



Combined Miscible Drive (CMD) “Recovering the Unrecoverable Barrel”



November 10, 2011

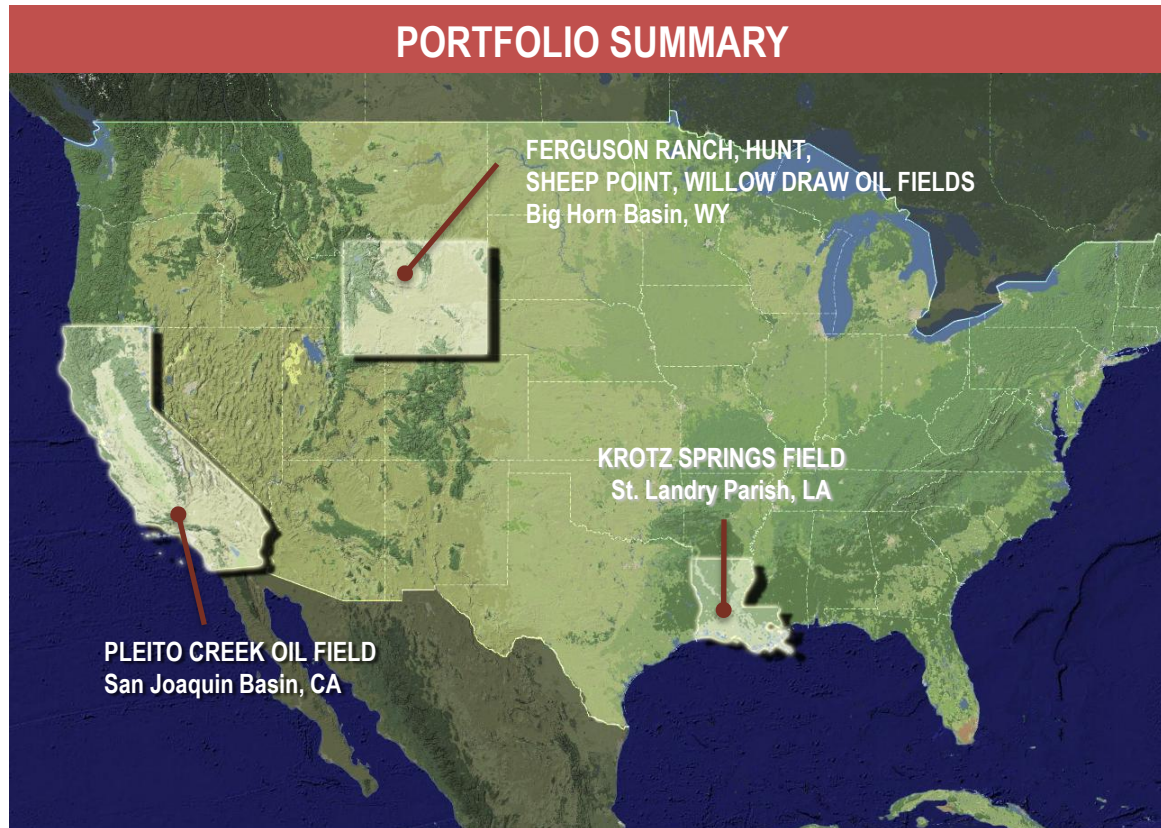
Confidential

Corporate Summary

- Public Company Listed in Toronto (TSX: NNN)
- Q3 Production Exit Rate – 1,300 BOEPD
- Reserves – 17.4 MMBOE Proved; 28.6 MMBOE Proved + Probable
- Acquire producing oil and gas properties with substantial conventional and enhanced oil recovery development
- Technical staff has specific expertise in evaluation, acquisition, re-development and Enhanced Oil Recovery (EOR) technologies.

High Quality, Oil Levered Asset Base

NiMin has built a concentrated portfolio of oil and gas properties in the United States with an attractive reserve base leveraged 98% to crude oil







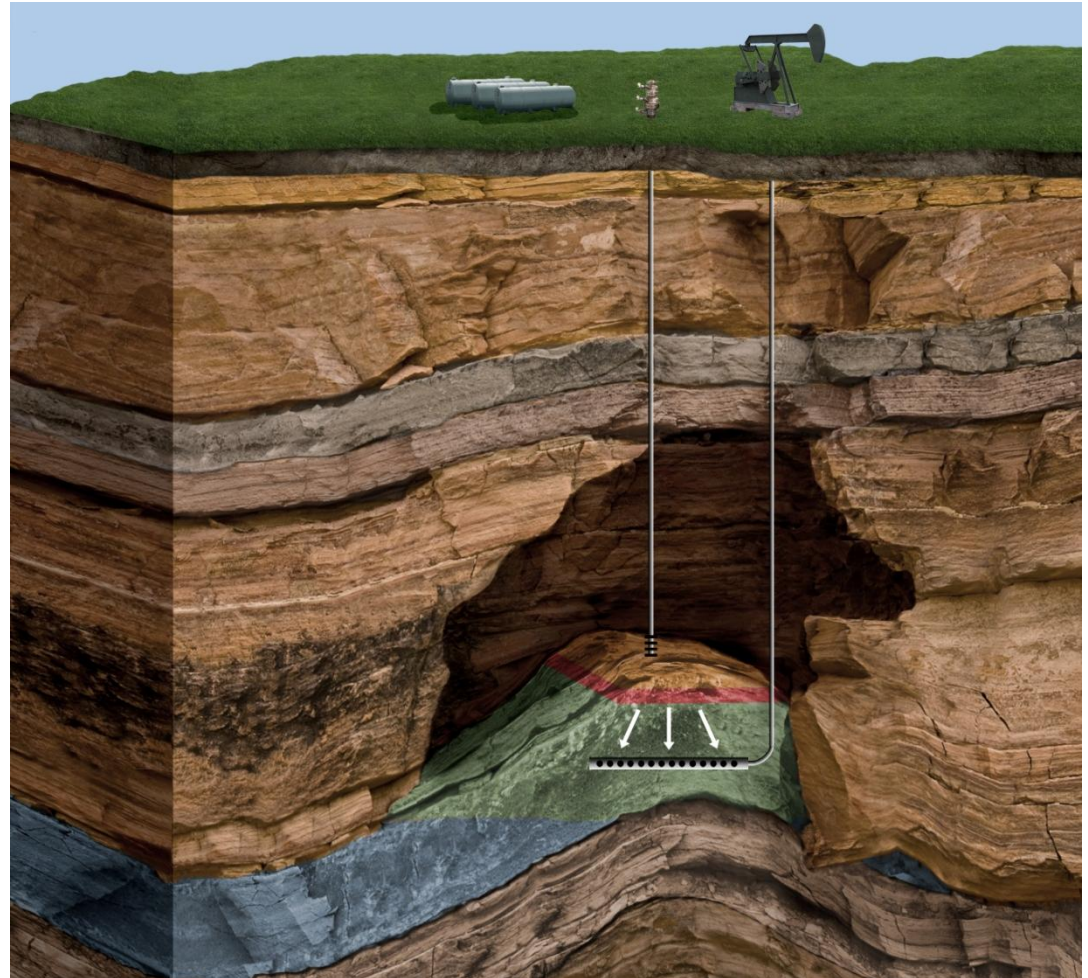
History of In-Situ Combustion

- In-situ combustion technology has existed for over 100 years - what's old is new again.
- In the US there have been 228 in-situ combustion projects ~ 60% failed:
 - Poor Reservoir Characterization
 - Unanticipated Operational Challenges
 - Management Commitment
- All projects that utilized oxygen enriched air were technical successes but uneconomic due to declining oil prices.

