

02/12/13

LUNCH & LEARN:

UCORE'S BOKAN

DOTSON RIDGE

RARE EARTH

PROJECT

<TARGET><BILL></BILL><SUBJECT>02-12-13 LUNCH and LEARN
UCORE'S BOKAN DOTSON RIDGE RARE EARTH
PROJECT</SUBJECT><COMM>HRES28</COMM></TARGET>

Lunch and Learn

Tuesday at Noon

Capitol Room 106

An In-depth Look at Alaska's Resources

Lunch provided by presenters

**HOSTED BY
REP. ERIC FEIGE &
REP. DAN SADDLER
CO-CHAIRS
House Resources**

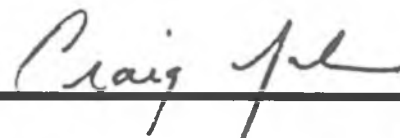
**Contact:
Linda Hay, Staff
465-3715**

Tuesday, Feb. 12, 2013

Program Title: **Ucore's Bokan Dotson Ridge
Rare Earth Project**

Presenters: Ken Collison, Chief Operating Officer
Ucore Rare Metals

Sponsor: Council of Alaska Producers



House Rules Committee Chair

Kenneth W. Collison

Mr. Collison has had more than 40 years of senior responsibility for mining operations and environmental affairs. Currently he is a consultant and President of Collison Minecon. He provides consulting services to mining and consulting companies. He is the Chief Operating Officer for Ucore Rare Metals responsible for completing the Feasibility Study followed by construction of a 1,500 tonne per day underground mine and mill. He is a Director of three mining companies.

Mr. Collison was COO of Thompson Creek Mines and Blue Pearl Mines. He was Manager of the Village Safe Water Program for the State of Alaska. Mr. Collison has also served as Vice-President and General Manager for Coeur d'Alene Mines (Alaska), Vice-President of Crandon Mining Corp. and President of Rio Kemptville Tin Company. Prior to that he held numerous positions with Rio Algom with emphasis on designing and building mines and major projects and environmental affairs. Mr. Collison holds a B.Sc. in Mining Engineering and a Masters of Engineering in Mining from the University of Saskatchewan.



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Bokan Dotson Ridge Heavy Rare Earths





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Cautionary Notes and Disclaimers

This presentation may contain forward-looking statements including, but not limited to, comments regarding the timing and content of upcoming work programs, geological interpretations, receipt of property titles, in-situ valuations, mining costs, potential mineral recovery processes, and other related matters. Forward-looking statements address future events and conditions and therefore involve inherent risks and uncertainties. The Ucore Rare Metals Inc properties are at an early stage. More work is required before the mineralization and the Projects' economic aspects can be confidently modeled. Actual results may differ materially from those currently anticipated in this presentation. No representation or prediction is intended as to the results of future work, nor can there be any promise that the estimates and projections herein will be sustained in future work or that the Projects will otherwise prove to be economic.



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Rare Earth Elements





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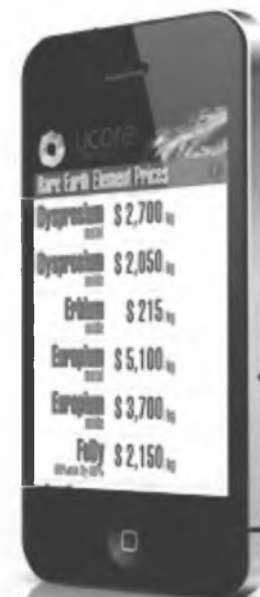
Rare Earth Apps



