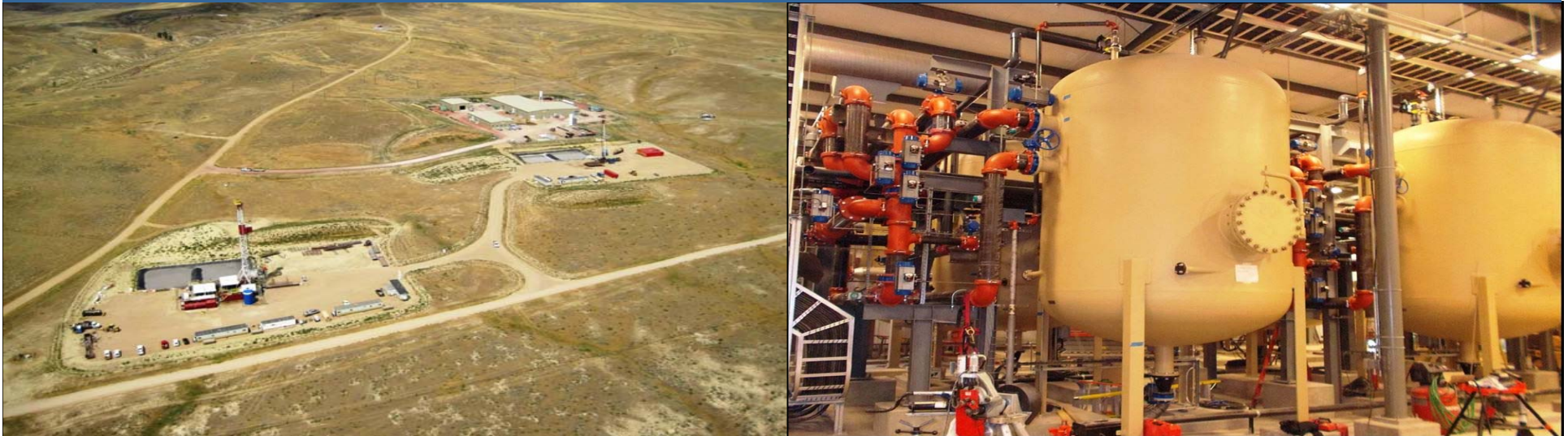


Nuclear. Clean Air Energy



IAEA Symposium CN-216

Nichols Ranch ISL Mine – A Case History



NYSE MKT
Toronto Stock Exchange

URZ

Frankfurt
Exchange

U9E

June 25, 2014



Nichols Ranch In-Situ Leach Uranium Mine Wyoming, USA

A Case History

Authors: Glenn Catchpole
Glenda Thomas

Company Summary

Uranerz Energy Corporation

Publically Traded U.S. Corporation

Traded on Three Stock Exchanges:

NYSE MKT & TSX: Symbol “URZ**”**

Frankfurt: Symbol “U9E**”**

Headquarters & Operations Office: Casper, Wyo, USA

Investor and Finance Office: Vancouver, B.C., Canada

Web Site: www.uranerz.com

Cautionary Statements

This presentation contains or refers to "forward-looking information" and "forward-looking statements" within the meaning of applicable United States and Canadian securities laws, which may include, but are not limited to, statements with respect to anticipated progress or outcome of the Company's permitting and development activities, construction activities, the projected construction and production timeline, future production estimates, future pursuit of uranium sales contracts, anticipated exposure to uranium market price fluctuations and pricing diversification, expected development, capital and operating costs and other projections, including resource estimates, our planned exploration and drilling programs and anticipated results, commodity recovery rate projections, the expected availability of future financing for acquisitions or exploration, anticipated regulatory approvals in respect of our planned operations, the expected advantages of in-situ mining in relation to capital costs, operating costs and environmental impact and all statements which set out future plans, projections, estimates or expectations. Such forward-looking statements reflect our current views with respect to future events and are subject to certain risks, uncertainties and assumptions, including, the risks and uncertainties outlined in our most recent financial statements and reports and registration statement filed with the United States Securities and Exchange Commission (the "SEC") (available at www.sec.gov) and with Canadian securities administrators (available at www.sedar.com). Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, believed, estimated or expected. We do not undertake to update forward-looking statements, except as required by law.

