PRESTON EAST DOME OPTION

Sothman township

A geological field party from the Ontario Department of Mines, under the direction of E. M. Abraham, mapped Sothman township during the summer of 1951. The writer visited the Preston East Dome property on September 5th, 1951, accompanied by E. M. Abraham and two Dominion Gulf geologists, R. Pountney and W. Rainboth. R. Edleston was working on the claims.

PROPERTY

The property consists of a group of 22 claims in Sothman township in the vicinity of the 5 milepost on the west boundary, and two contiguous claims in Nursey township. These claims were previously held by Buffalo Ankerite Mines Ltd. (see report by the writer on Sothman township, September 1947). The claims reverted to the Crown and were re-staked by R. Edleston, who has optioned them to Preston East Dome Mines Ltd.

ACCESS

Sothman township is located in the Sudbury Mining Division, approximately forty miles by air south of Timmins and twenty-five miles west of Matachewan. There are several canoe routes into the township which were described by T. L. Gledhill in his "Report on the Grassy River Area" Vol. XXXV Part 6, Ontario Department of Mines Annual Report, 1926. Since the township can be reached readily by plane from the base at South Porcupine, little use is being made of the canoe routes.

GENERAL GEOLOGY

Sothman is one of a group of nine townships described by T. L. Gledhill in the above-mentioned report. In general,

rock outcrops are not numerous. Knolls of sand and gravel and land-locked lakes with steep banks give the topography a "kame and kettle" appearance.

On map 31j, which accompanies Gledhill's report, the east half of Sothman township is shown to be underlain by rhyolite flows and acid pyroclastics of Keewatin age. In the west half of the township the underlying rocks are more normal Keewatin types (predominantly basic flows). Acid and basic intrusives have been found cutting the Keewatin flows, and occurrences of later diabase have been observed. Cobalt conglomerate, not shown on Gledhill's map, occur as ridges in the northwest corner of the township.

PROSPECTING AND DEVELOPMENT WORK

Exploration by Preston East Dome has been concentrated on a gossan zone in the northwest corner of claim S.55337 (formerly T.R.S.8848) where trenching had been done by the previous owners. In a geological report submitted by Buffalo Ankerite Gold Mines, Ltd. in 1947 to the Department of Mines for assessment work credit this showing is described by W. E. Clarke as follows:

"A series of trenches in the north-west corner of claim T.R.S.8848 were dug on narrow east-west striking quartz veins that showed heavy galena, sphalerite, chalcopyrite and pyrite mineralization. Gold values here were low, but silver values up to 3.16 ozs. per ton were obtained."

The main north-south trench put down by Buffalo-Ankerite, which lies between the trail and the west boundary of the claim, has been extended 40 feet to the north to give it an overall length

of 150 feet. A second north-south trench about 60 feet in length has been opened up 120 feet to the north and slightly east of the main trench. These trenches expose rusty-weathering, blocky jointed, dacitic agglomerate, the gossan apparently resulting from the oxidation of disseminated pyrite.

Traces of sphalerite and some nodular pyrite can be seen in the south end of the main trench. 60 feet to the north where the trench is notched on the west side a narrow zone of shearing crosses the trench striking S 80° E and dipping 80° S. Massive pyrite and sphalerite stringers can be seen in the shear. In the east arm of the trench incipient shearing can be seen on some of the E-W joint planes which are occasionally plated with sphalerite.

In the north half of the trench there are two very narrow irregular veins about 20 feet apart which are approximately parallel to the shearing. In the north vein massive pyrite, galena, sphalerite and traces of pyrrhotite, associated with calcite and quartz, were observed. The south vein contains stringers of sphalerite and a little galena. In both cases there is a dissemination and plating of sphalerite in the adjacent wallrocks. All the rock exposed by the two trenches contains a dissemination of fine pyrite.

Surface sampling is difficult on account of the rusty and fractured nature of the rock. A diamond drill is being brought in to drill an angle hole north from the south end of the main trench to determine whether mineable widths of lead-zinc sulphide mineralization exist.

Small, poorly exposed, scattered outcrops of carbonatized diorite can be seen between the main trench and the west boundary of the claim (S.55337) which suggest a dike of diorite trending north-south. To the west and to the south of the No. 4 post there are outcrops of carbonatized fine grained diorite. 75 feet to the east of the No. 4 post the north claim line crosses a small outcrop, trending north-south, of very fine grained chilled diorite. 50 feet farther east there is a parallel outcrop on the east side of which the rock has become a very coarse grained hornblendite. A graduation from diorite to hornblendite was seen in the core from an old diamond drill hole (No. 4) put down by Buffalo Ankerite. The next outcrop to the east on the north claim line is dacitic agglomerate, with shearing striking east-west and dipping steeply to the south.

