



borders & southern
petroleum plc & sonipetu

Sub-surface Update – May 2015

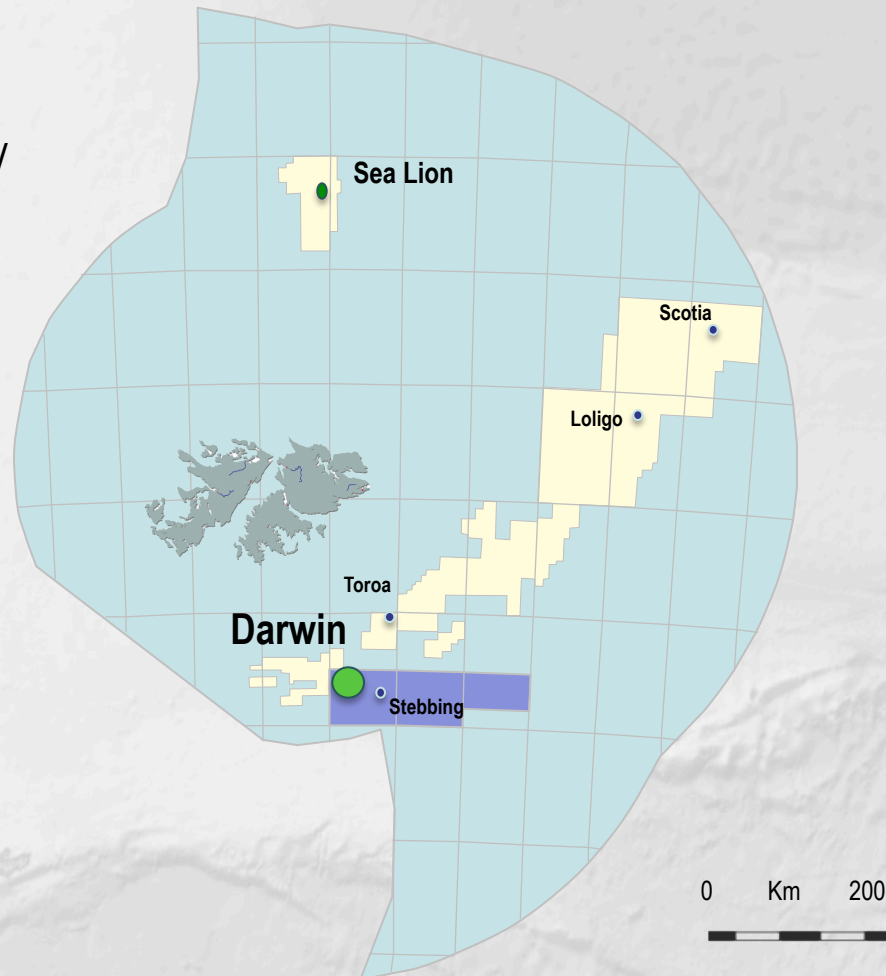
Sub-surface Evaluation Status

Re-mapping of integrated PSDM 3D seismic has been completed, confirming multiple play types.