Cautionary Statement for US Investors concerning estimates of mineral resources and potential target mineral resources:

Mineral resources disclosed in this presentation and in the NI 43-101 technical reports referenced herein have been estimated in accordance with the definition standards on mineral resources and mineral reserves of the Canadian Institute of Mining, Metallurgy and Petroleum referred to in National Instrument 43-101, commonly referred to as "NI 43-101". Our NI 43-101 technical reports may include estimations of potential mineral resources for further targeted exploration by Uranerz, disclosed pursuant to the applicable provisions of NI 43-101. The NI 43-101 technical reports referenced herein are a requirement of NI 43-101 and includes estimations of mineral resources and potential mineral resources for further targeted exploration by the issuer disclosed pursuant to the applicable provisions of NI 43-101. As a company listed on the TSX, we are required by Canadian law to provide disclosure in accordance with NI 43-101. US reporting requirements for disclosure of mineral properties are governed by the United States Securities and Exchange Commission ("SEC") and included in the SEC's Securities Act Industry Guide 7 entitled "Description of Property by Issuers Engaged or to be Engaged in Significant Mining Operations" ("Guide 7"). NI 43-101 and Guide 7 standards are substantially different. For example, the terms "mineral reserve", "proven mineral reserve" and "probable mineral reserve" are Canadian mining terms as defined in accordance with NI 43-101. These definitions differ from the definitions in Guide 7. The NI 43-101 technical reports and this presentation use or may use the terms "mineral resource", "measured mineral resource", "indicated mineral resource", "Inferred mineral resource", "potential uranium exploration target", "potential mineral resource", "potential mineral deposit" and "potential target mineral resource". US Investors are advised that these terms and concepts are set out in and required to be disclosed by NI 43-101 as information material to the issuer; however, these terms and concepts are not recognized by the SEC or included in Guide 7, and these terms and concepts are normally not permitted to be used in reports and registration statements filed with the SEC. US Investors should be aware that the issuer has no "reserves" as defined by Guide 7 and are cautioned not to assume that any part or all of an inferred mineral resource or potential target mineral resources will ever be upgraded to a higher category or confirmed or converted into Guide 7 compliant "reserves". US Investors are cautioned not to assume that all or any part of a potential target mineral resource exists, or is economically or legally mineable.

Current Key Corporate Officers

Senior Staff has 100+ years of combined ISL mining experience

Dennis Higgs, *Executive Chairman of the Board (B.Com.)*

↻ 29+ years in financial and venture capital markets

Glenn Catchpole, *CEO (P.Eng., M.S. Civil Engineering)*

↻ 36+ years of ISL uranium experience; 25 years in Wyoming

Paul Goranson, *President & COO (P. Eng., M.S. Environmental Engineering)*

↻ 25 years of uranium mining, processing and regulatory experience

Glenda Thomas, *Senior VP Operations (B.S. Chemical Engineering)*

↻ 17 years of mining experience, 6 years of ISL experience in Wyoming

Company History

Uranerz Energy Corporation

Company Incorporated in 1999 under the name Carleton Ventures Corp.

In 2005 Changed name to Uranerz Energy Corporation and adopted the following Business Model:

acquire quality uranium properties with the potential of being mined using the ISL extraction method with the objective of achieving uranium production as soon as practical

(focus on production; not grass roots exploration)

(primary target area for property acquisition - western U.S.A.; specifically – Texas and Wyoming)

Company History (cont'd)

With Key Staff on Board Began Uranium Property Acquisition in mid-2005

Focus of Acquisition; Power River Basin of Wyoming

Wyoming Has Largest Uranium Reserves in 50 States (source: U.S. Energy Information Agency)

Wyoming Largest Producer of Natural Uranium in 50 States Since 1986; all by the ISL Mining Method

All Wyoming Uranium Production Since 1986 Came Out of the Powder River Basin Until another ISL Mine Started up in 2013 in Southwest Wyoming

Company History (cont'd)

By 2008 Uranerz had Acquired 132,000 acres (54,000 hectares) of Mineral Properties in Wyoming