Discover Rare Earths



Available on the
App Store



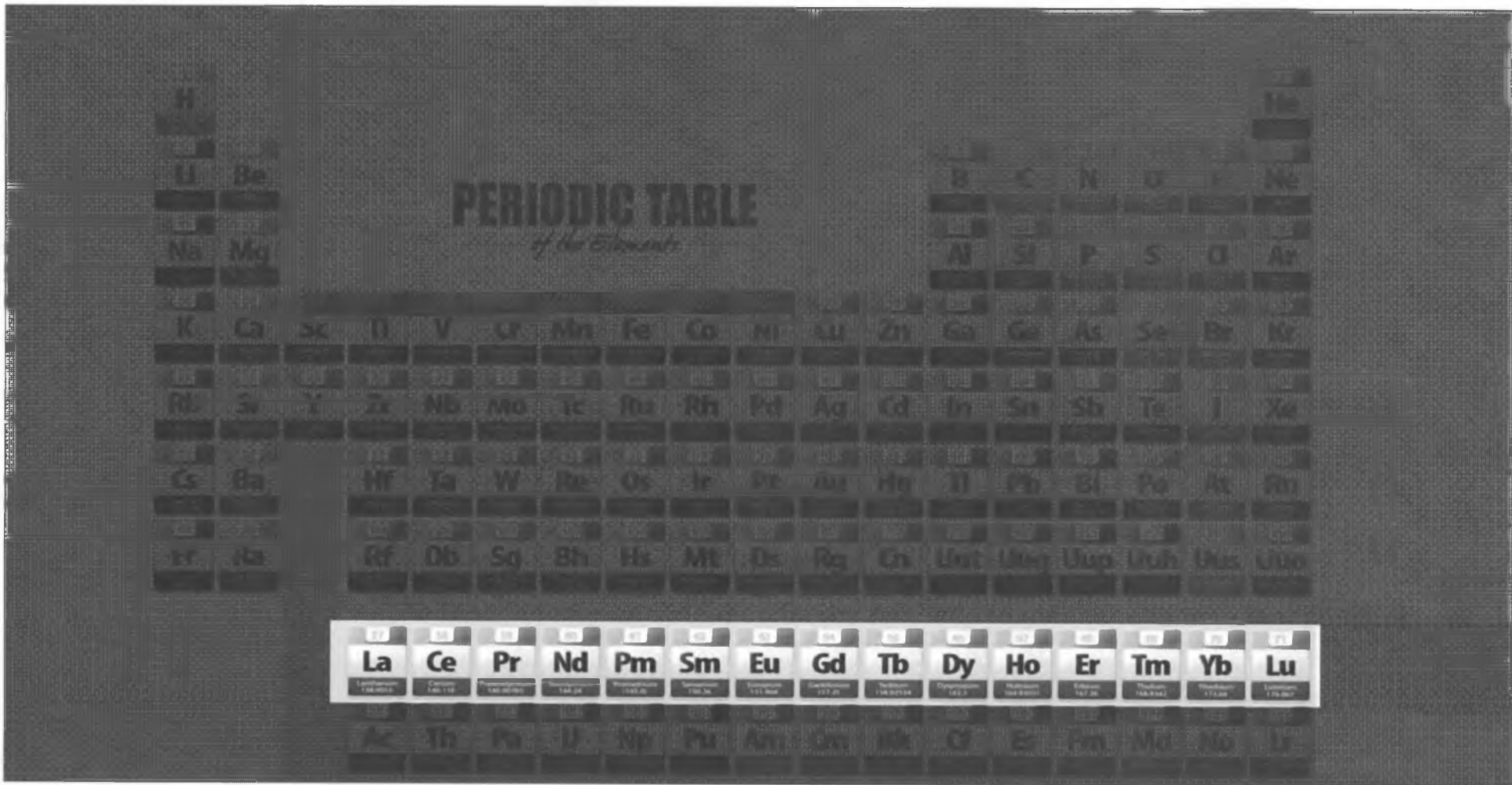
Rare Earth Prices



Available on the
App Store



ANDROID



57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
Lanthanum 138.9055	Cerium 140.116	Praseodymium 140.90765	Niodymium 144.24	Promethium (145.0)	Samarium 150.36	Europium 151.964	Gadolinium 157.25	Terbium 158.92534	Dysprosium 162.5	Holmium 164.93031	Erbium 167.26	Thulium 168.9342	Ytterbium 173.04	Lutetium 174.967

57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
La	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
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Light vs Heavy





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Light vs Heavy

Heavy vs Light Rare Earth Elements

	Pure Metal Oxide	Principle Uses	Price US \$ / kg *
light	Lanthanum Oxide	Re-chargeable batteries	\$ 20
	Cerium Oxide	Catalysts, glass, polishing	\$ 21
	Praseodymium Oxide	Magnets, glass colourant	\$ 115
	Neodymium Oxide	Magnets, lasers, glass	\$ 115
	Samarium Oxide	Magnets, lighting, lasers	\$ 70
heavy	Europium Oxide	TV colour phosphors:red	\$ 2,020
	Terbium Oxide	Military: Guided missiles, smart weapons	\$ 2,000
	Dysprosium Oxide	Military: Lasers, high powered magnets	\$ 1,000
	Gadolinium Oxide	Magnets, superconductors	\$ 105
	Yttrium Oxide	Phosphors, ceramics, lasers	\$ 100

