DIAMOND DRILL HOLE AT MOUNT SHOOBRIDGE, N.T.

INTRODUCTION

The Mt. Shoobridge diamond drill hole was drilled by Mines Branch, Northern Territory Administration, at the request of United Uranium N. L. Previously United Uranium had undertaken a programme of wagon drilling.

One drill hole (W.D.H.15; grid 1900'S) intersected mineralization giving values of 5.13% Pb over 15 feet. The diamond drill hole was collared 150 feet due west of the wagon drill hole and drilled in the 90° direction at a depression of 55°. At a depth of 400 feet the diamond drill hole was about 240 feet directly below the mineralization intersection. No lead minerals were seen in the cores.

LOCATION AND ACCESS

The Mt. Shoobridge lead prospect can be reached by following a bulldozed track for one and a quarter miles to the south-west from its turnoff on the Stuart Highway, a short distance west of the 105-mile peg.

GEOLOGY

The United Uranium lead prospect at Mt. Shoobridge occurs in metasediments assigned by the Bureau of Mineral Resources to the Golden Dyke Formation. Surface exposures suggest that the rocks in the immediate vicinity of the prospect are largely siltstones and phyllites.

A number of tin and lead workings occur in the area; quite a few of these are aligned along the same lineament as the United Uranium lead prospect. The lineament is the southern extremity of a large north-south trending fracture known as the Mt. Shoobridge fault. Near the lead prospect the lineament appears as a low hill of quartz boulders.

Patterson (1958) who did a detailed study of the Mt. Shoobridge area, briefly described the lead prospect under consideration stating: "The other (show) consists of sporadic lead mineralization in the quartz blow along which the tin-bearing greisen occurs. There are a few small gossanous patches along the otherwise barren quartz outcrop. These gave a positive KI test. On the eastern margin of the quartz blow about ½ mile south of the tin workings a shallow pit has been sunk on cerrusite, pyromorphite and anglesite. A yellowish mineral observed in a vug is probably wulfenite. Barytes occurs along with the lead and the high S.G. of this

mineral may have made this prospect appear more hopeful to its discoverer."

United Uranium drilled part of the quartz blow. Results were generally low. One hole, however, intersected lead mineralization of 5.13% Pb over 15 feet. These values came from the western edge of the quartz about 100 feet from the small pit mentioned by Patterson.

D.D.H. Mt. Shoobridge No. 1 was sited so as to drill directly below the favourable wagon drill intersection.

REFERENCE

PATTERSON, G. B. 1958 Report on Mt. Shoobridge Lead and Copper Prospects, Katherine-Darwin Region.

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NOTE ON GREYWACKE

The most common rock in the drill section is greywacke of varying grain size and composition. Quartz accounts for more than 50% of the typical greywacke - the remainder being feldspar and mafic minerals. The constituent grains are invariably badly sorted. Graded bedding with the coarser grade in the stratigraphically lower position can be observed in a few instances. Coarse-grained greywacke rests on finer-grained material in the few exposed contacts.

The mafic minerals are fine-grained and cannot be distinguished macroscopically. The original mafic content was probably argillaceous. There is, however, some metamorphic reorganisation of mafic minerals into streaks and grain coatings. Some of the feldspar grains can be seen to have small inclusions and indistinct boundaries which suggest that they might owe some of their granularity to metamorphic growth.

LOG OF DIAMOND DRILL HOLE NO. 1 - MT. SHOOBRIDGE

DEPTH	RECOVERY	DESCRIPTION
6' - 15'2"	2' 6"	6'-15'2". Schistose greywacke.
15' 2" - 20'0"	3'	15'2"-22'. Fine-grained, slightly gneissic greywacke.
20' 0" - 29' 0"	5' 9"	22'-23'. Micaceous siltstone. 23'-23'6". Gneissic greywacke. 23'6"-25'6". Mica schist. 25'6"-28'. Gneissic greywacke. 28'-29'. Powdered mica schist.
29' 0" - 30' 2"	1'	29'-30'2". Quartzitic greywacke, gneissic in places.
30' 2" - 37' 0"	5'	30'2"-37'. Schistose greywacke.
37' 0" - 73' 0"	4'	37'-75'9". Fine-grained greywacke, broken into angular fragments. Fracture planes are stained. Two small quartz veins.
73' 0" - 74' 6"	1' 6"	
74' 6" - 77' 0"	2' 6"	
77' 0" - 79' 0"	2'	75'9"-80'. Medium-grained greywacke. Chloritic material along fracture planes. Minor quartz veining no thicker than ¼".
79' 0" - 83' 0"	3' 6"	80'-83'. Fine-grained quartz-mica schist. The quartz predominates; mica plates are bent around the quartz grains, which tends to disorient the mica. 83'-83'3". Medium-grained quartz-mica schist. Coarser grained, more micaceous and better foliated than above.
83' 0" - 92' 6"	7'	83'3"-84'. Micaceous quartzite. Muscovite predominates amongst the mica, minor chlorite. 84'-85'3". Micaceous sandstone. Tends to be massive. 85'3"-88'6". Greisen ? with some inclusions of silicified country rock - quartz predominates in the greisen. Waxy, yellow mica liberally intermixed with quartz only in places.
92' 6" - 95' 4"	2'10"	88'6"-120'. Medium-grained greywacke.
95' 4" - 100' 6"	5' 2"	
100' 6" - 103'10"	3' 4"	
103'10" - 105' 0"	1' 2"	
105' 0" - 111' 0"	1'	
111' 0" - 120' 0"	1' 6"	
120' 0" - 129' 6"	2'	120'-126'. Grey-green phyllitic schist composed of quartz and mica.

