Mr. Martin:

In view of current situation, should discuss with Administrator.

Field Team did not follow our letter too well.

Policy of alloting any more funds for tungsten should be discussed with the Administrator before drafting any amendment.

FEJohnson

DMEA
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INTERIM REPORT ON OPERATING CONTRACT

and

REPORT ON OPERATOR'S REQUEST FOR ADDITIONAL EXPLORATION

DMEA DOCKET NO. 4216 - CONTRACT IDM-E 1032
TUNGSTEN MINING CORPORATION
HAMME MINE, VANCE COUNTY, NORTH CAROLINA
March 7, 1958

SUMMARY

Operations and completed work under the terms of DMEA contract Idm-E 1032 were inspected by Government representatives on February 12, 1958. The inspecting team consisted of H. L. Burmeister, U. S. Bureau of Mines and W. P. Williams, U. S. Geological Survey. The inspectors were accompanied to the work sites underground in the Hamme mine by A. M. Szynklewski, Operator's chief mining engineer. The project was reviewed and discussed in the mine offices with J. R. Sweet, General Manager, and W. R. Atkins, General Superintendent.

The Operator's request for contract amendment was discussed and a modified proposal for additional underground openings was agreed upon by the Operator and the examining team.

INTERIM REPORT

Project "A" - From January 1 to February 12, 1958, advance consisted of 184 feet of drifting and 12 feet of crosscutting on a diabase dike. Drifting was on a very tight structure with the exception of a 30 foot section containing barren quartz to an average width of approximately 2 feet. The 12 feet of crosscut is in a diabase dike which will be crosscut to the vein structure on the footwall side of the dike.

During this period, 4 holes were core drilled from the drift. Hole U-1306 was collared at coordinates N 21,188 - E 21,557 and was drilled 105 feet into the hangingwall on a S $87\frac{1}{2}°$ E bearing through granite gneiss

without encountering quartz. Hole U-1311 was collared at coordinates N 21,303 - E 21,629 and drilled into the footwall on a bearing of N 62½° W. From 0 to 93 feet the hole cored granite gneiss, chlorite schist and several small diabase dikes but no ore structure. From 93 feet to bottom at 123 feet the drilling was in the diabase dike shown on the application map and which was also crosscut in Project "A" near survey station 1467. Hole U-1312 was collared in the hangingwall at coordinates N 21,298 - E 21,643 and drilled to 120 feet on a bearing of S 88½° E. From 0 to 45 feet the drill penetrated granite gneiss and from 45 feet to bottom at 120 feet the rock was the same diabase now being crosscut. Hole U-1313 was collared in the hangingwall at coordinates N 20,033 - E 20,723 and drilled 70 feet on a bearing of S 58° E to check results obtained in hole U-1242. From 0 to 55 feet, hole U-1313 was in sericitic schist containing 4 separate 2 foot bands of practically barren quartz. During this period, cleanup in ore zones produced 12 tons of ore estimated to contain 0.4 percent WO_3.

Since the last inspection visit the drift has passed mostly through greenish-black, altered gneiss. No strong geologic structure was noted in the gneiss. Some fracturing is present, along with small scattered, white quartz pods and stringers. Neither hubnerite nor scheelite were seen in the quartz.

On the inspection date the last 15 feet of the drift was in a greenish-black basic dike. The Operator is wont to term the dike a diorite. The dike is, however, very fine grained (mineral species are indistinguishable megascopically) so that a better field term for the dike might be diabase or microgabbro. The dike strikes N 38° W and dips 83° SW. Some jointing and shearing is present in the dike rock; and local slickensides may be found. Blocky jointing in the dike will probably necessitate timbering of the drift. From surface exposures it is estimated that the dike has a

thickness of about 130 feet. The Operator's present plans call for penetrating the dike with the crosscut, then the attempt will be made to locate a quartz-vein structure on the north side of the dike.

Project "D" - This project was completed on January 30, 1958. There was completed 793 feet of drifting, and 1207 feet of crosscutting of which 293 feet was timbered. Core drilling amounted to 804 feet and 65 assays were made.

From January 1 to January 30 the date of completion, the southwest drift was advanced 109 feet. Of this advance, 75 feet was on a vein averaging 4.5 feet wide and cut assaying an average of 0.36 percent WO_3. The last 30 feet of drift and the face are on a very encouraging structure about 7 feet wide consisting of bands of quartz and sericite schist. One pod of quartz about 2 x 2 feet contains an estimated 0.6 percent WO_3. The northeast drift was advanced 66 feet, 30 feet of this advance being on vein material averaging 5 feet in width and assaying an average of 0.88 percent WO_3. The last 36 feet of advance was on a relatively tight structure containing a 6-inch width of quartz carrying a small amount of hubnerite. During this reporting period 2 holes were core drilled. Hole U-1307 was collared in the footwall at coordinates N 17,241 - E 16,991 and was drilled to 60 feet on a bearing of S $71\frac{1}{2}^{0}$ E. The sericitic and chloritic schist contained 7 small and scattered seams of barren quartz. Hole U-1308 was collared in the hangingwall at coordinates N 17,133 - E 16,886 and was drilled 100 feet on a due west bearing. The hole was in chloritic schist containing several narrow bands of sericitic schist but no quartz.

During this period project "D" produced 166 tons of ore which car sampled on average WO_3 content of 0.25 percent. See attached table for complete status of contract on February 12, 1958.

The face of the northeast drift is in greenish gray schist and gneiss. Pyrite in disseminated form is locally abundant. The face does not appear exceptionally favorable with regard to a tungsten-bearing, quartz-vein structure. A few thin (1-inch thick), barren, white quartz stringers may be seen in the face. In the northeast corner of the face there was noted a white quartz lens about 3 feet long and a foot thick that contained fluorite and disseminated hubnerite grains.

Since the last inspection the southwest drift has passed through greenish black sericite and chlorite schist. A white quartz vein has been carried in the back of the drift. The quartz vein carries fluorite and disseminated hubnerite. At the face the vein becomes separate, discrete stringers, about 6 inches thick, of white quartz that contain pyrite, tetrahedrite and hubnerite.

The face of the southwest drift appears very favorable from the standpoint of possible widening out of the vein structure farther to the southwest with an increase of tungsten grade.

Inspection of project work under the terms of contract Idm-E 1032 showed that operations were being done in an efficient and workmanlike manner. It is recommended that drifting in project "A" be continued. The basic dike should be penetrated and a search for ore deposits should be made beyond the dike.

REVIEW OF OPERATOR'S REQUEST FOR ADDITIONAL EXPLORATION

On December 9, 1957 the Operator requested an amendment be made to this contract providing for 1,600 lineal feet of additional exploration work at a total cost of $64,750.00. The Operator's justification for additional work is contained in a letter of November 26, 1957 from the Applicant's geological concultant, Mr. Carlton D. Hulin to Mr. William M. Weaver, Jr., president of the Tungsten Mining Corporation. A copy of this letter was attached to the request for an amendment.

The requested exploration was to be done in certain mineralized sections already discovered under this contract in each of the four projects. It was proposed to raise (and/or) sink and to drive exploratory drifts and crosscuts from the raises or winzes when considered advisable. Work was to be done in areas indicated on the plan maps accompanying the request and in amounts tabulated in the request, a copy of which follows:

Project -	A	B	C	D	Total
Winzes	100	50	50	50	250
Raises, sub-drifts and sub-crosscuts	500	350	150	350	1350
Total feet -	600	400	200	400	1600

In the course of the long conference with the Operator at the time of the interim inspection the proposed additional work was modified to some extent. The modified work plan was arrived at through mutual agreement between the Operator's representatives and the inspecting team. Amendment to the subject contract would provide for additional drifting, raising, winzing, sub-drifting and sub-crosscutting at seven locations, (1 to 7) as shown on the attached maps. The numbers indicate prefered sequence of work and also the prefered sequence to produce results.

The attached maps show the lens-like nature of the ore bearing quartz veins in the Hamme mine. So far, the DMEA sponsored work has exposed newly discovered ore veins in only horizontal dimension along the drifts. The extent of the veins along the dip above and below the drifts is completely unknown. The veins might be expected to extend vertically at least as far as they extend horizontally. Some of the larger more persistent veins in the mine extend for several hundred feet vertically. The examining team know of no method or mechanism by which the physical dimensions and characteristics (pinching and swelling) of an ore vein can be accurately predicted in advance of mine openings, except that where a strong shear zone or quartz vein is encountered the chances are good that ore may be found if the structure is pursued.

The seven work sites shown on the attached maps have been chosen for additional work because those places appear most favorable from the standpoint of ore grade and thickness, and the strength of the ore-bearing shear zone structure. We believe that if the proposed new work is completed there is a good possibility that the tonnage of ore already discovered by past DMEA work will be at least doubled. The weighted average grade of the ore discovered under DMEA contract to date is 0.63 percent WO_3. That grade compares very favorably with the run-of-mine ore grade of 0.60 percent WO_3. We believe that there is a good chance that the ore discovered by the proposed new work will have a grade of 0.63 percent WO_3 or better. The new work is designed and intended only to reasonably delimit - not develop - ore.

CONSLUSIONS AND RECOMMENDATIONS

The examining team agree with the Operator that a contract amendment providing for additional drifting, raising, winzing, sub-drifting and sub-crosscutting would be likely to result in the discovery of significant amounts of new tungsten ore reserves. If an amendment to the contract is contemplated, the examining team recommend for consideration the project herein outlined and that the work be done at the sites shown on the attached maps and in the approximate amounts shown on maps and also in the cost estimate.

If the examining team's proposal is made a part of the contract through amendment, it is further recommended that linear footages of underground opening in the same cost brackets be transferrable between work sites, with Government approval. Such an arrangement, already in force under the contract with diamond drilling, would lend much desirable flexibility to the project. As the work progressed footage could be diverted from the least promising sites toward the better locations, making for more efficient operation.

It would be advisable to drive the raises first at each work site, inasmuch as the raises would cost only half as much per linear foot as the winzes. If a raise is driven and it discloses that the ore zone either holds its width or widens upward it would seem advisable to either not winze at all at that location or winzing should be done only with prior Government approval. If the ore pinches out in the raise then, of course, the winze should be sunk.

DISCUSSION OF COST ESTIMATES

The Operator states in his request and the examiners agree that all openings except at location (1) should be of the smallest workable

dimension and done with the least amount of timber comensurate with safety. Costs as submitted by the Operator and also those herein estimated are to include all necessary timber and raise chutes as well as winze hoisting and dumping facilities, except that drift cutouts for winze bucket dump to car are not included.

The Operator states that his cost estimate of $35.00 per foot for raising and sub-drifting and sub-crosscutting is based on records for drifting over an 11 year period, plus his statement that these records disclose only a difference of $0.02 per foot in drifting and raising. The Operator's quoted price of $70.00 per foot for winzing is a complete estimate which he states is arrived at from 11 year records of all winzes driven, large and small, timbered and untimbered.

Copies of cost sheets used by the Operator in arriving at his cost figures were obtained and are made a part of this report. These sheets are designated "A" and "B". Sheet "A" covers direct and indirect costs without a breakdown of indirect costs and is said to not include comparable "Service Accounts" as indicated for the month of August, 1957 on sheet "B". It is extremely difficult to reconcile the high indirect costs of sheet "A" with the statement that the "Service Account" costs on sheet "B" are not included.

On the above basis of accounts, the company records show that DMEA drifting and crosscutting from November 1957 through January 1958 totaled 6,366 feet at a direct and indirect cost as per sheet "A" of $193,671.50. This cost amounts to $30.42 per foot of which $15.87 is direct and $14.55 is indirect. In further calculations to arrive at the $35.00 per foot for raises and sub-drifts, the Operator subtracted the amount of ($0.105 sand filling) per ton mined from the indirect cost of development.

To the result was added $5.01 from the "Service Account Sheet" (Sheet "B") to make a total cost of $35.43 per foot of drifts and crosscuts according to the Operator's sheets "A" and "B".

In this connection it should be remembered that in the original application the Operator requested an average of $47.11 per foot for drifts and crosscuts. The Field Team recommended a 25.70 percent reduction to an average cost of #35.52 per foot, which was reduced to $35.00 per foot in the contract. Further, the Operator states on page 3 of the present request that the actual cost of DMEA drifts and crosscuts, is slightly in excess of $35.00 per foot and on February 12 and 13, 1958 gave the Government representatives the figure of $35.43 as explained above. In consideration of the above it is considered that an estimated cost of $30.40 per foot of raise and sub-drift or sub-crosscut is adequate. This amount is the sum of $15.87 direct and $14.55 indirect costs and should include chutes and any other timbering necessary. Minimum dimensions should be 5 x 5 feet for raises and 5 x 6 feet for sub-drifts and crosscuts.

Concerning cost of winzing, the Operator's reasoning is as follows. Over the 1945-1956 period shown on sheet "A", there was done 3,116 feet of winzing at an average direct cost of $53.65 and indirect cost of $34.96 for a total on sheet "A" of $88.61. The cost of DMEA work (drifts and crosscuts), is 7.46 percent higher than costs of the period 1945-1956, therefore costs represented on sheet "A" should be $88.61 x 107.46 = $95.22. The "Service Account", sheet "B" then adds 16.46 percent or $15.67 to the $95.22 for a total cost of $110.89 per foot of winzing. The Operator proposed to reduce this cost to $70.00 per foot because many of the winzes represented under the $110.89 per foot cost were larger in

section than here necessary and also in cases they were fully timbered. The Operator stated that his estimated cost of $70.00 per foot is based on no solid figure.

If we now reduce the proposed $70.00 per foot by the same amount (25.70 percent) used for raising, we arrive at a cost of $52.01 per foot.

Due to the fact that proposed winzes are shallow and that therefore the cost of sinking installation and facilities is high per foot of sinking, it is estimated by the examiners that a cost of $60.00 per foot for winzing is adequate and should include costs of installing head block facilities and any necessary winze timbering.

It is necessary in sinking to widen the drift for the bucket to dump into a car. The examiners estimate widening will require the equivalent of 1½ standard drift rounds at a total cost of $165.00 for each of the 6 proposed winze locations. This cost would include installing switch and rail.

In his request for additional exploration, the Operator did not include the extension of any of the DMEA driven drifts on the 900 foot level but in consultation with the examiners the manager stated that the Operator definitely wished to do so in the southwest drift of Project "D". The favorable geological conditions in that area are discussed in another portion of this report. It was agreed in case additional drifting was done that not less than 400 additional feet would answer the purpose and be justifiable in this deposit. The cost of such drifting would be at the same rate used in the present contract, namely; $35.00 per foot where untimbered, and $32.40 per foot where timbered. It was agreed that no provision need be made for timbering as there remains sufficient unused

footage and funds in the original contract for additional work.

There remains in the original contract a sufficient number of unused assays for the entire proposed additional exploration and no provision need be made for more.

If additional exploration is considered, the following costs are recommended. The only firm agreement with the Operator on costs was that of $35.00 per foot for possible drift extension in Project "D", which is also the present cost. Exploration location numbers below are those shown on accompanying maps.

Location No. 1 (Project "D")

400 feet, drift and crosscut, minimum 7 feet x 7½ feet high @ $35.00/ft. (Where timbered to be @ $32.40/ft.)	$14,000.00	
Total, Location No. 1		$14,000.00

Location No. 2 (Project "A")

100 feet, raising @ $30.40/ft.	$ 3,040.00	
60 feet, winzing @ $60.00/ft.	3,600.00	
150 feet sub-drift or sub-crosscut from either winze or raise @ $30.40/ft.	4,560.00	
1 cutout for car @ $165.00	165.00	
Total, Location No. 2		$11,360.00

Location No. 3 (Project "B")

75 feet raising @ $30.40/ft.	$ 2,280.00	
25 feet winzing @ $60.00/ft.	1,500.00	
100 feet sub-drift or sub-crosscut from either winze or raise @ $30.40/ft.	3,040.00	
1 cutout for car @ $165.00	165.00	
Total Location No. 3		$ 6,985.00

Carried forward $32,345.00

Location No. 4 (Project "D")

90 feet raising @ $30.40/ft.	$ 2,736.00	
30 feet winzing @ $60.00/ft.	1,800.00	
100 feet sub-drift or sub-crosscut from either winze or raise @ $30.40/ft.	3,040.00	
1 cutout for car @ $165.00	165.00	
Total, Location No. 4		$ 7,741.00

Location No. 5 (Project "B")

75 feet raising @ $30.40/ft.	$ 2,280.00	
25 feet winzing @ $60.00/ft.	1,500.00	
100 feet sub-drift or sub-crosscut from either winze or raise @ $30.40/ft.	3,040.00	
1 cutout for car @ $165.00	165.00	
Total, Location No. 5		$ 6,985.00

Location No. 6 (Project "D")

75 feet raising @ $30.40/ft.	$ 2,280.00	
20 feet winzing @ $60.00/ft.	1,200.00	
100 feet sub-drift or sub-crosscut from either winze or raise @ $30.40/ft.	3,040.00	
1 cutout for car @ $165.00	165.00	
Total, Location No. 6		$ 6,685.00

Location No. 7 (Project "A")

50 feet raising @ $30.40/ft.	$ 1,520.00	
20 feet winzing @ $60.00/ft.	1,200.00	
75 feet sub-drift or sub-crosscut from either winze or raise @ $30.40/ft.	2,280.00	
1 cutout for car @ $165.00	165.00	
Total, Location No. 7		$ 5,165.00
Total for Locations 1 through 7		$58,921.00

W. P. Williams, Geologist
U. S. Geological Survey

H. L. Burmeister, Engineer
U. S. Bureau of Mines

March, 1958

A

	Feet	Lab.	Ft.	Sup.	Ft.	Total	Ft.	Contract	Ft.	Total	Ft.
Shafts, Shaft Sinking	3,776	$316,511.09	$35.5[illegible]	$237,[illegible]	[illegible]2.709	$384,053.77	$101.709	$387,855.06	$102.716	$771,908.83	$204.425
Stations and Pocket Stations	355	18,701.00	52.679	3,[illegible]	10.056	22,271.00	62.735	-	-	22,271.00	62.735
Shaft Pockets	1,294	37,156.48	28.714	35,537.[illegible]	27.463	72,694.07	56.177	32,587.24	25.183	105,281.31	81.360
Shaft Stations, Level Stations	1,361	66,056.04	48.535	16,2[illegible]	11.962	82,336.72	60.497	28,085.44	20.636	110,422.16	81.133
Pump Stations	106	4,139.90	39.055	631.89	5.9[illegible]	4,771.79	45.017	-	-	4,771.79	45.017
Sumps	102	4,703.00	46.108	690.00	6.764	5,393.00	52.872	-	-	5,393.00	52.872
Winzes	3,116	135,862.04	43.602	31,308.93	10.087	167,170.97	53.649	-	-	167,170.97	53.649
Drifts & Crosscuts, Diamond Drilling Station	82,355	1,014,901.58	12.324	362,201.48	4.399	1,377,103.06	16.723	14,982.50	.181	1,392,[illegible]	16.904
Raises, Diamond Drilling Raise	27,751	350,169.74	12.618	115,500.89	4.162	465,670.63	16.780	-	-	465,670.63	16.780
Test Hole Prospecting	-	230.81	-	52.98	-	283.79	-	-	-	283.79	-
Diamond Drilling	166,285	115,285.34	.693	60,159.49	.361	175,444.83	1.054	-	-	175,444.83	1.054
Total	-	$1,893,717.02	-	$863,476.61	-	$2,757,193.63	-	$[illegible]	-	$[illegible]	-

INDIRECT COSTS

	Feet	Lab.	Ft.	Sup.	Ft.	Total	Ft.	Contract	Ft.	Total	Ft.
Shafts, Shaft Sinking	3,776	$84,214.63	$22.302	$136,779.40	$36.223	$220,994.03	$58.5[illegible]	$165,[illegible]	$43.339	$[illegible]	$[illegible]
Stations and Pocket Stations	355	10,746.00	30.270	4,061.00	11.439	14,807.00	41.709	-	-	14,807.00	41.709
Shaft Pockets	1,294	21,089.22	16.297	23,041.28	17.806	44,130.50	34.103	11,543.19	8.920	55,673.69	43.023
Shaft Stations, Level Stations	1,361	38,313.98	28.151	17,341.99	12.742	55,655.97	40.893	9,943.00	7.305	65,598.97	48.198
Pump Stations	106	2,542.99	23.991	549.07	5.179	3,092.06	29.170	-	-	3,092.06	29.170
Sumps	102	2,573.00	25.225	1,124.00	11.019	3,697.00	36.244	-	-	3,697.00	36.244
Winzes	3,116	75,961.10	24.377	32,981.27	10.584	108,942.37	34.961	-	-	108,942.37	34.961
Drifts & Crosscuts, Diamond Drilling Station	82,355	585,708.94	7.112	335,320.50	4.071	921,029.44	11.183	4,933.44	.059	925,962.88	11.242
Raises, Diamond Drilling Raise	27,751	202,648.60	7.302	113,265.90	4.081	315,914.50	11.383	-	-	315,914.50	11.383
Test Hole Prospecting	-	146.62	-	41.13	-	187.75	-	-	-	187.75	-
Diamond Drilling	166,285	2,243.70	.013	98,600.01	.592	100,843.71	.605	-	-	100,843.71	.605
Total	-	$1,026,188.78	-	$763,105.55	-	$1,789,294.33	-	$152,306.28	-	$1,[illegible]	-

TOTAL COSTS

	Feet	Lab.	Ft.	Sup.	Ft.	Total	Ft.	Contract	Ft.	Total	Ft.
Shafts, Shaft Sinking	3,776	$ 230,725.72	$61.102	$374,322.08	$99.132	$ 605,047.80	$160.2[illegible]	$513,763.77	$136.0[illegible]	$1,118,791.57	$296.[illegible]
Stations and Pocket Stations	355	29,447.00	82.949	7,631.00	21.495	37,078.00	104.444	-	-	37,078.00	104.444
Shaft Pockets	1,294	58,245.00	45.011	58,578.87	45.269	116,824.57	90.280	44,130.37	34.103	160,954.94	124.383
Shaft Stations, Level Stations	1,361	104,370.02	76.686	33,622.67	24.704	137,992.69	101.390	38,028.44	27.941	176,021.13	129.331
Pump Stations	106	6,682.89	63.046	1,180.96	11.141	7,863.85	74.187	-	-	7,863.85	74.187
Sumps	102	7,276.00	71.333	1,8[illegible]	17.783	9,090.00	89.116	-	-	9,090.00	89.116
Winzes	3,116	211,823.14	67.979	64,290.20	20.631	276,113.34	88.610	-	-	276,113.34	88.610
Drifts & Crosscuts, Diamond Drilling Station	82,355	1,600,610.52	19.436	697,522.[illegible]	8.470	2,298,132.50	27.906	19,914.94	.240	2,318,047.44	28.146
Raises, Diamond Drilling Raise	27,751	552,818.34	19.[illegible]	22[illegible]	8.243	781,585.13	28.163	-	-	781,585.13	28.163
Test Hole Prospecting	-	[illegible]	-	[illegible]	-	[illegible].54	-	-	-	471.54	-
Diamond Drilling	166,285	1[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	1.659	-	-	276,288.54	1.659
Total	-	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-	$615,817.52	-	$5,162,305.48	-

B

TUNGSTEN MINING CORPORATION

GENERAL & [illegible]

[illegible]

Cost per ton mined = 27,26[illegible] tons

		Total	Per ton
[illegible] LABORATORY [illegible]			
[illegible]	$ 1,[illegible]0.[illegible]0		[illegible]
Supplies	277.53		0.01[illegible]
Miscellaneous			
		$ 1,527.93	
[illegible]			
GENERAL [illegible]			
[illegible]	$ 1,025.00		[illegible]
[illegible]	1,345.00		[illegible]
[illegible]	234.[illegible]		[illegible]
[illegible] heating	[illegible]		[illegible]
[illegible] & building repairs	[illegible]		[illegible]
[illegible] expense	[illegible]		[illegible]
[illegible]	[illegible]		[illegible]
[illegible] power	[illegible]		[illegible]
[illegible]	1,[illegible]		[illegible]
[illegible]	[illegible]		[illegible]
[illegible]	[illegible]		[illegible]
[illegible] re[illegible]	[illegible]		[illegible]
[illegible]	[illegible]		[illegible]
Miscellaneous expense	[illegible]		[illegible]
[illegible] vac. & holiday pay	[illegible].73		[illegible]
[illegible] plant and equipment	[illegible]		[illegible]
		$ 2,[illegible]	
[illegible] ADMINISTRATION			
[illegible], supt. & clerical	[illegible]		[illegible]
X [illegible] board	[illegible].50		[illegible]
X [illegible]	[illegible].[illegible]		[illegible]
X [illegible]	[illegible]		[illegible]
[illegible] & supplies	[illegible]		[illegible]
X [illegible]	[illegible]		[illegible]
[illegible] insurance	[illegible].74		[illegible]
[illegible] - employees' group	[illegible]		[illegible]
[illegible] taxes	[illegible]		[illegible]
X [illegible] - [illegible]	[illegible]		[illegible]
[illegible] and telegraph	[illegible]		[illegible]
[illegible]	[illegible]		[illegible]
X [illegible] vacation and holiday pay	[illegible]		[illegible]
[illegible] expense [illegible]	[illegible]		[illegible]
X [illegible] equipment	[illegible]		[illegible]
		[illegible]45.[illegible]	
[illegible] GENERAL [illegible]		[illegible],[illegible]48.3[illegible]	

X - deleted

POSITION 2/12/58

Project	Contract Dr.+XC (ft.)	Dr.+XC Completed (ft.)	Dr+XC Completed %	Dr.+XC Remaining (ft.)	Timbered (ft.)	Contract Core drill. (ft.)	Core drill. Completed (ft.)	Core drill Completed %	Assays
A	2200	1927	87.6	273	343		1401		11
B	1300	1300	100	0	40	4000	812		19
C	1200	1199	99.9	0	59		487		5
D	2000	2000	100	0	293		804		65
Totals	6700	6426	95.9	273	735	4000	3504	87.6	100

1415 ft. of timbered Dr.+XC allowed

DMEA 4216

TUNGSTEN MINING CORP.

2/13/58

TABLE-1

H.B.

DMEA
RECEIVED MAR 24 1958
DATE | INITIAL | CODE
3/24 | C | 220
3/24 | Com | 100
" | Ky | 110
3/25 | [illegible] | 800
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INTERIM REPORT ON OPERATING CONTRACT

DMEA 4216, Contract Idm-E 1032
Tungsten Mining Corp.
Hamme Mine, Vance County, North Carolina

Operations under this contract were inspected on March 12, 1958. The inspecting team consisted of V. J. Lynch, Bureau Member of the Field Team, H. L. Burmeister and L. E. Shirley, Bureau of Mines and Helmuth Wedow, Jr. U. S. Geological Survey. Mr. A. M. Szynklewski and Mr. W. R. Atkins, respectively chief mining engineer and general superintendent for the Operator, accompanied the inspectors underground.

Project "A" - From February 1 to March 12 the drift was advanced 60 feet on a very tight structure containing practically no quartz. No mineralization was present in the quartz. Crosscutting was continued to a total of 86 feet in the dike mentioned in the last previous interim report. In the last 50 feet of the crosscut the dike is more coarsely crystalline than it was nearer the contact.

Operations in Project "A" were placed on a one shift basis on February 24 due to the fact that the mine is operating with a minimum crew and the second shift was urgently needed to assist temporarily in sand filling operations. The dike rock is extremely bolcky and the single shift is engaged at present solely in timbering the entire crosscut.

As far as can be determined, the dike will continue in width for approximately another 40 feet. The first 66 feet of crosscut is shown on the Operator's maps for February.

Project "D" - As previously reported, drifting and crosscutting in this project was completed in January. From February 1 to March 12, the only activity consisted of core drilling one hole into the footwall to determine the possible extension to the southwest, of the first ore encountered

in the crosscut near survey station 1455. Drill hole U-1315 was collared at coordinates N 17,541 - E 17,247 and drilled to bottom at 51 feet on a bearing of S 89½° E. Barren quartz was encountered from 21½ feet to 23 feet.

The status of the entire contract is shown on Table I.

March, 1958

Helmuth Wedow, Jr., Geologist

H. L. Burmeister, Mining Engr.

V. J. Lynch, Mining Engr.

L. E. Shirley, Mining Engr.

POSITION 3/12/58

Project	Contract Dr. + XC (ft.)	Dr. + XC Completed (ft.)	Dr. + XC Completed %	Dr. + XC Remaining (ft.)	Timbered (ft.)	Contract Core drill. (ft)	Core drill. Completed (ft.)	Core drill Completed %	Assays
A	2200	2013	91.5	187	343		1401		11
B	1300	1300	100	0	40	4,000	812		19
C	1200	1199	99.9	1	59		487		5
D	2000	2000	100	0	293		855		65
Totals	6700	6512	97.2	187	735	4,000	3555	88.9	100

1415 ft. of timbered Dr. + XC allowed

DMEA 4216

TUNGSTEN MINING CORP.

3/17/58

TABLE - 1

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INTERIM REPORT ON OPERATING CONTRACT

DMEA 4216 (Tungsten), Contract Idm-E 1032
Tungsten Mining Corporation, Hamme Mine
Vance County, North Carolina

Operations under this contract were inspected January 7, 1958. The engineer was accompanied by Mr. A. M. Szynklewski, Chief Engineer for the company. This report covers DMEA operations from December 1, 1957 to January 7, 1958. Data relative to work accomplished to date and that still to be done are recorded in Table 1.

Project "A" - From December 1, 1957 to January 7, 1958 this project has been advanced by a total of 161 feet of drifting. The main drift to the northeast was advanced 106 feet and 55 feet of drifting was done to the southwest on the vein where first cut after the start of the project. The southwest drift started near survey stations 1384 and 1469 and is shown on the Operator's Report maps for December 1957.

During this period the main drift to the northeast has been driven on a structure 1 to 2 feet in width with a small amount of gouge and containing a very little barren quartz. The drift walls have been and still are slightly altered gneiss. On December 26 the main drift face had reached a point below old company drilled surface core holes Nos. S-514, S-382 and S-416, all of which had intercepted 2 zones of mineralization. All data indicated that the present drift is following the footwall mineralization. The engineer gave permission to core drill 2 holes into the hangingwall to test for a possible downward extension of the hangingwall mineralization encountered in the 3 surface drill holes. At the time of

visit, the first of these holes, U-1306 had been completed at 105 feet without finding a definite structure. Hole U-1306 is collared at coordinates N 21,187, E 21,555 on a bearing of S 84° E. The second core hole, U-1305 was drilled 45 feet into the hangingwall at a point about 150 feet southwest of U-1306. This hole encountered a barren zone of slight silicification from 21 to 24 feet which was not found in drill hole U-1306. Neither drill having found a structure, the present drift will be continued.

The drift to the southwest was started near survey stations 1384 and 1469 and is driven on the vein where first encountered northeast of the large dike shortly after this project was started. The drift was driven 55 feet on ore and to the dike which had changed strike from N 10° E where crosscut, to N 45° W at the contact in the face of this drift. The ore in the 55 feet of drift averages 8.1 feet in width and 5 cut samples over the entire width average 0.41 percent WO_3. This drifting extends the lens to a total length of 85 feet, with an average width of 8.5 feet and an average cut sample assay of 0.50 percent WO_3. This drift produced 241 tons of ore which car sampled an average of 0.22 percent WO_3. It is certain that the tonnage was greatly diluted by wall rock included in the cars.

As previously reported, Projects "B" and "C" have been completed.

Project "D" - Since December 1, 1957 the drift to the southwest has been advanced a total of 168 feet, of which 130 feet was on ore averaging 3 feet in width and containing an average of 0.43 percent WO_3, based on 12 cut samples. In December this drift produced 277 tons of ore

POSITION 1/7/58

Project	Contract Dr. + XC (ft.)	Dr. + XC Completed (ft)	Dr. + XC Completed %	Dr. + XC Remaining (ft.)	Timbered (ft.)	Contract Core drill. (ft.)	Core drill Completed (ft)	Core drill Completed %	Assays
A	2200	1741	79.3	459	343		1088		10
B	1300	1300	100	0	40	4000	812		19
C	1200	1199	99.9	1	59		487		5
D	2000	1855	92.7	145	293		654		54
Totals	6700	6095	91.0	605	735	4000	3041	76.0	88

1415 ft. of timbered Dr. + XC allowed

DMEA 4216

TUNGSTEN MINING CORP.

1/7/58

TABLE - 1

HB.

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12/18 | gb | 220
19 | Cobr | 100
| WSM | 400

INTERIM REPORT ON OPERATING CONTRACT

DMEA 4216 (Tungsten), Contract Idm-E1032
Tungsten Mining Corp., Hamme Mine
Vance County, North Carolina

Operations under Contract Idm-E1032 were inspected on December 4, 1957, by H. L. Burmeister, U. S. Bureau of Mines and W. P. Williams, U. S. Geological Survey. The inspecting team was accompanied on an underground inspection tour of the Hamme Mine by Mr. William Atkins, General Superintendent and Mr. A. M. Szynklewski, Chief Mining Engineer. The project was discussed at some length in the mine office with Mr. J. R. Sweet, General Manager.

Project "A"- The crosscut in the diabase dike, which was started in October, was continued through and beyond the dike for a total crosscut length of 106 feet. The dike is 55 feet wide on the line of the crosscut. The balance of crosscutting was done across the structure and into the hangingwall to make sure that the entire structure had been crossed.

From November 1 to December 4, 40 feet of drifting was completed on the structure, all on the southeastern side of the dike and in the same period 98 feet of crosscutting was completed, (see attached table). From November 1 to December 4, 75 lineal feet of crosscut was timbered. No ore had been produced in this period.

Since the last inspection the drift has passed through

the diabase dike and into greenish black chlorite schist. Schistosity is well developed, and at the drift face the rock is much sheared. At the drift face a 3-foot wide shear zone dips 47° southeast. The schist contains very sparse, scattered blebs and small lenses of white quartz. For the last 30 feet the drift has followed a fairly strong shear zone about 2 feet thick. The shear is being carried in the upper west rib of the drift. The shear zone contains abundant pyrite, and possibly some very sparse hubnerite in the small quartz lenses.

Project "B" - Work on this project was terminated by completion of 53 feet of drifting from November 1 to November 26. All drifting was done from the room containing survey station 1440. Drifting to the northeast on the structure accounted for 17 feet of advance and a drift to the southwest on the same structure was advanced 36 feet.

The wall rock in the room-like opening consists of intergrading dark greenish-gray chloritic schist and fine grained granite. Abundant fine grained pyrite and masses of purple fluorite are disseminated throughout the wall rocks. Drifting to the southwest and northeast disclosed that the shear zone in the room-like opening has pinched down in both directions to a thickness of only about 1 foot or less. In the faces of both drifts there are exposed only small, disconnected lenses of white quartz. Hubnerite is sparse or

absent in the drift faces. Lateral continuity of the mineralized zone appears to be poor. A fair chance appears to exist, however, of developing some ore tonnage either above or below the level of the 'room'.

Nine tons of ore with an estimated grade of 0.35 percent WO_3 were mined from Project B during November.

Project "C"- All work under Project C was completed prior to this inspection period.

Project "D"- From November 1 to December 4, 182 feet of drifting and 6 feet of crosscutting was completed southwest of the main crosscut and 15 feet of drifting was done to the northeast of the main crosscut.

In the northeast drift the white hubnerite-bearing quartz vein has pinched down, and the face of the drift showed only a narrow shear zone practically barren of tungsten. A new, narrow shear zone has appeared in the southeast rib of the drift which could possibly be revealed as an ore-bearing structure should the drift be driven farther to the northeast.

The southwest drift has progressed through gray to greenish brown, fine grained chloritic schist. Southwest of the main crosscut the hubnerite-bearing quartz vein gradually pinched down to a thickness of only about 1 foot. Ten feet southwest of survey station 1465, however, a new shear zone was discovered in a short, 6-foot exploratory crosscut into the hanging wall. The main drift was offset to follow the new

structure. For 60 feet the tungsten-bearing quartz vein was 8 to 10 feet thick, and three cut samples averaged 1.82 percent WO_3. Within the last few feet of advance the quartz vein has pinched rapidly, and the drift face showed only two, 6-inch thick veins that have a near vertical dip. The northwest vein appears most favorable because the quartz is the more favorable, saccharoidal, and less vitreous type that usually is tungsten bearing. For that reason the drift will be turned somewhat to the southwest to follow the most favorable vein.

One core drill hole was completed in November and another was drilling in Project "D" at the time of visit. Hole U-1301 was drilled horizontally on the line of the main crosscut to explore the hanging wall for possible additional structures. The hole was collared in the main crosscut face and bottomed at 259 feet. The hole penetrated chlorite and sericite schist. Several quartz veins were cut. The strongest vein was 7 feet thick, and was penetrated from 42.5 to 49.5 feet. This vein contained pyrite and molybdenite. None of the veins contained appreciable amounts of hubnerite, according to the applicant's drill hole log.

Core hole U-1302 was collared in the hanging wall of the northeast drift at coordinates N 17,541, E 17,230 and was being drilled at the time of visit. This hole is collared in the footwall of the molybdenum-bearing vein described in the preceding interim report.

During November, this project produced 283 tons of ore averaging 0.85 percent WO_3.

General Information

The mill is processing an average of 850 tons per day on a 5 day week basis, which is only slightly below normal. The mine is producing this tonnage on a two-shift, 4 day per week basis. Although the mine has been reduced from a three-shift, 6 day per week basis, the production is only slightly less than previously. This is due to the fact that production has been stopped in narrow stopes and increased in wide stopes where the production per man shift is much greater.

Filling stopes with wet tailings direct from the mill will start this month. The tailings are delivered at 35 to 40 percent solids through a 3½ inch steel pipe to a shafthead cyclone which dewaters to about 70 percent solids for delivery to stopes. Dry tailings are presently being used to a limited extent. No timber is used in these stopes and mining is carried on by using stopers on top of the sand fill and advancing one and sometimes two 6 to 8-foot cuts the width and length of the stope before filling. Six inches of sand fill is carried to the chutes by the slusher each time a cut is slushed to the raises.

Conclusions

Although Project A has not so far discovered large amounts of tungsten ore, the drift is only now approaching

and possibly entering the original target area under the Walker Nos. 5 and 10 veins. The veins outcrop above the proposed drift. It seems advisable to continue Project A drift far enough to the northeast to be sure that the target area has been adequately tested and explored.

Project C work has been successful in finding significant amounts of tungsten ore. The magnitude of the discovery, however, should probably be explored further by continuing the drifting in both southwest and northwest directions, as planned.

It appeared that all phases of the work were being accomplished by the Operator in an efficient and workmanlike manner.

December, 1957

TABLE

POSITION 12/4/57

Project	Contract Dr. + XC (ft.)	Dr. + XC Completed (ft.)	Dr. + XC Completed (%)	Dr. + XC Remaining (ft.)	Timbered (ft.)	Contract Core drill. (ft.)	Core drill. Completed (ft.)	Core drill Completed %	Assays
A	2200	1600	72.7	600	343		938		5
B	1300	1300	100.	0	40	4,000	812		19
C	1200	1199	99.9	1	59		487		5
D	2000	1683	84.2	317	293		367		38
Totals	6700	5782	86.3	918	735	4,000	2604	65.1	67

1415 ft. of timbered Dr. + XC allowed

DMEA 4216

TUNGSTEN MINING CORP.

12/4/57

N.B.

averaging 0.55 percent WO_3. The lens followed in December pinched out with the last 15 feet containing only a very small amount of barren quartz. The drift was stopped on January 1, 1958 and on January 6, core drill hole U-1307 was collared in the footwall at coordinates N 17,240, E 16,990 on a bearing S 73° E. At the time of visit this hole was drilling at 10 feet in schist and will be continued to about 45 feet to test for a possible extension of the 2 foot width of mineralization encountered near survey station 1465 and which is shown on the Operator's November report map. Upon completion of drill hole U-1307 it is planned to core drill a hole 120 feet into the hangingwall to test for a possible structure. This hole will be collared at coordinates N 17,130, E 16,885.

From December 1, 1957 to January 7, 1958 the drift to the northeast has been advanced 20 feet. The first 10 feet of advance was on a structure containing 1.5 feet of poorly mineralized quartz. The next 10 feet of advance is on mineralized quartz averaging 8.5 feet in width and which is estimated to contain 0.8 percent WO_3. No cut sample or car sample assays are yet available. The vein in the face contains the largest crystals of hubnerite yet found in this entire contract.

As of January 7, there remains a total of 145 feet of drifting to be done in project "D". This footage will be used exclusively in the northeast drift if the lens in the present face continues.

H. L. Burmeister
Mine Examination and Exploration Engr.
U. S. Bureau of Mines

January, 1958

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RECEIVED NOV 29 1957

DATE	INITIALS	CODE
11/29	gb	220
"	[illegible]	100
12/2	WSM	400

INTERIM REPORT ON OPERATING CONTRACT

DMEA 4216, Idm-E 1032
Tungsten Mining Corp., Hamme Mine
Vance County, North Carolina

Operations under this contract were inspected on November 13, 1957 by H. L. Burmeister, U. S. Bureau of Mines and John M. Parker, U. S. Geological Survey.

Project "A" - From October 31 to November 13 this project advanced a total of 65 feet, 55 feet of which was crosscutting through a diabase dike and a 10 foot crosscut was continued across a structure on the farther side of the dike. The structure where crosscut consists of 3 feet of apparently barren quartz stringers in schist. The crosscut will be continued an additional 25 feet to assure that we are on the full structure. This procedure proved necessary after crosscutting the original large dike in project "A".

The true width of the dike is 50 feet and the dike strikes N 01° W and dips 66° westerly. The vein structure strikes N 34° E and dips 67° southeasterly. No timbering was done during advance in the crosscut but timbering the entire crosscut was found to be necessary and was started during this visit. Timbering will require at least one week or until about November 22. As of November 13 there remains 673 feet of drifting and crosscutting to be done in project "A" (see attached table). This project will possibly require an additional 600 feet of core drilling.

Project "B" - Since November 1 there has been no advance in the southwest end of this project. The last drifting there from the crosscut amounted to 26 feet, which was done on an extremely tight structure consisting of a very little barren quartz in chloritic schist. The present face at coordinates N 19,400, E 18,937 completes the southwestern advance on this structure.

On the lens near survey station 1440, since November 1, there has been an advance of 4 feet on the structure in a northeasterly direction. The face contains a 4 foot width of small quartz lenses which are practically barren of mineralization. One or two more rounds will be blasted. One round has been blasted in a southwesterly direction on the same structure. The newly blasted face contains several quartz stringers, the largest of which is about 1½ feet wide. All the quartz contains a small amount of mineralization. This drifting will be continued for the full footage remaining in the contract (about 35 feet). Eight or ten tons of ore were recovered from the 2 rounds but no assays are yet available.

Project "C" - No work has been done since October 10 at which time there had been completed 1199 feet of drifting and crosscutting. The structure in the final face consists of a very tight granite gneiss containing a 4 inch width of barren quartz. This structure shows immediately beyond a 2 foot diabase dike which cut across the drift.

Project "D" - Since November 1 the drift to the southwest had been advanced a total of 68 feet. In the first 10 feet of advance the quartz was 3½ feet wide and in the next 58 feet the quartz averaged 1½ feet in width. The total advance produced 35 tons of ore on which the assay was not yet

available. On the day of visit, returns were completed on 9 assays covering this advance. The assays averaged 0.72 percent over an average width of 2.6 (Fig. 1).

Since November 1 the drift to the northeast has been advanced 5 feet to a total length of 95 feet. The first 66 feet of drift is indicated by 9 cut assays to average 7.5 feet in width with an average WO_3 content of 1.25 percent. In the drift to the northeast, the lens being followed has practically pinched out in the last 5 feet of advance. It appears probable that another lens is coming in from the footwall and shows in the face as an 8 inch vein of quartz which is slightly mineralized. Also in the northeast drift, at a point 65 feet from the crosscut, the drift encountered a 2½ foot molybdenite bearing quartz vein. This vein entering from the hangingwall side of the drift strikes N 22° E and dips 13° to 16° southeasterly. The vein continues in the hangingwall side of the drift for about 12 feet at which point it's strike carries it into the hangingwall. Although content of molybdenite is considerable, no samples had been taken. The Operator was advised to cut several samples.

With approval of the Government, it is presently planned to core drill 3 holes northwestward into the hangingwall and 1 eastward into the footwall as indicated in Fig. 1. The purpose of the hangingwall holes is to determine if there is a parallel structure. The core hole into the footwall will explore the possible extension of the quartz and fluorspar vein at "A" and the position of the extension of vein "B" which was not found in the

south drift. Results obtained in the hangingwall drill holes will govern the advisability of continuing the crosscut.

General

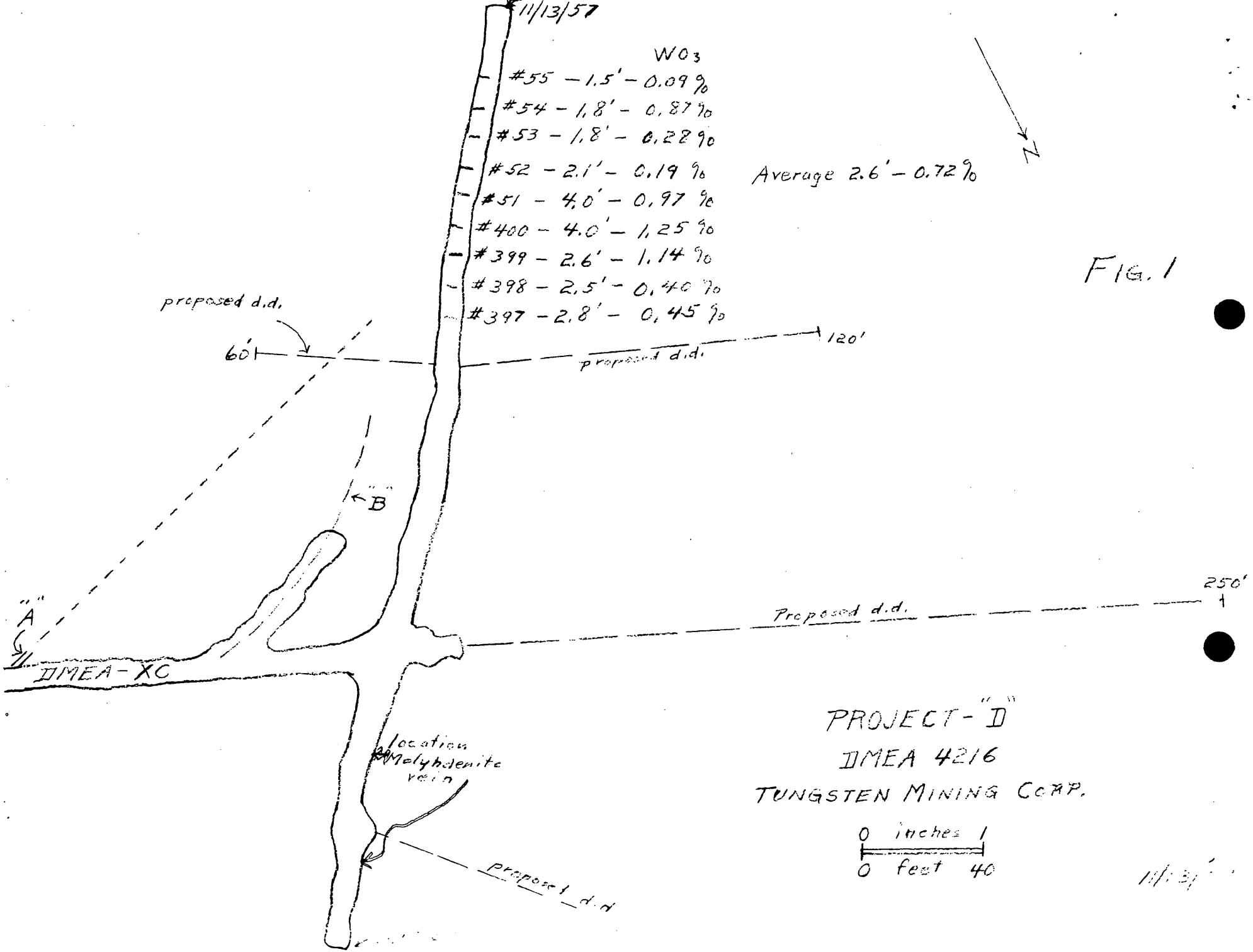
Core from 5 drill holes was checked.

The Operator expects to submit a request for additional funds for raising or sinking short distances on promising lenses not exposed in minable widths by drifting.

November, 1957

John M. Parker, Geologist
U. S. Geological Survey

H. L. Burmeister, Engineer
U. S. Bureau of Mines


11/13/57
WO3
#55 – 1.5' – 0.09 %
#54 – 1.8' – 0.87 %
#53 – 1.8' – 0.28 %
#52 – 2.1' – 0.19 %
#51 – 4.0' – 0.97 %
#400 – 4.0' – 1.25 %
#399 – 2.6' – 1.14 %
#398 – 2.5' – 0.40 %
#397 – 2.8' – 0.45 %
Average 2.6' – 0.72 %
N
FIG. 1
proposed d.d.
60'
120'
proposed d.d.
"B"
"A"
250'
Proposed d.d.
DMEA-XC
location Molybdenite vein
proposed d.d.
PROJECT-"D"
DMEA 4216
TUNGSTEN MINING CORP.
0 inches 1
0 feet 40

POSITION 11/13/57

Project	Contract Dr. & XC (ft)	Dr. & XC Completed (ft)	Dr. & XC Completed (%)	Dr. & XC Remaining (ft.)	(Ft.) Timbered	Contract Core drill. (ft)	Core drill. Completed (ft)	Core drill. Completed (%)	Assays
A	2200	1527	69.4	673	268		938		5
B	1300	1255	96.5	45	40	4,000	812		18
C	1200	1199 (completed)	99.9	0	59		487		5
D	2000	1553	77.7	447	293		0		26
Totals	6700	5534	82.6	1165	660	4,000	2237	55.9	54

1415 ft. of timbered drift and XC allowed

DMEA 4216

TUNGSTEN MINING CORP.

11/13/57

H.L.B.

DMEA
RECEIVED OCT 22 1957
10/21 GB 220
21 Dru
10/22 WSM 100
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INTERIM REPORT OF VISIT TO OPERATING CONTRACT

DMEA 4216 (Tungsten), Contract Idm-E 1032
Tungsten Mining Corp., Hamme Mine
Vance County, North Carolina

This property was inspected on October 9, 1957 by H. L. Burmeister, Bureau of Mines and J. M. Parker, Geological Survey. The team was accompanied underground by Mr. A. M. Szynklewski, Chief Mining Engineer, and the project was discussed with both Mr. Szynklewski and Mr. J. R. Sweet, General Manager.

PROJECT "A"

No drifting has been done from October 1 to October 9, due to diamond drilling operations. Drill hole U-1299, collared at coordinates N 20,795, E 21,218 and drilled into the hangingwall on a bearing of S 57° E, was completed at 131 feet. A small structure containing a trace of scheelite was encountered from 46½ to 50 feet and a barren quartz vein from 56 to 59 feet. Core hole U-1300 was drilling at 55 feet at the time of visit. Collared at coordinates N 20,992, E 21,355, this hole is being drilled into the footwall on a bearing of N 30° W and will be continued to a length of about 130 feet. The core consists of schist country rock except for 2½ feet of barren quartz from 44½ to 47 feet.

As stated in the Operator's September report, the drift was driven for 10 feet off of the structure. This footage is not being charged to the contract but the space resulting will be used for a car switch which was needed near this point. When drill hole U-1300 is completed the drift will be resumed. The drift advance since September 1, has been on a strongly bracciated and sheared structure occurring in enter-bedded gneiss and schist. The present drift face is probably very close to the contact of the large

diabase dike shown on the examination report map.

Consider now the approximate 13 foot width of fairly good grade ore encountered at the northeast end of the initial diabase dike crosscut driven at the beginning of Project "A". To the date of this visit nothing had been done to explorethis occurrence in a southwesterly direction largely because of a desire to advance the long drift to the northeast. The Operator was advised to very shortly drift southwestward and explore the possibilities of from 60 to 80 feet of good mineralization. The Operator agreed to do this.

PROJECT "B"

The main drift was advanced 56 feet from October 1 to October 9. In September, two core drill holes were drilled into the footwall: U-1296 and U-1297, which are shown on the map attached to the Operator's September report. Each hole cut a 1½ foot wide quartz vein carring traces of hubnerite. Drill hole U-1298 was drilled at a +33° angle to test the possible southwestward extension of the mineralization occurring near survey station 1440 at a point 55 feet above the level floor. From 82½ feet to 84 feet the vein assayed 1.35 percent WO_3.

The old drift face as of October 1, did not contain a structure so a crosscut was started into the footwall at the collar of drill hole U-1296 to explor the mineralization shown in U-1296. On the date of visit the crosscut had advanced 45 feet and had just cut a quartz vein which proved to be 4 inches wide and barren of tungsten.

As of October 9, there remains 88 feet of drift and crosscut to complete Project "B". To tie up all remaining possibilities for constructive exploration in this project, the Operator agreed to the following suggestions:

1. Drift about 30 feet southwestward on the above mentioned 4 inch quartz vein.

2. Advance about 50 feet southwestward on the mineralized structure occurring in the room containing survey station 1440.

3. Advance northeastward from the same room for a distance of about 10 feet to determine the point where the roll of the footwall will probably cut off the structure.

This disposition of the remaining footage appears to be the only chance of finding ore in this project of mineable width and length.

PROJECT "C"

The drift was advanced 183 feet from September 1 to the date of this visit, on a very tight structure containing 3 to 4 inches of barren quartz. The structure strikes about N 26° E and dips about 40° to the southeast. There appears to be very small possibilities of encountering an ore body in the 15 feet of drifting left in this project. The five samples cut and assayed in September between survey stations 1369 and 1380 averaged 0.45 percent WO_3 over a width of 1.9 feet and a drift length of 130 feet. It is felt that this mineralization may well be near the top or near the bottom of a potentially substandial body of ore. Without revision for raising and sinking this potential can not be explored. A further reference to a possibility in this connection will be found at the end of this report. Refer to supplemental map in Operator's September report.

PROJECT "D"

The crosscut advanced 72 feet from September 1 to October 9. At a point 5 feet northwest of survey station 1455 a drift was started southwesterly on the small vein previously reported. This drift was advanced 52 feet on the quartz vein which averages 1½ feet wide and strikes S 70° W and dips 74° SE. The first 20 feet of this vein is estimated to contain

0.4 percent WO_3. The remaining 32 feet assays at an average of 0.04 percent WO_3.

In the crosscut at a point 53 feet northwest of survey station 1455 another vein was encountered striking S 45° W and dipping an average of 76° NW. Where encountered by the crosscut the vein is 8 feet wide and assays an average of 0.78 percent WO_3. A drift had been advanced southwestward on this ore to a distance of 76 feet at the time of visit. Only two cut samples had been taken but in September this drift produced 107 tons of ore which car sampled at 1.34 percent WO_3. Data on ore production October 1 to October 9 was not available. At a point in the drift 44 feet from the crosscut the vein lensed out on the footwall side of the drift. At this point another good lense started on the hangingwall side and continues into face although the last five feet are of a lower grade. In the face the vein is 4 feet wide and contains a nearly vertical 8 inch diabase dike.

It appears probable that the small vein first discribed and the larger vein should intersect both on the dip and on the strike only a few feet in advance of the large vein face as of October 9. The examining team were advised that in this property a junction of veins has not in the past indicated an increase in either width or assay value. As soon as operations will not be disturbed in the drift to the southwest on the large vein, drifting will be started northeastward from the crosscut on the same vein. As soon as practical, the crosscut will be extended about 100 feet for the reason that the dip of the 8 foot vein is variable and another vein might be encountered which could correlate with the outcrops and mineralization found in surface holes previously drilled by the company.

The Operator brought up the subject of the possibility of increasing the total estimated cost of the contract by a few thousand dollars. The object of such an increase would be to allow for limited exploratory raises and winzes. As it is at present, several areas of potential ore are explored only by a drift which may be near the top or near the ~~btoom~~ bottom of lenses as they occur in this property and do not expose what might well be considerable tonnages of economic mineralization. The Operator stated that he expected shortly to request a limited amount of funds for such work. It is felt that the Operator has fair grounds for this request whether it be granted or not and they feel that some of this work would further unqualified certification.

October, 1957

H. L. Burmeister

H. L. Burmeister, Engineer
U. S. Bureau of Mines

ACTION ON INTERIM
OR FINAL FIELD TRIP REPORT
Date 9-23

Referred to:

1. ~~[illegible]~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. Docket Control Mails and Files
5. ~~[illegible]~~ Divisi
6. ~~Docket Control Mails and Files~~
7. 400

Note comments in report regarding:

1. Amendment
2. Requested —
3. Opinion working in amendment to I
4.

and take appropriate action.

- - - - - - - -

Action taken by Division:

Letter written saying no amendment needed, Lawrence has authority to transfer footage from transferee to unitized if total footage or cost not increased.

Robert E. Adams

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DMEA
RECEIVED SEP 23 1957

DATE	INITIALS	CODE
9/23	C	220
23	Com	100
24	WSM	400

INTERIM REPORT ON OPERATING CONTRACT

DMEA 4216 (Tungsten) Contract Idm-E 1032
Tungsten Mining Corp., Hamme Mine,
Vance County, North Carolina

This project was inspected on September 13, 1957 by H. L. Burmeister, Bureau of Mines and J. M. Parker, Geological Survey.

For the past several months it has become increasingly more evident that very probably some of the drift and crosscut footage allowed by contract could not be used unless an amendment was requested and granted. This situation has been brought about by the fact that the openings have required less timbering than was anticipated. It is practically certain that after completion of the allowed footage of untimbered drifts and crosscuts, there will remain a considerable unused footage of contract allowed timbered drifts and crosscuts. If this footage is not used some of the objectives of the contract could not be reached. The only alternative would be to timber openings not requiring support, thus involving unnecessary expense. It is the engineer's opinion that such unnecessary work could not be done under the terms of the original contract which recites that, "Drifts and crosscuts ..... shall be timbered where necessary." This condition however does not apply in Amendment No. 1, paragraph 2 which states, "Where timber is necessary, it shall consist of 8 inch by 8 inch oak posts .....etc."; it does not specify that timbering shall be done only when necessary. This opinion was not brought to the attention of the Operator.

During this visit the Operator drew up a request for amendment of contract. The request is to the effect that when all authorized footage of untimbered drifts and crosscuts has been driven, to then allow the Operator to drive untimbered drift and crosscut in lieu of the unused balance of timbered drift and crosscut. If this is not done the originally intended scope of exploration will not be accomplished. If the request is granted it will not increase the total allowed footage and will reduce the overall cost of the contract.

The inspecting team recommends that an amendment be prepared on the lines expressed in first draft of Mr. Sweet's request under date of September 12, 1957. I have prepared and attached copies of this draft on which I penciled several corrections while with Mr. Sweet. Our recommendation is based on the terms expressed in the attached copy of this letter.

Previous to this visit the engineer had prepared a table showing the status of each project and the entire contract as of August 31, 1957. A copy of this data is attached to this report for the purpose of indicating the need for an amendment as well as to present condensed information regarding the entire contract to August 31.

During this visit, it was arranged to have additional samples cut for assay in specific mineralized locations where the tungsten values are estimated to be low but on which there is no exact data. It has also been arranged to have all core drill logs submitted within the month. The

entire mine, including this project is operating on a 2 shift, 4 day per week basis. The mill is operating 5 days per week.

Project "A". This drift has advanced 50 feet since August 31, on the same unmineralized structure followed for the last 340 feet. This structure continues to be strong and remains approximately 3 feet wide. Because of the strength and bearing of the structure, no core drilling has been done in either wall for the past 480 feet of drift. A core hole will be collared in the hangingwall at a distance of about 60 feet northeast of survey station 1450. The hole will be drilled about 120 feet into the hangingwall because this wall usually is more lively than the footwall. This drilling has been approved by the Government examiners.

Project "B". As of August 31, there remained 150 feet of drifting to be done under the contract terms. The drift was advanced 48 feet from August 31 to September 11, the date of this visit. After crossing a small lamprophyre dike on September 1 and then approximately 30 feet of granite, the anticipated extension of the vein was encountered. At the point of interception the vein was approximately 3 feet wide and carried an estimated 0.40% WO_3. The tungsten mineralization continued for only a few feet but the structure containing a 2 to 3 foot width of nearly barren quartz continued to the present face. At the face both walls of the drift are in granite with the drift following a 1½ foot lamprophyre dike and an adjacent 1½ feet of barren quartz.

It is planned to advance the drift about 135 feet, leaving about 15 feet of drifting to be used in advancing northeasterly on the mineralization

in the room in which survey station 1440 is located. This should be sufficient to explore the probability that the hangingwall rolls sharply into a steeper dip. The examiners gave approval for core drilling two holes from the main drift into the footwall to explore the vein between the survey station 1440 area and station 1447. One hole to be collared at coordinates N 19,623 and E 19,215 would be inclined upward and bear westerly, the second to be collared in the main drift about 100 feet southwest of the first and to bear northwesterly.

During August 3 tons of ore were recovered in cleaning up the area near survey station 1440. This ore was estimated to contain 0.75% WO_3 which was the average car sample assay of 264 tons previously recovered at this location. Fifteen feet of drift was timbered in August and with no additional to September 11.

Project "C". As of September 11, there remains 153 feet of drifting to complete this project. By August 31, the crosscut had been driven through the 10 feet wide lamprophyre dike encountered by core drill hole U-1292 and 3 inches of fluorspar bearing quartz in a structure on the north wall of the lamprophyre. A drift was started on the structure which cuts the lamprophyre diagonally to the northeast. To September 11, this drift had been advanced 45 feet on this structure with the normal project "C" strike and which in the face contains a 4 inch width of fluorspar bearing quartz. At this time diamond drilling is not indicated as being of advantage. It is planned to continue the drift on the present structure.

Project "D". The crosscut was advanced 20 feet and 35 feet of timbering placed between August 31 and September 11.

At a point 94 feet northwest of survey station 1449 a structure was encountered crossing the crosscut on a bearing of N 20° E. The

structure is 3 feet in width and consists of brecciated and contorted slate containing a small amount of quartz with some fluorspar. Lying against the northeastern border of the structure is found a quartz band 2 feet wide which contains a small amount of hubnerite. The strike of the quartz band was not obtainable but it appears to strike several degrees more easterly than the structure. The quartz band does not cross the crosscut but appears only in the southwestern wall of the crosscut and 2 feet on the back where it terminates against the slate. The Operator's geological sketch of Project "D" with the August report shows this quartz band but it is not colored due to the fact that drilling muck covered the wall at the time the report was made. This quartz lies within 25 feet of the projected position of the Morton Estate No. 3 vein as indicated on the plan accompanying the application. A limited amount of drifting will be done to the southwestward immediately, the extent depending on developments. The crosscut will also be extended to assure that a change in dip has not occurred which would locate the Morton No. 3 further northwestward.

September, 1957

H. L. Burmeister

H. L. Burmeister, Mine Examination
and Exploration Engineer
U. S. Bureau of Mines

TUNGSTEN MINING CORP.
BOX 81
HENDERSON, N. C.
TELEPHONE NO. 1100

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RECEIVED SEP 23 1957

DATE	INITIALS	CODE

September 12, 1957

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team
Region 5, Room 13
P. O. Building
Knoxville 2, Tennessee

Re: DMEA 4216
Idm E 1032 (Tungsten)
Hanna Mine
Vance County, N. C.

Dear Mr. Laurence:

Please consider this as a written request for an amendment to DMEA Contract Idm-E 1032, Docket 4216.

Amendment No. 1 to this Contract, under "Estimated Costs of the Project, Fixed Unit Costs", recites that 5285 ft. of untimbered drifts and crosscuts be driven at a unit cost of $35.00 per foot, and that 1415 ft. of timbered drifts and crosscuts be driven at a unit cost of $32.40 per foot, and that the timbering for this 1415 ft. be performed at a unit cost of $6.00 per lineal foot.

We hereby request that Amendment No. 1 be further amended to permit transfer of any unused portion of the 1415 feet of "Timbered drift and crosscut", to the category of "Untimbered drift and crosscut." This transfer would be made after exhaustion of the contract allowed 5285 feet of, "Untimbered drift and crosscut," and would not change the total allowed footage of 6700 for both categories in all four Projects.

Justification for such an amendment is that when we have performed the entire 5285 ft. of advance in untimbered drifts and crosscuts, we would then have to timber all the remaining footage at that time in order to complete the 6700 ft. of drifts and crosscut contracted for, ~~even though~~ the experience record to date of the contract indicates that the 5285 feet will be exhausted prior to the completion of the 1415 ft. allowed for timbered drifts and crosscuts for all four ~~contracts~~. projects.

We feel that timbering where unnecessary, would not be good mining practice and it would also entail unnecessary expense ~~to the government~~ at the rate of $3.40 per foot for any drift or crosscut which is timbered when timber is not required. The $3.40 per foot is the difference in rate that the contract pays for timbered drifts and crosscuts as against untimbered drifts and crosscuts. The rate for untimbered drifts and crosscuts is $35.00 per foot; the rate for timbered drifts and crosscuts is $32.40 per foot, plus

$6.00 per foot for material and installation of the timber, or a total of $38.40 per foot, the net difference being $3.40 per foot.

As of September 1, 1957, we have completed 3813 ft. of untimbered drifts and crosscuts. Inasmuch as the present amendment calls for 5285 ft. in this category, we have 1472 ft. of drifts and crosscuts to drive without timber. Also, as of that date, we have completed 625 ft. of timbered drifts and crosscuts, leaving the difference between 1415 ft. and 625 ft., or 790 ft. of "Timbered drifts and crosscuts", to be driven. If no additional timbering were required after September 1, 1957, we would not be able to perform this 790 ft. of drifting and crosscutting unless we timbered all of it.

Although estimating necessary timber in new ground cannot be expected to be highly accurate, on the basis of past experience in the DMEA Projects to date, it appears probable that we will require 413 ft. of additional timber after September 1, 1957. If this were to be the case, the difference between 790 ft. and 413 ft., or 377 ft., could not be completed under the contract unless it was timbered.

The requested amendment is not construed to increase the overall amount of allowable expenditures in Contract Idm.-S 1032, or to increase the total allowed footage units. On the other hand it represents a possible saving to the Government.

The above estimate should be considered as such and not construed as a basis for a new estimate of costs. Our only desire is to provide a method whereby the total contract allowed footage of drifts and crosscuts may be used and in so doing most probably reduce the total cost of the contract to both the Government and the Operator.

This request for amendment was discussed with and approved by the Government representatives during their inspection visit on September 11, 1957. We are assured by them that this request for amendment will be mentioned in their interim report of this visit.

Very truly yours,

TUNGSTEN MINING CORPORATION

J. R. Sweet
Vice-President & General Mgr.

JRS:fnj

Tungsten Mining Corp. — DMEA 4216, — Idm-E 1032 9/11/57

POSITION SEPT. 1, 1957

Allowed under Contract	Remaining after Aug. 31, 1957	Work Completed, as of Aug. 31, 1957
Project "A" Drift + Crosscut - 2,200'	Project "A" Drift + Crosscut - 988'	Project "A" Drift untimbered 843' Drift timbered 155' Crosscut " 101' Xcut " 113' Total " 944' Total " 268' Timbering - 268' D. drilling - 669' Total Dr. + Xcut 1212'
Project "B" Drift + Crosscut - 1,300'	Project "B" Drift + Crosscut - 200'	Project "B" Drift untimbered 881' Drift timbered 35' Crosscut " 184' Xcut " 0' Total " 1065' Total " 35' Timbering - 35' D. drilling - 500' Total Dr. + Xcut 1100'
Project "C" Drift + Crosscut - 1,200'	Project "C" Drift + Crosscut - 198'	Project "C" Drift untimbered 732' Drift timbered 59' Crosscut " 211' Xcut " 0' Total " 943' Total " 59' Timbering - 59' D. drilling - 487' Total Dr. + Xcut 1002'
Project "D" Crosscut - 1,400' or to intersect Morton No. 3 vein Maximum drift and crosscut - 2,000'	Project "D" Crosscut - 276' Drift - 600' plus any Xcut footage not used to reach Morton No. 3 vein	Project "D" Drift untimbered 0' Drift timbered 0' Crosscut " 861' Xcut " 263' Total " 861' Total " 263' Timbering - 263' D. drilling - 0' Total Xcut 1124'
General Timbering - 1,415' of drift or crosscut, total D. drilling - 4,000', total	Totals for All Projects Drifts + Xcut untimbered 1472' " + " timbered 790' D. drilling 2344' Unexpended - $86,406.60	Totals for All Projects Drifts + Xcut untimbered - 3813' " + " timbered - 625' Total drifts + Xcut 4438' Total timbering - 625' Total D. drilling - 1656'

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INTERIM REPORT

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DMEA
RECEIVED AUG 5 1957

DATE	INITIALS	CODE
8/5	CCM	100
8/6	WSM	400

DMEA Docket No. 4216 - Contract Idm-E 1032
Tungsten Mining Corporation

Introduction

This project was inspected on July 24 by W. P. Williams, Geological Survey and H. L. Burmeister, Bureau of Mines. As previously reported the entire mining and milling operations were closed down from June 14 to July 1 for vacation. Since resuming operations on July 1 the entire mine is being operated on a 2 shift 4 day week basis.

All DMEA projects are being operated on a 2 shift, 4 day per week basis. The third shift usually confined to hoisting is not now operating. The mill is operating on a 3 shift, 5 day per week basis and is processing from 900 to 950 tons per day.

The examiners were accompanied by Mr. A. M. Szynklewski, Chief Mining Engineer. Mr. C. D. Hulin, Operator's consultant arrived while the examiners were at the property but too late to accompany them underground.

PROJECT "A"

Advance in this project from July 1 to July 24 inclusive consisted of 125 feet of drifting. The advance was made on a strong shear structure averaging approximately 5 feet in width. The structure has contained a few short and very narrow quartz lenses barren of tungsten mineralization. The drift will be advanced another 4 rounds after which each wall will be core drilled. Each hole will be approximately 100 feet long.

No timber has been placed or ore produced in this reporting period.

The drift has advanced through gray, medium grained gneiss and granite. The rocks are sheared and contorted and show that a geologic structure is present. White quartz lenses and pods as much as 1 foot thick and 10 feet long are found in the granite. Near the face of the drift, the rock becomes more schistose and much contorted. The schist structure is parallel to the drift and dips about 80° to the southeast. Hubnerite was not found in the quartz veinlets. Disseminated pyrite in small grains is common in the rock in the drift. At the face of the drift a mass of brown granite was found that showed much sky-blue, opalescent, quartz. The blue quartz was scattered as small ($\frac{1}{4}$" diameter) "eyes".

PROJECT "B"

From July 1 to July 24 the advance made in this Project has been somewhat complicated in determining what is a drift and what is a crosscut. The total advance in this period amounts to 110 feet of drift and crosscut. The attached map Fig. 1, indicates the conditions. The ore on the East-West vein including area "A" shown on map, has been cut off at all points except the face designated "B" where there remains slight structure and mineralization, both of which are too weak to make it advisable to follow.

During this reporting period 2 core drill holes were drilled south into the hangingwall. Drill hole U-1289 is collared at coordinates N 19617, E 19224 and was drilled 80 feet on a S 27° E bearing. Drill hole U-1290 is collared at coordinates N19,558, E 19,160 and was drilled 69 feet on a S 07° E bearing. No structure was found in either hole. (Fig. 1)

Presently advance is being made in a diorite dike at point "C". This dike is expected to be 30 to 40 feet in width as it was found to be on

the 500 foot level. Eight samples were cut in the "A" and "B" areas. The widths and assay values are recorded on the attached plan of Project "B". (Fig. 1)

From July 1 to July 24 this project exploration produced 227 tons of ore estimated to average 0.6% WO_3. The car sample assays are not available at this time. No timber was placed in this period.

At survey station No. 1434 (at the intersection of drifts and crosscut) the rock is medium to dark gray granite. A white quartz vein about 3 feet thick has a trend along the crosscut. Fifteen feet into the crosscut white quartz carries much blue and purple fluorspar in masses up to 1 foot thick and 4 feet long. About mid-way in the crosscut the quartz vein has disseminated huebnerite in bands up to 1 inch thick. At the end of the crosscut the quartz vein widens to about twelve feet and has abundant fluorspar, pyrite and sparse huebnerite.

West of the white quartz vein the rock is greenish black schist and granite. At the south end of the small mine opening, site "B", Fig. 1 the quartz vein pinches down to only three veinlets, each about 6 inches thick, that carry only very sparse pyrite and huebnerite.

In the drift to the south is found greenish-black granite, for the most part. Nine feet back from the drift face is the contact with a basic dike. The dike is dark green to black and very fine grained. The dike strikes due north and dips 78° west. There was no noticeable alteration of the granite at the contact with the dike. By projection from other parts of the mine, mainly the 500 foot level, it is estimated that the dike is about 30 feet thick.

PROJECT "C"

From July 1 to July 24 this drift has been advanced 90 feet. The last 75 feet of this advance was on the general strike but not on an actual structure. At present a core drill hole is being drilled in each wall of the drift and collared near the face of the drift. Disregarding the width of the drift, both holes are collared at coordinates N 17680, E 18695. Hole U-1292 is being drilled into the footwall on a N 14° W bearing and is now at 60 feet and has intercepted no structure but will be continued to a length of 130 feet. Drill hole U-1293 is drilled into the hangingwall on a bearing of N 87° E and is now at 60 feet. The hole cut quartz from 57½ feet and is still in quartz at 60 feet.

No timber has been placed and no ore has been produced during this reporting period.

On the day of the inspection, diamond-drill holes Nos. U-1292 and U-1293 were being drilled. The core from hole No. U-1293 shows a white quartz vein from 57.5 feet to 60 feet. The hole was being drilled on the day of the visit and the driller reported that ore had been encountered beyond 60 feet.

