Plains CO_2 Reduction (PCOR) Partnership Phase III

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Energy & Environmental Research Center

National Energy Technology Laboratory

U.S. Department of Energy
Carbon Storage R&D Project Review Meeting
Developing the Technologies and Building the
Infrastructure for CO_2 Storage

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Presentation Outline

- Project Overview
- Technical Discussion
- Project Wrap-Up

Benefit to the Program

- The research project is efficiently facilitating the deployment of commercial-scale carbon capture, utilization, and storage (CCUS) by implementing the key lessons learned through monitoring, verification, and accounting (MVA) strategies. These MVA strategies must be risk-based and site-specific. Wherever possible, the MVA technologies should be based on standard commercial practices and be commercially sustainable. The research project is continuing its efforts to facilitate the development of the North American regulatory and permitting framework, regional characterization, CO_2-transport infrastructure, and outreach and education. The commercial deployment of CCUS is more limited by economics and legal uncertainty than by technical challenges.
- This comprehensive research effort contributes to the Carbon Storage Program's effort to conduct field tests through 2030 to support the development of best practice manuals for site selection, characterization, site operations, and closure practices.

Project Overview:
Goals and Objectives

- In budget period (BP)3 (2007–2009), the focus of the program was to select two regionally significant yet different depositional geologic formation sites for large-volume (approximately 1 million tons of CO_2 a year) commercial tests designed to demonstrate that CO_2 storage sites have the potential to store regional CO_2 emissions safely, permanently, and economically for hundreds of years.
- The two sites selected were the Fort Nelson Carbon Capture and Storage (CCS) Project in northeastern British Columbia, Canada, and the Bell Creek Integrated CO_2 Enhanced Oil Recovery (EOR) and Storage Project in southeastern Montana.

Project Overview:

Goals and Objectives (continued)

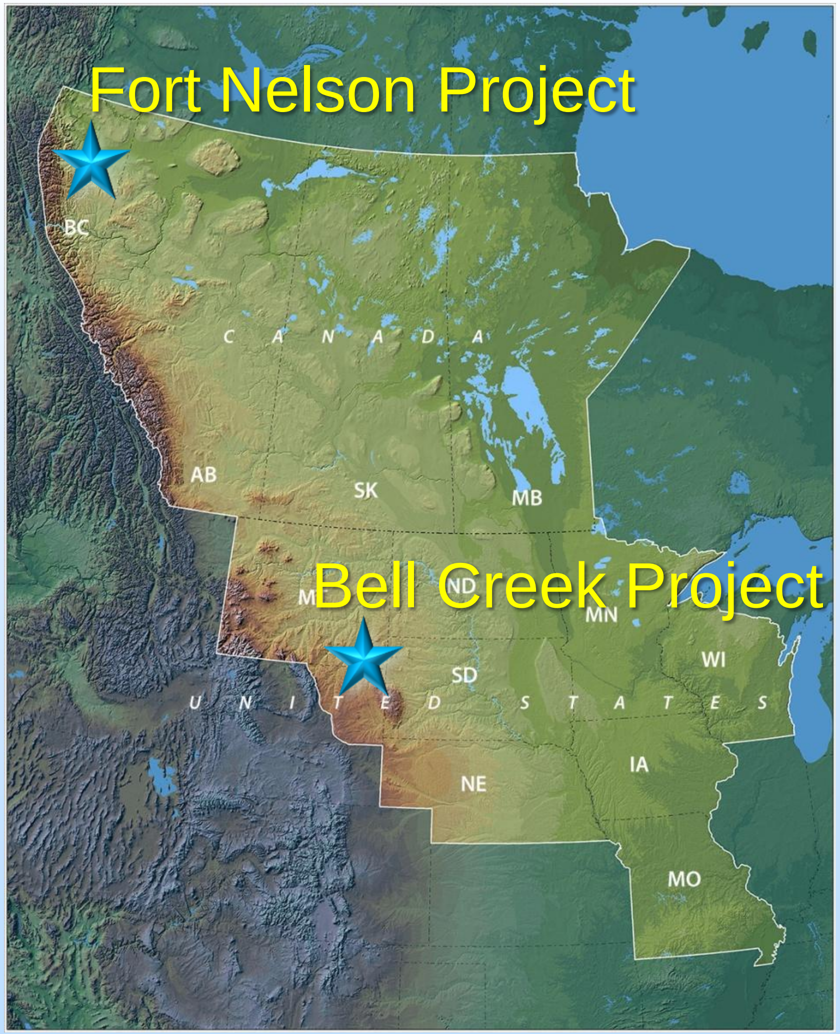
- In BP4 (2009–2015), the focus of the program is to inject CO_2 at commercial scale at two demonstration sites. For each site, the critical steps/decision points are 1) securing a CO_2 source, 2) permitting for pipelines and injection, 3) infrastructure development, 4) CO_2 injection, and 5) MVA implementation. Several years of injection and monitoring will be required in BP4 to move into the BP5 site closure and program wrap-up activities.
- The CO_2 sources for both sites have been secured. Permitting and infrastructure development are under way. CO_2 injection and MVA implementation will be occurring in the next several years.

Project Overview:
Goals and Objectives (continued)

- In BP5 (2016–2017), the focus of the program will be on site closure and project assessment. Since both demonstration projects are commercial and designed to run for decades, there will be no actual site closure, but instead, the PCOR Partnership will develop the information needed to assess the costs and technical considerations for those faced with CCUS site closure.

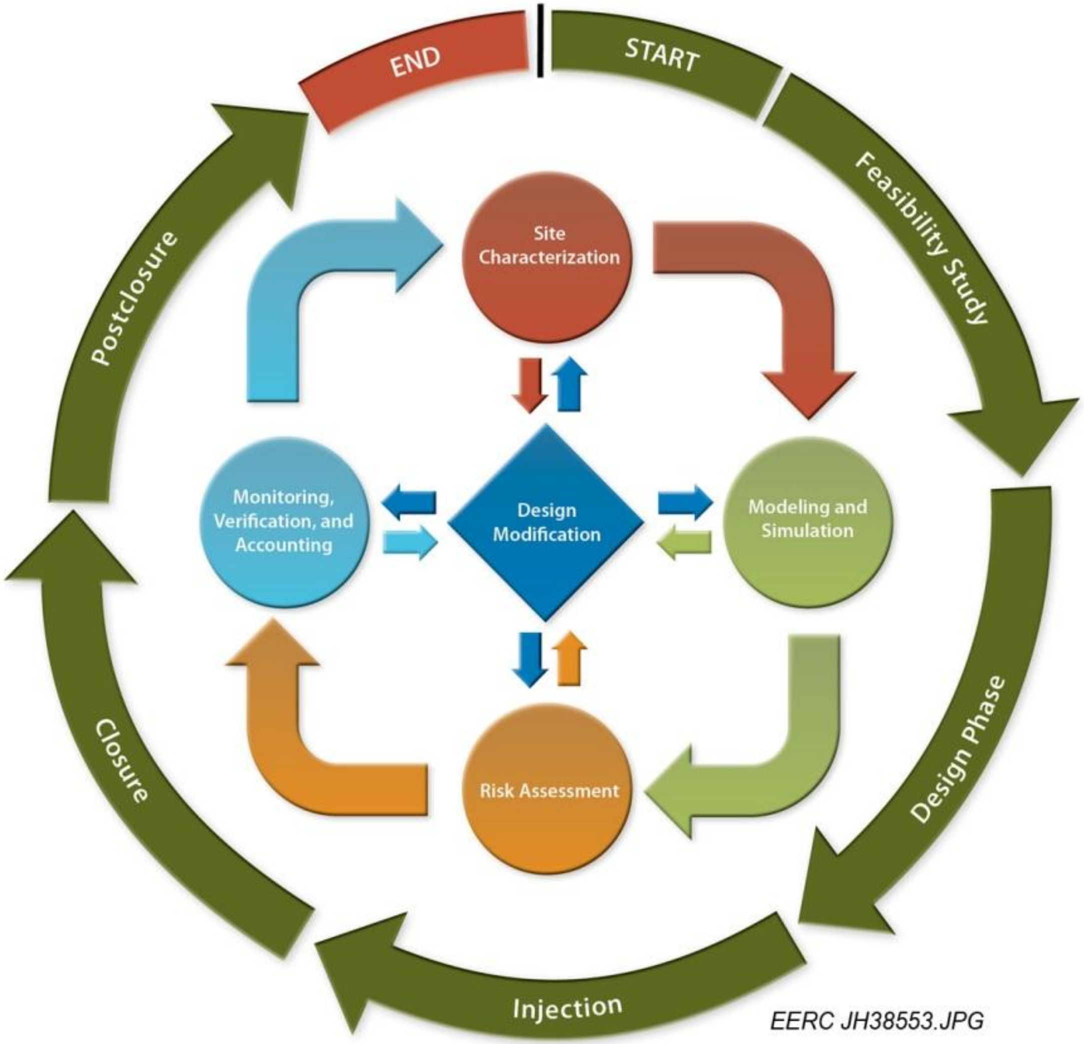
Commercial-Scale Demonstration Phase

- Two 1-million-ton/year-or-greater-scale demonstrations
  - EOR
  - Saline
- Ongoing and effective public outreach
- Continued regional characterization
- Continued involvement in other CO_2 storage projects in the region.
- Continued involvement in CCS and CO_2/EOR regulations



PCOR Partnership Objectives and Approach

- Risk-based approach to define MVA strategy
- Site characterization
- Modeling and simulation
- Risk assessment
- Cost-effective MVA plan



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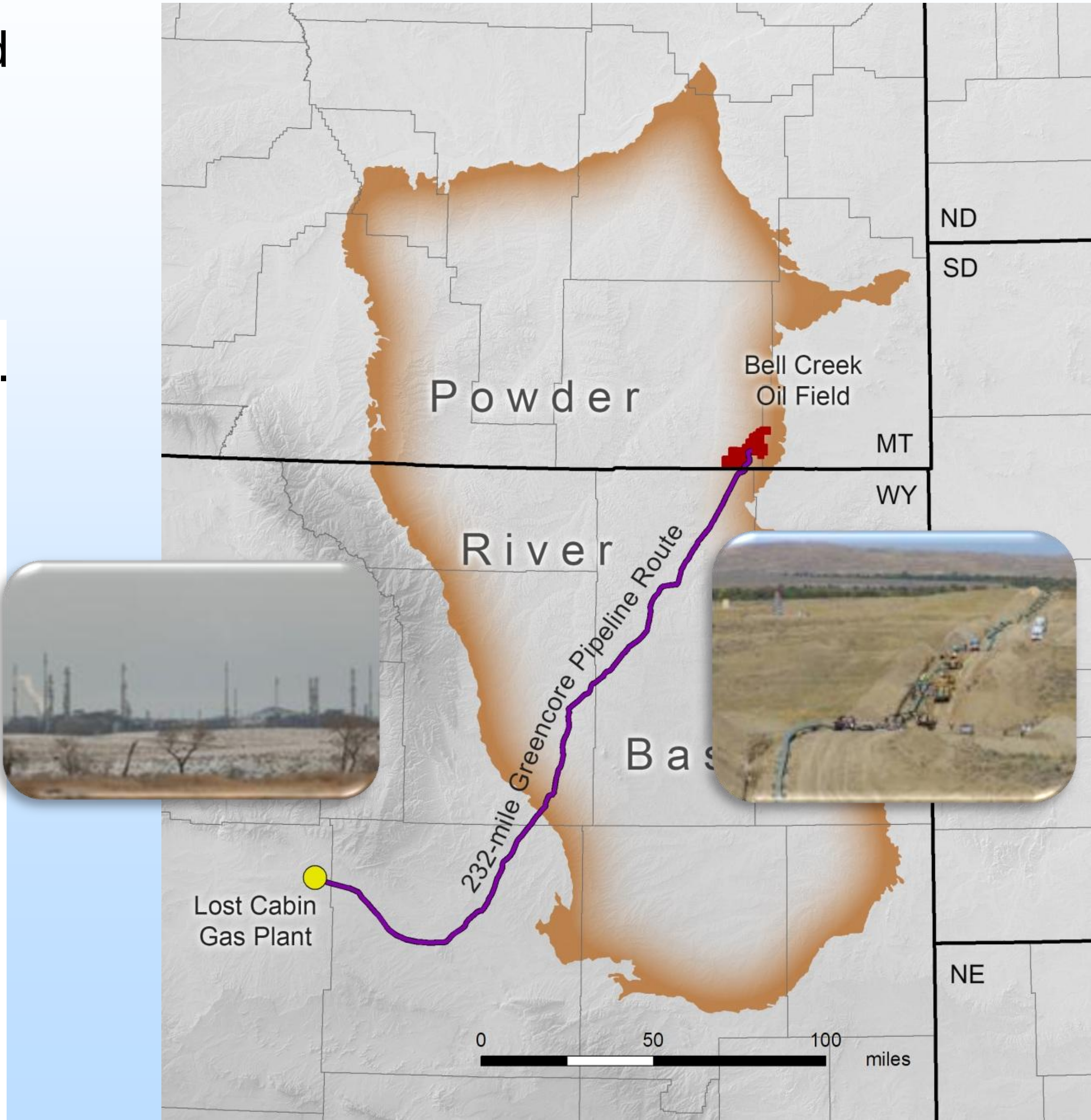
Bell Creek CO_2 EOR and Storage Project

- Bell Creek Oil Field is owned and operated by Denbury Onshore LLC (Denbury).
- CO_2 is sourced from ConocoPhillips' Lost Cabin natural gas-processing plant.

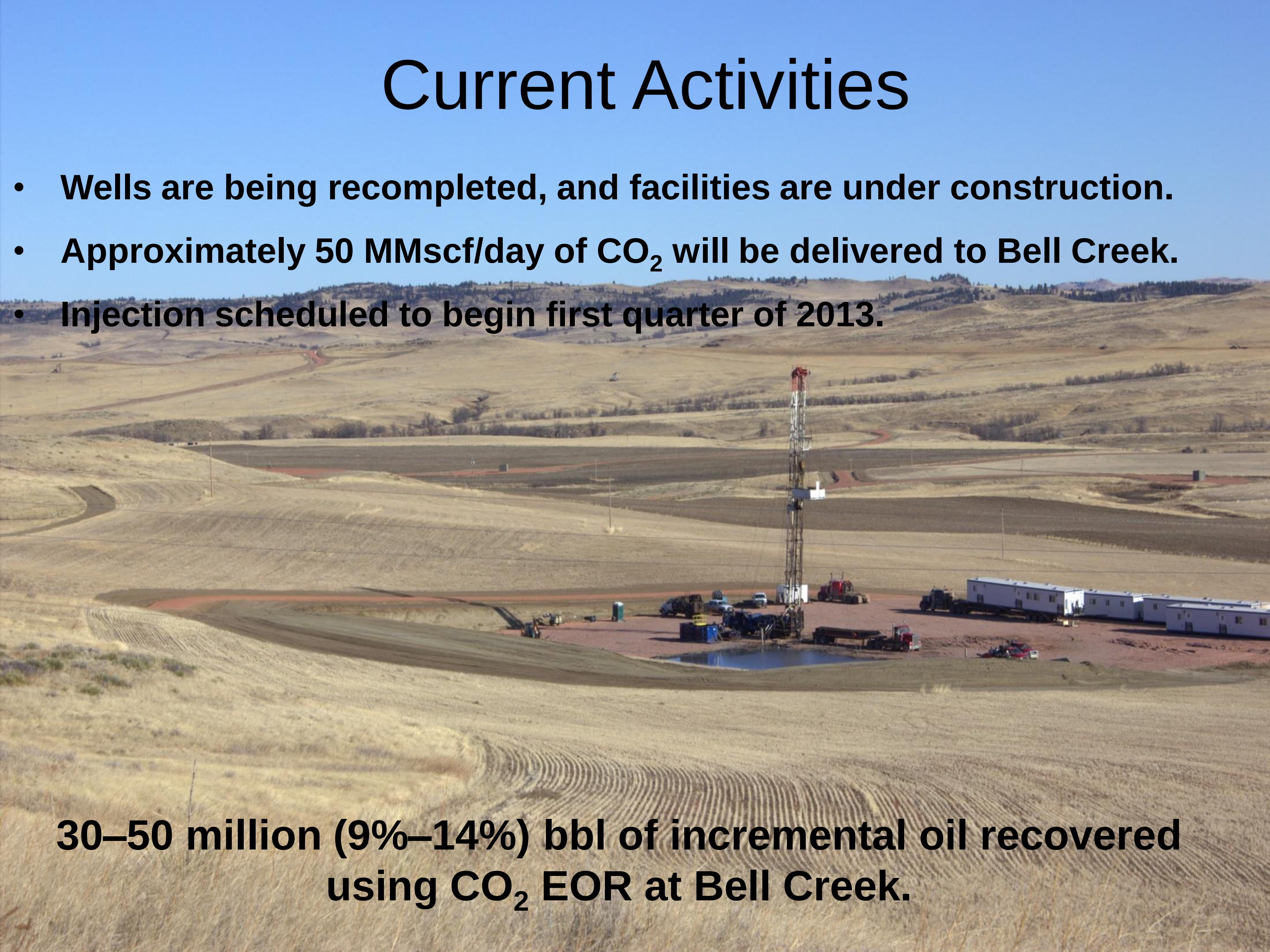


Field History

- **Discovered in 1967 (21,771 acres)**
- **Developed within 2 years (450+ wells)**
- **Primary production (solution gas drive), waterflooding, and two micellar polymer pilot tests**
- **Peak production 56,000 barrels of oil per day (August 1968)**
- **Current production 975 barrels of oil per day (45,100 barrels of water a day)**
- **Stock tank original oil in place (STOOIP) 353.5 million barrels of oil (MMbo)**
- **Cumulative production 133.4 MMbo (~38% recovery)**

