

A Case History of the East Hardy Unit, Mississippian Highway 60 Trend, Osage County, OK*

Ronald Snyder¹

Search and Discovery Article #20345 (2016)**

Posted February 22, 2016

*Adapted from oral presentation given at AAPG Mid-Continent Section meeting in Tulsa, Oklahoma, October 4-6, 2015

**Datapages © 2016 Serial rights given by author. For all other rights contact author directly.

¹Ceja Corporation, Tulsa, OK, USA (rons@ceja.com)

Abstract

A Case History of the East Hardy Unit, Mississippian Highway 60 Trend, Osage County, Oklahoma Abstract: The Highway 60 Trend derives its name from the fact that the trend lies in and along the route of U.S. Highway 60 that runs west from Pawhuska to the western edge of Osage County. The trend produces from numerous horizons within the section but is most widely known for the production obtained from the well defined stratigraphic pinch-out of the upper Mississippian triplitic facies that has been historically called ‘chat’. The East Hardy Unit consists of portions of sections 2, 3, 4, 5, 9, 10 and 11-25N-3E. Earliest drilling activity along this trend occurred before 1920 and has continued until present day. Throughout the years, industry's constant push to develop new techniques in exploration and development has served the Highway 60 Trend well. This paper serves to document the development of the acreage over time and outlines the methods and reasons for the constant push to understand the complex Mississippian reservoirs through the use of advancing technologies.

A Case History of the East Hardy Unit Mississippian Highway 60 Trend Osage County, Oklahoma

