LIST OF TABLES

2.1: Major geological subdivisions and their metallic resources of Iran (Nezafati 2006).

3.1: Major (wt.%) and trace element (ppm) composition of sandstones.

3.2: Values of Pearson’s coefficient of correlation of major and trace elements of sandstones.

3.3: Modal data of detrital framework components of sandstones.

3.4: Major (wt.%) and trace element (ppm) composition of shales.

3.5: Values of Pearson’s coefficient of correlation of major and select trace elements of shale.

3.6: Major (wt.%) element data of limestone.

3.7: Trace Element (ppm) data of limestone.

4.1: Proximate Analysis of Coal- (Air dried basis).

4.2: Elemental composition of Coal (D.m.m.f: basis).

4.3: Combustion parameters of the coals of the study area.

4.4. Different types of sulfur present in coals of the Pabedana area.

4.5: Maceral analysis (vol%) of Pabedana Coal.

4.6: Major elements analytical data of Pabedana coal.

4.7: Values of Pearson’s coefficient of correlation of major elements of coals.

4.8: Trace elements analytical data of Pabedana coal (mg/L).

4.9: Correlation coefficients of trace elements and ash yields.

5.1: Comparison of different methods Jigs, dense-medium separators and hydro cyclones.

6.1: Chemical Characterisation of tailings water in Zarand coal washing plant.

6.2 Heavy metals chemistry of tailings water in Zarand coal washing plant.

6.3: Water quality parameters (mg/L) of Zarand coal washing plant.

6.4: Trace elements in various fractions of Zarand coal washing plant.

7.1: Physical characteristics and chemical composition of groundwater zone-A, groundwater zone-B and tailings pond water.

7.2: Correlation matrix of ionic pairs in groundwater zone-A.

7.3: Suitability of groundwater for drinking purposes as per the drinking water standards stipulated by WHO, US-EPA and BIS.

7.4: Quality assessment parameters of groundwater zone-A and groundwater zone-B.

8.1: Heavy metals concentration in groundwater zone-A, B and Tailings pond.