

Esso Adgo J-27 / 300J276930135450

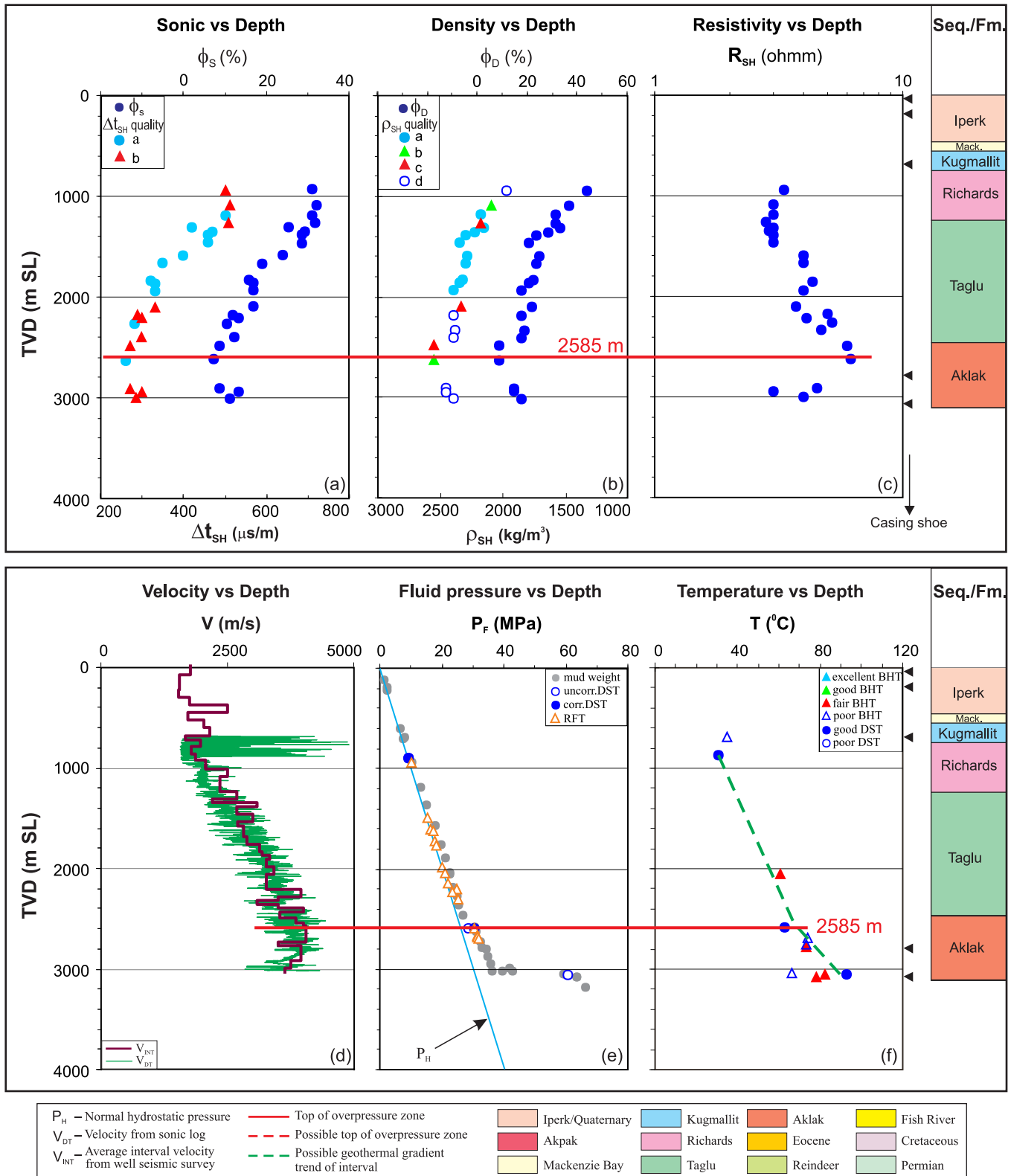


Figure A-1. Top of overpressure zone is detected at 2585 m with quality “a” by using the integrated analysis for the Adgo J-27 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_S$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth. Mack. - Mackenzie Bay.

Dome et al. Adlartok P-09 / 300P096940137450

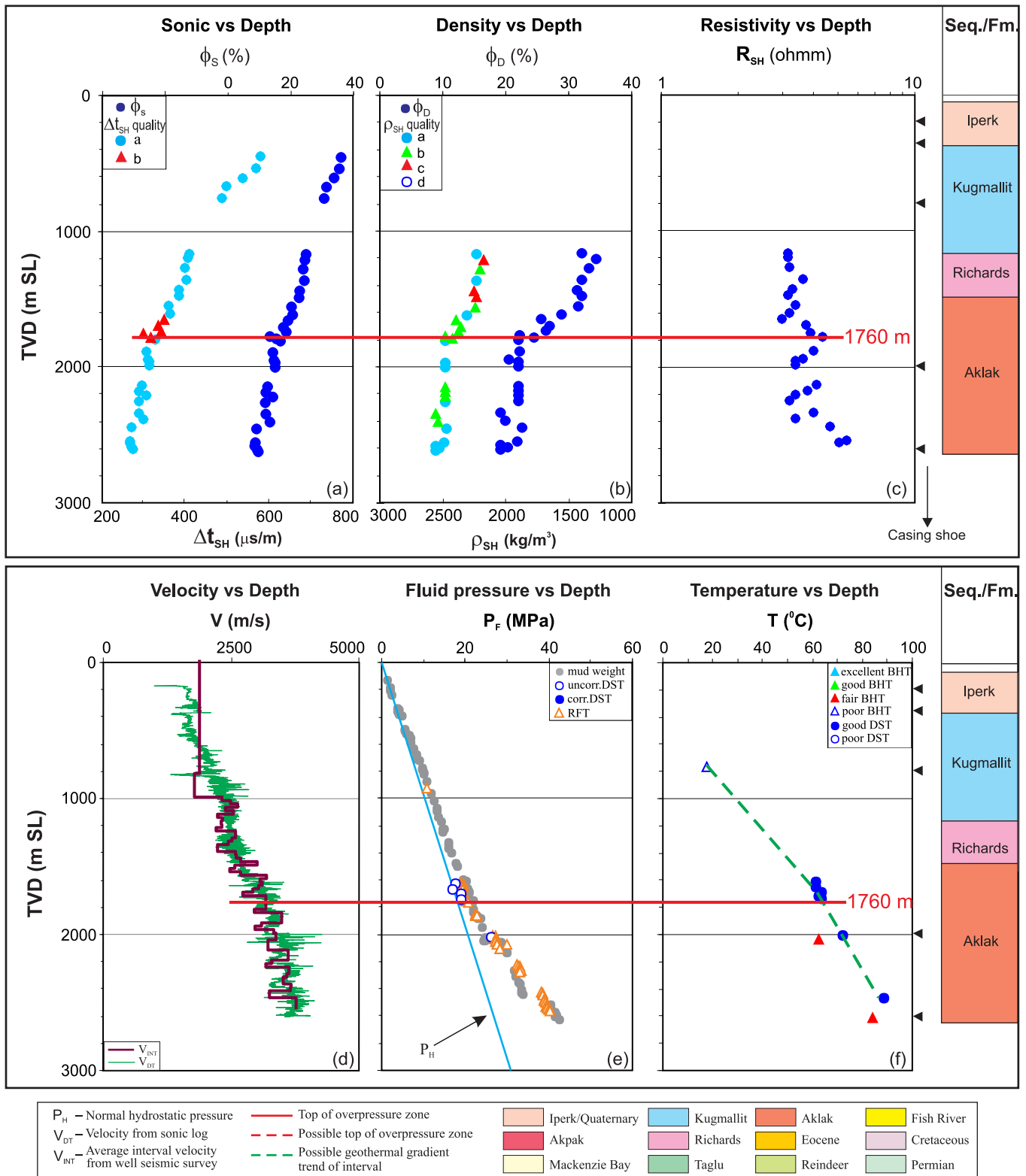


Figure A-2. Top of overpressure zone is detected at 1760 m with quality “a” by using the integrated analysis for the Adlartok P-09 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

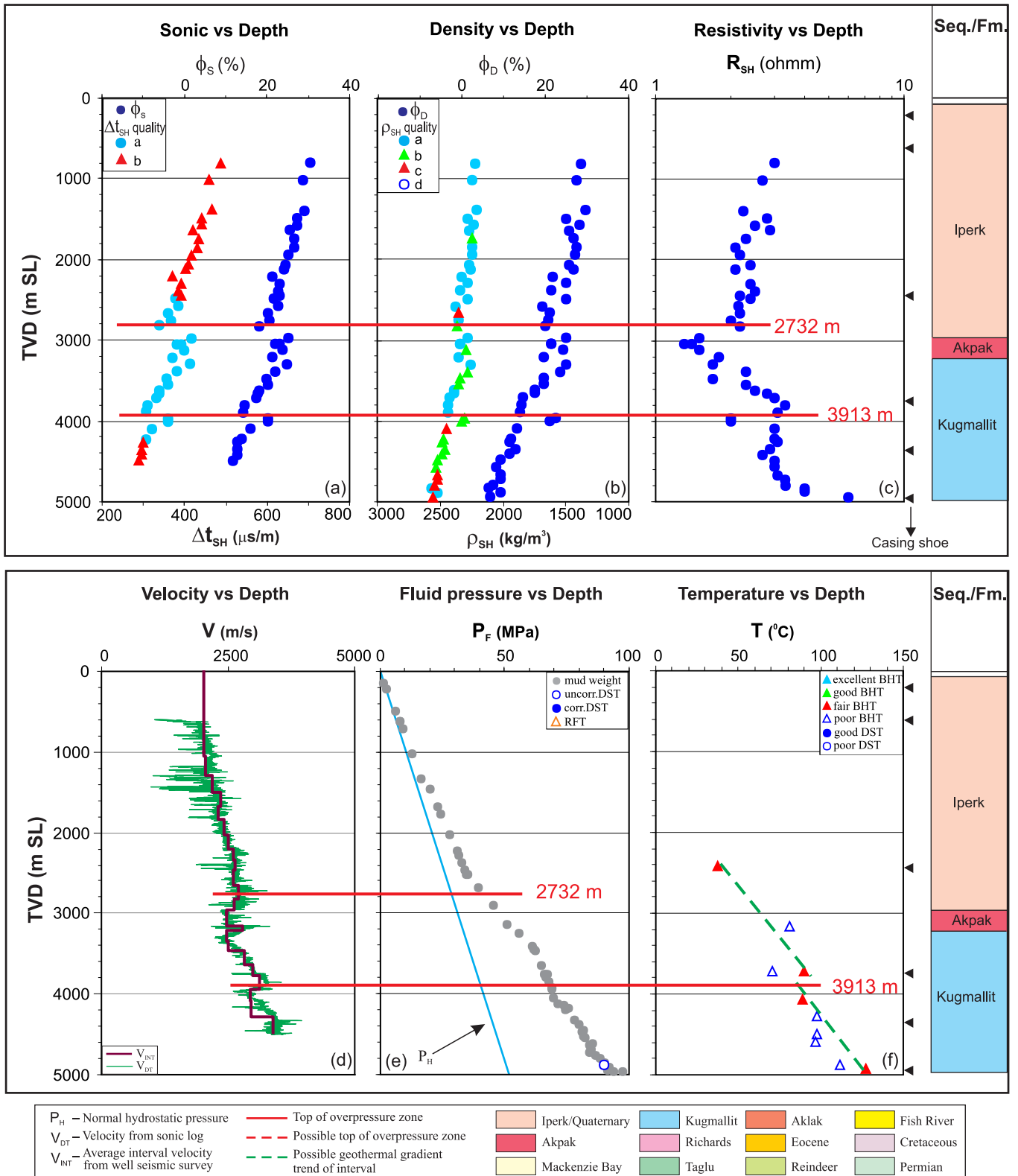


Figure A-3. Overpressure zones are detected with tops of OPZ at 2732 m (quality “b”) and 3913 m (quality “a”) by using the integrated analysis for the Aiverk 2I-45 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

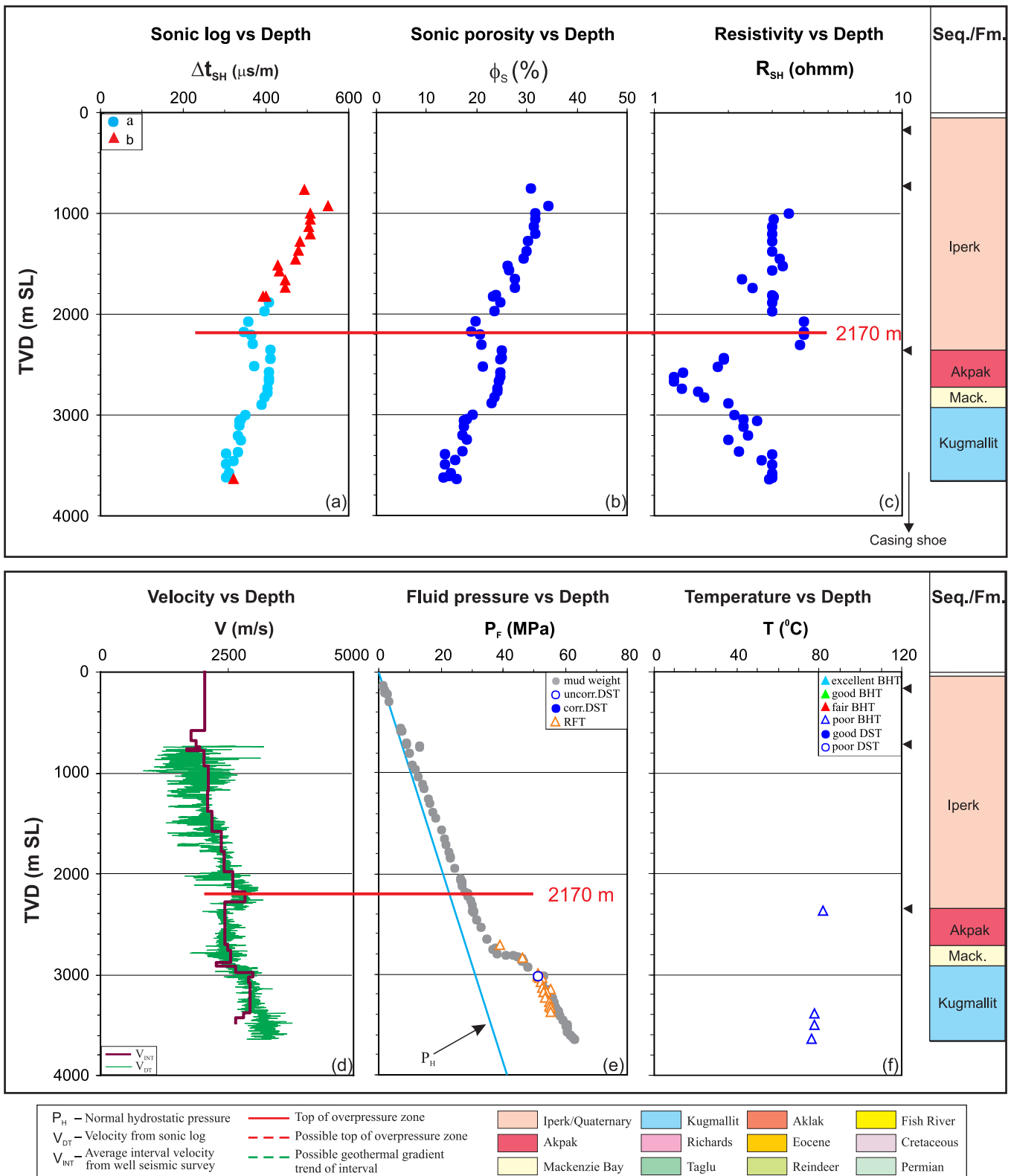


Figure A-4. Top of overpressure zone is detected at 2170 m with quality “a” by using the integrated analysis for the Akpak 2P-35 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) vs. depth; (b) shale sonic porosity ( $\phi_s$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth. Mack. - Mackenzie Bay.

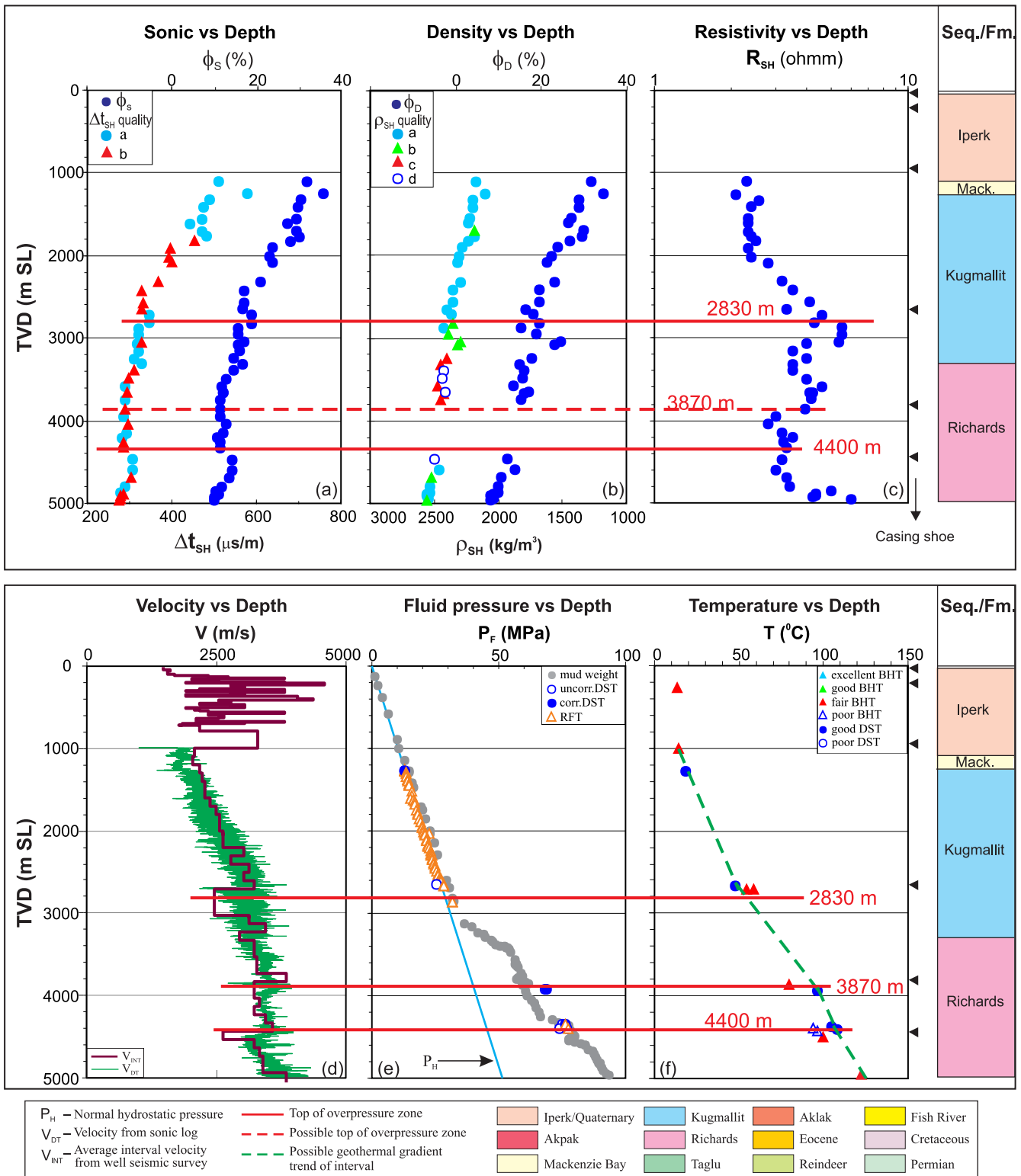


Figure A-5. Overpressure zones are detected with tops of OPZ at 2830 m (quality “a”), 3870 m (quality “b”) and 4400 m (quality “a”) by using the integrated analysis for the Amerk O-09 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth. Mack. - Mackenzie Bay.

Imp. Arnak L-30 / 300L306950133450

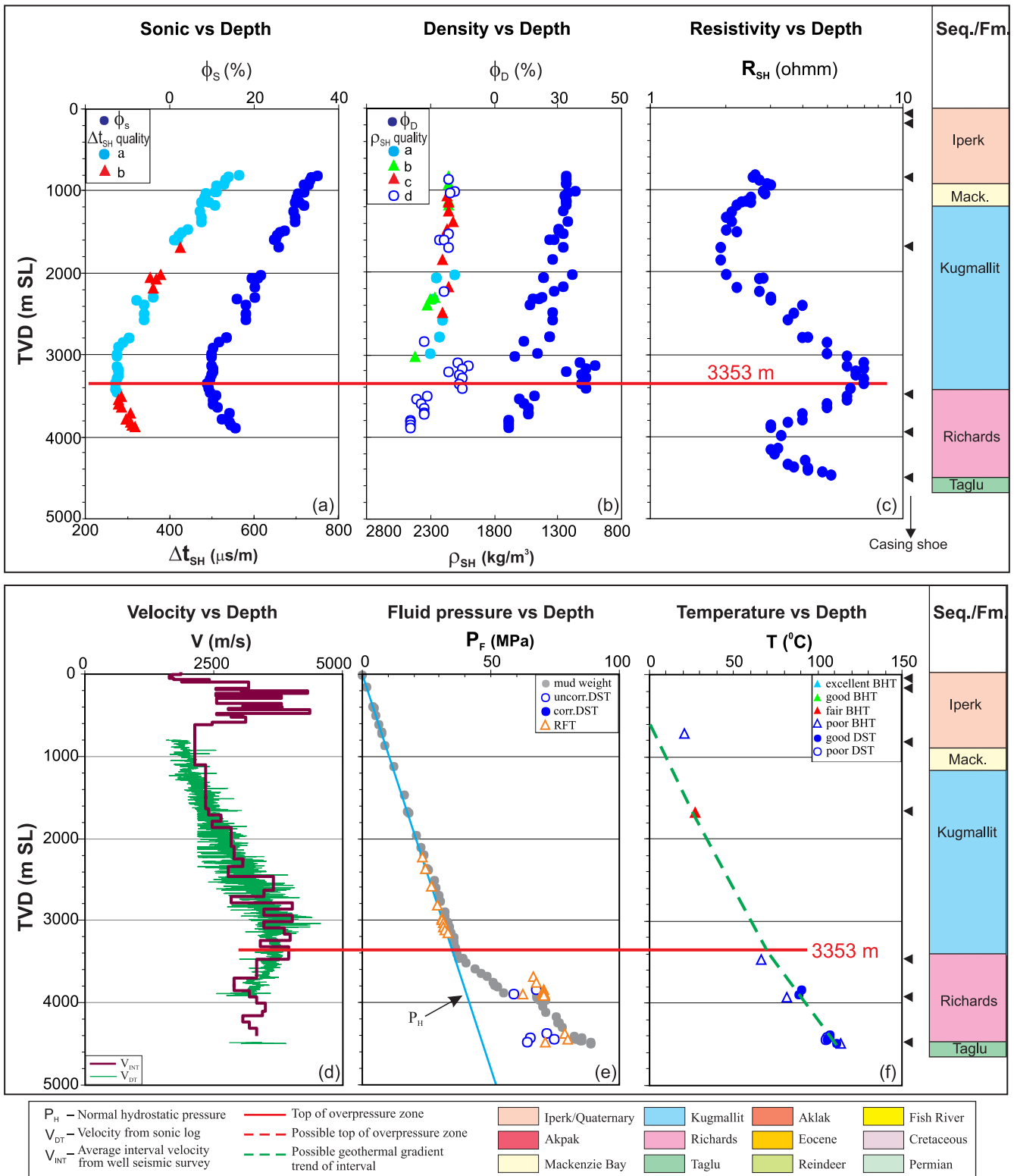


Figure A-6. Top of overpressure zone is detected at 3353 m with quality “a” by using the integrated analysis for the Arnak L-30 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_S$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth. Mack. - Mackenzie Bay.

