



Use of AI in remnant mining – A case example

October 8, 2026

Gold Road International

This document illustrates the use of an AI-based methodology at the Gold Road Mine at Oatman, Arizona. All examples are illustrative and the figures are based on a first set of analysis. The Company do not promise that any old production potential may be defined or produced based on the methodology presented

UNITED STATES SMELTING REFINING AND MINING COMPANY
GOLDROAD MINE

ASSAY LOG

HEADING: 100-4520 Stage
CO. 122

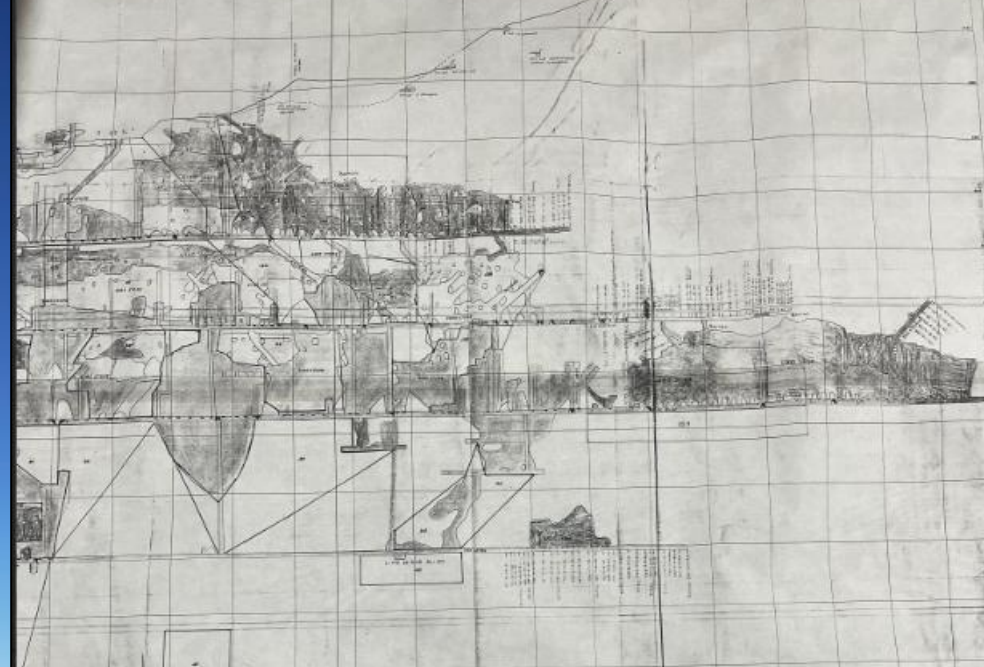
July 1991 *original*

DATE	SAMPLE NO.	LOCATION	WIDTH	GR. AU.	REMARKS
7-21	1724	Sta. 55-35'E up 11' FW Str.	2.0	1.58	5160
	1725	do. do.	1.2	.02	12.0
	1726	H.W. Andes	5.0	.02	
	1727	40'E up 11' FW L.H. Gr.	1.4	.35	490
	1728	H.W. Andes	4.0	.05	11.4
					2.4 3650
		Yn 1.7 - 1.072			
		St. 6.1 - 1.292			
8-4	1907	Sta-55-45'E up 11' FW Gr. Str.	2.2	2.81	2x 6192
	1908	H.W. Andes	4.4	.03	
	1909	50'E up 11' FW Gr.	1.8	5.95	1.8 10710
	1910	H.W. Andes	4.0	.02	
	1911	55'E up 11' FW Str.	1.0	.11	2.7 110
	1912	do. do.	1.7	1.71	14926
	1913	H.W. Andes	3.0	.02	
8-5	1914	60'E up 11' 2nd Andes	1.1	1.0	5.7 110
	1915	do. do.	2.2	7.35	16170
	1916	do. Andes	2.0	.15	360
	1917	65'E up 11' 2nd Gr.	2.8	10.80	5.6 30300
	1918	do. do. in Andes	2.1	.07	195
8-15	2056	70'E up 11' 2nd Wall	1.0	.07	
8-16	2057	do.	2.2	.81	2.2 1152
8-17	2058	do. Wall	3.0	.05	
	2059	85'E up 11' 2nd Wall	0.8	.03	
	2060	do.	3.0	2.23	3.0 8190
	2061	do. Wall	2.0	.06	
		Yn - 3.21' c 3.175			732 89926
		St. - 5.91' c 2.190			7

100-4520



A mined section of the Gold Road vein



A 1942 drawing of the Gold Road Mine



An old Gold Road Assay Log

Background

- Over the years – about 120 years of operations – assay logs have been prepared at Gold Road showing vein width and grade by location as mining and sampling have been conducted, see Example 1
- The logs are stored as paper files in the on-site paper archive at the mine, with many files being in dubious condition
- About 100.000 samples may exist. In general, this information has not been incorporated in the geo-model of the mine and it can not be used in reserve reports (e.g. 43-101) as the sampling method, reference points etc. can't be documented and since uploading and analysing the data pre-AI would be impractical
- The question has been raised as to whether this material, by applying AI, may help the team see patterns and trends in the gold deposition and to possibly derive ideas related to adjacent, non-mined, sections
- A case study has been conducted at Gold Road using AI to capture, review and analyse about 2560 assay logs from mined stopes in the Upper East section of the Gold Road mine (4150, 4410, 4660, 300-A, 4560, 4885, 5200, 4820 stopes)
- These logs are from 1938 to 1942
- The assays (width and grade) appear accurate, but the location is somewhat unclear and relative to ill defined references, see Example 2

Example 1



UNITED STATES SMELTING REFINING AND MINING COMPANY					
GOLDROAD MINE					
ASSAY LOG					
HEADING: <u>300-A-3885 STOPE</u> <u>April, 1939-Pg. 2</u>					
CO 625					
DATE	SAMPLE NO.	LOCATION	WIDTH	OZS. AU.	REMARKS
		Sub Total East			51.9 12.234 015 53.4
4-15	1050-B	#2 Mag. 20'W up 115' FW Vein	1.0	.15	3.8 .150 3.8
	51	" " H.W. Wall	2.8	.03	.084
	52	" " 11'E up 115' Vein	3.9	1.54	3.3 5.072 3.3
	53	" " 18'E up 115' Vein	3.0	.95	3.0 1.950 3.0
4-18	1068-B	#100 Mag. 15'W up 138' FW Vein	1.8	.25	6.0 .450 6.0
	69	" " " E Waste	1.5	.10	.150
	70	" " " H.W. Strs	2.7	.11	.297
	71	" " 23'W up 138' FW Vein	2.2	.15	6.0 .370 6.0
	72	" " " H.W. Strs	3.8	.12	.456
	73	" " 42'W up 138' FW Vein	1.7	.16	4.5 .272 6.7

Example 2

UNITED STATES SMELTING REFINING AND MINING COMPANY					
GOLDROAD MINE					
ASSAY LOG					
HEADING: <u>300-A-E Drift</u> <u>January, 1940</u>					
CO 625					
DATE	SAMPLE NO.	LOCATION	WIDTH	OZS. AU.	REMARKS
1-18	986-D	10'E of old timbers H.W.	0.7	.03	
	987	" " " FW Str	2.0	.04	
	991-D	15'E of old timbers H.W.	0.3	.07	
	993	" " " FW Red	1.0	.01	
1-24	994-D	20'E of old timbers gtz	0.5	.05	
1-26	115-C	Sta 22 + 43'E FW Waste	2.0	.01	



