

**Quality rank for IBPF determination**

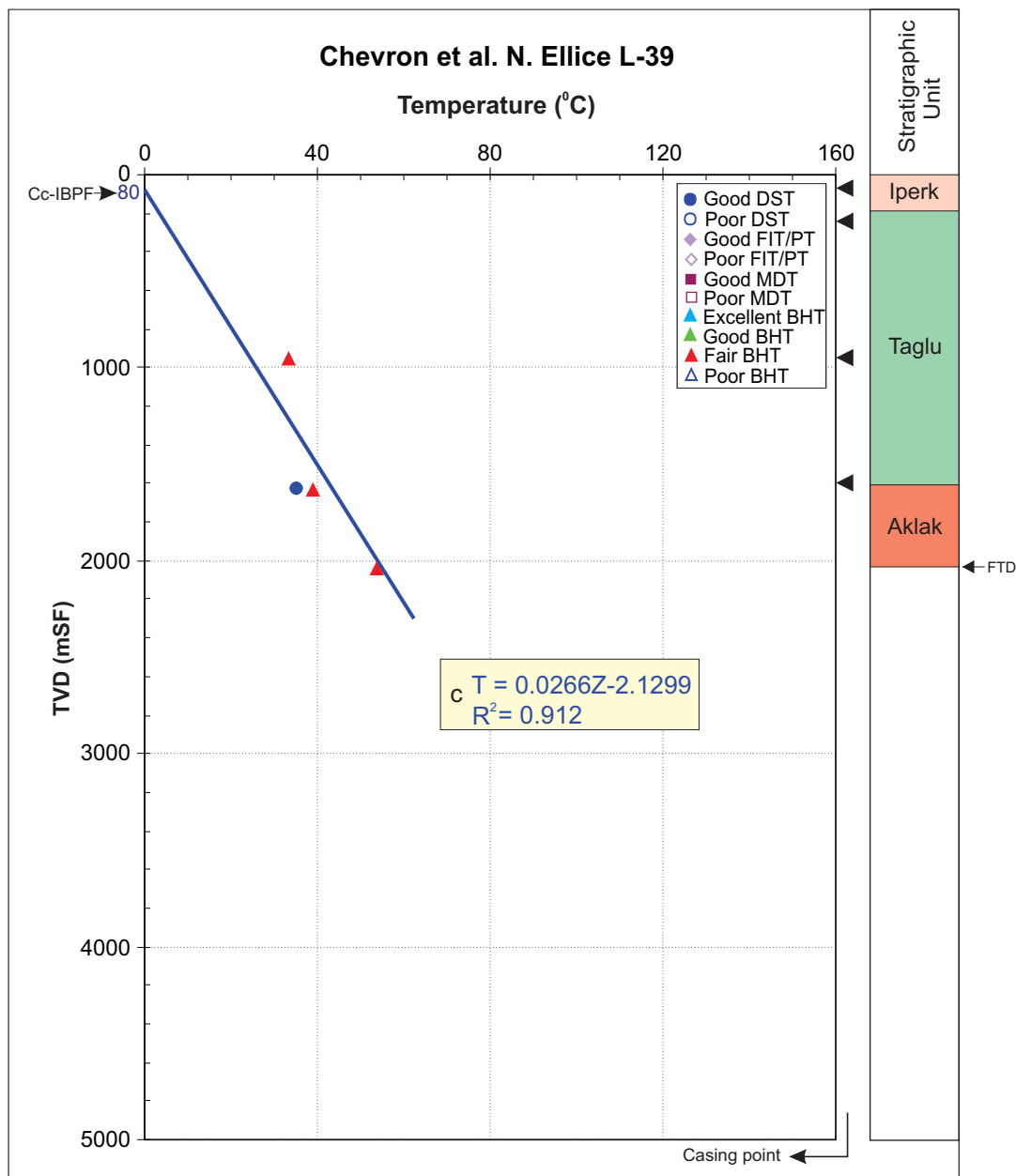
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 129. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the N. Ellice J-23 well; all DST and fair BHT points are used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 130. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the N. Ellice L-39 well; all DST and BHT points are used for the calculation.

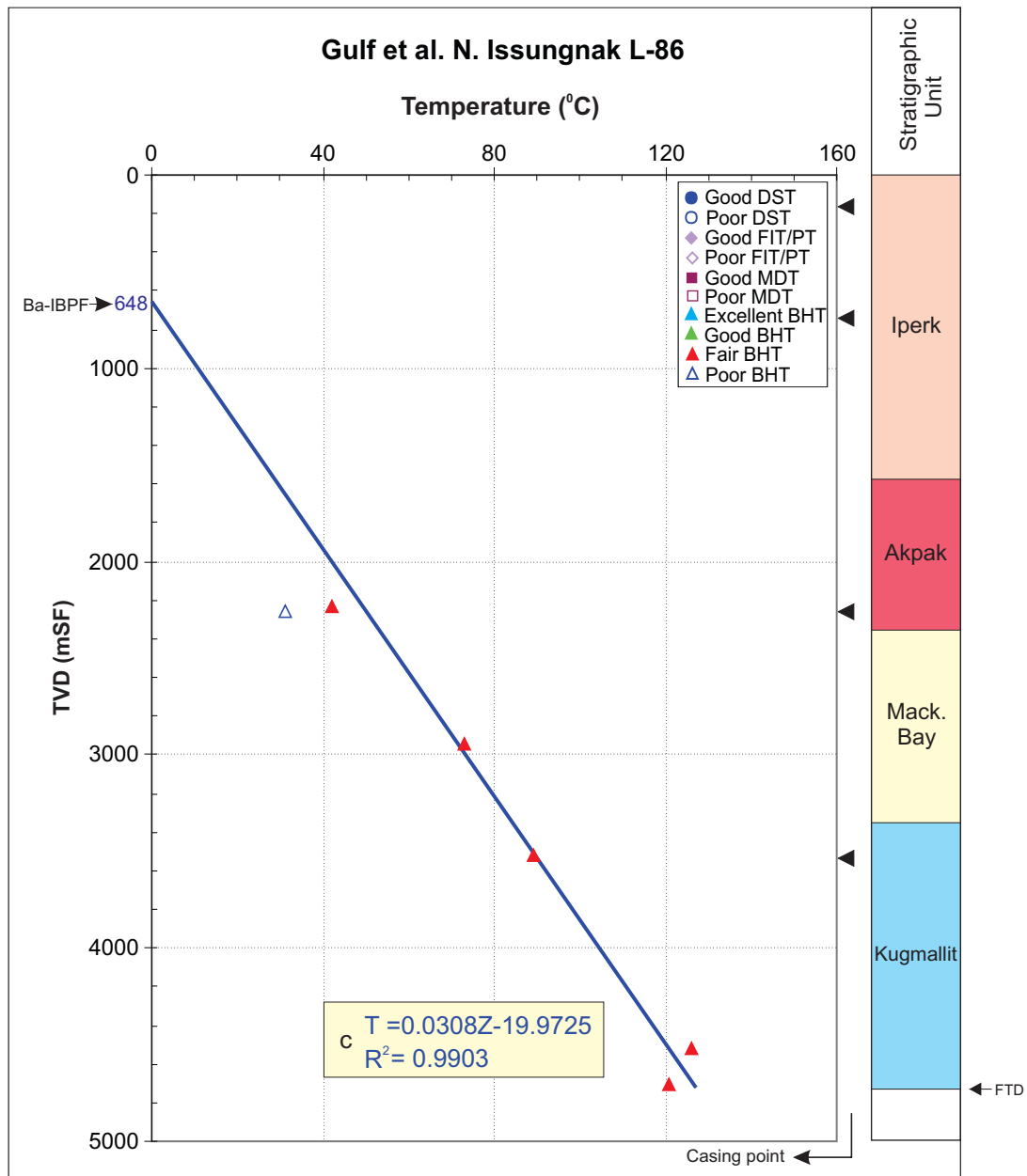
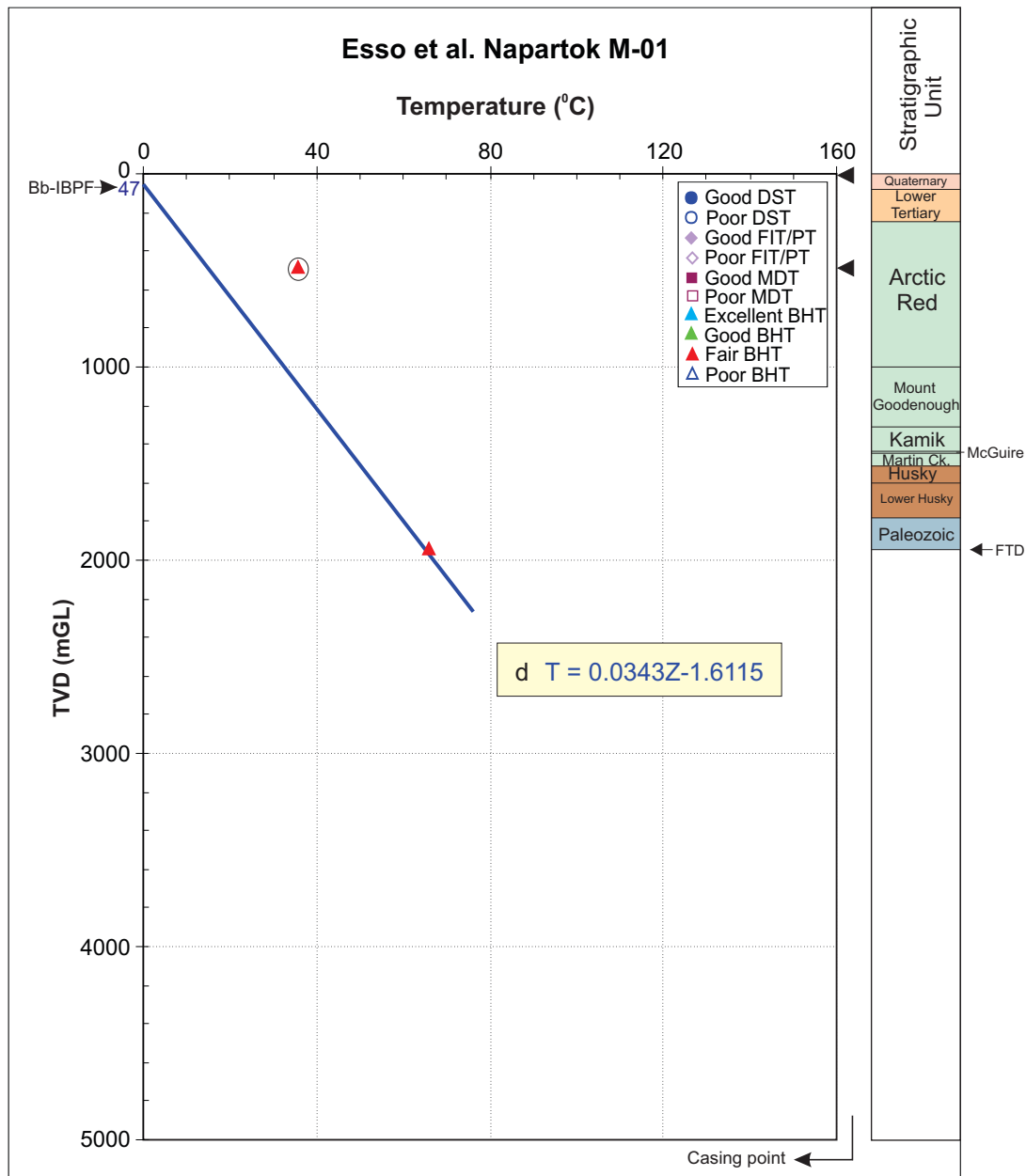


Figure 131. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the N. Issungnak L-86 well; all fair BHT points are used for the calculation.



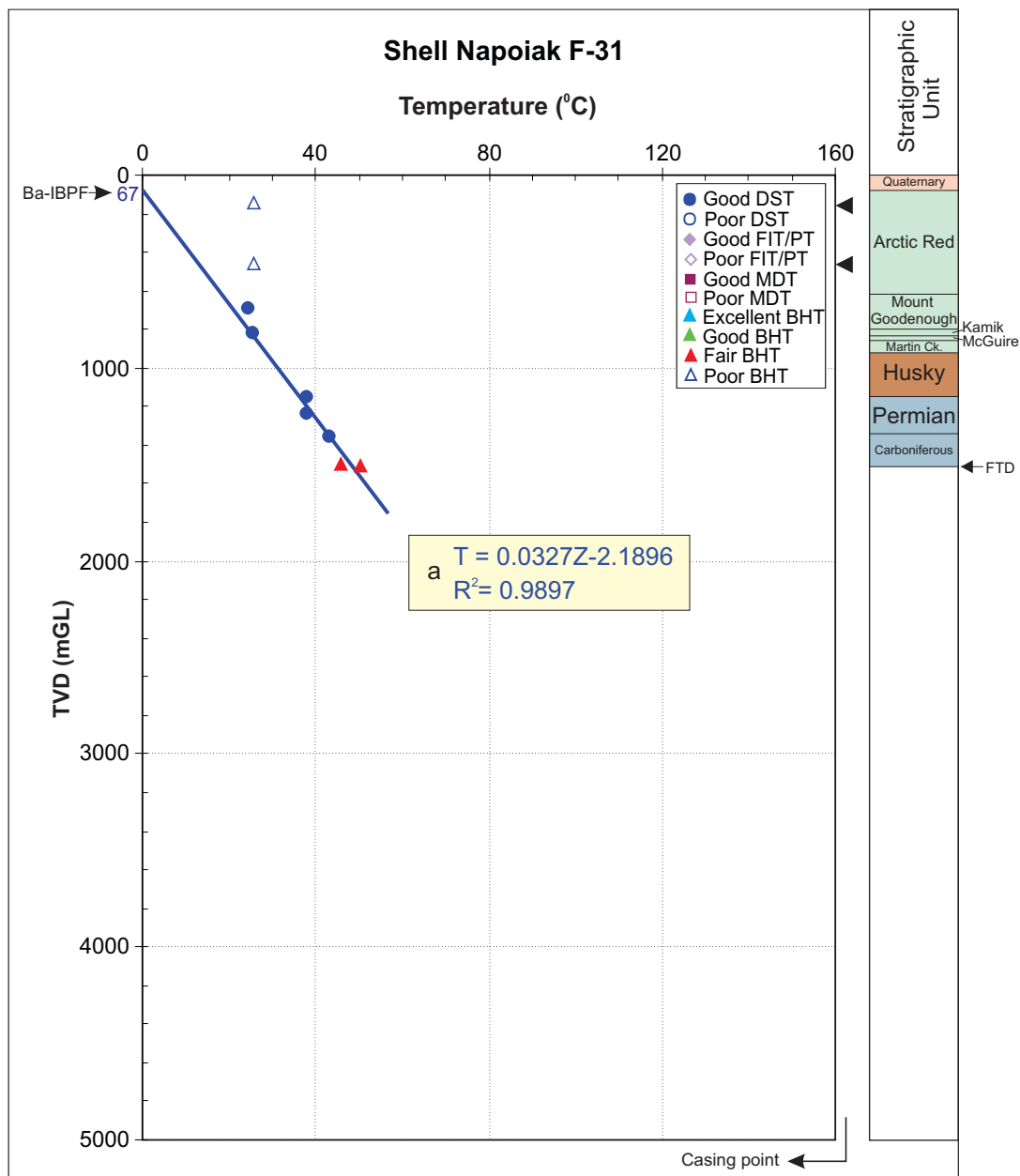
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 132. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Napartok M-01 well; fair BHT point (except the circled one) is used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 133. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Napoiak F-31 well; good DST and fair BHT points are used for the calculation.

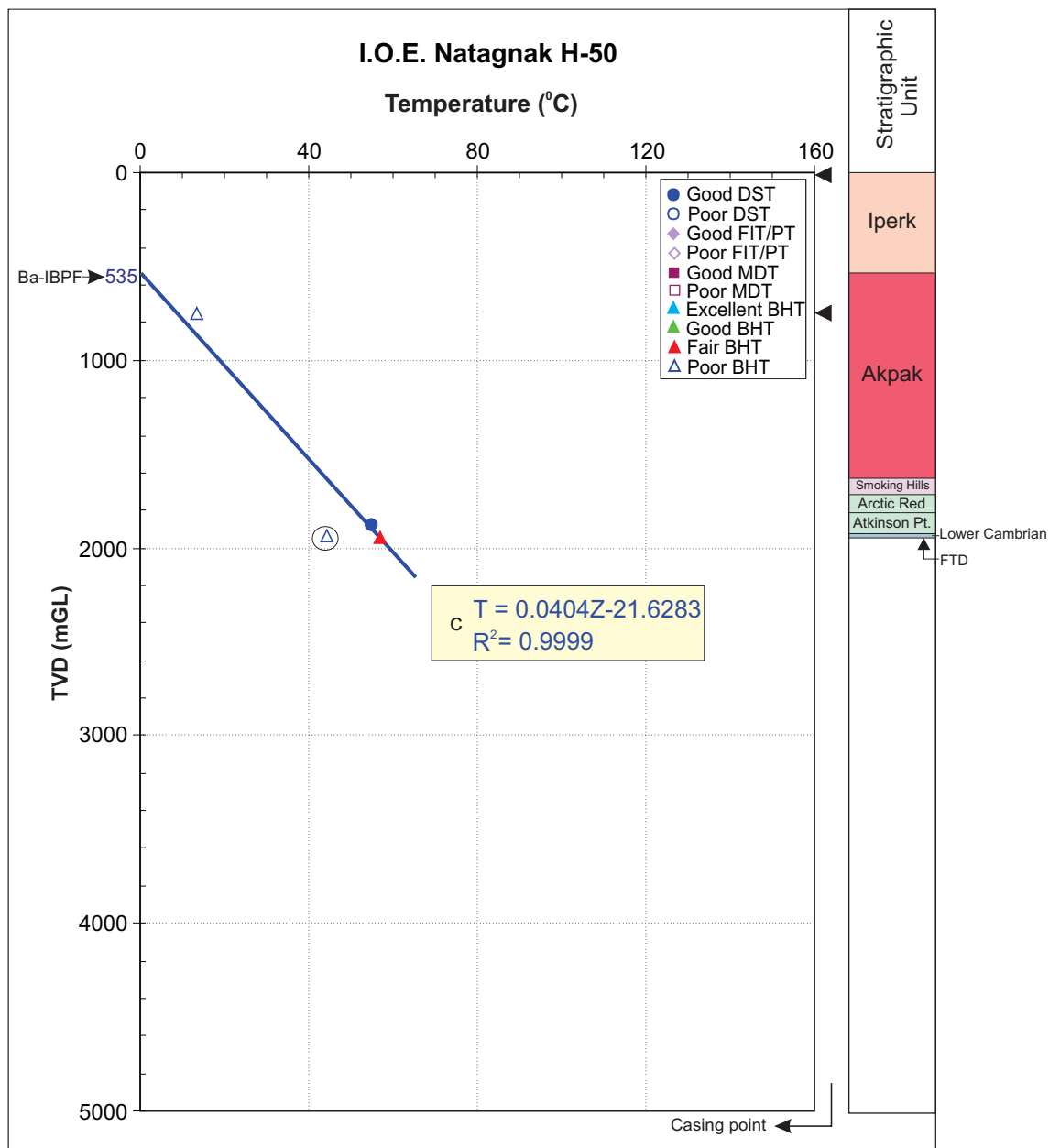
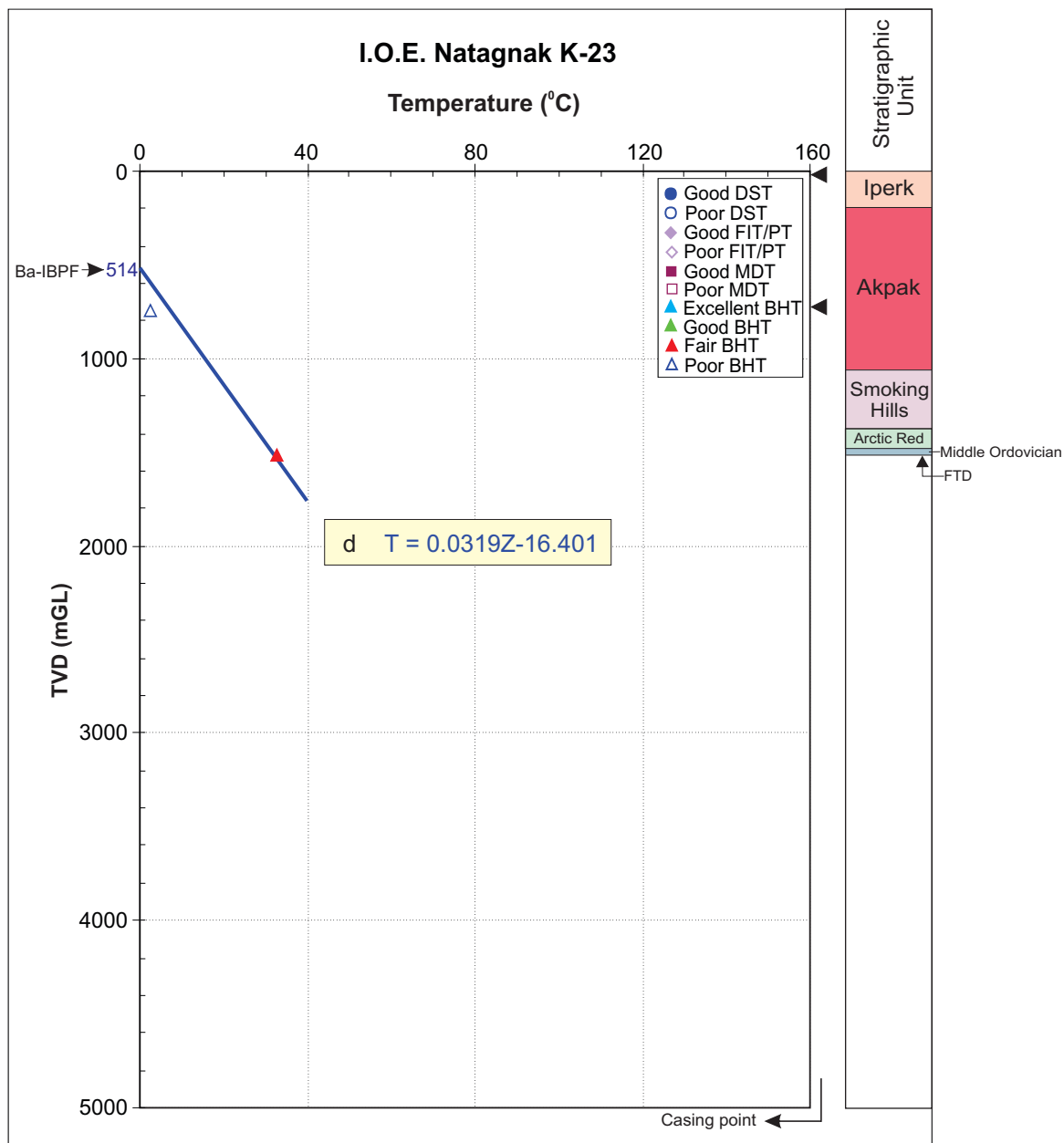


Figure 134. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Natagnak H-50 well; all DST and BHT points (except the circled one) are used for the calculation.



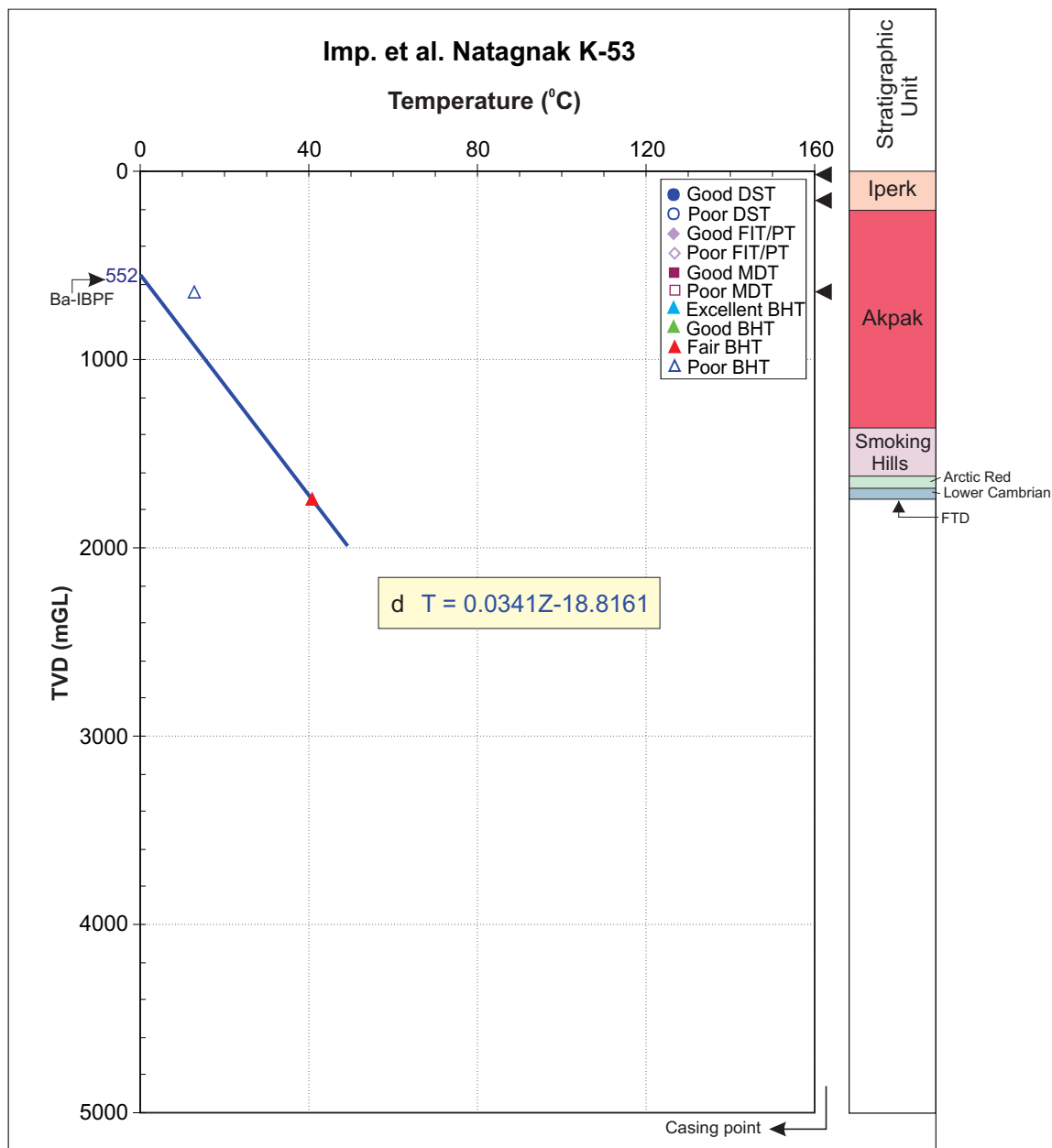
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 135. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Natagnak K-23 well; only fair BHT point is used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 136. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Natagnak K-53 well; only fair BHT point is used for the calculation.



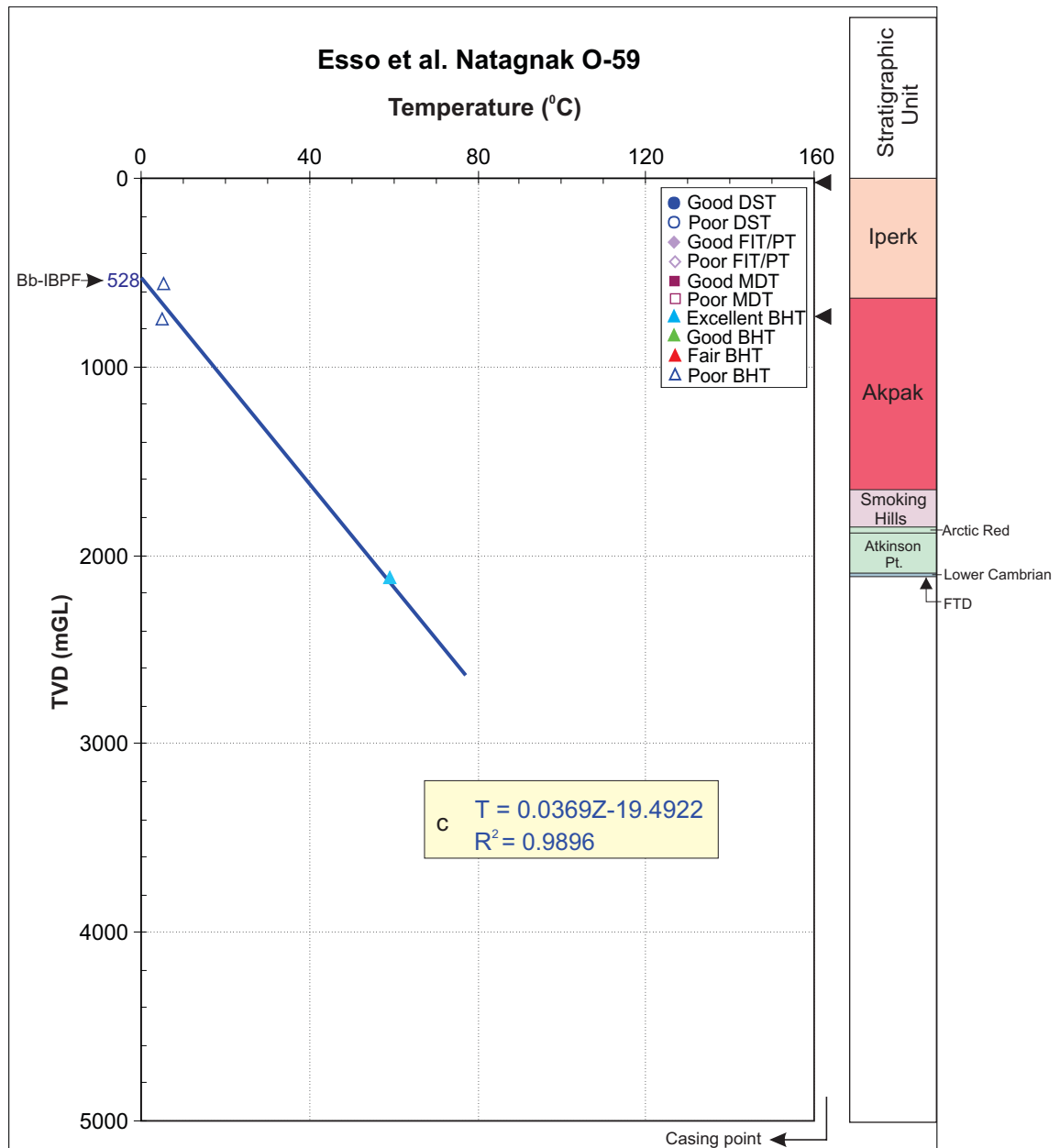
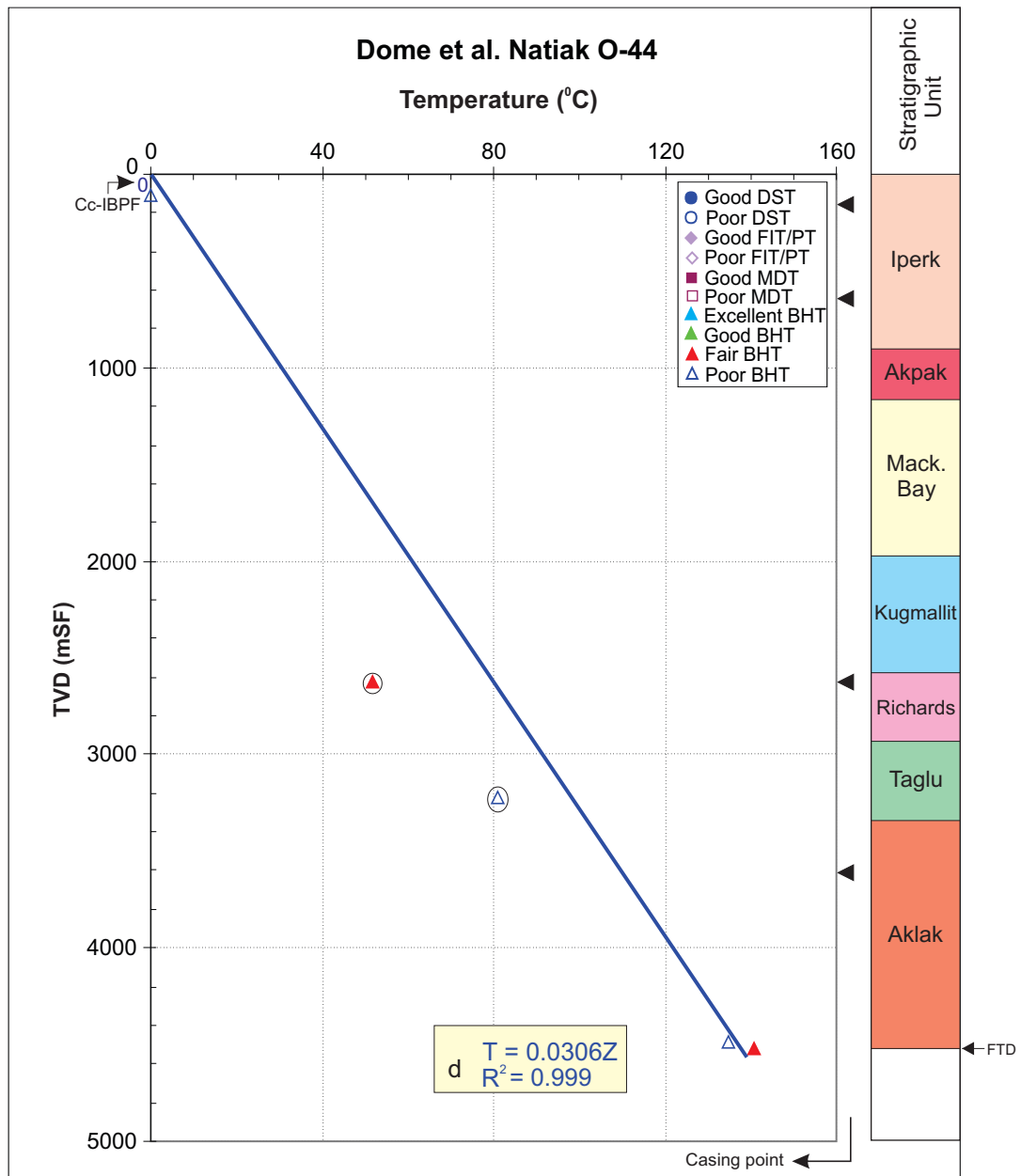


Figure 137. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Natagnak O-59 well; all BHT points are used for the calculation.