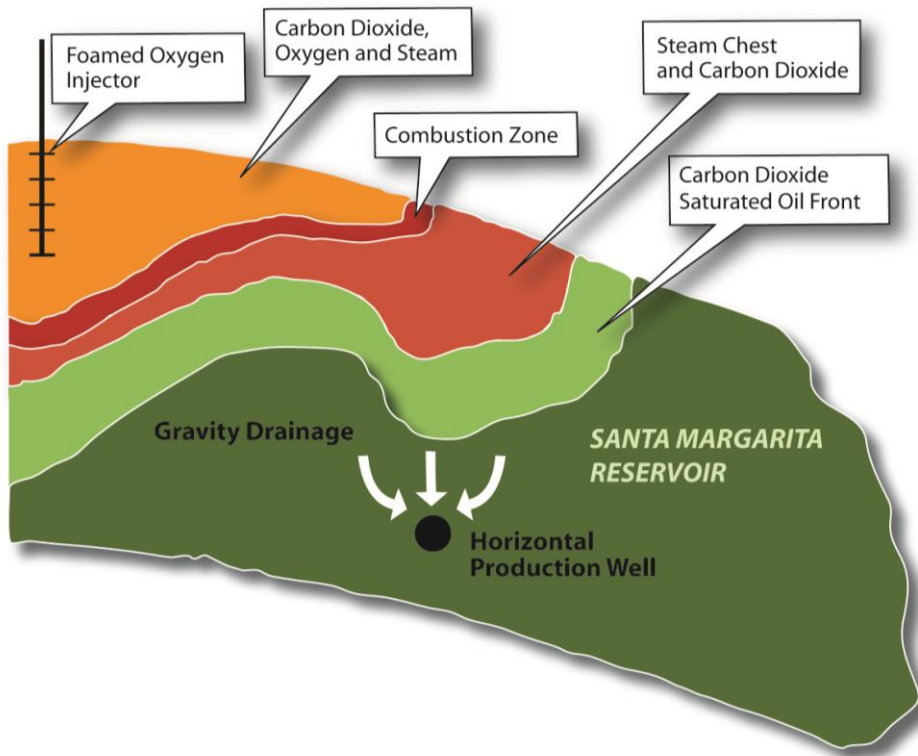
Combined Miscible Drive – CMD

A patented in-situ combustion process in which foamed oxygen is injected at the top of an oil reservoir to generate CO₂, heat, and steam.

-  Oxygen, Carbon Dioxide, and Steam
-  Combustion Zone
-  Oil
-  Water



CMD Process Elements

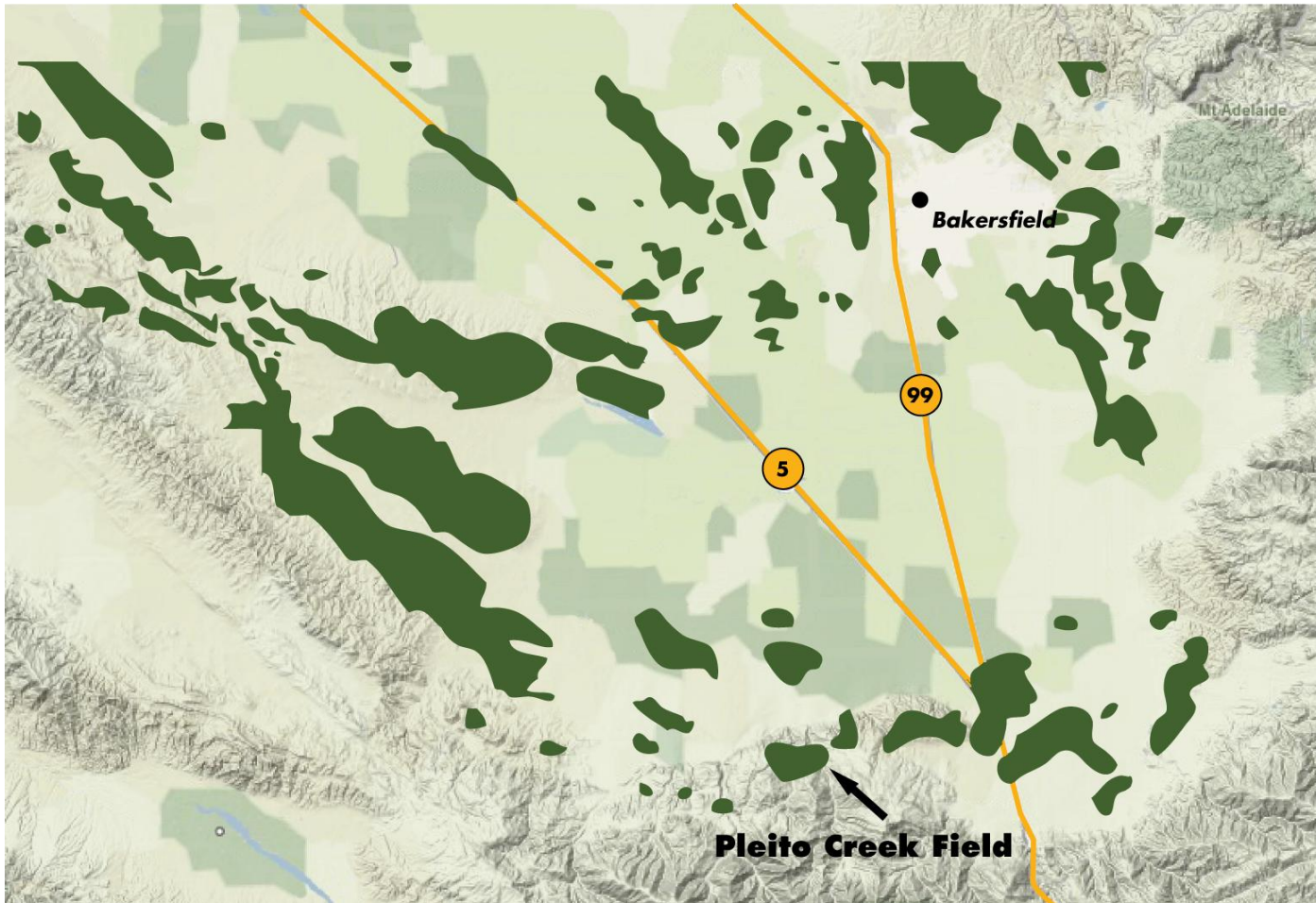


- Foamed oxygen is used to generate carbon dioxide and steam in-situ
- Steam heats and displaces oil toward the production wells
- Carbon dioxide and light oil form a miscible layer in front of the steam
- Carbon dioxide saturates the oil ahead of the miscible light oil layer
- The process is unique because the benefits of a CO₂ flood, gravity drainage, and a steam flood are combined to enhance production.