Case example



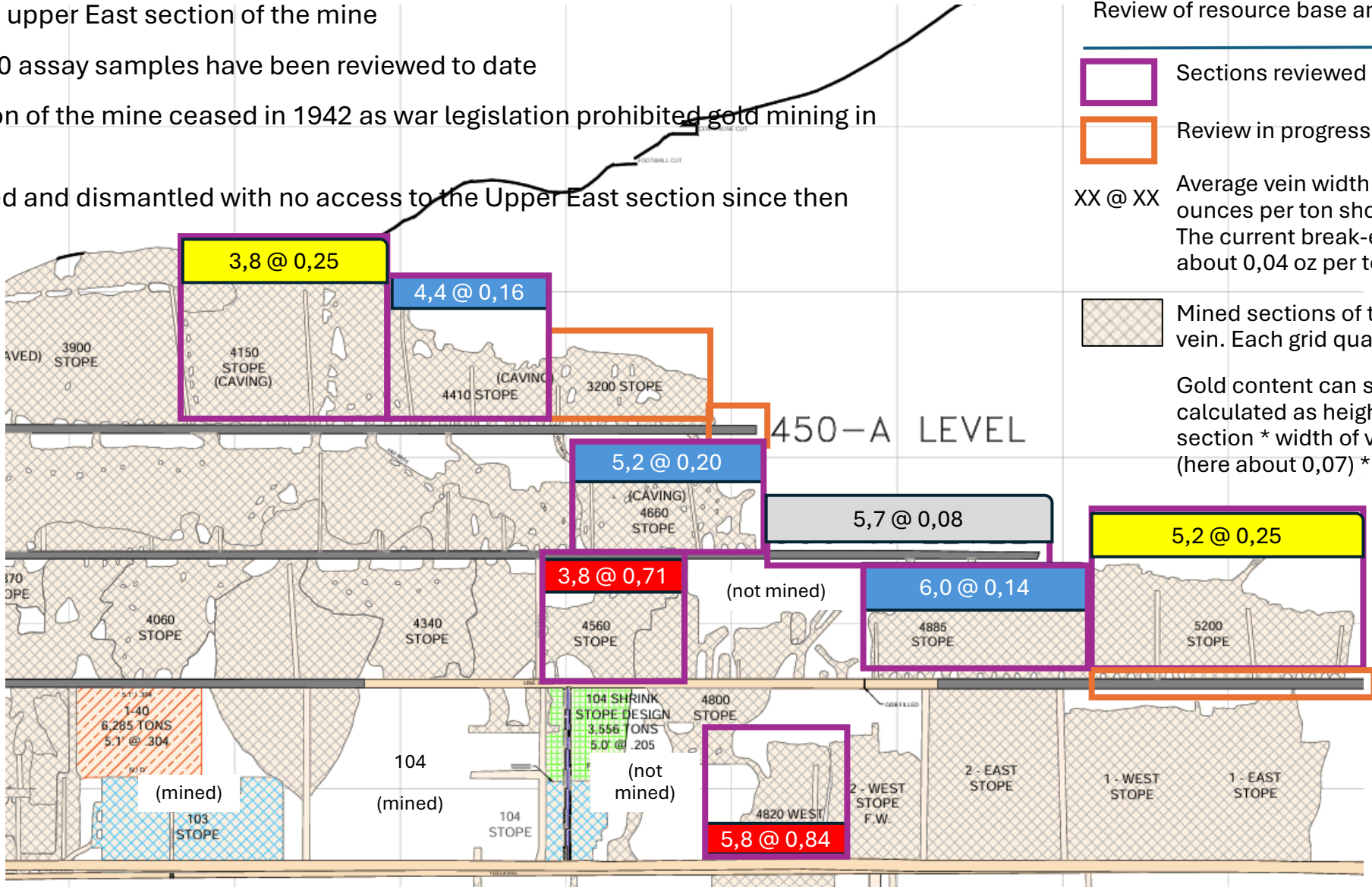
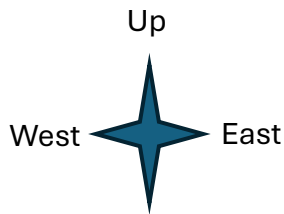
A case study was conducted to review in-between mining opportunities and new frontier opportunities in the upper East section of the mine

8 sections with 2560 assay samples have been reviewed to date

Mining in this section of the mine ceased in 1942 as war legislation prohibited gold mining in the US

The mine was closed and dismantled with no access to the Upper East section since then

The following pages summarize the review of each of the 8 sections



4150 – Grid of block, 296 1938/1939 samples

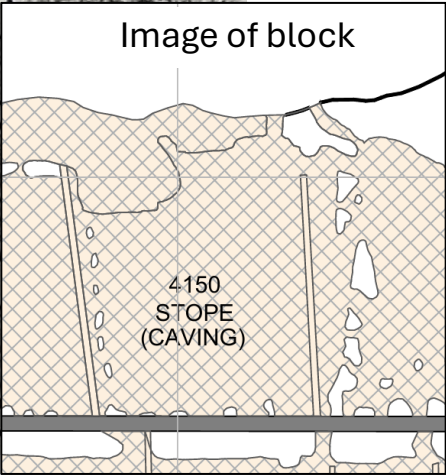
Average 3,8 feet @ 0,25 oz



The 296 samples were placed in the vertical x-y axis, the assay logs depicted and the average width and grade calculated in each section of a grid system

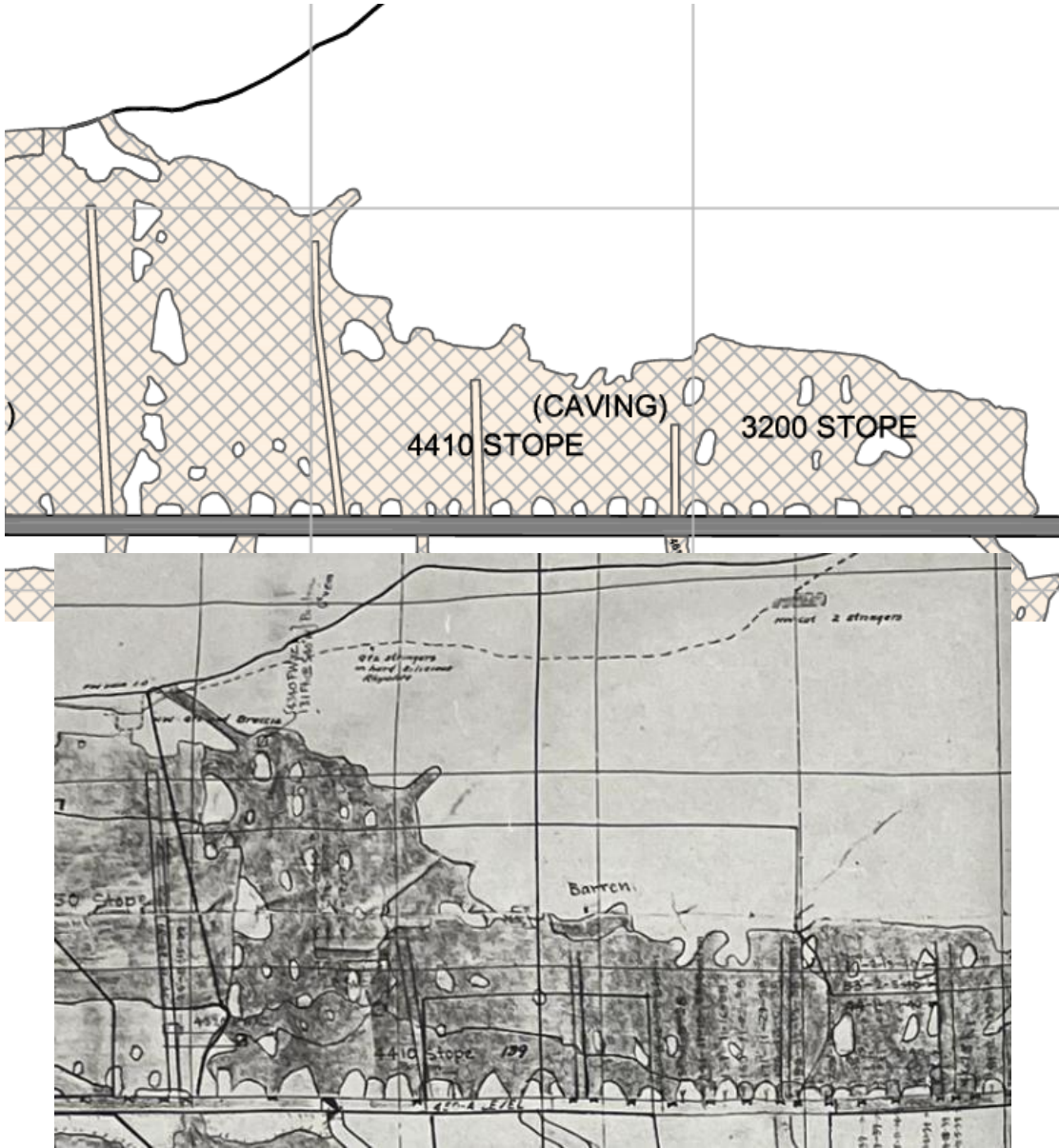
Partially in geomodel (bottom part)