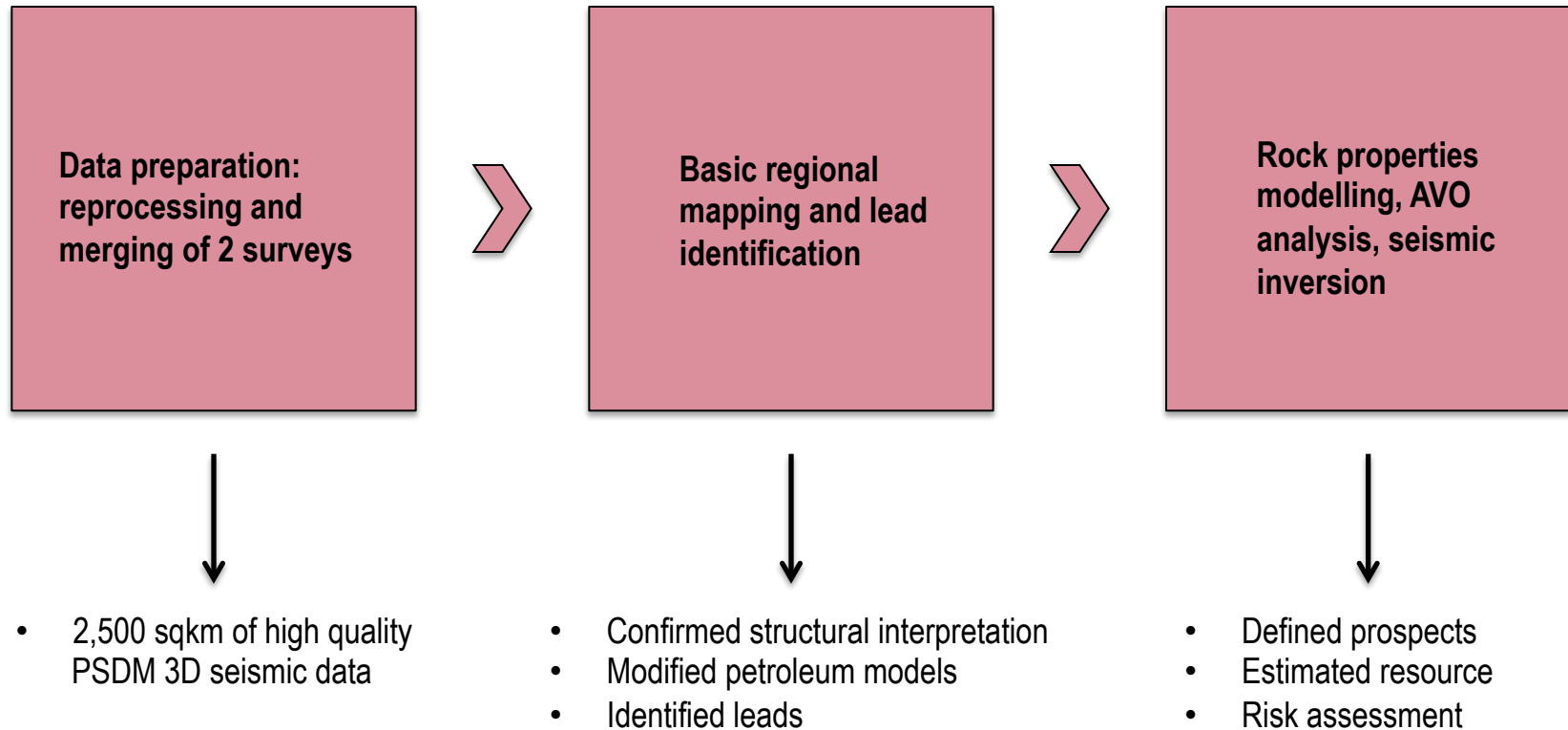
Numerous amplitude anomalies have been identified throughout the area.

A detailed reservoir characterisation study has been completed – Darwin's estimated resource has been upgraded; near-field prospects have been evaluated.

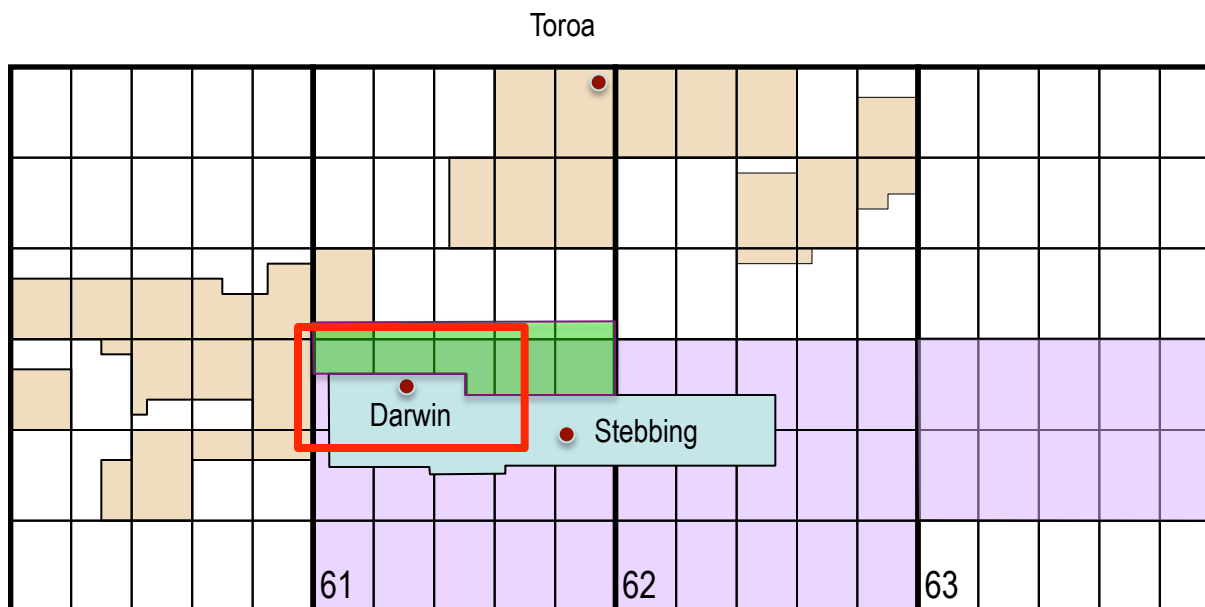
Future sub-surface work will continue to refine our understanding of the Early Cretaceous shelf plays, but will also provide new assessments of the slope channel and fan play.