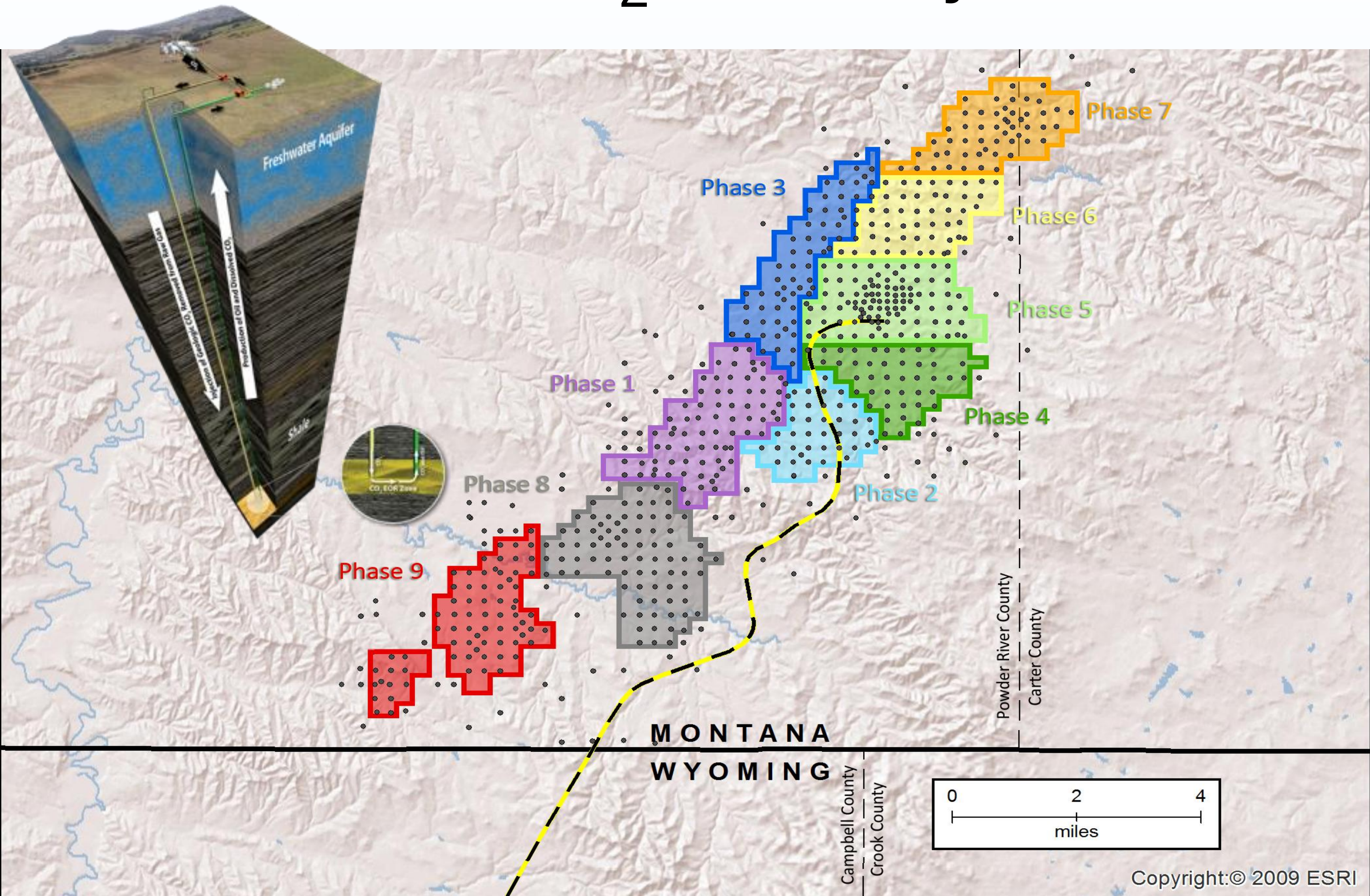
Current Activities

- **Wells are being recompleted, and facilities are under construction.**
- **Approximately 50 MMscf/day of CO_2 will be delivered to Bell Creek.**
- **Injection scheduled to begin first quarter of 2013.**

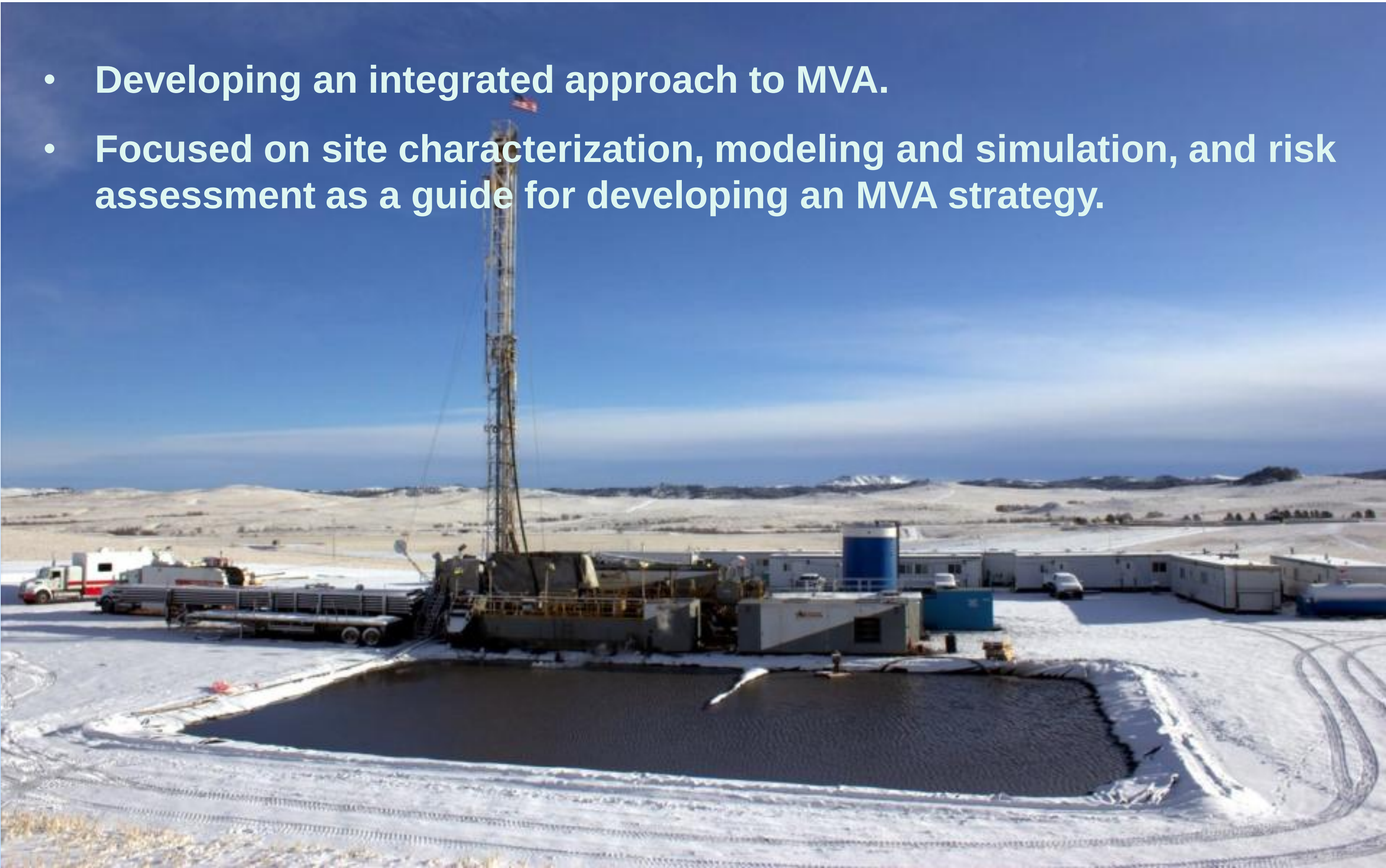


30–50 million (9%–14%) bbl of incremental oil recovered using CO_2 EOR at Bell Creek.

Phased CO_2 EOR Injection



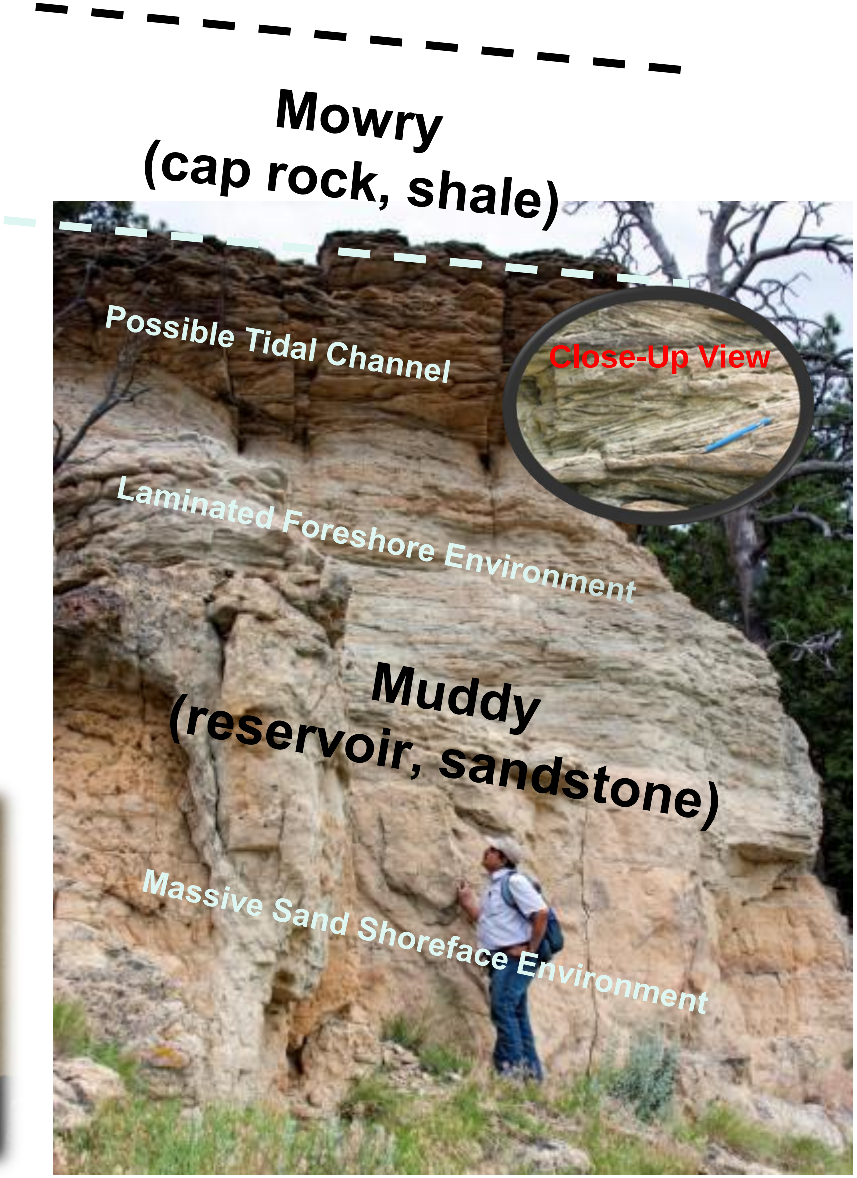
PCOR Partnership Activities at Bell Creek



- Developing an integrated approach to MVA.
- Focused on site characterization, modeling and simulation, and risk assessment as a guide for developing an MVA strategy.

Site Characterization

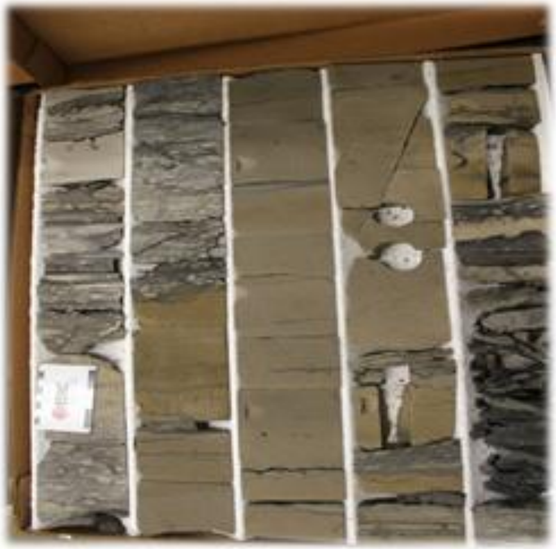
- Outcrop
- Core libraries (U.S. Geological Survey and Bureau of Economic Geology)
- Historic data (well files)
- LIDAR
- Dedicated data collection and monitoring well (December 2011)
  - Well log collection and analysis
  - Core collection and analysis
  - Downhole pressure and temperature sensors
- 3-D surface seismic survey
- Crosswell or vertical seismic profile (VSP)?



