



**PLANET**  
EXPLORATION INC

# GOLDEN LOON PROJECT – SOUTHERN BRITISH COLUMBIA

**TECHNICAL UPDATE**

**DECEMBER 2011**

**TSX.V:PXI**

# FORWARD-LOOKING STATEMENT



*This Presentation includes and is based on forward-looking information and statements that are subject to risks and uncertainties. All statements within, other than statements of historical fact, are to be considered forward looking. There can be no assurances that such statements will prove accurate and, therefore, readers are advised to rely on their own evaluation of such uncertainties. To the best of management's knowledge the information throughout the Presentation is revised and up to date.*

*This presentation has been reviewed by Christopher Taylor, P.Geo., a Qualified Person for the purpose of National Instrument 43-101.*

# GOLDEN LOON PROJECT



- The Golden Loon property hosts a potentially multi-billion tonne nickel-cobalt-platinum group element (Ni-Co-PGE) deposit with 10+ kilometre mapped strike length, and which has a gold system developed along its flank.
- Ni-Co-PGE Target: Planet's goal is to define a 2 - 3 kilometre zone surrounding recently completed positive test holes which has 2 - 4 lb *recoverable* Ni per tonne. Preliminary ammonium citrate extraction tests have been positive, and detailed metallurgical testing is supported.
- In addition to nickel, cobalt content and extraction will be tested. PGE's will also be investigated, as multi-gram platinum grab samples have been prospected from surface and PGE-enriched layers in the ultramafic have been intersected in drilling.
- Footwall margin has gold system with 1 - 4 g/t gold over 10 - 30 metre widths, *mineralized from surface*. Largely continuous zone drilled over 700 metres, remains open along strike and at depth. Potential multi-kilometre strike of system, likely multiple zones developed along the 10+ kilometre striking flank of the Ni-Co-PGE target.

# GOLDEN LOON 2011 BACKGROUND



## ***Deal Terms – Up to 100% Interest***

Option to earn 70% interest by paying \$500,000, issuing 2,000,000 shares & spending \$4,500,000 on exploration over three years

100% interest can be immediately earned by paying \$375,000 cash & issuing \$1 million cash equivalent in shares, *at any time before completion of full three-year earn-in*

## ***Past exploration work***

Past explorers include Noranda (1966-67), Rio Tinto (1973), Teck (1980-81), and various juniors to 2008. Placer gold mining on creek north of property ongoing since 1920's.

## ***Six seasons of diamond drilling***

- 1990 and 1997 of gold system
- 1999, 2003 and 2008 of ultramafic Ni-Co-PGE body
- 2011 Planet drills 5x strike extension of gold system and submits 2008 Ni core for assay

# 2011 EXPLORATION



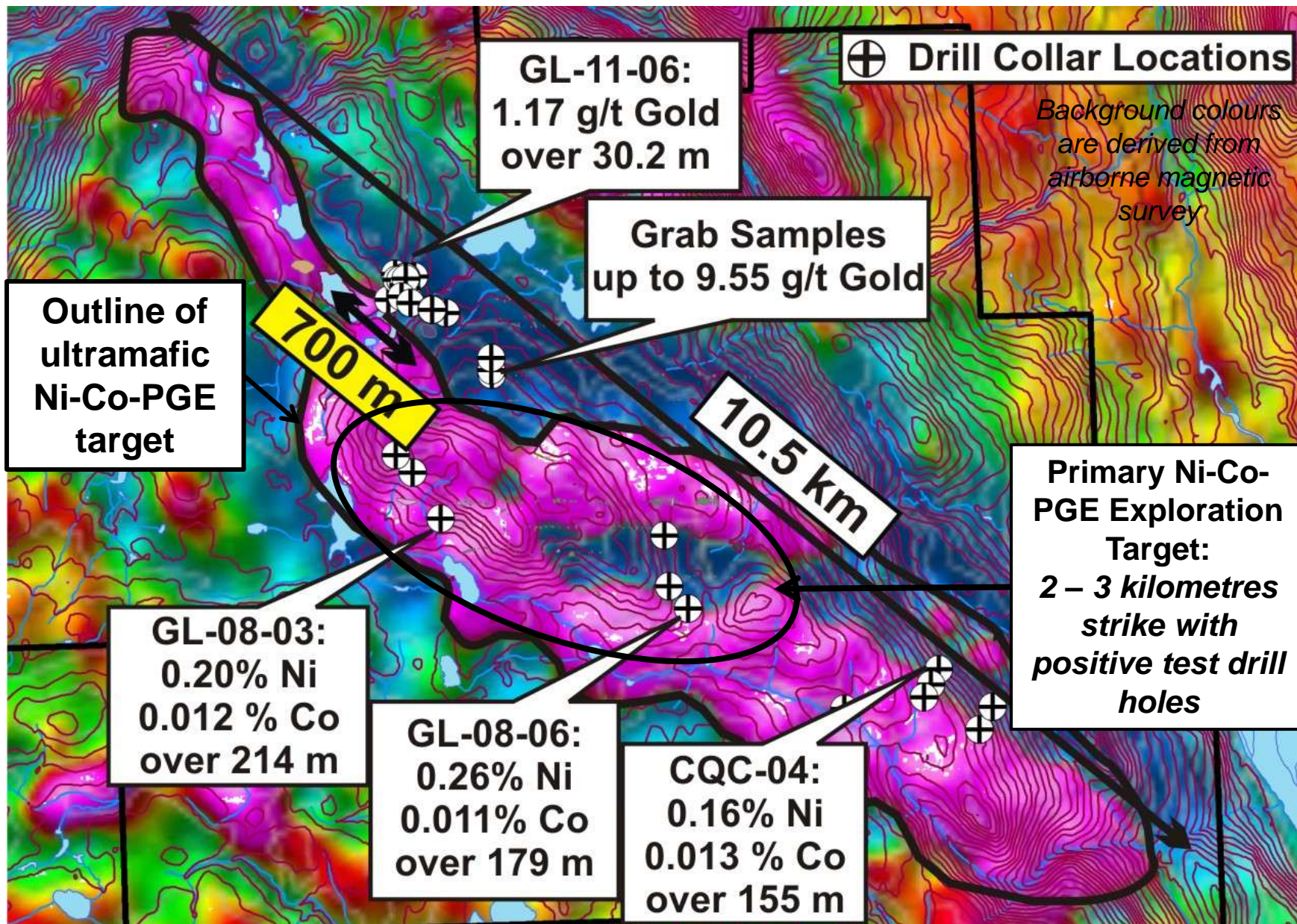
Phase 1 drilling commenced in fall/winter of 2011 with 2,500 m of diamond drilling to extend strike of gold system.