Contributors

Weldon Spitzer

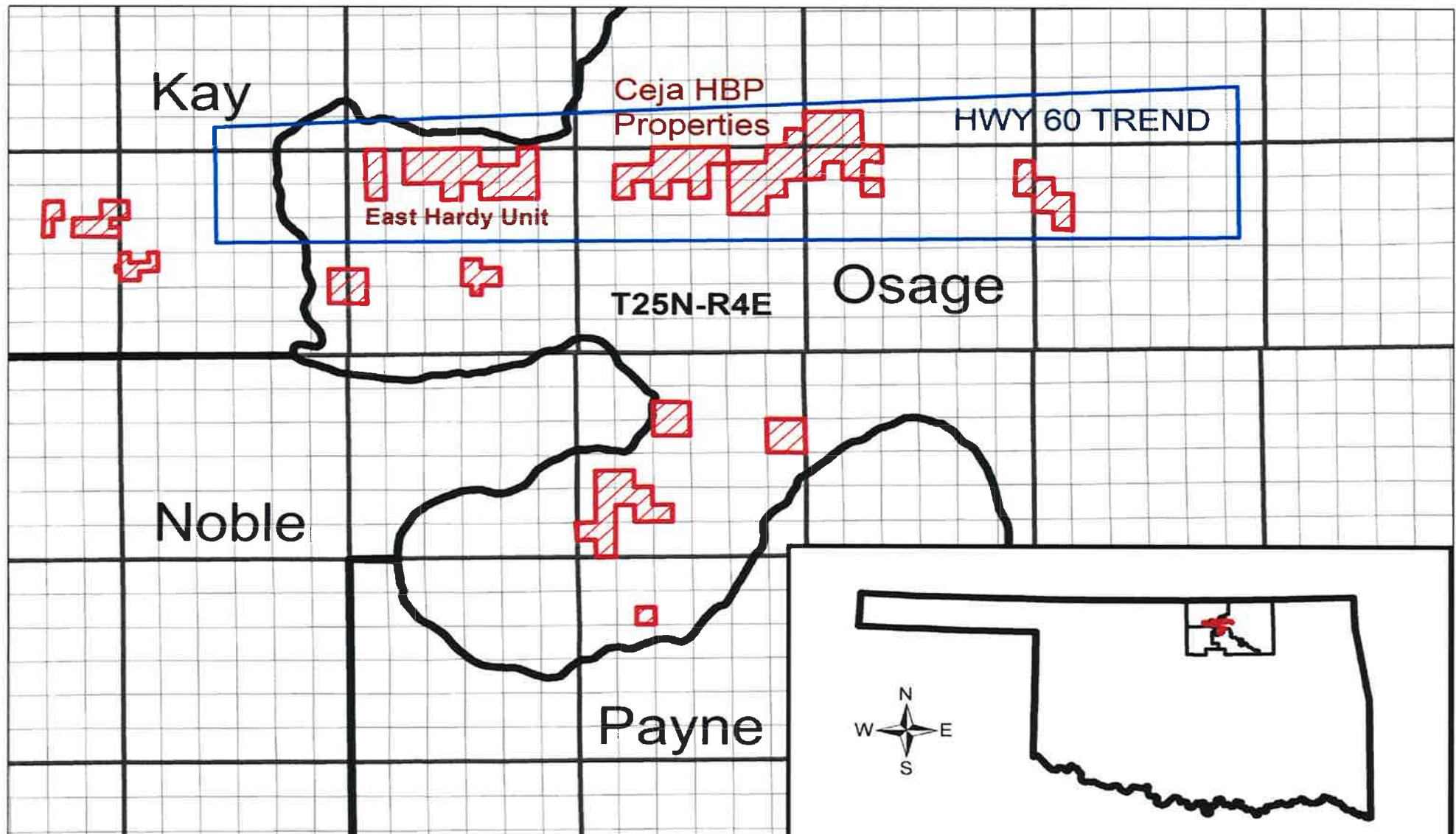
Richard Carter

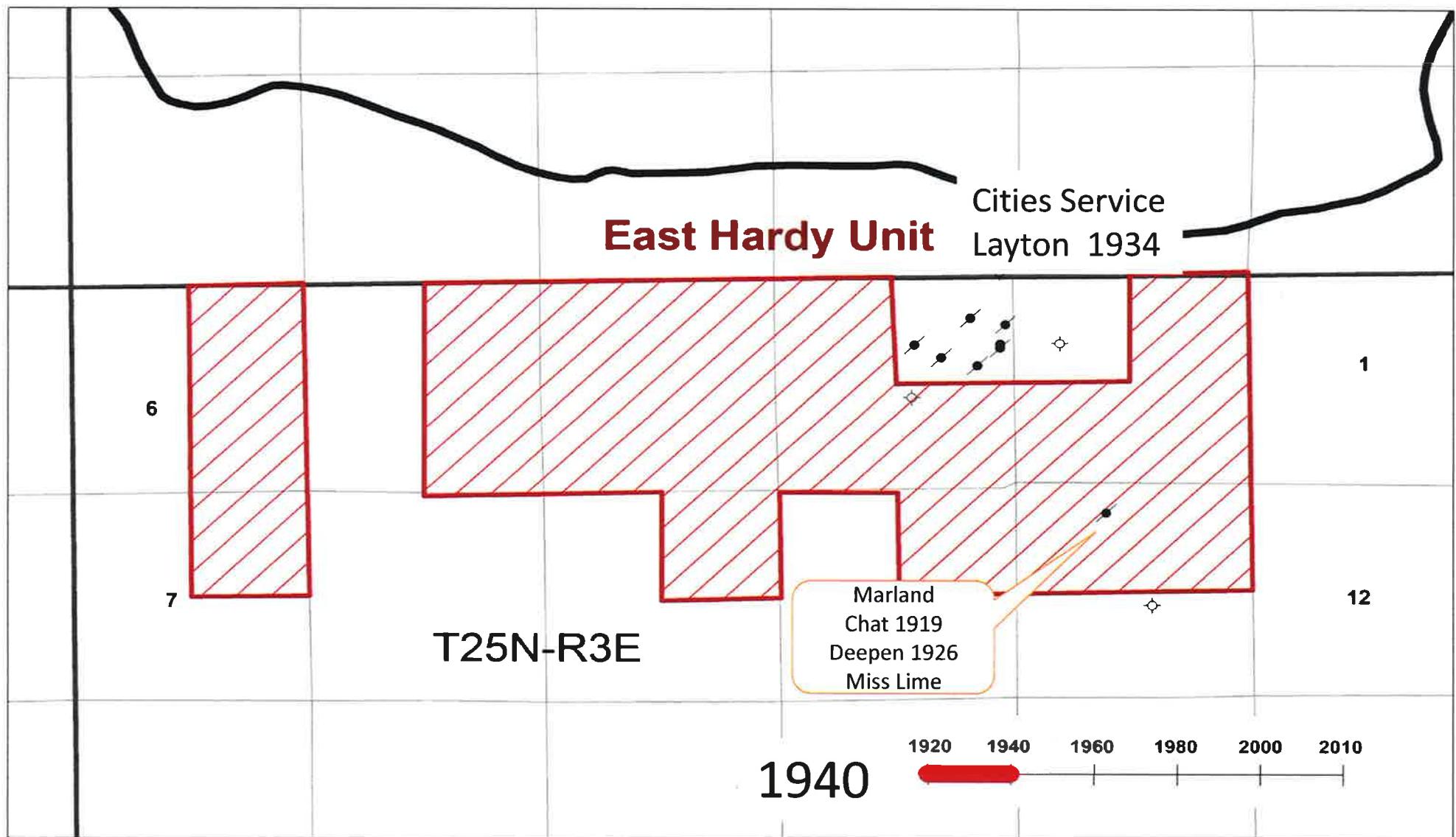
Dan Jacobs

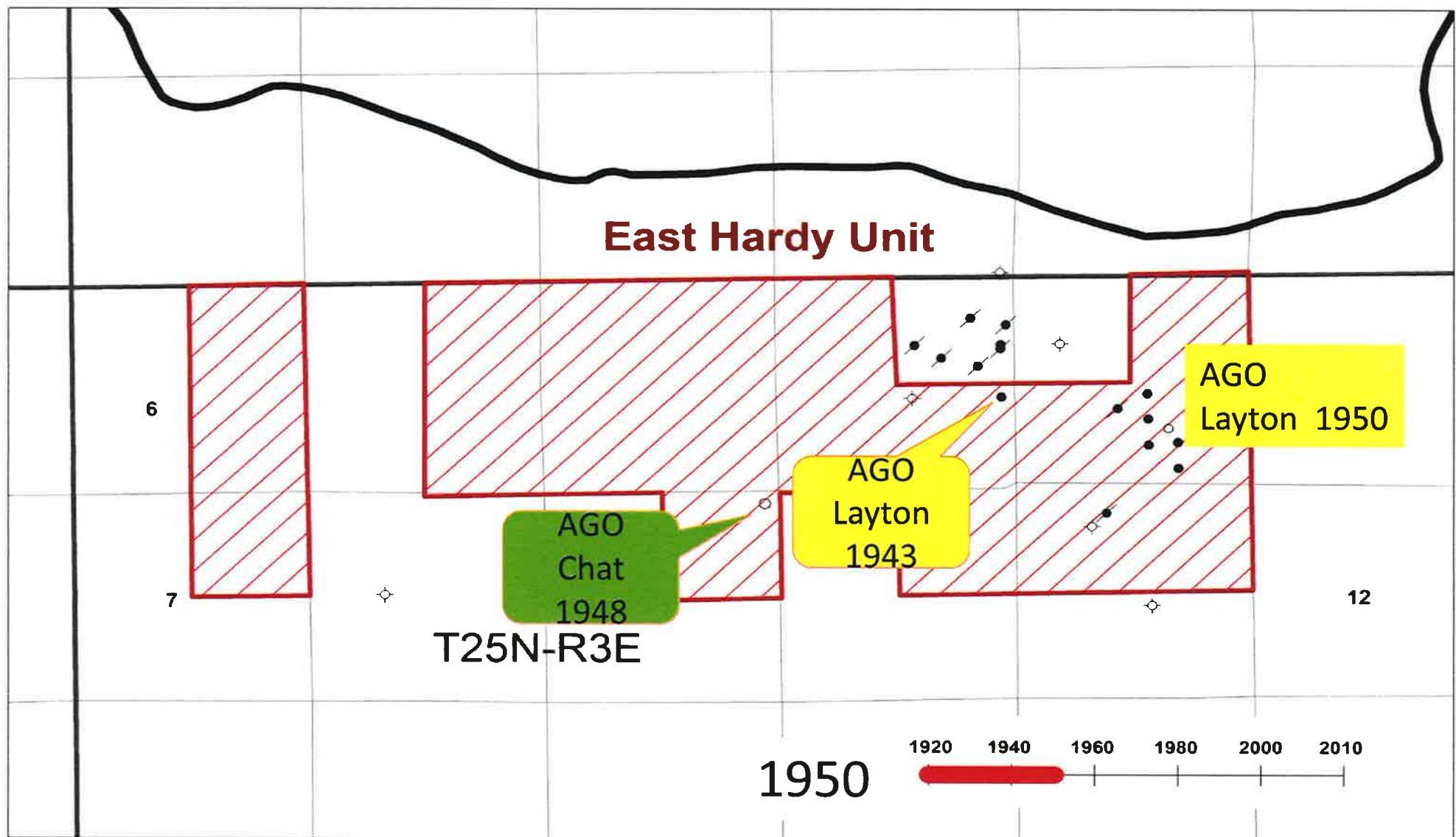
Ron Haveman