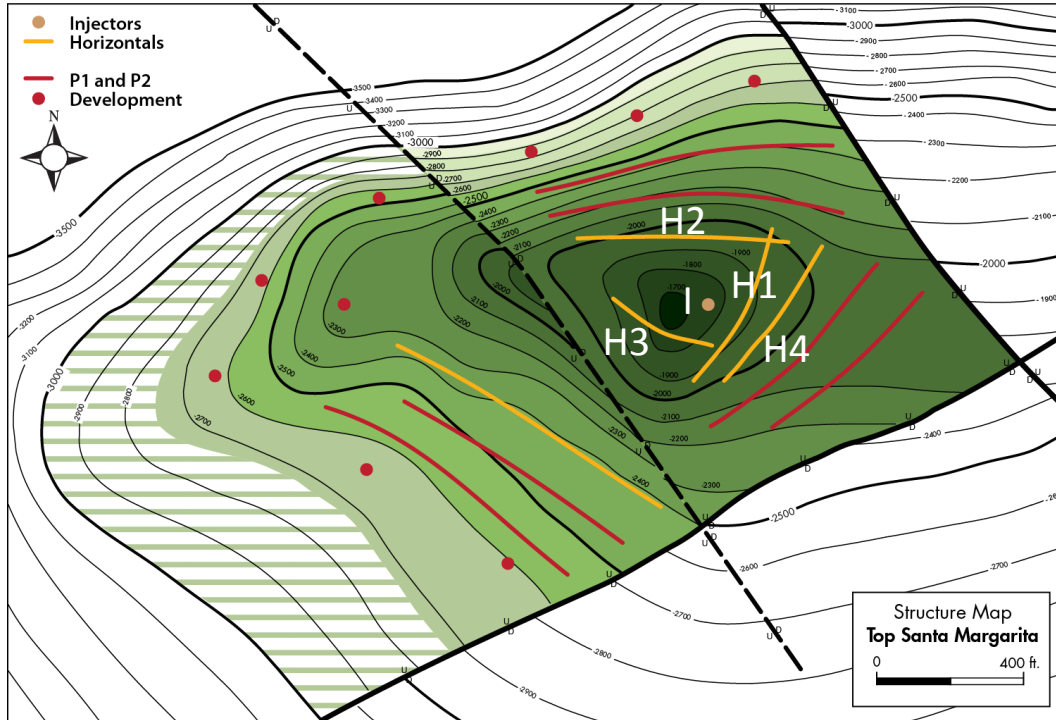
CMD Project Screening Parameters

- Reservoir Depth – 2,000 to 5,000 ft
- Porosity > 22%
- Initial Oil Saturation > 50%
- API Oil Gravity < 32°
- Reservoir Oil Viscosity < 500 cp
- Sloping Structure for Top Down Injection