Preliminary results include 30.2 m of 1.17 g/t gold and strike of gold mineralization extended from 150 metres to over 700 m.

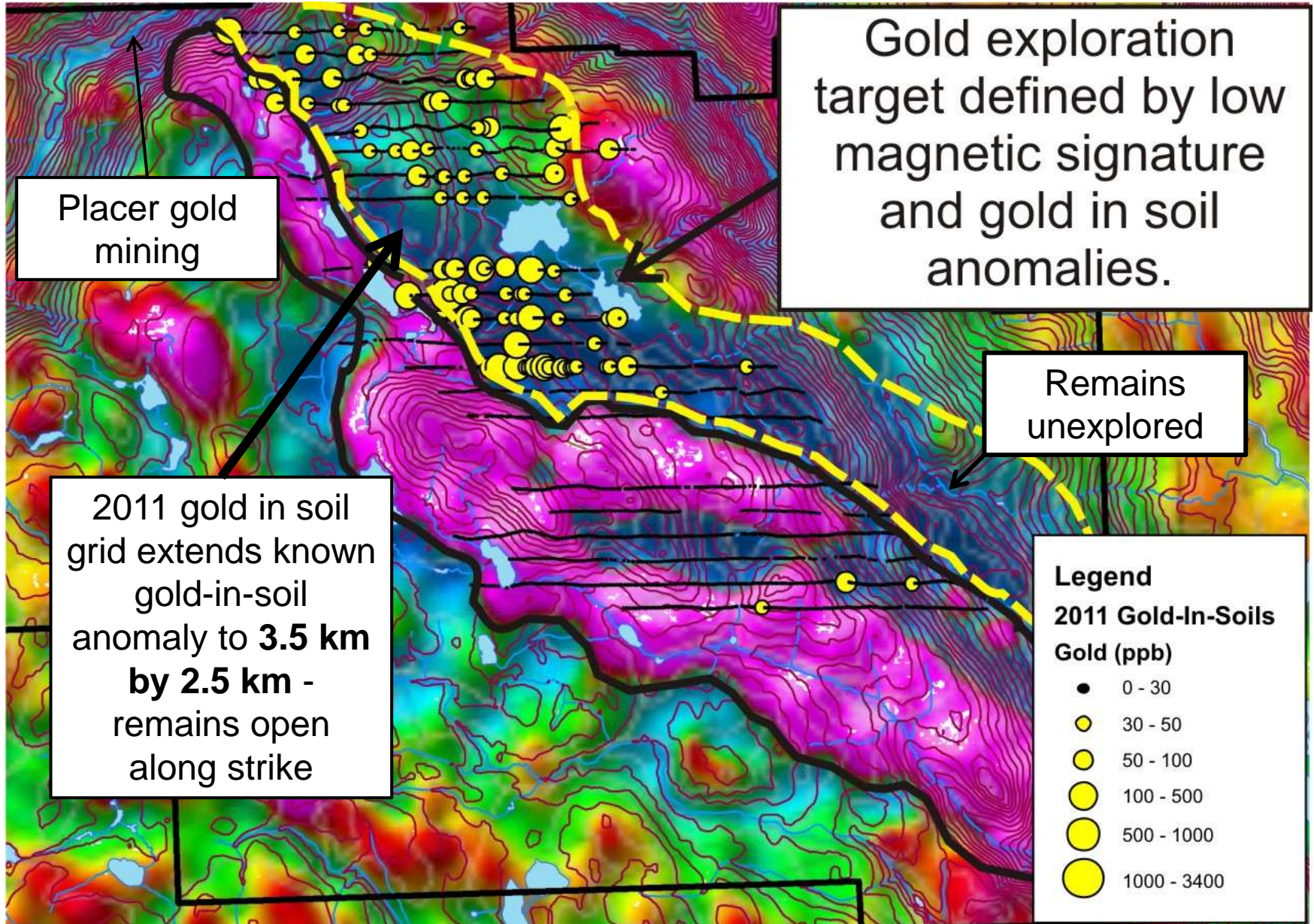
Definition of large 3.5 km by 2.5 km gold-in-soil anomaly on flank of Ni-bearing ultramafic.

Flank of Ni-bearing ultramafic is overlain by anomalous gold-in-soils in all areas where it has been tested to date.