This Acreage Contains some 36 Individual Properties

Acquisition Methodology

- **Historical Knowledge and Private Files of Staff**
- **Purchase of Historical Data Bases**
- **Joint Ventures with Uranerz as Operator**
- **Advanced Stage Exploration by Uranerz Team**
- **Purchase of Uranium Properties from Third Parties**

All Uranerz PRB Projects Located in the Historic Pumpkin Buttes Uranium District – Mining Started in this District in mid 1950s

Key Properties

1. Nichols Ranch

Indicated: 2,949,546 lbs (0.114%)

2. Hank

M&I: 2,236,050 lbs (0.123%)

Inferred: 246,753 lbs (0.087%)

3. Jane Dough

M&I: 2,735,432 lbs (0.108%)

Inferred: 240,246 lbs (0.081%)

4. Reno Creek

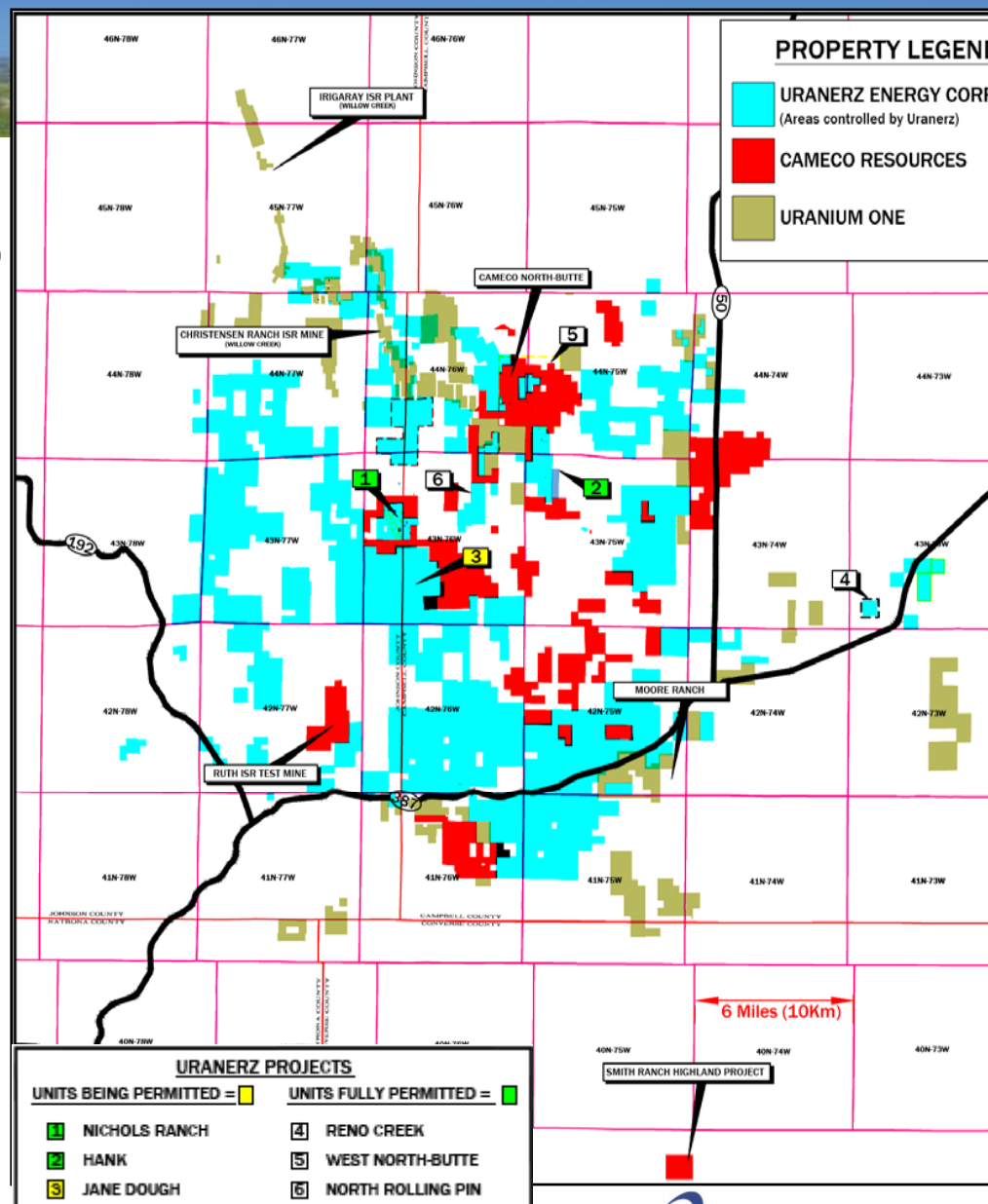
M&I: 4,292,948 lbs (0.056%)