* Rounded from source: metal-pages.com; July 2012

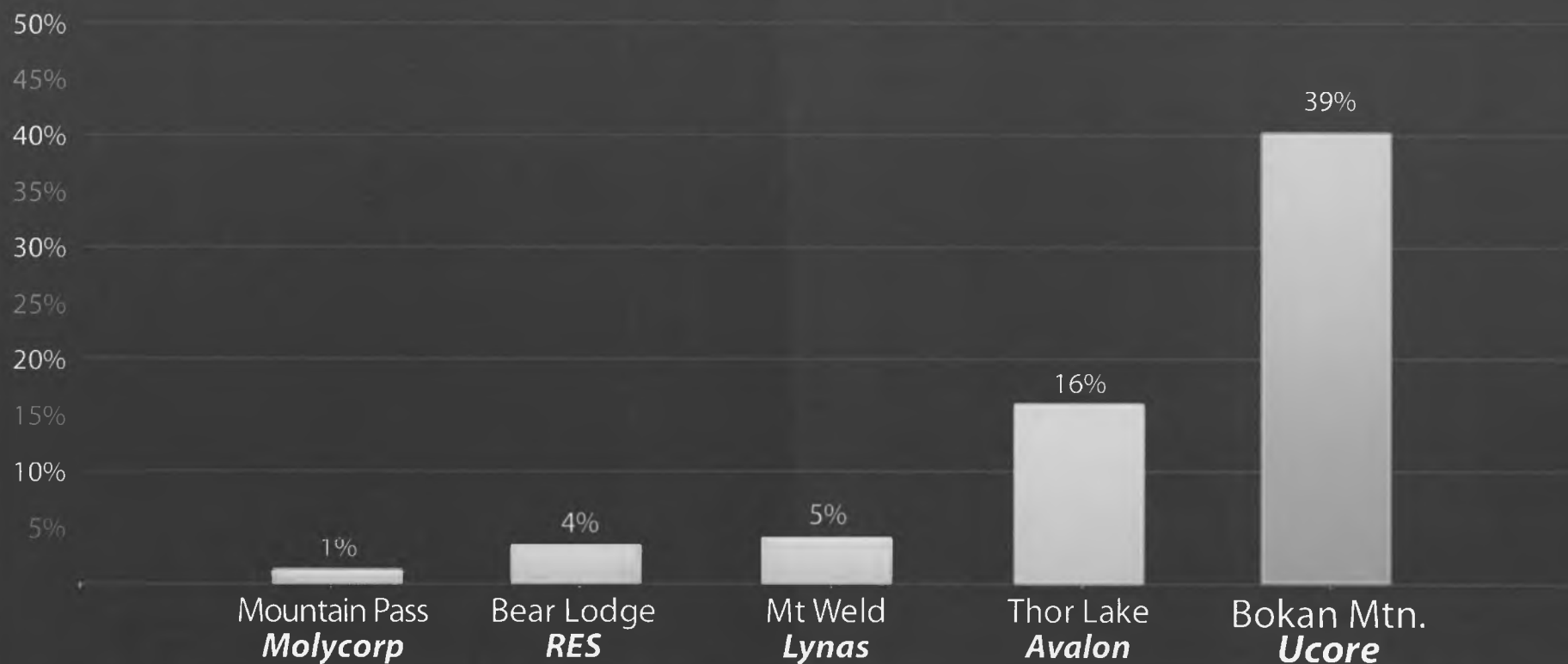


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HREO content

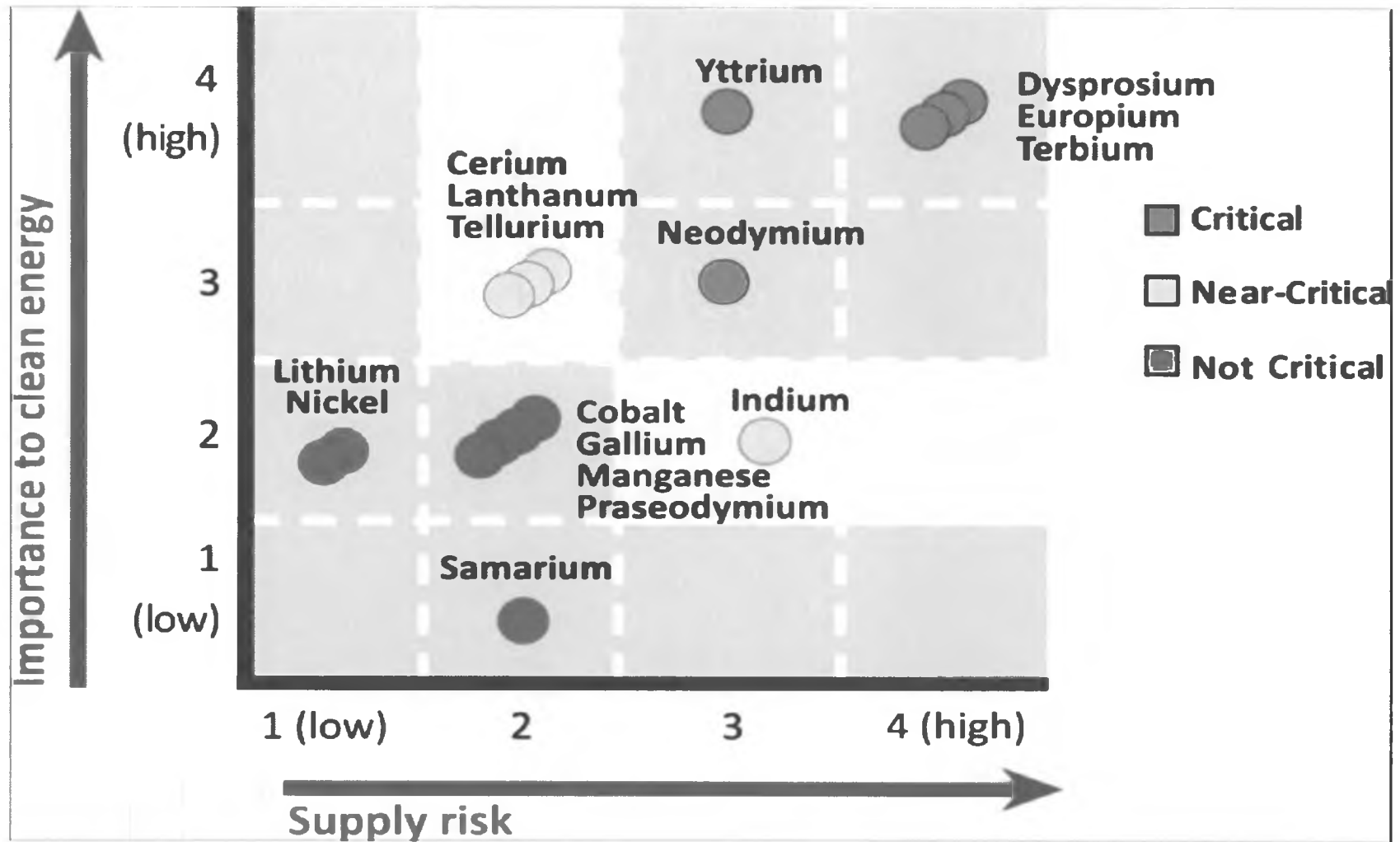
Heavy vs Light Rare Earth Elements

HREO Content (as a percent of TREO)





