




SFD Case Example
Western Canada Foothills Belt
Sikanni – Pocketknife Structures

“The Pink Mountain area has a complex two-staged tectonic evolution that involves Carboniferous extensional tectonics followed by Cretaceous compression.”

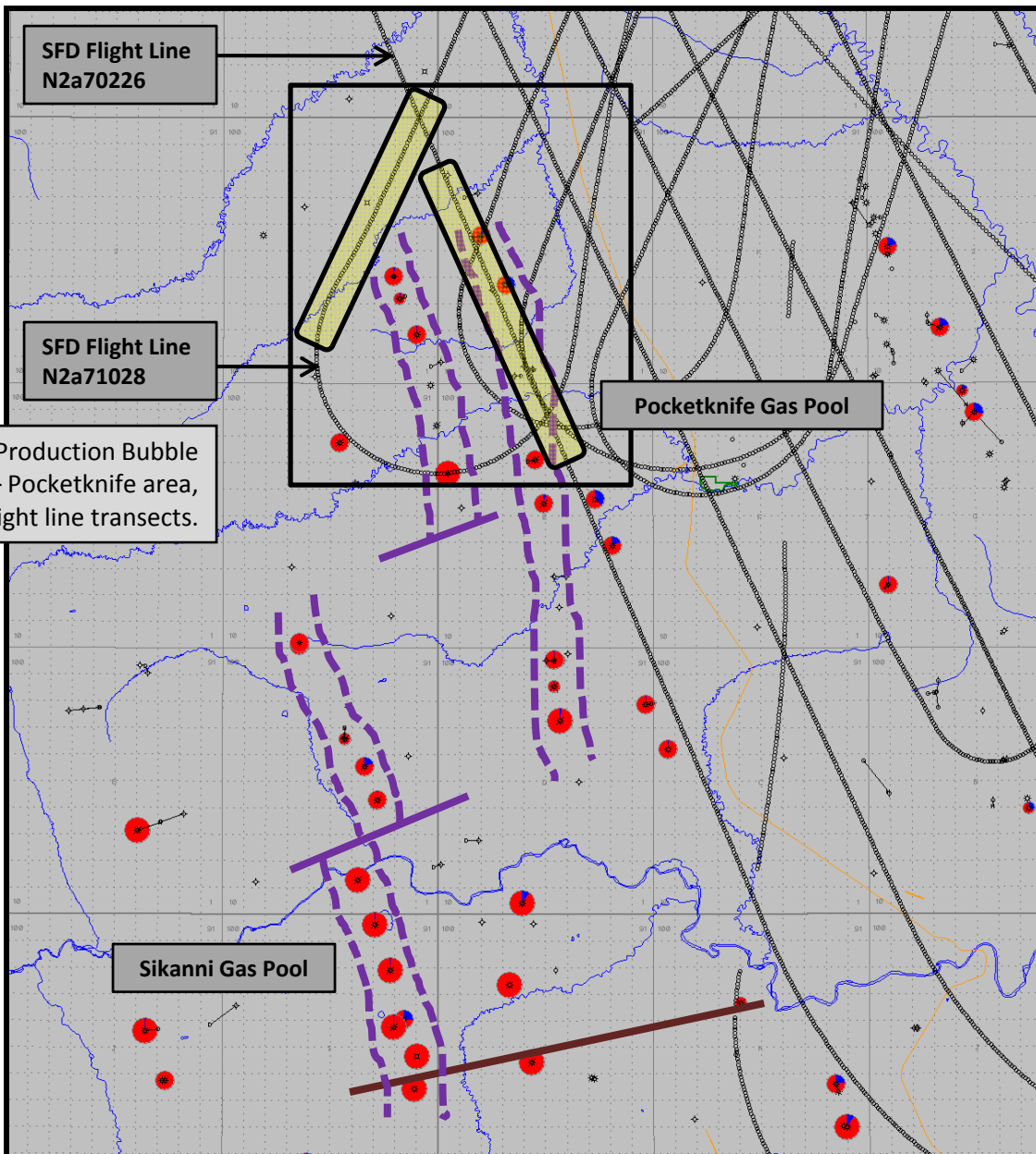
(Hinds & Spratt, 2005)

Mississippian Debolt Fm.: Production Bubble Map for the Sikanni – Pocketknife area, showing SFD flight line transects.