The drift has been advancing through greenish gray granite. At some places disseminated pyrite is common. The rock is mostly fine to medium grained granite without large fractures or shears. Quartz veins cut across the drift but they are minor - a maximum thickness of 3 inches. No huebnerite was found in the quartz. Pale blue opalescent quartz is scattered throughout the drift.

PROJECT "D"

From July 1 to July 24 this crosscut has advanced 133 feet in

chloritic rock. In this advance 3 small veins of barren quartz were crosscut. One vein, 6 inches wide was cut at a point 193 feet NW of Station 1433, one 6 inches wide was cut at a point 199 feet NW of Station 1433 and another 4 inches wide at a distance of 255 feet NW of station 1433. The strike of the 3 veins averages N 40° E.

No timber was placed this period.

At survey station No. 1437 the crosscut is in dark-colored, greenish black schist that has scattered white quartz veinlets up to 6 inches thick. The quartz veinlets trend nearly perpendicular to the crosscut. Pyrite, as small grains, is generally disseminated in the white quartz. At the crosscut face there is greenish gray granite and schist. White quartz veins trend generally across the crosscut. At one place, near the drift face, a narrow white quartz vein has a border about 2 inches thick of interleaved mica (muscovite). The books and leaves of mica are as much as 2 inches wide. Within the quartz there are scattered spots of dark purple fluorite as much as 3 inches wide. At the face of the crosscut the rock is becoming more gneissic. The foliation is almost vertical and most dips are to the east. Disseminated pyrite in pin-head size grains is common.

Conclusions and Recommendations

The project as a whole is now about 55 percent completed. Large tonnages of ore have not, so far, been discovered. On the other hand, the main target areas have not been reached in Projects "A" and "D". The work should continue in those projects until the target areas are reached and explored.

In Project "B" the dike should be penetrated by the drift (an estimated 30 feet) and the attempt be made to pick up the vein structure beyond the dike.

In Project "C" it appears that the drift has wandered too far into the hangingwall. C. D. Hulin, Operator's consultant, believes that the shearing and the quartz vein have been deflected along a lamprophyre dike and that the vein has veered into the footwall. That seems reasonable, and it was agreed that a short crosscut should be put into the footwall as an angling extension of the spur crosscut at a point opposite the 6/1/57 face and pointed at the bottom of core drill hole U-1265. This would seek for the structure. The crosscut would have a maximum estimated length of 30 feet. A diamond drill hole from the crosscut might then be advisable to seek out the vein to the north. If the crosscut and diamond drilling are successful in finding a promising structure, the main drift will probably be turned to get on the structure.

Mr. Williams is on annual leave and so will not be able to sign the joint report.

July, 1957

W. P. Williams, Geologist
U. S. Geological Survey

H. L. Burmeister
Mine Examination and
Exploration Engineer
U. S. Bureau of Mines

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DMEA
RECEIVED JUL 7 1958

DATE	INITIALS	CODE
7-7	C	220
7	Com	100
"	RG	110
7/7	[illegible]	800
	ORP	400

INTERIM REPORT ON OPERATING CONTRACT

DMEA 4216 (Tungsten), Idm-E 1032
Tungsten Mining Corp., Hamme Mine
Vance County, North Carolina

This property was visited June 18, 1958 by W. P. Williams, Geological Survey, V. J. Lynch and H. L. Burmeister. Bureau of Mines.

All four projects, A-B-C and D have now been completed. The Operator's report for May included all exploration data and costs except those involved in core drilling 3 holes in June. The Operator's June report will include drill hole logs and costs for these holes.

Mr. J. R. Sweet, the manager, reports that all mining and exploration will be stopped on June 26, 1958 and that from 350 to 400 men will be layed off. Stope filling with mill pond tailings will be continued for about 2 months. Approximately 40,000 units of tungsten concentrates are stockpiled at the mine. The Operator was advised of the data that should be included in his final report.

Following is the data on work done from May 31 to completion of the project in June.

Project "A"- Core hole U-1316, collared at coordinates N 21,528 E 21,852 on a bearing of N 37½° E. From 45 feet to bottom at 108 feet was in gneiss and chlorite schist except for 1 foot of barren quartz from 64 feet to 65 feet. Hole U-1317 was drilled into the footwall at coordinates N 21,529 E 21,841 on a bearing of N 37½° W. From 0 to 40 feet was in gneiss and from 40 feet to bottom at 108 feet was in diorite dike.

Project "B" - Core hole U-1318 is collared at coordinates N 19,534 E 19, 081 and drilled on a bearing of N 53½° W. From 0 to 5 feet slight

mineralization was found in the schist, from 5 to 134½ feet only gneiss was cored, from 134½ to 141 feet was diabase dike, 141 to 152½ feet was gneiss, 152½ to bottom at 229 was schist. A total of 400 feet of core drilling was done after May 31 to complete the entire contract.

Geology - Project A

Since the last inspection visit on March, 1958 the project "A" crosscut proceeded through the greenish black, medium to fine-grained diorite dike. The dike proved to be 144 feet thick.

After penetrating the dike, drifting to the northeast was resumed. The heading passed through granitic rocks which, at many places, are gneissic and, locally, sericitic and schistose. The rock is generally dark greenish brown.

After passing through the dike the drift encountered a quartz vein structure that ranged from 6 inches to 2 feet in thickness. The vein however is lenticular and discontinuous. At the face, and termination of Project "A", the fairly tight shear zone becomes wider, and the rock is sheared the width of the face. White quartz stringers up to 3 inches thick contain very sparse disseminated hubnerite. The wall rocks contain abundant disseminated pyrite. There is much sericitic alteration at the drift face.

The face of the drift appears favorable. The shear structure is more pronounced, the white quartz has favorable texture and color, and hubnerite is present. The drift should be extended to exhaust possibilities for ore discovery.

June, 1958

H. L. Burmeister, Engineer
U. S. Bureau of Mines

W. P. Williams, Geologist
U. S. Geological Survey

ACTION ON INTERIM
OR FINAL FIELD TEAM REPORT

Date 6/28

Referred to:

1. ~~Mr. Mittendorf~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. Docket Control Mails and Files
5. Division
6. ~~Docket Control Mails and Files~~
7. 400

Note comments in report regarding:

1. Request for amendment may be expected —
2. F.T. recommends
3.
4.

and take appropriate action.

- - - - - - - - -

Action taken by Division:

Draft of amendment prepared & gone to Legal — S.P.H. 7/2/67

Robert E. Adams

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 28 1957

DATE	INITIALS	CODE
6/28	C	220
7/1	Copy	100
7/2	RC	

INTERIM REPORT

DMEA 4216 - Contract Idm-E 1032

TUNGSTEN MINING CORPORATION

Introduction

The offices and mine of the Tungsten Mining Company, near Henderson, North Carolina, were visited on June 12, 1957, by H. L. Burmeister, U. S. Bureau of Mines and W. P. Williams, U. S. Geological Survey. The purpose of the visit was to inspect the exploration work completed to June 12 under the terms of DMEA Contract Idm-E 1032. The examining team was conducted on an underground inspection tour by Mr. W. R. Atkins, mine superintendent, and A. M. Szynklewski, chief mining engineer. The exploration project was also discussed in the mine office with Mr. J. R. Sweet, vice president and general manager of the company.

The entire mine will be closed down for vacation from June 14 to July 1.

Project "A":

Project "A" has advanced 58 feet in drifting since May 31, or 210 feet since April 30. From the face, as of 6/1/57 as shown in the Operator's May Report, there is a strong structure the width of the drift which contains very little quartz or mineralization. The advance from 5/1/57 to 6/12/57 has been on regular strike of about N 30° E. In this date bracket there is a vein approximately 70 feet long and 1-1/2 feet wide estimated to contain 0.25 percent WO_3. Diamond drill hole U-1279, 100 feet long into the footwall cut a 22-foot width of shearing containing a trace of mineralization from 58 feet to 80 feet. Hole U-1278 in the hanging wall (100 feet long) encountered shearing in schist from

68 feet to 74 feet. Diamond drill hole U-1280 into the hanging wall is 68 feet long and intersected quartz from 0.0 feet to 2 feet. This may be a potential structure but contains no mineral.

Seventy feet of timbering was placed in May, but none since May 31. During May it has produced 49 tons of ore from this project, which assayed 0.57 percent WO_3. The strong structure in the face, as of 6/12/57 will be followed on the strike although it is practically barren.

Project "B":

From April 30 to June 12, this project has advanced 128 feet in drifting and 85 feet in crosscutting. Twenty-six feet of this drifting has been done since June 1. Two diamond drill holes have been drilled since June 1 (see sketch). Hole U-1283 is collared at coordinates N 19,636 and E 19,215 and was drilled to a depth of 115 feet on N 44° W bearing. This hole encountered mineralization from 22-1/2 feet to 48 feet. From 22-1/2 feet to 30 feet the core assayed 0.36 percent WO_3, from 30 feet to 40 feet mineralization was very meager, from 40 feet to 48 feet the core assayed 0.75 percent. Drill hole U-1284 was collared at coordinates N 19,638 and E 19,217 and was drilled to a length of 47 feet on a bearing of N 9-1/2° W. This hole encountered light mineralization from 17 feet to 20 feet, the core assaying 0.02 percent WO_3. On 6/7/57 a drift was started on the 1 1/2-foot wide vein occurring at a point 21 feet NE of station 1430. The drift bears approximately S 80° W and is pointed at the mineralization found in holes U-1283 and U-1284. The drift, at the time of inspection, was 10 feet long. From a point 30 feet SW of station 1430 to a point 120 feet SW of station 1430 there is no structure and no

mineralization. This last 90 feet which does not show structure was driven because it is on the general strike of "B" project. The two above diamond drill holes were drilled while the drift was advancing. No ore was produced from April 30 to June 12.

It is planned to drill two core holes into the hanging wall, one to be collared 30 feet SW of station 1430 on a S 30° E bearing, and to be approximately 80 feet long. The other hole is to be collared at a point 115 feet SW of station 1430 on a bearing of S 7° E and to be drilled to a depth of approximately 90 feet. These holes would be drilled to test for any ore which might be on the direct strike and also on the projection on a 75° dip from the average strike of this vein on the 500-foot level. This drilling may or may not be done while the drift is being driven to encounter the ore found in diamond drill hole U-1283. If these holes are drilled at this time the combined footage would total approximately 20 feet in excess of the drill footage allowed by the contract for project "B".

Project "C":

From 5/1/57 to 6/12/57 there has been driven 43 feet of crosscut and 40 feet of drifting. Twenty-six feet of this drifting was done between 6/1/57 and 6/12/57, the latter being the date of inspection.

Diamond drill hole U-1265 was deepened 30 feet to a total depth of 70 feet and intersected only four inches of quartz which was at 58 feet on the hole. After drilling U-1265 the crosscutting was done to get on the footwall side of the lamprophyre dike where the structure was assumed to be as it was not in the drift. The crosscut was stopped in granite and the on-structure drift again

resumed from a point 18 feet N of station 1432. This face is still advancing in gneiss and is in a very tight structure without mineralization. The core drill holes on either side of the drift do not indicate a structure.

Project "D":

This crosscut advanced 289 feet since 5/1/57, 69 feet of this advance having been made between 6/1/57 and 6/12/57. The advance has all been in tightly foliated chloritic schist. No timber was placed in May or June to the date of inspection.

A difficulty has arisen in the matter of diamond drill footage allocated in the contract to each of the four projects. The immediate difficulty concerns project "B" to which is allocated 500 feet of core drilling. To June 10, 351 feet have been expended and it seems imperative that the 2 planned drill holes above mentioned in project "B" should be immediately drilled to avoid wasting time and a very possible unnecessary use of tunneling funds. If these holes are presently drilled they will exceed the maximum footage by approximately 20 feet and no footage would remain for subsequent exploration in "B" project. This same situation will unquestionably arise in the very near future in project "C", which indicates that an amendment to the contract will be necessary to adequately carry out the purpose of the entire contract. After consulting with the manager, Mr. Sweet, it is understood that he will immediately request an amendment to the contract which would, in effect, pool the entire 4000 feet of core drilling, any portion of which could then be used for the various projects as expedience dictates, but only with the consent of the Government.

Following is a table showing the status of diamond drilling on June 12, 1957:

Diamond Drilling Status as of June 12, 1957

	Drilling footage allowed	Drilling completed to June 12	% X-cut and drift complete	% d.d. completed
Project "A"	2000'	669'	40.5	33.4
"B"	500'	351'	60.6	70.2 (2 proposed holes not included)
"C"	500'	230'	60.3	46.0
"D"	1000'	0'	36.8	0

The examiners agree that the total 4000 feet of core drilling should be pooled for the 4 projects and used in any project as indicated for best exploration results. Drilling should be done only with consent of the Government.

Geology

Project A: Since May 1, 1957 the drift in project A has progressed through grayish green chlorite schist and gneiss. At one point (survey station 1427) there is a white quartz vein about 4 feet thick and about 40 feet long. The quartz vein carries sparsely disseminated pyrite and huebnerite. There are also local masses, up to 6 inches across, of purple fluorite within the quartz. The quartz lens pinches out at both ends. As the drift progressed northeast, quartz veins became more and more scarce until at the face on June 12 the rock consisted of greenish black schist with scattered white quartz stringers, up to 3 inches thick and 2 feet long, oriented parallel to the foliation. At the drift face the schistosity dipped 70° SE.

Although a strong quartz vein was lacking in the drift face, the rock is much fractured and sheared along steep planes parallel to the trend of the drift. The fracturing represents a strong structure that could contain productive quartz veins farther to the northeast.

Project B: This heading, since the last interim report, has passed through greenish gray sericite schist and gneiss. At survey station 1429 there is exposed in the back of the drift a white quartz vein that is a maximum of 6 feet thick and trends with the drift about 30 feet before pinching out. The vein carries only sparsely disseminated pyrite - no huebnerite. The vein dips 50°SE.

A white quartz vein about 3 feet thick and dipping 60-65° SE is the site of a branching drift being driven to explore the vein. The vein carries scattered huebnerite grains and purple fluorite masses. The rock enclosing the vein is gray gneiss. The location of the new, branching drift is indicated on the attached sketch map by the date 6-12-57. About 40 to 50 feet southwest of the tributary drift there are exposed lenses of white quartz that contain small scattered masses of purple fluorite. No huebnerite was noted in the quartz. The lenses average about 1 foot thick and about 10 feet long. The enclosing rocks are gray granite-gneiss that has disseminated pyrite and, locally, small scattered patches of sky-blue quartz.

In the stub end of the southwest drift the rock is fresh, relatively unfractured granite with local, thin, disconnected, white quartz veins. No huebnerite was noted in the quartz. Small diabase dikes, up to 6 inches thick cross the drift.

Project C: This drift has progressed through greenish and brownish gray granite and granite gneiss. The heading toward the northwest has been abondoned and the drift is now being driven on a more northeasterly bearing. A principal reason for changing course of the drift is to keep the drift on the hanging wall side of a fairly large lamprophyre dike where conditions are considered more favorable for ore deposits. In the abandoned heading the rock is granite containing locally abundant disseminated pyrite in cubic masses up to 1 inch across.

Rock in the main heading is brownish gray gneissic granite. At the face there are thin, tenuous white quartz seams up to 1/2 inch thick. The quartz seams dip about 80° SE. Fine grained disseminated pyrite may be found in or near the quartz. A tight vertical shear extends for a short distance along the northwest rib of the drift.

Project D: The work in this project consists of a long, straight cross-cut that has been passing through fairly homogeneous, dark green to black, fine grained, chlorite schist. Fracturing in the rock is tight but may carry thin stringers of quartz up to 1/4 inch thick. Sparsely disseminated pyrite is locally associated with the quartz. About 2 feet back from the drift face a green to black diabase dike about 1 foot thick crosses the drift and dips 68° to the northwest.

Core Storage and Logging

The Company stores the EX core from the underground core drilling in a corrugated metal core house near the mine office. There the core is logged as it comes from the hole. Next, the core that has been logged is

'skeletonized'. That is, only representative pieces of core from each major rock type are sorted and saved for permanent storage. In addition to rock types all abundantly mineralized core is saved, as well as all core showing favorable geologic structure (quartz vein or shear zone), all core showing facies change between rock types, and all core from thin dikes.

It is the examining geologist's opinion that the skeletonized core would be adequate for the Government's purposes. It is recommended, therefore, that the Operator be given permission to skeletonize DMEA core as collected, thus greatly reducing the problem of core handling and storage for all concerned.

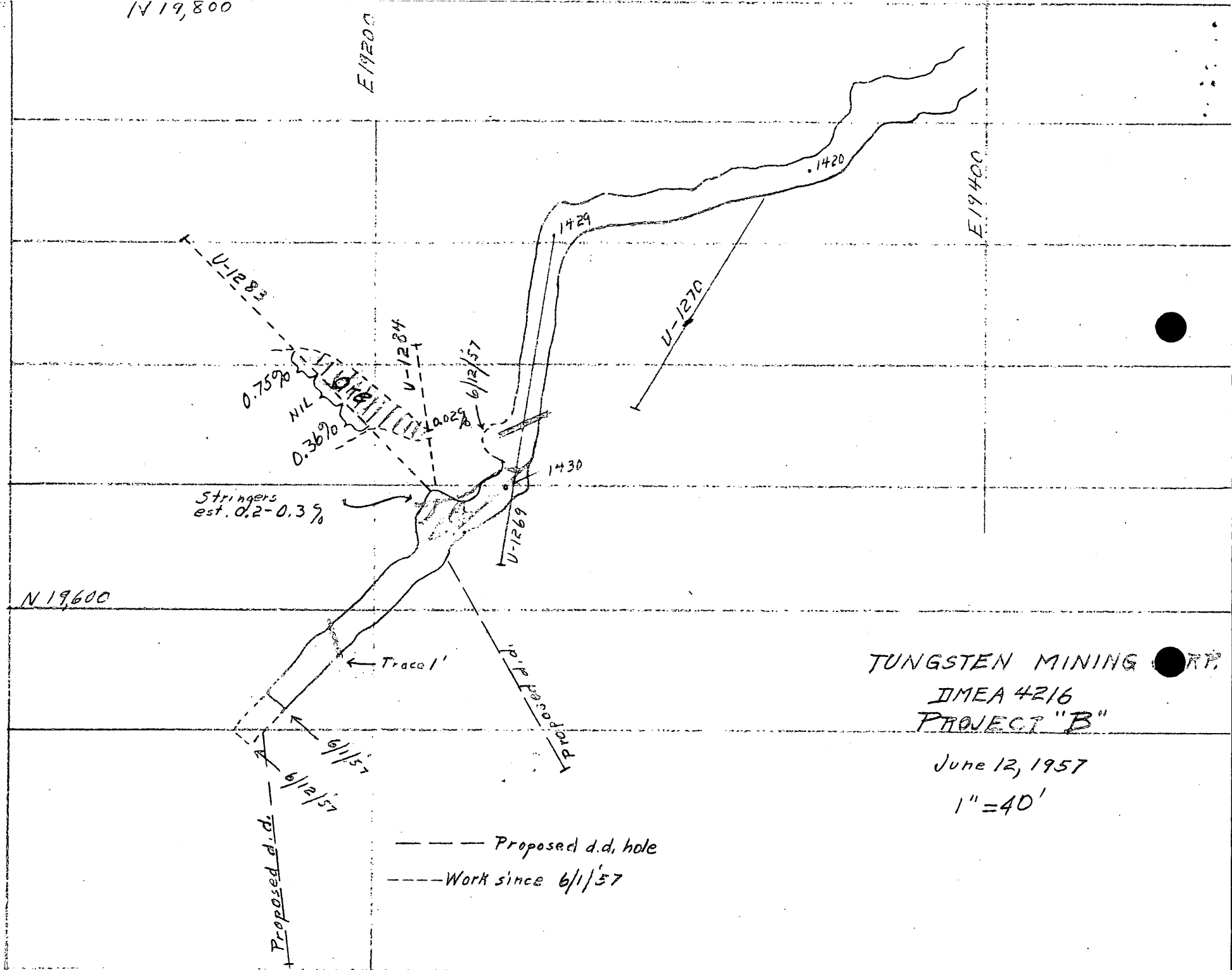
Conclusions and Recommendations

While large amounts of ore have so far not been discovered by work under the contract, it might be pointed out that the underground drifting is only about 50 percent completed. Two of the projects, A and D, have definite target areas for which the underground work is aimed; and maximum results can not be expected until those target areas are reached.

The Operator is experiencing considerable, and understandable, difficulty at times in choosing the most significant geologic structure and keeping the drifts on the most advantageous course. Under difficult conditions the underground drilling is of great use in keeping the drifts on the best course. It is recommended that the contract be amended to allow the Operator to use the total diamond drilling footage in the contract wherever the necessity for drilling arises rather than restricting certain footages to certain projects as the contract now states.

H. L. Burmeister
Mine Examination & Exploration Eng'r.
Bureau of Mines

W. P. Williams, Geologist
Geological Survey


N 19,800
E 19200
E 19400
N 19,600
1420
1429
1430
U-1283
U-1284
U-1270
U-1269
0.75%
NIL
0.36%
0.029%
6/12/57
Stringers
est. 0.2-0.3%
Trace 1'
6/1/57
6/12/57
Proposed d.d.
Proposed d.d.
Proposed d.d. hole
Work since 6/1/57
TUNGSTEN MINING CORP.
IMEA 4216
PROJECT "B"
June 12, 1957
1" = 40'

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DATE	INITIALS	CODE

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D M E A
RECEIVED MAY 30 1957

DATE	INITIALS	CODE
5/20	C	220
"	COM	100
5/22	WSM	400

INTERIM REPORT ON OPERATING CONTRACT

Docket No. DMEA 4216 (tungsten), Contract Idm-E 1032
Tungsten Mining Corporation, Hamme Mine, Vance County, N. C.

This property was visited by the engineer on May 9, 1957.

The Operator's report for the month of April had not been received at College Park but the Operator's copy was reviewed and the geology and work were checked underground. The work reported and the maps submitted in the April report were found to be correct in units and in the outline of structure encountered. Review of the data contained in the Operator's report would be only a repetition. A complete settlement of ore taken from this exploration to April 30, 1957 was planned to accompany the Operator's report for April. The company has the data at hand but due to Mr. Sweet's two week absence was not submitted. The engineer was informed that the complete data would be submitted before May 31.

Following are the data on conditions found and advances made from May 1 to May 9, 1957. A map showing the late progress accompanies this report.

PROJECT "A"

At a point 30 feet northeast of the May 1 face, about 4 feet of quartz with sparce tungsten mineralization entered the drift from the footwall side. This continued to increase in width and value to the face on May 9 when the full 8 foot width of the face was 80 percent quartz and one 2 foot width is estimated to contain 0.3 to 0.4 percent WO_3. This structure is

the most promising encountered except the short length of mineralization found at the dile and vein contact. Some of the hubnerite occurs in 2 to 3 inch diameter segregations. The present strike and dip are approximately those on which ore is usually found. A few tons of ore have been produced since May 1 but the exact amount or content was not obtainable at the time of visit.

PROJECT "B"

This drift was stopped at coordinates 19,725 N and 19,254 E for the reason that the strike and dip did not coordinate with the structure on the 500 level; the dip having flattened to 55 - 60 degrees. At this time core holes U-1269 and U-1270 were drilled to try and pick up a structure more nearly on regular strike in the footwall of the drift. Drill hole U-1269 encountered $1\frac{1}{2}$ feet of vein quartz with traces of tungsten mineralization at 62 feet and at 78 feet cut another $1\frac{1}{2}$ foot quartz vein containing hubnerite. The latter vein lines up approximately on a desirable strike with the quartz found in hole U-1270 and a very narrow stringer later found in the drift just east of station 1420. (See sketch)

After completing the two core drill holes a crosscut was started into the footwall at the drift face. At the time of visit the vein cut at 62 feet by hole U-1269 had been cut and passed by the crosscut. This vein shows itself to vary from $1\frac{1}{2}$ to 2 feet in width and is estimated to contain 0.4 percent WO_3. This vein is, however, not on the typical strike and the crosscut was advanced and on May 10 cut the second vein found 78 feet on hole U-1269. This second vein is $1\frac{1}{2}$ feet wide and is estimated to assay 0.40 percent WO_3. The strike of S 50° W and the dip of 78° southeast correlates well with the 500 level and also with the normal strike on the 900 level.

PROJECT "C"

During April 58 feet of drifting was done on a tight structure which paralleled a lamprophyre dike. When the structure disappeared 3 core holes, U-1264, U-1266 and U-1267 were drilled into the hanging wall with the result that no structure was found. One hole, U-1265 was core drilled into the footwall. This core showed some sericitic schist following the lamprophyre dike. Hole U-1265 is now being deepened an additional 30 or 40 feet and should indicate a structure as it is not in the drift or in the hanging wall drill holes.

No work was done on this project from May 1 to May 10. No ore was produced in April.

PROJECT "D"

This crosscut was continued on the original coarse during April for a distance of 143 feet. An additional 63 feet of advance was made from May 1 to May 10. The advance in April and to May 10 has been made in very dark chloritic schist which stands very well and requires no timber. Sixteen sets of timber were placed in April.

H. L. Burmeister

H. L. Burmeister
Mine Examination and Exploration Engineer.

ACTION ON INITIAL 1216
FINAL FIELD EXAM REPORT
Date C

Referred to:

1. ~~Mr. Mittendorf~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. ~~Docket Control Mails and Files~~
5. Division
6. Docket Control Mails and Files
7. ~~400~~

Note comments in report regarding:

1.

2.

3.

4.

and take appropriate action.

- - - - - - - -

Action taken by Division:

Watch for maps!

Robert E. Adams

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DATE	INITIALS	CODE
4/15	C	220
"	CMW	100
4/17	WSM	400

Interim Report

Docket No. DMEA 4216 (tungsten)
Tungsten Mining Corporation, Hamme Mine,
Vance County, North Carolina
Contract: Idm-E 1032

Operations under this contract was inspected on April 3, 1957. The inspection was made by V. J. Lynch, Member DMEA Field Team, Region V, H. L. Burmeister, Bureau of Mines and J. M. Parker, Geological Survey.

Work being accomplished on all of the projects is satisfactory but the results obtained in finding ore are rather disappointing. Continuing exploration as conducted at present is recommended.

Project "A"

Since March 1 the advance has been 148 feet. No advance has been made to date in April due to the fact that the drift is being widened for a car switching station. No timber was placed in March.

On March 4 the tight structure being followed pinched out and core drill holes V-1252 and V-1254 were drilled into the footwall and hangingwall respectively. (See attached print) Hole V-1252 cut a 6-inch vein estimated at 0.5 % WO_3 at 5 feet from the collar and V-1254 cut only a 2 foot vein of barren quartz. The drift was advanced and at a point 26 feet NE of Sta. 1406 the footwall vein, now 2 feet wide was encountered. This vein narrowed and pinched out at a point 70 feet northeast of Sta. 1406. The drift was then advanced an additional 90 feet on an increasingly tight structure containing no tungsten mineralization. The drift will be driven a few feet more and if mineralization is not encountered, diamond drill holes will again be drilled.

The face is in very dark schist with numerous quartz veinlets over a width of 10 feet. Both schist and veinlets have been considerably sheared and distorted.

Project "B"

From March 1 to April 3, this drift has been advanced a distance of 145 feet, which is 110 feet in advance of Sta. 1408. From a point 41 feet beyond Sta. 1391 to 72 feet beyond Sta. 1391 the drift followed a vein from 1 to $1\frac{1}{2}$ feet wide estimated to contain 0.15 % WO_3. From a point 80 feet beyond Sta. 1391 to a point 126 feet beyond Sta. 1391 the drift followed a vein averaging $5\frac{1}{2}$ feet wide with an average assay value of 0.63 % WO_3. The vein pinched out at 126 feet beyond Sta. 1391.

The present face is in a tight structure containing no mineralization. The last 2 rounds were driven too far into the hangingwall and did not follow the best appearing structure. This situation was corrected and no time will be lost as the off structure excavation will be used as a car switch.

There were produced from this drift in March, 165 tons of ore with an average car sample assay of 0.39 % WO_3. No timber has been installed.

The face is in dark crumpled schist. Much fine grained red siliceous rock (silexite) cuts across the schist and is found in irregular masses several feet wide.

Project "C"

Advance in this drift for March was 83 feet and on April 3 as 102 feet since February 28. This is 115 feet ahead of Sta. 1409. hirteen (13) sets of timber have been placed since February 28 including wide sets necessary for a car switch.

The drift turned eastward at a point 40 feet in advance of Sta. 1398 and is now on a N 32° E bearing which is more in conformity with the general strike. At the change in strike the small vein being followed pinched down to 6 inches and was completely barren. Also at this point the gouge got stronger and the dip of the structure steepened to 65°. The heavier gouge made timbering necessary. There was no tungsten mineralization in the drift during March, but the last 20 feet of advance shows some pyrite and a small amount of fluorspar.

In the face the footwall is somewhat schistose granite and in the center of the drift is found a mass of very black biotite schist which swells from a 3 inch width at the back to about 6 feet near the floor. The hangingwall rock is a lighter sericite phyllite with quartz pods. The last 15 feet of drift contains masses of coarsely crystalline calcite up to 1½ feet wide.

Project "D"

This crosscut was advanced 113 feet in March to a point 168' in advance of Sta. 1397 and no further advance has been made to April 3 due to completing a car switch station near the face. Nine (9) sets of timber were placed in March to cover the switching station. The west wall of the dike was encountered at a point 72 feet northwest of Sta. 1397. This shows the dike to be 200 feet thick on the crosscut.

The crosscut northwest of the dike is in baked slate or hornfels which here is a dark banded fine grained rock with red-brown streaks. It is shot through with irregular quartz veinlets and masses and with pinkish-white feldspar. The hornfels strikes N 20° E and is vertical.

General

It is found that breaking wide car switching areas makes timbering necessary when otherwise timber would not be used. This also retards progress and makes working the face more dangerous. As no restriction appears in the contract, the engineer gave permission to run out angling small crosscuts for car switches instead of widening the drift. The Operator also desires this, both for safety and to expedite advance.

It was arranged that included in the Operator's April report would be a complete documentation of ore tonnage recovered to date, all assays on the ore and concentrates, mill recovery and method of calculation.

Mr. Parker requested that I incorporate his observations and submit the report without his signature.

H. L. Burmeister

H. L. Burmeister
Mine Examination and
Exploration Engineer

Interim Report on Operating Contract

DMEA 4216 (tungsten), Contract Idm E-1032
Tungsten Mining Corporation, Hamme Mine, Vance County, North Carolina.

This project was inspected by H.L. Burmeister, U.S.B.M. and J.M. Parker, U.S.G.S. on February 27, 1957. The examiners were accompanied underground by A.M. Szynklewski, chief engineer. A conference was also held with W.R. Atkins, gen. supt..

Project "A"

As previously reported the mineralized structure was about 13 feet wide where intercepted at the east wall of the diabase dike. At this point a schist horse was entering the mineralized zone at its western edge. After drifting northeastward approximately 10 feet, the vein narrowed to 4 feet. In advancing the vein consistently lost both width and values until at a point 70 feet northeastward from the crosscut, the vein had pinched out both in horizontal and vertical dimension. The crest of the vein plunges northeasterly at an estimated 20 to 25 degrees which may indicate a greater width at a lower level.

When the vein pinched out, 2 holes were core drilled eastward into, the hangingwall. Drill hole U-1242 is 90 feet long, bears N. 88° E. and is collared at a point 13 feet NE of Sta. 1384. A structure encountered at 19 feet continued to the gneiss granite wall at 78 feet. Drill hole U-1241 is 100 feet long, bears N. 75° E. and is collared at a point 76 feet northeast of Sta. 1384. A structure was encountered at about 13 feet and continued to 95 feet. These cores have not yet been assayed and visually do not appear to be ore over any significant width. The core logs follow.

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DATE	INITIALS	CODE
3/11	C	220
13	COM	100

Drill hole U-1242 (EX core)

0' - 19'	schist
19 - 19.8	quartz
19.8- 36	schist
36 - 47.5	quartz with pyrite and chlorite seams
47.5- 50	chlorite schist
50 - 51.5	quartz plus chlorite seams and carbonate
51.5- 53	schist
53 - 53.5	quartz (dead)
53.5- 65	chlorite-sericite schist
65 - 67.5	chlorite and sericite schist with quartz veinlets (± ½ qtz.)
67.5- 71	silicified pink schist
71 - 72.5	chlorite schist plus pyrite
72.5- 78.5	siliceous serecitic schist
78.5- 90	granite gneiss

Drill hole U-1241 (EX core)

0 - 13	schist (chlorite & sericite), few hubnerite xls.
13 - 15	silicified sericite schist with 6" good ore at 13.5'
15 - 36	sericite schist with quartz seams
	At 19' quartz plus hubnerite
	At 25.5 " " " (5" plus scheelite)
	At 29.5 " " " (4" plus ")
	At 31 " " " (4" plus ")
	At 32.5-33.5 quartz plus hubnerite
36 - 86.5	mainly chlorite schist with minor quartz veinlets and sericite schist seams
86.5-88.5	dead quartz
88.5-90.5	silicified schist
90.5-94	sericitic, siliceous schist (lively looking)
94 - 95	chloritic schist
95 -100	granite gneiss

After completion of core drilling the drift was turned at a point 80 feet northeastward of Sta. 1384 into an angling crosscut bearing about N. 70° E. and intercepted the structure found in the core drill holes. The structure as exposed by the angling crosscut is in succession from west to east as follows.

2 feet	quartz and schist (visual content o.6% WO_3)
12 feet	schist with very little quartz (visually barren)
6 feet	schist with some quartz stringers (visual content 0.3% WO_3)
6 feet	schist, very little quartz (visually barren)
2 feet	quartz (visual content 0.2% WO_3)

After crossing this structure the drift was then turned to a bearing of N. 30° E. on the hangingwall or 2 foot width of quartz estimated to contain 0.2% WO_3. This section correlates best with mineralization on the 700 level. At the time of visit the drift face was 40 feet NE of the angling crosscut, or 115 feet beyond Sta. 1385. The advance in February to the date of visit was 156 feet. If the vein being followed does not materially improve in the next forty feet, holes will be core drilled into the footwall first and then the hangingwall. No timber has been placed this month.

Since crosscutting the diabase dike the workings have been driven mainly through a finely laminated schist which is very fine-grained and actually a phyllite composed largely of chlorite and quartz. The veins being crosscut and followed are highly variable in form and thickness. Most are only a few inches thick but in places are closely spaced and separated by thin slabs and shreds of schist. Though the veinlets are in general parallel to the foliation they crosscut the cleavage in detail, weaving back and forth through the rock.

Project "B"

Work on this project has been curtailed to allow greater advance in the other projects. At the time of visit the face was at a point 25 feet beyond Sta. 1391 which represents an advance in February to date of 37 feet. From the start the vein has varied from several inches to a maximum width of 4 feet and are barren except for a few spots several feet in length. The vein in the face is 1½ feet wide and carries some pyrite but no tungsten minerals. No timbering has been necessary.

The vein walls are dark greenish granite gneiss in which pyrite is fairly abundant. The gneiss contains very irregular patches of reddish silicified rock (silexite). Contacts of silexite are gradational and vague but it is apparently an alteration of the granite.

The vein being followed consists of a few quartz veinlets mostly 1-3 inches wide. These pinch out so that the number varies from place to place. They occur across a maximum width of 4 feet. Gouge is very noticeable in the face in contact with the veinlets and wall rock near them. Several prominent curved fractures parallel the vein group. These fractures and the gouge appear to be post-vein, but this was not definitely established.

Project "C"

The drift face is 60 feet northeasterly of Sta. 1398 or 481 feet from the start of the drift. At a point 336 feet from the start of the drift the strike changed from N. 18° E. to N. 30° E. which is more in conformity with the general strike. The vein in the face is 1½-2 feet in width. From the small dike crossing the drift and mentioned in the last report, to a point within 40 feet from the face, the vein was barren of all mineralization. The last 40 feet of vein contains considerable quantities of pyrite but no hubnerite.

The veinlets in the structure are very irregular and each one is only several inches wide. The drift is in dark granite but at the present face considerable sericite schist is associated with the vein.

No timber has been required.

Project "D"

The face of this crosscut in diabase dike is 55½ feet beyond Sta. 1397 or 189 feet from the starting point and continues on the original bearing of N. 65° W. The dike at the present face shows a width of 185 feet. During February up to the date of visit, there were placed 23 sets of timber accounting for 110 feet of crosscut. It had been thought that timbering might not be necessary but the ground slabs in large pieces after several weeks. Four-inch top lagging is required and in places 3 feet of top blocking is necessary to catch the ground.

At the face a prominent fracture coated with green material trends about N. 80° W. and dips 50° N. At about 21 feet NW of Sta. 1397 is a band (1-2 feet thick) of pink rock not yet identified. This band strikes approximately at right angles to the crosscut and dips 80° N.

It was requested that in the future all sample widths and assay value be indicated on the monthly report maps in their proper locations. Where mineralization is sparce (and/or) widths are narrow, estimates of WO_3 content will be indicated. Copies of actual assay office reports will accompany the original of each monthly report.

The ore recovered in exploration has been milled but no concentrate has been sold since the start of the contract so no selling price can be given and no settlement sheet is available on which to pay royalty due the Government.

A recap of the shifts for 1261 feet of DMEA advance indicates a total of 276.75 shifts, or an average advance of 4.56 feet per mining shift. This does not include timbering or slabbing. The average will probably decrease with distance from the shaft.

This report was compiled by the engineer from his data and that of Mr. Parker. It was not possible to write the report together.

Since no monthly vouchers have been paid, the Operator expects to compensate in the February report for all past timbered tunnel costs in accordence with the terms of Amendment No. 1.

H. L. Burmeister

H. L. Burmeister
U.S. Bureau of Mines

RECEIVED JAN 10 1957 DMEA

Interim Report on Operating Contract

Docket No. DMEA - 4216 (tungsten), Contract Idm-E 1032
Tungsten Mining Corporation
Hamme Mine, Vance County, North Carolina

This property was visited by the engineer on January 3 and 4, 1957.

Approximately 10 hours was spent with Mr. J. R. Sweet, General Manager, in an effort to assist him in preparing a request for amendment of the contract. A request is being mailed to Knoxville on January 5 with the further request that this one cancel and replace the one submitted December 17, 1956.

The request is based on the proportioned relation of the excavation necessary to place the present timber sets (5'-8" X 7½' inside) in the drifts and crosscuts being driven to contract specifications and the excavation that would be necessary to place the 7' X 7½' inside measurement timber specified in the contract. The calculation of these areas is based upon the attached prints which I prepared in College Park previous to this visit as a possible basis for agreement.

The presently used timber sets, namely 5' - 8" inside posts and 7½' in the clear between rail and bottom of cap are considered by me to be adequate for exploration and to comply with the State regulations. During this visit and for the first time the meaning of the regulations were made clear. The meaning and intent is that where width can be maintained as in hard rock not requiring timber the clearance must be 2½' on one side; where width cannot be maintained (where timber is used) the clearance may be 2½' on one side or a place of refuge made at intervals not to exceed 60 feet. On these projects the untimbered openings are being carried a minimum of 7' wide and 7½' high giving the required 2½' clearance. Where timber is presently being used (5' - 8" X 7' - 6") in the clear, refuge

places are being made and timbered as required.

The width necessary for removal to accommodate the present timber set (5'-8" inside posts) is 14.82% less than would be necessary for removal to accommodate the contract specification of (7' inside posts).

Applying this percentage to $35.00 indicates a reduction in cost of drift or crosscut by $5.19 per foot. Mr. Sweet indicates that the company is willing to absorb some of this reduction as contained in his revised request for amendment of contract.

Results of inspecting underground work follows:

Project "A" - This crosscut is still in the diabase dike and has advanced 55 ft. during December and the face is now 89 ft. beyond the starting point. During December 50 ft. of timber was placed bringing the total to date to 68 feet. A place of refuge is presently being timbered at the face. The ground is heavy and very blocky.

Project "B" - The curving crosscut first started was driven to a point 80 feet beyond the starting point. This point was beyond that at which the vein could possibly be intercepted. The quartz encountered in previously drilled, diamond drill hole U-831 was only several feet beyond the face at 80 feet. The flat lying 3 to 6 inch wide barren quartz veins in the face clearly indicate that the diamond drill hole had followed the flat quartz seams and had erroneously indicated width.

At the 80 ft. face this crosscut was abandoned and drilling operations retreated to the approximately 1 ft. wide vein which had been passed through by the curving crosscut at a point 36 ft. westerly of survey station 1358. Drifting started on this vein in a southwesterly direction with the belief that it is the vein sought but which has locally changed strike. This new drift has been advanced to a point 57' from station 1370. The structure has for the last 20 ft. averaged 2½ ft. wide and dips 76° southwesterly. The structure is about 50% quartz but contains no tungsten minerals.

Project "C" -

The drift face has reached a point 191' beyond the starting point. The quartz vein averages 2.7 ft. in normal width and the dip has flattened from 65° at starting point to approximately 50° in the face. The drift started in schist and at 40 ft. from the starting point entered granite complex in which it is continuing. At the present face a diabase dike is just coming across the drift on a bearing of approximately N 15° W.

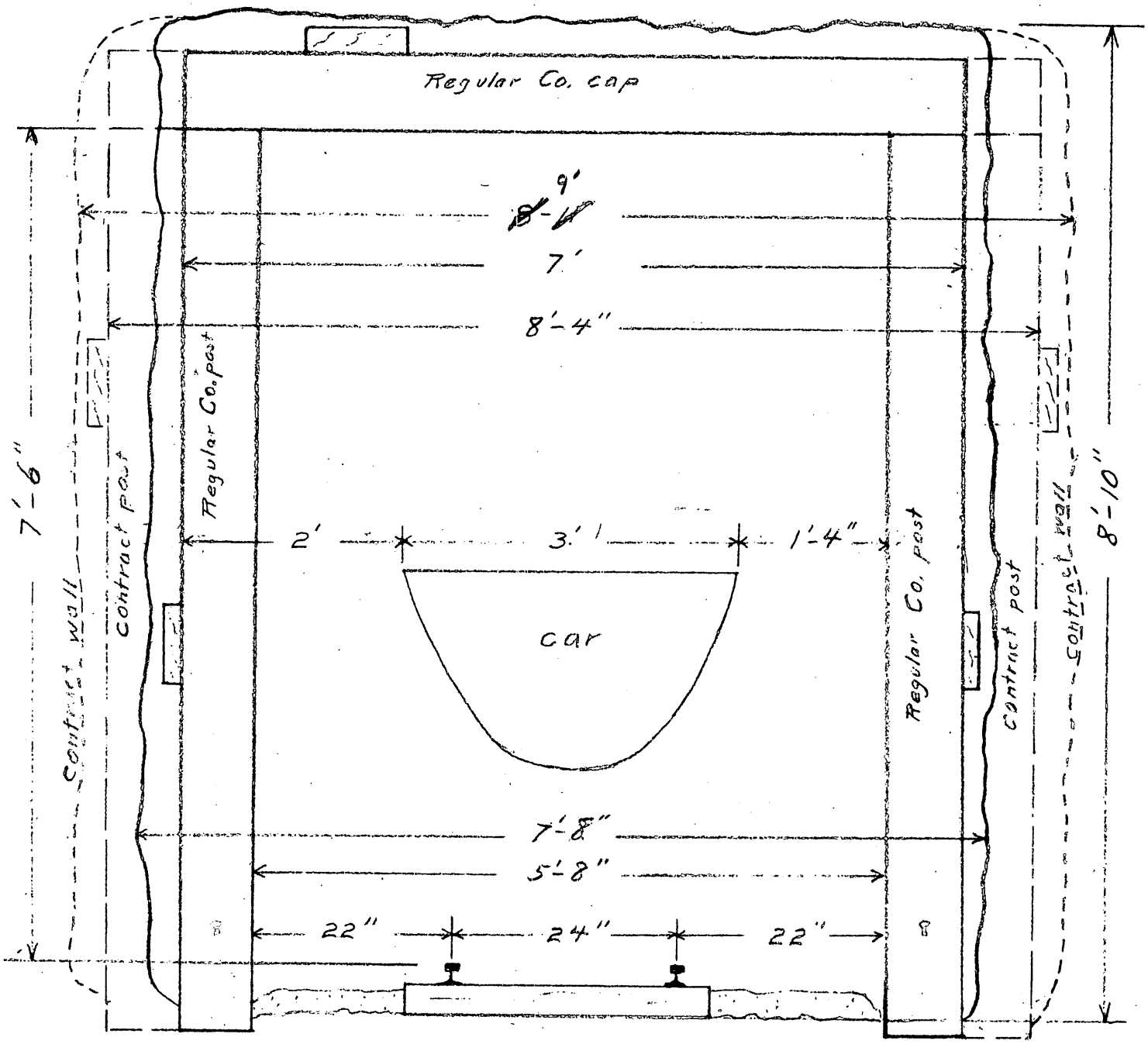
There has been 130 tons of ore taken from this drift since the start of the project. The car samples average 0.27% WO_3. A car passing station is presently being slabbed from the side of the drift.

Project "D" -

This crosscut in diorite dike has been advanced 13 ft. during December and to a point 56 ft. beyond the starting point. Six additional roof bolts have been placed but post hitches are presently being cut in the floor in preparation for timber. It is doubtful that bolts will hold the slabby ground. Roof bolting is not provided for in the contract.

H. L. Burmeister

H. L. Burmeister



Timber & walls as used by Co. } Requires breaking 7'-8" wide by 8'-10" high

Timber & walls as required in Contract } Requires breaking 8'-11" wide by 8'-10" high

IMEA - 4216

Tungsten Mining Corp.

3/4 scale

12/28/58

R.L.C.

RECEIVED
DEC 28 1956
D.M.E.A.

WSM 5/20/57

Interim Report on Operating Contract

Docket No. DMEA 4216 (tungsten)
Contract No.: Idm-E1032
Operator: Tungsten Mining Corporation
Location: Hamme mine, Vance County, N. C.

The purpose of project "B" was to drift on vein 3 on the 900' level. From data on the 500' level its projection on the 900' level was believed to be in the approximate location shown on the contract map as "Project B". To provide for connection with the main 900' crosscut a curving tunnel was started at the point marked 85° dip, just north of the 20,000 N.coordinate.

At a point approximately 36' from this starting point a small vein bearing S. 12°W. was crossed and the curving tunnel continued to a point 85' from the starting point in the belief that No. 3 vein lay beyond the small vein crossed. This opinion was shared by the engineer during inspection Dec. 11, 1956.

The following data was obtained in telephone conversation on Dec. 18 and 19 with Mr. J. R. Sweet, Gen. Mgr., and Mr. A. M. Szynklewski, mining engineer of the Tungsten Mining Corp.

As of 7 a.m. Dec. 19 this curving approach tunnel had reached a point 85' from the starting point without contacting a vein other than the small one bearing S. 12°W. It is the opinion of Mr. Sweet, Mr. Szynklewski, and Mr. C. D.Hulin, the company geological consultant who is at the mine, that vein No. 3 does not lie to the northwest of the present face of Project "B" curving tunnel. Substance is added by the fact that a diamond drill hole collared in the 900' level drift north of " B", reaches within several feet of the present face of "B" tunnel and did not intercept the vein. They expressed their belief that the small vein crossed 36' from the starting point is the No. 3 vein and that if drifted on will be found to change its present strike of S. 12°W. to a strike more nearly in conformance with the S.42°W. strike of vein No. 3 on the 500' level.

After plotting on the contract map the above data, I agree with the operator that the small vein should be drifted on and have so verbally informed the operator. This drift will be started either on night shift Dec. 19 or day shift Dec. 20, in the belief that it is the only logical thing to do.

H. L. Burmeister
Bureau of Mines.

December 19, 1956

MEMORANDUM

[illegible]

[illegible] 1956

[illegible]

[illegible]

[illegible] 2 - [illegible] Corporation
[illegible] October 3rd.

[illegible] with a grant
[illegible]

[illegible] the [illegible] and [illegible] one of
[illegible] to the [illegible] Raleigh, N.C.

[illegible]

[illegible]

cc: [illegible]
[illegible]
[illegible]
(1) [illegible] (2) [illegible]

RECEIVED
OCT 28 1956
T.M.E.A.

C O P Y

[illegible] Corp.
Box 81
[illegible], N.C.

December 19, 1956

RECEIVED
DEC 28 1956
[illegible]

Mr. [illegible] L. Burmeister
Mine Examination and Exploration Engineer
[illegible] Experiment Station
U. S. Department of Interior
Defense Minerals Exploration Administration
Colle e Park, Md.

Re: Docket No. [illegible] - [illegible]

Dear Mr. Burmeister:

Pursuant to our phone conversation of December [illegible] with regard to Project B, we are enclosing a print of our work sketch showing approximate advance in Project B and the location of our proposed new take-off point, which you approved during our phone conversation.

As you can see, based upon drilling results, we anticipated getting on the structure at a point near hole U 831 which encountered 3 ft. of quartz. Inasmuch as there is no structure at this point, it appears that the vein structure we came across at a point 30 ft. ahead of survey station 1350 is undoubtedly No. 3 vein which has made an abrupt change in strike.

The presence of 3 ft. of quartz in hole U 831 can be explained by several flat quartz seams which are present in the face of the crosscut but which do not comprise a vein structure.

It is our intent to take off to the southwest on the exposed vein structure (30 ft. ahead of survey station 1350) and to follow this structure which is expected to attain a more northerly strike which will parallel the vein as shown on the 200 level.

We wish to thank you for your approval of our revised plan in this project, because it will facilitate matters at this end.

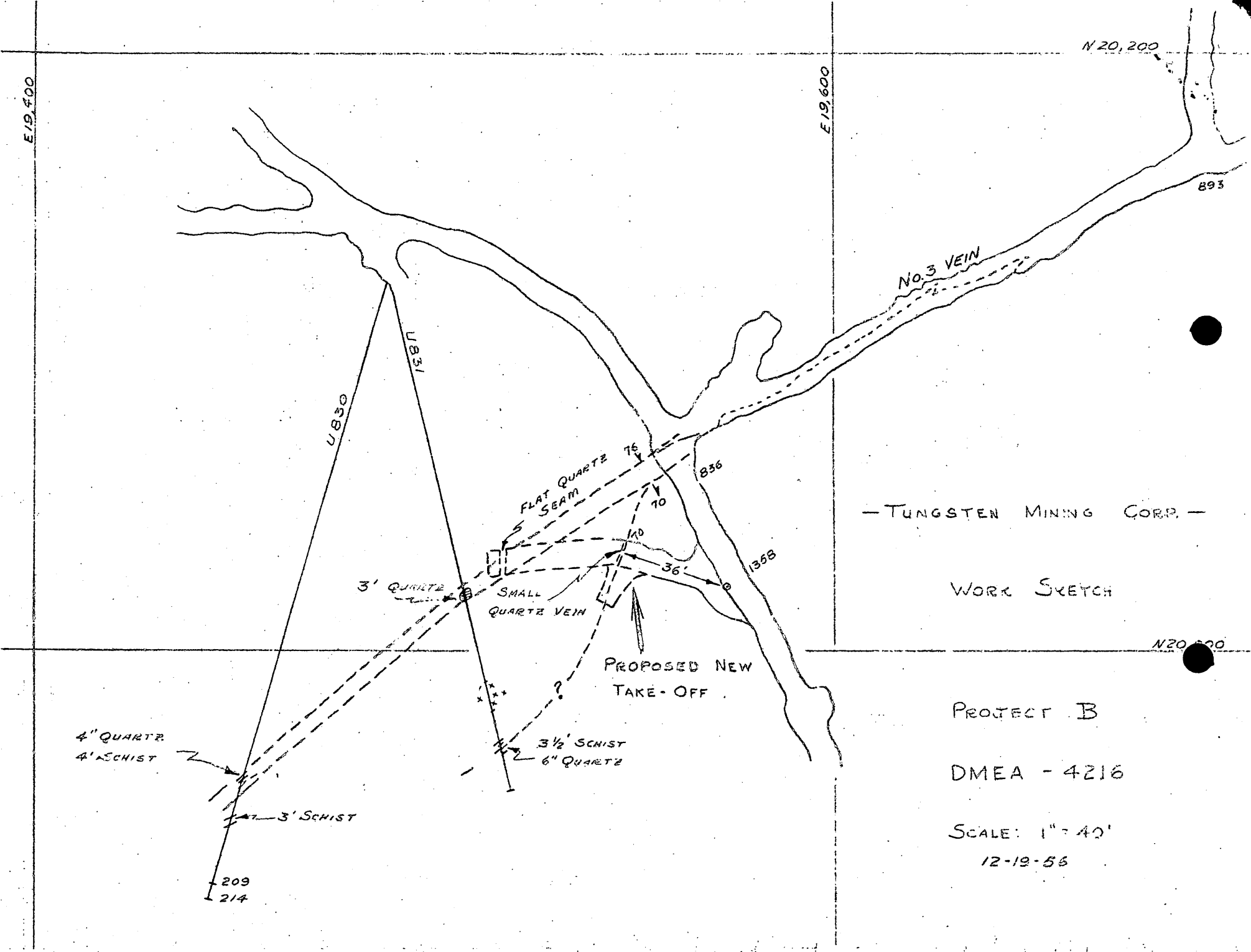
Yours very truly,

[illegible]

(S) [illegible]

Chief Engineer

[illegible]
[illegible]


N 20,200
E 19,400
E 19,600
893
No. 3 VEIN
U831
U830
FLAT QUARTZ SEAM
75
70
836
110
36'
1358
3' QUARTZ
SMALL QUARTZ VEIN
PROPOSED NEW TAKE-OFF
?
4" QUARTZ
4' SCHIST
3' SCHIST
3½' SCHIST
6" QUARTZ
209
214
— TUNGSTEN MINING CORP. —
WORK SKETCH
PROJECT B
DMEA - 4216
SCALE: 1" = 40'
12-19-56

RECEIVED
DEC 28

Interim Report on Operating Contract

Docket No. [illegible]A 4216 (tungsten)
Contract No.: I[illegible]-[illegible]032
Operator: Tungsten Mining Corporation
Location: Hamme Mine, Vance County, N. C.

The purpose of project "B" was to drift on vein 3 on the 900' level. From data on the 500' level its projection on the 900' level was believed to be in the approximate location shown on the contract map as "Project B". WSM To provide for connection with the main 900' crosscut a curving tunnel was started at the point marked 85° sig, just north of the 20,000 N.coordinate.

At a point approximately 36' from this starting point a small vein bearing S. 12°W. was crossed and the curving tunnel continued to a point 85' from the starting point in the belief that No. 3 vein lay beyond the small vein crossed. This opinion was shared by the engineer during inspection Dec. 11, 1956.

The following data was obtained in telephone conversation on Dec. 18 and 19 with Mr. J. R. Sweet, Gen. Mgr., and Mr. A. [illegible] Szynklewski, mining engineer of the Tungsten Mining Corp.

As of 7 a.m. Dec. 19 this curving approach tunnel had reached a point 85' from the starting point without contacting a vein other than the small one bearing S. 12°W. It is the opinion of Mr. Sweet, Mr. Szynklewski, and Mr. C. E.Mulin, the company geological consultant who is at the mine, that vein No. 3 does not lie to the northwest of the present face of Project "B" curving tunnel. Substance is added by the fact that a diamond drill hole collared in the 900' level drift north of " B", reaches within several feet of the present face of "B" tunnel and did not intercept the vein. They expressed their belief that the small vein crossed 36' from the starting point is the No. 3 vein and that if drifted on will be found to change its present strike of S. 12°W. to a strike more nearly in conformance with the S.42°W. strike of vein No. 3 on the 500' level.

After plotting on the contract map the above data, I agree with the operator that the small vein should be drifted on and have so verbally informed the operator. This drift will be started either on night shift Dec. 19 or day shift Dec. 20, in the belief that it is the only logical thing to do.

H. L. Burmeister
Bureau of Mines.

December 19, 1956

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

...closures

cc: [illegible]A
V. Lynch
...StClair
(1) ...ambrose (2) Stn.

COPY

[illegible] Gold Co.
Box [illegible]
[illegible], [illegible]

December [illegible], 1950

RECEIVED
DEC 26 1950
[illegible]

Mr. [illegible] L. Burmeister
Mine Examination and Exploration Engineer
[illegible] Experiment Station
[illegible] Department of Interior
Department of Mines Exploration and Exploitation
Helena [illegible], [illegible].

[illegible] Docket No. [illegible] - [illegible]

Dear Mr. Burmeister:

Pursuant to our phone conversation of December [illegible] in regard to Project B, we are enclosing a print of our work sketch showing approximate advance in Project B and the location of our proposed new breakout point, which you approved during our phone conversation.

As you can see, based upon drilling results, we anticipated cutting of the structure at a point [illegible] hole D 331 which encountered 3 ft. of quartz. Inasmuch as there is no structure at this point, it appears that the vein structure we crosscut at a point 30 ft. ahead of survey station 1350 is uncovered by hole [illegible] which has made an abrupt change in strike.

The presence of 3 ft. of quartz in hole D 331 can be explained by several flat quartz seams which are present in the face of the crosscut but which do not comprise a vein structure.

It is our intent to take off to the southwest of the exposed vein structure (30 ft. ahead of survey station 1350) and to follow this structure which is expected to attain a more westerly strike which will parallel the vein as known on the 500 level.

We wish to thank you for your revel on our proposed plans in this project, because it will facilitate matters to this end.

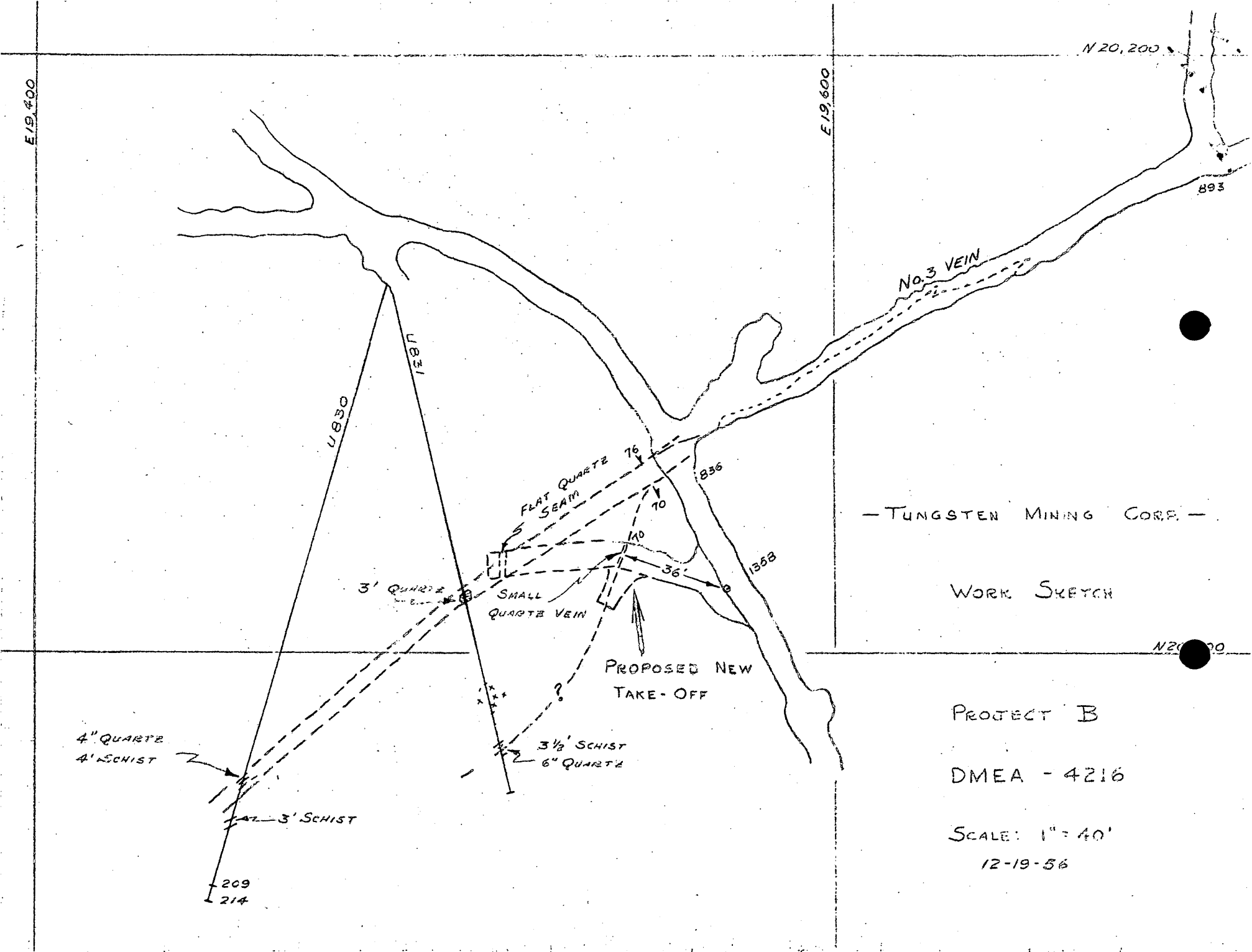
Yours very truly,

[illegible]

[illegible]

[illegible] Engineer

[illegible]
[illegible]


N 20,200
E 19,400
E 19,600
893
No. 3 VEIN
U831
U830
76
836
FLAT QUARTZ SEAM
70
110
36'
1358
3' QUARTZ
SMALL QUARTZ VEIN
PROPOSED NEW TAKE-OFF
?
4" QUARTZ
4' SCHIST
3' SCHIST
3½' SCHIST
6" QUARTZ
209
214
— TUNGSTEN MINING CORP. —
WORK SKETCH
PROJECT B
DMEA - 4216
SCALE: 1" = 40'
12-19-56

Interim Report On Operating Contract

Docket No. DMEA 4216 (tungsten)
Contract: Idm-E1032
Operator: Tungsten Mining Corp.,
Hamme Mine
Location: Vance County, North Carolina

RECEIVED DEC 26 1956 DMEA

This contract was inspected by H. L. Burmeister, Bureau of Mines, on December 11, 1956. The engineer was accompanied underground by Mr. A.M. Szynklewski, company mining engineer. After the underground inspection a conference was held with Mr. Szynklewski and Mr. W. R. Atkins, general superintendent.

Project "A" started Nov. 19 at coordinates N. 20,019.97, E. 20,583.72, which is 33.4 feet in advance of survey station 1061. The drift is on a bearing of N. 80° E. and as of 1 p.m. Dec. 11, had advanced a distance of 41 feet from the starting point. All of this advance has been in diorite dike which is blocky and requires tight timbering. A total of 7 sets of timber have been placed.

Project "B" was started Dec. 1 on coordinates N. 20,018, E. 19,635. This curving approach to the vein to be drifted on has advanced a distance of 41 feet from the starting point in fractured country rock which has not required timber. Vein No. 3 should be encountered within 40 ft. of the present face.

Project "C" was started Dec. 3 at coordinates N. 17,020, E.18,290. The drift has advanced a distance of 63 ft. from the starting point. A 2-ft. quartz vein was encountered at 30 ft. beyond the starting point and is still 2 ft. wide in the present face. The vein is live, containing considerable pyrite, but the tungsten is estimated to be below the economic cut-off limit of 0.6% and the width would not be economically minable.

Project "D" was started Nov. 26 on a bearing of N.65° W. at a point 30.8 ft. in advance of survey station 1354 and at a point having coordinates of N. 16,994.63, E. 18,259.69. The crosscut has advanced a

distance of 52 ft. from the starting point. The first 7 or 8 ft. of crosscut was in schist and the balance in diorite dike. Approximately 20 roof bolts 6 ft. long have been used in lieu of timber but it is judged that they will not serve in this blocky ground as the rock is already spalling around and between the bolt plates.

All drifts and crosscuts are being driven 7½ ft. wide and 8½ ft. high. The operator is driving 2 headings steadily, each on a 2-shift, 6-day per week basis. The 4 headings are alternated to accommodate timbering and mucking.

In the conference previously referred to the matter of having erroneously ~~having~~ reported all work as drifting in the November report was brought to the attention of the operator. Subsequent monthly reports will be made as outlined in the attached print, "Comments on the Operator's November report". Four copies of this outline were left with the operator. The December report will contain the correct footages and costs to date in the proper categories. It was agreed that the operator would each month include in his report the tonnage and tungsten content of ore recovered from exploration. In view of the fact that little ore will be recovered in the early stage of the work, the engineer told the operator that pending further advice it would be satisfactory for him once each 3 months to report the total tonnage, average assay and value of exploration production to the Executive Officer with a copy to the engineer. This report would be sent to the Executive Officer with proper certification of sale and a royalty check calculated on the contract specified royalty percentage. The operator was tol d that assay of mineralized diamond drill core was a legitimate cost and should be included in the number of assays allowed under the contract.

All assay widths and results will be marked on the progress maps and substantiated in company records. All car samples of ore will be substantiated in the company records.

The entire company personnel are extremely cooperative and are desirous of keeping accurate records.

H. L. Burmeister

H. L. Burmeister,
Bureau of Mines

December 17, 1956

Tungsten Mining Corporation

RECEIVED 1956

Comments on Nov. Operator's Report

On MF 10A under (1) Make "Drifting & Crosscutting"
On MF 10AA make "Drifting & Crosscutting" } Totals for all Projects as in Nov. report.

On each form make total of diamond drilling
" " " " " " assays.

- - - - -

On Supplemental Sheets

Very good to keep each Project on separate sheet like

Project "A"

	Feet This Month	Feet Previous	Feet To Date
Drifting	-	-	-
X cutting	-	-	-
Timbering	-	-	-
Diamond Drilling	-	-	-

Plus the narrative

- - - - -

Another page

Project "B"

	Feet This Month	Feet Previous	Feet To Date
Crosscutting	-	-	-
Timbering	-	-	-
Diamond drilling	-	-	-

Plus the narrative

- - - - -

Projects "B" & "C" same as above.

- - - - -

Assaying can be recorded in one place on one of the supplemental sheets and as a total on each form.

	This Month	Previous	To Date
Assays	-	-	-

Map - with survey stations and showing assay widths and results.

Form MF-104 (Rev.)
(April 1952)

AUG 13 58

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 8

Month of June, 1958 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, N. C.

Contract Amount, $ 246,660.00 Government Participation: 75 % Amount, $ 184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contracts: Short Form						
Drifting Drifts Not Timbered	-	$148,085.00	$148,085.00			
Drifting Drifts Timbered	-	10,141.20	10,141.20			
Crosscutting Not timbered	-	55,790.00	55,790.00			
Crosscutting XC Timbered	-	18,176.40	18,176.40			
Timbering	-	5,244.00	5,244.00			
(2) Labor and Supervision:						
Labor Core Drilling	660.00	5,940.00	6,600.00			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	306.00	306.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$660.00	$243,682.60	$244,342.60	$660.00	$243,682.60	$244,342.60

I certify that the above bill is correct and just and that payment therefor has not been received.

Date July 1, 1958 *Payee TUNGSTEN MINING CORPORATION

Per J. R. Sweet Title Vice Pres. & Gen. Mgr.

J.R.Sweet

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$494.99

Signature Helen R. Miller (Authorized Certifying Officer)

Date AUG 11 1958 Vou. No. 19

(See other side)

1947 6/6/58 165.01

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1032 in accordance with the terms of the contract.

Signature R. F. Burmeister Title Mining Engr. Date 7/2/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date AUG 4 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

AUG 18 '58

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1958 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, N. C.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting Not timbered	Ft.	-	-	$148,085.00	4231	$35.00		
Drifts timbered	Ft.	-	-	10,141.20	313	32.40		
XC not timbered	Ft.	-	-	55,790.00	1594	35.00		
XC Timbered	Ft.	-	-	18,176.40	561	32.40		
Winzes								
Drilling: Core	Ft.	660.00	400	6,600.00	4000	1.65		
Churn								
Auger								
Sampling	Ea.	-	-	306.00	102	3.00		
Trenching								
Test Pits								
Roads and Trails								
Timbering	Ft.	-	-	5,244.00	874	6.00		
TOTAL DISTRIBUTED COSTS		660.00	-	$244,342.60				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

REMARKS:

Date July 1, 1958 Operator TUNGSTEN MINING CORPORATION

Per J. R. Sweet Title Vice Pres & Gen Mgr.

J. R. Sweet

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

H. L. Burmeister 7/2/58

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION V

ELECTROTECHNICAL
EXPERIMENT STATION

P. O. BOX 217
NORRIS, TENNESSEE

8/13	H. J.	225
8/14		110
		400

August 11, 1958

Memorandum

To: Joy L. Chambers, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Personal Assistant, Norris, Tennessee

Subject: Monthly reports and vouchers

We are enclosing two copies each of the following monthly reports and vouchers:

Idm-E1032 Tungsten Mining Corporation
Docket No. DMEA-4216
19th and final payment - month of June
Completion Date: 6/6/58
Amount $494.99

Idm-E1106 Homer Boone
Docket No. DMEA-4534
7th payment - month of July
Amount $387.00

Idm-E1184 Sam L. Phillips
Docket No. DMEA-4803
3rd payment - month of July
Amount $945.00

Helen Miller
Helen R. Miller

Attachments
/hbm
Copies to R. A. Laurence
V. J. Lynch
Norris files
Day files

EXPLORATION PROJECT - SUPPLEMENTAL REPORT June 23, 1958

Month of June 1958 DMEA NO. 4216 CONTRACT NO. 1032

PROJECT A

	Feet This Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	-	1494	1494
Drifting, timbered @ $32.40	-	214	214
Crosscutting @ $35.00	-	224	224
Crosscutting, timbered @ $32.40	-	268	268
Timbering	-	482	482
Diamond Drilling	171	1446	1617
Number of Assays	-	13	13

The only work performed in Project A consisted of diamond drilling which amounted to 171 feet.

The drill hole started last month was 45 ft deep at the end of May. This hole (U-1316) is located at coordinates N21528, E-21852 and was drilled on a bearing of N73½E, to a depth of 108 ft.

This hole was drilled into the hanging wall to explore for possible other structures. No well defined structure was encountered. The hole was in gneiss and chlorite schist and intercepted one foot of barren quartz from 64 to 65 feet.

Another drill hole (U-1317) was drilled into the footwall. This hole is collared at a point with coordinates N21529, E21841 and was drilled on a bearing of N37½W to a depth of 108 feet.

No definite structure was encountered. From 40 ft to the end of the hole at 108 feet, the rock was diorite dike.

Drilling in Project A was completed on June 6, 1958.

AMS/hm

6-23-58

EXPLORATION PROJECT - SUPPLEMENTAL REPORT June 23, 1958

Month of June 1958 DMEA NO. 4216 CONTRACT NO. 1032

PROJECT B

	FEET THIS MONTH	FEET, PREVIOUS	FEET, TO DATE
Drifting @ $35.00	-	1015	1015
Drifting, timbered @ $32.40	-	40	40
Crosscutting @ $35.00	-	245	245
Crosscutting, timbered @ $32.40	-	0	0
Timbering	-	40	40
Diamond Drilling	229	812	1041
Number of Assays	-	19	19

One additional diamond drill hole was drilled in Project B during the month of June 1958.

This hole (U-1318) is located at a point with coordinates N19534, E19081, and was drilled on a bearing of N53½ W to a depth of 229 ft.

This hole was drilled to test the junction of the structure which is in the drift between survey stations 1429 and 1420, and the schist contact.

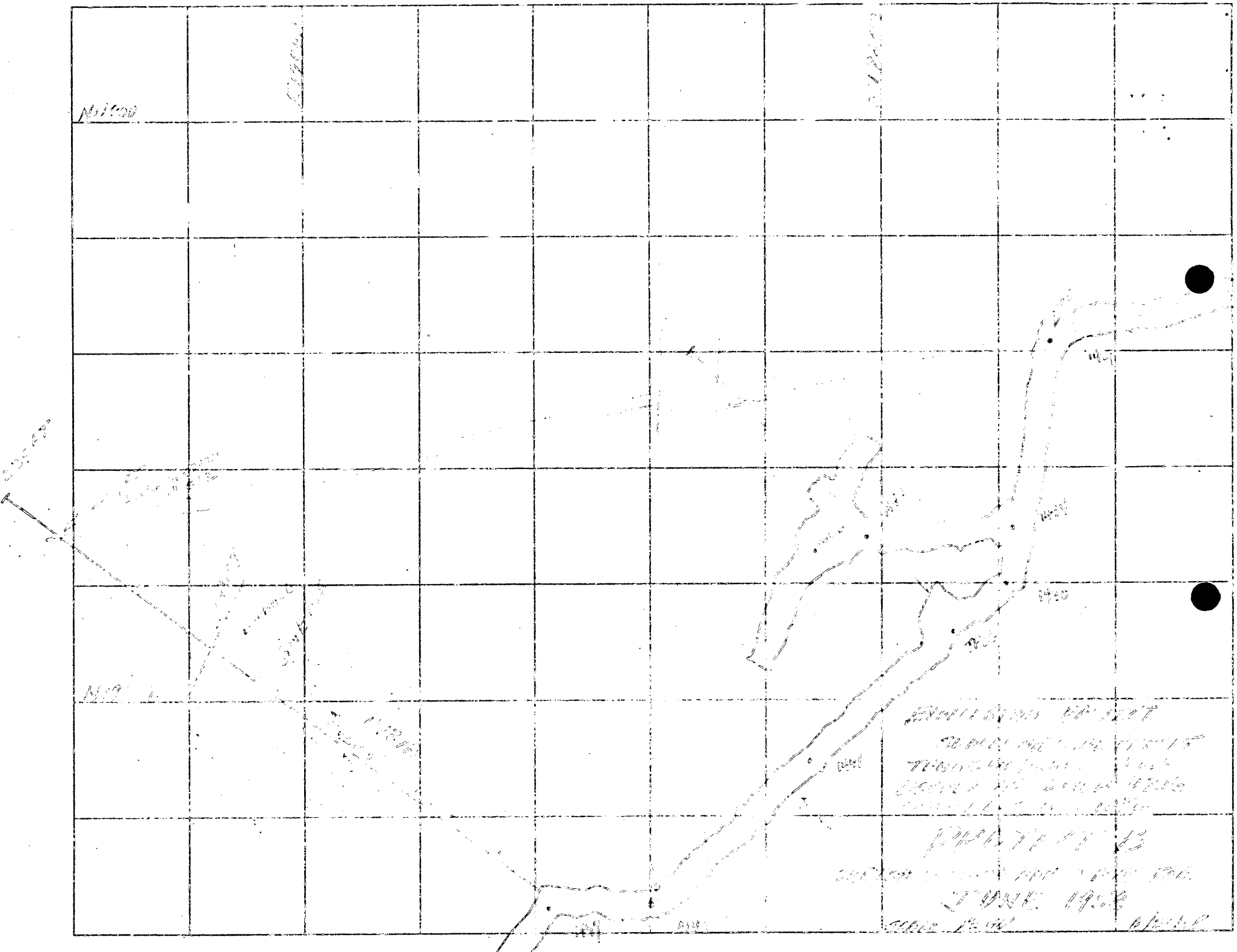
From 0 to 5 ft, there was scattered light mineralization in quartz seams in sericitic schist. The schist contact is at 152½ ft. No well-defined structure or veins were cut. From 205 ft 206 there is a siliceous zone with some quartz and possibly some brecciation.