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Green Technology





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Hybrid Vehicles

33 Pounds of REES

DIESEL FUEL ADDITIVE

- Lanthanum
- Cerium

HYBRID NIMH BATTERY

- Lanthanum
- Cerium

CATALYTIC CONVERTER

- Cerium
- Lanthanum

25+ ELECTRIC MOTORS THROUGHOUT VEHICLE

- Neodymium Magnets

GLASS AND MIRRORS POLISHING POWDER

- Cerium

LCD SCREEN

- Europium
- Yttrium
- Cerium

COMPONENT SENSORS

- Yttrium

HYBRID ELECTRIC MOTOR AND GENERATOR

- Neodymium
- Praseodymium
- Dysprosium
- Terbium

HEADLIGHT GLASS

- Neodymium

UV CUT GLASS

- Cerium





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Defence Applications





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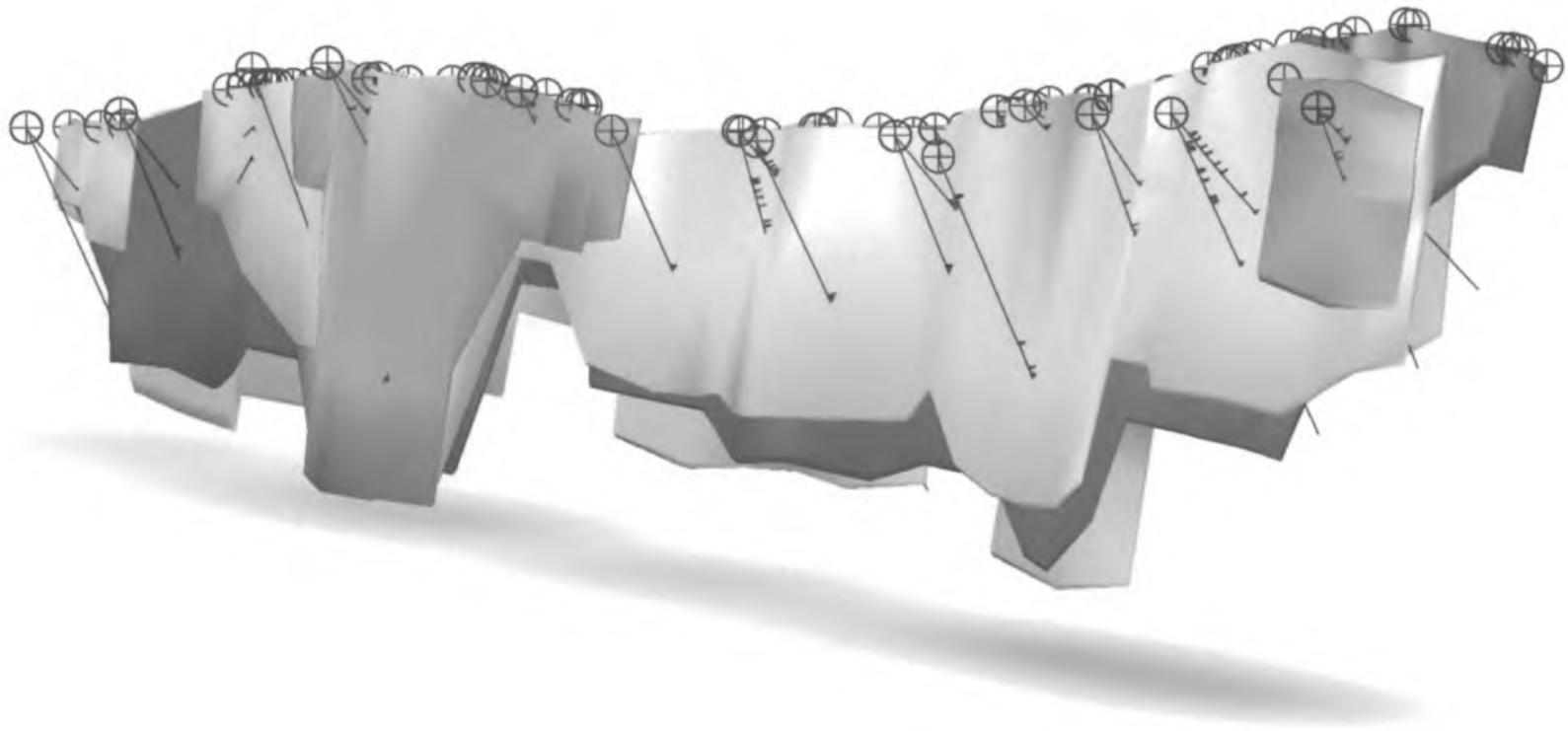
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Location



