



BACANORA MINERALS



DEVELOPING BORATE & LITHIUM RESOURCES IN SONORA, MEXICO

February, 2011



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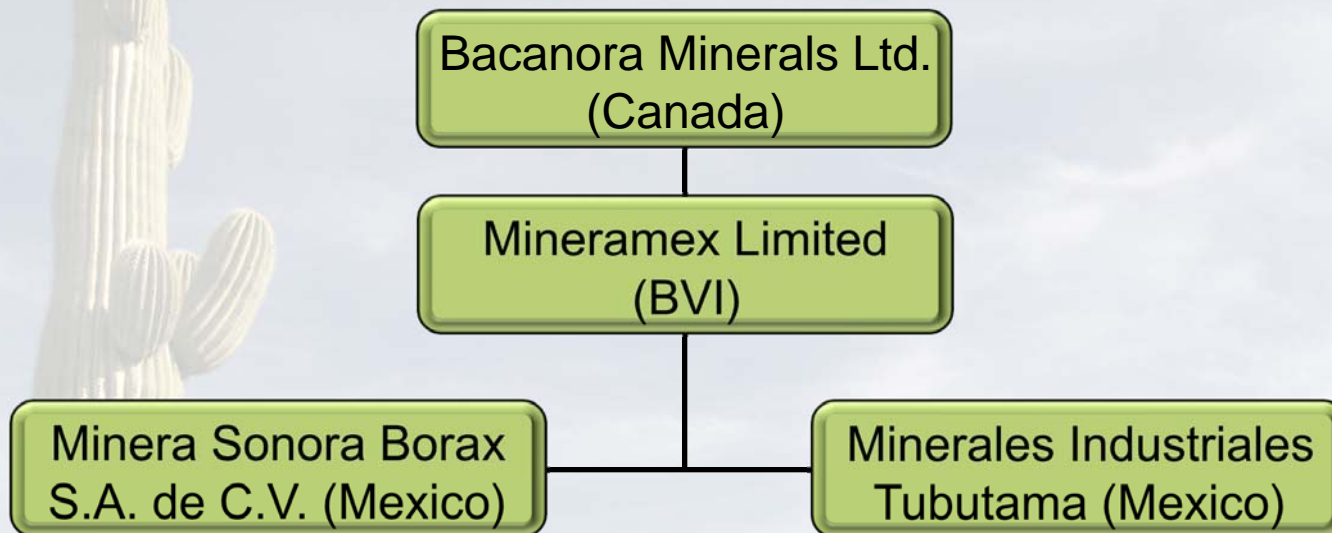


Investment Highlights

- *Located in mining friendly & resource-rich Sonora, Mexico*
- *Borate and lithium focus – 21st century commodities – critical and energy-saving components, without substitutes in many manufacturing processes and daily use products*
- *Acquired 100% interest, subject to royalties, in Magdalena Borate and Sonora Lithium Projects*
- *Additional borate and lithium targets being evaluated*
- *Close to infrastructure: access to roads, rail and power. Fully operational office and field teams in place*
- *Magdalena Borate Project: initial drill-indicated resource estimate of 11,100,000 tonnes @ 9.9% B₂O₃.*
- *Sonora Lithium Project: first 4 drill holes intersected up to – 54 metres @ 2713 ppm Li (equiv. 1.45% Li₂CO₃) & 19 m @ 5080 ppm Li (equiv. 2.71% Li₂CO₃) in hectorite clays*
- *Management team and Board with extensive experience operating in Mexico and proven discovery track record*
- *Excellent in country contacts working towards securing further high quality assets*



Corporate & Capital Structure



Capitalization (as of February 09, 2011):

Common shares, issued 37,257,497
Stock Options 1,487,433

Fully diluted Common Shares O/S 38,744,930



Directors & Management

Paul T. Conroy, Director, President & CEO

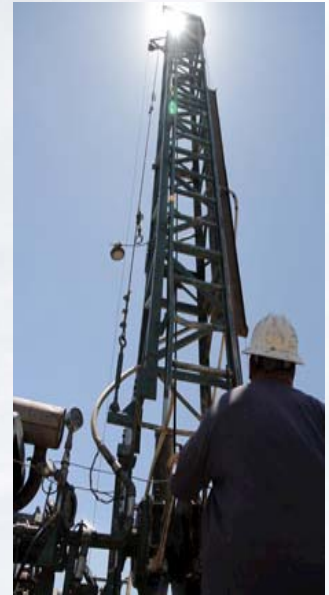
Martin Vidal Torres, MSc, V-P Exploration, Mexico and
General Manager – Minera Sonora Borax S.A. de C.V.