Mined from September 1938 to August 1939

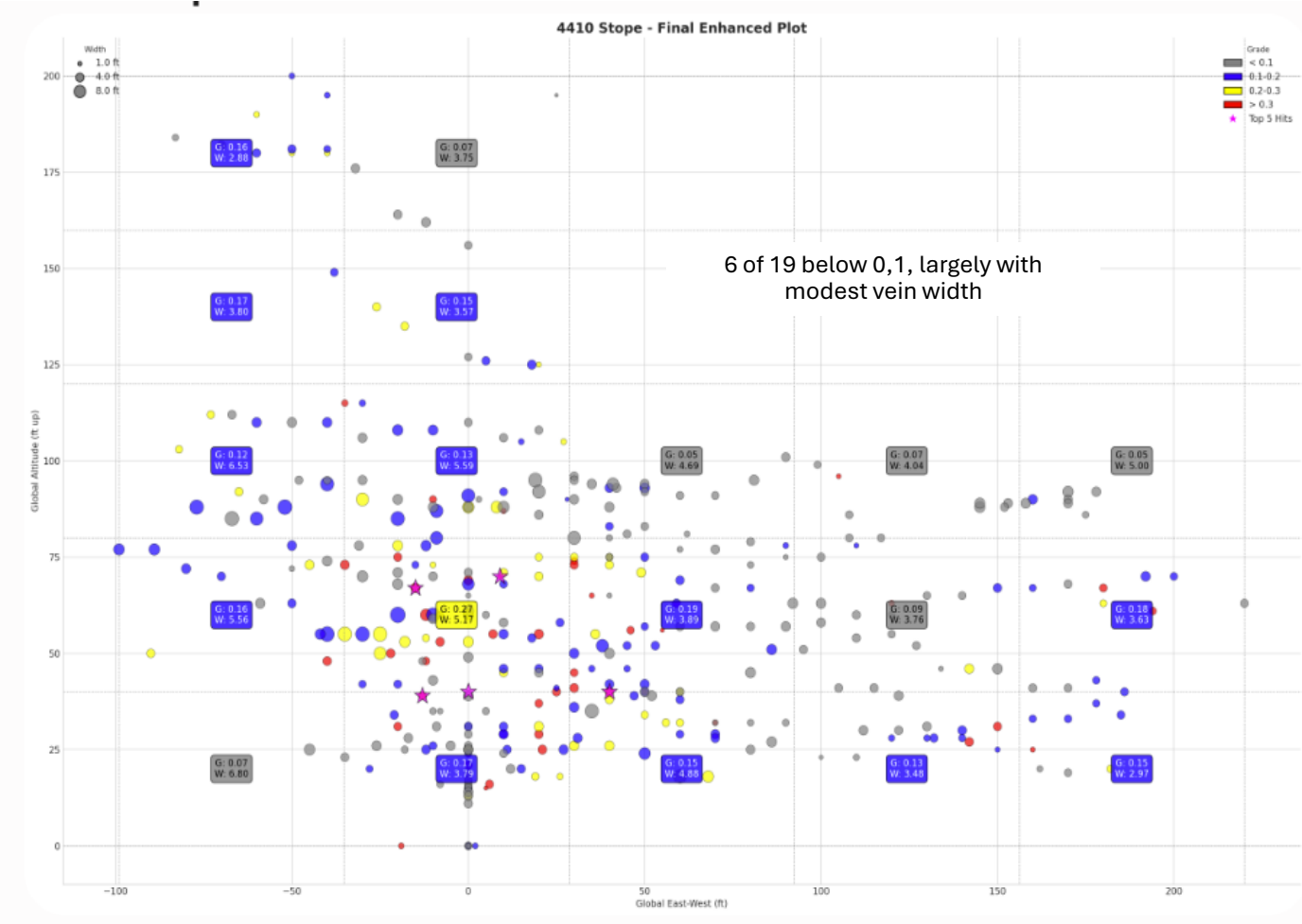


4410 – Review

Average 4,4 feet @ 0,16 oz



Partially in geomodel – Model seems to overestimate grades



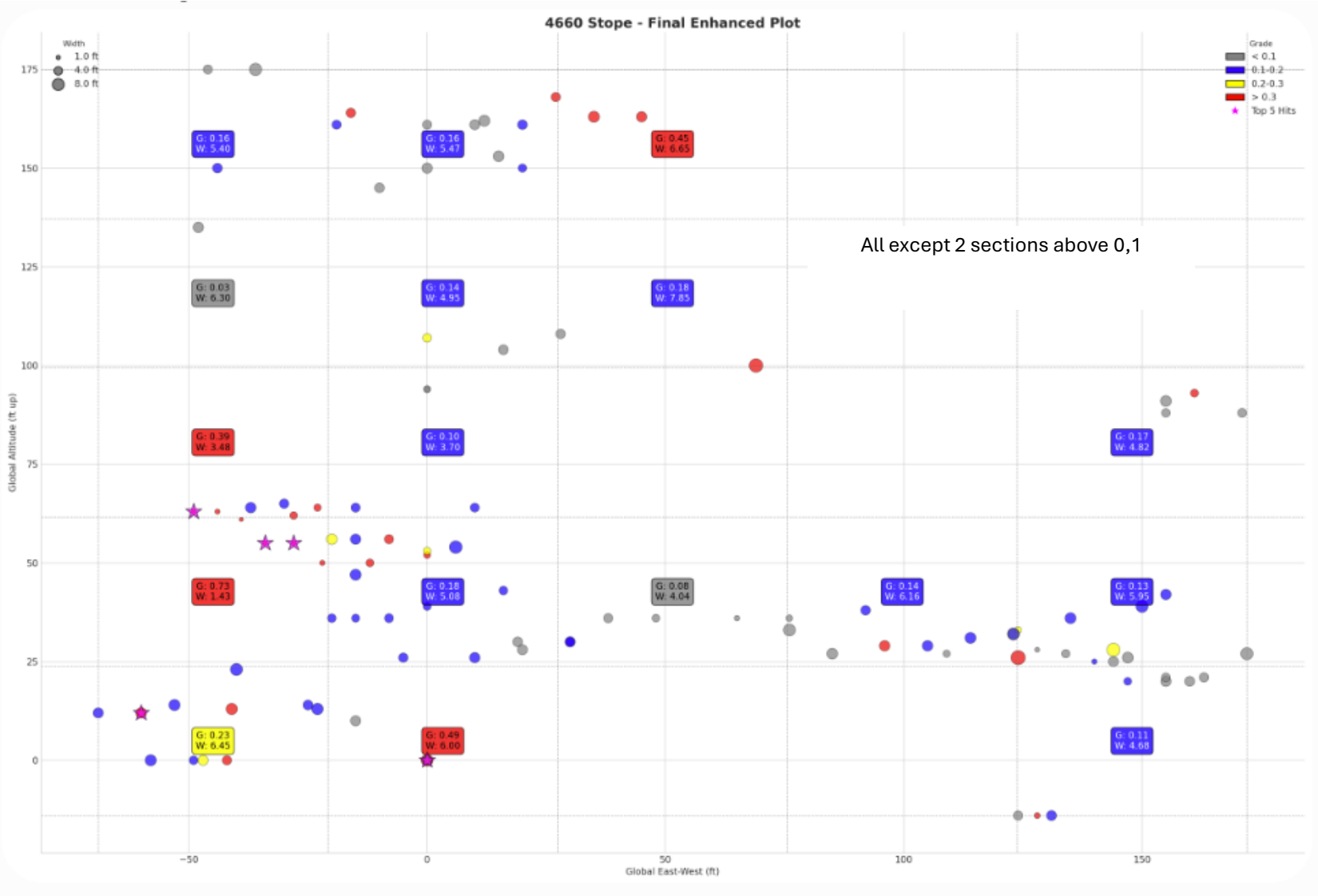
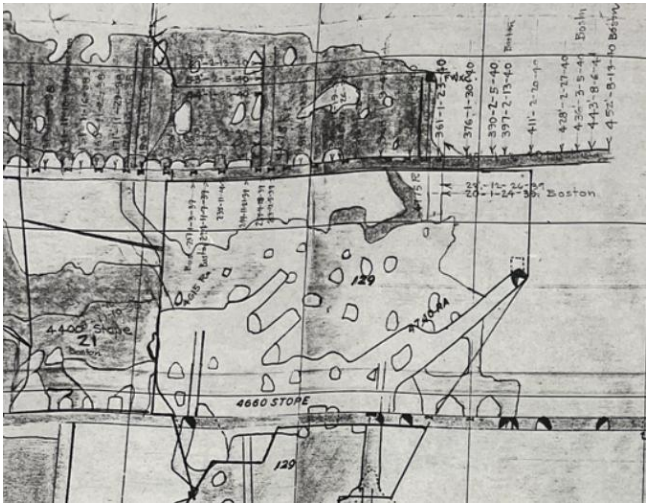
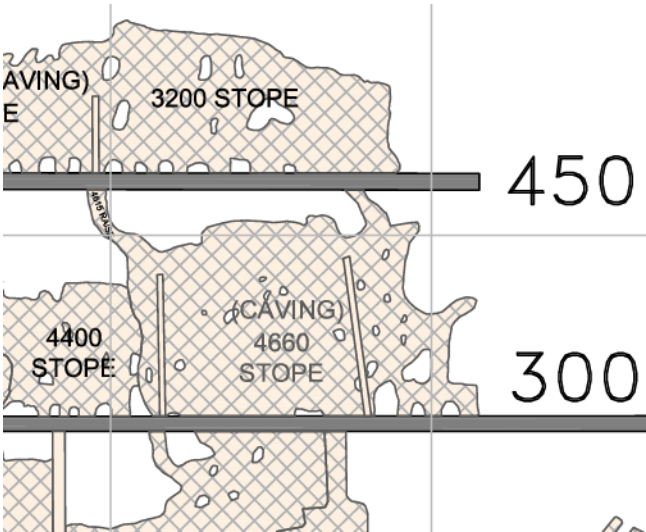
East-West sequence and distance of the samples needs to be verified. The horizontal distance seems reasonable