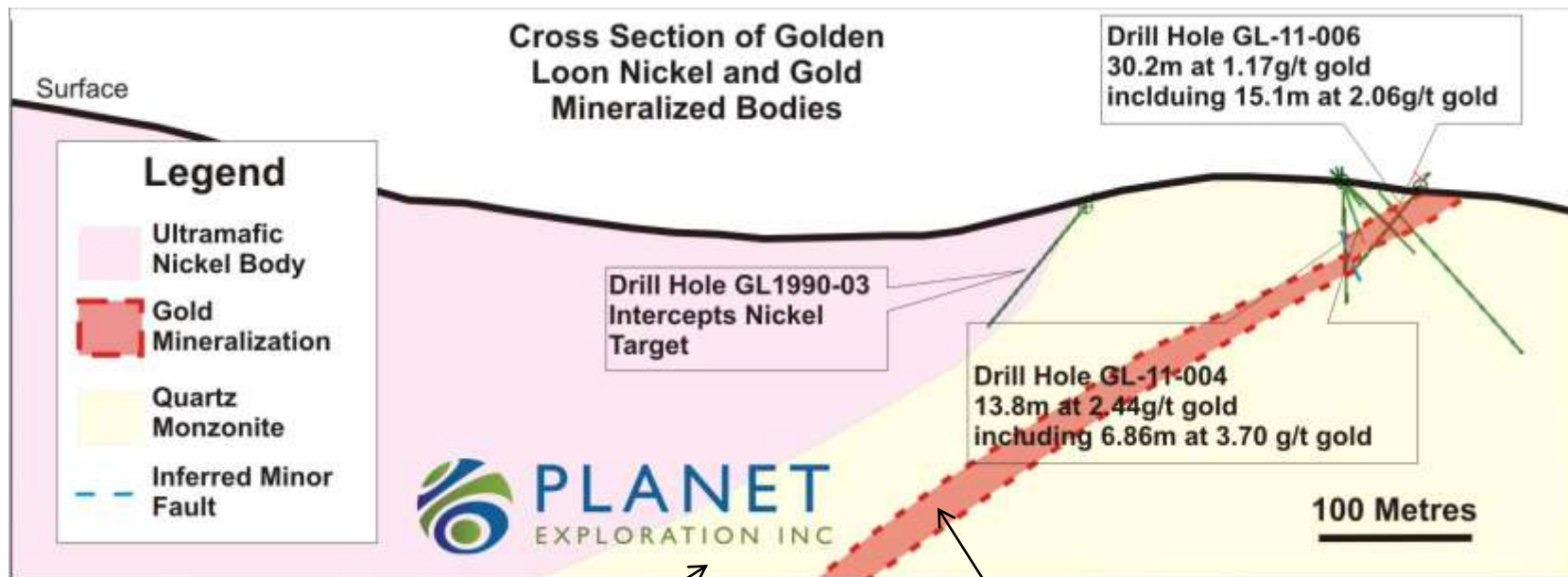
# GOLDEN LOON TARGETS AND DRILLING



# GOLDEN LOON GOLD TARGET



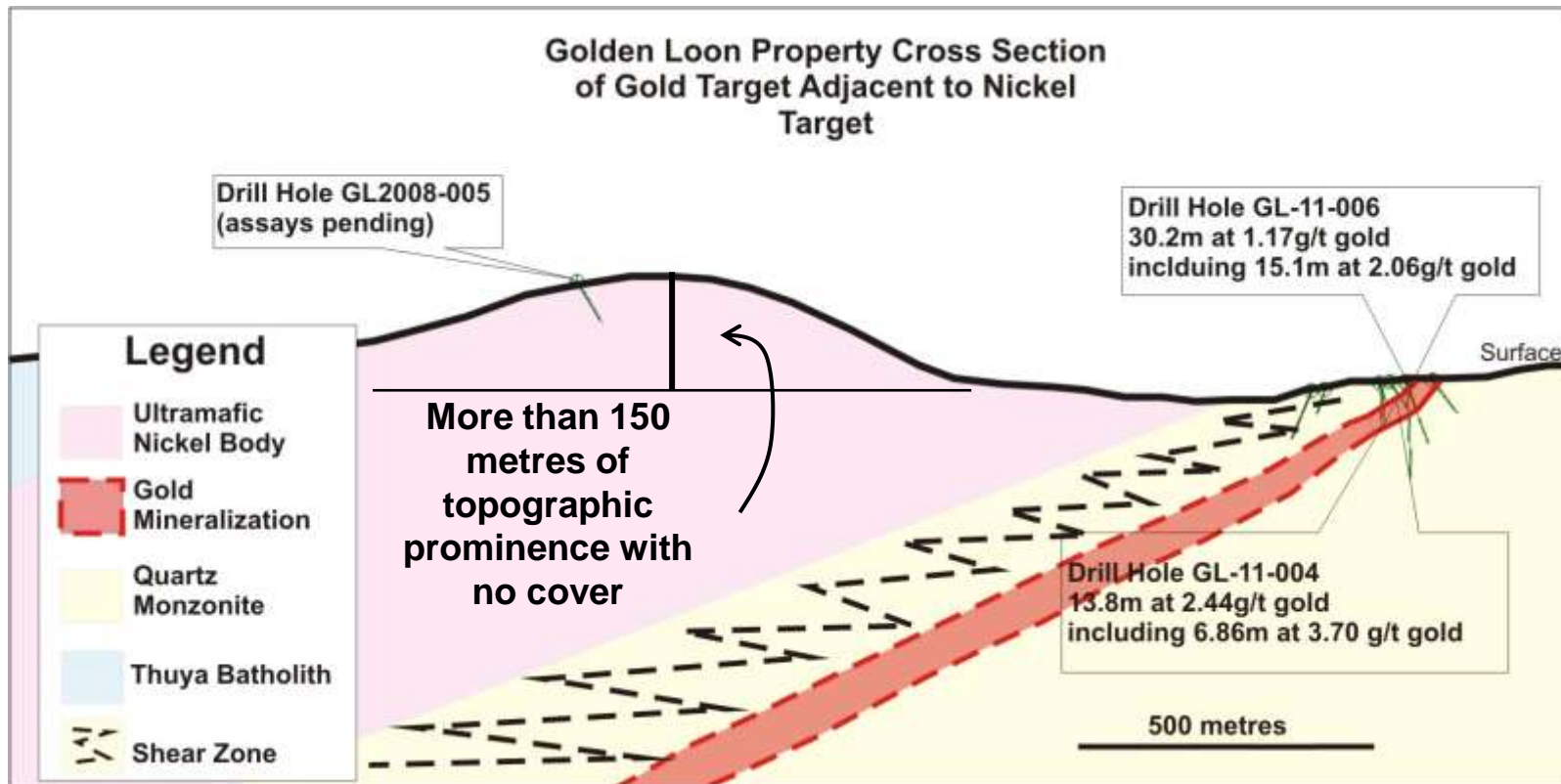
# CONCEPTUAL CROSS SECTION



Drilled gold system separated from Ni-Co-PGE body by ~100 m of shear zone

Drilled gold zone may continue down-dip, as it appears to be formed along the margin of the main shear zone that emplaced the ultramafic body