Inferred: 142,167 lbs (0.039%)

5. West North-Butte

M&I: 2,837,015 lbs (0.153%)

Inferred: 2,681,928 lbs (0.120%)



Company History (cont'd)

In Late 2005 Uranerz Acquired Six Uranium Properties in the Powder River Basin from a Third Party

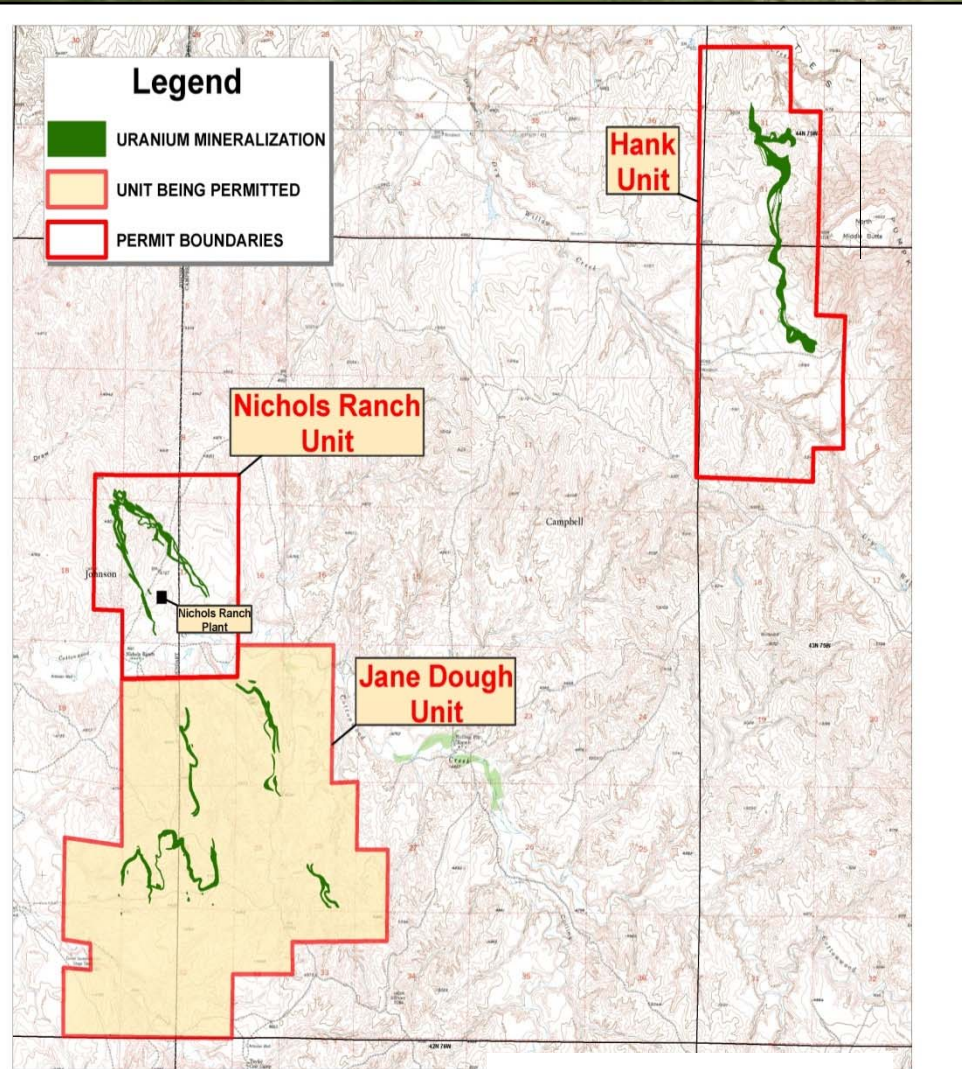
Acquisition included an Extensive Exploration Data Base on the Six Properties