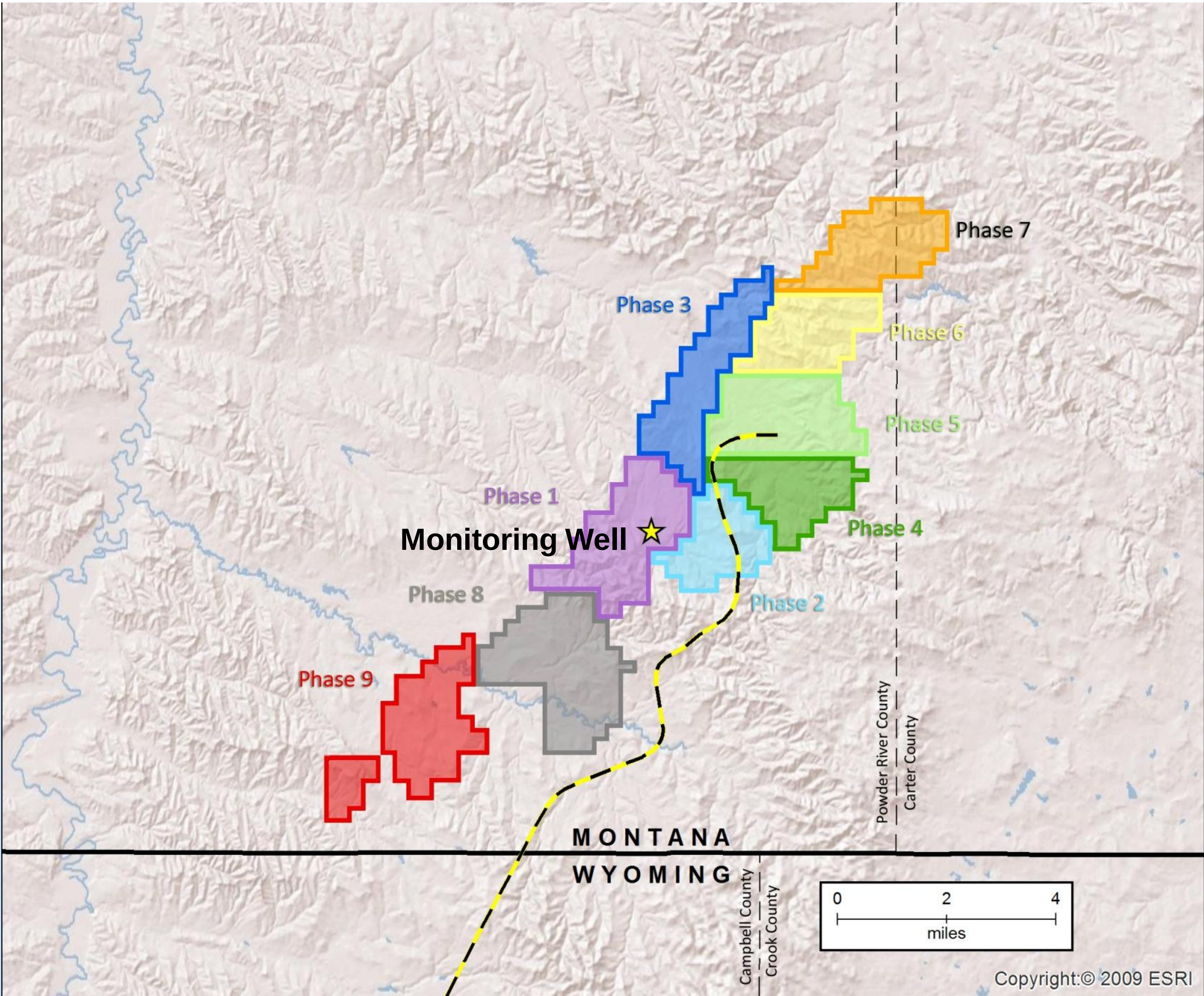
PCO2R Partnership

Site Characterization

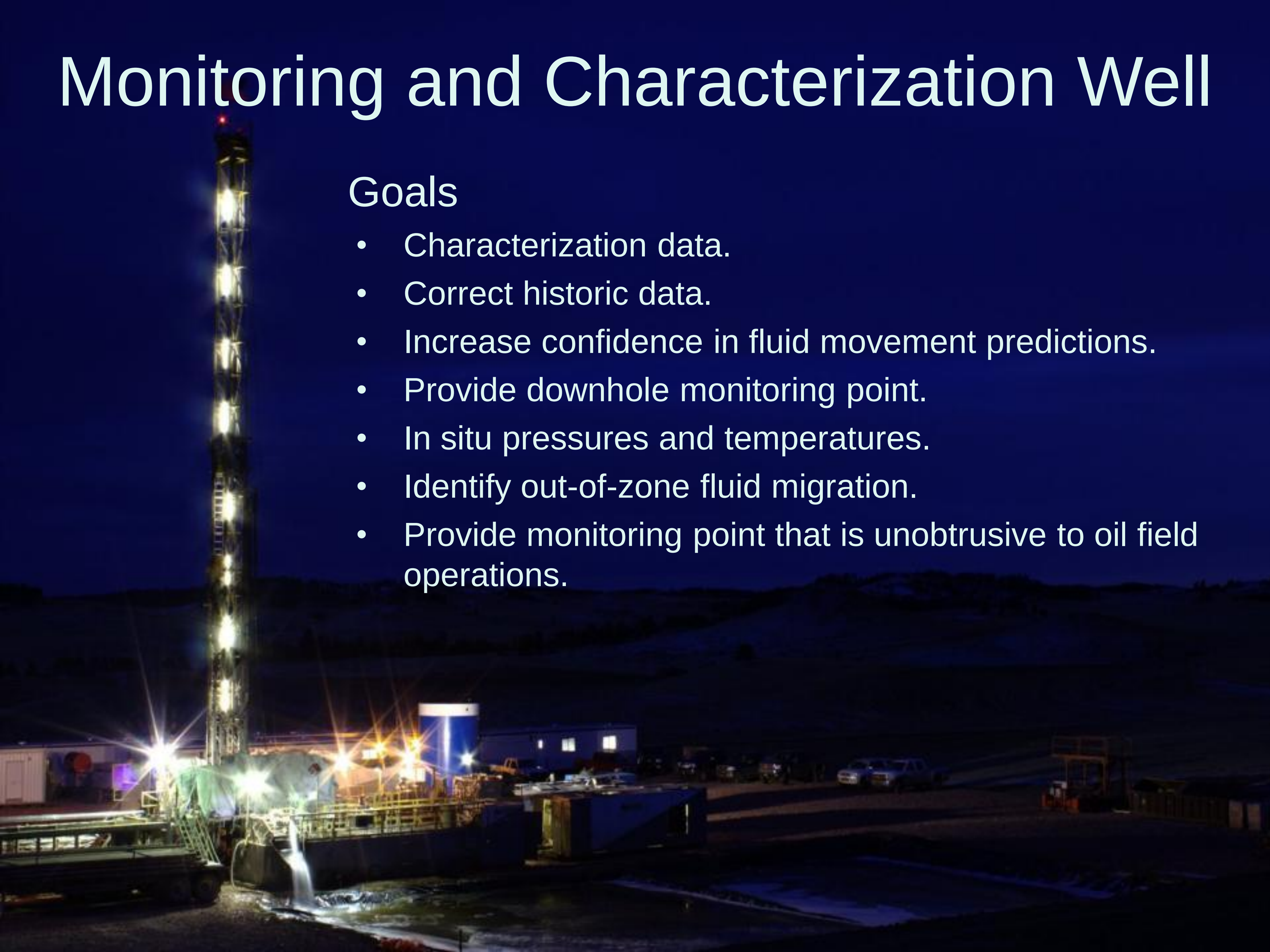
- The Muddy sandstone (only producing reservoir):
  - Depth = 4300–4500 ft
  - Gross thickness = 30–45 ft (Net 15–25 ft)
  - Normal permeability ranges = 100–1175 mD
  - High porosity = 25%–35% (loosely consolidated)
  - Oil gravity = 32 –41 API



Monitoring and Characterization Well



Monitoring and Characterization Well



Goals

- Characterization data.
- Correct historic data.
- Increase confidence in fluid movement predictions.
- Provide downhole monitoring point.
- In situ pressures and temperatures.
- Identify out-of-zone fluid migration.
- Provide monitoring point that is unobtrusive to oil field operations.

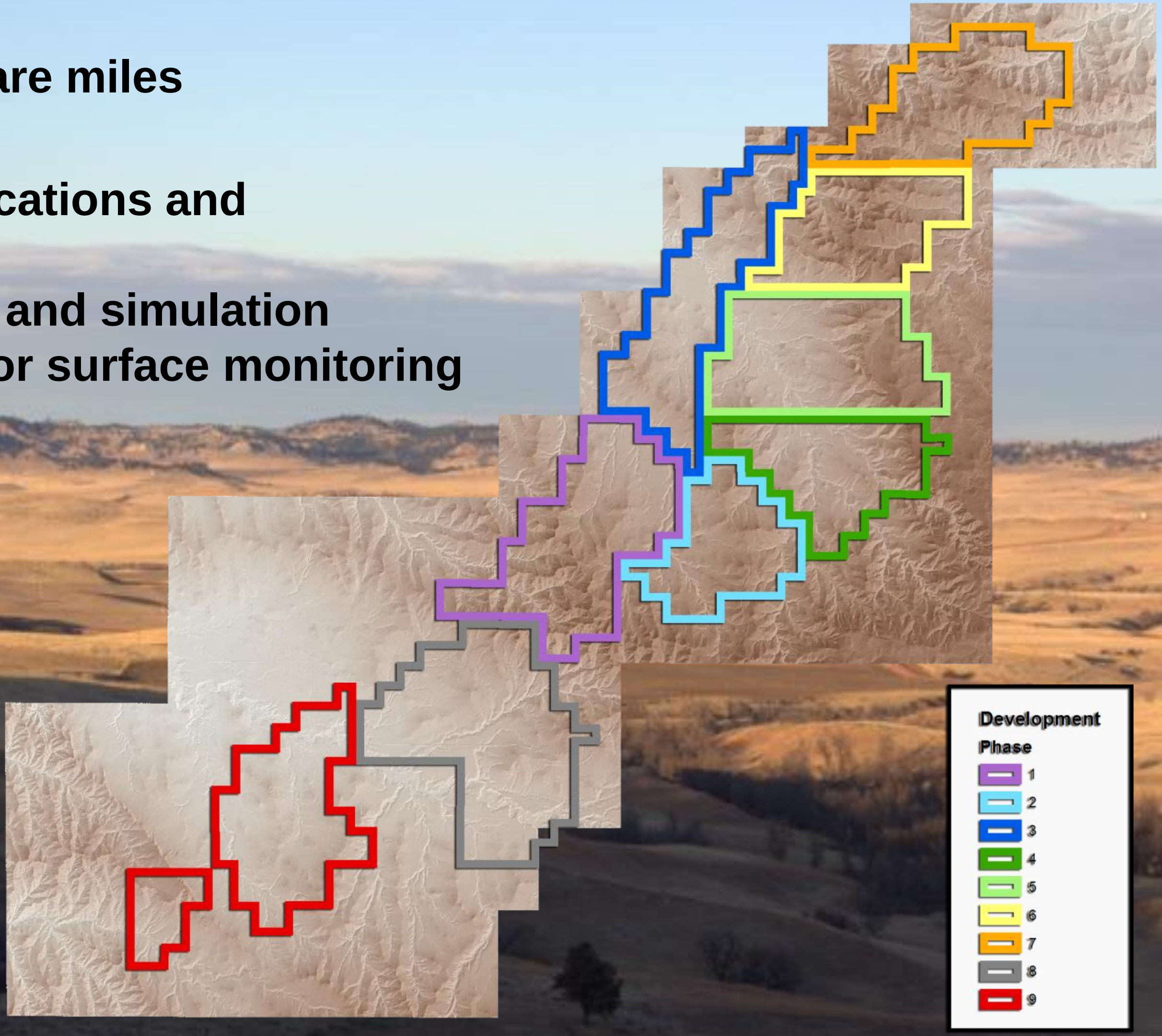
LIDAR Data (July 2011)

Area covered by lidar:

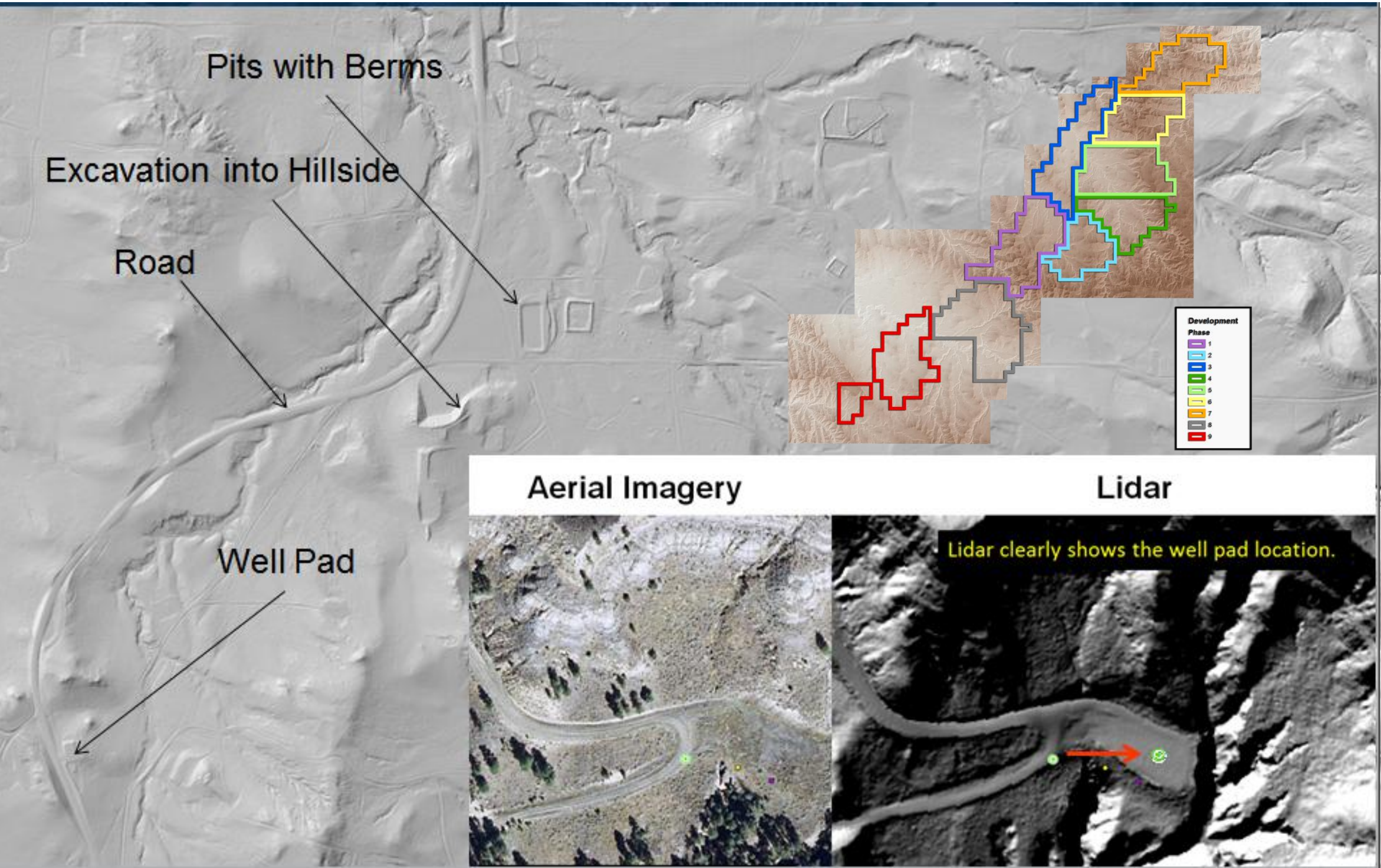
Approximately 75 square miles

Objective

- **Precisely place well locations and elevations**
  - **Geologic modeling and simulation**
  - **Locate wellheads for surface monitoring**