**Quality rank for IBPF determination**

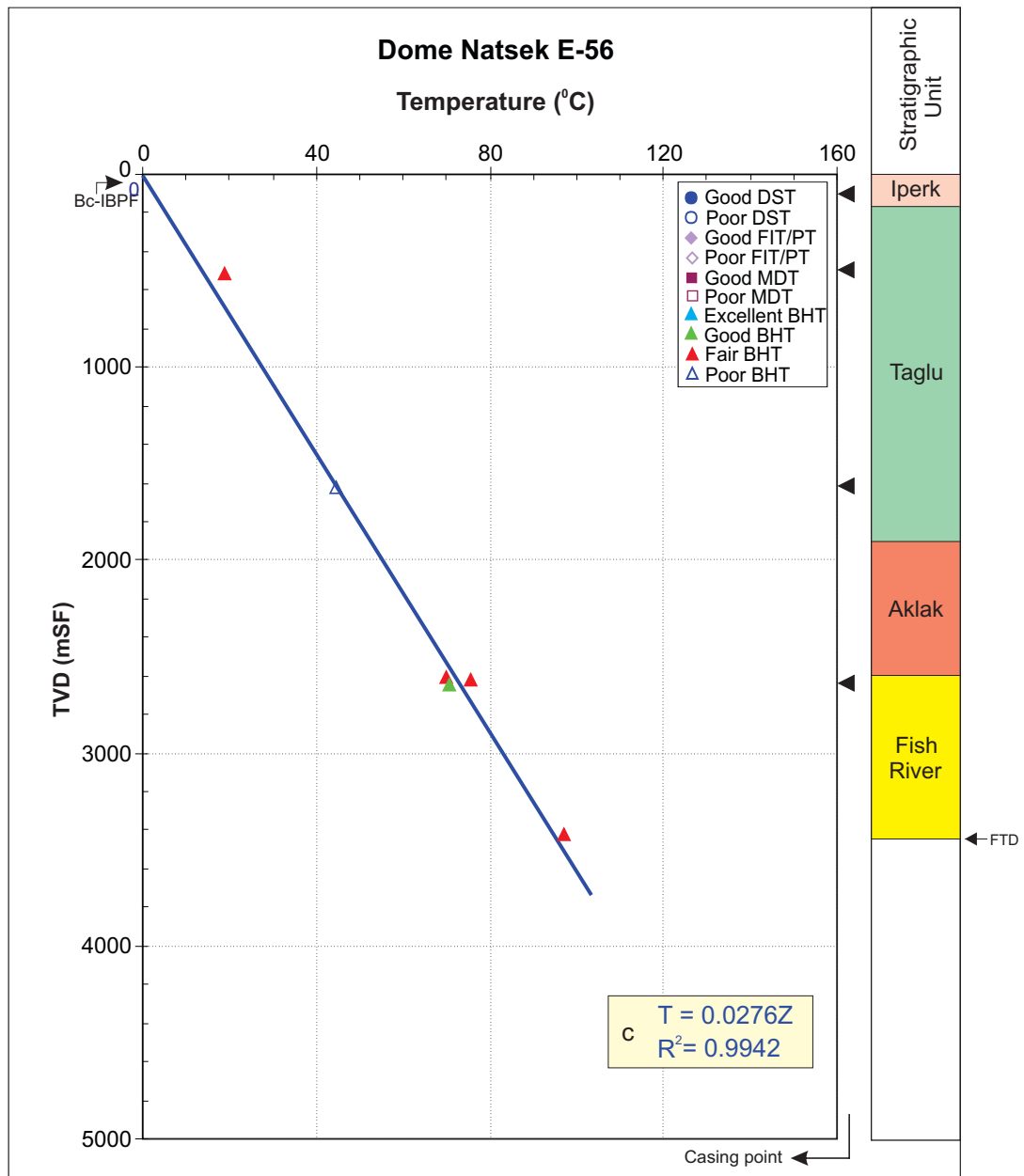
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 138. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Natiak O-44 well; only two BHT points at deeper depths are used for the calculation.



**Quality rank for IBPF determination**

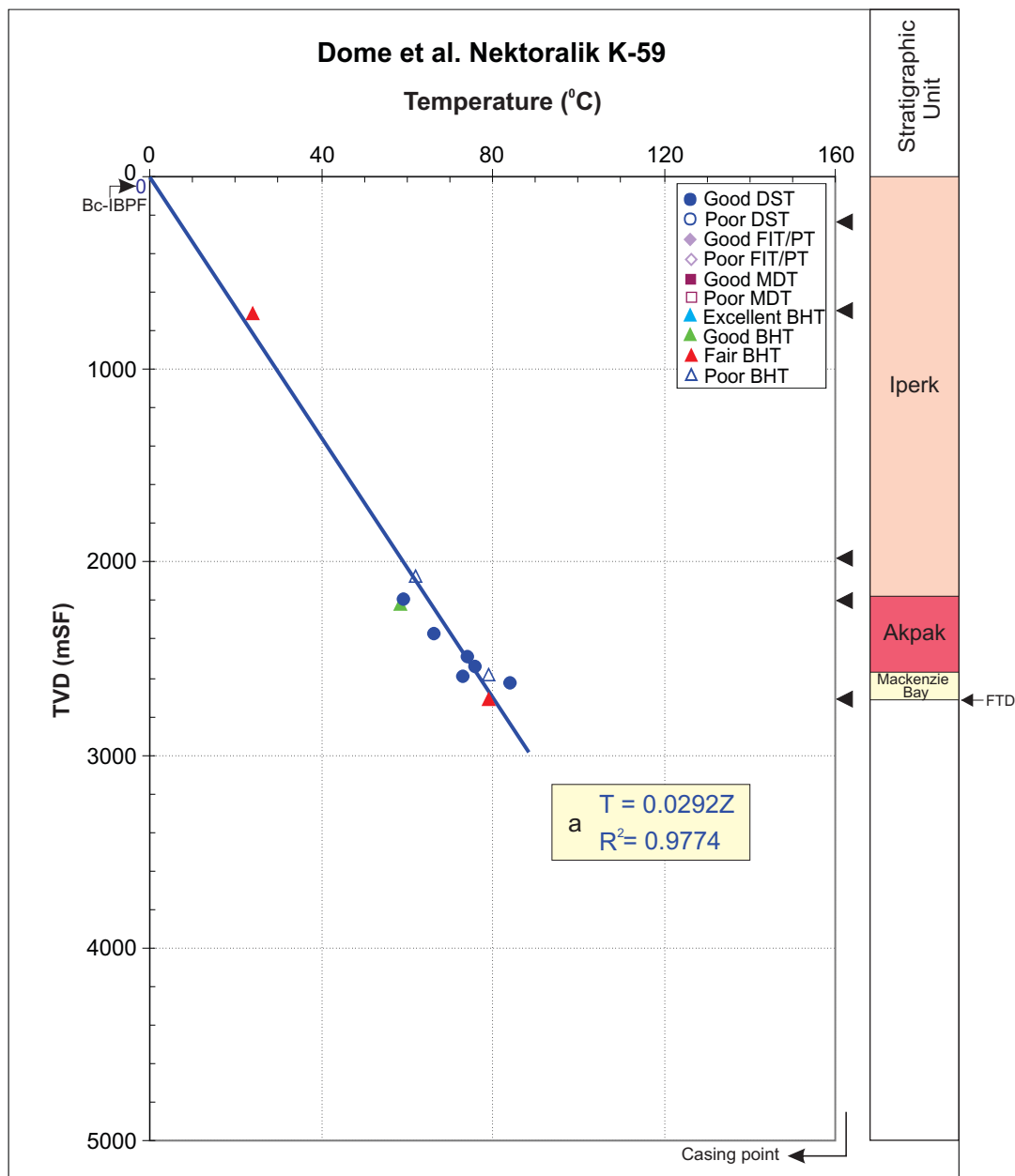
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 139. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Natsek E-56 well; all good and fair BHT points are used for the calculation.



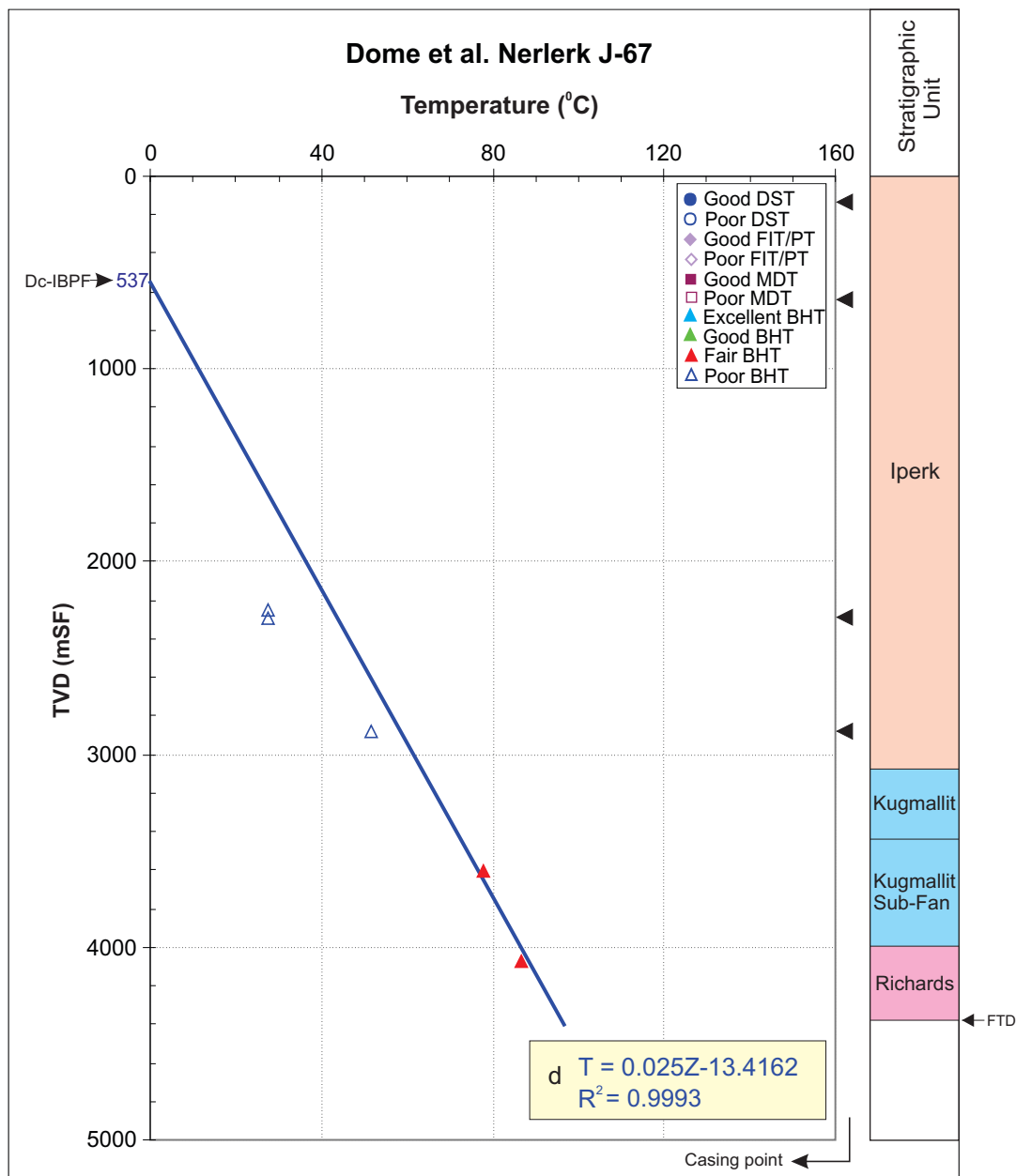
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 140. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Nektoralik K-59 well; good DST, good and fair BHT points are used for the calculation.



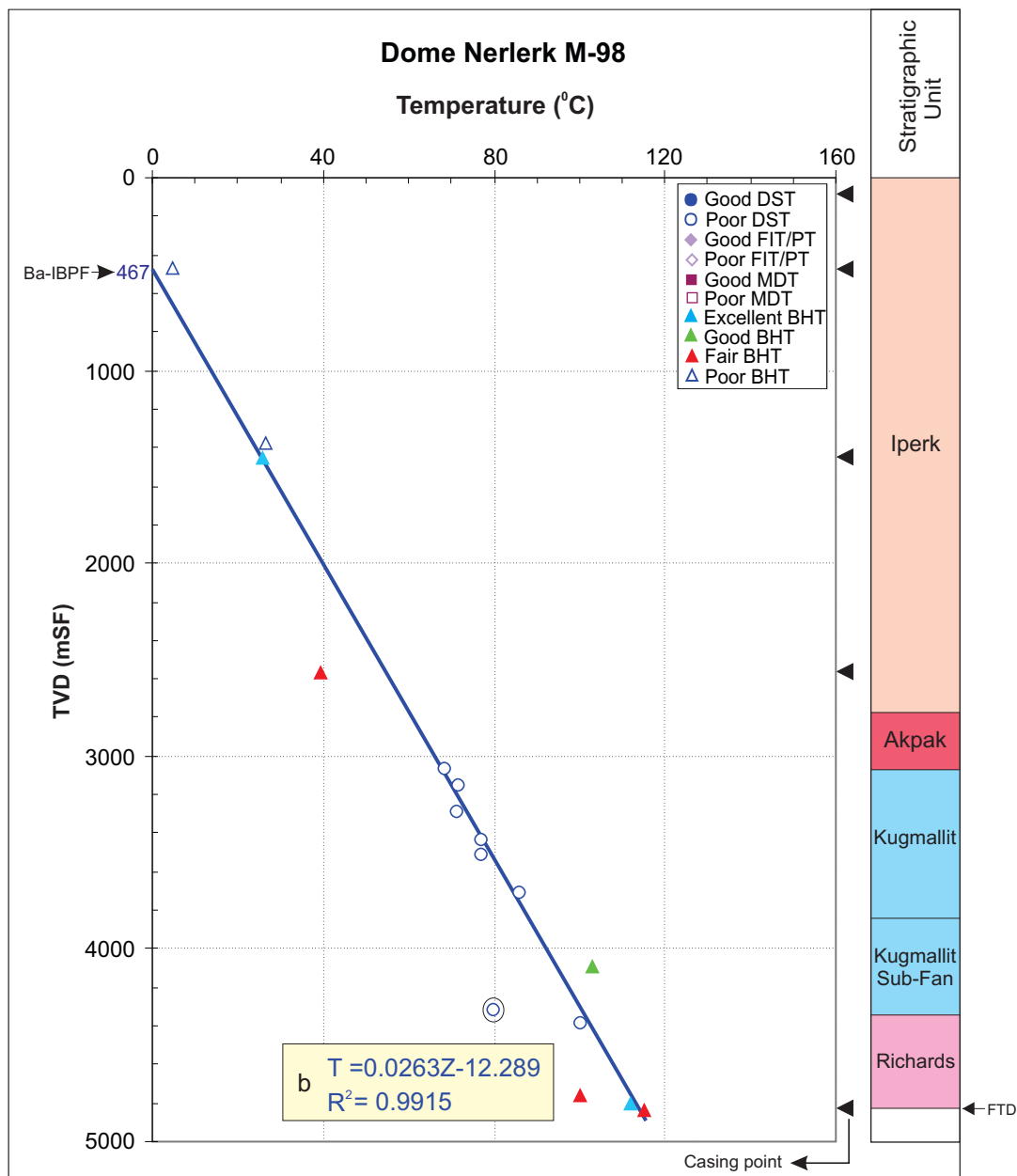
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 141. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Nerlerk J-67 well; only fair BHT points are used for the calculation.



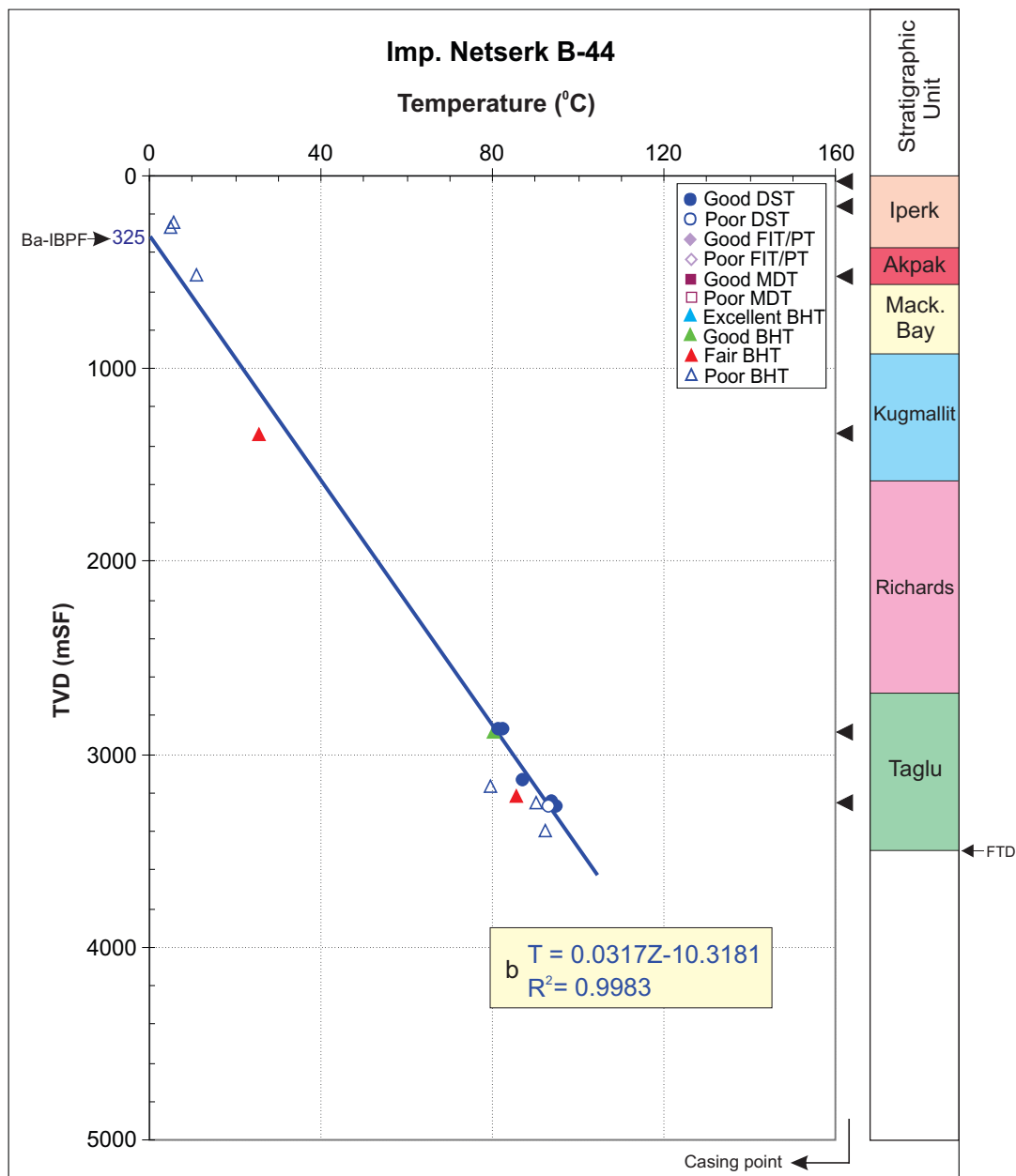
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 142. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Nerlerk M-98 well; all DST (except circled point), excellent and good BHT points are used for the calculation.



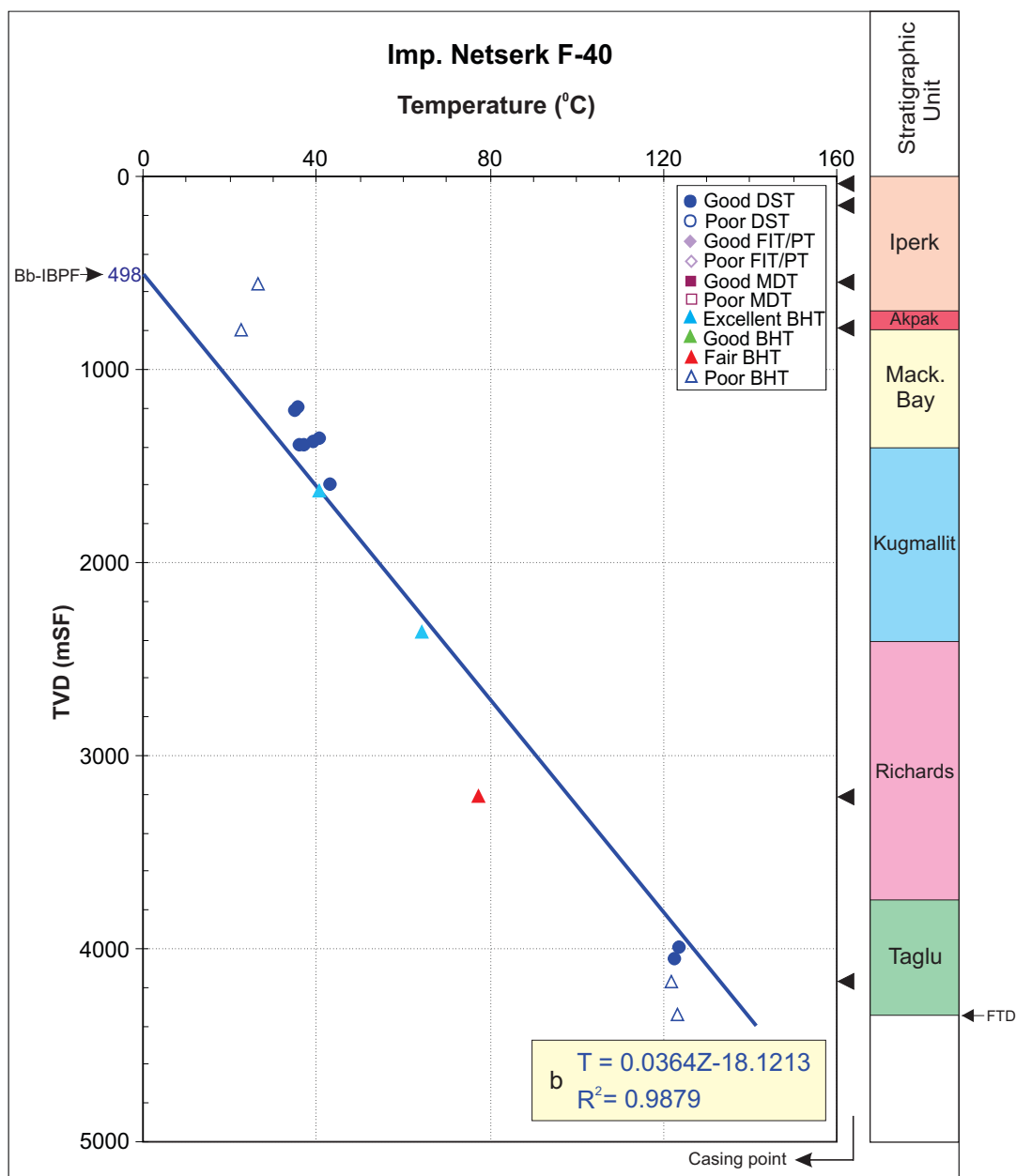
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 143. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Netserk B-44 well; all DST and good BHT points are used for the calculation.



**Quality rank for IBPF determination**

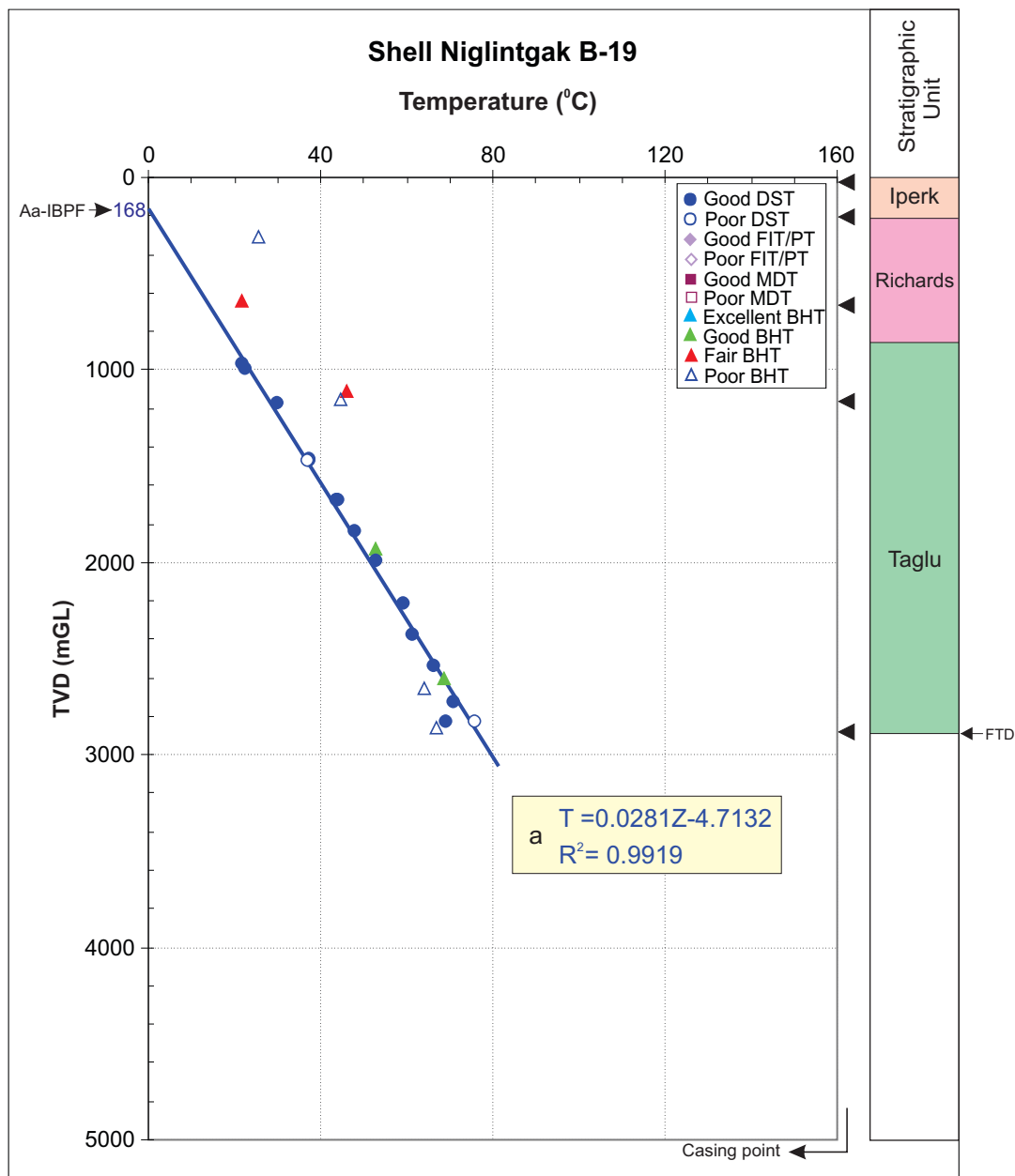
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 144. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Netserk F-40 well; all DST and excellent BHT points are used for the calculation.





**Quality rank for IBPF determination**

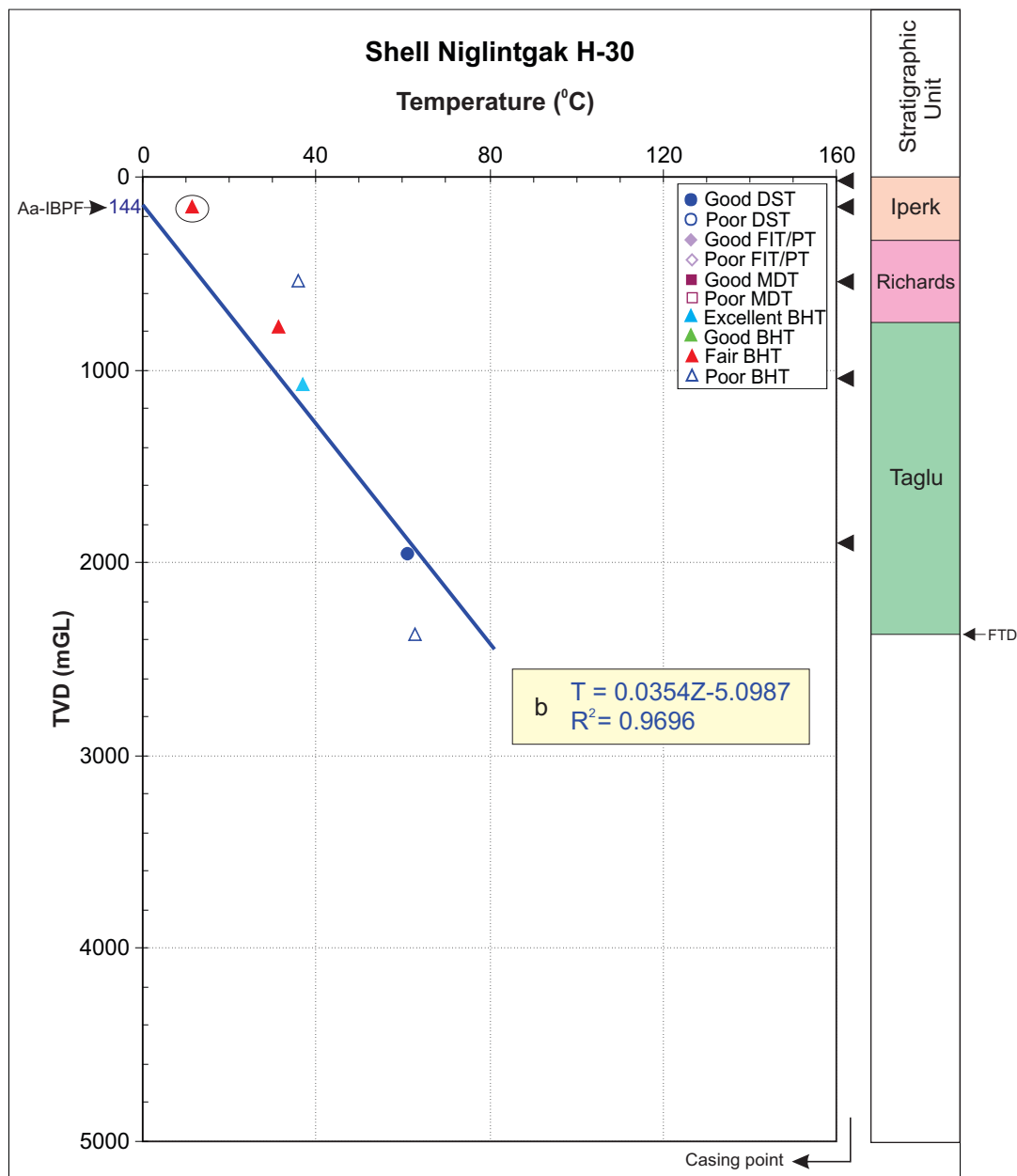
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 145. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Niglintgak B-19 well; all good DST and good BHT points are used for the calculation.