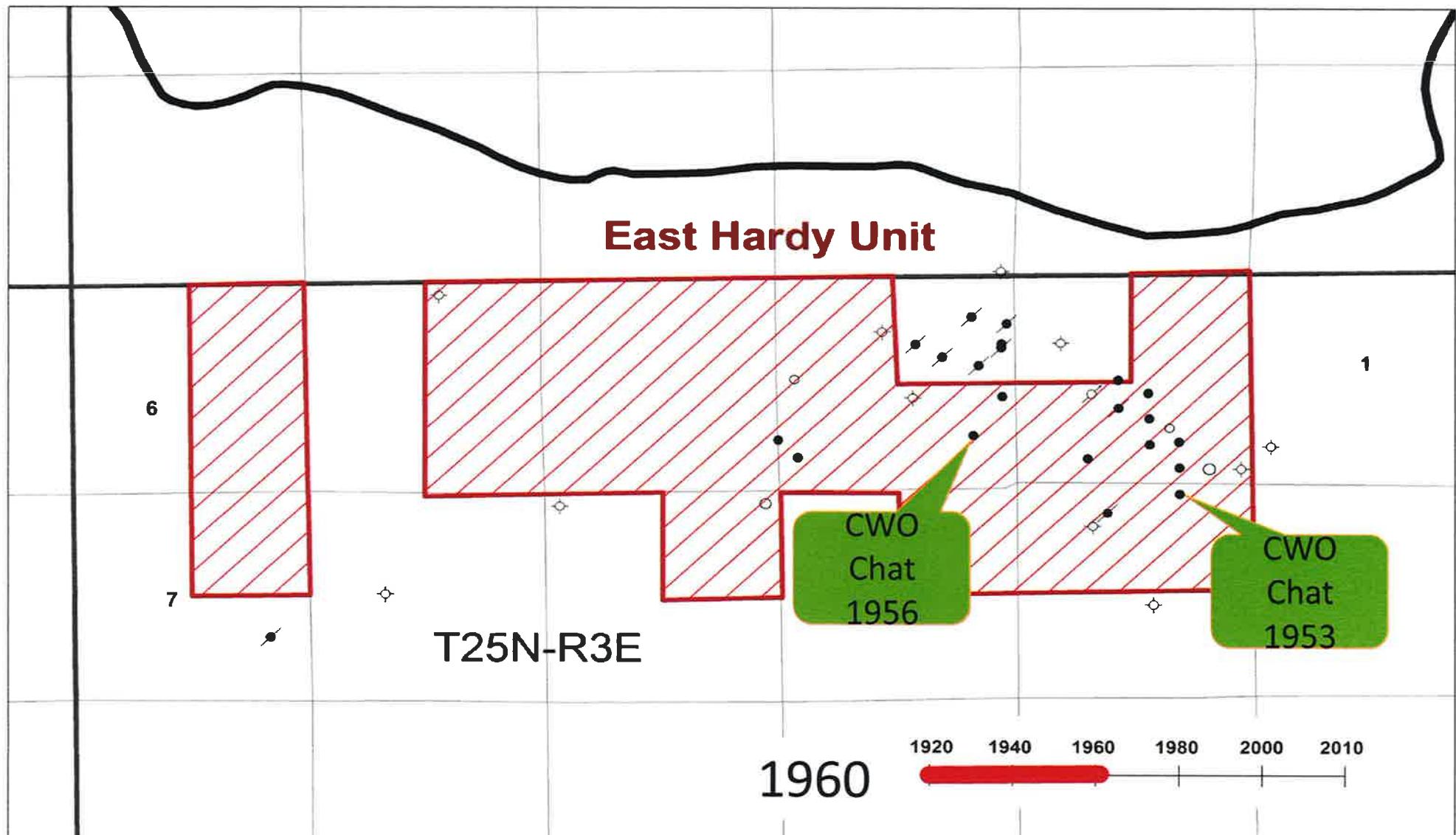
Ron Snyder - Speaker







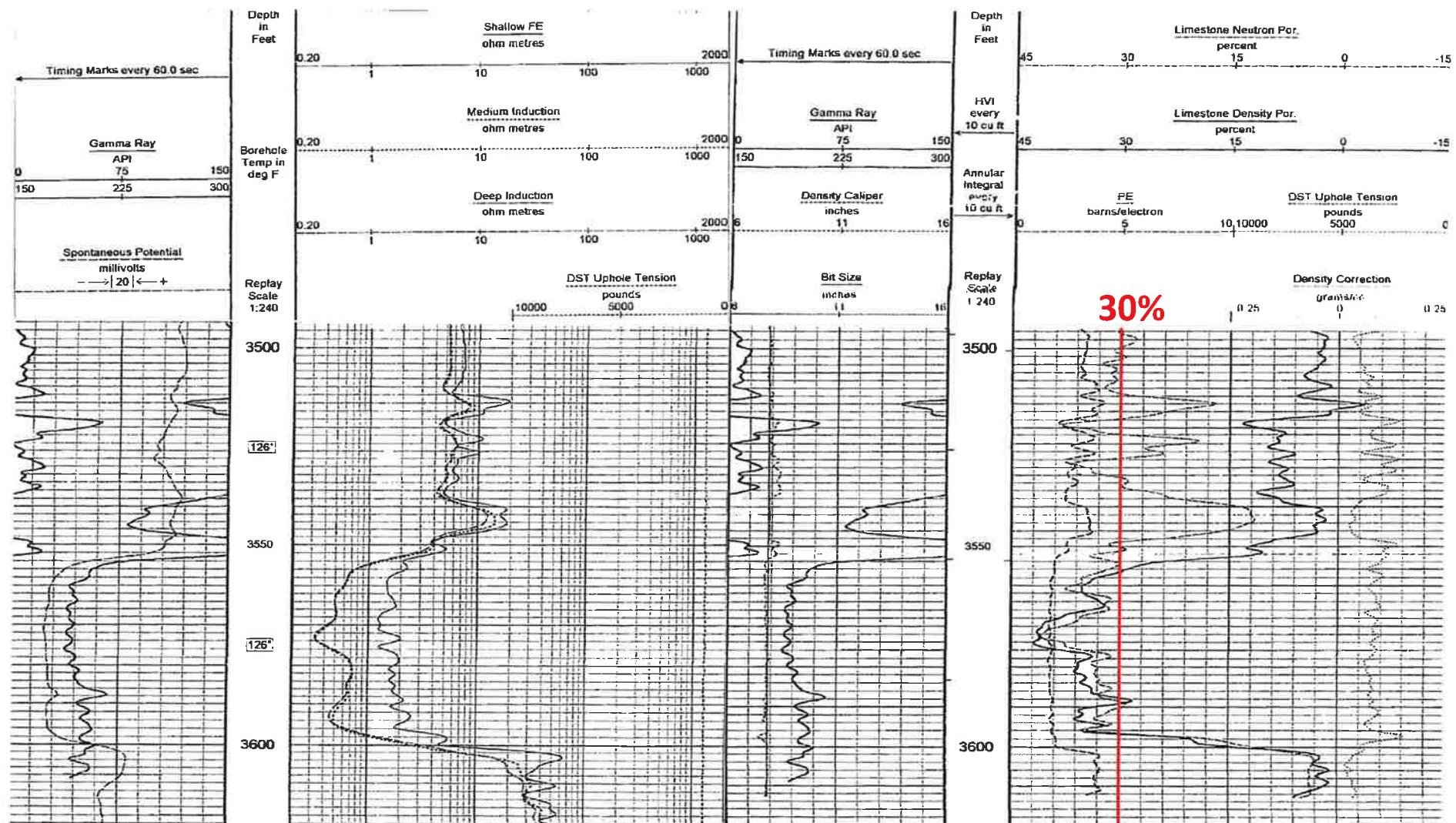




Braden B #4

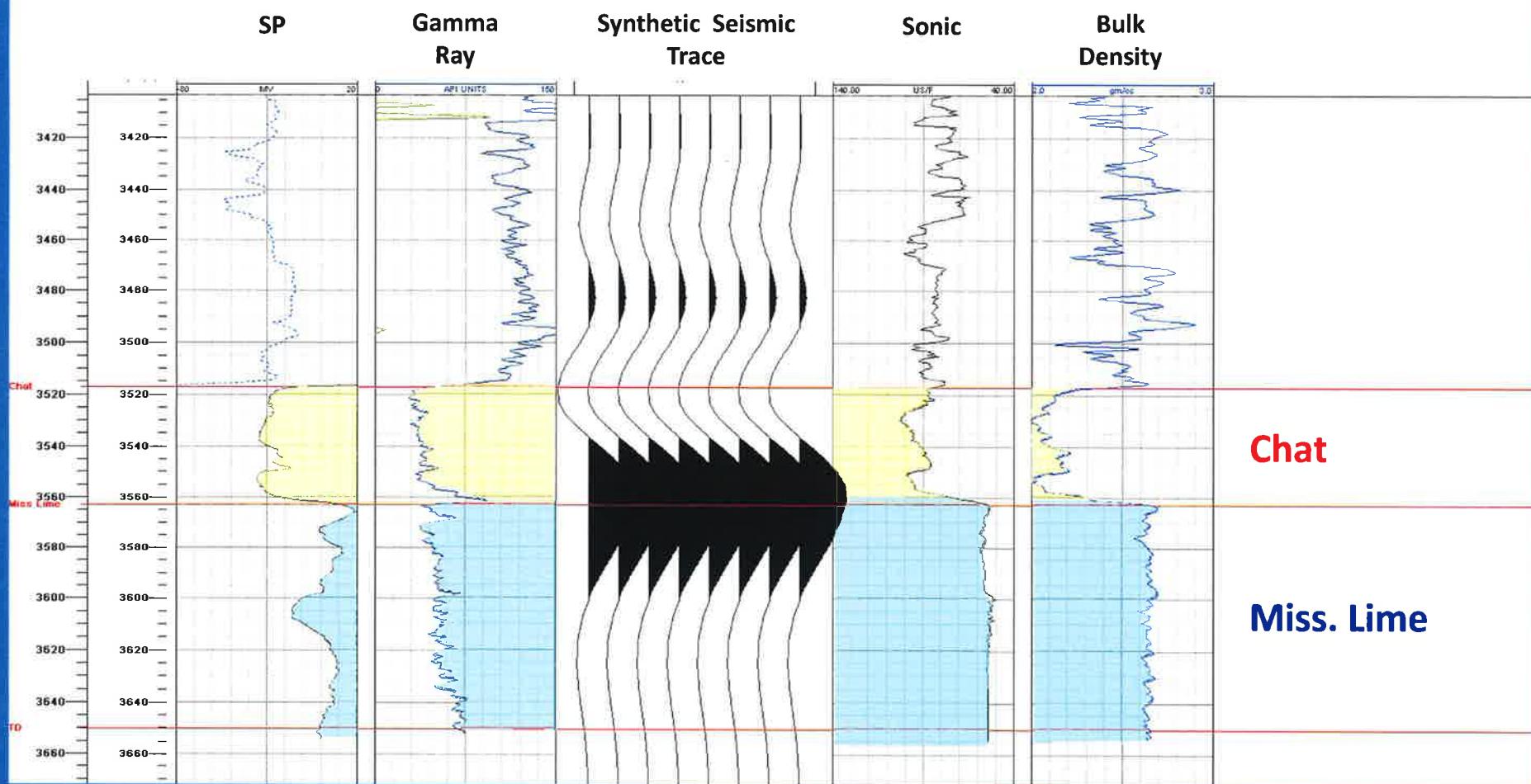
SW/4 2-25N-3E