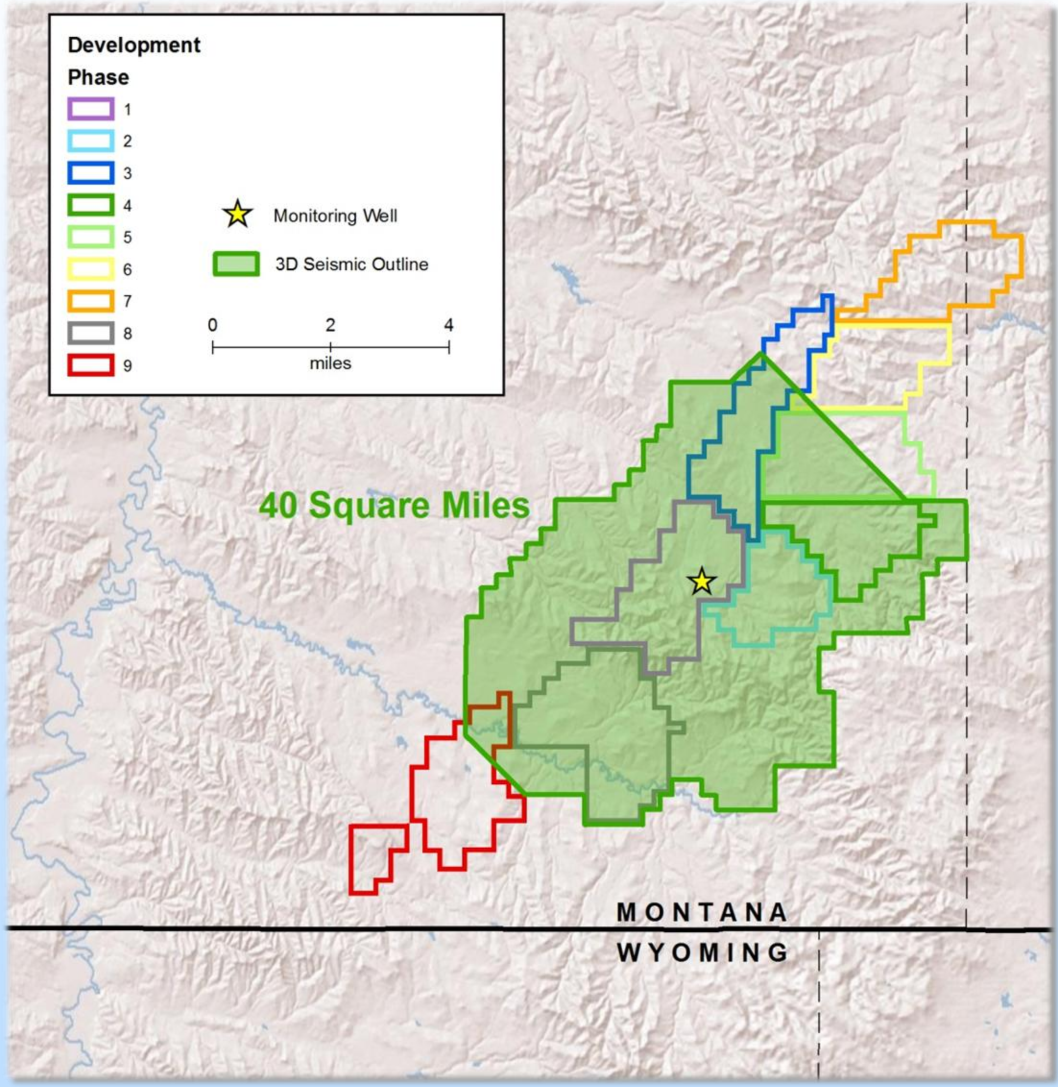
LIDAR

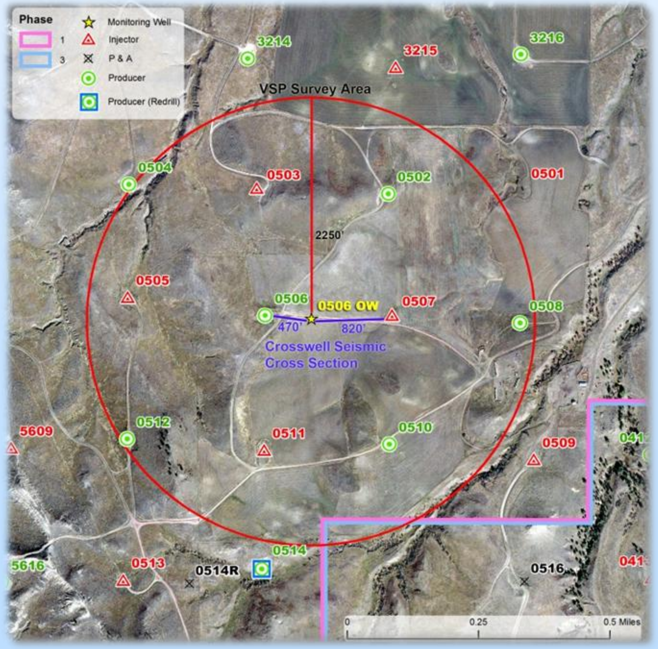


Lidar clearly shows the well pad location.

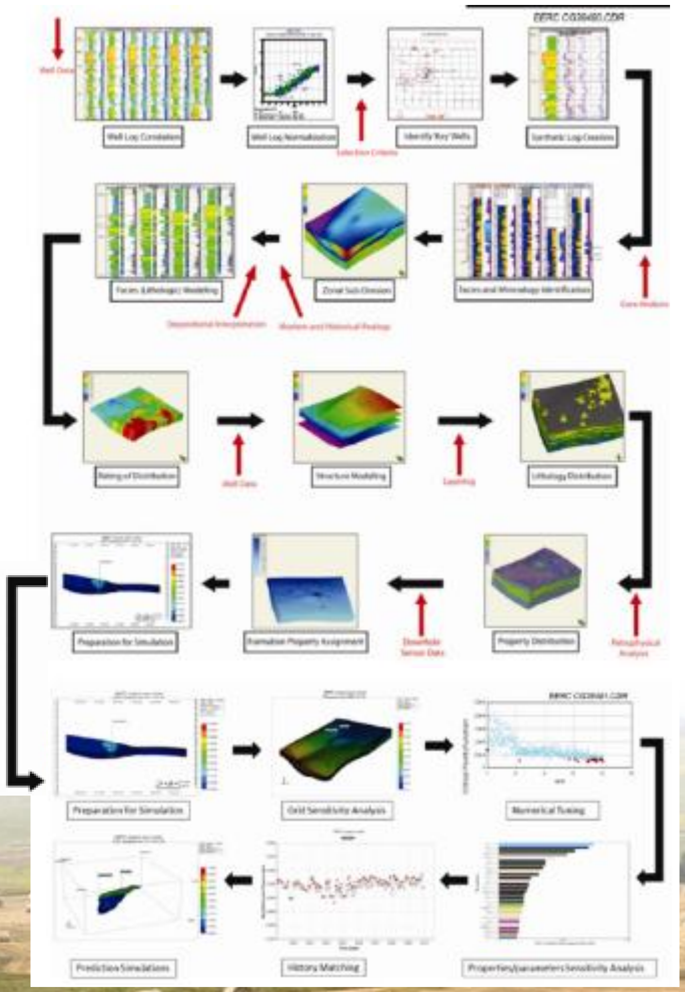
Seismic

- Assist with updip/downdip boundaries and reservoir structure.
- Provide baseline data for time-lapse seismic plume tracking.
- Check shot and seismic source testing completed December 2011.
  - Optimize survey parameters.





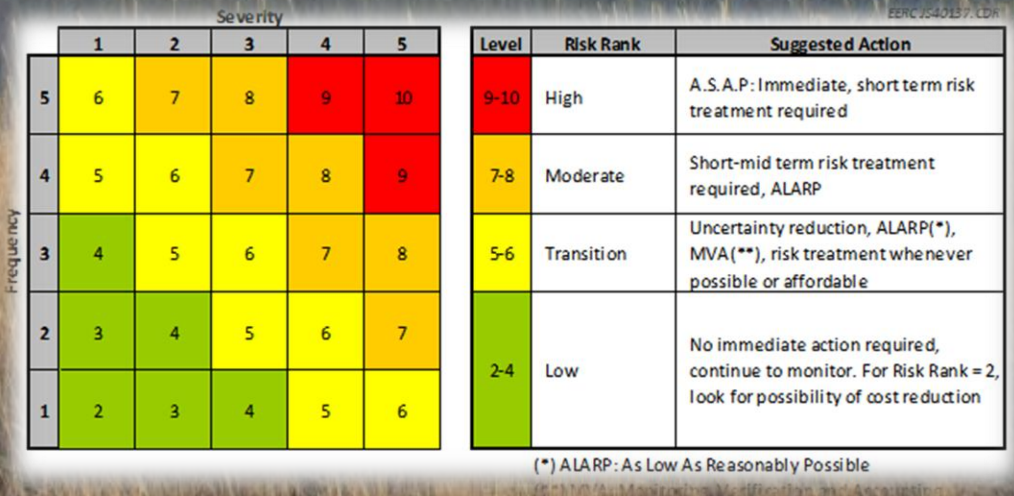
Modeling and Simulation



- Evaluate injection scenarios.
- Predict fluid migration pathways and area of influence at discrete time steps.
- Determine EOR and CO_2 storage efficiencies.
- Predict reservoir response to injection
- Aid in risk assessment
- Guide MVA program.

Risk Assessment

- Identify potential risks:
  - Injectivity
  - Containment
    - Reservoir
    - Wellbores
  - Retention
  - Capacity
- Mitigate and monitor unacceptable risks.
- Update based on monitoring and simulation.



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Frequency	Severity				
	1	2	3	4	5
5	6	7	8	9	10
4	5	6	7	8	9
3	4	5	6	7	8
2	3	4	5	6	7
1	2	3	4	5	6

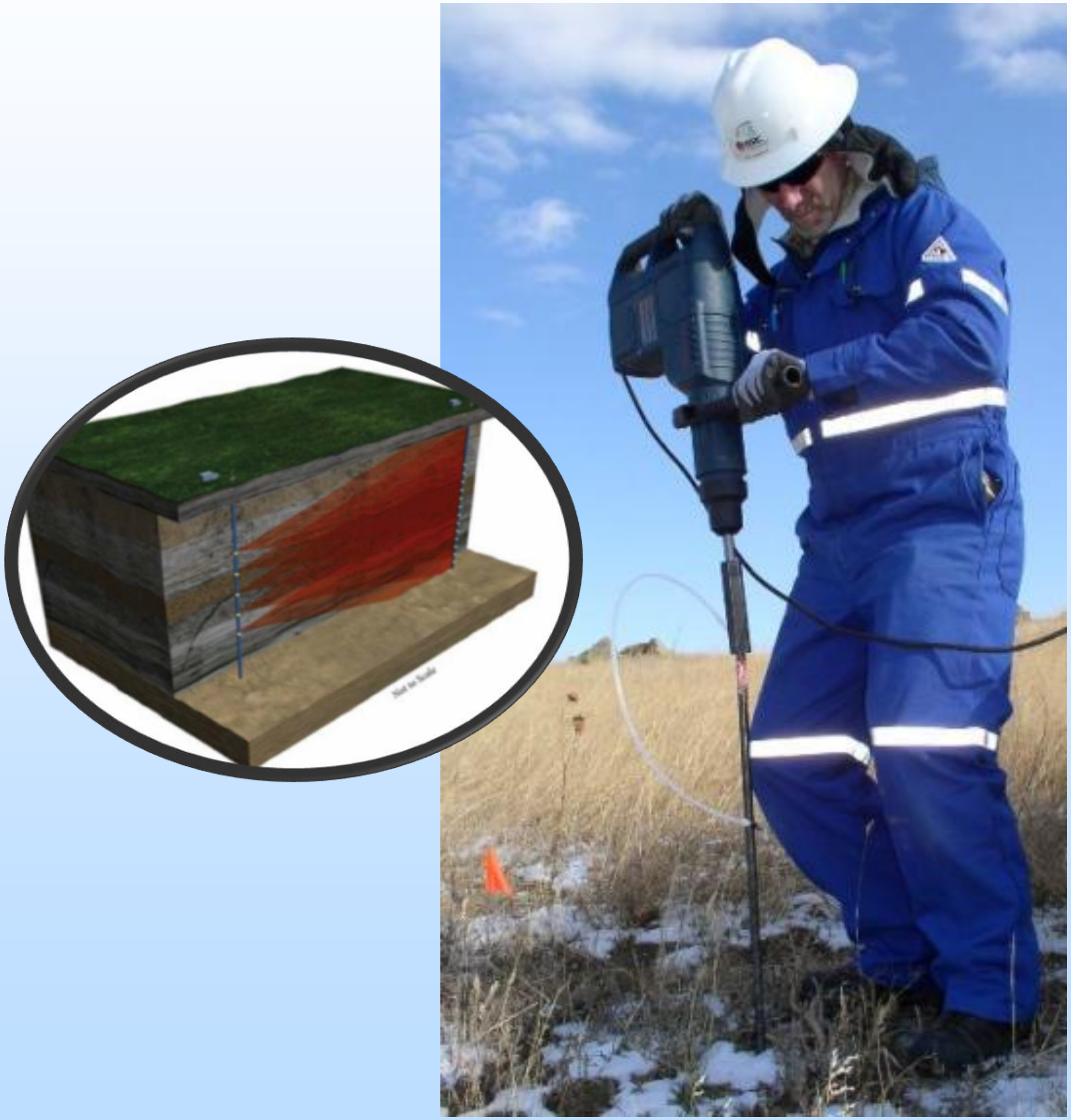
Level	Risk Rank	Suggested Action
9-10	High	A.S.A.P: Immediate, short term risk treatment required
7-8	Moderate	Short-mid term risk treatment required, ALARP
5-6	Transition	Uncertainty reduction, ALARP(*), MVA(**), risk treatment whenever possible or affordable
2-4	Low	No immediate action required, continue to monitor. For Risk Rank = 2, look for possibility of cost reduction

(*) ALARP: As Low As Reasonably Possible

(**) MVA: Monitoring, Verification and Accounting

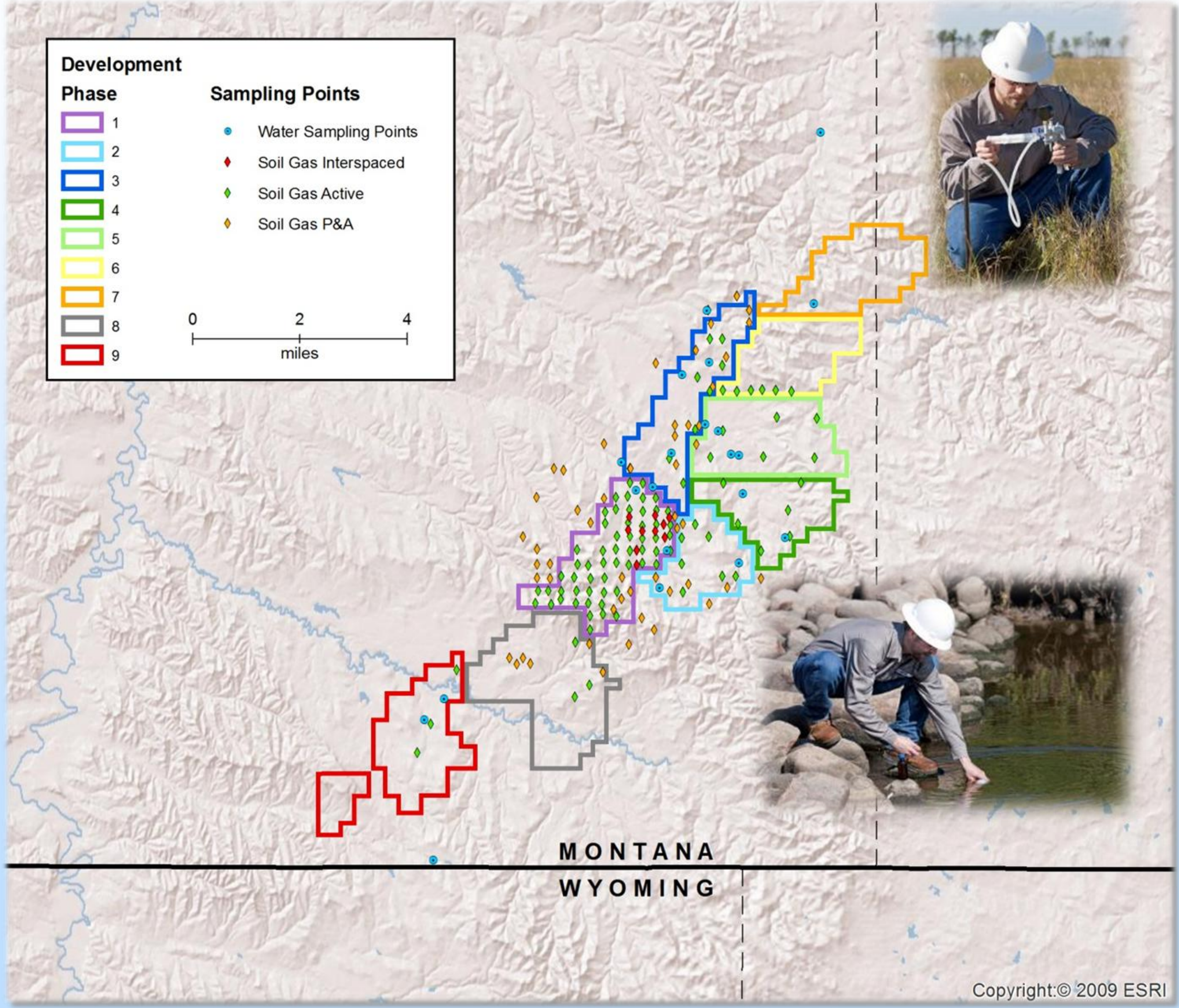
Bell Creek MVA Program

- CO_2 MVA program overlaid on a commercial EOR project
  - Guided by site characterization, modeling, simulation, and risk assessment
  - Compatibility with commercial project
  - Opportunity to supplement MVA program with commercial data
  - Focused on Phase 1 injection area
- Two-pronged approach:
  - Surface and near-surface
  - Reservoir



