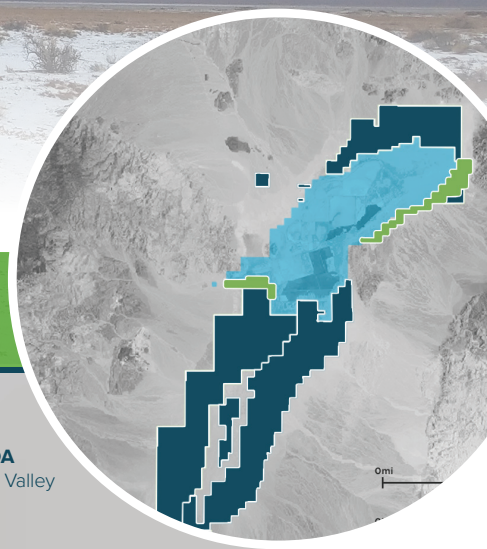
PURE ENERGY MINERALS

TSXV: PE **OTCQB:** PEMIF

21st Century Lithium Mines
Will Break New Ground

A lithium brine resource developer driven to become an innovative, low-cost supplier to the burgeoning lithium-battery industry.



HIGHLIGHTS

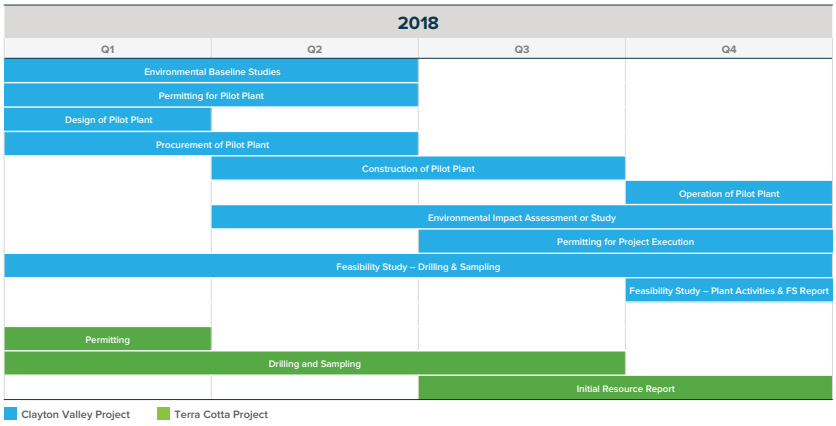
CLAYTON VALLEY PROJECT (>25,000 ACRES):
North American lithium brine resource

TERRA COTTA PROJECT:
World class discovery potential in the Lithium Triangle

MARKETS:
Potential customers in North America and around the globe

TECHNOLOGY:
Breakthrough processing technology: Better, Faster, Greener

A NEW YEAR OF DISCOVERY & PROJECT DEVELOPMENT



MANAGEMENT & BOARD

Patrick Highsmith, *President, CEO & Director*

Walter Weinig, PG, PMP; *VP Projects & Permitting*

Paul Zink, *CFO*

Michael Dake, *Director*

Mary Little, *Director*

Scott Shellhaas, *Director*

Bassam Moubarak, *Director*

Leo Karabelas, *Investor Relations*

CLAYTON VALLEY PROJECT

NI 43-101 Inferred Mineral Resource:
247,000 tonnes of lithium hydroxide
123 mg/L Lithium*

- Includes >25,000 acres in North America's only productive lithium district, surrounding Albemarle's Silver Peak Mine
- Outstanding infrastructure, including year-round road access, low-cost electrical power, and a trained workforce
- Quality Chemistry: Low Mg, Ca, and sulphate – among the best brines in the world for lithium recovery
- Positive Preliminary Economic Assessment (PEA)*

**The reader is cautioned that the PEA is based on inferred resources, which are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. The PEA is preliminary in nature and there is no certainty that the PEA will be realized.*

TERRA COTTA PROJECT

An option to acquire 32,000+ acres on Pocitos Salar, in the heart of the Lithium Triangle.

- Strong infrastructure: a provincial highway, rail line, and gas pipeline directly to the salar
- Historic sampling (2010) reported high lithium values (100 – 300 ppm) in near surface brines with significant potassium
- Initial geophysical surveys show promising drill targets
- Management has extensive Argentina experience, building and leading the discovery and development teams at the nearby Sal de Vida Project

NEW TECHNOLOGY:

Better, Faster, and Greener

PE is working with Tenova Advanced Technologies to evaluate the feasibility and economics of their solvent extraction based lithium recovery technology.

This has potential for **significant advantages over the conventional evaporation recovery process:**

ADVANTAGES

BETTER EFFICIENCY
90% Li Recovery vs. 40-50% Li Recovery

FASTER
hours vs. months

GREENER
reinjected brines and minimal solid waste vs. water losses and large waste piles

HIGH PURITY
isolation from impurities during processing

COMPACT INFRASTRUCTURE
small footprint vs. 4,000+ acre ponds

RECYCLE FRIENDLY
ability to treat used lithium feedstock

WEATHER
non-issue vs. dependent variable

FLEXIBLE FEEDSTOCK
lower cutoff grade vs. higher grade required

2016 Mini-pilot plant exceeded expectations, a proof-of-concept demonstrating high lithium recoveries (~90%), successful removal of Mg and Ca, and crystallization of high purity lithium hydroxide.

Walter Weinig, Professional Geologist and SME Registered Member (SME Registered Member # 4168729), is a qualified person as defined by NI 43-101 and supervised the preparation of the scientific and technical information that forms the basis for this fact sheet. Mr. Weinig is not independent of the Company as he is an officer.

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Please refer to Company website, news releases, presentations, and technical reports for important details and information pertaining to this Fact Sheet.