Drilling was completed in this Project on June 16, 1958, which also marked the completion of all DMEA work under the contract.

AMB/hs

6-23-58

K+E ALBANENE 105M (-) TRACING PAPER 14984



K+E ALBANENE 105M 14984

[illegible]

HOLE NO. [illegible]	BEARING [illegible]	COORDINATES
PROJECT [illegible]	DIP [illegible]	N [illegible]
[illegible]	DATE [illegible]	E [illegible]

Interval (ft)	Description of Core
0 - 12	Chlorite schist with minor quartz interval and lenses of quartzite at 3/8 ft. and at 4-1/2 ft.
12 - 24	Gneiss
24 - 34-1/2	Chlorite schist with numerous minor quartz veins
34-1/2 - 64	Principally chlorite gneiss with two 6-inch intervals of chlorite schist at 40-1/2 ft. and 48 ft.
64 - 65	Quartz vein lively.
65 - 74	Chloritic schist
74 - 94	Gneiss
94 - 105	Chlorite Schist
105 - 108	Gneiss

END

[illegible]

P. C. Hole No. [illegible]	BEARING [illegible]	CONDITIONS
[illegible]	DIP [illegible]	N [illegible]
[illegible]	[illegible]	S [illegible]

Interval (ft)	Description of Core
[illegible]	Chlorite schist with 1 inch of quartz at [illegible]
[illegible]	Gneiss
[illegible]	Trace pyrite and schist
[illegible]	Diabase dike with 2 inches of quartz at [illegible]
[illegible]	Gneiss
[illegible]	Diabase dike with quartz veins
[illegible]	Gneiss with 1 inch of quartz at [illegible]
[illegible]	Sericite schist, 1 inch of schorlite and 1 inch of quartz at [illegible]
[illegible]	Chlorite [illegible]

END

[illegible] CORPORATION
[illegible]

[illegible] Hole No. [illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

Interval (ft.)	Lithologic Column
0 - 8	Sandy [illegible] with [illegible] of [illegible] from 0 to 6-1/2 ft. 4 inches of quartz at 3 ft. [illegible] 1 inch of quartz at 5 ft. [illegible] Chlorite schist from 6-1/2 to 8-1/2 ft.
8 - 13-1/2	Gneiss.
13-1/2 - 15	Sericite schist
15 - 34	Gneiss with 2 inch of quartz at 32 ft.
34 - 42	Sericite schist with 2 inch of quartz at 34 ft.
42 - 47-1/2	Gneiss
47-1/2 - 49-1/2	Sericite schist with 2 inches of quartz at [illegible] ft.
49-1/2 - 73	Gneiss with 2 inch of quartz at 66 ft. and a sericitic interval from 65 to 67 ft.
73 - 97-1/2	Gneiss with a 6 inches of lamprophyre at 93 ft.
97-1/2 - 107	Gneiss with quartz parallel with core axis from 100 to 103 ft.
107 - 109	Silicified.
109 - 124	Gneiss with 4 inches of quartz at 117-1/8 ft.
124 - 129-1/2	Gneiss with 4 inches of dike at 129-1/2 ft.
129-1/2 - 143	Diabase dike.
143 - 152-1/2	Gneiss with 2-1/2 inches of dark quartz at 152-1/2 ft.
152-1/2 - 164	Chlorite schist
164 - 199	Chlorite schist, sericitic, with 1/2 inch of quartz at intervals a space of sericite at 174-1/2 ft.
199 - 205	Chlorite schist
205 - 206	[illegible] chlorite schist with 2 inch of quartz
206 - 229	Chlorite schist

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
Region V

ELECTROTECHNICAL LABORATORY — NORRIS, TENNESSEE

P. O. Box 217
Norris, Tennessee
July 11, 1958

Memorandum

To: Jay L. Chambers, Defense Minerals Exploration Administration, Interior Building, Washington 25, D. C.

From: Personal Assistant, Norris, Tennessee

Subject: Monthly reports and vouchers

We are enclosing two copies each of the following monthly reports and vouchers:

Idm-E1032 — Tungsten Mining Corporation
Docket No. DMEA-4216
18th payment - month of May
Amount $2210.44

Idm-E1150 — H. Lee Medford
Docket No. DMEA-4828
3rd payment - month of June
Amount $438.75

Idm-E1184 — Sam L. Phillips
Docket No. DMEA-4803
2nd payment - month of June
Amount $491.25

Idm-E1185 — Carolina Mining Company
Docket No. DMEA-4879
1st payment - month of May-June
Starting Date: 5/15/58
Amount $1122.00

Idm-E1195 — H. Lee Medford
Docket No. DMEA-4936
1st payment - month of June
Starting Date: 6/16/58
Amount $87.00

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 14 1958

DATE	INITIALS	CODE
7-14	C	220
"	[illegible]	100
	WSH	400

Idn-E1197 DeGroat, Buchanan & Buchanan
Docket No. DMEA-4946
1st payment - month of June
Starting Date: 6/9/58
Amount $309.00

Helen Miller
Helen R. Miller

Attachments
/hbm
Copies to R. A. Laurence
V. J. Lynch
Norris files
Day files

Form MF-104 (Rev.) (April 1952)

Budget Bureau No. 42-R1036.5

RECEIVED JUL 14 1958 DMEA

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1958 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, N. C.

Contract Amount, $ 246,660.00 Government Participation: 75 % Amount, $ 184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contractors: Short Form						
Drifts Not timbered	$2870.00	$145,215.00	$148,085.00			
Drifts timbered	-	10,141.20	10,141.20			
Crosscutting Not timbered	-	55,790.00	55,790.00			
XC Timbered	-	18,176.40	18,176.40			
Timbering	-	5,244.00	5,244.00			
(2) Labor and Supervision:						
Core Drilling	74.25	5,865.75	5,940.00			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	3.00	303.00	306.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$2947.25	$240,735.35	$243,682.60	2947.25	240,735.35	243,682.60

I certify that the above bill is correct and just and that payment therefor has not been received.

Date June 9, 1958 *Payee Tungsten Mining Corporation

Per J. R. Sweet Title Vice Pres & Gen Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 2210.44

Signature Helen R. Miller (Authorized Certifying Officer)

Date JUL 11 1958 Vou. No. 2

(See other side)

18

736.81

(For Government use only)

Certification by Government Representative:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1032 in accordance with the terms of the contract.

Signature W. Burmeister Title Mining Engr. Date 6/13/58

Approval by DMEA Executive Officer or Alternate:

Signature Robert A. Kennemer Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JUL 7 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 8 195 Docket No. DMEA 1216 Contract No. C-1032
Operator's Name [illegible] Corporation Minerals [illegible]
Address Box 991, [illegible], U. S.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting: [illegible]	Ft	2,70.00	82	[illegible]	4231	[illegible]		
Crosscutting: [illegible]	Ft	-	-	10,111.20	313	32.40		
Raising: [illegible]	Ft	-	-	55,722.00	1594	35.00		
Shafts: [illegible]	Ft	-	-	1,1[illegible]	561	32.15		
Winzes	Ft	73.25	65	5,949.00	3600	1.65		
Drilling: Core								
Churn								
Auger								
Stripping: [illegible]	Cu Yd	3.00	1	303.00	100	3.00		
Trenching								
Test Pits								
Roads and Trails: [illegible]	Ft	-	-	5,214.00	872	6.00		
Total Distributed Costs		[illegible]	-	[illegible]				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date June 9, 1958 Operator [illegible] Corporation

Per J. B. Wood [signature] Title Vice Pres & Gen Mgr.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

Remarks:

(Instructions on reverse)

(For Government use only)

H. L. Burmeister 6/13/58

MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT - SUPPLEMENTAL REPORT June 9, 1958

Month of May 1958 DMEA No. 4216 Contract No. 1032

Project A

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting @ 235.00	82	1412	1494
Drifting, timbered @ 232.40	-	214	214
Crosscutting @ 235.00	-	224	224
Crosscutting @ 232.40	-	268	268
Timbering	-	482	482
Diamond Drilling	45	1401	1446
Number of Assays	1	12	13

Drifting to the northeast was continued on the vein structure encountered last month.

The advance was 82 ft and this advance completed the drifting and crosscutting footage assigned to this Project, namely 2200 ft. This work was completed on May 29, 1958.

The first 40 ft of advance was on relatively tight chloritic structure with 2 to 4 narrow quartz seams with occasional spots of mineralization. The last 42 ft of advance was on much livelier structure, drift wide, with more sericitization and hydrothermal alteration. In this last 42 ft there were 2 to 3 quartz seams usually less than 1 ft in width, but they normally had some light mineralization. In one area one of these seams widened out to about 4 ft in width but it pinched down rapidly. One sample was taken in this wide area. For a width of 4.2 ft, the assay was 0.37% MoO_3.

Also from this are 28 tons of "ore" were taken out. Grab samples of this "ore" ran 0.07% MoO_3.

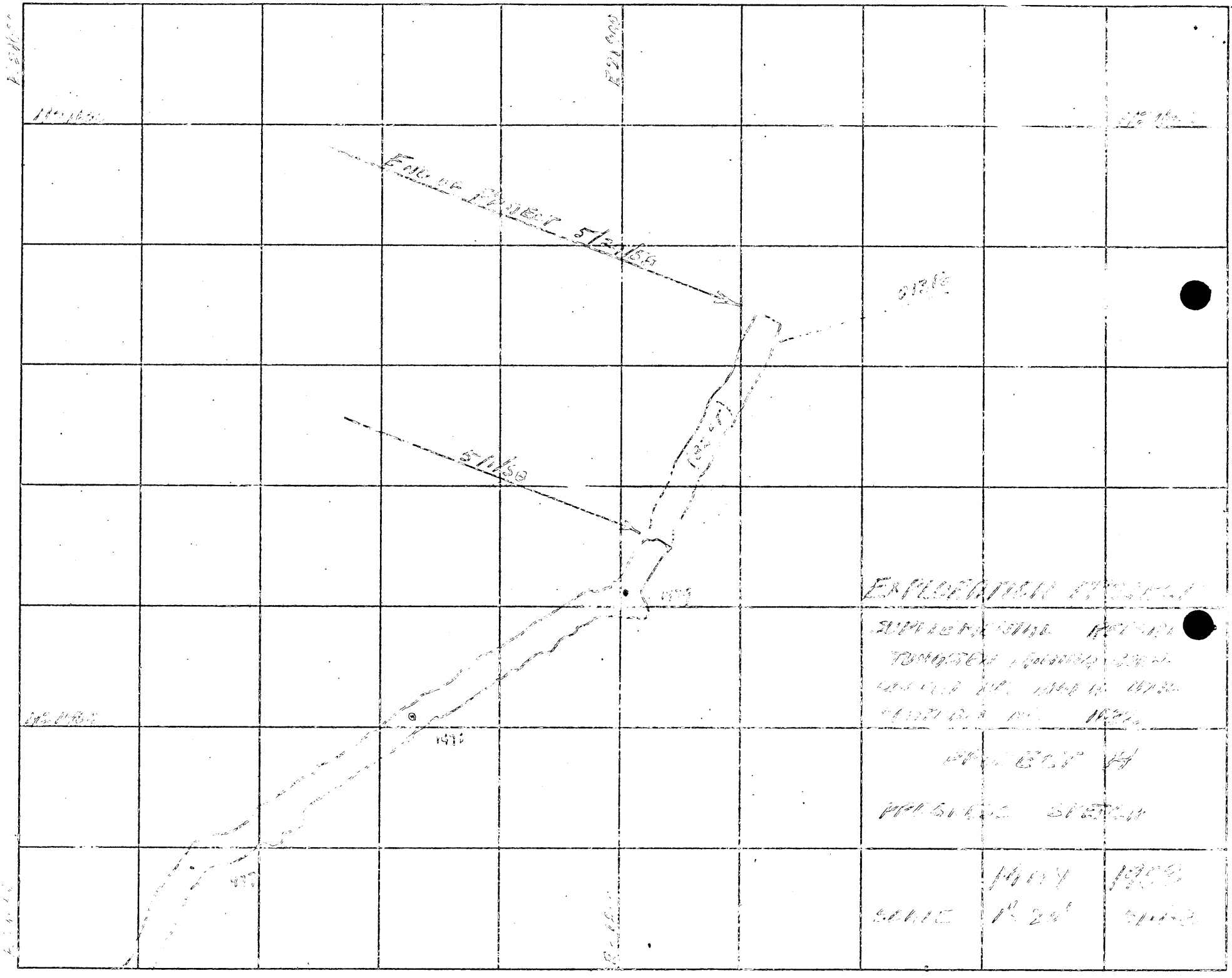
The occurence of this mineralization is regarded as being encouraging. It is certainly the best appearing structure that has been encountered in this drift in the last 1200 ft or so.

One diamond drill hole was started into the hanging wall on a bearing of about N74E and located about 97 ft ahead of survey station 1479. This hole was 45 ft deep at the end of the month. It is planned to drill to a depth of about 130 ft. Another hole will be drilled into the footwall to about the same depth.

No timber was installed during the month.

NOTE: One additional diamond drill hole is planned in Project B to complete the drilling program.

AWS/hs



Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

RECEIVED MAY 14 1958 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-

Month of April, 1958 Docket No. DMEA 4216 Contract No. E-1032
Operator's Name Tungsten Mining Corporation Minerals Tungsten
Address Box 931, Henderson, N. C.
Contract Amount, $ 246,660.00 Government Participation: 75 % Amount, $ 184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
~~Drifts~~ not timbered	770.00	144,445.00	145,215.00			
~~Drifts~~ Timbering Timbered	-	10,141.20	10,141.20			
Crosscutting Not tinbered	2415.00	53,375.00	55,790.00			
~~Drifting~~ XC Timbered	-	16,176.40	16,176.40			
Timbering	-	5,244.00	5,244.00			
(2) Labor and Supervision:						
~~Labor~~ Core drilling	-	5,865.75	5,865.75			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	3.00	300.00	303.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	3188.00	237,547.35	240,735.35	3188.00	237,547.35	240,735.35

I certify that the above bill is correct and just and that payment therefor has not been received.
Date May 5, 1958 Payee TUNGSTEN MINING CORPORATION
Per J. R. Sheets* Title VICE PRES. & GEN. MGR.
J. R. Sheets

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 2391.00
Signature Helen R. Miller
(Authorized Certifying Officer)
Date MAY 12 1958 Vou. No. 170
(See other side)

797.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1032 in accordance with the terms of the contract.

Signature [illegible] Burmeister Title Mining Engr. Date 5/7/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Lynch Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date MAY 9 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED MAY 14 1958 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1958 Docket No. DMEA 4216 Contract No. S-1077

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, N. C.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting: Not timbered	Ft.	$ 770.00	22	$145,215.00	4149	$ 35.00		
Drifting: Timbered	Ft.	-	-	10,141.20	313	32.40		
Crosscutting: Not timbered	Ft.	2415.00	69	55,790.00	1594	35.00		
Crosscutting: XC Timbered	Ft.	-	-	18,176.40	561	32.40		
Raising								
Shafts								
Winzes								
Drilling: Core	Ft.	-	-	5,865.75	3555	1.65		
Churn								
Auger								
Sampling	Ea.	3.00	1	303.00	101	3.00		
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Timbering	Ft.	-	-	5,244.00	874	6.00		
Total Distributed Costs		$3188.00	-	$240,735.35				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date May 5, 1958 Operator TUNGSTEN MINING CORPORATION

Per J. R. Sweet Title VICE PRES. & GEN. MGR.

J. R. Sweet

Remarks:

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

H. L. Burmeister 5/7/58

MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT - PROGRESS REPORT

Month of April 1958 DMEA No. 4216 Contract No. 1032

PROJECT A

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	22	1390	1412
Drifting, timbered @ $32.40	-	214	214
Crosscutting @ $35.00	69	155	224
Crosscutting, timbered @ $32.40	-	268	268
Timbering	-	482	482
Diamond Drilling	-	1401	1401
Number of Assays	1	11	12

Crosscutting was continued in Project A in dike to a point about 49 ft ahead of survey station 1478. At this point several gneiss and dike seams were encountered.

Shortly thereafter, the crosscut was turned to the east to crosscut to the structure more rapidly. Within a few feet a structure was encountered.

This structure is 3 to 4 feet wide and contains a vein averaging about 1 ft. wide. The vein has some fair mineralization but it is very erratic in occurrence, being spotty both along the strike and the dip. The structure lacks hydrothermal alteration.

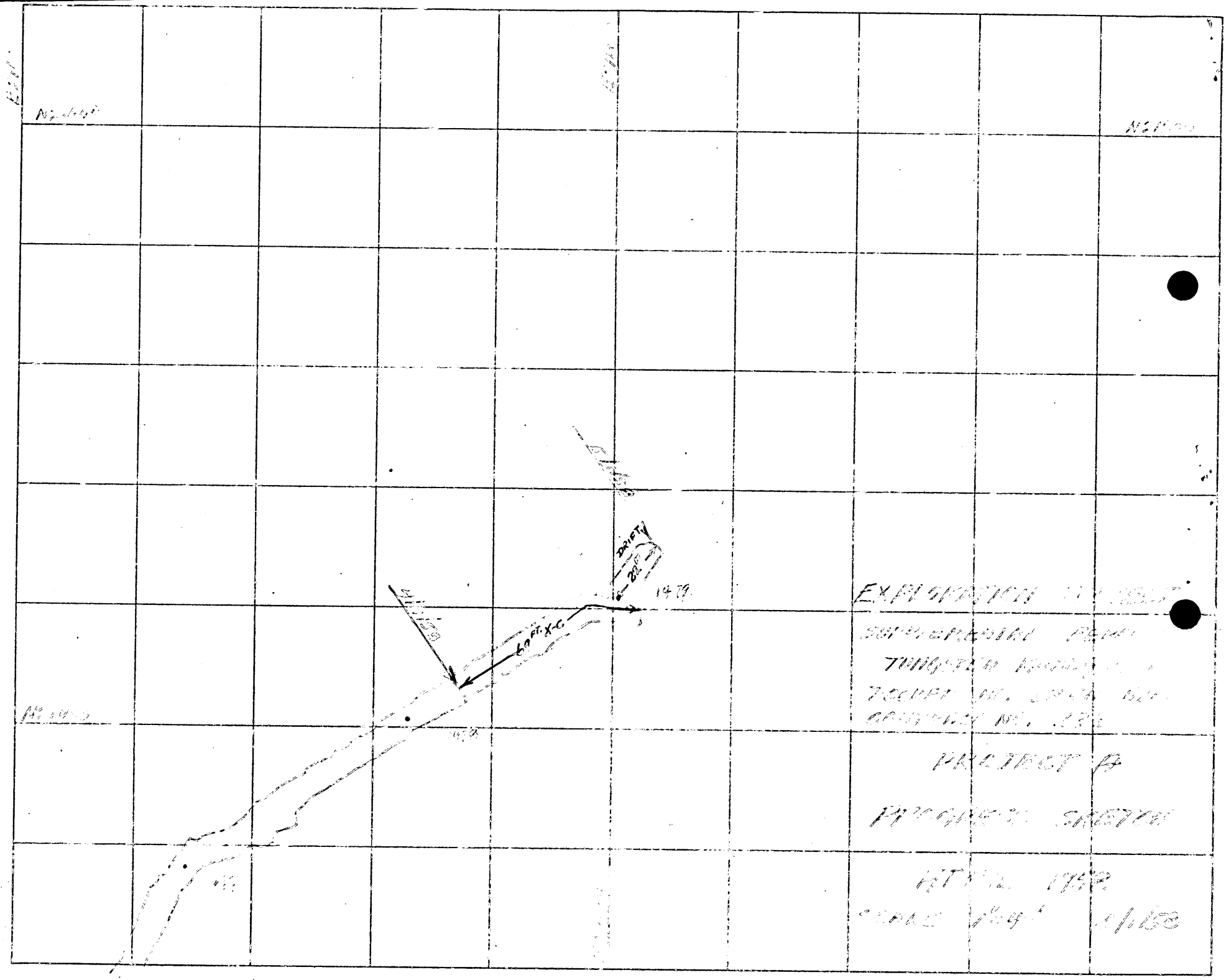
The vein strikes about N30E. Dips are generally very steep and where first encountered reverse of that normally expected. The sample was taken over a width of 0.9 ft. The assay was 0.51% WO3.

There was 69 ft of crosscutting advance and 22 ft of drifting advance.

82 ft of drifts and crosscuts remain to be driven to attain the 2270 ft alloted to this Project.

No timber was installed during the month and no ore production was obtained. There was no diamond drilling.

JCS/hm



K+E ALBANENE 195M (TRACING PAPER) 14806

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-53

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March 1958 Docket No. DMEA 1216 Contract No. D-1032
Operator's Name Tungsten Mining Corporation Minerals Tungsten
Address Box 931, Henderson, N. C.
Contract Amount, $ 246,660.00 Government Participation: 75 % Amount, $ 184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY (WSM): Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drifts not timbered	[illegible]	146,510.00	144,445.00			
Drifts timbered	1911.60	8,229.60	10,141.20			
Bulldozing not timbered	[illegible]	54,935.00	53,375.00			
Crosscutting XX timbered	2592.00	15,584.40	18,176.40			
Drifting Timbering	834.00	4,410.00	5,244.00			
(2) Labor and Supervision:						
Labor XXX Core drilling	-	5,065.75	5,065.75			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	300.00	300.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	1662.60	235,884.75	237,547.35	1662.60	235,884.75	237,547.35

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 4-5-58 *Payee TUNGSTEN MINING CORPORATION

Per L. R. Sweet Title VICE PRES & GEN MGR.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 1246.95

Signature Helen R. Mellin (Authorized Certifying Officer)

Date APR 18 1958 Vou. No. 158

(See other side)

415.65

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1032 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engr. Date 4/15/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER Date APR 17 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED APR 21 1958

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 1958 Docket No. DMEA 4216 Contract No. D-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, N. C.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting Not timbered	Ft.	[illegible]	-	$144,445.00	4127	$ 35.00		
Drifting timbered	Ft.	1911.60	-	10,141.20	313	32.40		
Crosscutting Not timbered	Ft.	[illegible]	20	53,375.00	1525	35.00		
Crosscutting timbered	Ft.	2592.00	14	18,176.40	561	32.40		
Winzes								
Drilling: Core	Ft.	-	-	5,865.75	3555	1.65		
Churn								
Auger								
Stripping Sampling	Ea.	-	-	300.00	100	3.00		
Trenching								
Test Pits								
Roads and Trails								
Timbering	Ft.	834.00	139	5,244.00	874	6.00		
Total Distributed Costs		$1,662.60	-	$237,547.35				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date April 5, 1958 Operator TUNGSTEN MINING CORPORATION

Per J. R. Sweet Title VICE PRES & GEN MGR.

J. R. Sweet

Remarks: Adjusted for timbering in crosscuts and drifts in March that was previously reported as not timbered.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

N. P. Burmeister 4/15/58

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT SUPPLEMENTAL REPORT 4/2/58

Month of March 1958 DMEA No. 4216 Contract No. 1032

Project A

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	-	(1449 -59) = 1390'	1390
Drifting, timbered @ $32.40	-	(155 /59) = 214	214
Crosscutting @ $35.00	20	(201 -66) = 135'	155
Crosscutting, timbered @ $32.40	14	(188 /66 = 254'	268
Timbering	139	343	482
Diamond Drilling	-	1401	1401
Number of Assays	-	11	11

Crosscutting was continued in Project A through March 6, 1958, on a one-shift basis. At this time it became necessary to timber the ground in the dike and about 45 ft south of the dike.

Timbering was done on a one-shift basis from March 6, 1958 to March 26, 1958. On March 26th, advance to the northeast was resumed and is being conducted on a one-shift basis as of April 1, 1958.

The advance has been all in diorite dike which air-slacks badly and requires timbering.

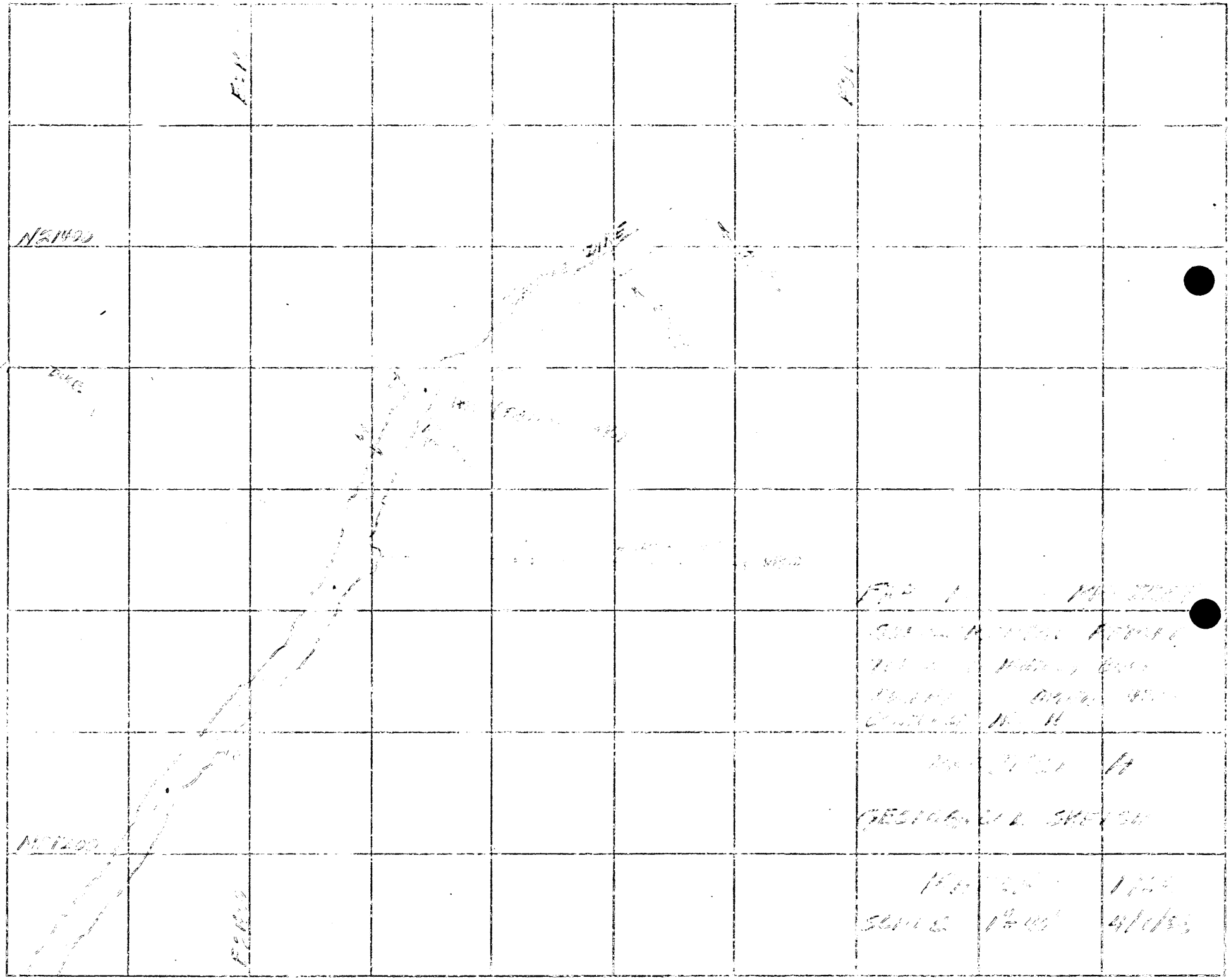
During the month 29 sets of timber covering 139 lineal feet were placed.

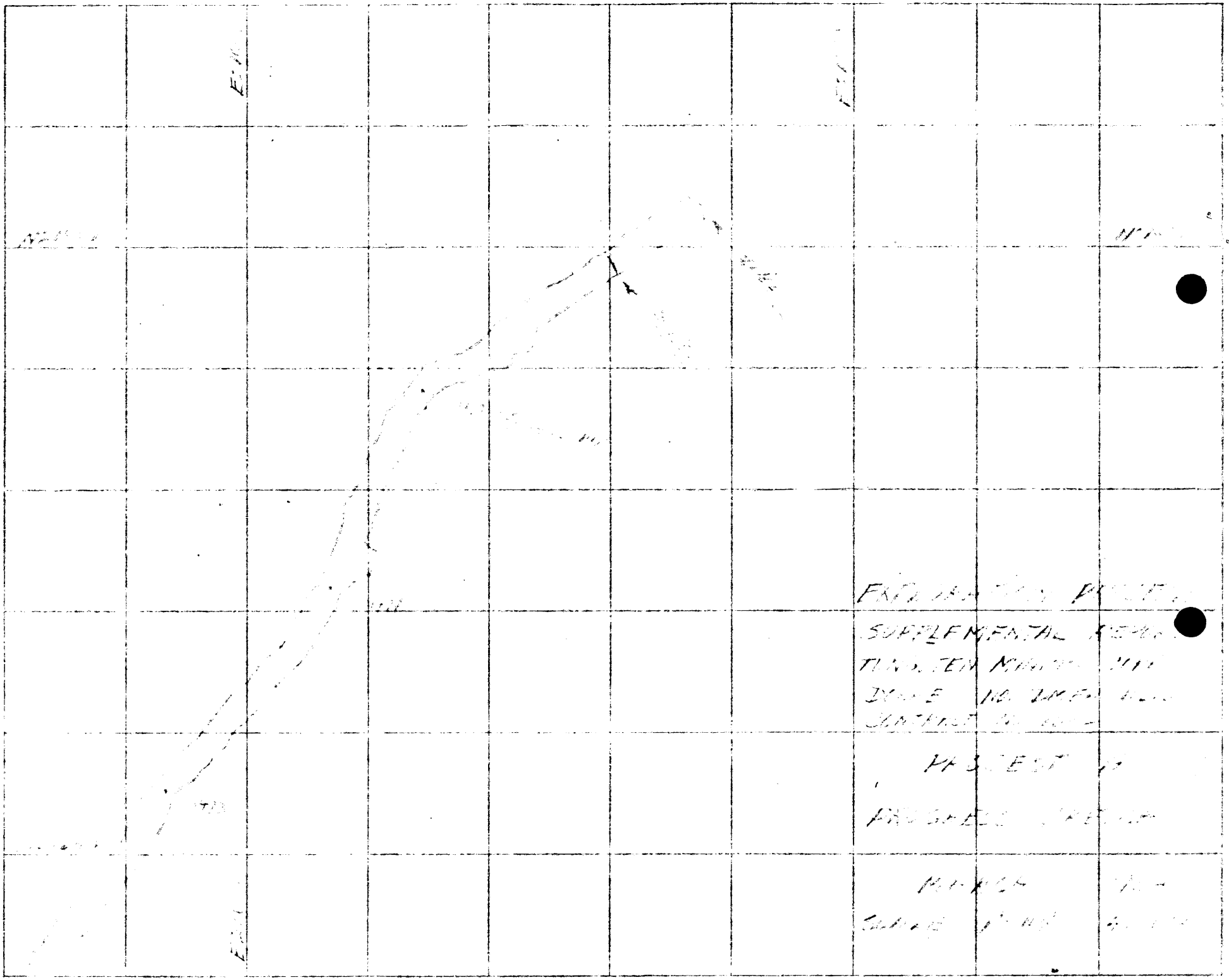
Fifty-nine feet of drift previously reported as untimbered, was timbered in March. Sixty-six feet of crosscut previously reported as untimbered was timbered in March. This is a total of 125 ft previously reported as untimbered at $35.00 a foot which must be adjusted to $32.40 per foot. This 125 ft plus the 14 ft of timbered crosscut reported this month totals 139 ft, the total timbering footage for the month of March 1958.

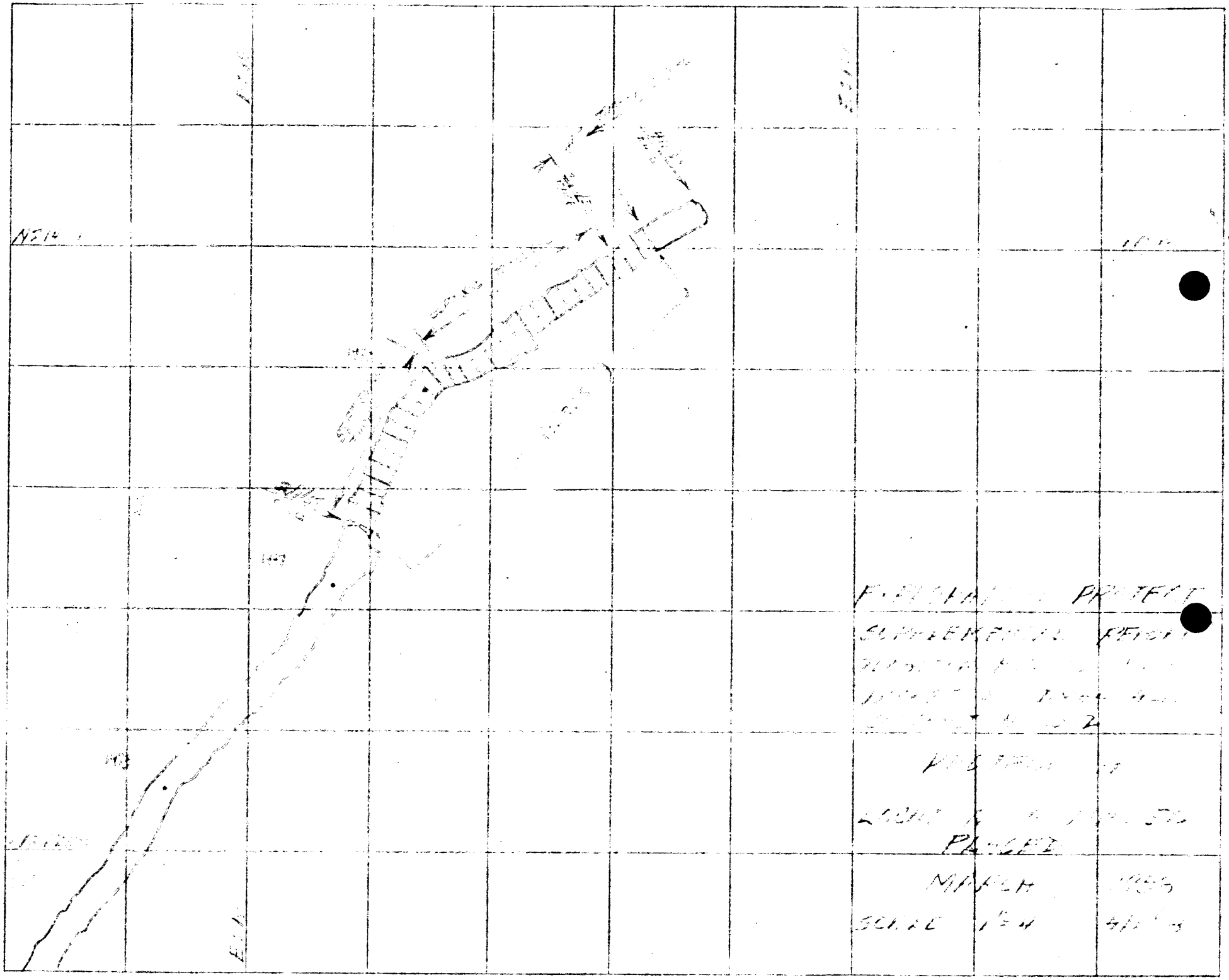
These figures are reflected in the "Feet, Previous" column in this report.

No diamond drilling was performed during the month; no assays were obtained, and no ore production was obtained during this month.

AMS/hs
4/4/58






PLANNED
MARCH
SCALE

EXTRA COPY
DMEA
RECEIVED APR 21 1958

DATE	INITIALS	CODE

FOC

Usually Audits sends us the maps but keeps the vouchers. Is something astray here

GOO has copy

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
REGION V

ELECTROTECHNICAL
EXPERIMENT STATION

P. O. BOX 217
NORRIS, TENNESSEE

March 11, 1958

Memorandum

To: Jay L. Chambers, Defense Minerals Exploration Administration, Interior Building, Washington 25, D.C.

From: Personal Assistant, Norris, Tennessee

Subject: Monthly reports and vouchers

We are enclosing two copies each of the following monthly reports and vouchers:

Idm-E1032 Tungsten Mining Corporation
Docket No. DMEA-4216
15th payment - month of February
Amount $3457.24

Idm-E1086 Howard McKinney
Docket No. DMEA-4646
8th payment - months of January and February
Amount $866.25

Helen Miller
Helen R. Miller

Attachments
/hbm
Copies to R. A. Laurence
V. J. Lynch
Norris files
Day files

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 13 1958

DATE	INITIALS	CODE
3/13	C	220
4	FEO	110
	WSM	400

Form MF-104 (Rev. March 1952)

RECEIVED MAR 13 1958 D.M.E.A.

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 47

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of February, 1958 Docket No. DMEA 4216 Contract No. D-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, N. C.

Contract Amount, $216,660.00 Government Participation: 75 % Amount, $ 181,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drifting Not timbered	2100.00	114,410.00	116,510.00			
Drifting Timbered	-	6,229.60	6,229.60			
Crosscutting Not timbered	2310.00	52,675.00	54,985.00			
Drifting Timbered	-	15,584.40	15,584.40			
Timbering	-	4,410.00	4,410.00			
(2) Labor and Supervision:						
Labor Core Drilling	199.65	5,666.10	5,865.75			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	-	300.00	300.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4609.65	231,275.10	235,884.75	4609.65	231,275.10	235,884.75

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 3-5-58 *Payee Tungsten Mining Corporation

Per J. R. Scott Title Vice Pres. & Gen. Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 3457.24

Signature Helen R. Meier (Authorized Certifying Officer)

Date MAR 11 1958 Vou. No. 145 (See other side)

15

1152.41

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1032 in accordance with the terms of the contract.

Signature R. J. Burmeister Title Mining Engr. Date 3/7/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM Date MAR 10 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
MAR 13 1958
D.M.E.A.

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 195 8 Docket No. DMEA 1216 Contract No. [illegible]
Operator's Name Hungerford Mining Corporation Minerals [illegible]
Address Box 931, Penticton, B. C.

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting: Not timbered	Ft.	2100.00	40	24,510.00	1186	35.00		
Drifting: Timbered	Ft.	-	-	8,220.60	254	32.40		
Crosscutting								
Raising: Not timbered	Ft.	2310.00	66	54,935.00	1571	35.00		
Raising: Timbered	Ft.	-	-	15,532.80	481	32.40		
Shafts: Not timbered								
Shafts: Timbered								
Winzes								
Drilling: Core	Ft.	199.65	121	5,065.75	3555	1.65		
Drilling: Churn								
Drilling: Auger								
Stripping: Bulldozing	Hr.	-	-	300.00	100	3.00		
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Hauling	Ft.	-	-	4,410.00	735	6.00		
Total Distributed Costs		4652.65	-	123,194.75				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date 3-6-58 Operator Hungerford Mining Corporation

Per J. R. Ducar Title Vice Pres. & Gen. Mgr.

J. R. Ducar

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Remarks:

(For Government use only)

W. W. Burmeister 3/7/58

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

[illegible] 1[illegible] [illegible] [illegible] 1[illegible]

[illegible]

	feet, [illegible]	feet, [illegible]	feet, [illegible]
[illegible]	[illegible]	13[illegible]	[illegible]
[illegible], [illegible]	-	1[illegible]	[illegible]
[illegible]	[illegible]	135	[illegible]
[illegible], [illegible]	-	1[illegible]	[illegible]
[illegible]	-	3[illegible]	3[illegible]
[illegible] drilling	7[illegible]	1[illegible]	[illegible]
[illegible]	-	11	11

[illegible] was continued on the [illegible] structure for a distance of about [illegible] ft [illegible] at a diorite dike was encountered.

A few feet beyond this point a crosscut was started to cut across the dike and a distance of [illegible]. This crosscut has been in diorite dike all the way.

Since the drift was at times indistinct, upon encountering the dike, the advance was [illegible] ft of drifting and [illegible] ft of crosscutting, as shown in the accompanying sketch.

This diorite dike has encountered in drill hole -1312 where it cut about 7[illegible] ft of dike but did not go through it. From a place indicated in the sketch this dike may be up to 15[illegible] ft thick. Less than [illegible] crosscut the dike and picked up the structure on the north side of the dike.

During the month one diamond drill hole was drilled in crosscut , -1313, at the bottom of the first lead of the encountered north of the main dike in the crosscut. This hole was collared at a point with coordinates [illegible],[illegible], [illegible],[illegible] and was drilled on a bearing of [illegible] to a depth of [illegible] ft.

The hole was drilled as results obtained in hole -1312 which encountered considerable veins of vein with traces of mineralization.

Drill hole -1313 encountered several quartz veins.

Intersection veins within were 1 ft, 2 1/2 ft, 3 1/2 ft, [illegible] 2 1/2 ft. The last three showed traces of mineralization.

A timber was placed across the north, [illegible] necessary in the dike as work progresses.

No [illegible] was [illegible] during the month.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of February 1958 Item No. 4215 Contract No. 1032

Project D

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ 35.00	-	793	793
Drifting, timbered @ 32.40	-	0	0
Crosscutting @ 35.00	-	914	914
Crosscutting, timbered @ 32.40	-	293	293
Timbering	-	293	293
Diamond Drilling	51	804	855
Number of Assays	-	65	65

Drifting and crosscutting in Project D was completed in January 1958, therefore there is no additional advance.

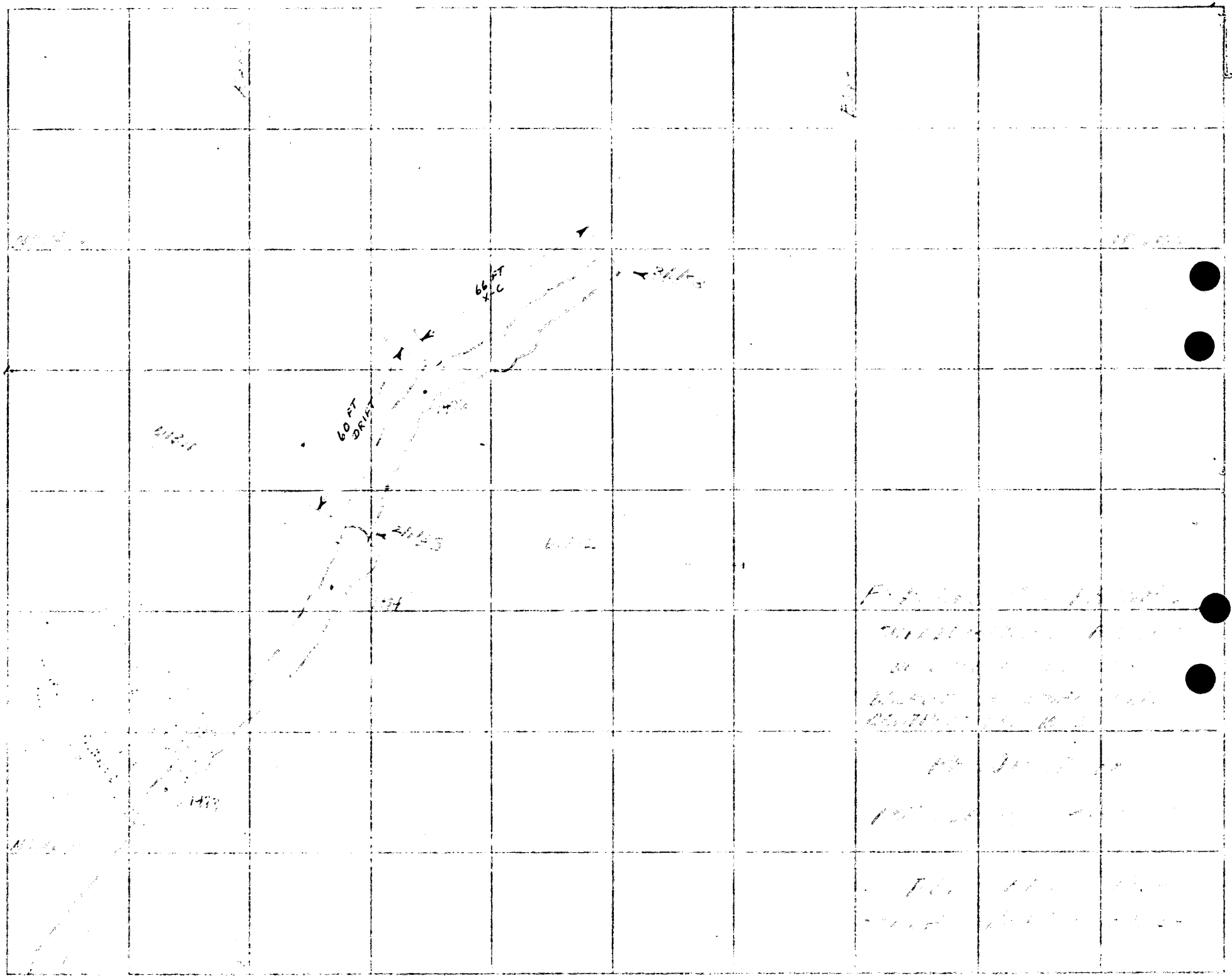
During the month of February one hole, D-1315, was drilled in the north drift of Project D to test the foot-wall for possible structure correlating with the structure near survey station 1455.

The hole D-1315, was collared at a point with coordinates N17541, E-17247, and drilled on a bearing of S89½E to a depth of 51 ft. From 0' to 23' the hole was in sericite-schist with some indication of structure from 21½ ft to 23 ft. No mineralization was encountered and only minor quartz seams were present.

No timber was placed and no ore was produced during the month.

A.G/m

RECEIVED
MAR 10 1958
U. S. BUREAU OF MINES
DEF. MIN. ADM.
Knoxville, Tennessee


66 FT
X-C
60 FT
DRIFT

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

RECEIVED FEB 27 1958 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 42

Month of January, 1958 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corp. Minerals Tungsten

Address Box 931, Henderson, North Carolina

Contract Amount, $246,660.00 Government Participation: 75 % Amount, $184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY (WSM): Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drifts Not Timbered	10885.00	133525.00	144410.00			
Drifts Timbered	--	8229.60	8229.60			
Crosscutting not Timbered	--	52675.00	52675.00			
Crosscutting Timbered	--	15584.40	15584.40			
Timbering	--	4410.00	4410.00			
(2) Labor and Supervision:						
Core Drilling	838.20	4827.90	5666.10			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	36.00	264.00	300.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	11759.20	219515.90	231275.10	11759.20	219515.90	231275.10

I certify that the above bill is correct and just and that payment therefor has not been received.

Date 2-5-58 *Payee Tungsten Mining Corp.

Per J. R. Sweet Title Vice Pres. & Gen. Mgr.

J. R. Sweet

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 8819.40

Signature Helen R. Miller
(Authorized Certifying Officer)

Date FEB 25 1958 Vou. No. 132

(See other side)

2939.80

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
FEB 27 1958
D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 1958 Docket No. DMEA 4216 Contract No. E-1032
Operator's Name Tungsten Mining Corp. Minerals Tungsten
Address Box 931 Henderson, N. C.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting not timbered	Ft.	10885.00	311	144410.00	4126	$35.00		
Drifting timbered	Ft.	--	--	8229.60	254	32.40		
Raising not timbered	Ft.	--	--	52675.00	1505	35.00		
Shafts XC timbered	Ft.	--	--	15584.40	481	32.40		
Winzes								
Drilling: Core	Ft.	838.20	508	5666.10	3434	1.65		
Churn								
Auger								
Stripping Sampling	ea.	36.00	12	300.00	100	3.00		
Trenching								
Test Pits								
Roads and Trails								
Timbering	Ft.	--	--	4410.00	735	6.00		
TOTAL DISTRIBUTED COSTS		11759.20	--	231275.10				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

REMARKS:

Date 2-5-58 Operator Tungsten Mining Corp.

Per J. R. Sweet Title Vice Pres. & Gen. Mgr.
J.R. Sweet

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

W. E. Burmeister 2/10/58

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT SUPPLEMENTAL REPORT

Month of January 1958 | DMEA No. 4216 | Contract No. 1032

Project A

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	136	1253	1389
Drifting, timbered @ $32.40	-	155	155
Crosscutting @ $35.00	-	135	135
Crosscutting, timbered @ $32.40	-	188	188
Timbering	-	343	343
Diamond Drilling	348	983	1331
Number of Assays	1	10	11

Drifting to the northeast was continued on the structure which is from 1 to 2 ft. wide. Some quartz in two short lenses was encountered, but no mineralization is present. Generally, the structure does not appear to have had much alteration, although some gouge is present.

The drilling started last month in Project A was completed with hole U1306, being collared at a point with coordinates N21180, E 21557 and drilled S87½E to a depth of 105 ft. This hole failed to indicate the presence of any hanging wall structure.

In view of these drilling results the drift was advanced as explained above. Toward the end of the month two more holes were drilled to test both walls. Neither hole encountered any structure and both holes bottomed in dike.

Hole U1311 was collared at a point with coordinates N21303, E21629 and drilled N62½W to a depth of 123 ft.

Hole U1312 was collared at a point with coordinates N21296, E21643 and was drilled on a bearing of S86½E to a depth of 120 ft.

Total advance was 136 ft.

No timber was placed during the month.

12 tons of ore estimated to assay 0.41% WO_3 were produced as a result of clean-up of the backdrifting performed in December on the first ore lens encountered in this Project.

A car transfer point was excavated during the month.

AMS/mlb

[illegible]LONATION PROJECT SUPPLEMENTAL [illegible]ORT

Month of January 1958 DMEA No. 4216 Contract No. 1032

Project D

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	175	618	793
Drifting, timbered @ $32.40	0	0	0
Crosscutting @ $35.00	0	914	914
Crosscutting, timbered @ $32.40	0	293	293
Timbering	0	293	293
Diamond Drilling	160	644	804
Number of Assays	11	54	65

The southwest drift was advanced 109 ft., encountering a new lens of mineralized vein in the hanging wall side. The mineralization in this lens is a good deal lower grade than that of previous lenses encountered. The average of 7 samples is 0.36% WO_3. The lens pinched out rapidly but averages about 5 or 6 ft. wide for a length of about 40 ft. Some mineralization is still present in the face.

Two diamond drill holes were drilled in the south drift, one into the footwall (U1307) and one into the hanging wall (U1306).

Hole U1307 was collared at a point with coordinates N17241, E16991 and was drilled on a bearing of S71½E to a depth of 60 ft. The first 15 ft. was in rather lively structure but no mineralization is present.

Hole U1306 was collared at a point with coordinates N17133, E16886 and was drilled due West to a depth of 100 ft. The first five feet of this hole was in lively structure with a trace of mineralization.

The northeast drift was advanced 66 ft., encountering a short irregular lens with good values. Only about 20 ft. in length of this lens is of mineable width. When this lens pinched down the drift was turned into the footwall to prospect a limly looking shear which left the drift at a point about 30 ft. back of the present face, but no favorable structure was encountered.

Drifting and crosscutting in this Project was completed in the south drift on January 30, 1958, although one more diamond drill hole is planned in the north drift to explore the lively structure exposed in the crosscut at survey station 1455.

Total advance in Project D was 175 ft. for the month.

No timber was placed during the month.

During the month 166 tons of ore were produced. Grab samples of this ore assayed 0.25% WO_3.

ANS/mlb

TUNGSTEN MINING CORPORATION
HENDERSON, N.C.

DMSA

D. D. HOLE NO. U-1305 BEARING S65°E COORDINATES

PROJECT A DIP 0° N 21,276.3

DATE 11-10-57 DEPTH 45 ft. E 21,[illegible]

INTERVAL (ft.)	Description of Core
0 - 8	Gneiss
8 - 10	Lamprophyre or chlorite schist.
10 - 21½	Gneiss
21½ - 24½	Silicified sericite-chlorite schist not lively.
24½ - 35	Gneiss
35 - 36½	Gneiss and chlorite schist mixed
36½ - 39½	Possible structure not too lively. Mostly chlorite schist, some gneiss seams. Flesh colored albite from 38 to 39½ ft.
39½ - 40	Chlorite schist.
40 - 45	Gneiss.

END

TUNGSTEN MINING CORPORATION
HENDERSON, N.C.

D. D. HOLE NO. DMEA U 1306	BEARING S87½° E	COORDINATES
PROJECT A	DIP 0°	N 21,187.81
DATE 1-1-58	DEPTH 105 ft.	E 21,557.25

INTERVAL(Ft.)	Description of Core
0 - 32½	Gneiss
32½ - 36	Altered epidotized gneiss, siliceous.
36 -46	Gneiss with 4 inches of silexite at 41 ft.
46 - 48½	Gneiss with 6-inch intervals of chlorite schist at 46½ ft. and at 48½ ft.
48½ - 65	Gneiss, silified from 56½ to 58½ ft.
65 - 92	Gneiss, epidotized.
92 - 99	Siliceous, highly chloritic gneiss.
99 - 102	Chlorite schist.
102 - 104	Silexite
104 - 105	Gneiss

END

TUNGSTEN MINING CORPORATION
HENDERSON, N.C.

D. D. HOLE NO. DMRA U-1357	BEARING S71½E	COORDINATES
PROJECT D	DIP 0°	N 17,241.09
DATE 1-6-58	DEPTH 60 ft.	E 16,990.70

INTERVAL (Ft.)	Description of Core
0 - 15	Sericite schist with numerous 1 to 8-inch quartz seams.
15 - 38½	Chlorite schist with 6 inches of bare quartz at 22 ft.
38½ - 43	Sericite schist with bare quartz from 41 to 42 ft.
43 - 60	Chlorite schist.

END

TUNGSTEN MINING CORPORATION
HENDERSON, N. C.

DMEA

D. D. HOLE NO. U-1308 BEARING Due West COORDINATES

PROJECT D DIP 0° [illegible]

DATE 1-6-58 DEPTH 100 ft. [illegible]

INTERVAL (ft.)	Description of Core
0 - 1½	First 4 inches sericite schist followed by 16 inches of barren, pyritic quartz.
1½ - 2	Sericite schist.
2 - 3	Lively quartz with one large hubnerite crystal.
3 - 4	Sericite schist.
4 - 5	Quartz, lively.
5 - 10	Sericite schist.
10 - 16½	Sericite - chlorite schist.
16½ - 17½	Dead quartz.
17½ - 44	Chlorite schist with a few minor quartz intervals.
44 - 46½	Sericite schist with a minor quartz stringer.
46½ - 53½	Chlorite schist.
53½ - 56½	Sericite schist, siliceous.
56½ - 68½	Chlorite schist.
68½ - 69½	Sericite schist.
69½ - 70½	Quartz, barr.
70½ - 100	Chlorite schist with 6 inches of barren quartz at 90 ft.

END

TUNGSTEN MINING CORPORATION
HENDERSON, N.C.

D.D. HOLE NO. DMEA U-1311

BEARING N 62½° W

COORDINATES

PROJECT A

DIP 0°

N 21,302.7

DATE 1-27-58

DEPTH 123 ft.

E 21,629.3

INTERVAL (FT)	Description of Core
0 - 24	Dark Gneiss with chloritic areas as follows: 8 inches at 7½ ft., 12 inches at 12 ft., and 4 inches at 24 ft.
24 - 34	Dark, chloritic gneiss.
34 - 46½	Gneiss with chloritic seams.
46½ - 55½	Gneiss with 1 inch of dead quartz at 52 ft. and 2½ inches of dead quartz at 52½ ft.
55½ - 56	Diabase dike
56 - 65	Gneiss with chloritic schist most of which is 12 inches from 58 to 59 ft.
65 - 70	Gneiss
70 - 71	Chlorite schist.
71 - 72	Gneiss
72 - 75	Chlorite schist
75 - 77½	Sericitized gneiss
77½ - 81½	Chlorite schist
81½ - 82½	Diabase dike
82½ - 86	Chlorite schist.
86 - 87½	Diabase dike
87½ - 91	Chlorite schist, pyritic
91 - 93	Diabase dike with 4 inches of chlorite schist
93 - 123	Diabase dike

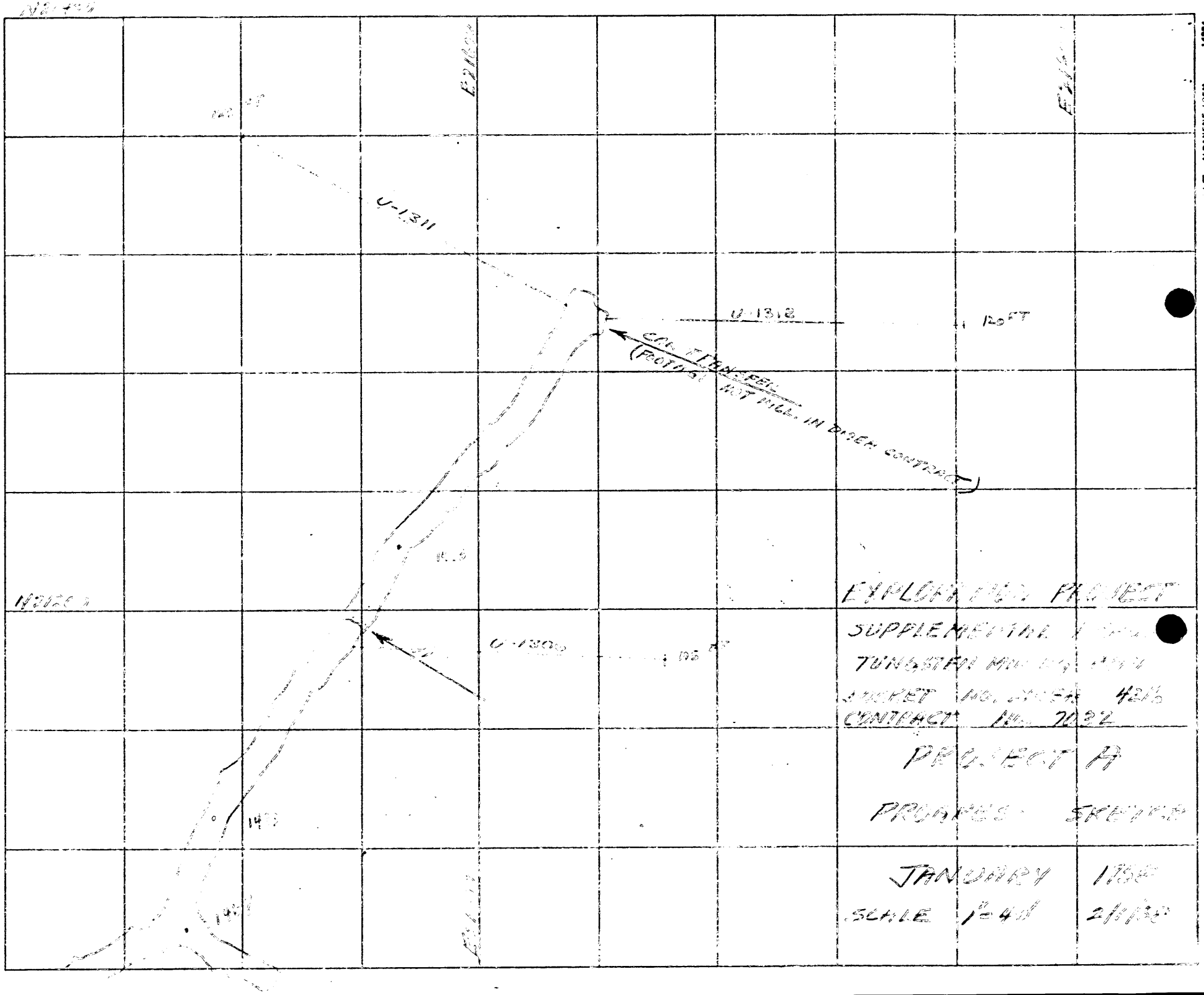
END

TUNGSTEN MINING CORPORATION
HENDERSON, N.C.

D.D. HOLE	DMEA U-1312	BEARING	S88½°E	COORDINATES	
PROJECT	A	DIP	0°	N	21,298.1
DATE	1-29-58	DEPTH	120 ft.	E	21,643.0

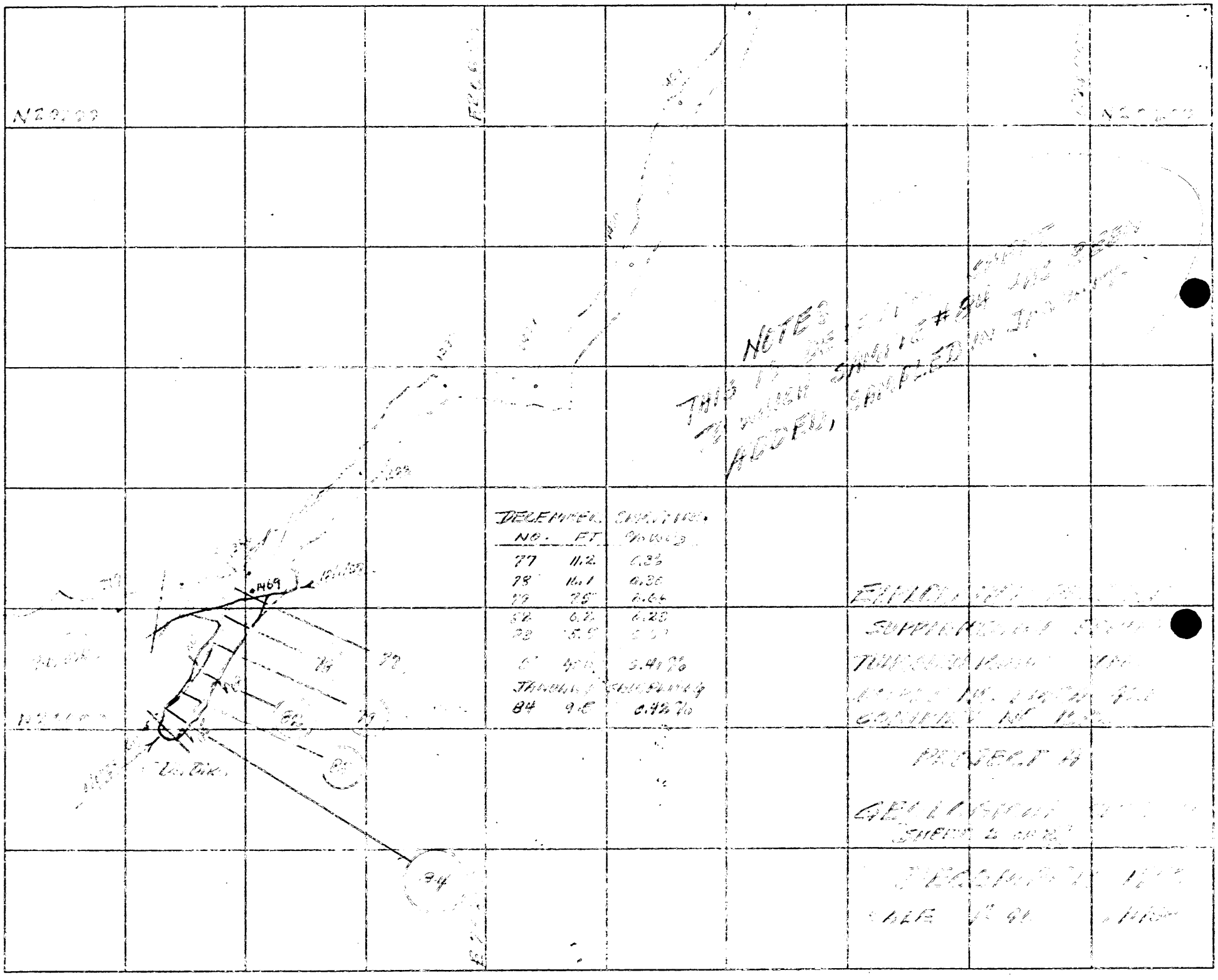
INTERVAL (Ft.)	Description of Core
0 - 45	Gneiss
45 - 50	Diorite Dike, no clean contacts
50 - 52	Gneiss
52 - 60	Diorite Dike (2ft. core recovered)
60 - 120	Diorite Dike. Rock from 108 to 110 ft. is fine - grained, hard, somewhat lighter color. Diabase?

END


U-1311
U-1312
120 FT
CAT. TRANSFER
(PROPOSED NOT INCL. IN PAPER CONTRACT)
EXPLORATORY PROJECT
SUPPLEMENTAL
TUNGSTEN
SHEET NO.
CONTRACT NO. 7032
PROJECT A
PROGRESS SKETCH
JANUARY 1956
SCALE 1" = 400'
2/8/56

EXTRA COPY
DMEA
RECEIVED FEB 27 1958

DATE	INITIALS	CODE



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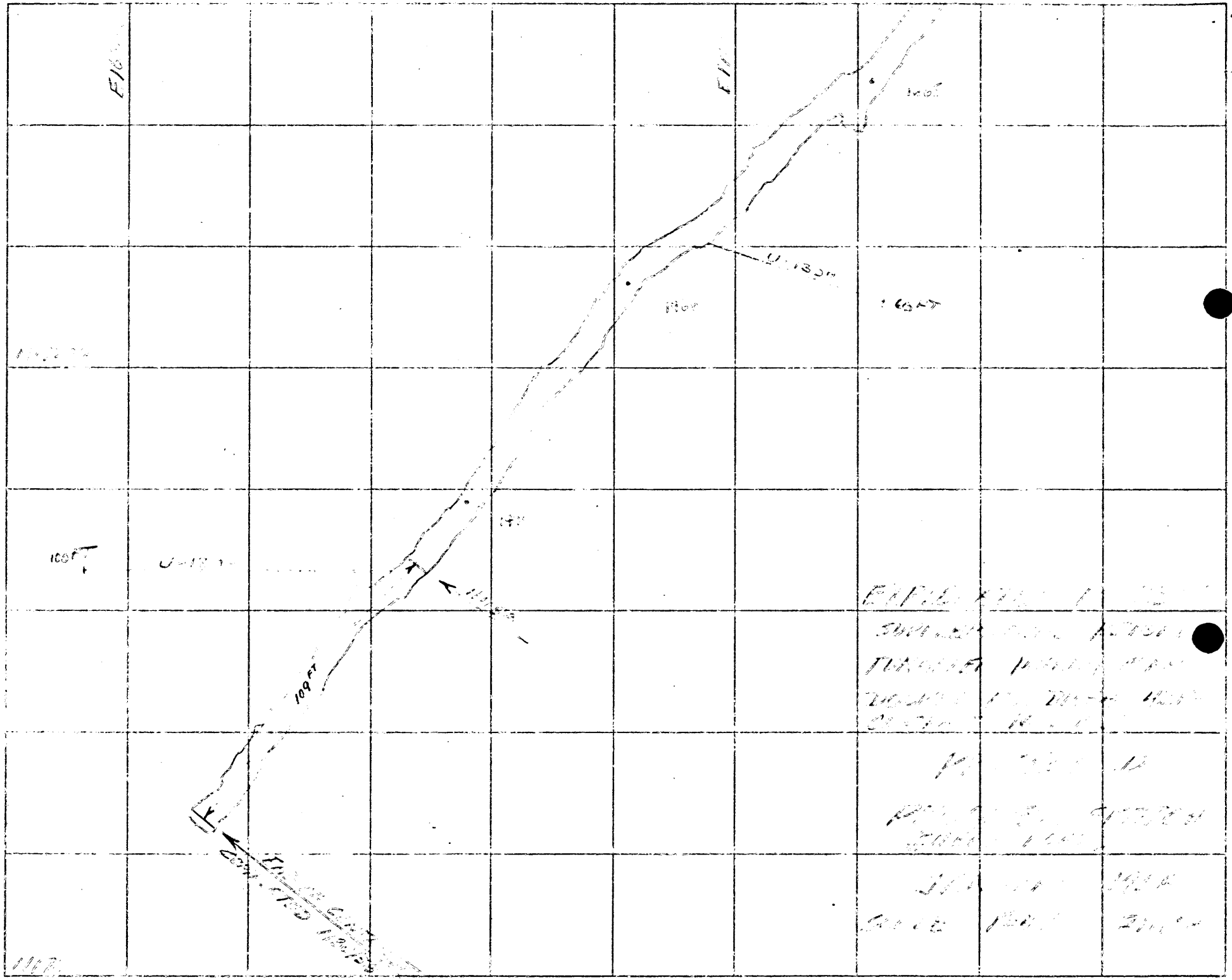
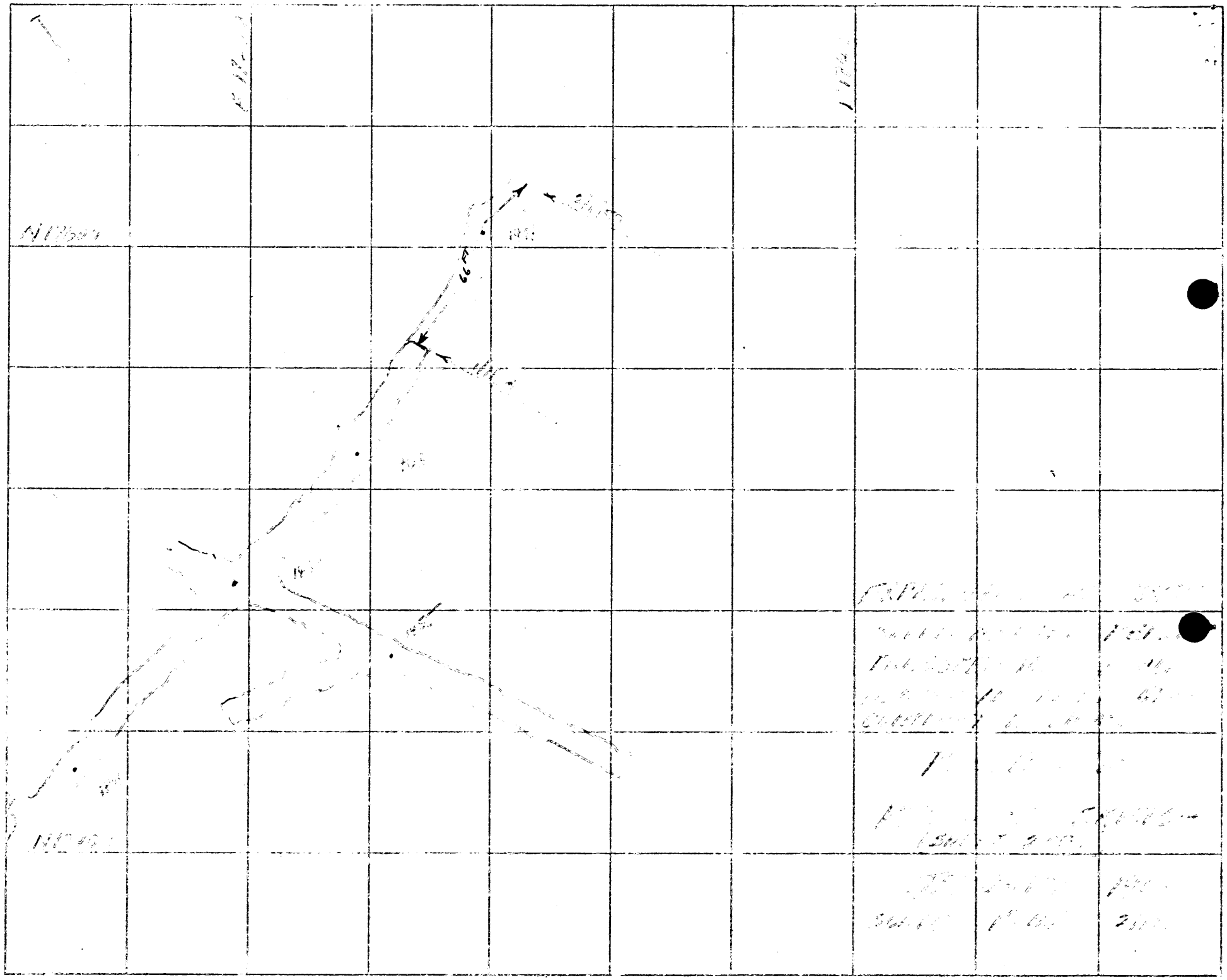

100 FT
109 FT



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RECEIVED FEB 27 1958

DATE	INITIALS	CODE

Form DIF-104 (Rev.) (April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JAN. 20 1958 D.M.E.A.

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-35

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December 1957 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

Contract Amount, $ 246,660.00 Government Participation: 75 % Amount, $184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY WSM: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contracts: Short Form						
~~Drifting~~ Drifts Not timbered	$10815.00	$122,710.00	$122,710.00	10815.00	122,710.00	133,525.00
~~Raising~~ Drifts Timbered	-	8,229.60	8,229.60	-	8229.60	8229.60
Crosscutting Not timbered	-	52,675.00	52,675.00	-	52675.00	52675.00
~~Diamond~~ Core Drilling XC. Timbered	-	15,584.40	15,584.40	-	15584.40	15584.40
	-	4,410.00	4,410.00	-	4410.00	4410.00
(2) Labor and Supervision:						
Labor	693.00	4,134.90	4,827.90	693.00	4134.90	4827.90
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	63.00	201.00	264.00	63.00	201.00	264.00
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$11571.00	$207,944.90	$219,515.90	11571.00	207,944.90	219,515.90

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Jan. 6, 1958 *Payee TUNGSTEN MINING CORPORATION

Per J. R. Schuert Title Vice Pres. & Gen. Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 8678.25

Signature Helen R. Miller (Authorized Certifying Officer)

Date JAN 16 1958 Vou. No. 115

(See other side)

2892.75

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1032 in accordance with the terms of the contract.

