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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 <no text>      Used No
              ID 00000      Name

COGO        NM Azmth From North      Dir North-East

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

LOCELL      KI Local Rad 20925604.474      Flat.      298.2572229329

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

SHFTGRD     CB File name <no text>

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

DATUM       CB Molodensky
              Srce Rad 20925604.474      Srce Flat 298.2572229329
              Rotn X 0°00'00"      Rotn Y 0°00'00"
              Rotn Z 0°00'00"      Trans X 0.000
              Trans Y 0.000      Trans Z 0.000
              Scale 0.000000000

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

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

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 9.700 Measurement Uncorrected

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

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

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

PT DGN SO Name 101 To the Point

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

SURVEY EVENTKISurvey event Survey ended

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measurement True

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

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

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measurement True

GPSREF KI Reference 44501

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

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

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 9.700 Measurement Uncorrected

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

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

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

PT DGN SO Name 102 To the Point

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

SURVEY EVENTKISurvey event Survey ended

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

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SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measurement True

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

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

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measurement True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1516
 Init type On the fly seconds 523108.0
 Init counter 1 Point ID <no text>
 Survey type Real Time Plate H.Dist <null>
 Plate V.Dist <null> Plate azimuth <null>

SURVEY EVENTKISurvey event Survey ended

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measurement True

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

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

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measurement True

GPSREF KI Reference 44501

INIT KI Init event Gained Week 1516
 Init type On the fly seconds 523481.0
 Init counter 3 Point ID <no text>
 Survey type Real Time Plate H.Dist <null>
 Plate V.Dist <null> Plate azimuth <null>

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

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 9.700 Measurement Uncorrected

GPSVEC SO Point ID Auto0060 DX -4430.889 DY 2648.948
 Class Stake out DZ 679.259 Code 107-1-30-09CHK
 Obs L1 Fixed H.pr 0.020 V.pr 0.040

GPSQC1 NM Min SVs 11 PDOP max 1.4
 Relative DOPs Yes HDOP max 0.6
 Total GPS pos 4 VDOP max 1.3
 Monitor status Not monitored RMS 18.3
 Horz SD Vert SD
 Start wk 1516 sec 523520.0 End wk 1516 sec 523523.0

GPSQC2 NM Ttl satellites 11 Err Scale 0.0099999998
 VCV xx 0.0000598084 VCV xy 0.0000569163
 VCV xz -0.0000356114 VCV yy 0.0000798075
 VCV yz -0.0000463645 VCV zz 0.0000480059

PT DGN SO Name 107 To the Point

GRID D SO Delta N -0.027 Delta E -0.003
 Delta Elv -0.018

SURVEY EVENTKISurvey event Survey ended

NOTE TS Time Date 01/30/2009 Time 17:34:38

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY KI Elev mask 10 PDOP mask 6.0

SURVEY EVENTKISurvey event Rover survey started

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

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

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

PT DGN SO Name 434 To the Point

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

SURVEY EVENTKISurvey event Survey ended

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

SURVEY EVENTKISurvey event Rover survey started

GPSANT KI Antenna ht 0.000 Measuremt True

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

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

NOTE NM Receiver firmware version=0.000

GPSANT KI Antenna ht 4.245 Measuremt True

GPSREF KI Reference 44501

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

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

NOTE NM Receiver firmware version=3.710

GPSANT KI Antenna ht 9.700 Measuremt Uncorrected

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

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

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

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

PT DGN SO Name 106 To the Point

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

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

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

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

GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
VCV xx 0.0000322694 VCV xy 0.0000303883
VCV xz -0.0000233197 VCV yy 0.0000614759
VCV yz -0.0000492575 VCV zz 0.0000735323
    