Dome et al Havik B-41 / 300B417030132000

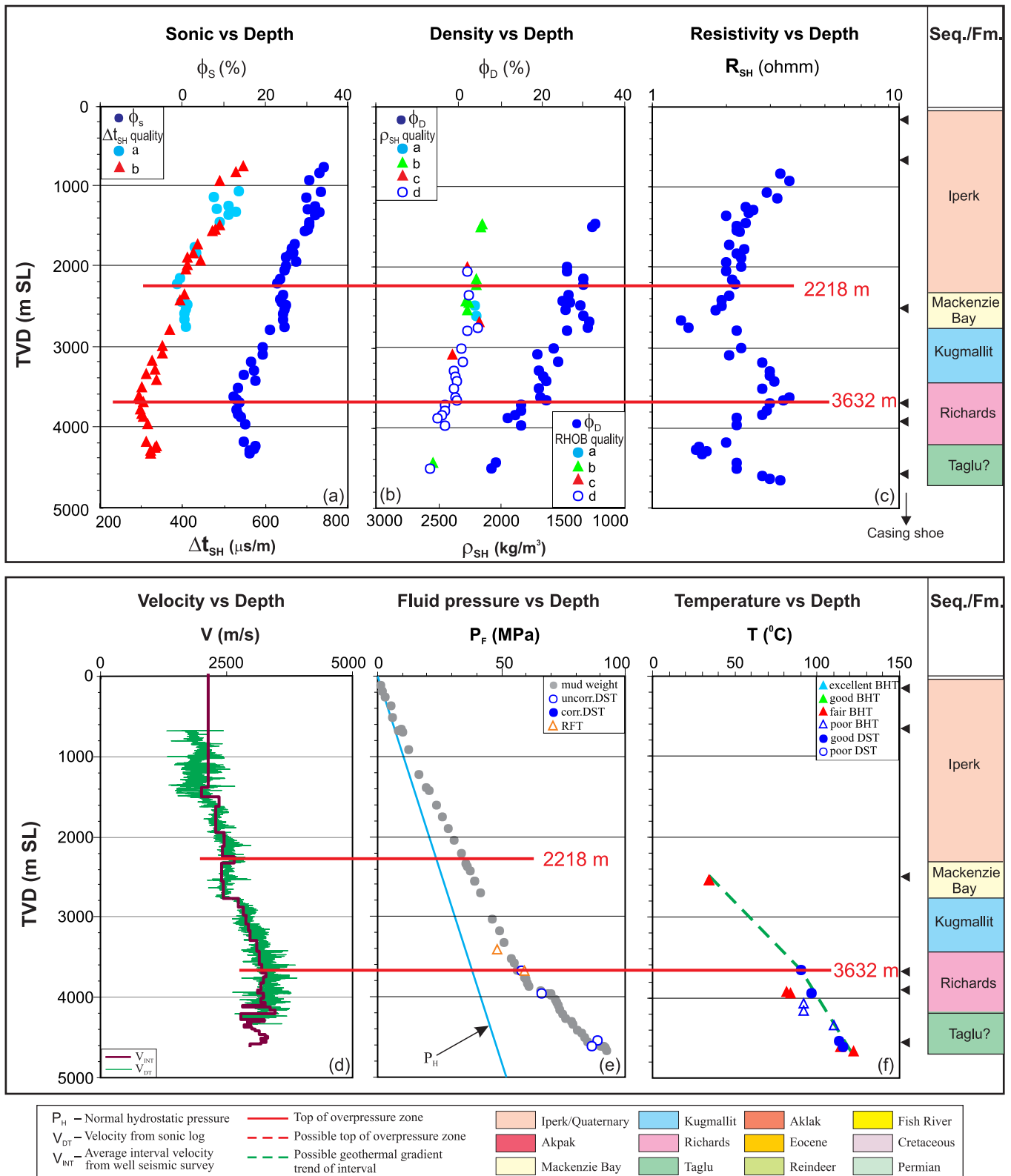


Figure A-7. Overpressure zones are detected with tops of OPZ at 2218 m and 3632 m with quality “a” by using the integrated analysis for the Havik B-41 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

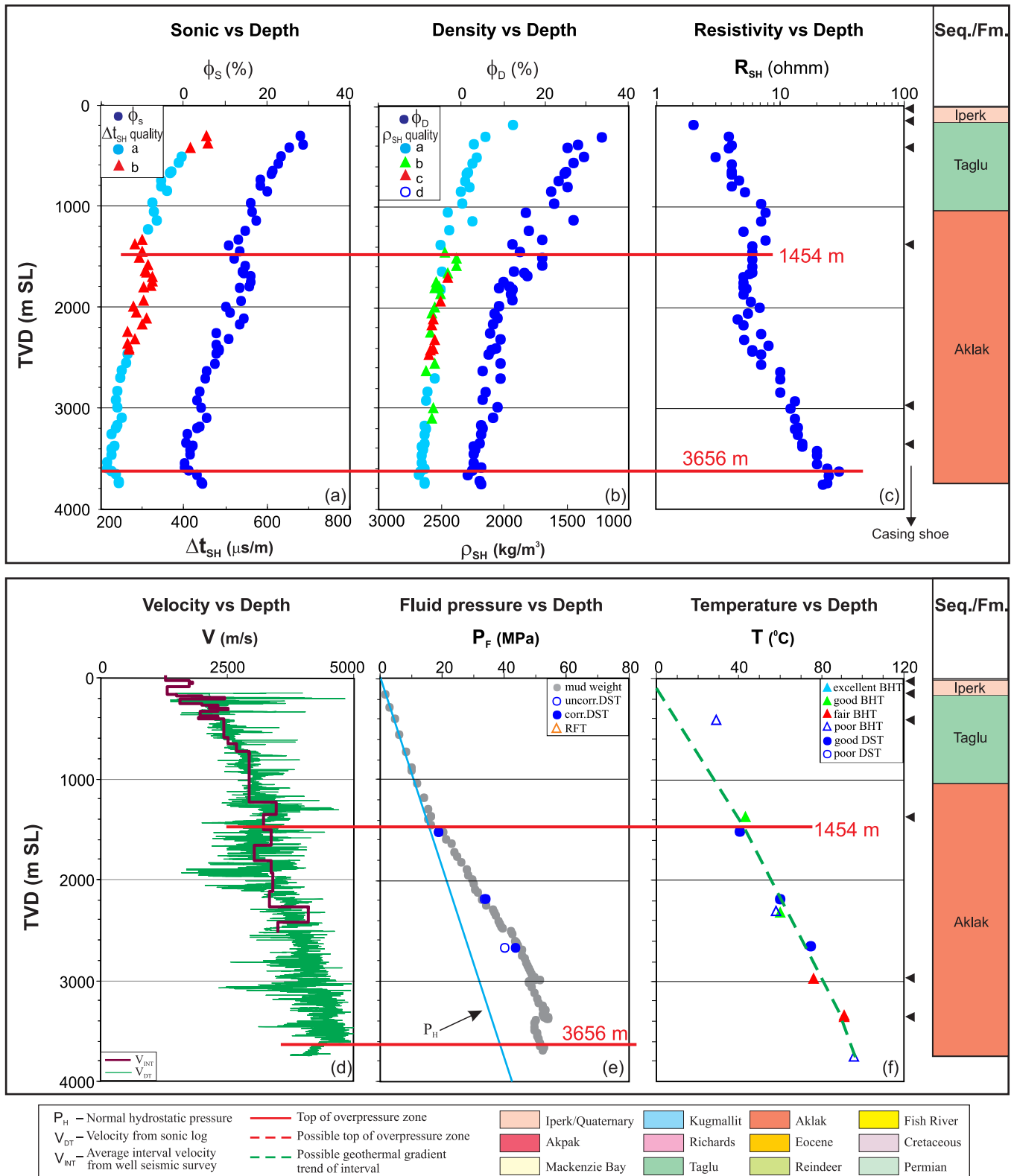


Figure A-8. Overpressure zones are detected with tops of OPZ at 1454 m (quality “a”) and at 3656 m (quality “b”) by using the integrated analysis for the Ikattok J-17 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.



Dome et al. Irkaluk B-35 / 300B357040134000

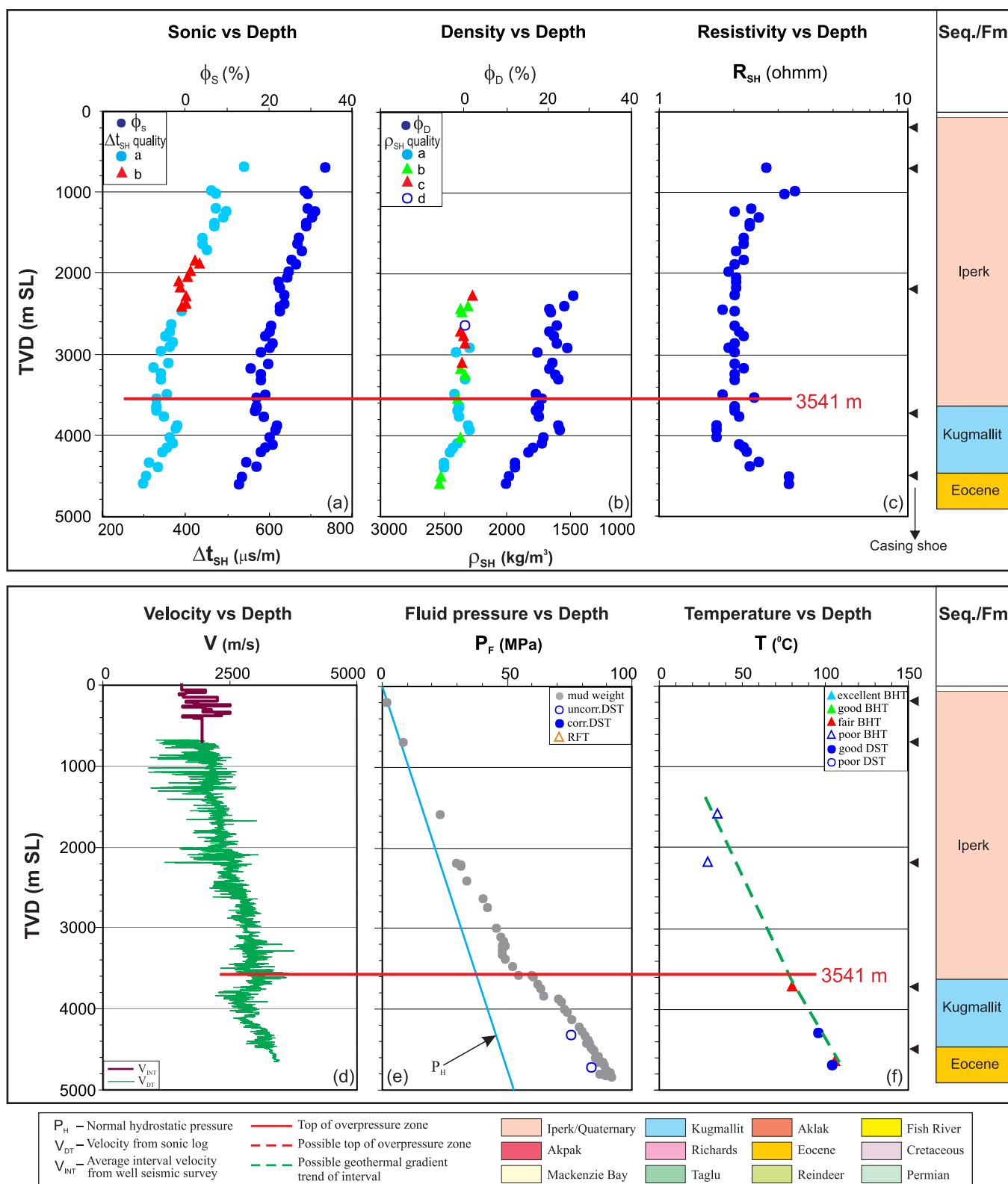


Figure A-9. Top of overpressure zone is detected at 3541 m with quality “a” by using the integrated analysis for the Irkaluk B-35 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

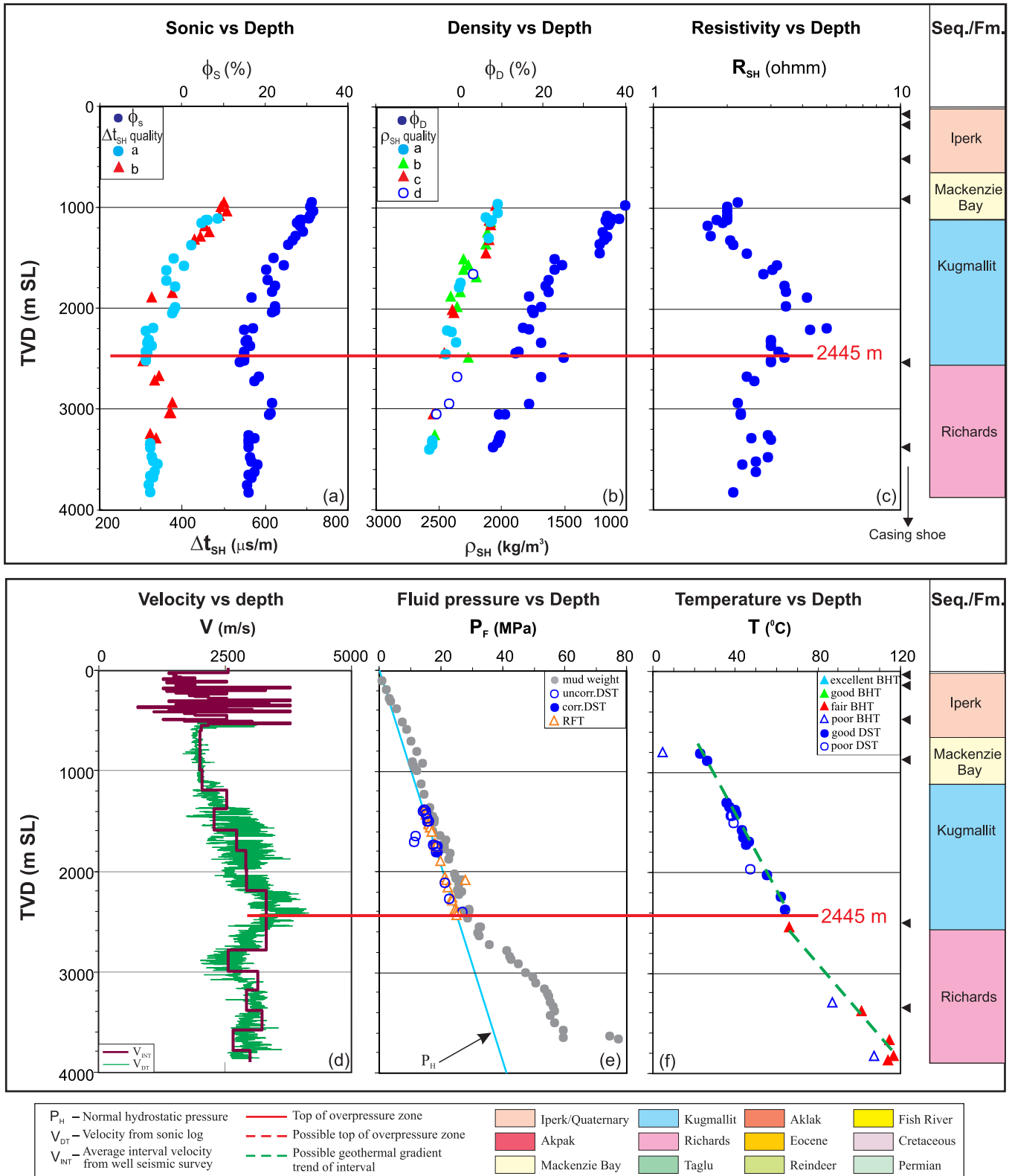


Figure A-10. Top of overpressure zone is detected at 2445 m with quality “a” by using the integrated analysis for the Kadluk O-07 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

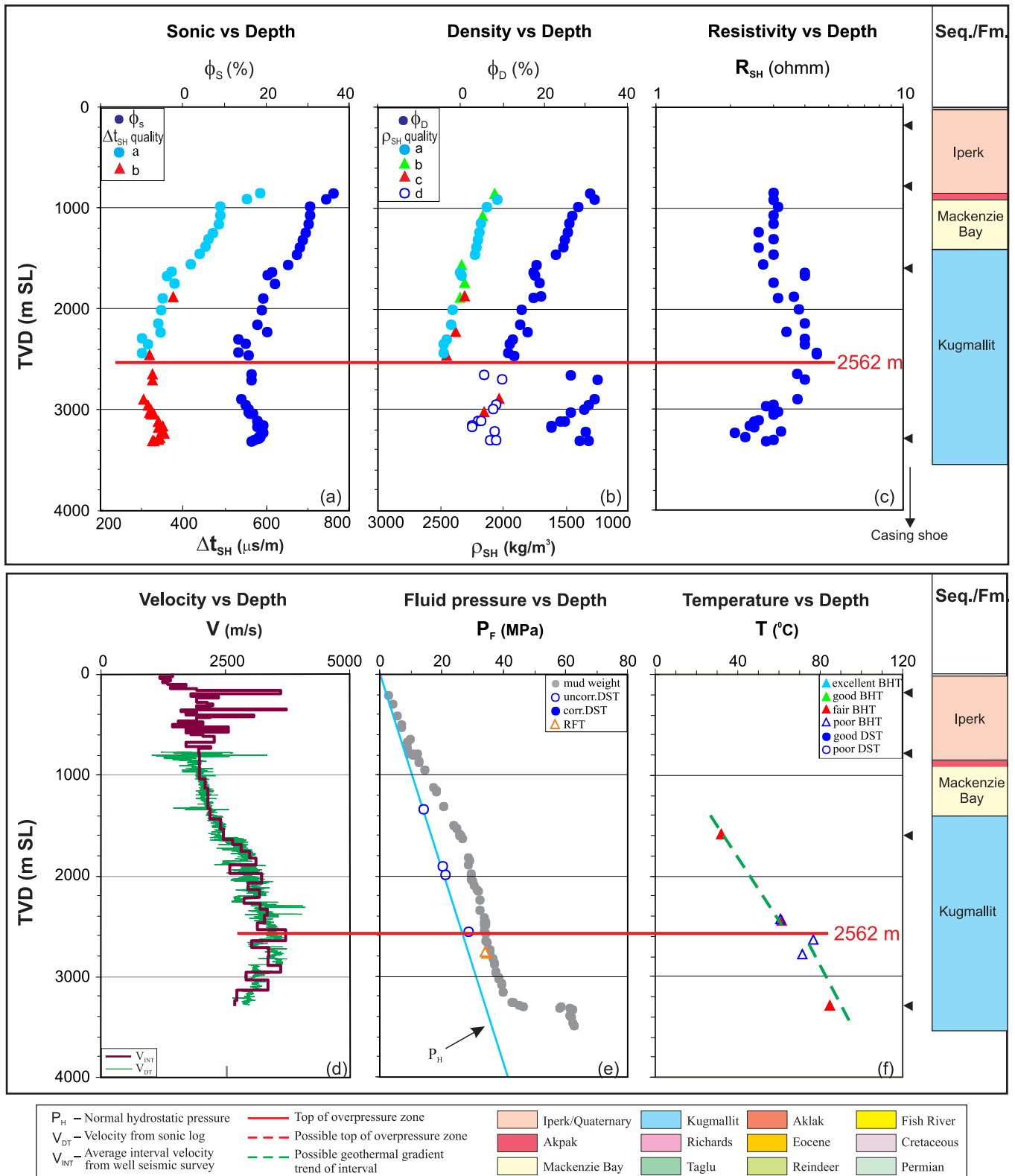


Figure A-11. Top of overpressure zone is detected at 2562 m with quality “a” by using the integrated analysis for the Kiggavik A-43 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

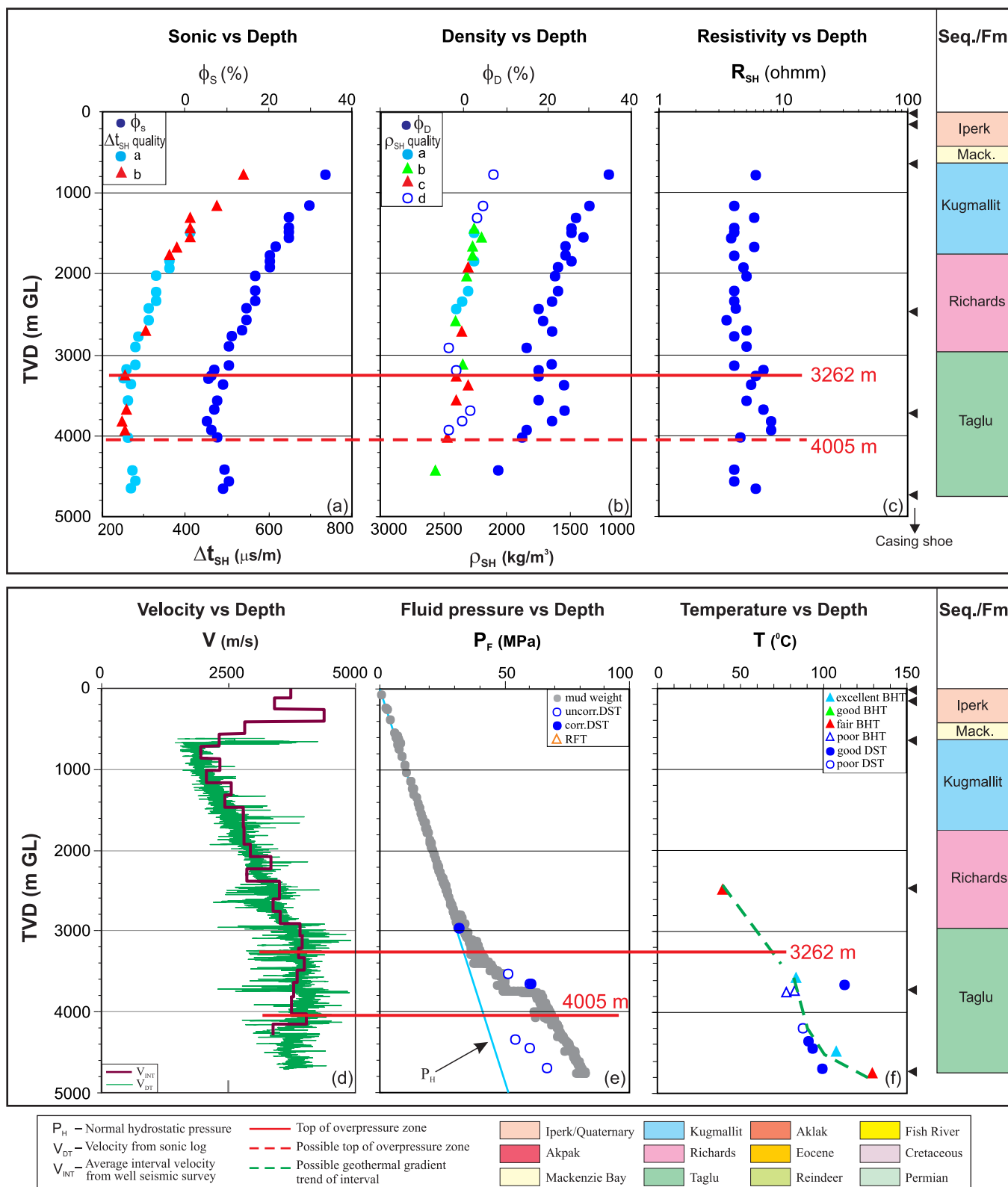


Figure A-12. Overpressure zones are detected with tops of OPZ at 3262 m (quality “a”) and at 4005 m (quality “b”) by using the integrated analysis for the Kilagmiotak F-48 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_S$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth. Mack. - Mackenzie Bay.