DEPTH	RECOVERY	DESCRIPTION
129' 6" - 132' 3"	1' 9"	126'-139'. Fragmented core of rather quartzitic greywacke.
132' 3" - 137' 0"	2'	
137' 0" - 140'10"	1' 6"	139'-143'6". Greywacke with a number of broad, rather diffuse quartz veins. Some of the veins have drusy vugs.
140'10" - 143' 6"	2'	
143' 6" - 151' 9"	7'	143'6"-153'3". Medium-grained greywacke.
151' 9" - 153' 3"	1'	
153' 3" - 171' 0"	7' 6"	153'3"-171'. Quartz-rich greywacke with occasional large (up to 1/16"), sub-rounded clear quartz grains.
171' 0" - 187' 0"	4' 6"	171'-187'. Slightly schistose greywacke containing isolated fragments of two other rock types. One is a fine-grained, white, quartz-muscovite rock, the other is dark green chloritic schist.
187' 0" - 204' 6"	4'	187'-204'6". Schistose greywacke. Lighter coloured than usual. The schistosity is due to a certain degree of aligned flattening of feldspar as well as orientation of mica. There also is some faint compositional banding of chloritic material.
204' 6" - 220' 0"	6' 6"	204'-220'. Schistose greywacke.
220' 0" - 240' 0"	2'	220'-240'. Schistose greywacke and chloritic quartz-mica phyllitic schist. The latter is finer grained than the greywacke; well developed foliation has, in some places, monocline-like folds confined to narrow seams.
240' 0" - 250' 6"	2'	Phyllitic schist with some light-coloured quartz-muscovite greywacke.
250' 6" - 279' 3"	2' 6"	250'-296'. Felspathic and chloritic quartzite - a hard, competent rock.
279' 3" - 296' 0"	4' 3"	
296' 0" - 297' 1"	3"	296'-306'. Highly quartzitic greywacke.
297' 1" - 308' 1"	3'	306'-321'. Fine-grained, dark green quartz-mica schist.
308' 1" - 315' 0"	3' 6"	
315' 0" - 325' 3"	10'	321'-325'3". Dark green, fine-grained micaceous quartzite. Fairly similar to above but more quartzose and massive.
325' 3" - 328' 0"	1'	325'3"-328'. Fragments of quartz-mica schist with some small quartz veins. One fragment of massive unmineralised quartz.
328' 0" - 346' 0"	18'	328'-339'. Fine-grained greywacke with scattered, thin quartz veins. At 339' there is a ½" thick quartz-sphalerite vein. The sphalerite is dark and coarsely crystalline.

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DEPTH	RECOVERY	DESCRIPTION
		339'-342'. Greywacke. This section has a slight suggestion of being graded - coarser at the bottom. The contact at 342' is particularly sharp. 342'-346'. Fine-grained greywacke. Also slightly coarser towards bottom.
346' 0" - 352' 6"	6'	346'-352'6". Rather schistose greywacke. At 352'6" change from BX to AX.
352' 6" - 361' 0"	6'	352'6"-361'. Felspathic quartz-mica schist.
361' 0" - 369' 6"	3' 6"	361'-391'. Fine-grained greywacke with a few thin quartz veins.
369' 6" - 371' 0"	1'	
371' 0" - 374' 0"	3'	
374' 0" - 379' 0"	5'	
379' 0" - 385' 6"	6'	
385' 6" - 391' 0"	5' 6"	
391' 0" - 401' 3"	9"	391'-395'3". Fine-grained, schistose greywacke.
401' 3" - 403' 9"	2' 6"	395'3"-403'. Fine-grained greywacke.
403' 9" - 411' 3"	6' 6"	403'-406'6". Fine-grained, schistose greywacke. 406'6"-409'9". Fine-grained greywacke with a sharp contact on schistose greywacke below. 409'9"-411'3". Fine-grained schistose greywacke with ¾" calcite vein at 411'.
411' 3" - 421' 3"	3'	411'3"-424'. Fine-grained greywacke.
421' 3" - 424' 0"	2' 6"	
424' 0" - 429' 0"	2' 6"	424'-429'. Schistose greywacke.
429' 0" - 441' 0"	3'	429'-441'. First 2' of core is fine-grained greywacke with a sharp contact on schistose greywacke which forms the last foot of core.
441' 0" - 450' 3"	7' 6"	441'-449'. Fine-grained micaceous greywacke.
450' 3" - 454' 0"	2' 6"	449'-463'. Schistose greywacke.
454' 0" - 458' 0"	2'	
458' 0" - 465' 0"	7'	463'-467'3". Fine-grained greywacke.
465' 0" - 476' 0"	4' 3"	467'3"-468'3". Schistose greywacke. 468'3"-476'. Broken, badly ground core, fragments mainly fine-grained greywacke.
476' 0" - 491' 0"	2' 6"	476'-491'. Fragmented and ground fine-grained quartzitic greywacke with a few schist fragments and one greisen fragment.