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PT DGN SO Name          420          To the Point
GRID D SO Delta N      -0.001      Delta E      -0.004
        Delta Elv      -0.014
NOTE   TS Time Date 01/30/2009 Time 18:06:59
SURVEY EVENTKISurvey event Survey ended
NOTE   TS Time Date 05/01/2009 Time 13:43:55
NOTE   TS Time Date 06/18/2009 Time 18:34:48
SURVEY KI Elev mask 10          PDOP mask 6.0
SURVEY KI Elev mask 10          PDOP mask 6.0
SURVEY KI Elev mask 10          PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000          Measuremt True
GPSPOS FD Point ID 44501          Lat 36°03'10.29917"N Lng 114°59'31.59480"W
        Class Control          Hgt 1645.648          Code 1_30_09_BASE
        Obs User Input          H.pr <null>          V.pr <null>
EQUIP SI Receiver SPS851          Serial no <no text>
        Antenna Zephyr - Model 2
        Meas To Antenna Phase Center
        Tape adj 0.000          Serial no <no text>
        H.Offset 0.000          V.Offset 0.000
NOTE   NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245          Measuremt True
GPSREF KI Reference 44501
INIT   KI Init event Gained          Week 1536
        Init type On the fly          seconds 437711.0
        Init counter 1          Point ID <no text>
        Survey type Real Time          Plate H.Dist <null>
        Plate V.Dist <null>          Plate azimuth <null>
NOTE   NM Following data imported from Phase 4 Stake.job
NOTE   NM Modified 6:28:16 PM 6/18/2009
NOTE   NM Old values
SURVEY EVENTKISurvey event Survey ended
NOTE   TS Time Date 07/06/2009 Time 10:25:40
NOTE   NM Following data imported from CAMU Control.CSV
NOTE   NM Following data imported from 7-2-09 Phase 2 & 3A Waste
NOTE   NM pnts.csv
SURVEY KI Elev mask 10          PDOP mask 6.0
SURVEY KI Elev mask 10          PDOP mask 6.0
SURVEY KI Elev mask 10          PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000          Measuremt True
GPSPOS FD Point ID 44501          Lat 36°03'10.29917"N Lng 114°59'31.59480"W
        Class Control          Hgt 1645.648          Code 1_30_09_BASE
        Obs User Input          H.pr <null>          V.pr <null>
EQUIP SI Receiver SPS851          Serial no <no text>
        Antenna Zephyr - Model 2
        Meas To Antenna Phase Center
        Tape adj 0.000          Serial no <no text>
        H.Offset 0.000          V.Offset 0.000
NOTE   NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245          Measuremt True
GPSREF KI Reference 44501
INIT   KI Init event Gained          Week 1539
        Init type On the fly          seconds 149284.0
        Init counter 2          Point ID <no text>
        Survey type Real Time          Plate H.Dist <null>
        Plate V.Dist <null>          Plate azimuth <null>
EQUIP NM Receiver SPS881          Serial no 4813149404
        Antenna R8 Model 2/SPS88x Internal
        Meas To Bottom of antenna mount
        Tape adj 0.000          Serial no <no text>
        H.Offset 0.000          V.Offset 0.213
NOTE   NM Receiver firmware version=3.710
GPSANT KI Antenna ht 6.562          Measuremt Uncorrected
    
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GPSVEC SO Point ID 23001      DX  -6797.885      DY  1569.154
        Class Stake out    DZ  -1861.584      Code 7-6-09prechk
        Obs L1 Fixed       H.pr 0.022       V.pr 0.030

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

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

PT DGN SO Name            23000          To the Point

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

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

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

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

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

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

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

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

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

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

PT DGN SO Name            34001          To the Point

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

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

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

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

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

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

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

PT DGN SO Name            34002          To the Point
    
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GRID D SO Delta N      0.115          Delta E      -0.768
        Delta Elv    0.027

GPSVEC TP Point ID 23006      DX  -7231.158      DY  2085.581
        Class Normal      DZ  -1561.945      Code toe-2
        Obs L1 Fixed      H.pr 0.023      V.pr 0.029

GPSQC1 NM Min SVs          8          PDOP max    1.1
        Relative DOPs Yes      HDOP max    0.7
        Total GPS pos 6      VDOP max    0.9
        Monitor status Not monitored      RMS         17.6
        Horz SD              Vert SD
        Start wk 1539 sec 150230.0      End wk 1539 sec 150235.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx 0.0000285428      VCV xy 0.0000187026
        VCV xz -0.0000082676      VCV yy 0.0000482326
        VCV yz -0.0000237095      VCV zz 0.0000500561

GPSVEC SO Point ID 23007      DX  -7205.822      DY  2054.581
        Class Stake out      DZ  -1565.918      Code mid
        Obs L1 Fixed      H.pr 0.023      V.pr 0.029