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Resource





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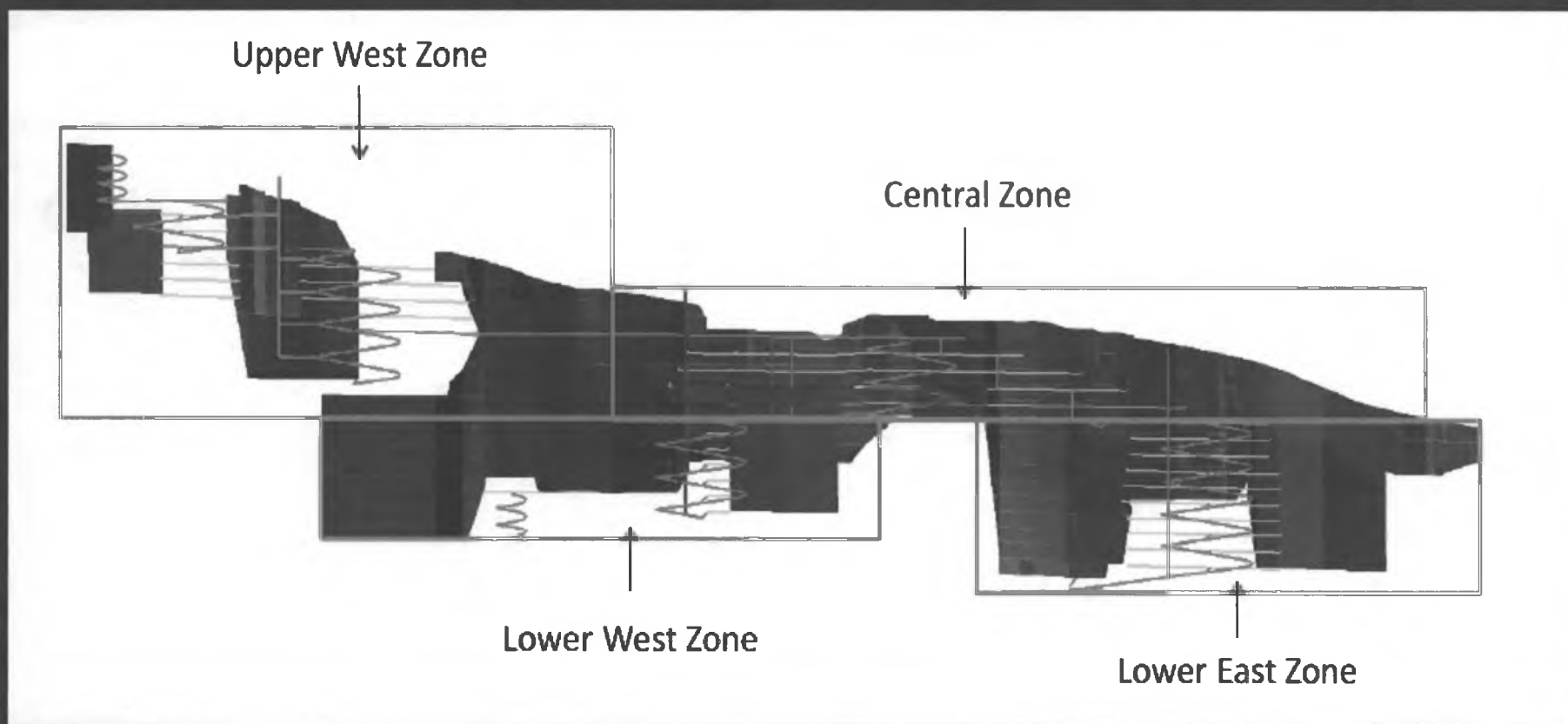
Resource

	% TREO Cut-off	Tonnes	TREO	HREO/ TREO	Contained TREO (lbs)
	0.8%	1,021,000	1.054%	36.80%	23,718,000
	0.7%	1,549,000	0.951%	37.70%	32,467,000
	0.6%	2,489,000	0.834%	39.60%	45,751,000
Resource	0.5%	3,669,000	0.746%	38.60%	60,325,000
PEA Base Case	0.4%	5,276,000	0.654%	40.00%	76,049,000
	0.3%	6,126,000	0.613%	40.80%	82,765,000
	0.2%	6,702,000	0.580%	41.30%	85,673,000



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Orebody & Mine Design

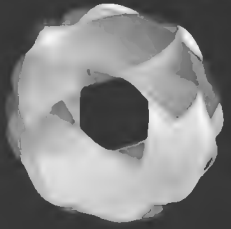




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Geology/Mineralization



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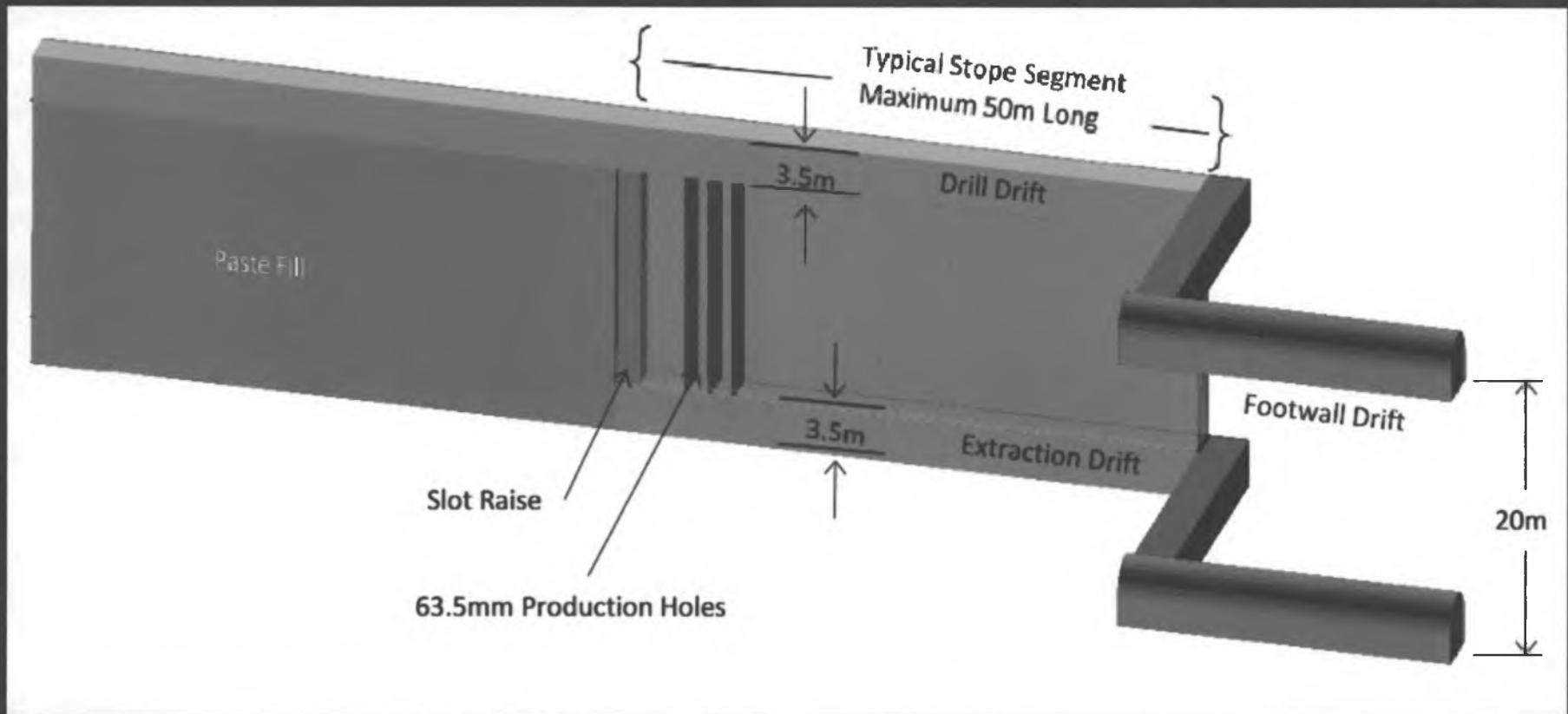
Mine Operations

