

SC V10-70 Copyright © Trimble Navigation Ltd, 1996-2003  
 Serial no 4043 07-Jul-09 12:37  
 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 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 0.000000000

PLANE CB Orig Nrth 18728.937 Orig East 15068.999  
 Trans N -24.769 Trans E -1.419  
 Rotation -0°20'39.273751" Scale 1.000000000

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

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 0.00999999998  
 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      -0.0000315253      VCV zz 0.0000400671

PT DGN  SO  Name      101                      To the Point

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

SURVEY  EVENTKISurvey event Survey ended

SURVEY  KI  Elev mask 10                      PDOP mask 6.0

SURVEY  KI  Elev mask 10                      PDOP mask 6.0

SURVEY  KI  Elev mask 10                      PDOP mask 6.0

SURVEY  EVENTKISurvey event Rover survey started

GPSANT  KI  Antenna ht 0.000                      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      -0.0000408528      VCV zz 0.000049765

PT DGN  SO  Name      102                      To the Point

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

SURVEY  EVENTKISurvey event Survey ended

SURVEY  KI  Elev mask 10                      PDOP mask 6.0

SURVEY  KI  Elev mask 10                      PDOP mask 6.0

SURVEY  KI  Elev mask 10                      PDOP mask 6.0

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SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000                      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 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                      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 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                      Measuremt 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
		Delta Elv	-0.014	-0.004
NOTE	TS	Time Date	01/30/2009	Time 18:06:59
SURVEY	EVENTKIS	Survey 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	EVENTKIS	Survey 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	EVENTKIS	Survey 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	EVENTKIS	Survey 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

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 0.00006059	
		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	



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	

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

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

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	

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	0.0000686634
PT DGN	SO	Name	34010	To the Point	

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

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		DY	1866.540
		Class Stake out		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		DY	1866.980
		Class Normal		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		DY	1846.562
		Class Stake out		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		DY	1846.939
		Class Normal		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		DY	1824.299
		Class Stake out		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

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



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		DY	1733.977
		Class Normal		Code toe-2	
		Obs L1 Fixed		V.pr 0.039	
			DZ -2161.360		
			H.pr 0.020		
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		DY	1714.565
		Class Stake out		Code toe-1	
		Obs L1 Fixed		V.pr 0.040	
			DZ -2167.171		
			H.pr 0.020		
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		DY	1713.636
		Class Normal		Code toe-2	
		Obs L1 Fixed		V.pr 0.040	
			DZ -2167.954		
			H.pr 0.020		
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		DY	1698.749
		Class Stake out		Code toe-1	
		Obs L1 Fixed		V.pr 0.038	
			DZ -2167.297		
			H.pr 0.019		
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		DY	1697.403
		Class Normal		Code toe-2	
		Obs L1 Fixed		V.pr 0.038	
			DZ -2168.165		
			H.pr 0.019		
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

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

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

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	EVENTKI	Survey 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	EVENTKI	Survey 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 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	Measuremt 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	

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 0.0000615192
		VCV yz -0.0000184514	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 0.0000612025
		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 0.0000608841
		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

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

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

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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	

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

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
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DTM DELTASO	V.Distance	0.023
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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
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DTM DELTASO	V.Distance	0.013
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NOTE	TS	Time Date 07/06/2009 Time 14:23:18
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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	

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

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 -0.0000011499		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

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