10 km

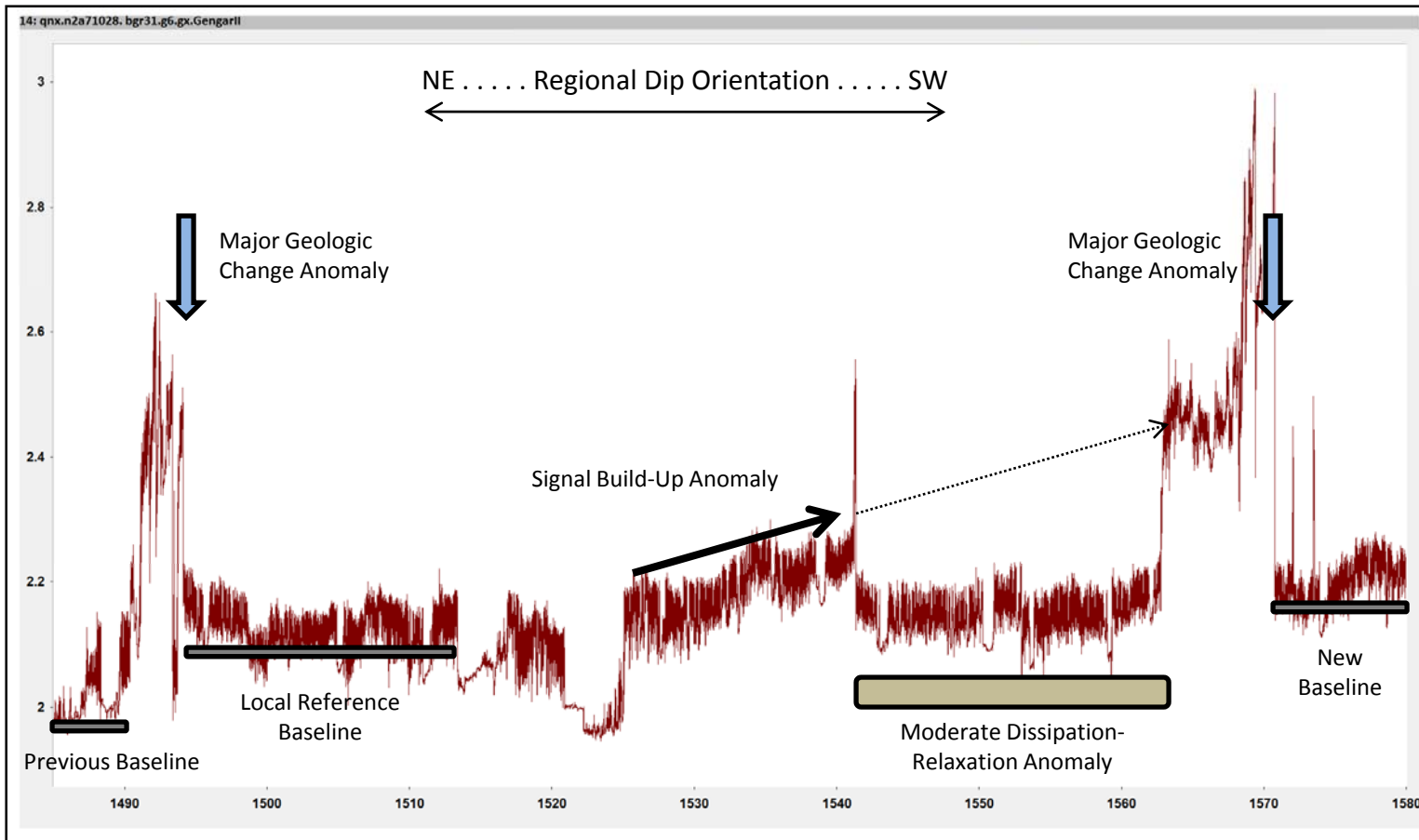
-  Approximate position of productive crestal features at the Debolt level
-  Location of Balanced Cross-section from Hinds & Spratt (2005) paper
-  Example SFD Signal

Reference: Hinds & Spratt (2005) **“Stratigraphy, structure and tectonic history of the Pink Mountain Anticline, Trutch (94G) and Halfway River (94B) map areas, northeastern British Columbia.”**
Bull. Can. Pet. Geol., 53(1), pp 84-98.