Signature R. L. Burmeister Title Mining Eng'r. Date 1/10/58

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JAN 15 1958

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-404A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED JAN 20 1958

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1957 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting: Not timbered	Ft.	$10815.00	309	$133,525.00	3815	$35.00		
Drifting: Timbered	Ft.	-	-	8,229.60	254	32.40		
Crosscutting: Not timbered	Ft.	-	-	52,675.00	1505	35.00		
Crosscutting: X-C Timbered	Ft.	-	-	15,584.40	481	32.40		
Raising								
Shafts								
Winzes								
Drilling: Core	Ft.	693.00	420	4,827.90	2926	1.65		
Churn								
Auger								
Stripping: Sampling	Ea.	63.00	21	264.00	88	3.00		
Trenching								
Test Pits								
Roads and Trails								
Timbering	Ft.	-	-	4410.00	735	6.00		
TOTAL DISTRIBUTED COSTS		$11571.00	-	$ 219,515.90				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Jan. 6, 1958 Operator TUNGSTEN MINING CORPORATION

Per J. R. Sweet Title VICE PRES. & GEN. MGR.

J.R. Sweet

REMARKS:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

W. P. Burmeister 1/10/58

MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT SUPPLEMENTAL REPORT

Month of December 1957 OMKA No. 4216 Contract No. 1032

Project A

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	151	1102	1253
Drifting, timbered @ $32.40	-	155	155
Crosscutting @ $35.00	-	135	135
Crosscutting, timbered @ $32.40	-	188	188
Timbering	-	343	343
Diamond Drilling	45	938	983
Number of Assays	5	5	10

Drifting was continued to the north east on the structure encountered beyond the dike last month. The structure is fairly prominent but a good deal tighter than previously. No quartz or mineralization is present and there is not much hydrothermal alteration present.

In view of the possibility that the drifting might be on the footwall structure of two structures as indicated by surface drilling, two diamond drill holes were planned to test the hanging wall. One of these U-1305, was drilled to a depth of 45 ft from the short crosscut north of the dike. The other has not as yet been started.

D.D.H. U-1305 was collared at coordinates N-21076, E-21532 and drilled on a bearing of 365E to a depth of 45 ft.

No definite structure is indicated. One foot of silicified, altered schist (silexite) at 38 to 39 ft may possibly compose the hanging wall structure. A second hole near the present face will be started immediately. If any likely structure is encountered, it is planned to crosscut to it and pursue further drifting to the northeast. Correlating the present structure to the surface and to surface drilling it appears that the better structure should be in the hanging wall.

The drifting to the north east accounted for 96 ft of advance.

There was also 55 ft of drifting advance to the southwest starting at a point with coordinates N-20042 E-20720, on the lens of ore encountered beyond the first dike near the start of the Project. This advance was almost all in ore varying in width from 11 ft to about 6 ft. The grade of this ore is fair. Five samples averaged 0.415 WO3. The ore continued to the dike which was exposed in the last round.

Advance to the northeast will be resumed as soon as the drilling in the north face is completed.

Total advance in the Project was 151 ft.

No timber was placed during the month

241 tons of ore were produced as a result of the back drifting on the lens of ore mentioned above. Grab samples of this ore assayed 0.22% WO3.

AMS/hs

EXPLORATION PROJECT SUPPLEMENTAL REPORT

Month of December 1957 DMEA No. 4216 Contract No. 1032

Project D

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	158	460	618
Drifting, timbered @ $32.40	-	0	0
Crosscutting @ $35.00	-	914	914
Crosscutting, timbered @ $32.40	-	293	293
Timbering	-	293	293
Diamond Drilling	375	269	644
Number of Assays	16	38	54

The drift to the southwest was advanced 158 ft. Most of this advance was on a mineralized vein averaging about 3 ft wide.

The lens of ore which was reported upon in the last montly report lensed out abruptly at a point about 73 ft southwest of survey station 1465, and a new lens in the hanging wall was encountered; however, as indicated above the widths in this new lens are relatively narrow. At months' end this lens also had completely pinched out.

D.D.H. U-1302 which was started last month, being 10 ft deep, was drilled to a depth of 168 ft. It encountered 2½ ft fo structure from 97 to 99½ ft, but no well-defined vein.

D.D.H. U-1303 was collared at coordinates N-17418, E-17123 and drilled on a bearing of N65W to a depth of 141 ft. No veins were encountered.

D.D.H. U-1304 was collared at coordinates N-17409, E-17134 and drilled on a bearing of 557½ E to a depth of 76 ft. This hole encountered 1½ ft of barren vein from 10 to 11½ ft, and 1½ ft of vein from 73½ to 75 ft.

During the month 277 tons of ore were produced. Grab samples of this ore assayed 0.55% WO3.

No timber was placed during the month.

AMS/he

TUNGSTEN MINING CORPORATION
HENDERSON, [illegible]

DD HOLE NO. [illegible]-1302 BEARING N 36° [illegible] COORDINATES N 17,[illegible] E 17,[illegible]

PROSPECT D DIP 9° [illegible]

DATE 13-[illegible]-[illegible] DEPTH 163 ft.

INTERVAL (ft.)	Description of Core
0-10	Sericitic schist. Schist to siliceous from 2½ ft. to 3½ ft. and also from 5 ft. to 7 ft. 3 inches of sericite quartz at 7½ ft.
10-33	Sericitic-chloritic schist. Siliceous-varies in color from reddish to grayish.
33-70	Mostly sericite schist. Siliceous and chloritic-varies in color from light gray to red. Quartz stringers at [illegible] ft., [illegible] ft. [illegible] ft., 6 inches of bare quartz followed by 6 inches of coarse sericite schist with fluorite.
70-97	Siliceous schist. Very siliceous in spots. Darker than previous.
97-99½	Mixed quartz and schist. Trace of sericite at 99 ft.
99½-112	Schist-dark green, fine-grained, siliceous, hard, no schistosity. A quartz stringer at 111 ft. and 6 inches of sericite quartz at [illegible] ft.
112-150	Sericite schist country rock. 8 inches of quartz with some fluorite at 151 ft.
150-162	Chlorite schist, schistose.
162-163	Sericite schist country rock.

END

TUNGSTEN MINING CORPORATION
HENDERSON, N. C.

D. D. HOLE NO. DMRA K-1333	BEARING N 65° W	COORDINATES
PROJECT [illegible]	DIP [illegible]°	N [illegible]
DATE 12-[illegible]-47	DEPTH 131 ft.	E [illegible]

INTERVAL (Ft.)	Description of Core
0-43	Dark green chlorite schist with minor quartz intervals at 3 ft., 15 ft., 17 ft., 23 ft., 25 ft., 29½ ft., 32½ ft., 33 ft. and 46 ft.
43-71	Sericite schist, chloritic in spots. Looks like structure. Quartz intervals as follows: 3 inches at 53½ ft., 3 inches at 55 ft., 5 inches at 59 ft., and 6 inches at 67 ft. Core badly broken from 56 ft. to 71 ft.
71-81	Chloritic schist with 3 inches of quartz at 73½ ft. and 5 inches of pink quartz at 75 ft.
81-131	Dark green chlorite schist with 2 inches of pyritic quartz at 96 ft., 3 inches of silicified schist at 98 ft., and 4 inches of barre quartz at 131 ft.

END

TUNGSTEN MINING CORPORATION
HENDERSON, N. C.

DDH

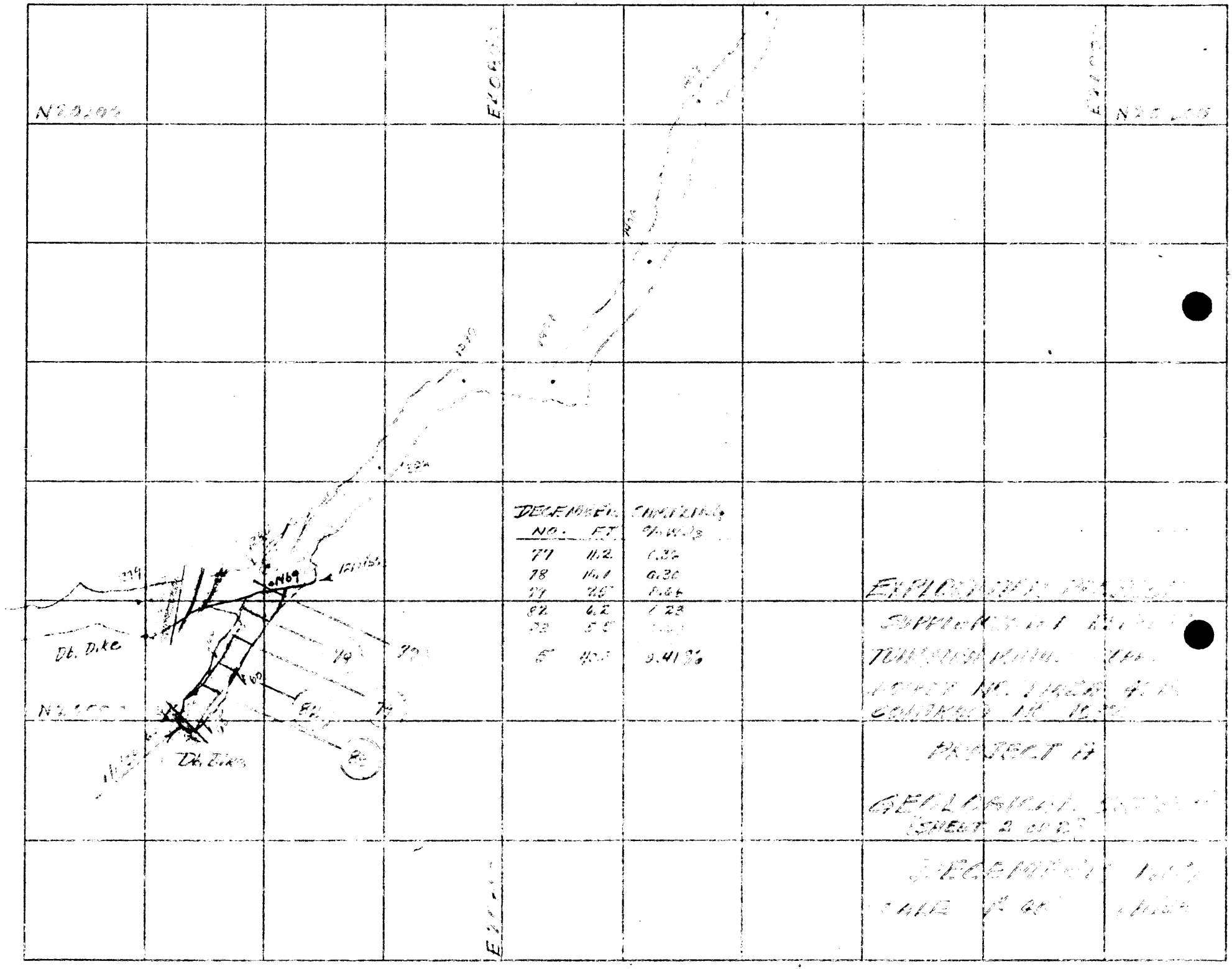
D. D. HOLE NO. F-1104 BEARING S 52½° E COORDINATES

PROJECT D DIP 90 N 1[illegible],[illegible].5

DATE 12-12-57 DEPTH 76 ft. E [illegible],13[illegible].2

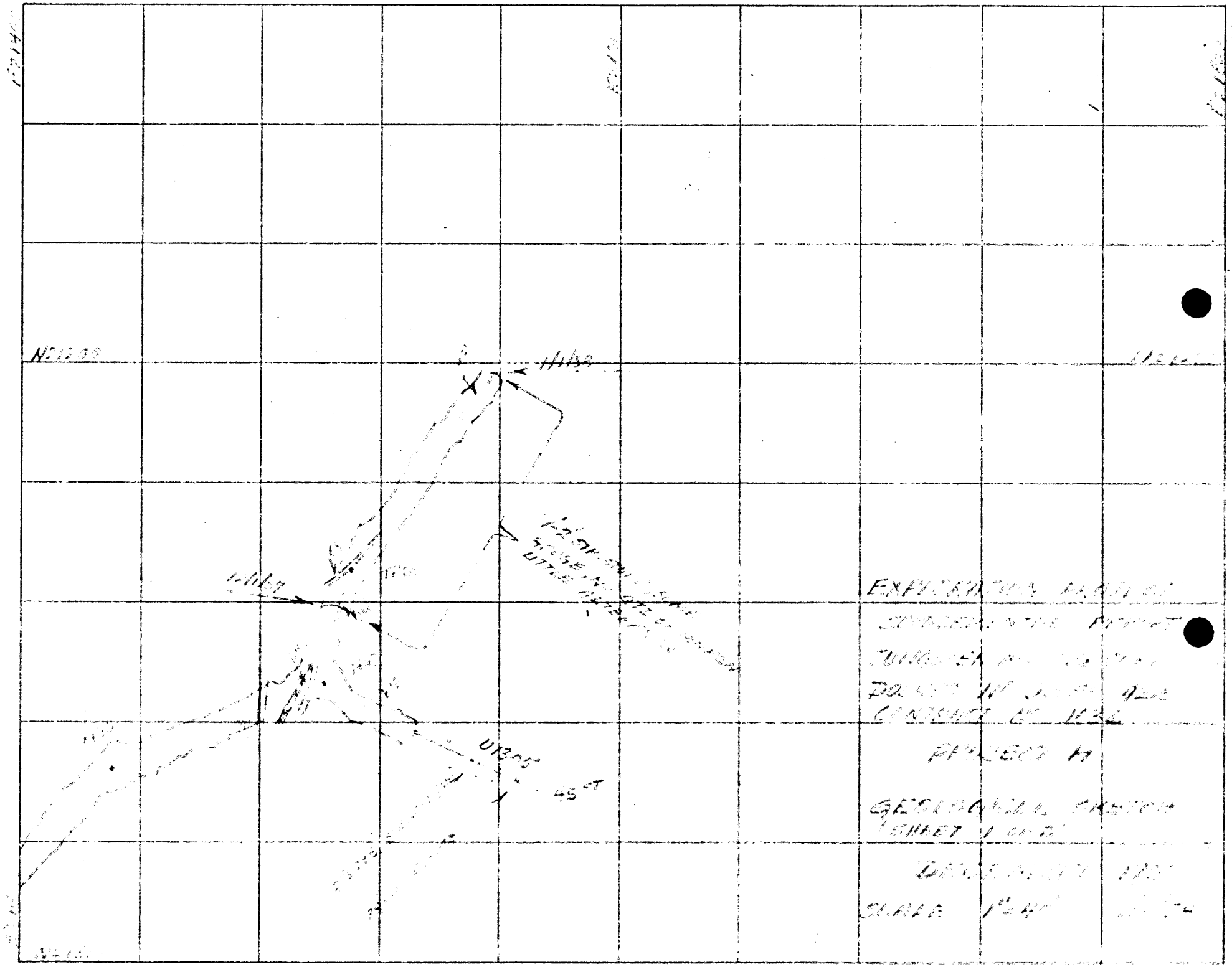
INTERVAL (Ft.)	Description of Core
0-2	Light green chlorite-sericite schist with two minor quartz stringers.
2-7½	Reddish sericite schist with 6 inches of chlorite schist at 5½ ft.
7½-9	Gray sericite schist.
9-10	Mixed quartz and sericite schist, lively.
10-12½	Bare quartz, liv[illegible]
12½-13	Gray sericite schist.
13-14	Red sericite schist with two minor quartz stringers.
14-15	Dark green chloritic schist.
15-19½	Gray sericite schist.
19½-25	Greenish chlorite schist with three 2-inch quartz stringers.
25-26	Barren quartz.
26-36	Greenish chlorite schist with 4 inches of quartz at 31 ft.
36-58½	Greenish chlorite schist with a quartz stringer at 46 ft. and 5 inches of quartz with MoS_2 and FeS_2 at 51½ ft.
58½-67	Mostly sericitic schist with minor intervals of chloritic schist and 3 small quartz stringers.
67-73½	Chlorite schist.
73½-75	Quartz with MoS_2 and FeS_2
75-76	Sericite schist.

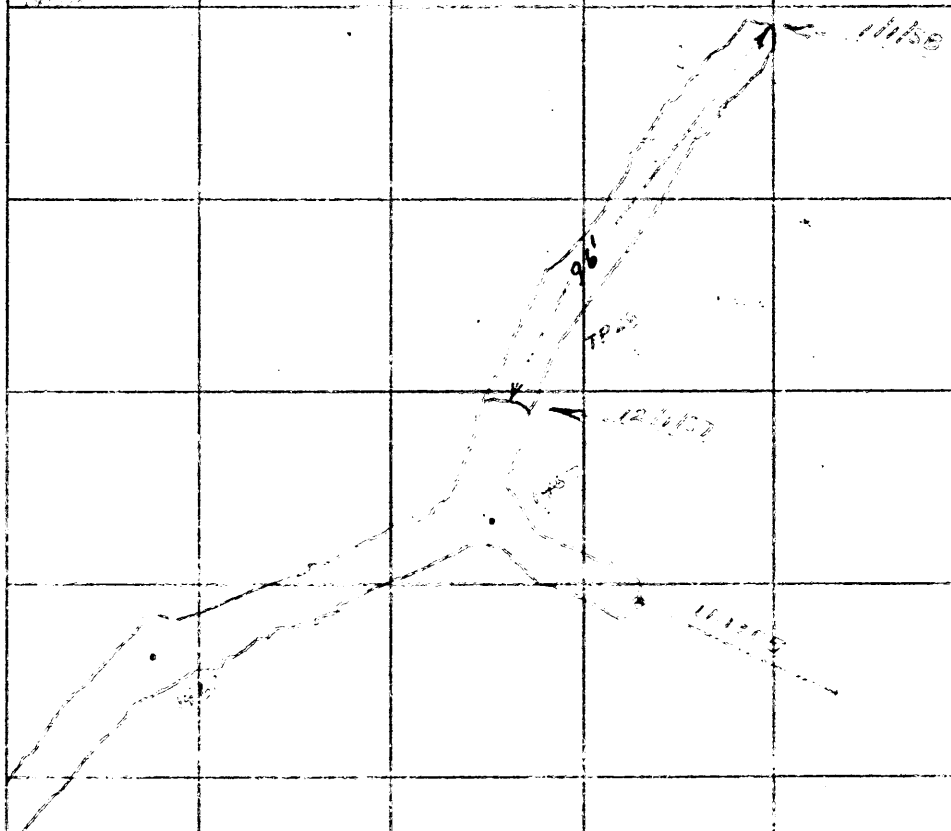
END



K+E ALBANENE 195M 14984 ⊗ TRACING PAPER

K+E ALBANENE 195M TRACING PAPER 14964


EXPLORATION
PROJECT
GEOLOGICAL
SHEET
SCALE
45 FT



EXPLORATION PROJECT

SUPPLEMENTAL REPORT

PUBLICATION PERMIT

DOCKET NO. [illegible]

CONTROL NO. [illegible]

PROJECT A

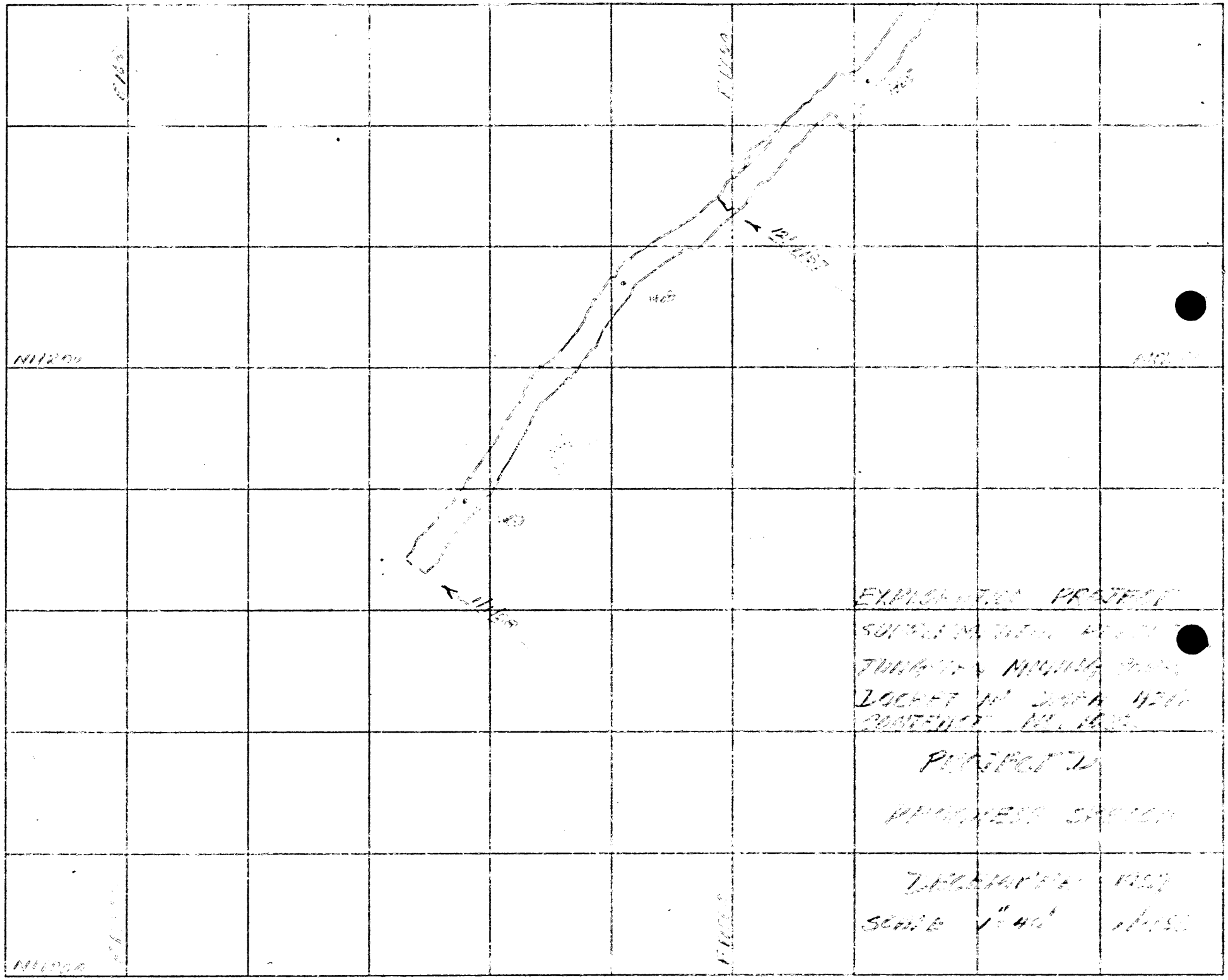
PROGRESS SUMMARY

(SHEET NO. 2)

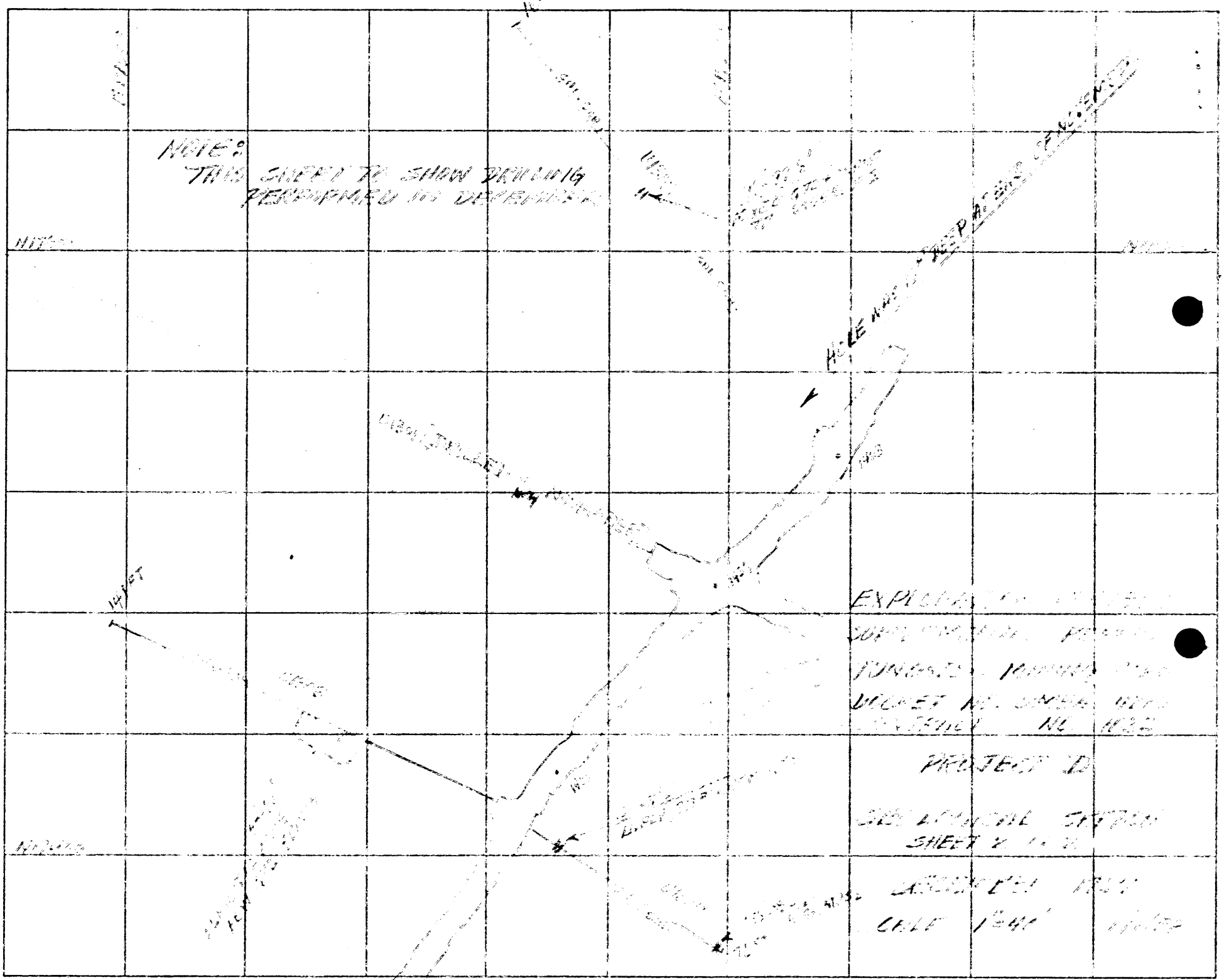
DECEMBER 1980

SCALE 1" = 40'

K+E ALBANENE 105M TRACING PAPER 14984



K+E ALBANENE 195M TRACING PAPER 14994


NOTE:
THIS SHEET TO SHOW DRILLING
PERFORMED IN DECEMBER
HOLE NO. 1 DEEP PROFILE
EXPLORATION
PROJECT D
SEE ARMORAL STATION
SHEET
CALC 1540'

Form M[illegible]
April [illegible]

RECEIVED
DEC 19 1957
D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 30

Month of November, 1957 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931 Henderson North Carolina

Contract Amount, $246,660.00 Government Participation: 75 % Amount, $184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY WBM: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
~~Drift~~ not Timbered	$8890.00	113820.00	122710.00			
~~xxxxxxxxxx~~ ~~Bulkhead~~ Timbered	--	8229.60	8229.60			
Crosscut not Timbered	1015.00	51660.00	52675.00			
~~Drift~~ XC - Timbered	2430.00	13154.40	15584.40			
Timbering	450.00	3960.00	4410.00			
(2) Labor and Supervision:						
~~Labor~~ Core Drilling	443.85	3691.05	4134.90			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	51.00	150.00	201.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$13279.85	194665.05	207944.90	13279.85	194665.05	207944.90

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Nov. 6, 1957 *Payee Tungsten Mining Corp.

Per J. R. Lucas Title Vice Pres. & Gen. Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 9,959.89

Signature Helen R. Miller
(Authorized Certifying Officer)

Date DEC 17 1957 Vou. No. 98
(See other side)

3319.96

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1032 in accordance with the terms of the contract.

Signature D. L. Burmeister Title Mining Engr. Date 12/9/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Zyrek Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date DEC 12 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form [redacted]
(April [redacted])

Budget Bureau No. 42-R1151.2

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1957 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corp. Minerals Tungsten

Address Box 931 Henderson, North Carolina

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting not timbered	Ft.	$8890.00	254	$122,710.00	3506	$35.00		
Drilling timbered	Ft.	--	0	8,229.60	254	32.40		
Raising not timbered	Ft.	1015.00	29	52,675.00	1505	35.00		
Raising XC Timbered	Ft.	2430.00	75	15,584.40	481	32.40		
Winzes								
Drilling: Core	Ft.	443.85	269	4,134.90	2506	1.65		
Churn								
Auger								
Stripping Sampling	ea	51.00	17	201.00	67	3.00		
Trenching								
Test Pits								
Roads and Trails								
Timbering	Ft.	450.00	75	4,410.00	735	6.00		
TOTAL DISTRIBUTED COSTS		$13279.85		$207,944.90				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

REMARKS:

Date Nov. 6, 1957 Operator Tungsten Mining Corp.

Per J. R. Sweet Title Vice-Pres. & General Manager

J.R. Sweet

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

W. S. Burmeister 12/9/57

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of November 1957 DMEA No. 4216 Contract No. 1032

Project A

	Feet, This Month	Feet, Previous	Feet, to Date
Drifting @ $35.00	20	1082	1102
Drifting, timbered @ $32.40	-	155	155
Crosscutting @ $35.00	23	112	135
Crosscutting, timbered @ $32.40	75	113	188
Timbering	75	268	343
Diamond Drilling	-	938	938
Number of Assays	-	5	5

The crosscut started last month was continued going through the dike which was about 55 ft. wide on the line of the crosscut. The crosscut was continued on the same bearing encountering a structure.

To ascertain that other parallel structures were present in the hanging wall side, the crosscut was turned sharply to the southeast and advanced about 31 ft.

The above crosscutting accounted for 98 ft. of advance.

Since no lively structures were encountered by this additional crosscutting a drift to the northeast was started on the structure in the vicinity of station 1467. This drift has been advanced 20 ft. The last 10 ft. or so has been on a very strong shear zone with up to 2 ft. of gouge, with small lenses of quartz and traces of mineralization.

Total advance was 98 ft. of crosscut and 20 ft. of drifting or 118 ft.

During the month 16 sets of timber covering 75 lineal ft. of crosscut were placed.

No ore was produced during the month.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT 12/5/57

Month of November 1957 DMEA No. 4216 Contract No. 1032

Project B

	Feet, This Month	Feet, Previous	Feet, to Date
Drifting @ $35.00	53	962	1015
Drifting, timbered @ $32.40	-	40	40
Crosscutting, @ $35.00	-	245	245
Crosscutting, timbered @ $32.40	-	0	0
Timbering	-	40	40
Diamond Drilling	-	812	812
Number of Assays	1	18	19

Work in this Project was completed on November 26, 1957.

During the month there was a total of 53 ft. of advance in the area of the "room" near survey station 1440.

36 ft. of advance was made to the southwest on the structure which split up and pinched out. The first 15 or 20 ft. was mineralized lightly. Thereafter, the structure tightened.

17 ft. of advance was made to the northeast on the same structure. The structure continues northward but here too, it pinches. The best mineralization in this drift is on a cross-vein coming into the drift from the east side.

Total advance was 53 ft, completing the contract at 1300 ft.

During the month 9 tons of ore were produced, estimated to assay 0.35%WO_3.

No timber was placed.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of November 1957 | DMEA No. 4216 | Contract No. 1032

Project D

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	181	279	460
Drifting, timbered @ $32.40	0	0	0
Crosscutting, @ $35.00	6	908	914
Crosscutting, timbered @ $32.40	0	293	293
Timbering	0	293	293
Diamond Drilling	269	0	269
Number of Assays	16	22	38

Drifting to the south was continued on a mineralized vein. The first 10 ft. of this advance was on vein 3 to 4 ft. wide. Thereafter the vein, consisting of several lenses, averaged 1 to 2 ft. wide to a point about 10 ft. south of survey station 1465.

At this point, there were indications on the west side of the drift that a new lens might be present in the hanging wall. A crosscut round into the hanging wall exposed the apparent start of a new lens and drifting to the south was started on this new lens accounting for 51 ft. of additional drifting in good ore, more than drift wide. A Leyner test hole indicates possibly 10 or 11 ft. of ore at one location. Three samples of the ore on this new lens average 0.82% WO_3.

Following the starting of the drift on this new lens an additional 6 ft. of drifting was done in the original heading, to expose more fully a narrow vein in the footwall side, which is 1½ ft wide and has some mineralization. Although it does not appear commercial at this point, this footwall vein should be tested later by a short drill hole.

In the north drift, there was 15 ft. of drifting advance on structure, rather tight, with a small amount of mineralized quartz.

Summarizing, there was 166 ft. of drifting to the south, 15 ft. of drifting to the north, and 6 ft. of crosscutting in the south drift, or a total of 187 ft. of advance.

In addition, there was 6 ft. of crosscutting in the south drift to establish a diamond-drill station. This footage is not included in the DMEA contract footage.

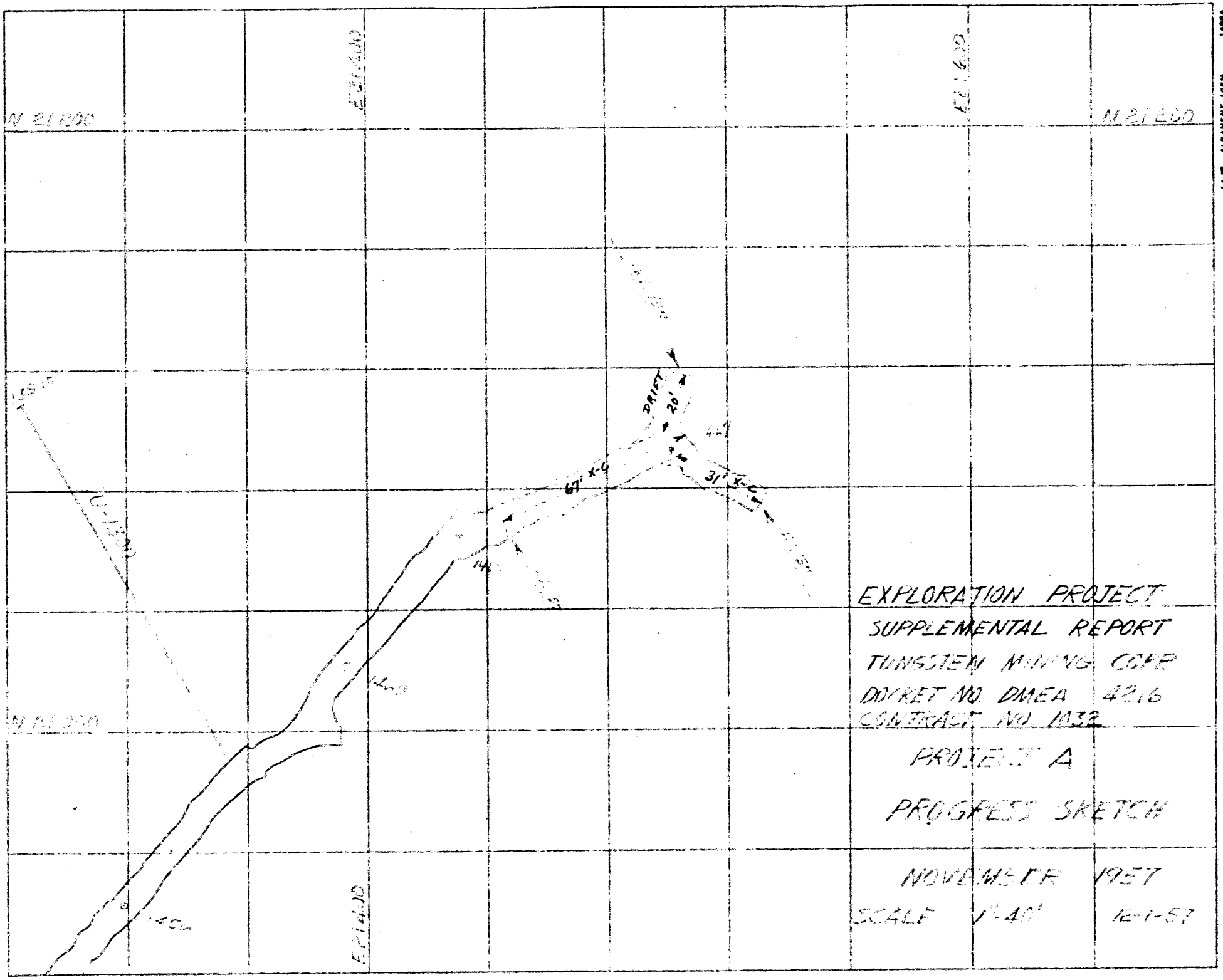
269 ft. of diamond drilling was performed. One hole U1301 was collared at coordinates N17501, E17175, and drilled N65W to a depth of 259 ft. This hole is on the line of the original crosscut to test the hanging wall. Several veins were cut, and one structure at 152 ft. looks quite lively.

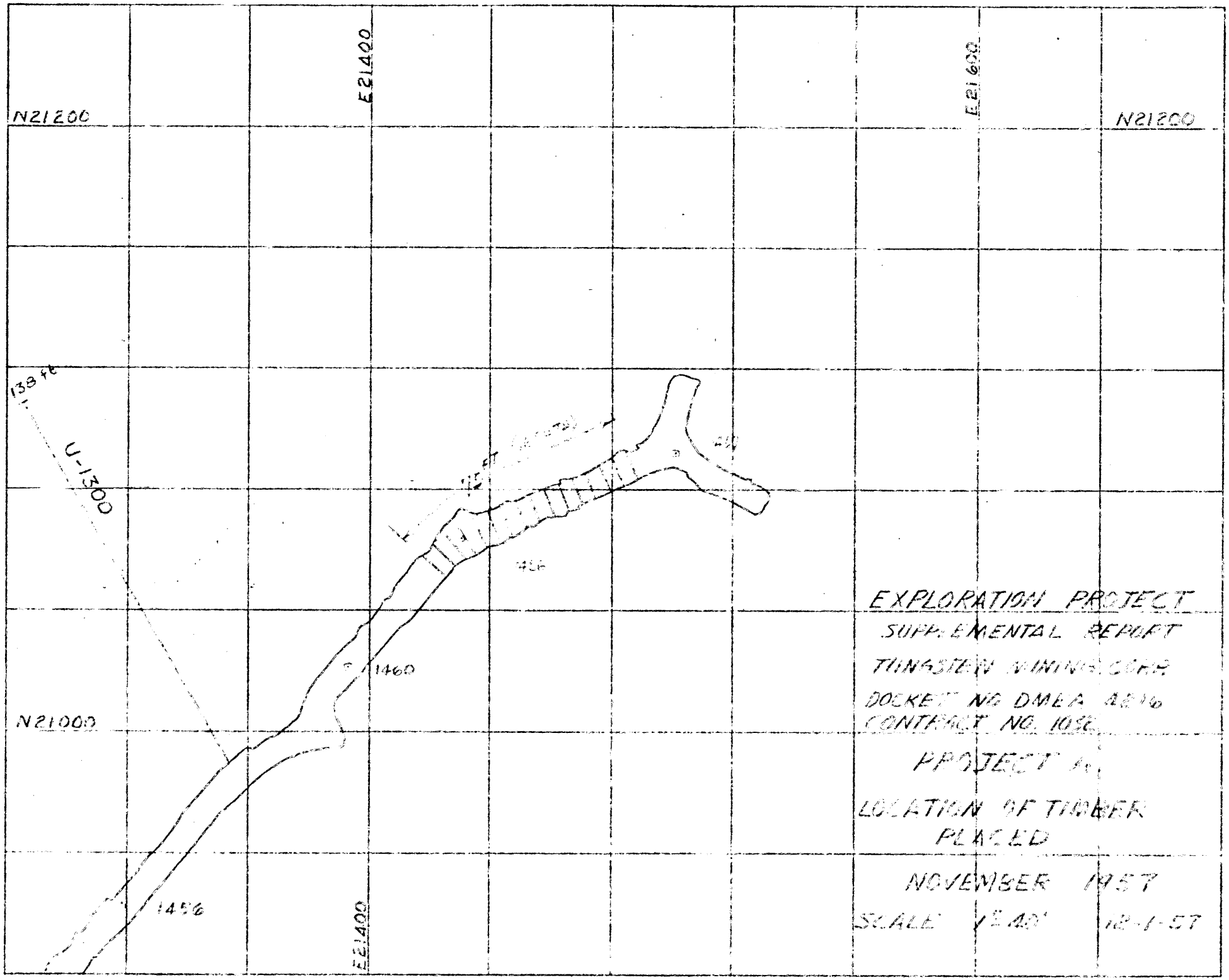
Another hole 01302 was started from the north drift, at coordinates N17541, E17230 on a bearing of N37W. This hole was only 10 ft. deep at the end of the month.

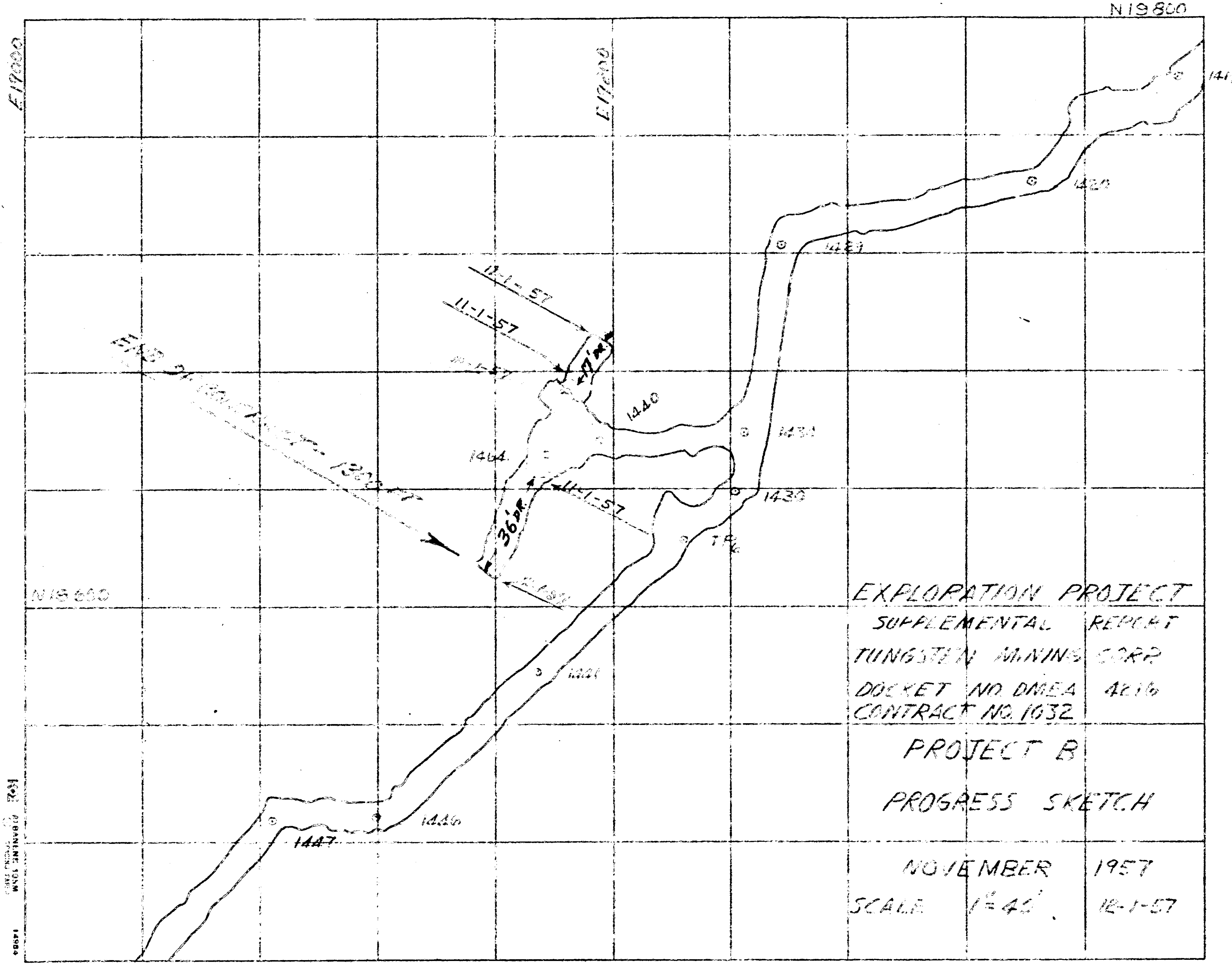
EXPLORATION PROJECT - SUPPLEMENTAL REPORT
Project D

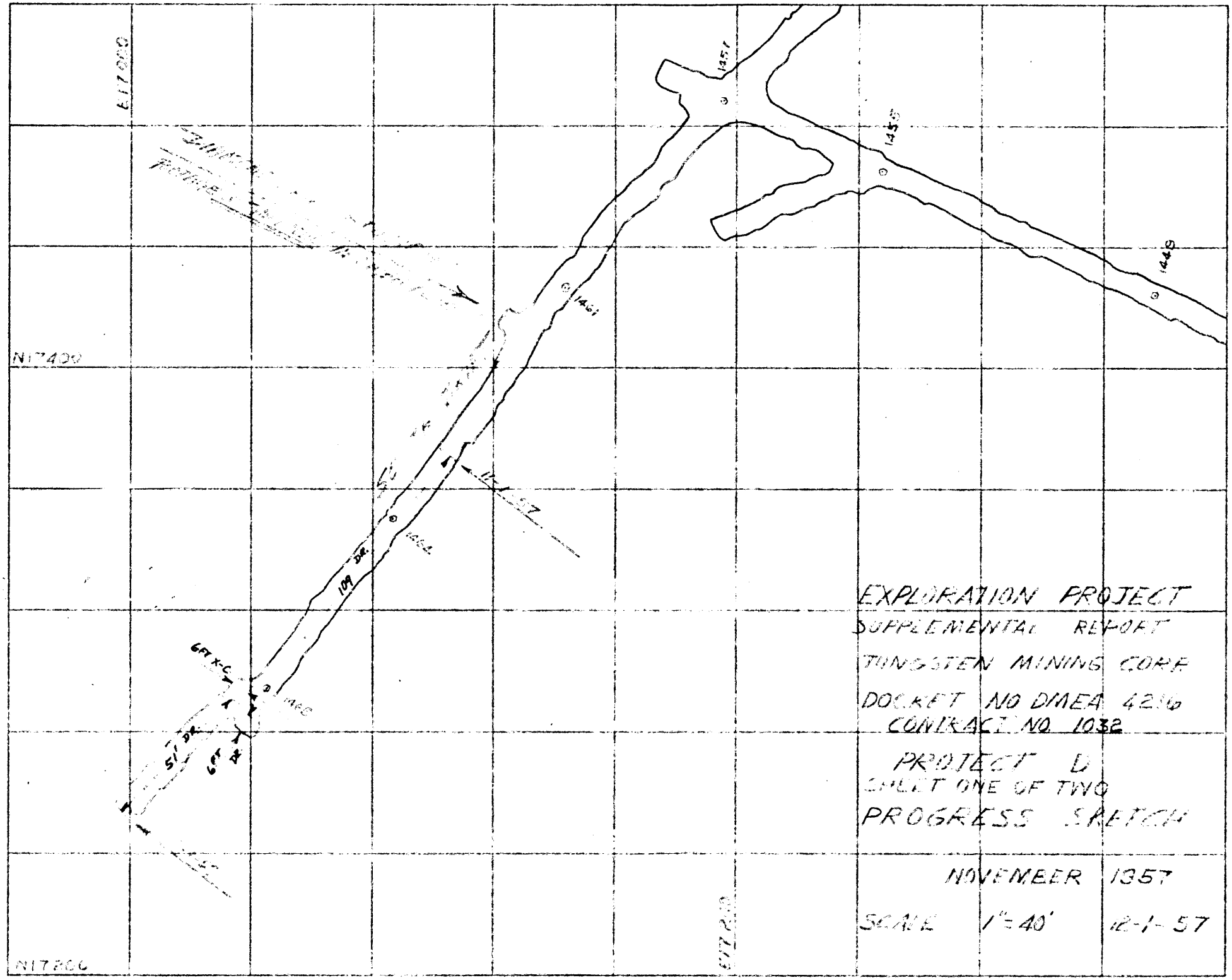
During the month, 283 tons of ore were produced. Grab samples of this ore assayed 0.85% WO_3.

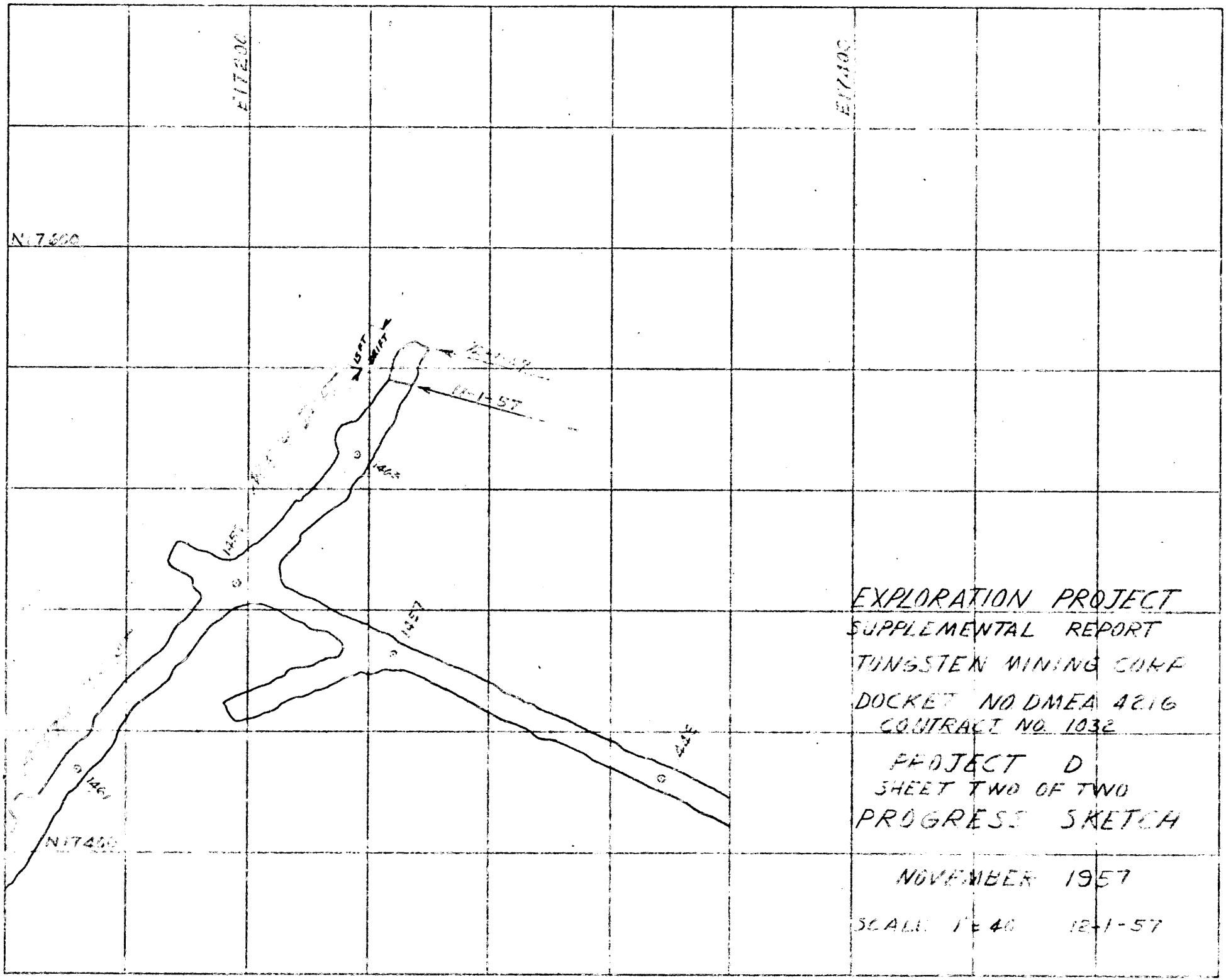
No timber was placed during the month.


N 21000
E 21400
E 21600
N 21600
N 21200
E 21400
DRIFT
20'
67' X-C
31' X-C
U-1500
1500
1450
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT A
PROGRESS SKETCH
NOVEMBER 1957
SCALE 1"=40'
16-1-57


N21200
E21400
E21600
N21200
138 ft
U-1300
1460
N21000
1456
E21400
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO DMEA 4216
CONTRACT NO. 1056
PROJECT No.
LOCATION OF TIMBER
PLACED
NOVEMBER 1957
SCALE 1" = 40'
12-1-57


N19800
N19600
12-1-57
11-1-57
11-1-57
17' X
36' DR.
1440
1464.
1434
1430
1429
1420
1411
TP6
1446
1447
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT B
PROGRESS SKETCH
NOVEMBER 1957
SCALE 1" = 40'
12-1-57


E17000
N17400
N17800
E17200
1451
1453
1449
1461
1464
109 DR.
6FT X-C
1466
51' DR.
6FT DR.
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO DMEA 4236
CONTRACT NO. 1032
PROJECT D
SHEET ONE OF TWO
PROGRESS SKETCH
NOVEMBER 1957
SCALE 1" = 40'
12-1-57


E 17200
E 17300
N 7600
N 7400
1457
1461
1462
1457
1457
1461
12-1-57
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP
DOCKET NO DMEA 4216
CONTRACT NO. 1032
PROJECT D
SHEET TWO OF TWO
PROGRESS SKETCH
NOVEMBER 1957
SCALE 1" = 40'
12-1-57

TUNGSTEN MINING CORPORATION
HENDERSON, N.C.

D. D. HOLE NO. DMEA U-1301

PROJECT D

DATE 11-19-57

BEARING N 65°W

DIP 0°

DEPTH 259 ft.

COORDINATES

N 17,301.5

E 17,17[illegible]

INTERVAL (Ft.)	Description of Core
0 - 19½	Chlorite schist - siliceous from 0 to 2 ft. Barren quartz from 3 to 4 ft.
19½ - 20	Diabase dike.
20 - 26	Chlorite schist with 2 inches of barren quartz at 22 ft.
26 - 28	Sericite schist with 2 inches of lively quartz at 26½ ft.
28 - 41	Chloritic schist.
41- 42½	Sericitic schist.
42½ - 49½	Quartz vein, lively looking, with FeS and MoS.
49½ - 50	Sericitic Schist
50 - 67	Chloritic schist, green.
67- 81	Chloritic schist, reddish, with 6 inches of pyritic quartz at 67 ft; 8 inches of mixed quartz and schist at 73 ft; and 5 inches of bare quartz at 75 ft.
81 - 86	Chloritic schist, greenish, reddish, and grayish.
86 - 99½	Chloritic schist, reddish. Four inches of bare quartz at 89 ft. Schist is greenish from 98 to 99½ ft.
99½ - 129	Sericitic schist looks like a country rock type of schist rather than that associated with shearing. Rock is red to gray. Bare quartz from 114½ to 115½ ft. Also 6 inches of quartz at 126 ft.
129 - 152	Chloritic schist, greenish to reddish.
152 - 155	Small structure. Bare quartz from 152 to 153 ft. Coarse sericite schist with CaF from 153 to 155 ft. Trace of scheelite in schist at 153 ft.
155 - 217	Green to gray chlorite schist with bare quartz from 212 to 213 ft.
217 - 241	Chlorite schist with barren quartz from 218 to 219 ft. Also 4 inches of bare quartz at 228 ft.

TUNGSTEN MINING CORPORATION
HENDERSON, N. .

D. . Hole No. DMEA U-1301 | BEARING N 65°W | COORDINATES

PROJECT D | DIP 0° | N 17,500.5

DATE 11-19-57 | DEPTH 259 ft | E 17,174.5

241 - 244	Mostly barren quartz with 6 inches of coarse sericite schist at 243 ft.
244 - 259	Chlorite schist with 5 inches of bare quartz at 248 ft.

End.

Form M-106 (BC)
(April 1962)

RECEIVED
NOV 18 1957
D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 24

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October 195 7 Docket No. DMEA 4216 Contract No. B-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

Contract Amount, $ 246,660.00 Government Participation: 75 % Amount, $ 184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY WSM: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Dr. not timbered	$13510.00	$100310.00	$113820.00			
Bulldozing Dr. timbered	-	$229.60	$229.60			
Crosscutting not timbered	2485.00	49175.00	51660.00			
Drifting XL timbered	-	13154.40	13154.40			
Timbering	-	3960.00	3960.00			
(2) Labor and Supervision:						
Labor Core Drilling	$443.85	3247.20	3691.05			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	54.00	96.00	150.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$16492.85	170172.20	194665.05	16492.85	178,172.20	194665.05

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Nov. 6, 1957 *Payee Tungsten Mining Corp.

Per J. R. Lucas Title Vice-Pres. & Gen. Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 12,369.64

Signature Helen R. Miller
(Authorized Certifying Officer)

Date NOV 14 1957 Vou. No. 84

(See other side)

4123.21

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1032 in accordance with the terms of the contract.

Signature W. L. Burmeister Title Mining Engr. Date 11/8/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date NOV 12 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of October 195 7 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting not timbered	ft.	13510.00	386	113820.00	3252	035.00		
Dr. timbered	ft.	-	-	8229.60	254	32.40		
Crosscutting								
Raising AC not timbered	ft.	2485.00	71	51660.00	1476	35.00		
AC timbered	ft.	-	-	13154.40	406	32.40		
Shafts								
Winzes								
Drilling: Core	ft.	443.05	269	3691.05	2237	1.65		
Churn								
Auger								
Stripping Sampling	ea.	54.00	18	150.00	50	3.00		
Trenching								
Test Pits								
Roads and Trails								
Timbering	ft.	-	-	3960.00	660	6.00		
Total Distributed Costs		16492.05		194665.05				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Nov. 6, 1957 Operator Tungsten Mining Corporation

Per J. R. Lucas Title Vice-Pres. & Gen. Mgr.

Remarks:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

N. A. Burmeister 11/8/57

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc.". The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of October 1957 DMEA No. 4216 Contract No. 1032

Project A

	Feet, This Month	Feet, Previous	Feet, to Date
Drifting @ $35.00	84	998	1082
Drifting, timbered @ $32.40	-	155	155
Crosscutting @ $35.00	11	101	112
Crosscutting, timbered @ $32.40	-	113	113
Timbering	-	268	268
Diamond Drilling	269	669	938
Number of Assays	-	5	5

The drift was turned to the northwest to get back on the structure, and was advanced 84 ft. encountering diabase dike and going into it for about 20 ft. to ascertain that it was the main dike expected and not a minor narrow dike.

A crosscut was started on a bearing of N 70 E to crosscut the dike and locate the structure on the other side of the dike.

No timber was placed during the month, and no ore was produced in October.

During the month, two diamond drill holes were drilled, one in the footwall, and one in the hanging wall. No major veins were intersected, but structure was encountered in each.

D. D. Hole U 1299 was drilled in the hanging wall; collared at coordinates N 20791, E 21218, on a bearing of S 55½ E. and drilled to a depth of 131 ft.

D. D. Hole U 1300 was drilled in the footwall; collared at coordinates N 20990, E 21354, on a bearing of N 30 W and drilled to a depth of 138 ft.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of October 1957 DMEA No. 4216 Contract No. 1032

Project B

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	30	932	962
Drifting, timbered @ $32.40	-	40	40
Crosscutting @ $35.00	55	190	245
Crosscutting, timbered @ $32.40	-	0	0
Timbering	-	40	40
Diamond Drilling	-	812	812
Number of Assays	-	18	18

The crosscut started last month was continued and accounted for 55 ft. of advance, encountering the structure indicated by drill holes U 1296 and U 1297.

Drifting on this structure to the southwest accounted for 26 ft. of additional advance.

Where the crosscut encountered the structure, it looked fairly lively consisting of about 4 inches of quartz with a trace of mineralization, and a small amount of gouge. As the drift was advanced to the southwest, the structure tightened and little or no quartz remained.

Inasmuch as there are drill hole intersections on both ends of this drift, it was agreed with the DMEA officials to limit the drifting in this area and apply the remaining footage to further exploratory work in the ore lens near survey station 1440.

There was 4 ft. of drifting advance in the above area to the northeast. This advance, near survey station 1440 is shown on a separate sheet. The round exposed numerous quartz seams striking north east and dipping to the southeast. Only a trace of mineralization is present.

Total advance for October is thus 30 ft. of drifting advance and 55 ft. of crosscutting advance.

No timber was placed, and no ore was produced during the month.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of October 1957 DMEA No. 4216 Contract No. 1032

Project C

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	63	866	929
Drifting, timbered @ $32.40	-	59	59
Crosscutting @ $35.00	-	211	211
Crosscutting, timbered @ $32.40	-	0	0
Timbering	-	59	59
Diamond Drilling	-	487	487
Number of Assays	-	5	5

The drift on the structure being followed was advanced 63 ft. The structure consists of 3 to 6 inches of quartz, with no mineralization at the face, a diabase dike was encountered, it being about 2 ft. thick.

The advance of 63 ft. brings the total footage of this Project to 1199 ft. at which point the work in this Project was terminated.

No timber was placed and no ore was produced during the month.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of October 1957 DMEA No. 4216 Contract No. 1032

Project D

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	209	70	279
Drifting, timbered @ $32.40	-	0	0
Crosscutting @ $35.00	5	903	908
Crosscutting, timbered @ $32.40	-	293	293
Timbering	-	293	293
Diamond Drilling	-	0	0
Number of Assays	18	4	22

From the crosscut, at the vein location, a drift to the north was started and advanced 81 ft. The ore remained drift wide for about 50 ft. at which point it started to narrow down. In the next 31 ft. the ore lens pinched down and only a few inches of vein remains in the present face.

At a point about 25 ft. back from this face a test hole in the hanging wall indicated the presence of an additional vein. A crosscut round was blasted into the hanging wall, (accounting for 5 ft. of advance) to explore this showing. A flat-dipping vein 2 to 3 ft. wide was exposed, but no mineralization is present.

The drift south was advanced 128 ft. on vein. At a point about 45 ft. south of survey station 1457, the ore lensed out. However, a new ore lens came into the drift on the hanging wall side and persisted for the remainder of the advance. This new lens is fairly good ore, but is considerably narrower averaging only about 3½ ft. wide. A small dike about 1 ft. wide, entered the drift and stayed within the vein for a length of about 60 ft. At the month's end, the vein was about 3½ ft. wide and contained fairly good mineralization.

During the month, 18 samples were taken in these drifts. The weigned average of these samples is 1.08% WO_3.

As a result of this drifting, 594 tons of ore were produced. Grab samples of this ore assayed 0.81% WO_3.

Total advance was 214 ft. in this Project. No timber was placed.

TUNGSTEN MINING CORPORATION
HENDERSON, N. C.

D. D. HOLE NO. DDEA D-1300 | BEARING N. 39° W. | COORDINATES

PROJECT A | DIP 0° | N 20,990.2

DATE 10-2-47 | DEPTH 138' | E 21,334.0

INTERVAL (ft.)	Description of Core
0 - 19	Gneiss with chlorite schist from 1' to 3' and from 9½ to 10'. 4" of bare quartz at 8'.
19 - 31	Chlorite schist. At 20½', 1" of qtz. above 1" of diabase. Also 4" of diabase at 23½' and 7" of diabase at 26½'. Sericite schist from 28' to 29' and 5" of diabase at 29'.
31 - 33	Diabase dike.
33 - 34½	Chlorite schist.
34½ - 39½	Diabase dike with 7" of chlorite schist at 36'.
39½ - 44½	Chlorite schist.
44½ - 46½	Quartz, lively looking but barren.
46½ - 82	Gneiss with 7" of lamprophyre dike at 53½' and lamprophyre also from 56' to 57'.
82 - 83	Lamprophyre dike.
83 - 127½	Gneiss except as follows: At 84' 4" of silexite; at 89', 8" of sericitic schist; at 105', 1" of lamprophyre; at 107½', 5" of lamprophyre; and at 110', ½" quartz.
127½ - 129½	Sericitic schist.
129½ - 138	Gneiss.

End.

TUNGSTEN MINING CORPORATION
ATHERTON, N. C.

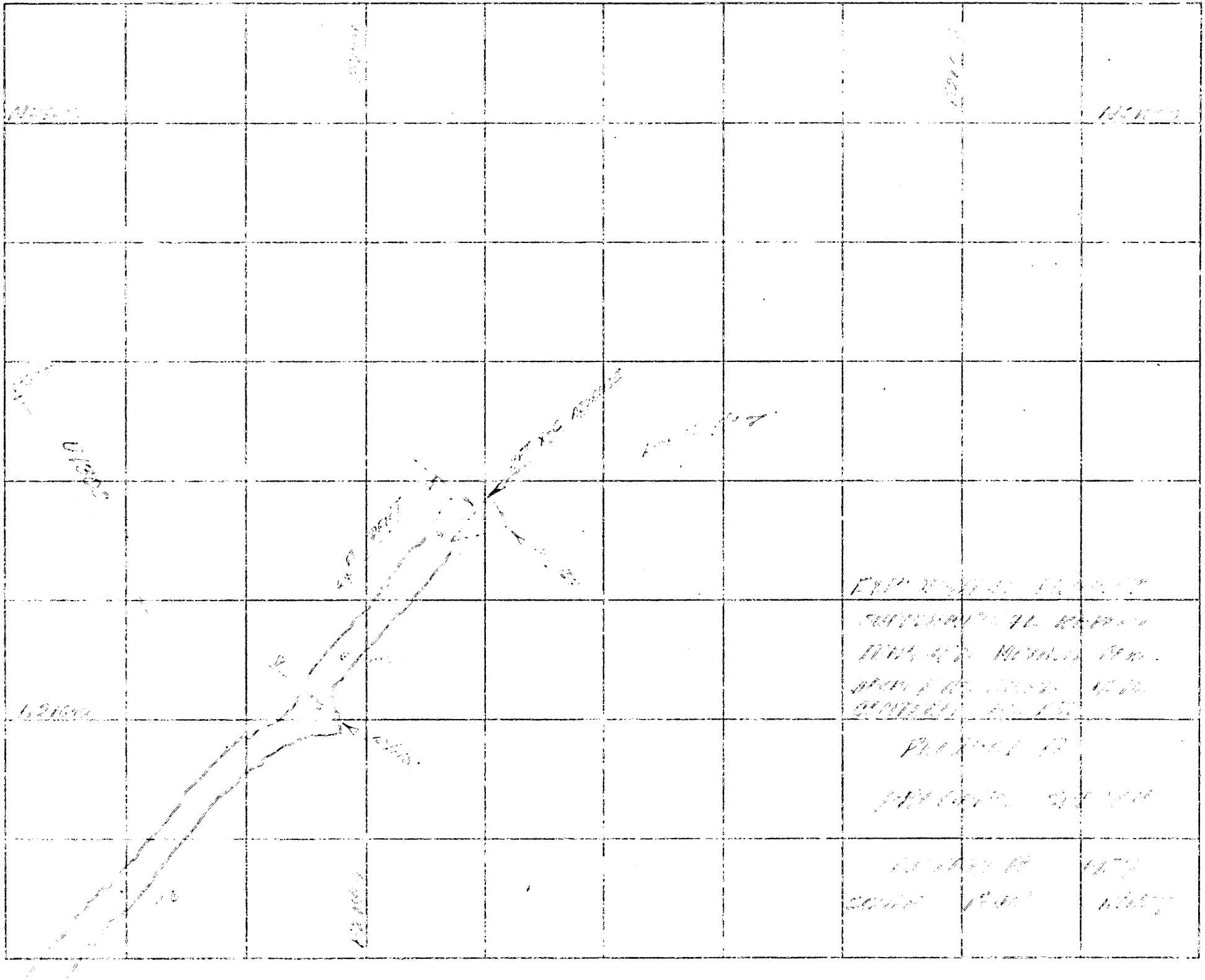
D. D. HOLE NO. DMEA F-1299 | BEARING S 55½° E | COORDINATES

PROJECT A | DIP 0° | N 22,771.1

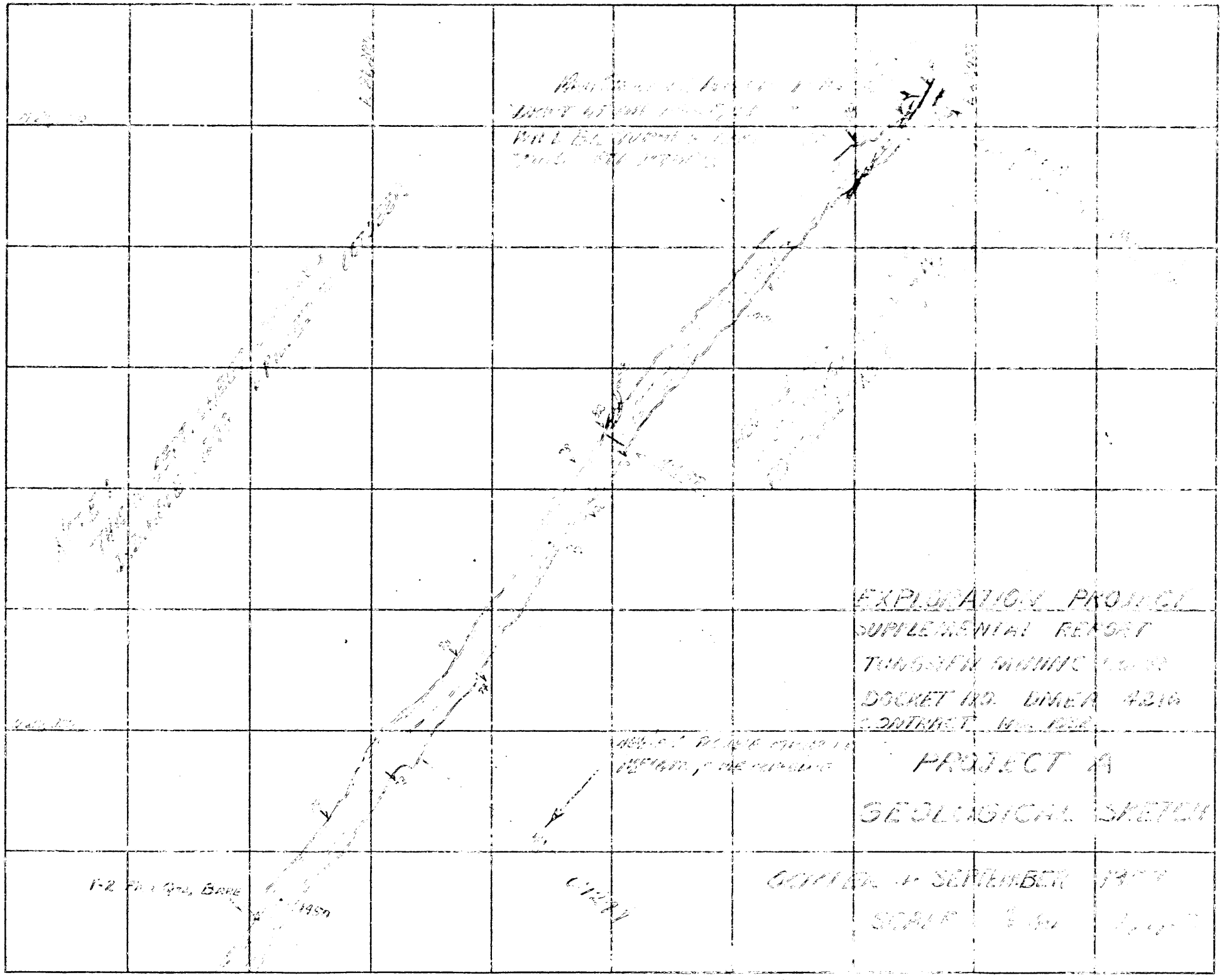
DATE 10-2-57 | DEPTH 131 ft. | E 21,717.7

INTERVAL (ft.)	Description of Core
0 - 21	Mostly chlorite schist. Numerous minor quartz intervals. Many 3" to 6" gneissic zones.
21 - 32	Gneiss with barren quartz from 27' to 28'.
32 - 36	Chlorite schist with a trace of scheelite at 35' and also at 35½'. Interval is gneissic toward end.
36 - 38½	Gneiss.
38½ - 43½	Chlorite schist with a trace of scheelite at 39'.
43½ - 46½	Chloritic gneiss. At 43', 6" chlorite schist and at 45½', 3" of dead quartz.
46½ - 49	Sericite schist with mixed quartz and schist from 47½' to 49'. At 48', 3" of good scheelite.
49 - 50	Chlorite schist with 3" of bare quartz at 49 1/4' followed by 4" of chlorite schist with good scheelite.
50 - 54	Chloritic gneiss.
54 - 56	Chloritic schist.
56 - 59	Siliceous sericite schist with 3" of chlorite schist at 58 ft.
59 - 66	Chlorite schist with 6" of gneiss at 59½ ft. and a quartz stringer at 66 ft.
66 - 99	Chloritic gneiss with numerous minor chlorite schist seams.
99 - 112	Chlorite schist. Gneissic and associated from 101' to 102'.
112 - 115½	Chloritic-sericitic schist.
115½ - 116½	Chlorite schist.
116½ - 118	Sericitic - chloritic schist.
118 - 120½	Silicified sericite schist, brownish gray.
120½ - 124½	Sericite - chlorite schist.
124½ - 129	Chlorite schist. Gneissic from 127' to 128'.
129 - 131	Gneiss.

