta E -0.021
        Delta Elv 0.017

GPSVEC SO Point ID 23232      DX  -6798.732      DY  1527.952
        Class Stake out    DZ  -1912.998      Code 3rd FL
        Obs L1 Fixed       H.pr 0.016       V.pr 0.034

GPSQC1 NM Min SVs          8                PDOP max 1.5
        Relative DOPs Yes    HDOP max 0.6
        Total GPS pos 6      VDOP max 1.4
        Monitor status Not monitored RMS 22.6
        Horz SD              Vert SD
        Start wk 1542 sec 592412.0 End wk 1542 sec 592417.0

GPSQC2 NM Ttl satellites 13          Err Scale 0.0099999998
        VCV xx 0.0000228406 VCV xy 0.0000275499
        VCV xz -0.0000199191 VCV yy 0.0000625085
        VCV yz -0.0000366758 VCV zz 0.0000419615

PT DGN SO Name              33027          To the Point

GRID D SO Delta N           -0.010          Delta E -0.039
        Delta Elv 0.041

GPSVEC SO Point ID 23233      DX  -6837.040      DY  1560.062
        Class Stake out    DZ  -1896.073      Code 3rd FL
        Obs L1 Fixed       H.pr 0.016       V.pr 0.035

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 14.1
        Horz SD              Vert SD
        Start wk 1542 sec 592467.0 End wk 1542 sec 592472.0

GPSQC2 NM Ttl satellites 13          Err Scale 0.0099999998
        VCV xx 0.0000243334 VCV xy 0.00002997
        VCV xz -0.0000226299 VCV yy 0.0000665678
        VCV yz -0.0000410018 VCV zz 0.0000471299

PT DGN SO Name              33026          To the Point

GRID D SO Delta N           0.053           Delta E -0.067
        Delta Elv 0.040

GPSVEC SO Point ID 23234      DX  -6710.898      DY  1530.266
        Class Stake out    DZ  -1875.362      Code mid
        Obs L1 Fixed       H.pr 0.016       V.pr 0.035

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 20.8
        Horz SD              Vert SD
        Start wk 1542 sec 592622.0 End wk 1542 sec 592627.0

GPSQC2 NM Ttl satellites 14          Err Scale 0.0099999998
        VCV xx 0.0000243409 VCV xy 0.000030478
        VCV xz -0.0000226086 VCV yy 0.0000684327
        VCV yz -0.0000414949 VCV zz 0.0000475848

LIN DGN SO Name              33083-33008      To the Line
        Station 111.760      H.Offset <null>
        Elv <null>

LIN D SO D Station          <null>          D Offset -0.034
        D Elev 0.010         Grd to Line 1:3.308

GRID D SO Delta N           -0.022          Delta E 0.026
        Delta Elv 0.010

GPSVEC SO Point ID 23235      DX  -6646.794      DY  1558.056
        Class Stake out    DZ  -1844.454      Code <no text>
        Obs L1 Fixed       H.pr 0.016       V.pr 0.036

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 13.9
        Horz SD              Vert SD
        Start wk 1542 sec 592779.0 End wk 1542 sec 592784.0
    
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GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000257975 VCV xy 0.0000315851
VCV xz -0.0000258089 VCV yy 0.0000656367
VCV yz -0.0000437123 VCV zz 0.0000539077

LIN DGN SO Name 33083-33008 To the Line
Station 39.259 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.019
D Elev 0.022 Grd to Line 1:0.88

GRID D SO Delta N -0.012 Delta E 0.015
Delta Elv 0.022

GPSVEC SO Point ID 23236 DX -6665.811 DY 1593.911
Class Stake out DZ -1813.975 Code mid
Obs L1 Fixed H.pr 0.016 V.pr 0.037

GPSQC1 NM Min SVs 13 PDOP max 1.3
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 1.2
Monitor status Not monitored RMS 8.8
Horz SD Vert SD
Start wk 1542 sec 592919.0 End wk 1542 sec 592924.0

GPSQC2 NM Ttl satellites 13 Err Scale 0.0099999998
VCV xx 0.0000254411 VCV xy 0.0000319874
VCV xz -0.0000258404 VCV yy 0.0000685986
VCV yz -0.00004543 VCV zz 0.0000547497

LIN DGN SO Name 33082-33009 To the Line
Station 34.331 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.011
D Elev 0.052 Grd to Line 1:0.207

GRID D SO Delta N 0.008 Delta E -0.008
Delta Elv 0.052

GPSVEC SO Point ID 23237 DX -6719.169 DY 1575.400
Class Stake out DZ -1835.491 Code mid
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 27.4
Horz SD Vert SD
Start wk 1542 sec 592997.0 End wk 1542 sec 593002.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000228204 VCV xy 0.0000281976
VCV xz -0.0000210088 VCV yy 0.0000632832
VCV yz -0.0000384559 VCV zz 0.0000464604

LIN DGN SO Name 33082-33009 To the Line
Station 91.656 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.008
D Elev 0.014 Grd to Line 1:0.528

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

GPSVEC SO Point ID 23238 DX -6736.220 DY 1608.009
Class Stake out DZ -1807.687 Code mid
Obs L1 Fixed H.pr 0.016 V.pr 0.033