NiMin California Property

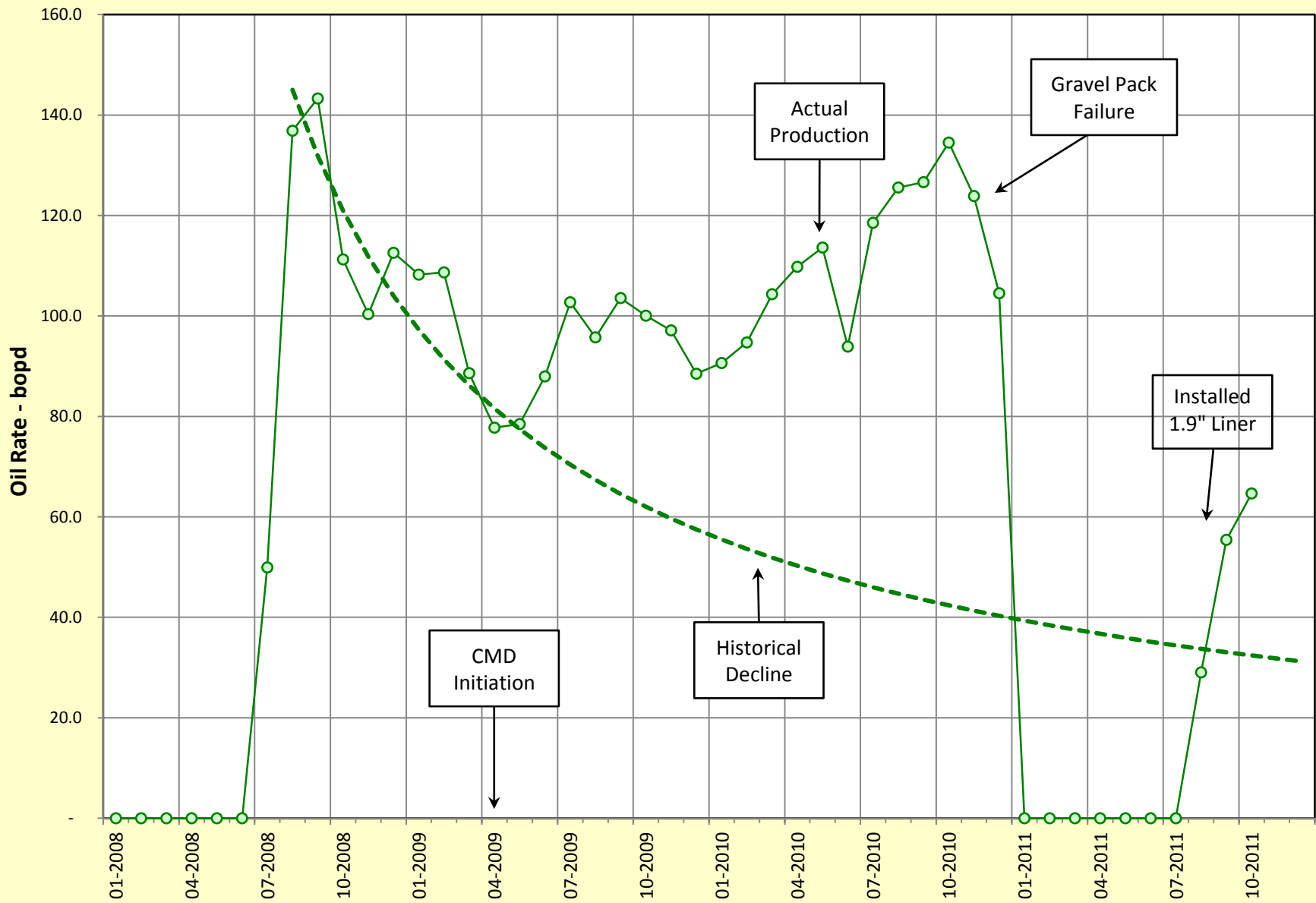


Pleito Creek Field – Santa Margarita Reservoir

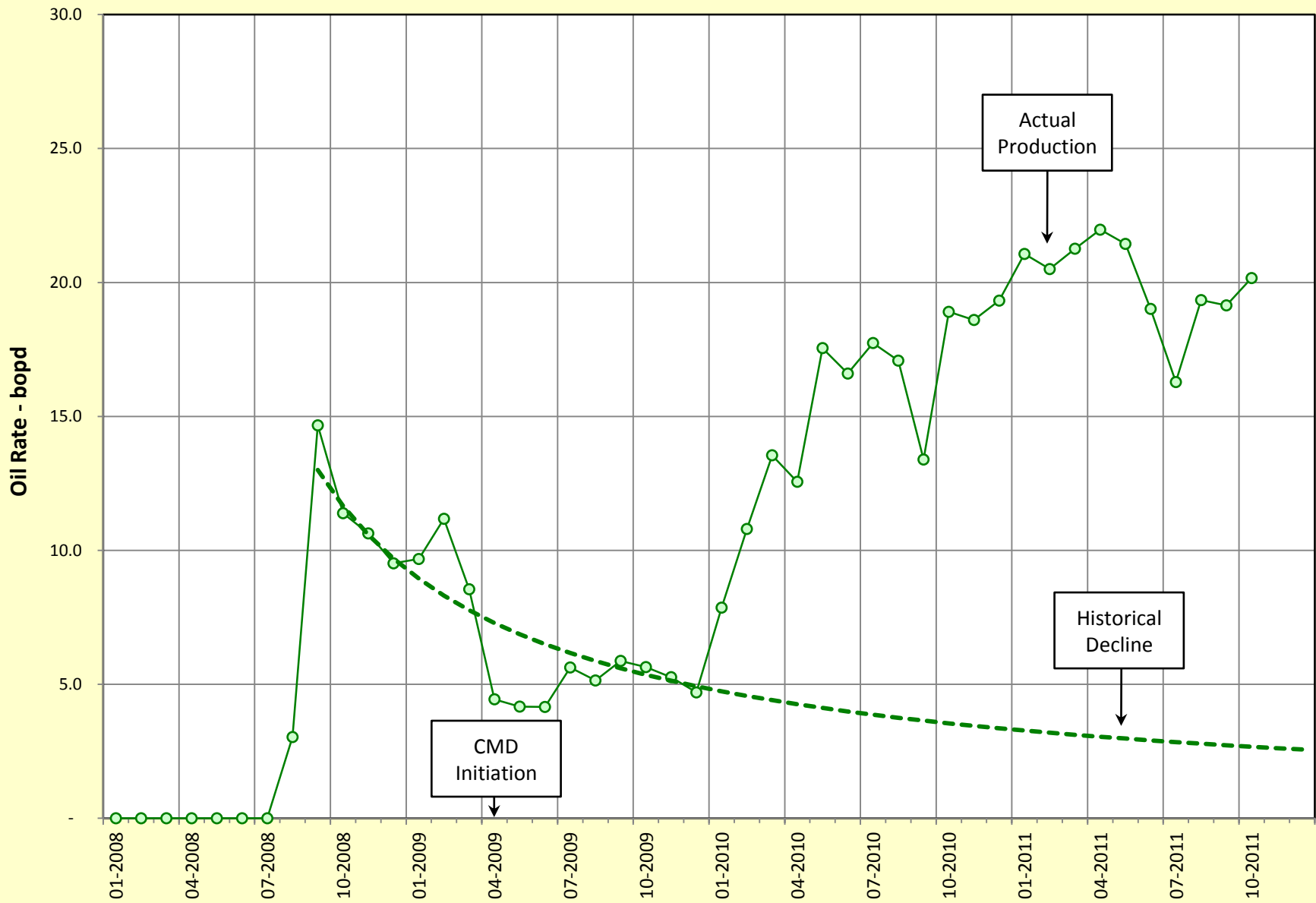


- OOIP = 38.7 million bbl
- Reservoir & Crude Oil Properties
 - Depth = 3,600 to 4,600 ft
 - Avg. $k = 90$ md
 - Avg. $\Phi = 28\%$
 - $S_{OR} = 65\%$
 - 16° API Crude & 185 cp @ 105° F
 - Temperature = 105° F
 - Avg. net pay = 115 feet
- Current production 300 BOPD
- CMD response in 3 horizontal wells
- Primary expected recovery up to 12%
- CMD expected recovery up to 60%