GPSQC1 NM Min SVs          8          PDOP max    1.2
        Relative DOPs Yes      HDOP max    0.7
        Total GPS pos 6      VDOP max    0.9
        Monitor status Not monitored      RMS         12.5
        Horz SD              Vert SD
        Start wk 1539 sec 150311.0      End wk 1539 sec 150316.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx 0.0000283604      VCV xy 0.0000184896
        VCV xz -0.0000083497      VCV yy 0.0000480019
        VCV yz -0.0000243802      VCV zz 0.0000515132

LIN DGN SO Name          34002-34050      To the Line
        Station          37.350      H.Offset    <null>
        Elv              <null>

LIN D SO D Station      <null>          D Offset    -0.037
        D Elev          0.031      Grd to Line 1:1.178

GRID D SO Delta N      0.035          Delta E      0.012
        Delta Elv    0.031

GPSVEC SO Point ID 23008      DX  -7242.129      DY  2027.359
        Class Stake out      DZ  -1617.302      Code mid
        Obs L1 Fixed      H.pr 0.023      V.pr 0.030

GPSQC1 NM Min SVs          8          PDOP max    1.2
        Relative DOPs Yes      HDOP max    0.7
        Total GPS pos 5      VDOP max    0.9
        Monitor status Not monitored      RMS         14.8
        Horz SD              Vert SD
        Start wk 1539 sec 150441.0      End wk 1539 sec 150446.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx 0.0000283771      VCV xy 0.0000184009
        VCV xz -0.0000086384      VCV yy 0.0000480607
        VCV yz -0.0000256047      VCV zz 0.0000541724

LIN DGN SO Name          34003-34049      To the Line
        Station          40.092      H.Offset    <null>
        Elv              <null>

LIN D SO D Station      <null>          D Offset    -0.004
        D Elev          0.020      Grd to Line 1:0.199

GRID D SO Delta N      0.004          Delta E      0.001
        Delta Elv    0.020

GPSVEC SO Point ID 23009      DX  -7268.072      DY  2060.349
        Class Stake out      DZ  -1613.996      Code toe-1
        Obs L1 Fixed      H.pr 0.022      V.pr 0.029

GPSQC1 NM Min SVs          8          PDOP max    1.2
        Relative DOPs Yes      HDOP max    0.7
        Total GPS pos 6      VDOP max    0.9
        Monitor status Not monitored      RMS         10.9
        Horz SD              Vert SD
        Start wk 1539 sec 150522.0      End wk 1539 sec 150527.0

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx 0.0000282724      VCV xy 0.0000188592
        VCV xz -0.0000096566      VCV yy 0.0000463068
        VCV yz -0.0000233391      VCV zz 0.000050731

PT DGN SO Name          34003          To the Point

GRID D SO Delta N      0.004          Delta E      -0.176
        Delta Elv    0.030

GPSVEC TP Point ID 23010      DX  -7269.748      DY  2060.936
        Class Normal      DZ  -1612.834      Code toe-2
        Obs L1 Fixed      H.pr 0.022      V.pr 0.029

GPSQC1 NM Min SVs          8          PDOP max    1.2
        Relative DOPs Yes      HDOP max    0.7
        Total GPS pos 5      VDOP max    0.9
        Monitor status Not monitored      RMS         12.7
        Horz SD              Vert SD
        Start wk 1539 sec 150544.0      End wk 1539 sec 150549.0
    
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GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
          VCV xx 0.0000281763 VCV xy 0.0000186354
          VCV xz -0.0000094525 VCV yy 0.0000466051
          VCV yz -0.0000242717 VCV zz 0.0000523266

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

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

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

PT DGN SO Name 34004 To the Point

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

PT DGN SO Name 34005 To the Point

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

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

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

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

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

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

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

PT DGN SO Name 34006 To the Point

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

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

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

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

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

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

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

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

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

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

GPSVEC SO Point ID 23020 DX -7353.691 DY 1932.359
 Class Stake out DZ -1783.890 Code mid
 Obs L1 Fixed H.pr 0.024 V.pr 0.037

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GPSQC1 NM Min SVs 7 PDOP max 1.4
Relative DOPs Yes HDOP max 0.7
Total GPS pos 5 VDOP max 1.2
Monitor status Not monitored RMS 9.0
Horz SD Vert SD
Start wk 1539 sec 151690.0 End wk 1539 sec 151695.0