Work Flow




Early Cretaceous Focus Area



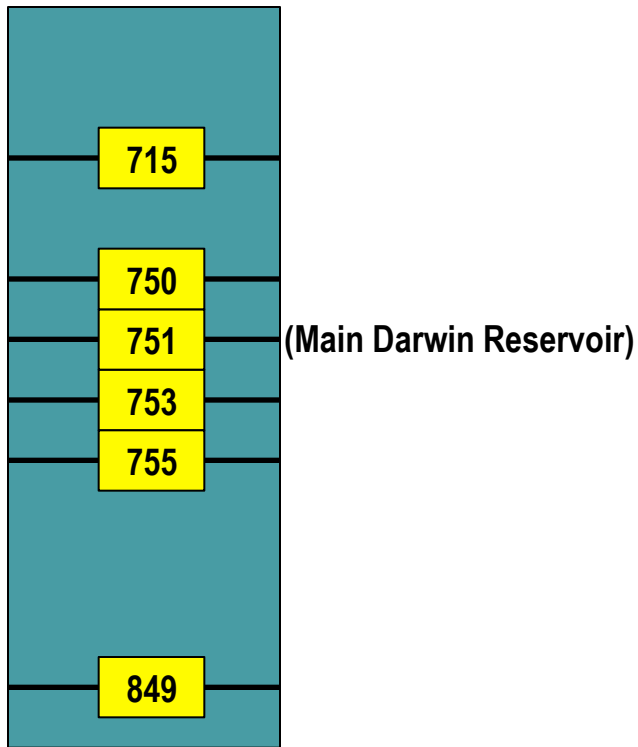
 B & S operated

 3D (2008)  3D (2013)