Osage County, OK

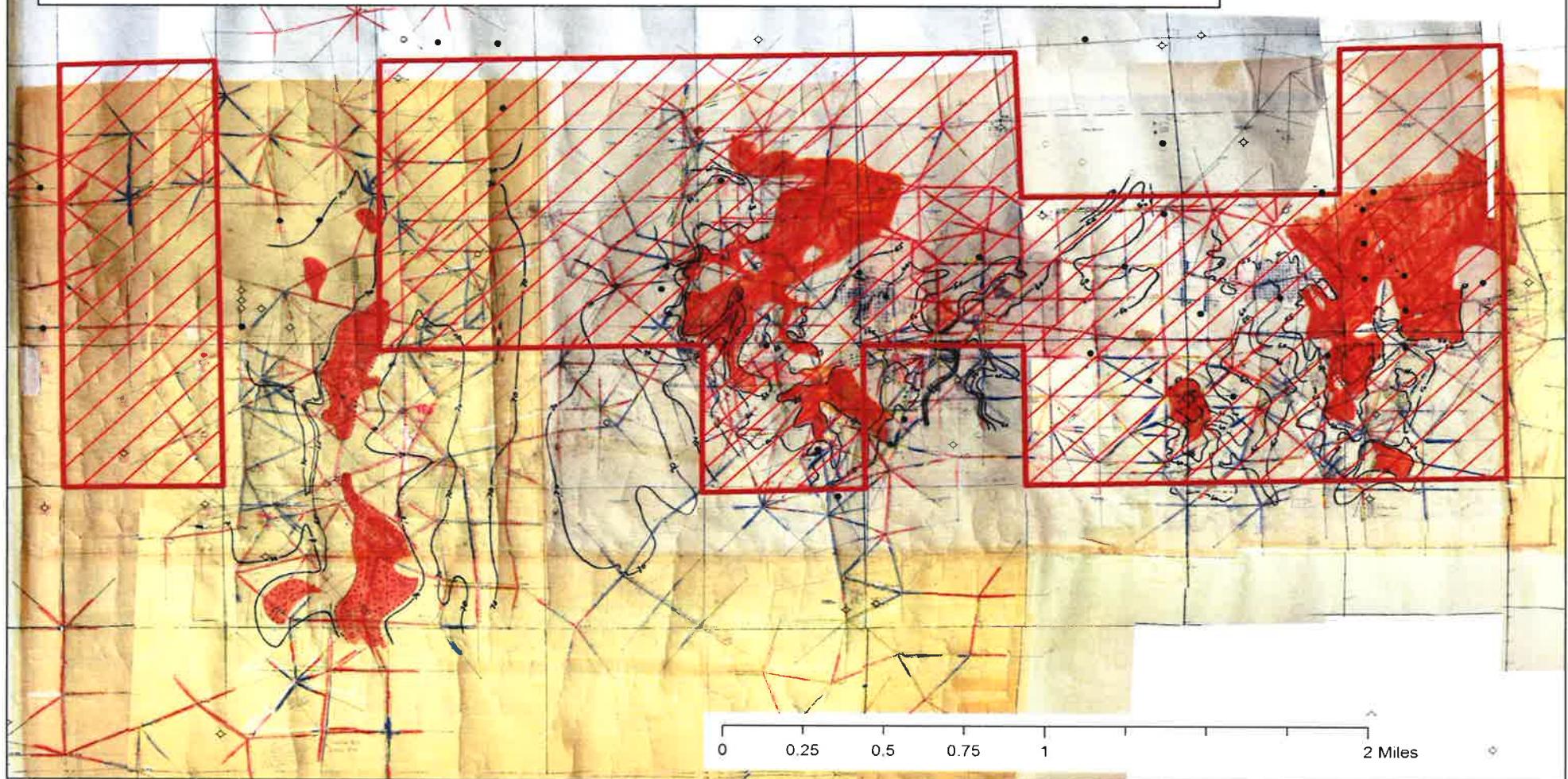


Slides for Ron's AAPG Talk

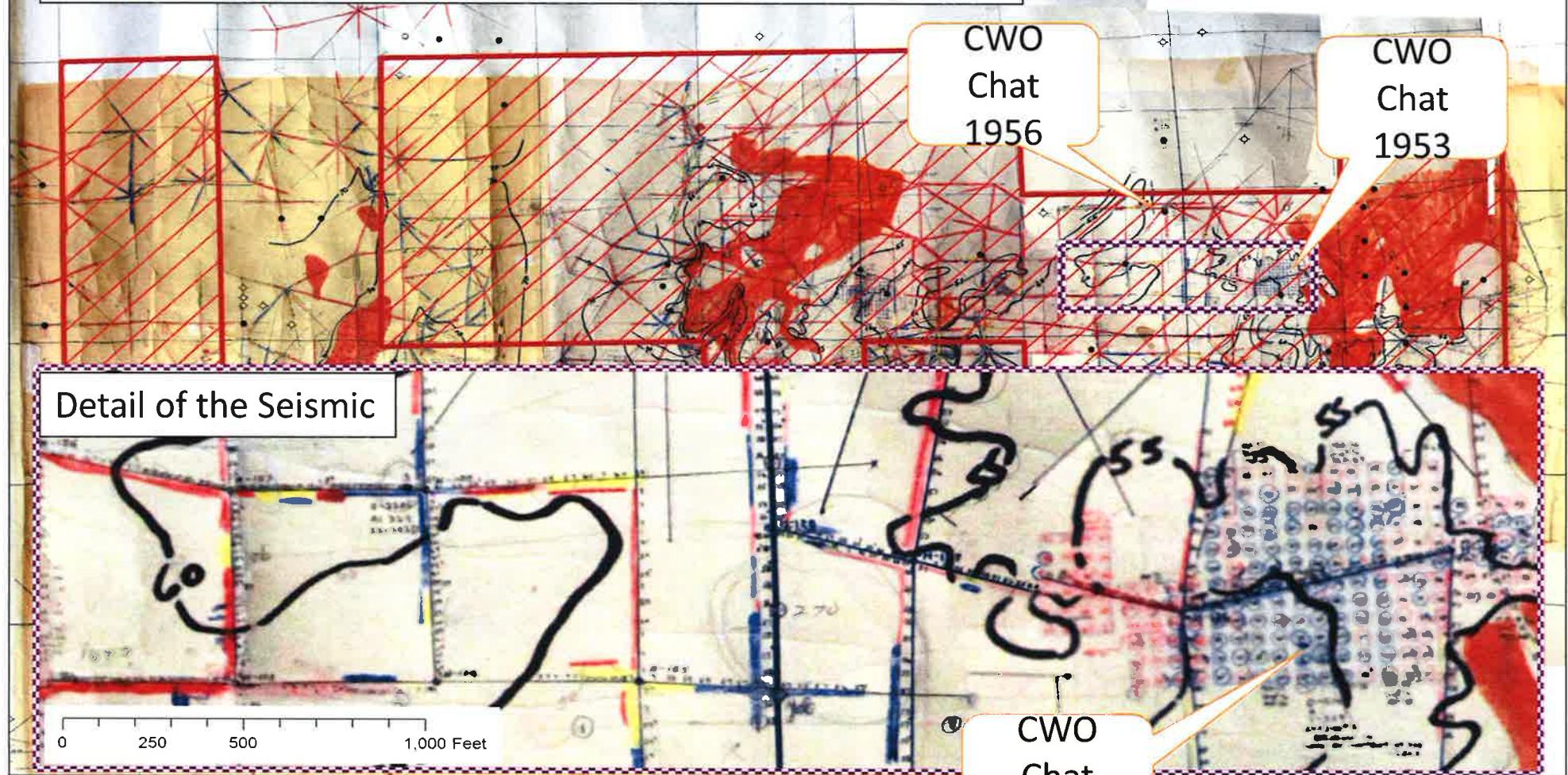
Chat Model



CW Oliphant Early 100% Seismic Map 6'-12'