# CONCEPTUAL CROSS SECTION – “WHALE BACK” NI-CO-PGE OVER GOLD

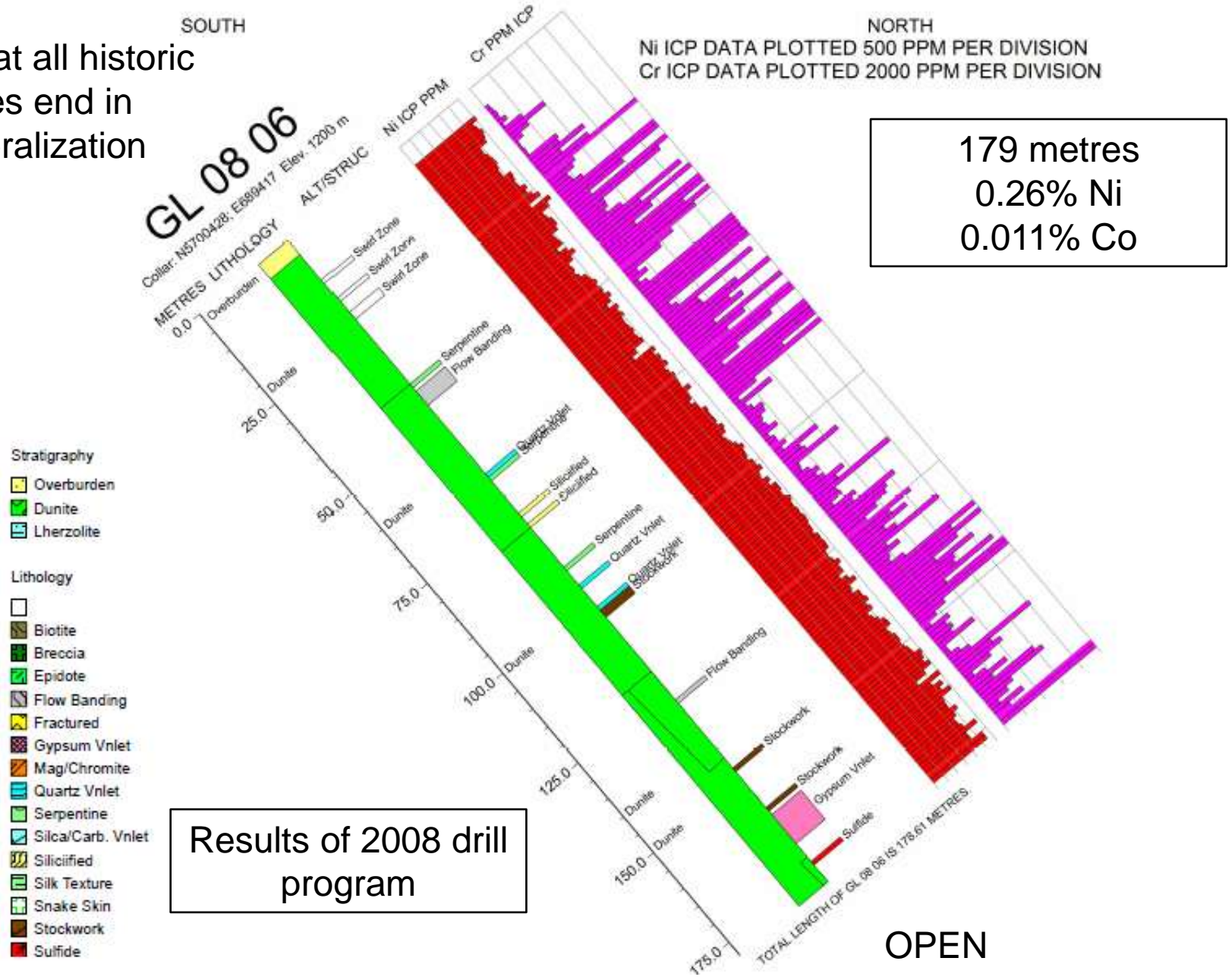


Ni-Co-PGE mineralized body has no cover rocks and sits as a topographic prominence – positive implications for any future development. Note scale of this conceptual section is much larger than previous. Geometries are inferred at depth.

# NI-CO-PGE ULTRAMAFIC BODY

- From collar of highest drill hole to bottom of lowest, over 300 vertical metres of Ni-mineralized ultramafic has been drilled, at this time across a 5 kilometre strike length
- All holes end in mineralization – mineralized body thicker based on projected geometry from surface
- Initial targets are multi-kilometre zones of 0.20 – 0.30% Ni. Positive preliminary drill test by previous operator identified first such zone, with 2+ kilometres of strike (Drill holes GL-08-02 and 06). Zone is open in all directions
- PGE's present in various mafic layers, more work required to characterize (assays pending)
- Consistent cobalt generally averages approximately 0.011%

Note that all historic holes end in mineralization



S45 DEGREES W

Ni ICP DATA PLOTTED 500 PPM PER DIVISION  
Ni CITRIC ACID DATA PLOTTED 0.05% PER DIVISION  
Cr ICP DATA PLOTTED 2000 PPM PER DIVISION  
Cr FUSION DATA PLOTTED 1.0% PER DIVISION