Data from November 1938 to June 1940

4660 – review

Average 5,2 feet @ 0,20 oz

Not in geomodel

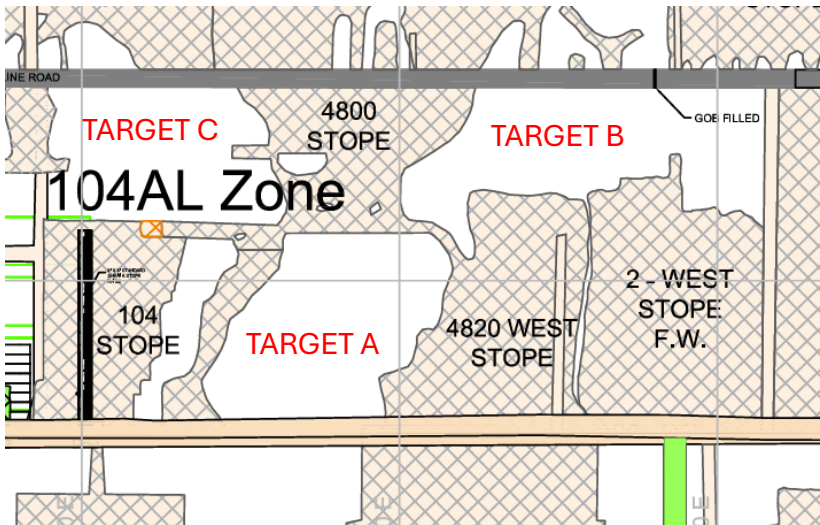


East-West sequence and distance of the samples needs to be verified. The horizontal distance seems reasonable

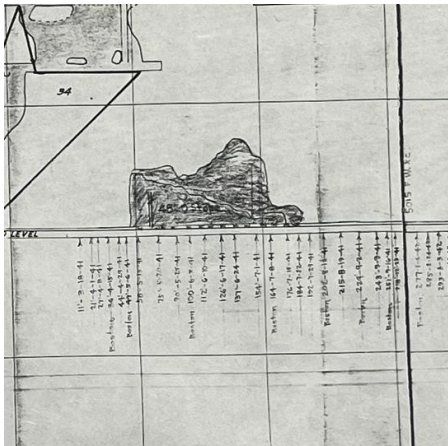
Data from August 1937 to June 1938.