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

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

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

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

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

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

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

PT DGN SO Name 34007 To the Point

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

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

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

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

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

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

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

PT DGN SO Name 34008 To the Point

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000312483 VCV xy 0.0000240603
VCV xz -0.0000197839 VCV yy 0.0000541412
VCV yz -0.0000368707 VCV zz 0.0000675701

PT DGN SO Name 34009 To the Point

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

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

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

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

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

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

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

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

GPSVEEC 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
        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

GPSVEEC 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
        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

GPSVEEC 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
        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

GPSVEEC 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
        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

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

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

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

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

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

PT DGN SO Name              34012      To the Point

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

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

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

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

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

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

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

PT DGN SO Name              34013      To the Point

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

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

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

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

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

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

GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
          VCV xx  0.0000385538      VCV xy   0.0000348546
          VCV xz  -0.0000296187    VCV yy   0.0000678015
          VCV yz  -0.0000490666    VCV zz   0.0000695501
    
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PT DGN SO Name          34014          To the Point
GRID D SO Delta N      -0.119          Delta E      -1.037
        Delta Elv      -0.003
GPSVEC TP Point ID 23040      DX   -7592.551      DY   1824.441
        Class Normal    DZ   -2080.892      Code toe-2
        Obs L1 Fixed    H.pr 0.020          V.pr 0.038
GPSQC1 NM Min SVs          8          PDOP max    1.4
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos  5          VDOP max    1.2
        Monitor status Not monitored RMS          16.4
        Horz SD          Vert SD
        Start wk 1539 sec 153185.0 End wk 1539 sec 153191.0
GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx          0.0000384871 VCV xy      0.0000348955
        VCV xz          -0.0000296151 VCV yy      0.0000677135
        VCV yz          -0.0000489292 VCV zz      0.000069015
GPSVEC SO Point ID 23041      DX   -7581.900      DY   1785.593
        Class Stake out DZ   -2123.439      Code toe-1
        Obs L1 Fixed    H.pr 0.020          V.pr 0.039
GPSQC1 NM Min SVs          8          PDOP max    1.4
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos  5          VDOP max    1.2
        Monitor status Not monitored RMS          10.8
        Horz SD          Vert SD
        Start wk 1539 sec 153266.0 End wk 1539 sec 153271.0
GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx          0.0000393787 VCV xy      0.0000361367
        VCV xz          -0.0000304727 VCV yy      0.0000694649
        VCV yz          -0.0000498403 VCV zz      0.0000687377
PT DGN SO Name          34015          To the Point
GRID D SO Delta N      -0.417          Delta E      -0.692
        Delta Elv      -0.002
GPSVEC TP Point ID 23042      DX   -7583.556      DY   1785.363
        Class Normal    DZ   -2123.742      Code toe-2
        Obs L1 Fixed    H.pr 0.020          V.pr 0.039
GPSQC1 NM Min SVs          8          PDOP max    1.4
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos  5          VDOP max    1.2
        Monitor status Not monitored RMS          12.5
        Horz SD          Vert SD
        Start wk 1539 sec 153282.0 End wk 1539 sec 153290.0
GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx          0.0000389979 VCV xy      0.0000358783
        VCV xz          -0.0000302185 VCV yy      0.0000688611
        VCV yz          -0.0000493405 VCV zz      0.000067742
GPSVEC SO Point ID 23043      DX   -7564.642      DY   1759.861
        Class Stake out DZ   -2145.096      Code toe-1
        Obs L1 Fixed    H.pr 0.020          V.pr 0.039
GPSQC1 NM Min SVs          8          PDOP max    1.4
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos  6          VDOP max    1.2
        Monitor status Not monitored RMS          12.2
        Horz SD          Vert SD
        Start wk 1539 sec 153359.0 End wk 1539 sec 153364.0
GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx          0.0000401905 VCV xy      0.0000373899
        VCV xz          -0.0000312919 VCV yy      0.0000712195
        VCV yz          -0.0000506893 VCV zz      0.0000681517
PT DGN SO Name          34016          To the Point
GRID D SO Delta N      -0.785          Delta E      -0.491
        Delta Elv      -0.006
GPSVEC TP Point ID 23044      DX   -7566.361      DY   1759.201
        Class Normal    DZ   -2145.821      Code toe-2
        Obs L1 Fixed    H.pr 0.020          V.pr 0.039
GPSQC1 NM Min SVs          8          PDOP max    1.4
        Relative DOPs Yes      HDOP max    0.6
        Total GPS pos  5          VDOP max    1.2
        Monitor status Not monitored RMS          12.8
        Horz SD          Vert SD
        Start wk 1539 sec 153388.0 End wk 1539 sec 153397.0
GPSQC2 NM Ttl satellites 8          Err Scale 0.0099999998
        VCV xx          0.0000393957 VCV xy      0.0000368074
        VCV xz          -0.0000307318 VCV yy      0.0000699414
        VCV yz          -0.0000496528 VCV zz      0.000066242
GPSVEC SO Point ID 23045      DX   -7539.467      DY   1735.017
        Class Stake out DZ   -2160.454      Code toe-1
        Obs L1 Fixed    H.pr 0.020          V.pr 0.039
    