Derek Batorowski, CGA, Director, Chief Financial Officer &
Corporate Secretary

Raymond Hodgkinson, PEng, Director

George Jones, LLB, Director

Colin Orr-Ewing, Director and major shareholder



21st Century Elements with unique electrochemical properties

() = ESTIMATES

1 1A	H 1 1.008 Hydrogen																		18 VIIIA	He 2 4.00 Helium
2	Li 3 6.94 Lithium	Be 4 9.01 Beryllium										B 5 10.81 Boron	C 6 12.01 Carbon	N 7 14.01 Nitrogen	O 8 16.00 Oxygen	F 9 19.00 Fluorine	Ne 10 20.18 Neon			
3	Na 11 22.99 Sodium	Mg 12 24.31 Magnesium										Al 13 26.98 Aluminum	Si 14 28.09 Silicon	P 15 30.97 Phosphorus	S 16 32.07 Sulfur	Cl 17 35.45 Chlorine	Ar 18 39.95 Argon			
4	K 19 39.10 Potassium	Ca 20 40.08 Calcium	Sc 21 44.96 Scandium	Ti 22 47.88 Titanium	V 23 50.94 Vanadium	Cr 24 52.00 Chromium	Mn 25 54.94 Manganese	Fe 26 55.85 Iron	Co 27 58.93 Cobalt	Ni 28 58.69 Nickel	Cu 29 63.55 Copper	Zn 30 65.38 Zinc	Ga 31 69.72 Gallium	Ge 32 72.61 Germanium	As 33 74.92 Arsenic	Se 34 78.96 Selenium	Br 35 79.90 Bromine	Kr 36 83.80 Krypton		
5	Rb 37 85.47 Rubidium	Sr 38 87.62 Strontium	Y 39 88.91 Yttrium	Zr 40 91.22 Zirconium	Nb 41 92.91 Niobium	Mo 42 95.94 Molybdenum	Tc 43 (97.9) Technetium	Ru 44 101.07 Ruthenium	Rh 45 102.91 Rhodium	Pd 46 106.42 Palladium	Ag 47 107.87 Silver	Cd 48 112.41 Cadmium	In 49 114.82 Indium	Sn 50 118.71 Tin	Sb 51 121.76 Antimony	Te 52 127.60 Tellurium	I 53 126.90 Iodine	Xe 54 131.29 Xenon		
6	Cs 55 132.91 Cesium	Ba 56 137.33 Barium	La 57 138.91 Lanthanum	Hf 72 178.49 Hafnium	Ta 73 180.95 Tantalum							Hg 80 200.59 Mercury	Tl 81 204.38 Thallium	Pb 82 207.2 Lead	Bi 83 208.98 Bismuth	Po 84 (209) Polonium	At 85 (210) Astatine	Rn 86 (222) Radon		
7	Fr 87 223.02 Francium	Ra 88 226.03 Radium	Ac 89 227.03 Actinium	Rf 104 (261) Rutherfordium	Db 105 (262) Dubnium	Sg (263) Seaborgium	Bh (262) Bohrium	Hs (265) Hassium	Mt (266) Meitnerium	110 Nov. 1994	111 Nov. 1994	112 1996		Unnamed Discovery 114 1999	Unnamed Discovery 116 1999	Unnamed Discovery (118) 1999				

ALKALI METALS **ALKALI EARTH METALS** **HALOGENS** **NOBLE GASES**

Commodity focus



Borates

a group of Boron minerals containing **Borate = B_2O_3**

e.g. *Colemanite:* $Ca_2B_6O_{11} \cdot 5H_2O$ - 50.8%)