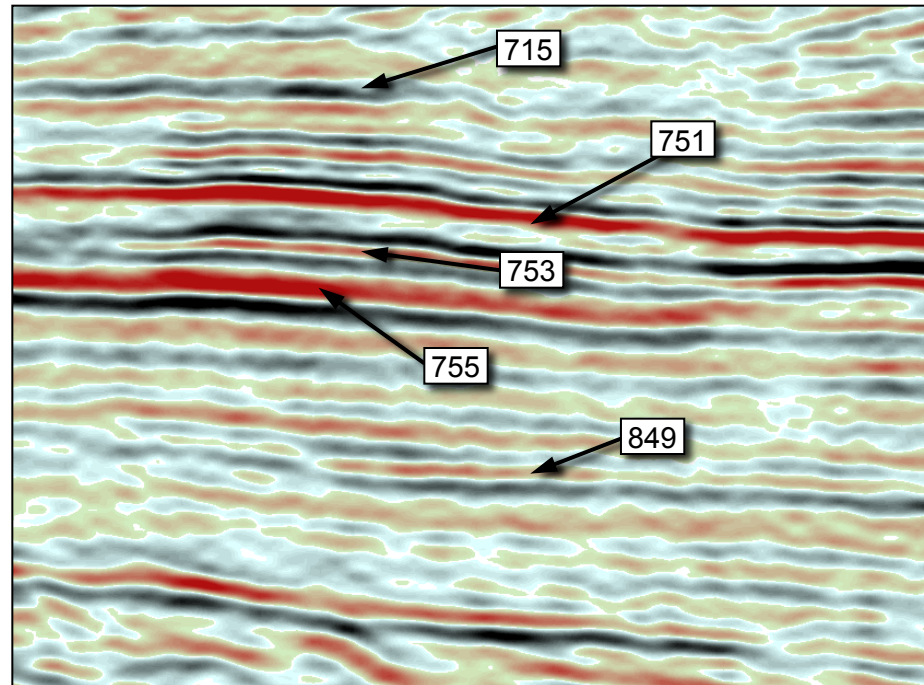
 Noble Energy operated

50 km

Relative Stratigraphy - Reservoirs

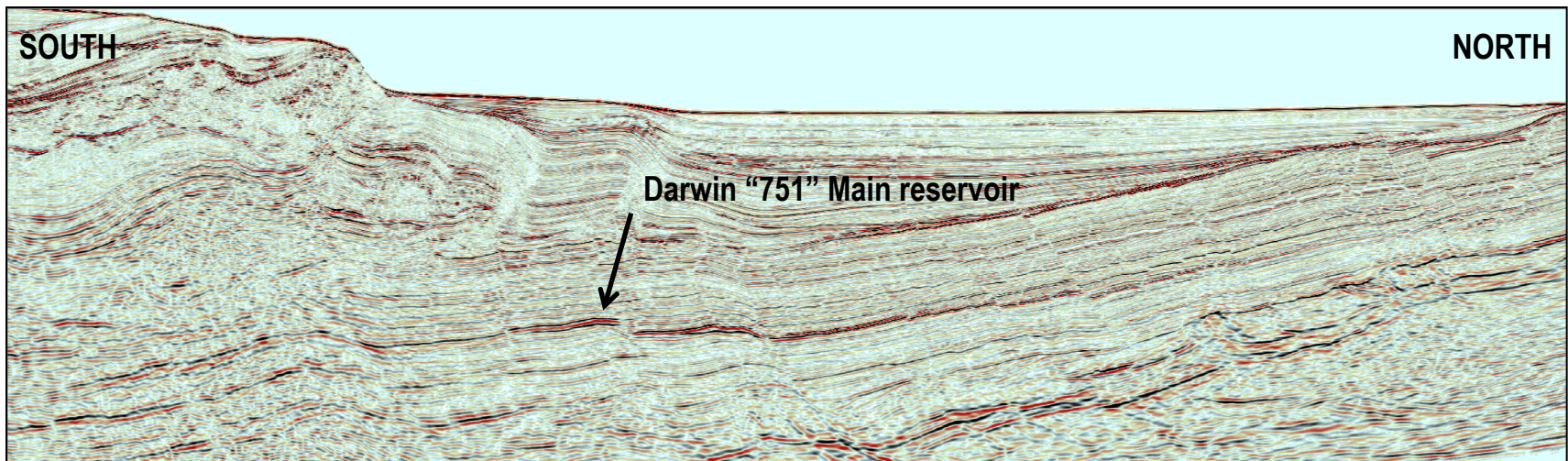
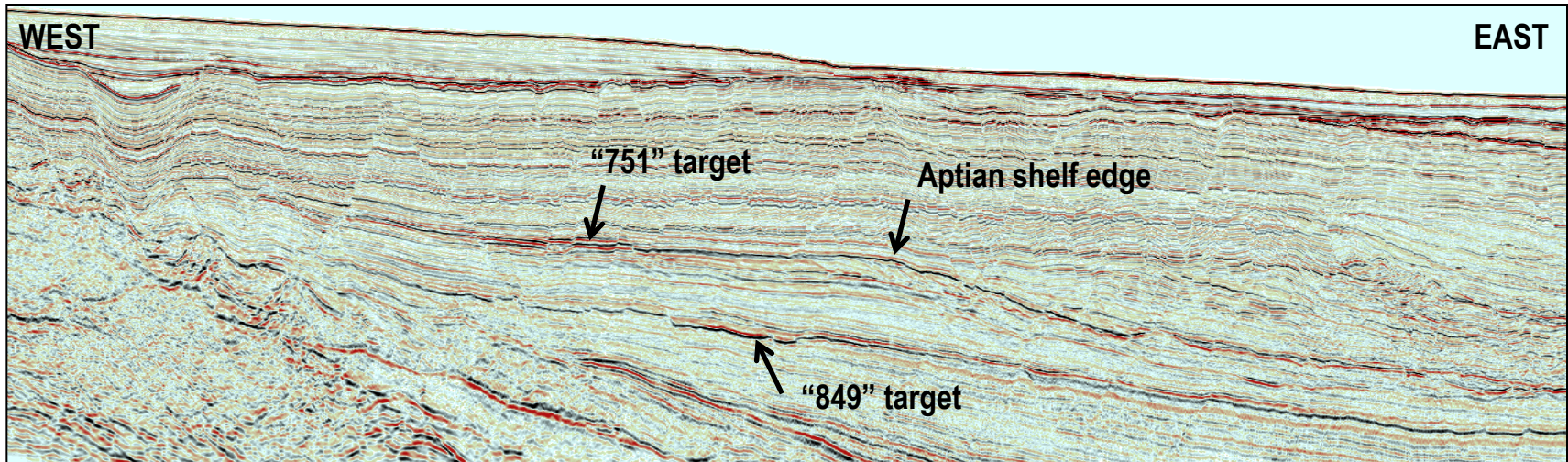


