

# BuffaloHornSCAN | Mississippi Lime

## PROGRAM OVERVIEW

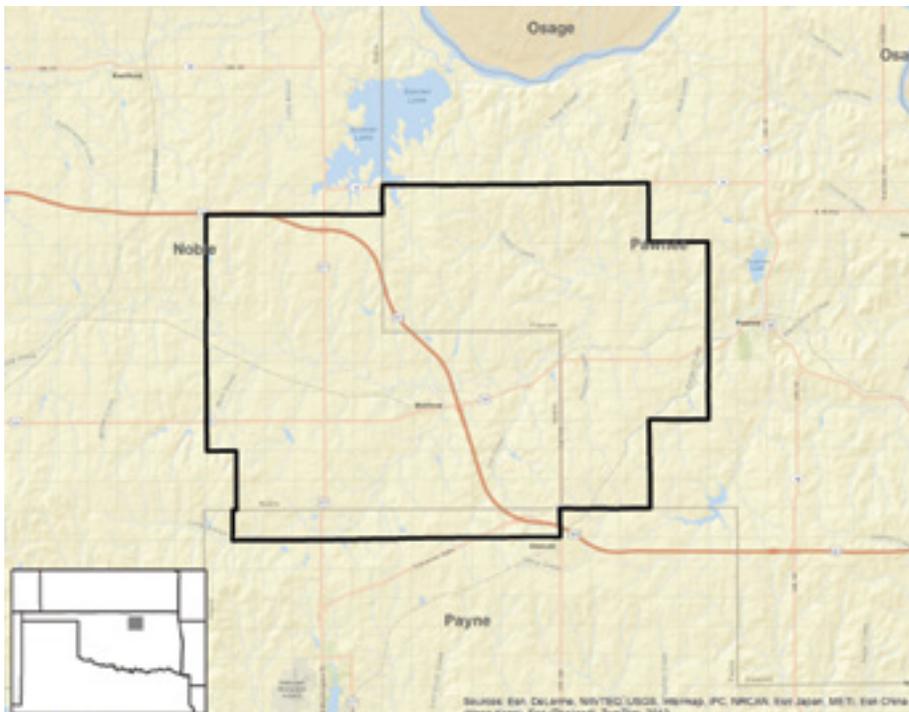
ION's BuffaloHornSCAN™ is a 3D multi-client survey primarily located in the Oklahoma counties of Noble and Pawnee and comprises approximately 178 square miles. Targeting the Mississippi Lime play in the Anadarko Basin, this survey has been designed to provide high quality structural imaging and rock property prediction.

## PROGRAM OBJECTIVES

- Provide high quality structural imaging for geo-hazard avoidance
- Better characterize rock properties and natural fracture systems
- Establish what seismic attributes impact drilling and completion decisions
- Better understand key geologic drivers, maximize production and minimize development costs



● ION's 3D ResSCANS

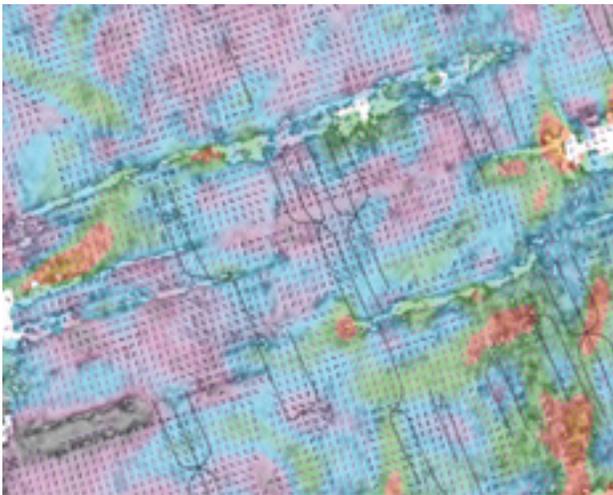


Map of ION's BuffaloHornSCAN survey

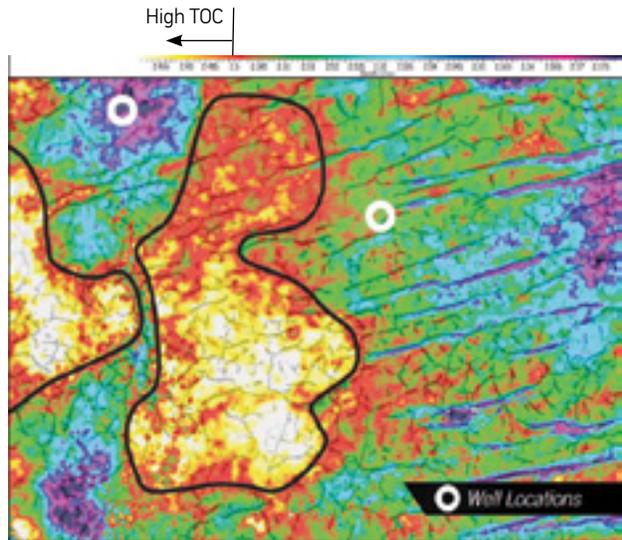
**KEY ACQUISITION PARAMETERS:**

- Receiver line interval: 660 ft.
- Receiver group interval: 165 ft.
- Shot line interval: 330 ft.
- Shot point interval: 165 ft.
- Bin size: 82.5 x 82.5 ft.
- Nominal fold: 338

Acquiring multicomponent data can provide more robust rock property estimates compared to conventional p-wave surveys. Examples of rock property deliverables from our ResSCAN multi-client library are shown below.



This azimuthal anisotropy map at the reservoir level, co-rendered with coherency, is used for fracture and stress determination.



This density map at the reservoir level, derived using simultaneous inversion of P-wave and C-wave data and co-rendered with fault probability, indicates areas with elevated TOC and a corresponding change in the structural fabric of the rock.

**ABOUT ResSCAN™**

ResSCAN programs are 3D multicomponent imaging and characterization programs designed to help E&P companies better understand conventional and unconventional reservoirs to maximize production. Unlike traditional P-wave surveys, ION's seismic approach provides enhanced key rock property insights away from the well bore. The workflow integrates upfront geological, petrophysical, and rock physics analysis to establish which seismic attributes best predict key reservoir properties and impact drilling and completions engineering decisions. The enhanced imaging and seismic attribute analyses enable operators to evaluate and address key challenges associated with geohazard identification and avoidance, reservoir characterization, and completions effectiveness.

[ResSCANS@iongeo.com](mailto:ResSCANS@iongeo.com) | [iongeo.com/Data\\_Library](http://iongeo.com/Data_Library)