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DEPTH	RECOVERY	DESCRIPTION
491' 0" - 501' 6"	2'	491'-501'6". Fine-grained quartzitic greywacke containing a few small drusy vugs.
501' 6" - 510' 6"	2'	501'6"-526'6". Impure quartzite fragments, appears to be a highly quartzose variant of the usual greywacke. A few dark (chloritic ?) blotches.
510' 6" - 513' 0"	1' 6"	
513' 0" - 526' 6"	4'	

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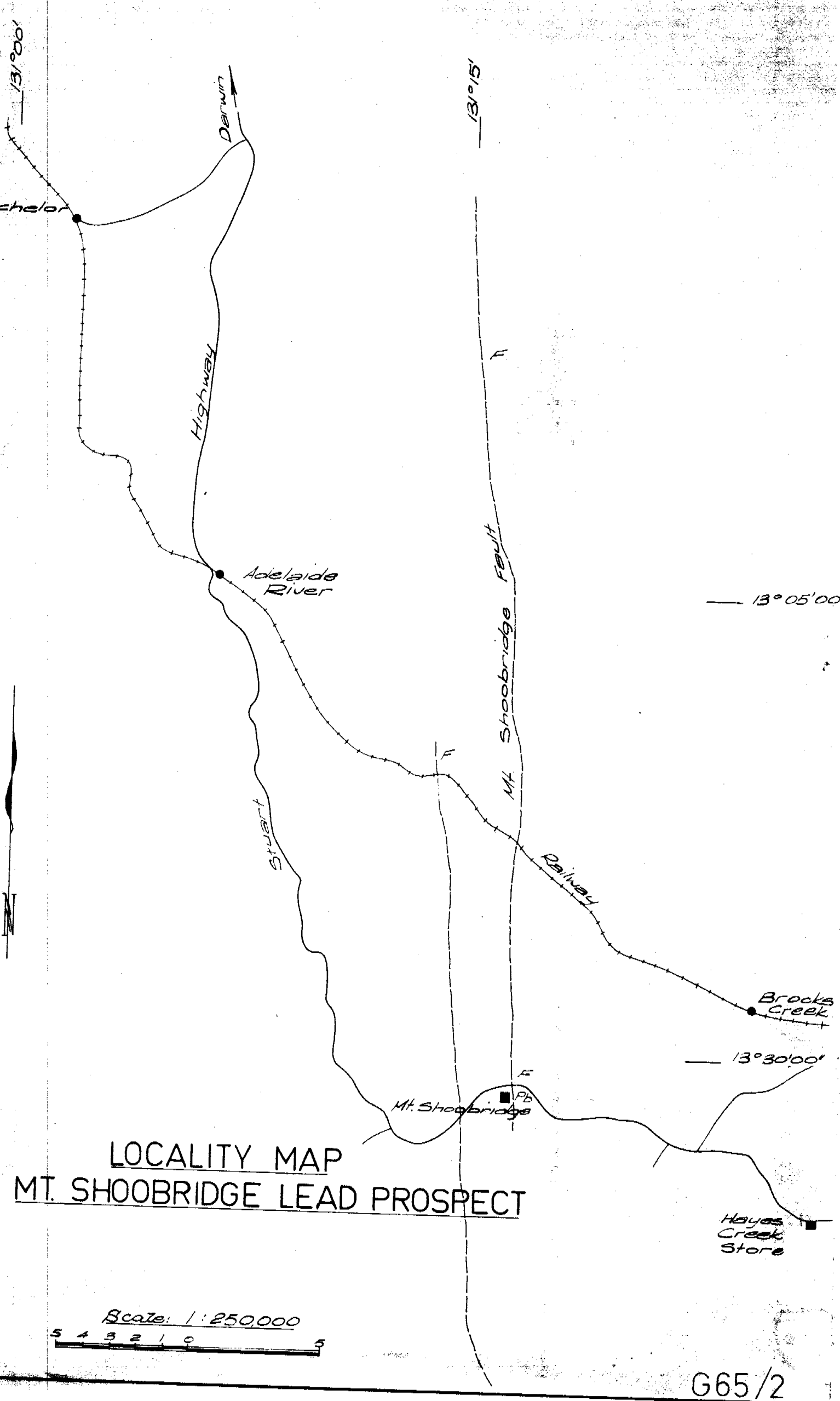
LOCALITY MAP
MT. SHOOBRIDGE LEAD PROSPECT