Proven and potential reservoir intervals

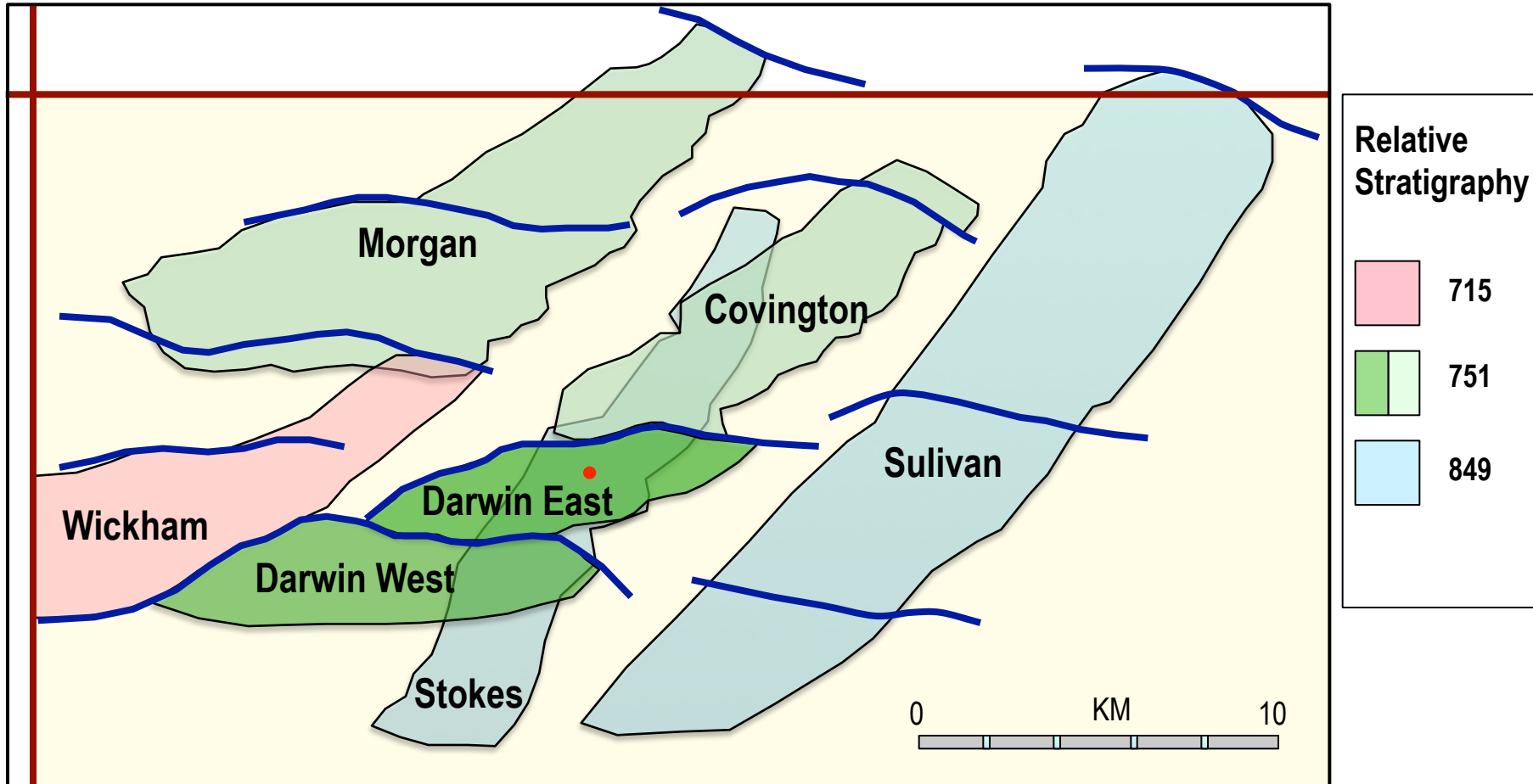


B&S mapping nomenclature

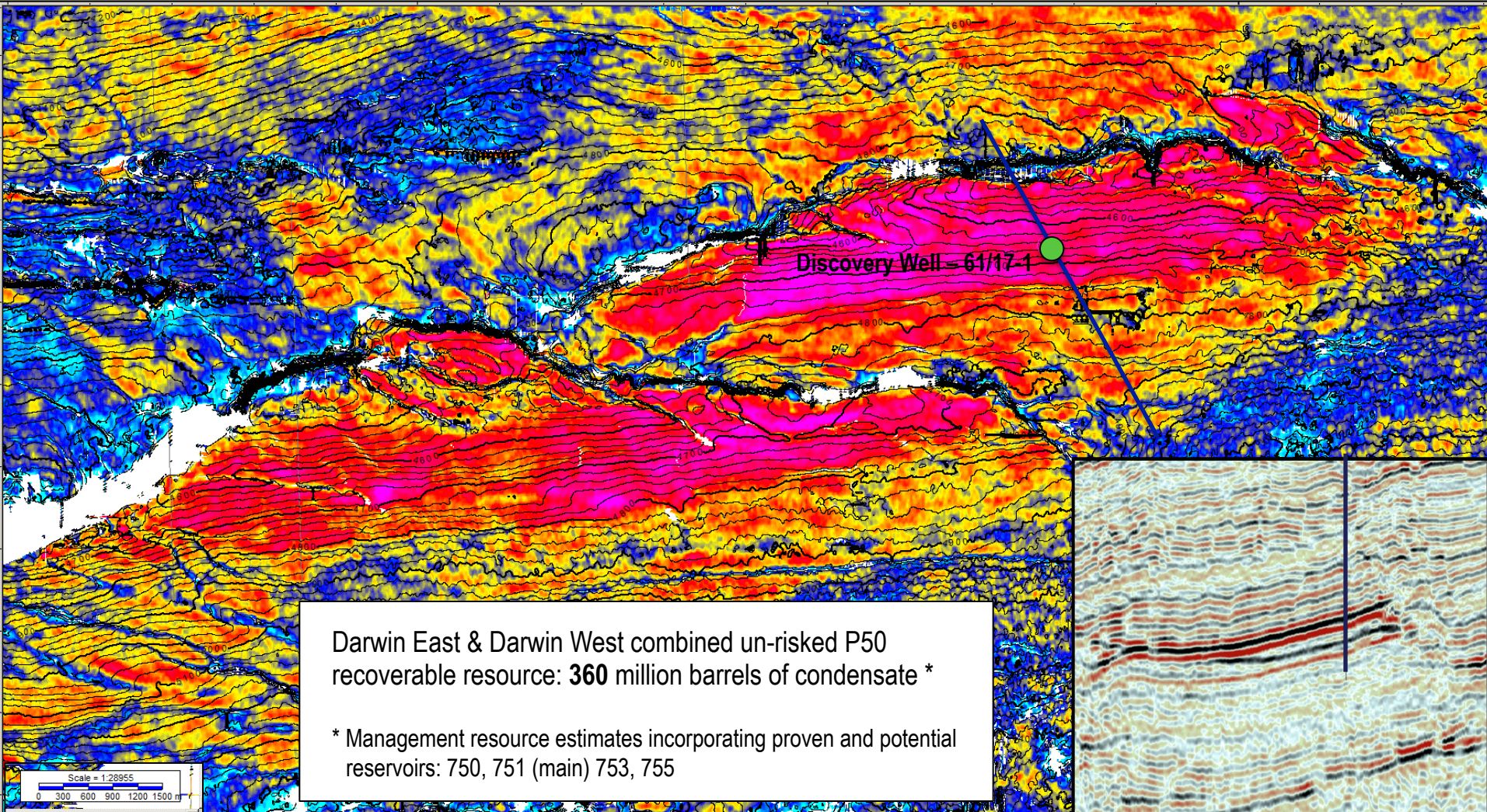
Regional Seismic



Early Cretaceous Near-field Prospects



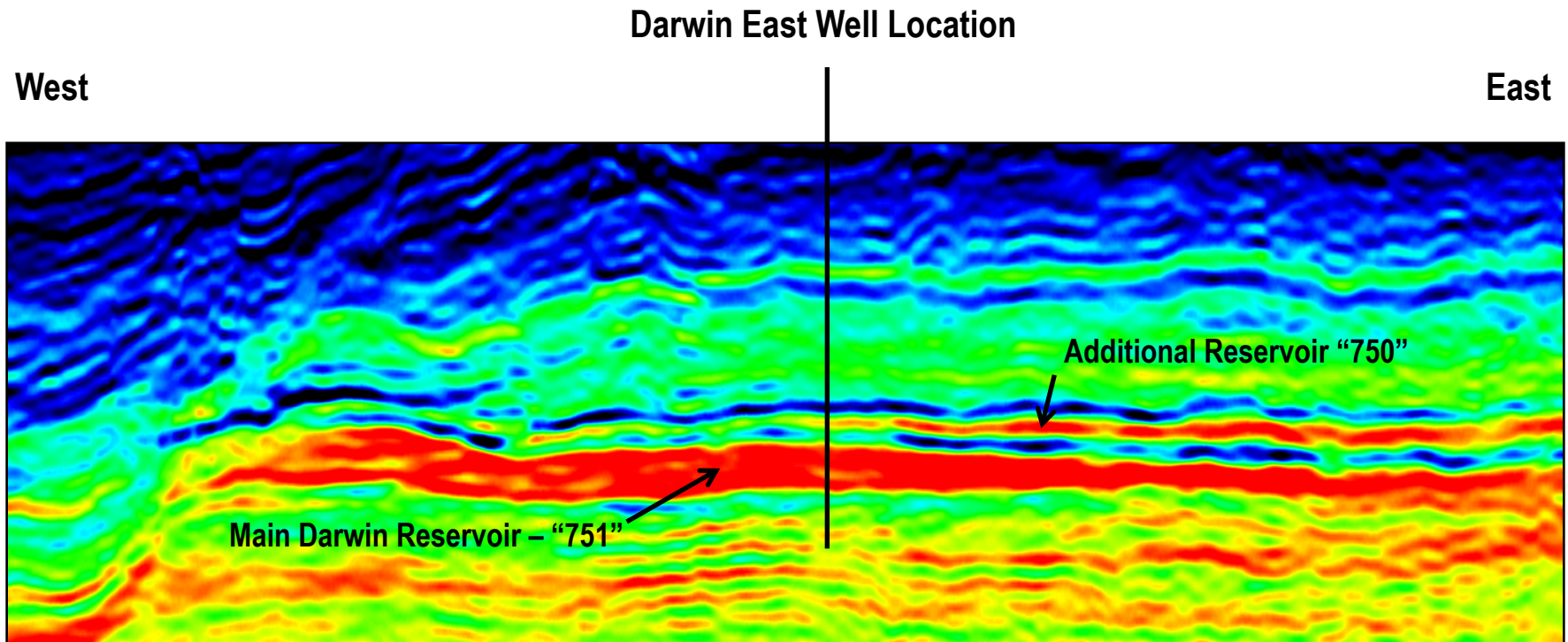