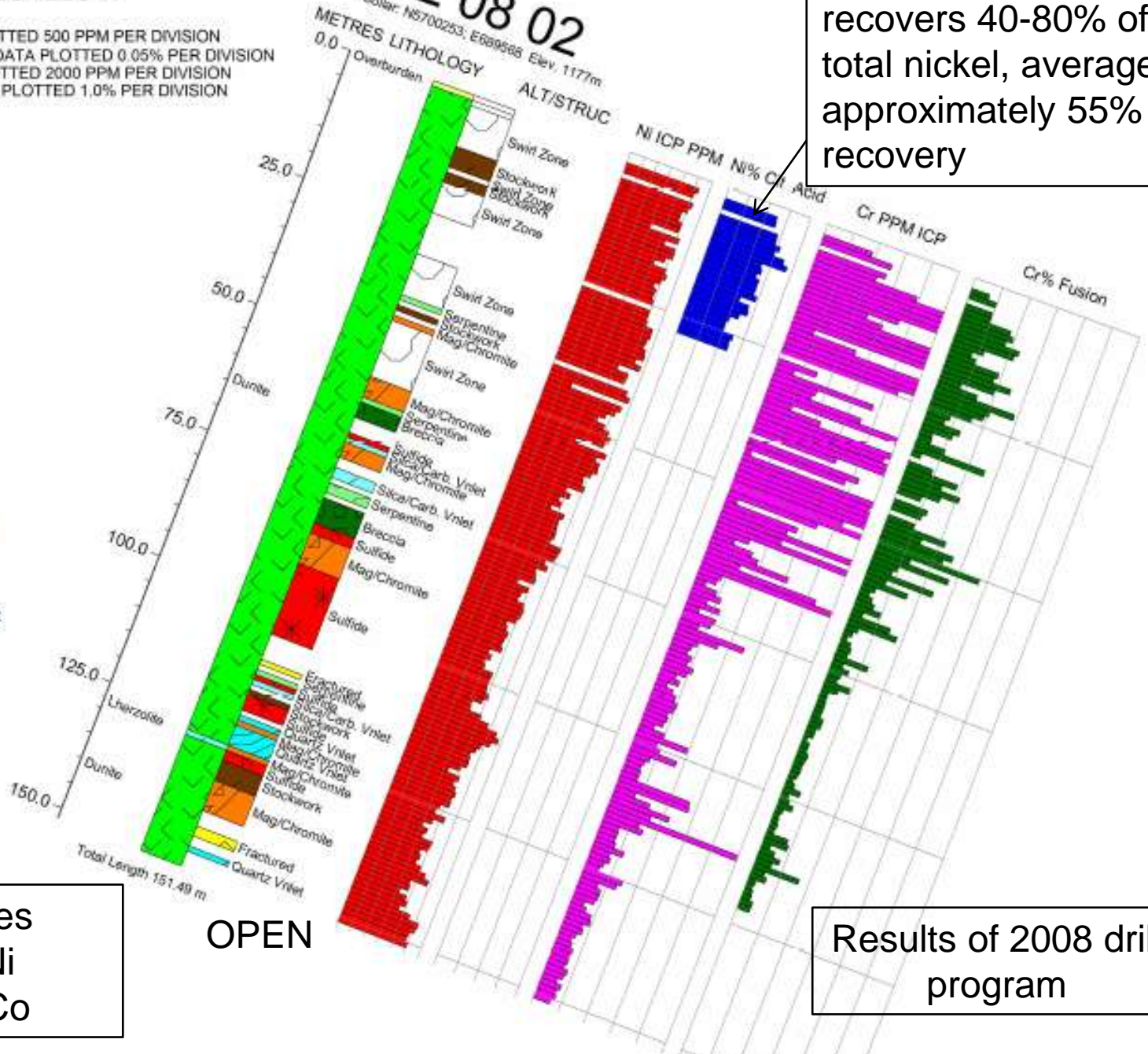
Stratigraphy

- Overburden
- Dunite
- Lherzolite

Lithology

- Biotite
- Breccia
- Epidote
- Flow Banding
- Fractured
- Gypsum Vnlet
- Mag/Chromite
- Quartz Vnlet
- Serpentine
- Silica/Carb. Vnlet
- Silicified
- Silk Texture
- Snake Skin
- Stockwork
- Sulfide

GL 08 02  
Collar: N5700253; E689568 Elev. 1177m



Ammonium citrate recovers 40-80% of total nickel, averages approximately 55% recovery

151 metres  
0.22% Ni  
0.011% Co

OPEN

Results of 2008 drill program

# LAYERED ULTRAMAFIC NI-CO-PGE TARGET



Primary Ni-Co-PGE deposit layering from centimetres to 10's of metres in thickness. Bands vary in Cr and PGE content but Ni and Co are more consistent



# GOLD TARGET



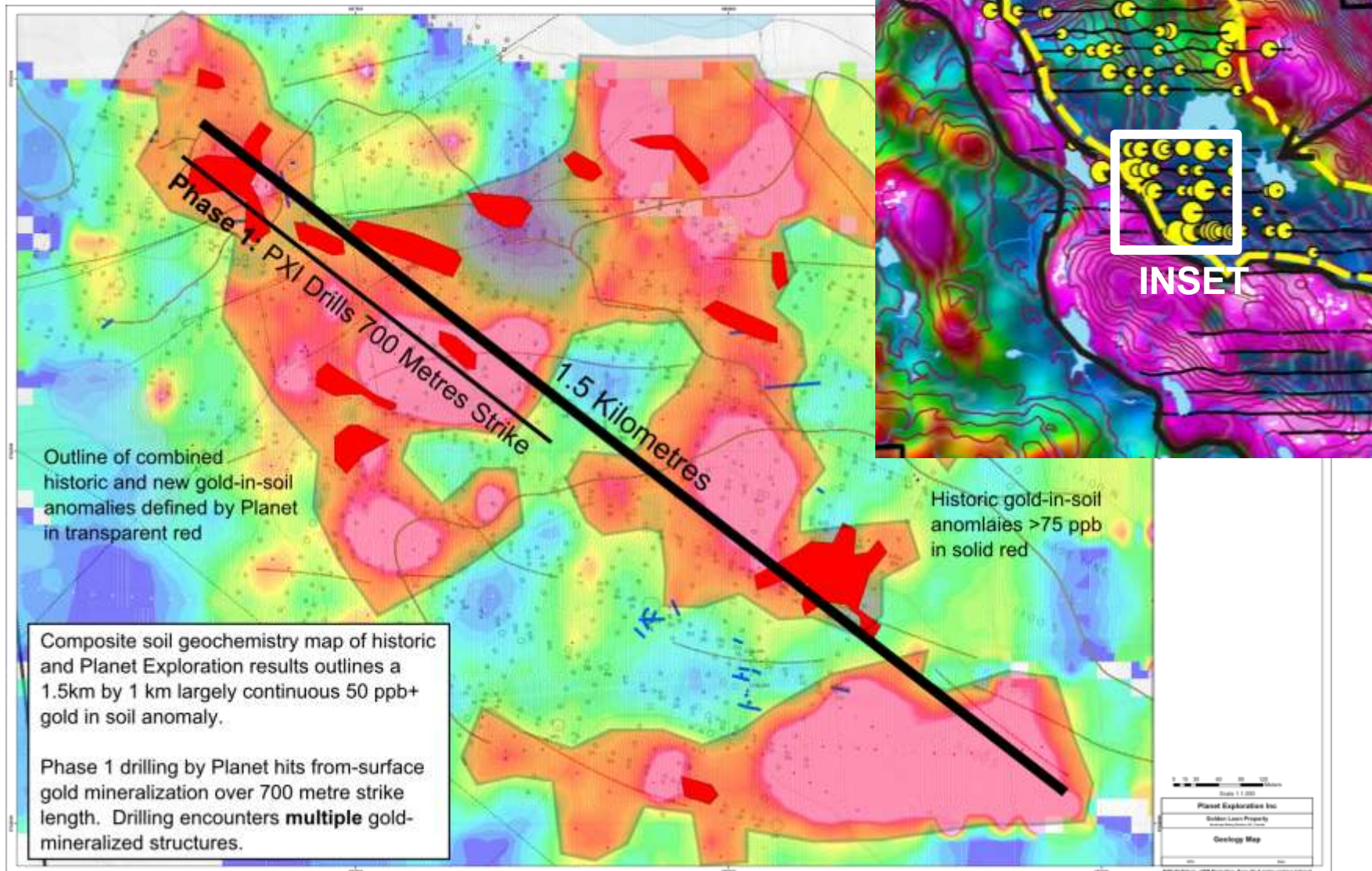
Near and at surface gold mineralization drill-tested historically and in 2011. Results include 1.17 g/t over 30.2 metres from surface and open along strike and down-dip.

