A Tour of the Mineral Deposits of Peru &
The Ayawilca Zinc-Tin-Silver discovery in Central Peru

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Disclaimer

References to Peru deposit sizes are indicative only, based on in some cases, limited data. The research on deposit size/contained metals is not exhaustive, and may contain errors. The author takes no responsibility for the accuracy of deposit inventories, size or grade for Peru deposits shown herein, which are calculated on a best efforts basis. Generally the size and the contained metals of the deposits shown are based on past production + reserves + resources (M+I) data, where readily available. In some instances, gold-silver and silver-dominant deposits are converted to gold equivalent ounces.

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**Mineral Rank in World 2015**

<table>
<thead>
<tr>
<th>Mineral</th>
<th>Rank in World 2015</th>
<th>Latin America 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc</td>
<td>2nd</td>
<td>1st</td>
</tr>
<tr>
<td>Copper</td>
<td>3rd</td>
<td>2nd</td>
</tr>
<tr>
<td>Tin</td>
<td>3rd</td>
<td>1st</td>
</tr>
<tr>
<td>Lead</td>
<td>4th</td>
<td>1st</td>
</tr>
<tr>
<td>Silver</td>
<td>3rd</td>
<td>2nd</td>
</tr>
<tr>
<td>Gold</td>
<td>5th</td>
<td>1st</td>
</tr>
</tbody>
</table>

**PERU**

**A Mining country**

- Well established mining law
- One of few belts where majors/juniors compete
• Three physical regions
• Good infrastructure
• Access to coast, several deep water ports
• Many x-Andean roads, improving
1:1M Geology

- Area of Peru
  1.28 M sq km
  = 1.5X NSW

- Good regional geological data available
- No access to past exploration data, yet
Gold Mines of Peru (epithermal)

- 4 main sub-belts for Au, Cu, Pb, Zn, Ag
- Partitioning of metals
- Au found in the north, south of Andes belt
- World class deposits in BOLD

MAIN MINERAL BELTS OF PERU (INTRUSION RELATED)
- 5-15 Ma Miocene
- 35-45 Ma Eocene
- 55-65 Ma Paleocene
- 90-110 Ma Cretaceous

GOLD (SILVER) DEPOSITS GOLD EQ OUNCES

- Tantahuatay 3 Moz
- La Zanja 1 Moz
- Cerro Corona 3 Moz
- La Arena 3 Moz
- La Virgen 2 Moz
- Yanacocha >40 Moz
- Lagunas Norte 9 Moz
- Pierina 9 Moz
- Ucchuchaccua (2 Moz)
- Lima
- Pallancata 3 Moz
- Inmaculada 2 Moz
- Arcata 2 Moz
- Orcopampa 3 Moz
- Arasi 1 Moz
- Santa Rosa 1 Moz
- Chucapaca 6 Moz
- Aruntani 2 Moz
- Pucamarca 1 Moz
- Corani (3 Moz)
**Yanacocha Mine** (Newmont-Buenaventura-IFC):

- One of world’s largest gold deposits
- Series of volcanic centres: domes, vents
- High sulphidation epithermal deposits

Resource outline (2000)
Geology map (Newmont, 2000)

Cerro Quilish (unmined)
Yanacocha Mine today

- Commenced in 1993, 30-35 Moz gold mined + reserves/resources 5 Moz (2015)
- Peak production 3.3 Moz/yr (2005), now producing around 0.6 Moz/yr
Yanacocha Geology

- Gold mineralization related to intensity of silicification, leaching
- Can be tabular in nature and capped by weakly altered rocks

Quartz Alunite → Quartz Granular → Quartz Vuggy/Massive

..Increasing gold grade

** see QV samples from Pierina

Newmont (2000)
Copper Mines of Peru (porphyries)

- 2 main copper belts
- World class deposits in BOLD
Antamina Mine (Glencore-BHP-Teck-Mitsubishi): - the world’s largest skarn deposit?