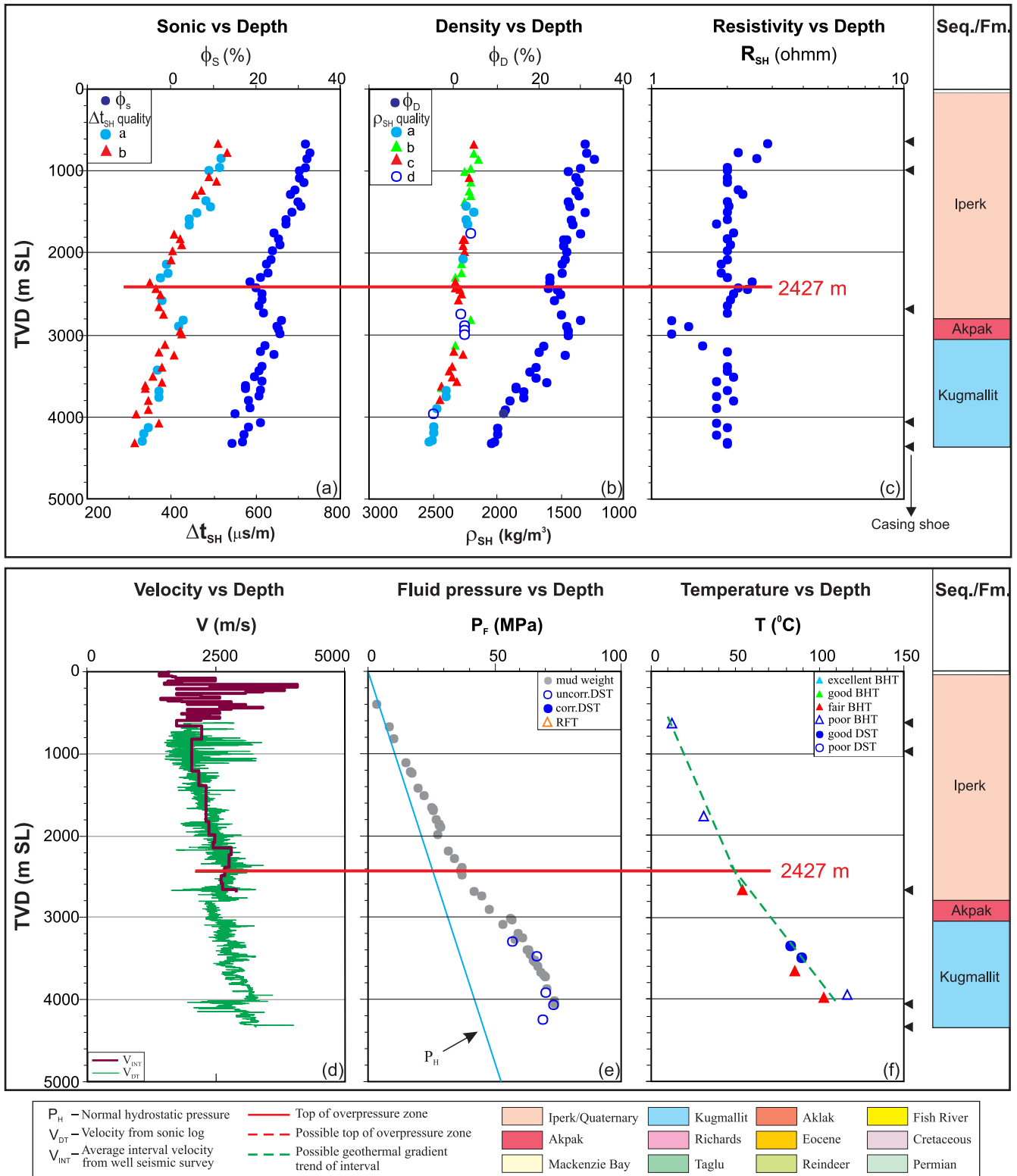


Figure A-13. Top of overpressure zone is detected at 2427 m with quality “a” by using the integrated analysis for the Koakoak O-22 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

Gulf et al Kogyuk N-67 / 300N677010133000

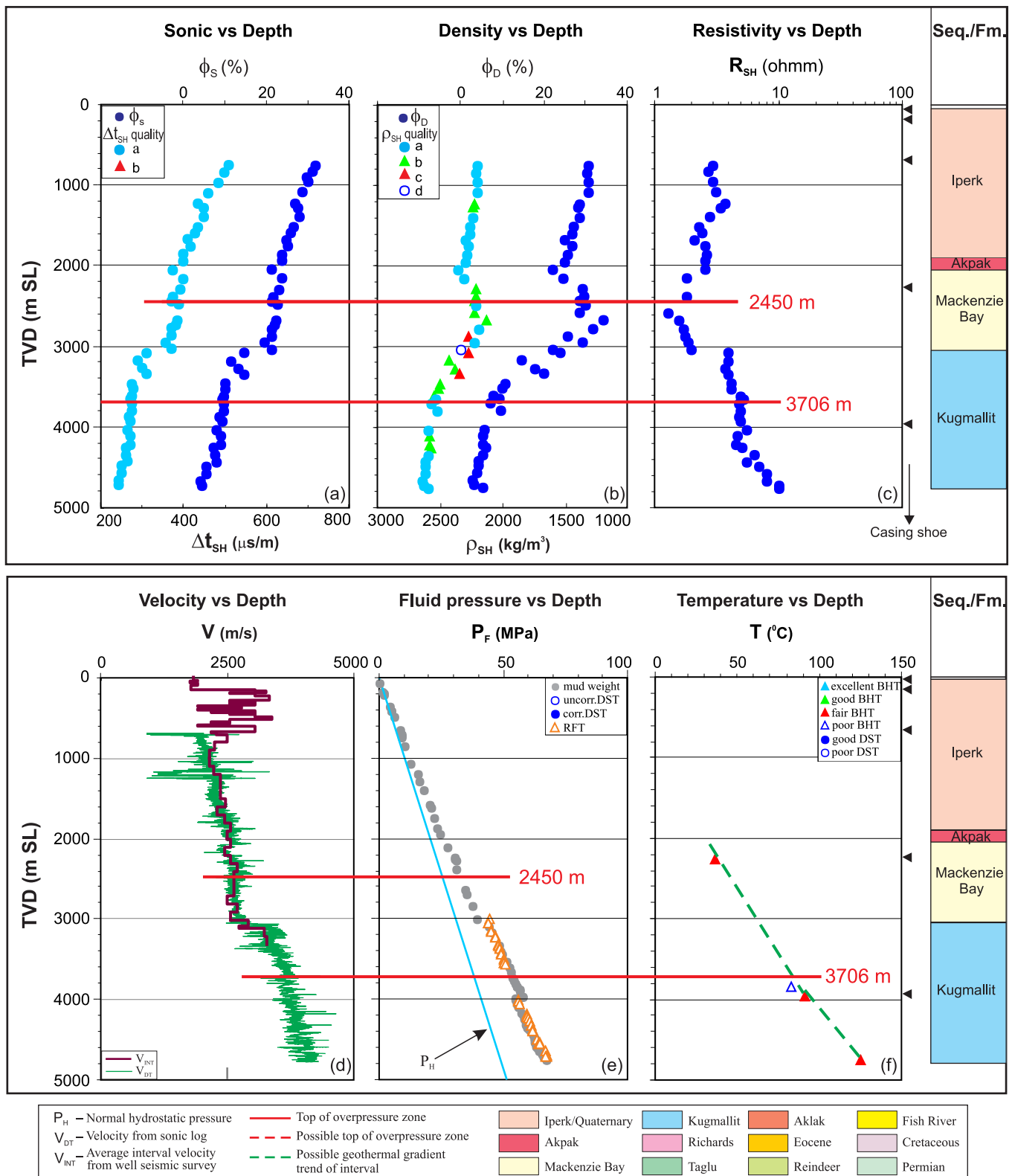


Figure A-14. Overpressure zones are detected with tops of OPZ at 2450 m (quality “a”) and at 3706 m (quality “b”) by using the integrated analysis for the Kogyuk N-67 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

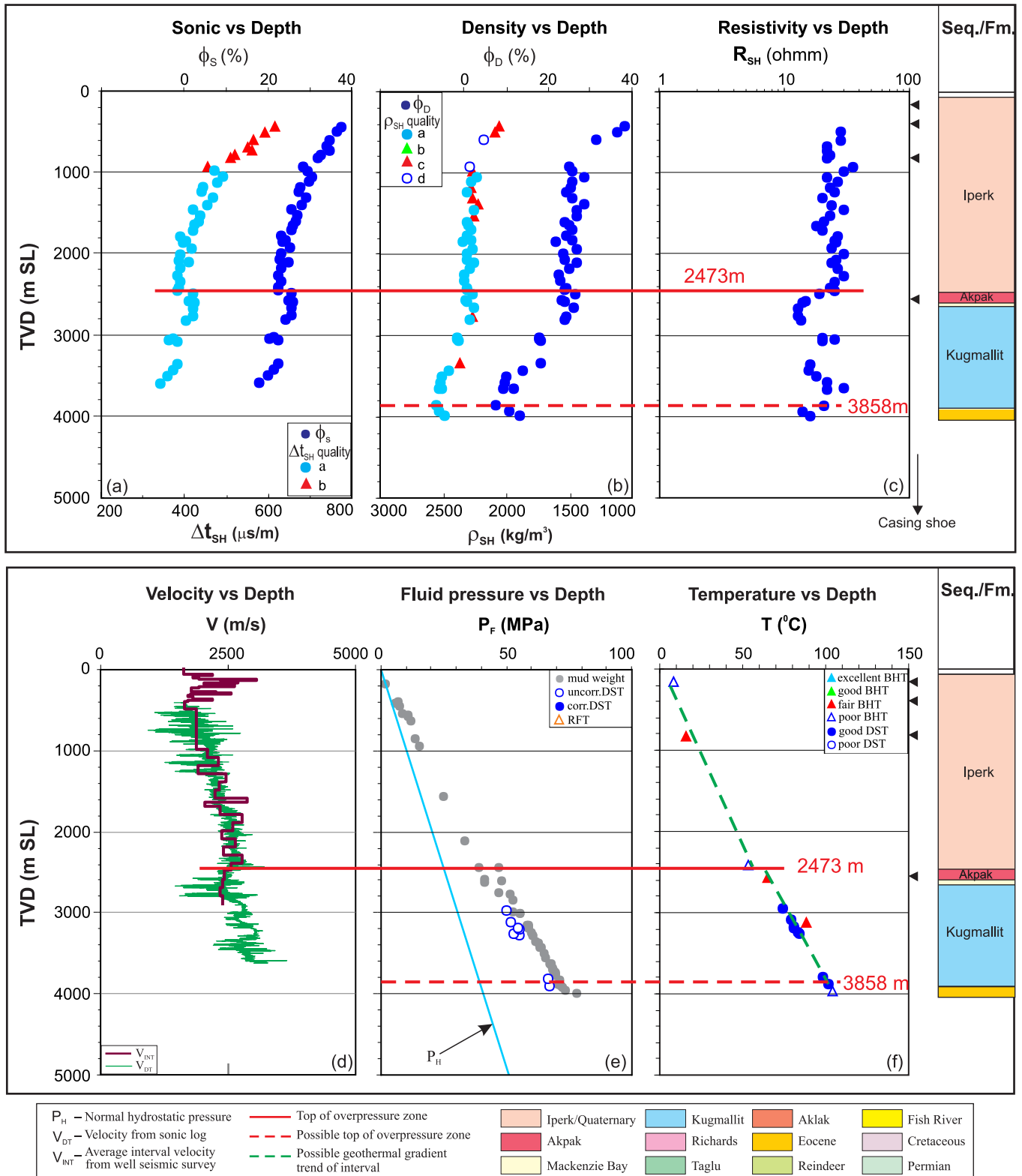


Figure A-15. Top of overpressure zone at 2473 m with quality “a” and a possible top of overpressure at 3858 m with quality “c” are detected by using the integrated analysis for the Kopanoar 2I-44 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_f$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

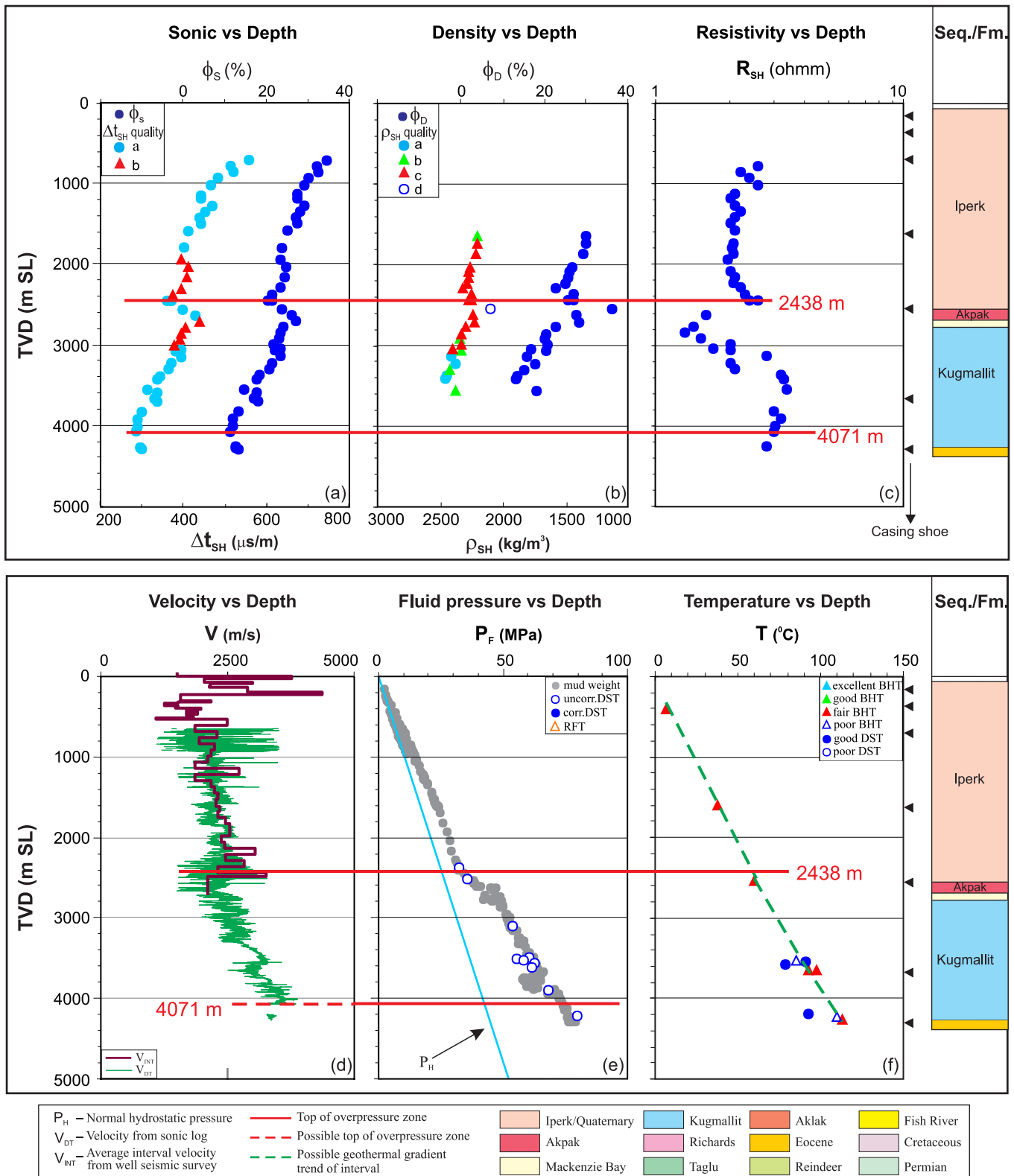


Figure A-16. Overpressure zones are detected with tops of OPZ at 2438 m (quality “a”) and at 4071 m (quality “b”) by using the integrated analysis for the Kopanoar M-13 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.



PC Devon Kugpik L-46 / 300L466900135150

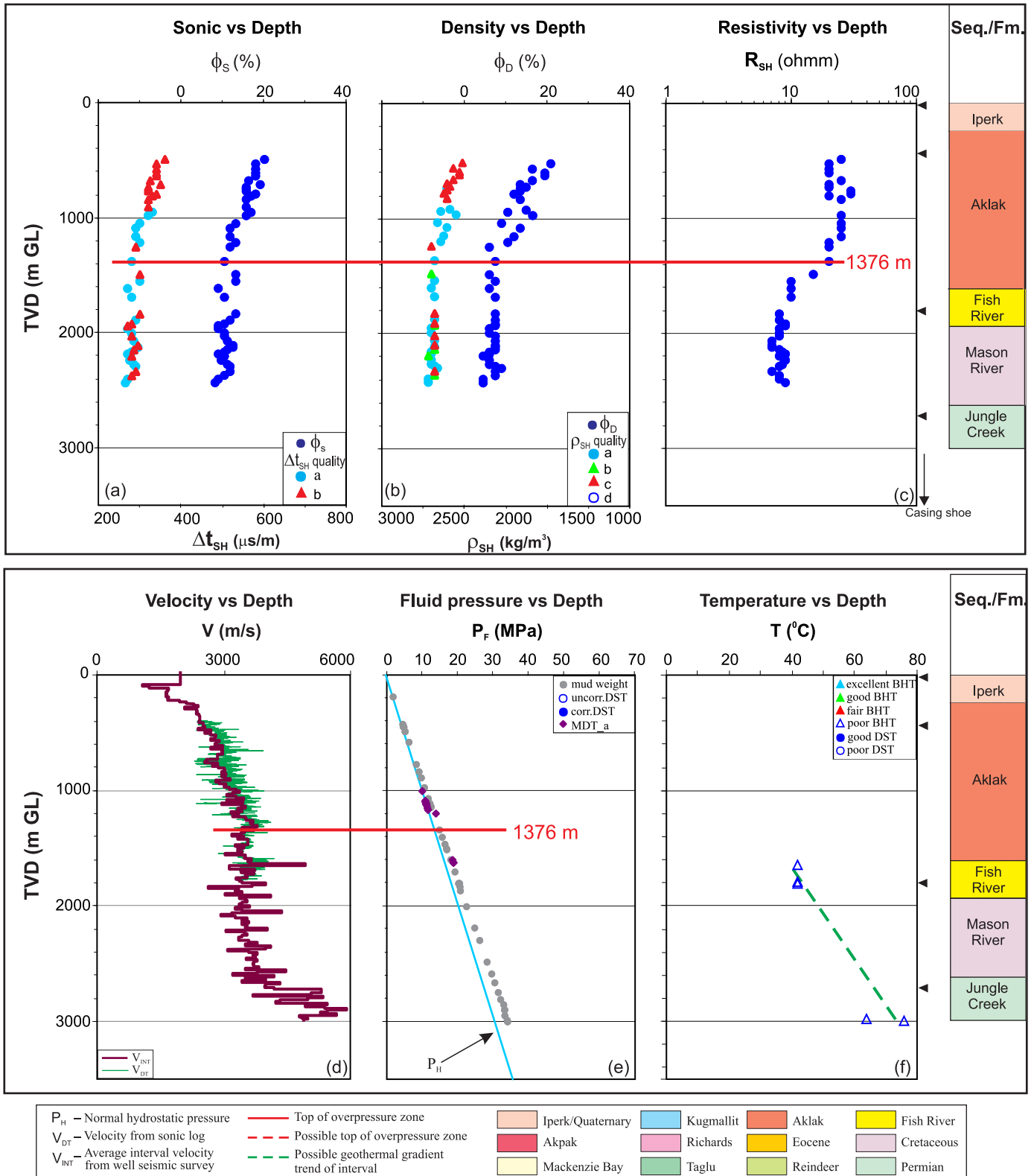


Figure A-17. Top of overpressure zone is detected at 1376 m with quality “a” by using the integrated analysis for the Kugpik L-46 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_S$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

Shell Kumak J-06 / 300J066920135000

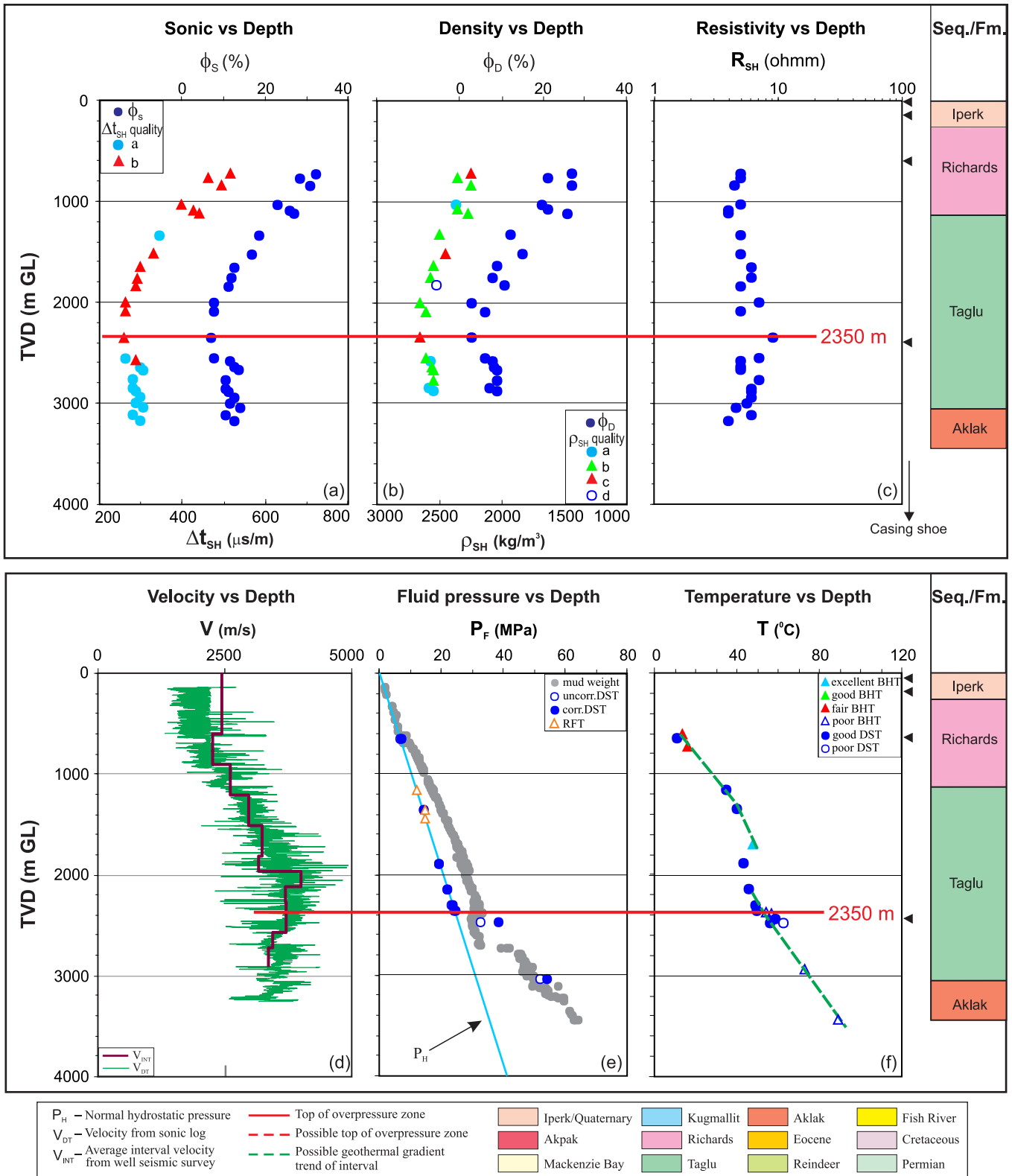


Figure A-18. Top of overpressure zone is detected at 2350 m with quality “a” by using the integrated analysis for the Kumak J-06 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

### Shell Kumak K-16 / 300K166920135000

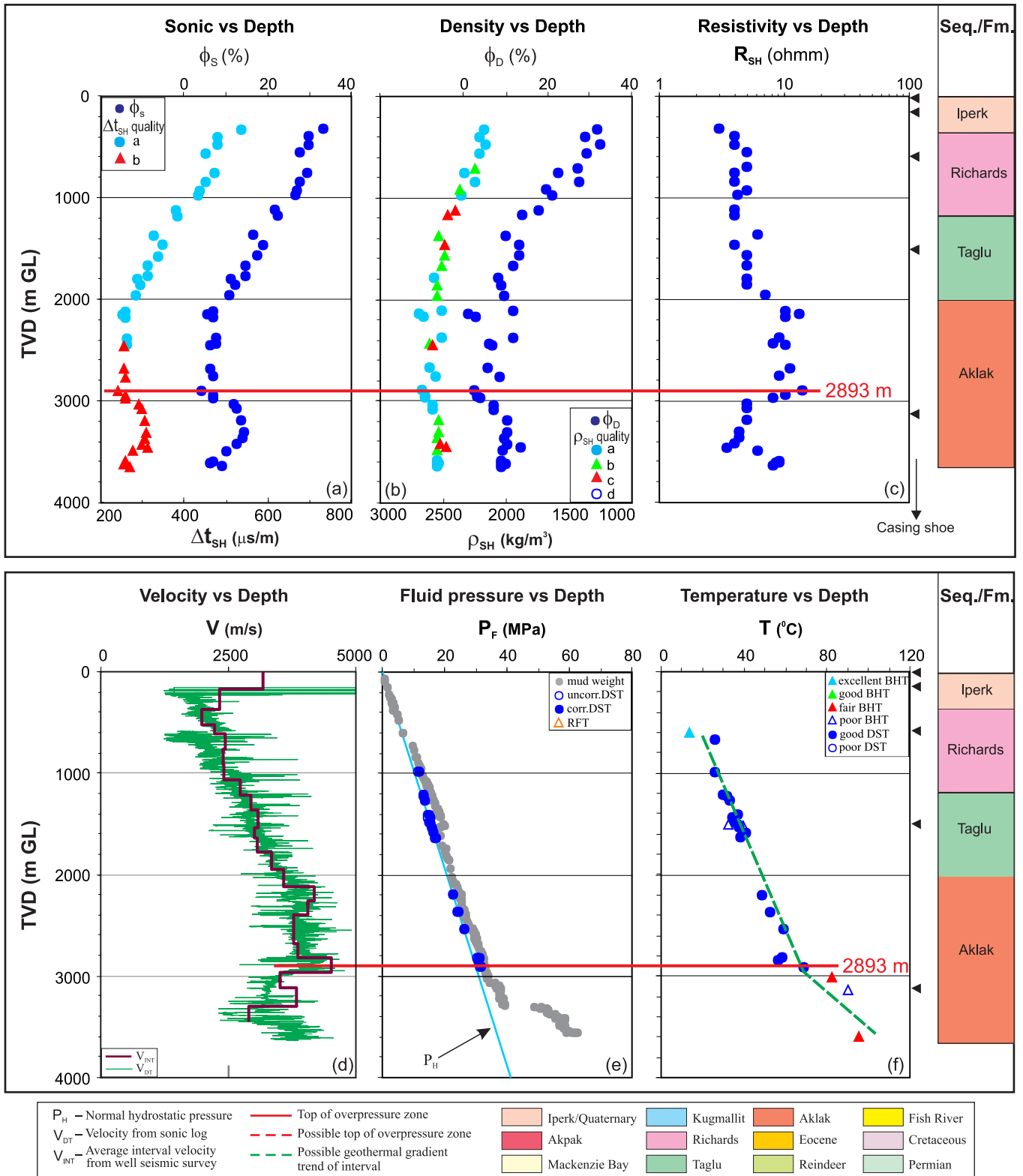


Figure A-19. Top of overpressure zone is detected at 2893 m with quality “a” by using the integrated analysis for the Kumak K-16 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