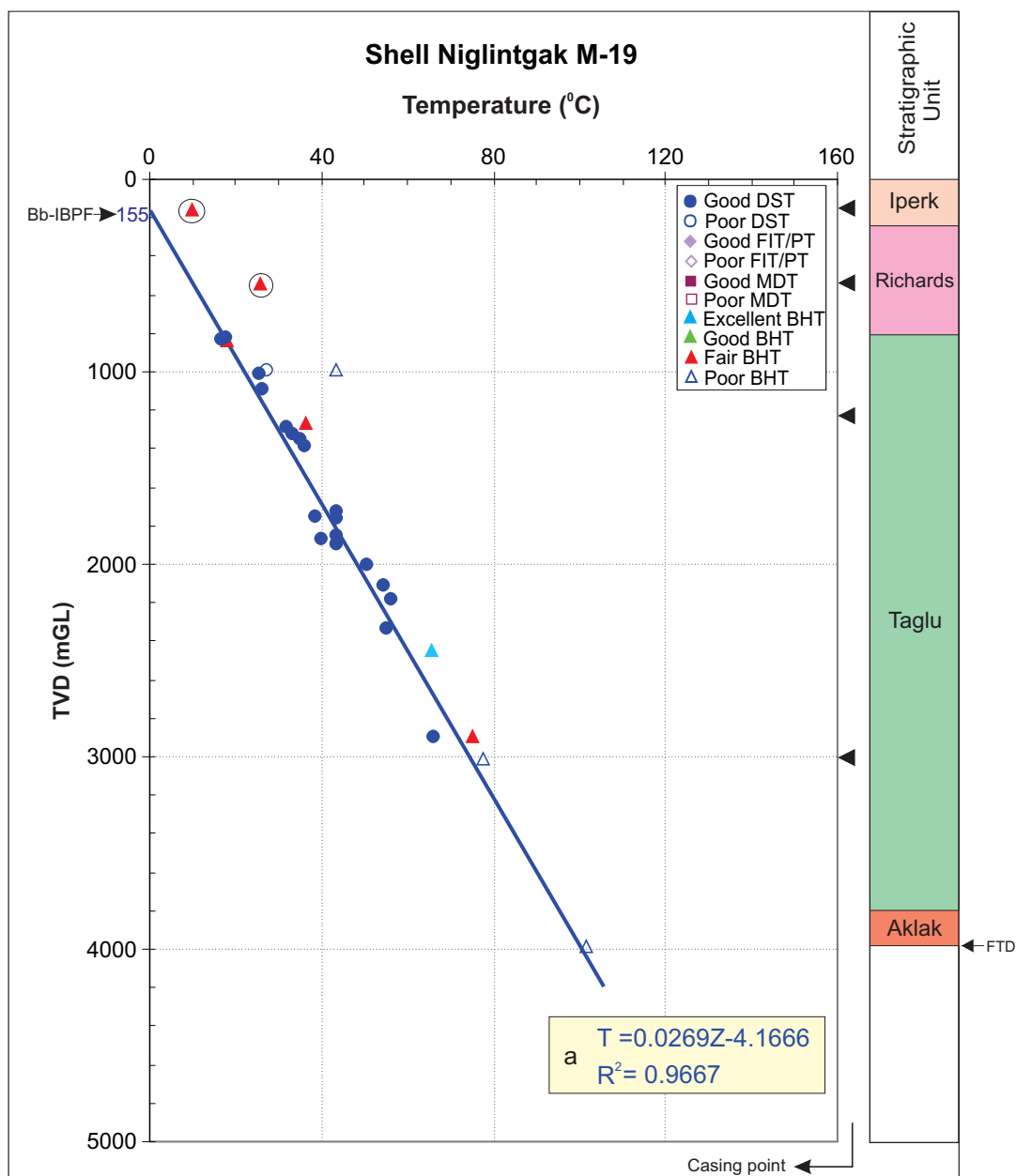
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 146. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Niglinkgak H-30 well; good DST, excellent and fair BHT points (except circled one) are used for the calculation.



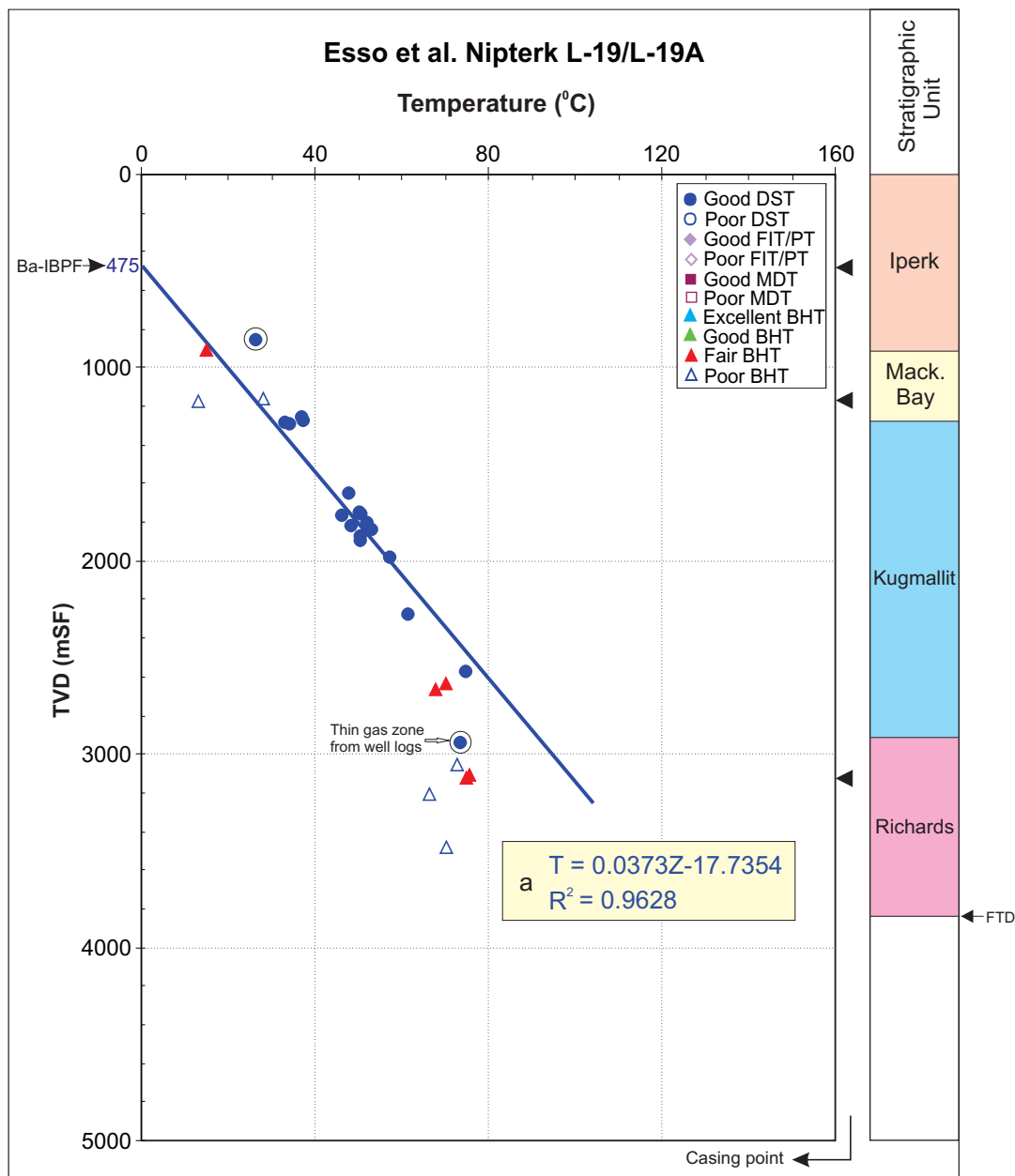
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
B-IBPF is determined using geophysical methods;  
C-IBPF is extrapolated from BHT and DST temperature data;  
D-IBPF is obtained from other information (e.g. well history report)  
a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 147. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Niglintgak M-19 well; all DST, excellent and fair BHT points (except the circled points) are used for the calculation.



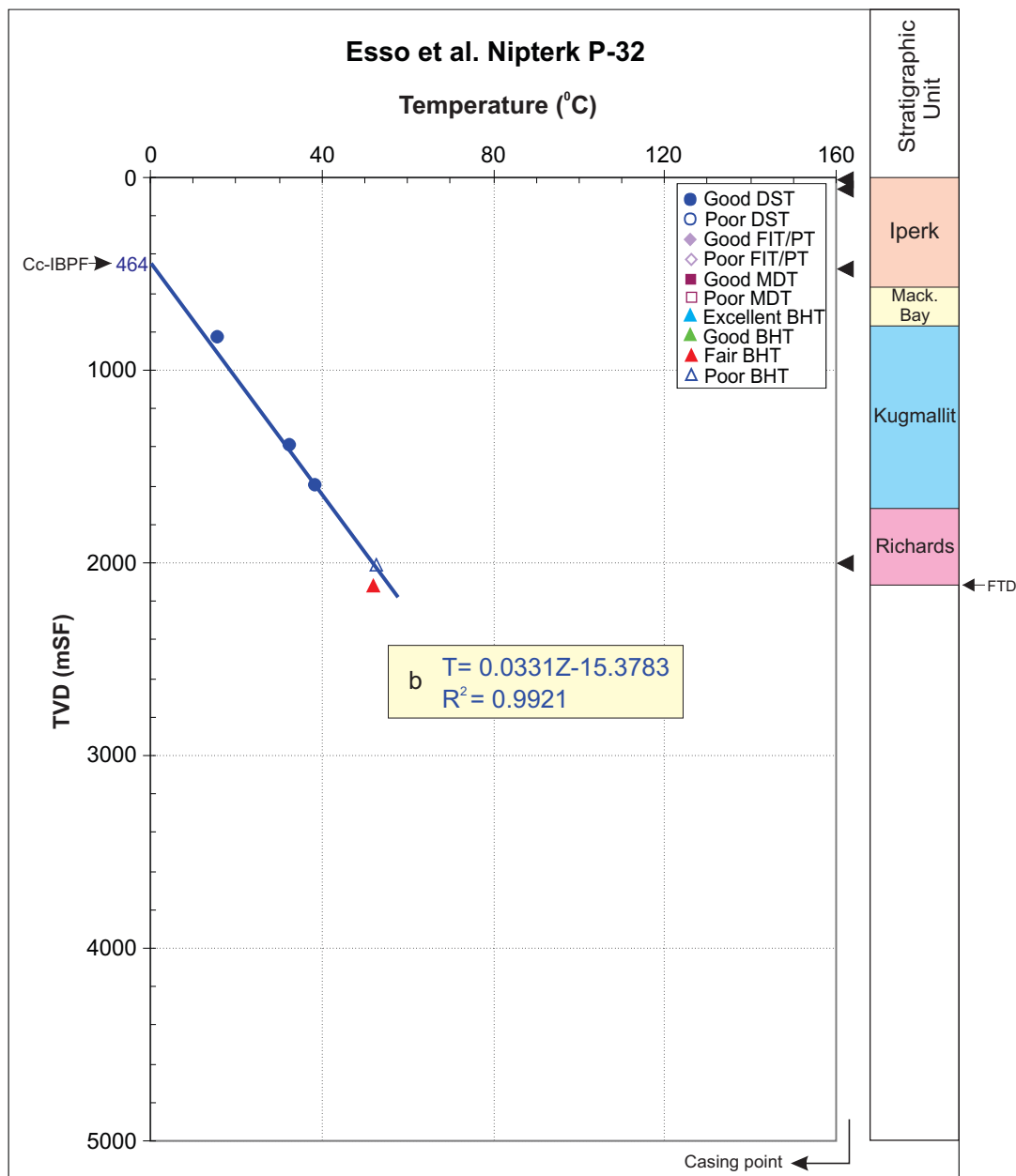
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 148. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Nipiterk L-19 well; all good DST points (circled points excluded) are used for the calculation.



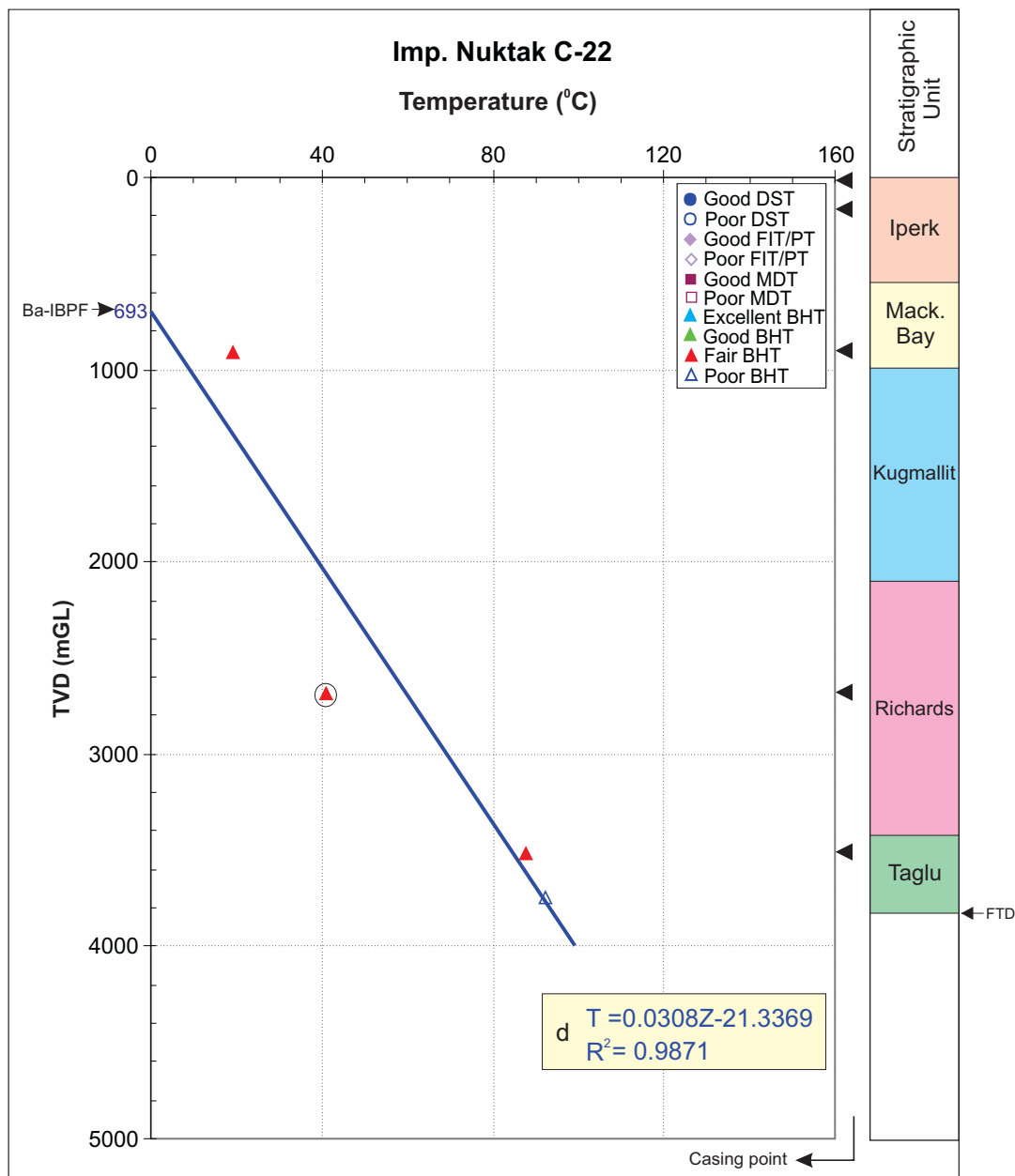
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 149. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Nipiterk P-32 well; all good DST and BHT points are used for the calculation.



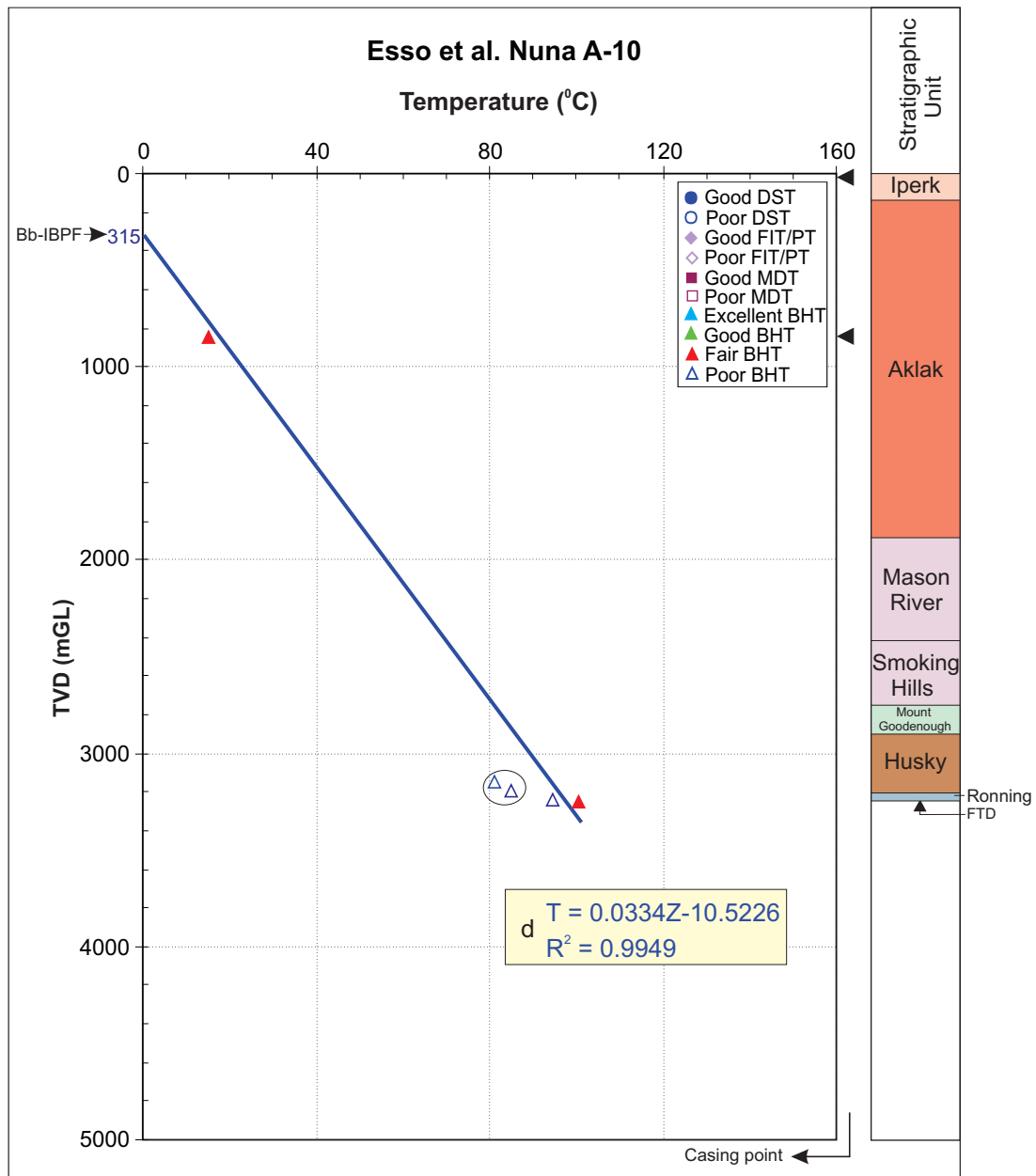
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 150. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Nuktak C-22 well; all BHT points (except circled one) are used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 151. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Nuna A-10 well; all BHT data (except circled points) are used for the calculation.

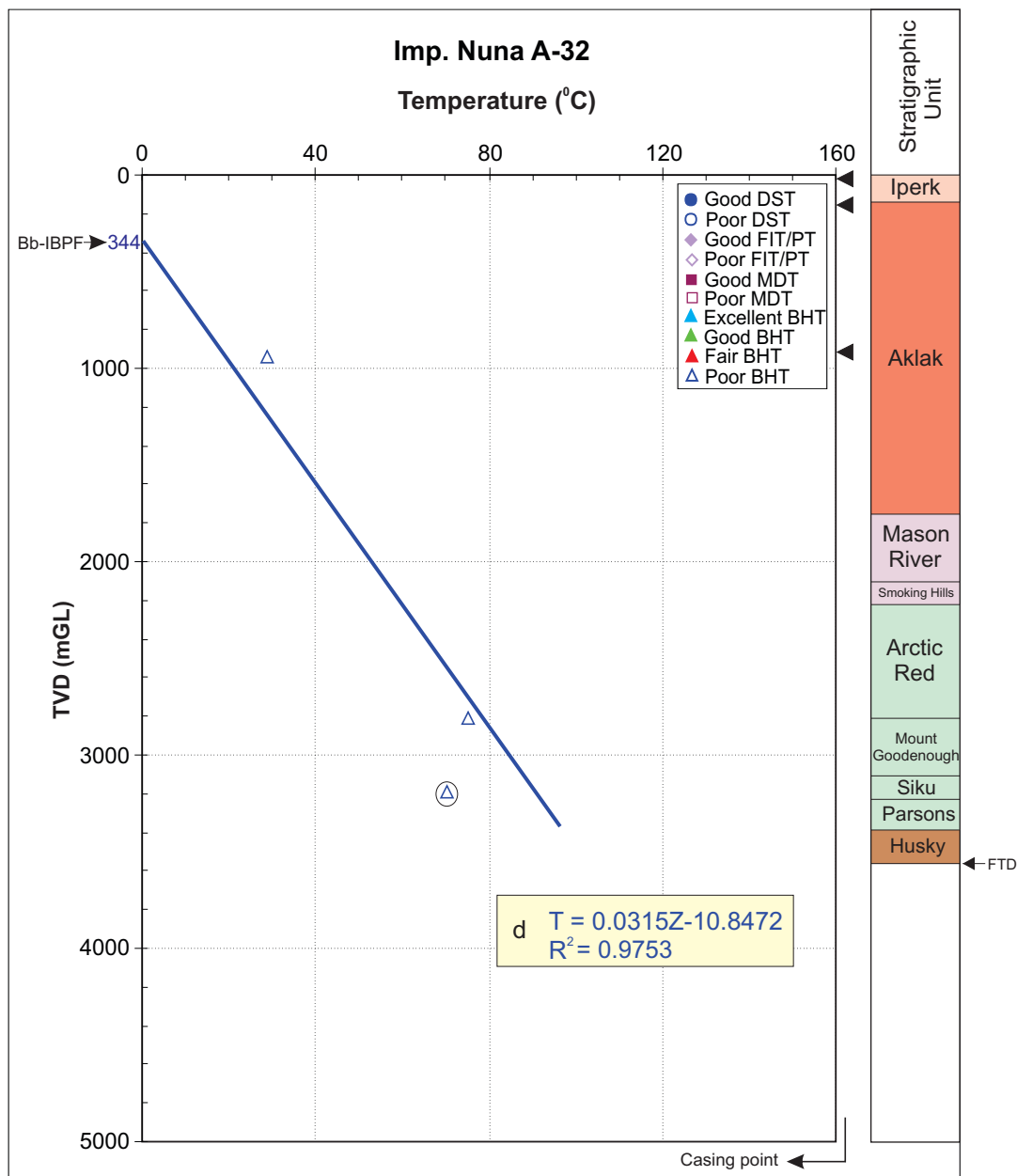
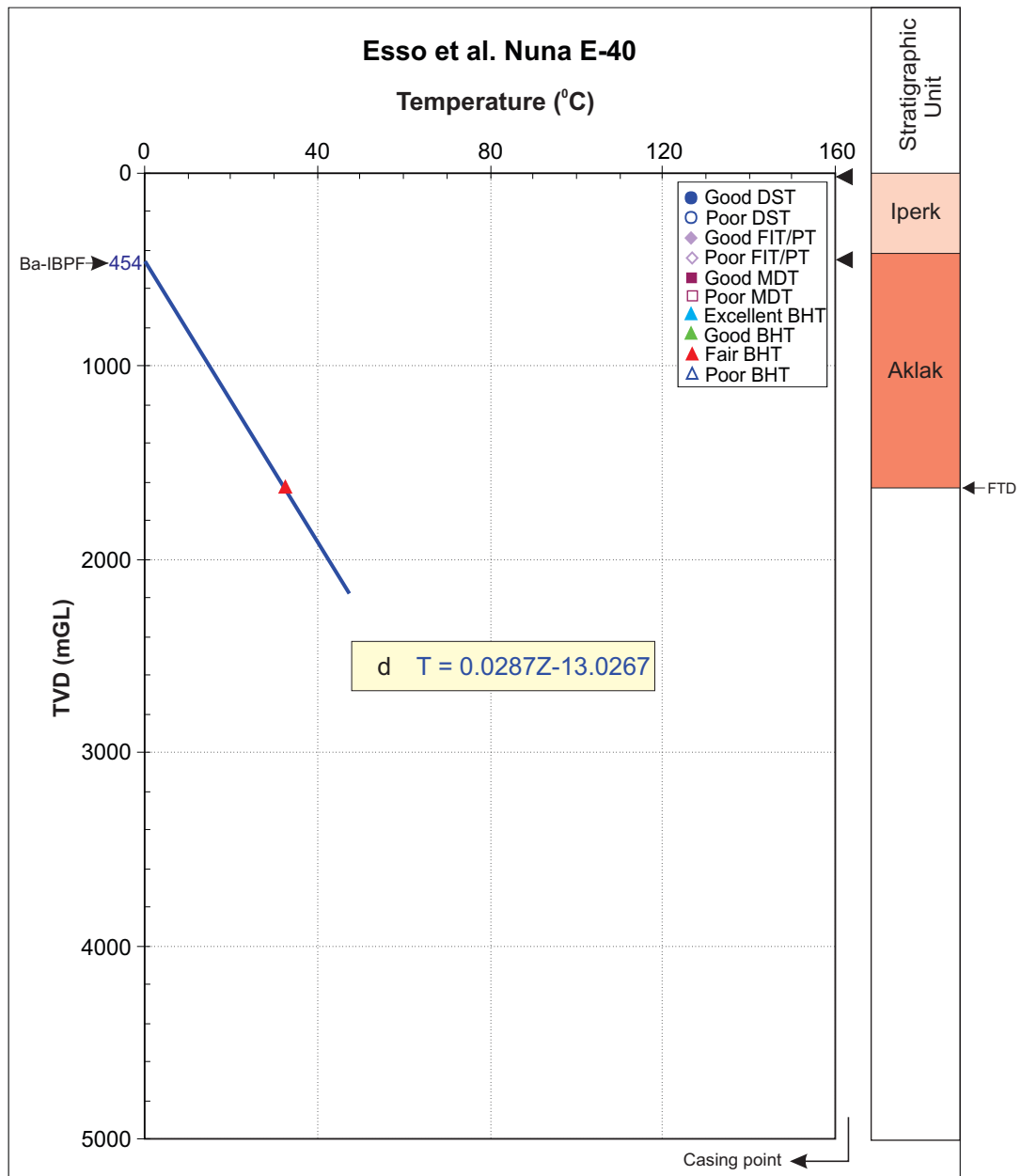


Figure 152. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Nuna A-32 well; all BHT points (except the circled one) are used for the calculation.





**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 153. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Nuna E-40 well; available one fair BHT point is used for the calculation.

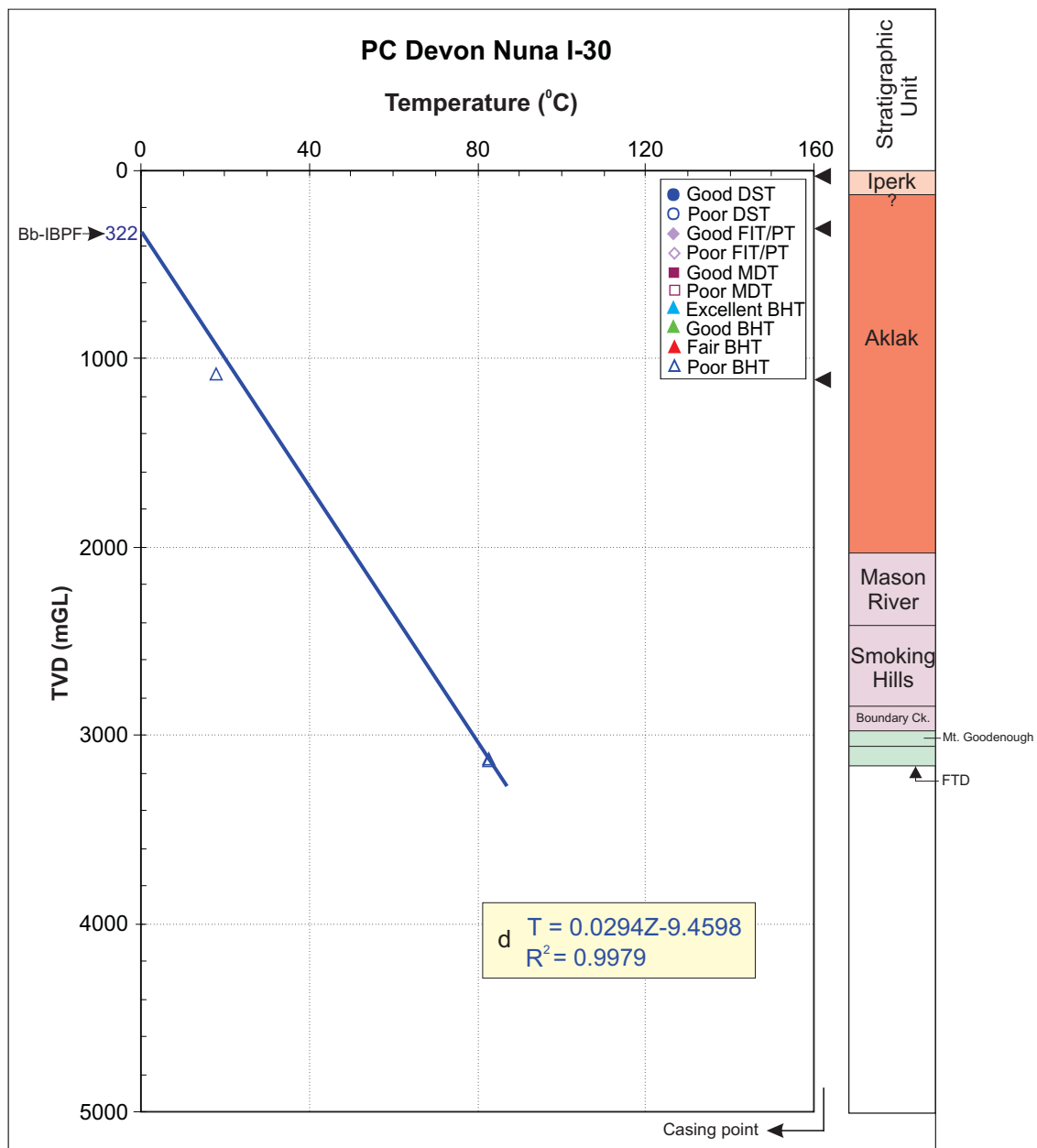
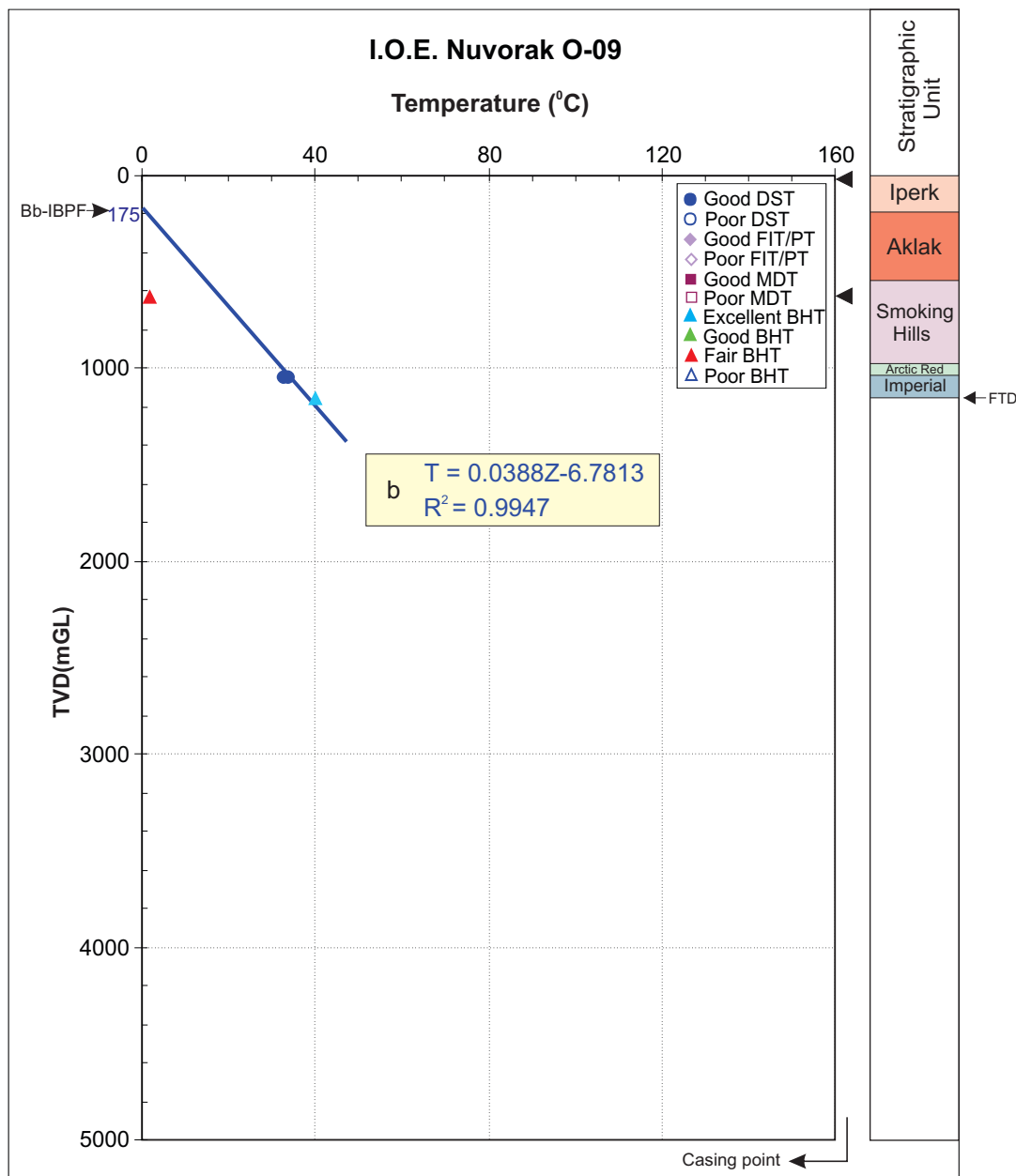


Figure 154. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Nuna I-30 well; all BHT points are used for the calculation.



