

UNDERGROUND WATER SURVEY

of

SECTIONS 16 and 17. HUNDRED OF CAMPOONA

The property of Mr. S.D. Harris, Kielpa.

Accompanied by Mr. Harris, Jnr., a survey of the above property was made on 21st May, 1954.

Location:

The property is situated approximately 10 miles North-East of Kielpa, and access is gained by following the main road from Cleve to Darke Peak to a cross-roads 4 miles East of Kielpa, and thence proceeding East and North-East for about 4 miles.

Topography, Climate, etc.:

The property is located near the western limit of the Cleve hills, and consists mainly of sandy flats with a few stony ridges. The annual rainfall approximates 15 inches falling mainly in the winter-spring period.

Water Requirements:

Water is required for the watering of sheep on Section 17. A supply of 500 to 1,000 gallons per day would suffice.

Existing Water Supplies:

There are no existing water supplies on Section 17, but there is a bore on the South boundary of Section 16, details being: Depth 114 ft., supply around 500 gallons per day, and quality not known, but considered suitable for sheep. Mr. Harris was advised to submit a water sample for analysis by the Mines Department before equipping the bore.

The sandy nature of most of the property makes dams a doubtful proposition. There may be a few places where dams could be considered, but these should be carefully tested for clay by hand-boring before any excavating is undertaken.

General Geology, etc.:

The ridges and higher ground in the Eastern half of both Sections 16 and 17 comprise hard basement rocks - gneisses and gneissic granites to the East, flanked by haematite quartzites

with considerable barren quartz reefs, and some haematite to the West. The general regional trend is North-South, with varying dip. There is some evidence of folding.

Underground Water Prospects:

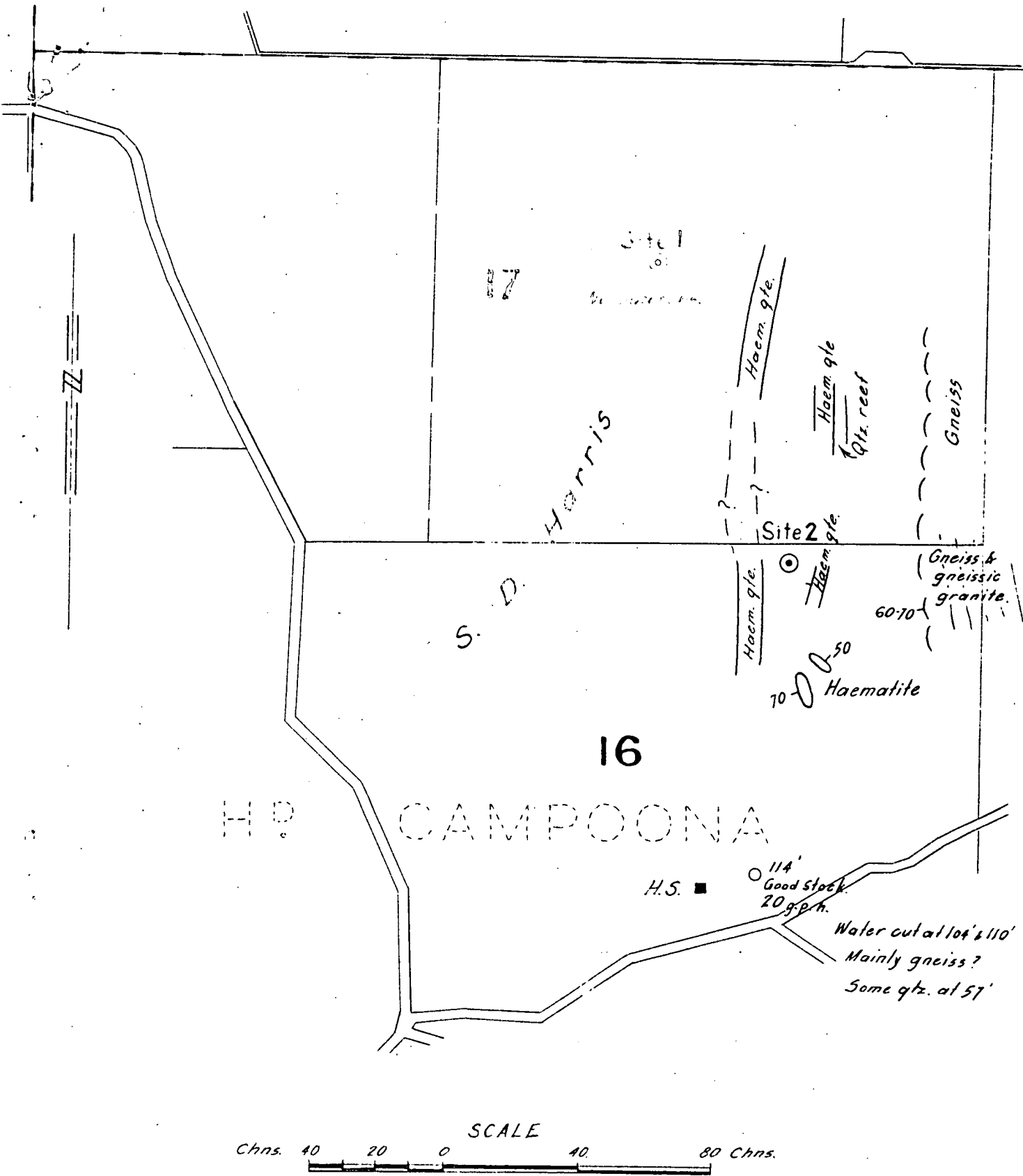
Assuming satisfactory quality water was cut in the bore on Section 16, there are reasonable prospects of obtaining similar or better results in Section 17. The rocks in the Eastern half of the Section are mainly too hard for economic drilling, and a site (Site 1) was selected in a low area West of the known hard rock occurrences. Geology here is obscured by sand and soil, but it is hoped softer drilling will be met. Depth to water is unknown, but could be 150 ft. or more. Casing requirements are also unknown.

A second site (Site 2) was indicated to Mr. Harris in a hollow between ridges of hard haematite quartzites. This site is more risky, depending for success on the hope that softer strata exists in this soil-covered hollow.

Recommendations:

Sink a bore to 150-200 ft. on Site No. 1, drilling on Site No. 2 to be governed by the results of drilling on Site 1.


DEPUTY GOVERNMENT GEOLOGIST



To accompany report by T. A. Barnes.

S.A. DEPARTMENT OF MINES

Approved	Field	Dist.	UNDERGROUND WATER SURVEY	D.M.	Scale 40 ch. to 1 in.
		Tec. M.B.L.	Hd. Campoona, Secs. 16 & 17.	Reg.	S 924
		C. A. R.R.	S. D. Harris.		Date 9-6-54. Dmll
Director	C.A.	Engd.			