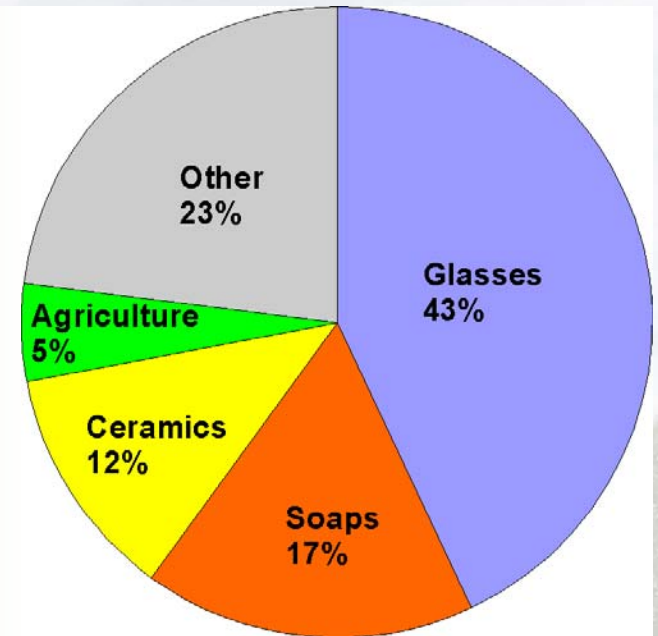
Ulexite: $NaCaB_5O_9 \cdot H_2O$ - 43.0%) B_2O_3 by weight

Tincal (borax) $Na_2B_4O_7 \cdot 10H_2O$ - 36.5%)

Uses:

Boron compounds have a number of unique, high tech, energy saving uses for which substitution with other compounds is not possible.

- Glasses, heat-resistant (including fiberglass insulation & textile) . Boron also reduces the energy used to produce glass. 43
- Detergents, soaps & personal care products; 17
- Ceramics, glazes; 12
- Agricultural micronutrients; 5
- Other uses (e.g. in control rod alloys in nuclear reactors to bleed off excess energy). 23



