

# Natural Resources Reporting: Views from a Major Dr. Patrick Redmond, Teck

Natural Resources Reporting Workshop Dublin Castle, May 15, 2009



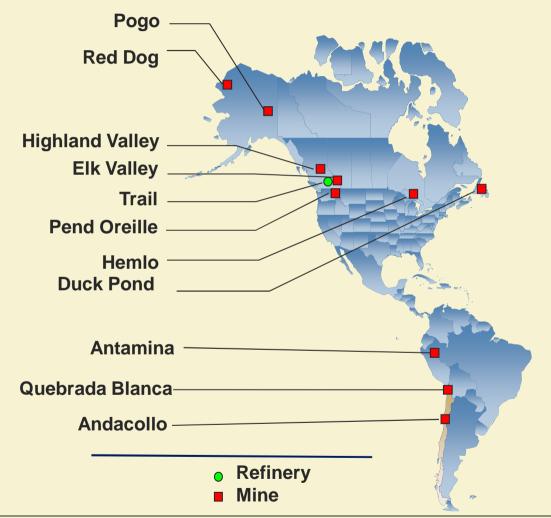
#### **Presentation Outline**



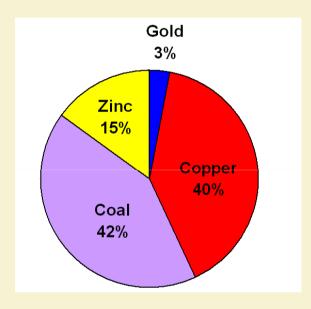
- Background on Teck
- Teck's Resource and Reserve reporting procedures – how we ensure NI 43-101 compliance
- Summary and Conclusions

#### A Diversified Mining Company





2008 Operating Profit by Business Unit



Revenue : C\$ 6.9 Billion

Market Cap: C\$ ~8 billion

Net Earnings: C\$ 659 million

+ Exploration offices in Canada, Mexico, Chile, Peru, Ireland, Turkey and Australia



# Red Dog, Alaska



#### World's largest zinc mine

- by production & reserves
- Reserves/ Resources life>30 years



| Production   | 2007    | 2008    |
|--|---------|---------|
| <ul><li>Zn Production (t)</li></ul>                | 575,000 | 515,000 |
| <ul><li>– Pb Production (t)</li></ul>              | 124,000 | 112,000 |
| <ul> <li>Operating Profit (C\$ million)</li> </ul> | 885     | 240     |



# Highland Valley, Canada



One of World's largest tonnage copper mining / milling complexes



| <ul> <li>Production</li> </ul> | )                   | 2007     | 2008    |
|--------------------------------|---------------------|----------|---------|
| <ul><li>– Cu Pro</li></ul>     | duction (t)         | 136,000  | 116,000 |
| <ul><li>Mo Pro</li></ul>       | duction (mlbs)      | 4.0      | 4.2     |
| <ul><li>Operation</li></ul>    | ing Profit (C\$mill | ion) 776 | 426     |

# Elk Valley Coal, Canada



World's second largest exporter of seaborne hard coking coal



Production

2007

2008

Coal Production (t) 22,561,000

23,009,000

Operating Profit (C\$ Million)

1,226

# Teck's Approach



- Teck's Approach to R&R Reporting
- How we ensure consistency across multiple mines, commodities, and jurisdictions

#### Standard - NI 43101



Proven and Probable Mineral Reserves and Measured, Indicated and Inferred Mineral Resources are estimated in accordance with the definitions of these terms adopted by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") in November 2005 and incorporated in National Instrument 43-101, "Standards of Disclosure for Mineral Projects" ("NI 43-101"), by Canadian securities regulatory authorities.

### NI 43-101 - History



- NI 43-101 was created after the Bre-X scandal to protect investors from unsubstantiated mineral project disclosures
- It is now the cornerstone of R&R reporting in Canada
- Teck personnel were involved in the formulation of the original CIM guidelines that underpin NI 43-101

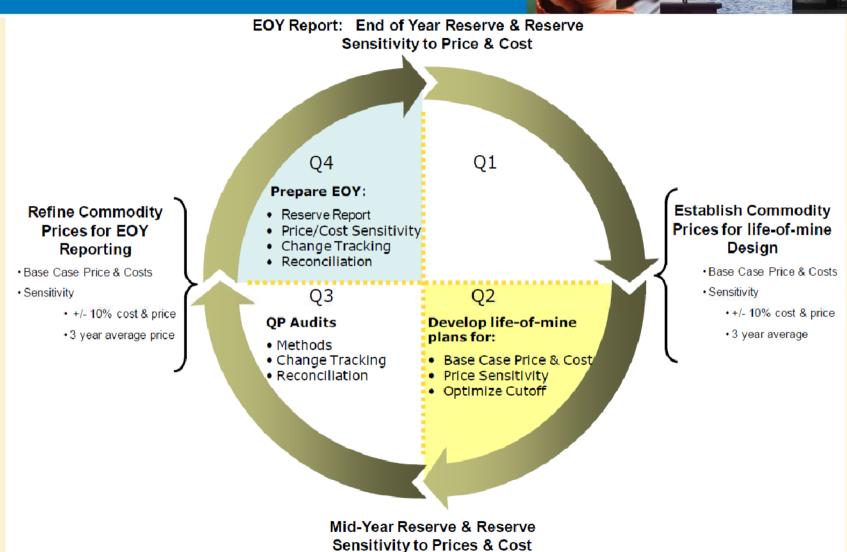
#### R&R Team



- Paul Bankes, Director Reserve Estimation
- 4 people on his team with extensive R&R modelling/estimation experience
- Reports to Reserve Committee of Management (includes division heads)
- Which in turn reports to the Reserve Committee of the Board of Directors