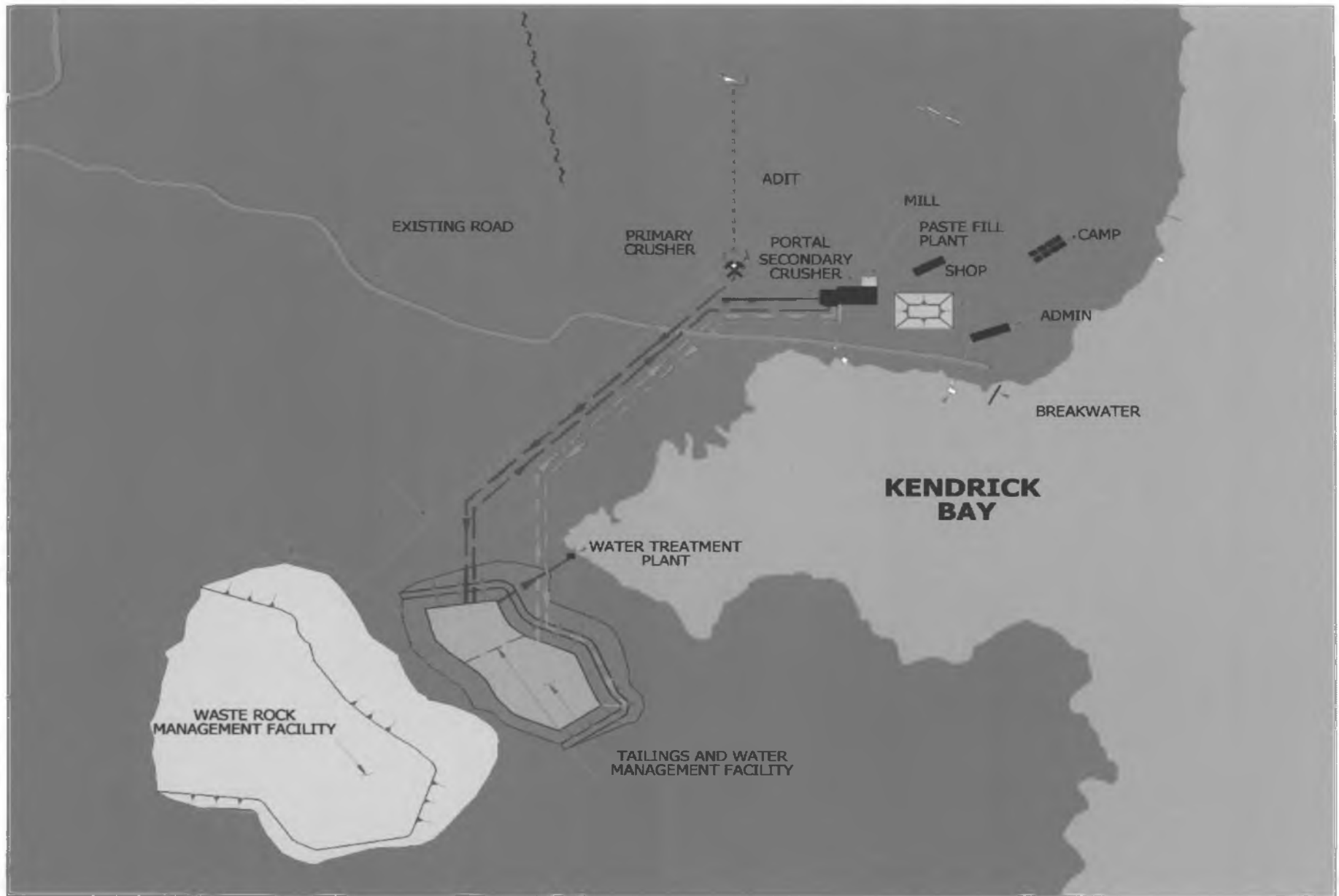
- Camp
- 1,500 tonne per day underground mine
- Trackless equipment underground
- Emphasis will be on local hire and training
- 190 employees



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Mine Operations





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Conceptual Project Design



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Unique Technology

Utilizing ore sorting and mag. separation

- Sorting rejects approx. 50% of mill feed as waste
- Magnetic separators reject approx. 50% of feed
- 1,500 tpd mine but 375 tpd leach and separation circuit

RESULT IS ALL TAILINGS WILL GO U/G AS BACKFILL

Solid Phase Extraction (SPE)

- Process invented by Intellimet together with Ucore
- Nitric acid leach at 90 Deg. C
- SPE columns separate individual rare earths