Values: *Boric acid, high purity* ~ \$US700/tonne

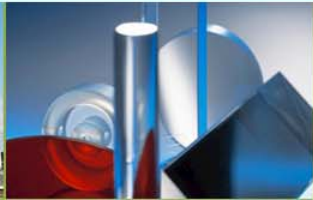
Colemanite \$US320/tonne



Worldwide Borate Distribution



Borate Projects

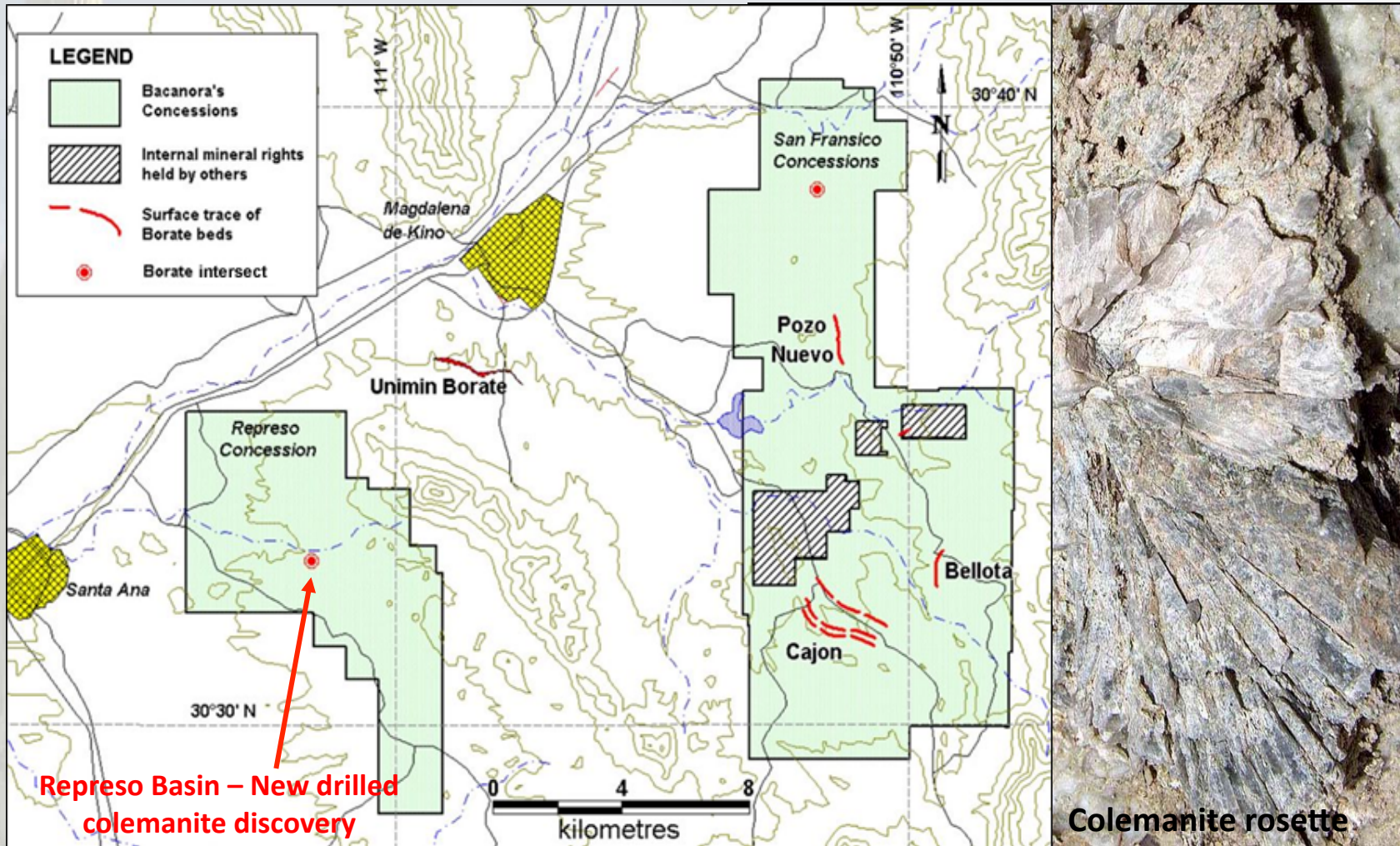


Magdalena Borate Project

- *Two concession areas totalling 15,508 hectares in area*
- *Borate hosted in Miocene sediment-volcaniclastic succession in-filling extensional sub-basins formed over metamorphic core complexes*
- *Three borate zones: Cajon; Bellota; Pozo Nuevo; plus other targets: Represo & Escuadra*
- *Preliminary drill indicated resource at Cajon:
11.1 million tonnes @ 9.9% B₂O₃ in 2 stacked beds*
- *Cajon resource can be expanded with in-fill drilling on the 3,000 metre strike length of the deposit*
- *Preliminary metallurgical testing is in progress for Cajon*
- *Bulk sampling and in-fill drilling planned for Cajon in 2011 in order to update resource and advance project to feasibility*
- *Pozo Nuevo target, drilled in 2007, B₂O₃ values comparable to Cajon*
- *Represo Basin – New Colemanite discovery adjacent to Cajon*