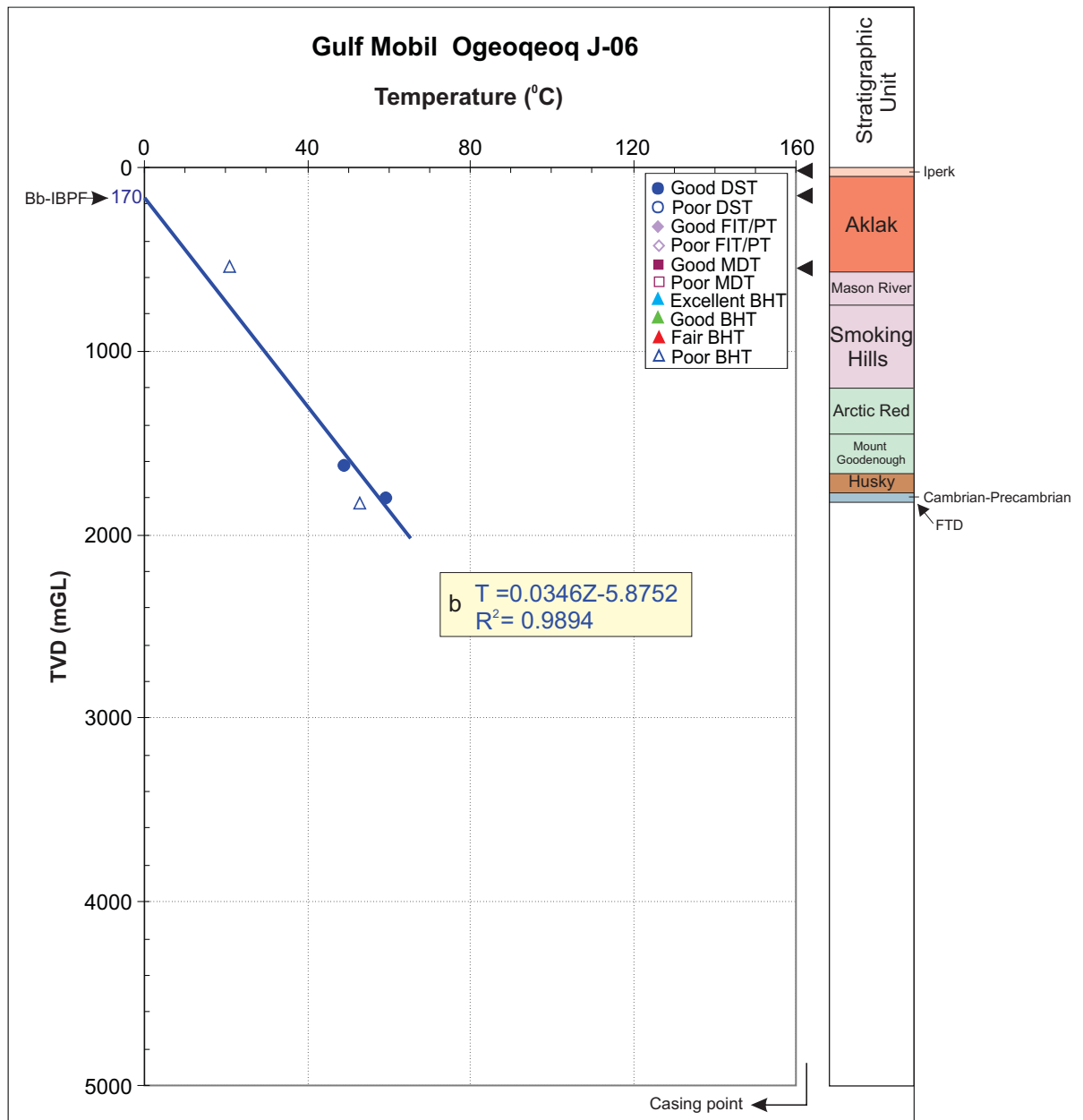
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 155. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Nuvorak O-09 well; good DST and excellent BHT points are used for the calculation.



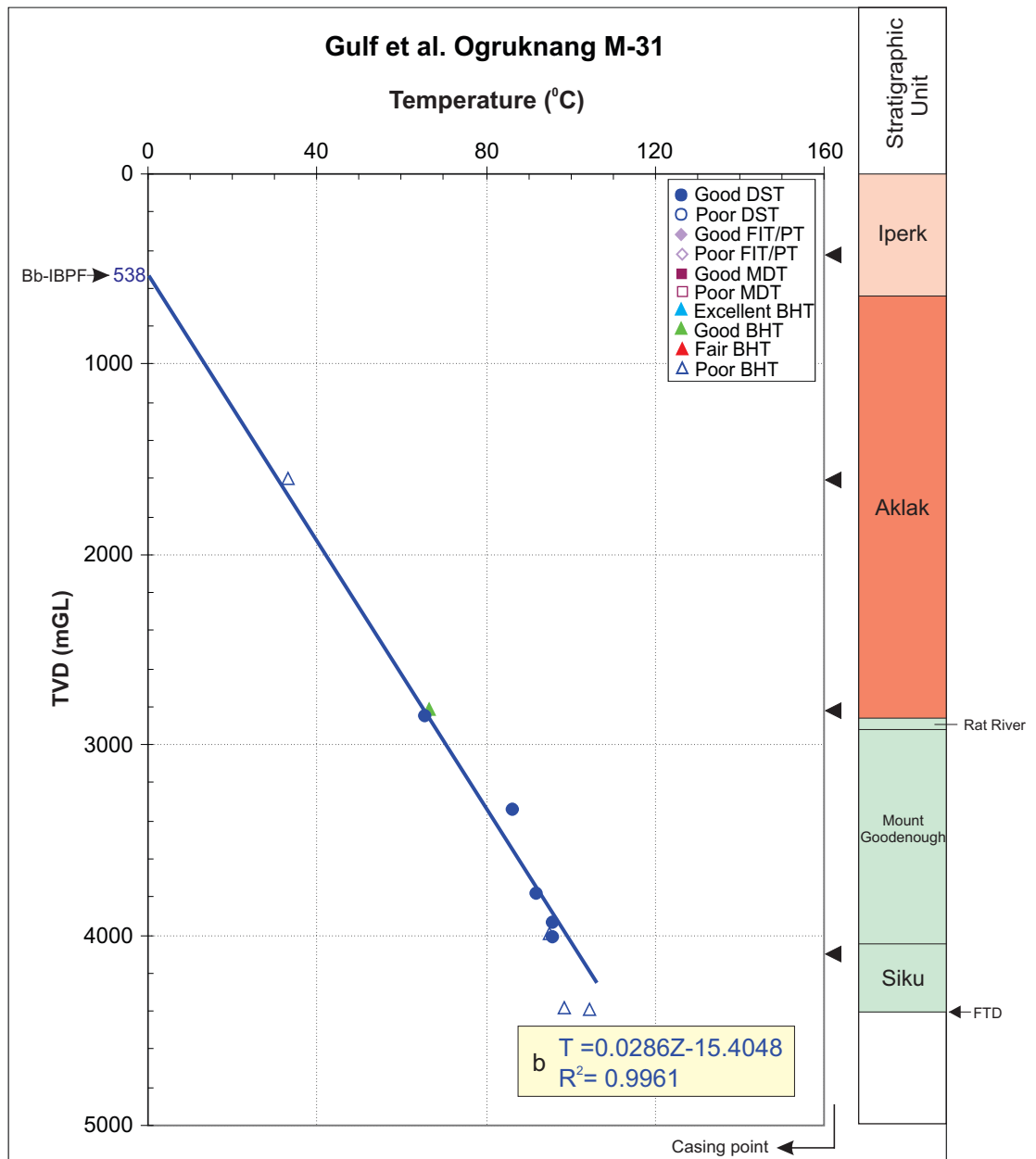
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 156. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Ogeoqeoq J-06 well; the two good DST are used for the calculation.



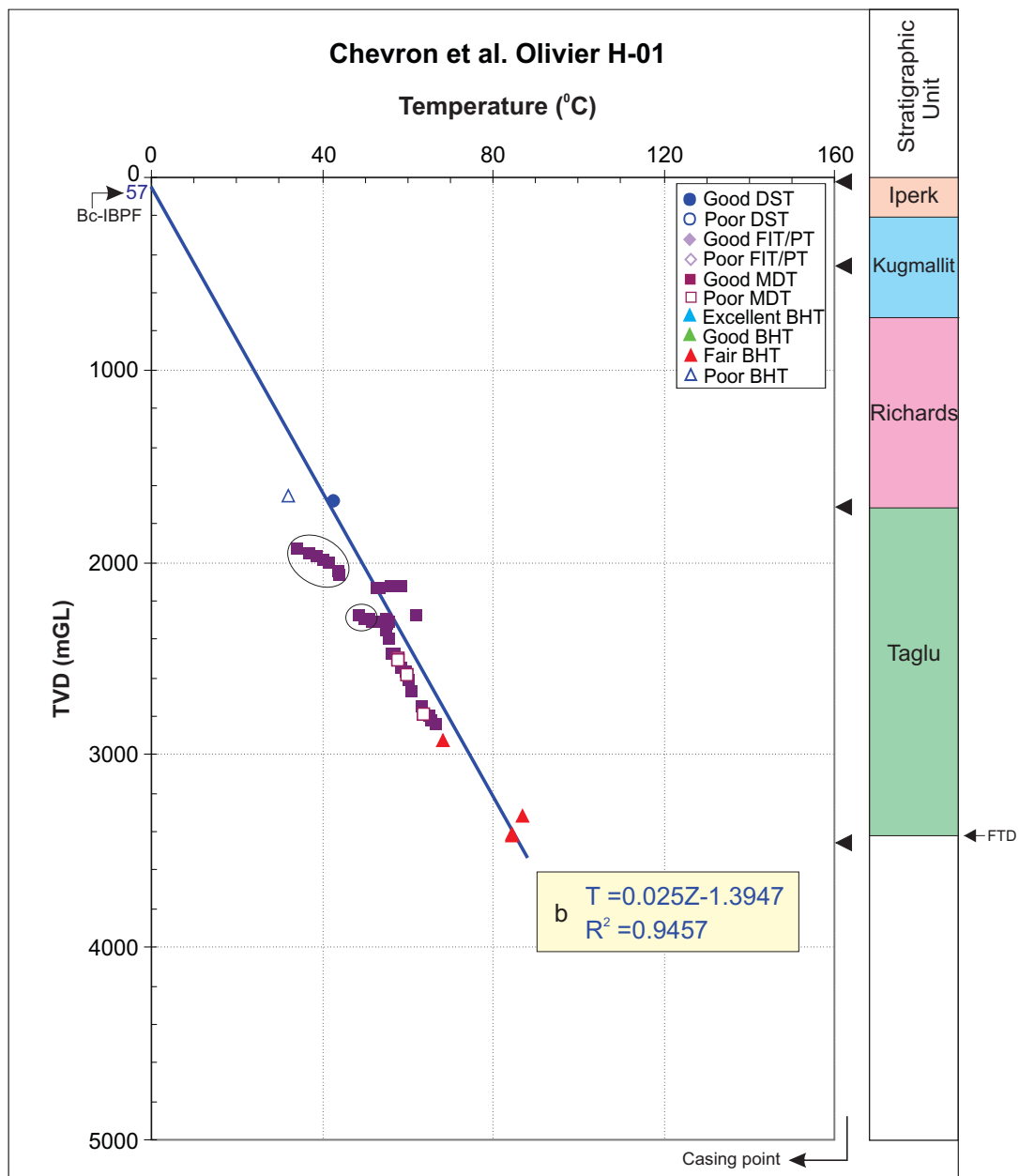
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 157. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Ogruknang M-31 well; all good DST and good BHT points are used for the calculation.



**Quality rank for IBPF determination**

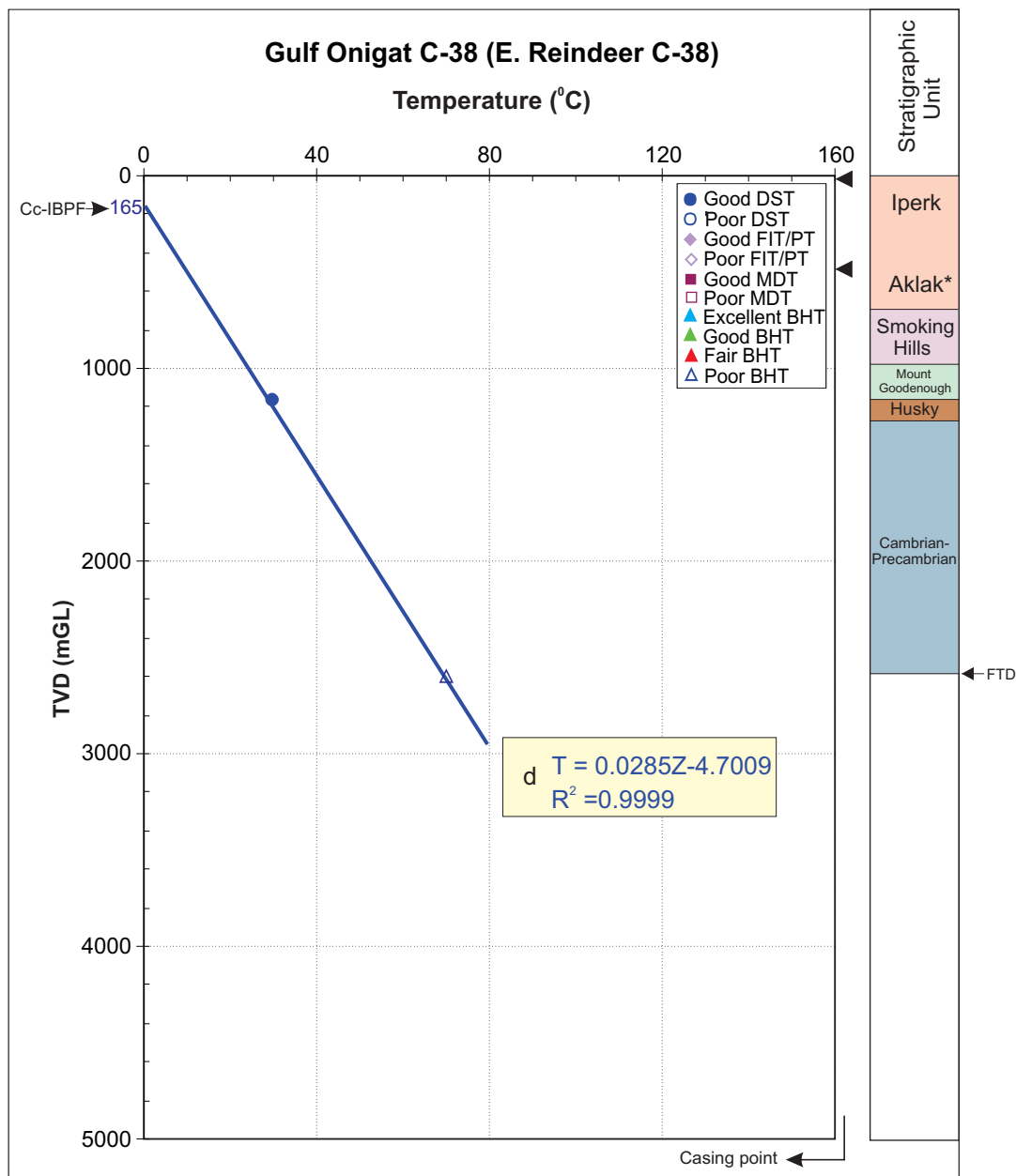
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 158. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Olivier H-01 well; good DST, all MDT (except the circled points) and fair BHT points are used for the calculation.



**Quality rank for IBPF determination**

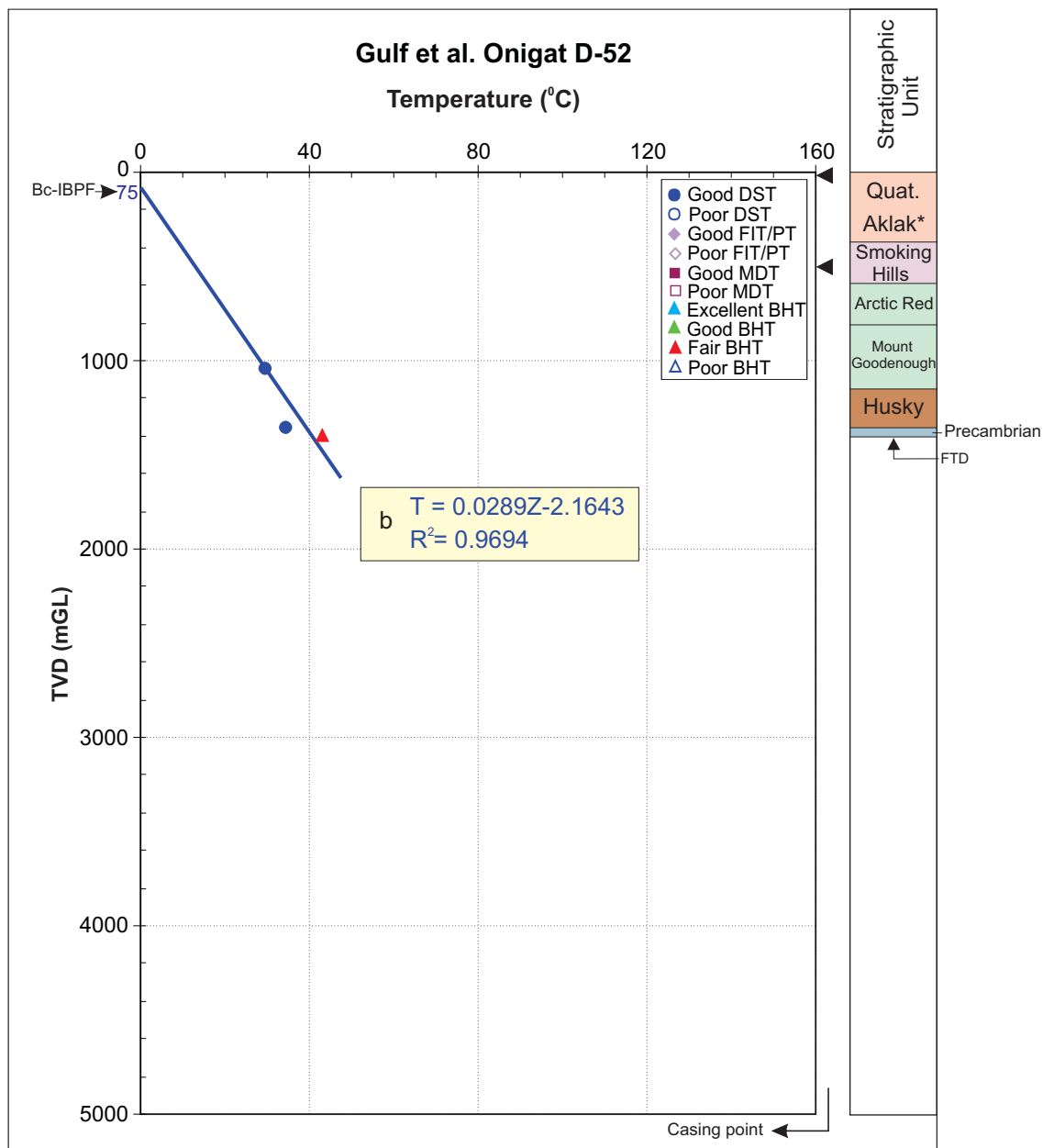
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

\* Its top was not determined due to lack of information.

Figure 159. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Onigat C-38 well; available good DST and fair BHT points are used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

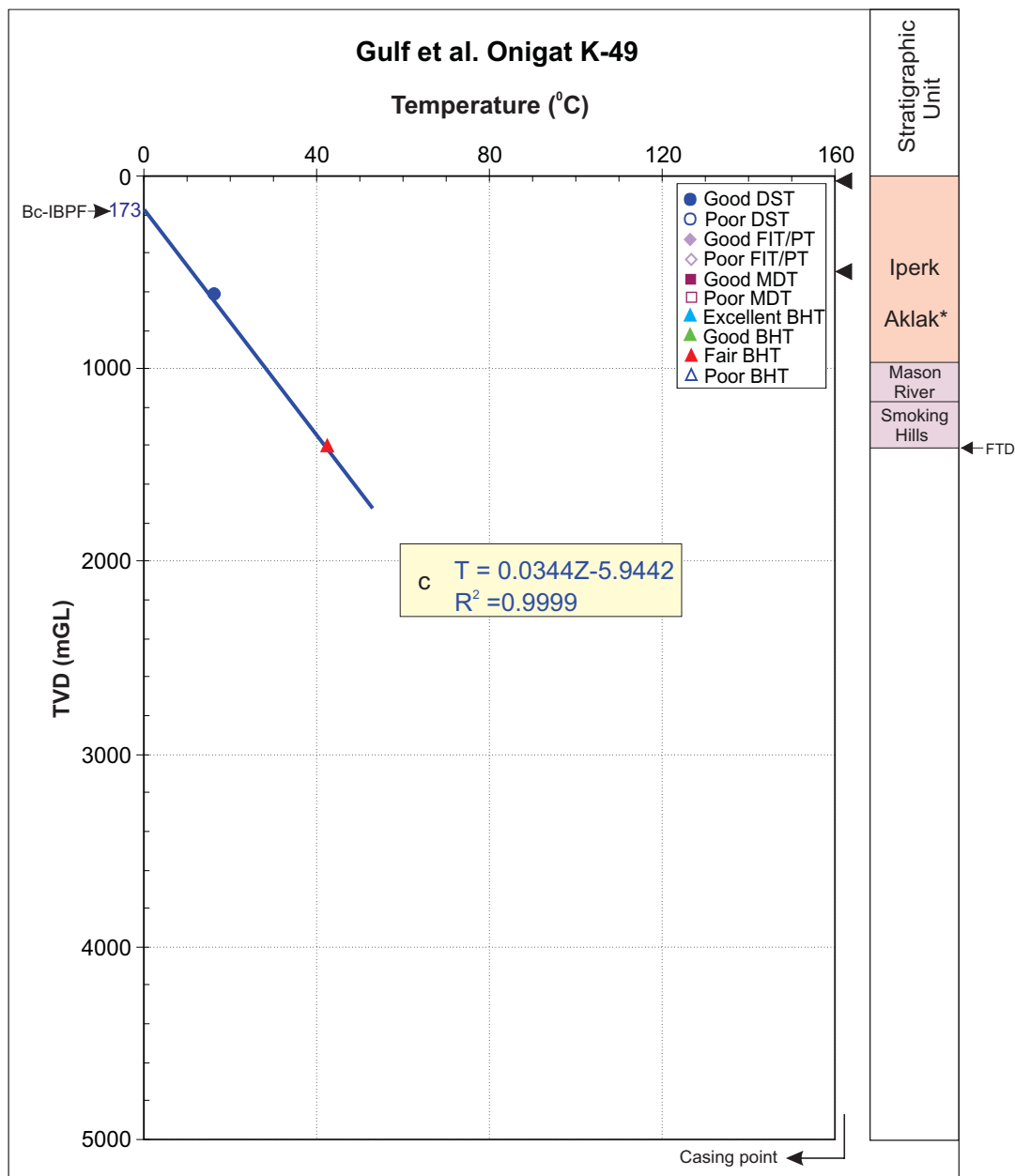
**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

\* Its top was not determined due to lack of information.

Figure 160. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Onigat D-52 well; good DST and fair BHT points are used for the





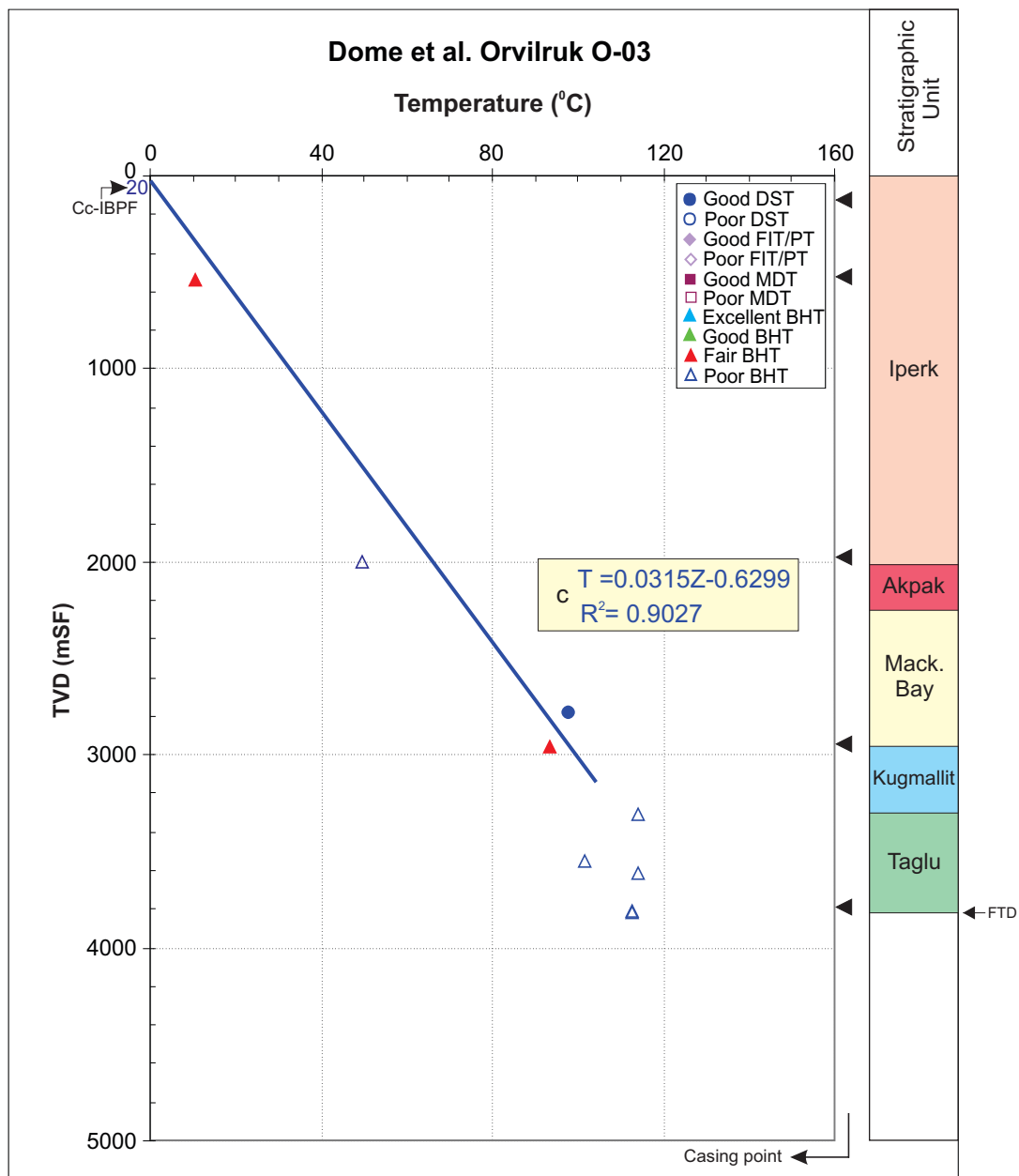
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 161. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Onigat K-49 well; good DST and fair BHT points are used for the calculation.