GPSQC1 NM Min SVs 14 PDOP max 1.2
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 18.6
Horz SD Vert SD
Start wk 1542 sec 593084.0 End wk 1542 sec 593089.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000219758 VCV xy 0.0000268611
VCV xz -0.0000190734 VCV yy 0.0000608093
VCV yz -0.0000352043 VCV zz 0.0000434499

LIN DGN SO Name 33010-33081 To the Line
Station 53.166 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.012
D Elev 0.070 Grd to Line 1:0.166

GRID D SO Delta N -0.008 Delta E 0.008
Delta Elv 0.070

GPSVEC SO Point ID 23239 DX -6686.121 DY 1625.524
Class Stake out DZ -1787.276 Code mid
Obs L1 Fixed H.pr 0.016 V.pr 0.029

GPSQC1 NM Min SVs 14 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.9
Monitor status Not monitored RMS 18.5
Horz SD Vert SD
Start wk 1542 sec 593140.0 End wk 1542 sec 593145.0
    
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GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000168391 VCV xy 0.0000191876
VCV xz -0.0000135093 VCV yy 0.0000481612
VCV yz -0.0000267867 VCV zz 0.000035826

LIN DGN SO Name 33010-33081 To the Line
Station 107.121 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.040
D Elev 0.012 Grd to Line 1:3.365

GRID D SO Delta N -0.028 Delta E 0.029
Delta Elv 0.012

GPSVEC SO Point ID 23240 DX -6697.392 DY 1652.875
Class Stake out DZ -1763.589 Code mid
Obs L1 Fixed H.pr 0.017 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 20.2
Horz SD Vert SD
Start wk 1542 sec 593278.0 End wk 1542 sec 593283.0

GPSQC2 NM Ttl satellites 14 Err Scale 0.0099999998
VCV xx 0.0000214313 VCV xy 0.0000270573
VCV xz -0.0000182831 VCV yy 0.0000650021
VCV yz -0.0000359587 VCV zz 0.0000433967

LIN DGN SO Name 33080-33011 To the Line
Station 27.059 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset -0.058
D Elev 0.021 Grd to Line 1:2.774

GRID D SO Delta N -0.041 Delta E 0.042
Delta Elv 0.021

GPSVEC SO Point ID 23241 DX -6672.276 DY 1661.526
Class Stake out DZ -1753.469 Code toe-1
Obs L1 Fixed H.pr 0.016 V.pr 0.032

GPSQC1 NM Min SVs 15 PDOP max 1.1
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 1.0
Monitor status Not monitored RMS 14.3
Horz SD Vert SD
Start wk 1542 sec 593360.0 End wk 1542 sec 593366.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000196293 VCV xy 0.0000243966
VCV xz -0.0000169384 VCV yy 0.0000595978
VCV yz -0.0000334421 VCV zz 0.0000418352

PT DGN SO Name 33080 To the Point

GRID D SO Delta N 0.068 Delta E 0.053
Delta Elv 0.016

GPSVEC TP Point ID 23242 DX -6671.235 DY 1661.079
Class Normal DZ -1752.243 Code toe-2
Obs L1 Fixed H.pr 0.016 V.pr 0.031

GPSQC1 NM Min SVs 14 PDOP max 1.1
Relative DOPs Yes HDOP max 0.5
Total GPS pos 5 VDOP max 1.0
Monitor status Not monitored RMS 18.7
Horz SD Vert SD
Start wk 1542 sec 593384.0 End wk 1542 sec 593390.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.000018321 VCV xy 0.0000226418
VCV xz -0.0000142755 VCV yy 0.0000576644
VCV yz -0.0000301261 VCV zz 0.000036792

NOTE TS Time Date 08/01/2009 Time 13:51:37

GPSVEC SO Point ID 23243 DX -6750.275 DY 1634.546
Class Stake out DZ -1785.105 Code mid
Obs L1 Fixed H.pr 0.016 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 16.8
Horz SD Vert SD
Start wk 1542 sec 593504.0 End wk 1542 sec 593509.0

GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.0000192459 VCV xy 0.000022312
VCV xz -0.0000149137 VCV yy 0.0000524976
VCV yz -0.0000287656 VCV zz 0.0000383916

LIN DGN SO Name 33011-33080 To the Line
Station 53.738 H.Offset <null>
Elv <null>

LIN D SO D Station <null> D Offset 0.006
D Elev 0.054 Grd to Line 1:0.106
    
```

```
GRID D SO Delta N      -0.004          Delta E      0.004
        Delta Elv    0.054

GPSVEC SO Point ID 23244      DX  -6773.916      DY  1934.957
        Class Stake out      DZ  -1471.258      Code 8-1-09postchk
        Obs L1 Fixed          H.pr 0.016          V.pr 0.030

GPSQC1 NM Min SVs          16          PDOP max  1.1
        Relative DOPs Yes      HDOP max  0.5
        Total GPS pos 6        VDOP max  0.9
        Monitor status Not monitored RMS      14.6
        Horz SD                Vert SD
        Start wk 1542 sec 593738.0 End wk 1542 sec 593743.0

GPSQC2 NM Ttl satellites 16          Err Scale 0.0099999998
        VCV xx  0.0000190168      VCV xy  0.0000229476
        VCV xz  -0.0000123228      VCV yy  0.0000597317
        VCV yz  -0.0000261956      VCV zz  0.0000287485

PT DGN SO Name          23204          To the Point

GRID D SO Delta N      0.026          Delta E      0.002
        Delta Elv    -0.053

SURVEY EVENTKISurvey event Survey ended
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