Using the Acquired Data Base Uranerz Selected Two Properties for Advanced Exploration and Subsequently Made Decision to Develop These Properties into Commercial ISL Uranium Mines

Names of Two Properties Selected:

- **Nichols Ranch (now in production)**
- **Hank (licensed for construction and production)**

Nichols Ranch and Hank Units



0 2,000 8,000
Feet Feet

Digital Oil & Gas Well Data was
obtained from the Wyoming
Oil & Gas Commission.
Coordinate System is 4801 UTM Wyo. E.

Nichols Ranch ISL Uranium Mine

Timeline Overview

- **Uranerz Acquisition of Nichols Ranch; 2005**
- **Orebody Delineation Drilling; 2006, 2007**
- **Preparation of Envir. License Applications; 2006, 2007**
- **December 2010 Submittal of Federal & State Applications; Dec. 2007**
- **State Mining Permit Received;**
- **Federal NRC License Received; July 2011**
- **Construction Started; August 2011**
- **ISL Mining Commenced; April 2014**

Environmental Permitting

In Wyoming Three Major Environmental Permits Required for Uranium Mining (Non-Agreement State)

- **State – Permit to Mine (WDEQ)**
- **Federal – Source Material License (NRC)**
- **State & Federal – Deep Disposal Well(s) Permit**
- **Other Minor Permits**

Construction

- **Licensed to Build Full ISL Facility including Dryer with Maximum Annual Production of 2 Million Pounds Per Year**
- **Midway through Licensing Decided to Build Just to Front End of Plant – Filtration, Ion Exchange, & Lixiviate Make-Up, and Waste Water Disposal Circuits**
- **Ship Loaded Resin to Third-Party (Cameco) for Elution, Precipitation, Washing, Drying and Packaging**
- **Built Plant Building and Foundations for Full Plant Option so Can Install Full Plant when Needed**
- **Construction Completed in 2013**
- **Highly Automated Plant to Reduce Man Power Requirements**

Construction – Waste Water Disposal

ISR Mining in the U.S. Generates Waste Water that Must be Disposed of in a Legally Acceptable Manner

Sources of Waste Water:

- **Wellfield Bleed (~1% of total wellfield flow)**
- **Plant Wash Down**
- **Reverse Osmosis Brine from -**
 - **Mining**
 - **Groundwater Restoration**

Construction – Waste Water Disposal

Options for Waste Water Disposal in the U.S.