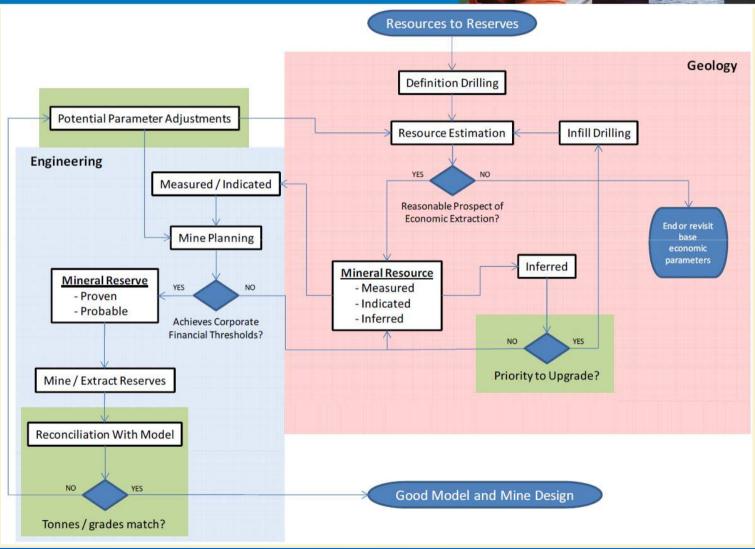
# Reporting Timetable





### Resources to Reserves







# Standardised Reporting From Each Operation



- 1. Summary
- 2. Ownership
- 3. Location
- 4. Land Tenure
- 5. Geology
- 6. Drilling & Sampling
- 7. QA/QC

# Standardised Reporting From Each Operation



- 8. Production Reconciliation
- 9. Modelling Method & Parameters
- 10. Mine Design Parameters
- 11. Resource & Reserve Statement
- 12. R&R Change Tracking
- 13. Economic Test
- 14. Sensitivity Analysis

# Signed Reports



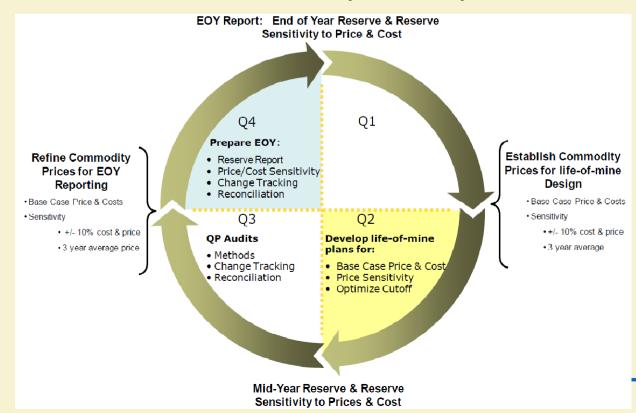
- R&R reports must be signed and dated by the site QP(s) and General Manager of Mine
- ~16 mines with up to 4 section QPs at each

|   | CONSENT OF QUALIFIED PERSON   |
|---|---|
|   | Name  |
|   | I,, <u>P. Geo</u> ., consent to the public filing by Teck Cominco Limited of information contained within sections,, and of report entitled "2007 Year End ReservesMine". |
|   | <u>"signed and sealed"</u>  |
| CERTIFICATE OF QUALIFIED PERSON  Name , P. Geo  | , P.Geo   |
| Company:<br>Address:<br>Telephone:  | Date:   |
| I,, <u>P. Geo.</u> , am employed as a <u>Chief Geologist</u> at the report entitled " <u>2007 Year-end</u> ReservesMine", with an ef  | Mine. This certificate applies to the fective date of 2007.   |
| I graduated from the University of with a Bachelor of <u>Science</u> of the Association of Professional Engineers and Geoscientists of in various mining projects for and metals in <u>Canade</u> | FB.C. (#). Since I have been involved   |
| As a result of my experience and qualifications I am a Qualified I 101 Standards of Disclosure for mineral Projects (NI 43-101). I a of report entitled "2007 Year End ReservesMine".             |   |
| "signed and sealed"   |   |
| , <u>P.Geo</u>  | Teck  |

#### In-house Audits



- Regular audits of each mine site by Director Reserve
   Estimation or a member of his team
- Reserve audit template in place



### **Summary and Conclusions**



- We have a strict definition of a Resource must have "reasonable prospect for extraction"
- 2. Qualified Persons (QPs) are key personally liable, must document results, efficient tracking of certification and consent
- 3. We have a Resource and Reserve committee of the board. Officers of the company take on significant responsibility