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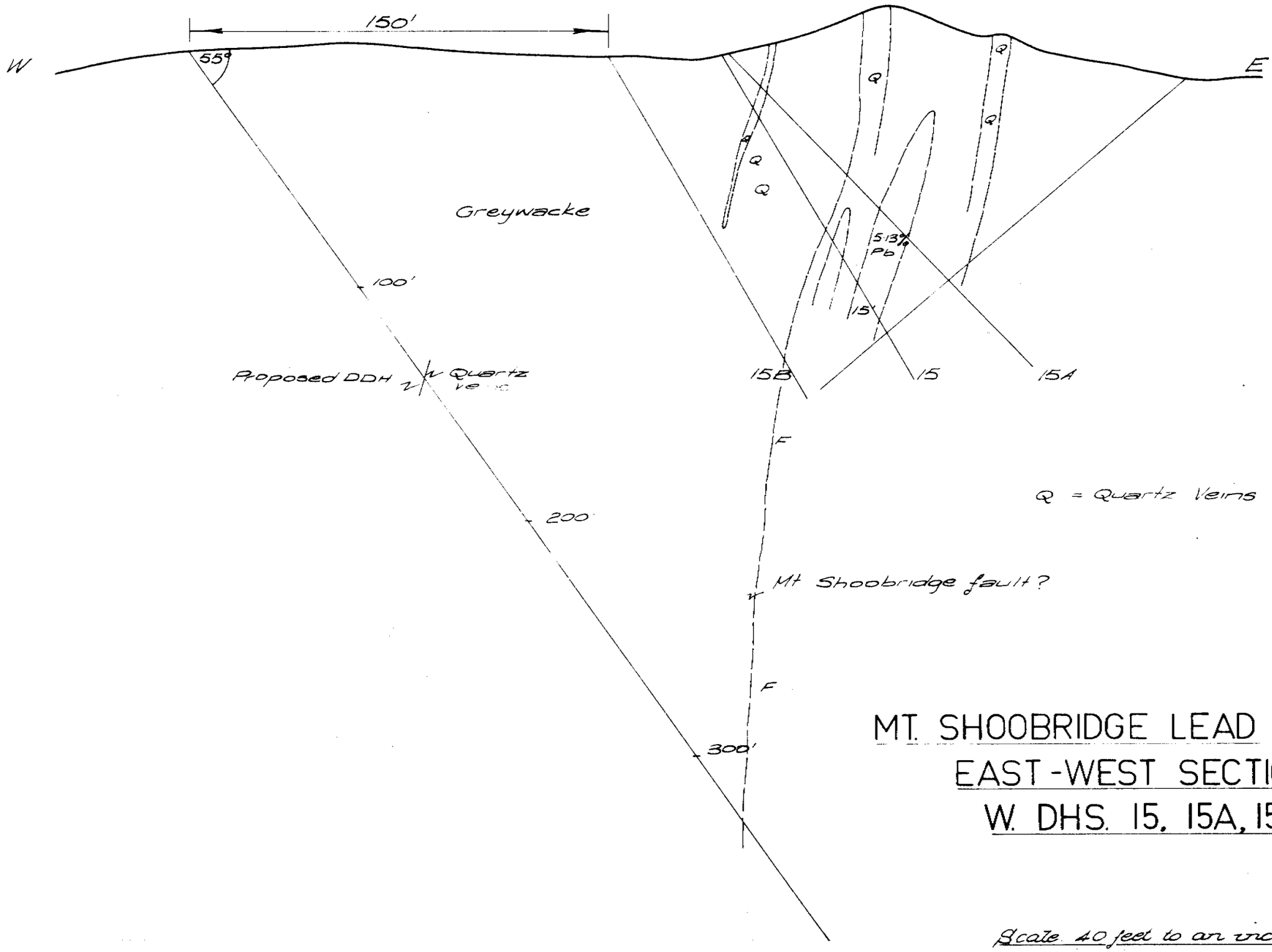

MT. SHOOBRIDGE LEAD PROSPECT
EAST-WEST SECTION
W. DHS. 15, 15A, 15B.

Scale 40 feet to an inch

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