

**GeoBC and NR Sector Data Services
BRITISH COLUMBIA ACTIVE CONTROL SYSTEM**

GNSS ACTIVE CONTROL POINT as of 2024/04/18

STATION: BCSL / SMLD
GEODETIC MARK: 506204
FULL NAME: BCACS - Summerland PARC ACP
CLASS: BCACS Primary
LOCATION: Summerland, B.C., Canada
Installed on concrete pillar at Pacific Agriculture Centre

- 2006/04/11

MARKER COORDINATES: Latitude N 49°33'55.55222"
Longitude W 119°38'39.20938"
Hybrid Ellipsoid Height (HEH) 429.110m*
Orthometric Height 445.290m

*The Hybrid Ellipsoid Height was derived by adding the HTV2.0 separation (N) to the levelling-derived orthometric height. It is not a true GNSS-derived ellipsoid height. BCACS, since inception, was designed for optimal compatibility with orthometric heights in the surrounding passive control networks.

GEODETIC ATTRIBUTES: Datum/Ellipsoid = NAD83(CSRs) 4.0.0.BC.1
Geoid Model = HTV2.0 (1997.0)
N = -16.18
xi = 1.4 s
eta = 1.1 s

OBSOLETE

~~— Preliminary~~

~~MARKER COORDINATES: Lat. n49 33 55.5519
Long. w119 38 39.21042
HAE 429.175m (ellipsoid)
Elev. 445.295m (msl)~~

~~PHASE CENTRE COORDS Lat. n49 33 55.5519
Long. w119 38 39.21042
HAE 429.338m (ellipsoid)
Elev. 445.458m (msl)~~

~~GEODETIC ATTRIBUTES: Datum/Ellipsoid = NAD83/WCS 84
Geoid Model = HT97
N = -16.12
xi = 1.25
eta = -1.11"~~

REFERENCE NETWORKS:

Inner:

Outer:

COLLOCATION TIES:

- nil

ANTENNA HEIGHT: > vertical distance measured to antenna reference point (ARP)

- 2009/12/07 19:00UT 0.100
- 2000/07/05 00:00UT 0.100

GNSS RECEIVER:

- 2024/04/18 20:00UT Septentrio PolaRx5 s/n#3079616
- 2009/12/07 19:00UT Leica GRX1200 +GNSS s/n#495171
- 2000/07/05 00:00UT Trimble 4000SSi s/n#3543A13017

GNSS Rx FIRMWARE:

- 2024/04/18 20:00UT Firmware 5.5.0
- 2015/06/18 16:37UT Firmware 9.20 / ME 6.404
- 2013/11/07 14:08UT Firmware 8.71 / ME 6.112
- 2012/05/08 15:57UT Firmware 8.51 / ME 4.007
- 2011/09/12 14:30UT Firmware 8.20 / ME 4.007
- 2011/02/21 21:50UT Firmware 8.10 / ME 4.007
- 2010/09/08 15:00UT Firmware 8.0
- 2010/05/05 18:30UT Firmware 7.80
- 2009/12/07 19:00UT Firmware ver. 7.53
- 2000/07/05 00:00UT Nav7.29/Sig3.07/Boot3.34

ANTENNA (diagram below):

- 2013/10/23 19:10UT Leica AT504GG (GLONASS) with LEIS Radome
sn 200009
- 2013/10/21 16:40UT Leica Choke Ring w/ LEIS Dome sn 1235
- 2009/12/07 19:00UT Leica AR25 w/ Leica Dome sn9040019
- 2000/07/05 00:00UT Trimble Compact L1/L2 with Ground Plane)
s/n#0080050696

ANTENNA CABLE:

- 2024/06/10 20:00UT FSJ4-50B Extension Pigtail Added
- 2000/07/05 00:00UT FSJ4-50B Superflex 100m

CLOCK:

- 2024/04/18 20:00UT GNSS Receiver Internal Clock
- 2009/12/07 19:00UT GPS Receiver Internal Clock
- 2000/07/05 00:00UT GPS Receiver Internal Clock

COMPUTER HARDWARE:

- 2009/12/07 19:00UT N/A
- 2000/07/05 00:00UT IBM PII 350 sn 1S627555U23CDR77
2Gbyte hard disk (NTFS Format)
- 2000/07/05 17:00UT 3Com EtherLink III Card s/n# ?