Historic grab samples of over 1 oz/t gold from quartz-pyrite-chalcopyrite-galena veining (shown)

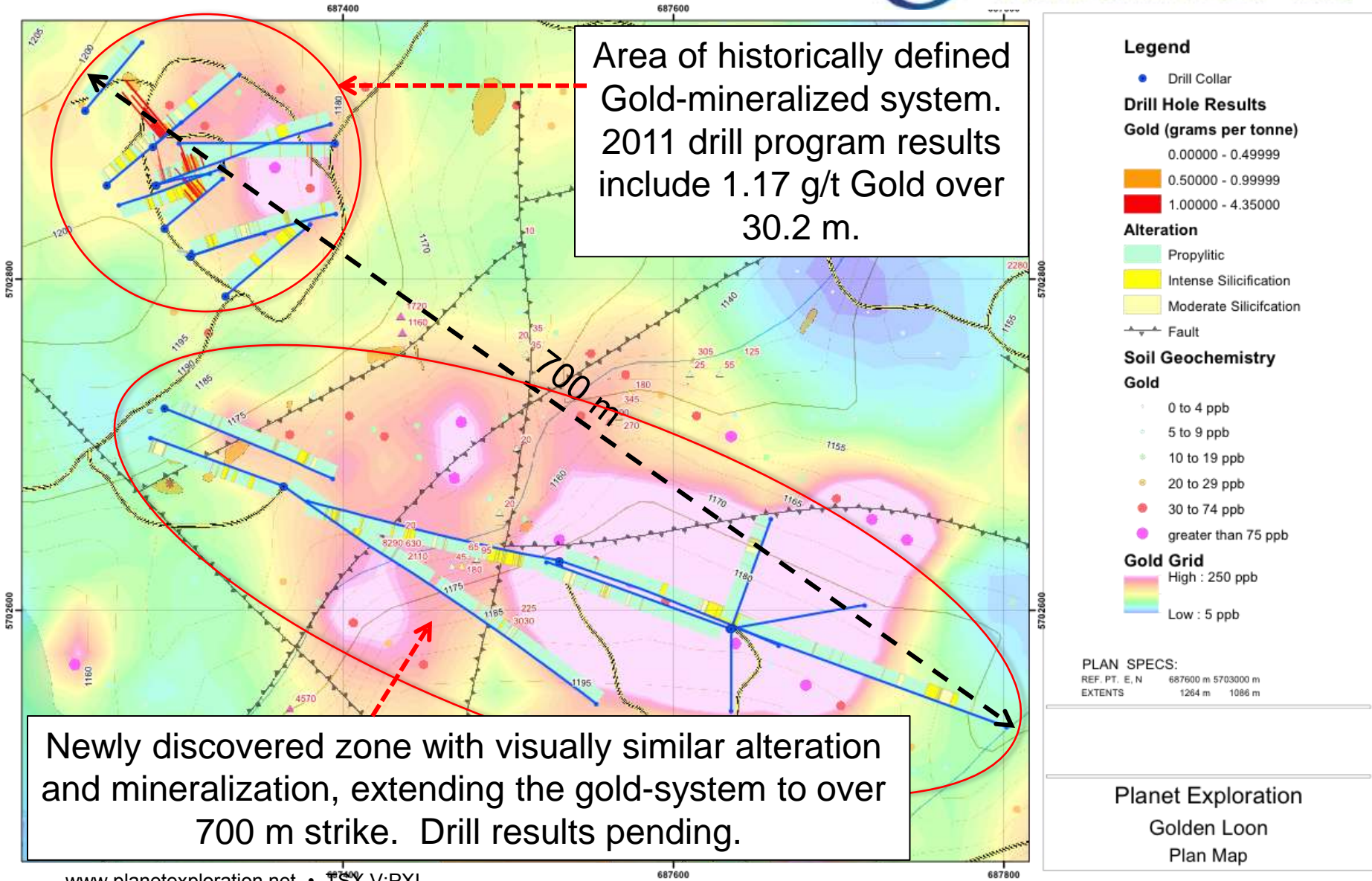


2011: Strike lengths of gold zones being extended through mapping, geophysics, and drilling.