PC Anderson Kurk M-15 / 300M156910135151

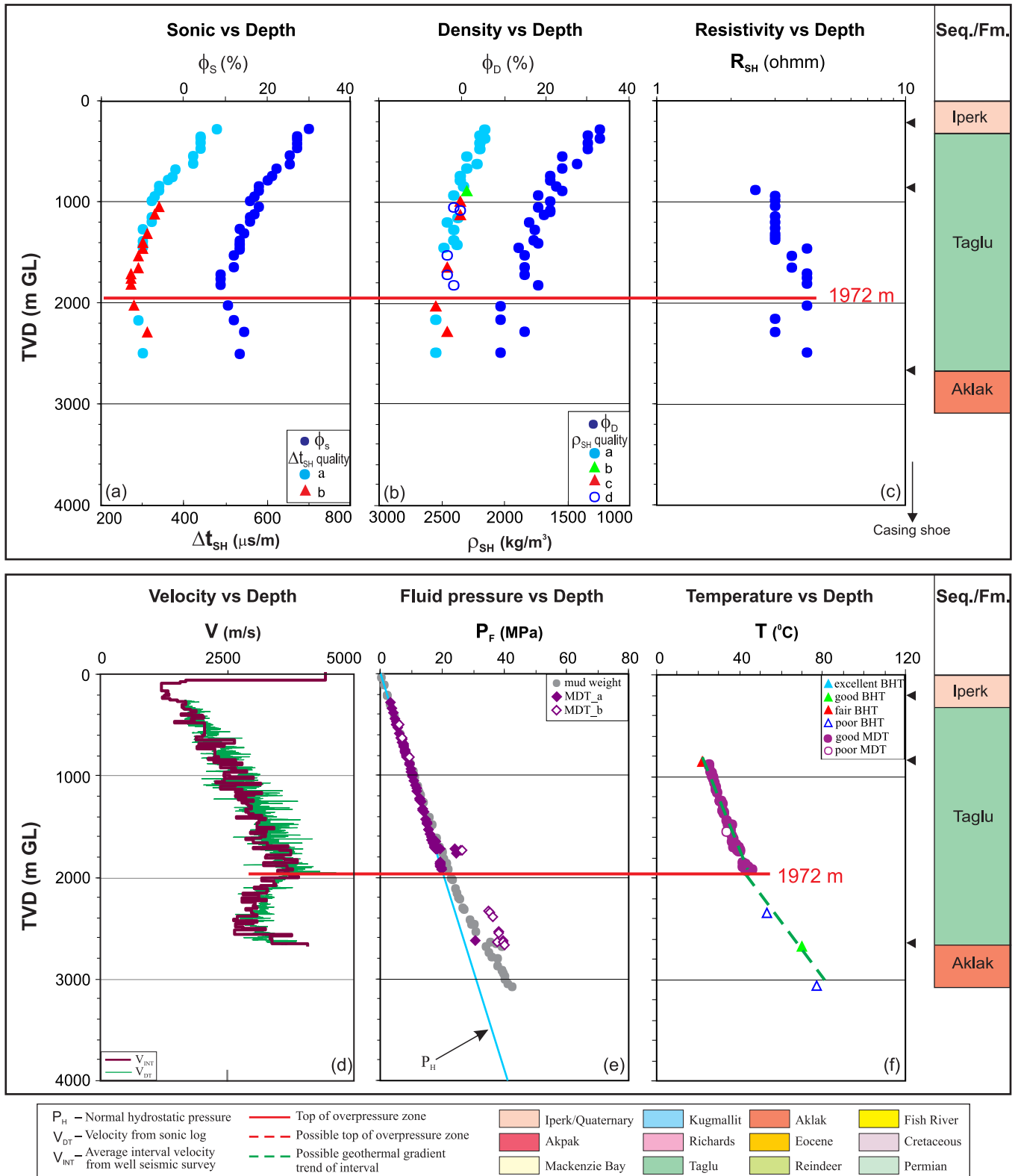


Figure A-20. Top of overpressure zone is detected at 1972 m with quality “a” by using the integrated analysis for the Kurk M-15 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_S$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

Imp. Mallik A-06 / 300A066930134300

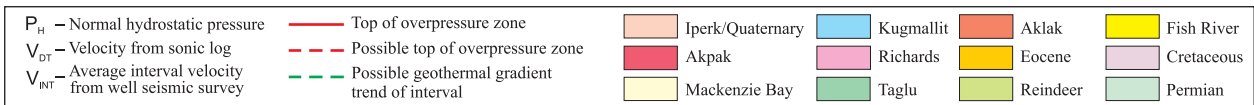
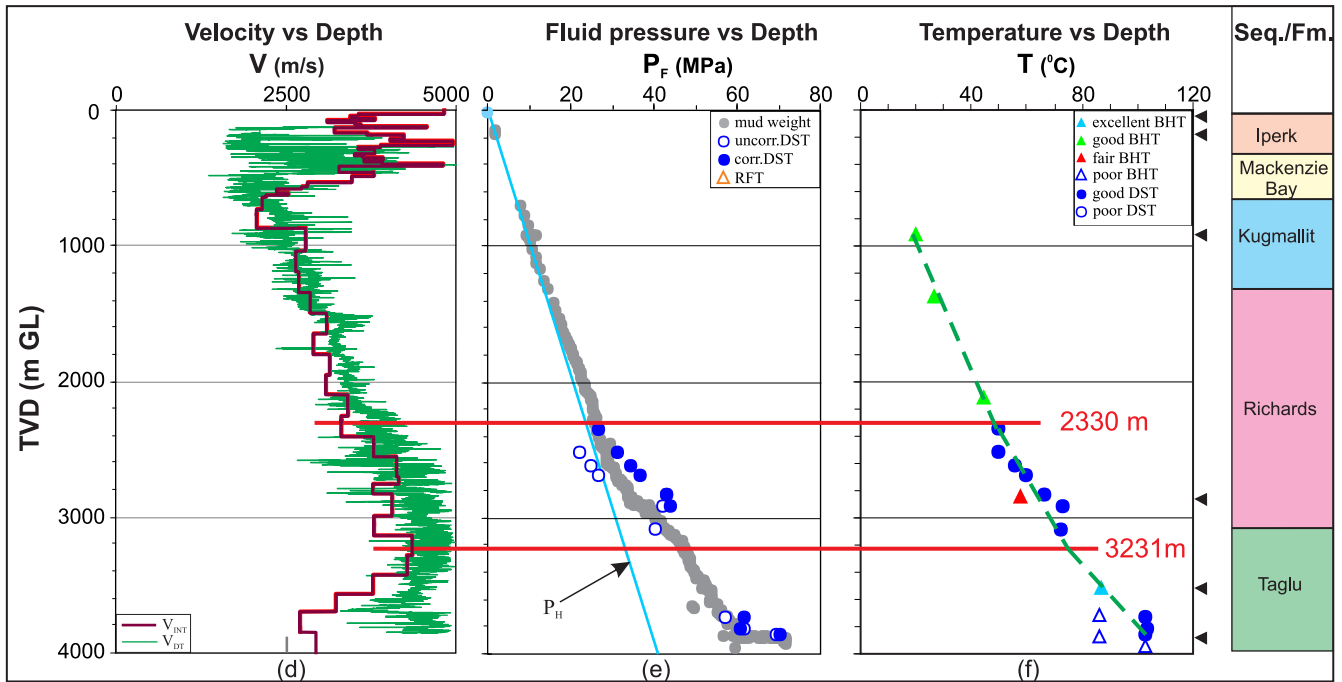
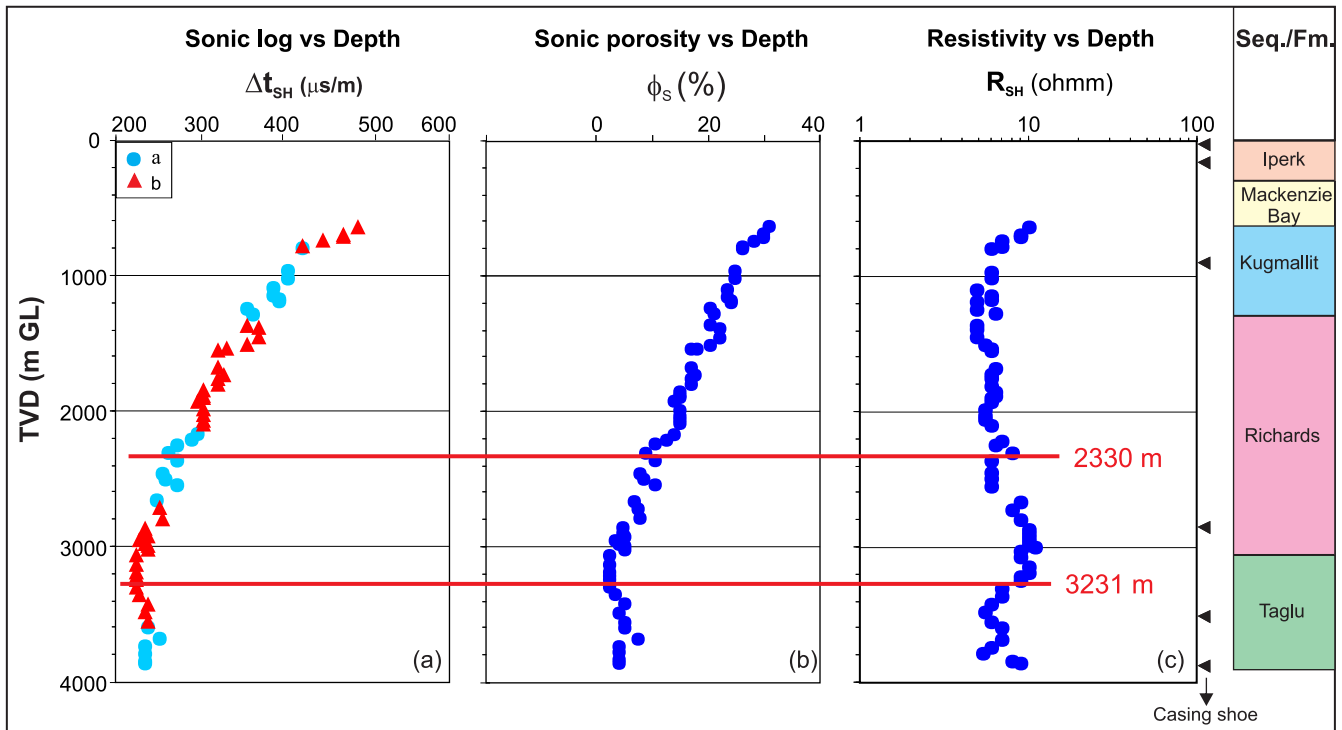


Figure A-21. Overpressure zones are detected with tops of OPZ at 2330 m (quality “a”) and 3231 m (quality “a”) by using the integrated analysis for the Mallik A-06 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) vs. depth; (b) shale sonic porosity ( $\phi_S$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

Imp. Malik J-37 / 300J376930134300

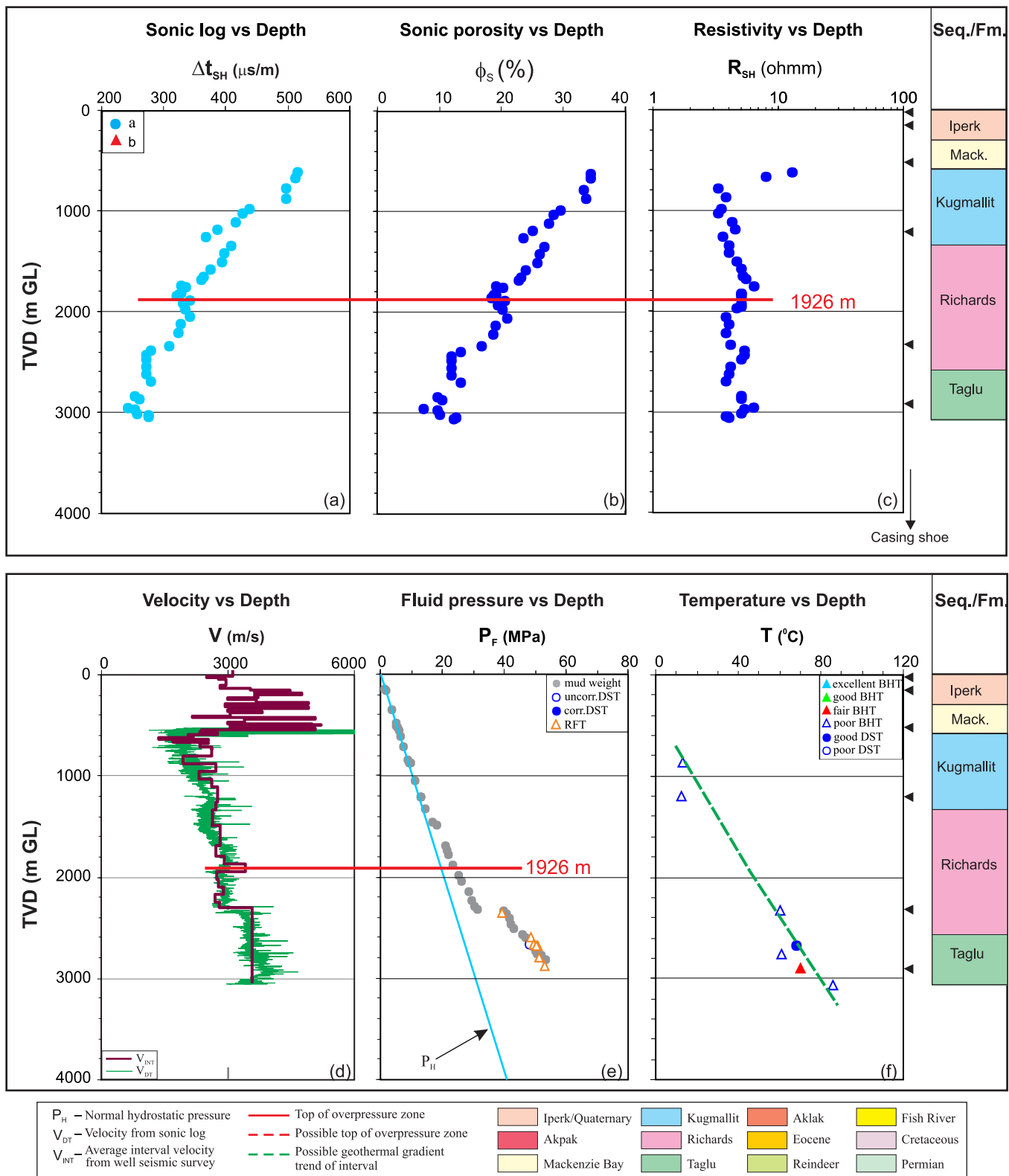


Figure A-22. Top of overpressure zone is detected at 1926 m with quality “a” by using the integrated analysis for the Mallik J-37 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) vs. depth; (b) shale sonic porosity ( $\phi_s$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth. Mack. - Mackenzie Bay.

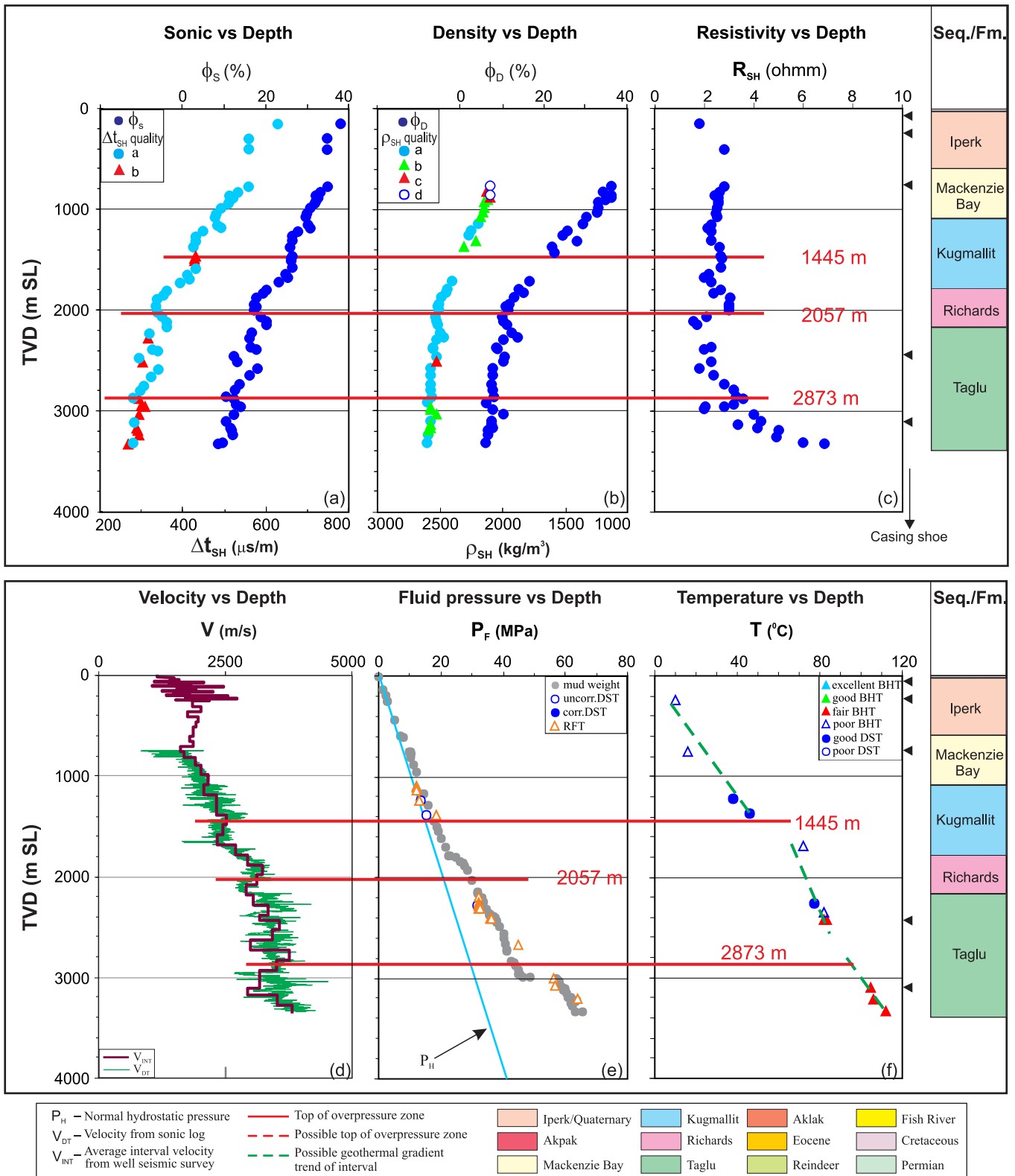


Figure A-23. Overpressure zones are detected with tops of OPZ at 1445 m, 2057 m and 2873 m with quality “a” by using the integrated analysis for the Minuk I-53 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

Chevron et al N. Ellice L-39 / 300L396920135450

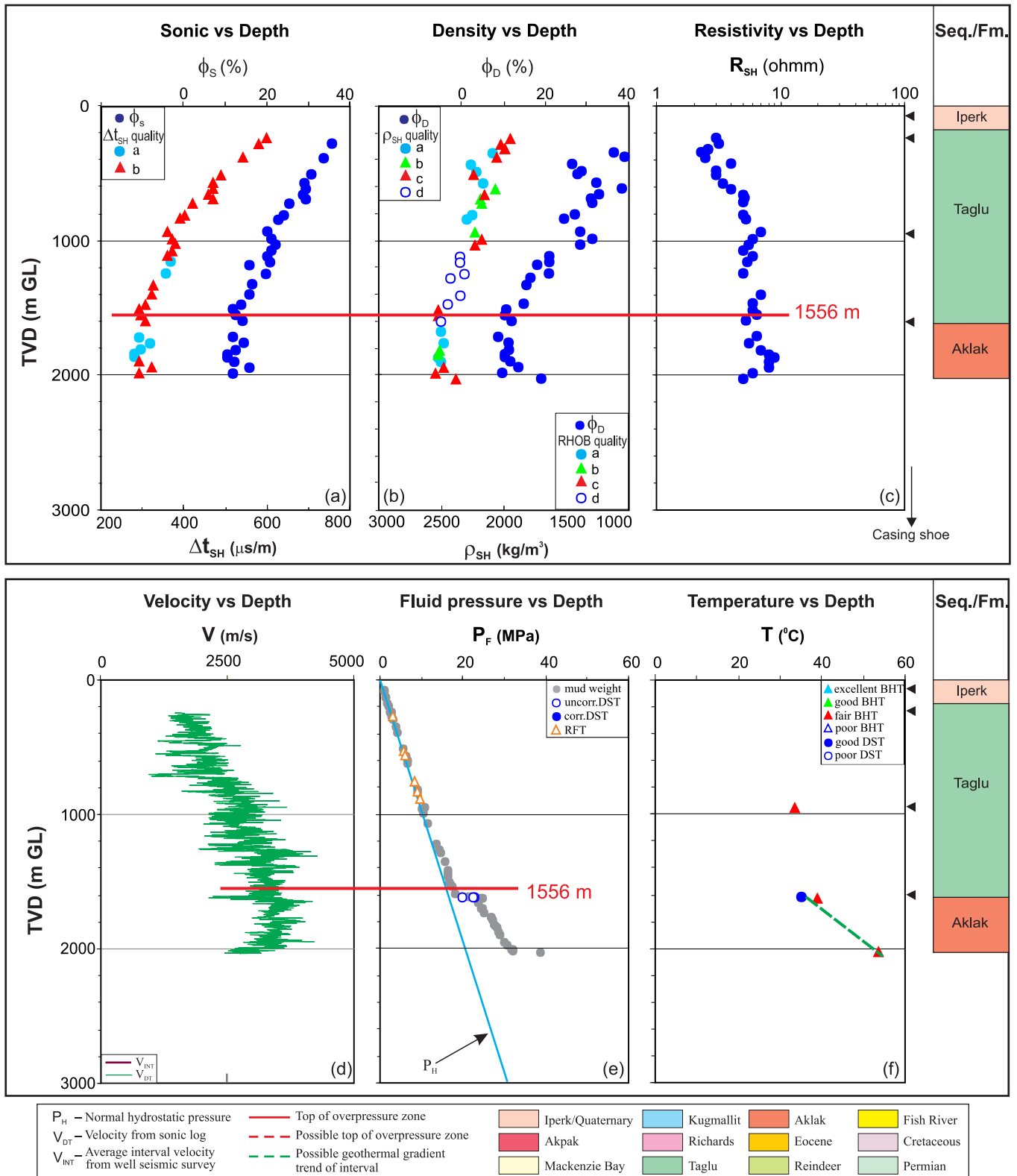


Figure A-24. Top of overpressure zone is detected at 1556 m with quality “a” by using the integrated analysis for the North Ellice L-39 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_S$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.