COMPUTER SOFTWARE:

- 2009/12/07 19:00UT N/A
- 2000/07/05 00:00UT Trimble URS for Windows ver2.1 s/n# 55699
pcAnywhere
vnc

MODEMS:

- 2024/04/18 20:00UT Modem Upgraded
- 2000/07/05 00:00UT N/A

UNINTERRUPTABLE POWER SUPPLY:

- 2024/04/18 20:00UT Mean Well DRC-100A
- 2006/09/05 00:00UT APC s/n#
- 2000/07/05 00:00UT Best Fortress LI1.42KVAB s/n#

STATUS:

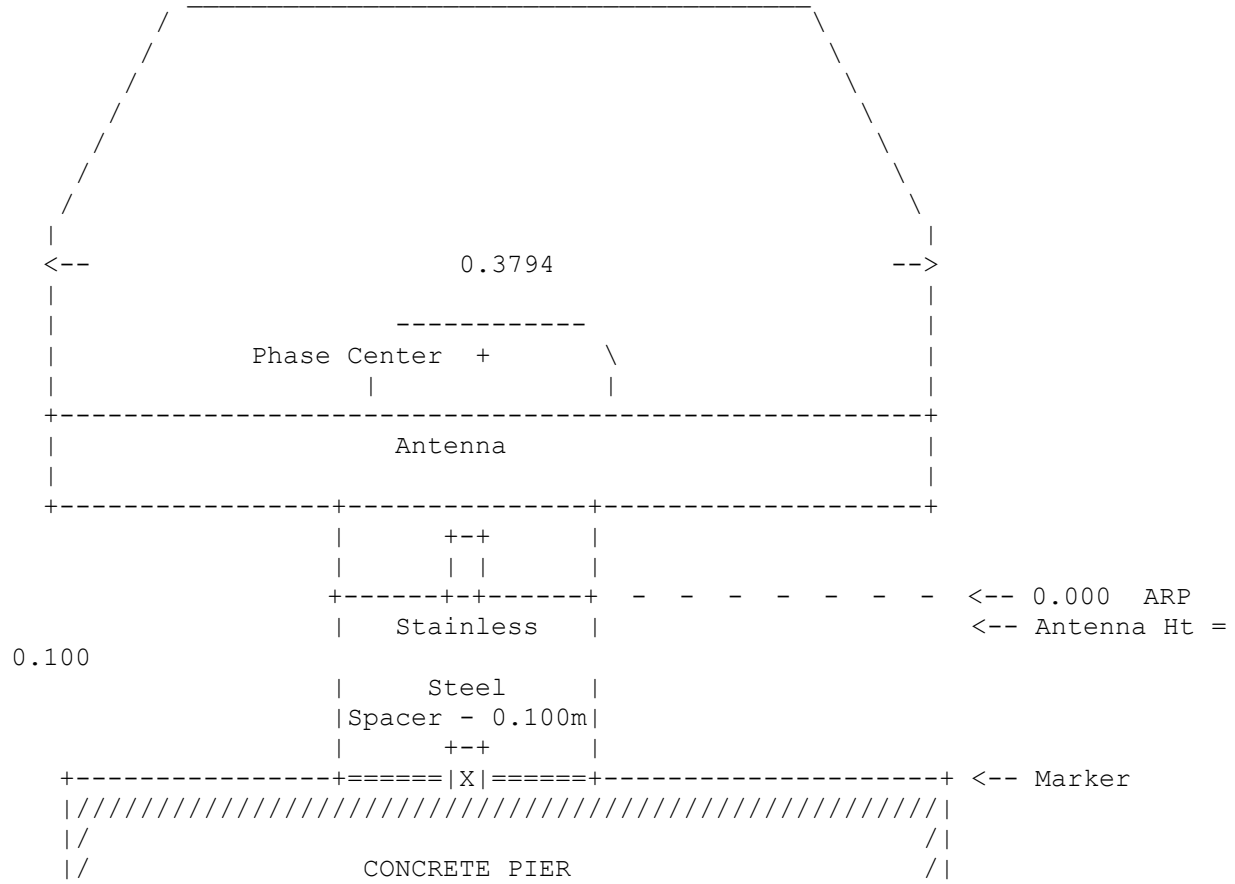
- 2000/07/05 00:00UT Operational

AGENCY: GeoBC and NR Sector Data Services
Natural Resource Information & Digital Services Division
Ministry of Water, Land and Resource Stewardship