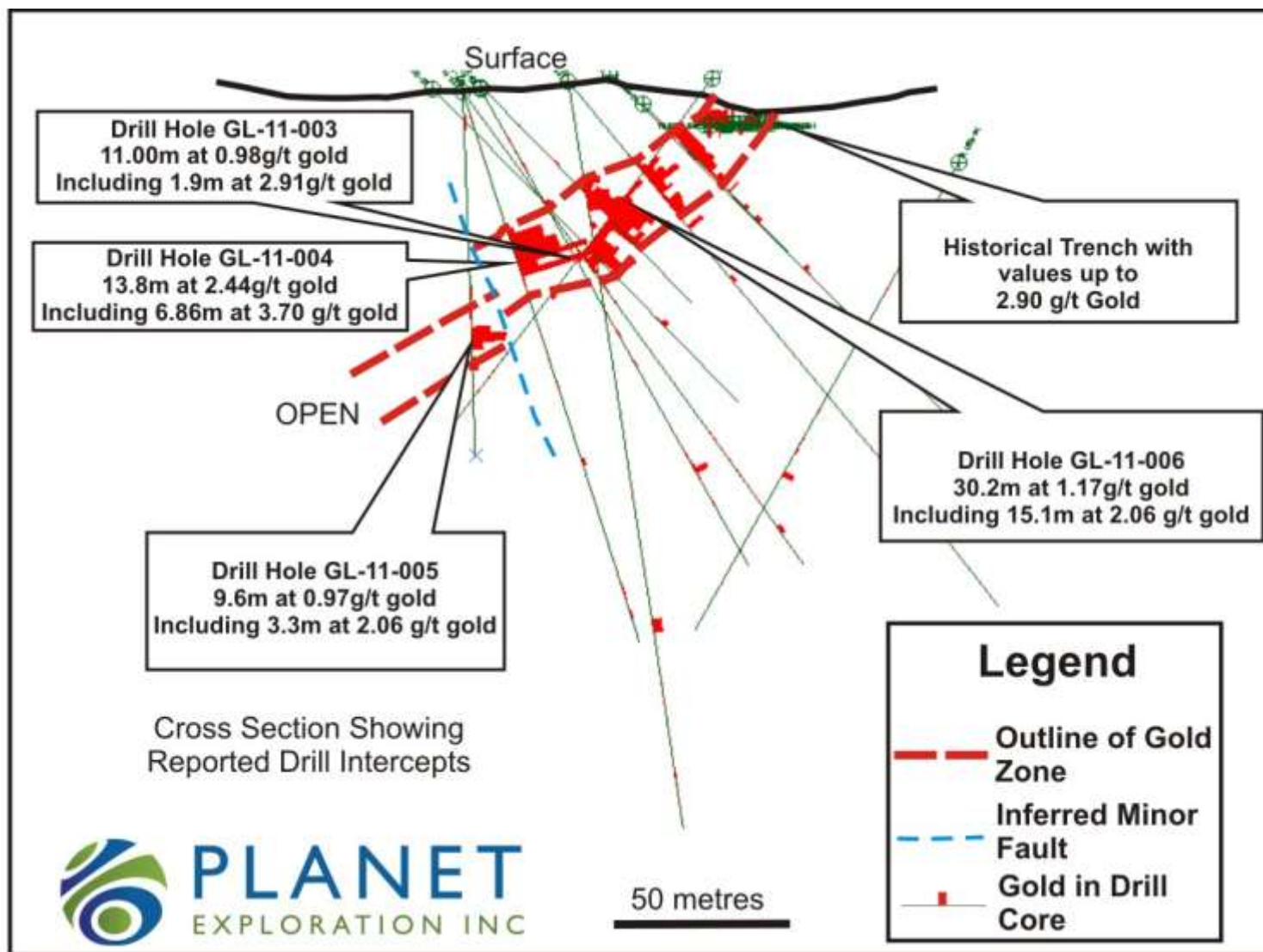
# GOLD-IN-SOIL ANOMALY DRILLED



# 2011 GOLD DISCOVERIES



# FROM-SURFACE GOLD ZONE SHOWING NEW RESULTS FROM 2011



# 2011 ASSAY RESULTS IN FROM-SURFACE GOLD SYSTEM



Drill Hole	From (m)	To (m)	Interval (m)	Gold (g/t)
<b>GL-11-001</b>	24.4	44.6	20.2	0.78
<i>including</i>	<i>27.4</i>	<i>40.3</i>	<i>12.9</i>	<i>1.01</i>
<b>GL-11-002</b>	21.2	28.6	7.35	1.75
<i>including</i>	<i>26.4</i>	<i>28.6</i>	<i>2.15</i>	<i>3.15</i>
<b>GL-11-003</b>	46.9	57.8	11.0	0.98
<b>GL-11-004</b>	<b>31.7</b>	<b>45.5</b>	<b>13.8</b>	<b>2.44</b>
<i>including</i>	<i>36.0</i>	<i>42.8</i>	<i>6.86</i>	<i>3.70</i>
<b>GL-11-005</b>	50.6	60.1	9.6	0.97
<i>including</i>	<i>50.6</i>	<i>53.9</i>	<i>3.3</i>	<i>2.06</i>
<b>GL-11-006</b>	<b>22.2</b>	<b>52.4</b>	<b>30.2</b>	<b>1.17</b>
<i>including</i>	<i>34.2</i>	<i>49.3</i>	<i>15.1</i>	<i>2.06</i>

# FOUR GOLD MINERALIZATION VARIETIES



Gold mineralization in  
4 styles:

- a) *Massive silica veining*
- b) *Stockworks*
- c) *Structural crush zones, and*
- d) *Igneous matrix breccias*



0.68 g/t gold  
Stockwork

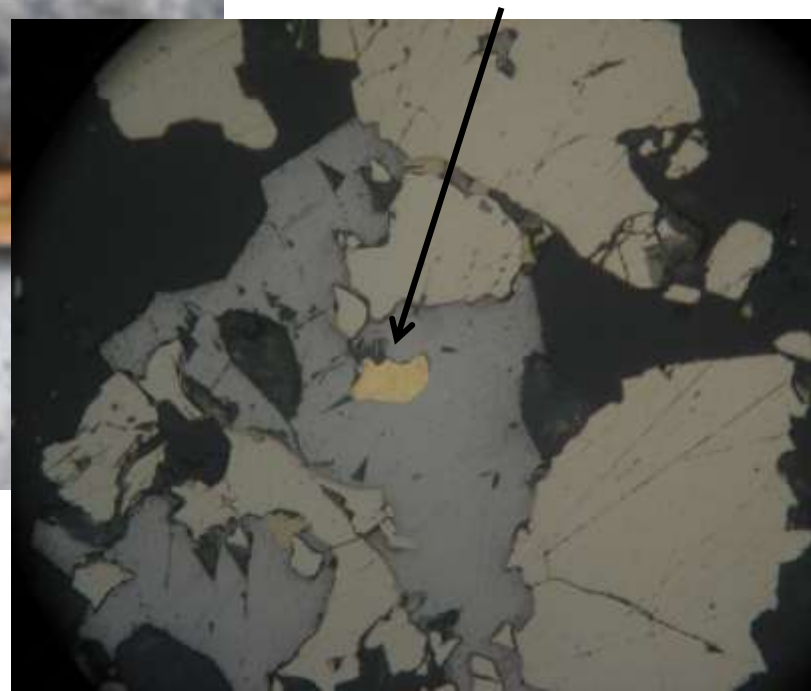


Shown: 3.15 g/t  
gold  
GL-11-002  
Massive silica  
veining with relict  
banding