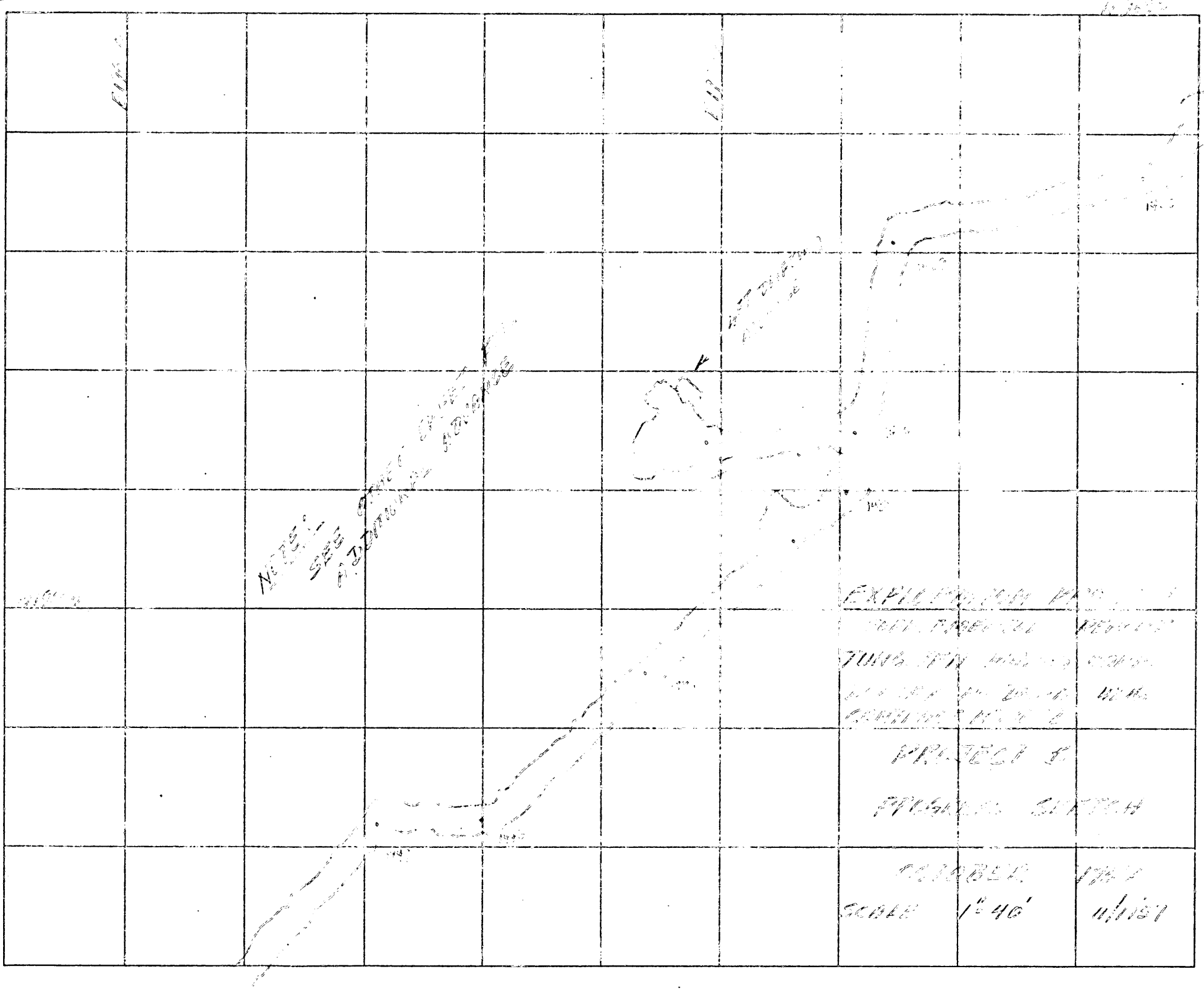
End.



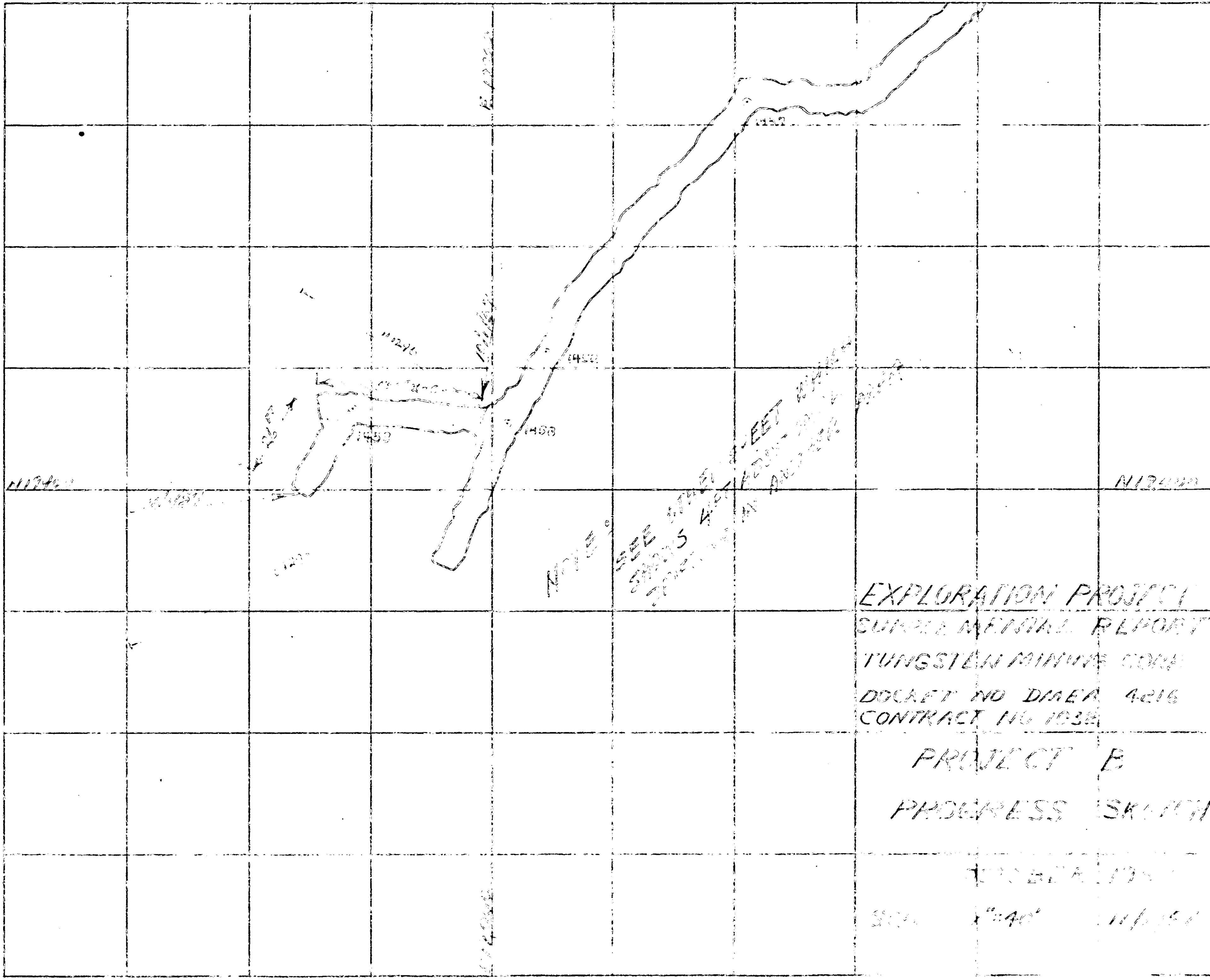
K+E ALBANENE 193M
TRACING CARTA
04206



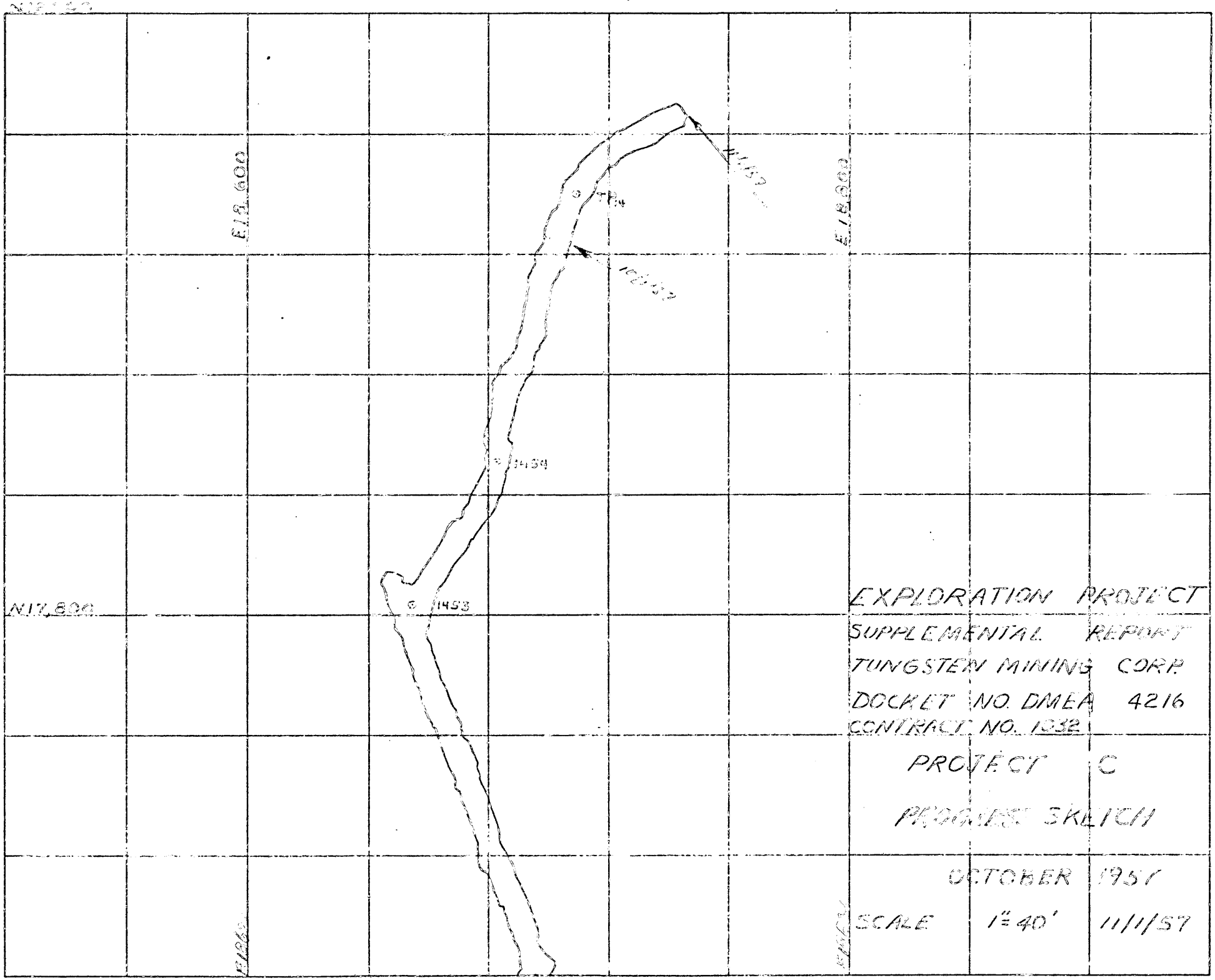
K+E ALBANENE 105M TRACING PAPER 14984



K+E ALBANENE 195M (m) YEARS PAPER 16080

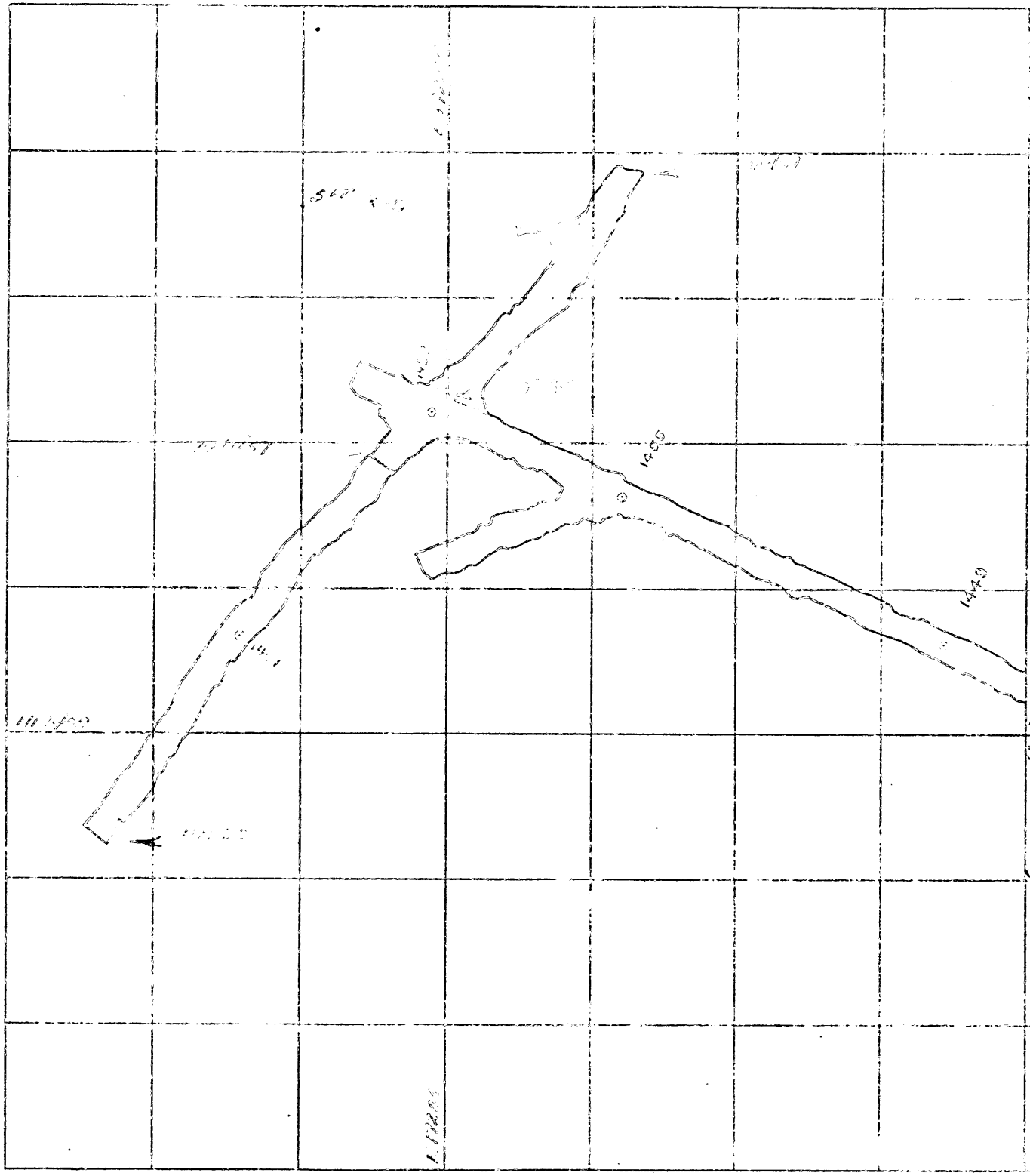


K&E ALBANENE 100M 14984


E18,600
E18,800
N17,800
1453
1454
1455
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1332
PROJECT C
PROGRESS SKETCH
OCTOBER 1957
SCALE 1" = 40'
11/1/57

EXTRA COPY.
D M E A
RECEIVED NOV 18 1957

DATE	INITIALS	CODE



EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4916
CONTRACT NO. 1032
PROJECT D
PROGRESS SKETCH
OCTOBER 1957
SCALE 1"=40' 11/1/57

K+E ALDARENE 1959 14290

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S MONTHLY REPORT AND VOUCHER

4 PAID OR VOUCHER & SCHEDULE
HELD OF PAYMENTS K- 21

D.M.E.A. OCT 1957

Month of September 1957 Docket No. DMEA 4216 Contract No. E-1032
Operator's Name Tungsten Mining Corporation Minerals Tungsten
Address Box 931, Henderson, North Carolina
Contract Amount, $ 246,660.00 Government Participation 75% Amount, $ 184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY WSM: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Dr not timbered	$14350.00	$85960.00	$100310.00			
Dr timbered	$ 162.00	$ 8067.60	$ 8229.60			
Bulldozing Ac not timbered	$ 1680.00	$47495.00	$49175.00			
Crosscutting Ac timbered	$ 972.00	$12182.40	$13154.40			
Drifting Timbering	$ 210.00	$ 3750.00	$ 3960.00			
(2) Labor and Supervision: Core Drilling	$ 514.80	$ 2732.40	$ 3247.20			
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	$ 30.00	$ 66.00	$ 96.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
Totals	$17918.80	$160253.40	$178172.20	17918.80	160253.40	178172.20

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Oct 4.1957 *Payee Tungsten Mining Corporation

Per J. R. Sweet Title Vice Pres & Gen Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

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(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 13439.10

Signature Helen R. Miller
(Authorized Certifying Officer)

Date OCT 23 1957 Vou. No. 76
(See other side)

4479-70

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1032 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engr. Date 10/14/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lemmon Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date OCT 16 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

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(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form ME-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED OCT 25 1957 D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 195 7 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting: Dr not timbered	ft.	$14350.00	410	$100310.00	2866	$35.00		
Crosscutting: Dr timbered	ft.	$ 162.00	5	$ 8229.60	254	$32.40		
Raising: XC not timbered	ft.	$ 1680.00	48	$ 49175.00	1405	$35.00		
Shafts: XC timbered	ft.	$ 972.00	30	$ 13154.40	406	$32.40		
Winzes								
Drilling: Core	ft.	$ 514.80	312	$ 3247.20	1968	$ 1.65		
Churn								
Auger								
Stripping: Sampling	ea.	$ 30.00	10	96.00	32	$ 3.00		
Trenching								
Test Pits								
Roads and Trails								
Timbering	ft.	$ 210.00	35	$ 3960.00	660	$ 6.00		
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		$17918.80		$ 178172.20				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Oct 4, 1957 Operator Tungsten Mining Corporation

Per J. R. Lucas Title Vice Pres. & Gen Mgr.

Remarks:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

H. L. Burmeister 10/7/57

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc.". The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of September 1957 DMEA No. 4216 Contract No.1032

Project A

	Feet, This Month	Feet, Previous	Feet, To Date
Crosscutting @ $35.00	0	101	101
Crosscutting, timbered @ $32.40	0	113	113
Drifting @ $35.00	155	843	998
Drifting, timbered @ $32.40	0	155	155
Timbering	0	268	268
Diamond Drilling	0	669	669
Number of Assays	0	5	5

This month's advance was 155 ft. on a fairly strong sheer, with some gouge. A small dike has cut across the structure near the face. The last two rounds have diverged from the structure, but the drift will be turned back into this structure. Very little quartz is present in the structure and no mineralization is present.

No timber was placed during the month, and no ore production came from this Project in September.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of September 1957 | DMEA No. 4216 | Contract No. 1032

Project B

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	51	881	932
Drifting, Timbered @ $32.40	5	35	40
Crosscutting @ $35.00	6	184	190
Timbering	5	35	40
Diamond Drilling	312	500	812
Number of Assays	1	17	18

The drift was continued for 56 feet along the lamprophyre. Whereas previously the structure contained considerable quartz, this advance had very minor amounts of quartz.

Since this advance looked rather poor, two holes were drilled in the footwall. Both of these holes indicated presence of structure and a narrow vein. Crosscutting to this structure is now in progress, started at the point where DDH U-1296 was collared. This accounts for 6 feet of crosscutting advance.

DD Hole U-1296 was collared at a point with coordinates N-19426, E-18996 on a bearing of N57W and was drilled to a depth of 72 feet.

D.D.Hole U-1297 was collared at a point with coordinates N-19398, E-18990, on a bearing of S65W and was drilled to a depth of 130 feet.

A third hole was drilled to check the structure southwest of the ore lens previously developed in the vicinity of survey station 1440. This hole, U-1298 was drilled at ∠ 33 degrees and encountered a 1½ ft vein with some fair scheelite mineralization about 47 feet above the back of the level. This hole was collared at coordinates N-19621, E-19215 on a bearing of N87½W, at ∠ 33 degrees.

One sample was taken and assayed in the vicinity of survey station 1447.

One set of timber was installed in the vicinity of survey station 1429.

Total advance was 62 feet.

No ore production came from this project during the month.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of September 1957 DMEA No. 4216 Contract No. 1032

Project C

	Feet, this month	Feet, Previous	Feet, To Date
Drifting @ $35.00	134	732	866
Drifting, timbered @ $32.40	0	59	59
Crosscutting @ $35.00	0	211	211
Timbering	0	59	59
Diamond Drilling	0	487	487
Number of Assays	5	0	5

A drift was started on the structure encountered the previous month. This structure strikes about N26E and dips to the southeast at 38 to 43 degrees. The structure is quite tight but has 3 to 4 inches of quartz. No mineralization has been noted.

Total advance was 134 ft.

No timber was placed.

Five samples were taken of mineralization encountered at the start of Project C near survey stations 1369 and 1380.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of September 1957 | DMEA No. 4216 | Contract No. 1032

Project D

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	70	0	70
Drifting, timbered, @ $32.40	0	0	0
Crosscutting @ $35.00	42	861	903
Crosscutting, timbered @ $32.40	30	263	293
Timbering	30	263	293
Diamond Drilling	0	0	0
Number of Assays	4	0	4

At a point about 7 ft southeast of the face as of September 1, 1957 there was a structure on the southwest side of the crosscut. It was not until after the first of the month that somemineralization was noted in this structure.

After advancing the crosscut about 20 ft, a drift to the southwest was started on this structure. For the first 20 or 25 ft this vein was 1 ft or less in width but had some high-grade mineralization. For the remainder of the footage driven in this drift, the vein was 2 to 2½ ft wide, but the mineralization was much weaker. The advance in this drift was 52 ft.

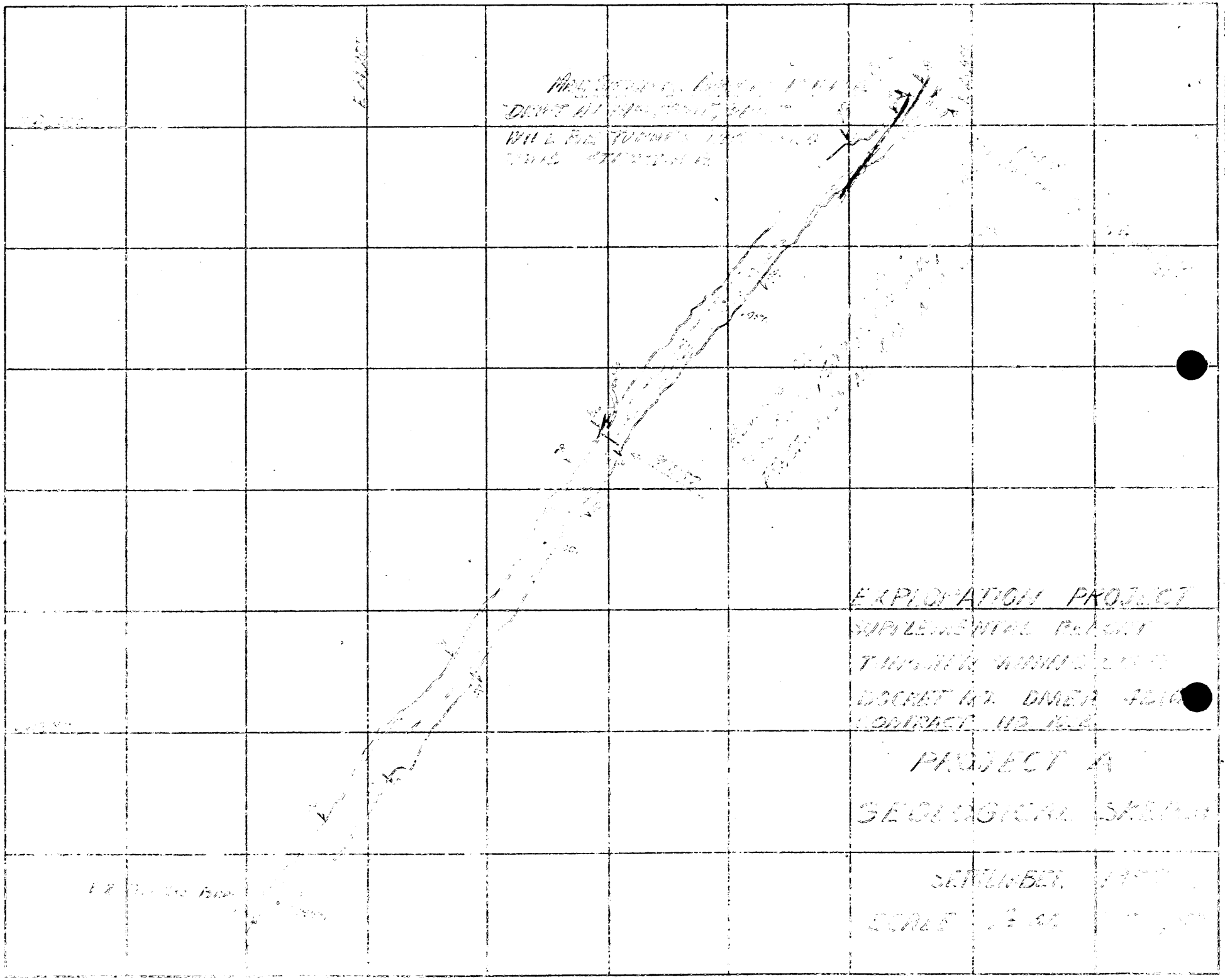
The crosscut was then advanced again and encountered a vein about 9 ft wide. This vein is well mineralized and appears to be of mineable grade and width. After crosscutting this structure a drift to the south west was started on this ore and was advanced 18 ft. The vein remains strong.

Advance in the crosscut was 72 ft.

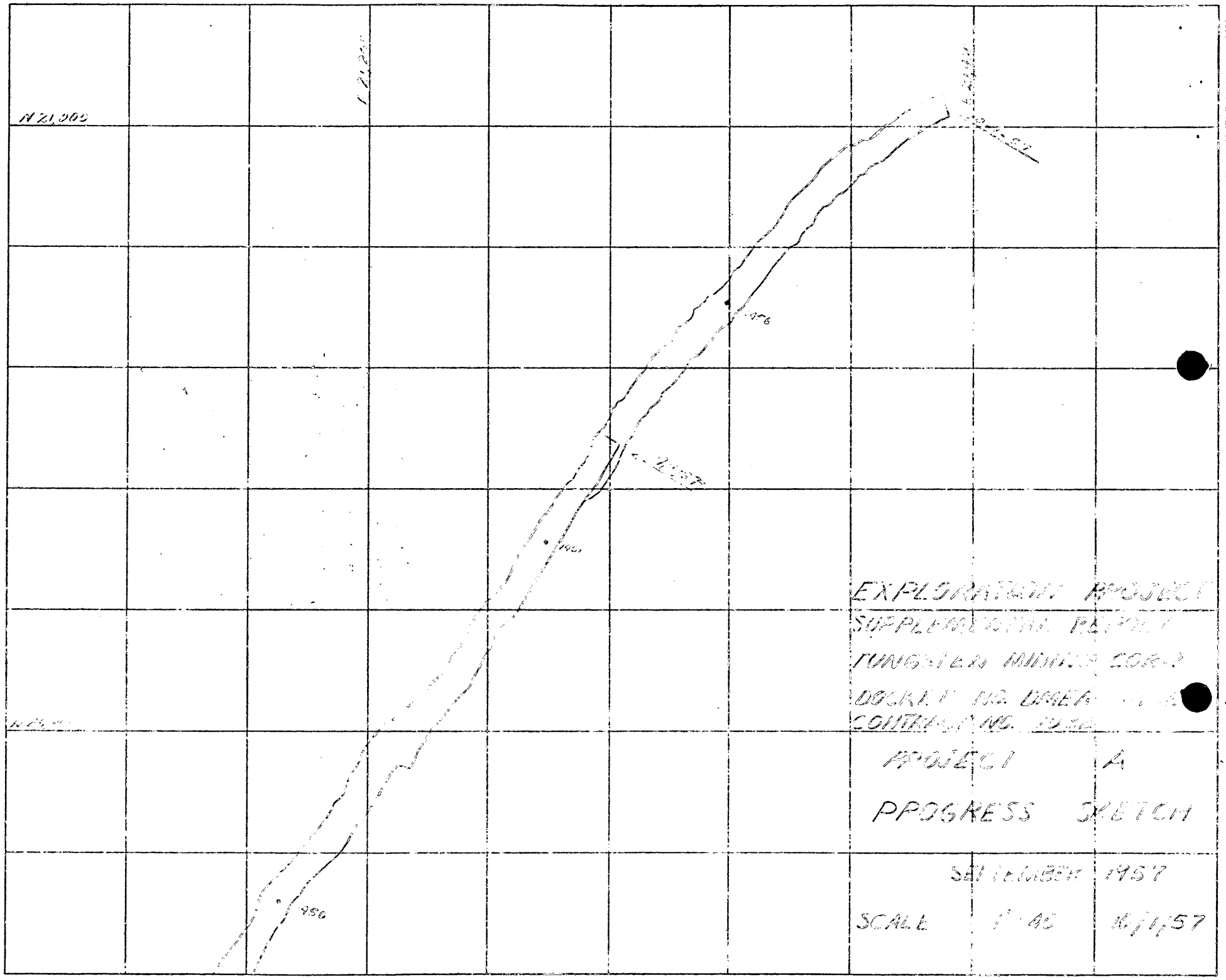
Four samples were taken of mineralization in both veins.

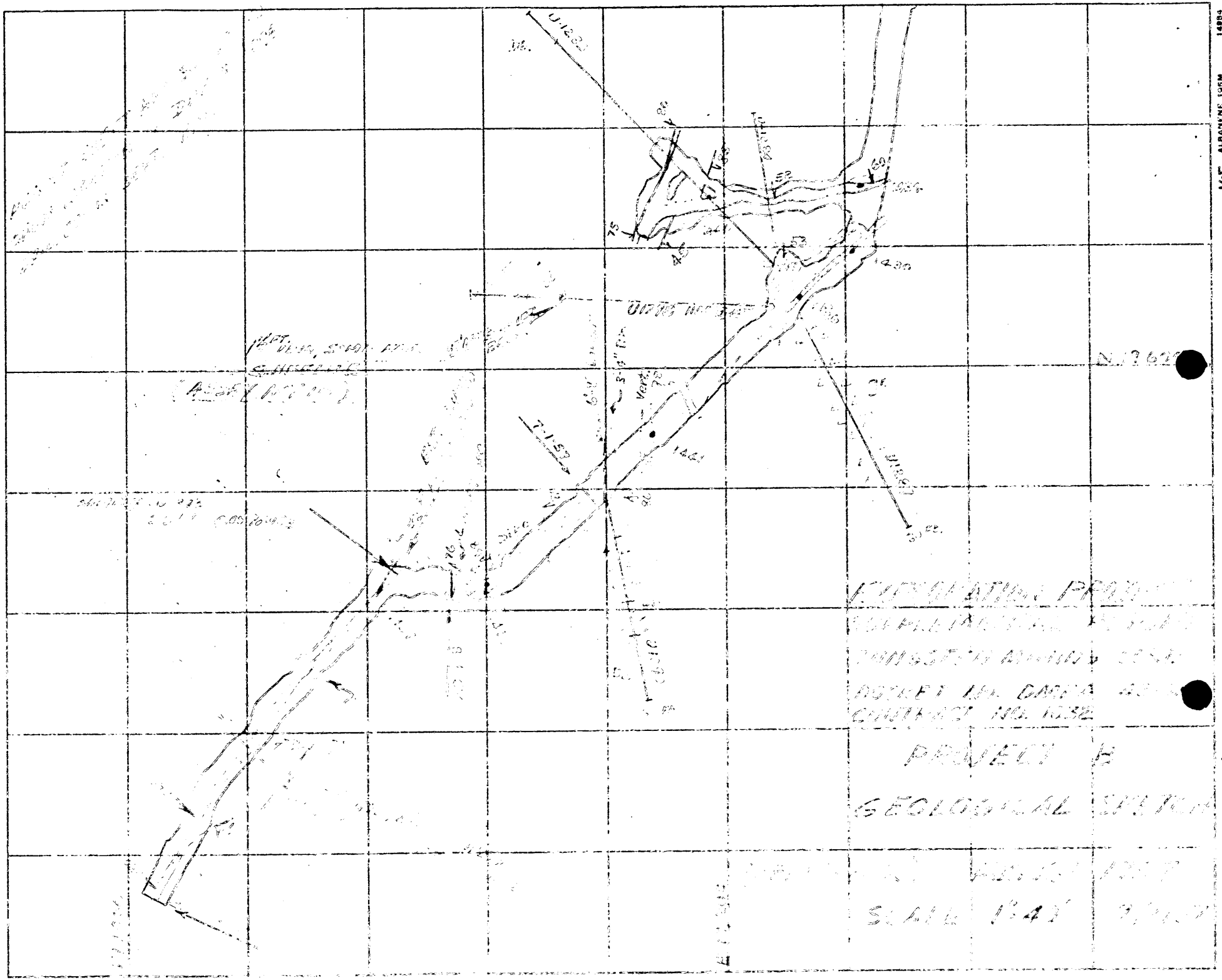
During the month, 7 sets of timber, covering 30 lineal ft, were installed.

Production from Project D amounted to 107 tons. Grab samples of this ore assayed 1.34% WO_3.

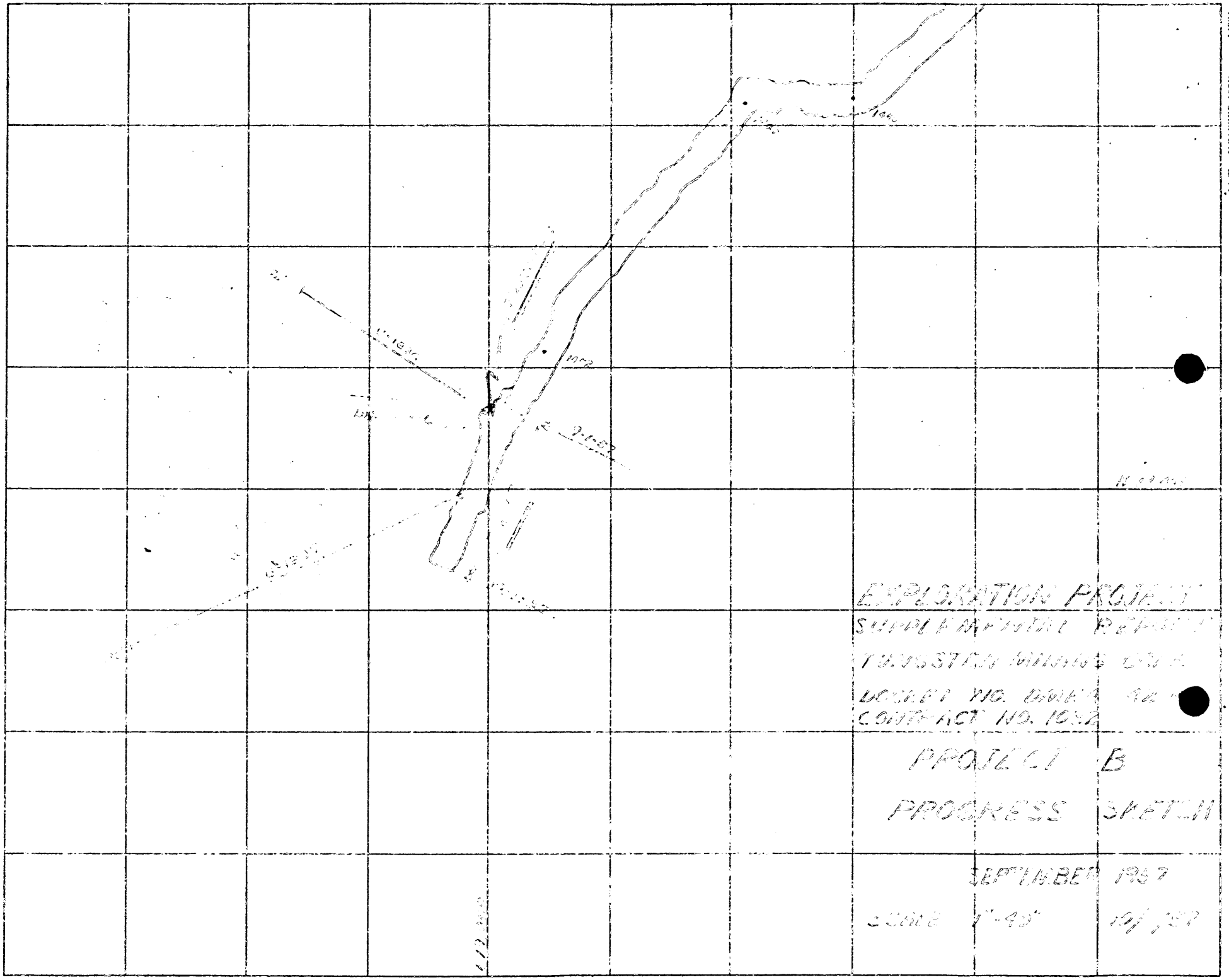


K+E ALBANENE 196M 14684


N 21,000
456
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
PROJECT A
PROGRESS SKETCH
SEPTEMBER 1957
SCALE 1" = 40'
8/1/57



K&E ALBANENE 105M ⓐ TRACING PAPER 14894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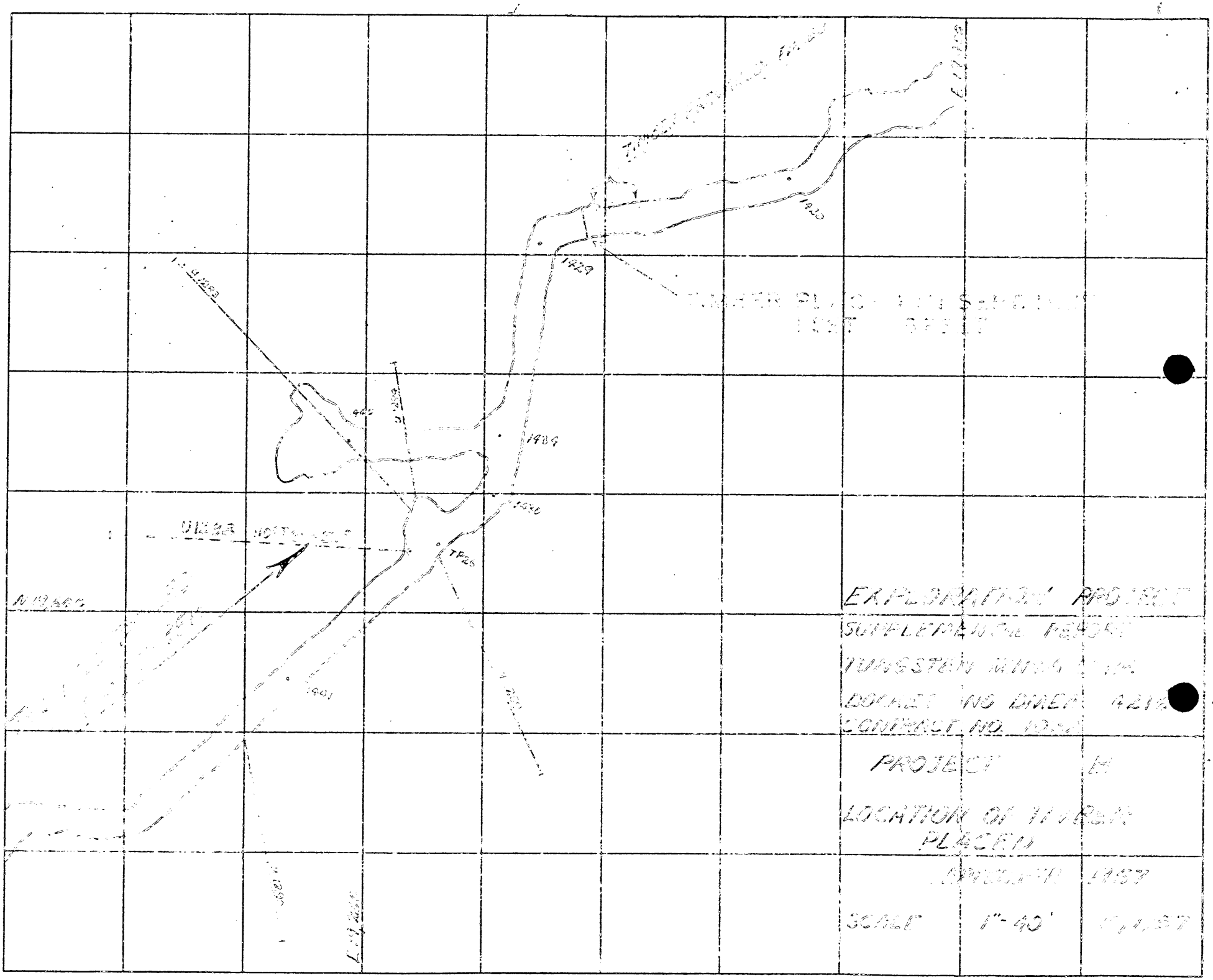
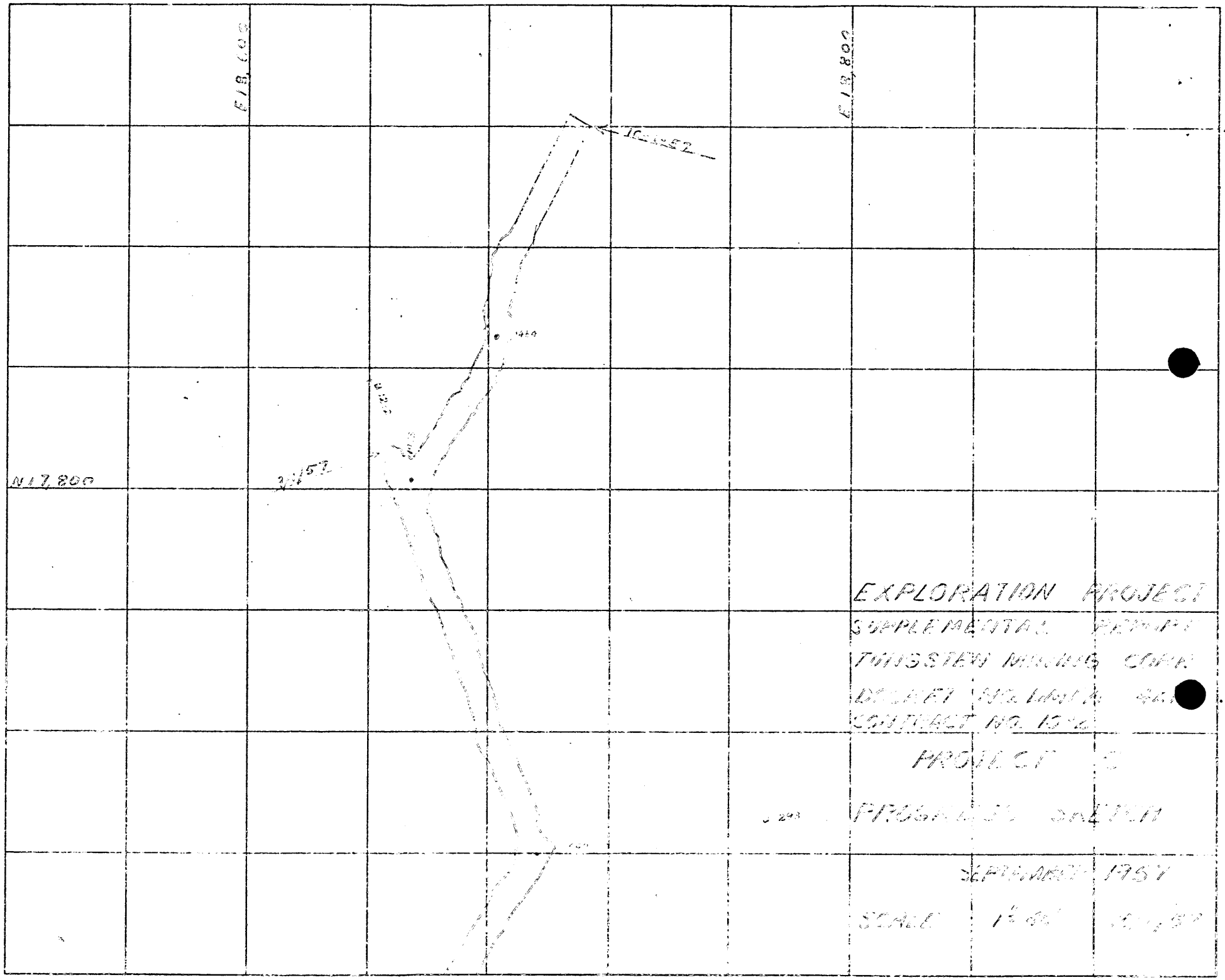
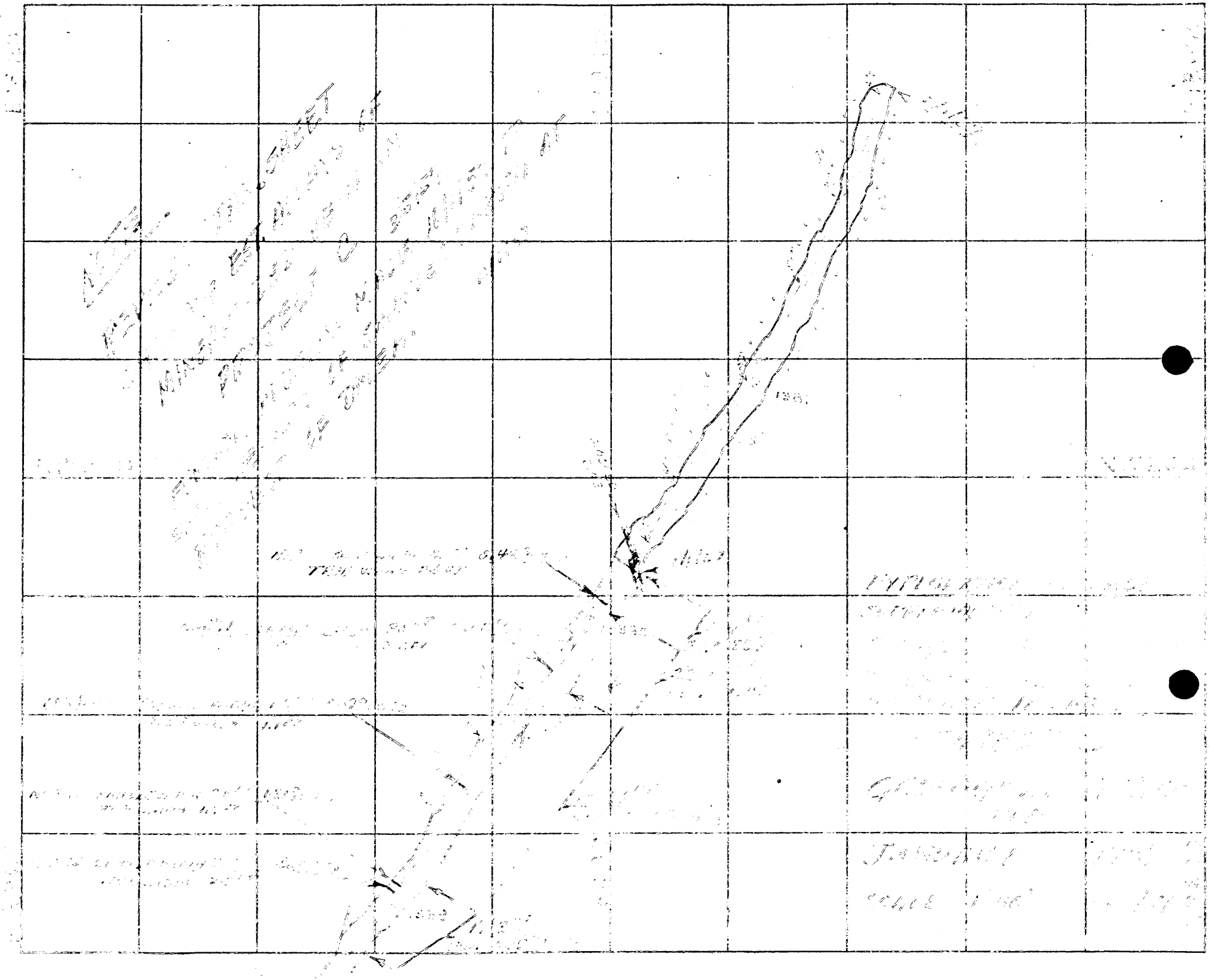
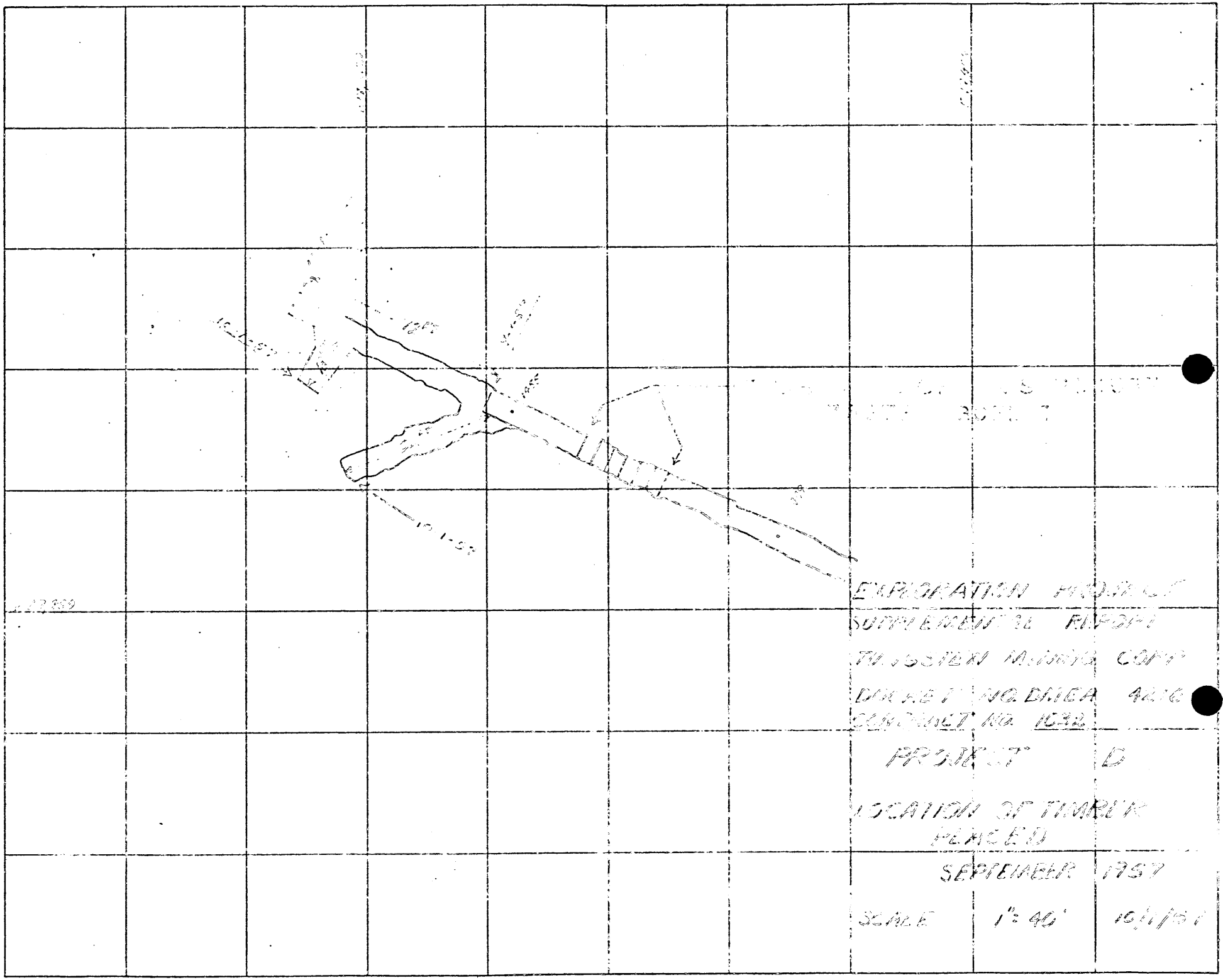
SUPPLEMENTAL REPORT
TRANSITRON ELECTRONICS CORP.
DOCKET NO. 60064
CONTRACT NO. 1052
PROJECT B
PROGRESS SKETCH
SEPTEMBER 1957
SCALE 1"=90'
1 OF 1 SH

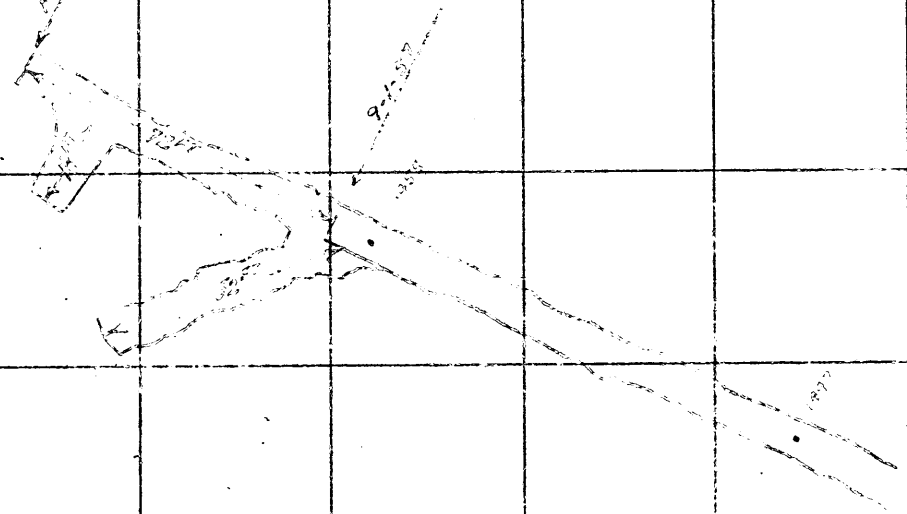

1420
1429
1439
1430
TP26
1401
N 13500
E 14000
E 14500
PROJECT
LOCATION OF TIMBER
PLACED
SCALE
1" = 40'


E 18,600
E 18,800
N 17,800
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
CONTRACT NO. 1912
PROJECT
SEPTEMBER 1957
SCALE



K+E ALBANENE 10514 © KEUFFEL & ESSER CO. 14884


EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TRANSCEN MINING CORP
DRAWET NO DMEA 4216
SEQUENCE NO 1032
PROJECT D
LOCATION OF TIMBER
FENCED
SEPTEMBER 1957
SCALE 1" = 40'



EXPLORATION PROJECT

SUPPLEMENTAL REPORT

TUNGSTEN MINING CORP.

DOCKET NO. DMEA 4216

CONTRACT NO. 1532

PROJECT D

PROGRESS SKETCH

SEPTEMBER 1957

SCALE 1" = 40'

9/1/57

[illegible]

[illegible]	[illegible]
0 - 13	Chloritic schist. Minor quartz veins and slight carbonate mineralization. Pyritic.
13 - 26	Sericitic schist. Chloritic in parts. Pyritic. Contains several 4" to 8" quartz veins with minor hematite and sericite mineralization.
26 - 36½	Chloritic schist. Few sericitic seams. Several quartz stringers, one with minor mineralization. Low grade of magnetite is noted along with pyrite and garnet.
36½ - 38½	Quartz vein - barren.
38½ - 90½	Chlorite - pinkish.
90½ - 95	Siliceous schist. Some quartz veins.
95 - 97	Chloritic schist.
97 - 100	Gneiss.

End

[illegible]

[illegible]

[illegible]	[illegible]
0 - 13	Sericitic schist. Few barren quartz veins.
13 - 17½	Chloritic sericite with sericitic crust.
17½ - 19	Sericitic schist - Foliated.
19 - 26½	Chloritic sericite. 3 inches of quartz with traces of [illegible]
26½ - 47½	Quartz vein with minor chloritic [illegible]. Not [illegible]
47½ - 50	Chloritic sericite with 2 inches of barren quartz.
50 - 51½	Quartz with calcite.
51½ - 53	Sericite schist.
53 - 53½	Barren quartz
53½ - 67½	Chloritic sericite. A few minor quartz veins.
67½ - 71	Chlorite or chlorite schist.
71 - 72½	Chlorite schist.
72½ - 73½	Sericitic schist.
73½ - 90	Granite.

End

[illegible]

[illegible] SMA 9 - 1252 [illegible] 120 ft.

[illegible]	[illegible]
0 - 2½	Chlorite schist with a quartz stringer.
2½ - 5	Sericite schist, 3" to 1"-quartz and chlorite with some schist, 1" to 1½"-quartz with some muscovite and epidote.
5 - 69	Chlorite schist with numerous quartz stringers. Some scattered traces of epidote in the schist.
69 - 72½	Gneiss, sheared.
72½ - 76	Lamprophyre dike.
76 - 79	Gneiss.
79 - 113	Chlorite schist. Several 1" quartz stringers and two 6" intervals, all broken. Traces of epidote in the schist at 110 ft.
113 - 120	Gneiss.

[illegible]

[illegible]

[illegible]

[illegible]	[illegible]
0 - 8½	Sericite schist, granoblastic texture.
8½ - 40	Chlorite schist, granoblastic texture. Few veins of scheelite at 10 ft.
40 - 60	Chlorite schist. Several 2" to 6" quartz veins, and barren.
60 - 62	Quartz vein, barren.
62 - 66	Sericite schist with 6" of barren quartz.
66 - 68½	Chlorite schist.
68½ - 72	Siliceous or siliceous schist.
72 - 82	Sericite schist with garnet, fluorite, and a seam of scheelite.
82 - 94	Chlorite schist.
94 - 90	Unch[illegible].

End

[illegible]

[illegible]	[illegible]
0 - 3	Grolio
3 - 17½	Serieito schist with some fluorite.
17½ - 22	Grolio.
22 - 26	Chlorite schist.
26 - 32½	Grolio.
32½ - 35½	Chlorite schist.
35½ - 40	Grolio.

[illegible]

[illegible]

[illegible]

[illegible]	[illegible]
0 - 4[illegible]	Gneiss with stringers of quartz and hornblende.
4[illegible] - 18	Hornblende diko.
18 - 20	Sericite schist.
20 - 59	Gneiss with a 1[illegible] ft. seam of chlorite schist at 34[illegible] ft. and a quartz stringer at 38[illegible] ft.
59 - [illegible]	Gneiss.

end.

[illegible]

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	Gneiss bits & [illegible]
[illegible]	[illegible] dike with two [illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

End

[illegible]	[illegible]
0 - 5	Gaelic
5 - 10	Intelligent reader who seems familiar in the field [illegible]
10 - 50	Gaelic.

End

[illegible]

[illegible]	[illegible]
0 - [illegible]	Sericite schist, pyritic, with a few quartz stringers.
[illegible] - [illegible]	Granite.
[illegible] - 20	Sericite schist.
20 - [illegible]	Granite.
[illegible] - 26	Sericite schist. [illegible] to [illegible] and [illegible] to 23'-foot quartz [illegible] [illegible] chlorite at 22'. [illegible] to 25'-foot [illegible].
26 - 38	Gneiss with a few minor quartz stringers and zones of sericite [illegible].
38 - 60	Sericite schist. 50' to 52' is chloritic.
60 - 62½	Quartz vein with only a trace of [illegible].
62½ - 65	Chlorite schist with abundant pyrite.
65 - 69½	Granite.
69½ - 81	Sericite schist with several thin quartz veins with traces of [illegible].
81 - 107	Gneiss and granite.

[illegible]

[illegible]

[illegible]	[illegible]
[illegible]	Snow [illegible] with several minor quartz veins.
[illegible]	Columbite [illegible].
[illegible]	Dorfeldite [illegible]
[illegible]	Cont[illegible]
[illegible]	Dorfeldite [illegible] with several minor [illegible]
[illegible]	Cont[illegible] with a few minor quartz [illegible].

[illegible]

[illegible]

[illegible]	[illegible]
0 - 2	Serpentine rocks with chromite and pyrite.
2 - 4	Chloritic schist.
4 - 7	Basic.
7 - 8	Chloritic schists.
8 - 10	Mostly zone quartz, some chrome ocre.
10 - 12	Chloritic schist.
12 - 20	Gneiss with minor chloritic schists [illegible]
20 - 30	Chloritic gneiss.
30 - 34	Chloritic schist.
34 - 40	Chloritic gneiss.
40 - 48	Chloritic schist with gneissic zones and [illegible] chloritic [illegible]
48 - 52	Gneiss.
52 - 68	Chloritic schist.
68 - 100	Gneiss.

End.

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

[illegible]	[illegible]
0 - 2	[illegible] quartz, highly pyritic, and with 5% or [illegible] mineralization.
2 - 10	Sericite schist with minor quartz seen at 5 [illegible] and traces of hematite and scheelite at 6 [illegible].
10 - 20	Sericite schist borewash [illegible].
20 - 40	Chlorite schist. 30% to 35%-[illegible] quartz, also a few minor quartz seam[illegible]
40 - 47	Gneiss.
47 - 65	Chlorite schist with two minor quartz seam[illegible].
65 - 68	Sericitic schist.

End

[illegible]

[illegible]	[illegible]
[illegible] - 1	Sericite schist, graphitic.
1 - 10	Gneiss with a minor sericite seam.
10 - 17½	Sericite schist, graphitic. Minor quartz seam at [illegible] ft.
17½ - 20	Gneiss.
20 - 20½	Sericite schist.
20½ - 43	Quartz vein with fair amphibole and sphene.
	Assays: 22½ - 30' 0.03 oz.
	30' - 40' Nil
	40' - 43' 0.13 oz.
43 - 50	Chloritic schist with trace of muscovite.
50 - 55	Gneiss with a few quartz stringers and several pyritic zones. Top of Lamprophyre at 54½ ft. and a diorite stringer at [illegible] ft.
55 - 58	Chloritic schist.
58 - 97	Sericite schist.
97 - 98	Gneiss.
98 - 114	Sericite schist with a minor quartz stringer and a fairly pyritic zone.
114 - 115	Diabase dike.

End.

[illegible]	[illegible]
[illegible]	Mixed [illegible] [illegible] and [illegible].
[illegible]	[illegible].
[illegible]	[illegible] to [illegible] with a minor [illegible] [illegible].
[illegible]	[illegible] [illegible]. Very light [illegible] and [illegible] [illegible].
	[illegible]
[illegible]	[illegible].
[illegible]	[illegible].
[illegible]	[illegible] [illegible].
[illegible]	[illegible].

[illegible]

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	Sandy clay on [illegible] sand or sandstone schist.
[illegible]	Gravel.
[illegible]	Sandstone with a few minor quartz veins.

[illegible]

TUNGSTEN MINING CORPORATION
HENDERSON, N. C.

D.D. HOLE NO. [illegible] - 1990 BEARING [illegible]° E COORDINATES

PROJECT B DIP [illegible]° [illegible]

[illegible] DEPTH [illegible] [illegible]

Interval (Ft.)	Description of Core
0 - [illegible]	Gneiss. [illegible] - [illegible]-slightly sericitic with a few minor quartz veins.
	[illegible] brown garnets at 15 ft.
[illegible] - [illegible]	Gneiss also.
[illegible] - [illegible]	Gneiss with several short intervals of diorite.
[illegible] - [illegible]	Gneiss also.

End

TUNGSTEN MINING CORPORATION
DRILL HOLE No. [illegible]

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

Interval (feet)	Description of core
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

end

[illegible]

[illegible]	[illegible]
0 - 1[illegible]	[illegible]
1[illegible] - 2[illegible]	Sericite schist.
2[illegible] - 2[illegible]	Talcose schist.
2[illegible] - 2[illegible]	Quartz.
2[illegible] - 2[illegible]	Chloritic schist.
2[illegible] - 3[illegible]	Sericite schist with a quartz stringer.
3[illegible] - 3[illegible]	Quartz.
3[illegible] - 3[illegible]	Chloritic schist.
3[illegible] - 3[illegible]	[illegible].
3[illegible] - 4[illegible]	Chloritic schist with a trace of chalcopyrite.
4[illegible] - 4[illegible]	Sericite schist.
4[illegible] - 4[illegible]	Quartz with a trace of sericite.
4[illegible] - 5[illegible]	Sericite schist with a trace of [illegible].
5[illegible] - 6[illegible]	Quartz.
6[illegible] - 6[illegible]	Sericite schist.
6[illegible] - 6[illegible]	Quartz with pyrite, bar[illegible].
6[illegible] - 6[illegible]	Sericite schist with [illegible] of bare quartz.
6[illegible] - 7[illegible]	Quartz.
7[illegible] - 7[illegible]	Chloritic
7[illegible] - 7[illegible]	Quartz.
7[illegible] - 8[illegible]	Sericite schist with [illegible] bare quartz.
8[illegible] - [illegible]	Quartz.

[illegible].

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
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[illegible]	[illegible]

[illegible]	[illegible]
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[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
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[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 12

OPERATOR'S MONTHLY REPORT AND VOUCHER

of August, 1957 Docket No. DMEA 4216 Contract No. D- 1032
tor's Name Tungsten Mining Corporation Minerals Tungsten
Address Box 931, Henderson, North Carolina
tract Amount, $ 246,000.00 Government Participation: 75% Amount, $ 184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY WSM: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Dr. not timbered	$ 6055.00	$ 79905.00	$ 85960.00			
Bulldozing Dr. timbered	$ 3240.00	$ 4827.60	$ 8067.60			
Crosscutting not timbered	$ 10990.00	$ 36505.00	$ 47495.00			
Drifting XC timbered	-	$ 12182.40	$ 12182.40			
Timbering	$ 600.00	$ 3150.00	$ 3750.00			
(2) Labor and Supervision:						
Labor Core Rig	-	$ 2732.40	$ 2732.40			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	$ 66.00	$ 66.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 20885.00	$ 139368.40	$ 160,253.40	20,885.00	139,368.40	160,253.40

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I certify that the above bill is correct and just and that payment therefor has not been received.
Date Sept 6, 1957 *Payee Tungsten Mining Corporation
Per J. K. Lucas Title Vice Pres. & Gen Mgr

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 15,663.75
Signature Helen R. Muller
(Authorized Certifying Officer)
Date SEP 12 1957 Vou. No. 49
(See other side)

5,221.25

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1032 in accordance with the terms of the contract.

Signature W. L. Barmeister Title Mining Engr. Date 9/9/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date SEP 11 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1957 195____ Docket No. DMEA 4216 Contract No. E-1092

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting Dr not timbered	ft.	$6055.00	173	$85960.00	2456	$35.00		
Crosscutting Dr timbered	ft.	$3240.00	100	$ 8067.60	249	$32.40		
Raising XC not timbered	ft.	$10990.00	314	$47495.00	1357	$35.00		
Shafts XC timbered	ft.	-	-	$12182.40	376	$32.40		
Winzes								
Drilling: Core	ft.	-	-	$ 2732.40	1656	$ 1.65		
Churn								
Auger								
Stripping Sampling	ea.	-	-	$ 66.00	22	$ 3.00		
Trenching								
Test Pits								
Roads and Trails								
Timbering	ft.	$ 600.00	100	$ 3750.00	625	$ 6.00		
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$20885.00		$160059.40				

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The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

REMARKS:

Date September 6, 1957 Operator Tungsten Mining Corporation

Per J. R. Sweet Title Vice Pres. & Gen Mgr.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

W. H. Burmeister 9/9/57

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of August 1957 | DMEA No. 4216 | Contract No. 1032

Project A

	Feet, This Month	Feet, Previous	Feet, To Date
Crosscutting @ $35.00	0	101	101
Crosscutting, timbered @ $32.40	0	113	113
Drifting @ $35.00	32	811	843
Drifting, timbered @ $32.40	85	70	155
Timbering	85	183	268
Diamond Drilling	0	669	669
Number of Assays	0	5	5

All of this month's advance was on the same strong shear, striking about N 30 E. As was the case last month, the shear is about drift wide and there is gouge on both walls. No sizeable lenses of quartz were encountered. There is only one place, near the face, where any diverging structure may be present.

The advance for the month was 117 ft.

During the month it was necessary to install 85 lineal feet of timber, in an area where continual sloughing of the back made timbering necessary.

Also, during the month, room was excavated for a car transfer.

No ore was produced from this Project in August.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of August 1957 DMEA No. 4216 Contract No. 1032

Project B

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	141	740	881
Drifting, timbered @ $32.40	15	20	35
Crosscutting @ $35.00	0	184	184
Timbering	15	20	35
Diamond Drilling	0	500	500
Number of Assays	0	17	17

The drift to the west which had been started at the end of July was advanced about 27 ft. encountering a vein which was about 3 ft. wide on the north side of the drift, but pinched rapidly on the south side of the drift. This vein is fairly well mineralized, estimated to assay 0.40% WO_3.

The drift was then turned on this structure and has been advanced 129 ft. The vein pinched rapidly but the structure continues fairly strong with quartz in varying widths from 1 to 3 ft. No mineralization is present in the structure which consists of lamprophyre, and quartz.

During the month it was necessary to install 4 sets of timber covering 15 lineal feet, in an area where continued sloughing of gouge loosened up the back.

During the month 3 tons of ore were hand sorted from muck remaining in the area in the vicinity of survey station 1440. This ore is estimated to assay 0.75% WO_3 which is the same as the assay for grab samples of 264 tons extracted in July.

Total advance was 156 ft. for the month of August.

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EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of August 1957 | DMEA No. 4216 | Contract No. 1032

Project C

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	0	732	732
Drifting, timbered @ $32.40	0	59	59
Crosscutting @ $35.00	142	69	211
Timbering	0	59	59
Diamond Drilling	0	487	487
Number of Assays	0	0	0

There was 4 ft. of crosscutting advance in the short crosscut northwest of survey station TP 12, to prospect for the structure. No new structures were encountered. The remaining 138 ft. of advance was on D. D. Hole U 1292. This advance encountered only one structure which has the strike and dip expected of the structure which left the drift near survey station 1421. This structure consists of about 3 inches of quartz and correlates fairly well with a tight structure exposed in the short crosscut northwest of TP 12.

Plans are to drift to the northeast on this structure, identified as "A" on the accompanying sketch.

Total advance for the month was 142 ft.

No timber was placed during the month and no ore was produced.

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EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of August 1957 | DMEA No. 4216 | Contract No. 1032

Project D

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting	0	0	0
Crosscutting @ $35.00	172	689	861
Crosscutting, timbered @ $32.40	0	263	263
Timbering	0	263	263
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Crosscutting was continued in Project D on the original course and accounted for 172 ft. of advance.

This advance was all in chloritic rock and numerous narrow quartz veins were encountered. Three rather lively structures were intersected. Those marked "A" and "B" on the accompanying sketch appear to be the most promising encountered to date in this Project. Both show the presence of the right type of vein quartz, gouge, and brecciation. The presence of considerable silicification on the footwall of "A" is also noteworthy. All are but a few inches wide.

During the month, a car turnout was excavated in the Project.

No timber was placed and no ore production came from Project D. during the month.