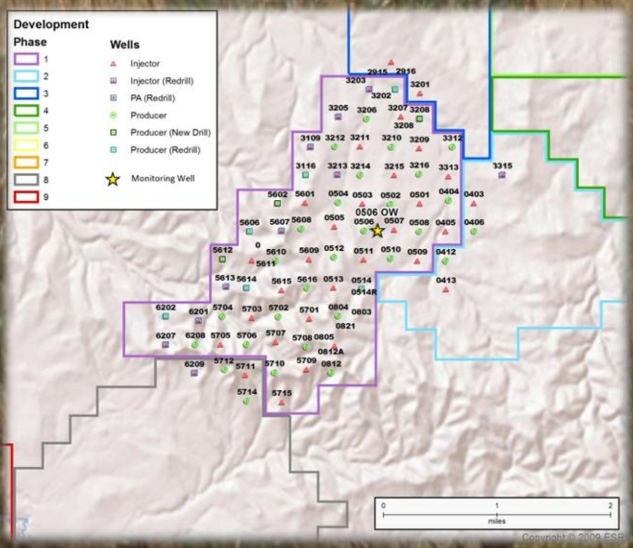
Surface and Near-Surface MVA Program

- 1-year baseline data set
  - Seasonal CO_2 variations over range of microenvironments
- Periodic postinjection surveys
- Identify and understand anomalies and verify site security:
  - Natural biological processes
  - Seasonal variations
  - Agricultural practices
  - Migration from depth

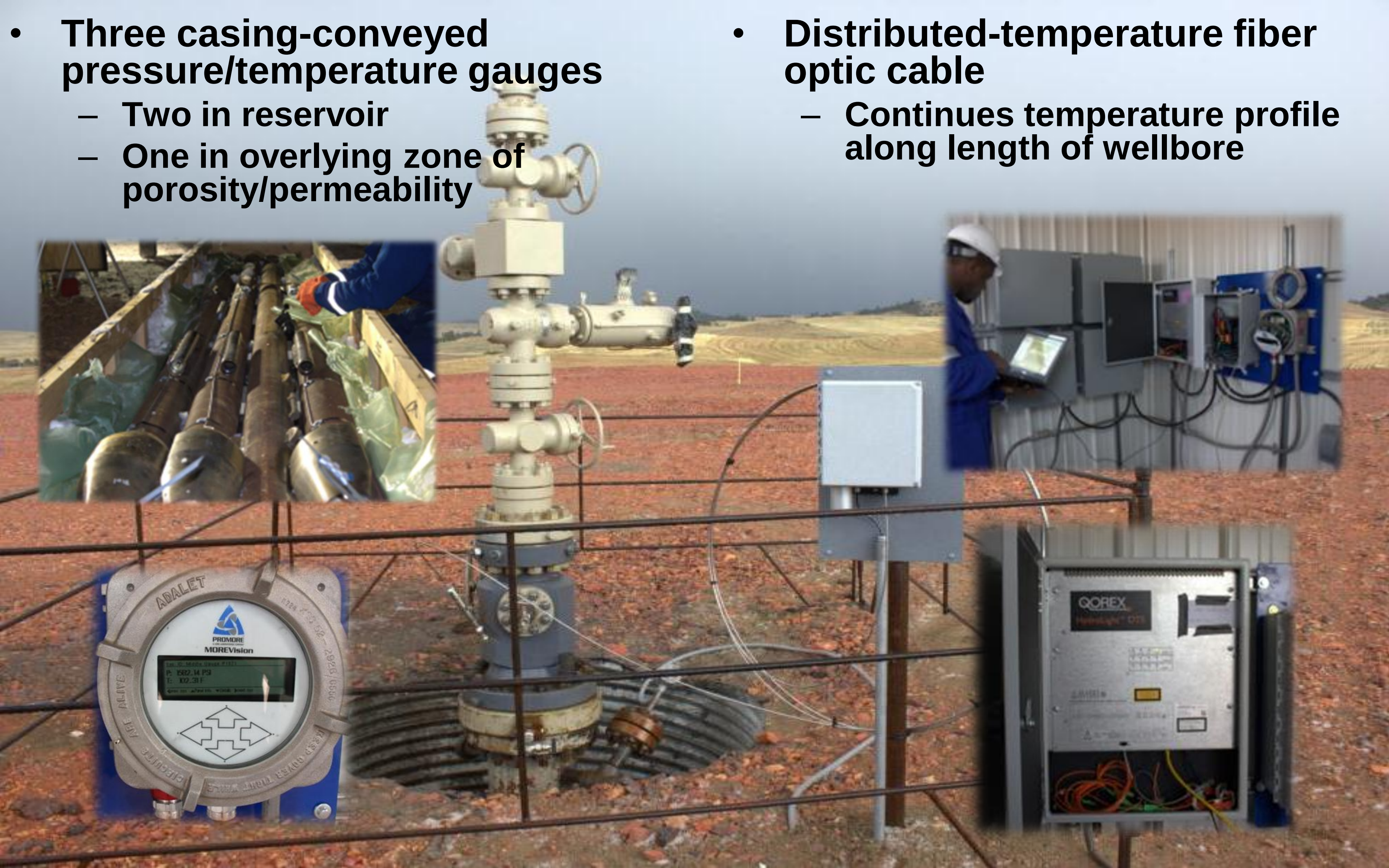


Reservoir MVA Program

- **Utilize existing infrastructure (commercial EOR project)**
- **Active wells outfitted with real-time sensors:**
  - **Surface and production casing pressure**
  - **Flow line and tubing pressure**
  - **Production tests and flow logs**
- **Seismic (time-lapse VSP, Crosswell, and 3-D surface).**
- **Pulsed neutron.**
- **Monitoring well installed January 2012.**

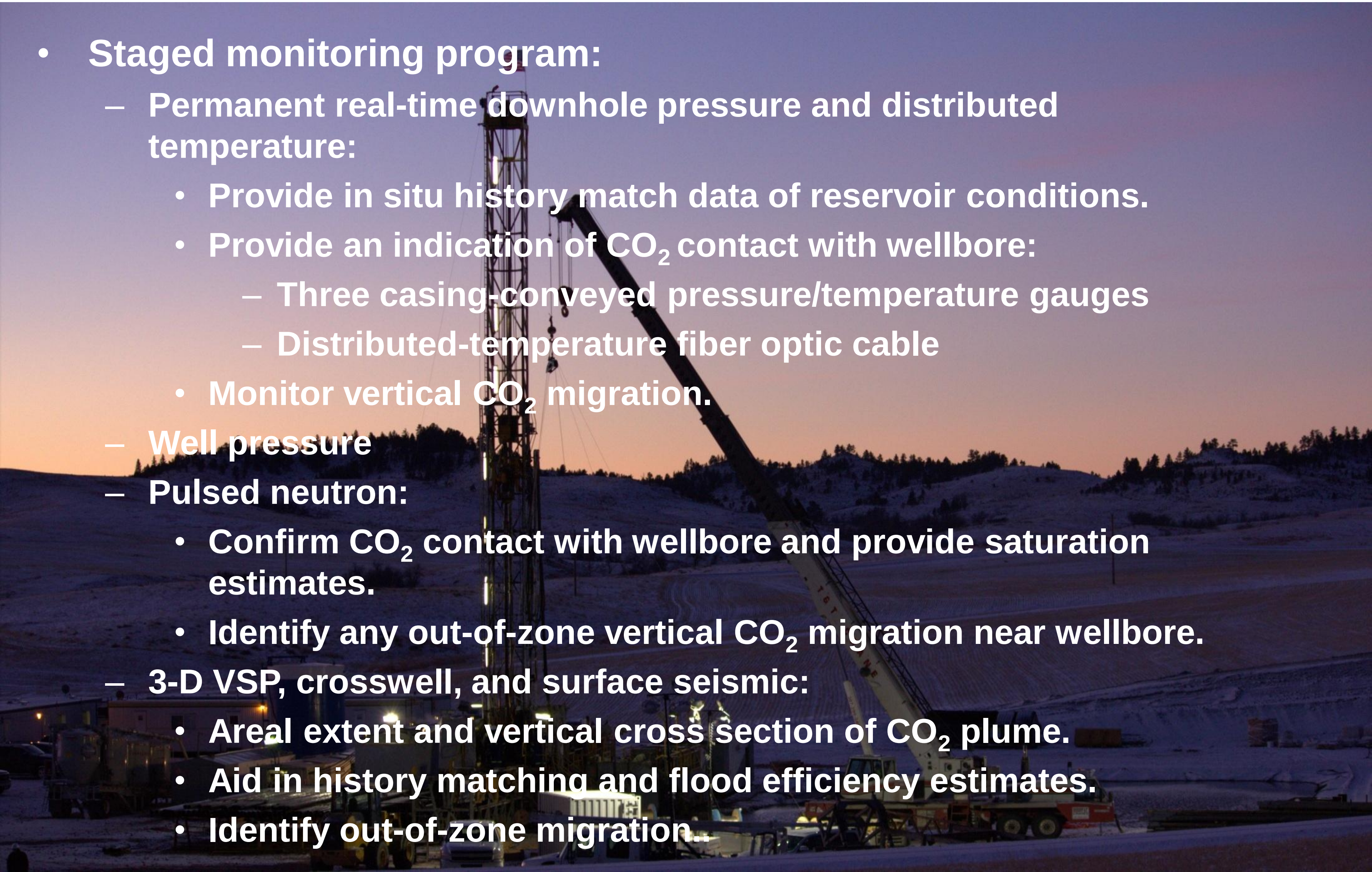


Monitoring and Characterization Well Real-Time Data



- **Three casing-conveyed pressure/temperature gauges**
  - **Two in reservoir**
  - **One in overlying zone of porosity/permeability**
- **Distributed-temperature fiber optic cable**
  - **Continues temperature profile along length of wellbore**

Monitoring and Characterization Well



- **Staged monitoring program:**
  - **Permanent real-time downhole pressure and distributed temperature:**
    - **Provide in situ history match data of reservoir conditions.**
    - **Provide an indication of CO_2 contact with wellbore:**
      - **Three casing-conveyed pressure/temperature gauges**
      - **Distributed-temperature fiber optic cable**
    - **Monitor vertical CO_2 migration.**
  - **Well pressure**
  - **Pulsed neutron:**
    - **Confirm CO_2 contact with wellbore and provide saturation estimates.**
    - **Identify any out-of-zone vertical CO_2 migration near wellbore.**
  - **3-D VSP, crosswell, and surface seismic:**
    - **Areal extent and vertical cross section of CO_2 plume.**
    - **Aid in history matching and flood efficiency estimates.**
    - **Identify out-of-zone migration..**

Bell Creek Status and Next Steps

Status

- First round of site characterization complete.
  - Drilled and completed monitoring well winter 2011/12.
  - Currently acquiring 3D surface seismic.
- First round of modeling and simulation, and risk assessment complete.
- Four rounds of surface and near-surface monitoring complete.
- Pipeline construction is under way.
- Phase 1 of field preparation for injection is under way.

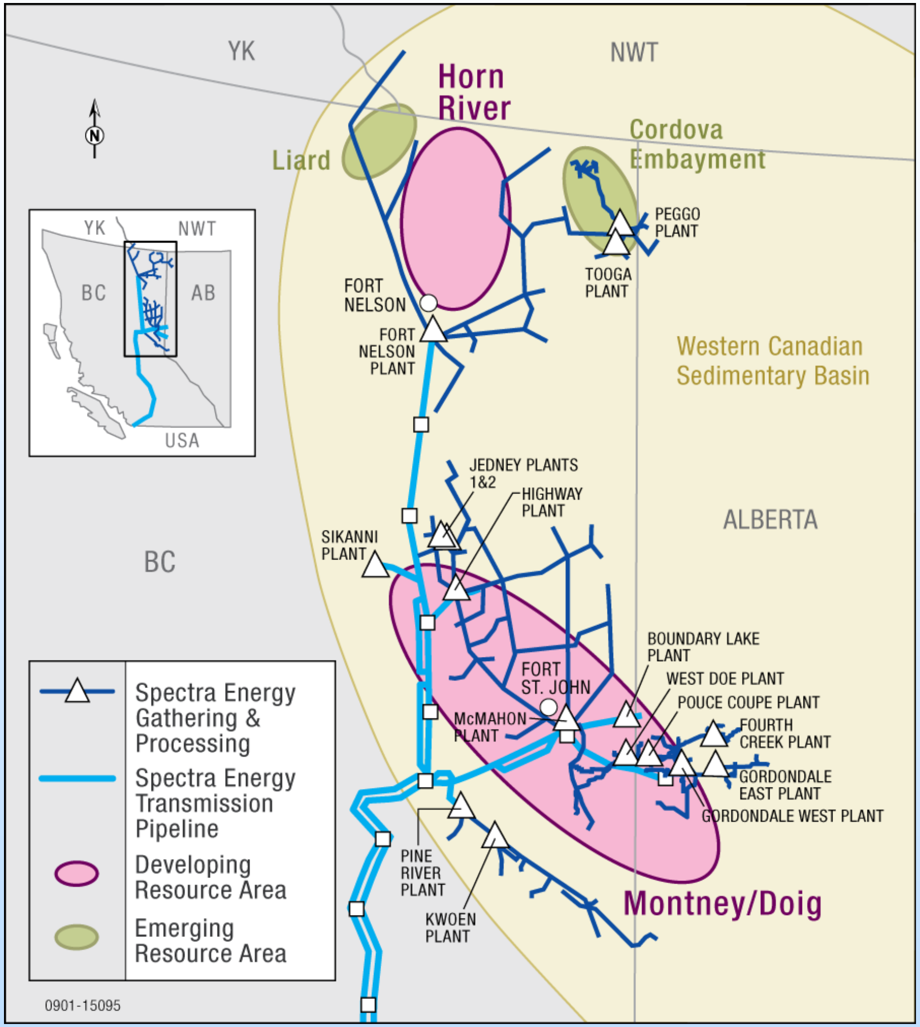
Next Steps

- Conduct fifth baseline surface and near-surface sampling in Nov 2012.
- Conduct a large pulsed neutron logging campaign.
- Reenter existing wells in the field to use as additional deep monitoring points.
- Complete baseline MVA plan.
- Pipeline to be completed December 2012.
- Injection to begin first quarter of 2013.

Fort Nelson CCS in a Deep Saline Formation

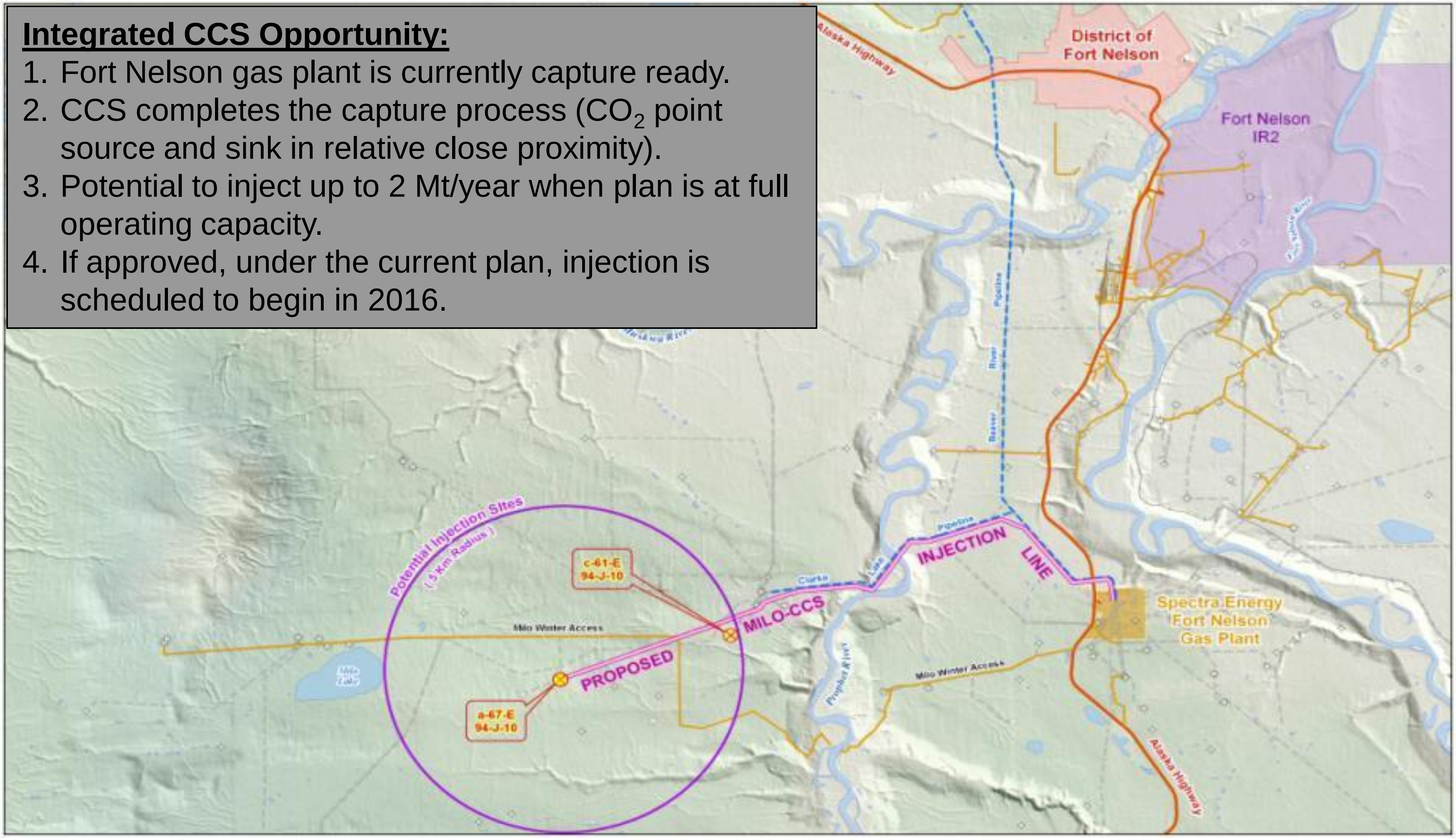
Drill rig and camp site near Fort Nelson, British Columbia, Canada

Spectra Energy's Fort Nelson Gas Plant



- 1 Bcf/d raw gas-processing capacity – largest facility of its kind of North America.
- Spectra Energy gathering and processing assets are strategically positioned in the growing Horn River Basin, processing both conventional and unconventional shale gas resources.
- The proposed Fort Nelson CCS project is a potential solution to mitigate CO_2 emissions as shale gas production grows.