Magdalena Borate Project

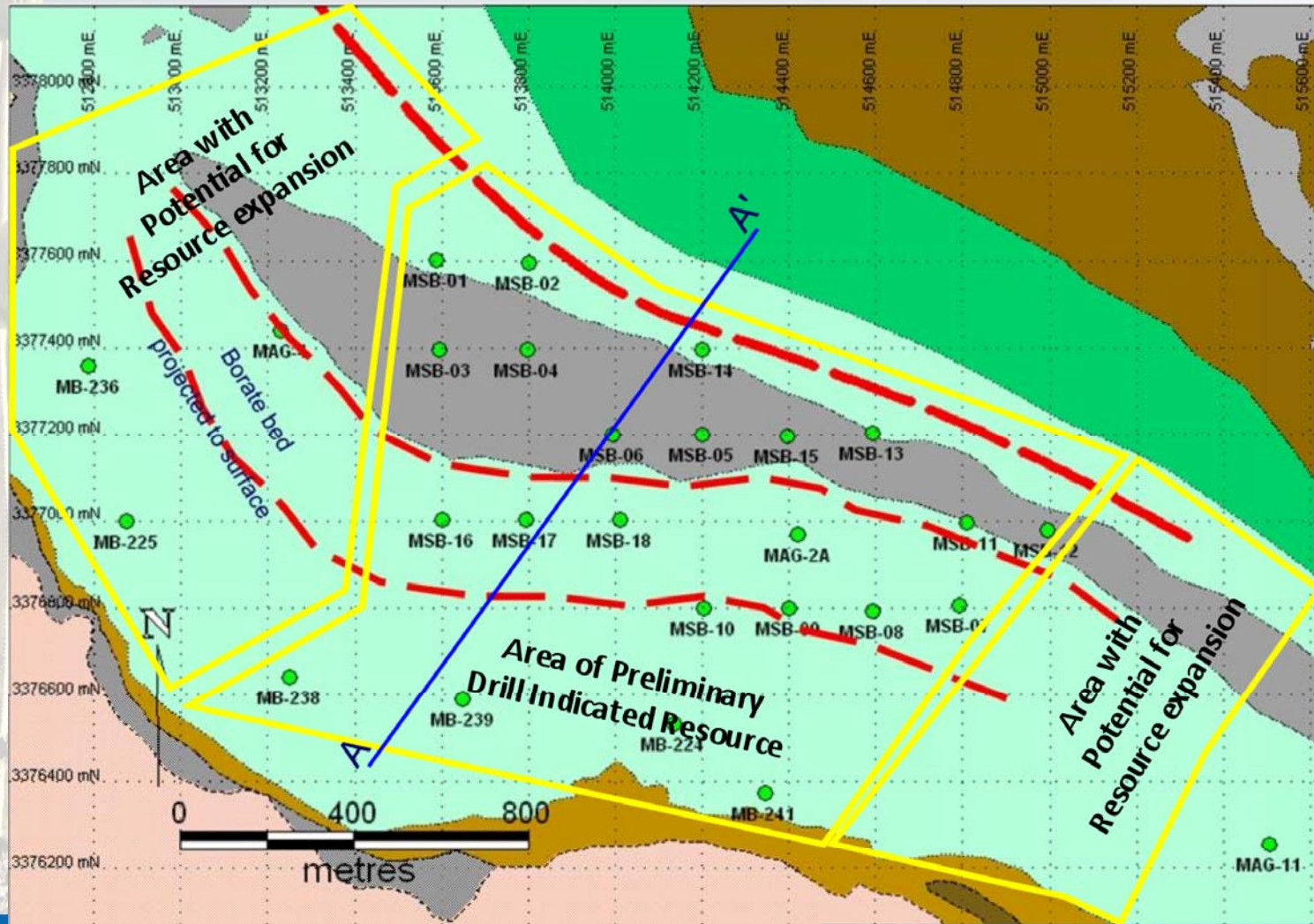


Magdalena Borate – Cajon Deposit

View northwest across Cajon deposit toward Magdalena de Kino

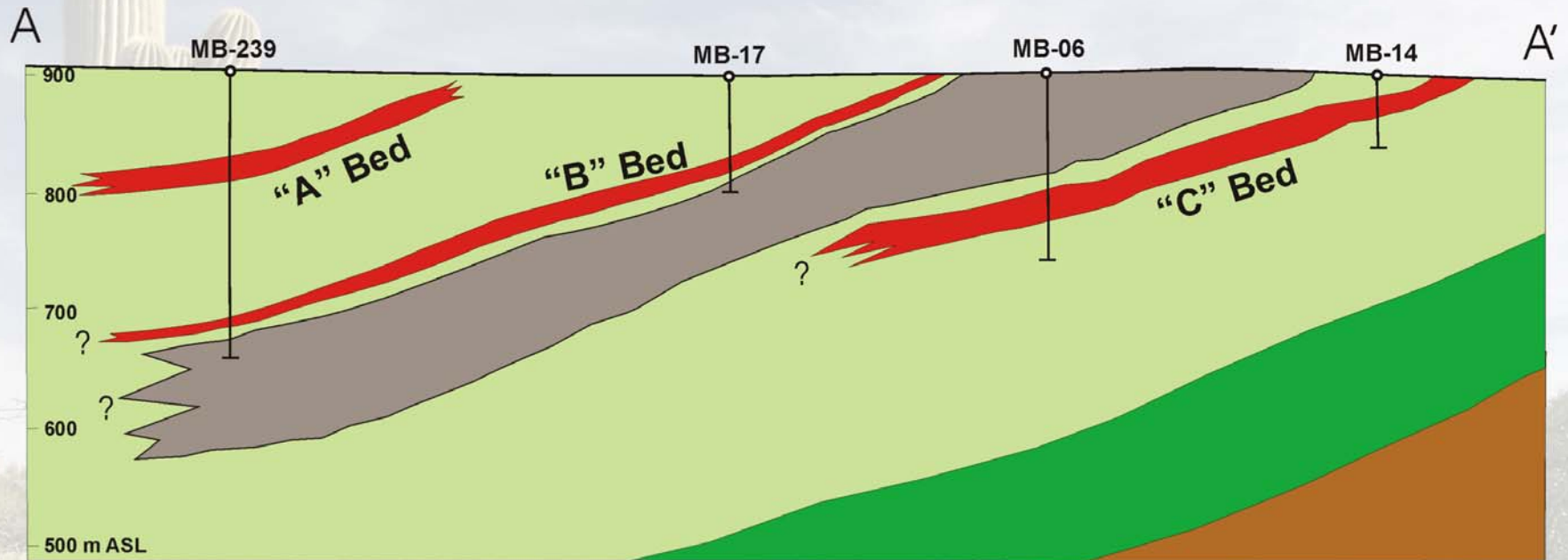


Magdalena Borate – Cajon Deposit



Magdalena Borate – Cajon Deposit

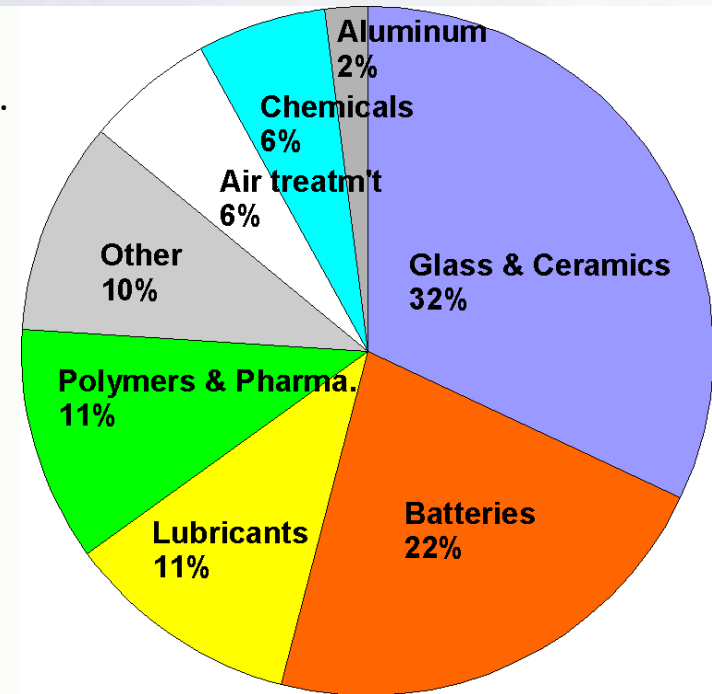
Cross Section A – A'
Looking west



Lithium - the lightest metal!

- *has a number of useful and special, technology driven properties:*

- Imparts thermal shock resistance to glasses (eg, Corning Ware, Pyrex), also used in fiberglass, ceramics, glazes etc.
- Rechargeable, high electrical storage capacity batteries;
- Lubricants for high temperature applications;
- Aluminum processing (Li_2CO_3) as a reducing agent in smelting);
- Light weight lithium-aluminum and lithium-magnesium alloys for aerospace applications;
- Other uses include pharmaceuticals, fuel cells; catalysts;
- Potential futures uses include as a fuel in nuclear fusion reactors – a game changer for the energy industry!



Rapidly changing market dynamics due to increasing useage, especially in electric vehicles.