- Porphyry intrusion into limestones
- Reactive host rock
- Replacements by copper/zinc minerals
Leach caps – why are they important?
An example from Cuajone mine, southern Peru

Secondary enrichment:
- Increased copper grade
- Quicker payback of capex
- Leachable copper
- Produce Cu cathode
- Close to surface
- Close to the coast

** see samples of jarosite leach cap from Michiquillay project
Cerro Verde Mine (Freeport-Sumitomo-Buenaventura):
– Possibly Peru’s largest copper porphyry deposit

Photo 1997
Copper Mines of Peru

Quellaveco Project (Anglo American-Mitsubishi):
- 1.5Bt @ 0.7% copper resource
- Peru’s largest undeveloped copper project
Zinc Mines of Peru

- 2 main zinc belts (3 including MVTs)
- World class deposits in BOLD
Cerro de Pasco Mine (Volcan):
- Carbonate Replacement Deposit “CRD”
- Replacement of limestones by sulphides: zinc+lead+silver, lots of pyrite
- Similar to skarn but lower temperature, shallow, epithermal
Zinc Mines of Peru

Cerro de Pasco - Cross section

Volcanic vent (diatreme)

Host

Baumgartner et al., 2008
Comments on Peru Mineral Deposits

**Gold:**
- Most deposits discovered post-1990, high-sulphidation epithermals
- Production decreasing as large deposits now past their peak
- No big discoveries in last few years

**Copper:**
- Porphyries along coastal belt discovered in 1960s and 1970s
- Brownfields projects getting bigger and bigger, huge inventories
- Few tier one deposits left undeveloped, and no new giant discoveries
- IOCG potential along coastal belt

**Zinc-lead-silver:**
- Several old and tired deposits, few new discoveries

**Tin:**
- One mine, one potential new discovery

Exploration opportunities – still exist but there are challenges:
- Peru becoming a mature belt; most new discoveries likely to be ‘under cover’
- Access more complex than in the past, community support is essential
- Red tape, permitting requirements can slow progress - costs time and money
- Good local team a necessity
Ayawilca Project:
A new Zinc-Tin discovery in Central Peru

Antamina:
Largest Current Copper/Zinc Mine in Peru

Cerro de Pasco:
Largest Historic Silver/Zinc Mine in Peru
Tinka Resources: Regional Tenement Map

- 100% Tinka
- 140 km² of tenements, largely unexplored
- Drilling only tested small area
- Ayawilca, Colquipucro
- Tambillo & Yanapizgo new surface manifestations in 2016
Colquipucro: Silver oxide mineralization hosted by Cretaceous sandstone

Ayawilca: Zinc-tin mineralization hosted by underlying Triassic limestone – ‘blind’
Mineral Resource Estimates Feb’ 2015

- Ayawilca Inferred Mineral Resource:
  - 13.3 Million Tonnes grading 7.7 % Zinc Eq.
    (5.9% Zn, 0.2% Pb, 68 g/t In, 14g/t Ag):
      - 1.7 billion pounds of Zinc;
      - 909 tonnes of Indium;
  
  Cut-off: NSR $60/t

  - Resource upgrade expected Q2 2016, 9000 m drill program
    (Q4 2015) for ZINC and TIN

- Colquipucro Silver Oxide Resource (<2km away):
  - 14.3 Moz silver grading 60 g/t Ag (Indicated), and
  - 13.2 Moz silver grading 48 g/t Ag (Inferred)

Cut-off: 15g/t Ag ($12/t)
Ayawilca Project - Geology

- Resource boundaries limited by drill permit boundaries
- 12 km² prospective area
- ~28,000 m drilled at Ayawilca
- Resources open

- Drill Holes with weak Zn
- Drill Holes with strong Zn

- Gossans
- Coal
- Sandstone
- Gypsum
- Limestone
- Conglomerate
- Phyllite

Inferred Resource (Feb 2015)

Colquipucro
Indicated (14.3 Moz Ag) & Inferred (13.3 Moz Ag) Mineral Resource
+ 500ppm Zn soils

Untested
**Ayawilca Cross Section (West to East)**

- 213 metres is equivalent to a 66 story building
- Mineralization found in drilling over 2km x 2km area, open
- Sandstone ‘seal’ was important control - prevented early discovery
# High Grade Mineralization at Ayawilca

