Seismic Inversion

# Mission-Oriented Seismic Research Program

• Overview: M-OSRP identifies and addresses major seismic exploration challenges. The program has developed fundamentally new concepts and delivered more effective seismic capability. Further significant impediments to effective drill decisions need to be addressed.

• Need: There is a pressing need to improve location, delineation, and monitoring of reservoirs, either with or without reliable subsurface information. M-OSRP has provided the most capable methods for removing multiples in seismic data, and is extending that capability to primaries, to better resolve and identify targets. Among recent high impact developments is a new and practical method for Q compensation without requiring knowledge, estimation or determination of Q. That will be another game-changing, high impact seismic delivery and will improve exploration, appraisal and development drill placement. EM methods will also significantly benefit from this advance

• Key result: M-OSRP is developing the next generation of internal multiple capability that can effectively remove a multiple interfering with a primary without damaging the primary. That is one of several projects within M-OSRP that will allow for more effective and reliable on-shore and offshore exploration and production drilling decisions.

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