Table 19 Soil (Mineralogy)

	DATA OPTION 1: Airborne hyper-spectral data	**DATA OPTION 2: Satellite hyper-spectral e.g. Hyperion**
Spatial Dimensions		
Area to cover	Up to 1000 km ^{2}	7.7 km swath width
Mapping unit	0.5m – 5m	30 m (220 spectral bands)
Positional accuracy	Dependent on geo-referencing process	Dependent on geo-referencing process
Temporal Dimensions		
When	User defined	Landsat + 1 minute
How often	User defined (can be < 1 day)	16 days
Variable to map	Soil mineral fractional content	Soil mineral fractional content
Environmental Restrictions	Cloud cover Vegetation cover	Cloud cover Vegetation cover
Processing technique **(Output)**	Feature detection (Mineralogy type map and target features)	Feature detection (Mineralogy type map and target features)
Resources – Hardware and Software	PC Image processing software	PC Image processing software
Resource – Personnel	Trained in hyper-spectral data processing. Knowledge of area to be mapped	Trained in hyper-spectral data processing Knowledge of area to be mapped
References: Note these are some example references	Ben-Dor et al. (2002) Green et al. (1998)	Kruse et al. (2003)

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