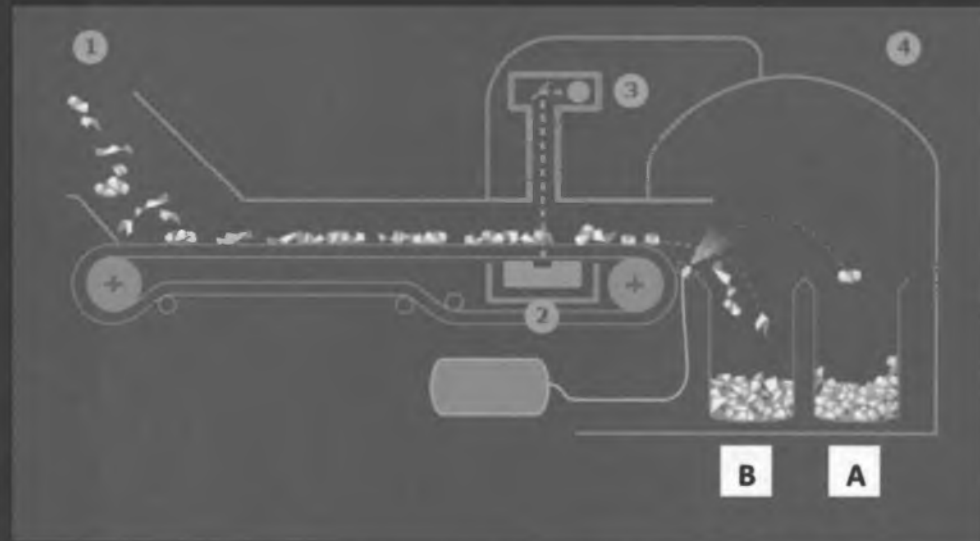


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Ore Sorter



- 1 Feeding of unsorted material
- 2 X-ray camera
- 3 X-ray source
- 4 Separation chamber





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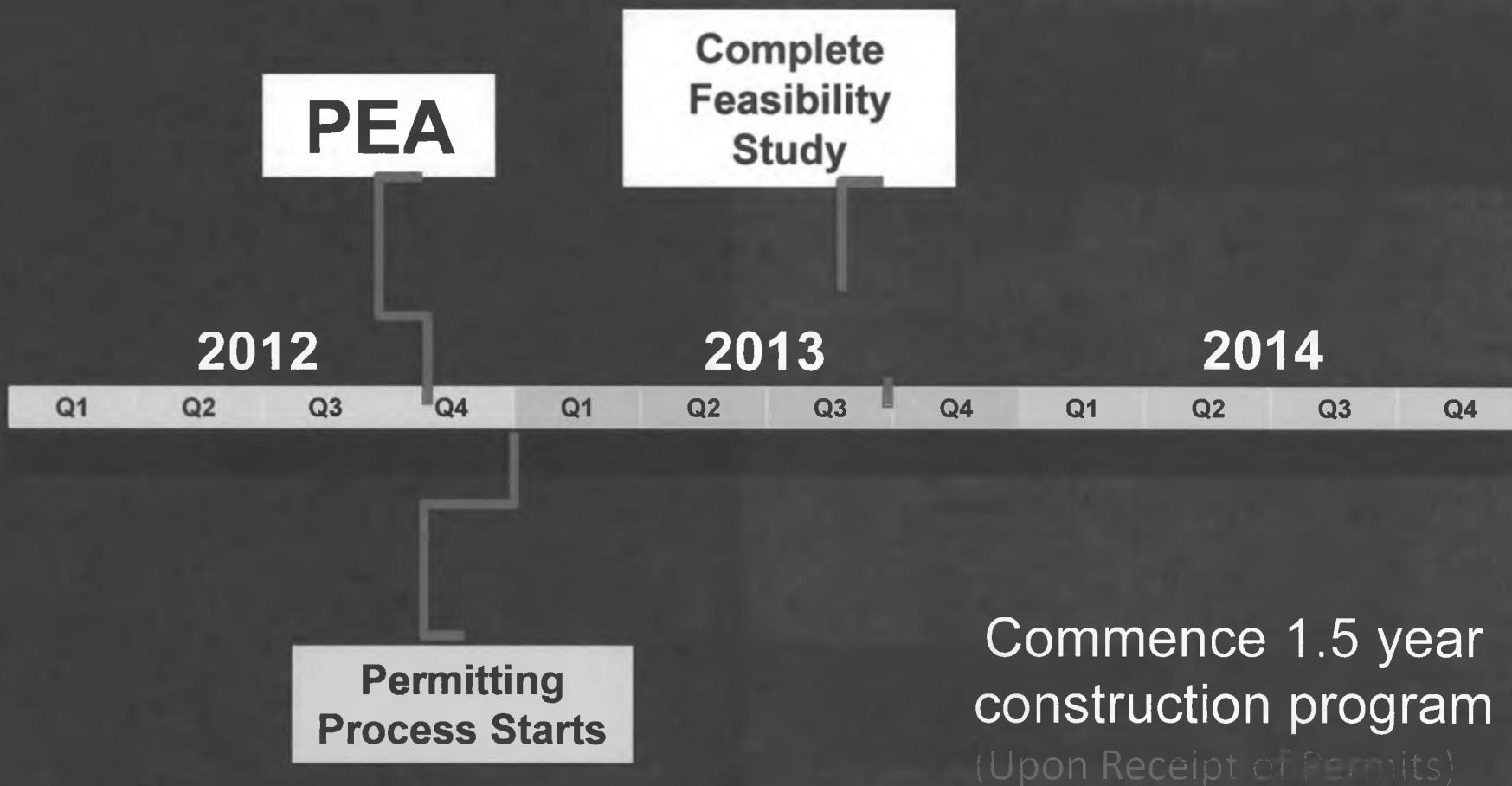
Solid Phase Extraction

- New nano technology
- First stage separates nuisance materials such as thorium, uranium and iron. U/G with paste backfill.
- Subsequent series of columns separates individual rare earths and then precipitated as oxides.
- Separation occurs very quickly so columns are very small. Therefore has low capital cost.