Gulf et al. N. Issungnak L-86 / 300L867010134000

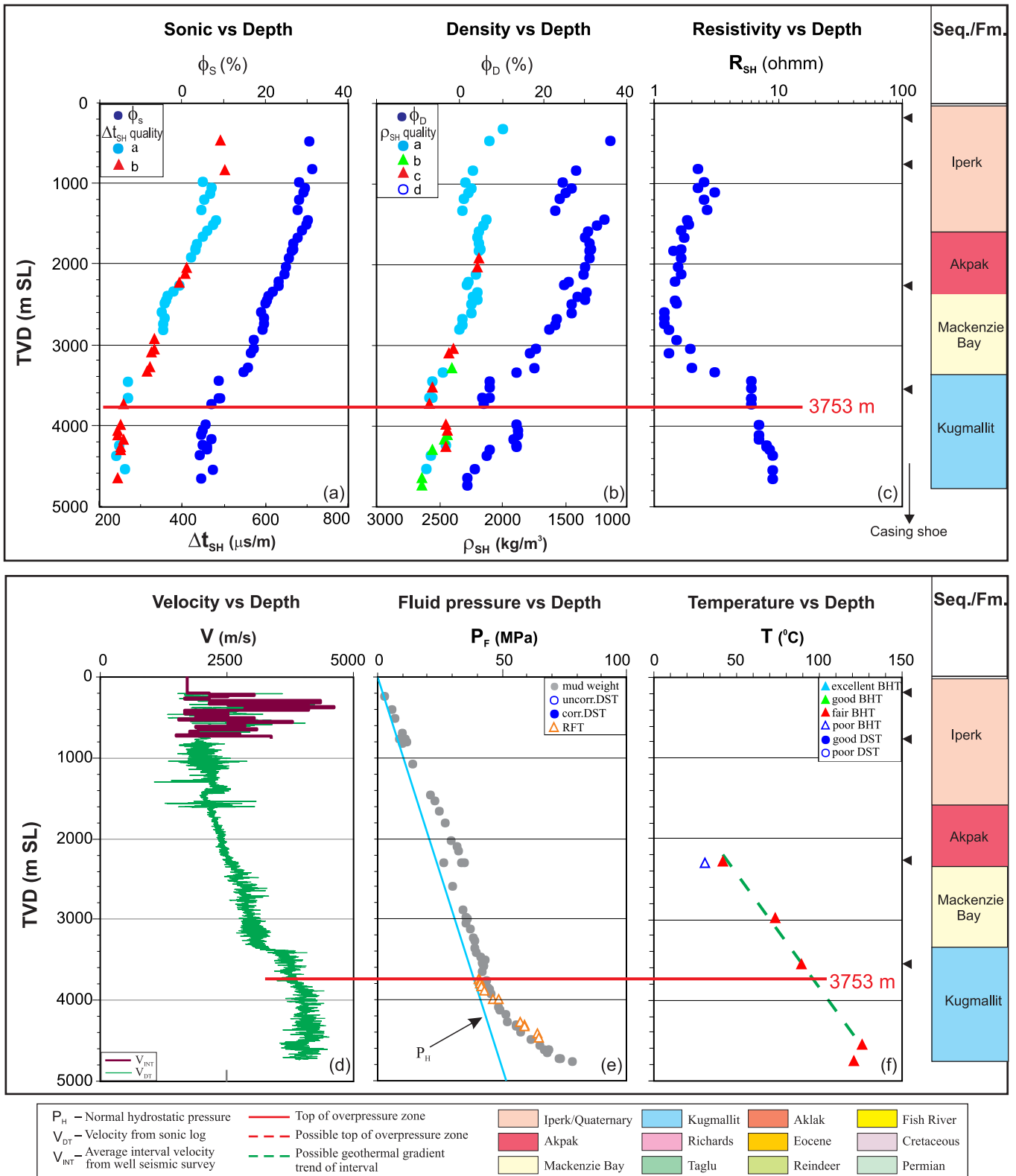


Figure A-25. Top of overpressure zone is detected at 3753 m with quality “a” by using the integrated analysis for the North Issungnak L-86 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

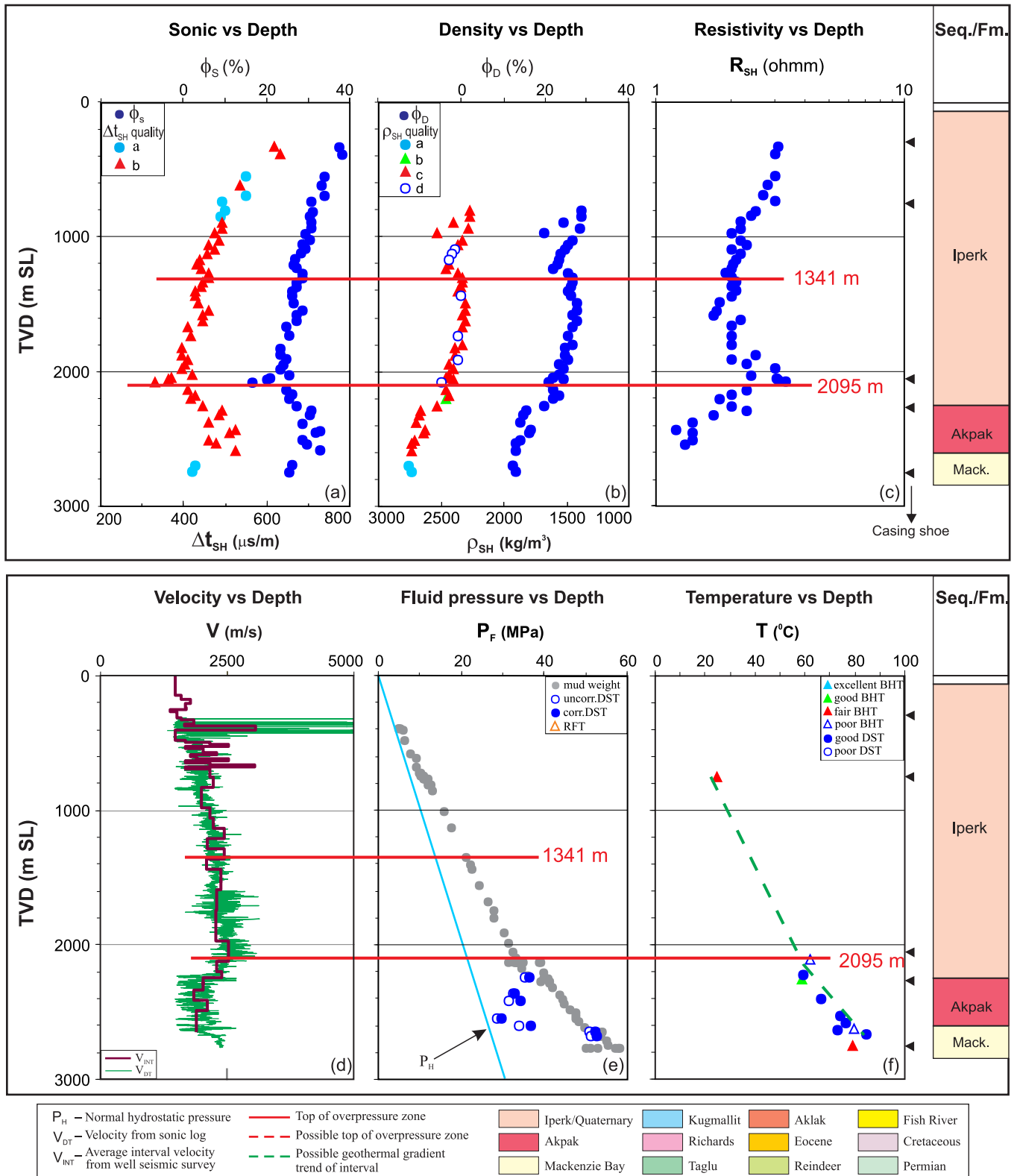


Figure A-26. Overpressure zones are detected with tops at 1341 m (quality “b”) and 2095 m (quality “a”) by using the integrated analysis for the Nektoralik K-59 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth. Mack. - Mackenzie Bay.

### Dome Nerlerk M-98 / 300M987030133000

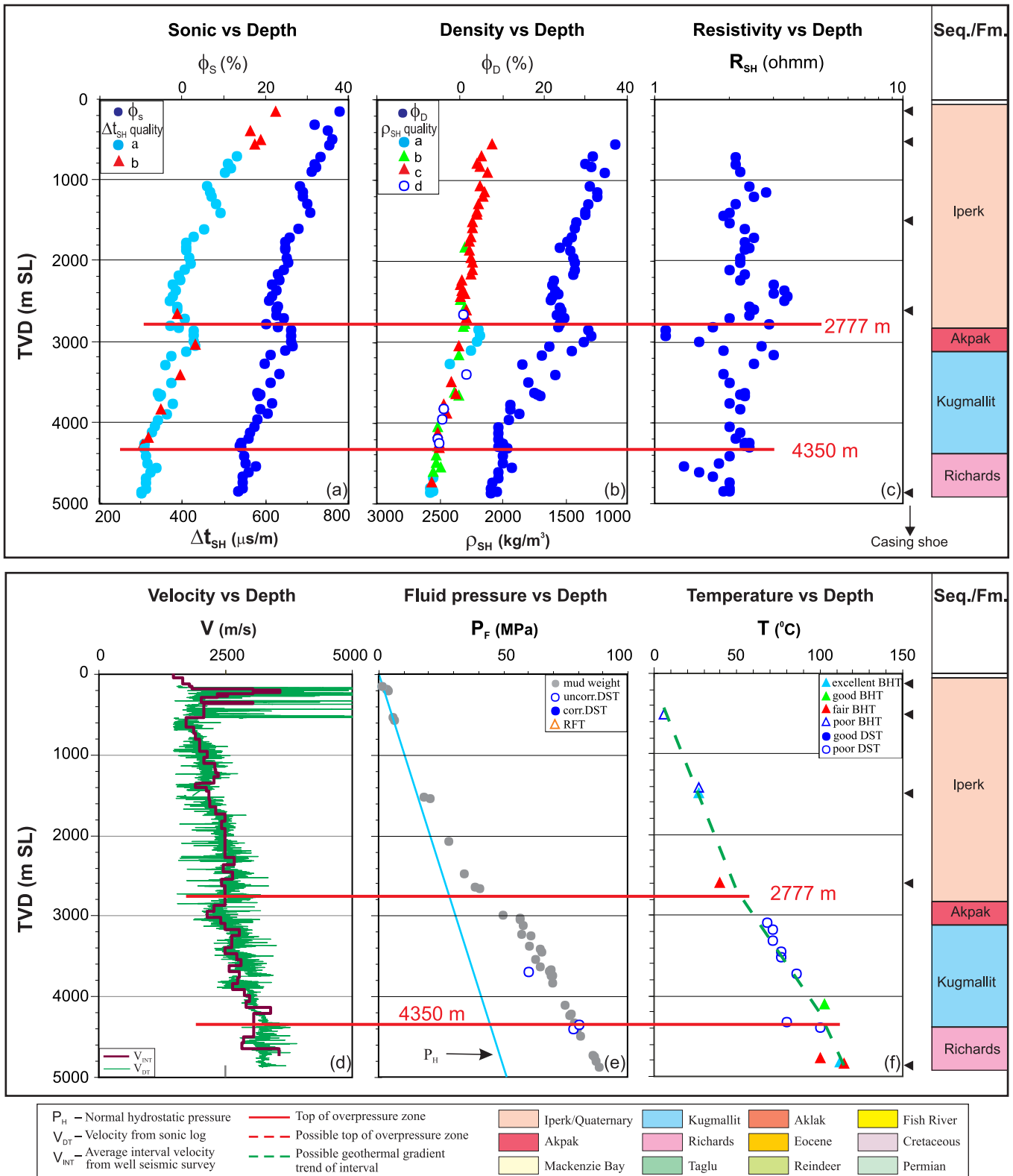


Figure A-27. Overpressure zones are detected with tops at 2777 m and 4350 m (quality “a”) by using the integrated analysis for the Nerlerk M-98 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

Imp. Netserk B-44 / 300B446940135450

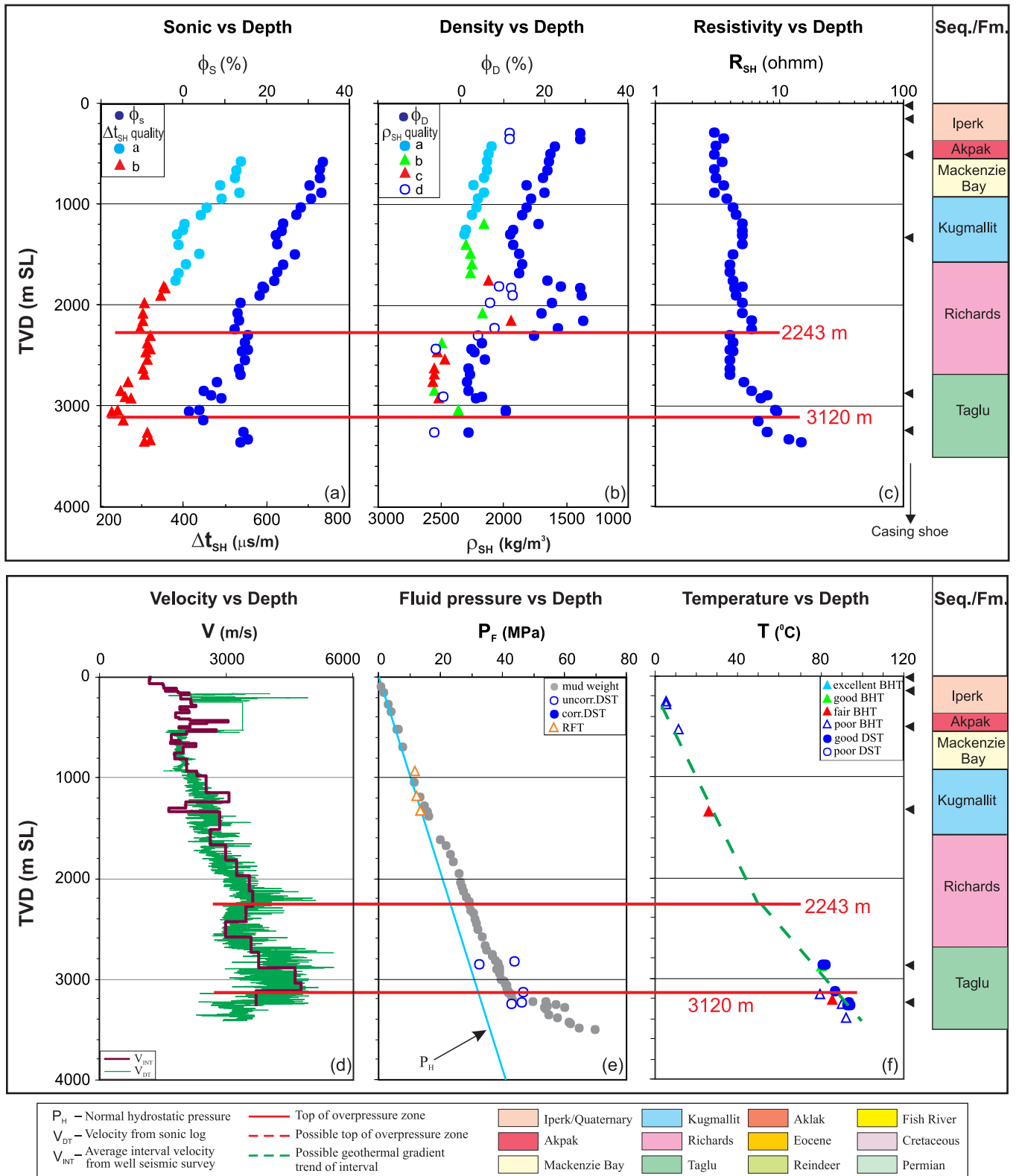


Figure A-28. Overpressure zones are detected with tops at 2243 m and 3120 m (quality “a”) by using the integrated analysis for the Netserk B-44 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

Imp. Netserk F-40 / 300F406940135450

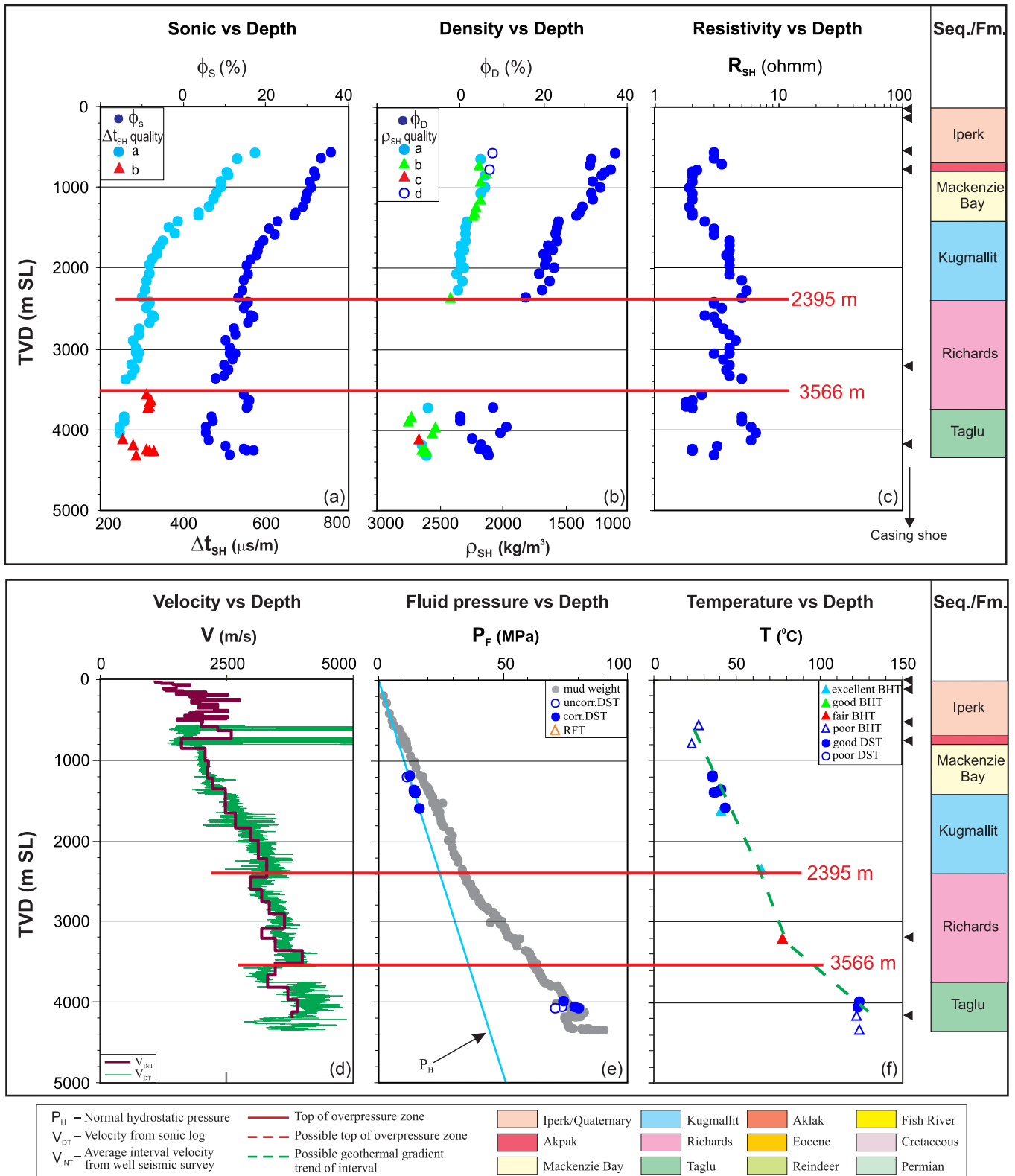


Figure A-29. Overpressure zones are detected with tops at 2395 m (quality “b”) and 3566 m (quality “a”) by using the integrated analysis for the Netserk F-40 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

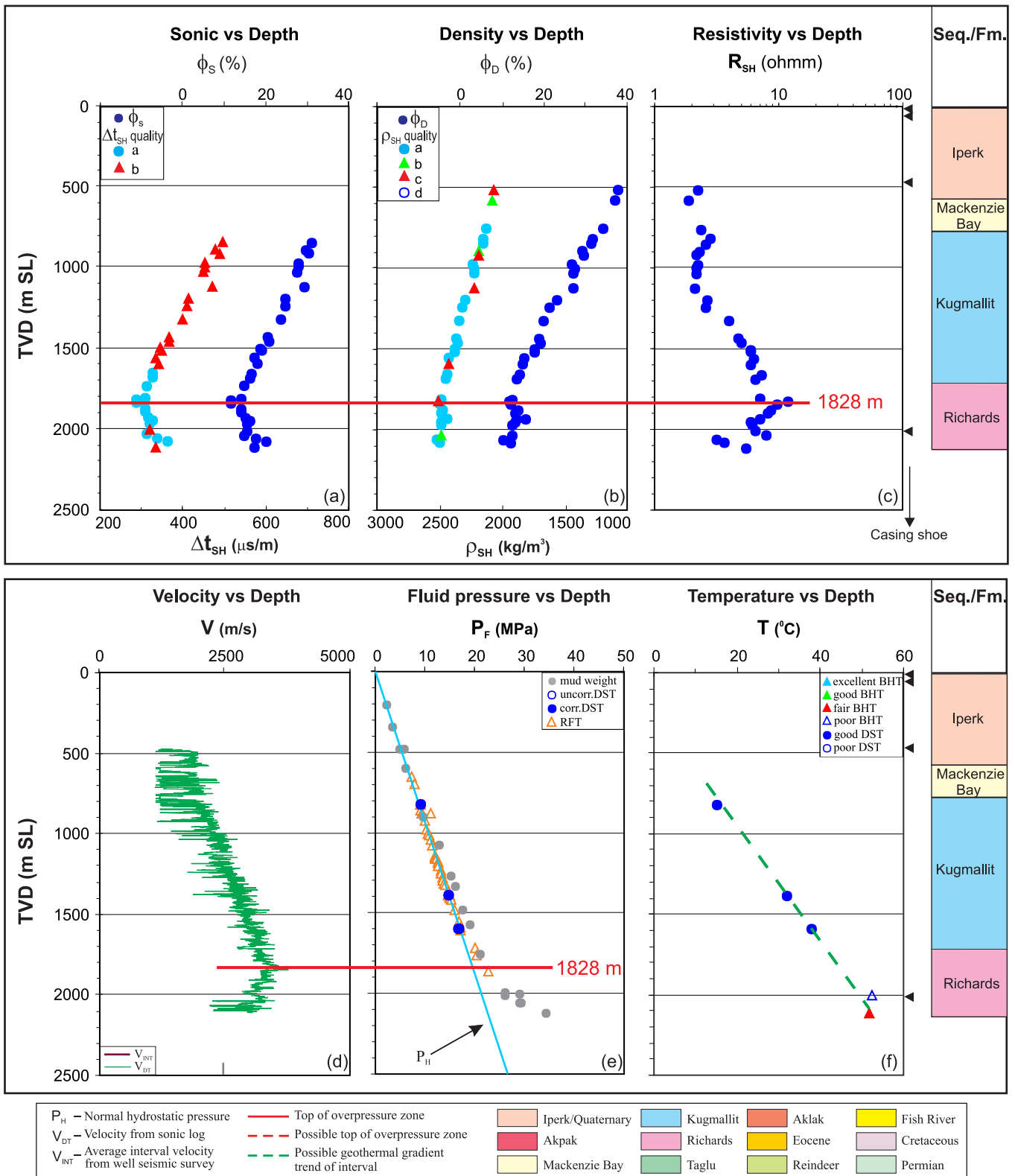


Figure A-30. Top of overpressure zone is detected at 1828 m with quality “a” by using the integrated analysis for the Nipterk P-32 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

Devon Paktoa C-60 / 300C606930136300

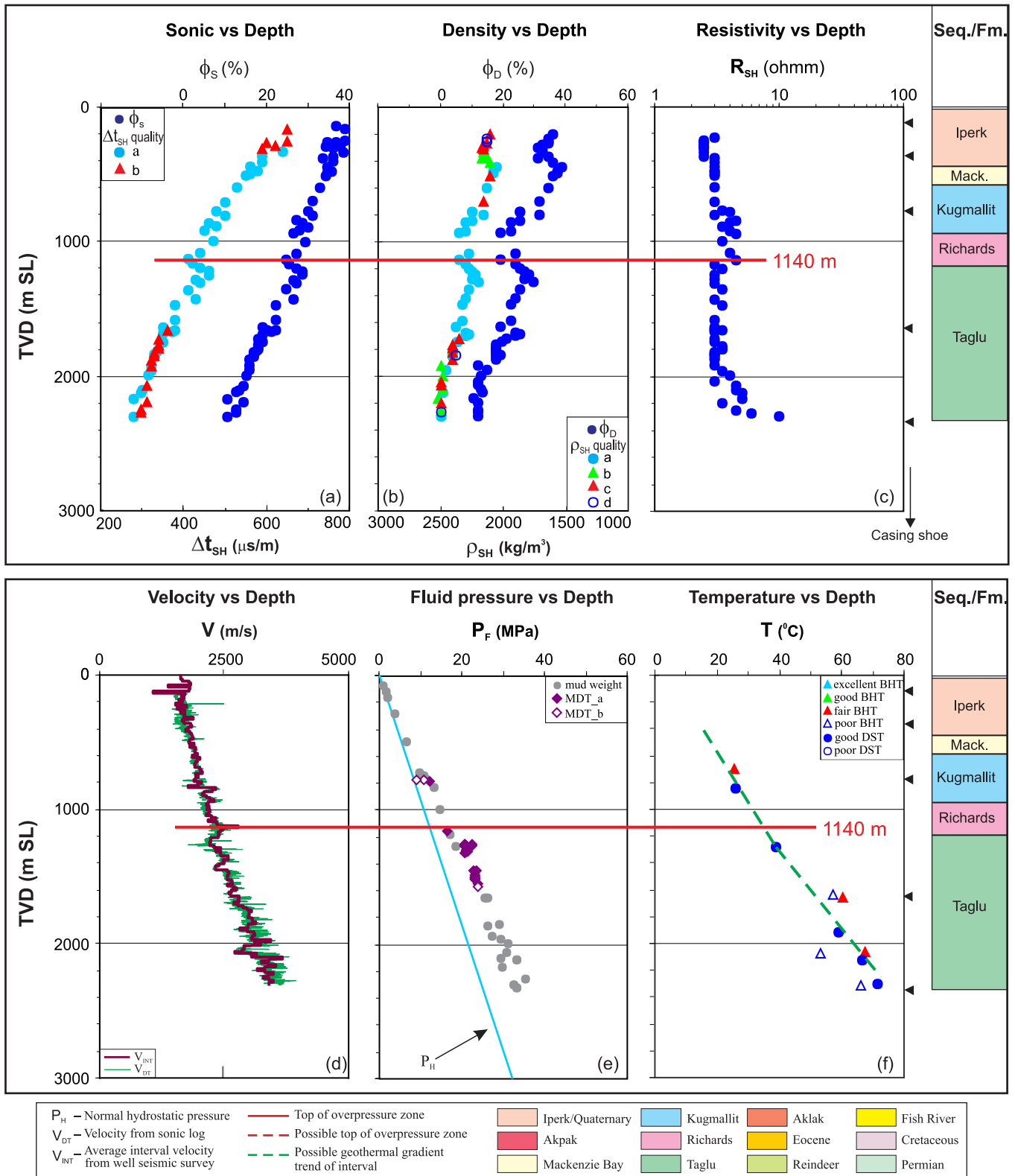


Figure A-31. Top of overpressure zone is detected at 1140 m with quality “a” by using the integrated analysis for the Paktoa C-60 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_S$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth. Mack. - Mackenzie Bay.

