Holbrook Area Potash Project
American West Potash

Fall 2011
Agenda

- Who we are
- Why we are here
- Potash Overview
- Holbrook: Competitive Advantages
- American West Potash
- Next Steps
- A Snap Shot of Potash Processing
Holbrook: Significant Strategic Advantages

- Solid historical geologic analysis and modeling
- Significant potash reserve at shallow depths
- Likely to be conventionally mined, then complete with solution mining
- No oil and gas conflict
- Close to large agricultural and industrial markets: Southwest, California, Mexico, Ports for international shipments
- Potential for low cost construction and mining
- Favorable business climate; political stability
- Favorable weather
Potash

- What is it?
- Where is it found
- World statistics
  - Tons used
  - World trade
  - Domestic activity
Potash Projects and Reserves

- Canada
- Russia
- Other – Argentina, Peru, Congo, Thailand
- US
  - Carlsbad
  - North Dakota
  - Holbrook
Potash Economics

- Key agricultural nutrient
- World shortage of potash, limited global reserves
- Increasing global demand
- Increasing sales prices and improved technology now make Arizona project viable

Source: Infomine.com
American West Potash Partnership

- Karlsson Group – over two years of work in the Holbrook Basin
- Prospect Global – extensive experience in natural resource projects, financial and technical expertise
- Pat Avery – Executive Project Manager
- Developed strategic and progress plans, have made significant progress
Mining, Manufacturing and Fertilizer Experience

- Potash: Led last six projects in the US
  - Expansion of three underground mines and surface plants (New Mexico, Utah)
  - Design and engineering of opening an abandoned mine (NM)
  - Two major solution mining projects (NM, UT)
- Manage all aspects of fertilizer design, engineering, construction, production, supply chain and sales
- Nitrogen complexes
- Phosphate mining, phos acid plants, gold, silver, copper, clay, silica- Id, UT, NV, Wy, CO, AZ, WA, Or
Accomplishments

- Leasehold accumulation
  - 42 state sections, approx. 27,000 acres
  - 8 private sections- surface plant
  - Completed acquisition for 100 private sections of mineral leases
  - 150 sections combined
    - Working with North Rim Exploration, top potash consulting firm
- Compiled, digitized and evaluated historical data
- Completed 43-101 Resource Report
- Prepared preliminary design, budget and permitting plan for full 2.0MM product ton facility
- Cooperative efforts in the area
North Rim Geologic Study

- Mapped all historical information
- Compared well data to Rauzi Report
- Begin mine plan
NI 43-10 Plan

- 2D seismic line
- Well location
Next Steps – Future Work

- Continue with area wide field work
  - Seismic - Began 2/1/2011
  - Drilling - May 1 - August 15
  - Geologic modeling
- Complete an NI 43-101 - Done - October 15, 2011.
  - Results are very positive and merit future work.
  - Large, long life mine resource
- Develop mine plan, feasibility study and long term budget
- Finalize project viability
State and Local Benefits

- **Job Creation**
  - Consulting and permitting: 1-1.5 years
  - Construction: 1 year, 500 – 800 jobs
  - Mining/Production: 300 – 400 jobs

- **State royalty revenue (hundreds of millions)**

- **State and county ad valorem tax revenue**

- **Sales tax revenue (hundreds of millions)**

- **Underground mining reduces visual and environmental impact**
Key Conclusions

- Significant land position
  - 150 sections, 95,000 acres
  - potentially 900mm tons of potash
- Cooperative efforts with adjacent land owners
- Significant resource potential and revenue stream
  - Ann.production: 2mm tpy-40-50 years of mining
- Favorable region and conditions: reserves, depth, climate, markets, and business environment
A Snap Shot of Potash Mining and Processing

- Underground Mine
- Surface Processing Plant: floatation, separation, drying
- Product Prep: sizing, granulation
- Product Storage and Rail/Truck Load Out
- Infrastructure: electrical, water, steam, roads, rail
- No hazardous steps, processes or chemicals
Underground Mining
Underground Mining

- Continuous miners cut the face
- Ore is moved by conveyors to production shaft
Surface Processing

Ore comes to the surface and is concentrated from 8-20% ore to 60-62% salable product
Surface Process

1. Crushing → Scrubbing
2. Desliming → Slimes Disposal
3. Sizing → Coarse Conditioning
4. Fines Conditioning → Flotation
5. Flotation → Concentrate
6. Tails → Debrining-Drying
7. Tails Disposal → Sizing-Compaction
Floatation Building
Product

Holbrook will produce red standard and granular...
Potash Facility – A good industrial partner and neighbor
Questions?