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GPSQC1 NM Min SVs 8 PDOP max 1.4
 Relative DOPs Yes HDOP max 0.6
 Total GPS pos 6 VDOP max 1.2
 Monitor status Not monitored RMS 18.5
 Horz SD Vert SD
 Start wk 1539 sec 153458.0 End wk 1539 sec 153463.0

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

PT DGN SO Name 34017 To the Point

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

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

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

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

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

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

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

PT DGN SO Name 34028 To the Point

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

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

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

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

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

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

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

PT DGN SO Name 34029 To the Point

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

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

GPSQC1 NM Min SVs 8 PDOP max 1.3
 Relative DOPs Yes HDOP max 0.6
 Total GPS pos 5 VDOP max 1.2
 Monitor status Not monitored RMS 21.3
 Horz SD Vert SD
 Start wk 1539 sec 153641.0 End wk 1539 sec 153646.0

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GPSQC2 NM Ttl satellites 8 Err Scale 0.0099999998
VCV xx 0.0000377495 VCV xy 0.0000358416
VCV xz -0.0000298688 VCV yy 0.0000703335
VCV yz -0.000048849 VCV zz 0.0000630497

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

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

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

PT DGN SO Name 34018 To the Point

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

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

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

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

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

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

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

PT DGN SO Name 34019 To the Point

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

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

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

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

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

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

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

PT DGN SO Name 34020 To the Point

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

GPSVEC TP Point ID 23056 DX -7318.298 DY 1639.737
Class Normal DZ -2147.078 Code toe-2
Obs L1 Fixed H.pr 0.019 V.pr 0.037
    
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GPSQC1 NM Min SVs      8          PDOP max  1.3
          Relative DOPs Yes      HDOP max  0.6
          Total GPS pos  5       VDOP max  1.2
          Monitor status Not monitored RMS       20.7
          Horz SD
          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
          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
          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
          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
          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
          Start wk 1539 sec 154259.0 End wk 1539 sec 154264.0

GPSQC2 NM Ttl satellites 7          Err Scale 0.0099999998
          VCV xx  0.0000588558    VCV xy   0.0000641833
          VCV xz  -0.0000475543    VCV yy   0.0001086494
          VCV yz  -0.0000711981    VCV zz   0.0000712934
    