Imp. Pullen E-17 / 300E176950134150

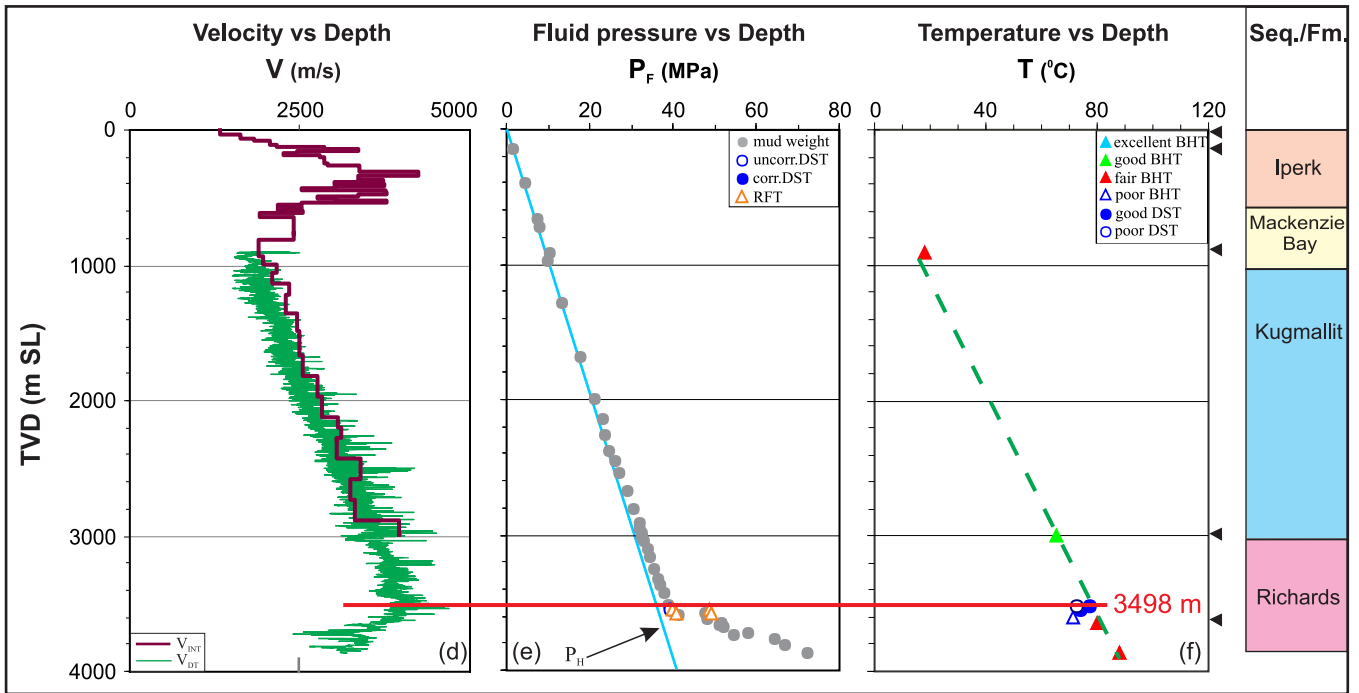
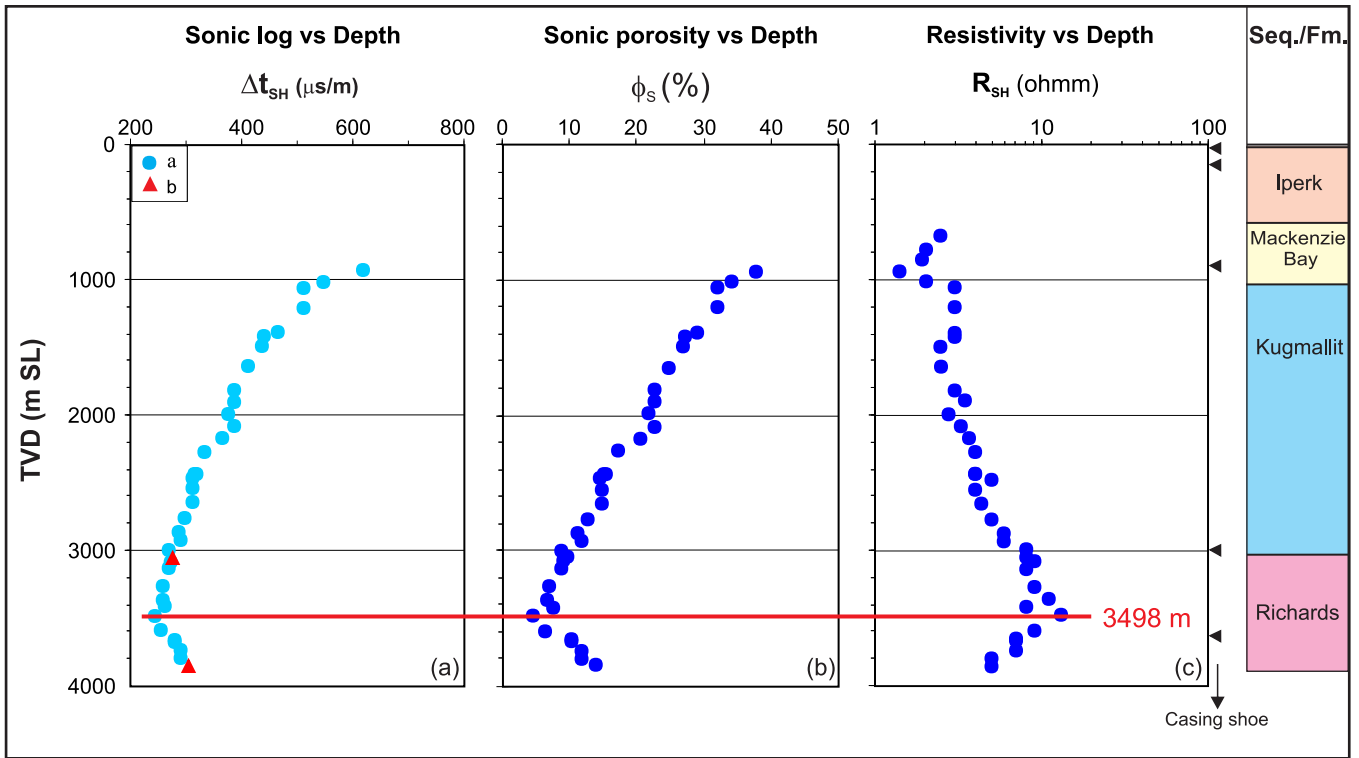


Figure A-32. Top of overpressure zone is detected at 3498 m with quality “a” by using the integrated analysis for the Pullen E-17 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) vs. depth; (b) shale sonic porosity ( $\phi_s$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.



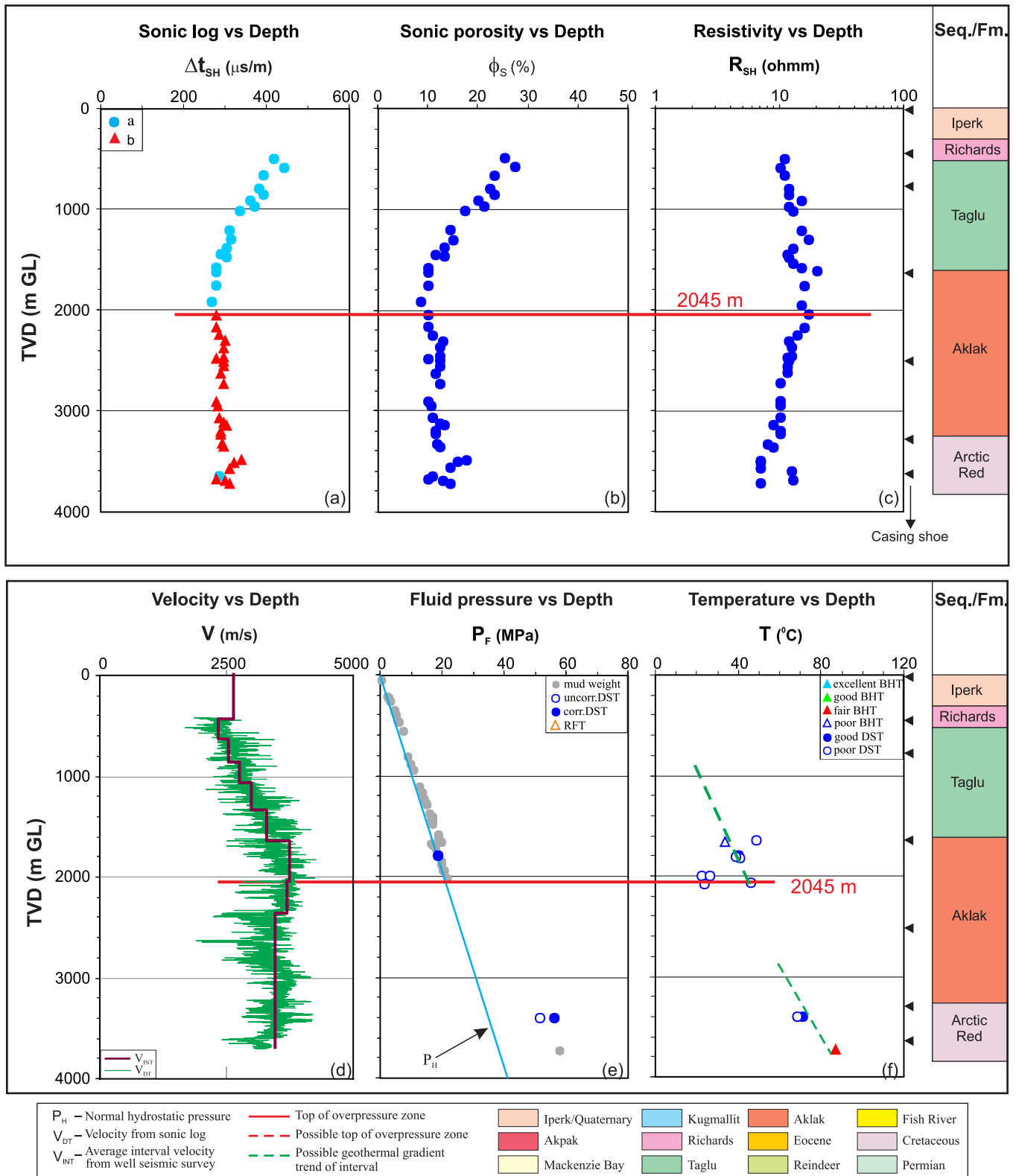


Figure A-33. Top of overpressure zone is detected at 2045 m with quality “a” by using the integrated analysis for the Reindeer D-27 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) vs. depth; (b) shale sonic porosity ( $\phi_S$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

Imp. Sarpik B-35 / 300B356930136150

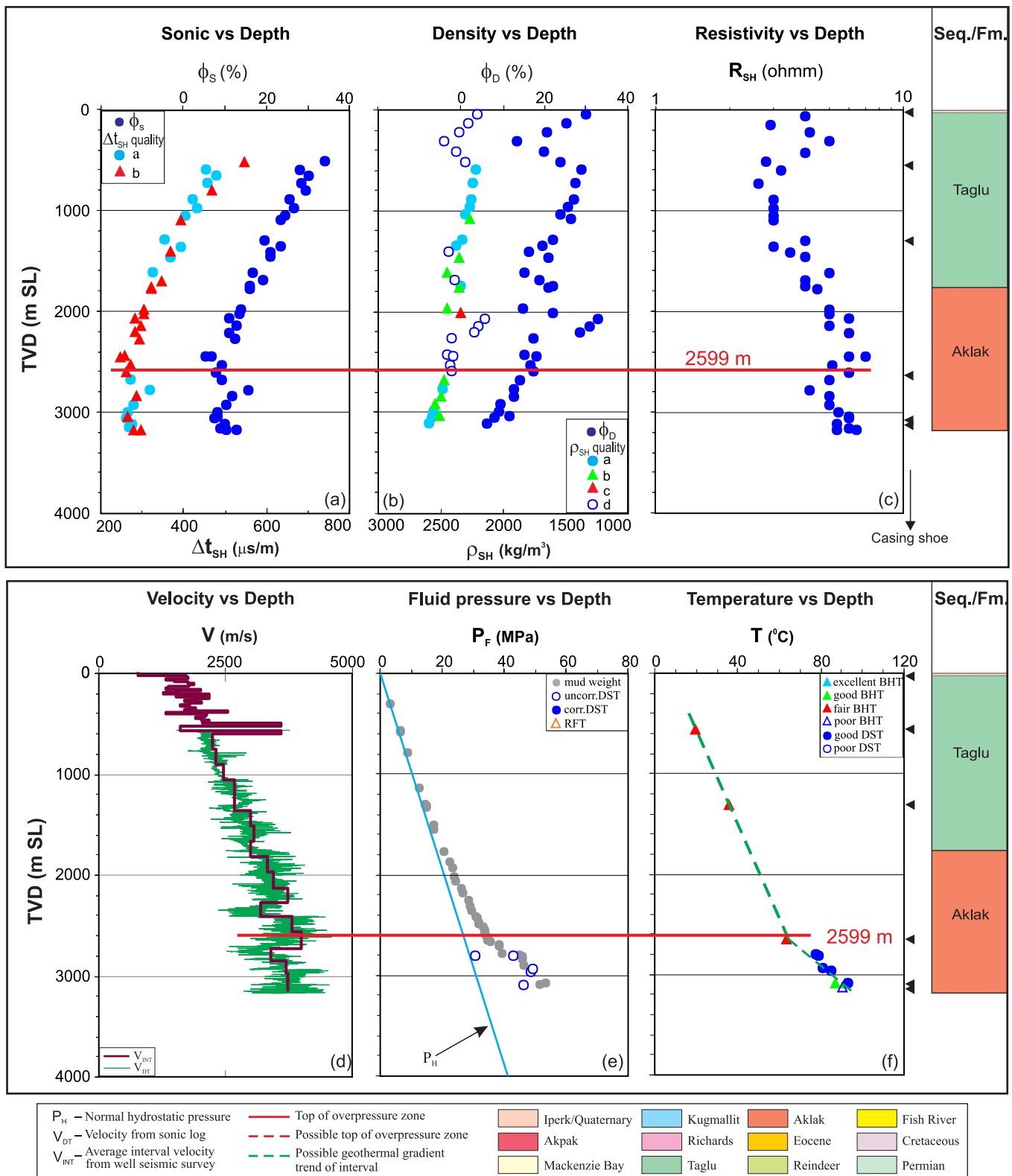


Figure A-34. Top of overpressure zone is detected at 2599 m with quality “a” by using the integrated analysis for the Sarpik B-35 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_S$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

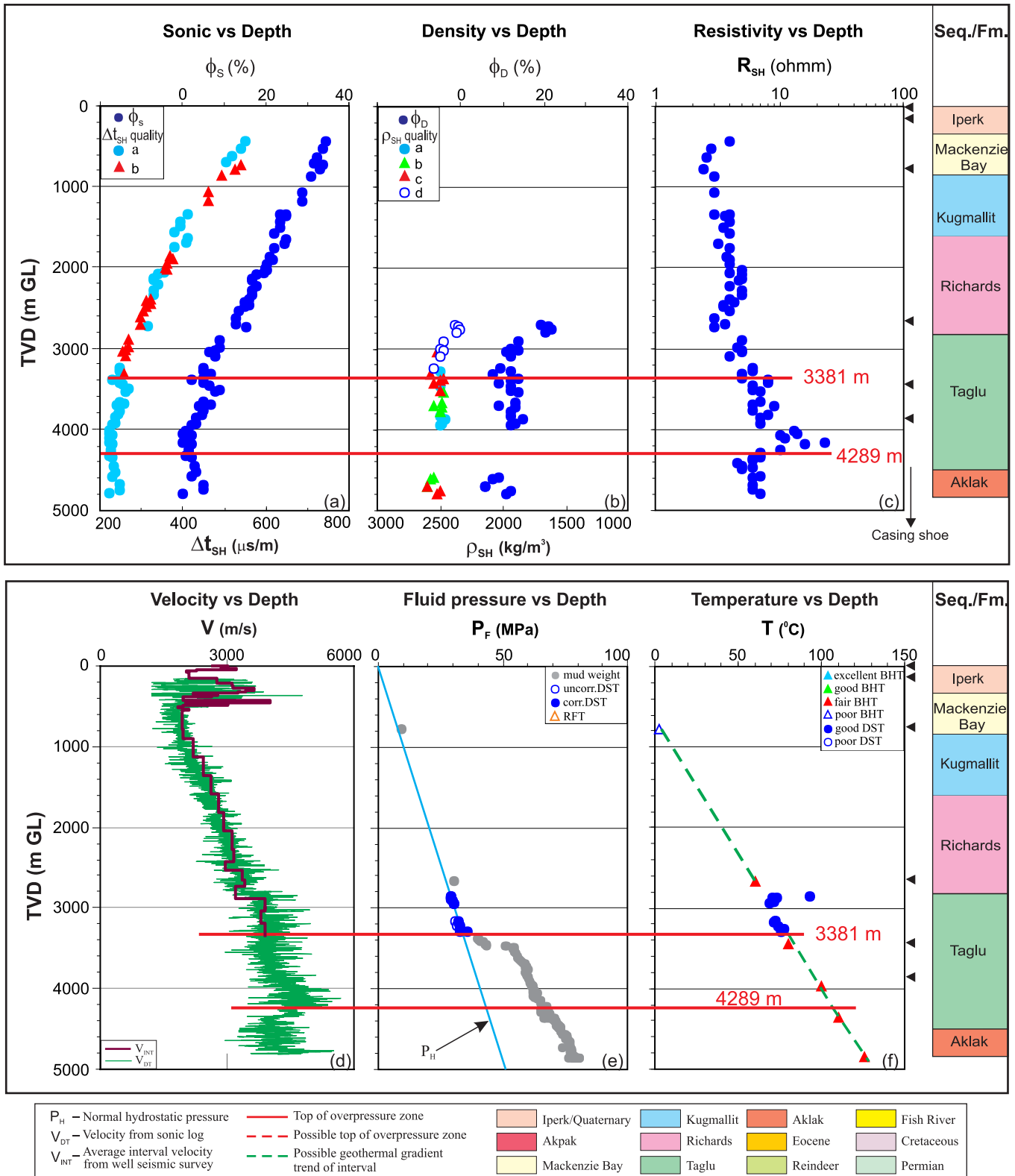


Figure A-35. Overpressure zones are detected with tops at 3381 m (quality “a”) and 4289 m (quality “b”) by using the integrated analysis for the Taglu C-42 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

I.O.E. Taglu D-43 / 300D436930134450

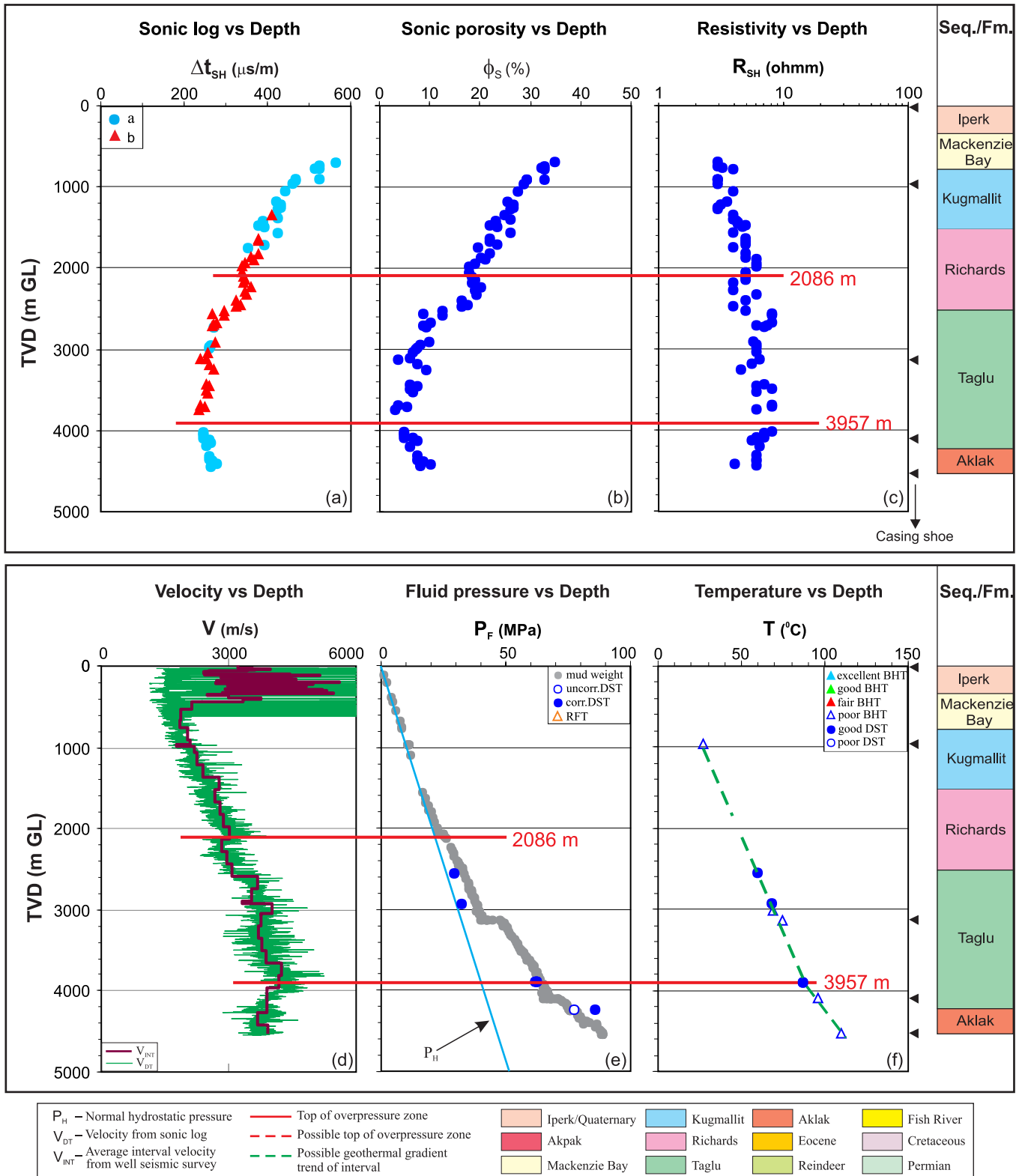


Figure A-36. Overpressure zones are detected with tops at 2086 m (quality “b”) and 3957 m (quality “a”) by using the integrated analysis for the Taglu D-43 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) vs. depth; (b) shale sonic porosity ( $\phi_s$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