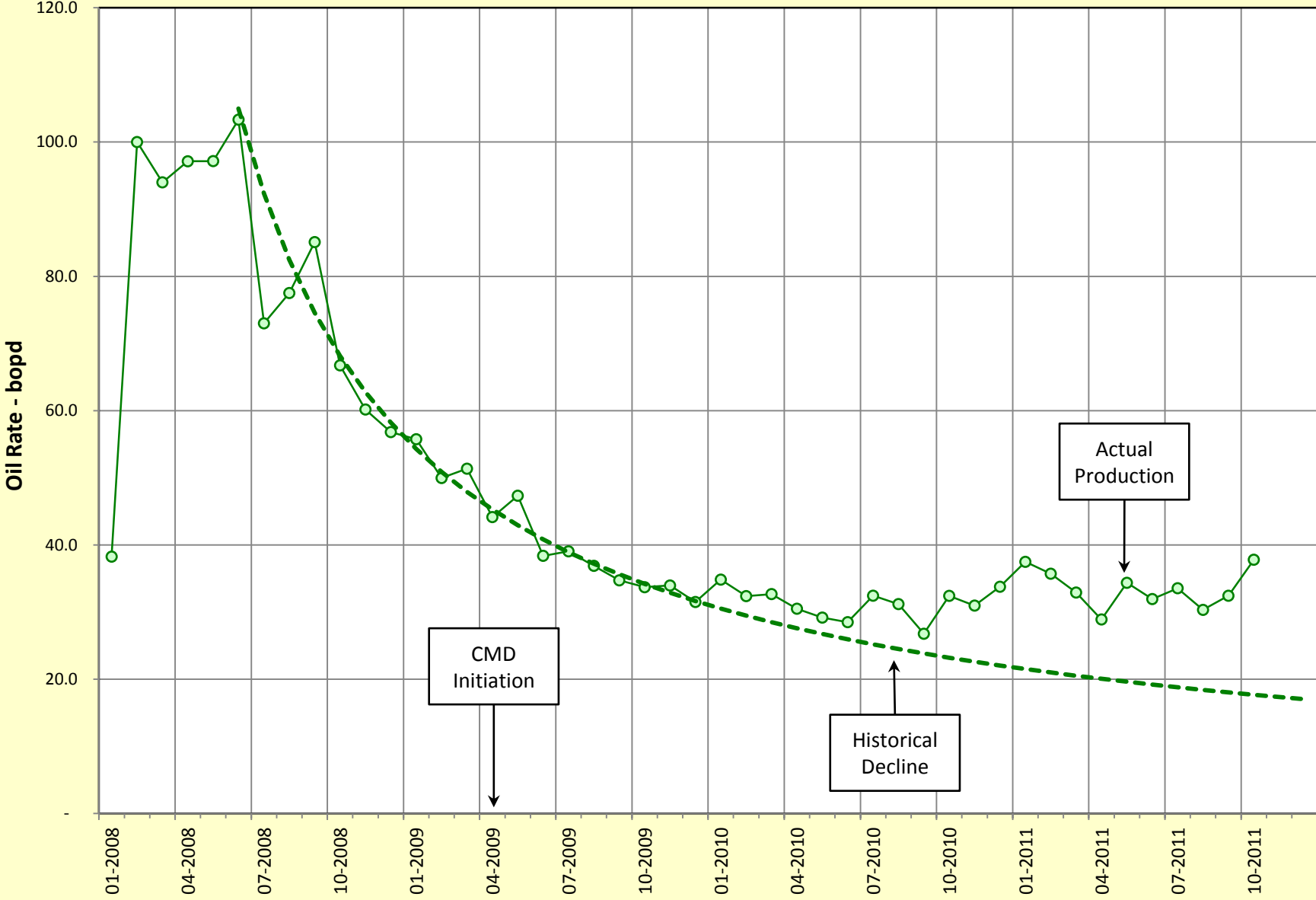
H-02 Production Plot



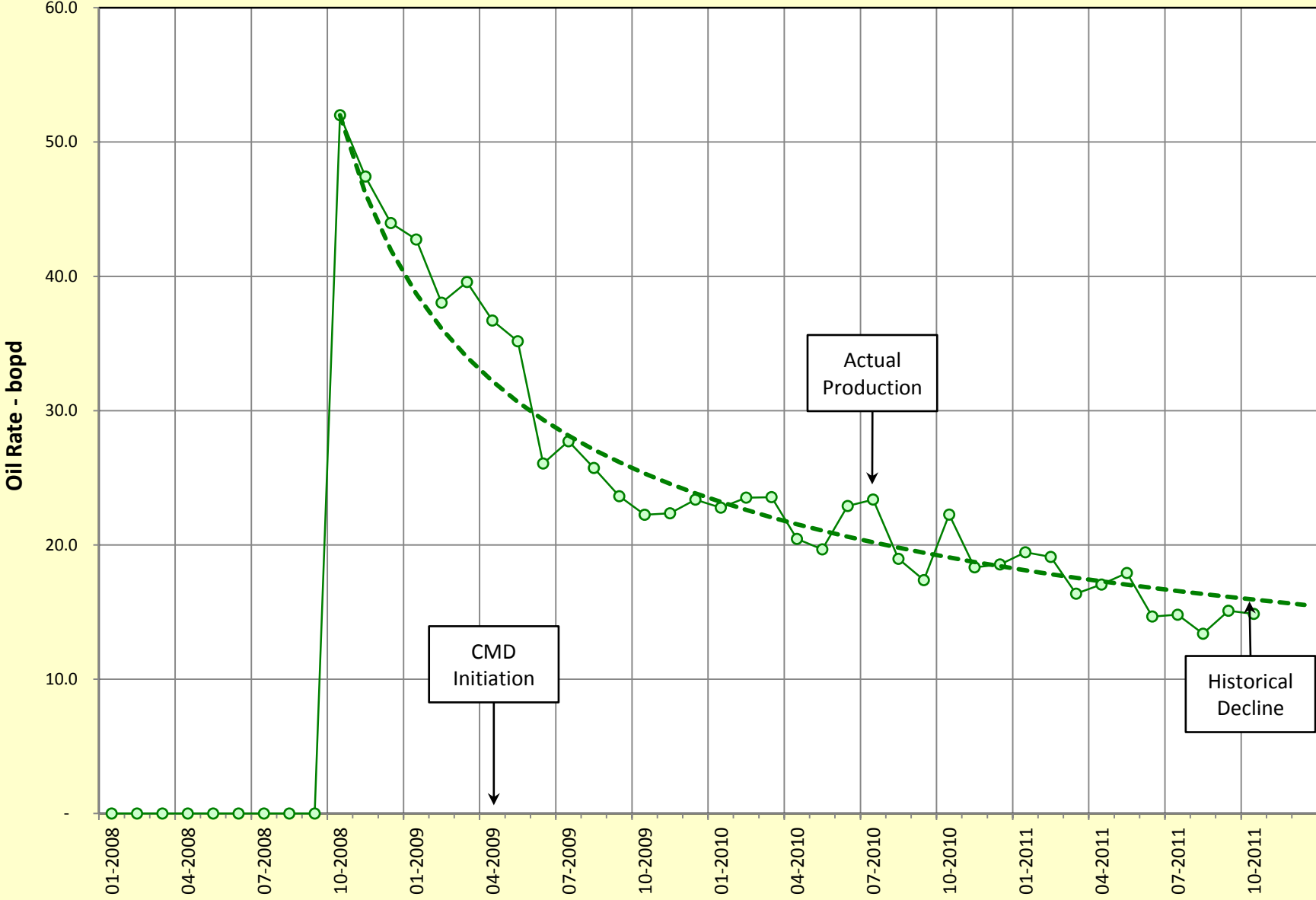
H-03 Production Plot



H-01 Production Plot



H-04 Production Plot

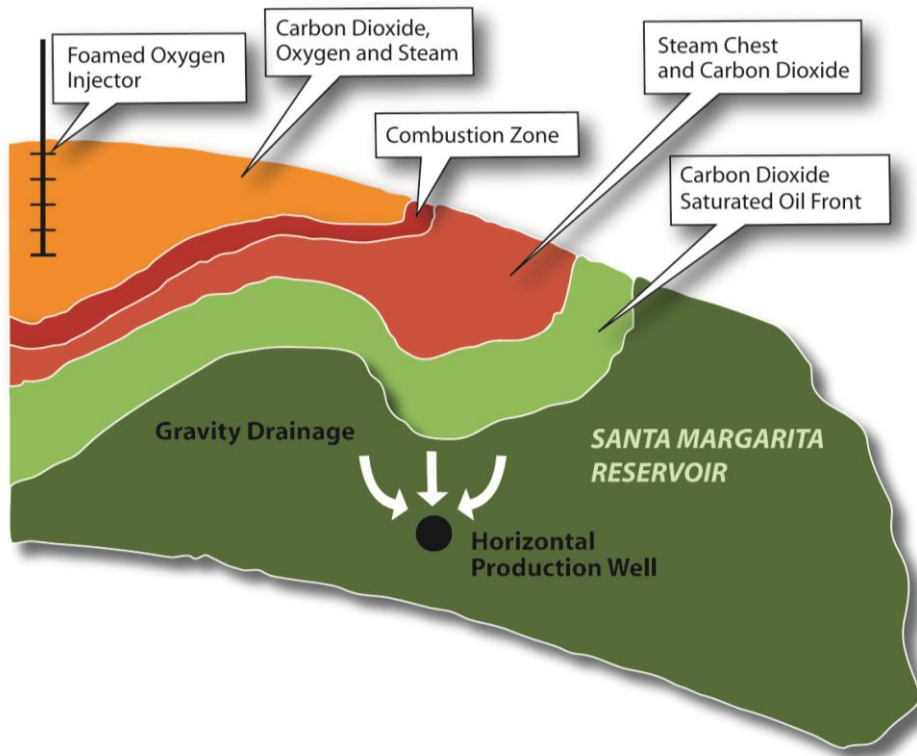


Pleito Creek Injection Facility

1. Produced Water Treating
2. Liquid O₂ Storage & Pumping
3. O₂ Vaporization
4. Water & O₂ Mixed to O₂ Foam
5. Injection Well Design
6. Safety System