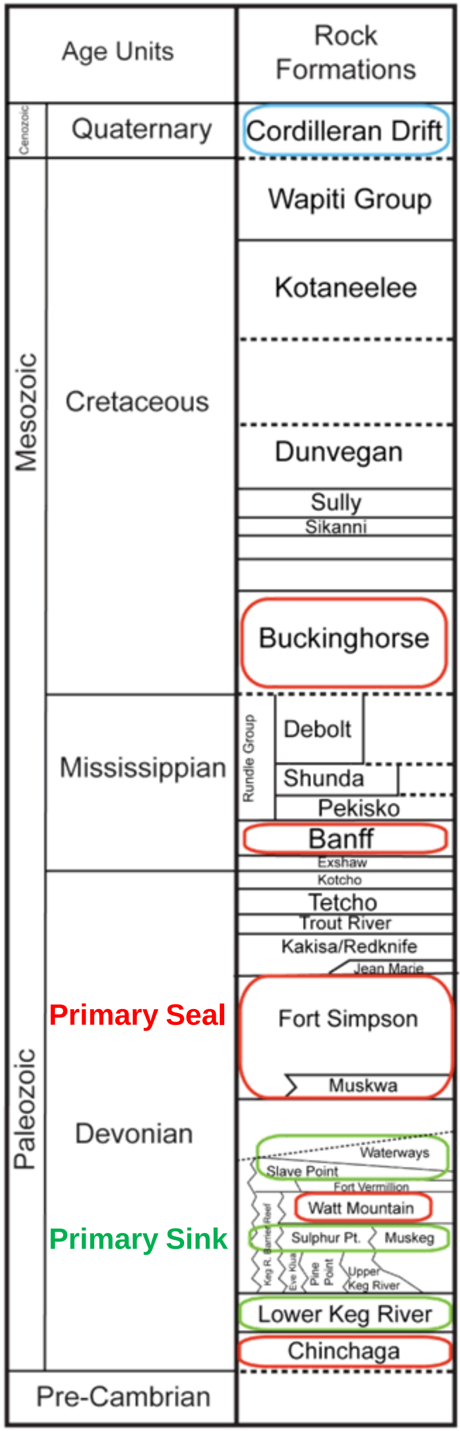
Fort Nelson CCS Feasibility Project – Main Components



Integrated CCS Opportunity:

1. Fort Nelson gas plant is currently capture ready.
2. CCS completes the capture process (CO_2 point source and sink in relative close proximity).
3. Potential to inject up to 2 Mt/year when plan is at full operating capacity.
4. If approved, under the current plan, injection is scheduled to begin in 2016.

Site Characterization



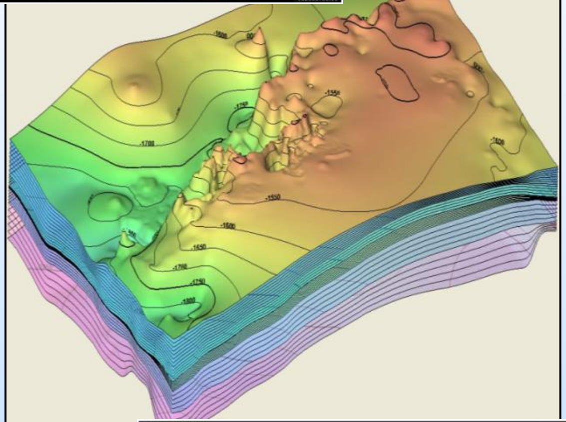
93 wells in study area

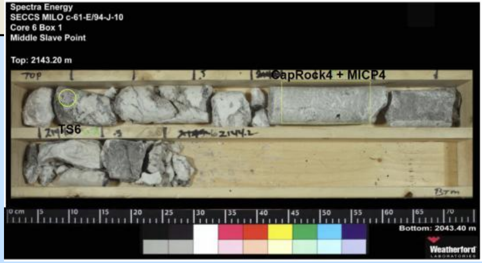
Historical 2-D and 3-D seismic

Hydrogeological studies

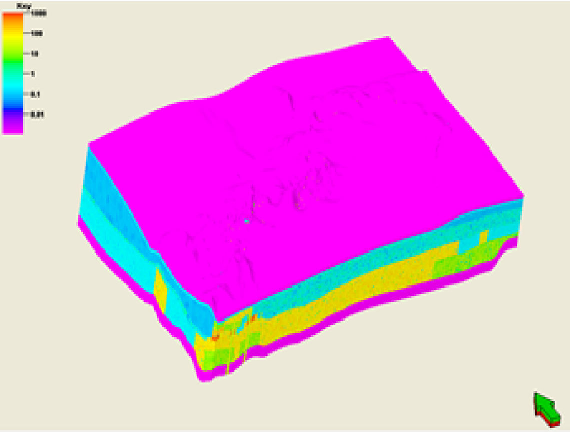
Test Well – C-61-E

- Core and cuttings
- Formation pressures
- Formation fluids
- Water injection testing
- Cap rock integrity testing
- Solubility testing
- Relative permeability testing
- Hg injection capillary pressure tests
- Geochemical reactivity testing

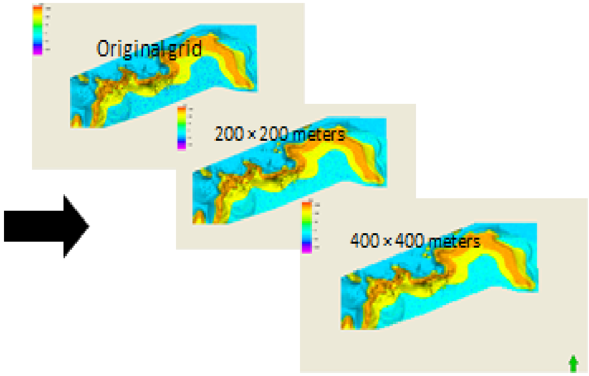




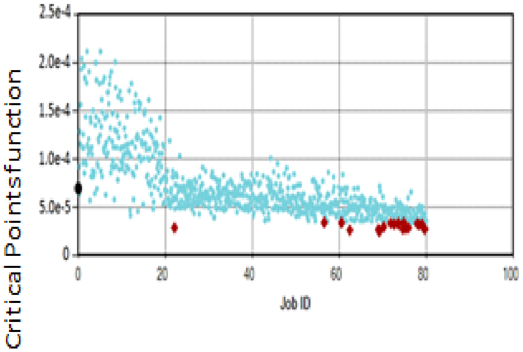
Modeling and Simulation



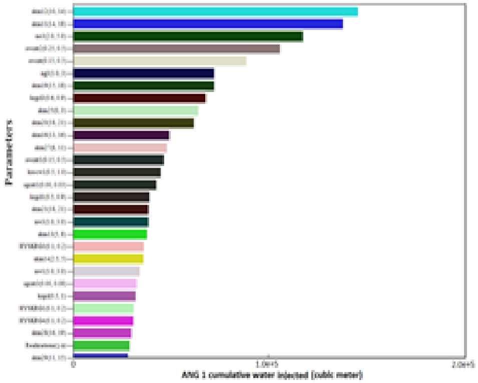
Preparation for Simulation



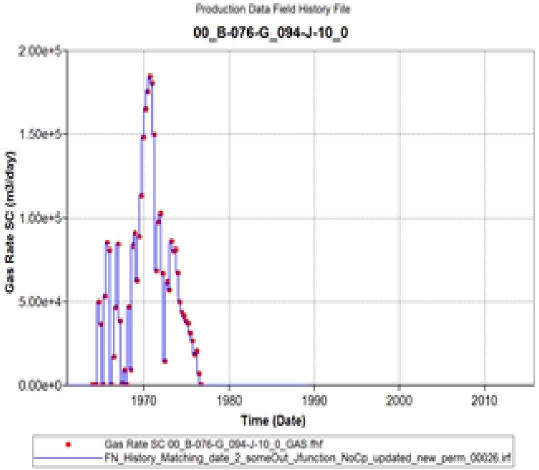
Grid Sensitivity Analysis



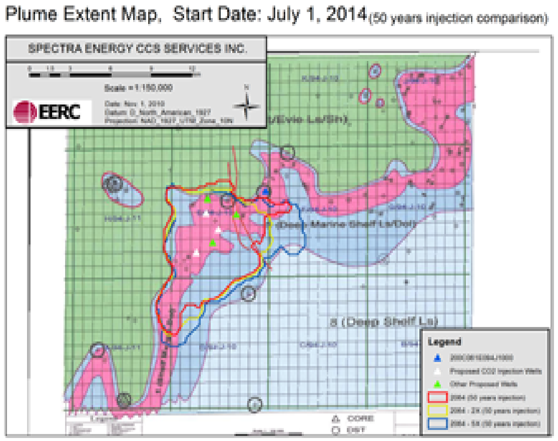
Numerical Tuning



Properties/parameters Sensitivity Analysis



History Matching



Prediction Simulations

Risk Management Fort Nelson

- First-round risk assessment (2010) indicated four areas that could impact the project period.
  - Sour CO_2 contamination of two currently producing gas pools.
  - Pressure changes could adversely affect nearby natural gas production and water disposal operations.
  - Loss of injectivity.
  - Insufficient storage volume.
- Most of these risks are because of geological uncertainty due to limited data.
- The results of the first-round risk assessment were used to adjust the injection location to reduce project risks.
- Second round of risk assessment using potential new injection locations and updated geological model was completed in summer 2011.

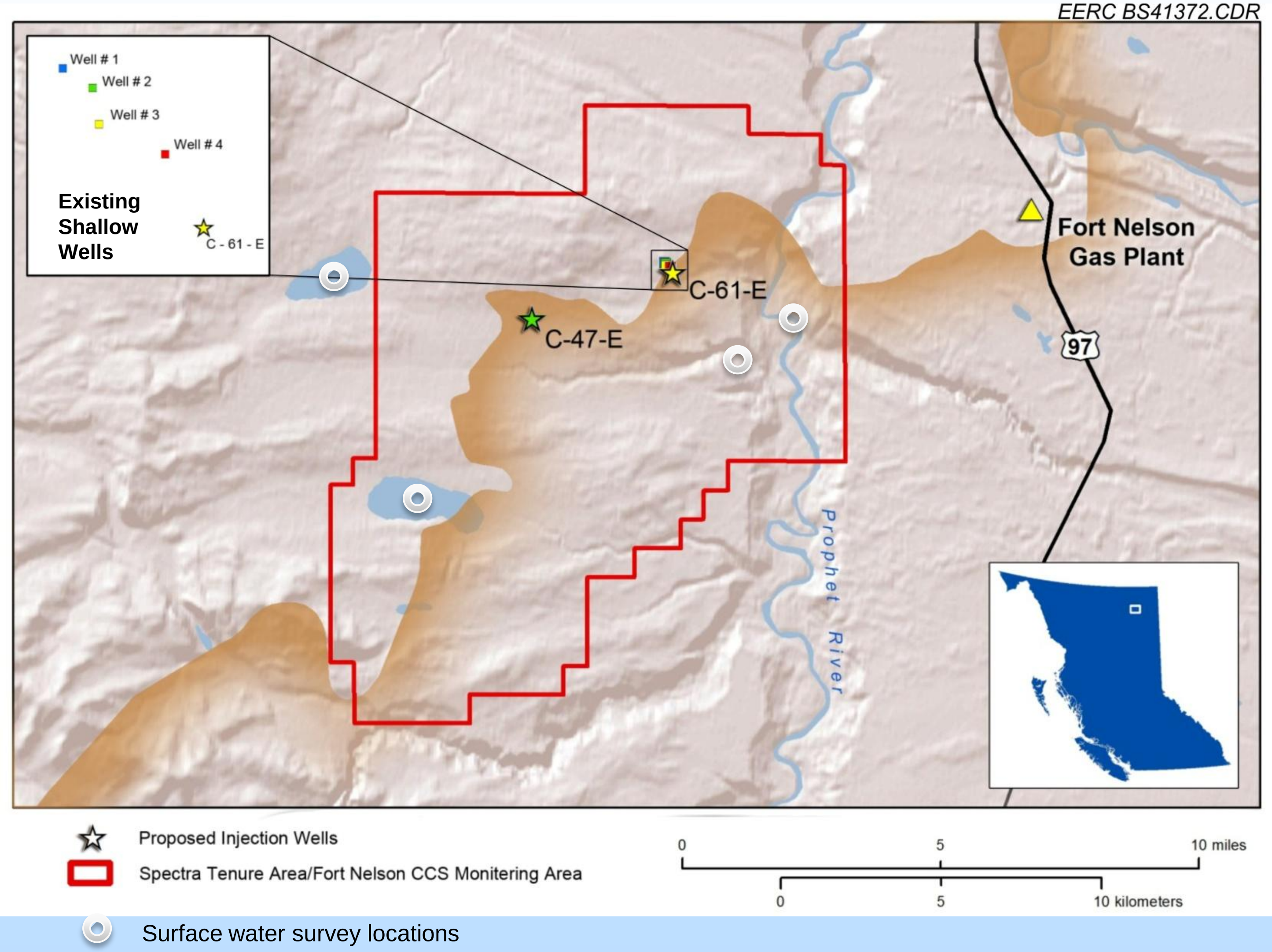
Surface and Shallow Subsurface MVA Planning

Activities to Be Done

Additional shallow groundwater monitoring wells drilled near c-47-E.

Baseline soil gas survey, specific locations to be determined.

Baseline surface water survey at Prophet River, creek near ice bridge, and Klowee and Milo Lakes.