**Quality rank for IBPF determination**

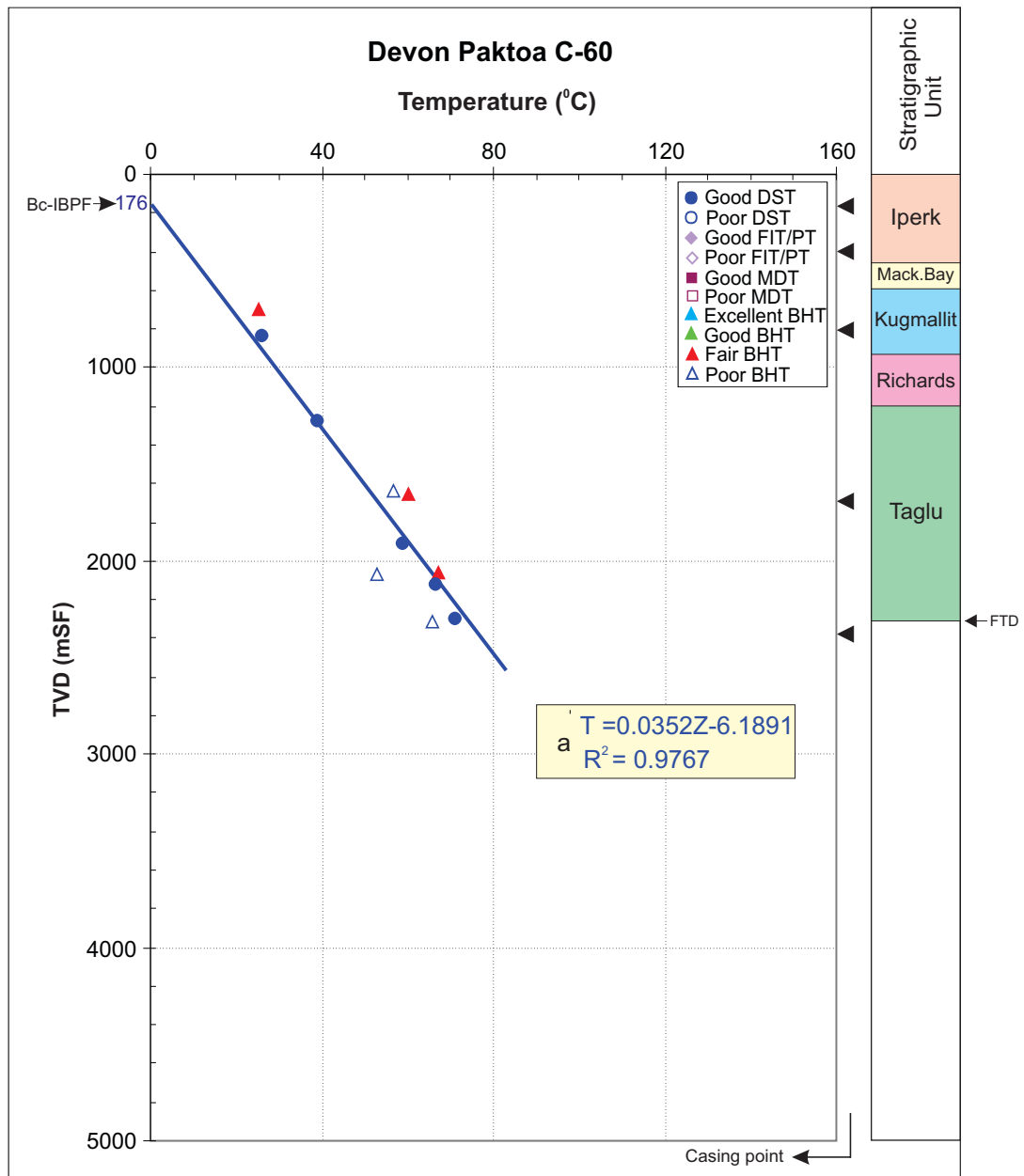
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 162. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Orvilruk O-03 well; good DST and fair BHT points (except circled one) are used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 163. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Paktoa C-60 well; good DST and fair BHT points are used for the

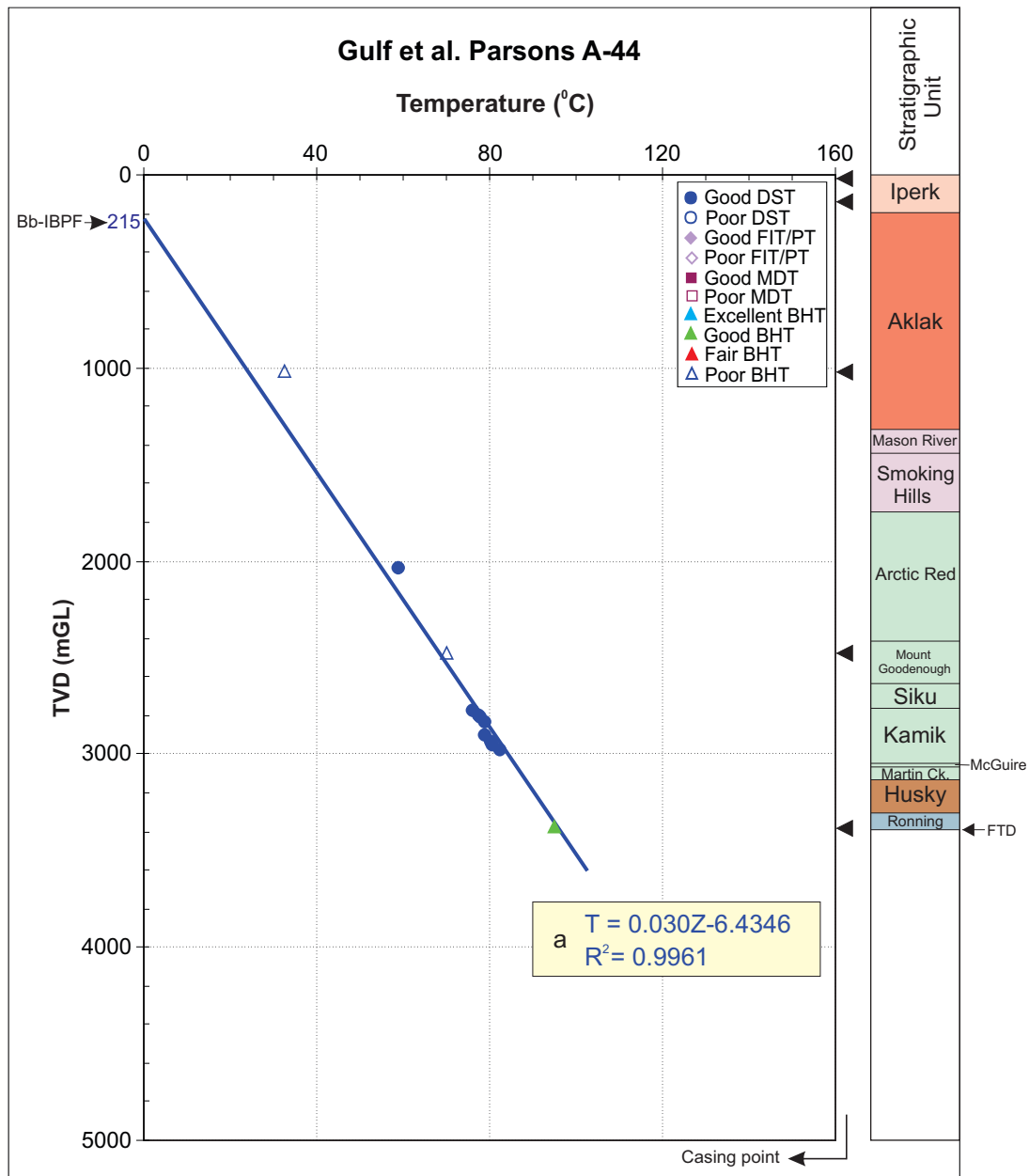
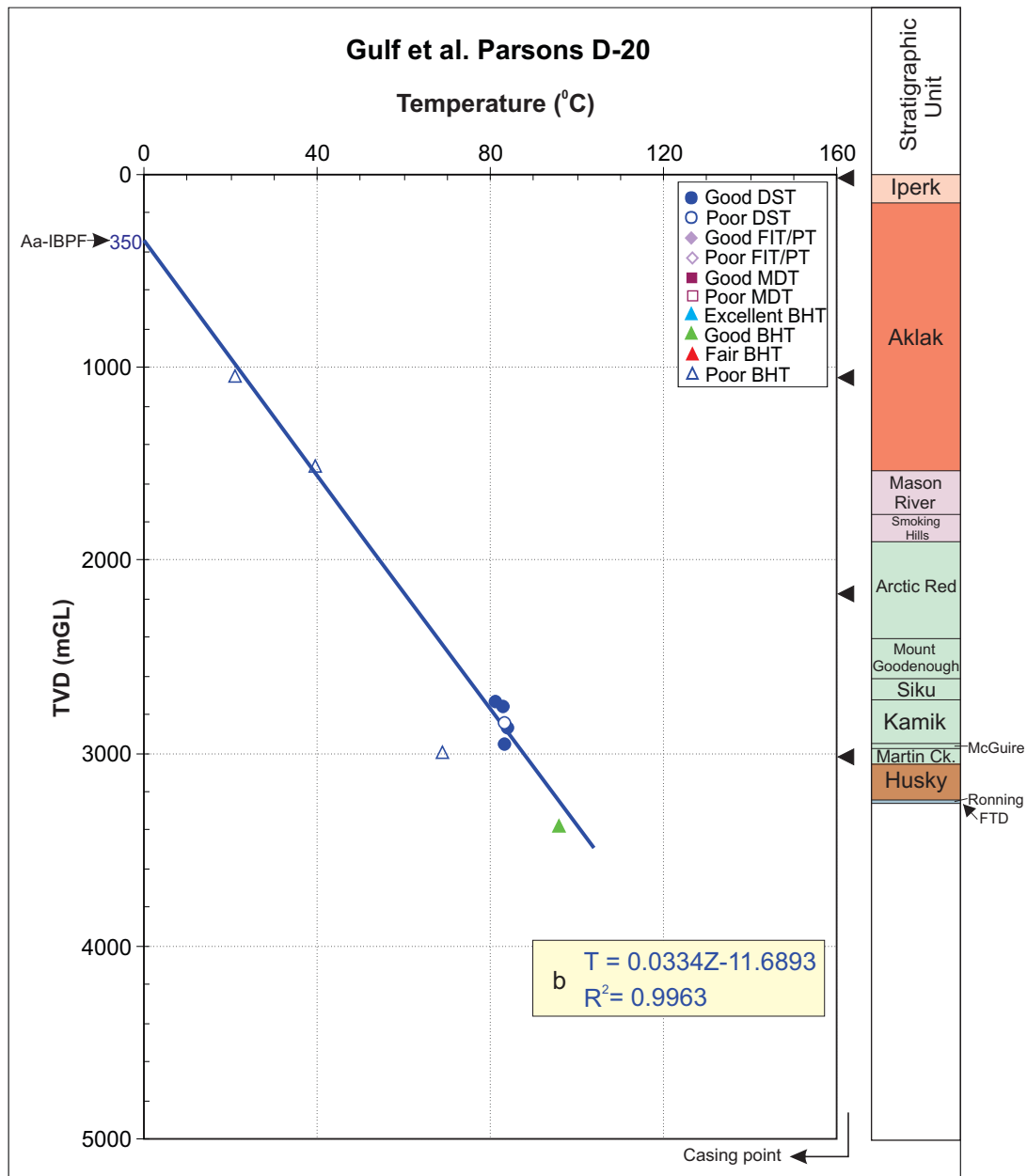


Figure 164. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Parsons A-44 well; good DST and good BHT points are used for the calculation.



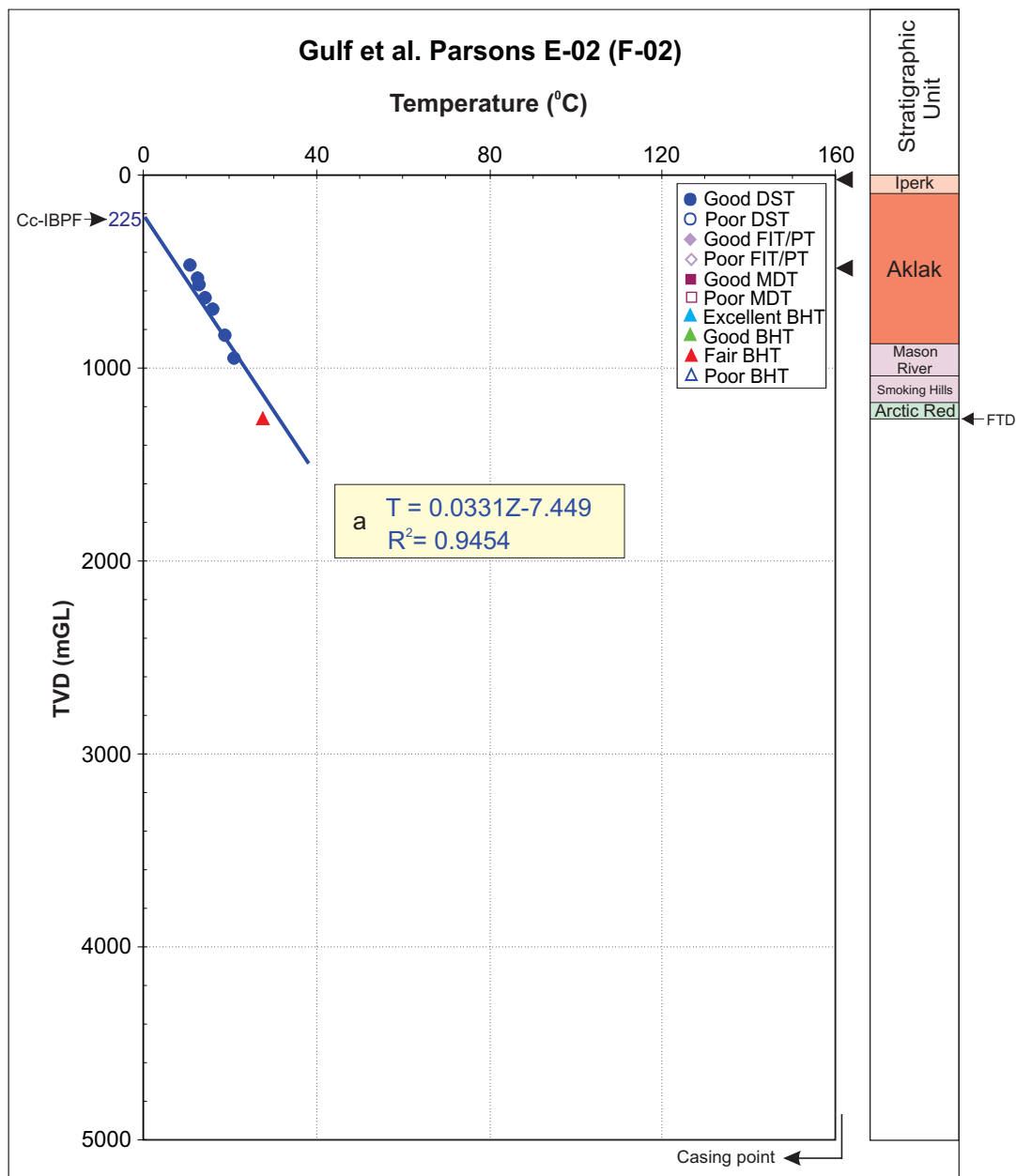
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 165. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Parsons D-20 well; all DST and good BHT points are used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 166. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Parsons E-02 well; all good DST and fair BHT points are used for the calculation.

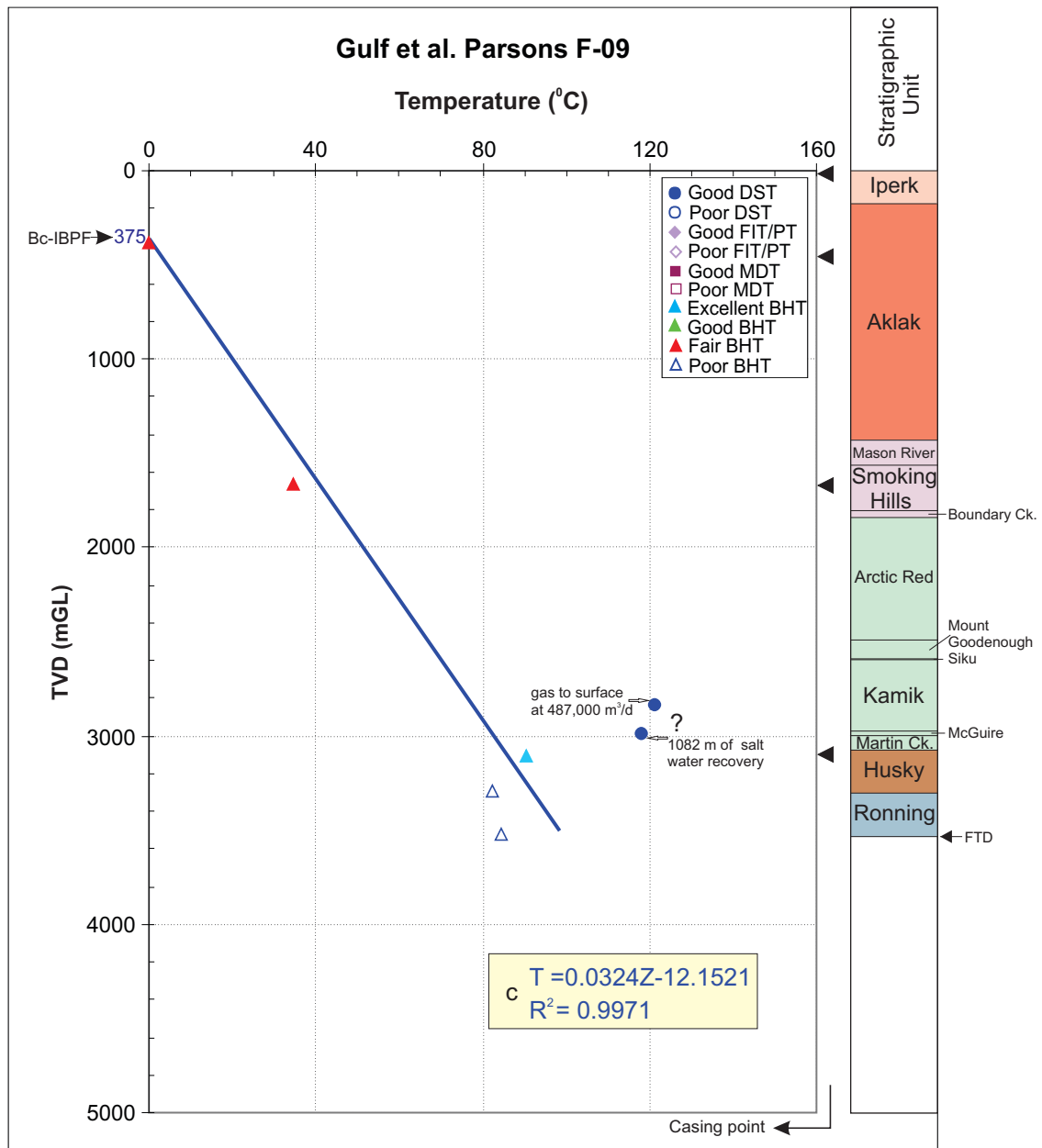
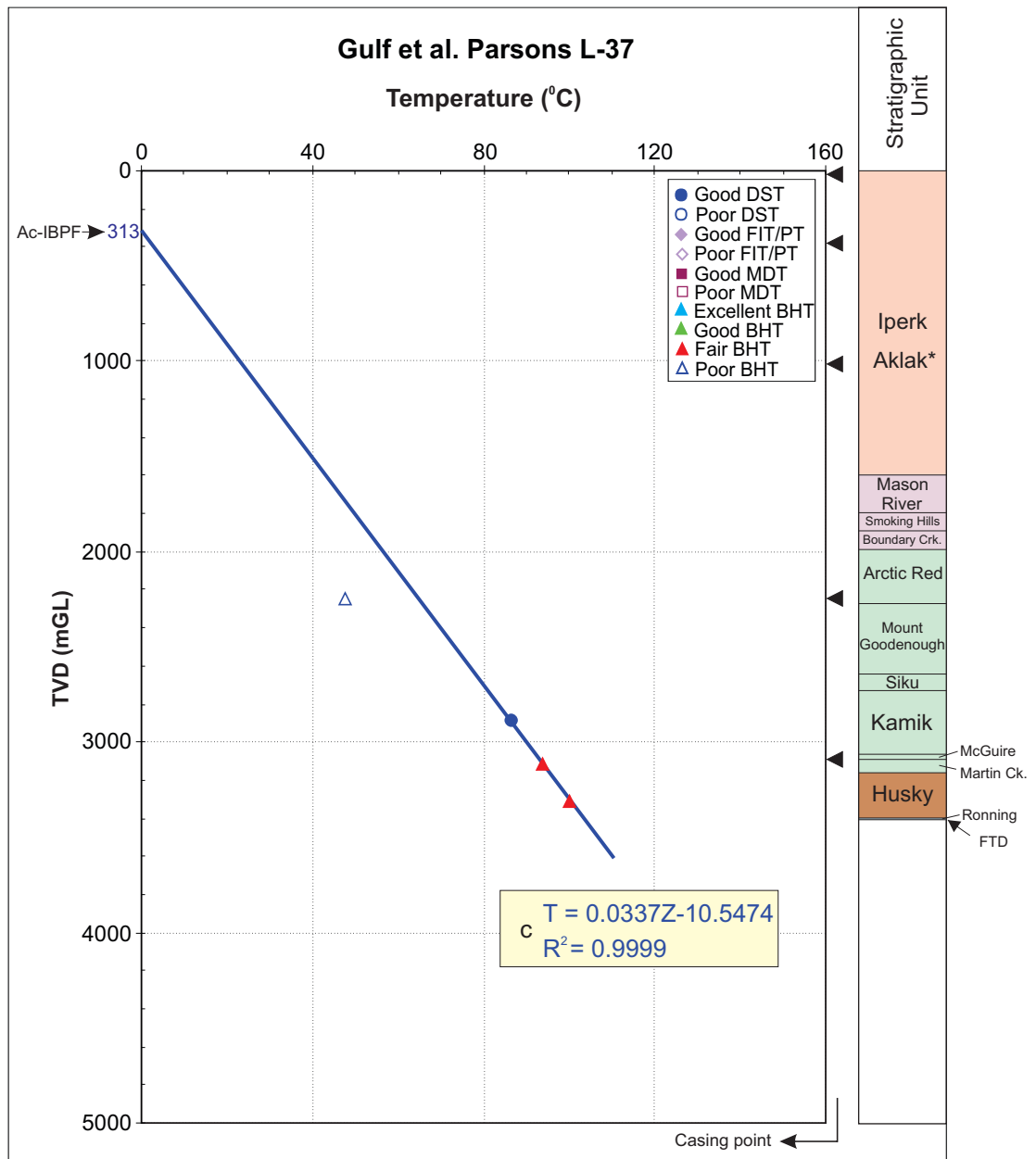


Figure 167. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Parsons F-09 well; excellent and fair BHT points are used for the calculation.



**Quality rank for IBPF determination**

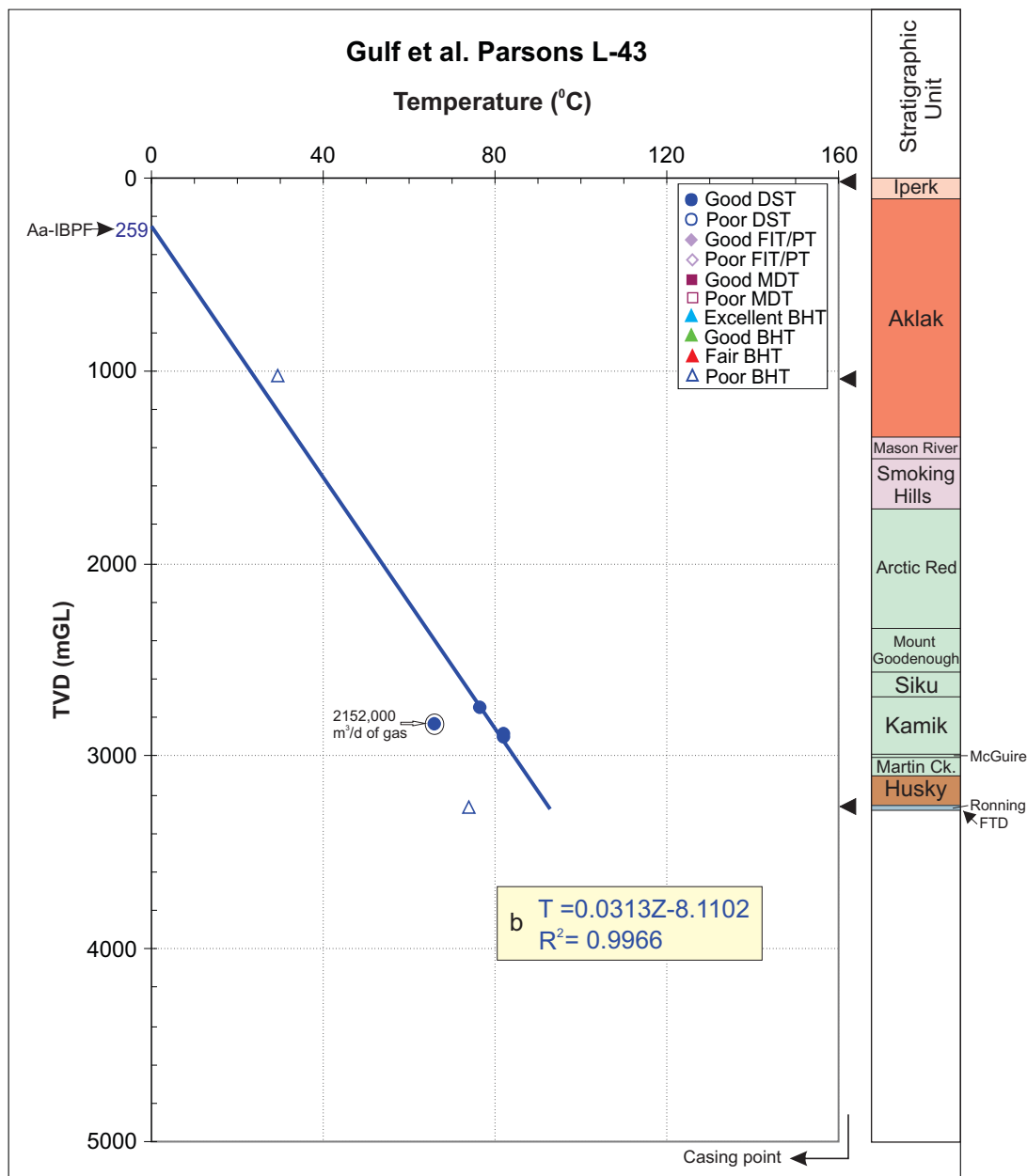
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 168. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Parsons L-37 well; good DST and fair BHT points are used for the calculation.





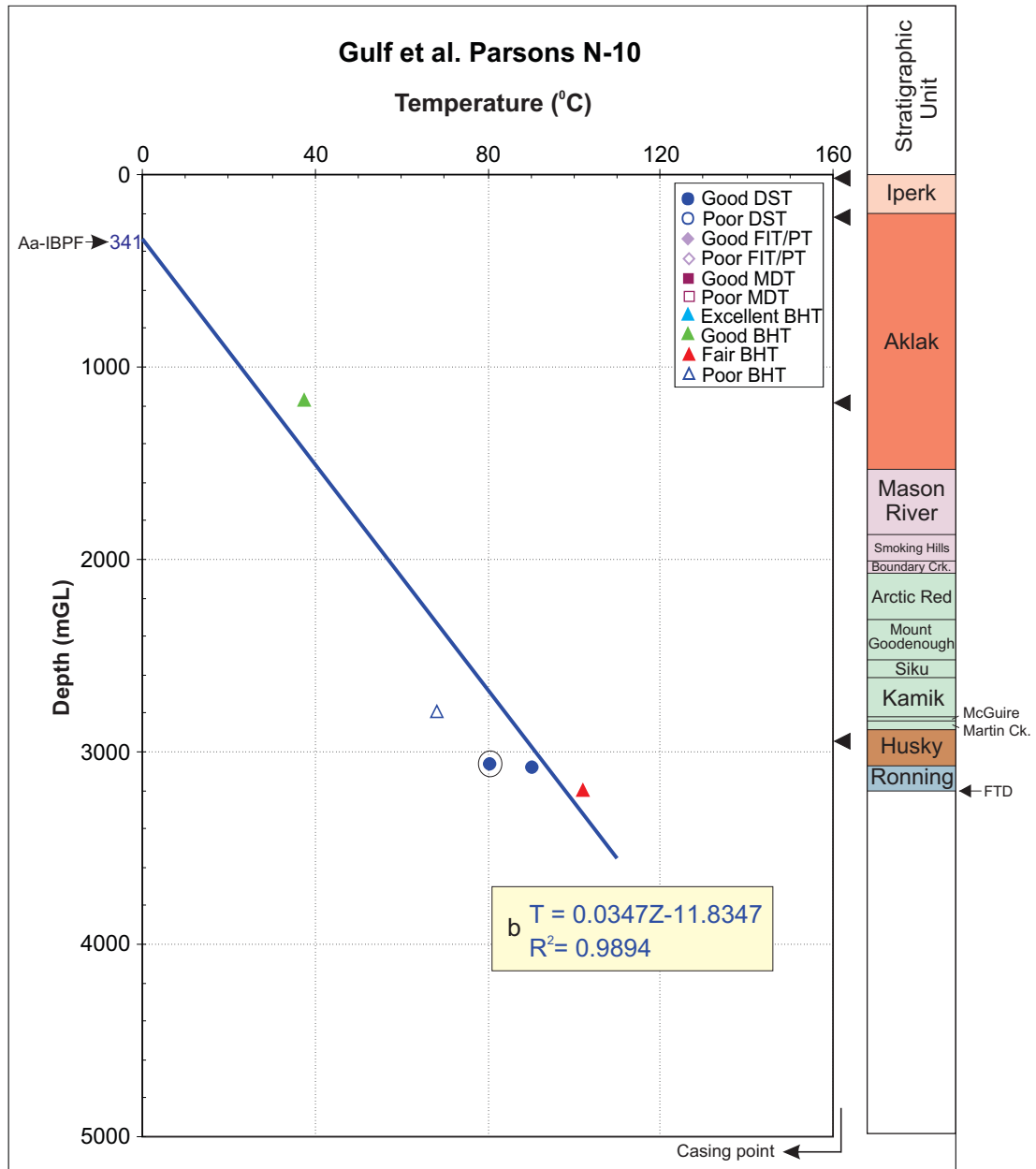
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 169. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Parsons L-43 well; good DST data (except circled point) are used for the calculation.



**Quality rank for IBPF determination**

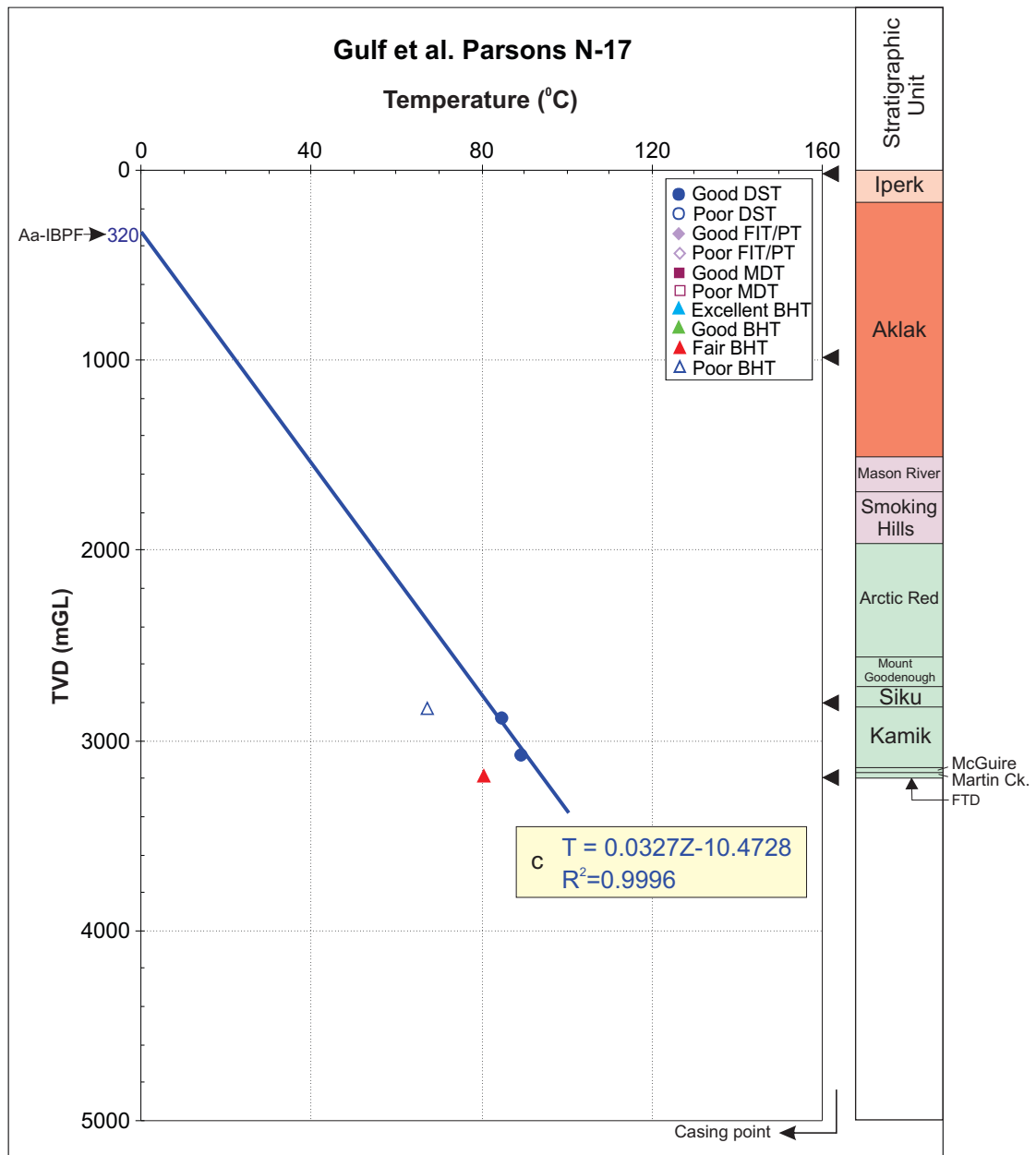
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 170. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Parsons N-10 well; good DST (except the circle one), good and fair BHT points are used for the calculation.



**Quality rank for IBPF determination**

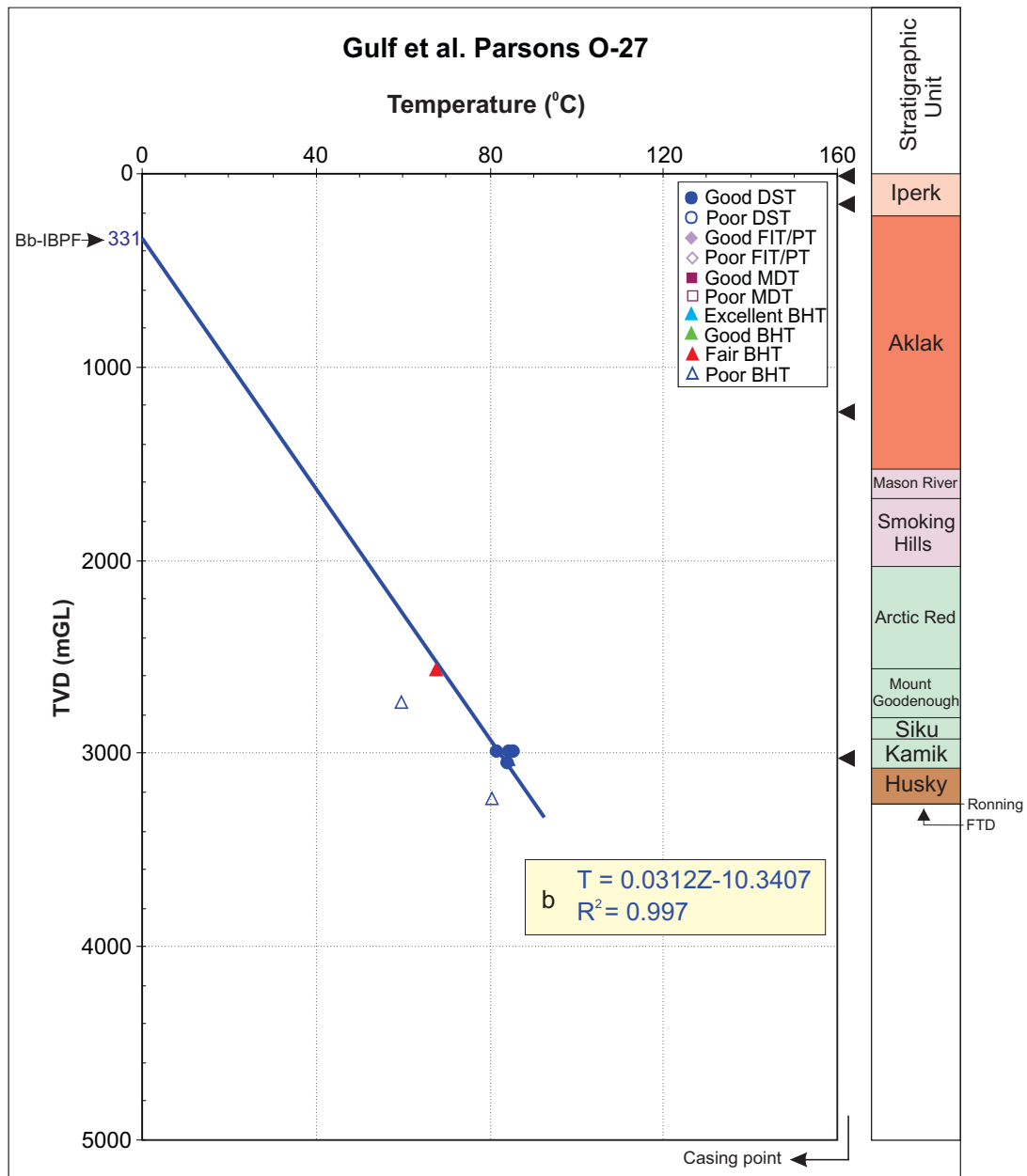
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 171. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Parsons N-17 well; only good DST points are used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 172. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Parsons O-27 well; good DST and fair BHT points are used for the calculation.