4820 – review

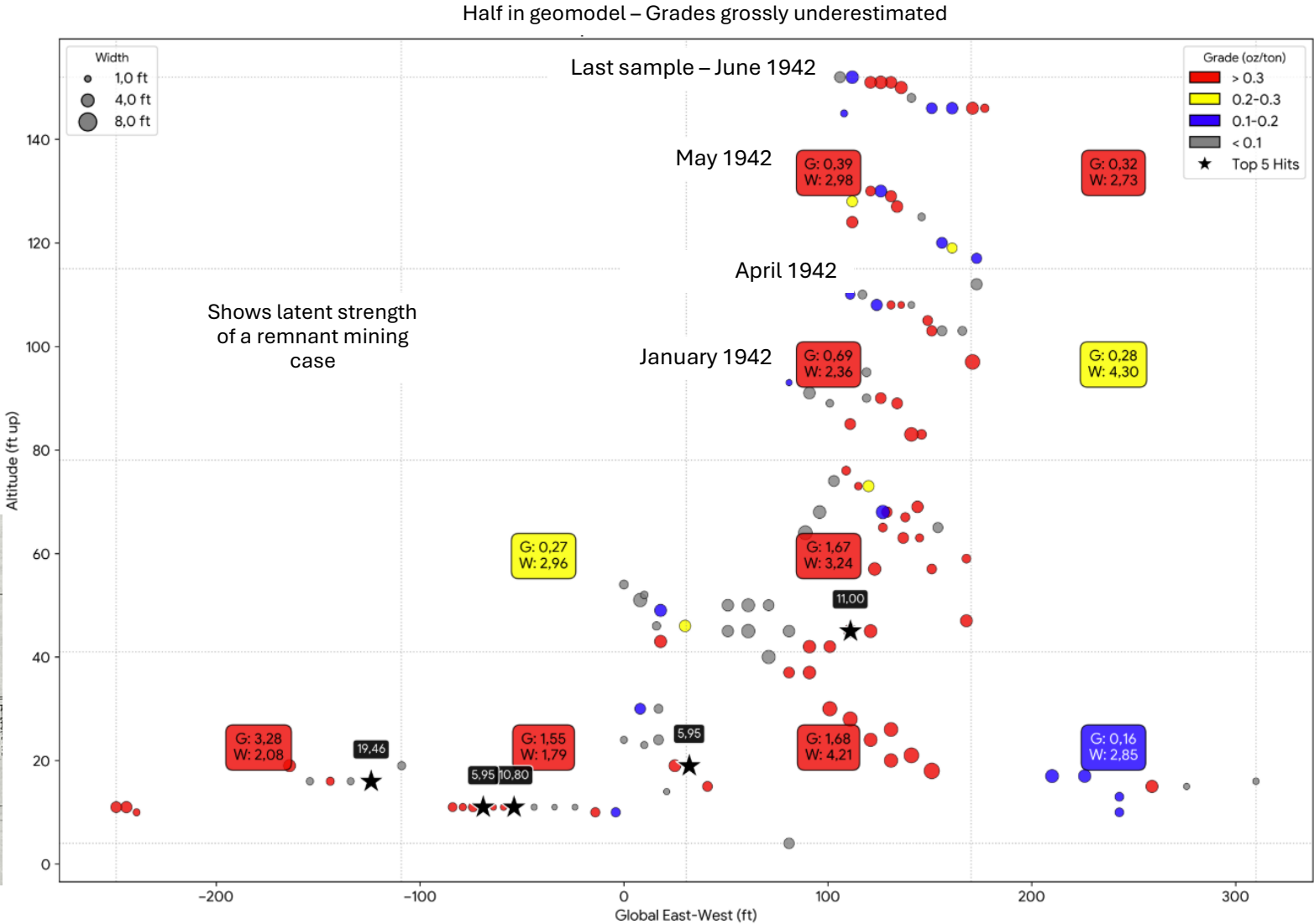
Average 5,8 feet @ 0,84 oz



Unmined section above and on West side, the latter accessible today from 100 level access road



Mined ahead of other sections in 1941, indicating high grades at lower altitudes



East-West sequence and distance of the samples need reconsideration. However, all are above hurdle, also on East side. Grades in bottom section ("Station 55") of 2,65 oz, East Manway @ 0,98 and West Manway @0,73

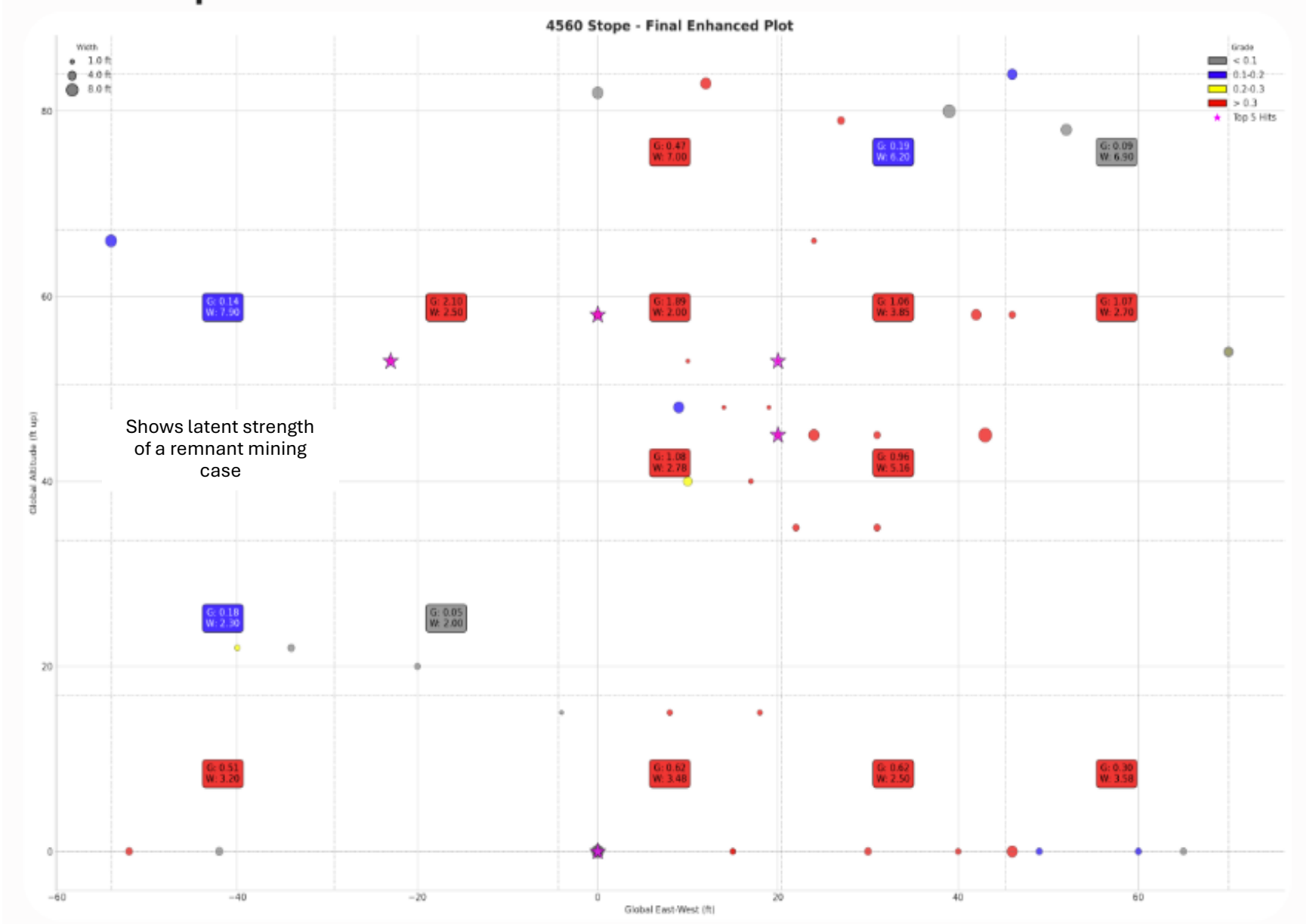
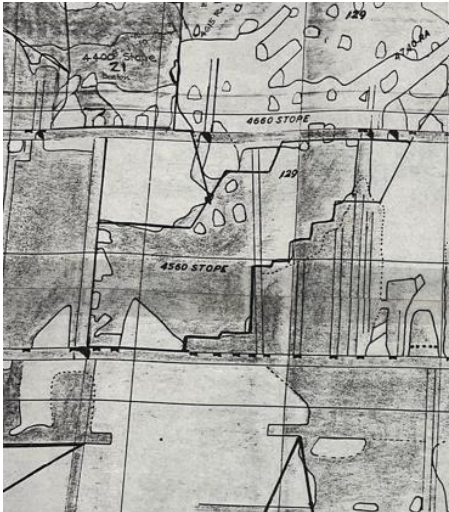
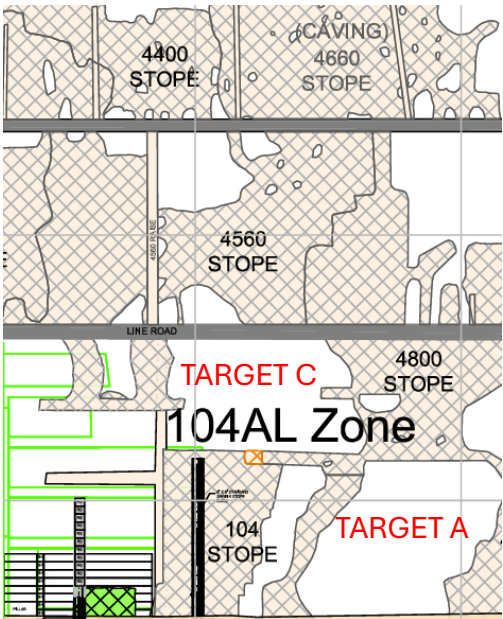
Samples from June 1941 to June 1942