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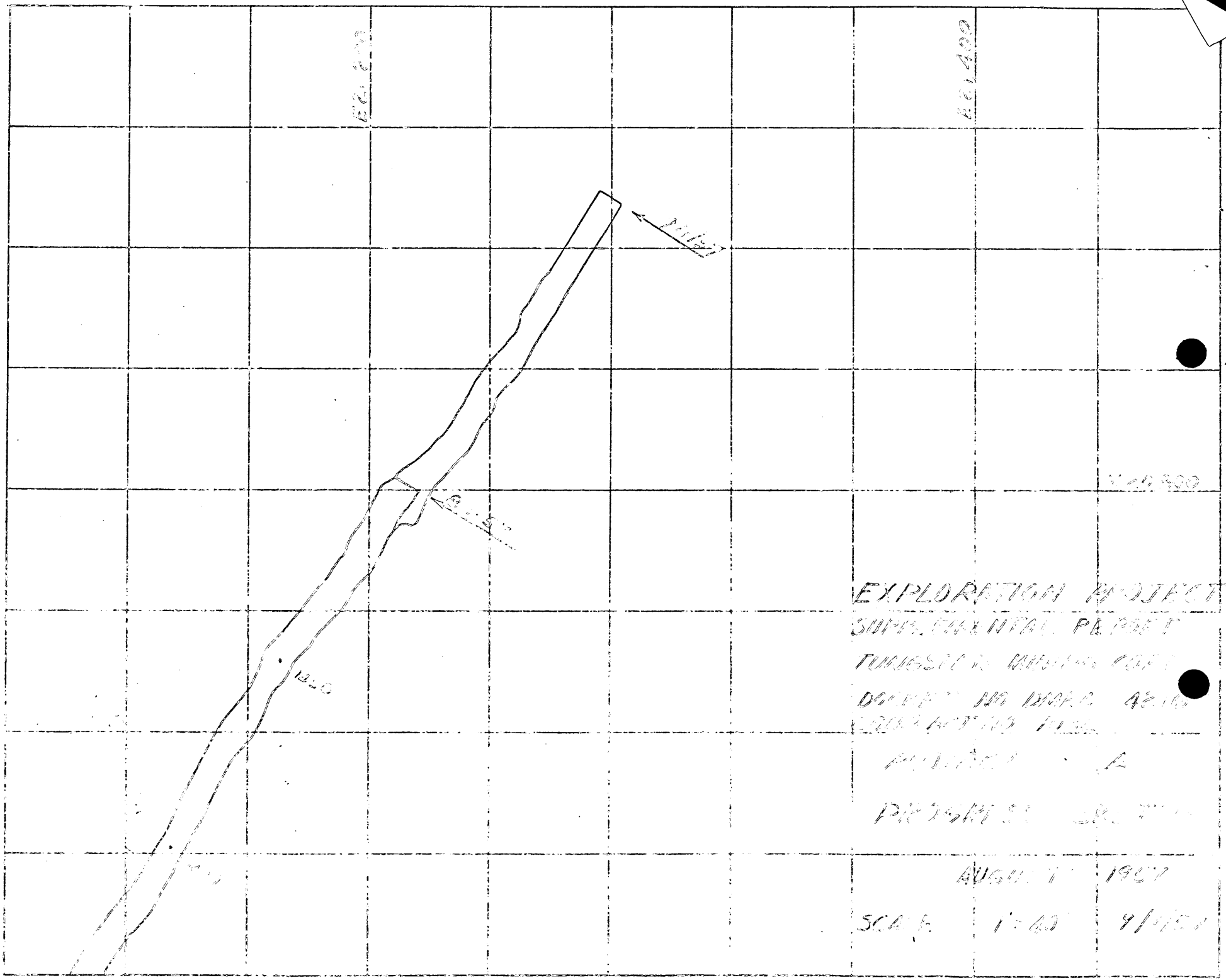
DATE	INITIALS	CODE

EXPLORATION PROJECT
PROJECT A
GEOLOGICAL STUDY
SCALE 1:40'

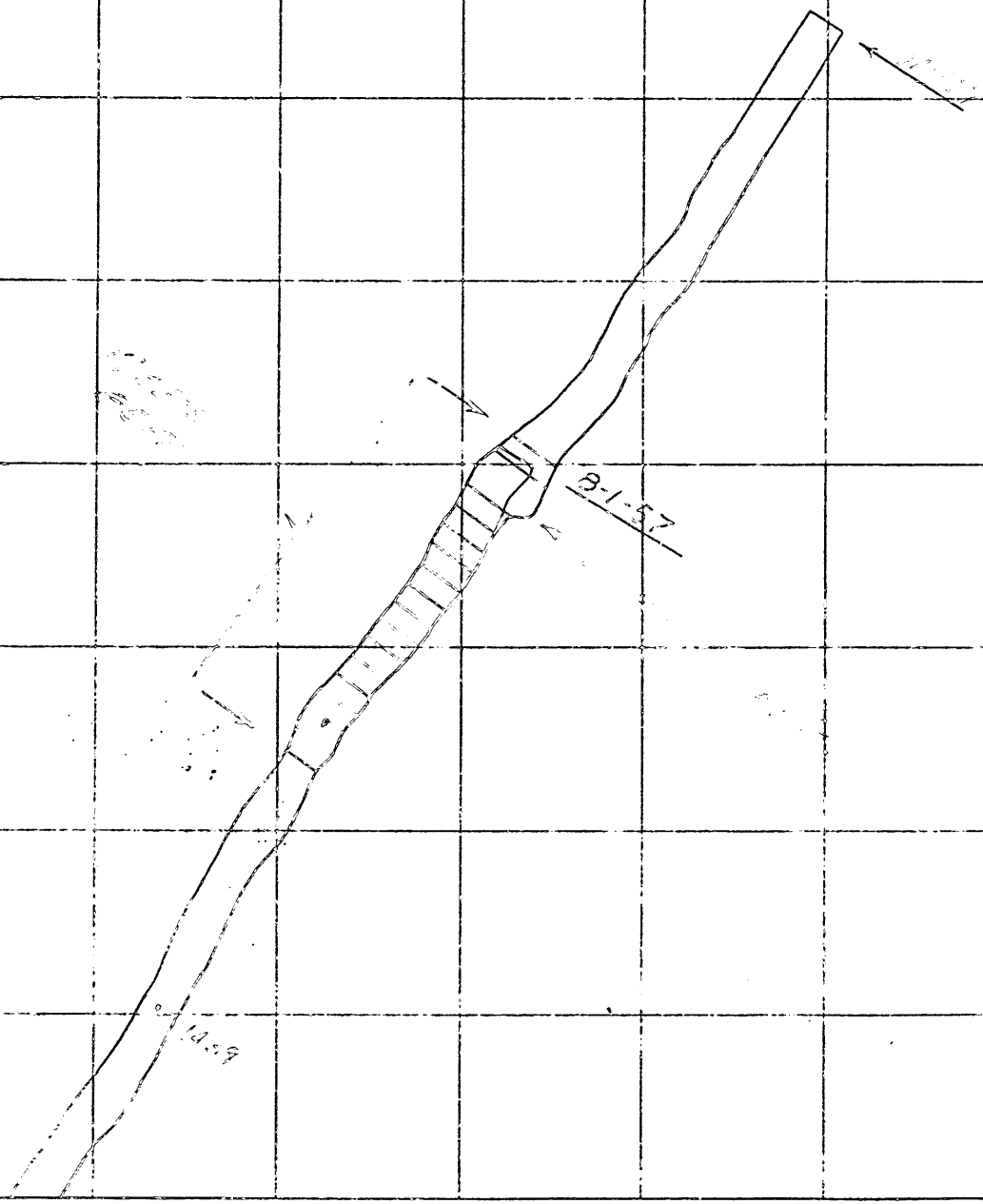
EXTRA COPY
D M E A
RECEIVED SEP 16 1957

DATE	INITIALS	CODE


EXPLORATION PROJECT
AUGUST 1967
SCALE 1" = 40'

EXTRA COPY,
D M E A
RECEIVED SEP 16 1957

DATE	INITIALS	CODE



EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. OMLA 42.10
SUBPART NO. 1630

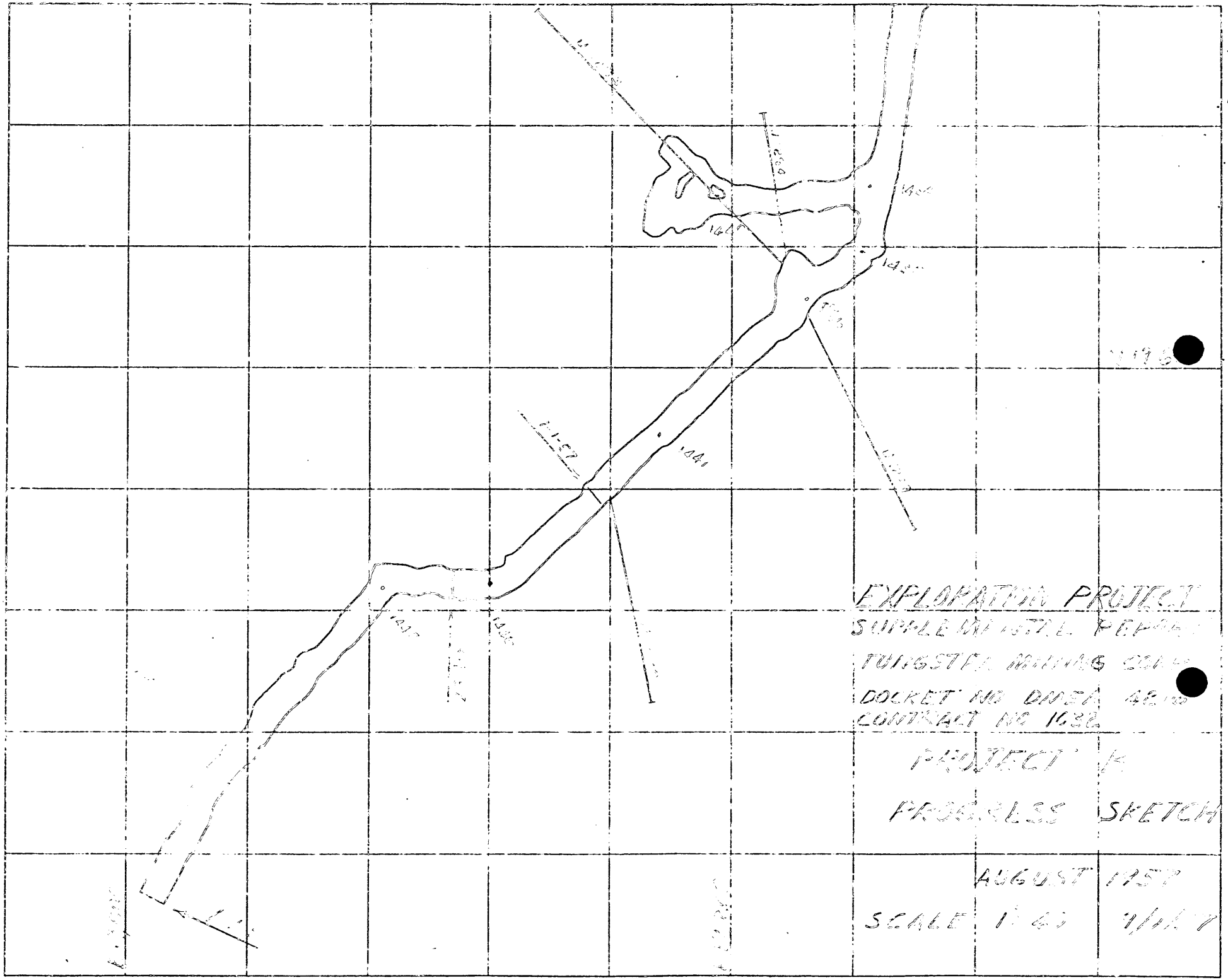
PROJECT A

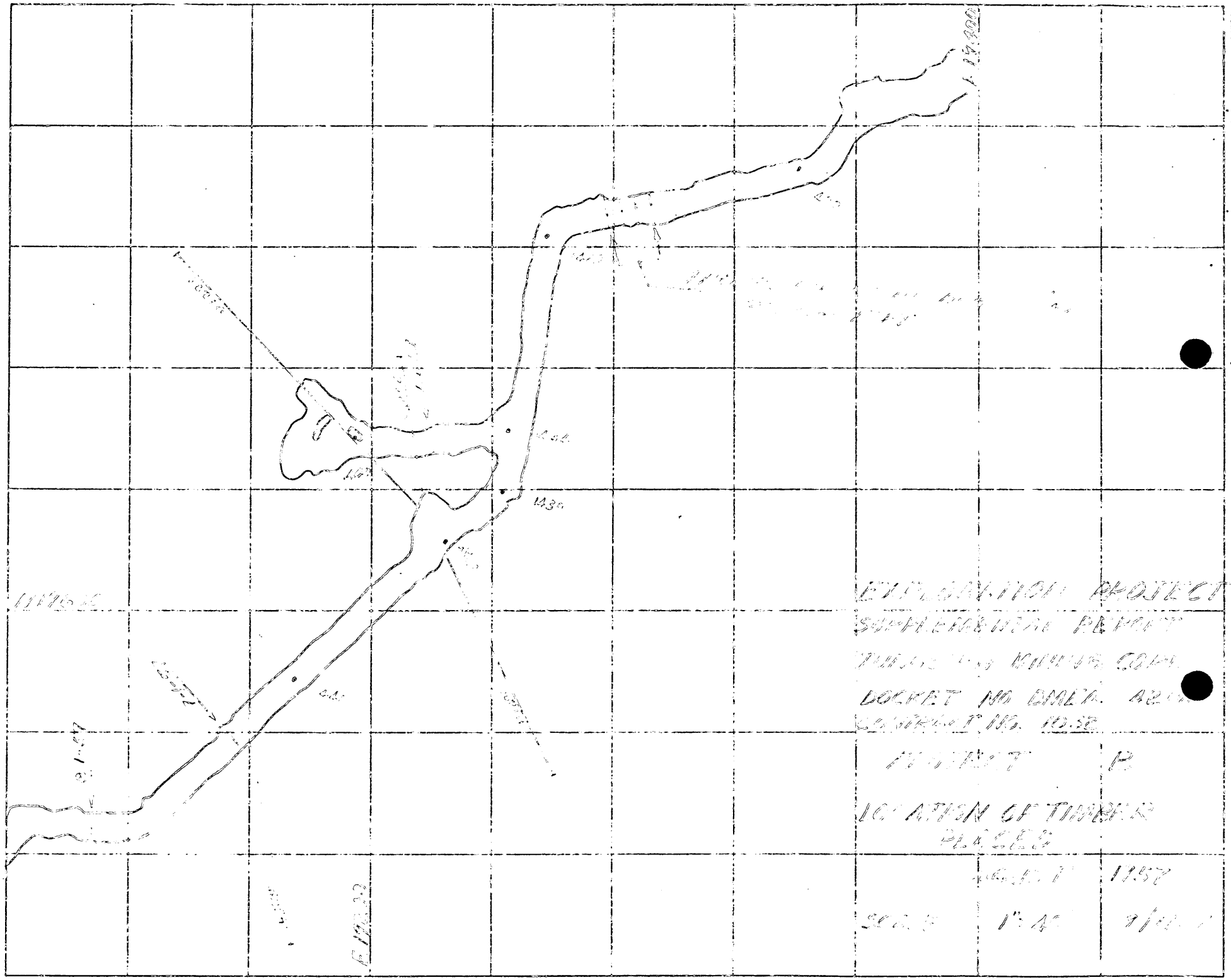
LOCATION OF TIMBER PLACED

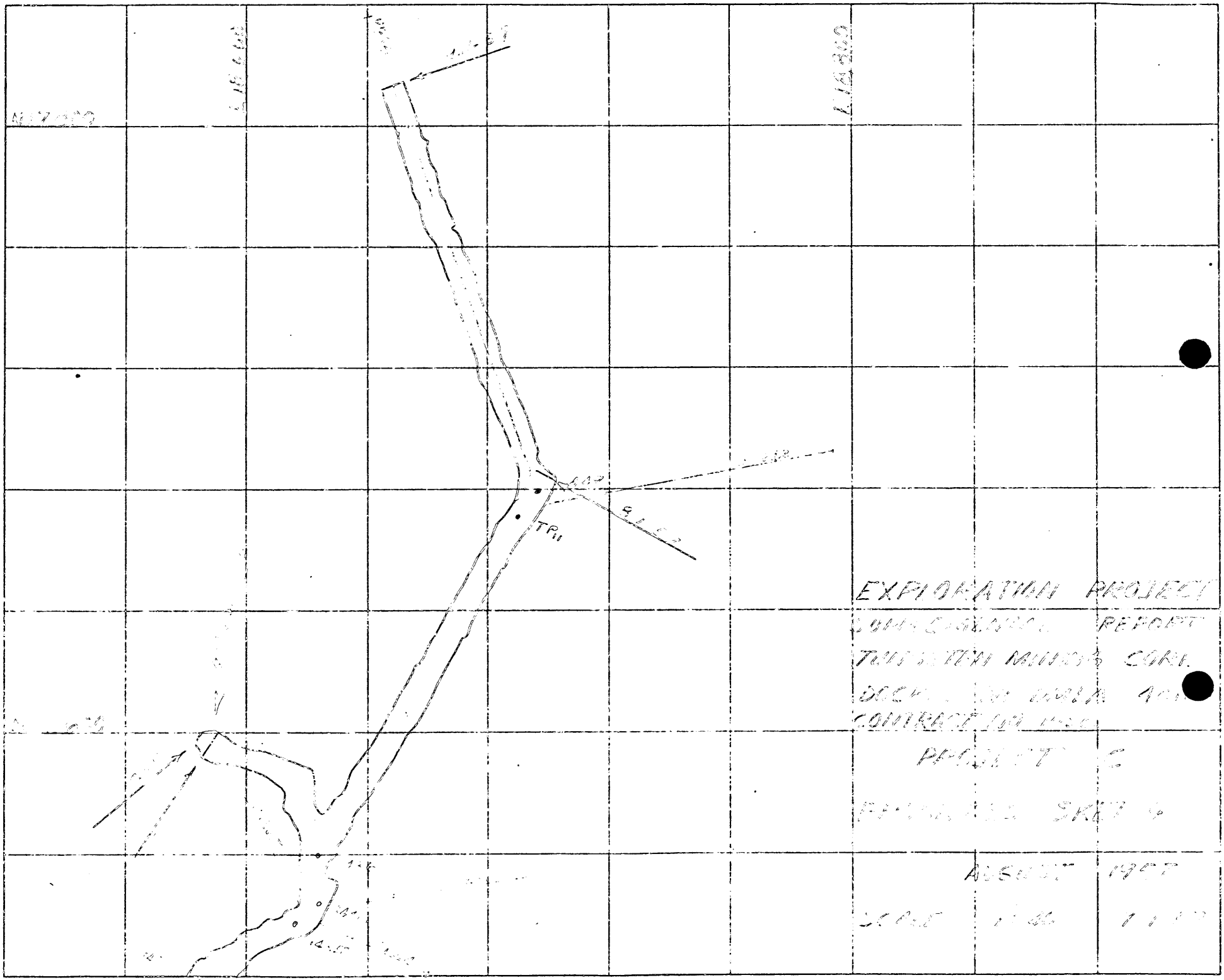
AUGUST 1981

SCALE 1 = 200' 3/1981

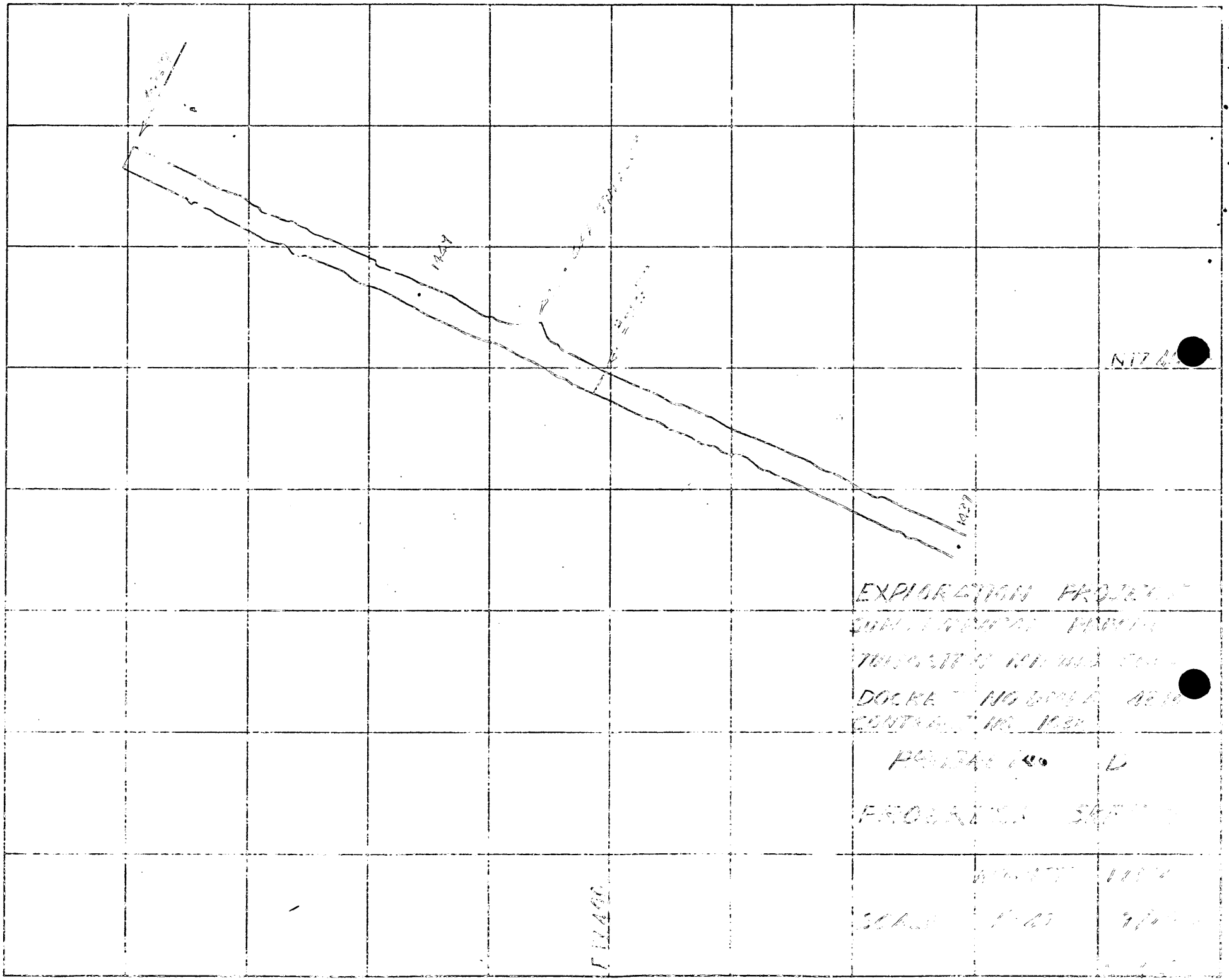
K+E ALDANENE. 100M TRACING PAPER 14934


EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMSA 48-10
CONTRACT NO. 1632
PROJECT K
PROGRESS SKETCH
AUGUST 1957
SCALE 1" = 40'


EXPLORATION PROJECT
SUPPLEMENTAL REPORT
DOCKET NO. DMEA
LOCATION OF TIMBER
PLACED
1957



ALBANENE 100M 14004 TRACING PAPER


EXPLORATION PROJECT
DOCKET NO
PROJECT NO
PROJECT STAFF
VILLAGE
ALBANENE 100M
TRACING PAPER

RECEIVED
AUG 22 1957
D.M.E.A.

DM MF-K (April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 7

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1957 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

Contract Amount, $ 246,660.00 Government Participation: 75 % Amount, $ 184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY WSM: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Dr.not timbered	$13510.00	$66395.00	$79905.00			
Bulldozing Dr.timbered	$ 648.00	$ 4179.60	$ 4827.60			
Crosscutting XC.not timbered	$ 7420.00	$29085.00	$36505.00			
Drifting XC.timbered	$ -	$12182.40	$12182.40			
Timbering	$ 120.00	$ 3030.00	$ 3150.00			
(2) Labor and Supervision:						
Labor Core Drlg	$ 669.90	$ 2062.50	$ 2732.40			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	$ 33.00	$ 33.00	$ 66.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$22400.90	$116967.50	$139368.40	22400.90	116967.50	139368.40

I certify that the above bill is correct and just and that payment therefor has not been received.

Date August 6, 1957 Payee Tungsten Mining Corporation

Per J. R. Lucas Title Vice Pres. & Gen. Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 16800.67

Signature Helen R. Miller
(Authorized Certifying Officer)

Date AUG 20 1957 Vou. No. 33

(See other side)

560023

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1032 in accordance with the terms of the contract.

Signature [illegible] Title Mining Eng'r. Date 8/9/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date AUG 15 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1957 Docket No. DMEA 4216 Contract No. E-1032
Operator's Name Tungsten Mining Corporation Minerals Tungsten
Address Box 931, Henderson, North Carolina

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting Dr not timb	ft.	$13510.00	386	$79905.00	2283	$35.00		
Crosscutting Dr timbered	ft.	$ 648.00	20	$ 4827.60	149	$32.40		
Raising XC not timb	ft.	$ 7420.00	212	$36505.00	1043	$35.00		
Shafts XC timbered	ft.	-	-	$12182.40	376	$32.40		
Winzes								
Drilling: Core	ft.	$ 669.90	406	$ 2732.40	1656	$ 1.65		
Churn								
Auger								
Stripping Sampling	ea.	$ 33.00	11	$ 66.00	22	$ 3.00		
Trenching								
Test Pits								
Roads and Trails								
Timbering	ft.	$ 120.00	20	$ 3150.00	525	$ 6.00		
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		$22400.90		$139368.40				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date August 6, 1957 Operator Tungsten Mining Corporation

Per J. R. [illegible] Title Vice-Pres & Gen Mgr.

Remarks:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

W. L. Burmeister 8/9/57

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of July 1957 DMEA No. 4216 Contract No. 1032

PROJECT A

	Feet, This Month	Feet, Previous	Feet, To Date
Crosscutting @ $35.00	0	101	101
Crosscutting, timbered @ $32.40	0	113	113
Drifting @ $35.00	177	634	811
Drifting, timbered @ $32.40	0	70	70
Timbering	0	183	183
Diamond Drilling	0	669	669
Number of Assays	2	3	5

All of this month's advance was on a strong shear striking about N 30 E. The structure averages about drift wide and there is gouge on both walls. Two narrow short lenses of quartz were encountered. Mineralization was nil.

In view of the strong structure being followed, it was not deemed necessary to test the walls, especially since there are no structures diverging from the drift.

Advance was 177 ft. of drifting.

No timber was installed and no ore was produced during the month.

Two samples were taken in Project A in the vicinity of station 1427 at request of DMEA, although this particular lens is not deemed mineable. A separate sheet shows the location and results of these samples.

Where is it? See Assay Plan for May 1957" attached.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

DMEA No. 4216 Contract No. 103

Month of July

PROJECT B

	Feet, This Month	Feet, Previous	Feet, To Date
5.00	120	620	740
bered @ $32.40	20	0	20
Drift @ $35.00	0	184	184
Drift	20	0	20
Crilling	149	351	500
Assays	9	8	17

n Project B, the drift to the west from Survey Station 1434 was continued dvanced 49 ft. in ore from 2 ft. to about 5 ft. in width. At a point about t. west of station 1434 a strong structure cut the ore off. This advance ounted for 49 ft. of advance. Since at this point there was still good ore both sides of the drift, one round was taken to the northeast and one round the southwest accounting for 5 ft. and 6 ft. of advance respectively. The nly unexplored ore at that time was on the north side of the drift about 53 ft. ahead of Station 1434 where drill hole U 1283 indicated more ore to the north. A drift was started on this ore and accounted for 22 ft. of additional advance, mostly in ore.

A total of nine samples was taken in this ore. Based on the true thickness of the vein, these samples averaged 0.46% WO_3. Although the vertical continuity of this ore is quite uncertain, it is felt that this area is of mineable size and grade.

Having fully explored the ore in this section, the main drift southwest of station 1441 was again advanced and this advance amounted to 58 ft. A diabase dike was encountered, being about 20 ft. in width. The drift was then turned on a bearing of due west in the hopes of encountering No. 3 Vein structure which probably lies northwest of the drift in which stations 1430 and 1441 are located. Following the normal pattern, No. 3 vein should be on the far side of the dike somewhat northwest of its position on the near side of the dike.

Two diamond-drill holes were drilled in Project B during the month on the hanging wall side to determine if No. 3 Vein was in this side of the drift. Neither hole encountered any structure which could be identified as No. 3 Vein. These holes are U 1289, on a bearing of S 26½ E., to a depth of 80 ft. and at coordinates N 19618, E 19225, and hole U 1290 on a bearing of S 11½ E. to a depth of 69 ft. and at coordinates N 19558, E 19160.

During the month 264 tons of ore were produced from Project B. Grab samples of this ore assayed 0.75% WO_3.

During the month 5 sets of timber covering 20 ft. were installed.

Total advance for the month was 140 ft. of drifting.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of July 1957 DMEA No. 4216 Contract No. 1032

PROJECT C

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	89	643	732
Drifting, timbered @ $32.40	0	59	59
Crosscutting @ $35.00	26	43	69
Timbering	0	59	59
Diamond Drilling	257	230	487
Number of Assays	0	0	0

Drifting was continued on a bearing of about N 30 E on the average strike of the vein accounting for 89 ft. of advance. However, the tight shear being followed pinched out and although several other shears were encountered, none tied in well with the expected strike and dip of the vein. Two drill holes were then drilled to check both walls. Numerous shears were indicated in both holes, but no ore was located.

At this point it was deemed advisable to drive a short crosscut to cut any structure which Drill Hole U 1265 failed to show up. This was done with government approval. The advance amounted to 26 ft. No definite structure correlating with the structure apparently leaving the drift near survey point 1421 was located.

Since the structure should lie northwest of the main drift, plans are to crosscut on hole U 1292 to prospect the various indicated structures.

Total advance for the month was 89 ft. of drifting and 26 ft. of crosscutting.

Drill hole U 1292 is on a bearing of N 19½ W to a depth of 160 ft. at coordinate N 17686, E 18694. Drill hole U 1293 is on a bearing of N 79½ E to a depth of 97 ft., at coordinates N 17675, E 18698.

No timber was placed during the month, and no ore production came from this Project during July.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of July 1957 DMEA No. 4216 Contract No. 1032

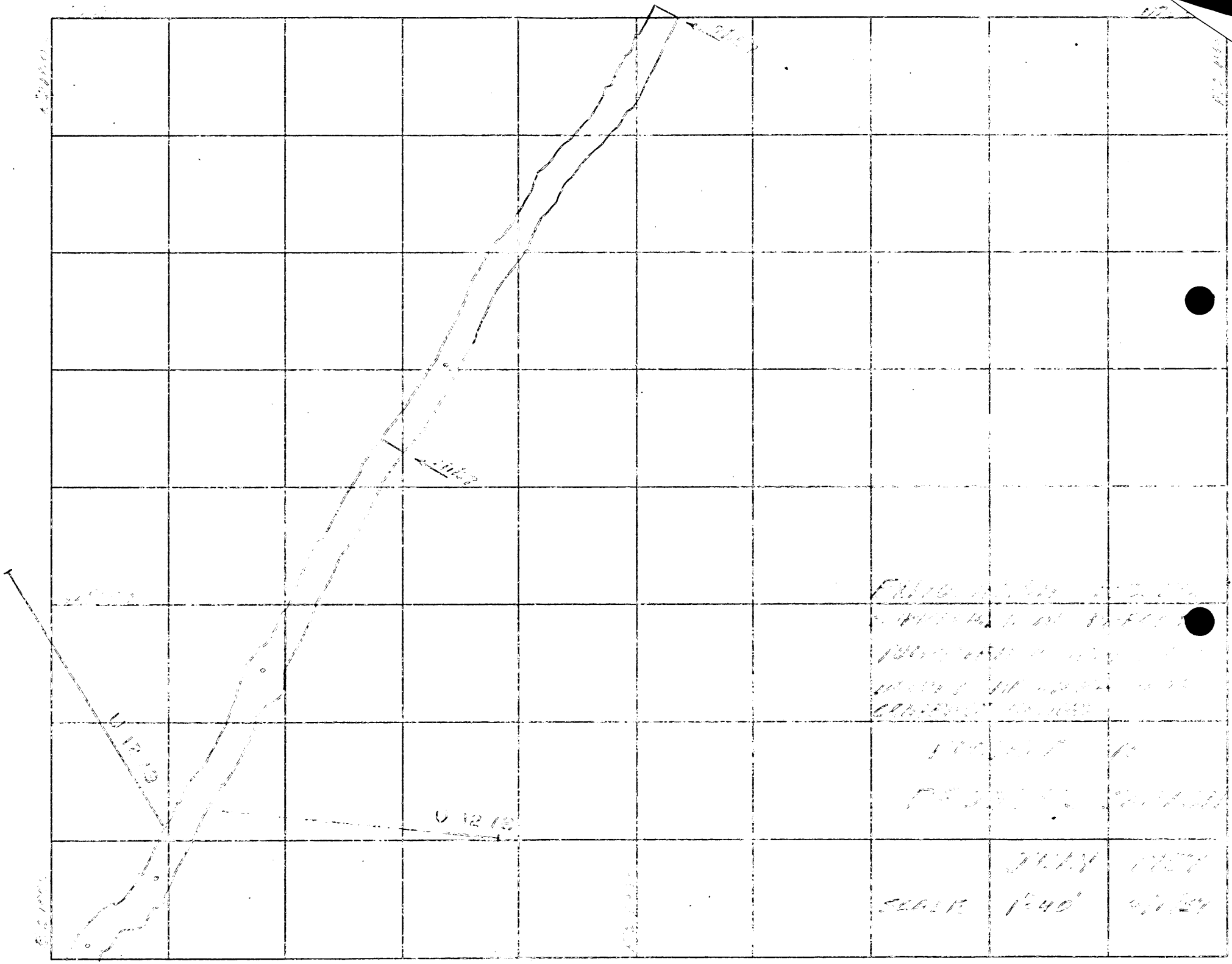
PROJECT D

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting	0	0	0
Crosscutting @ $35.00	186	503	689
Crosscutting, timbered, @ $32.40	0	263	263
Timbering	0	263	263
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Crosscutting was continued in Project D on the original course and accounted for 186 ft. of advance.

The advance was in chloritic rock. Several quartz veins were cut, usually quite narrow and all barren; however, their presence is encouraging.

No timber was placed during the month, and no ore production came from this Project.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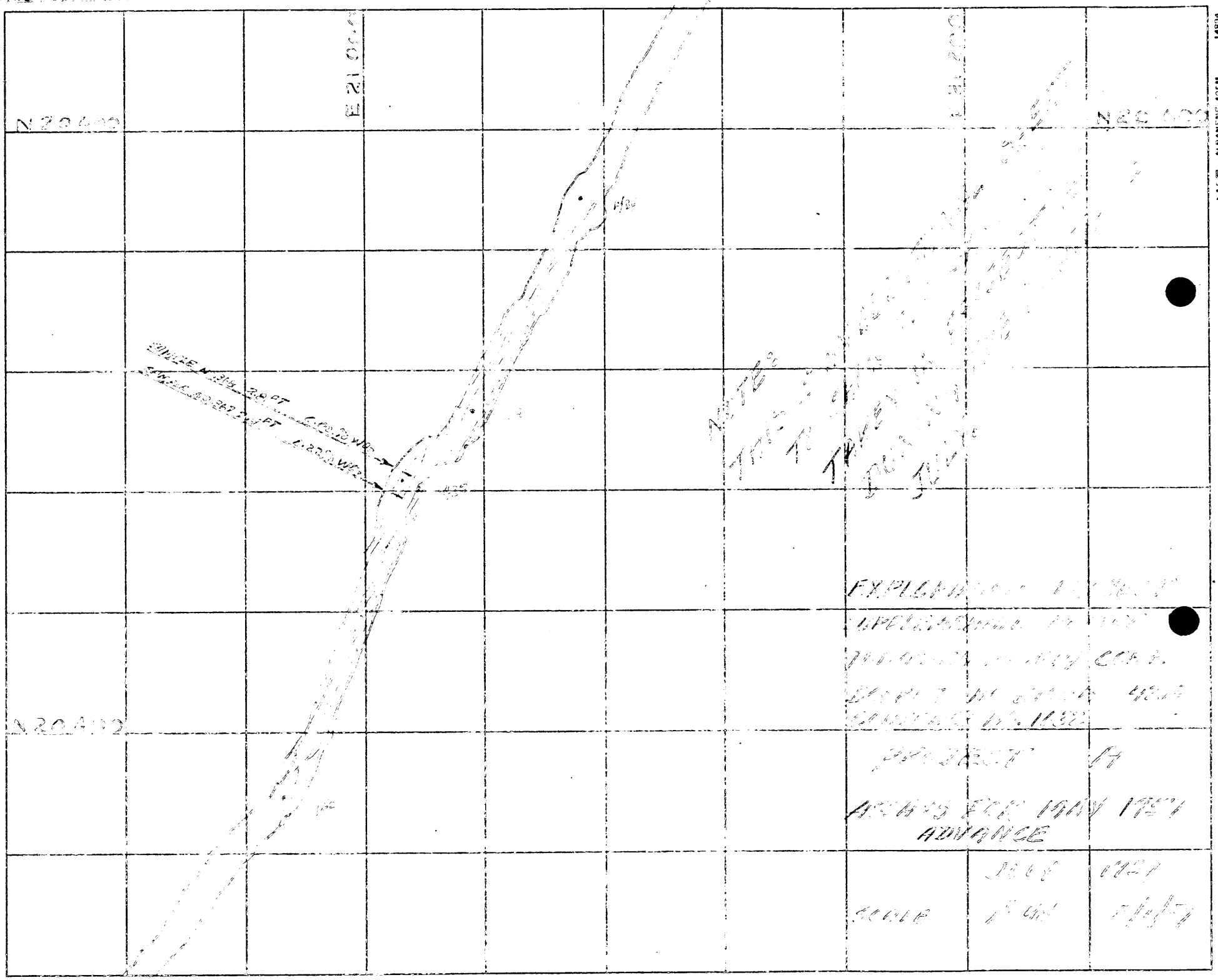
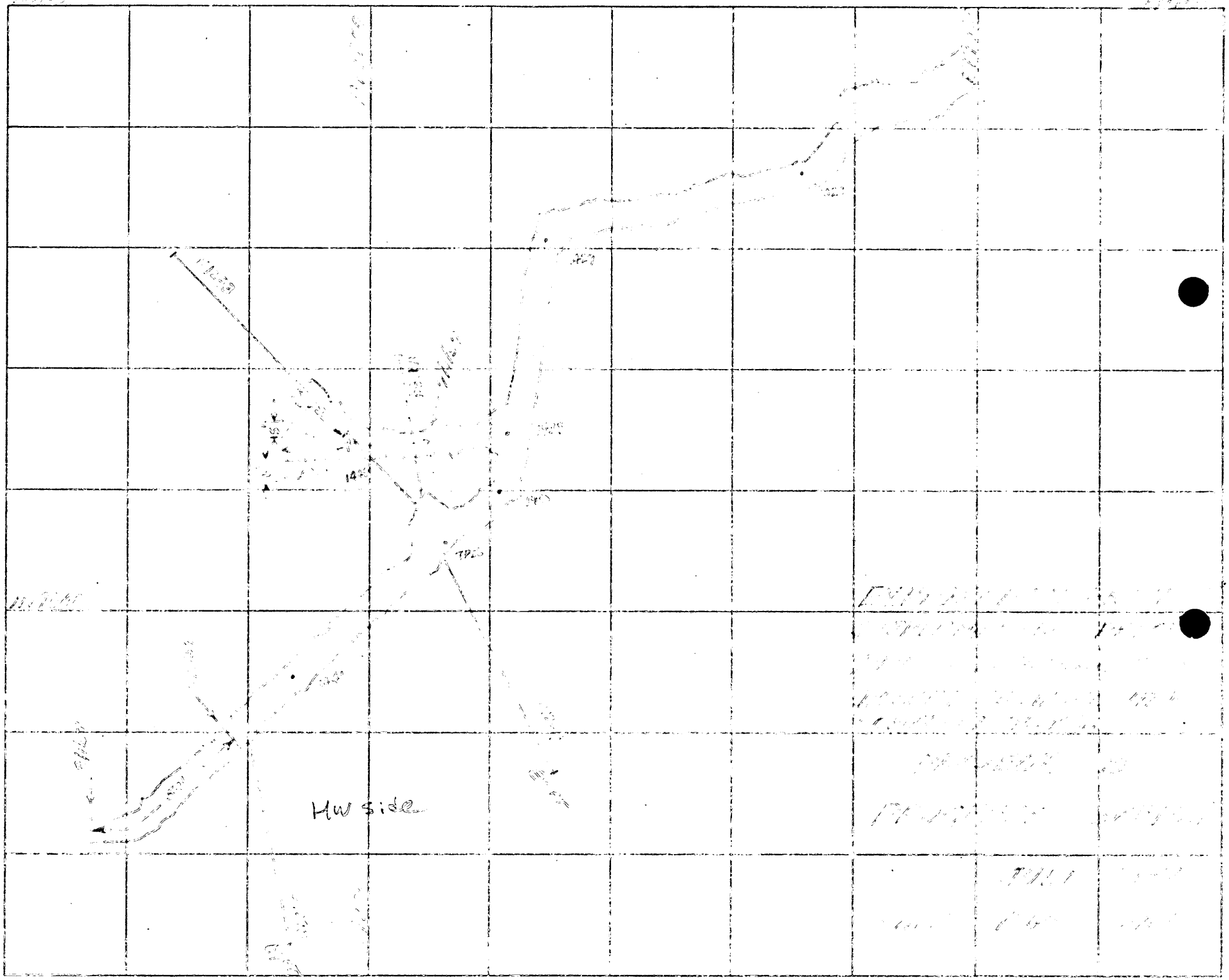
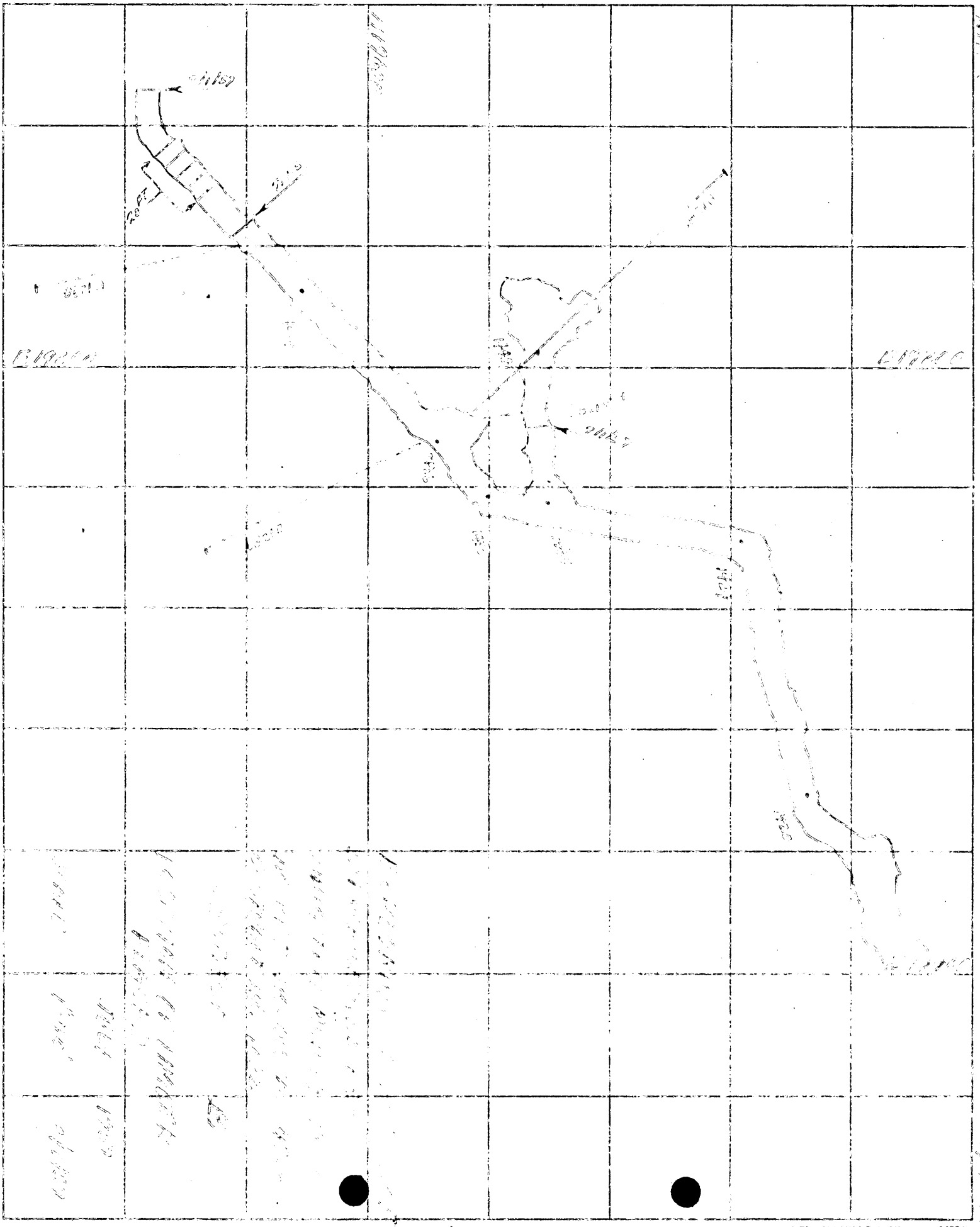


K+E ALBANENE 105M 14894 TRACING PAPER



K+E ALDANENE 1980 ® TRACING PAPER



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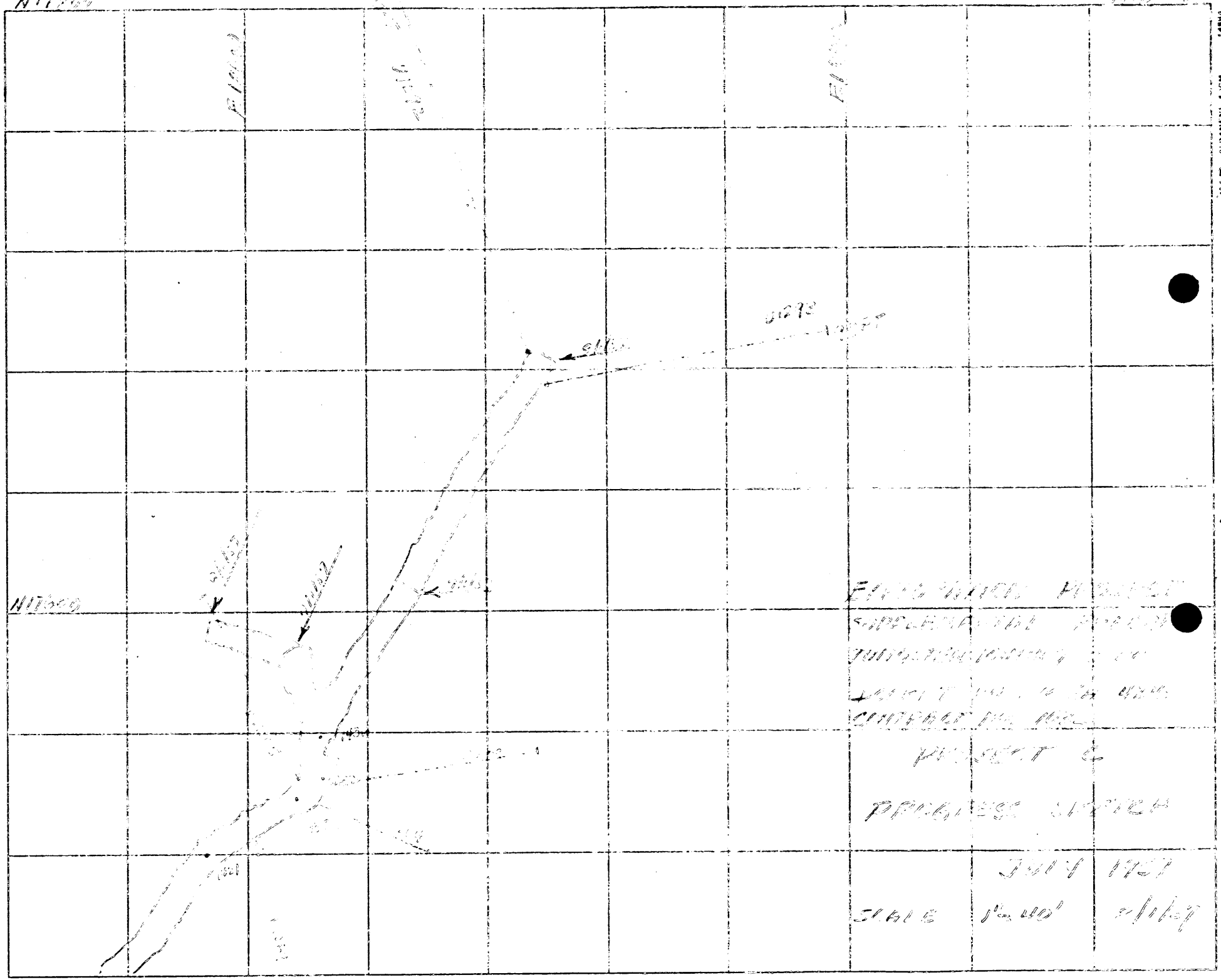
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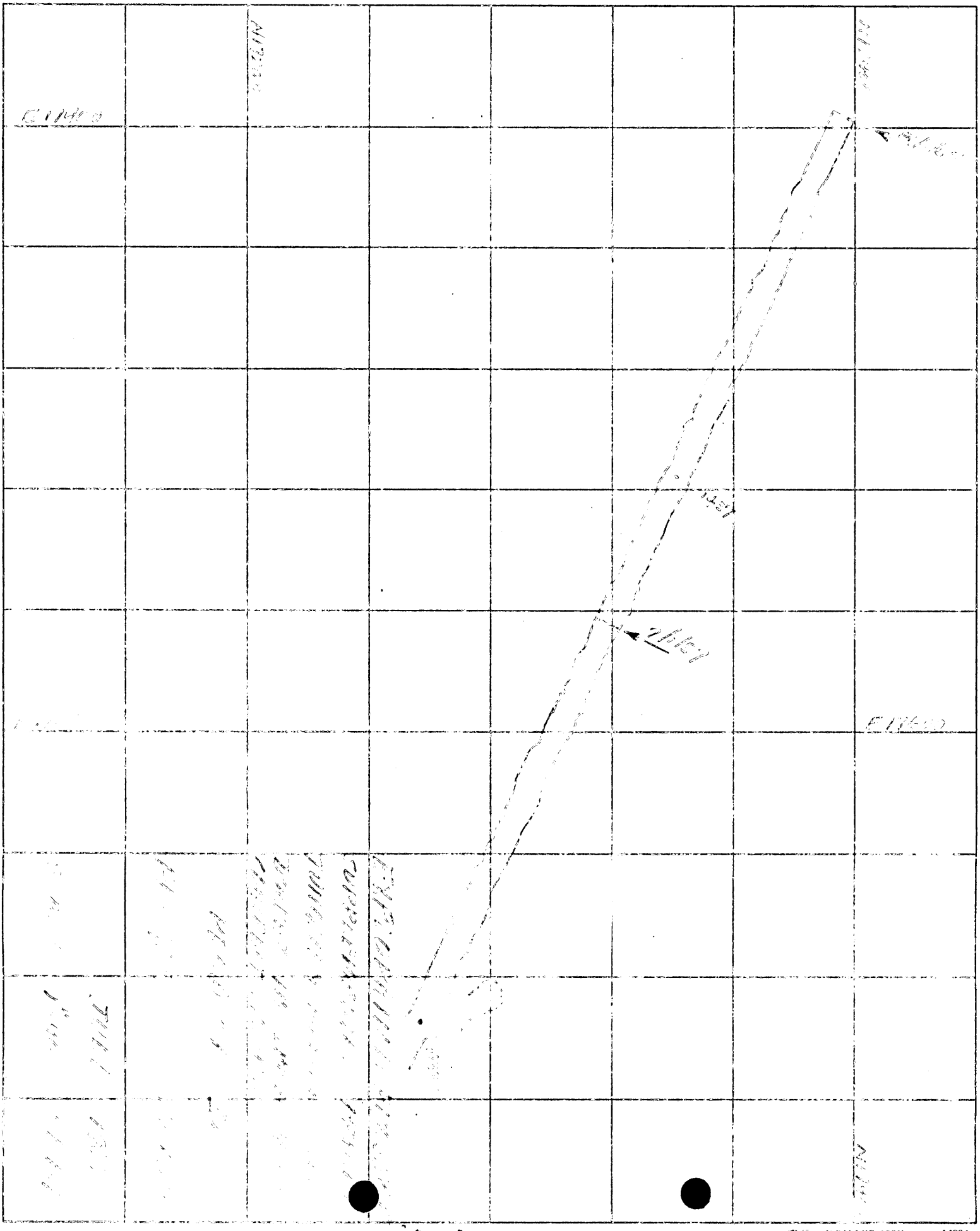

K+E A MILLIMETER 195M 14984
PAPER

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-, 2

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1957 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

Contract Amount, $ 246,660.00 Government Participation: 75 % Amount, $ 184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY WSM: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Dr. not timb.	$ 5950.00	$ 60445.00	$ 66395.00			
Bulldozing Dr timbered.	$ -	$ 4179.60	$ 4179.60			
Crosscutting XC not timb.	$ 3500.00	$ 25585.00	$ 29085.00			
Drifting XC timbered.	$ -	$ 12182.40	$ 12182.40			
Timbering	$ -	$ 3030.00	$ 3030.00			
(2) Labor and Supervision:						
Labor Core drilling	$ 267.30	$ 1795.20	$ 2062.50			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	$ 12.00	$ 21.00	$ 33.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 9729.30	$ 107238.20	$ 116967.50	9729.30	107,238.20	116,967.50

RECEIVED JUL 15 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.

Date July 3, 1957 *Payee Tungsten Mining Corporation

Per J. R. Lucas Title Vice Pres. & Gen Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 7296.98

Signature Helen R. Mullis (Authorized Certifying Officer)

Date JUL 12 1957 Vou. No. 5

(See other side)

2432.32

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1032 in accordance with the terms of the contract.

Signature [illegible] Title Mining Engr. Date 7/5/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature [illegible] Title EXECUTIVE OFFICER DMEA FIELD TEAM REGION V Date JUL 10 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1957 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting Dr. not timb.	ft.	$ 5950.00	170	$ 56395.00	1897	$ 35.00		
Crosscutting timbered.	ft.	$ -	-	$ 4179.60	129	$ 32.40		
Raising XC not timb.	ft.	$ 3500.00	100	$ 29085.00	831	$ 35.00		
Shafts XC timbered	ft.	$ -	-	$ 12182.40	376	$ 32.40		
Winzes								
Drilling: Core	ft.	$ 267.30	162	$ 2062.50	1250	$ 1.65		
Churn								
Auger								
Stripping Sampling	ea.	$ 12.00	4	$ 33.00	11	$ 3.00		
Trenching								
Test Pits								
Roads and Trails								
Timbering	ft.	$ -	-	$ 3030.00	505	$ 6.00		
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		$ 9729.30		$ 116967.50				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

REMARKS:

Date July 3, 1957 Operator Tungsten Mining Corporation

Per J. R. Scott Title Vice-Pres & Gen Mgr.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

W. A. Burmeister 7/5/57

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INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of June 1957 DMEA No. 4216 Contract No. 1032

Project A

	Feet, This Month	Feet, Previous	Feet, To-Date
Crosscutting @ $35.00	0	101	101
Crosscutting, timbered @ $32.40	0	113	113
Drifting @ $35.00	85	549	634
Drifting, timbered @ $32.40	0	70	70
Timbering	0	183	183
Diamond Drilling	0	669	669
Number of Assays	0	3	3

All of this month's advance was on a distinct shear striking about N 30 E. The Shear consists of gouge from 1 to 2 ft. wide. Occasional narrow seams of quartz are present, usually less than 6 inches wide, with traces of mineralization.

The drifting advance was 85 ft. for the month.

No timber was installed during the month and no ore was produced.

No work was performed during the last two weeks of June, due to the plant vacation period.

Room for a car transfer was slabbed out during the month.

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DATE MONTHS TO CODE

Exploration Project - Supplemental Report

Month of June 1957 DMEA No. 4216 Contract No. 1032

Project B

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	42	578	620
Crosscutting @ $35.00	0	184	184
Timbering	0	0	0
Diamond Drilling	162	189	351
Number of Assays	4	4	8

The drift on a bearing of about S 44 W was continued for 17 ft. This advance was granite with no semblance of any structure correlating with No. 3 Vein.

In the meantime drilling was being performed in the footwall side. One drill hole encountered 25½ ft. of vein, some of which was good ore; another hole drilled to the north encountered 3 ft. of vein, lightly mineralized. These intersections seemed to correlate well with the narrow vein encountered at a point 21 ft. north of survey station 1430.

Based upon these drilling results, and the lack of any structure in the southwest heading, a new drift was started toward these two drill intersections at a point about 21 ft. north of station 1430.

This drift has advanced 25 ft., on the vein which averages about 3 ft. wide and has erratic mineralization. The strike is somewhat more westerly than it was in the crosscut and the dip also varies considerably from 65 degrees to about 50 degrees to the south.

Drill hole U 1283, 115 ft. deep, was started at a point with coordinates N 19636, E 19215 and drilled on a bearing of N. 44 W.

Assays as follows:

22½' - 30' - 0.36% WO_3
30' - 40' - Nil
40' - 48' - 0.75% WO_3

Average 25.5 Ft. @ 0.34% WO_3

Drill hole U 1284, 47 ft. deep was started at a point with coordinates N 19638, E 19217 and drilled on a bearing of N 9½ W.

Assay:

17' - 20' - 0.02% WO_3

Further drilling is planned to test the hanging wall area for possible structure on which drifting can be maintained to the southwest.

No timber was placed during the month and no ore was produced.

No work was performed during the last two weeks of June due to the plant vacation period.

Exploration Project - Supplemental Report

Month of June 1957 DMEA No. 4216 Contract No. 1032

Project C

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	43	600	643
Drifting, timbered @ $32.40	0	59	59
Crosscutting @ $35.00	0	43	43
Timbering	0	59	59
Diamond Drilling	0	230	230
Number of Assays	0	0	0

The drift started in May was continued and advanced 43 ft. Some structure is present in this drift, striking about N 30 E and dipping about 75 degrees to the south east. However, this structure is very tight and does not appear to be very promising. No mineralization is present.

No timber was placed during the month, and no ore was produced.

No work was performed during the last two weeks of June due to the plant vacation period.

Exploration Project - Supplemental Report

Month of June 1957 DMEA No. 4216 Contract No. 1032

Project D

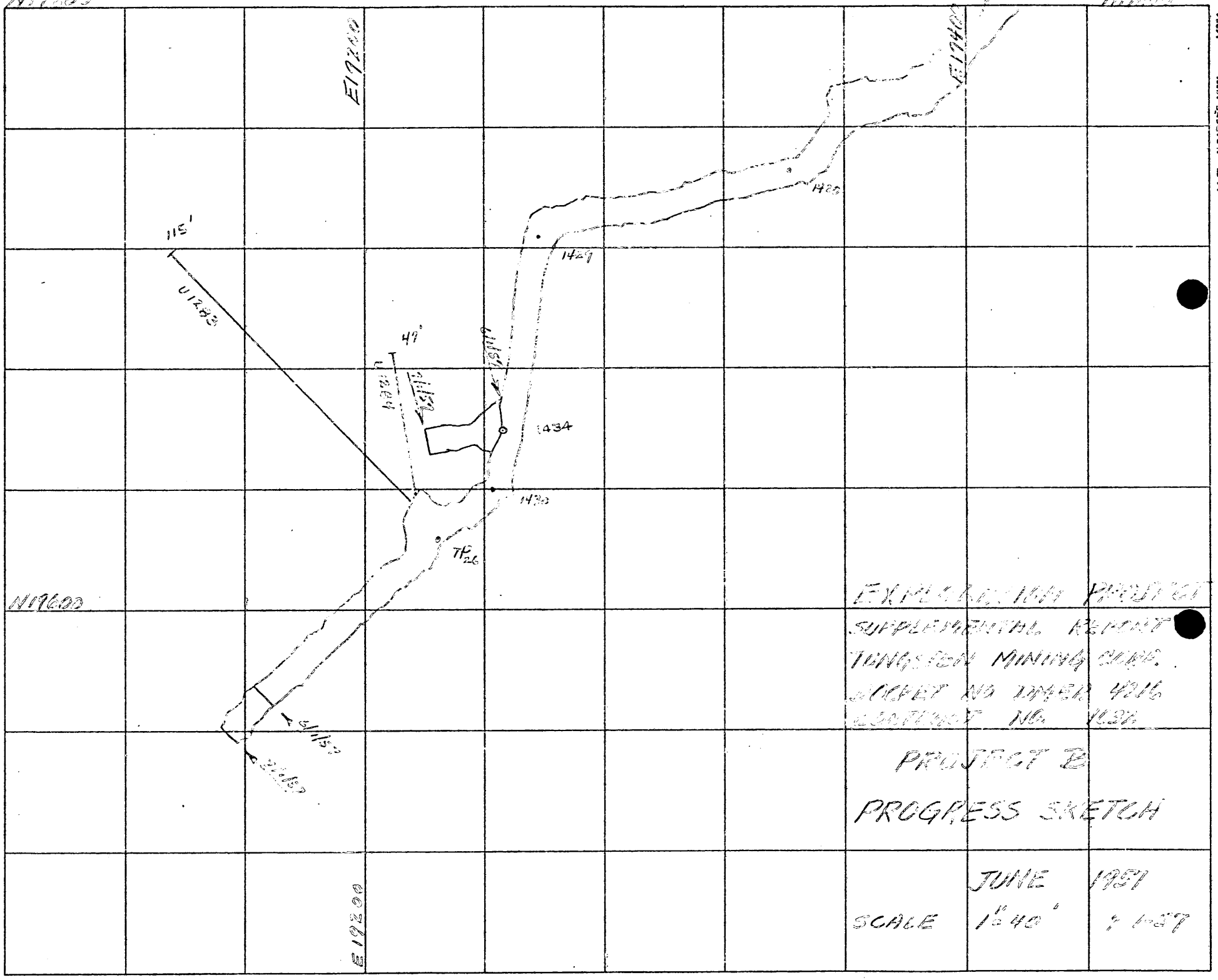
	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting	0	0	0
Crosscutting @ $35.00	100	403	503
Crosscutting, timbered @ $32.40	0	263	263
Timbering	0	263	263
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Crosscutting was continued in Project D on the original course and accounted for 100 ft. of advance.

The advance was in chloritic schist with considerable epidote, and with numerous irregular quartz seams, usually one to three inches wide.

No timber was placed during the month and no ore production came from this Project.

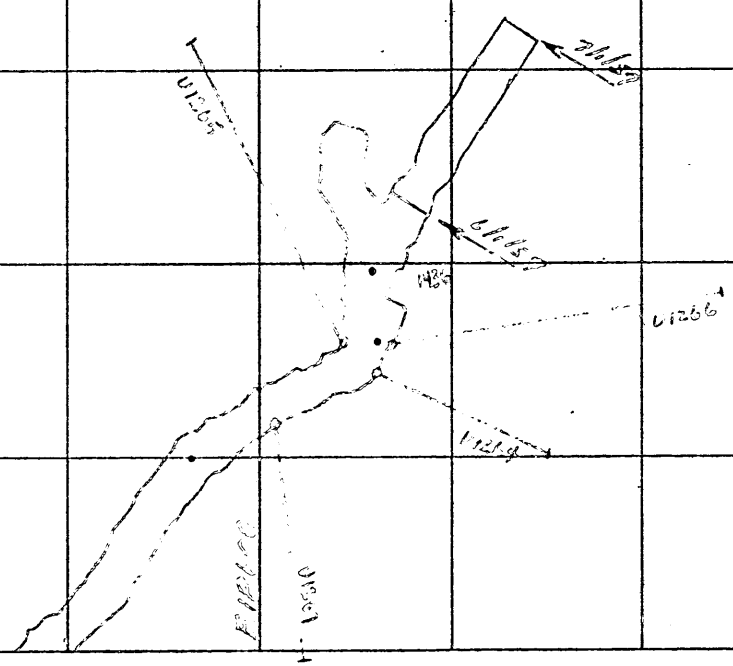
No work was performed during the last two weeks of June due to the plant vacation period.


N19800
N19600
E17200
E17400
E19200
115'
U1283
49°
1429
1434
1430
TP26
1428
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
SCREET NO. UPPER 4216
CONTRACT NO. 1636
PROSPECT B
PROGRESS SKETCH
JUNE 1957
SCALE 1" = 40'
1" = 20'

N17200 N17800

E18600 E18800

N17600



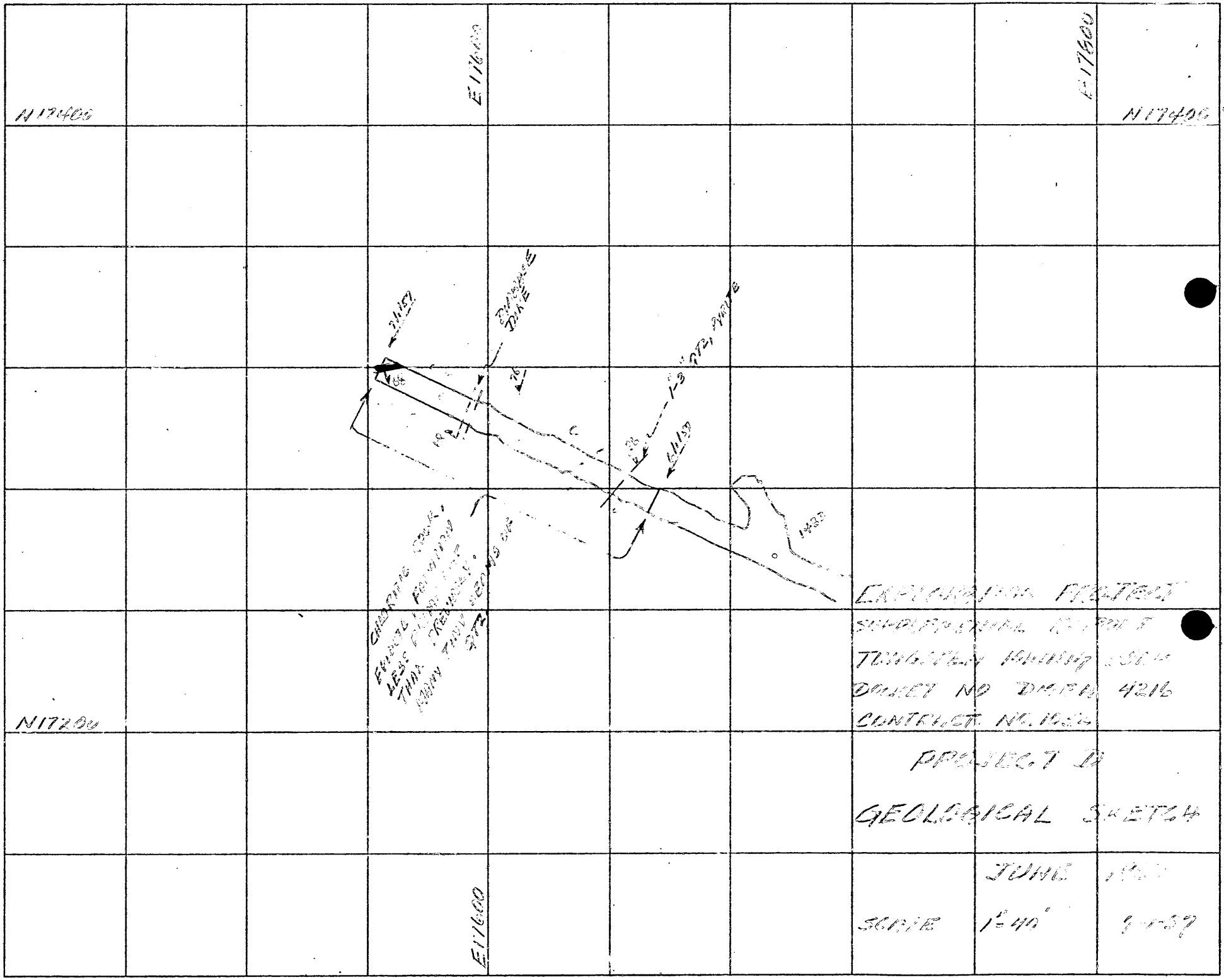
EXPLORATION PROJECT
SUPPLEMENTAL [illegible]
TUNGSTEN MINING CORP.
[illegible]
CONTRACT NO. [illegible]

PROJECT C
PROGRESS SECTION

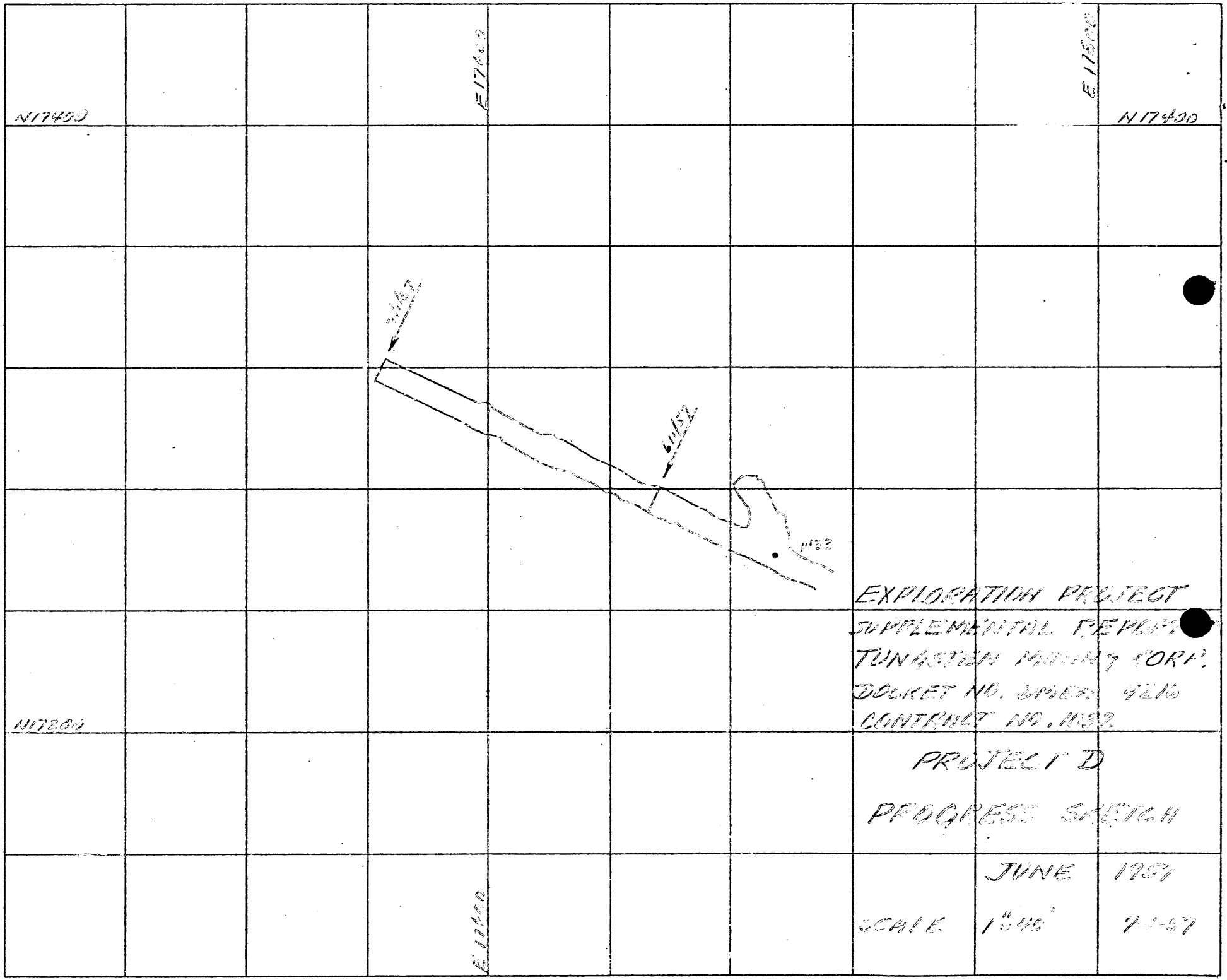
SCALE 1" = 40' JUNE 1949

E18200

K+E ALBANENE 195M TRACING PAPER 14984



K+E ALBANENE 10SM TRACING PAPER 14984


N17450
E17600
E17800
N17450
N17200
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. 3465-A 4246
CONTRACT NO. 1032
PROJECT D
PROGRESS SKETCH
JUNE 1957
SCALE 1"=40'
E17600

Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 78

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1957 Docket No. DMEA 4216 Contract No. D- 1032
Operator's Name Tungsten Mining Corporation Minerals Tungsten
Address Box 931, Henderson, North Carolina
Contract Amount, $ 246,000.00 Government Participation: 75 % Amount, $ 184,975.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contractors: Short Form						
Drilling — Or not timb	6930.00	53915.00	60845.00			
Bulldozing — Or timbered	2208.00	1911.00	4119.00			
Crosscutting — Or not timb	12145.00	13440.00	25585.00			
Drifting — Or timbered	-	12192.40	12192.40			
Timbering	520.00	2510.00	3030.00			
(2) Labor and Supervision:						
Labor — Core Drlg	403.35	1391.85	1795.20			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	-	82.00	82.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	22256.35	84981.85	107238.20	22256.35	84981.85	107238.20

RECEIVED JUN 24 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date June 6, 1957 *Payee Tungsten Mining Corporation
Per J. R. Stuart Title Vice Pres & Gen Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:
$ 16692.26
Signature Helen R. Miller
(Authorized Certifying Officer)
Date JUN 20 1957 Vou. No. 208
(See other side)

5564.09

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E1032 in accordance with the terms of the contract.

Signature K. L. Bassmaster Title Mining Engr. Date 6/14/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date JUN 19 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of May 7, 195 Docket No. DMEA 4216 Contract D-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting: Dr. not timb	ft	$930.00	198	$6045.00	1727	$35.00		
Dr. timbered	ft	$2268.00	70	$4179.60	129	$32.40		
Crosscutting: XC not timb	ft	$1215.00	347	$25585.00	731	$35.00		
XC timbered	ft	-	-	$12192.40	376	$32.40		
Raising								
Shafts								
Winzes	ft	$[illegible]	699	$1155.20	1080	$1.65		
Drilling: Core								
Churn								
Auger								
Blasting	ea.	-	-	$21.00	7	$3.00		
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Hauling	ft	$420.00	70	$3030.00	505	$6.00		
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		$22256.35		$107238.20				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date June 6, 1957 Operator Tungsten Mining Corporation

Per J. R. Lucas Title Vice Pres & Gen Mgr.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

Remarks:

(Instructions on reverse)

(For Government use only)

W. P. Burmeister 6/14/57

RECEIVED JUN 24 1957 D.M.E.A.

INSTRUCTIONS

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In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of May 1957 DMEA No. 4216 Contract No. 1032

PROJECT A

	Feet, this Month	Feet, Previous	Feet, To-Date
Crosscutting @ $35.00	0	101	101
Crosscutting, timbered @ $32.40	0	113	113
Drifting @ $35.00	82	467	549
Drifting, timbered @ $32.40	70	0	70
Timbering	70	113	183
Diamond Drilling	269	400	669
Number of Assays	0	3	3

Except for the last 50 ft., this month's advance has been in very lively structure with several irregular lenses of vein which contain light mineralization. Although these lenses do not appear to be of mineable size at this level, it is possible that they could develop into ore bodies below the level or above the level.

One lens is about 35 ft. long with widths up to 3½ ft, and another lens is about 45 ft. long and the width is from 1½ ft. to 2 ft.

The shear zone has tightened considerably in the last 50 ft. from a width of four feet down to 6 to 12 inches. The shear is being followed presently.

Total drifting advance was 152 ft. during May.

During the month 70 ft. of timber was placed in the area where the shear was wide and loose.

Three diamond drill holes were drilled during the month accounting for 269 ft. of drilling.

Hole U 1278 was drilled in the hanging wall and encountered possible structure from 67½ ft. to 73 ft., but no mineralization. This hole was collared at coordinates N 20531, E 21053 on a bearing of S 84½ E. Depth was 160 ft.