- **Evaporation Ponds**
- **Land Applied**
- **Deep Disposal Wells**

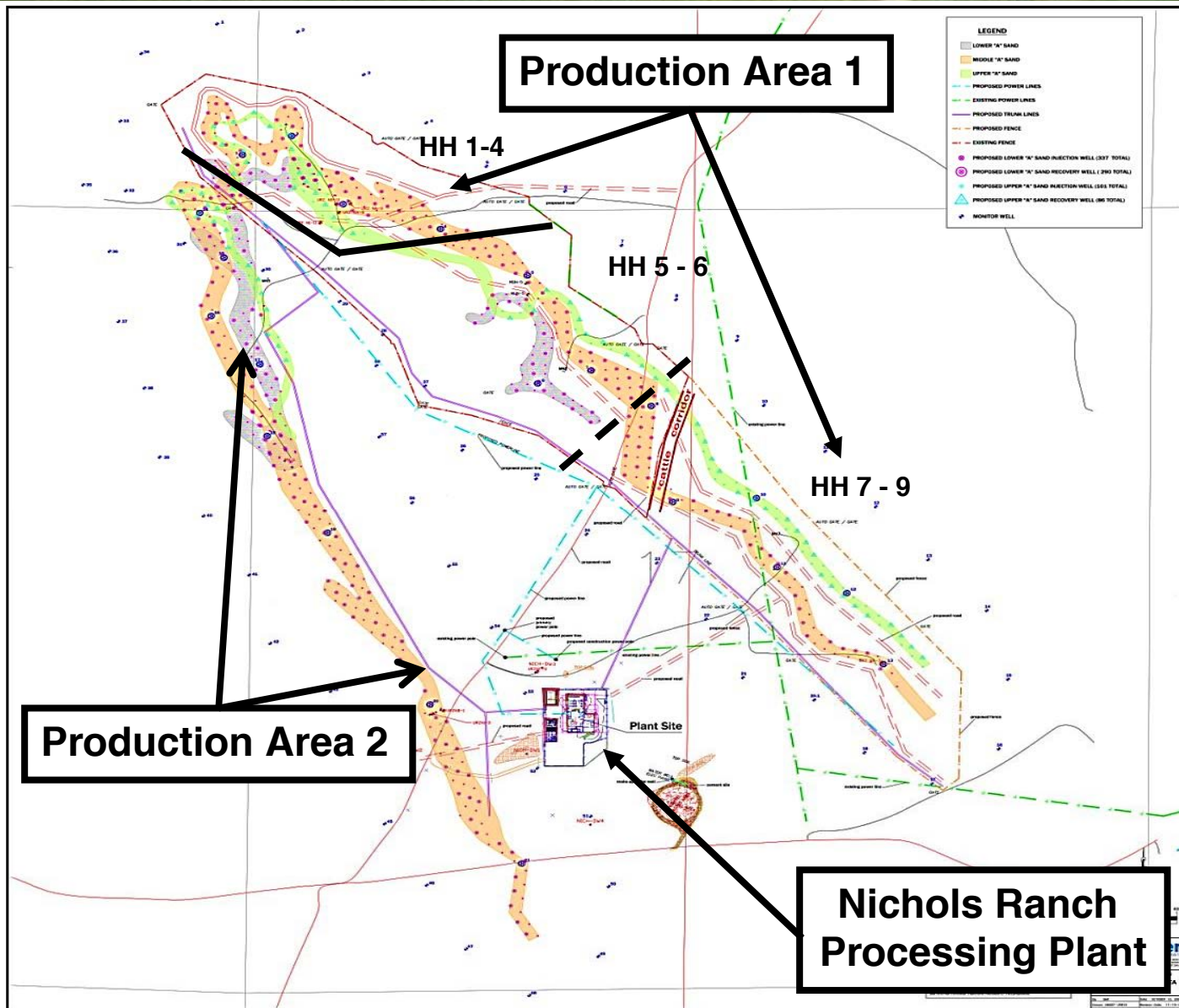
Uranerz Chose Deep Disposal Wells

- **NRC Required Two Wells for Redundancy**
- **Two Wells Installed**
- **Each Well is Capable of Handling All Waste Water during both Production and Aquifer Restoration**