```

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PT DGN SO Name 34023 To the Point
GRID D SO Delta N 0.232 Delta E -0.102
Delta Elv 0.024
GPSVEC SO Point ID 23062 DX -6797.882 DY 1569.181
Class Stake out DZ -1861.619 Code 7-6-09chk
Obs L1 Fixed H.pr 0.020 V.pr 0.049
GPSQC1 NM Min SVs 7 PDOP max 1.7
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 1.5
Monitor status Not monitored RMS 9.5
Horz SD Vert SD
Start wk 1539 sec 154422.0 End wk 1539 sec 154427.0
GPSQC2 NM Ttl satellites 7 Err Scale 0.0099999998
VCV xx 0.00006462 VCV xy 0.0000728119
VCV xz -0.0000524387 VCV yy 0.0001208584
VCV yz -0.0000779385 VCV zz 0.0000735349
PT DGN SO Name 23000 To the Point
GRID D SO Delta N -0.056 Delta E 0.022
Delta Elv 0.008
SURVEY EVENTKISurvey event Survey ended
NOTE TS Time Date 07/06/2009 Time 13:20:16
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY KI Elev mask 10 PDOP mask 6.0
SURVEY EVENTKISurvey event Rover survey started
GPSANT KI Antenna ht 0.000 Measurement True
GPSPOS FD Point ID 44501 Lat 36°03'10.29917"N Lng 114°59'31.59480"W
Class Control Hgt 1645.648 Code 1_30_09_BASE
Obs User Input H.pr <null> V.pr <null>
EQUIP SI Receiver SPS851 Serial no <no text>
Antenna Zephyr - Model 2
Meas To Antenna Phase Center
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.000
NOTE NM Receiver firmware version=0.000
GPSANT KI Antenna ht 4.245 Measurement True
GPSREF KI Reference 44501
INIT KI Init event Gained Week 1539
Init type On the fly seconds 159645.0
Init counter 1 Point ID <no text>
Survey type Real Time Plate H.Dist <null>
Plate V.Dist <null> Plate azimuth <null>
EQUIP NM Receiver SPS881 Serial no 4813149404
Antenna R8 Model 2/SPS88x Internal
Meas To Bottom of antenna mount
Tape adj 0.000 Serial no <no text>
H.Offset 0.000 V.Offset 0.213
NOTE NM Receiver firmware version=3.710
GPSANT KI Antenna ht 6.562 Measurement Uncorrected
GPSVEC SO Point ID 23063 DX -6797.876 DY 1569.187
Class Stake out DZ -1861.610 Code 7-6-09chk
Obs L1 Fixed H.pr 0.020 V.pr 0.026
GPSQC1 NM Min SVs 15 PDOP max 1.0
Relative DOPs Yes HDOP max 0.6
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 16.1
Horz SD Vert SD
Start wk 1539 sec 159678.0 End wk 1539 sec 159683.0
GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
VCV xx 0.000017251 VCV xy 0.0000162913
VCV xz 0.0000021133 VCV yy 0.000055408
VCV yz -0.0000164789 VCV zz 0.0000280137
PT DGN SO Name 23000 To the Point
GRID D SO Delta N -0.067 Delta E 0.020
Delta Elv 0.009
GPSVEC SO Point ID 23064 DX -7527.220 DY 1819.477
Class Stake out DZ -2019.338 Code mid
Obs L1 Fixed H.pr 0.022 V.pr 0.027
GPSQC1 NM Min SVs 15 PDOP max 1.1
Relative DOPs Yes HDOP max 0.7
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 12.9
Horz SD Vert SD
Start wk 1539 sec 160149.0 End wk 1539 sec 160154.0

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

GPSQC1 NM Min SVs 15 PDOP max 1.2
Relative DOPs Yes HDOP max 0.7
Total GPS pos 5 VDOP max 0.9
Monitor status Not monitored RMS 18.5
Horz SD Vert SD
Start wk 1539 sec 160529.0 End wk 1539 sec 160534.0
    
```

```

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
    
```

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

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

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

GPSQC1 NM Min SVs 10 PDOP max 1.0
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 11.6
Horz SD Vert SD
Start wk 1539 sec 162687.0 End wk 1539 sec 162692.0

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

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

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

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

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

GPSQC1 NM Min SVs 10 PDOP max 1.0
Relative DOPs Yes HDOP max 0.6
Total GPS pos 5 VDOP max 0.8
Monitor status Not monitored RMS 14.9
Horz SD Vert SD
Start wk 1539 sec 162839.0 End wk 1539 sec 162844.0