Hole U 1279 was drilled in the footwall to a depth of 101 ft. This hole encountered possible structure from 58½ ft. to 80 ft. with traces of mineralization, at 79½ ft. This hole was collared at coordinates N 20526, E 21038 on a bearing of N 31½ W.

Hole U 1280 was drilled to depth of 68 ft. to check the south end of the lens of quartz which enters the drift from the hanging wall side near survey point 1423. This hole was collared at coordinates N 20324, E 20933 on a bearing of N 80 E. Aside from the structure adjacent to the drift, no favorable results were obtained.

During the month 49 tons of ore were produced from Project A. Grab samples of this ore assayed 0.57% WO_3.

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EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of May 1957 DMEA No. 4216 Contract No. 1032

PROJECT B

	Feet, this Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	102	476	578
Crosscutting @ $35.00	85	99	184
Timbering	0	0	0
Diamond Drilling	0	189	189
Number of Assays	0	4	4

The crosscut started in April was continued for a distance of 72 ft., encountering the vein indicated by D. D. H. U 1269.

At a point about 63 ft. ahead of survey station 1429, a narrow vein, 1 to 1½ ft. wide, was encountered. This vein is estimated to assay 0.40% WO_3.

At a point about 78 ft. ahead of station 1429, the structure assumed to be No. 3 Vein was encountered. This vein, also 1 to 1½ ft. wide and estimated to assay 0.50% WO_3 was drifted upon, exposing a length of about 35 ft. At this point the structure died out. However, since at this location there was considerable mineralized quartz on the northwest side of the drift, a prospect crosscut was driven to the northwest, exposing several stringers of mineralized quartz, but none of these appeared to have the proper attitude or inclination correlating with No. 3 Vein structure. This crosscut accounted for 13 ft. of advance.

Rather than going off on a tangent on any of these showings, it was deemed advisable to advance on a course S 44 W and to later test the walls for any evidence of No. 3 Vein.

Two structures were cut in the subsequent drift advance but these do not correlate with No. 3 Vein.

Drilling will probably be undertaken shortly to test the walls and to test the structure previously followed between survey stations 1420 and 1429.

Drifting advance for the month was 102 ft. Crosscutting advance was 72 ft. and 13 ft. for a total of 85 ft.

No production of ore came from this Project during May.

No timber was required.

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EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of May 1957 DMEA No. 4216 Contract No. 1032

PROJECT G

	Feet, this Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	14	586	600
Drifting, timbered @ $32.40	0	59	59
Crosscutting @ $35.00	43	0	43
Timbering	0	59	59
Diamond Drilling	30	200	230
Number of Assays	0	0	0

A crosscut was started and advanced 43 ft. in a northerly direction to cross the lamprophyre dike. It was assumed the structure was on the northwest side of this dike and that it would stay on that side of the dike. However, having crossed the dike, there was no evidence of any structure, and based on results of D. D. H. U 1265, none could be expected. It also became apparent that the lamprophyre dike had taken a turn to the north and following the dike would throw the drift off the general strike of the structure.

A drift was therefore started at a point about 20 ft. ahead of survey station 1432 on a bearing of N 30 E. Some structure is present in this face dipping at about 67 degrees to the southeast and striking about N 30 E although this may not be the correct structure. There is about 2 ft. of shearing present, but no quartz. This drift accounted for 14 ft. of advance.

During the month, D. D. H. U 1265 was deepened by 30 ft. to a depth of 70 ft. No structure was indicated.

Total advance for the month was thus, 43 ft. of crosscutting and 14 ft. of drifting.

No timber was installed during the month.

No production of ore was realized from this Project during the month.

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EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of May 1957 DMEA No. 4216 Contract No. 1032

PROJECT D

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting	0	0	0
Crosscutting @ $35.00	219	184	403
Crosscutting, timbered @ $32.40	0	263	263
Timbering	0	263	263
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Crosscutting was continued in Project D on the original course and accounted for 219 ft. of advance.

The advance was in chloritic schist. Several shears were encountered but no mineralization is present.

The ground is standing well and no timber was placed.

No production of ore came from the Project during the month.

A car turnout was excavated during the month. This footage is not included in the 219 ft. of advance reported.

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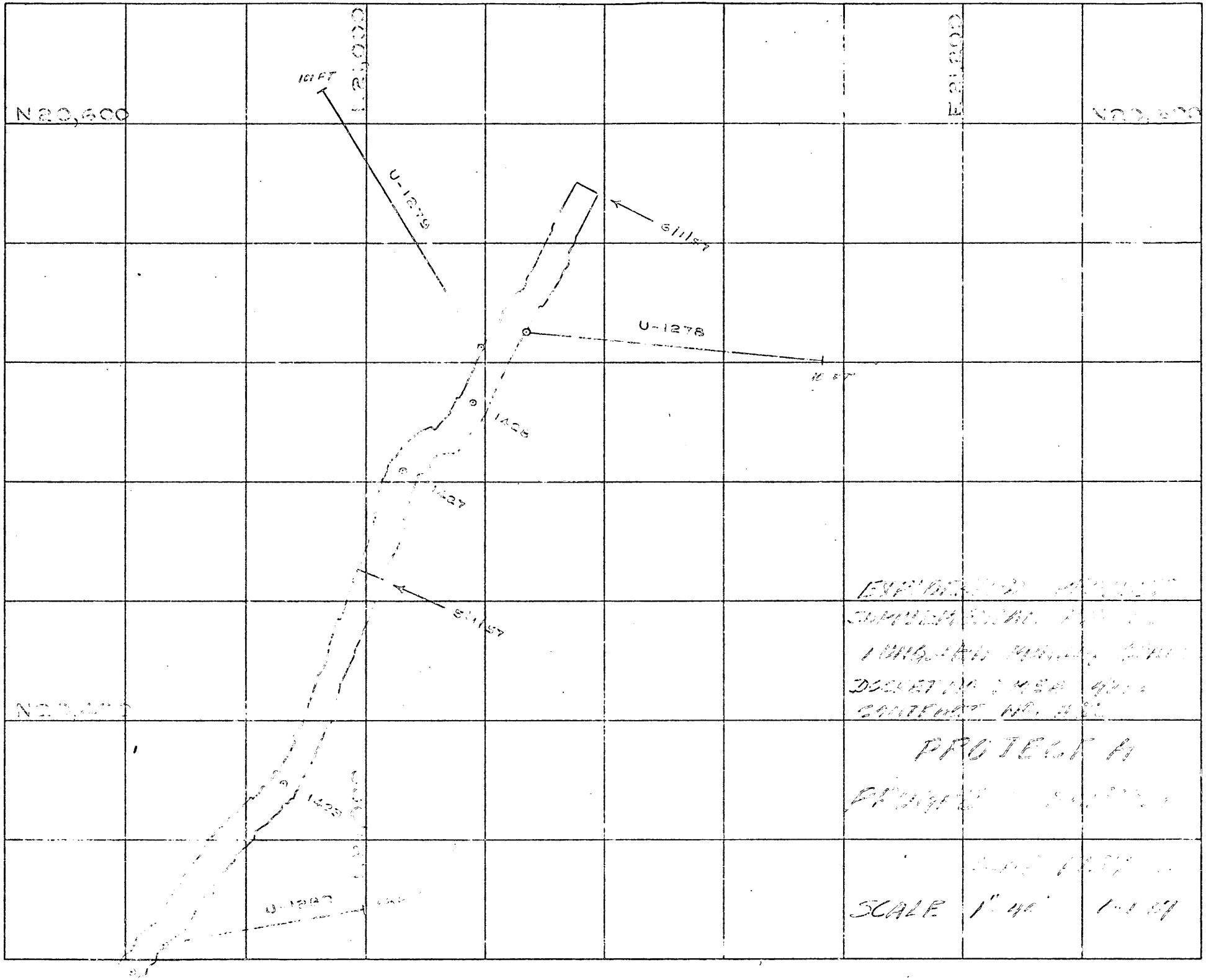
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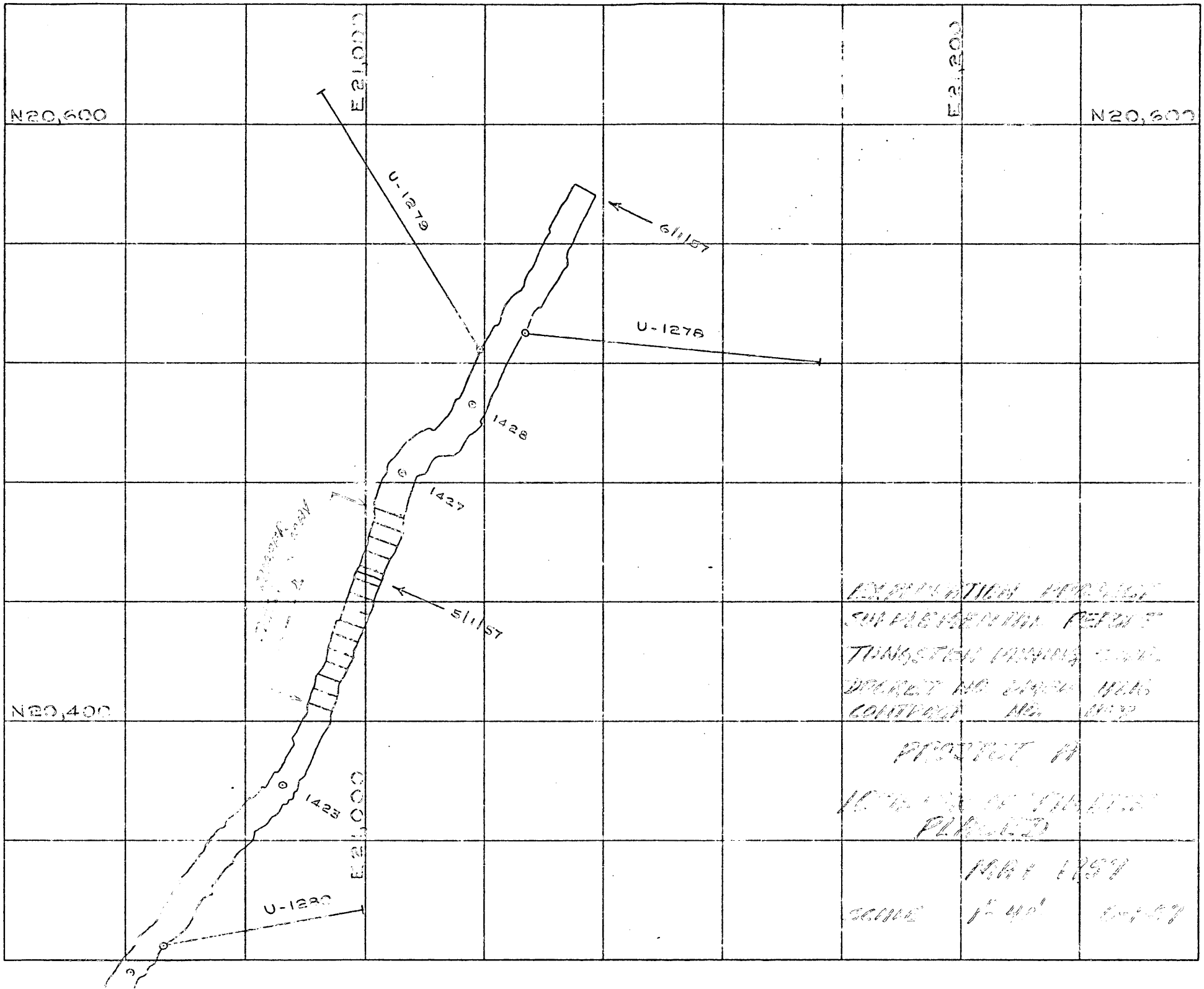
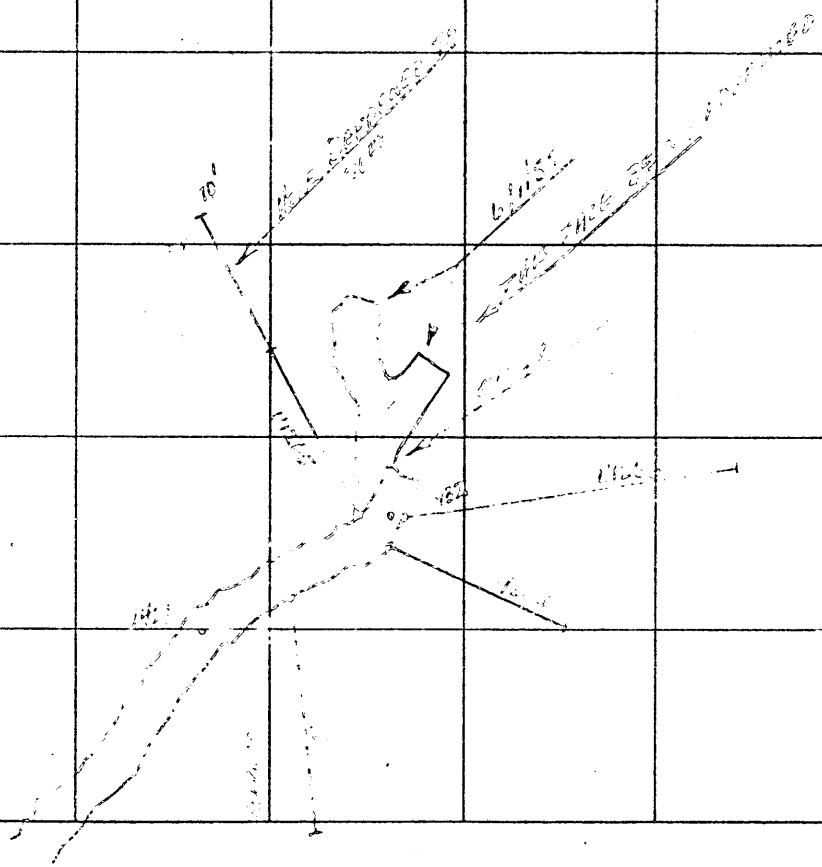


K+E 10 X 10 TO 1/2 INCH 14004 KEUFFEL & ESSER CO. MADE IN U.S.A.

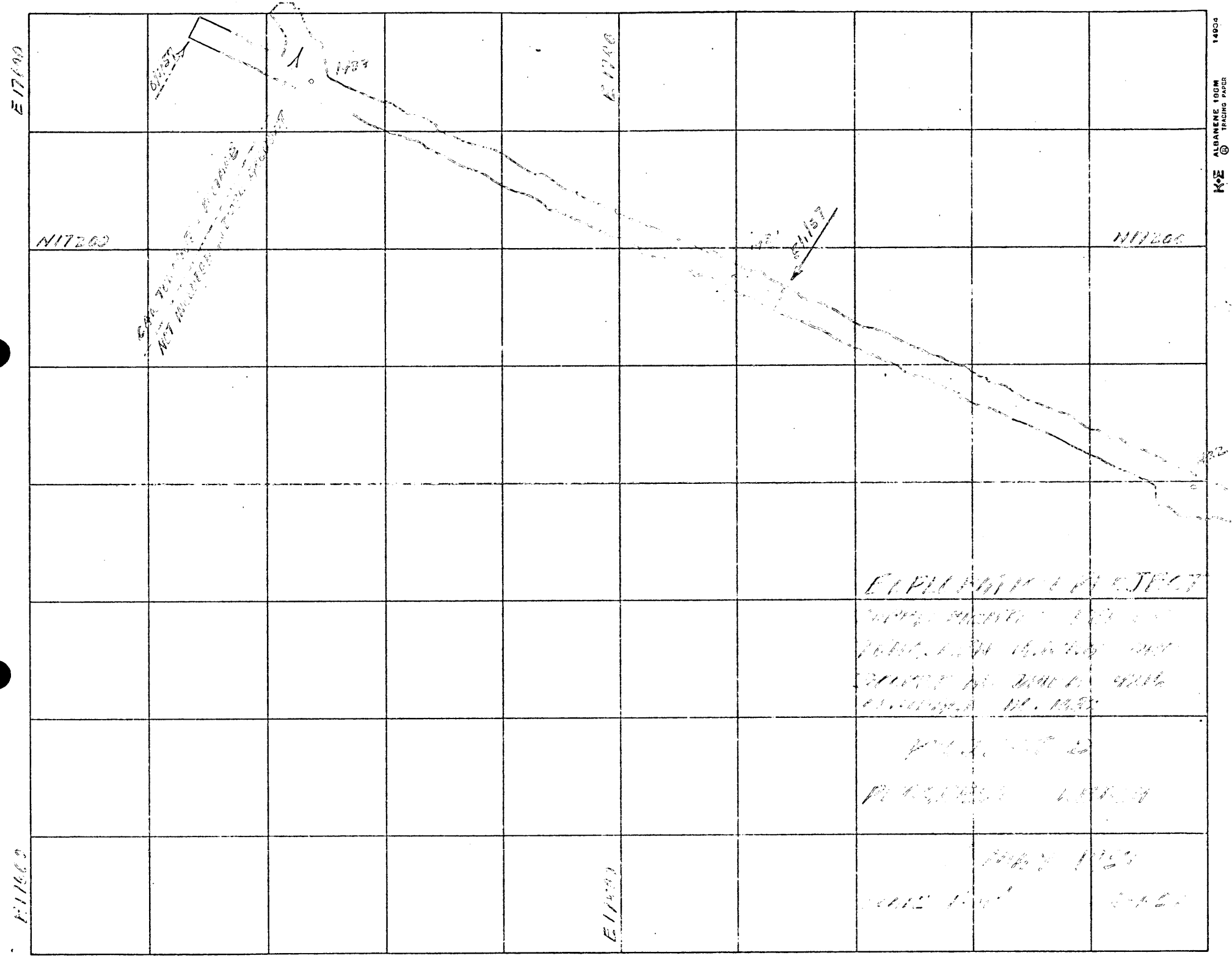
K+E ALBANENE 190M TRACING PAPER 14084



EXPLORATORY PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CO.
LOCKED MO. DRAFT
CONTRACT NO. 1032

PROJECT C

ALBANENE 100M TRACING PAPER 14904



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Form MF-104 (Rev.)
(April 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5
PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 71

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April 7 4216 Contract No. DMEA R-1032
Operator's Name Tungsten Mining Corporation Contract Minerals Tungsten
Address P.O. Box 931, Henderson, Nev.
Contract Amount, $ 246,660.00 Government Participation: 75 % Amount, $ 184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Contracts:						
Short Form Or not timb	$ 13125.00	$ 40390.00	$ 53515.00			
Drilling Or timbered	$ -	$ 1911.60	$ 1911.60			
Bulldozing Xc not timb	$ 2450.00	$ 10990.00	$ 13440.00			
Crosscutting Xc timbered	$ 2980.80	$ 9201.60	$ 12182.40			
Drifting Timbering	$ 552.00	$ 2058.00	$ 2610.00			
(2) Labor and Supervision	$ 641.85	$ 660.00	$ 1301.85			
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment	-	$ 21.00	$ 21.00			
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 19749.65	$ 65232.20	$ 84981.85	19749.65	65232.20	84981.85

RECEIVED MAY 20 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.

Date May 14, 1957 *Payee Tungsten Mining Corporation

Per G. V. Boyd Title Ass't Secretary

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 14812.24

Signature Peter R. Mellen
(Authorized Certifying Officer)

Date MAY 17 1957 Vou. No. 192
(See other side)

4937.41

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1032 in accordance with the terms of the contract.

Signature W. Burmester Title Mining Engr. Date 5/13/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date MAY 15 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1957 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

Operation	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Dr not timb	ft	$13425.00	375	$33515.00	1949	$35.00		
Dr timbered	ft	-	-	1911.60	59	32.40		
Drifting xc not timb	ft	2450.00	70	13440.00	384	35.00		
Crosscutting xc timbered	ft	2980.80	92	12182.40	376	32.40		
Raising								
Shafts	ft	641.85	389	1301.85	789	1.65		
Winzes								
Drilling: Core								
Churn Sampling	ea	-	-	21.00	7	3.00		
Auger								
Stripping								
Trenching								
Test Pits Timbering	ft	552.00	92	2610.00	435	6.00		
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.		19749.65		84961.85				
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

May 4, 1957 Tungsten Mining Corporation

Date ..... Operator Ass't Secretary

Per G. V. Boyd Title

Remarks: For April '57, footage of crosscut timbered (92') ex- ~~Remarks: footage of timbered cross-cut driven (87') by 5 ft. Therefore credit crosscutting @ $35.00 by 5 ft and debit crosscutting timbered @ $32.40 by 5 ft.~~

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

W. L. Burmeister 5/13/57

RECEIVED MAY 20 1957 D.M.E.A.

INSTRUCTIONS

Preparation of Form MF–104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF–104A has been designed to tie in with Form MF–104 for both monthly and cumulative costs. The "Total Costs" on Form MF–104A for each month should equal the monthly "Total Costs" as reported on Form MF–104. This is also true of the "Total Costs To Date".

In preparing Form MF–104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 195 7 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

OPERATION	Unit	Costs This Month	Actual Units This Month	Adjusted ~~Corrected Units~~ Units Apr'57	Units to Date	Unit Costs to Date	Authorized by Contract Units	Authorized by Contract Unit Costs
Drifting Dr not timb	ft		375	375				
Crosscutting Dr timbered	ft		-	-				
Raising xc not timbered	ft		75	70				
Shafts xc timbered	ft		87	92				
Winzes								
Drilling: Core	ft		389	389				
Churn								
Auger								
Stripping Sampling	ea							
Trenching								
Test Pits								
Roads and Trails								
Timbering	ft		92	92				
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date May 4,1957 Operator Tungsten Mining Corporation

Per _____ Title Ass't Secretary

Remarks: For April'57 footage of crosscut timbered(92') exceeded footage of timbered crosscut driven (87') by 5 ft. Therefore credit crosscutting $35.00 by 5 ft and debit crosscutting timbered $32.00 by 5 ft.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

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GPO 872894

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

MONTH OF APRIL 1957 DMEA NO. 4216 CONTRACT NO. 1032

PROJECT A

	Feet, This Month	Feet, Previous	Feet, To Date
Crosscutting @ $35.00	(5)	106	101
Crosscutting, timbered @ $32.40	5	108	113
Drifting @ $35.00	182	285	467
Timbering	5	108	113
Diamond Drilling	0	400	400
Assays	0	3	3

At the end of March, the structure in Project A was quite tight and not too lively. At a point about 45 ft. ahead of the face on March 31, a shear came into the drift from the footwall side and this shear is being followed presently. Actually it is the strongest structure encountered to date in Project A. The structure consists of sericite schist, strongly sheared with considerable gouge and irregular lenses of quartz with traces of mineralization. In one area about 10 ft. long, the mineralization is good. The width of this structure is about 4 ft. in the last 80 ft. driven. This type of structure is considered favorable for ore occurrence.

Total drifting advance for the month was 182 ft. No timber was placed in this advance, but some may be necessary later because the sheared area is loose.

During the month it was necessary to place an additional set of timber in the original crosscut just beyond the dike, about 15 ft. ahead of Station 1379.

In the early part of April, a car turnout was excavated. No production of ore was realized from Project A during April.

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EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of April 1957 DMEA No. 4216 Contract No. 1032

PROJECT B

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	135	341	476
Crosscutting @ $35.00	19	80	99
Timbering	0	0	0
Diamond Drilling	189	0	189
Number of Assays	0	4	4

As indicated in last month's report, the structure tightened up considerably. The drift got off the structure having been turned too far to the north. This area was turned into a car turnout and this footage is not included in this report.

The drift was subsequently turned to the south and a fairly strong structure was encountered and was followed for about 100 ft. However, it became apparent that this structure did not correlate well with the strike and dip of No. 3 Vein, even though up to three feet of fairly good looking quartz is present in the face.

At this point drilling was undertaken to test for the No. 3 Vein shear zone. Two holes were drilled indicating the presence of the zone on about the normal strike of the vein heretofore.

Hole U 1269, 107 ft. deep, was collared at a point with coordinates N. 19720; E 19258 and drilled on a bearing of S 8½ W. This hole encountered the structure at 78½ ft., indicating 1½ ft. of vein with traces of mineralization.

Hole U 1270, 82 ft. deep, was collared at a point with coordinates N 19737; E 19328 and was drilled on a bearing of S 30½ W. The structure was encountered at 50 ft. with only stringers of quartz present.

As a result of this drilling and the wrong attitude of the structure being followed a crosscut to the structure was started on Drill Hole U 1269 and was advanced 19 ft.

Drifting advance accounted for 135 ft. of advance. Crosscutting accounted for 19 ft. of advance.

No production of ore came from this Project during April.

No timber was installed.

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EXPLORATION PROJECT - SUPPLEMENTAL REPORT

MONTH OF APRIL 1957 DMEA NO. 4216 CONTRACT NO. 1032

PROJECT C

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting @ $35.00	58	528	586
Drifting @ $32.40	0	59	59
Crosscutting	0	0	0
Timbering	0	59	59
Diamond Drilling	200	0	200
Number of Assays	0	0	0

Drifting was continued in Project C, but the strength of the structure was dissipated along the lamprophyre and when no definite structure remained, drilling was undertaken to test the walls. Three holes were drilled in the hanging wall and one hole in the footwall. The hanging wall holes failed to indicate any structure correlating with that of No. 28 Vein. The footwall hole did show some schist following the lamprophyre, however this hole may be deepened further in view of geological information obtained from Dr. C. D. Hulin.

In any case, it appears that the structure should be on the footwall side of the lamprophyre and when drifting is again resumed, the drift will be turned northward to cross the lamprophyre and get back on the structure which is expected to strengthen again.

Holes drilled were:

U 1264	N 17538 E 18624	S 65 E, HoR 40 ft.
U 1265	N 17543 E 18617	N 26½ W, HoR 40 ft.
U 1266	N 17543 E 18627	N 81½ E, HoR 70 ft.
U 1267	N 17526 E 18603	S 6½ E, HoR 50 ft.

Progress in Project C was 58 ft. of drifting. The work was sporadic, since efforts are concentrated in advancing Project D.

No timber was installed during the month.

No ore was produced during the month.

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DATE | NOTES | CODE

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

MONTH OF APRIL 1957 DMEA NO. 4216 CONTRACT NO. 1032

PROJECT D

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting	0	0	0
Crosscutting @ $35.00	56	128	184
Crosscutting @ $32.40	87	176	263
Timbering	87	176	263
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Crosscutting was continued in Project D on the original course and accounted for 143 ft. of advance.

The advance was in dark, baked schist. One zone of silicification was encountered and one zone of faulting. No mineralization is present.

During the month 16 sets of timber, covering 87 lineal feet, were installed. The ground seems somewhat more stable than heretofore.

No production of ore came from Project D during the month.

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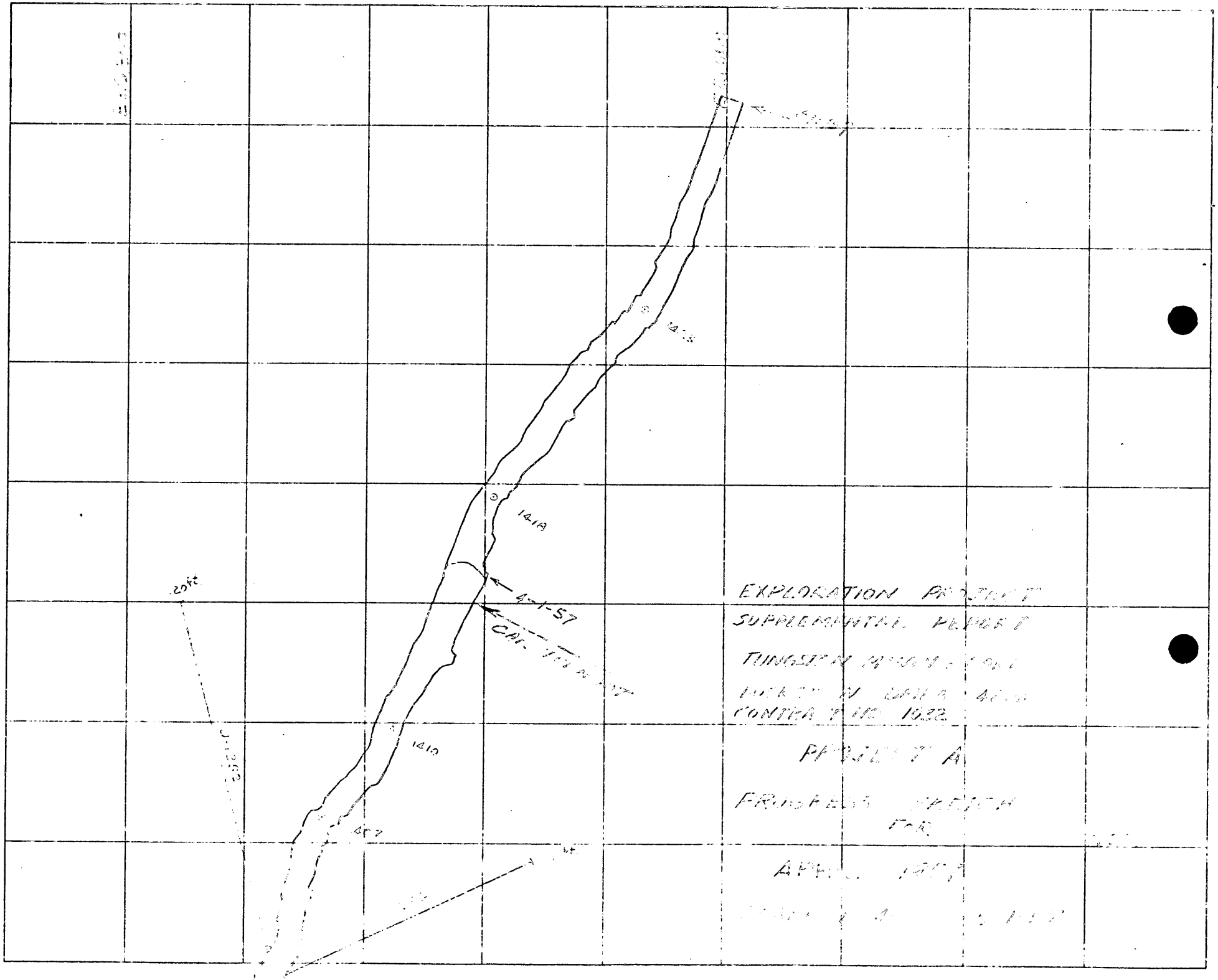
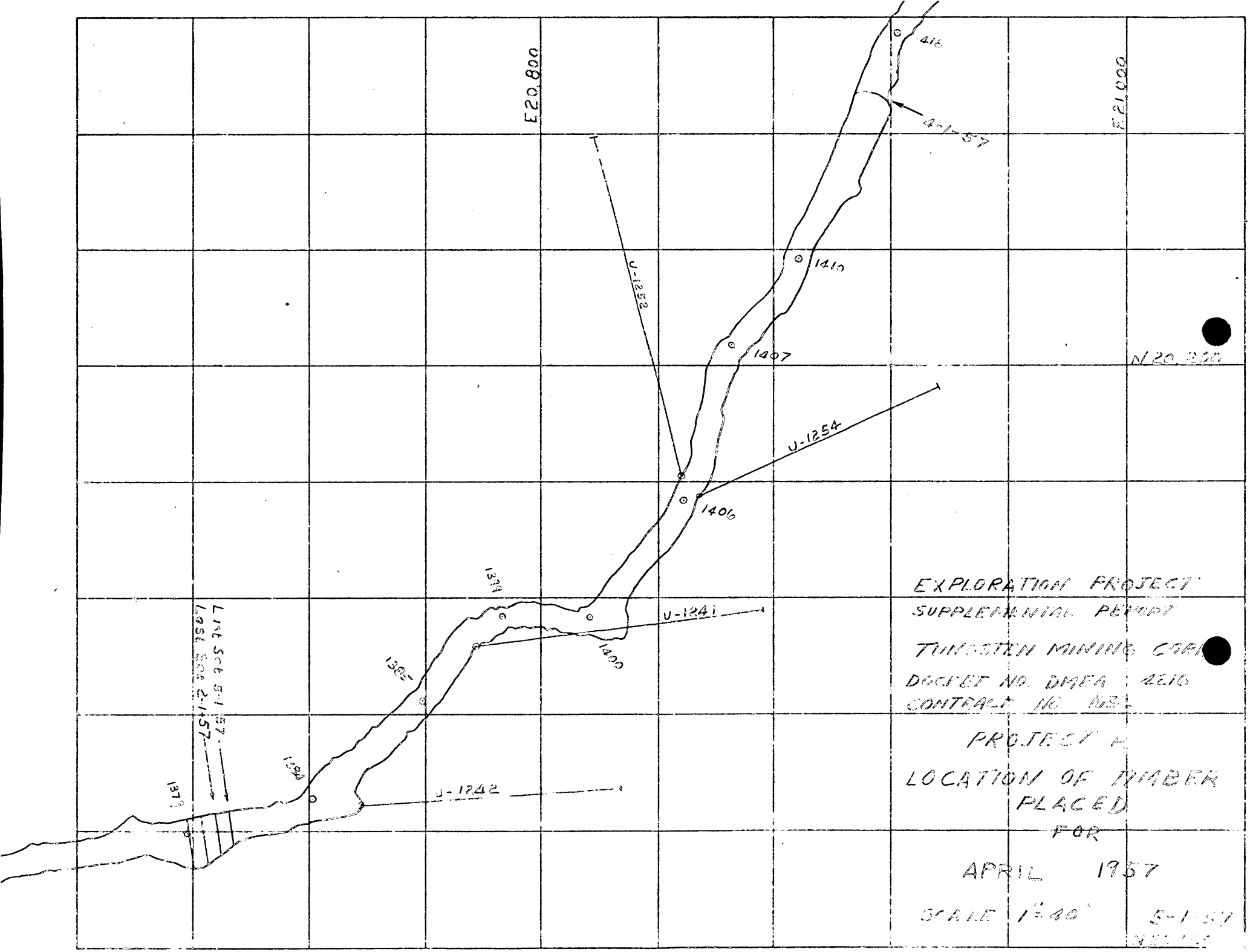

141A
141B
20ft
EXPLORATION PROJECT
SUPPLEMENTAL PROJECT
PROJECT A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Last Sce 5-1-57
Last Sce 2-1-57
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP
DOCKET NO. DMEA 4616
CONTRACT NO. 1052
PROJECT
LOCATION OF MAPER
PLACED
FOR
APRIL 1957
SCALE 1" = 40'
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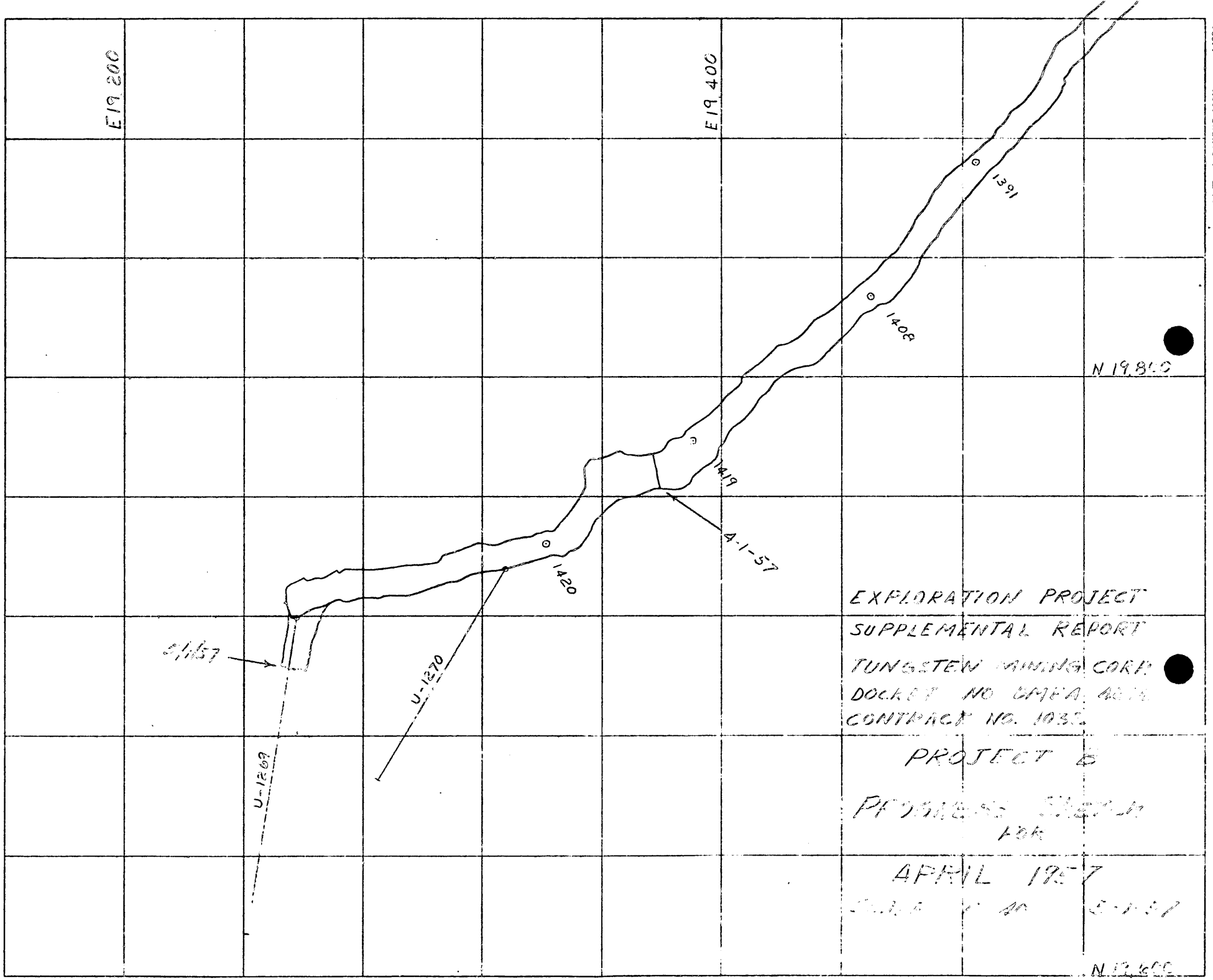
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U-1269
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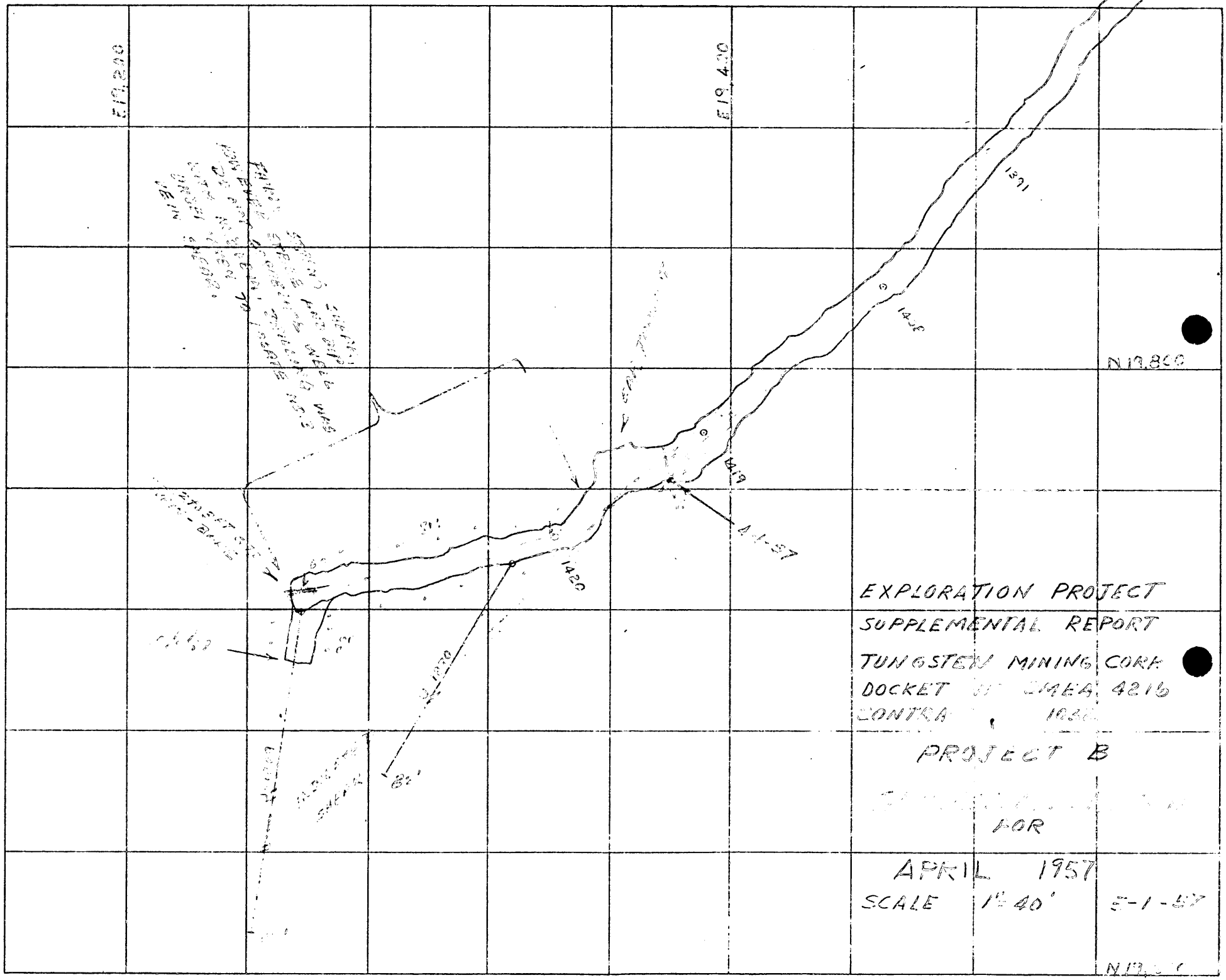
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
PROJECT
APRIL 1957
N 19,600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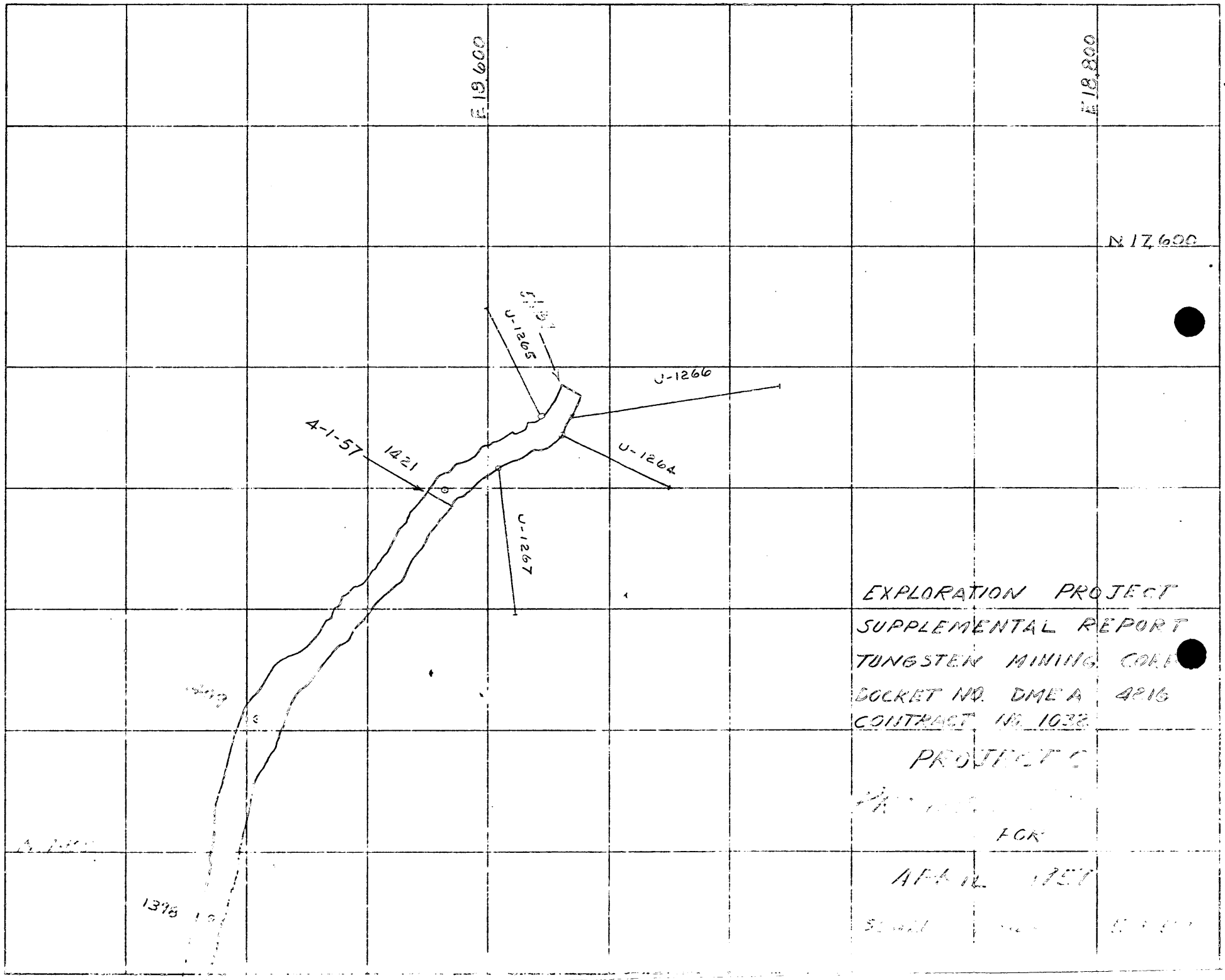
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET
CONTRA
PROJECT B
FOR
APRIL 1957
SCALE 1" = 40'
5-1-57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U-1265
U-1266
U-1264
U-1267
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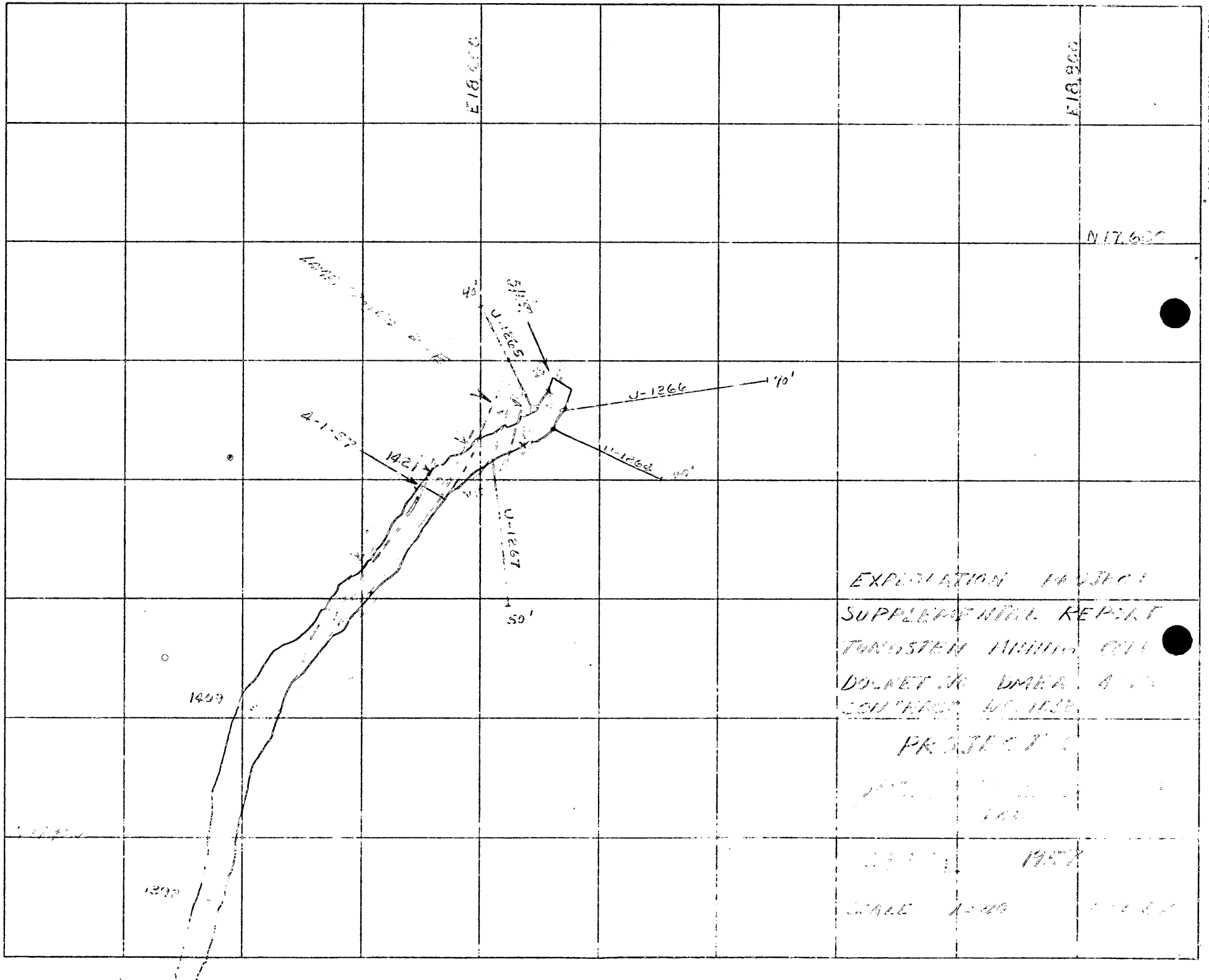
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT
FOR
APRIL 1957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N17,600
U-1266
70'
U-1266a
90'
U-1267
50'
1421
1409
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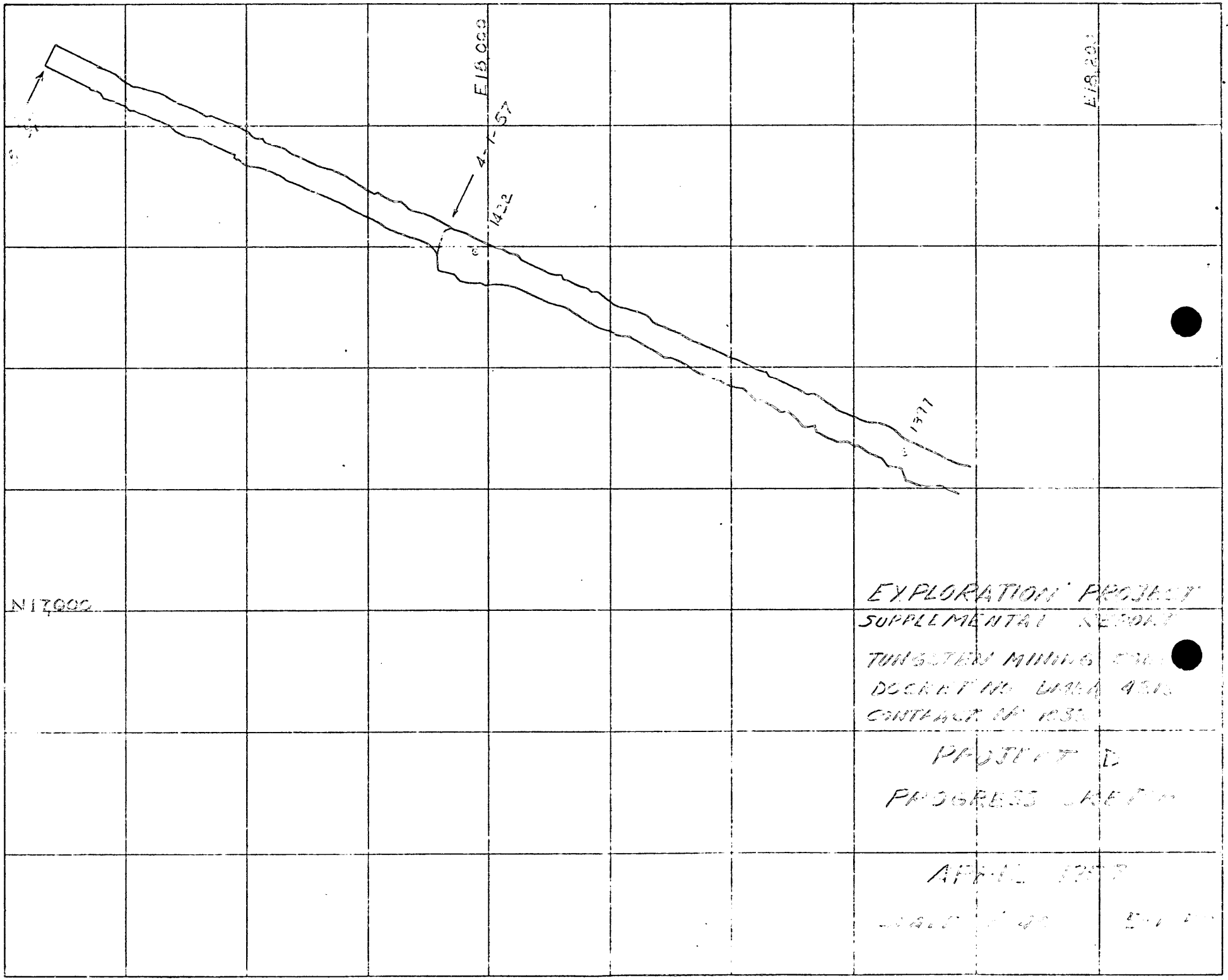
SUPPLEMENTAL REPORT
TUNGSTEN MINING CO.
DOCKET NO.
CONTRACT NO.
PROJECT
1977
SCALE 1:200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TUNGSTEN MINING
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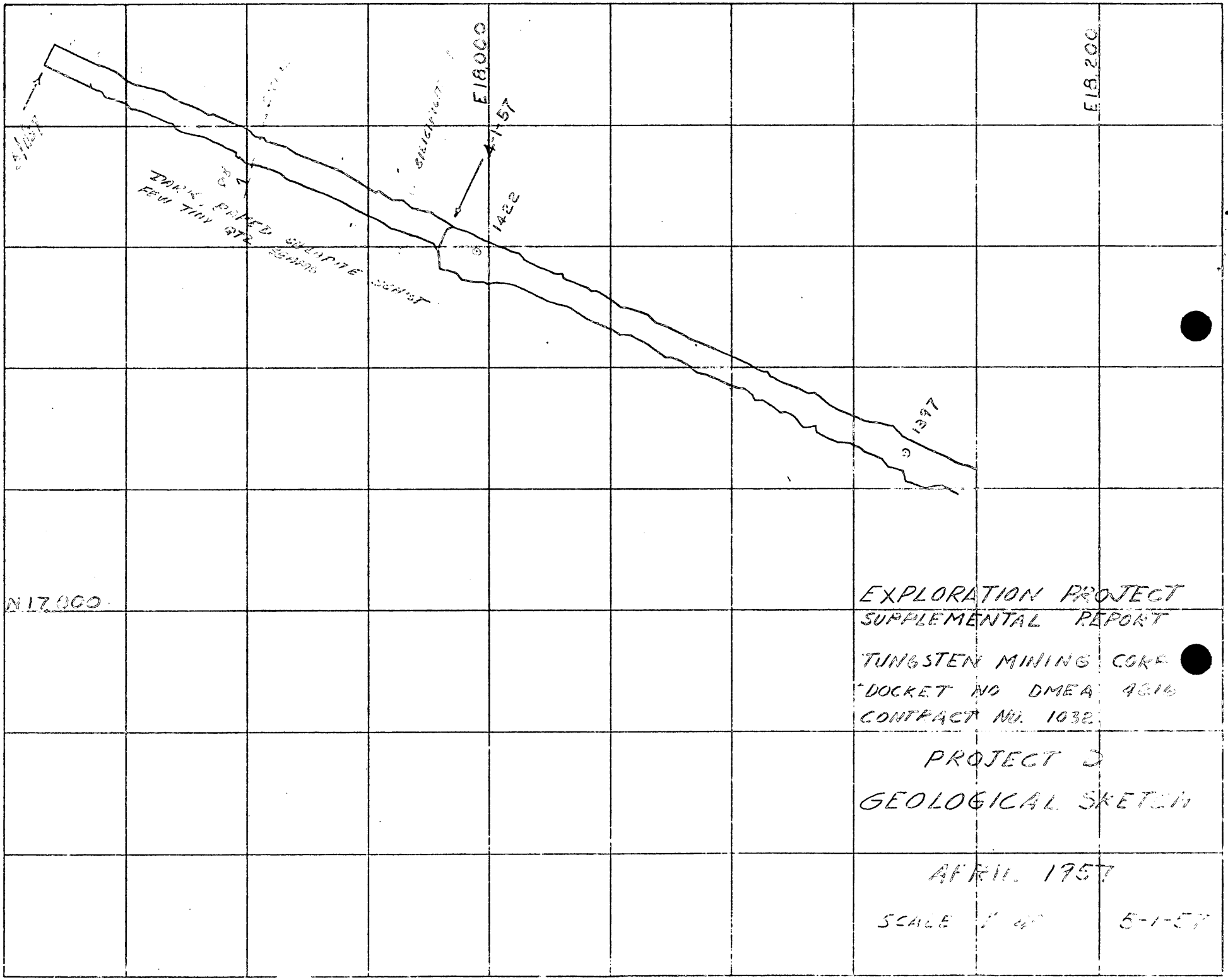
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SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO DMEA 4616
CONTRACT NO. 1032
PROJECT 3
GEOLOGICAL SKETCH
APRIL 1957
SCALE 1" = 40'
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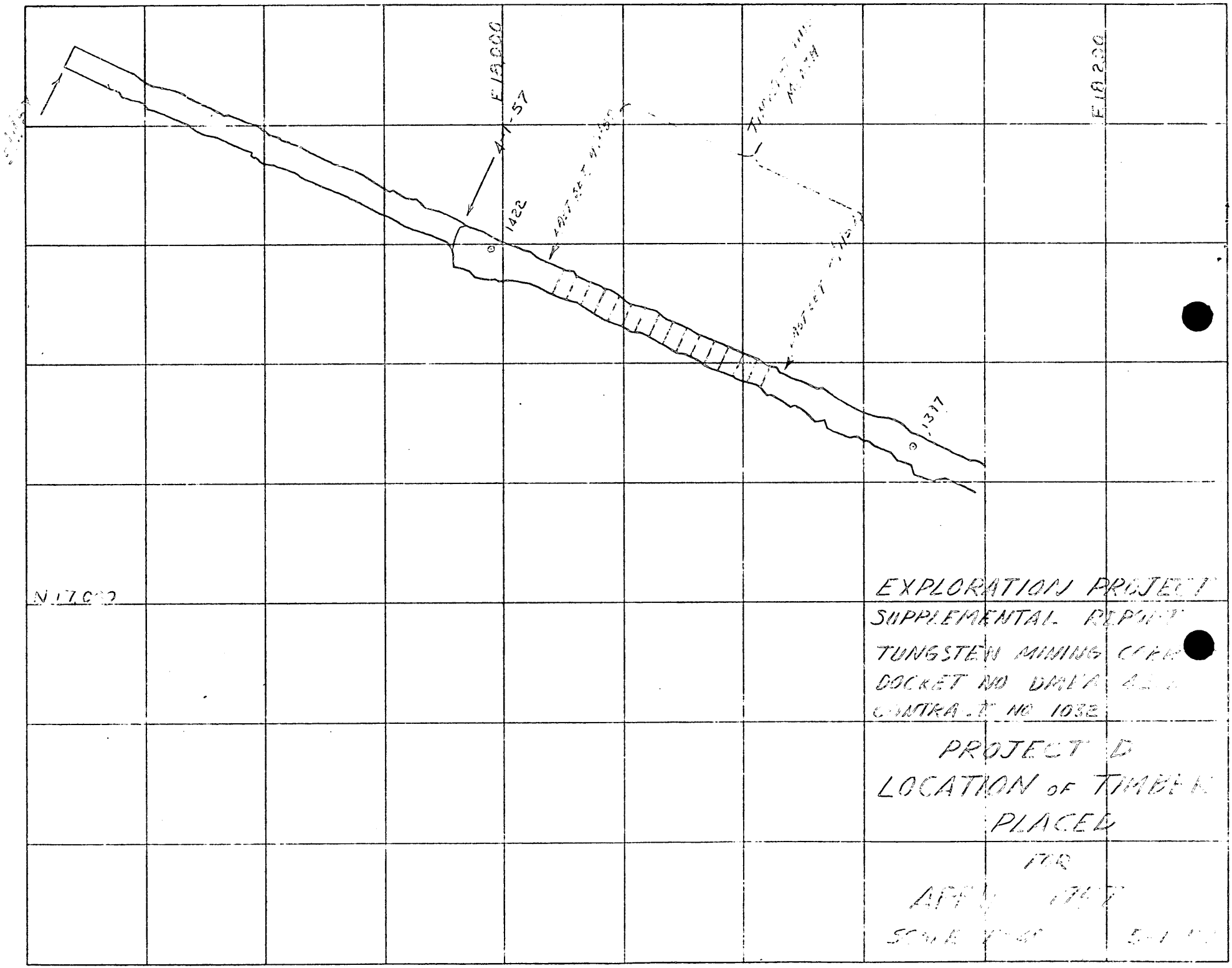
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EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP
DOCKET NO DMEA
CONTRACT NO 1032
PROJECT D
LOCATION OF TIMBER
PLACED
FOR
APPROVAL

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE
PAYMENTS No. 63

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of March, 1957 Docket No. DMEA 4216 Contract No. B-1032
Operator's Name Tungsten Mining Corporation Minerals Tungsten
Address P.O. Box 931, Henderson, N.C.
Contract Amount, $ 246,660.00 Government Participation: 75 % Amount, $ 184,995.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY (WSM): Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling Dr Not Timb	$ 10430.00	$ 29960.00	$ 40390.00			
Bulldozing Dr Timbered	$ 1911.60	-	$ 1911.60			
Crosscutting XC Not Timb	$ 2555.00	$ 8435.00	$ 10990.00			
Drifting XC Timbered	$ 1296.00	$ 7905.60	$ 9201.60			
Timbering	$ 594.00	$ 1464.00	$ 2058.00			
(2) Labor and Supervision:						
Labor Core Drlg	$ 346.50	$ 313.50	$ 660.00			
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	$ 12.00	$ 9.00	$ 21.00			
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 17145.10	$ 48087.10	$ 65232.20	17145.10	48087.10	65232.20

RECEIVED APR 23 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.

Date April 6, 1957 *Payee Tungsten Mining Corporation

Per J. R. Stuart Title Vice Pres. & Gen. Mgr.

*Where voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 12,858.83 ~~$ [illegible]~~

Signature Helen R. Miller
(Authorized Certifying Officer)

Date APR 18 1957 Vou. No. 174

(See other side)

8572.55

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E-1032 in accordance with the terms of the contract.

Signature R. A. Burmeister Title Mining Engr. Date 4/12/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lawrence Title EXECUTIVE OFFICER DMEA REGION V Date APR 15 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED APR 1957 DMEA

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of March 195 7 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting: Dr Not Timb	ft	$ 10430.00	298	$ 40390.00	1154	$ 35.00		
Dr Timbered	ft	$ 1911.60	59	$ 1911.60	59	$ 32.40		
Crosscutting: XC Not Timb	ft	$ 2555.00	73	$ 10990.00	314	$ 35.00		
XC Timbered	ft	$ 1296.00	40	$ 9201.60	284	$ 32.40		
Raising								
Shafts								
Winzes	ft	$ 346.50	210	$ 660.00	400	$ 1.65		
Drilling: Core								
Churn								
Sampling	ea	$ 12.00	4	$ 21.00	7	$ 3.00		
Stripping								
Trenching								
Test Pits								
Roads and Timbering	ft	$ 594.00	99	$ 2058.00	343	$ 6.00		
TOTAL DISTRIBUTED COSTS								TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
		$ 17145.10		$ 65232.20				
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date April 6, 1957 Operator Tungsten Mining Corporation

Per J. P. Lucas Title Vice Pres & Gen Mgr

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

REMARKS:

(Instructions on reverse)

(For Government use only)

H. D. Burmeister 4/12/57

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of March 1957 DMEA No. 4216 Contract No. 1032

PROJECT A

	Feet, This Month	Feet, Previous	Feet, To-Date
Crosscutting @ $35.00	0	106	106
Crosscutting, timbered @ $32.40	0	108	108
Drifting @ $35.00	148	137	285
Timbering	0	108	108
Diamond Drilling	210	190	400
Number of Assays	0	3	3

At the end of February, the drift in Project A had very little structure and drilling was undertaken to test the walls for any structure which may have been by-passed.

Two diamond-drill holes were drilled, U 1252, into the footwall and U 1254 into the hanging wall. Hole U 1252 with coordinates N 20164, E 20248, and on a bearing of N 14½ W was drilled into the footwall to a depth of 120 ft. which was sufficient to test all structures previously encountered. Hole U 1254 with coordinates N 20156, E 20854 on a bearing of N 64½ E was drilled into the hanging wall to a depth of 90 ft., being deep enough to test the entire structure.

Hole U 1252 encountered 1½ ft. of vein from 6 ft. to 7½ ft. estimated to assay 0.50% WO_3. The best structure in the hole appeared to be from 2½ ft. to 8 ft. The remainder of the hole was in chlorite schist, with some gneiss.

Hole U 1254 was mostly in chlorite schist but did encounter a fairly lively structure from 60 ft. to 82 ft. The liveliest portion of this structure appeared to be from 72 ft. to 82 ft., with only a minute trace of mineralization; however, this structure should be checked at intervals by further drilling.

In view of this drilling, the drift was turned slightly to the north to get on the structure indicated by Hole U 1252. The vein was encountered and varied from 6 inches to 2 ft. wide until it pinched out after about 45 ft. of drifting upon it. Values for the wider portion of this vein were fair, estimated at 0.50% WO_3.

As this vein pinched out, the structure tightened up, and the drift is being continued on this structure which consists of chlorite-sericite schist with quartz stringers sometimes up to one foot wide. Only an occasional trace of mineralization is present.

The total drifting advance was 148 ft.

No timber was installed during March, and no production of ore was realized from Project A during the month.

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EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of March 1957 DMEA No. 4216 Contract No. 1032

PROJECT B

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	126	215	341
Cross Cutting @ $35.00	0	80	80
Drilling	0	0	0
Total of Assays	0	0	0
	4	0	4

Drifting on the vein structure was continued in Project B and accounted for ft. of advance.

At a point about 15 ft. ahead of last month's point of furthest advance a narrow but lively vein was encountered and persisted for a length of about 30 ft. The vein varied in width from 1 ft. to 2 ft. and the estimated assay for it was from 0.10% WO_3 to 0.20% WO_3.

At a point 55 ft. from last month's advance and about 24 ft. southwest of survey station 1408, a lens of ore was encountered. The width of this lens averages about 5.5 ft. and the grade is fairly good as indicated by four chip samples taken of this ore. The ore lens is about 45 ft. long and appears to be of mineable size and grade.

As this lens pinched out, the structure tightened up again and little quartz is present.

Results of samples taken:

Sample No. 354	4.7 ft. width	1.24% WO_3
Sample No. 355	5.3 ft. width	0.65% WO_3
Sample No. 356	5.5 ft. width	0.27% WO_3
Sample No. 357	6.6 ft. width	0.48% WO_3
Average	5.5 ft. width	0.63% WO_3

During March, 165 tons of ore were stockpiled from Project B. A Grab Sample of this ore assayed 0.39% WO_3.

No timber was installed in March.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of March 1957 DMEA No. 4216 Contract No. 1032

PROJECT C

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	24	504	528
Drifting @ $32.40	59	0	59
Crosscutting	0	0	0
Timbering	59	0	59
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Drifting on the vein structure was continued and accounted for 83 ft. of advance during March.

As indicated last month, the structure has turned further to the east and maintains a strike of about N 37 E, which is on about the expected strike. Where the structure made the change in strike, it also appeared to steepen, with some dips as steep as 68 degrees to the southeast.

In the vicinity of the turn, the shearing became more intense and required timbering in a section.

The structure is not very lively and only a minor amount of quartz is present. No values are present.

During the month, 13 sets of timber were installed covering 59 lineal ft. of drift.

A turnout for switching cars was cut out during the month.

No production of ore was realized in Project C during March.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of March 1957 DMEA No. 4216 Contract No. 1032

PROJECT D

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting	0	0	0
Crosscutting @ $35.00	73	55	128
Crosscutting, Timbered @ $32.40	40	136	176
Timbering	40	136	176
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Crosscutting was continued in Project D on the original course and accounted for 113 ft. of advance.

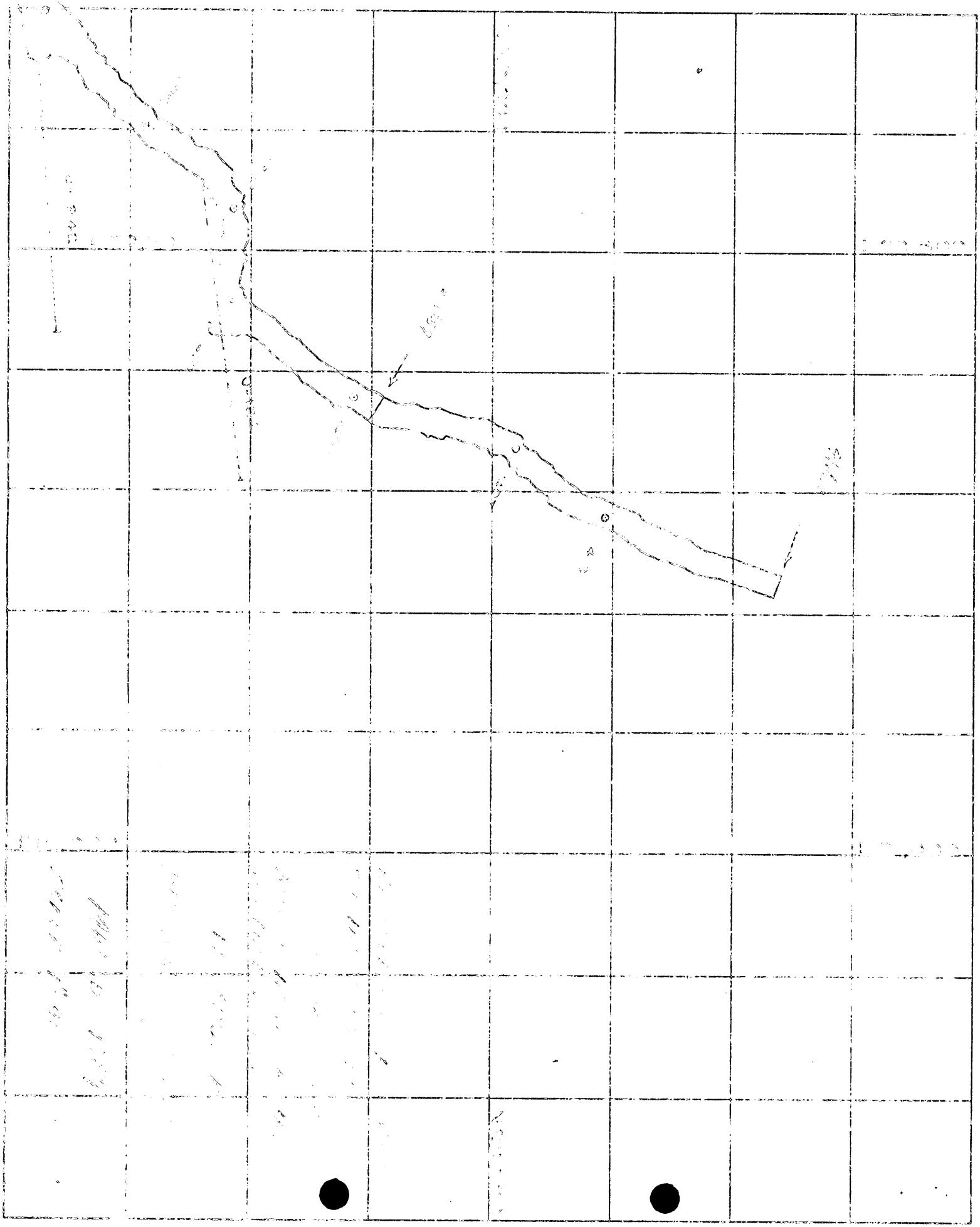
At a point about 18 ft. ahead of last month's point of advance, the crosscut left the dike. The width of the dike on the course of the crosscut is about 200 ft.