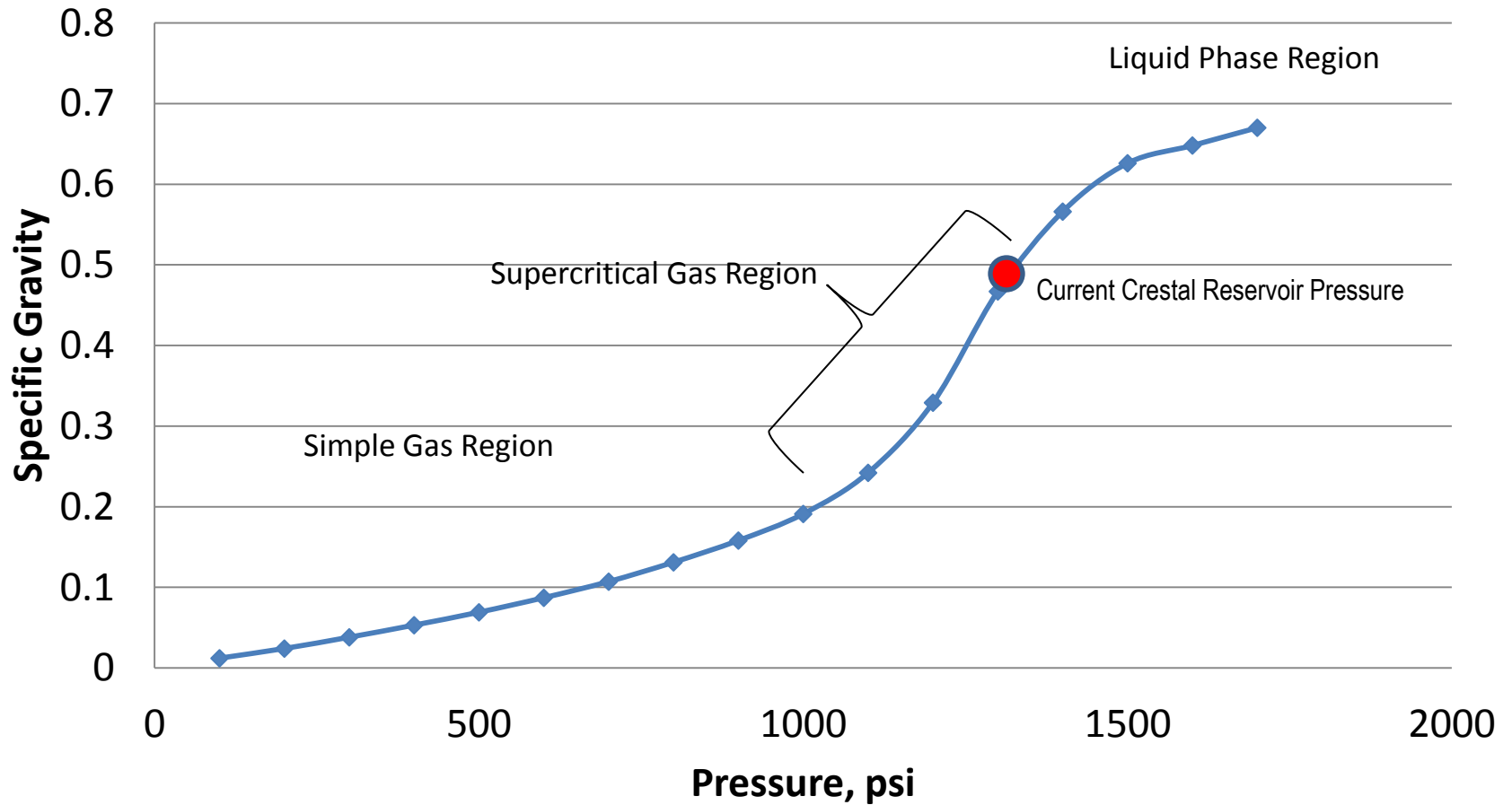


Pleito Creek Conditions for CMD

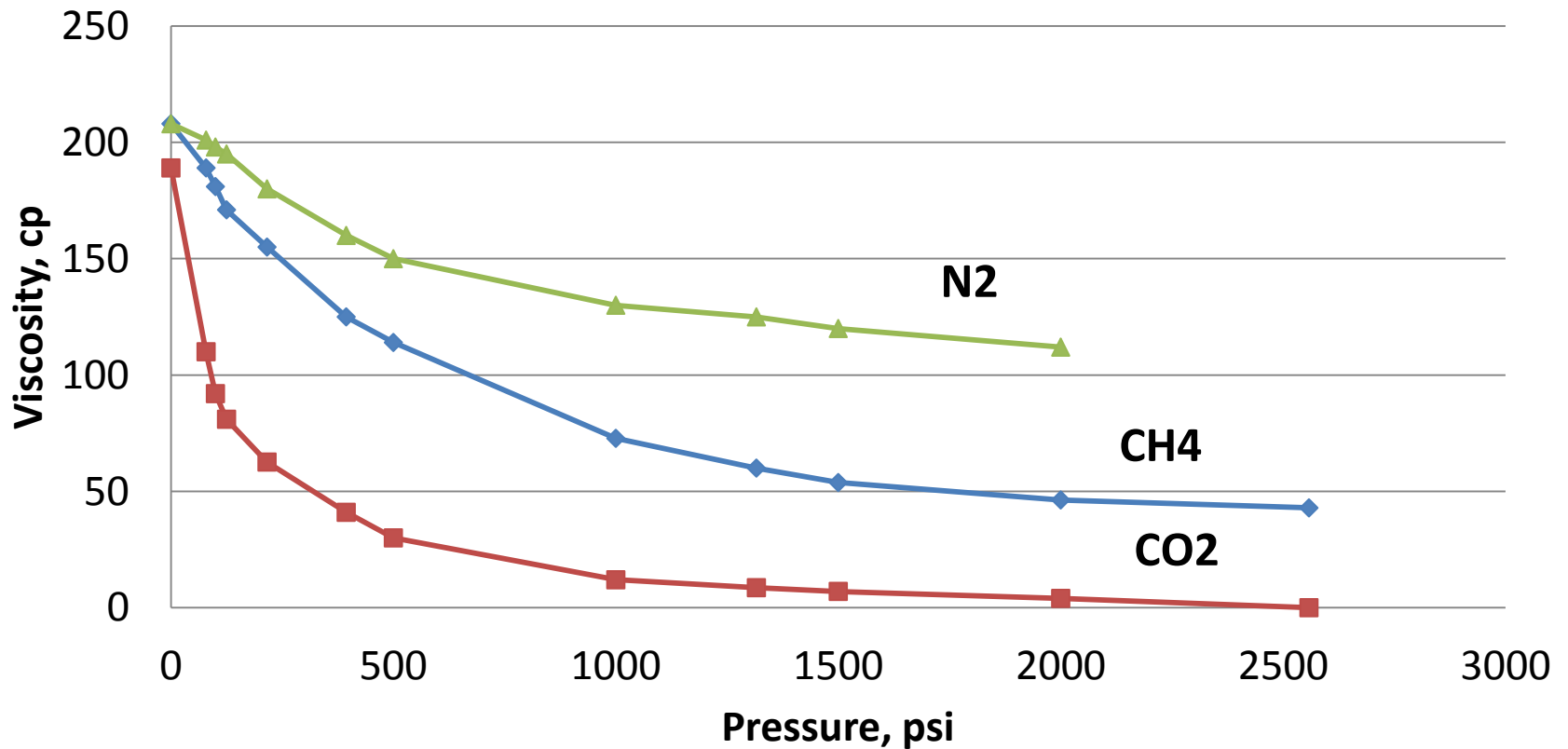


- Top Down Injection
- Gravity Stable
- Reservoir Temperature = 105° F
- Injection Pressure = 1,700 psi
- Significant CO₂ Absorption