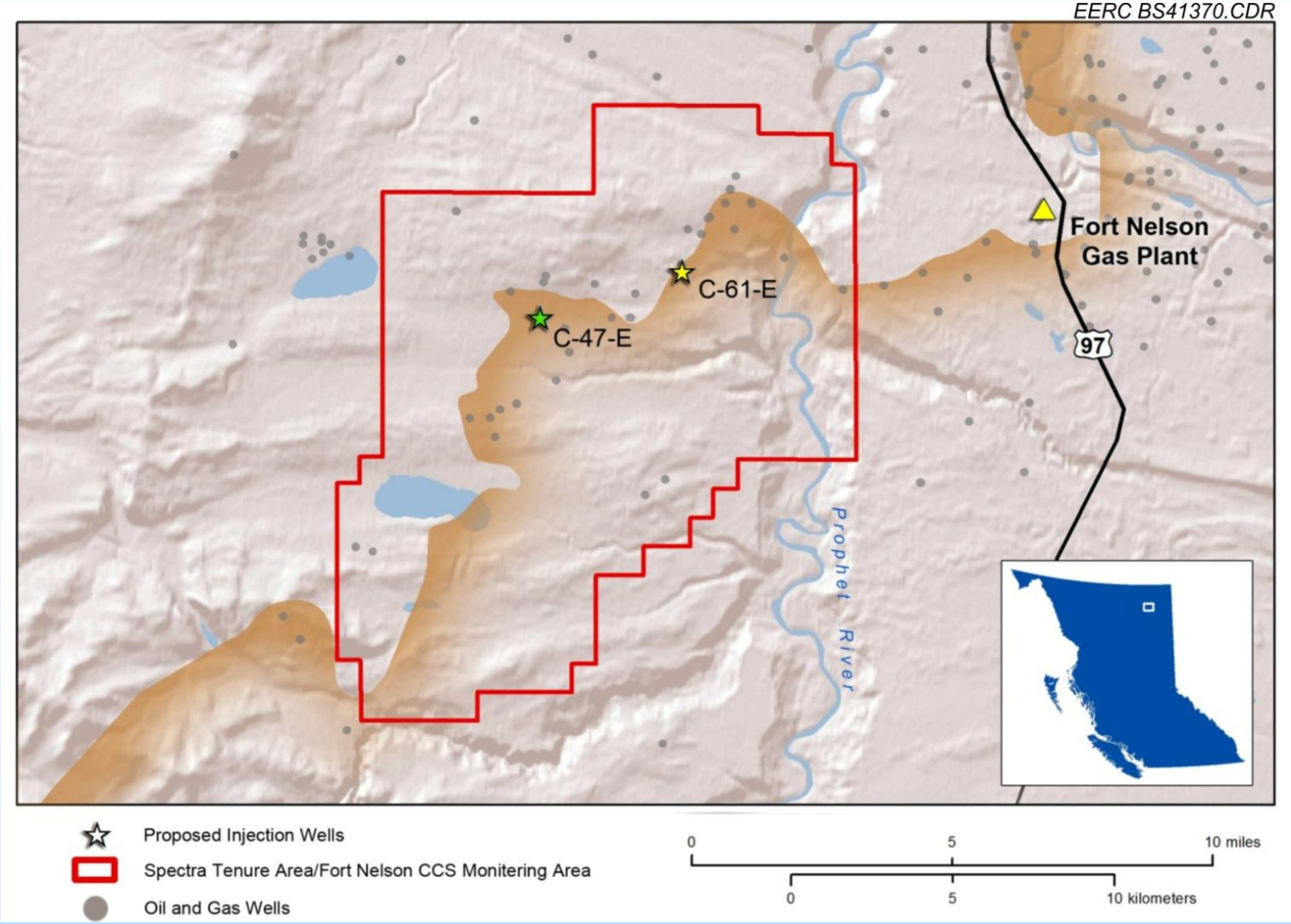
Deep Geological System MVA Planning

Plans being developed for two injection scenarios ("two tracks"):

- Injection at c-61-E.
- Injection at c-47-E.

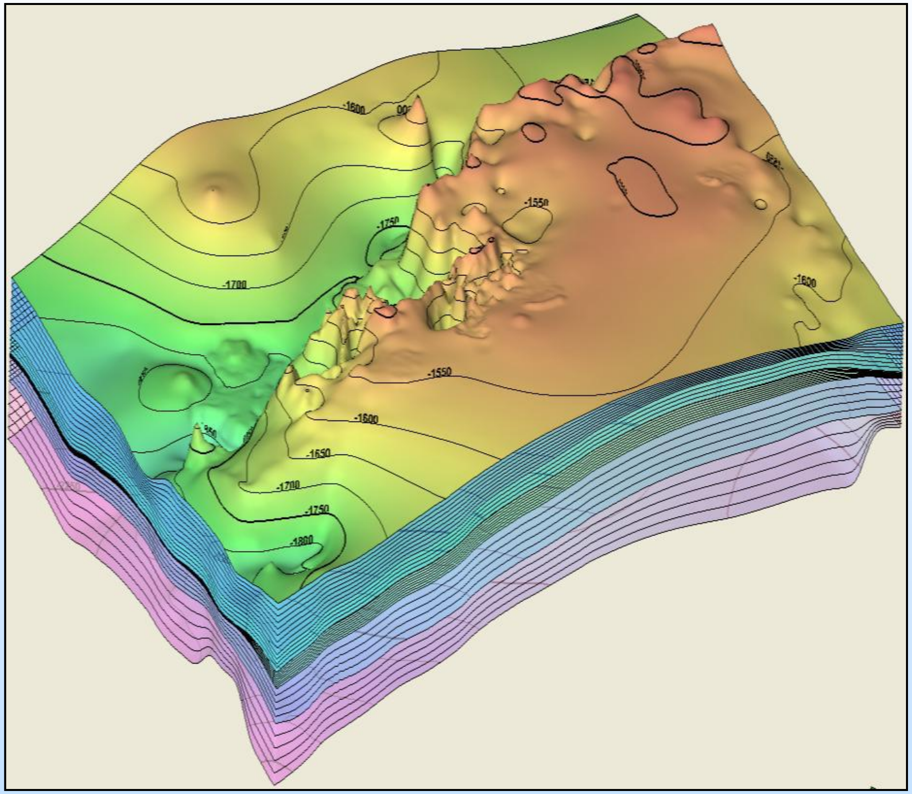
Each site has different risks:

- c-61-E has less geological uncertainty, but is closer to existing gas pools.
- c-47-E is further from gas pools but has more geologic uncertainty.



What Do Characterization and Modeling Tell Us About the Potential Injection and Storage Targets?

Feasibility testing and modeling to-date shows capability of delivering:



Required Storage Capacity

- Hydrogeology – supports capacity.
- Modeling - 50+-year injection.
- Existing water disposal schemes.

Permeability and Injection Capability

- 600-mD+ permeability (in situ testing).
- Low number of injection wells required.
- Good pressure dissipation.

Excellent Containment

- Stable tectonics.
- 1800+-ft thick, impervious shale cap rock.
- Postinjection – Large pressure falloff in 10 years, and reduces to near preinjection pressures in 40 years.

Fort Nelson Status and Next Steps

Status

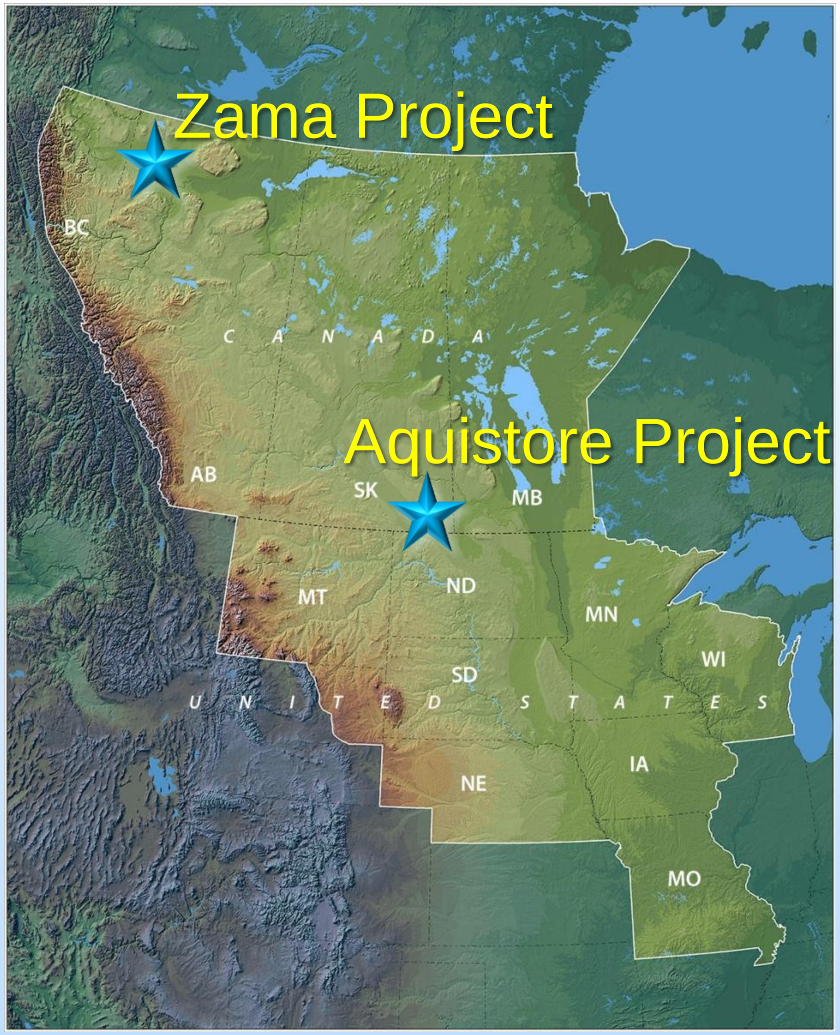
- Drilled test well winter 2008/2009.
- Cored and logged test well.
- Laboratory analysis of core:
  - Petrological
  - Geomechanical
  - Geochemical
- Reentered the well for testing in winters of 2009/2010 and 2011/2012.
- Acquired existing 2-D and 3-D seismic data.
- Completed two rounds of modeling.
- Completed two rounds of risk assessment.
- Developed surface and shallow subsurface MVA plan.

Next Steps

- Continue developing deep subsurface MVA plan using Bayesian Belief Network approach.
- Drill a second test well.
- Shoot 3-D seismic survey.
- Test materials from second test well for geomechanical, geochemical, and petrophysical properties.
- Update geologic model based on additional data.
- Rerun predictive simulations.
- Conduct a third round of risk assessment.
- Adjust MVA plan

Additional Projects

- ✓ Regional Characterization
- ✓ Basal Cambrian
- ✓ Aquistore
- ✓ Zama
- ✓ Water Working Group
- ✓ Outreach
- ✓ Regulatory Involvement



PCOR Partnership Outreach Support

- 65-page regional sequestration atlas
- Fact sheets on key topics and projects
- Variety of PowerPoint presentations
- Public Web site with streaming and downloadable materials
- Sequestration documentaries (television broadcasts, Web streaming, and DVDs)
- Video clips
- Technical reports (over 50)

Plains CO_2 Reduction (PCOR) Partnership
Practical, Environmentally Sound CO_2 Sequestration

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Carbon Sequestration, Climate Change and CO_2
The basics of CO_2 concerns and CO_2 management options

About the Partnership
Carbon Sequestration, Climate Change and CO_2
CO_2 and Storage in the Region
CO_2 Sequestration Projects
News and Publications
Documentaries
Video Clip Library
Reduce Your Carbon Footprint
Frequently Asked Questions
Links

Carbon dioxide (CO_2) sequestration, the long-term storage of CO_2 either in geologic zones deep underground or at the earth's surface in plants and soils, is emerging as a major strategy to help address climate change concern
sequestration projects need to
account.

The Plains CO_2 Reduction (P
of over 80 U.S. and Canadian s
groundwork for practical and e
sequestration projects in the he

The PCOR Partnership is led
Research Center at the Univers
seven regional partnership
Energy (DOE) **National Energ**
(NETL's) Regional Carbon S
Program. NETL and RCSP are

CO2 Storage News
Nov. 13: More letters o
Nov 13, 2010
Nov. 13: More letters on carb
Graham Thomson, who write
Google
Quincy makes bid to host st
The Chemistry of Carbon Se

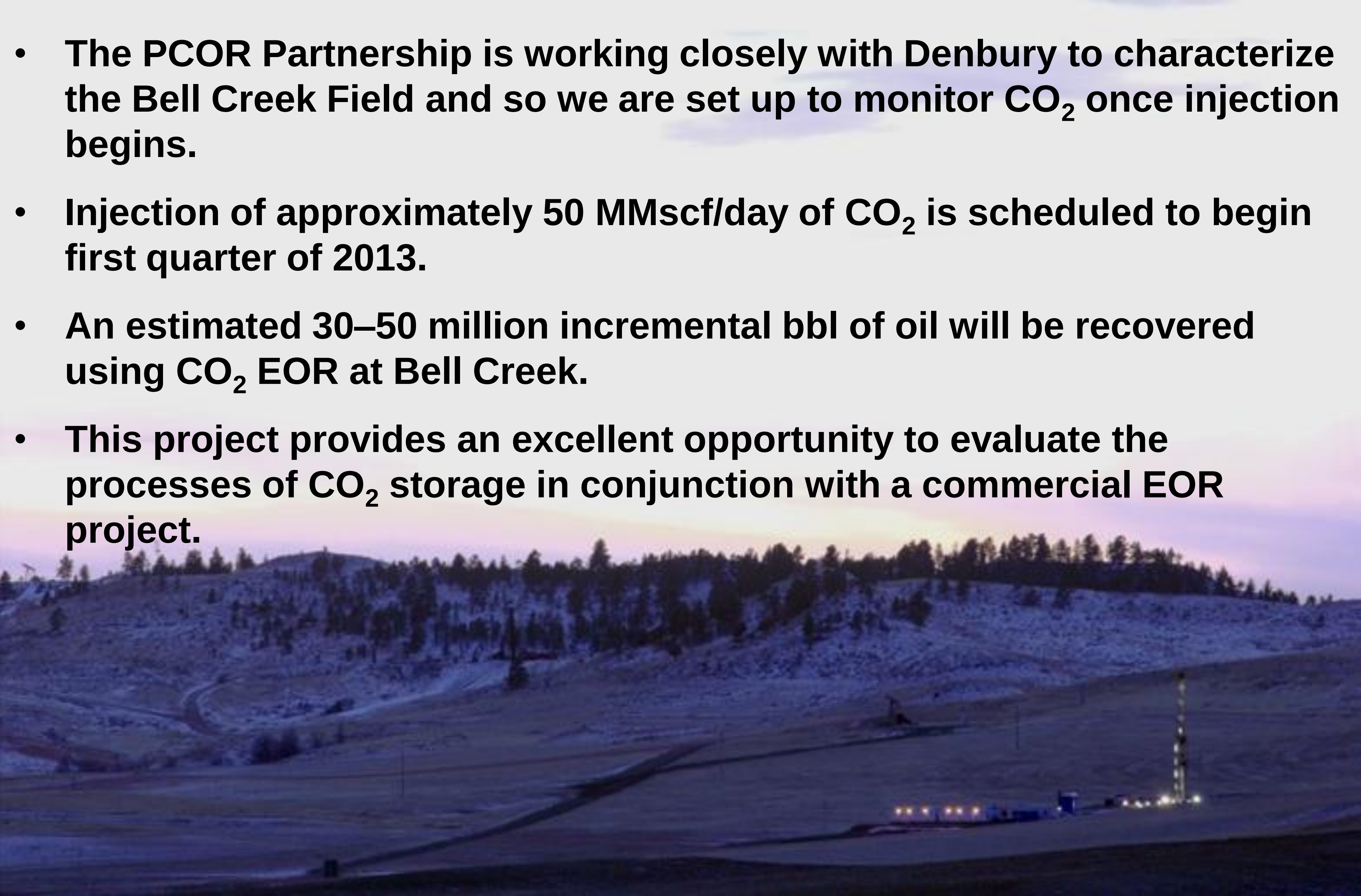
PCOR Partnership Features:
DOE Techlines

Fort Nelson Conclusions

- **An integrated approach to site characterization, modeling, and risk assessment can:**
    - **Lead to an effective, site-specific monitoring program.**
    - **Identify data gaps in site characterization.**
    - **Increase the likelihood of project success by identifying and mitigating potential risks.**

The Fort Nelson site has excellent potential but still requires more characterization data to ensure project success.

Bell Creek Summary



- The PCOR Partnership is working closely with Denbury to characterize the Bell Creek Field and so we are set up to monitor CO_2 once injection begins.
- Injection of approximately 50 MMscf/day of CO_2 is scheduled to begin first quarter of 2013.
- An estimated 30–50 million incremental bbl of oil will be recovered using CO_2 EOR at Bell Creek.
- This project provides an excellent opportunity to evaluate the processes of CO_2 storage in conjunction with a commercial EOR project.

Thank You!