Highest grade at Manway #1, 45 feet up, 50 feet East @11 oz per ton

4560 – review

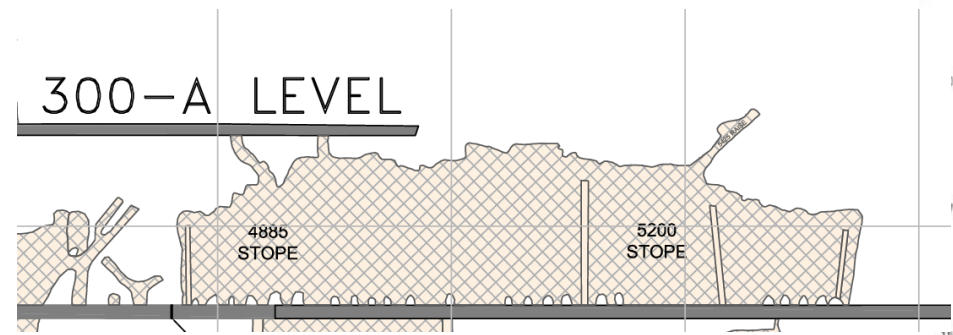
Average 3,8 feet @ 0,71 oz

Partially in geomodel – Model seems to underestimate grades in top section



4885 – review

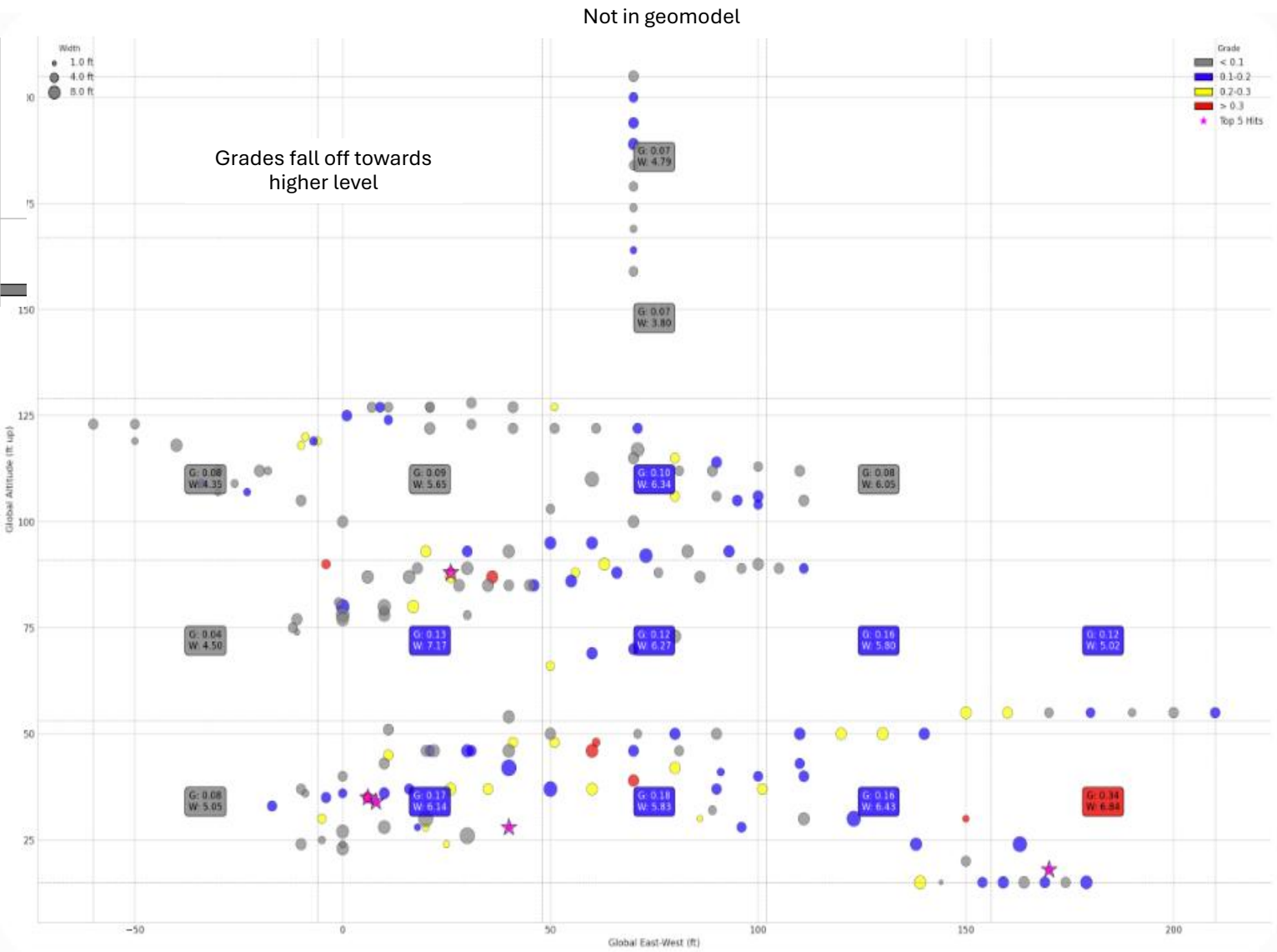
Average 6,0 @ 0,14



Large unmined section above and some on the East side

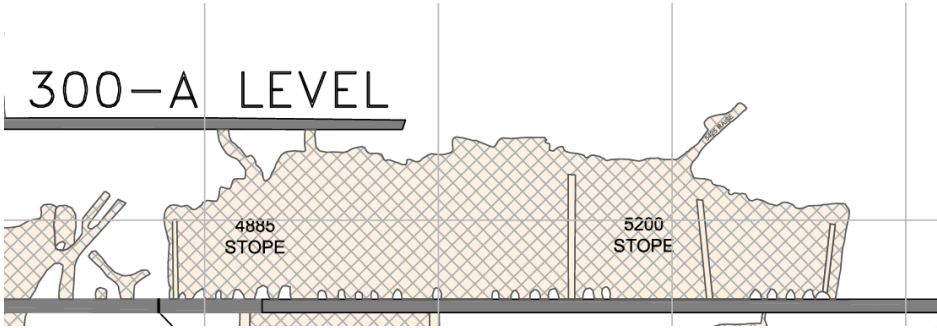
All mined by USSRM, with easy access from Line Road

Mined from June 1940 to November 1940, with steadily declining grades through production/sampling period