Values: Lithium carbonate, Li_2CO_3 ~\$US6,000/tonne



Lithium sources

Lithium is sourced from 2 primary feed stocks:

Brines:

- these account for the bulk of current lithium production, with Chile being the biggest producer. Brines are problematical due to Magnesium contamination: $Mg/Li < 10$ - over time Mg can become increasingly concentrated in brines, making Li recovery difficult.

Minerals:

1. traditionally **spodumene** ($LiAlSi_2O_6$) from pegmatites has been the feedstock used to produce lithium carbonate (Li_2CO_3). Pegmatites tend to be small, narrow bodies that can be expensive to mine.
2. More recently **hectorite** – a lithium-rich clay ($Na_{0.3}(Mg,Li)_3Si_4O_{10}(OH)_2$) – has become the focus for new lithium resource development, primarily because patents covering lithium recovery from hectorite have expired providing a new opportunity for those with hectorite resources. ***Bacanora's lithium project is focused on developing hectorite deposits*** formed in young desert playas that can be mined using low-cost bulk-mining techniques.



Worldwide Lithium Distribution

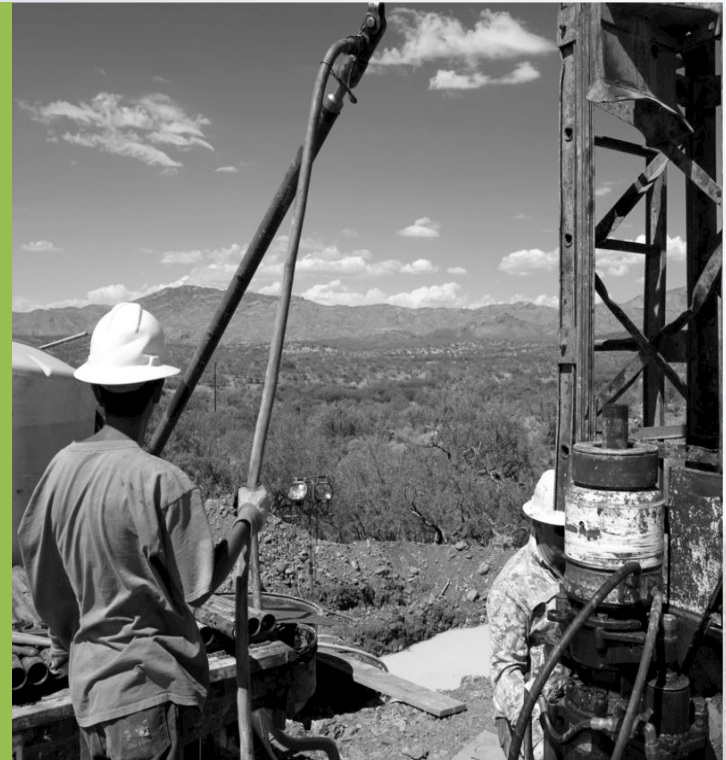


Lithium Projects



Sonora Lithium

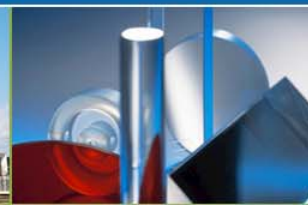
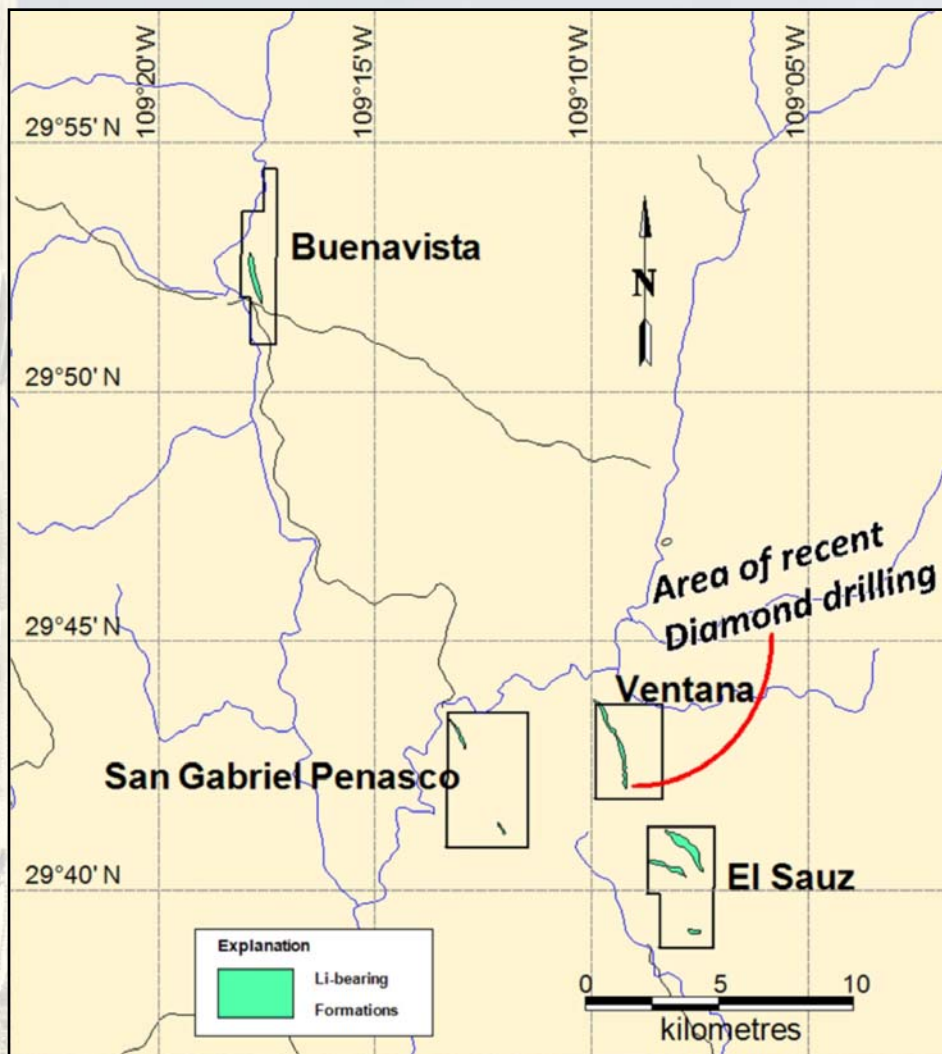
- *Early stage hectorite lithium exploration project*
- *Four concessions covering a total of 4,050 hectares*
- *First 4 drill holes intercepted zones with Li values ranging from 2713 ppm over 54 metres to 5080 ppm over 19 m (equiv. to 1.47% and 2.71 % Li_2CO_3 respectively*)*
- *Excellent opportunity to define large bulk-mineable lithium resources*