Darwin East & West



Darwin East & Darwin West combined un-risked P50 recoverable resource: **360** million barrels of condensate *

* Management resource estimates incorporating proven and potential reservoirs: 750, 751 (main) 753, 755

Darwin – Inverted Seismic Data

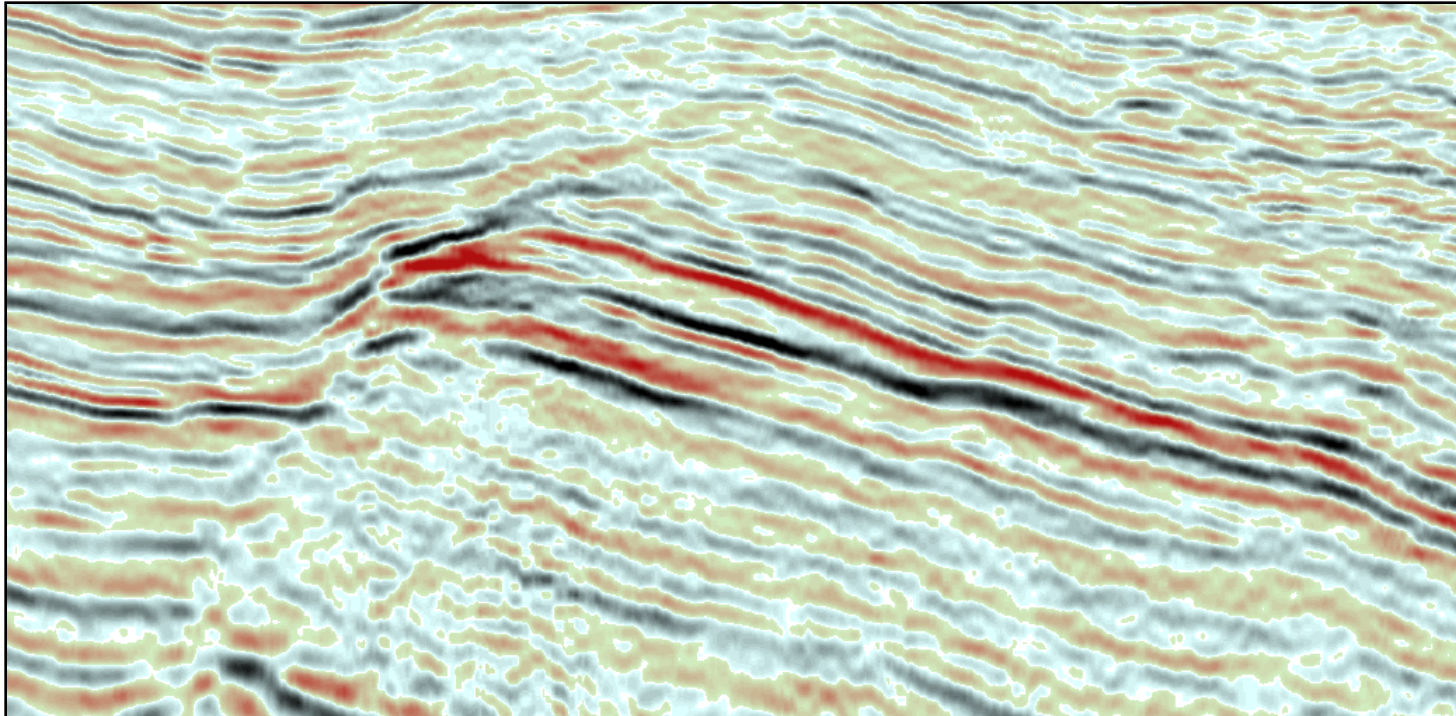


West to East seismic line through the Darwin East well location displaying VpVs ratio inversion data. Hydrocarbon charged thin sands in the well are seen to increase in thickness towards the south and east

