

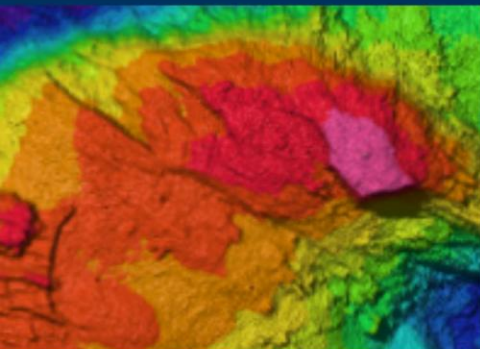


THE IMPORTANCE OF ESTABLISHING AN ENVIRONMENTAL BASELINE

Tom Dettweiler
Director Mineral Exploration Division

Michael Wright
ERIAS Group

www.odysseyminerals.com



Our Evolution

- Over 18 years experience in developing advanced exploration capabilities in the field of historic shipwrecks
- Recruited to apply those techniques to the field of SMS exploration
- While bidding to implement our tested survey techniques, approached by Bluewater Minerals to partner on their existing tenements
- Formed Dorado Ocean Resources and converted the *Dorado Discovery* into the first purpose-built mineral exploration vessel

Time Line – SMS Exploration

- Beginning 2010 Acquired an ex-seismic vessel and began conversion to the R/V *Dorado Discovery*
- August 2010 set off on a multi-national operation to explore and quantify the Dorado/Bluewater tenements
- Early 2011 conducted similar operations for Neptune Mineral Resources
- After acquisition of Neptune, the new Neptune Minerals acquired Dorado tenements and Odyssey was contracted to continue exploration of these tenements

Time Line – Phosphate Exploration

- Conducted exploration and sampling of the Chatham Rise Phosphorite Deposits off New Zealand on contract to Chatham Rise Project
- Conducted Discovery and Exploration of major Phosphorite Deposit in Eastern Pacific including one of the finest Environmental data collections to date.

Our Unique Approach-The “Swiss Army Knife”

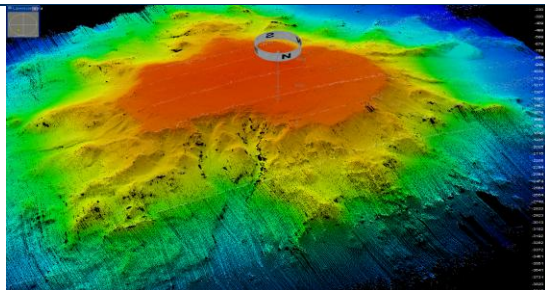
- Put the scientists to sea with all the equipment and technical support they need
- Create flexibility to modify the operation based on real-time data, in order to maximize the knowledge of each site before moving on, as well as being able to respond to the unexpected
- Keep the same well-trained and integrated team together, maintaining a high level of expertise

Dorado Discovery

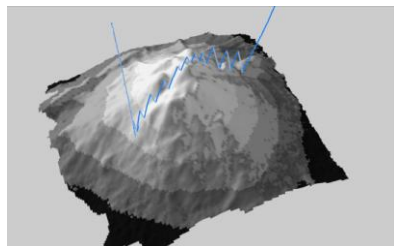
Aerial and Drill

B-Roll

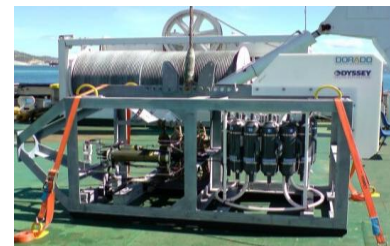
Deep-Ocean Mineral Exploration and Sampling



Ship Mounted Multibeam



TowYo Survey



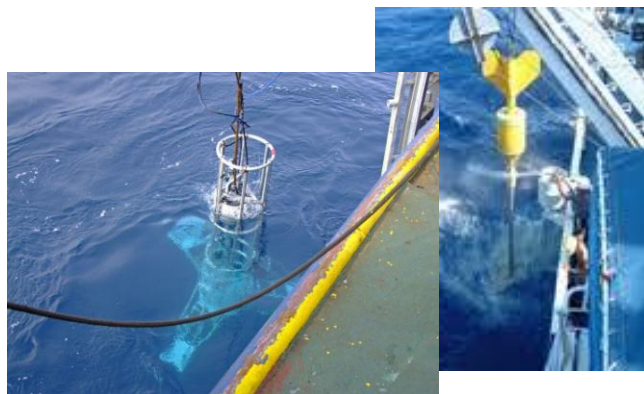
DeepTow Sidescan and Magnetometer



ZEUS ROV Inspection, Sampling, and High Resolution Mapping



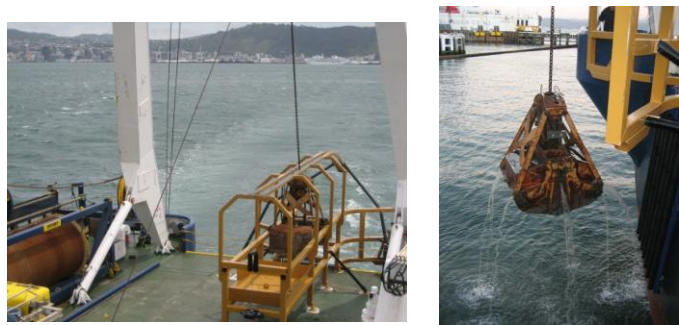
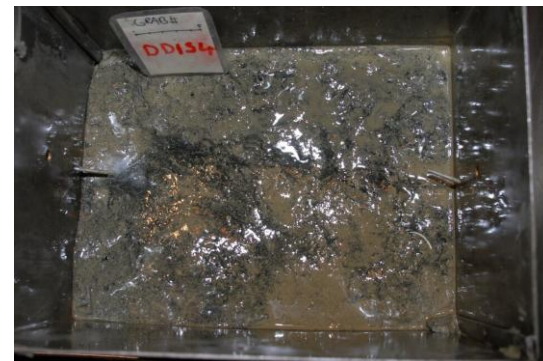
Core Collection and Bulk Sampling



**Piston, Gravity,
and Vibra-
Coring and
Multicoring**



Box Coring



Bulk Sampling



Single Pass Seafloor Drill



Environmental Collection Program

Why do we want to do this?

- As citizens of the planet it is our social obligation
- We plan to maintain a lead in proper exploration for the long term
- DeRisking of the potential resource site
- “Kickstart” the design of the recovery process to minimize or, in some cases, prevent impact
- Give the governing bodies the knowledge they need to make informed decisions on granting, remediation, and monitoring
- The personal challenge of being one of the first industries to develop in partnership with the environment

Supporting the effort to have industry buy-in

Driving the International Marine Minerals Society
supporting committees.

- Technology
- Environmental
- Education

Identifying primary industry issues and offering
solutions at the next Underwater Mining Institute
in 2014