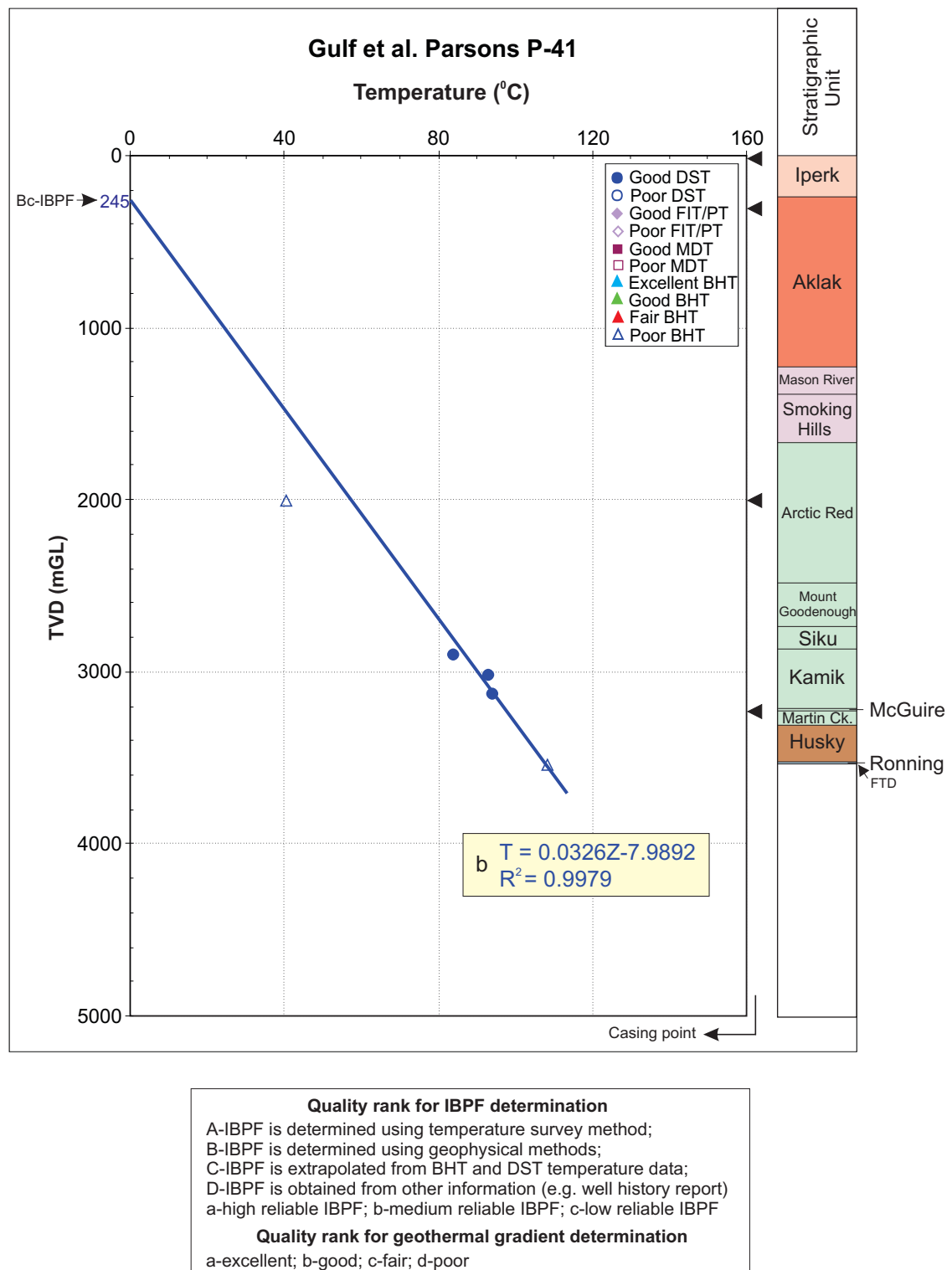
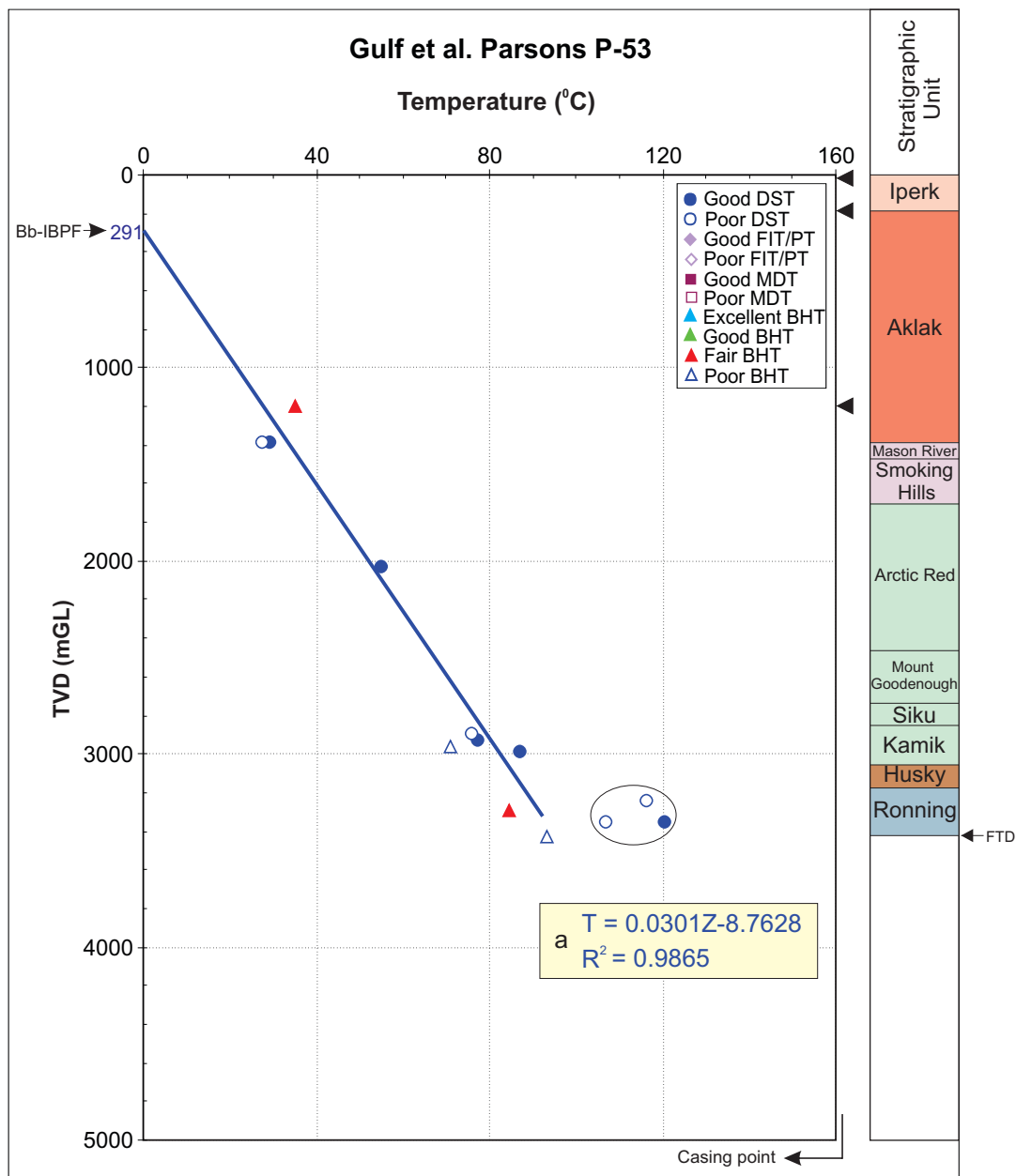


Figure 173. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Parsons P-41 well; good DST points are used for the calculation.



**Quality rank for IBPF determination**

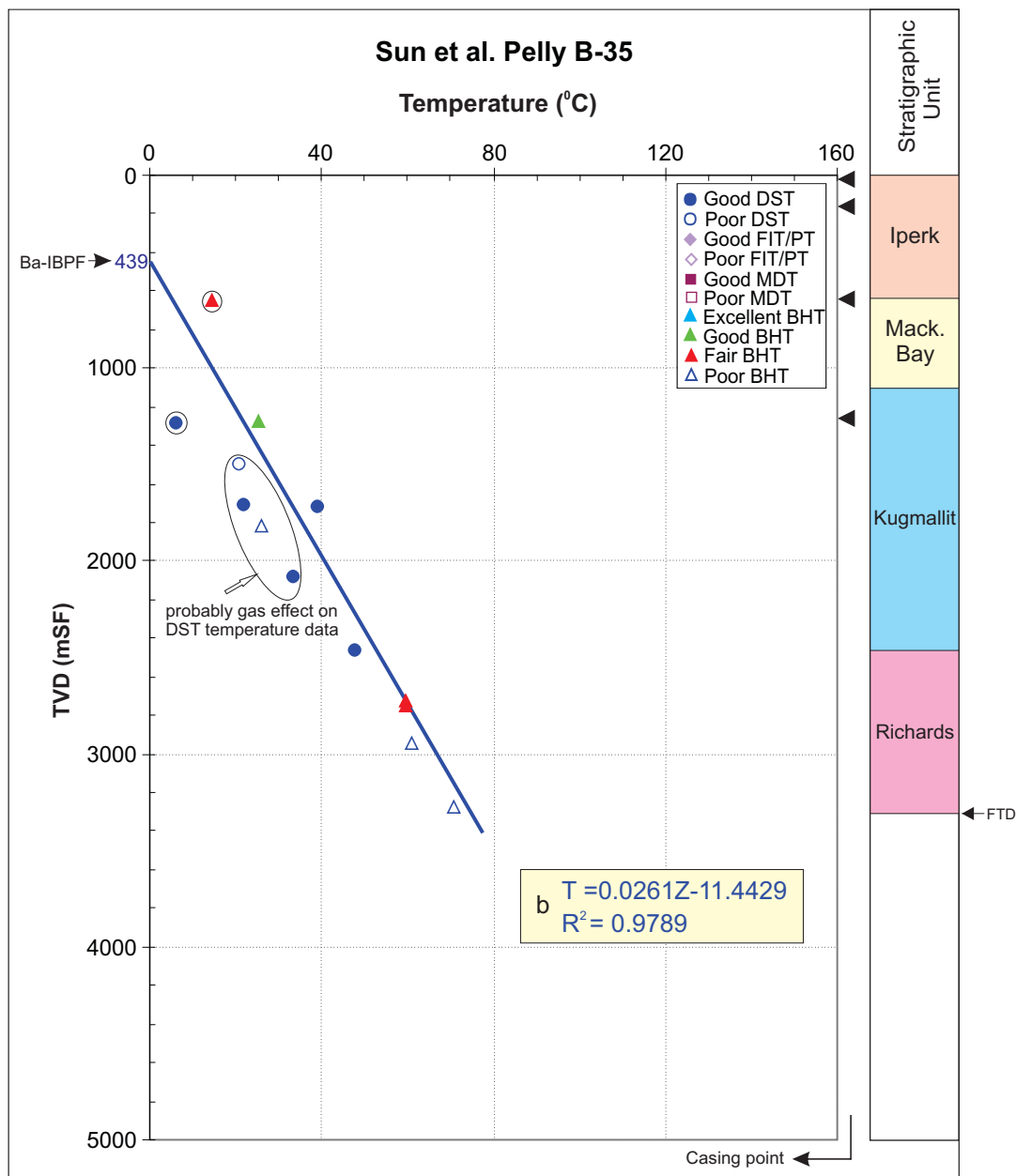
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 174. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Parsons P-53 well; all DST (except the circled points) data are used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 175. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Pelly B-35 well; good DST (except circled points), good and fair BHT points (except circled one) are used for the calculation.

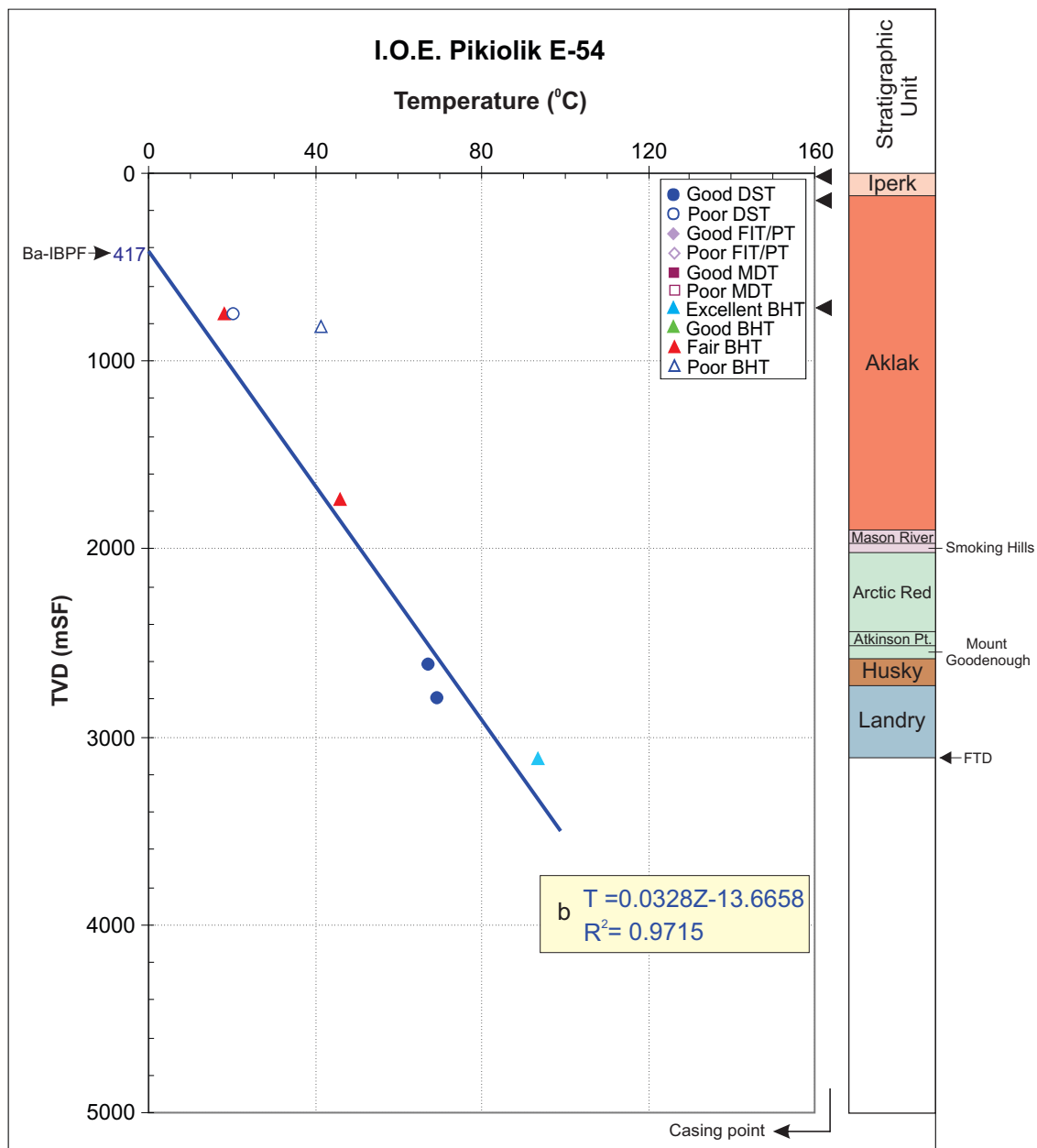
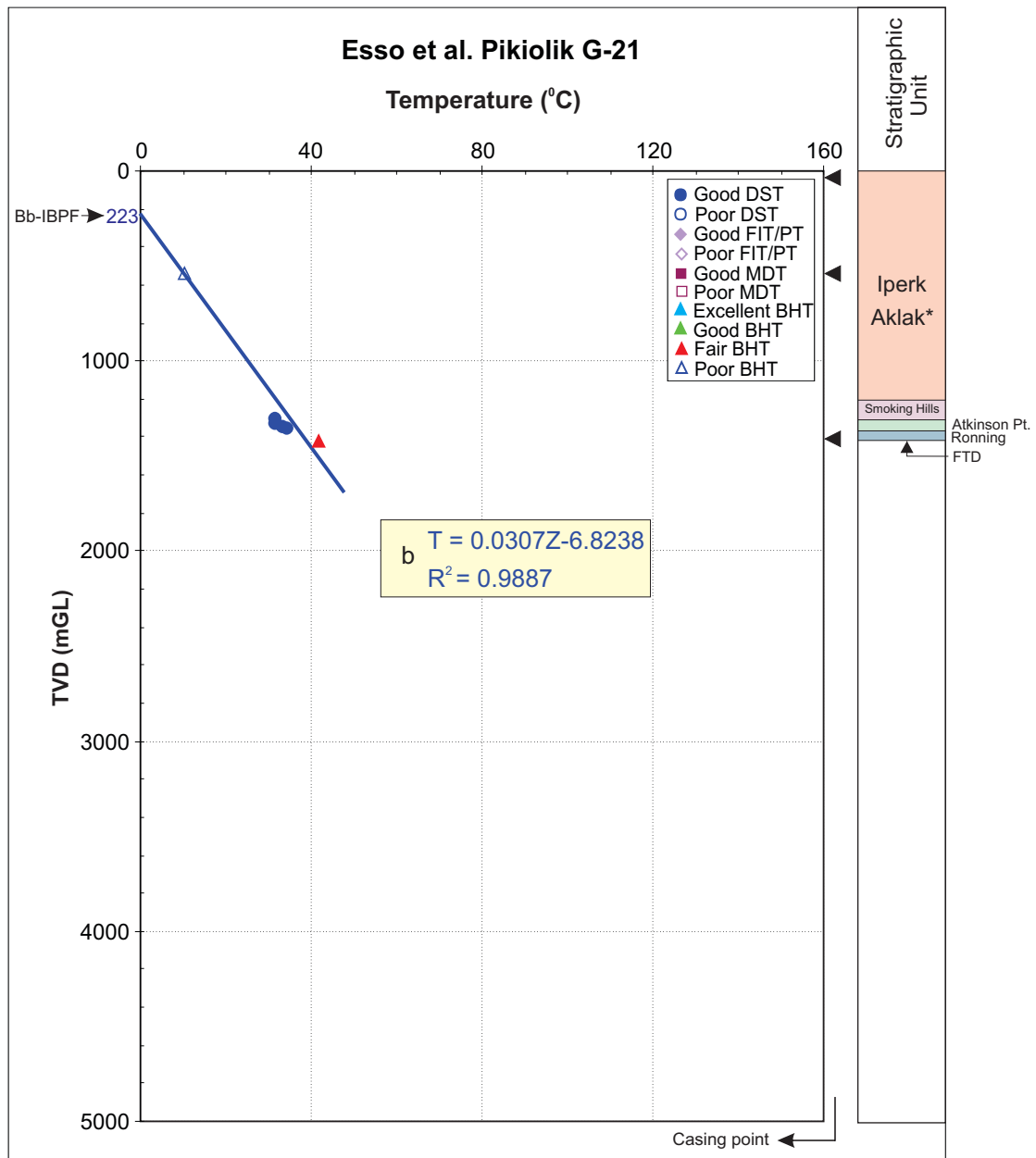


Figure 176. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Pikiolik E-54 well; all DST, excellent and fair BHT points are used for the calculation.





**Quality rank for IBPF determination**

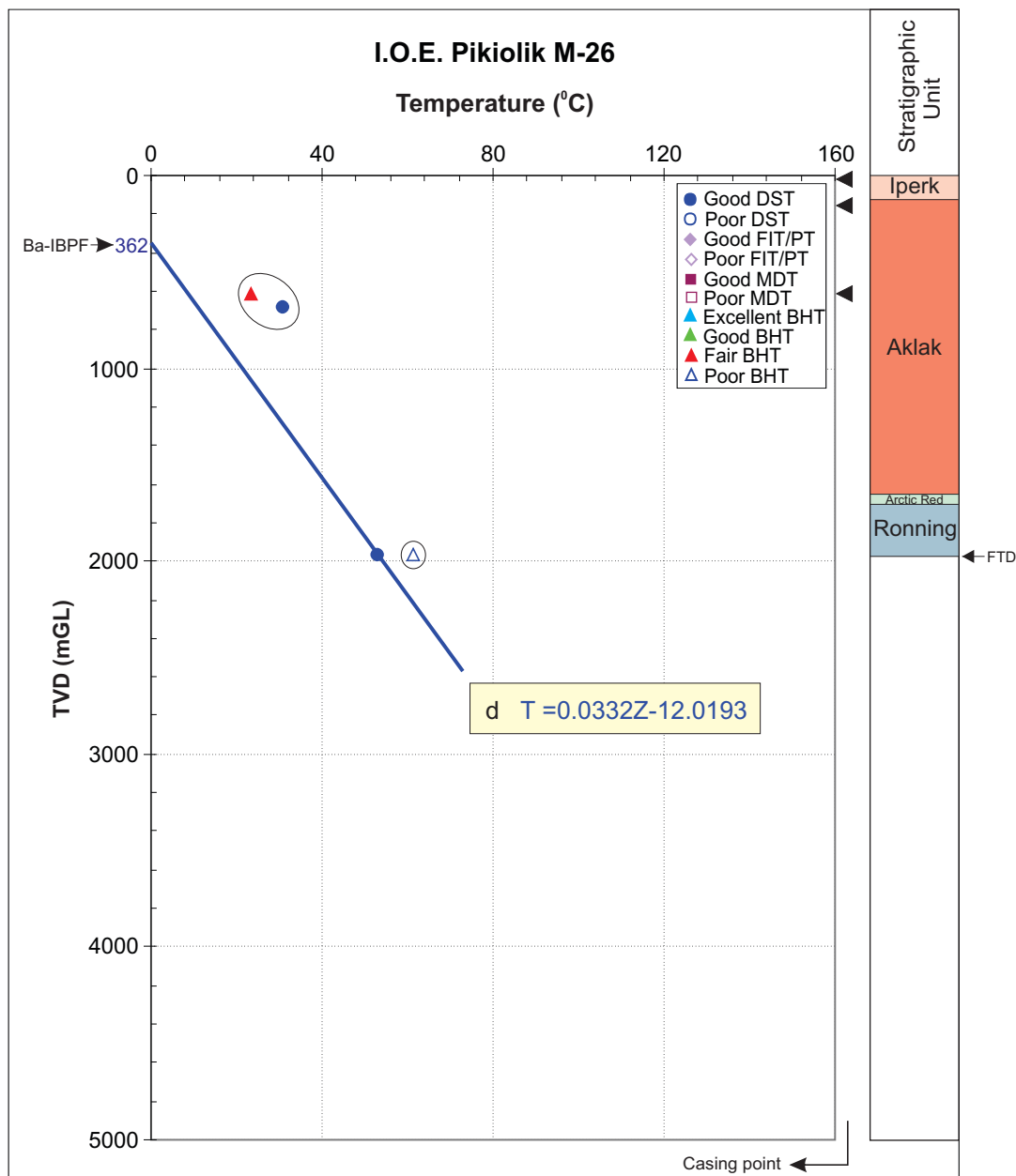
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 177. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Pikiolik G-21 well; all DST and fair BHT points are used for the calculation.



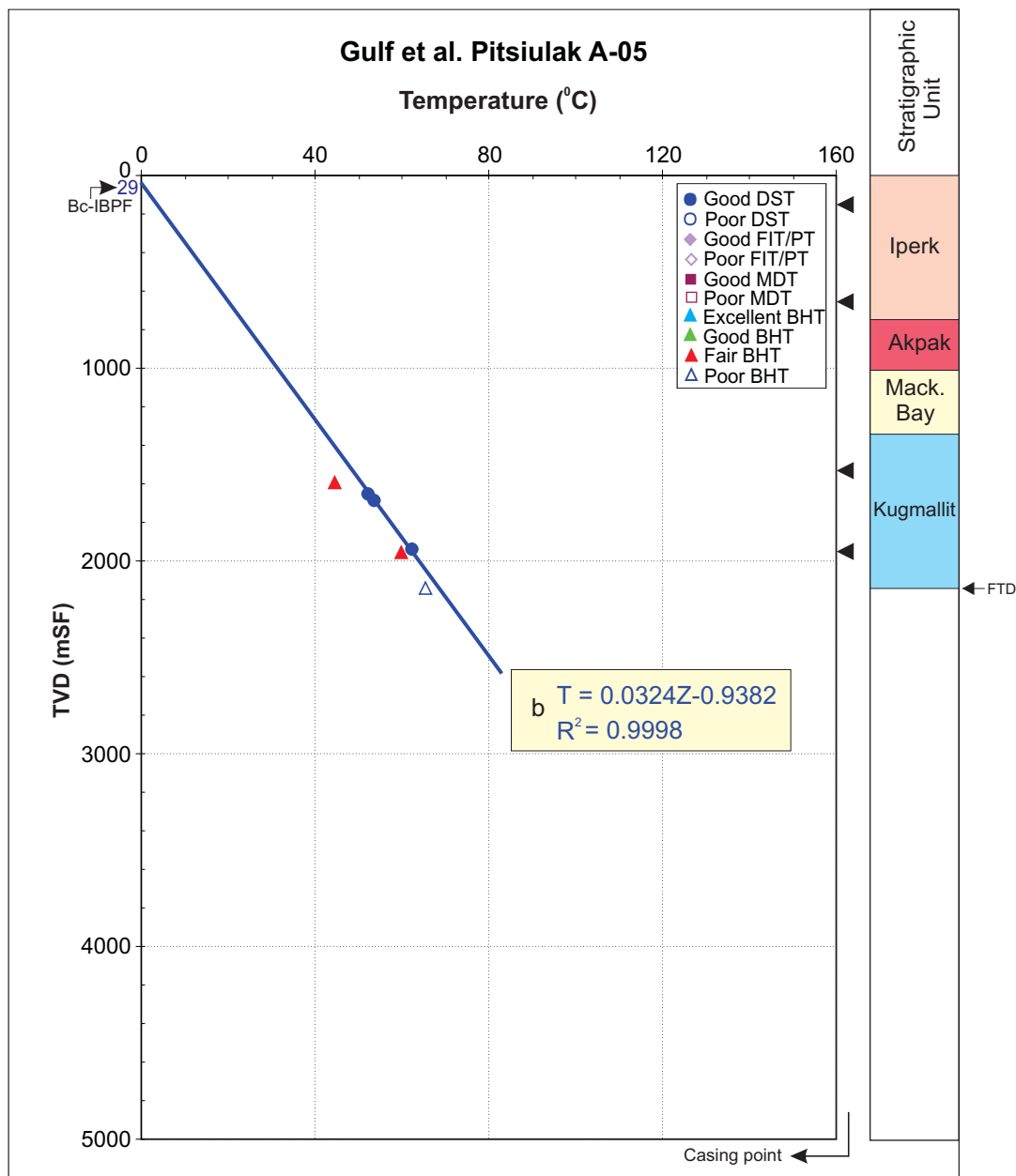
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 178. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Pikiolik M-26 well; only one good DST point is used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 179. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Pitsiulak A-05 well; good DST points are used for the calculation.

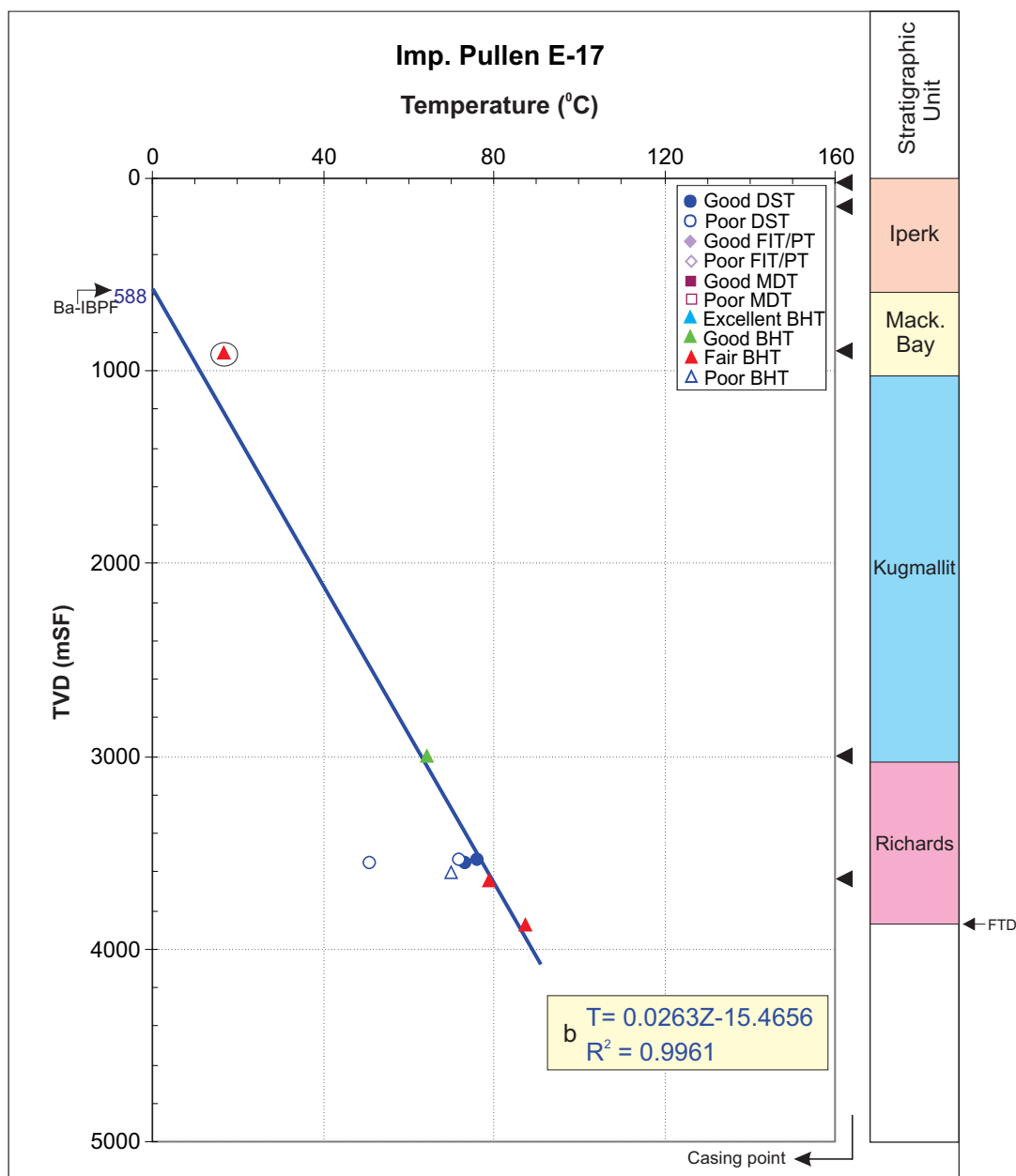
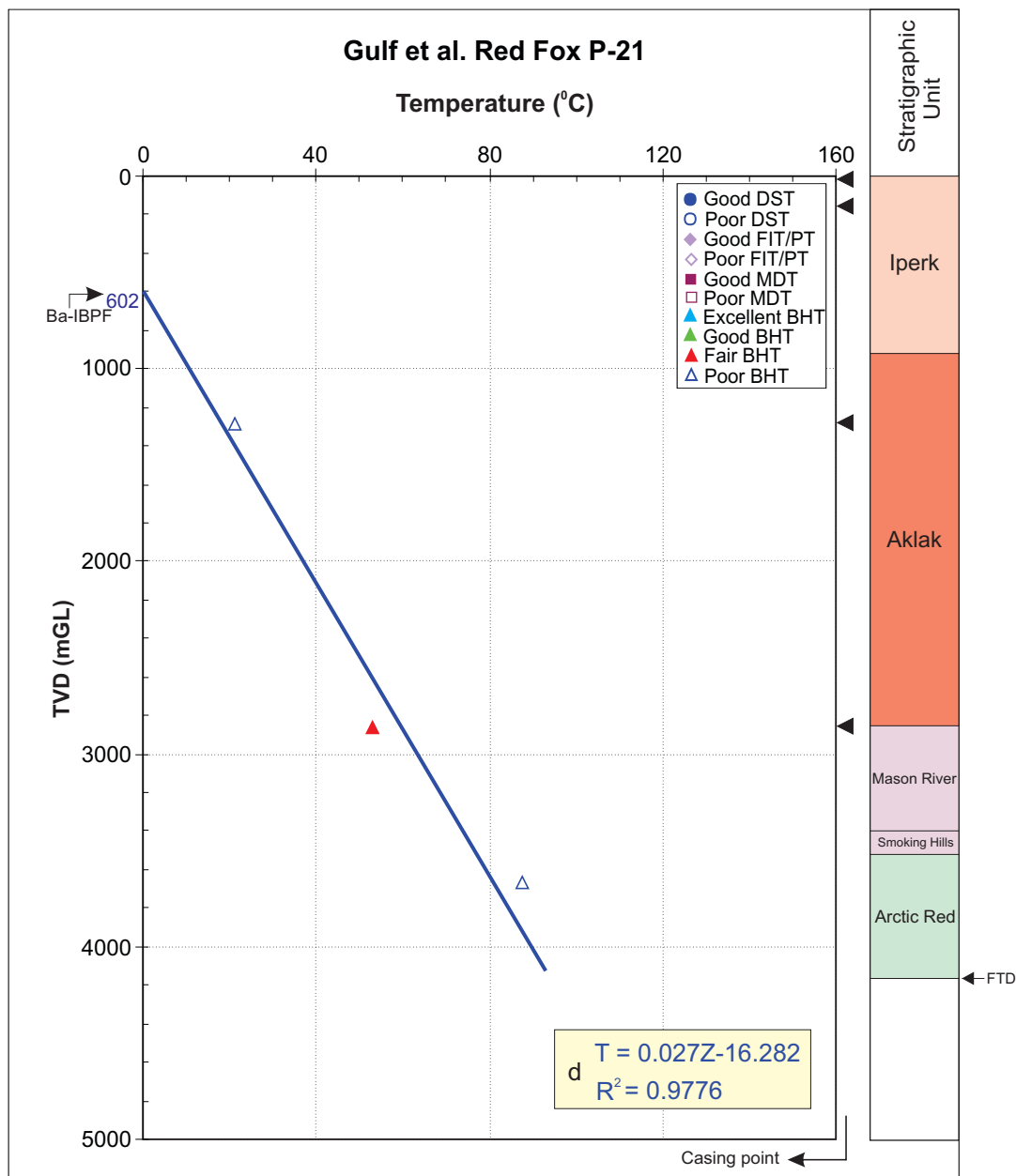


Figure 180. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Pullen E-17 well; good DST, good and fair BHT (except the circled one) points are used for the calculation.