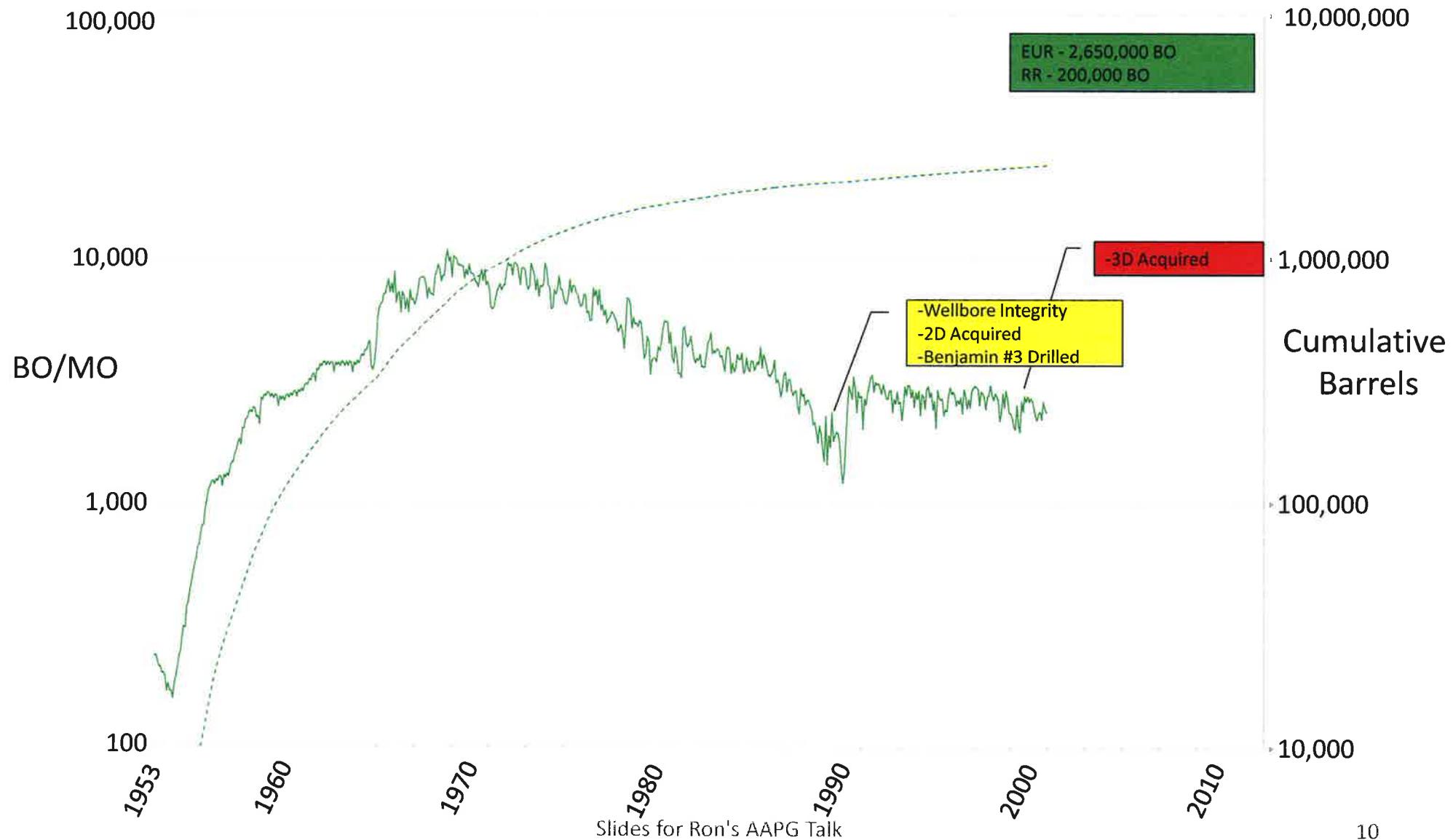


CW Oliphant Early 100% Seismic Map

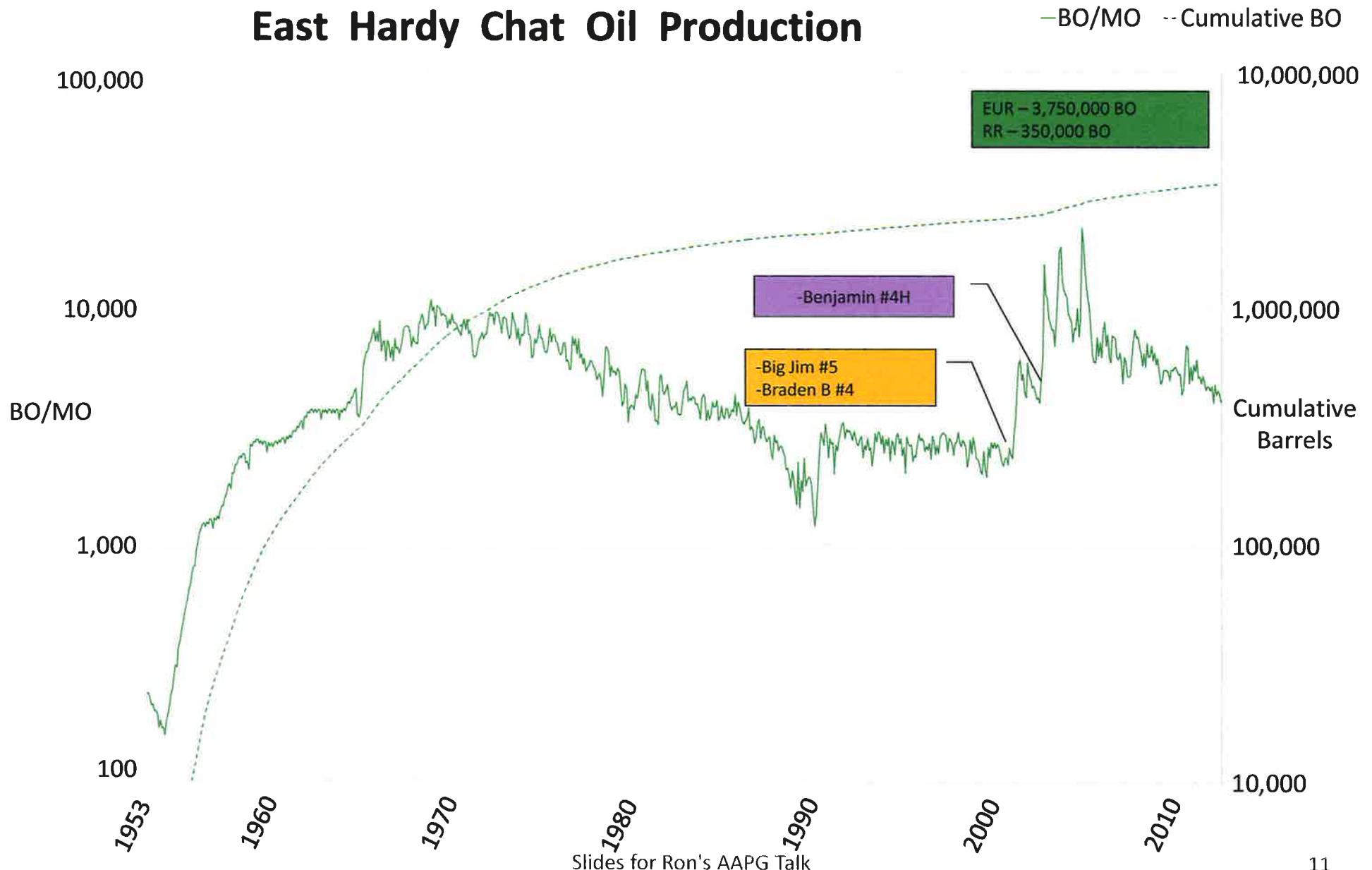


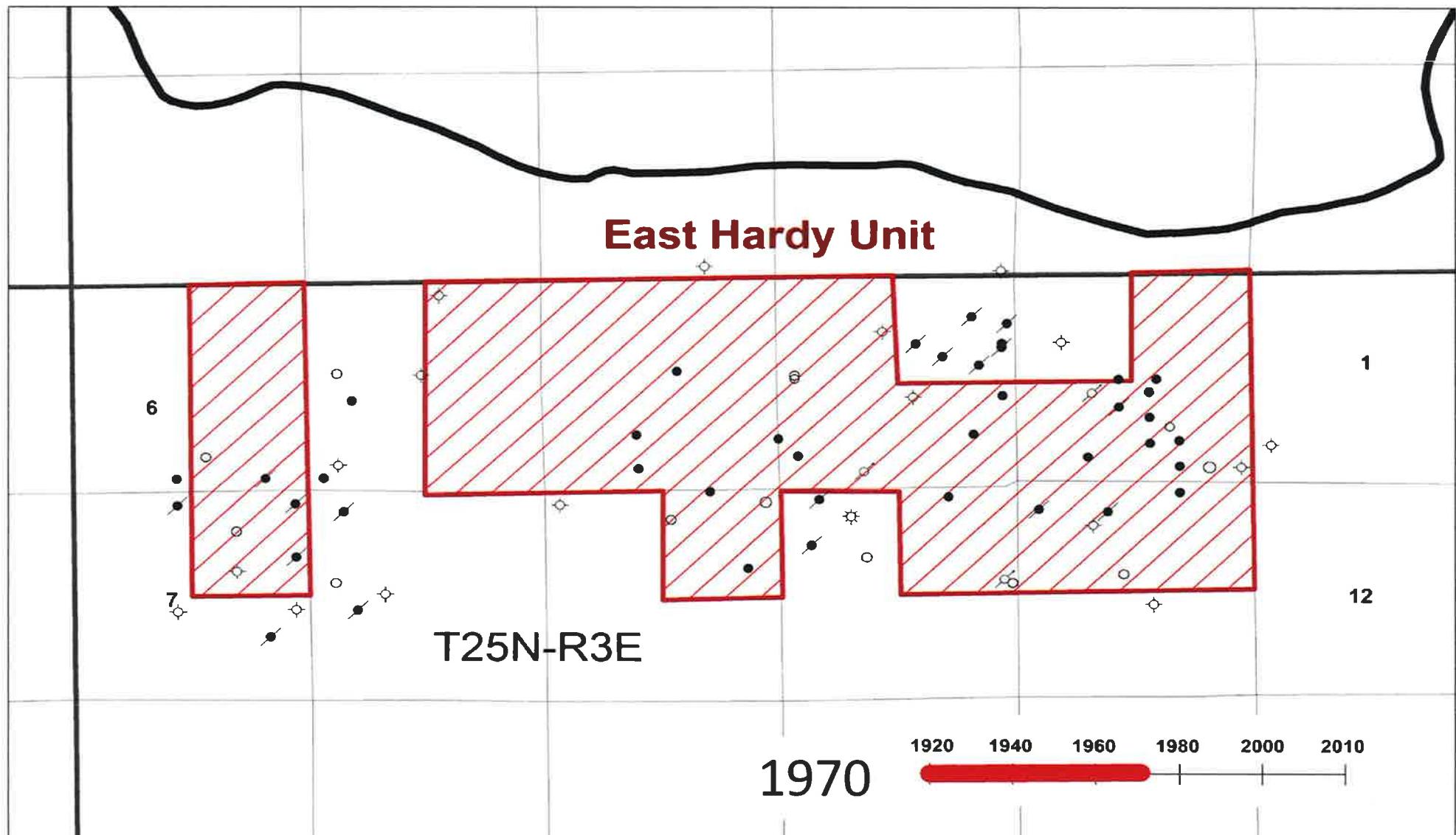
East Hardy Chat Oil Production