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

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

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

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

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

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

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

PT DGN SO Name 34027 To the Point

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

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

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

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

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

```

GPSQC1 NM Min SVs 15 PDOP max 1.0
 Relative DOPs Yes HDOP max 0.5
 Total GPS pos 6 VDOP max 0.8
 Monitor status Not monitored RMS 13.9
 Horz SD Vert SD
 Start wk 1539 sec 163163.0 End wk 1539 sec 163168.0

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

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

DTM DELTASO V.Distance 0.023

GPSVEC SO Point ID 23094 DX -6929.025 DY 1511.295
 Class Stake out DZ -2059.660 Code mid
 Obs L1 Fixed H.pr 0.017 V.pr 0.025

GPSQC1 NM Min SVs 16 PDOP max 0.9
 Relative DOPs Yes HDOP max 0.5
 Total GPS pos 5 VDOP max 0.8
 Monitor status Not monitored RMS 17.6
 Horz SD Vert SD
 Start wk 1539 sec 163240.0 End wk 1539 sec 163245.0

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

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

DTM DELTASO V.Distance 0.013

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

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

GPSQC1 NM Min SVs 16 PDOP max 1.0
 Relative DOPs Yes HDOP max 0.5
 Total GPS pos 6 VDOP max 0.8
 Monitor status Not monitored RMS 14.6
 Horz SD Vert SD
 Start wk 1539 sec 163398.0 End wk 1539 sec 163403.0

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

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

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

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

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

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

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

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

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

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

GPSVEC SO Point ID 23097 DX -6802.736 DY 1468.477
 Class Stake out DZ -2031.722 Code mid
 Obs L1 Fixed H.pr 0.016 V.pr 0.026

GPSQC1 NM Min SVs 16 PDOP max 1.0
 Relative DOPs Yes HDOP max 0.5
 Total GPS pos 5 VDOP max 0.8
 Monitor status Not monitored RMS 9.4
 Horz SD Vert SD
 Start wk 1539 sec 163697.0 End wk 1539 sec 163702.0

```

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

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

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

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

GPSVEC SO Point ID 23098 DX -6767.381 DY 1455.077
Class Stake out DZ -2028.036 Code mid
Obs L1 Fixed H.pr 0.016 V.pr 0.026

GPSQC1 NM Min SVs 16 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 9.8
Horz SD Vert SD
Start wk 1539 sec 163803.0 End wk 1539 sec 163808.0

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

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

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

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

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

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

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

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

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

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

GPSVEC SO Point ID 23100 DX -6683.961 DY 1422.078
Class Stake out DZ -2022.897 Code mid
Obs L1 Fixed H.pr 0.016 V.pr 0.026

GPSQC1 NM Min SVs 16 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 12.3
Horz SD Vert SD
Start wk 1539 sec 164027.0 End wk 1539 sec 164032.0

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

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

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

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

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

GPSQC1 NM Min SVs 15 PDOP max 1.0
Relative DOPs Yes HDOP max 0.5
Total GPS pos 6 VDOP max 0.8
Monitor status Not monitored RMS 20.3
Horz SD Vert SD
Start wk 1539 sec 164163.0 End wk 1539 sec 164168.0
    
```

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GPSQC2 NM Ttl satellites 15 Err Scale 0.0099999998
          VCV xx 0.0000183365 VCV xy 0.0000176223
          VCV xz -0.0000098921 VCV yy 0.0000427278
          VCV yz -0.0000217604 VCV zz 0.0000293467

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

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

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

GPSVEC SO Point ID 23102 DX -6580.052 DY 1382.276
          Class Stake out DZ -2013.027 Code mid
          Obs L1 Fixed H.pr 0.015 V.pr 0.025

GPSQC1 NM Min SVs 16 PDOP max 0.9
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 5 VDOP max 0.8
          Monitor status Not monitored RMS 8.1
          Horz SD Vert SD
          Start wk 1539 sec 164309.0 End wk 1539 sec 164315.0

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

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

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

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

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

GPSQC1 NM Min SVs 16 PDOP max 1.0
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 0.9
          Monitor status Not monitored RMS 11.3
          Horz SD Vert SD
          Start wk 1539 sec 164820.0 End wk 1539 sec 164825.0

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

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

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

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

GPSVEC SO Point ID 23104 DX -6482.498 DY 1345.893
          Class Stake out DZ -2002.304 Code mid
          Obs L1 Fixed H.pr 0.015 V.pr 0.026

GPSQC1 NM Min SVs 16 PDOP max 0.9
          Relative DOPs Yes HDOP max 0.5
          Total GPS pos 6 VDOP max 0.8
          Monitor status Not monitored RMS 10.0
          Horz SD Vert SD
          Start wk 1539 sec 165186.0 End wk 1539 sec 165195.0

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

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

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

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

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

GPSVEC SO Point ID 23105 DX -6433.782 DY 1328.349
          Class Stake out DZ -1995.960 Code mid
          Obs L1 Fixed H.pr 0.015 V.pr 0.027
    
```

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