Darwin West Reservoirs: “751” “753” & “755”

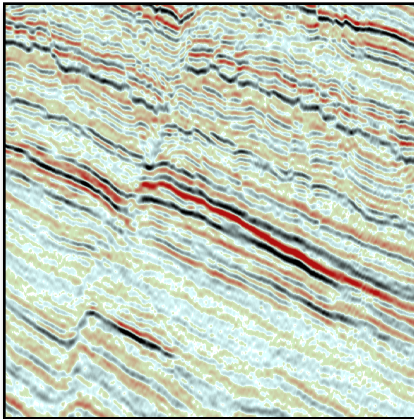
West

East



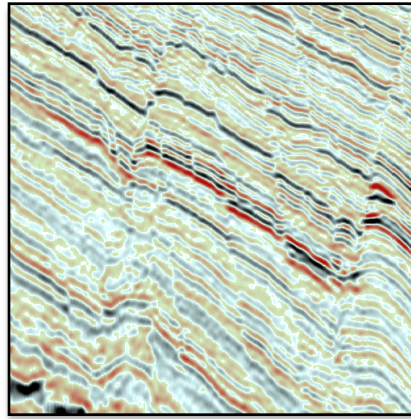
West to East seismic line through the Darwin West fault block. Two additional reservoir intervals below the main reservoir display amplitude conformance to structure

Near-Field Prospects



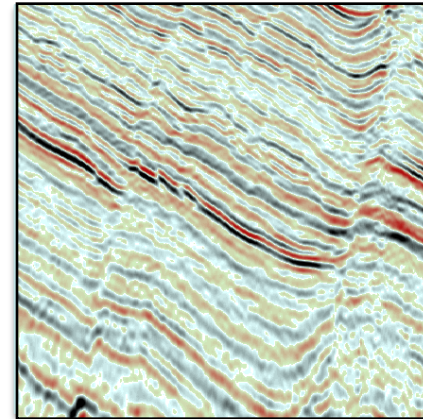
Covington

Early Cretaceous reservoir "751"
Un-risked P50 resource: **216** mmbbl *
Predicted Phase: oil



Morgan

Early Cretaceous reservoir "751"
Un-risked P50 resource: **230** mmbbl *
Predicted Phase: oil

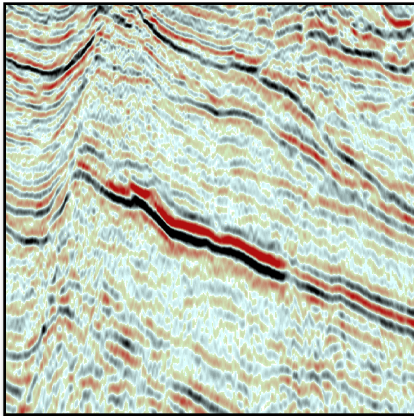


Wickham

Early Cretaceous reservoir "715"
Un-risked P50 resource: **119** mmbbl *
Predicted Phase: oil

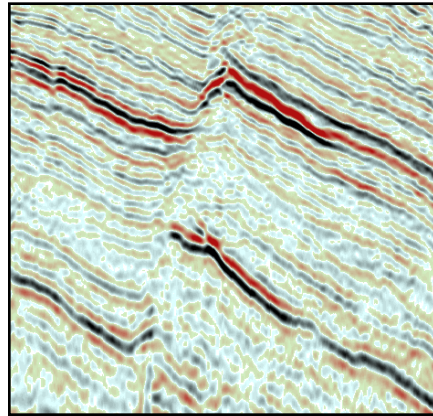
* Management recoverable resource estimates

Near-Field Prospects



Sullivan

Early Cretaceous (?) reservoir "849"
Un-risked P50 resource: **473** mmbbl *
Predicted Phase: gas condensate



Stokes

Early Cretaceous (?) reservoir "849"
Un-risked P50 resource: **134** mmbbl *
Predicted Phase: gas condensate

* Management recoverable resource estimates

Summary

- The Early Cretaceous shallow marine play fairway containing combination structural and stratigraphic traps has been evaluated
- Darwin's near-field prospects display seismic amplitude and AVO anomalies
- A seismic inversion study indicates that near-field prospects could be hydrocarbon charged, with both oil and gas condensate as possible phases
- Darwin's resource estimates have been revised upwards
- Substantial near-field prospectivity has been defined and quantified