I.O.E. Taglu D-55 / 300D556930134450

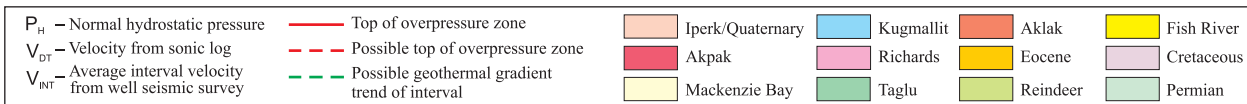
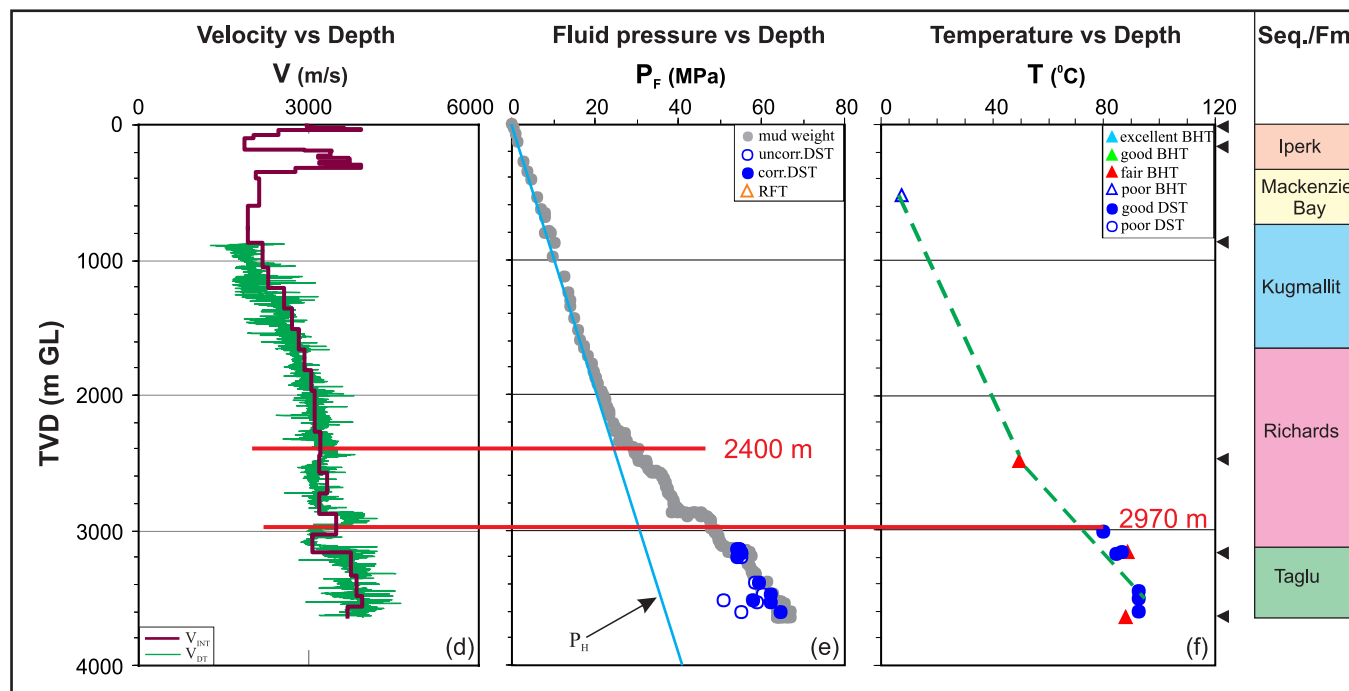
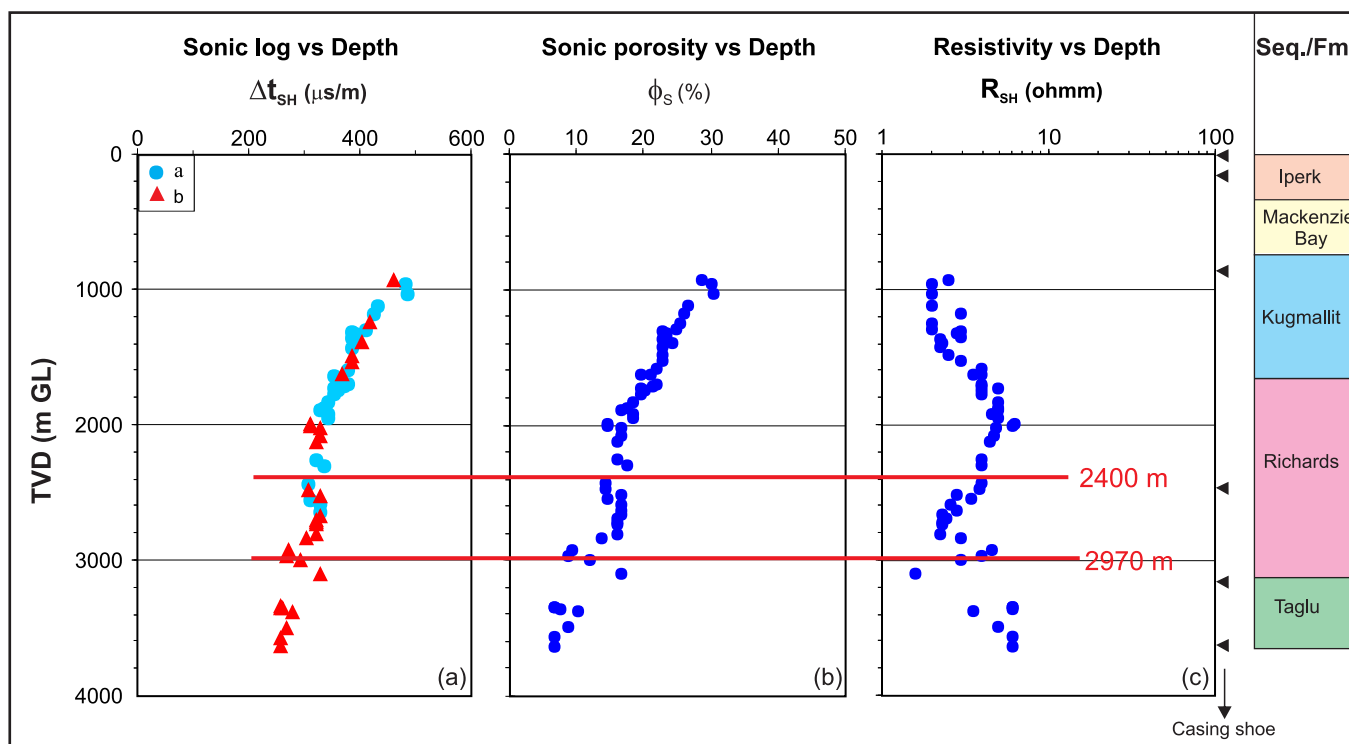


Figure A-37. Overpressure zones are detected with tops of OPZ at 2400 m (quality “b”) and 2970 m (quality “a”) by using the integrated analysis for the Taglu D-55 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) vs. depth; (b) shale sonic porosity ( $\phi_S$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

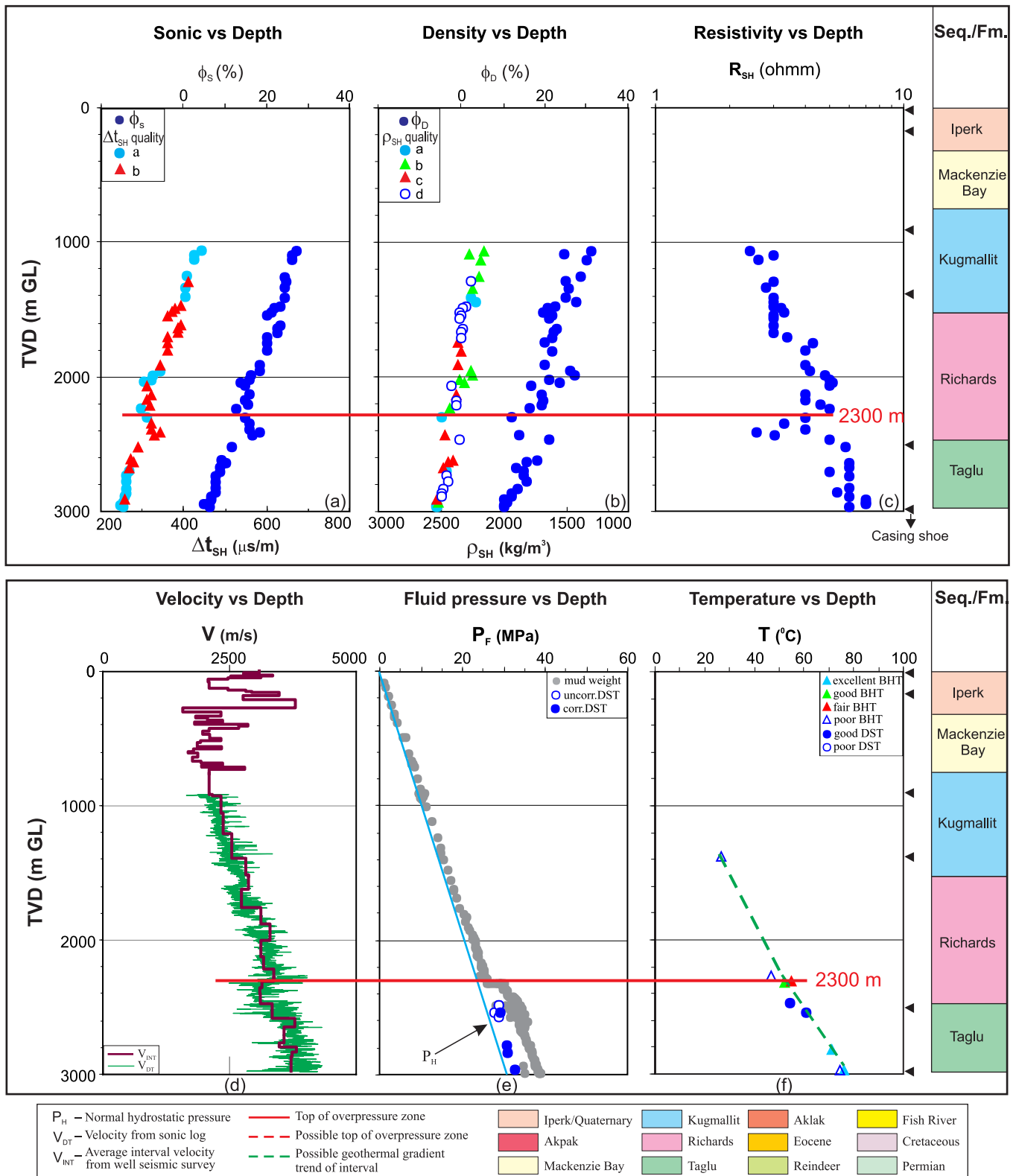


Figure A-38. Top of overpressure zone is detected at 2300 with quality “a” by using the integrated analysis for the Taglu G-33 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

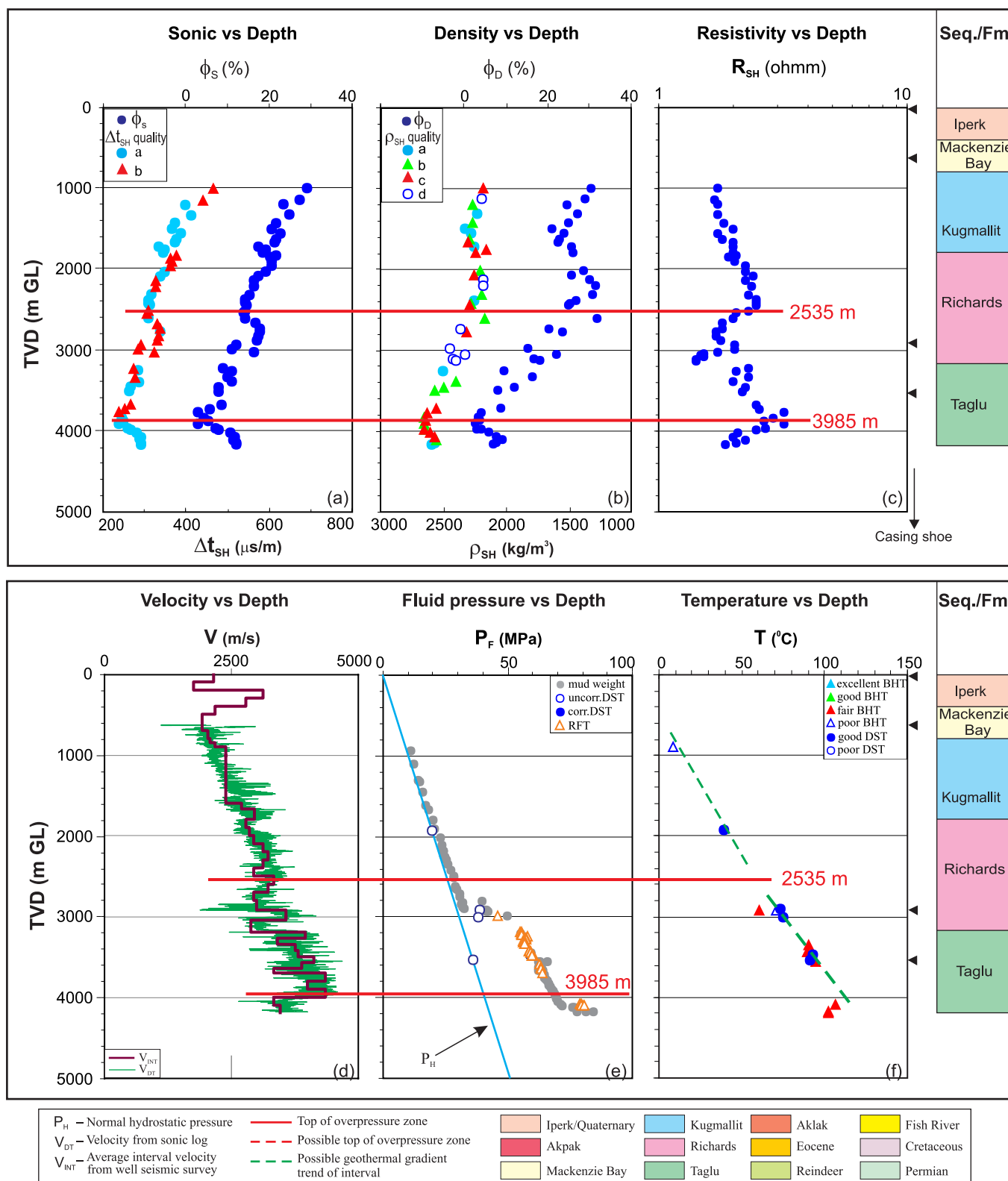


Figure A-39. Overpressure zones are detected with tops of OPZ at 2535 m (quality “a”) and 3985 m (quality “a”) by using the integrated analysis for the Taglu W. H-06 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

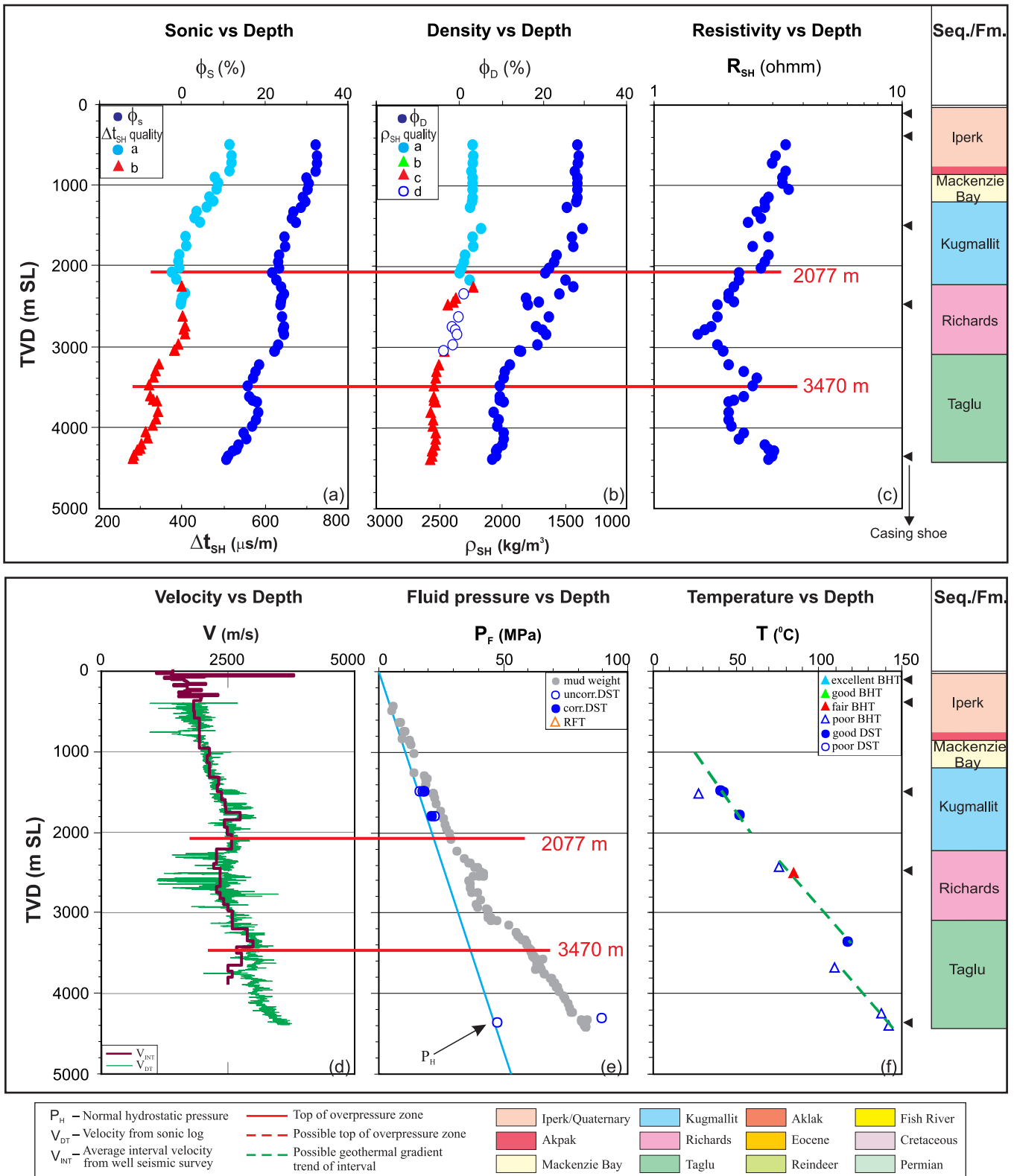


Figure A-40. Overpressure zones are detected with tops of OPZ at 2077 m (quality “a”) and 3470 m (quality “a”) by using the integrated analysis for the Tarsiut A-25 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.



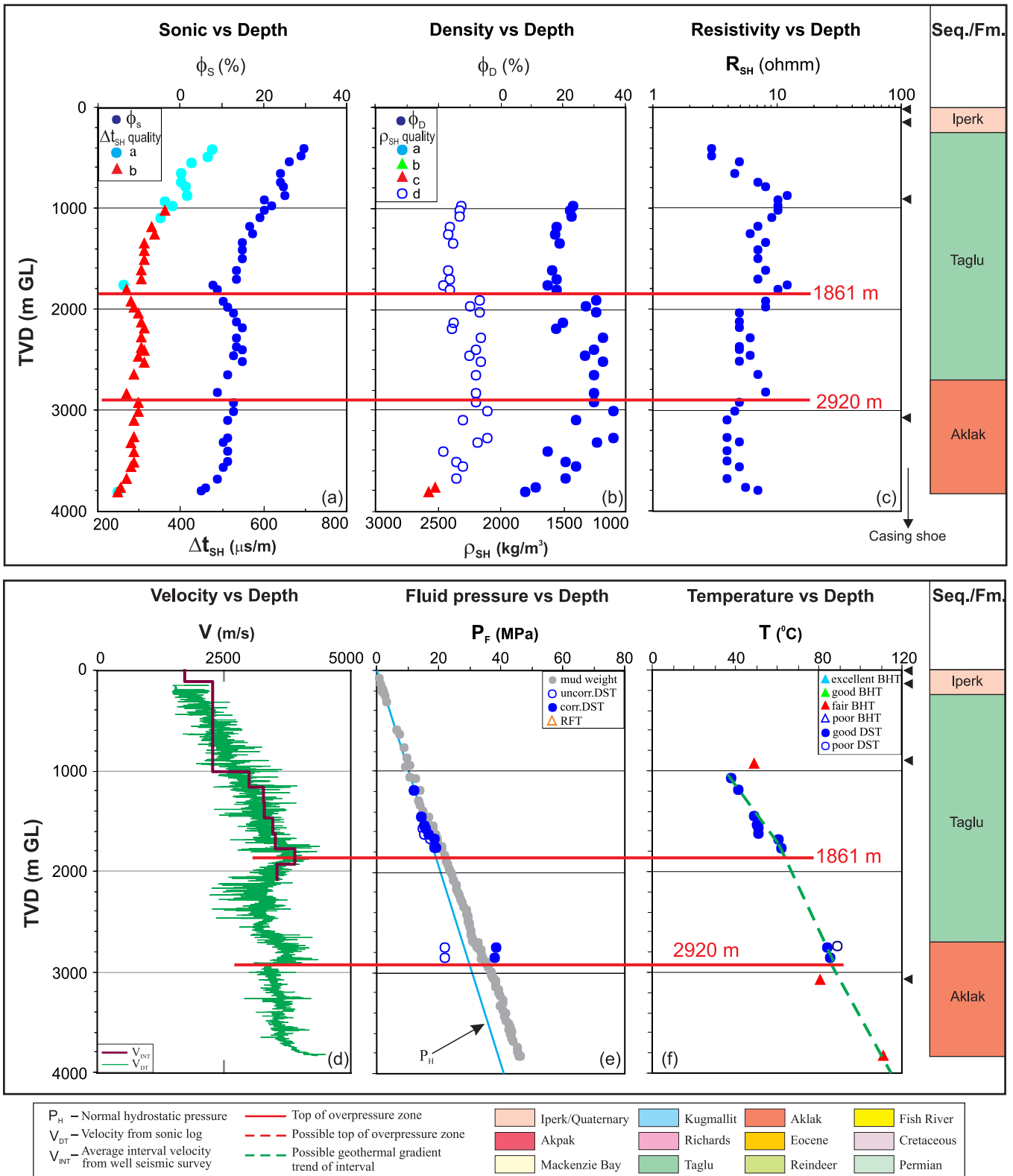


Figure A-41. Overpressure zones are detected with tops of OPZ at 1861 m (quality “a”) and at 2920 m (quality “a”) by using the integrated analysis for the Titalik K-26 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

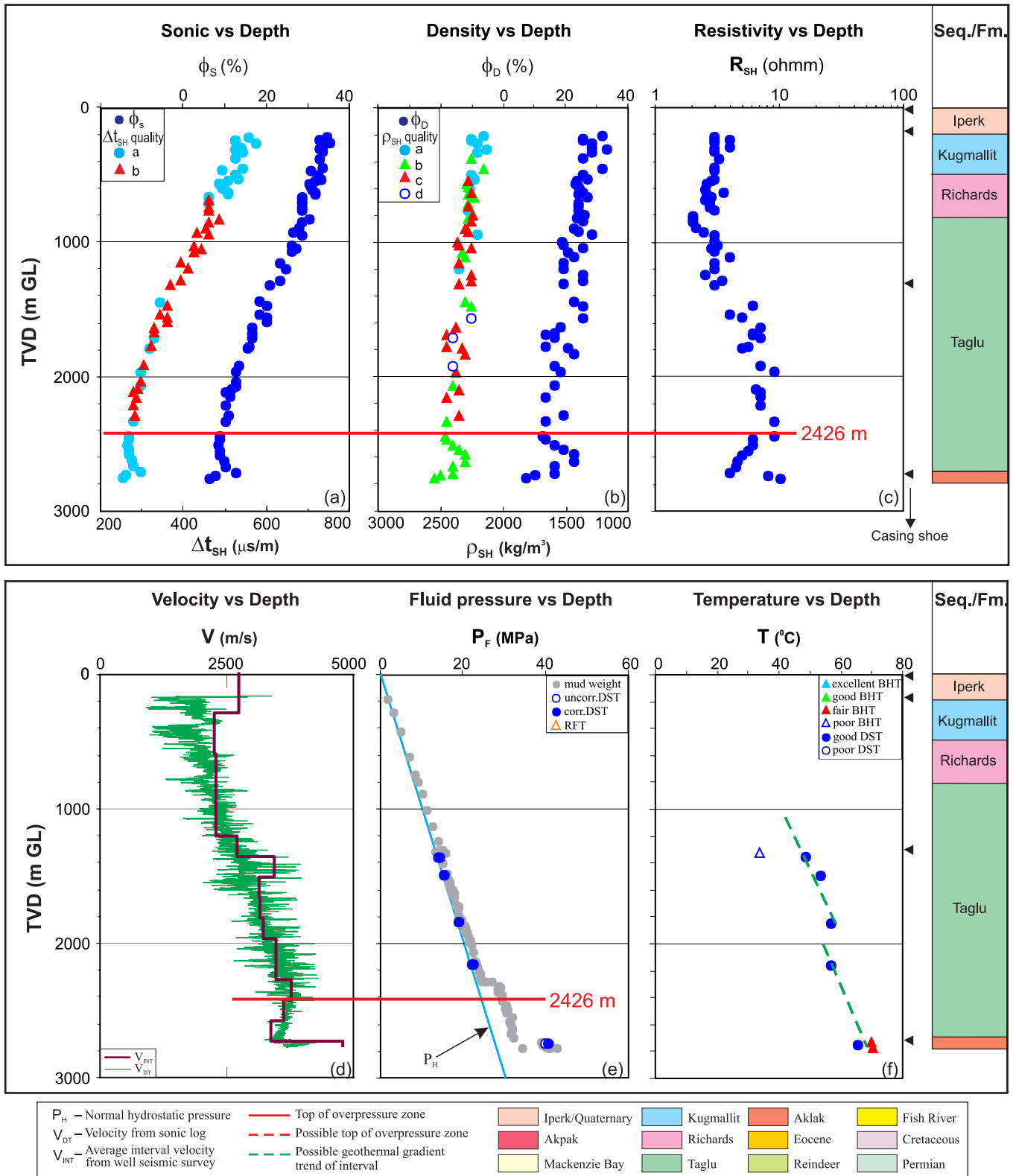


Figure A-42. Top of overpressure zone is detected at 2426 m with quality “a” by using the integrated analysis for the Toapolok O-54 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_S$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