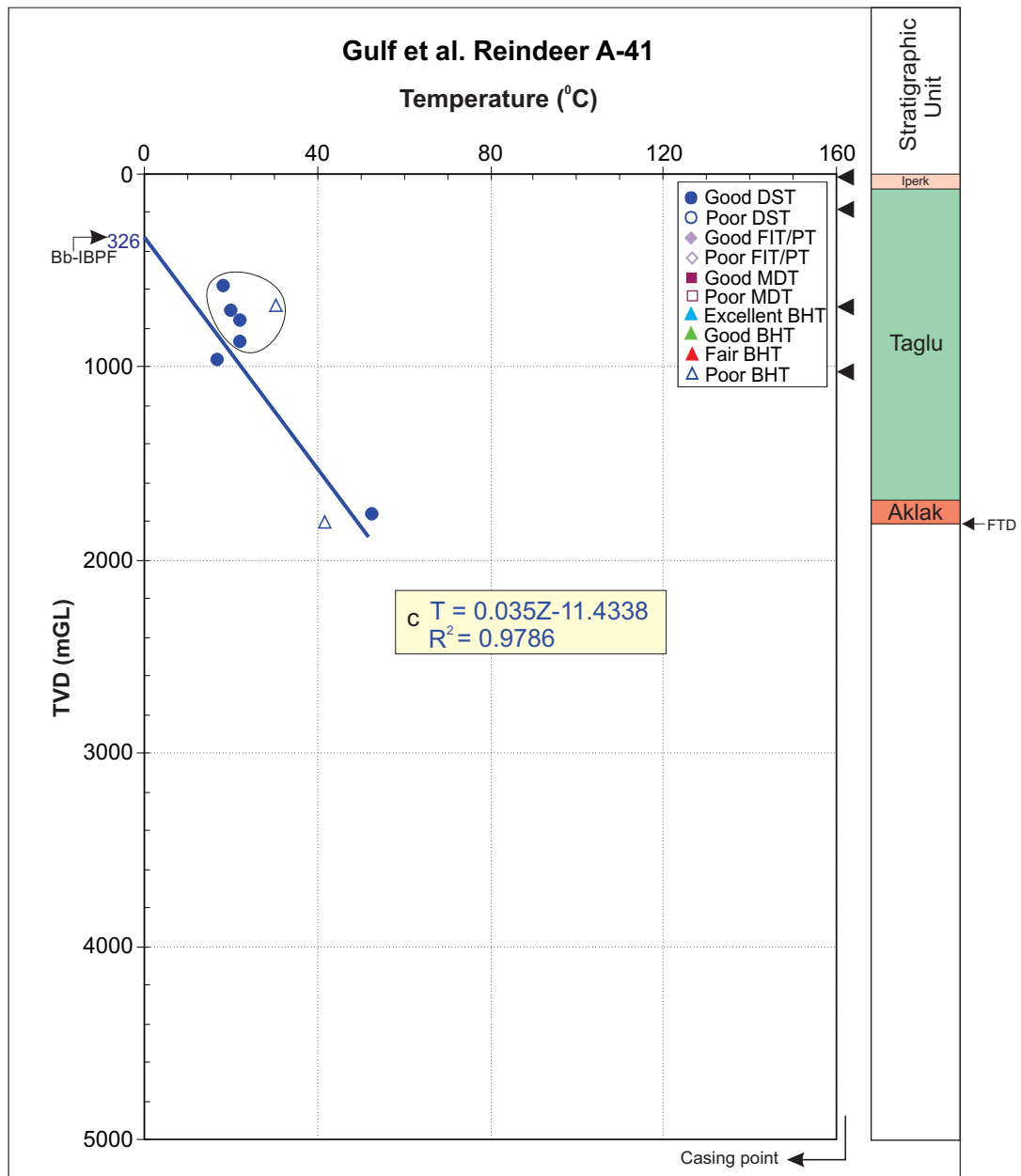
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
B-IBPF is determined using geophysical methods;  
C-IBPF is extrapolated from BHT and DST temperature data;  
D-IBPF is obtained from other information (e.g. well history report)  
a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 181. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Red Fox P-21 well; all BHT points are used for the calculation.



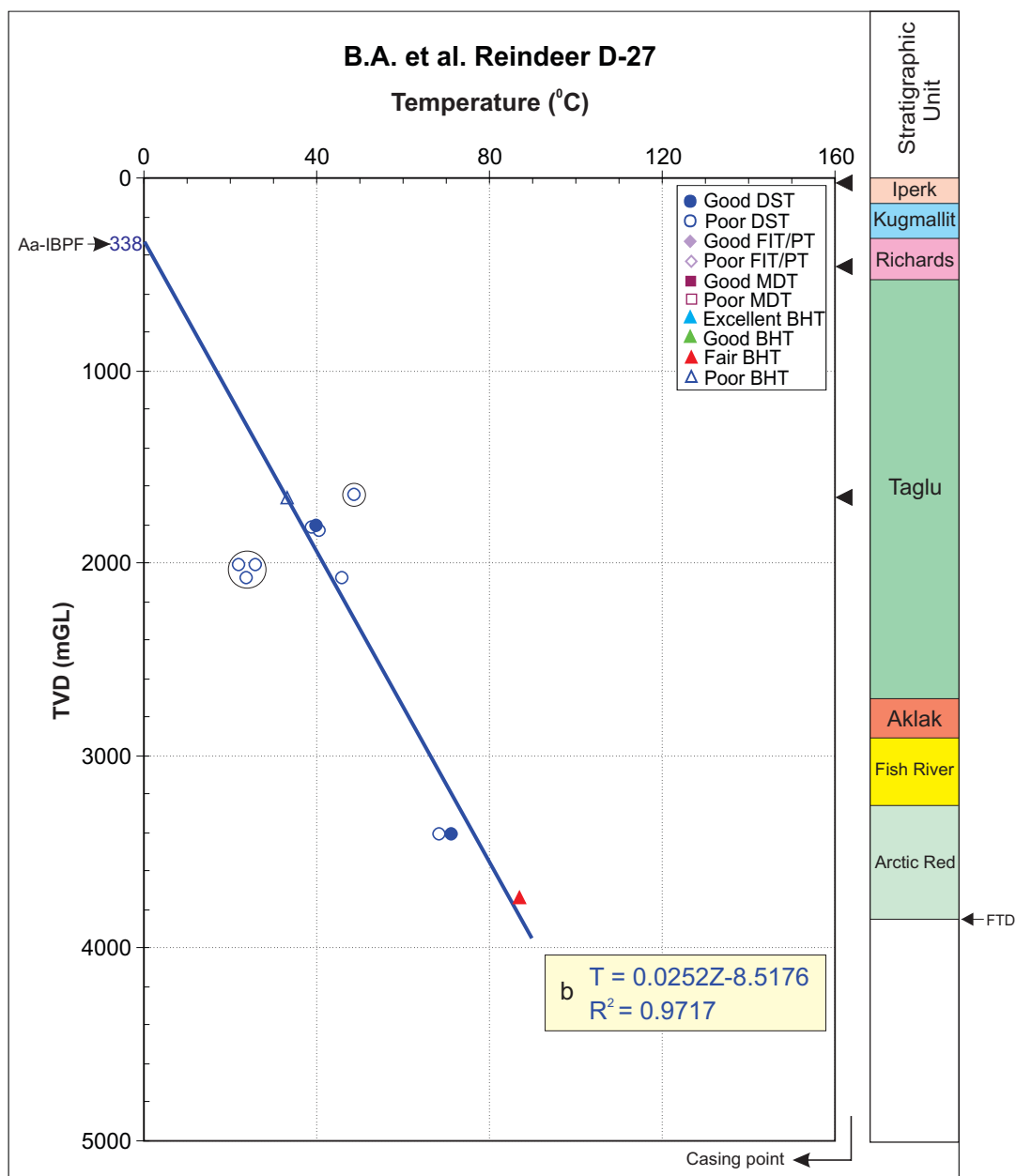
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 182. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Reindeer A-41 well; only two points (the circled points are excluded) are used for the calculation.



**Quality rank for IBPF determination**

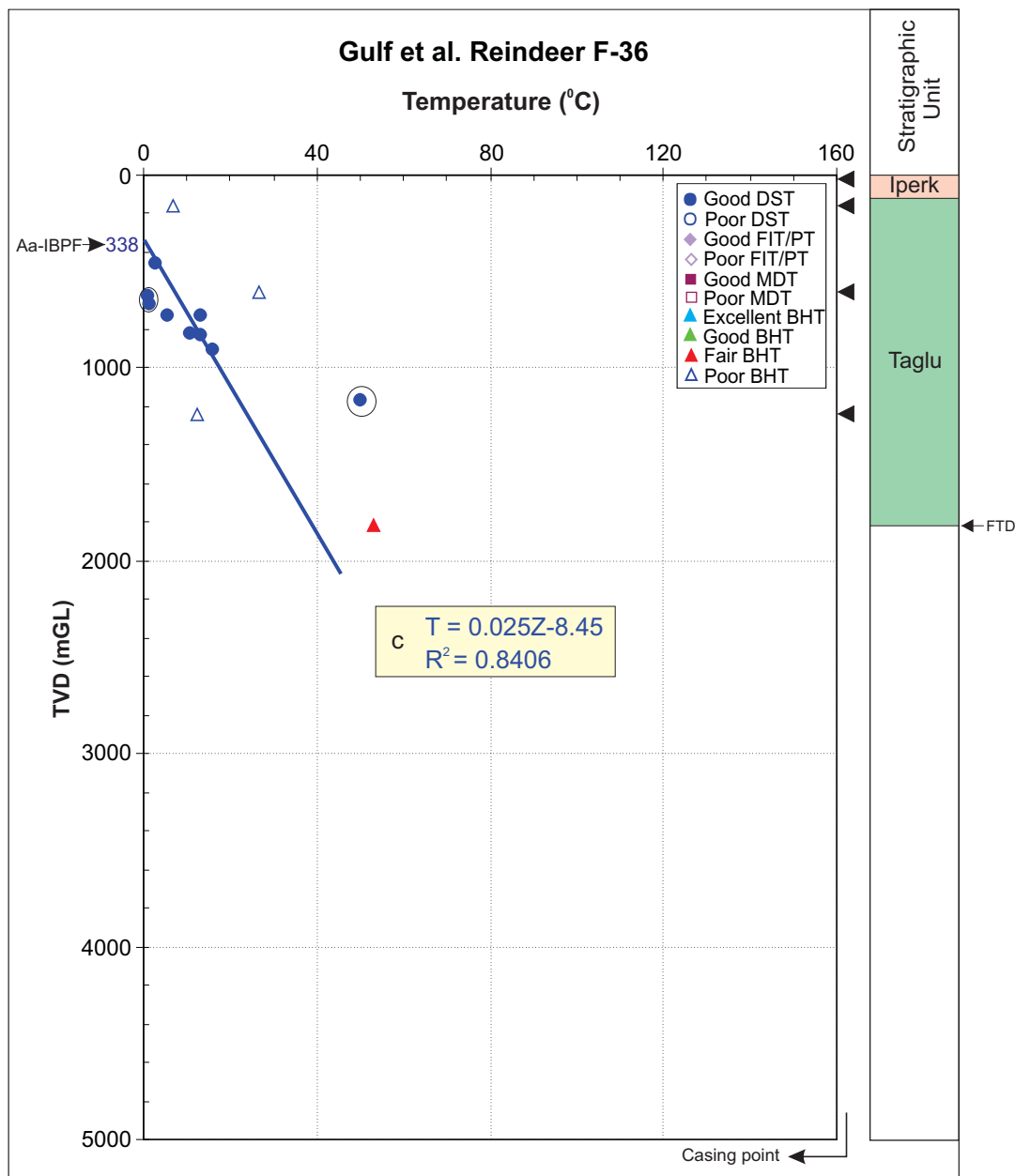
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 183. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Reindeer D-27 well; all DST (circled points excluded) and fair BHT points are used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 184. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Reindeer F-36 well; good DST (circled points excluded) points are used for the calculation.



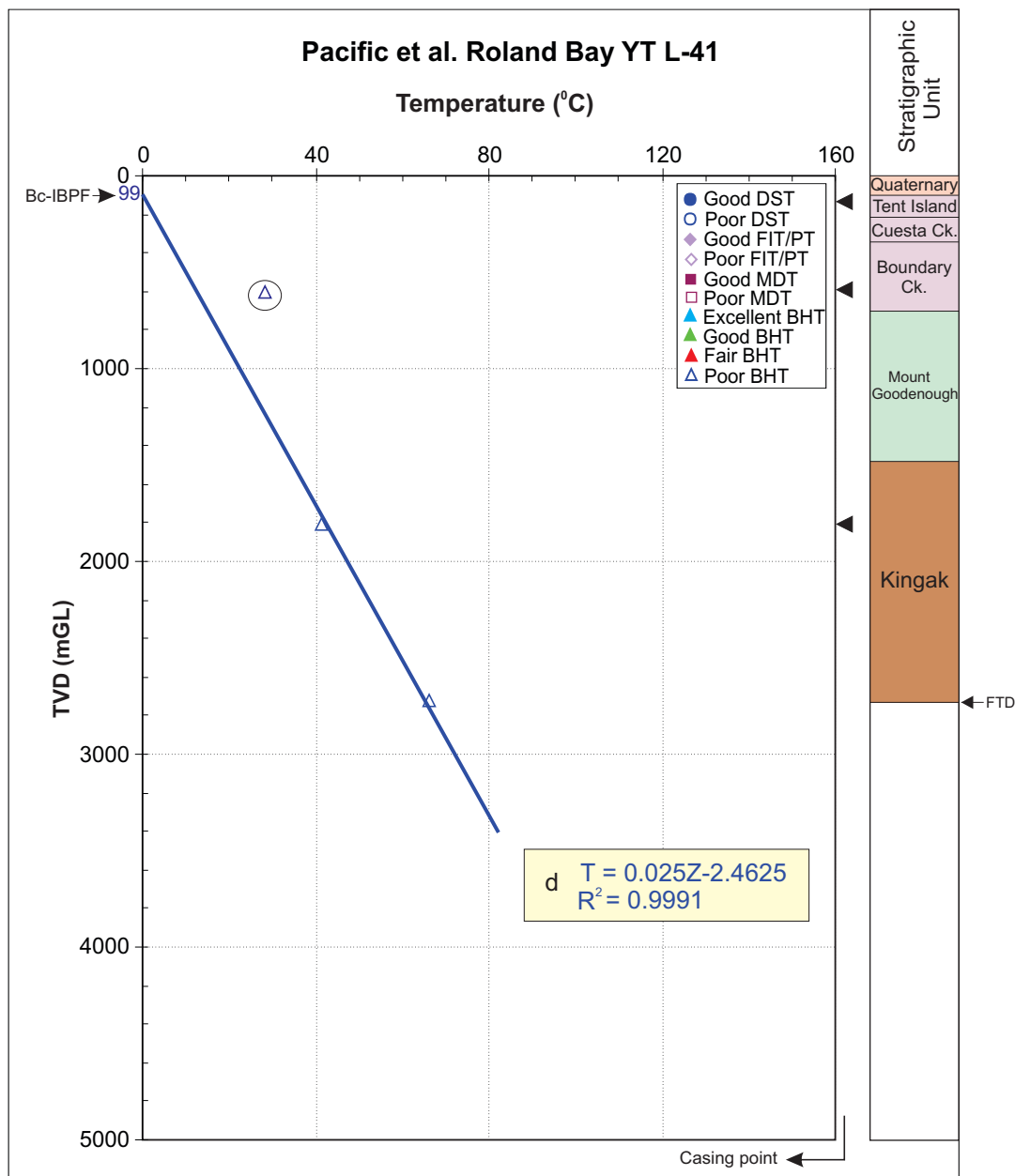
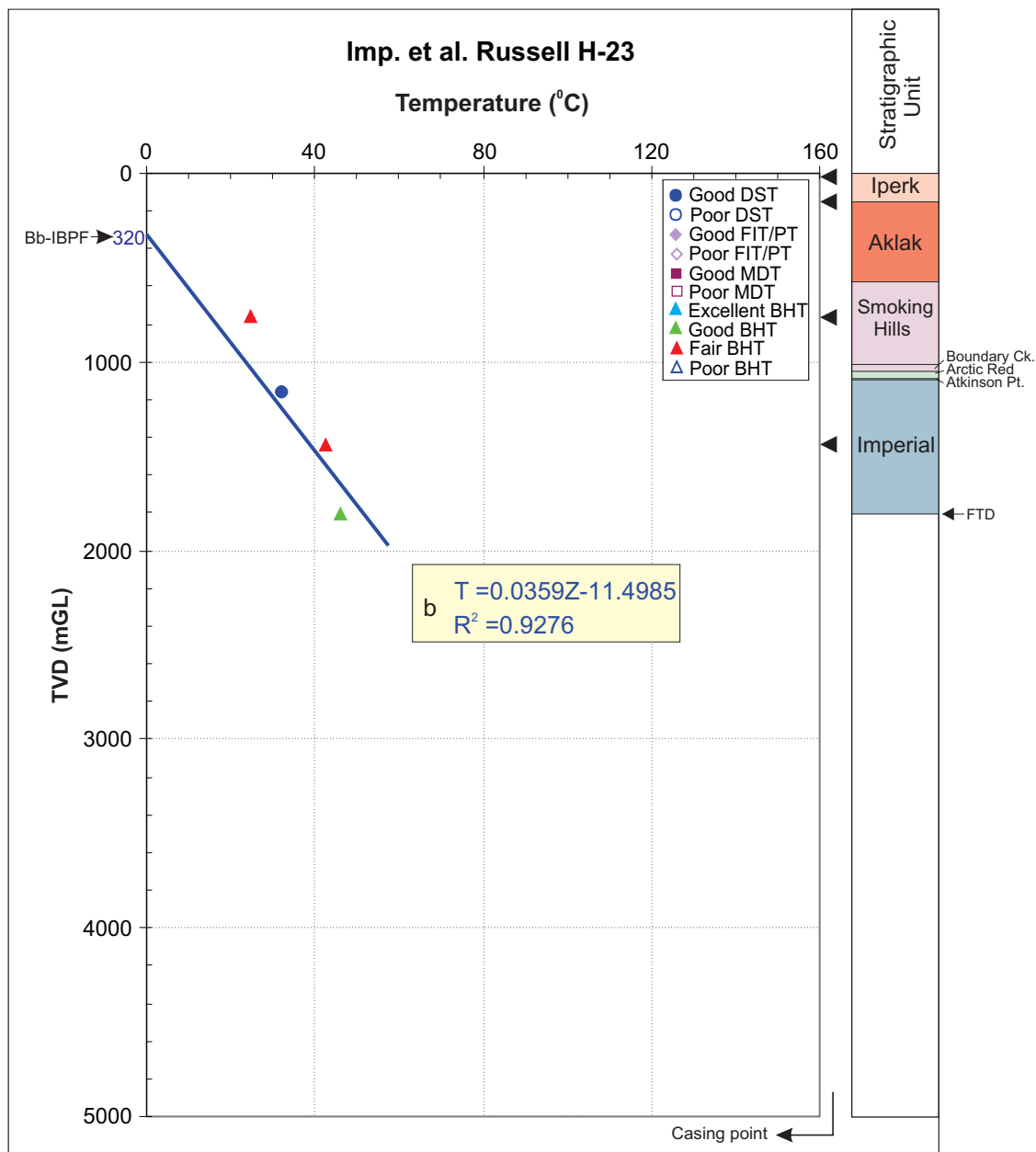


Figure 185. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Roland Bay YT L-41 well; all BHT points (circled one excluded) are used for the calculation.



**Quality rank for IBPF determination**

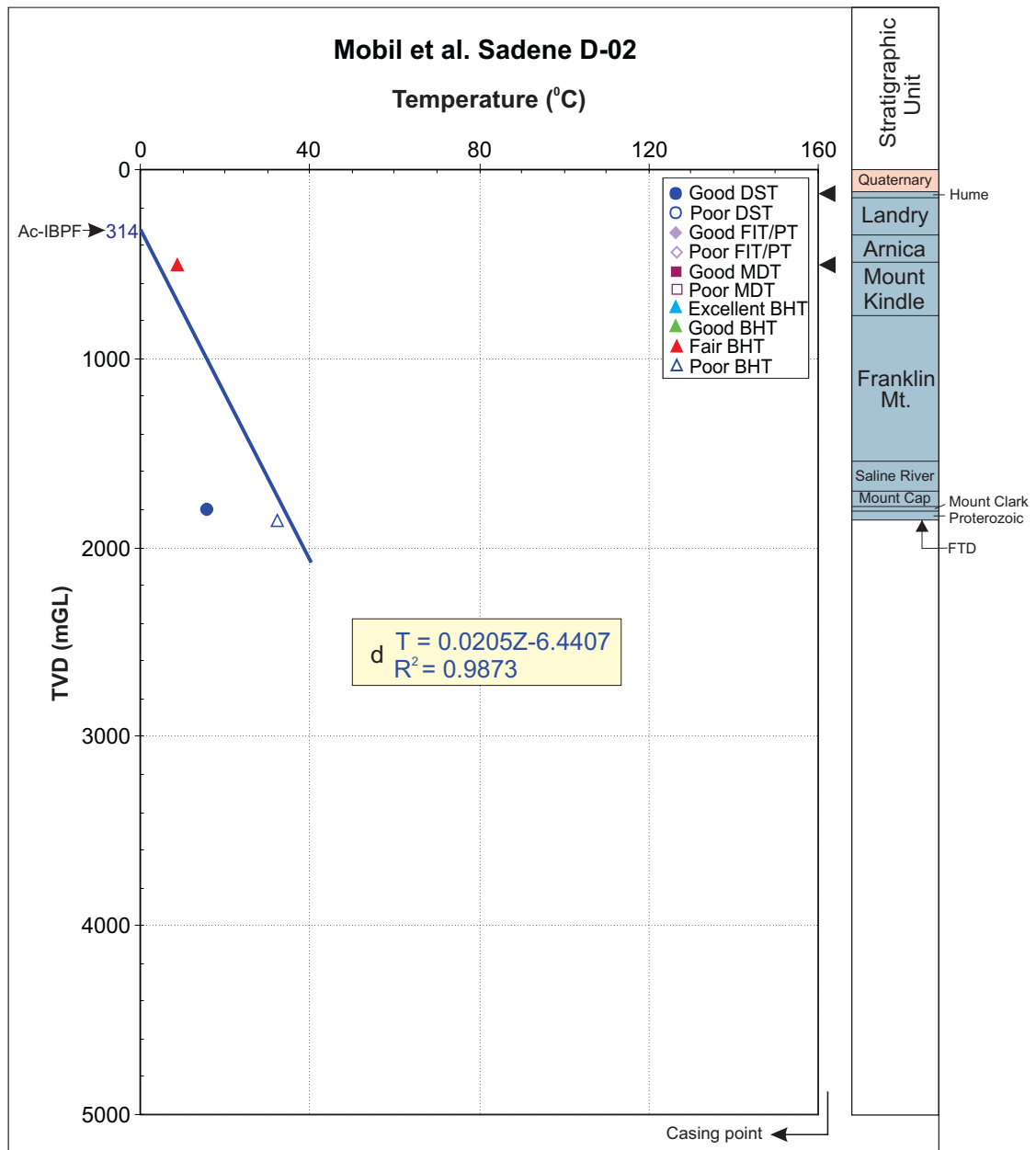
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 186. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Russell H-23 well; good DST, and all BHT points are used for the calculation.



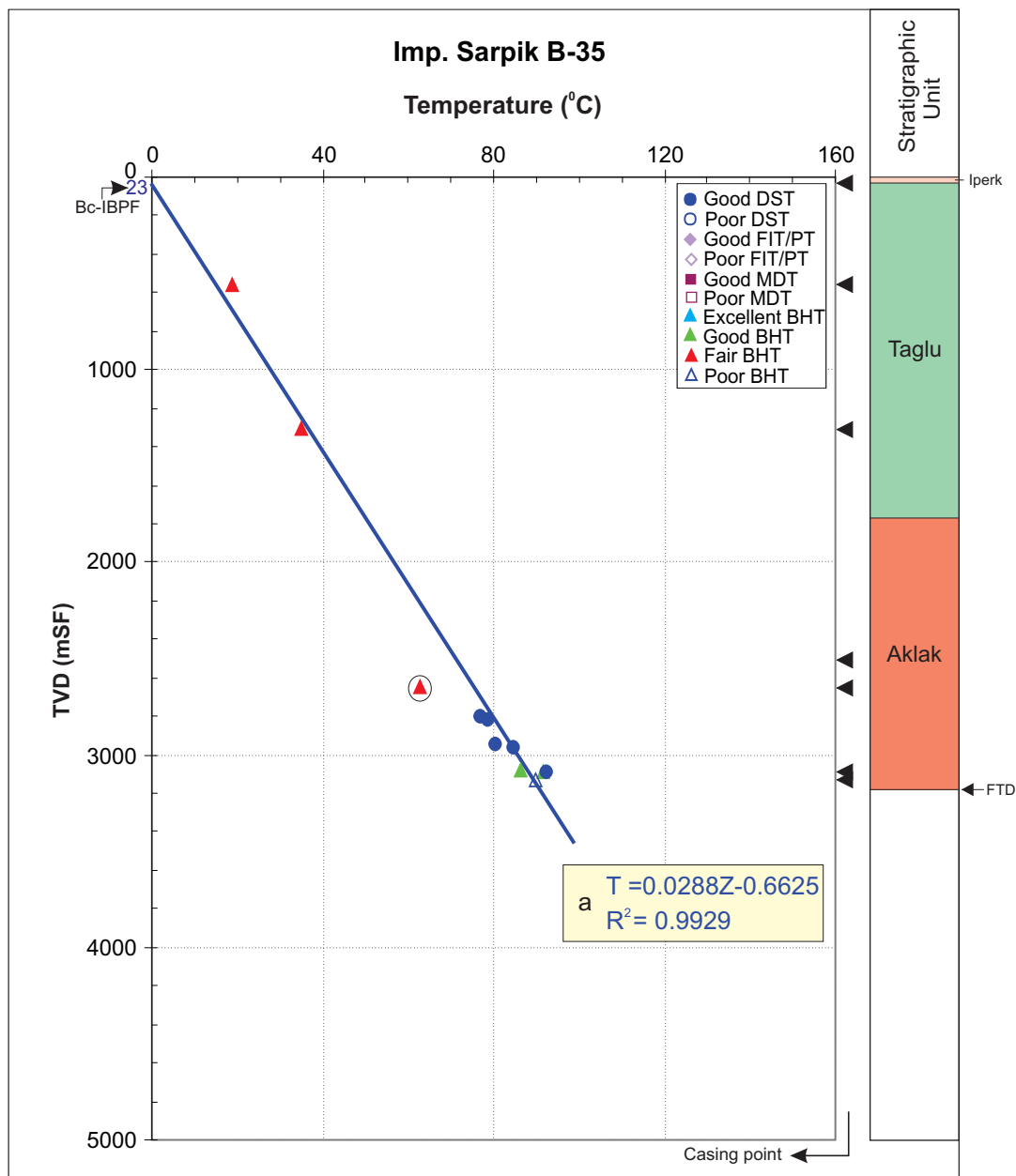
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 187. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Sadene D-02 well; the two BHT points are used for the calculation.



**Quality rank for IBPF determination**

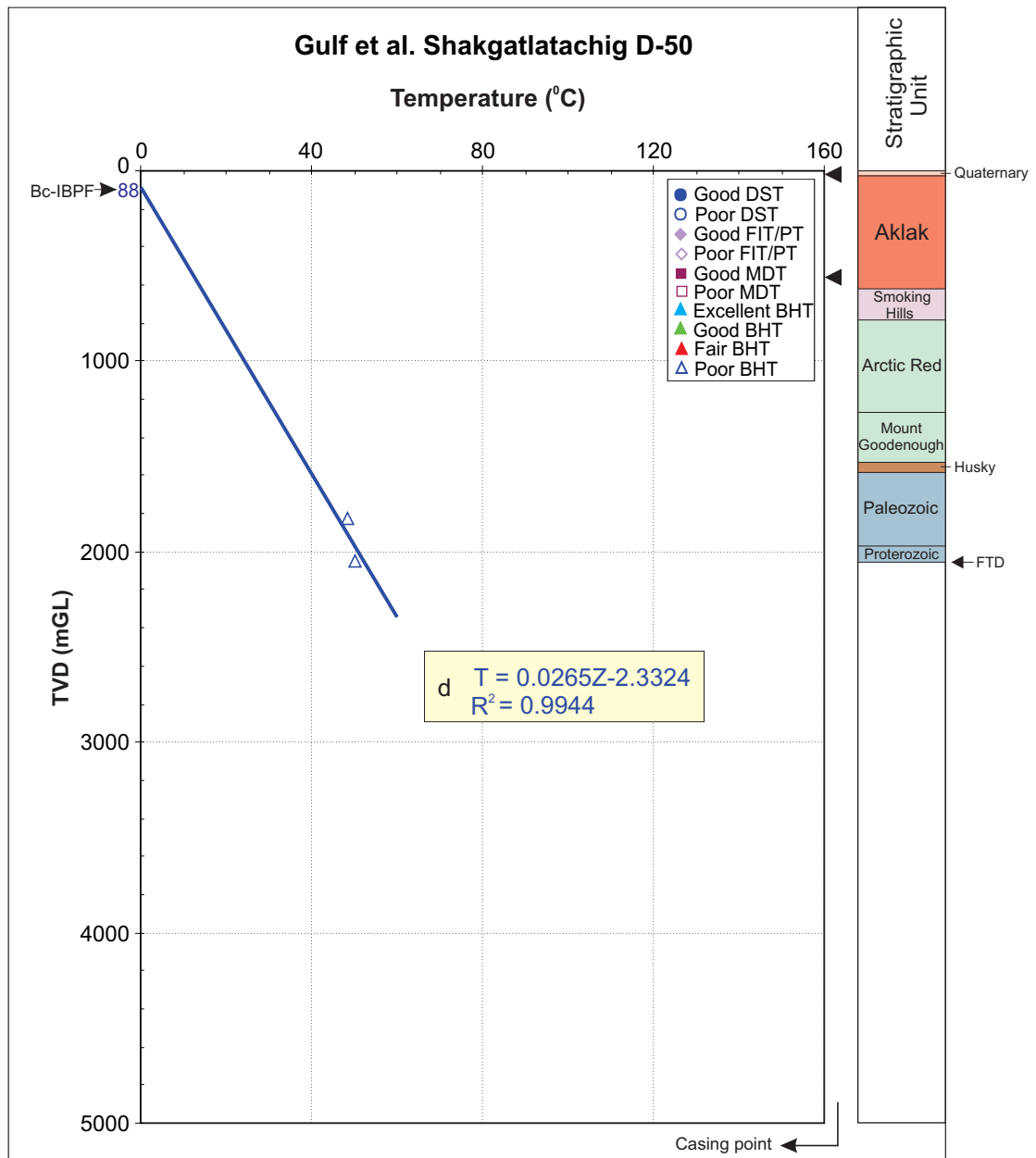
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 188. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Sarpik B-35 well; good DST, good and fair BHT points (circled one excluded) are used for the calculation.