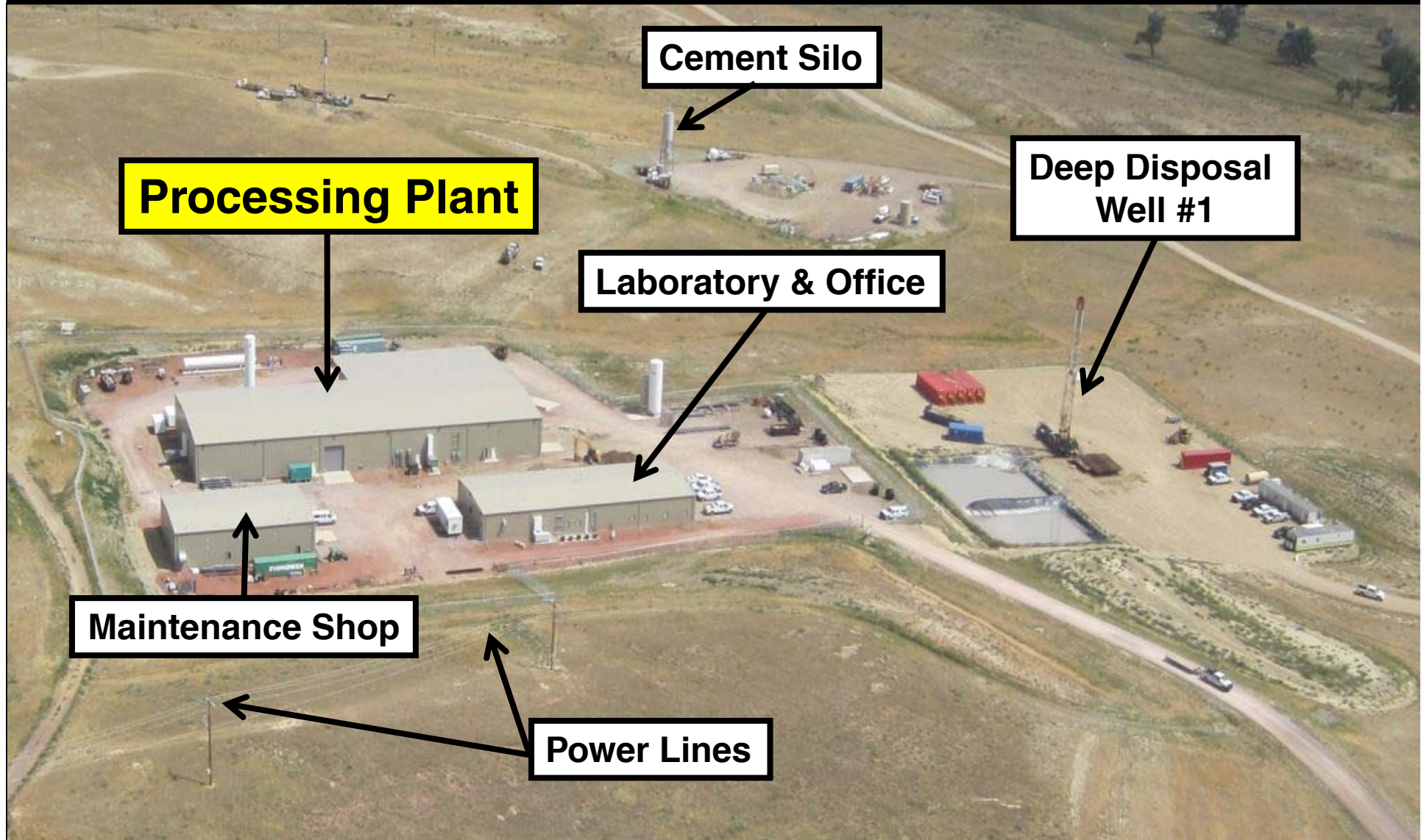
Nichols Ranch Operations

- **Mine Startup:** **April 15, 2014**
- **Production Target (2014):** **300,000 to 400,000 pounds (as U₃O₈)**
- **Plant Flow Capacity:** **3,600 gpm (818 m³/hr.)**
- **Three Long Term U.S. Domestic Sales Contracts:**
 - 1. Exelon – two contracts**
 - 2. Unnamed Large U.S. Nuclear Utilities**

Nichols Ranch Ore Body



Nichols Ranch ISL Project



Nichols Ranch Wellfield Installation



Header House – Internal Piping



Ion Exchange Columns & Sand Filters



Summary

Mine Name:	Nichols Ranch ISL Uranium Mine (newest uranium mine in North America)
Owner:	Uranerz Energy Corporation
Location:	Powder River Basin, Wyoming, USA
Mine Startup Date:	April 15, 2014
Lic. Production Rate:	Up to 2,000,000 pounds as (as U₃O₈) per year
Plant Flow Capacity:	3,600 gpm (818 m³/hr.)
Production Target (2014):	300,000 to 400,000 pounds (as U₃O₈)
Production Target (2015):	500,000 to 600,000 pounds (as U₃O₈)



CORPORATE HEADQUARTERS

1701 East "E" Street
P.O. Box 50850
Casper, Wyoming , USA 82605-0850
Tel: 307.265.8900

ADMINISTRATIVE AND IR OFFICE

Suite 1410 – 800 West Pender Street
Vancouver, BC
Canada V6C 2V6
Tel: 604.689.1659