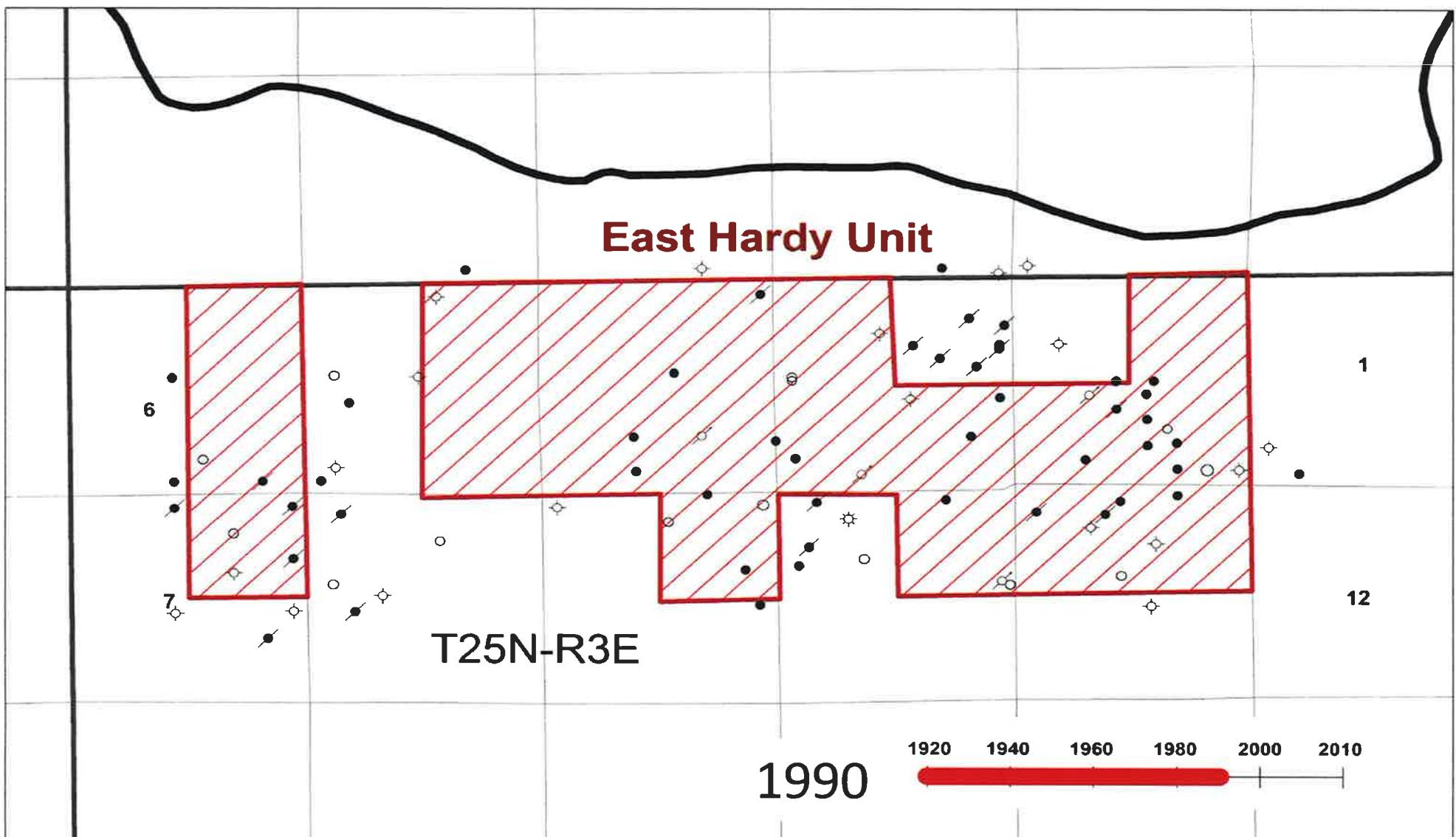
—BO/MO -- Cumulative BO

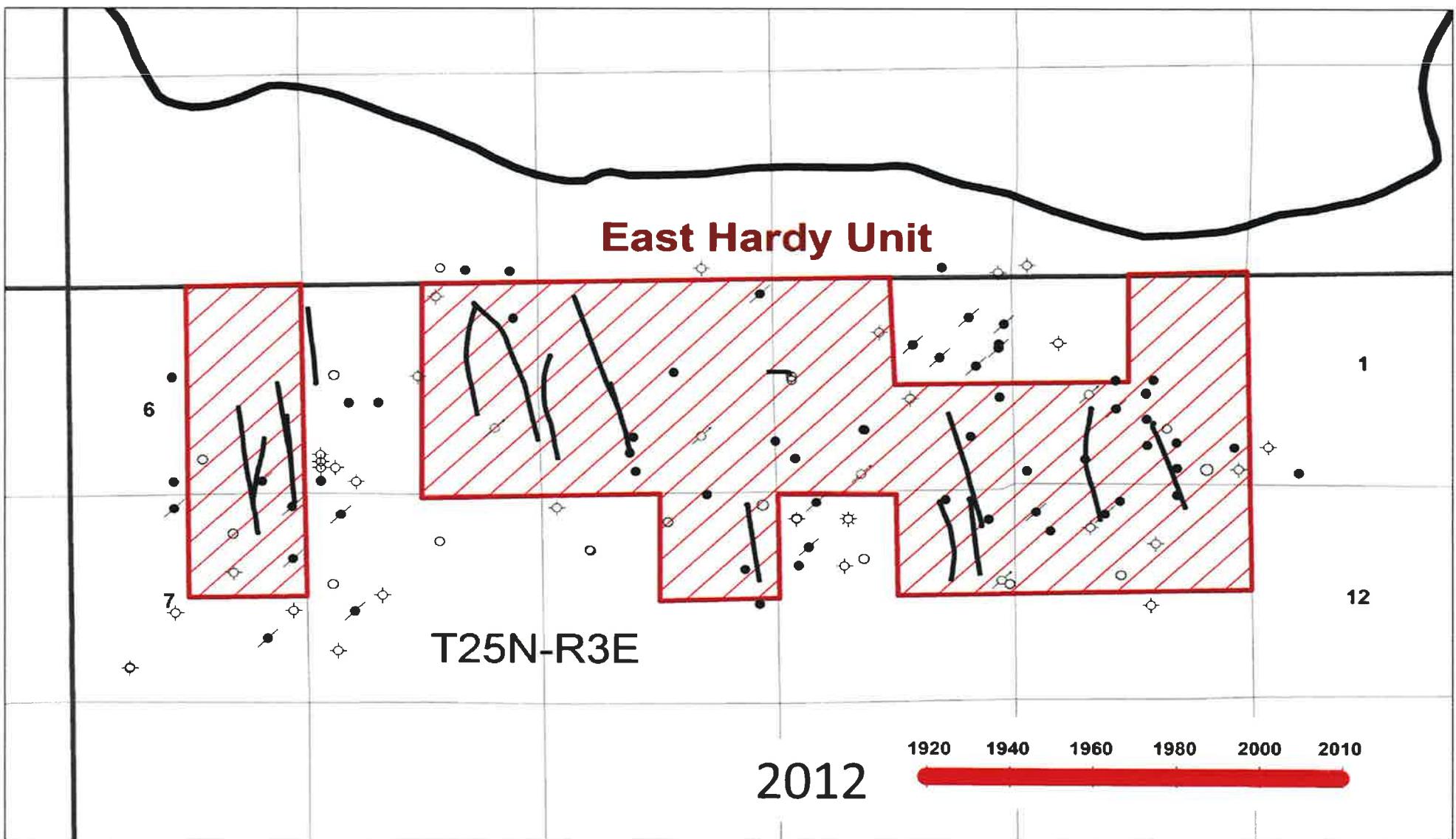


East Hardy Chat Oil Production

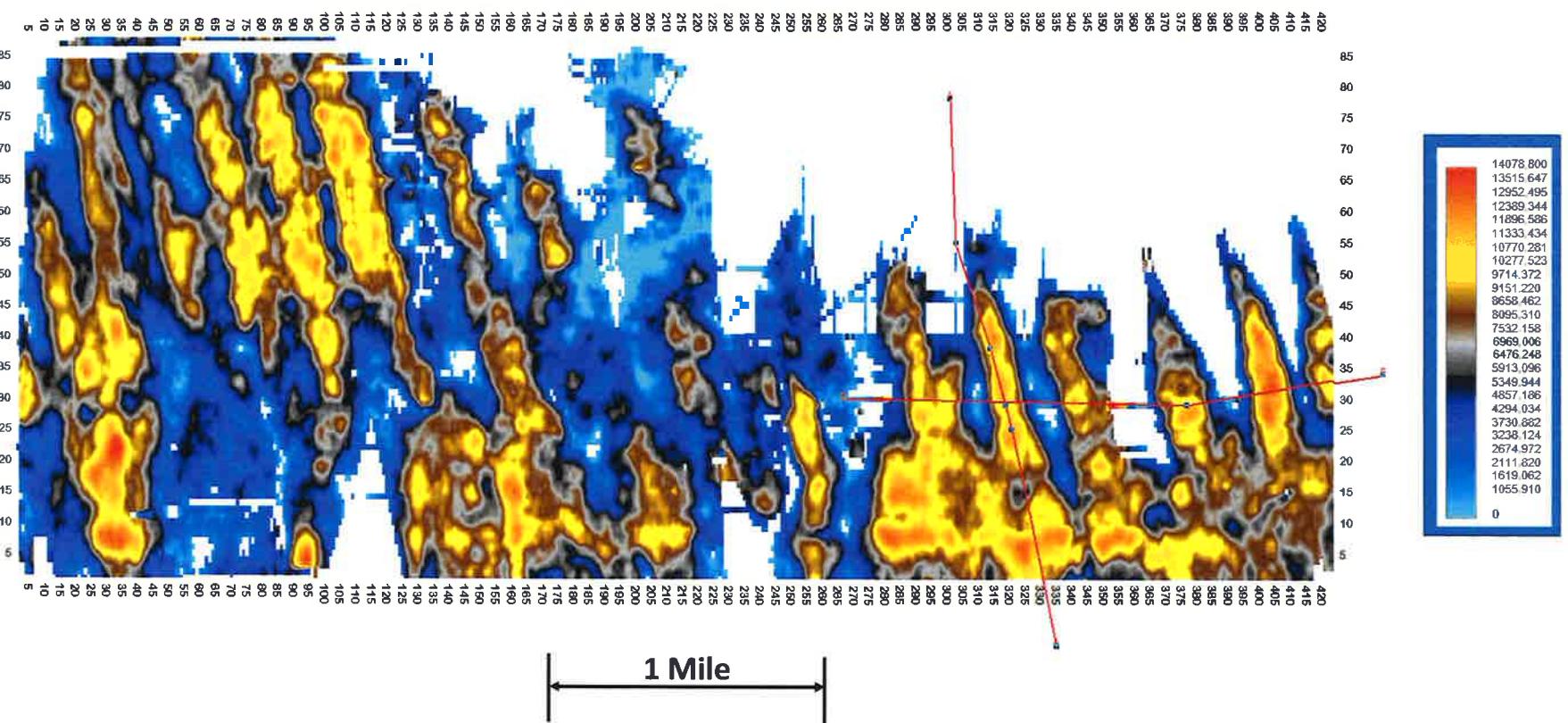