- *Relatively easy access and development potential. Diamond drilling to resume, second quarter 2011 (18 holes, 2,500 metres)*



*Note: conversion factor for Li to Li_2CO_3 is: Li times 0.0005329 = Li_2CO_3



Sonora Lithium - Concessions



2011 Work Program

First Quarter

- *Completion of Diamond drill program on Sonora Lithium Project*
- *Completion of preliminary metallurgical testing on Magdalena borate*
- *Commence in-fill diamond drill program on Magdalena Borate Project*

Second Quarter

- *Initiate environmental studies in advance of borate project permitting*
- *Commence Phase 2 diamond drill program on Sonora Lithium Project*
- *Bulk sampling & detailed metallurgical testing of Magdalena borate*

Third Quarter

- *Completion of in-fill diamond drilling, bulk sampling Magdalena borate*

Fourth Quarter

- *Feasibility study: Magdalena Borate Project*

2011 Program Cost Estimate: \$US1,000,000



Summary

- *Excellent Borate and Lithium assets in Mexico*
- ***Close to local markets** and within easy access of overseas markets.*
- *Near term driver: **Magdalena Borate Project:***
 - Preliminary drill indicated resources: **11.1 million tonnes @ 9.9% B₂O₃** in 2 beds*
 - Initial metallurgical testing in progress*
 - Bulk sampling, detailed metallurgical studies & in-fill drill planned for 2011*
- ***Exciting Lithium opportunity** with potential for large tonnage bulk mineable operation.*
- *Experienced management and Board with proven track record for resource discovery & development.*
- *Actively looking for additional, **new opportunities** that will enhance Bacanora's resource portfolio.*



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