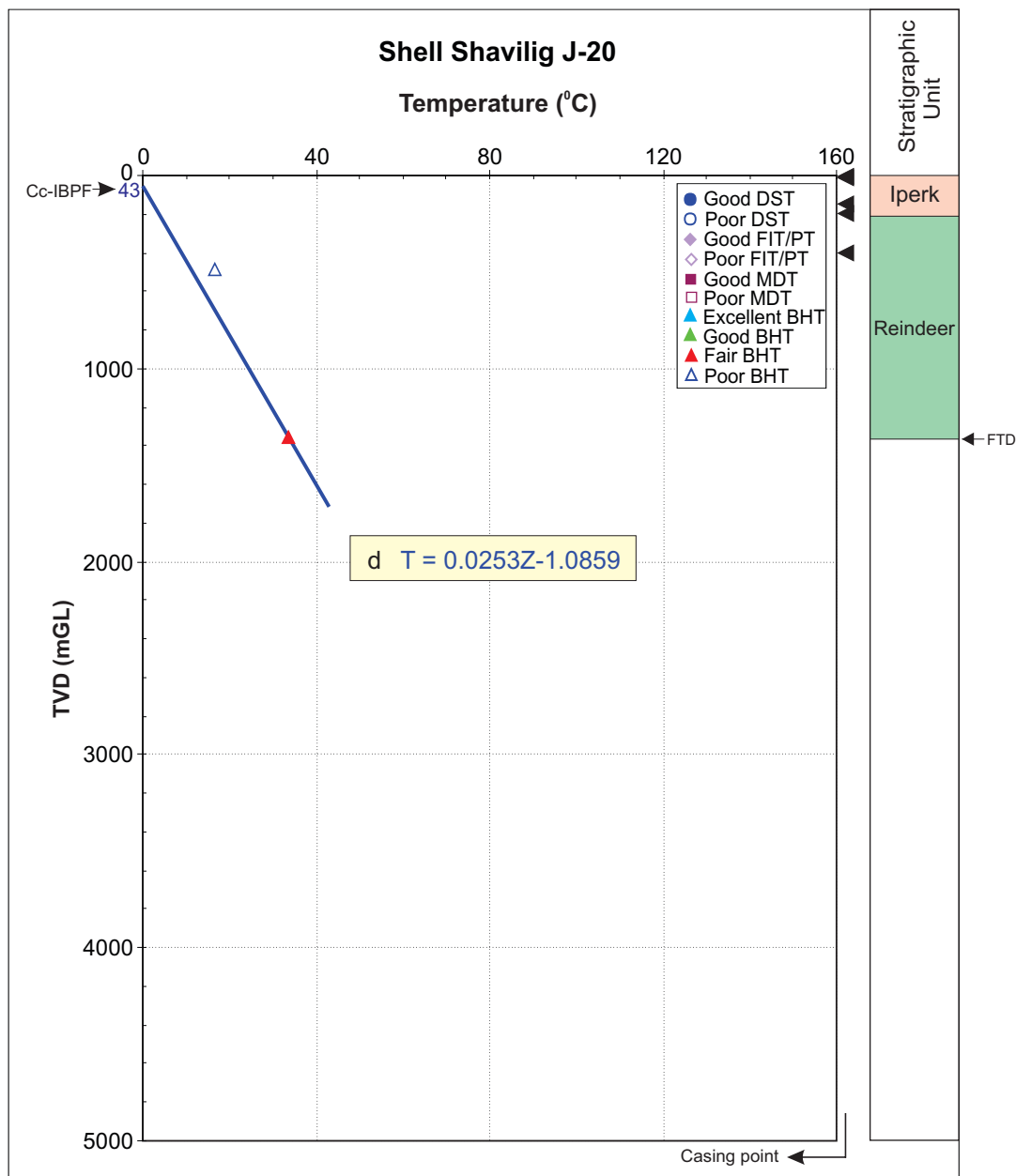
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

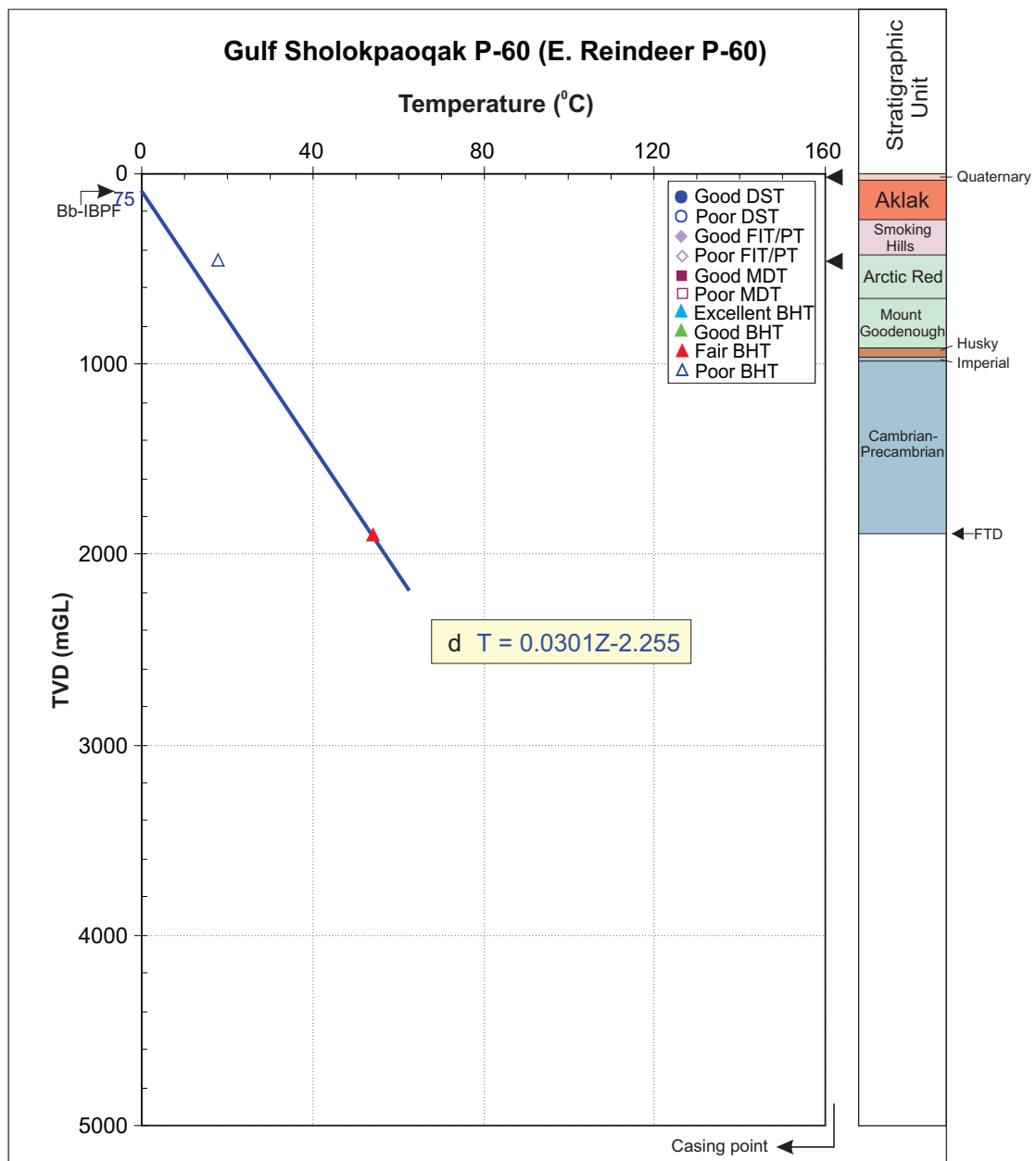
Figure 189. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for Shakgatlatlachig D-50 well; all poor BHT points are used for the calculation.



**Quality rank for IBPF determination**  
 A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**  
 a-excellent; b-good; c-fair; d-poor

Figure 190. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Shavilig J-20 well; only fair BHT point is used for the calculation.



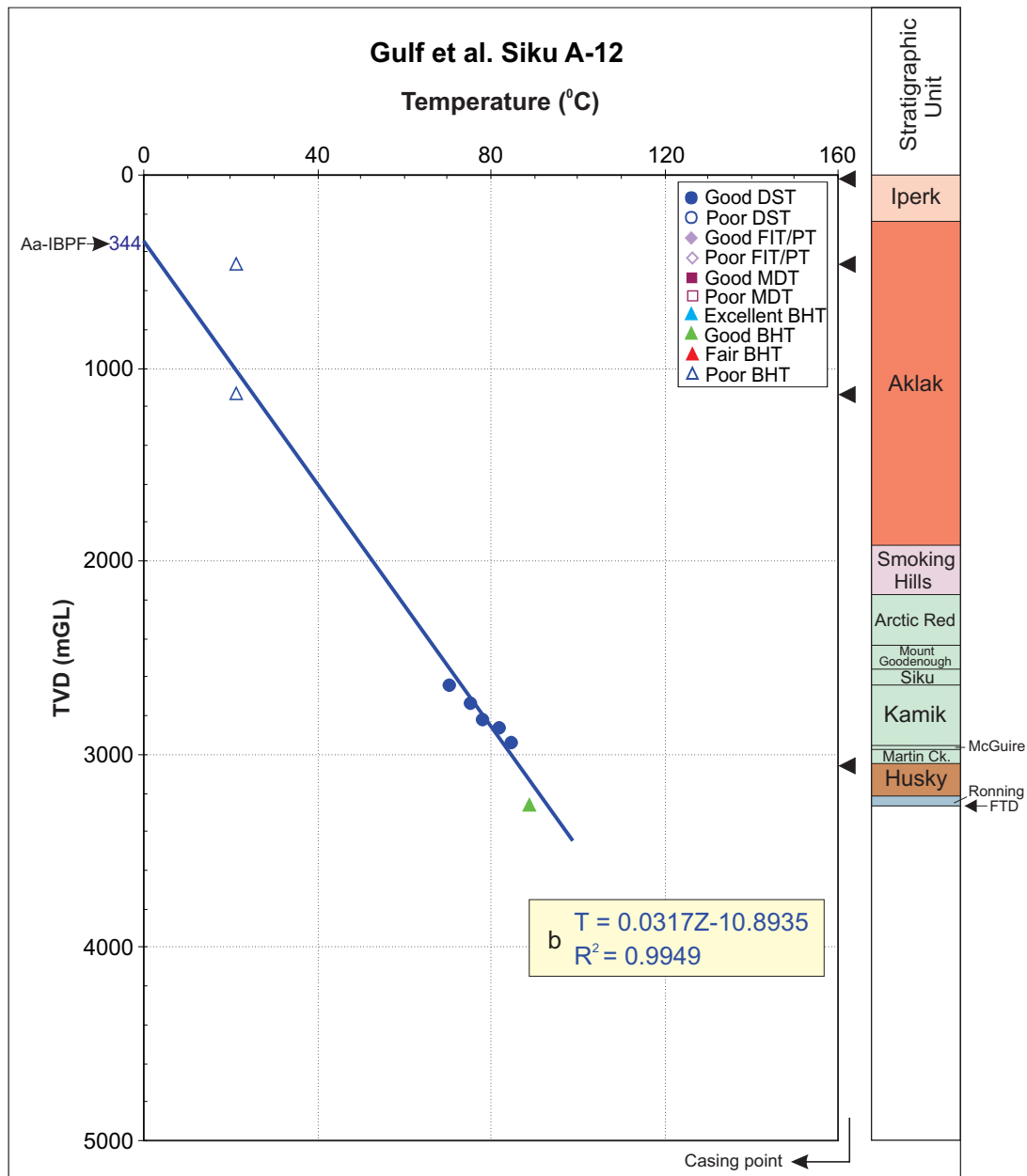
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 191. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Sholokpaoqak P-60 well; only fair BHT point is used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

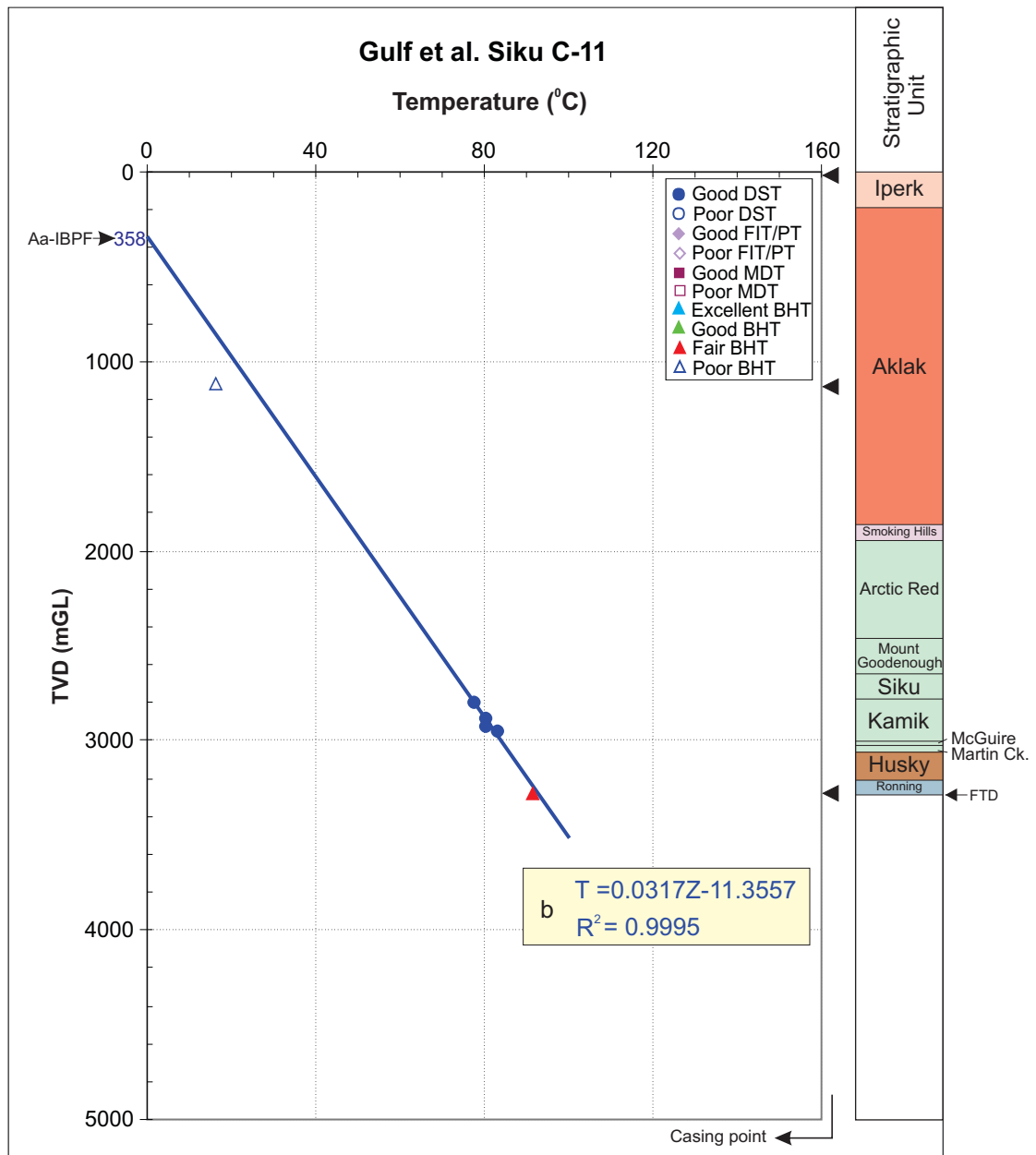
a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 192. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Siku A-12 well; all good DST and good BHT points are used for the calculation.





**Quality rank for IBPF determination**

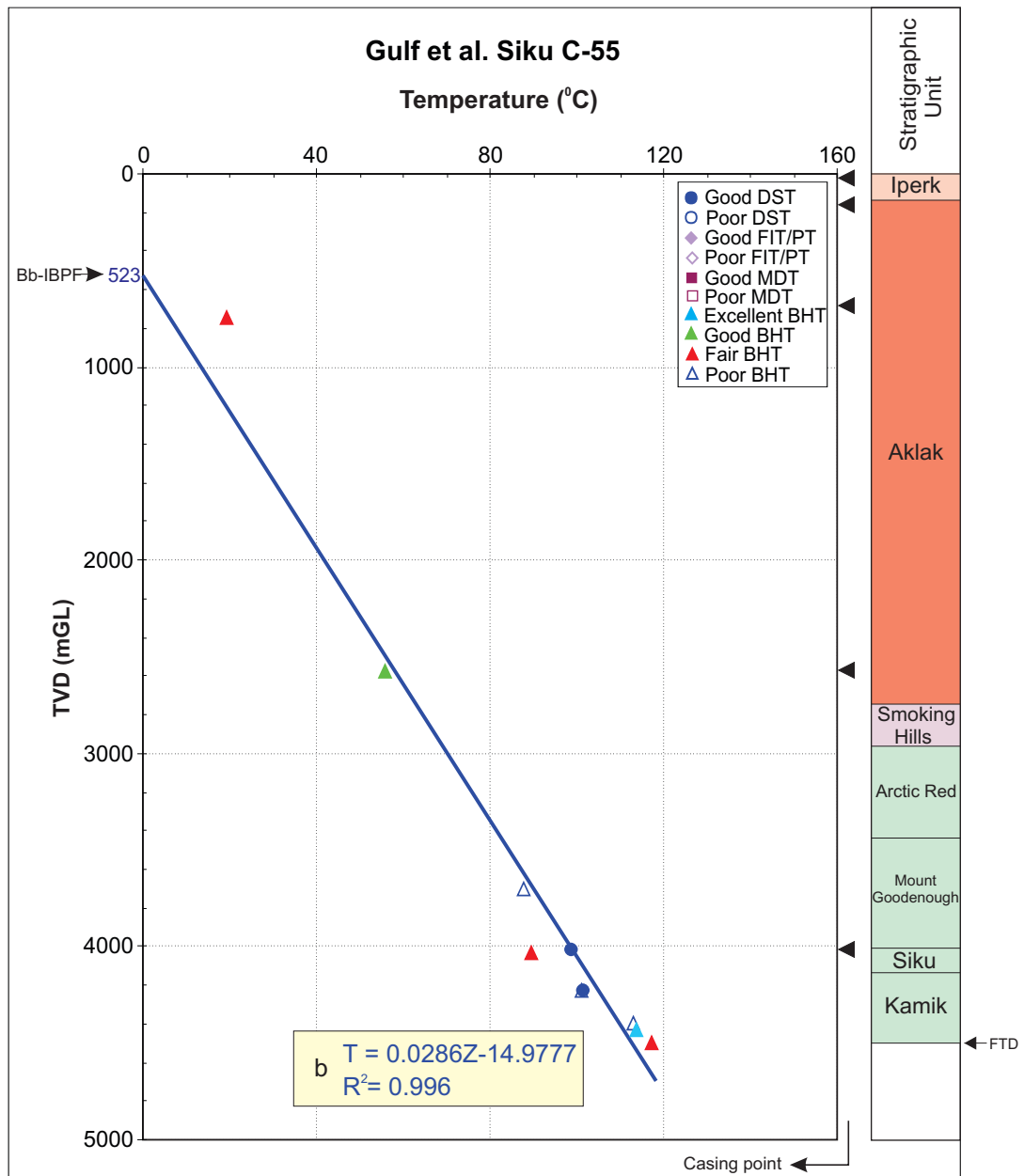
A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)

a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 193. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Siku C-11 well; good DST and fair BHT points are used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 194. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Siku C-55 well. All good DST, excellent and good BHT points are used for the calculation.

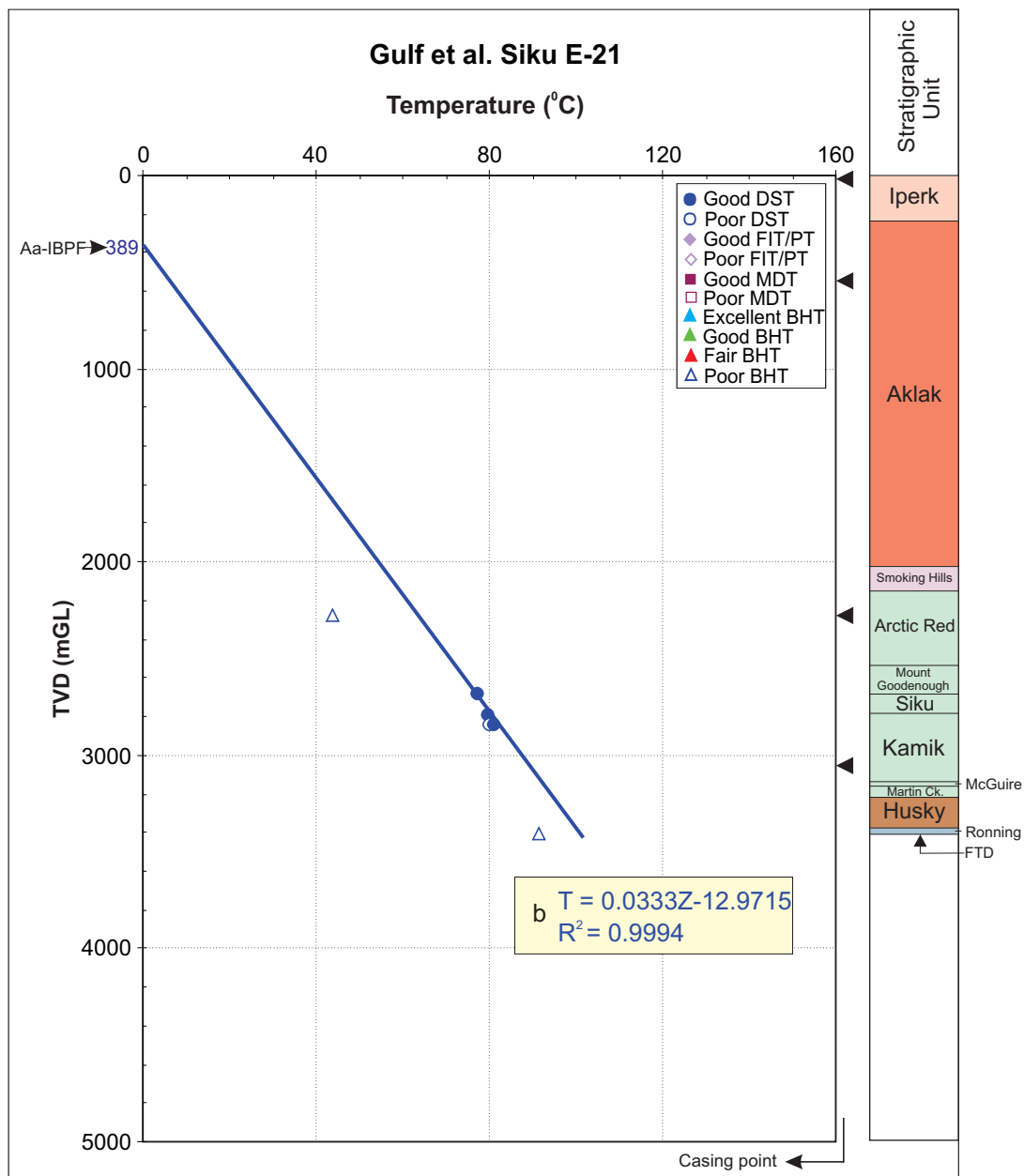
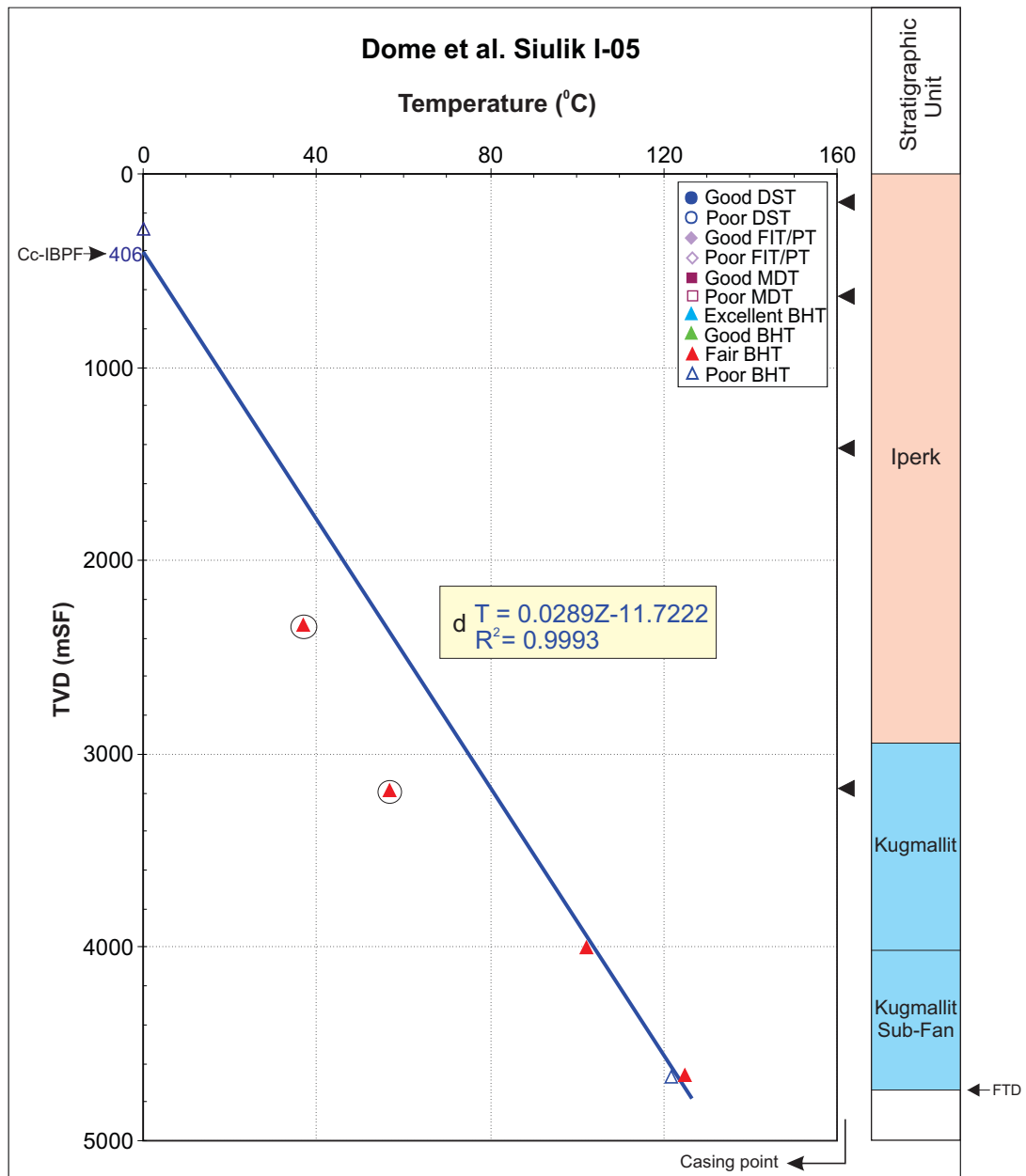


Figure 195. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Siku E-21 well. All DST points are used for the calculation.



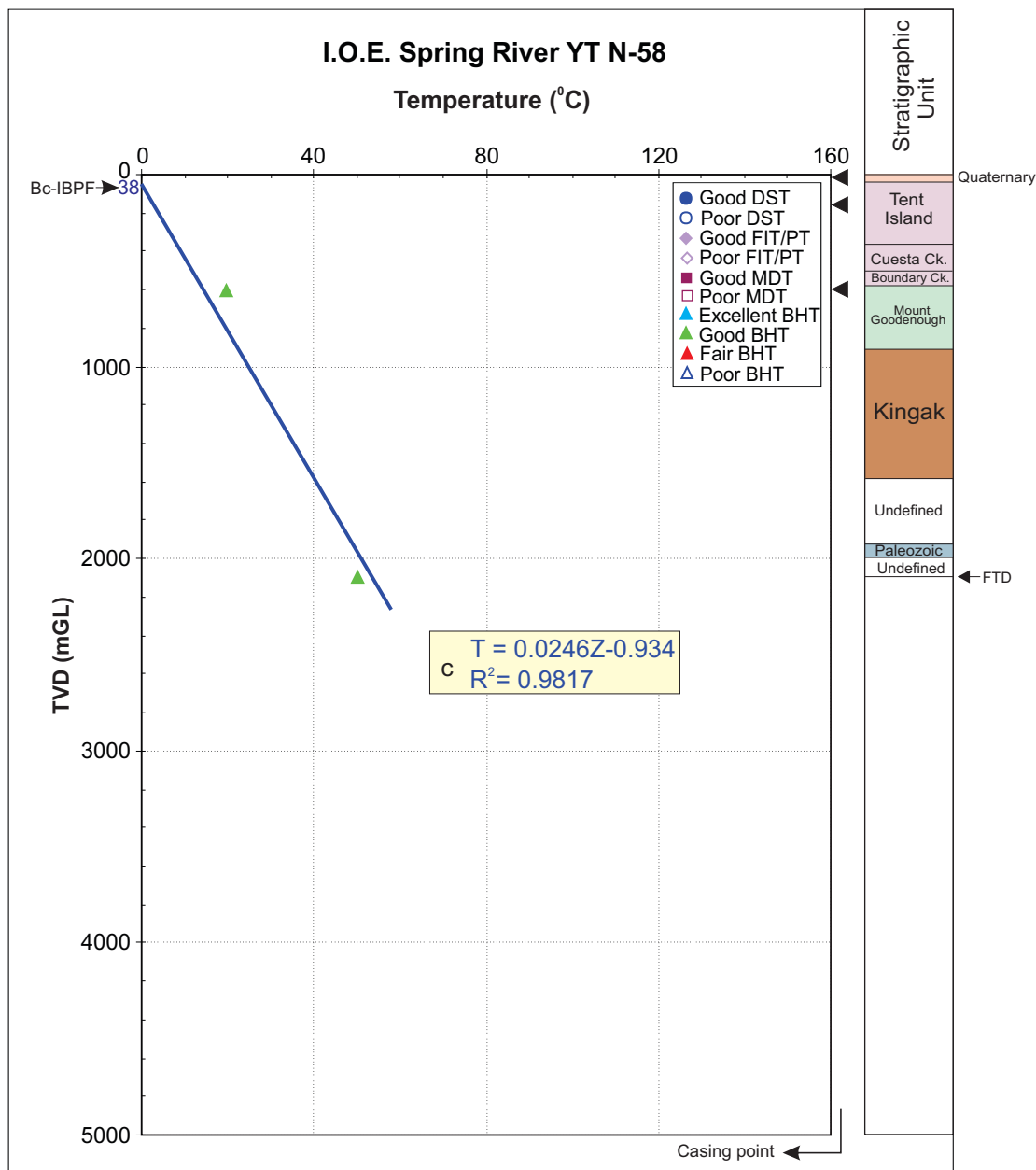
**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 196. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Siulik I-05 well; fair BHT points (except circled) and one poor BHT are used for the calculation.



**Quality rank for IBPF determination**

A-IBPF is determined using temperature survey method;  
 B-IBPF is determined using geophysical methods;  
 C-IBPF is extrapolated from BHT and DST temperature data;  
 D-IBPF is obtained from other information (e.g. well history report)  
 a-high reliable IBPF; b-medium reliable IBPF; c-low reliable IBPF

**Quality rank for geothermal gradient determination**

a-excellent; b-good; c-fair; d-poor

Figure 197. Average geothermal gradient is determined by applying a least-squares fit to the deep temperature data and a constrained regression tied to an independent permafrost base for the Spring River YT N-58 well; good BHT points are used for the calculation.