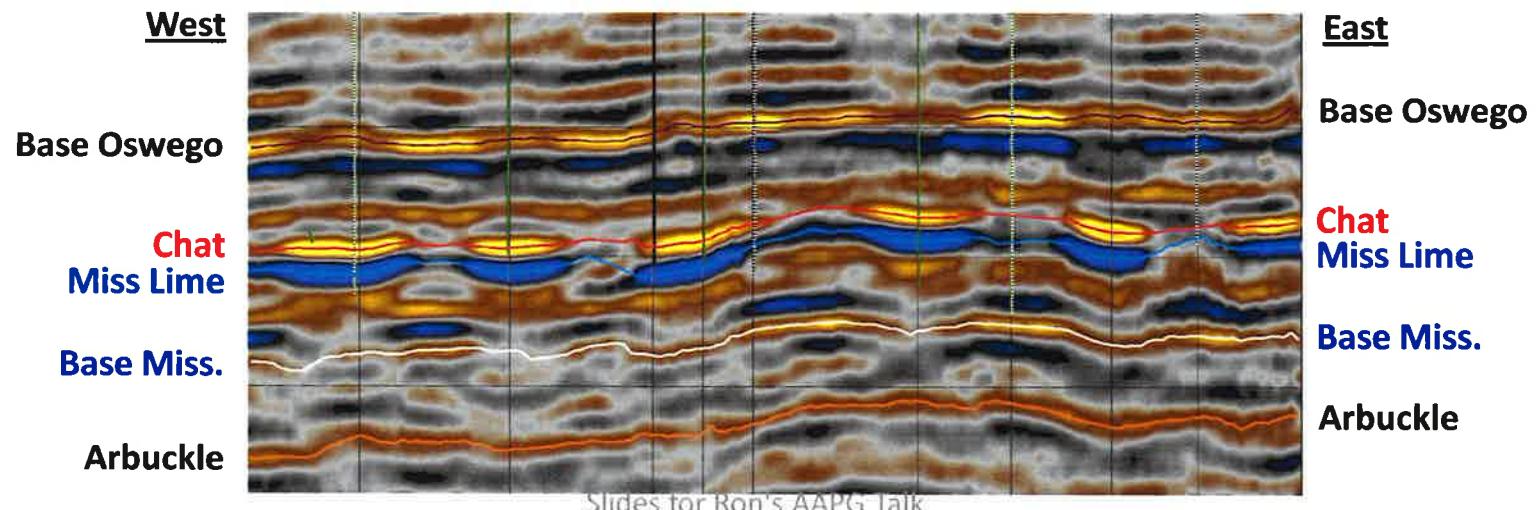
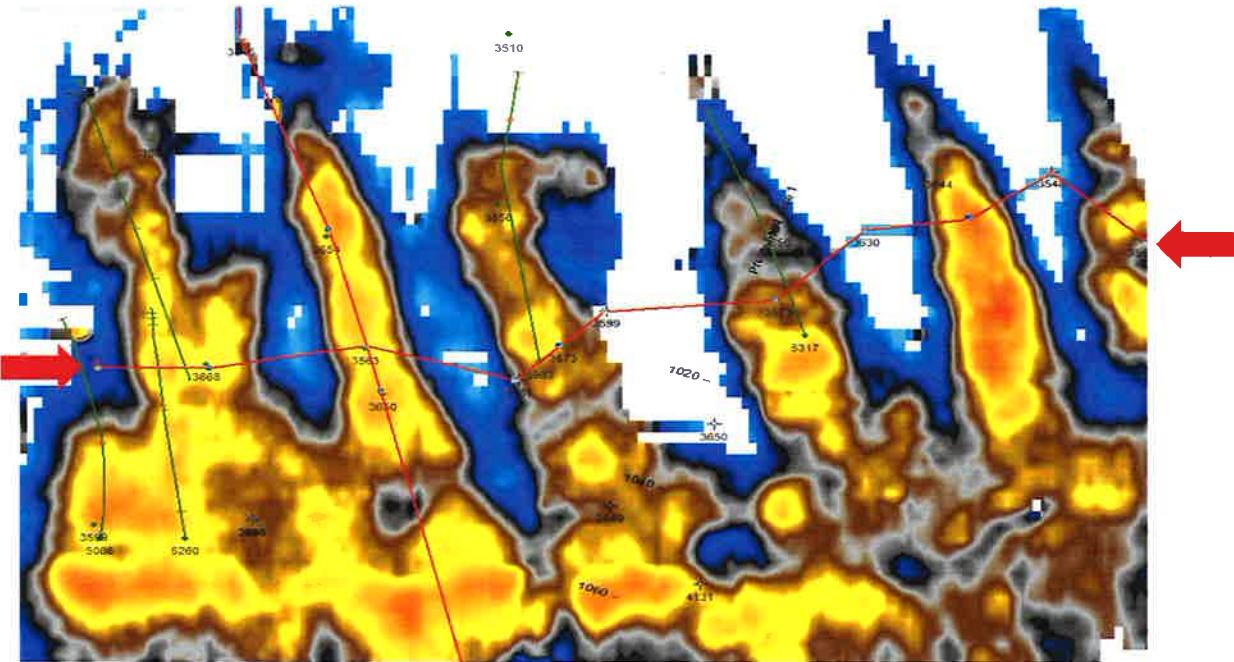




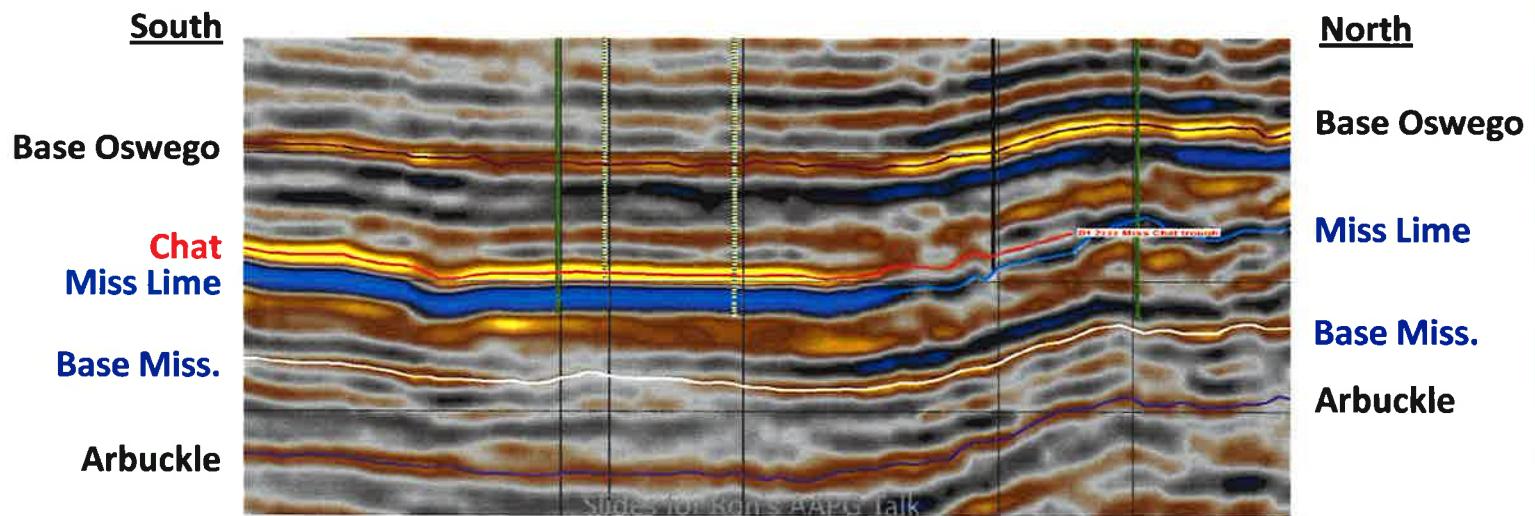
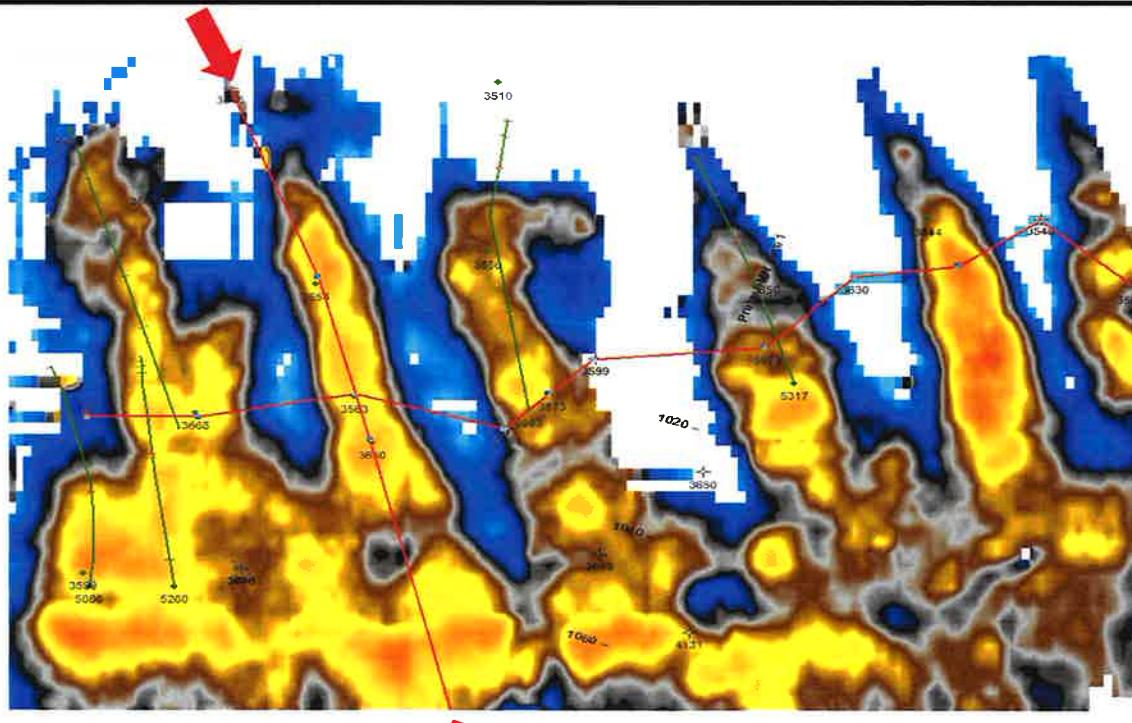
Top of Chat Trough Amplitude