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Steps to Production





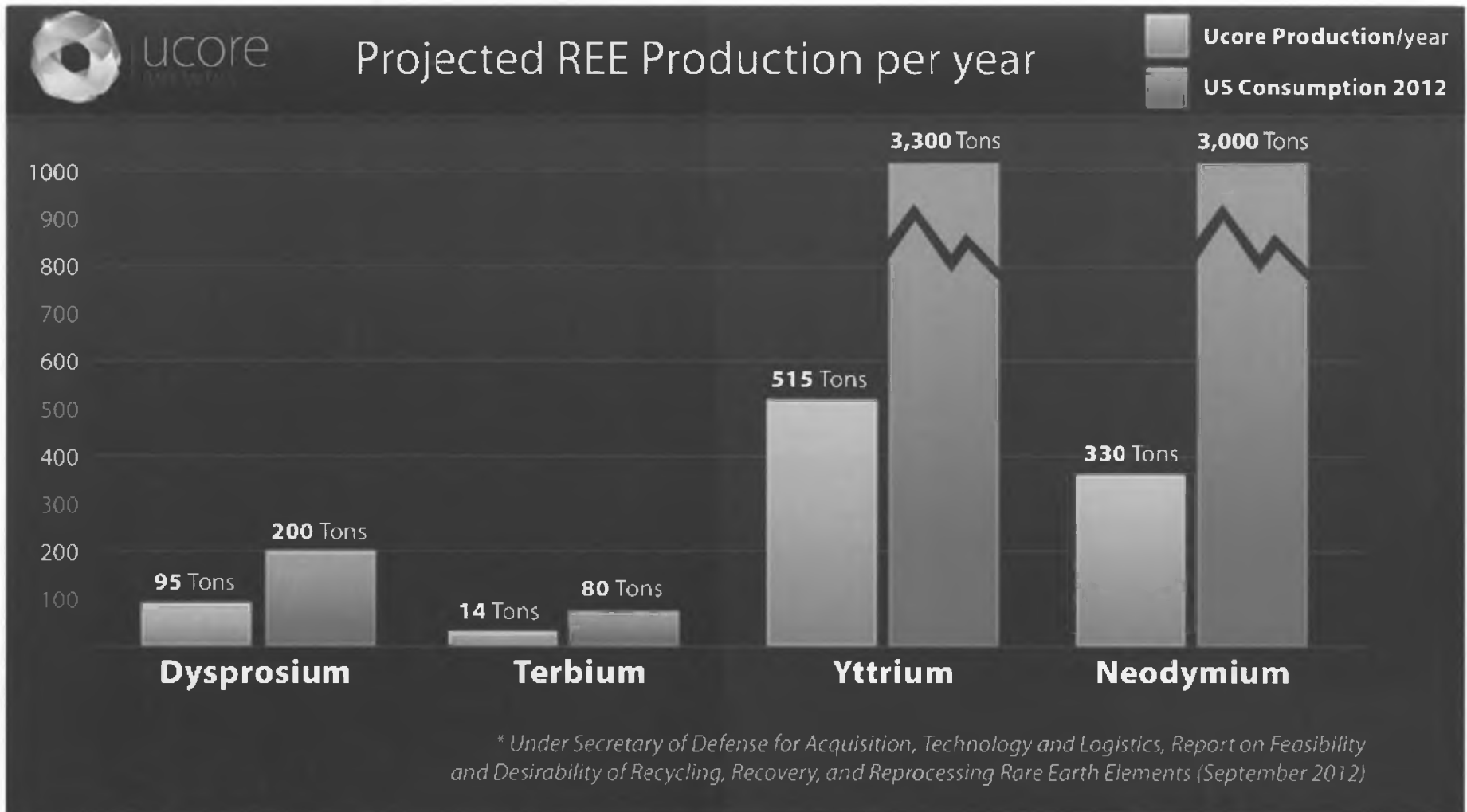
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PEA Results

- Preproduction capital - \$221 m incl. \$25 m contingency
and includes the REO separation plant
- IRR - 43%
- NPV - \$577 m at 10% discount rate, pre-tax
- Payback period – 2.3 years
- 11 year mine life
- Produce 2,250 tonnes REOs including 95 tonnes Dy_2O_3 ,
14 tonnes Tb_2O_3 and 515 tonnes Y_2O_3



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Community/Gov't Relations

- Local hire and training: meet regularly with KIC, UAF, UAA and UAS.
- Community outreach: met with a number of POW Tribal Associations, Ketchikan, Saxman and local fishing groups. Presentations to Craig Mining Symposium and Ketchikan AMA.
- Gov't. Outreach: meet with Govenor's office, legislators and their staff and support POW road bill and State support resolution. Have DoD support.



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Whats Coming

- New resource – 2nd quarter
- Award Feasibility Study – 1st quarter
- Secure off-take agreements - 2013
- Award pilot plant contract – 1st quarter



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What Have We Got?

- Deposit with a high percentage of HREOs
- Project with very robust economics
- Very small footprint and no tailings on surface at closure
- New technology results in production of individual REOs
- Great opportunity for a new industry for the State





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TSX-V:UCU | OTCQX:UURAF

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