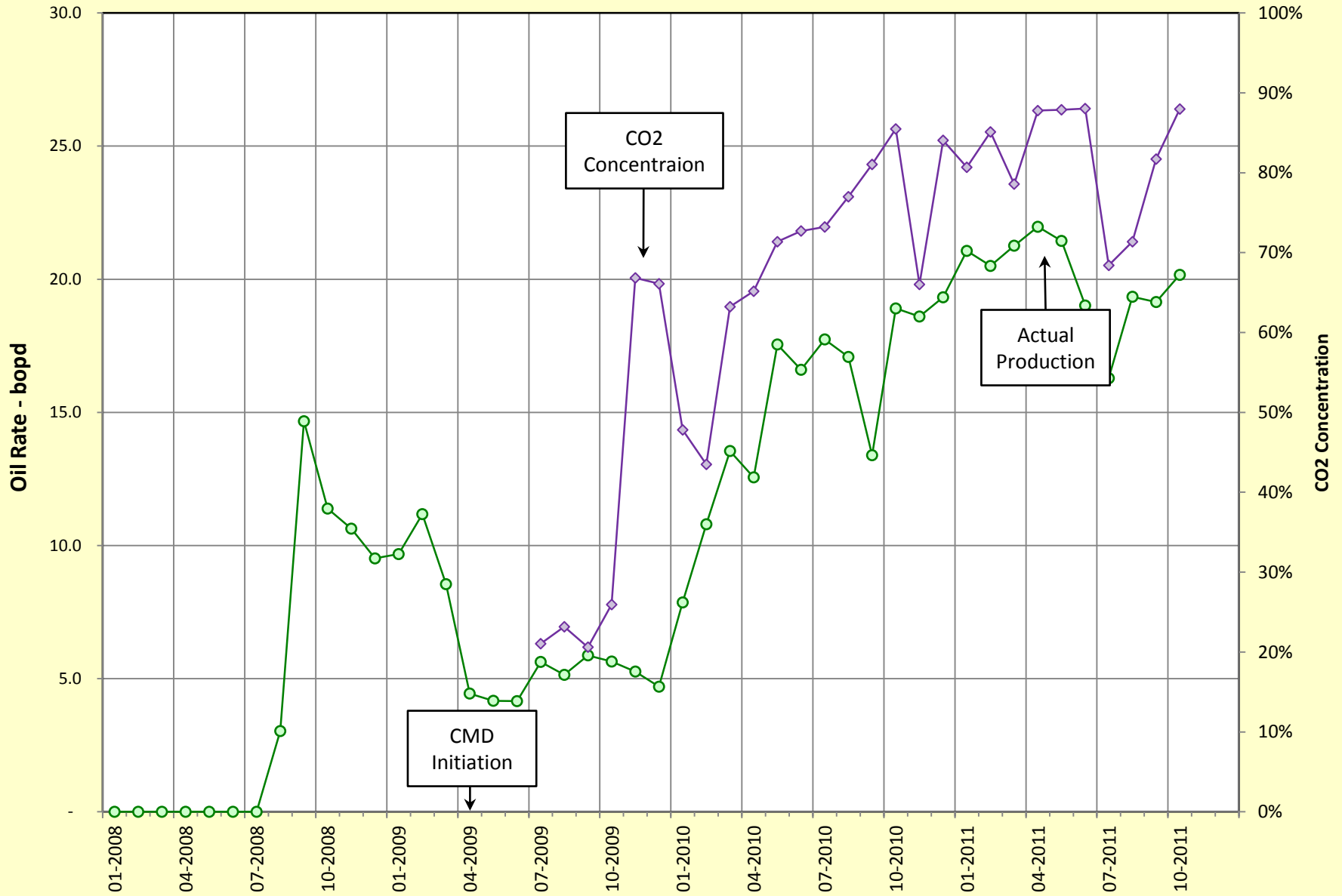
Pleito Creek - CO₂ Density @105° F



Pleito Creek Field - Gas Saturated Oil Viscosity @105° F



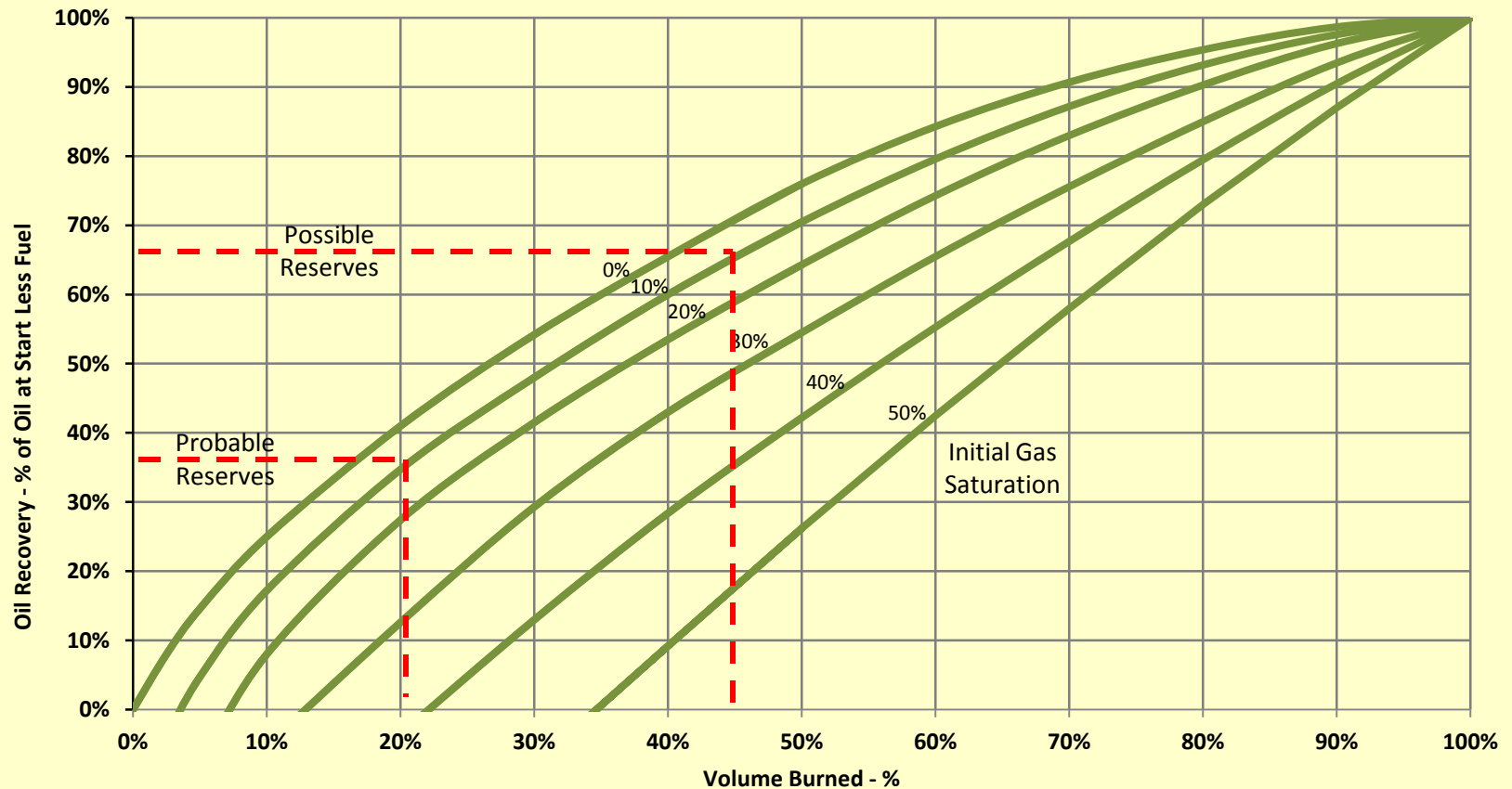
H-03 Production Plot



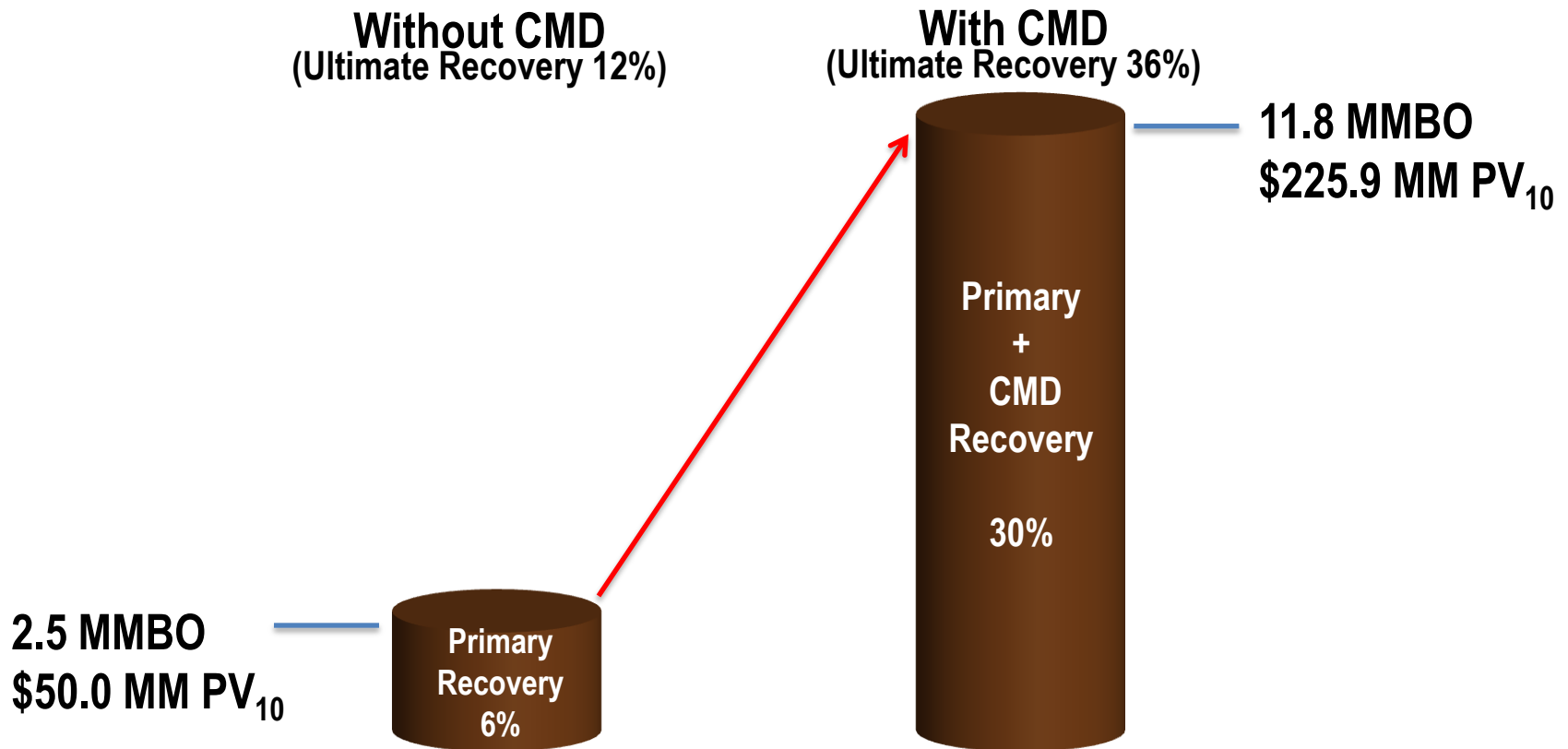
Benefits of CO₂ Generation

- Supercritical CO₂ acts like a gas and a liquid
- Significant absorption of CO₂
- Oil swells up to 34%
- Oil viscosity reduction up to 91% (100 to 10 cp)

Top-down Burn, Oil Recovery Factor



Pleito Creek Field Reserves



CMD Summary

- CMD process allows for the efficient recovery of oil at greater depths than steam methods
- CMD process generates only 10-15% of the greenhouse gases as in conventional steam generation and no local footprint
- In the US, there are approximately **165** heavy oil fields with **14** billion barrels OOIP that could benefit from this process
- In the US, there are approximately **276** light oil fields with **32** billion barrels OOIP that could benefit from this process

Contact Information

Address: 1160 Eugenia Place,
Suite 100
Carpinteria, CA 93013

Office: (805) 566-2900

Fax: (805) 566-2917

Website: www.niminenergy.com

Sven Hagen, PhD
President
shagen@niminenergy.com

Scott Dobson
Chief Operating Officer
sdobson@niminenergy.com