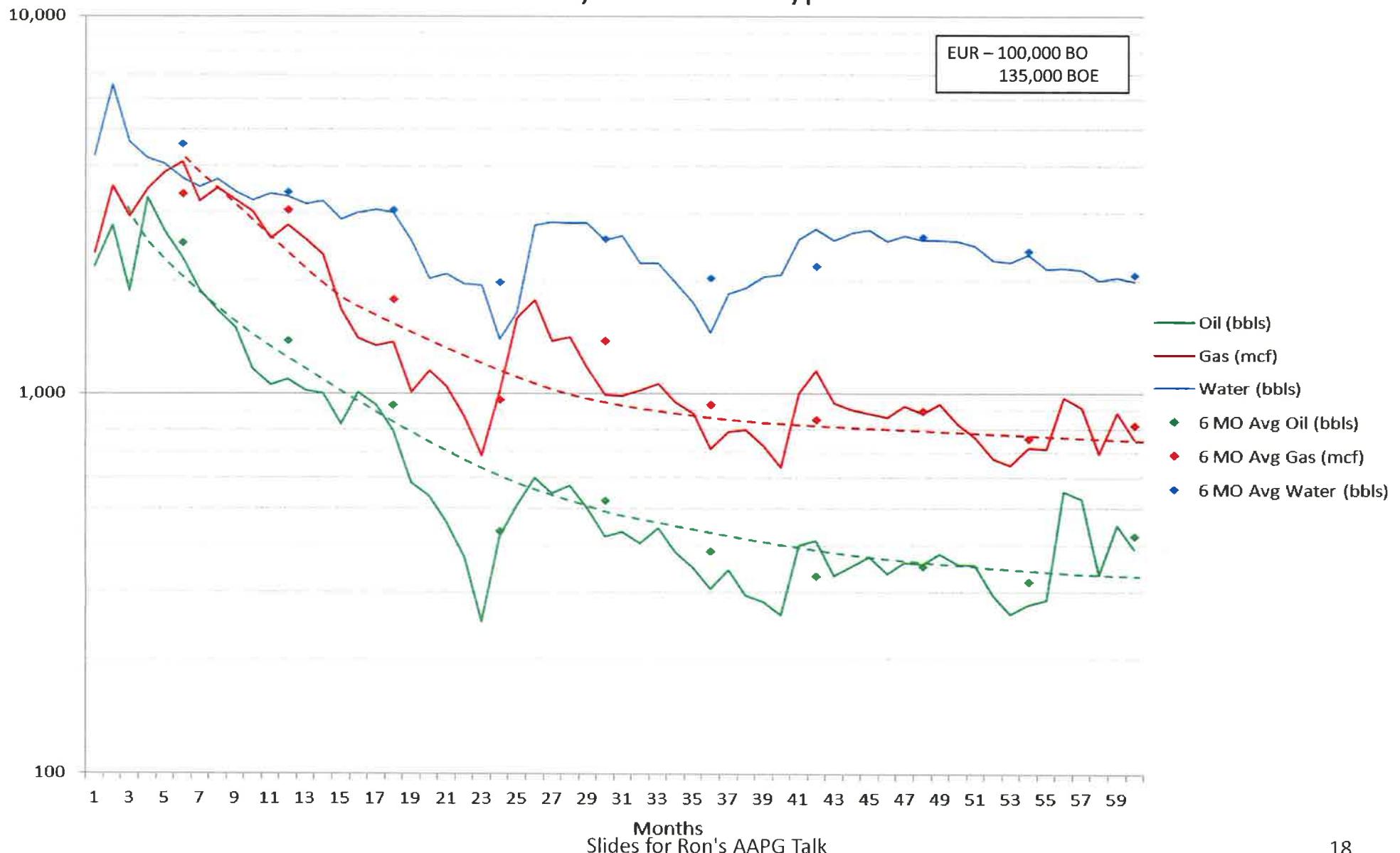
**Top of Chat
Trough
Amplitude**



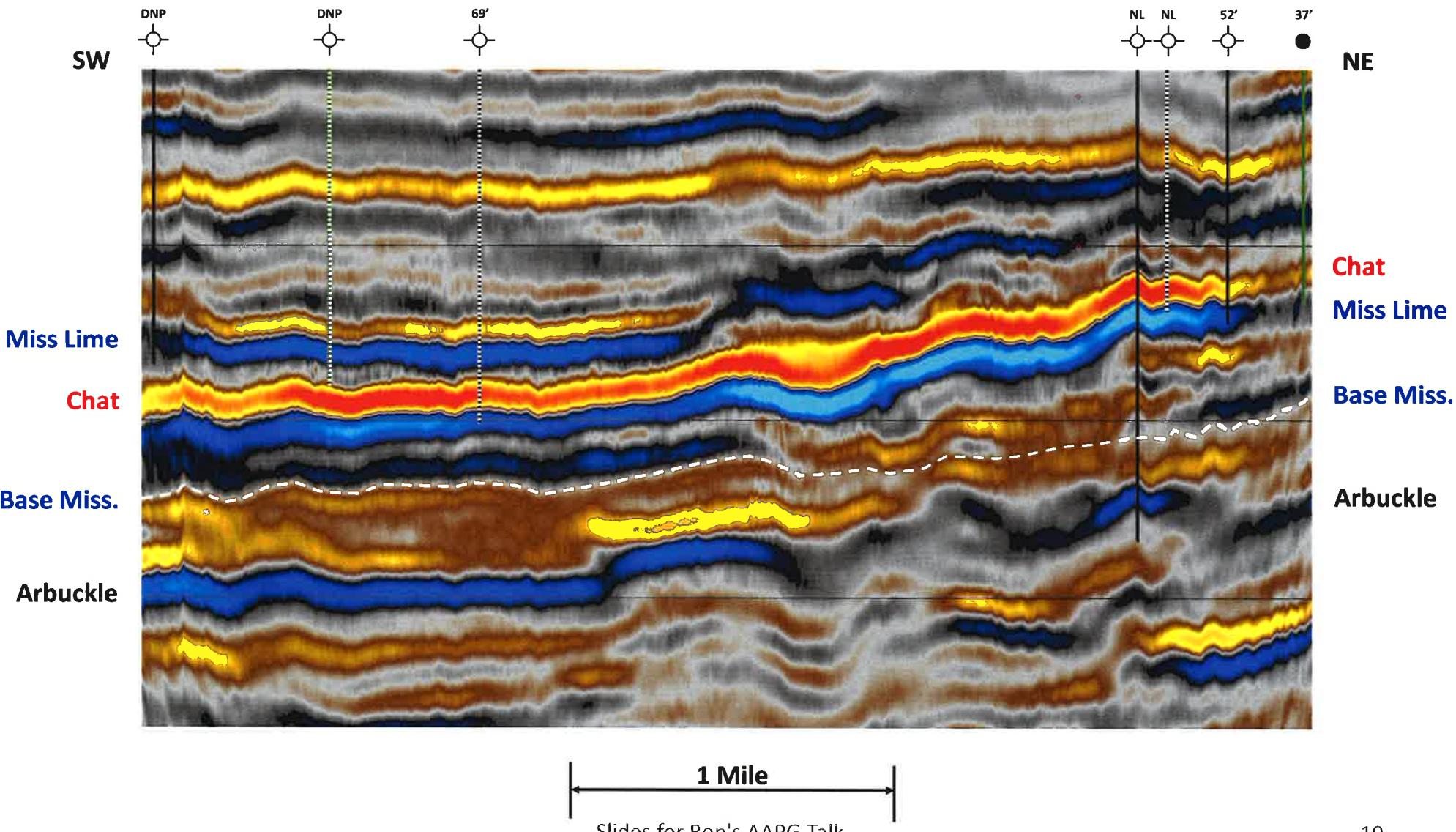
**Top of Chat
Trough Amplitude**



East Hardy Horizontal Type Curve

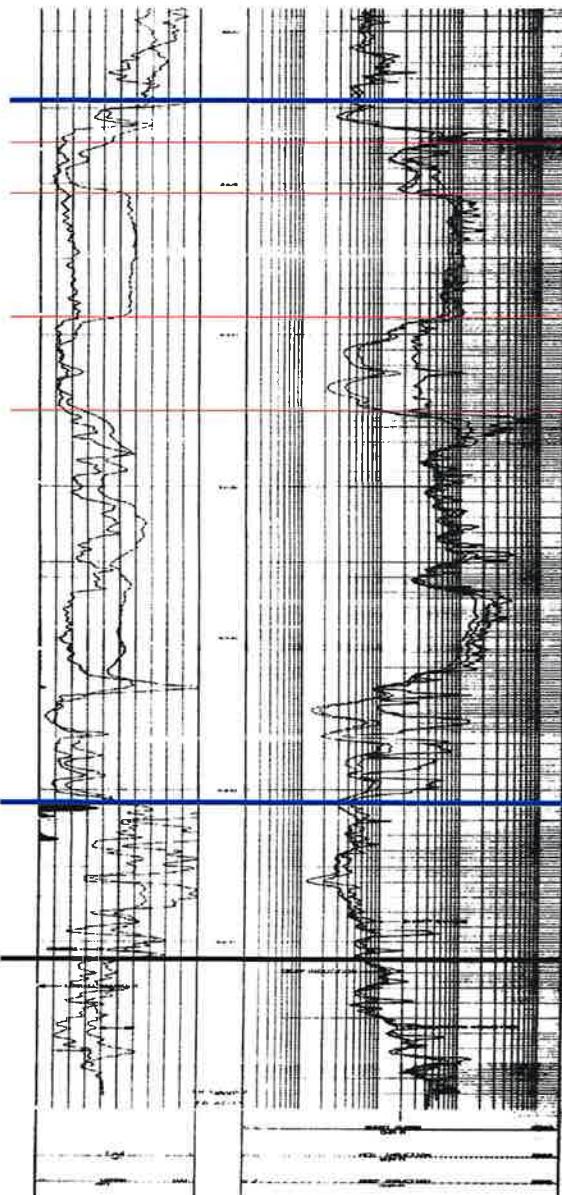


East Hardy Unit



Slides for Ron's AAPG Talk

Dual Induction



Top Mississippian

Chat

Chat
(Secrest or Highway 60)

Base Mississippian

Arbuckle

Density-Neutron