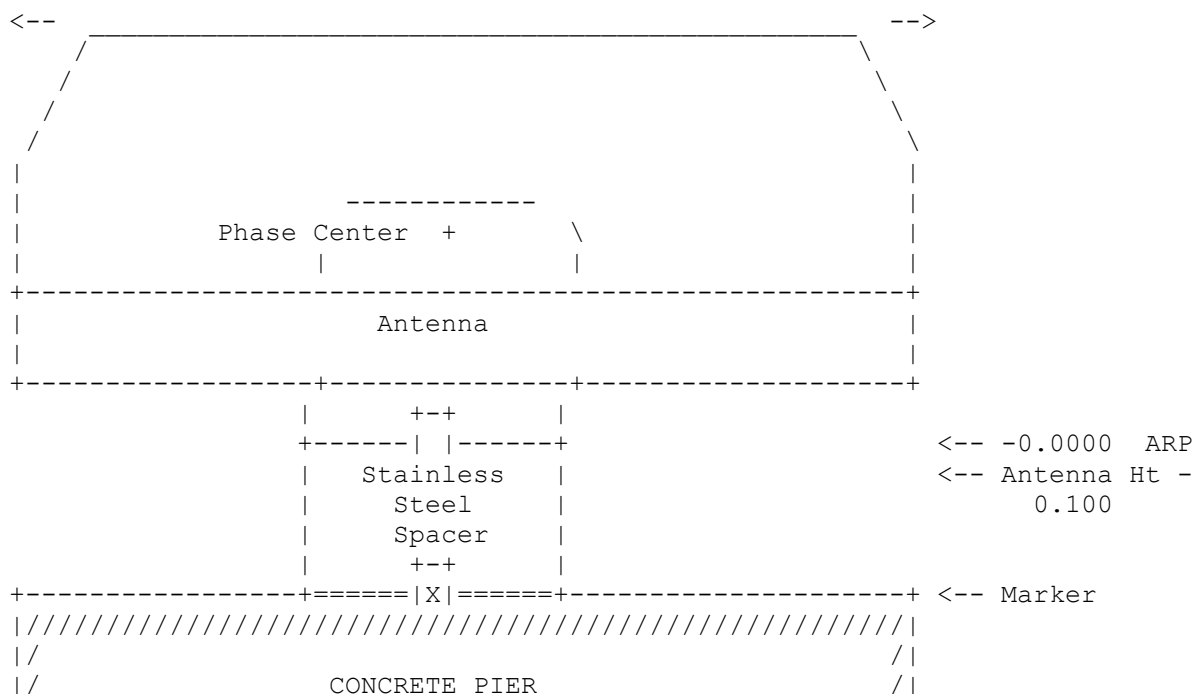
CONTACT: Foundational Information and Technology Branch
3400 Davidson Ave.
Victoria, BC, Canada V8Z 3P8
email: GeoBCinfo@gov.bc.ca

ANTENNA DIAGRAM:

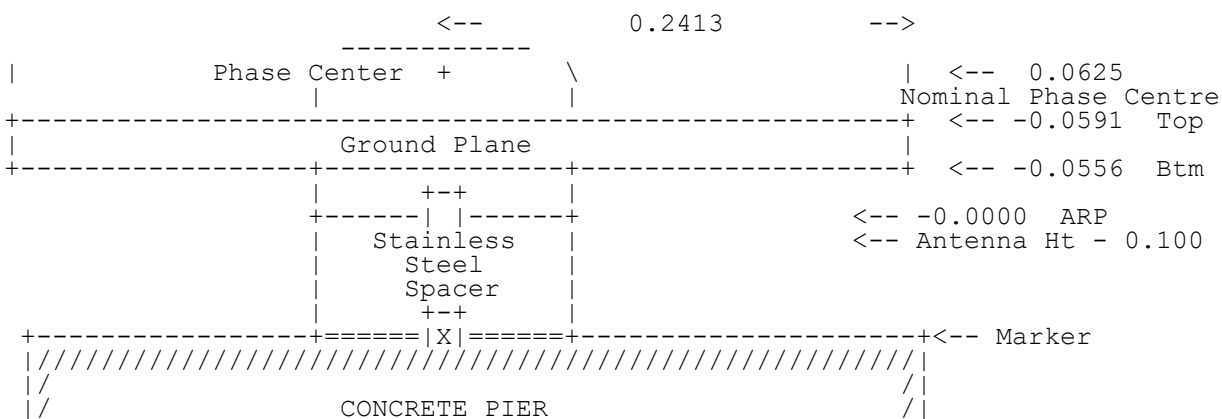
- 2013/10/23 M T Style Leica Choke Ring with Leica dome (LEIAT504GG LEIS)



2009/12/07 Leica AR25 w/ Leica dome (AR25 LEIT)



Trimble Geodetic L1/L2 Compact with Ground Plane (NGS TTRM 22020.00+GP)



Marker - X

ACRONYMS

- ACP ... Active Control Point
- ARP ... Antenna Reference Point
- BCACS ... British Columbia Active Control System
- GNSS ... Global Navigation Satellite System
- HEH ... Hybrid Ellipsoid Height
- HTV2.0 (1997.0) ... Height Transformation Model Version 2.0 Epoch 1997.0
- N ... geoid-ellipsoid separation
- NAD83(CSRS) 4.0.0.BC.1... North American Datum 1983, Canadian Spatial Reference System, Version 4, Epoch 2002, British Columbia