Contact Information

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World Wide Web: **www.undeerc.org**
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PCOR Partnership Program Manager
cgorecki@undeerc.org

Appendix

Supplemental Slides

A Growing Partnership

PCOR Partnership 2003 – Present

- NETL
- EERC Energy & Environmental Research Center Putting Research into Practice UND University of North Dakota Grand Forks
- ABENGOA BIOENERGY
- AIR PRODUCTS
- Alberta ENERGY
- AERI Alberta Energy Research Institute
- Alberta Innovates Technology Futures
- ALLETE
- Ameren
- ACCCE American Coalition for Clean Coal Electricity
- American Lignite Energy
- Apache Canada Ltd.
- Aquistore
- Baker Hughes
- Basin Electric Power Cooperative A Touchstone Energy Cooperative
- Bechtel
- Biorecro
- Blue Source
- BNI Coal
- British Columbia The Best Place on Earth Ministry of Energy, Mines and Petroleum Resources
- BC Oil & Gas Commission
- C12 Energy
- CCX Chicago Climate Exchange
- CMG
- Dakota Gasification Company
- Denbury
- Ducks Unlimited Canada Conserving Canada's Wetlands
- Ducks Unlimited
- Eagle Operating Inc.
- EICCD
- Enbridge
- Encore Acquisition Company
- ERCB Energy Resources Conservation Board
- AGS Alberta Geological Survey
- Environment Canada
- Excelsior Energy
- Fischer Oil and Gas, Inc.
- Great Northern
- Great River Energy
- Halliburton
- Hess
- Huntsman
- Husky Energy
- Indian Land Tenure Foundation
- Interstate Oil & Gas Compact Commission
- DNR
- Kiewit
- Lignite Energy Council
- Manitoba
- Manitoba Hydro
- Marathon
- MEG Energy Corp
- Melzer Consulting
- Minnesota Pollution Control Agency
- minnesota power
- Minnkota Power Cooperative, Inc.
- Missouri Department of Natural Resources
- Missouri River Energy Services
- Montana-Dakota Utilities Co.
- Montana Department of Environmental Quality
- Public Service Commission Montana
- Murex Petroleum Corporation
- National Commission on Energy Policy
- Natural Resources Canada
- Nebraska Public Power District Always there when you need us
- Nexant
- North American Coal Corporation
- North Dakota Department of Commerce Office of Renewable Energy and Energy Efficiency
- North Dakota Department of Health
- North Dakota Geological Survey 1895
- North Dakota Oil and Gas Division
- Industrial Commission of North Dakota Lignite Research, Development and Marketing Program
- Industrial Commission of North Dakota Oil and Gas Research Council
- North Dakota Natural Resources Trust
- North Dakota Petroleum Council
- NDSU North Dakota State University
- Otter Tail Power Company
- Oxand Risk Management Solutions
- ptrc Petroleum Technology Research Centre
- PTTC
- Pinnacle A Halliburton Service
- Prairie Public
- Pratt & Whitney A United Technologies Company
- Praxair Making our planet more productive
- Ramgen Power Systems
- RPS Energy
- Saskatchewan Industry and Resources
- SaskPower
- Schlumberger Carbon Services
- Shell Canada Limited
- Spectra Energy
- Strategic West Energy Ltd.
- Suncor Energy
- TAQA
- Tesoro
- TGS
- University of Alberta
- University of Regina
- USGS science for a changing world
- Weatherford
- Advanced Geotechnology
- Western Governors' Association
- Westmoreland Coal Company
- WBI Energy An MDU Resources Group company
- Wisconsin Department of Agriculture, Trade & Consumer Protection
- Wyoming Office of State Lands and Investments
- Xcel Energy Responsible by Nature

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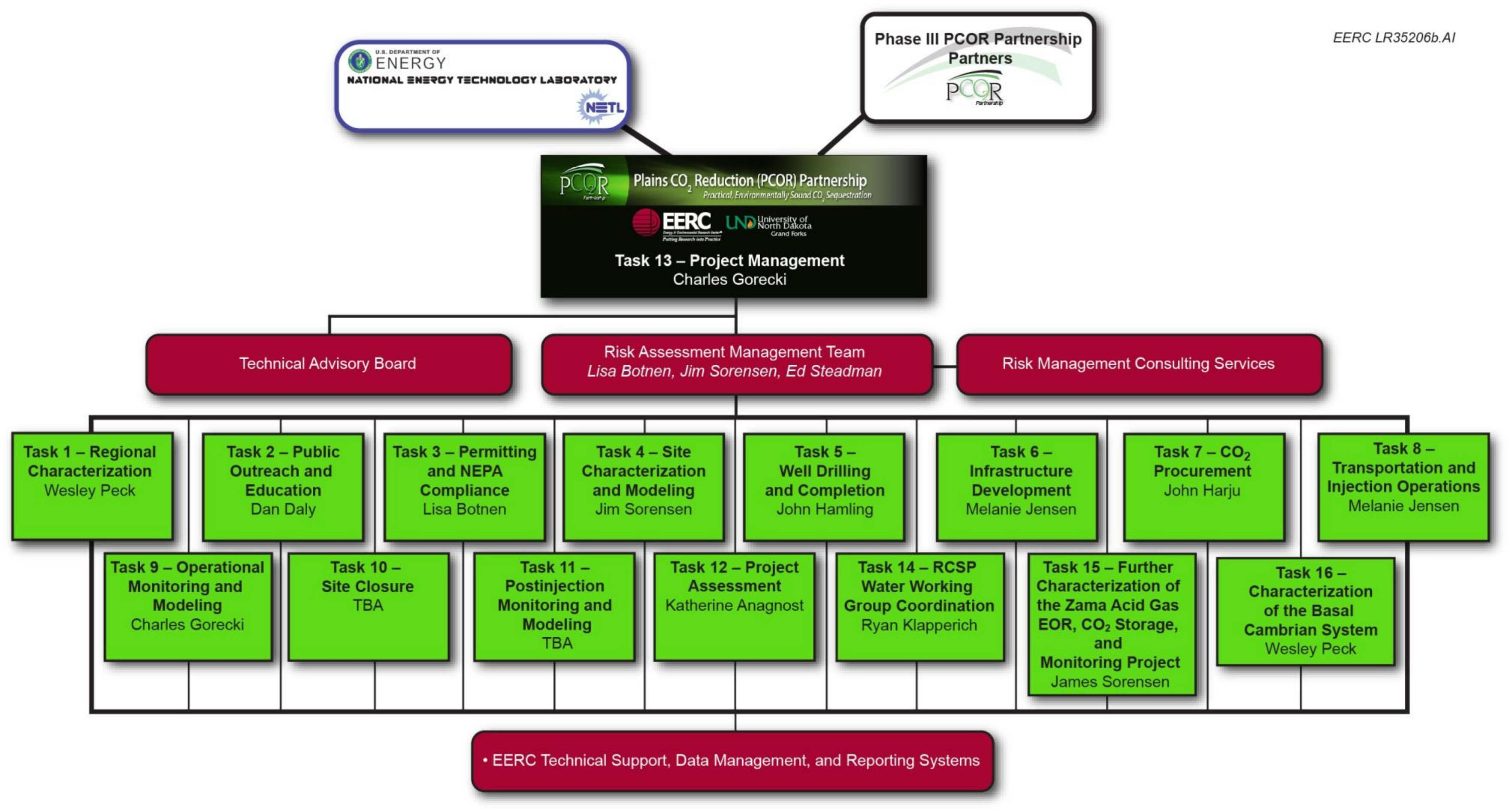
Organization Chart



EERC LR35206b.AI

U.S. Department of Energy
National Energy Technology Laboratory
NETL

Phase III PCOR Partnership Partners

Plains CO_2 Reduction (PCOR) Partnership
Practical, Environmentally Sound CO_2 Sequestration
EERC
University of North Dakota Grand Forks

Task 13 – Project Management
Charles Gorecki

Technical Advisory Board

Risk Assessment Management Team
Lisa Botnen, Jim Sorensen, Ed Steadman

Risk Management Consulting Services

Task 1 – Regional Characterization
Wesley Peck

Task 2 – Public Outreach and Education
Dan Daly

Task 3 – Permitting and NEPA Compliance
Lisa Botnen

Task 4 – Site Characterization and Modeling
Jim Sorensen

Task 5 – Well Drilling and Completion
John Hamling

Task 6 – Infrastructure Development
Melanie Jensen

Task 7 – CO_2 Procurement
John Harju

Task 8 – Transportation and Injection Operations
Melanie Jensen

Task 9 – Operational Monitoring and Modeling
Charles Gorecki

Task 10 – Site Closure
TBA

Task 11 – Postinjection Monitoring and Modeling
TBA

Task 12 – Project Assessment
Katherine Anagnost

Task 14 – RCSP Water Working Group Coordination
Ryan Klapperich

Task 15 – Further Characterization of the Zama Acid Gas EOR, CO_2 Storage, and Monitoring Project
James Sorensen

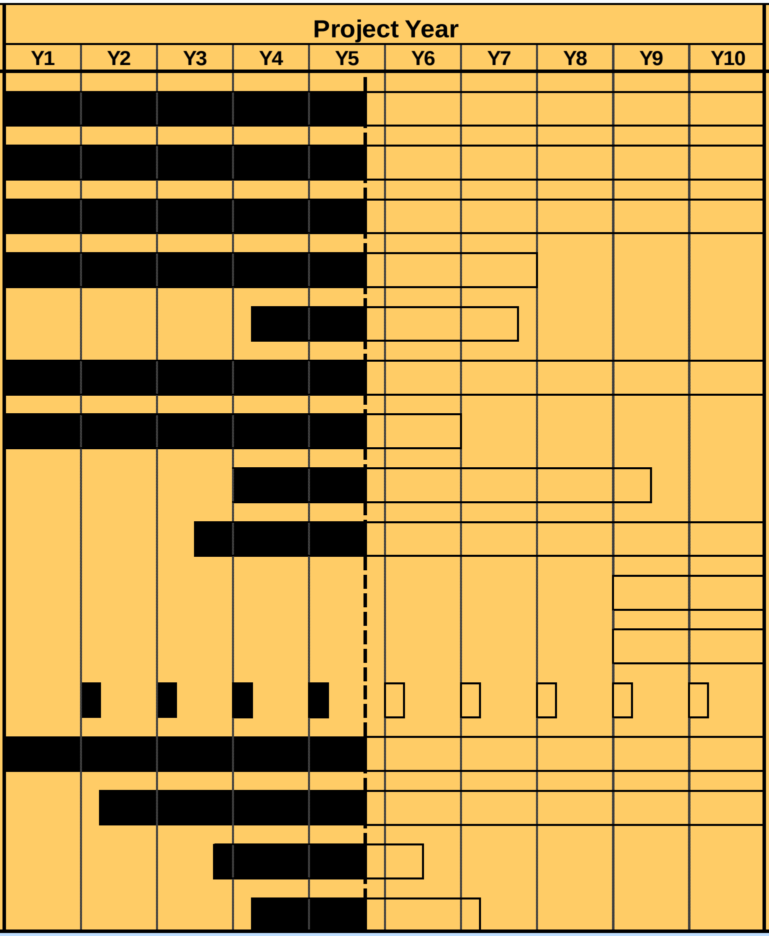
Task 16 – Characterization of the Basal Cambrian System
Wesley Peck

- EERC Technical Support, Data Management, and Reporting Systems

Research Team

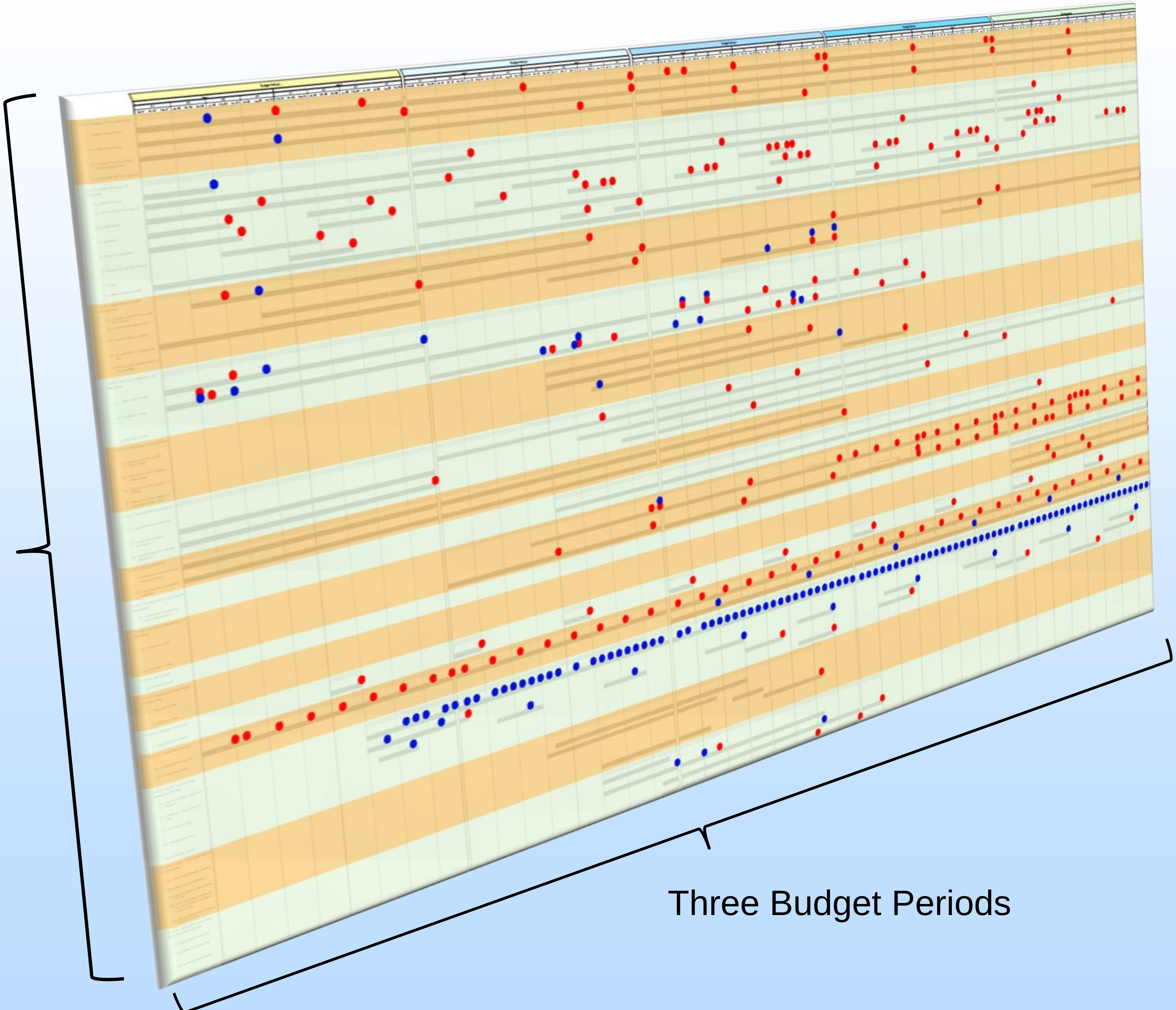
	Geomechanical	Geochemical	Hydrogeology	MVA	Modeling	Risk Analysis	Engineering	Transport and Compression	EOR	Drilling and Completion	Economics	Regulatory
EERC	X	X	X	X	X	X		X	X			X
Denbury Onshore LLC				X			X	X	X	X	X	
RPS Energy	X			X	X	X	X		X	X		
Alberta Innovates – Technology Futures		X	X			X						
Spectra Energy	X	X	X	X		X	X	X		X	X	X
CETER Group, Inc.						X					X	X
Baker Hughes; Schlumberger; Halliburton	X	X		X	X		X		X	X		
Computer Modelling Group					X				X			
British Columbia Oil & Gas Commission				X		X			X			X
Montana Oil & Gas									X			X
McLellan Energy Advisors, Inc	X				X	X				X		
Other partners	X	X	X	X	X	X	X	X	X	X	X	X

Gantt Chart



	% Complete	Status
Task 1: Regional Characterization	48	On schedule and on budget
Task 2: Public Outreach and Education	48	On schedule and on budget
Task 3: Permitting and NEPA Compliance	48	On schedule and on budget
Task 4: Site Characterization and Modeling	68	On schedule and on budget
Task 5: Well Drilling and Completion	43	On schedule and on budget
Task 6: Infrastructure Development	48	On schedule and on budget
Task 7: CO_2 Procurement	79	On schedule and on budget
Task 8: Transportation and Injection Operations	32	On schedule and on budget
Task 9: Operational Monitoring and Modeling	30	On schedule and on budget
Task 10: Site Closure	0	To be initiated October 2015
Task 11: Postinjection Monitoring and Modeling	0	To be initiated October 2015
Task 12: Project Assessment	44	On schedule and on budget
Task 13: Project Management	48	On schedule and on budget
Task 14: RCSP WWG	40	On schedule and on budget
Task 15: Further Characterization of Zama Project	72	On schedule and on budget
Task 16: Characterization of the Basal Cambrian System	50	On schedule and on budget

Milestones and Deliverables



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Tasks

- 🔴 Deliverable
- 🔵 Milestone

Three Budget Periods

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