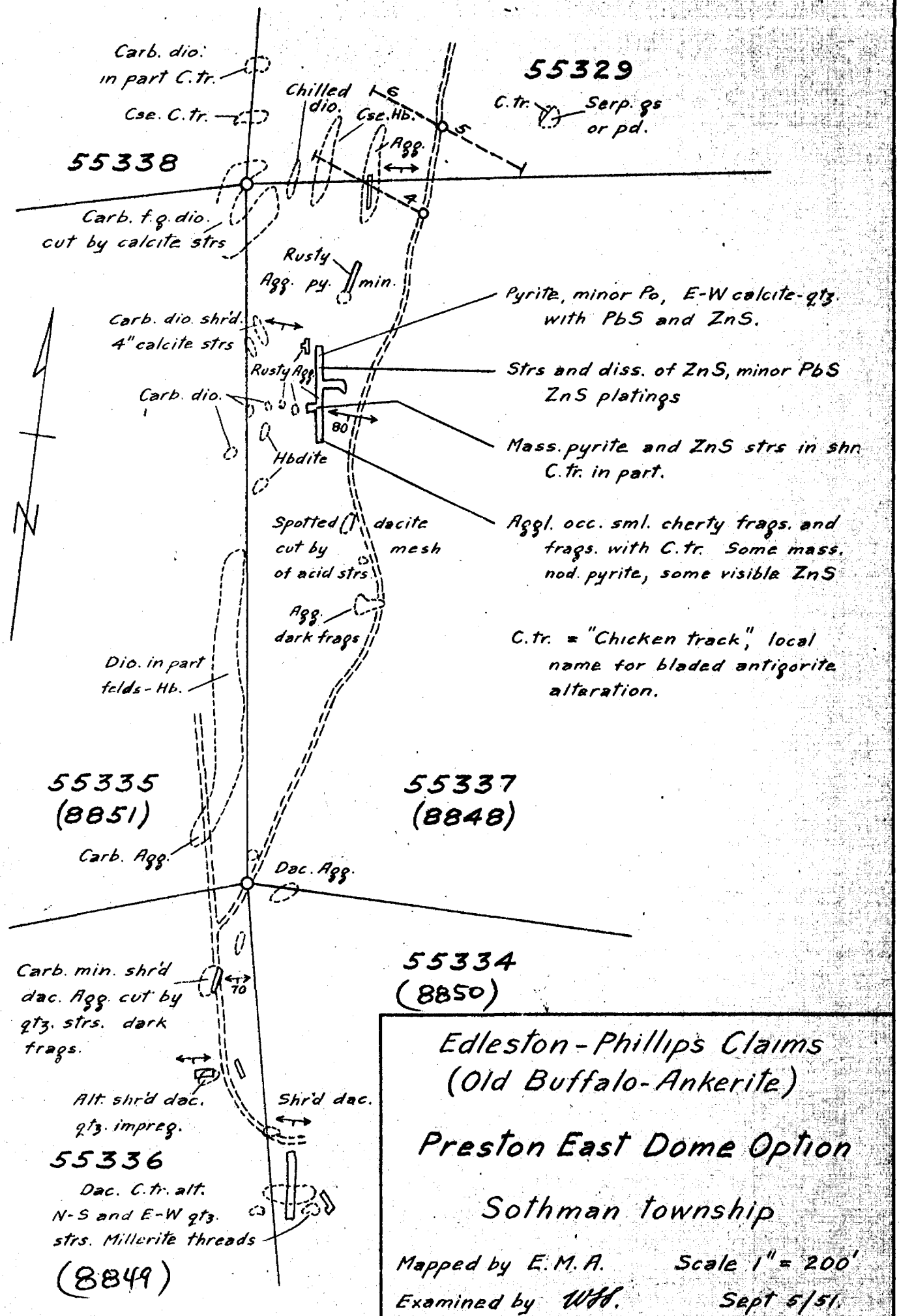
The showings and adjacent geology were mapped by E. M. Abraham on the scale of 1" = 200'. A copy of his map accompanies this report.

W. S. Savage

W. S. Savage,
Resident Geologist.

September 27th, 1951.

Copy to M.E. Hurst. Oct 1/51



Edleston - Phillips Claims
(Old Buffalo-Ankerite)

Preston East Dome Option

Sothman township

Mapped by E.M.A. Scale 1" = 200'

Examined by W.H. Sept 5/51.