TGS

FIRESTONE 3D
MULTI-CLIENT 3D SEISMIC SURVEY
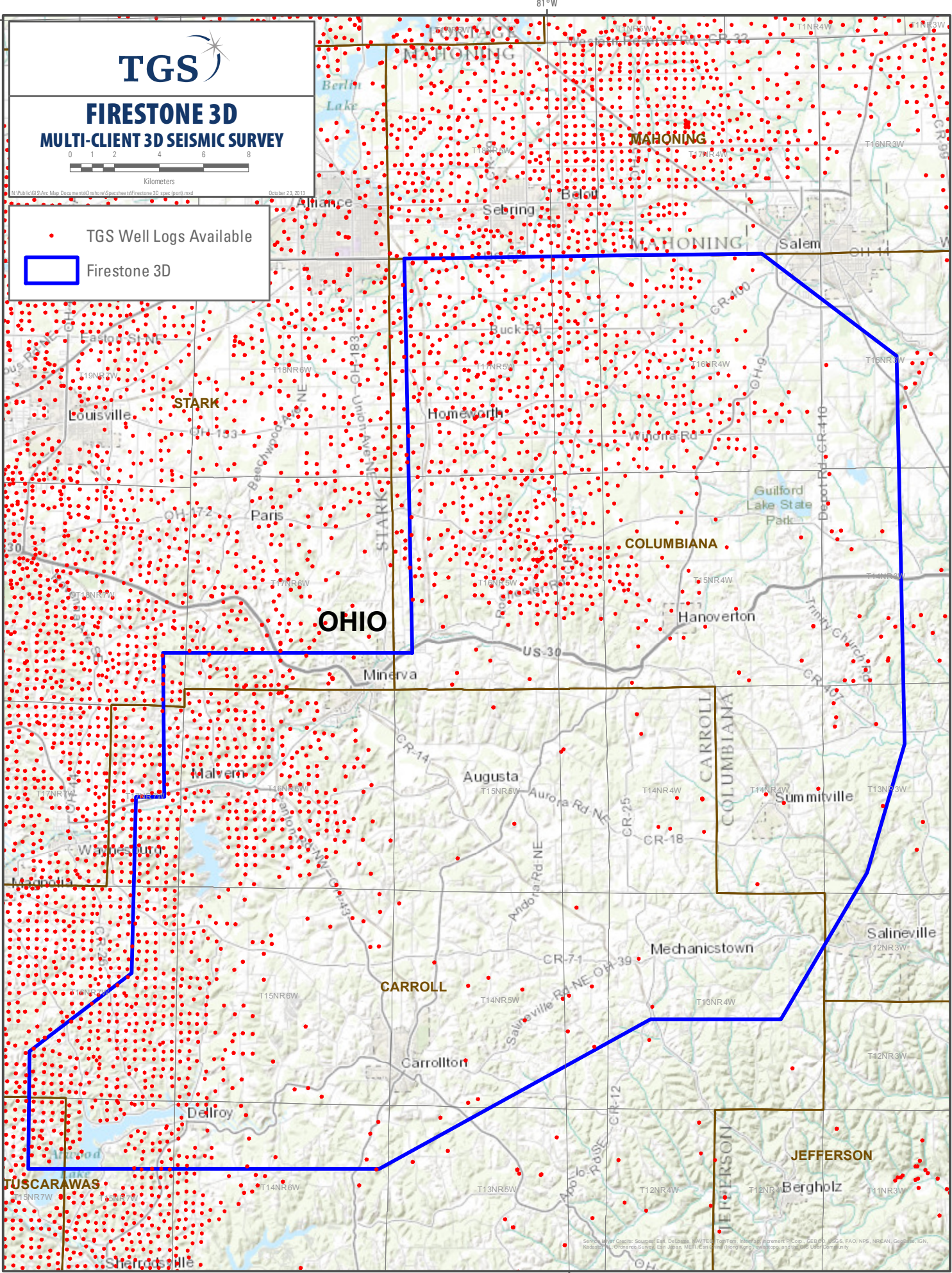
Kilometers
0 1 2   4   6   8

N:\Public\GIS\Arc Map Documents\Onshore\Specsheet\Firestone 3D spec (port).mxd   October 23, 2013

•   TGS Well Logs Available

▭   Firestone 3D

OHIO

MAHONING

STARK

COLUMBIANA

CARROLL

JEFFERSON

TUSCARAWAS

Louisville
Paris
Malvern
Waynesburg
Magnolia
Dellroy
Sherrodsville
Carrollton
Minerva
Augusta
Mechanicstown
Hanoverton
Summitville
Salineville
Bergholz
Alliance
Sebring
Beloit
Homeworth
Salem

Berlin Lake

Guilford Lake State Park

ACQUISITION PARAMETERS

Acquisition Date:	May 2012 – February 2013
Receiver Interval:	220 ft
Source Interval:	220 ft (245.9 ft diagonal)
Receiver Line Spacing:	880 ft
Source Line Spacing:	1320 ft
Geophones:	6, 10 Hz linear array
Record Length:	5000 ms
Sample Interval:	2 ms
Multiplicity (Nominal):	130
Recorded Bin Size:	110 x 110 feet
Source Type:	Mixed source:
	3 Vibrators with 2 sweeps x 12 s,
	6-120 Hz, linear sweep
	2.2# dynamite at 30 ft
Maximum Offset:	19382 ft
Template:	20L x 156 stations per line, roll one line
Receiver Orientation:	West - East
Surface Area:	409 mi²
Acquired By:	Tidelands Geophysical

PRE PROCESSING
Processed by Arcis in Calgary – Estimated October 2014

- Input Preprocessed data from Firestone 3D
- 5D Interpolation

- Output 5D pre-processed data – no demultiple (CDP sorted)

TIME MIGRATION and POST-STACK PROCESSING

- Anisotropic Kirchhoff pre-stack curved ray migration (input-output grids 110x110 ft)
- Output raw migrated gathers with NMO
- Mute and stack

- Output raw migration
- Spectral whitening
- Apply filter and scale
- Noise reduction and footprint attenuation
- Output processed migration

AVAILABLE PSTM DELIVERABLES

- 5D Preprocessed data – no demultiple
- 5D Pre-stack time migrated CDP gathers with NMO
- 5D Raw PSTM migration

- 5D Processed PSTM migration
- Data processing final report

The processing flow and parameters published herein are the anticipated flow and parameters for the survey and TGS will use commercially reasonable efforts to follow this flow and parameterization. However, the foregoing notwithstanding, TGS reserves the right to modify the processing flow and parameters as needed to adjust for timing, testing, and new technologies.