## Zinc (Indium-Lead-Silver)

<table>
<thead>
<tr>
<th>Drill Hole</th>
<th>From (m)</th>
<th>To (m)</th>
<th>Interval (m)</th>
<th>Zinc (%)</th>
<th>Lead (%)</th>
<th>Silver (g/t)</th>
<th>Indium (g/t)</th>
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<tbody>
<tr>
<td>A13-05</td>
<td>130.3</td>
<td>343.2</td>
<td>212.9</td>
<td>5.34</td>
<td>0.17</td>
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<td>83</td>
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<td>130.3</td>
<td>179.5</td>
<td>49.2</td>
<td>10.07</td>
<td>32</td>
<td>51</td>
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<td>150.0</td>
<td>166.0</td>
<td>16.0</td>
<td>18.14</td>
<td>39</td>
<td>120</td>
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<tr>
<td></td>
<td>and</td>
<td>316.0</td>
<td>326.0</td>
<td>10.0</td>
<td>12.93</td>
<td>42</td>
<td>670</td>
</tr>
</tbody>
</table>

## Tin (Copper-Silver)

<table>
<thead>
<tr>
<th>Drill Hole</th>
<th>From (m)</th>
<th>To (m)</th>
<th>Interval (m)</th>
<th>Tin (%)</th>
<th>Copper (%)</th>
<th>Silver (g/t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A15-40</td>
<td>328.0</td>
<td>378.5</td>
<td>50.5</td>
<td>1.23</td>
<td>0.16</td>
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<td>341.0</td>
<td>13.0</td>
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<td>332.5</td>
<td>2.5</td>
<td>8.81</td>
<td>0.18</td>
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<tr>
<td>A13-11</td>
<td>328.0</td>
<td>344.2</td>
<td>16.2</td>
<td>1.03</td>
<td>0.67</td>
<td>22</td>
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<tr>
<td></td>
<td>including</td>
<td>330.0</td>
<td>332.0</td>
<td>2.0</td>
<td>4.81</td>
<td>2.07</td>
</tr>
</tbody>
</table>
30% of prospective area drilled to date

Gravity, Ground magnetics and IP completed

Magnetics provides the best indirect exploration guide

However, zinc is not directly associated to strongest magnetic anomalies (pyrrhotite)
IP Geophysical Anomalies

- IP at 350 metres depth
- Extensive sulphide
- Chaucha anomaly not yet permitted to drill
- Drill permits expected Q3-Q4 2016

Chargeability at 350 m depth (mV/V)
Ayawilca Breccias

10 cm A15-052 208m

10 cm A13-013 303m
Mineralization I - Zinc Replacement of Limestone

Sphalerite in fractures and matrix replacement

A14-24 Massive Py-Sph in limestone; 350 m depth
Massive pyrrhotite replacing limestone: 1% tin (cassiterite), 0.3% copper

Drill hole A14-27, 350 m depth
Cassiterite (tin oxide) is disseminated within pyrrhotite, chalcopyrite
Tinka – Milestones and Outlook

100%-owned advanced exploration project

Colquipucro (Inferred silver Resource 30Moz, 35 holes ~6,500m)

Ayawilca (no resource, zinc drill intercepts, 25 holes ~11,000m)

**Ayawilca Initial Inferred Zinc Resource** of 1.7B lb Zn + Pb-In-Ag credits (13Mt @ 7.7% Zn equiv) Feb/15

Geophysics & 10,000m drilled

9,000m drilled

TK–DAR merger, C$7.9M financing (Sentient C$5.3M), New CEO (Former Darwin CEO) Jul/14

C$7.2M raised (Sentient C$2.0M, IFC C$4.5M) May/15

**Resource increase** Mid 2016

**Drill** >10,000m in Q3-Q4 2016

~CXXM to be raised for Preliminary Economic Assessment (PEA)

**Indicative Stages & Timeline**

<table>
<thead>
<tr>
<th>Early Exploration</th>
<th>Sentient/ Darwin Project Acquisition</th>
<th>Exploration &amp; Resource Delineation</th>
<th>Feasibility PFS/FS</th>
<th>Funding, Construction and Operation</th>
</tr>
</thead>
</table>
Tinka Resources - Corporate

Trading Symbol: TSXV: TK

 Shares Issued: 149.8 M
  Warrants: 39.8 M
  Options: 10.3 M
  Shares reserved: 0.5 M
  Fully diluted: 200.4 M

Key statistics:
  Last financing: C$7.25m May’15 ($0.215 /sh)
  Cash March 31, 2016: ~C$3.8 M
  Market cap @ $0.24/share: ~C$35 M

Major shareholders
  Sentient Group: 21.5%
  International Finance Corp (World Bank): 14.0%
Machu Picchu, 1996

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AYAWILCA VIDEO

Thank you! Gracias!