5200 – review

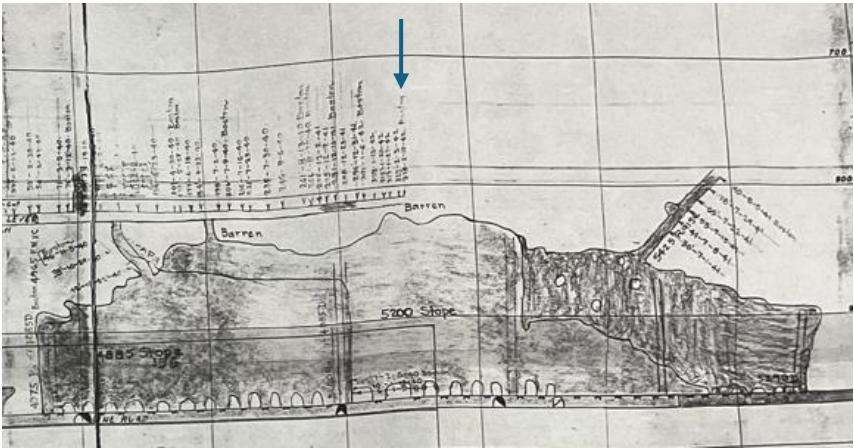
Average 5,17 feet @ 0,25 oz



Large unmined section above and on the East side

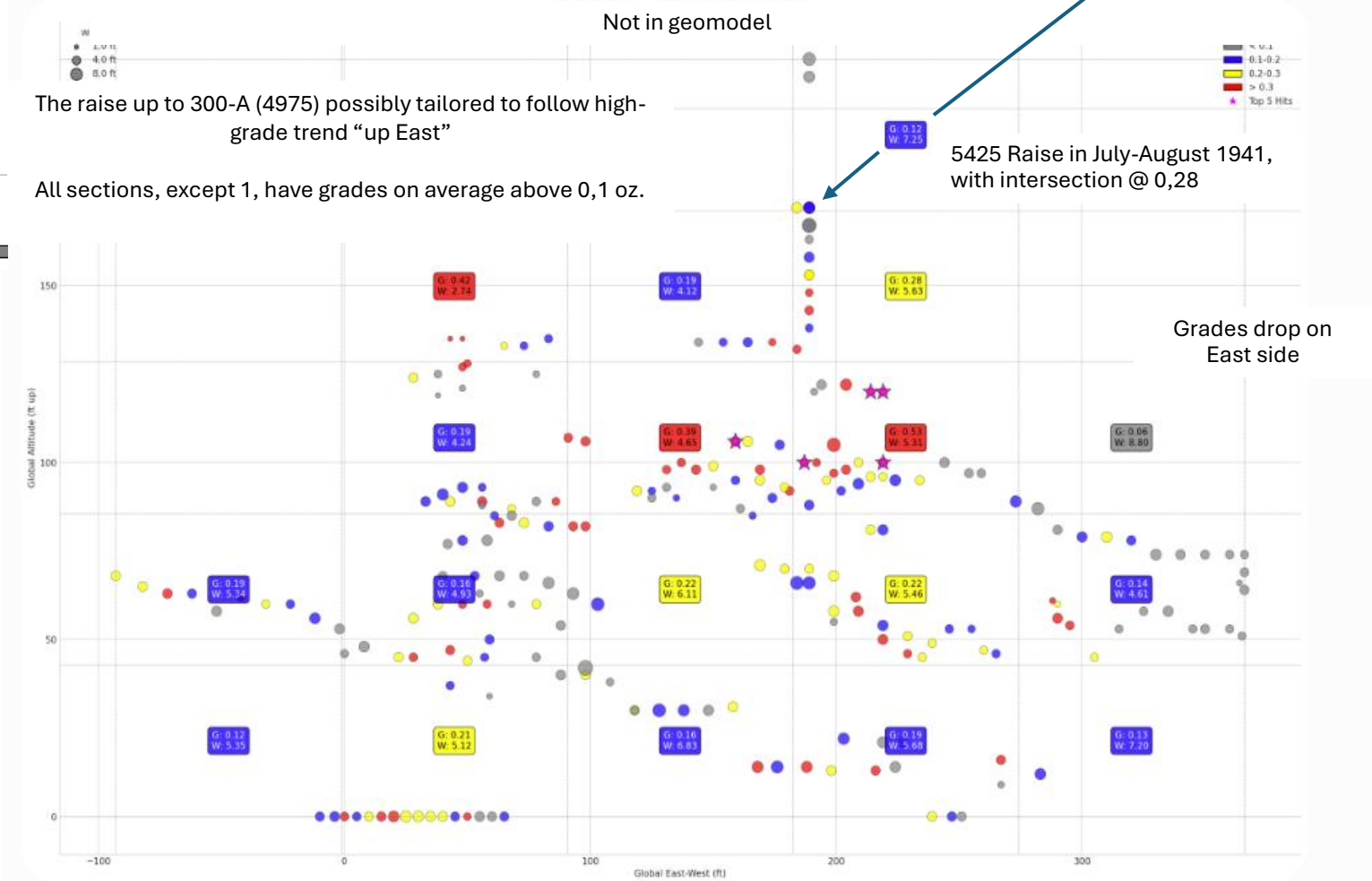
All mined by USSRM, with easy access from Line Road

Last advancement above on 300-A in February 1942, i.e. after 5425 Raise



Text says “Barren” above mid- and East section

1872	Face of Bulge for 300 A Level.	7.1	1.1
1873	Sta 4+ 5'W=	4.8	.28
1874	Stw Audis.	1.8	.02

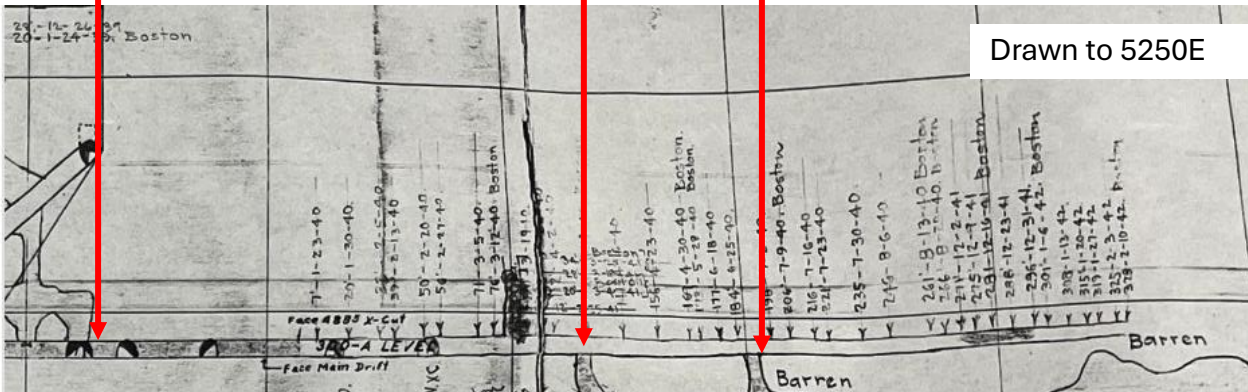
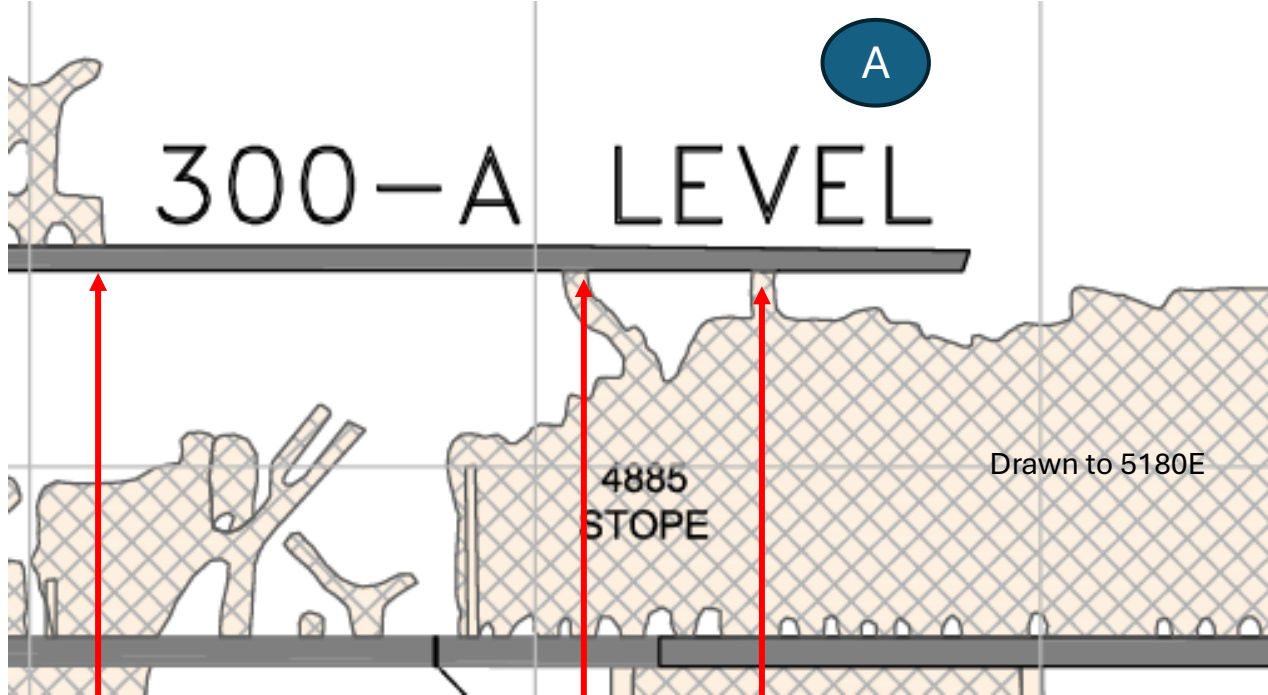


East-West sequence and distance of the samples needs to be verified. The horizontal distance seems reasonable.