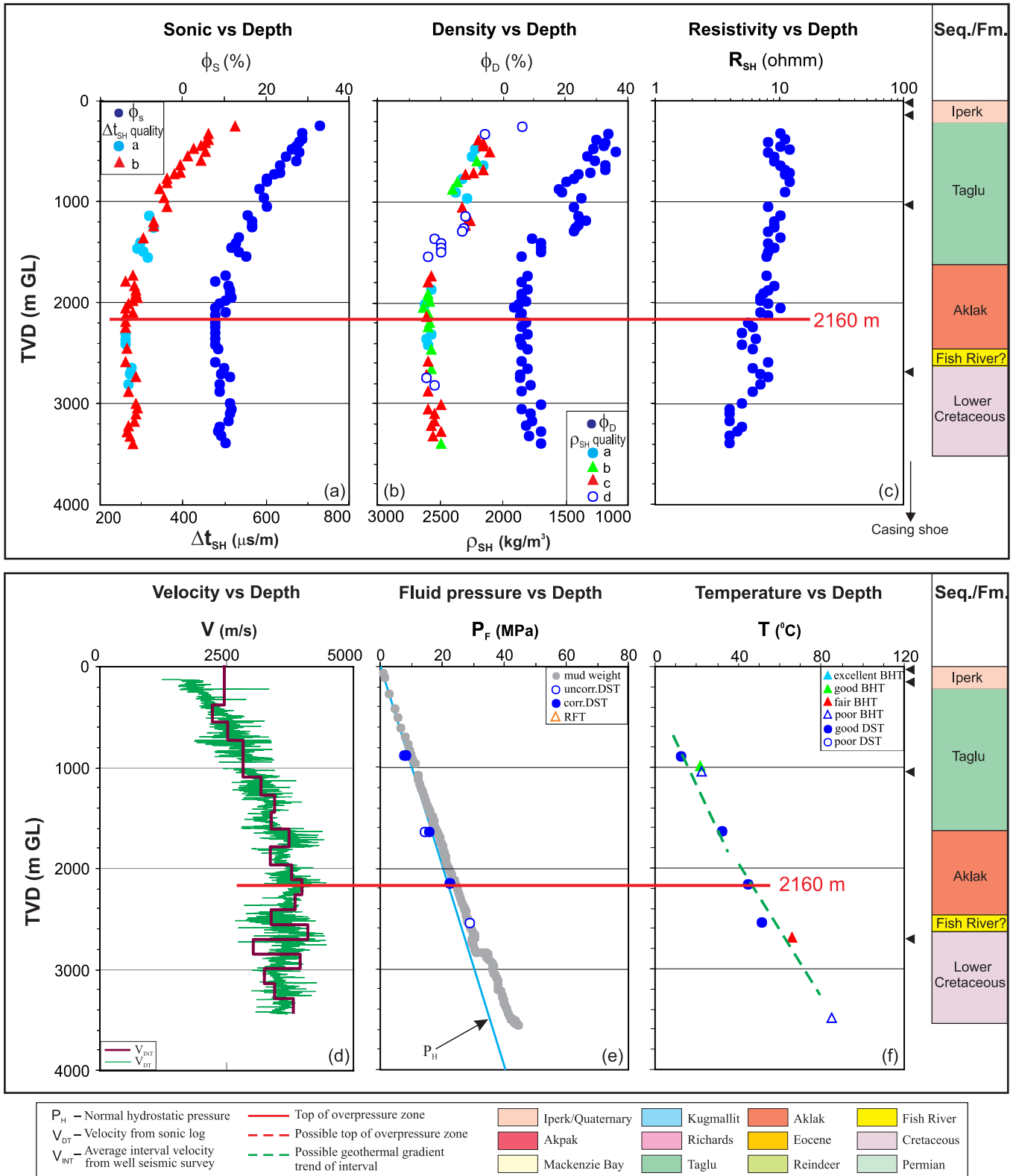


Figure A-43. Top of overpressure zone is detected at 2160 m with quality “a” by using the integrated analysis for the Tununuk F-30 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

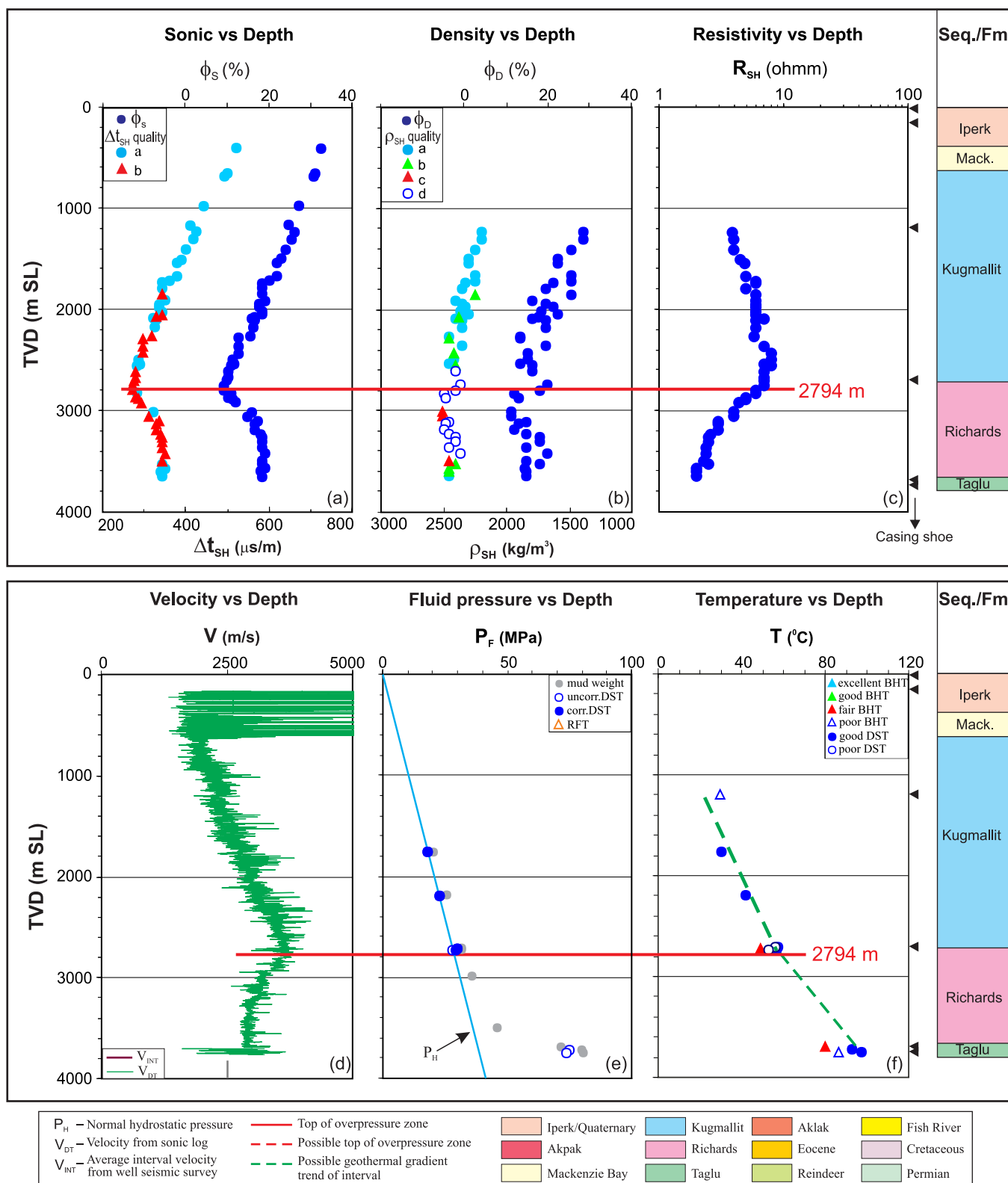


Figure A-44. Top of overpressure zone is detected at 2794 m with quality “a” by using the integrated analysis for the Unark L-24 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth. Mack. - Mackenzie Bay.

Shell Unipkat I-22 / 300I226920135150

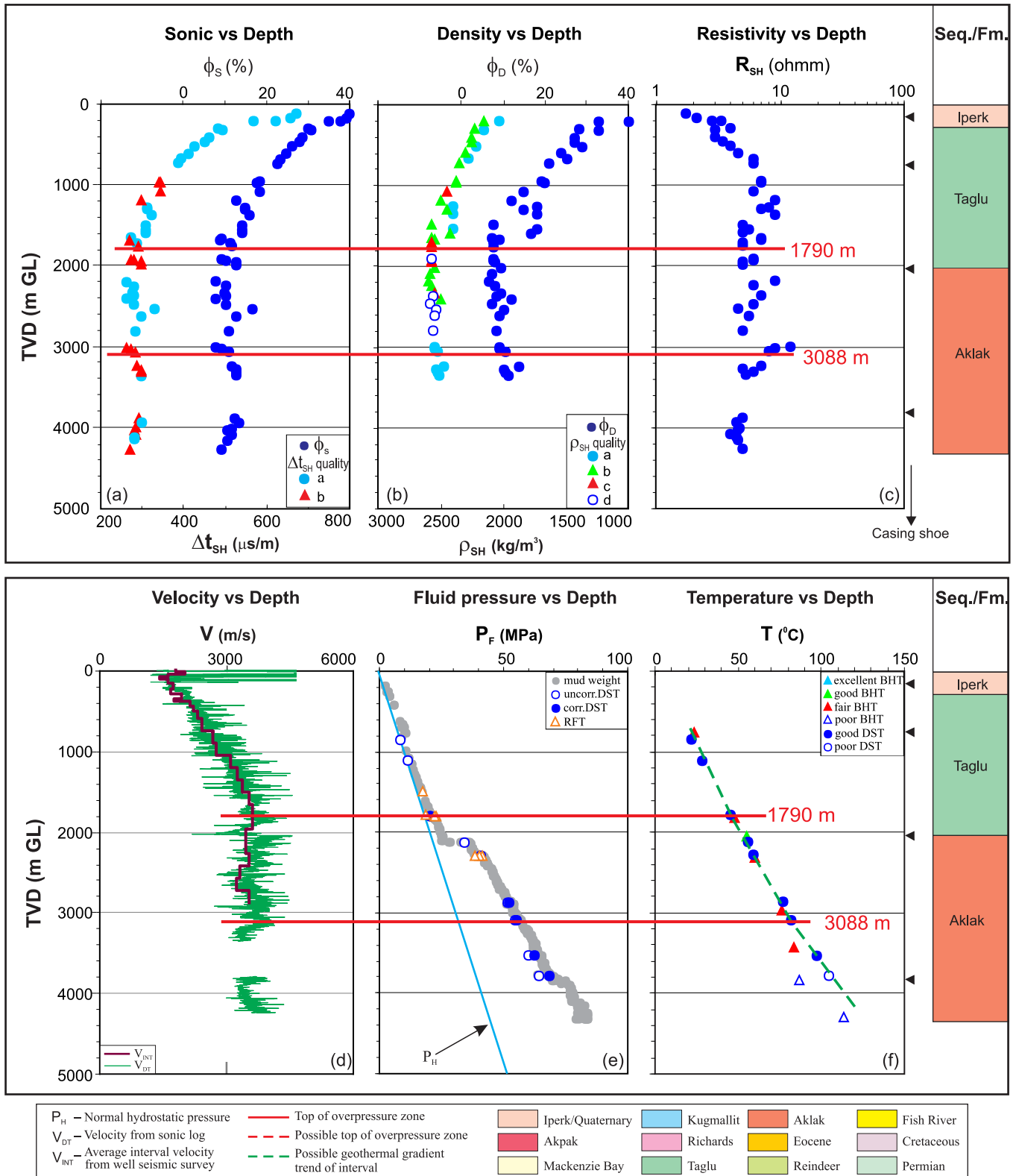


Figure A-45. Overpressure zones are detected with tops of OPZ at 1790 m (quality “a”) and 3088 m (quality “a”) by using the integrated analysis for the Unipkat I-22 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

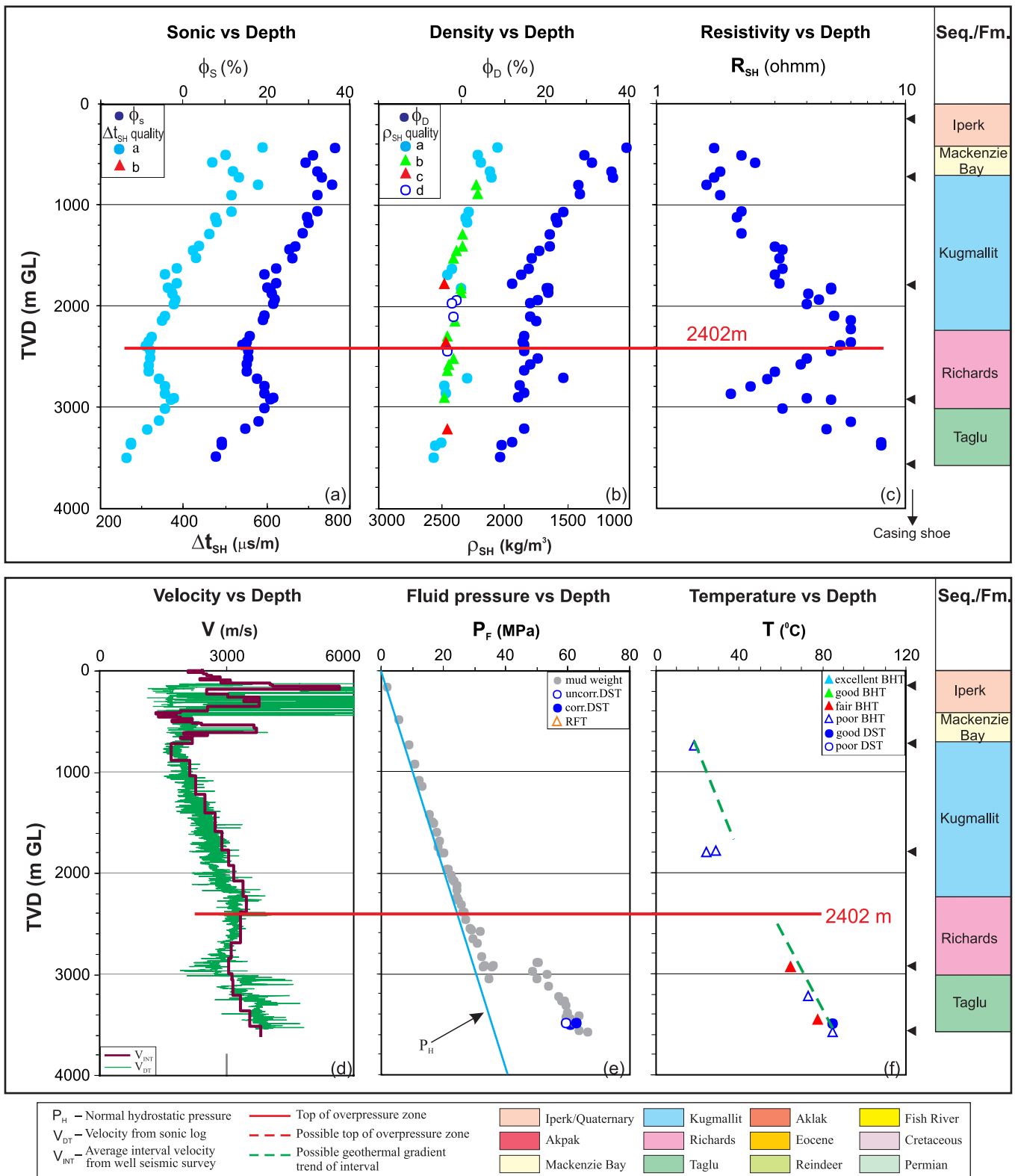


Figure A-46. Top of overpressure zone is detected at 2402 m with quality “a” by using the integrated analysis for the Upluk M-38 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

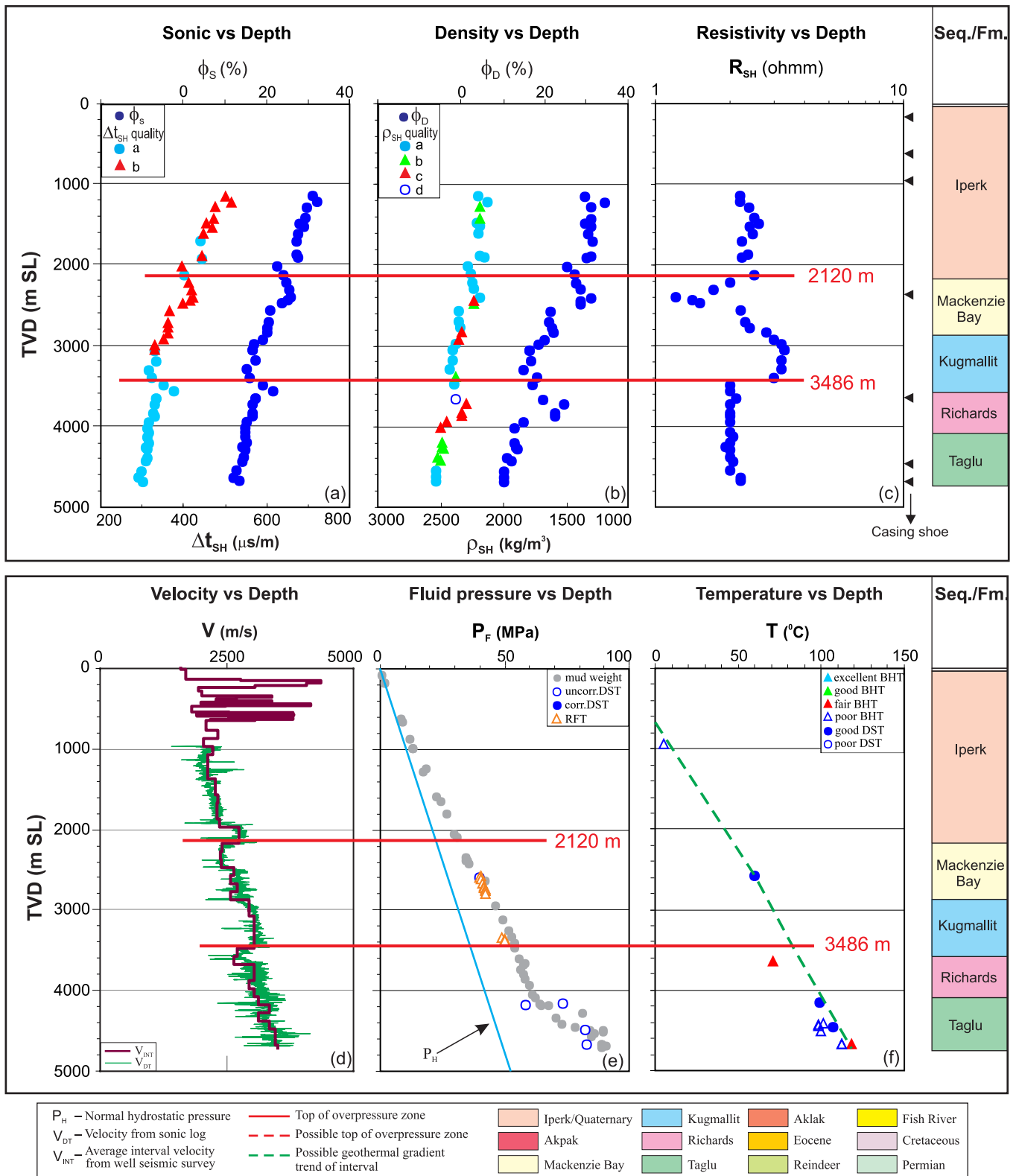


Figure A-47. Overpressure zones are detected with tops of OPZ at 2120 m (quality “a”) and 3486 m (quality “a”) by using the integrated analysis for the Uviluk P-66 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs. depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.

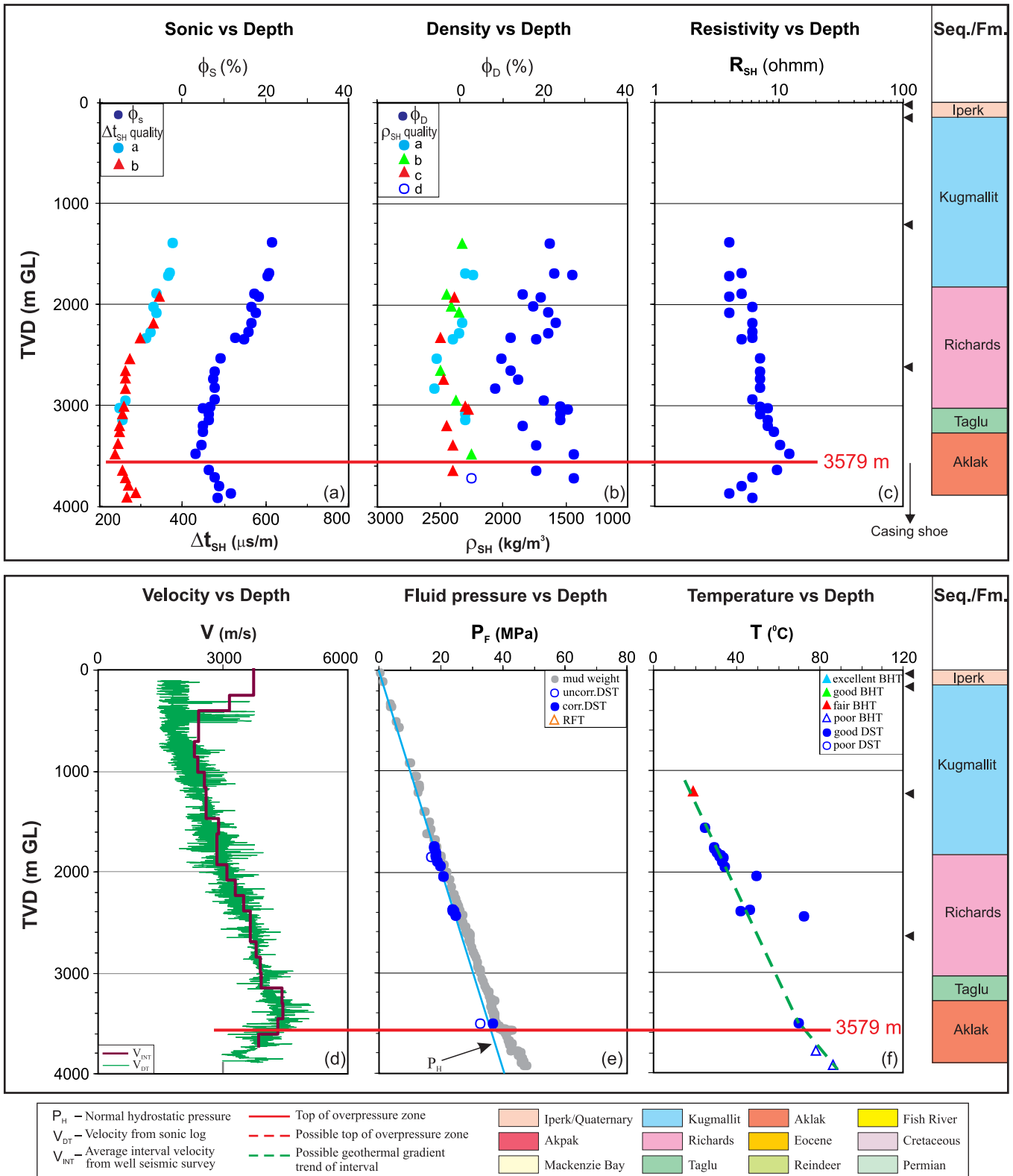


Figure A-48. Top of overpressure zone is detected at 3579 m with quality “a” by using the integrated analysis for the Ya Ya A-28 well in the Beaufort-Mackenzie Basin. (a) shale sonic transit time ( $\Delta t_{SH}$ ) and sonic porosity ( $\phi_s$ ) vs. depth; (b) shale bulk density ( $\rho_{SH}$ ) and density porosity ( $\phi_D$ ) vs depth; (c) shale deep resistivity ( $R_{SH}$ ) vs. depth; (d) continuous sonic velocity ( $V_{DT}$ ) and average interval seismic velocity ( $V_{INT}$ ) vs. depth; (e) fluid pressure ( $P_F$ ) from well test and drilling mud weight vs. depth; and (f) borehole temperature vs. depth.