# MINERALIZATION AND ALTERATION

In reported drill area, total drill indicated width of gold mineralized system is over 60 metres, with a 10 – 30 metre 1 – 4 g/t mineralized core

Gold in photomicrograph

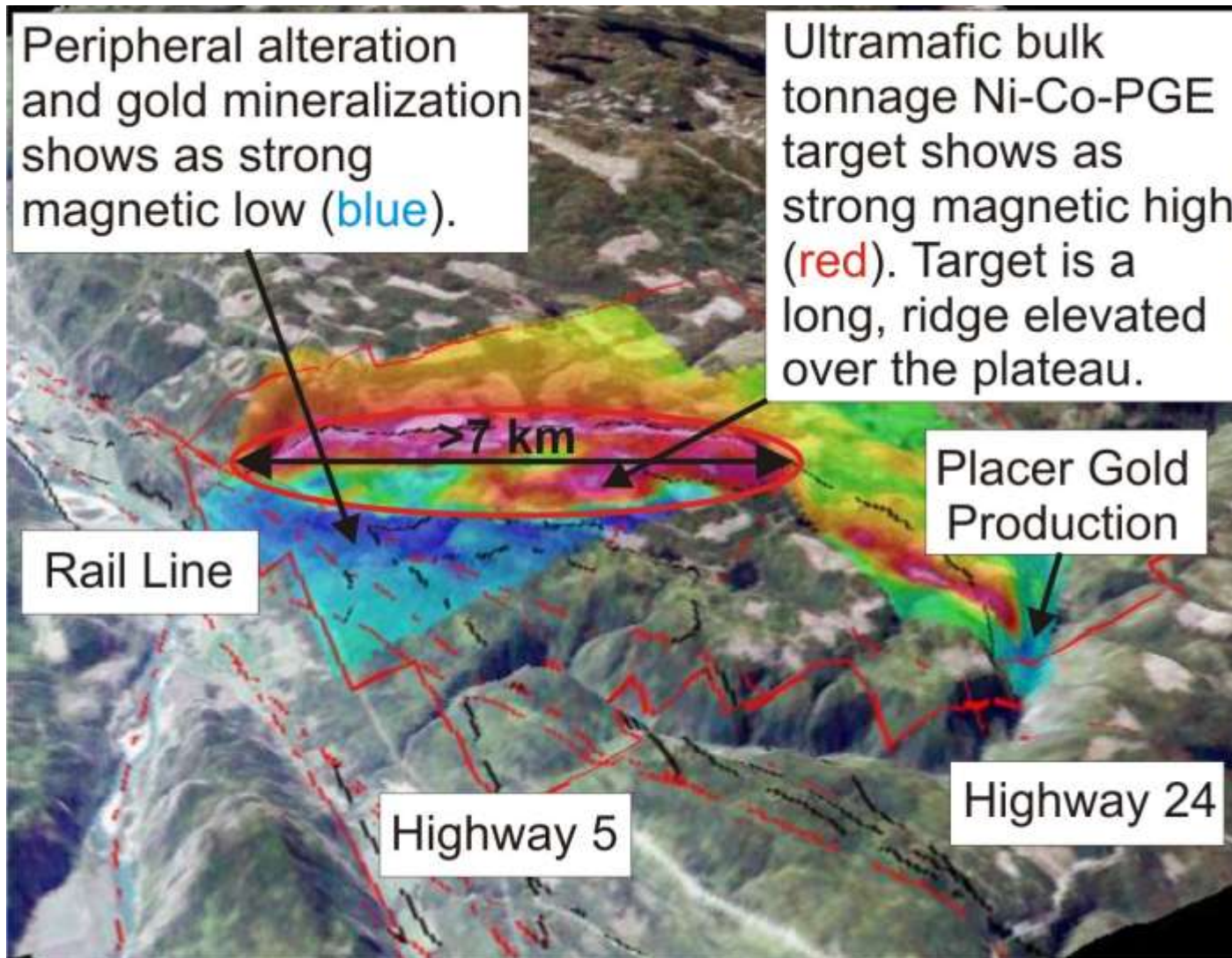


Intense silicification with disseminated pyrite  
2011 Drill Program.

# GOLD EXPLORATION MODEL

- Gold mineralization is mapped and drilled in the footwall (lower contact) of the Ni-Co-PGE mineralized ultramafic, which is a major crustal shear zone.
- Gold mineralized system has been drilled over 700 metres (remains open along strike and at depth) of the 10.5 kilometre contact of the ultramafic. Gold-in-soils mapped over northern 3.5 kilometres, southern 7 kilometres remains unexplored.
- Gold is mapped and drilled in various structures that cut the ultramafic and other units
- Gold is mapped and drilled in various polymetallic quartz veins that cut all rock units

# GOLDEN LOON TARGETS AND INFRASTRUCTURE



Peripheral alteration and gold mineralization shows as strong magnetic low (blue).

Ultramafic bulk tonnage Ni-Co-PGE target shows as strong magnetic high (red). Target is a long, ridge elevated over the plateau.

Rail Line

Highway 5

Placer Gold Production

Highway 24

# **NEAR-TERM PLANS**

- **Remaining 10 drill holes from Phase 1 drilling of gold system to be released early 2012**
- **Assays of historic drill holes into Ni-Co-PGE target to be released in early 2012**
- **Phase 2 drill program testing Ni-Co-PGE and gold systems to begin in winter/spring 2012**
- **Metallurgical testing of Ni-Co-PGE core to begin early 2012, analysis focused on Ni extraction, characterization of PGE content and identification of priority targets for definition drilling within larger mineralized body**
- **\$1M+ budget for Phase 2 exploration program – dual exploration of Ni-Co-PGE and gold systems**

# CONTACT



## ***PLANET EXPLORATION INC.***

*Suite 302, 750 West Pender Street*

*Vancouver, BC, Canada V6C 2T7*

***Tel: 604.681.0084***

***Fax: 604.681.0094***

***Website: [www.planetexploration.net](http://www.planetexploration.net)***

### ***Investor Relations***

***Tel: 604.681.0084***

***Email: [info@planetexploration.net](mailto:info@planetexploration.net)***