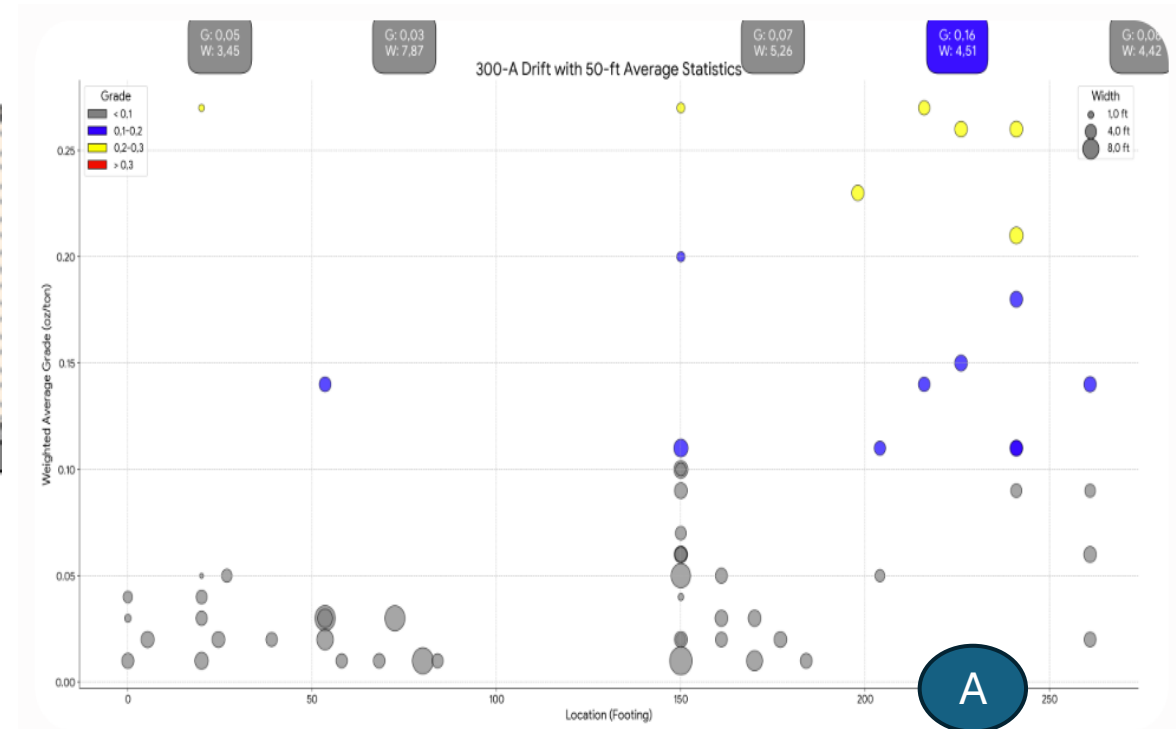
Samples from April 1940 to August 1941

Location of “Manway 4” and “Spad” for 5425 Raise need to be clarified; Base of Raise 5425 assumed to be 30 feet West of Central Shaft and 20 feet below the highest level of workings

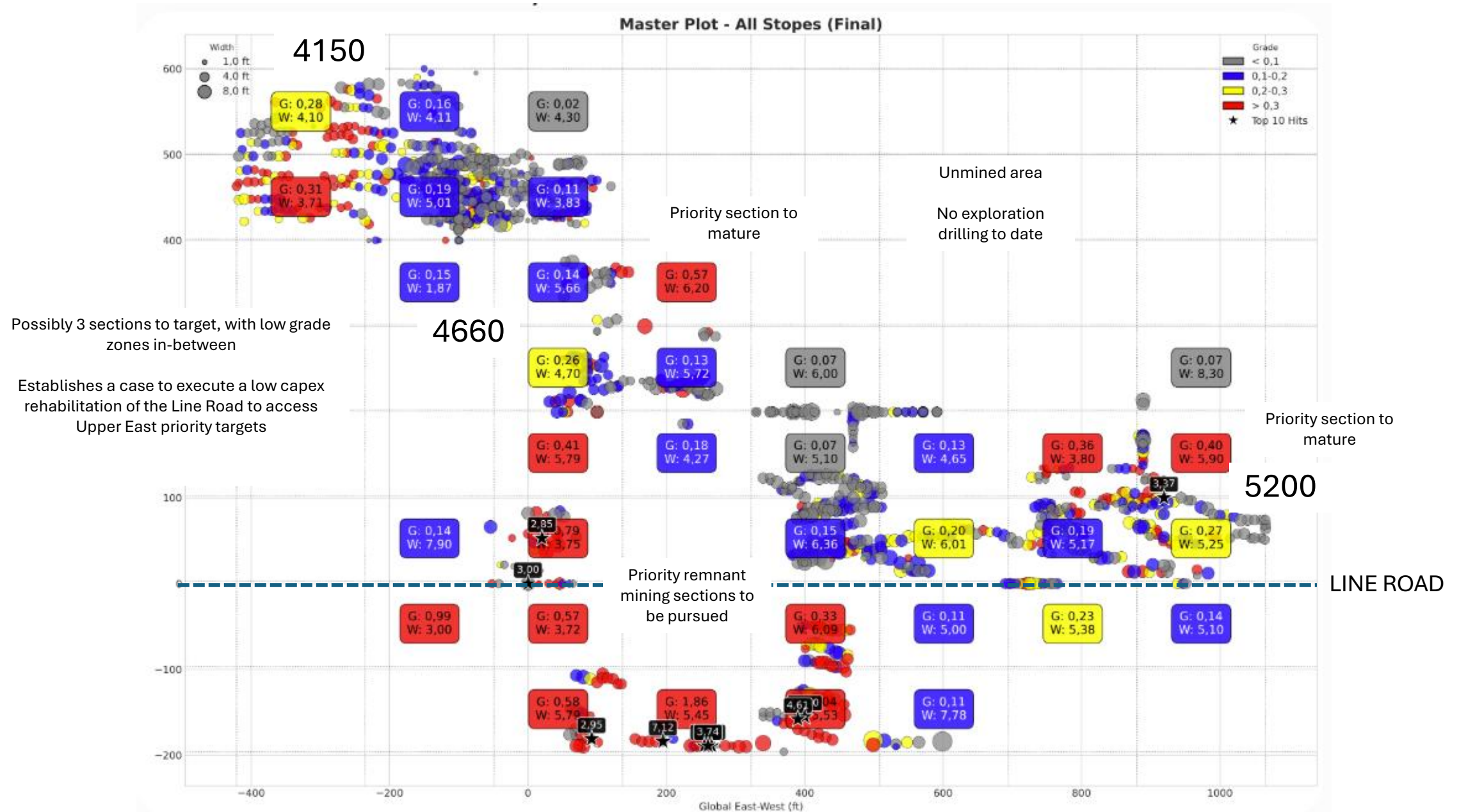
300-A



Poor results on West side, improving towards the East



Summary of 2562 AI samples



Summary of experiences in use of AI

- The effort could not have been executed without AI
- The scanning and data capture from hundreds of assay-pages would hardly be feasible without AI; However, the data capture had to be done in small batches in a user dialogue due to the complexity of the data structure and the quality of the locational data
- A scripted sequence defined to allow AI to conduct several standardized analysis
- Numerous ambiguities had to be sorted out, with this example being a first illustration
- The AI-models used did rush ahead and provide answers, not being transparent on the quality of the data and the reliability of the models used
- A very valuable tool has been established that can help identify priority targets, see trends, avoid mistakes and reduce the need for expensive exploration drilling
- 3 development efforts already in progress in the zone reviewed
- The approach will selectively be rolled out across the sections of the Gold Road Mine, see the next page, allowing the company to identify additional minable deposits

Block	Samples
4150	296
4410	662
4660	222
300	152
4560	80
4885	411
5200	454
4820	285
Sum	2562

Overview of Gold Road

TRUE-vein, twice the size, with mining ceased in 1924/1935, not shown*

-  Section covered by case example
-  Accessible today
-  Partial access today
-  Dewatering in progress to access



* Also, a part of the Gold Road portfolio