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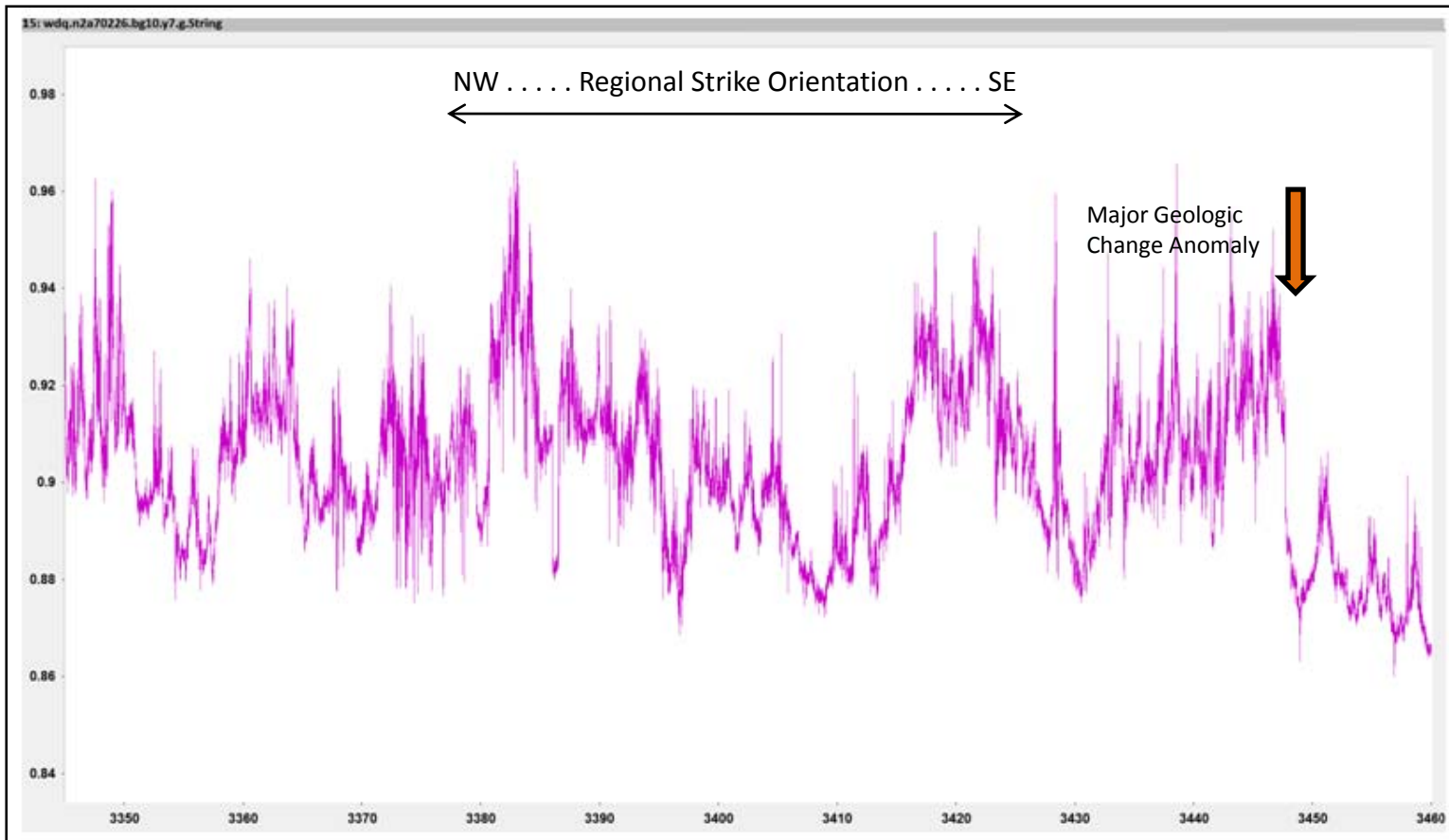
SFD Signal Sensor 'G2'; Flight Line N2a71028; 1485 – 1580 seconds



Sensor 'G2' provides the best geological change indicators on this flight segment.

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SFD Signal Sensor 'S'; Flight Line N2a70226; 3345 – 3460 seconds



This flight segment illustrates “confused” signal, demonstrating few clear-cut stress anomalies.

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Enlarged Area

5 km

Key Observations:

- ✓ The dip line (71028) generally provides improved stress anomaly resolution over the strike line (70226).
- ✓ The dip line correctly locates the extrapolated eastern limit of the Pocketknife structural crest at '1'.
- ✓ The strike line correctly locates the extrapolated eastern limit of the Pocketknife structural crest at '2'.
- ✓ The dip line correctly identifies and locates excellent reservoir on trend with Debolt production, west Pocketknife structure at '3'.

Note: The correlation of SFD signal response to actual geologic features represents an informed technical opinion as prepared by the NXT interpretation team. These interpretations, while believed reasonable, are non-unique. Other correlations and interpretations are possible.