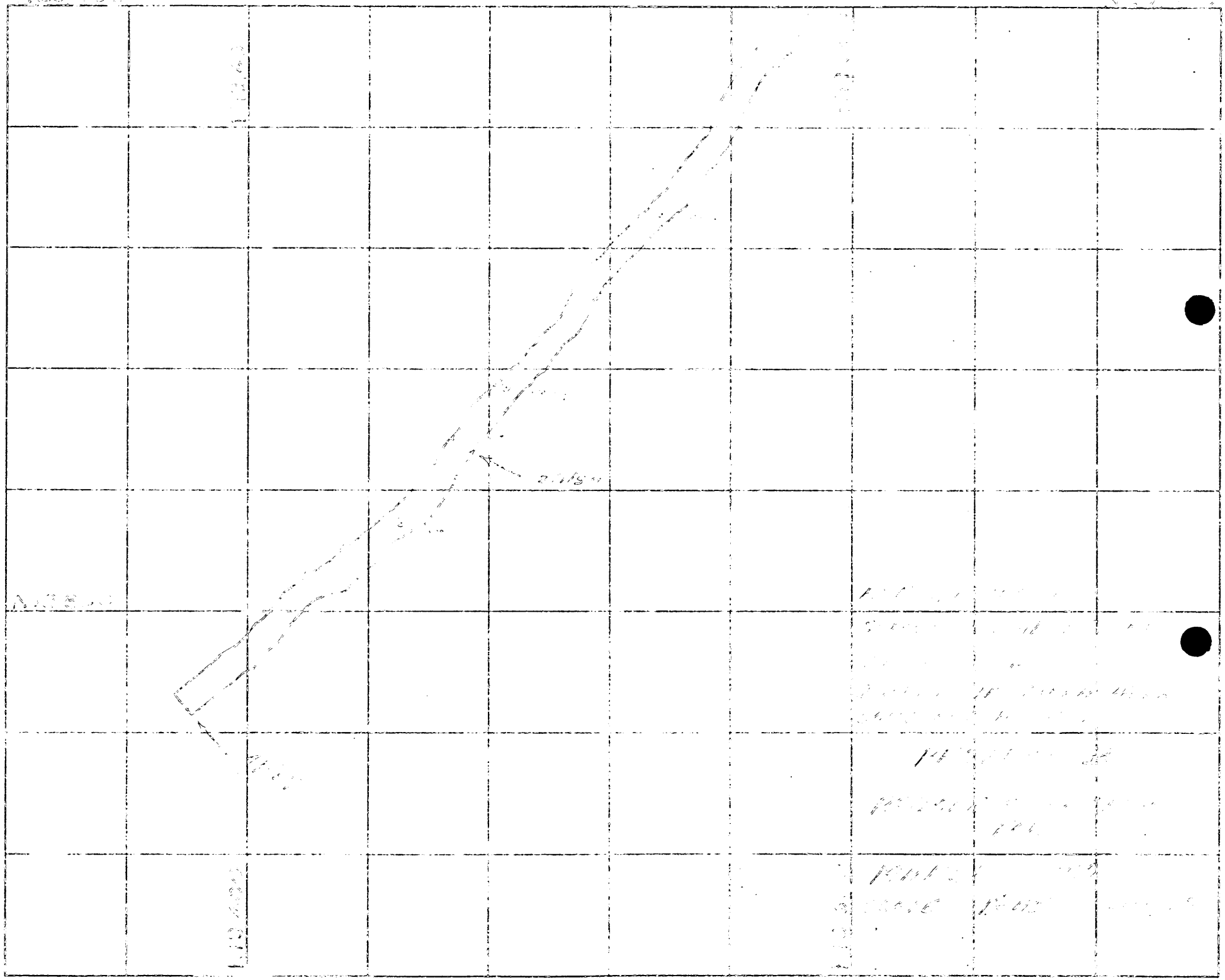
The remainder of the advance, about 95 ft., was in baked, black schist with diabase seams. There is definite indication of banding, and quartz stringers are present.

During the month 9 sets of timber were placed in two sections, covering 40 lineal ft. of crosscut.

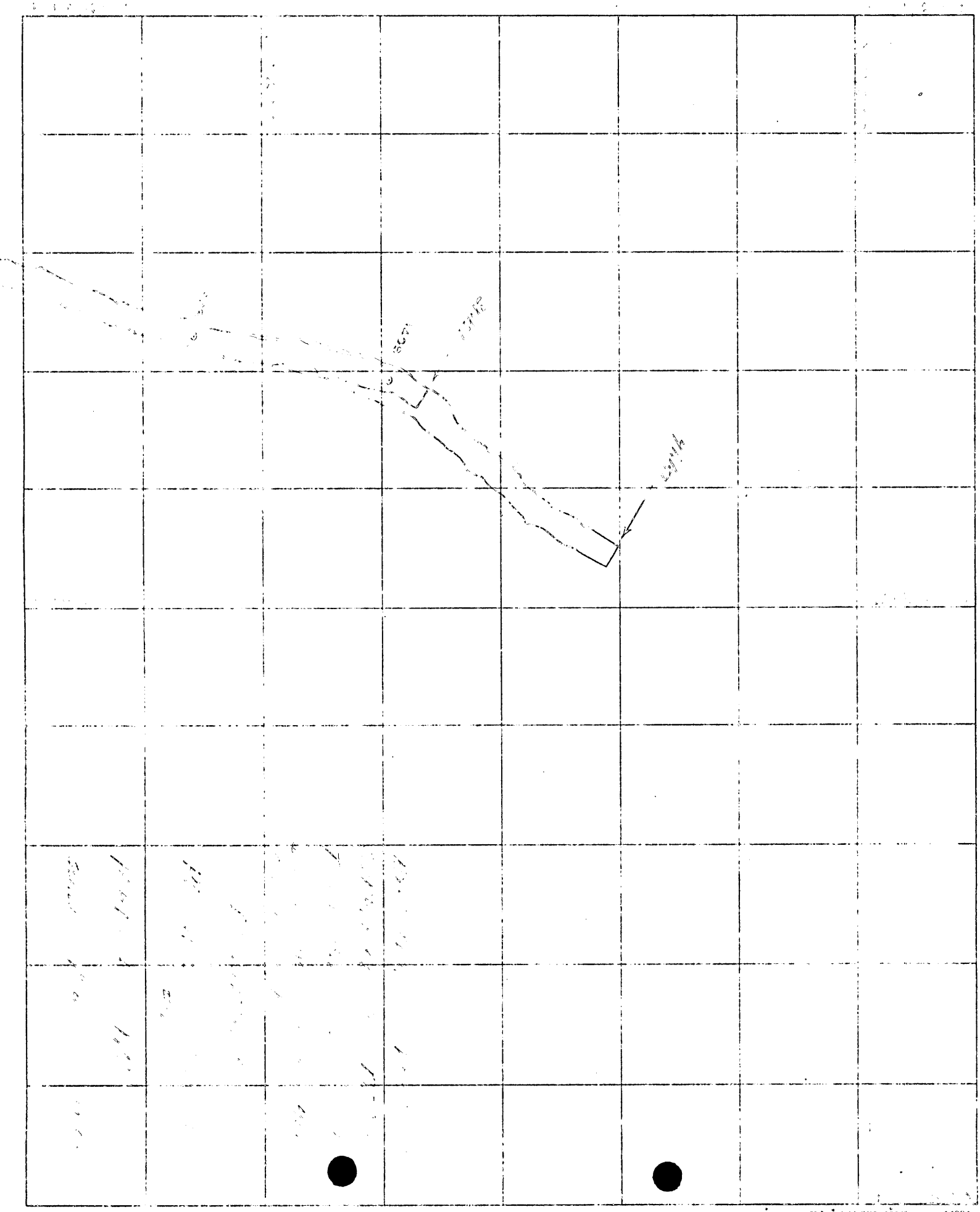
A turnout for switching cars was cut out during the month.

No production of ore came from Project D during the month.

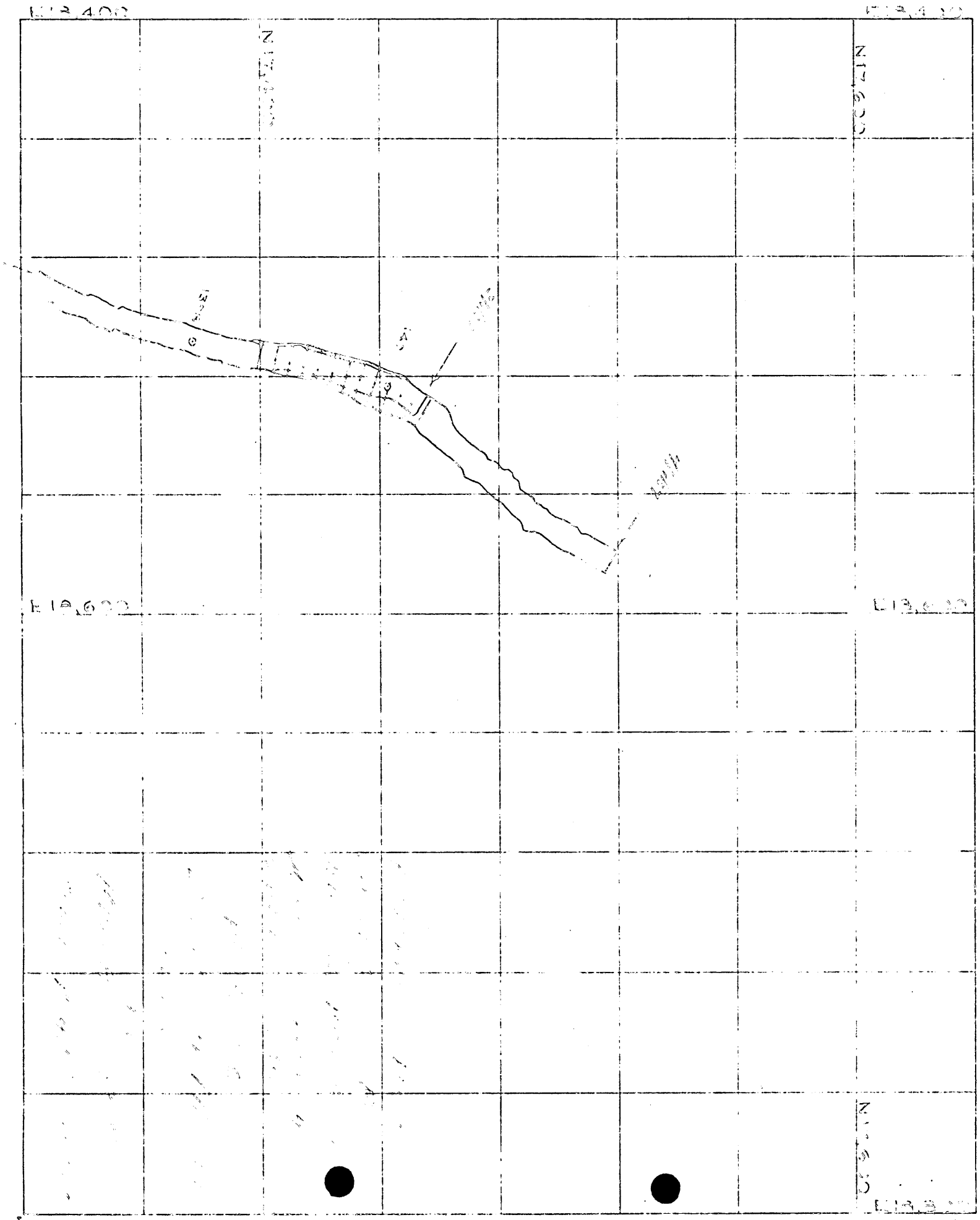




ALEXANDER ROSS 14020

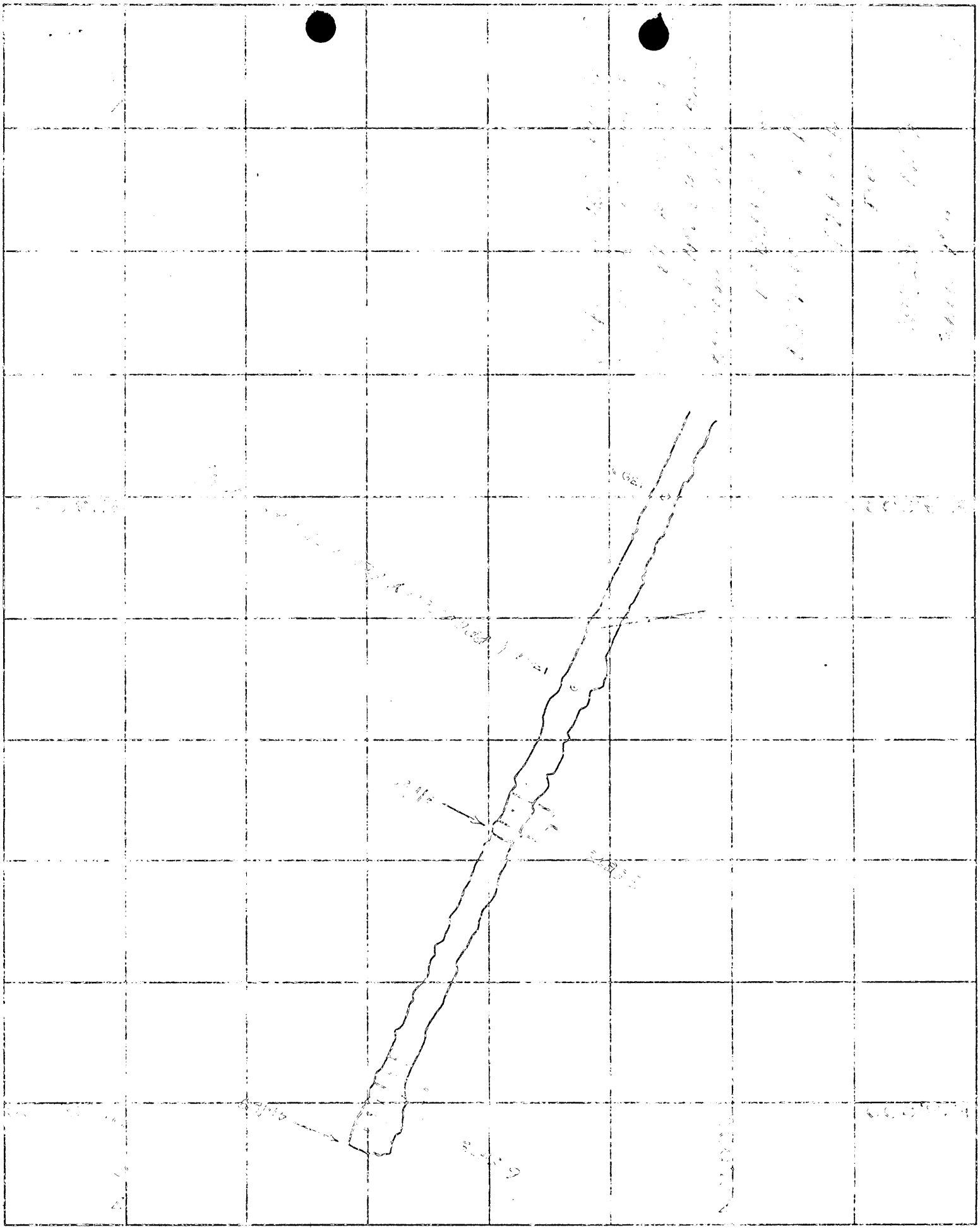


K+E ALBANENE FORM 10000



K+E PLOANERG 1000 ⊗ TRACING PAPER 14000

K&E 10 X 10 TO THE INCH 359-23
KEUFFEL & ESSER CO. MADE IN U.S.A.



Form MF-1[illegible]A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

RECEIVED MAR 25 1957 DMEA

Month of February 1957 Docket No. DMEA 4216 Contract No. E-1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

OPERATION	Unit	Costs This Month	Adjusted Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting: Dr. Not Timb	Ft	$9695.00	277	$29,960.00	856	$35.00		
Crosscutting: Dr. Timb								
Raising: Xc Not Timb	Ft	35.00	2	$ 8,435.00	241	$35.00		
Shafts: Xc Timbered	Ft	$4406.40	136	$ 7905. 60	244	$32.40		
Winzes								
Drilling: Core	Ft	$ 313.50	190	$ 313.50	190	$ 1.65		
Churn								
Auger								
Stripping: Sampling	ea.	$ 6.00	2	$ 9.00	3	$ 3.00		
Trenching								
Test Pits								
Roads and Trails								
Timbering	Ft	$ 816.00	136	$ 1464.00	244	$ 6.00		
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		$15,201.90		$48,087.10				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date March 8,1957 Operator Tungsten Mining Corporation

Per J. R. Lucas Title Vice-Pres & Gen Mgr.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Remarks: Costs for February '57 and costs to date conform with contract as amended Jan 30,1957

For February '57, footage of crosscut timbering(136') exceeded footage of timbered crosscut driven (61') by 75 ft-therefore debit crosscut timbered by 75 feet and credit crosscut not timbered by 75 ft.

(For Government use only)

W. L. Burmeister 3/12/57

MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

Form MF-104A
(April 1952)

UNIT ADJUSTMENT SHEET ONLY
February 1957

Budget Bureau No. 42-R315.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED MAR 22 1957

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of February 1957 Docket No. DMEA 4216 Contract No. E-1032
Operator's Name Tungsten Mining Corporation Minerals Tungsten
Address Box 931, Henderson, North Carolina

OPERATION	Unit	Costs This Month	Actual Units This Month	Adjusted ~~Costs to Date~~ Units, Feb'57	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
~~Drifting~~ Dr Not Timb			277	277				
~~Crosscutting~~ Dr Timbered			-	-				
~~Raising~~ Xc Not Timb			74	1				
~~Shafts~~ Xc Timbered			61	136				
Winzes								
Drilling: Core			190	190				
Churn								
Auger								
~~Stripping~~ Sampling			2	2				
Trenching								
Test Pits								
Roads and Trails								
Timbering			136	136				
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date March 8, 1957 Operator Tungsten Mining Corporation

Per [signature] Title Vice-Pres & Gen Mgr.

Remarks: For February'57, footage of crosscut timbering(136')exceeded footage of timbered crosscut driven(61') by 75 ft-therefore debit crosscut timbered by 75 feet and credit crosscut not timbered by 75 ft.

→ NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

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GPO 872894

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

EXTRA COPY
D.M.E.A.
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DATE | INITIALS | CODE

Month of February 1957 DMEA No. 4216 Contract No. 1032

Project A

	Feet, This Month	Feet, Previous	Feet, To-Date
Crosscutting @ $35.00	54	52	106
Crosscutting, timbered @ $32.40	0	108	108
Drifting @ $35.00	114	23	137
Timbering	0	108	108
Diamond Drilling	190	0	190
Number of Assays	2	1	3

The drift started last month was continued on the structure for a distance of about 57 ft., at which point the lens of ore and the structure pinched out. Of this advance, the first 10 ft. was in rather lean ore which pinched down from a width of 6½ ft. to about 2 ft. Additional mineralization continued for a distance of 35 ft., the vein averaging 1 to 2 ft. wide and containing fairly good mineralization, estimated to assay 0.60% WO_3.

At this point, diamond drilling was undertaken to test the hanging wall. Hole U1241 was drilled at a point with coordinates N 20,103, E 20,777 on a bearing of N 82½ E. This hole encountered good structure from 13 ft. to 50 ft., with several mineralized quartz seams, the widest being 12 inches from 32½ to 33½ ft. The hole was 100 ft. deep.

A second diamond drill hole U 1242 was drilled at a point with coordinates N 20,049 and E 20,737 on a bearing of N 86 E. This hole encountered 8 inches of mineralized quartz at 19 ft. and a wide, almost barren vein from 36½ ft. to 47½ ft. This hole was 90 ft. deep.

As a result of this drilling, the structure was crosscut encountering four separate vein seams, the first being almost barren and but a few inches wide. The second was from 1 to 2 ft. wide and had fair mineralization; the third varied from 2½ ft. to nil in width and was lightly mineralized; the fourth varied from 1 to 1½ ft. in width and was also lightly mineralized.

Inasmuch as the strength of the structure appeared to be on the hanging wall (see Hole U 1242) a drift was started again from the end of this crosscut on a bearing of about N 30 E. The small lens of ore pinched out in about 15 ft. and although some semblance of structure remained, it was not too encouraging. The drift was continued for another 42 ft. in anticipation of further drilling the footwall to determine if the structure in the footwall is the one carrying the mineralization. This will be done shortly.

In general, the south side of the crosscut looks livelier than the north side.

A total of 168 ft. of drifting and crosscutting was performed; 57 ft. of drifting in the original heading, then 54 ft. of crosscutting, and then 57 ft. of additional drifting.

Two additional samples were taken of the vein in the original drift. Sample No. 352 was 14.5 ft. northeast of survey station 1384 and Sample No. 353 was 24.5 ft. ahead of station 1384.

Month of February 1957 DMEA No. 4216 Contract No. 1032

Project A (Cont'd)

Results as follows:

Sample No. 352	5.5 ft.	0.13% WO_3
Sample No. 353	6.5 ft.	0.16% WO_3

No timber was installed during the month of February.

During the month 68 tons of ore from Project A were stockpiled. A grab sample of this ore assayed 0.14% WO_3.

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DATE

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of February 1957 DMEA No. 4216 Contract No. 1032

Project B

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	36	179	215
Crosscutting @ $35.00	0	80	80
Timbering	0	0	0
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Drifting on the vein structure was continued sporadically in Project B, at times when it was not possible to work in Project A.

The advance was 36 ft. on tight structure with up to 1 or 1½ ft. of quartz present. No mineralization was encountered.

No timbering was required.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of February 1957 DMEA No. 4216 Contract No. 1032

Project C

	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting @ $35.00	127	377	504
Crosscutting	0	0	0
Timbering	0	0	0
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Drifting in Project C was continued on the vein structure. The vein structure was liveliest for the first 45 ft. of this months advance averaging 1 to 2 ft. wide, with practically no mineralization present. The remainder of the advance was on a rather tight structure averaging 6 inches wide with no quartz present. The last 50 ft. of advance indicates the structure takes a definite turn to the northeast.

Drifting accounted for 127 ft. of advance. No timber was installed but some may be necessary in a few areas where the back is loose.

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of February 1957 DMEA No. 4216 Contract No. 1032

Project D

	Actual Feet, This Month	Adjusted Units-Feb.	Feet, Previous	Feet, To-Date
Drifting	0	0	0	0
Crosscutting, Timbered @ $32.40	61	136	0	136
Crosscutting @ $35.00	20	55	110	55
Timbering	136	136	0	136
Diamond Drilling	0	0	0	0
Number of Assays	0	0	0	0

Crosscutting advance was 81 ft. in diorite dike. The dike rock which at first appears to stand fairly well becomes loose and blocky upon continued exposure and almost the entire crosscut will be timbered, including most of the area which was previously roof-bolted.

Of the 43 ft. reported as untimbered in November, 8 ft. was timbered in February.

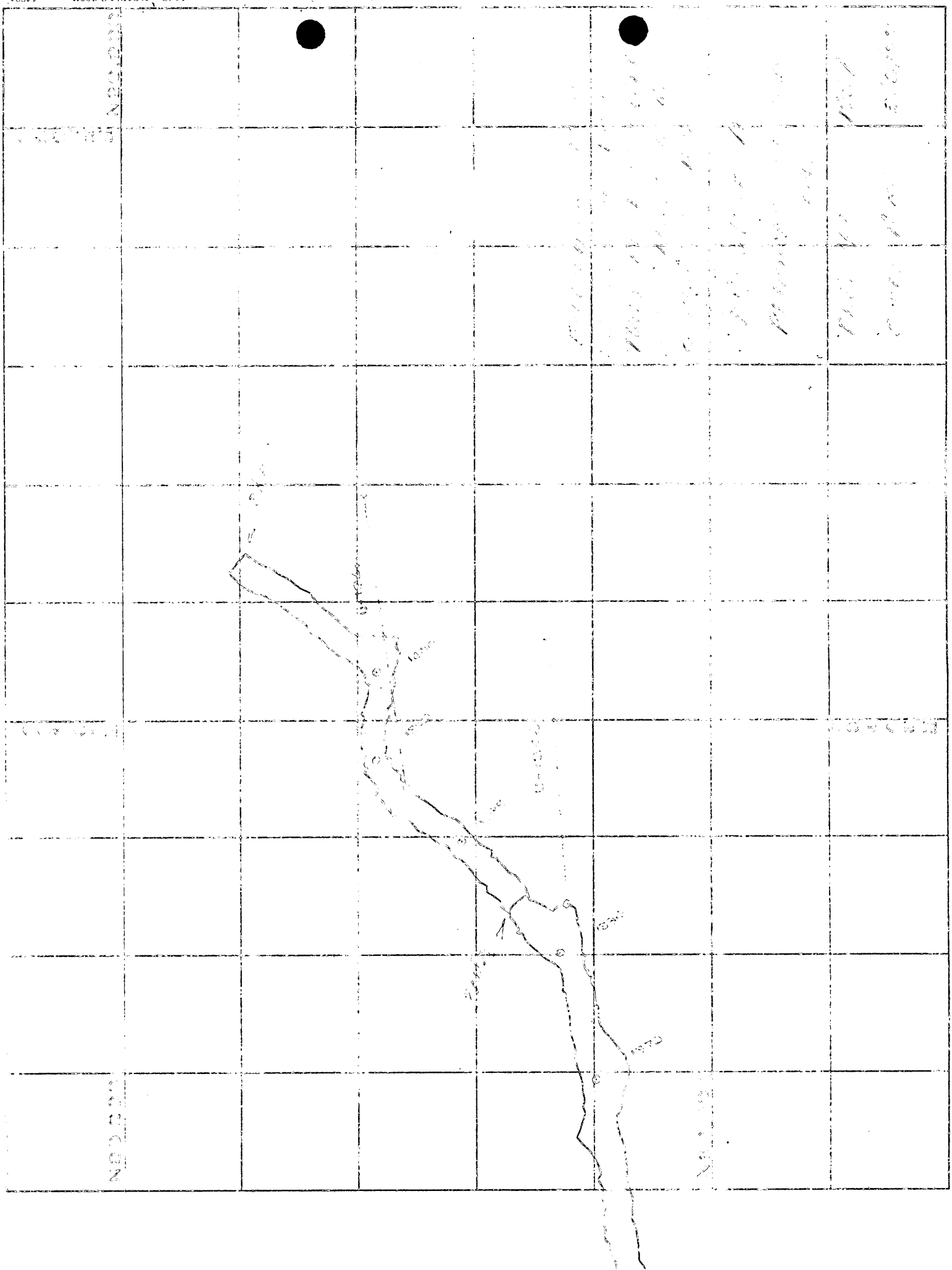
The 13 ft. reported untimbered in December was timbered in February.

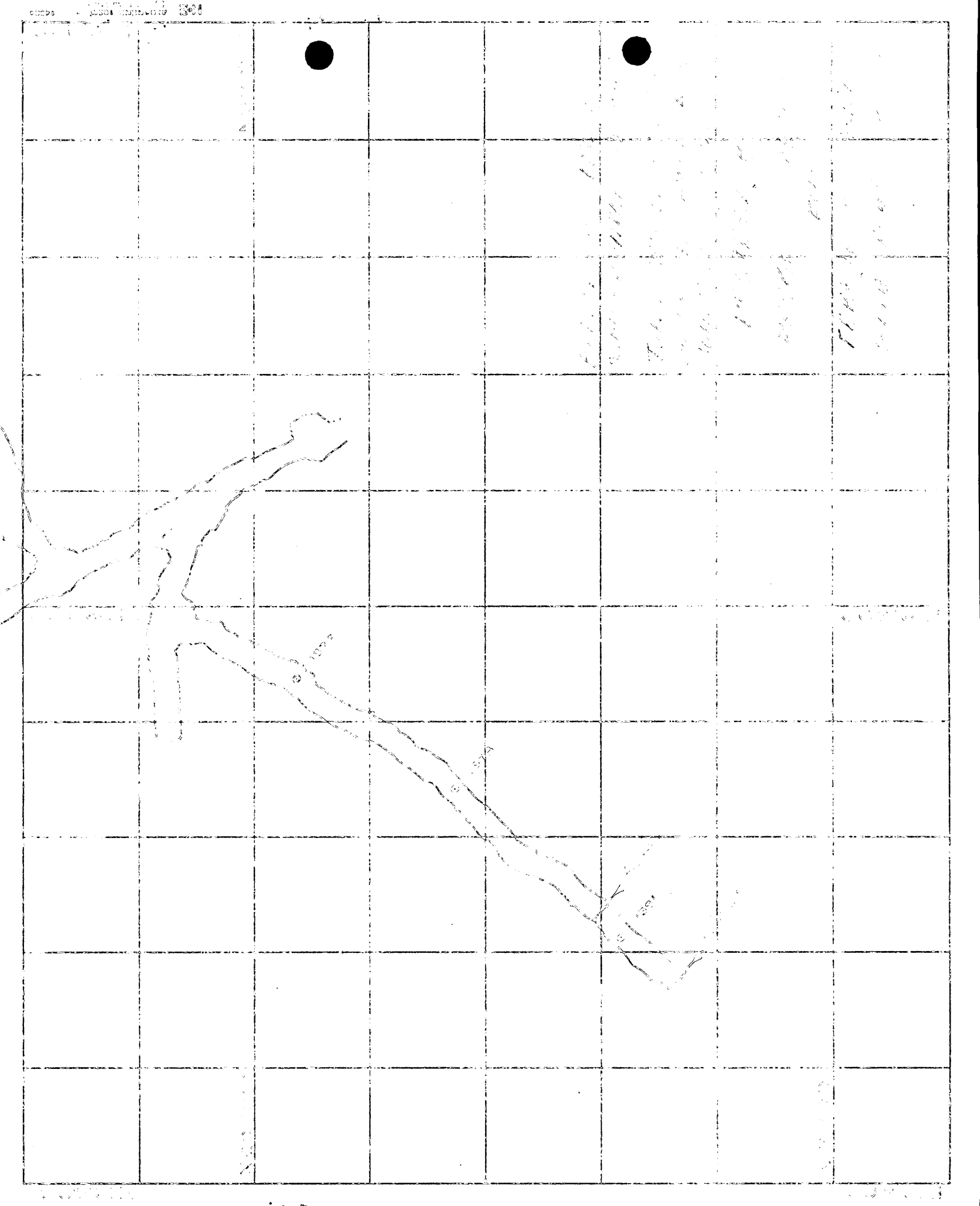
The 54 ft. reported as untimbered in January was timbered in February.

Of the 81 ft. advance in February, 61 ft. was timbered and 20 ft. was untimbered.

All together 28 sets of timber was placed covering 136 lineal feet.

No mineralization was encountered, nor is expected in the dike.





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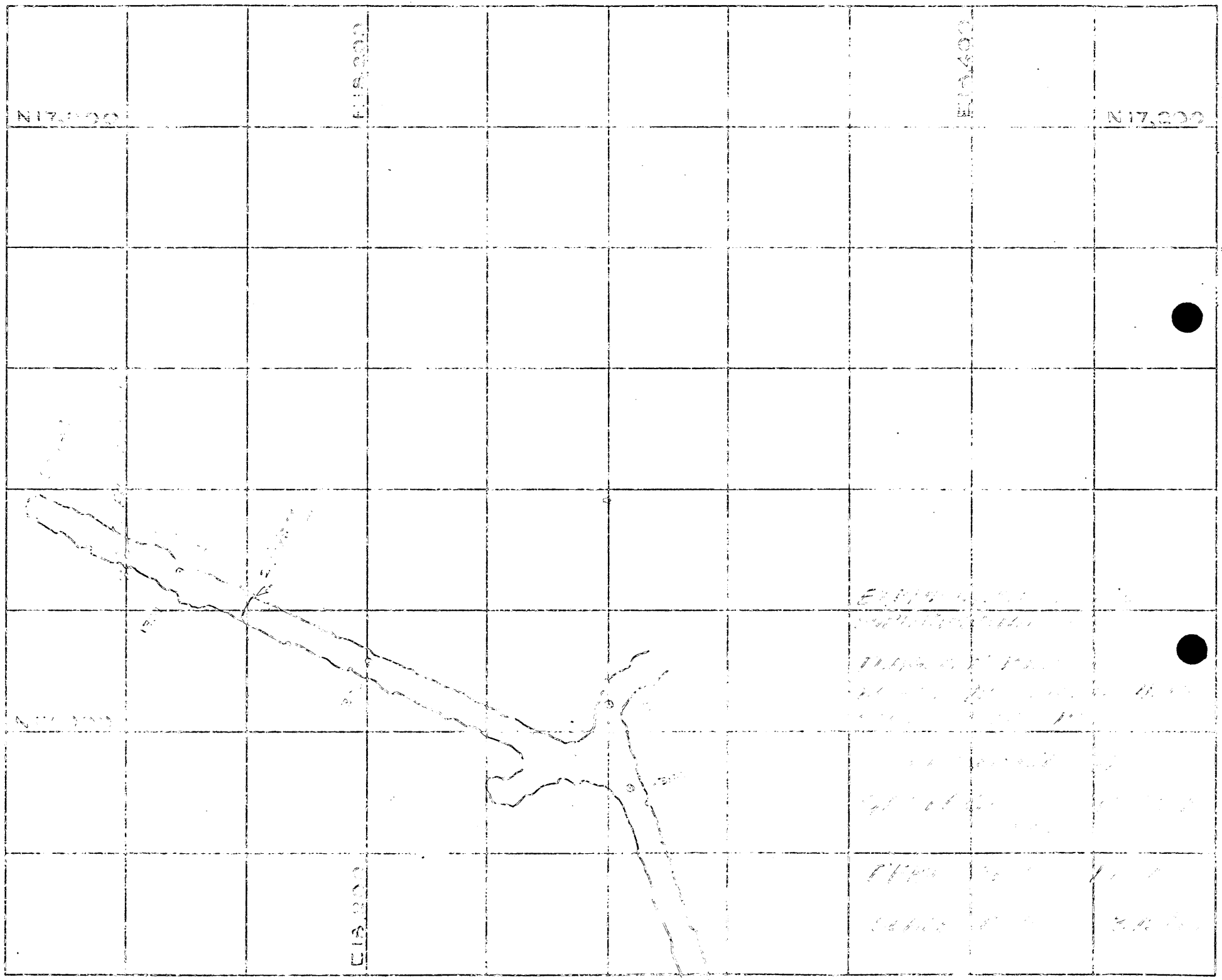
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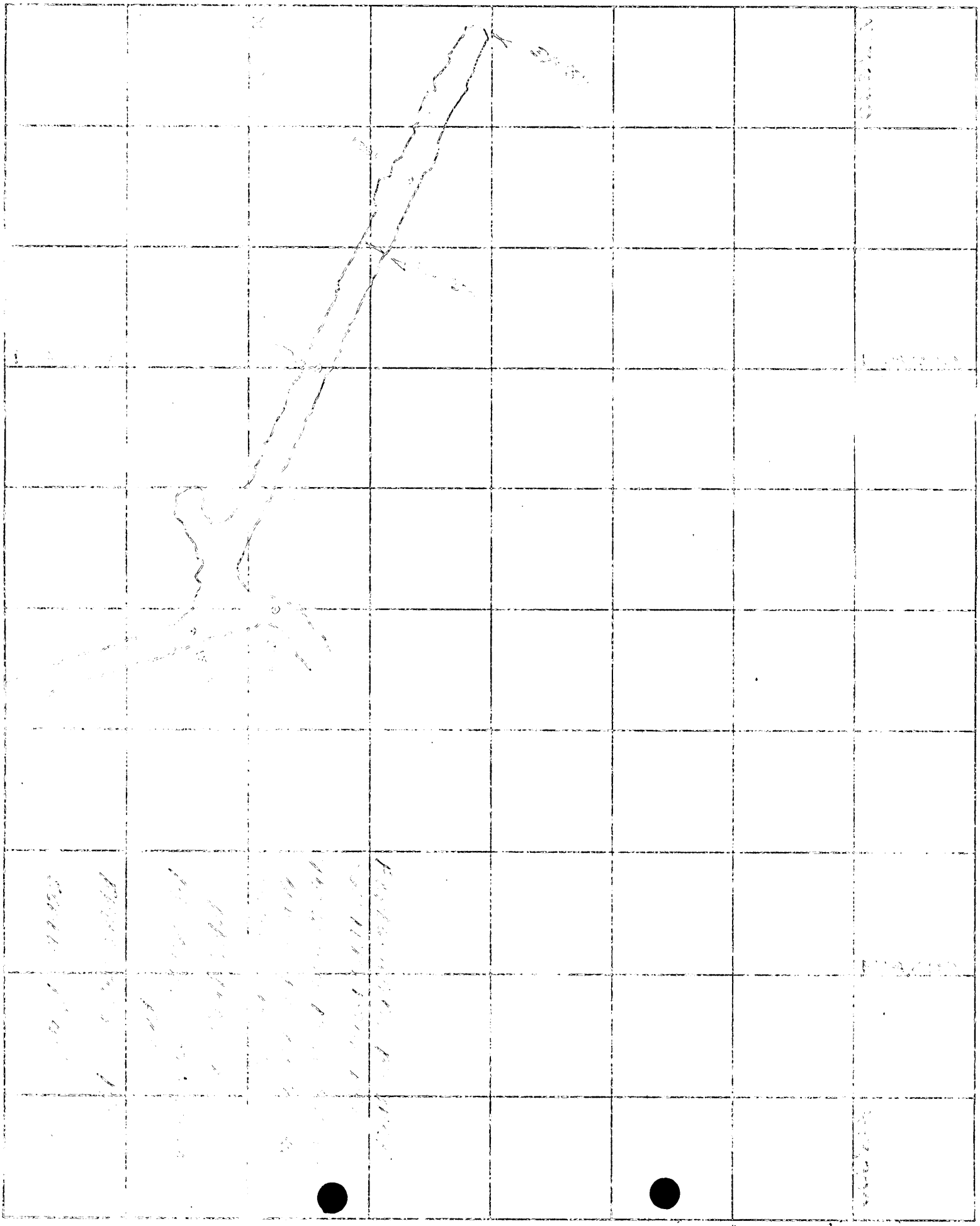

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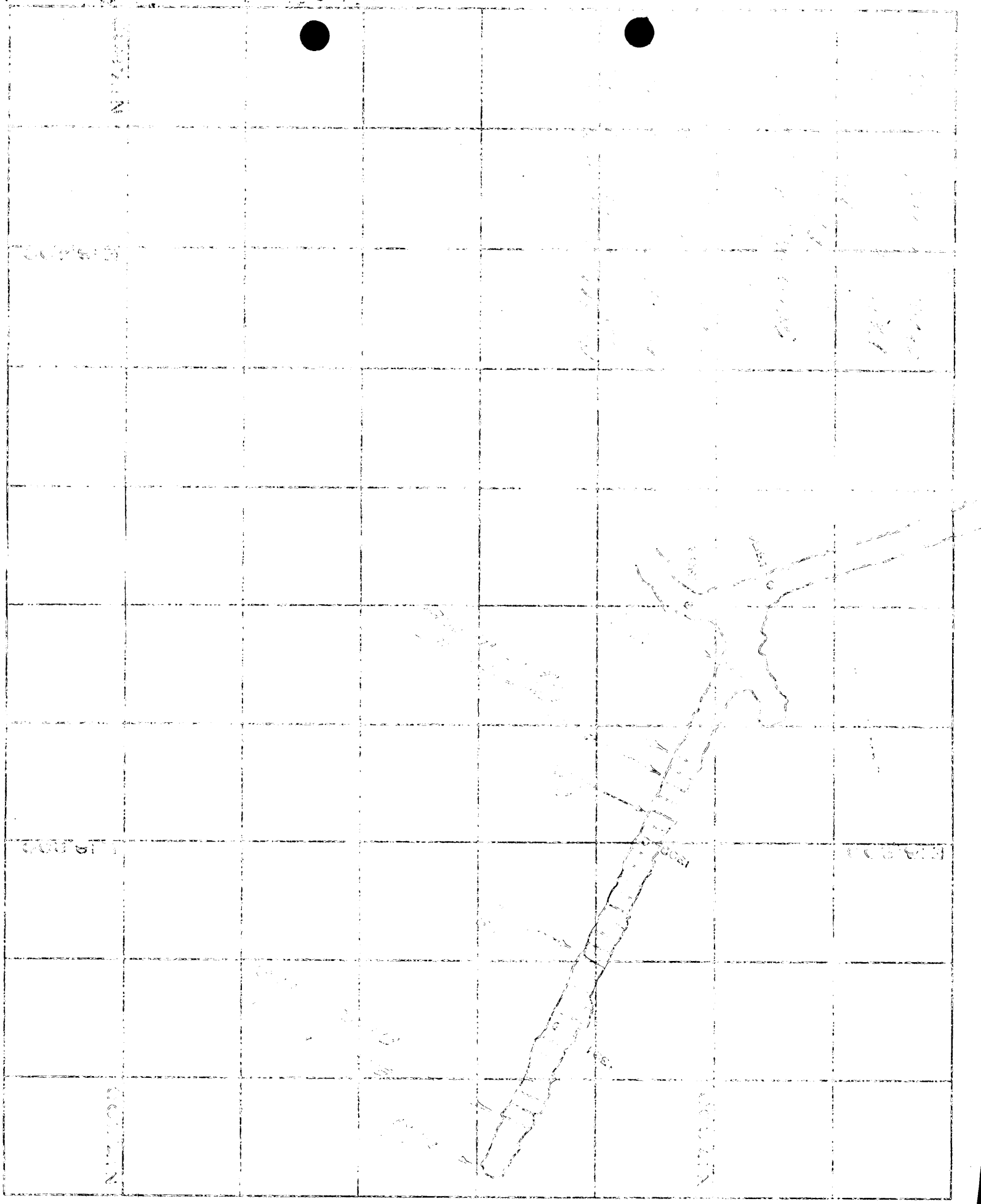

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 53

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January 1957 Docket No. DMEA 4216 Contract No. 1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

Contract Amount, $ 250,340.00 Government Participation: 75 % Amount, $ 187,750.00

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form } Contracts:						
~~Drilling~~ Drifting: no timber				12,110.00	8155.00	20,265.00
~~Bulldozing~~ Crosscutting: no timber				2970.00	5495.00	8470.00
Crosscutting	$ 4375.00	$ 7875.00	$ 12,250.00			
Drifting	$ 12,110.00	$ 8155.00	$ 20,265.00			
Crosscutting-Timbered.				1296.00	2203.20	3499.20
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber	$ 240.00	$ 408.00	$ 648.00	240.00	408.00	648.00
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis	$ 3.00	*	$ 3.00	3.00	—	3.00
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$ 16,728.00	$ 16,438.00	$ 33,166.00	16,624.00	16261.20	32,885.20

RECEIVED MAR 4 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Feb 6, 1957 *Payee Tungsten Mining Corporation

Per J. R. Lucas Title Vice-Pres. & Gen. Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 12,468.00

Signature Helen R. Miller
(Authorized Certifying Officer)

Date MAR 1 1957 Vou. No. 138

(See other side)

4156.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1032 in accordance with the terms of the contract.

Signature W. L. Burmeister Title Mining Eng'r. Date 2/12/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lemmon Title EXECUTIVE OFFICER DMEA REGION V Date FEB 21 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

GPO 872893

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of January 195 7 Docket No. DMEA 4216 Contract No. 1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, North Carolina

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT Units	AUTHORIZED BY CONTRACT Unit Costs
Drifting	Feet	$12,110.00	346	$20,265.00	579	$35.00		
Crosscutting	Feet	$ 4,375.00	125	$12,250.00	350	$35.00		
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Timbering	Feet	$ 240.00	40	$ 648.00	108	$ 6.00		
TOTAL DISTRIBUTED COSTS		$16,725.00		$33,163.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Assays		$ 3.00	1	$ 3.00	Assays @ $3.00 ea.			
TOTAL COSTS		$16,728.00		$33,166.00				

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date Feb 6,1957 Operator Tungsten Mining Corporation

Per J. R. Scott Title Vice-Pres. & Gen.Mgr.

REMARKS:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

Subject to adjustment of unit cost by amendment
W. A. Burmeister

Form MF-104 corrected to conform to amendment No. 1
N. J. Lynch

RECEIVED MAR 4 1957 D.M.E.A.

INSTRUCTIONS

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GPO 872894

EXPLORATION PROJECT - Supplemental Report

Month of: January 1957 DMEA No. 4216 Contract No. 1032

Project A (Partially Timbered)

	Feet, This Month	Feet, Previous	Feet, to Date
Drifting	23	0	23
Crosscutting	71	89	160
Timbering	40	68	108
Diamond Drilling	0	0	0
Number of Assays	1	0	1

Crosscutting was continued on a bearing of N. 80 E. At a point about 13 ft. ahead of survey station 1379, the crosscut went through the N E side of the diabase dike. A few feet ahead, a vein 1 to 1½ ft. wide was encountered, but since the vein did not appear lively, the crosscut was continued and at a point about 40 ft. ahead of station 1379 another vein was encountered. This vein was crosscut to the apparent hanging wall and proved to be about 16 ft. wide (in plan). The vein carried good mineralization, and a sample taken across the back assayed 1.02% WO_3 for 15.7 ft. although this appears somewhat high.

The above crosscutting accounted for 71 ft. of advance.

As soon as this vein had been crosscut, a drift to the north east on a bearing of approximately N 30 E was started on the footwall of this vein. However, after one round, an inclusion of schist came into the face and the only ore remaining appeared to be on the hanging wall side of the drift. The drift was turned slightly to the hanging-wall side and at the month's end, about 4 ft. of vein had been exposed, although the grade of the ore was not very good.

The above drifting accounted for 23 ft. of advance.

A car switch and a safety "dog-hole" were cut out during the month.
Inasmuch as other parallel lenses may exist in this area, diamond drilling will be undertaken shortly to test the hanging wall.

Eight additional sets of timber were installed covering 40 lineal feet. It is quite probable that additional timber will not be required in this area.

During the month, 154 tons of ore were stockpiled. Car grab samples taken of this rock assayed 0.32% WO_3.

1372
NEG 2900
NEG 2900

EXPLORATION PROJECT - Supplemental Report

Month of January 1957 DMEA No. 4216 Contract No. 1032

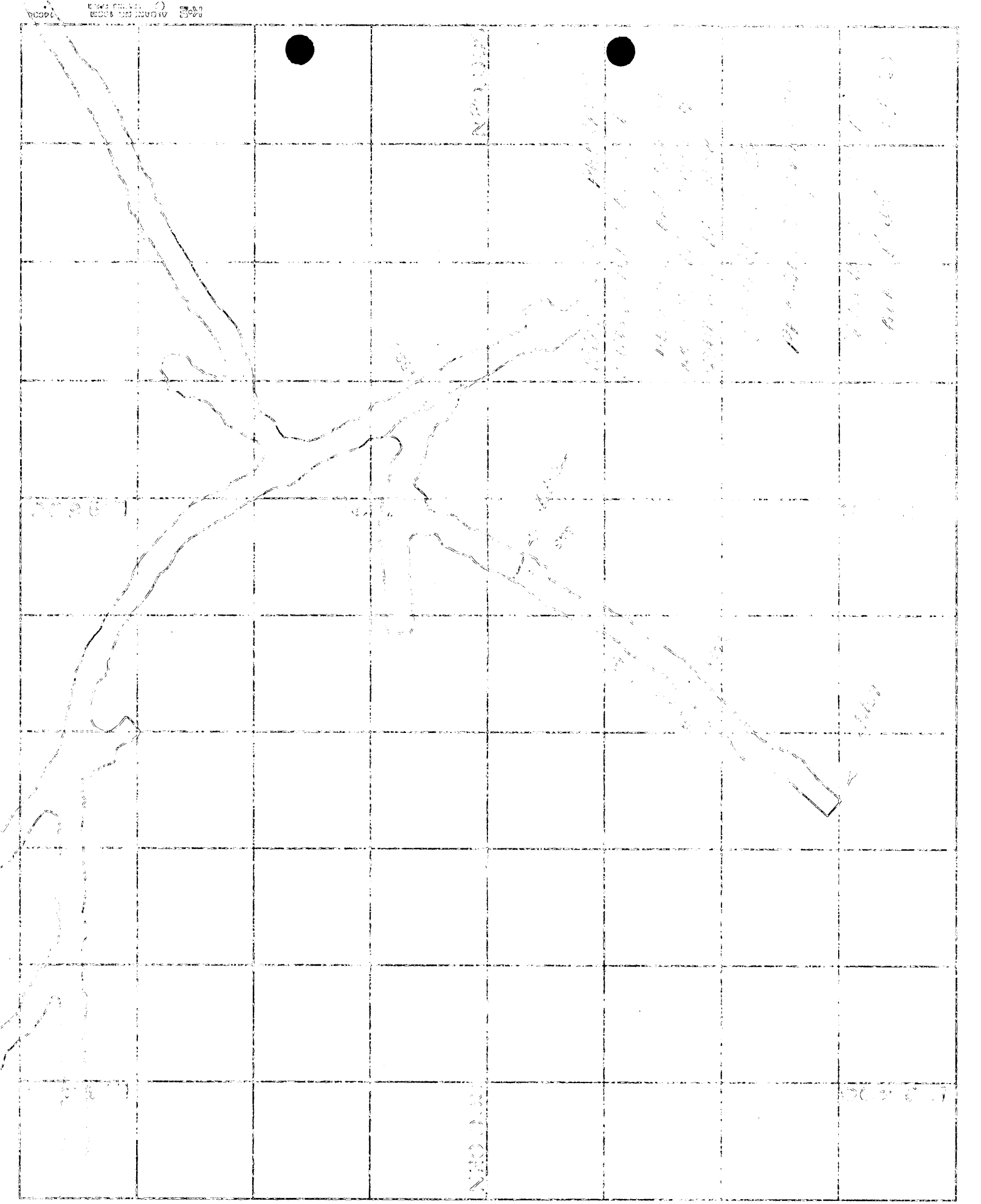
Project B

	Feet, this Month	Feet, Previous	Feet, To-Date
Drifting	137	42	179
Crosscutting	0	80	80
Timbering	0	0	0
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Drifting on the vein structure was continued and accounted for 137 ft. of advance. The structure has attained a strike of about S 40 W which is about the same as that of the vein on the 500 Level. The dip correlation is good also.

The structure has averaged 2 to 3 ft. wide with the quartz being that wide also in a few areas. Generally no mineralization was present except the last 15 or 20 ft. where there were a few small crystals of hubnerite.

No timbering was required.



EXPLORATION PROJECT - Supplemental Report

Month of January 1957 DMEA No. 4216 Contract No. 1032

Project C

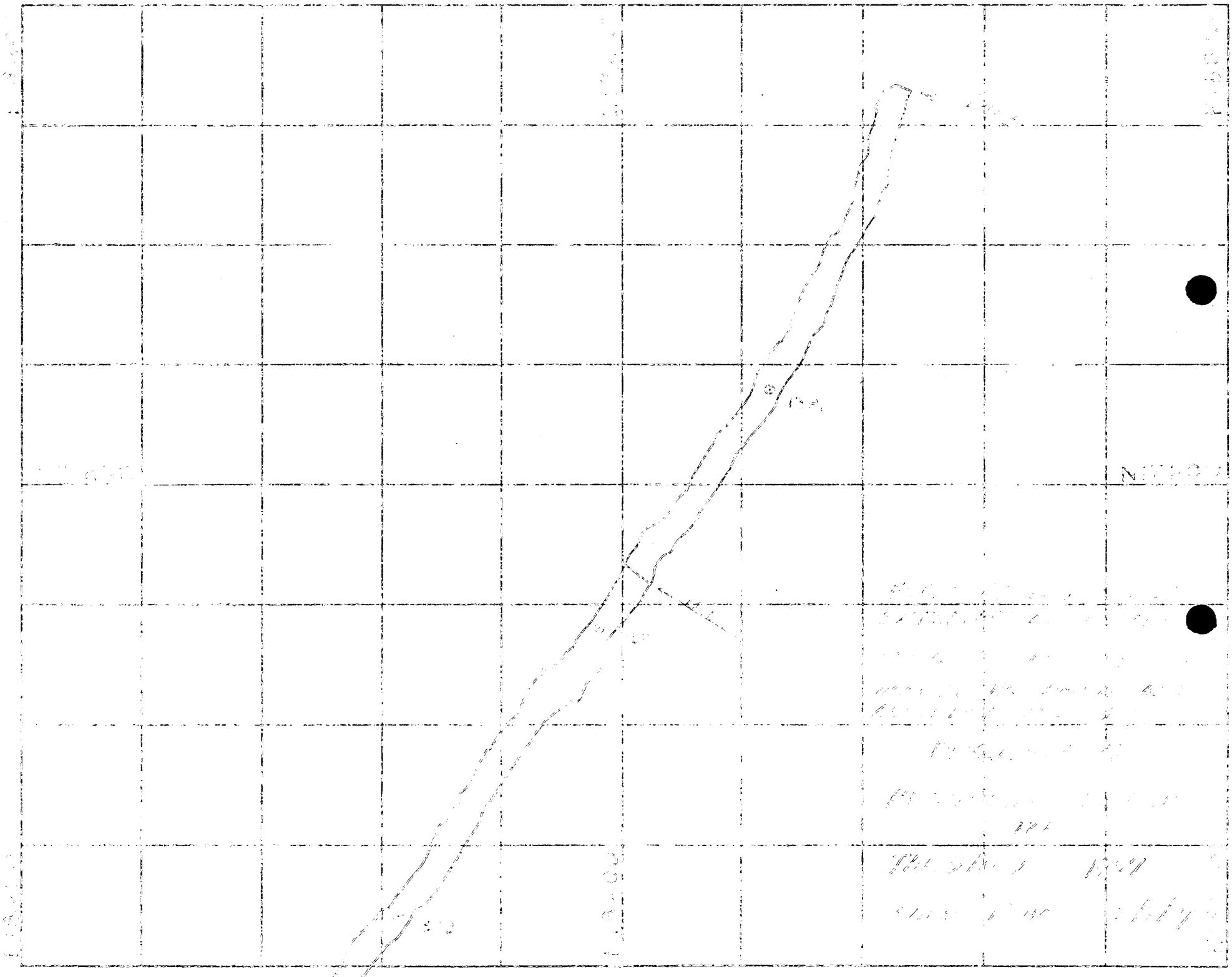
	Feet, This Month	Feet, Previous	Feet, To-Date
Drifting	186	191	377
Crosscutting	0	0	0
Timbering	0	0	0
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Drifting was continued in Project C on the vein structure. The dike reported as being in the face of the project at the end of the December was about 2 feet thick. The vein was picked up on the other side of this dike and has averaged about 2 ft. wide to the present face.

The mineralization which was good on the south side of dike, dropped off on the north side. Very little mineralization was encountered in this month's drifting and the quartz does not appear to be very lively.

A car switch was completed and as a result of this slabbing 17 tons of rock were stockpiled for ore, estimated to assay 0.27% WO_3.

Drifting accounted for 186 ft. of advance. No timbering was required.



EXPLORATION PROJECT - Supplemental Report

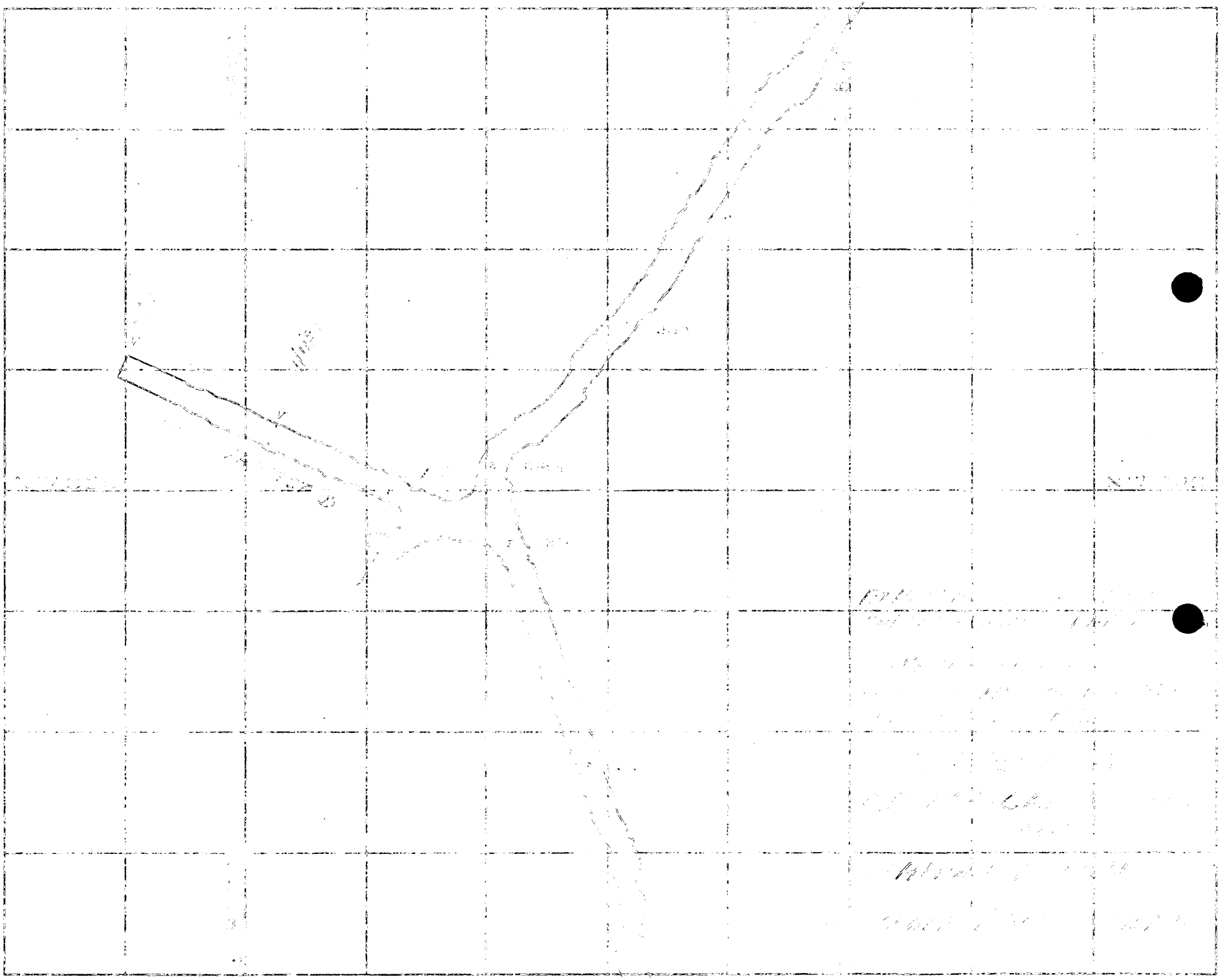
Month of January 1957 DMEA No. 4216 Contract No. 1032

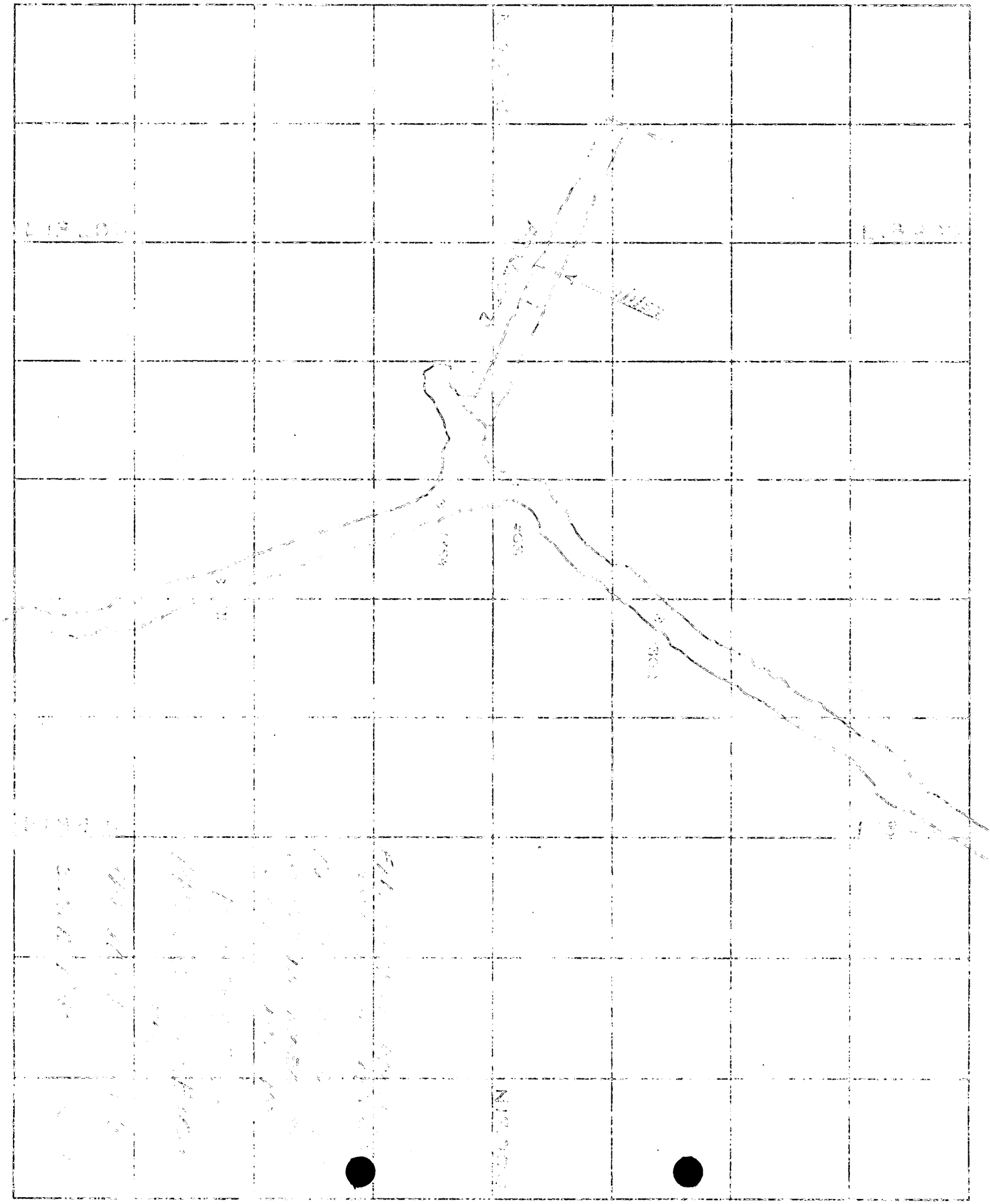
Project D

	Feet, this Month	Feet, Previous	Feet, to Date
Drifting	0	0	0
Crosscutting	54	56	110
Timbering	0	0	0
Diamond Drilling	0	0	0
Number of Assays	0	0	0

Crosscutting advance was 54 ft. in diorite dike which stands up somewhat better than heretofore. Probably no timbering will be required. No additional roof bolts were placed.

No mineralization was encountered and none is expected in the dike.





K&E ALBANENE 10 X 10 PER INCH 14 X 20

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- 53

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December, 1956 Docket No. DMEA 4216 Contract No. 1032
Operator's Name Tungsten Mining Corporation Minerals Tungsten
Address Box 931, Henderson, North Carolina
Contract Amount, $ 250,340.00 Government Participation: 75 % Amount, $ 187,750.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent / Short Form Contracts:						
Drifting - no timber				8155.00	—	8155.00
cross cutting - no timber				3430.00	2065.00	5495.00
Crosscutting	$5180.00	$ 2695.00	$ 7875.00			
Drifting	$8155.00	$ 00.	$ 8155.00			
Crosscutting timbered.				1573.20	630.00	2203.20
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber	300.00	108.00	408.00	300.00	108.00	408.00
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$13,635.00	$2603.00	$16,438.00	13458.20	2803.00	16261.20

RECEIVED MAR 4 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Jan. 7, 1957 *Payee Tungsten Mining Corporation

Per J. R. [illegible] Title Vice-Pres. & Gen. Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 10,093.65

Signature Helen R. Miller
(Authorized Certifying Officer)

Date MAR 1 1957 Vou. No. 138
(See other side)

3364.55

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. F-4032 in accordance with the terms of the contract.

Signature W. J. Lynch Title MINING ENGINEER U. S. BUREAU OF MINES Date FEB 27 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Lamanna Title EXECUTIVE OFFICER DMEA REGION V Date FEB 27 1957

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED MAR 4 1957 DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of December 1956 Docket No. DMEA 4216 Contract No. 1032
Operator's Name Tungsten Mining Corporation Minerals Tungsten
Address Box 931, Henderson, North Carolina

OPERATION	Unit	Costs This Month	Units This Month	Costs to Date	Units to Date	Unit Costs to Date	Authorized by Contract: Units	Authorized by Contract: Unit Costs
Drifting	Feet	$8155.00	233	$8155.00	233	$35.00	-	
Crosscutting	Feet	$5180.00	148	$7875.00	225	$35.00	6700	$35.00
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Timbering	Feet	$300.00	50	$400.00	68	$6.00	4415	$6.00
Total Distributed Costs		$13,635.00	-	$16,438.00				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

Date January 7, 1957 Operator Tungsten Mining Corporation

Per J. R. Lucas Title Vice-Pres. & Gen. Mgr.

Remarks:

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

Form MF-104 corrected to conform to Amendment No. 1

V. J. Lynch
MINING ENGINEER
U. S. BUREAU OF MINES

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

TUNGSTEN MINING CORP.
BOX 81
HENDERSON, N. C.
TELEPHONE NO. 1100

January 5, 1957

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of: December 1956 DMEA No. 4216 Contract No. 1032

PROJECT A (Timbered Crosscut)

	Feet, This Month	Feet Previous	Feet, To Date
Drifting	0	0	0
Crosscutting	55	34	89
Timbering	50	18	68
Diamond Drilling	0	0	0

All of the advance in Project A to date, is or will be timbered. (89 ft).

Crosscutting was continued in Project A on a bearing of N80°E. The advance was 55 feet.

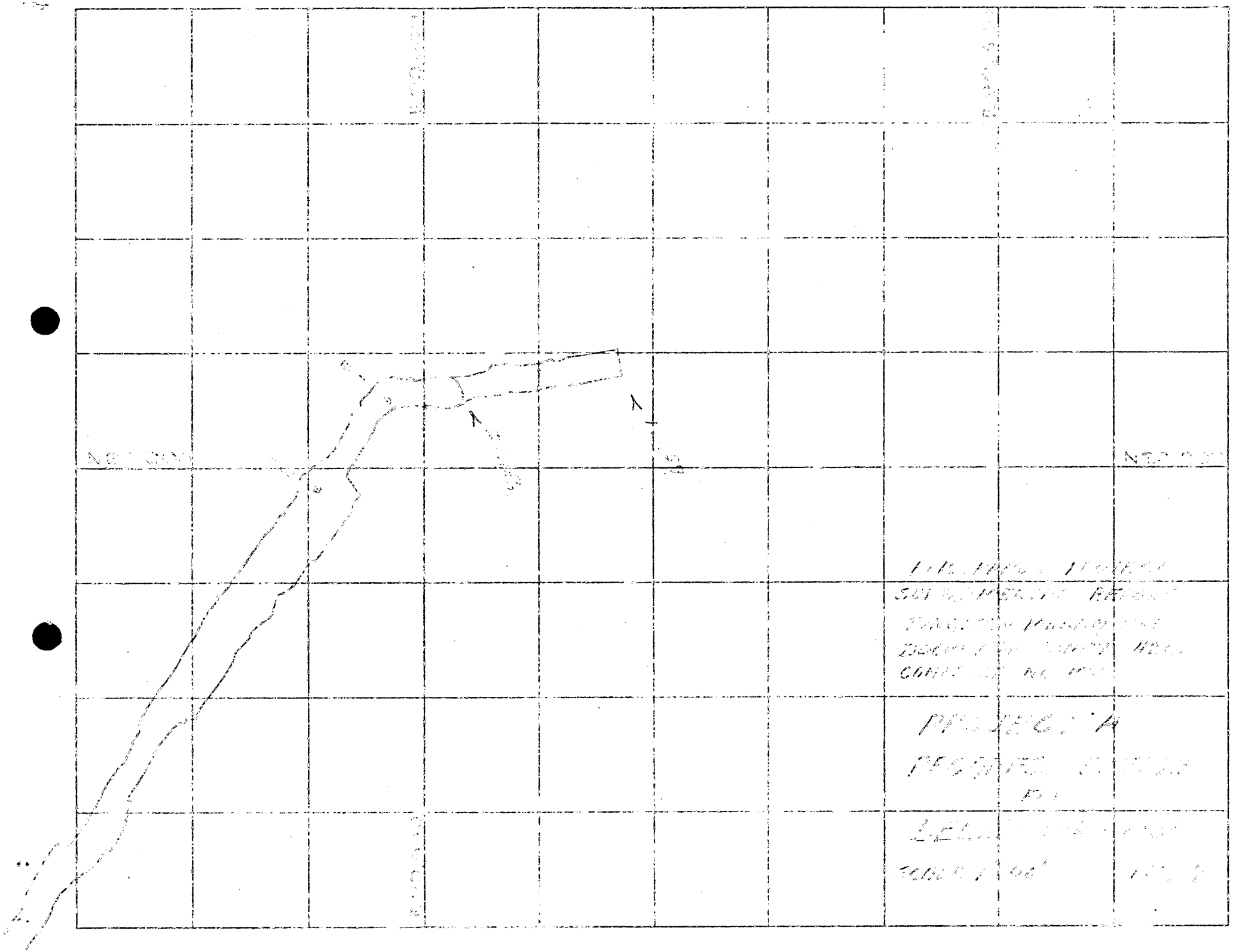
Ten additional sets of timber were installed covering 50 lineal feet.

The advance was in diabase dike which is still very blocky and requires timber support throughout. The advance was rather slow due to the time consumed in timbering. Sets installed have a minimum width inside of posts of 5 feet 8 inches and a height of 7 feet 6 inches above the rail.

No mineralization was encountered, nor is expected in dike.

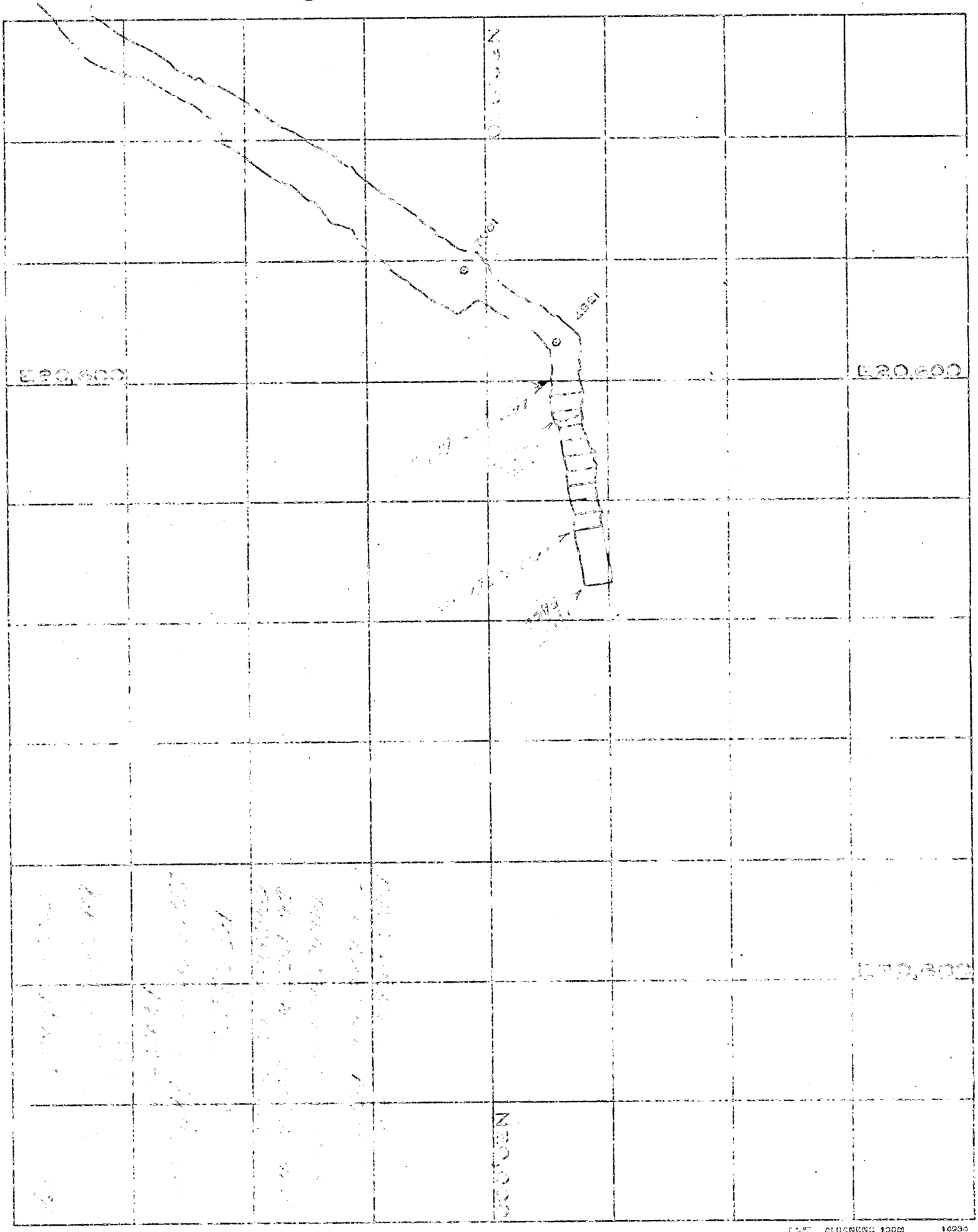
Note: In the November Report advance listed as "Drifting" for Project A, (34 feet), was actually crosscutting advance.

DOCUMENT CONTROL
DOCS UNCLASSIFIED



ALBANENE 100M TRACING PAPER 14030

1887
1881
G
G



DRAFTING ROOM
LEADING PAPER
10930

TUNGSTEN MINING CORP.
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TELEPHONE NO. 1100

RECEIVED MAR 4 1957 D.M.E.A.

January 5, 1957

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of: December 1956 DMEA No. 4216 Contract No. 1032

PROJECT B

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting	42	0	42
Crosscutting	80	0	80
Timbering	0	0	0
Diamond Drilling	0	0	0

Crosscutting to the expected location of No. 3 Vein was started on the dayshift of Saturday, December 1, 1956. The crosscut was started at a point with coordinates N20,021.5 and E19630.5, and 2.5 feet ahead of survey station 1358.

The crosscut encountered a narrow vein (1 to 1½ ft of mineralized quartz) at a point 36 ft ahead of survey station 1358; the vein striking about S12W and dipping 70° to the east. When this vein was encountered it was not recognized as the No. 3 Vein structure because its strike did not correlate with that of No. 3 Vein as known to the north east of this level. The crosscut was continued to the vicinity of the intersection of 3 feet of quartz in DDH U-831. As no structure was present at this location, it became apparent that the small vein previously encountered must be No. 3 Vein which had changed strike very abruptly.

The presence of the 3 ft of quartz in D.D.H. U-831 is explained by the presence of several narrow flat-lying quartz seams exposed in the face of the crosscut.

On December 18, 1956 Tungsten Mining Corporation obtained permission by phone from Mr. H. L. Burmeister, to discontinue crosscutting and to commence drifting on the small vein encountered.

Drifting was started and has been advanced 42 feet from the starting point. The first ten to fifteen feet remained lively with up to 2 feet of mineralized quartz vein present. Subsequently the vein pinched but the structure continues fairly strong being 2 to 2½ ft wide, with no mineralization present.

TUNGSTEN MINING CORP.
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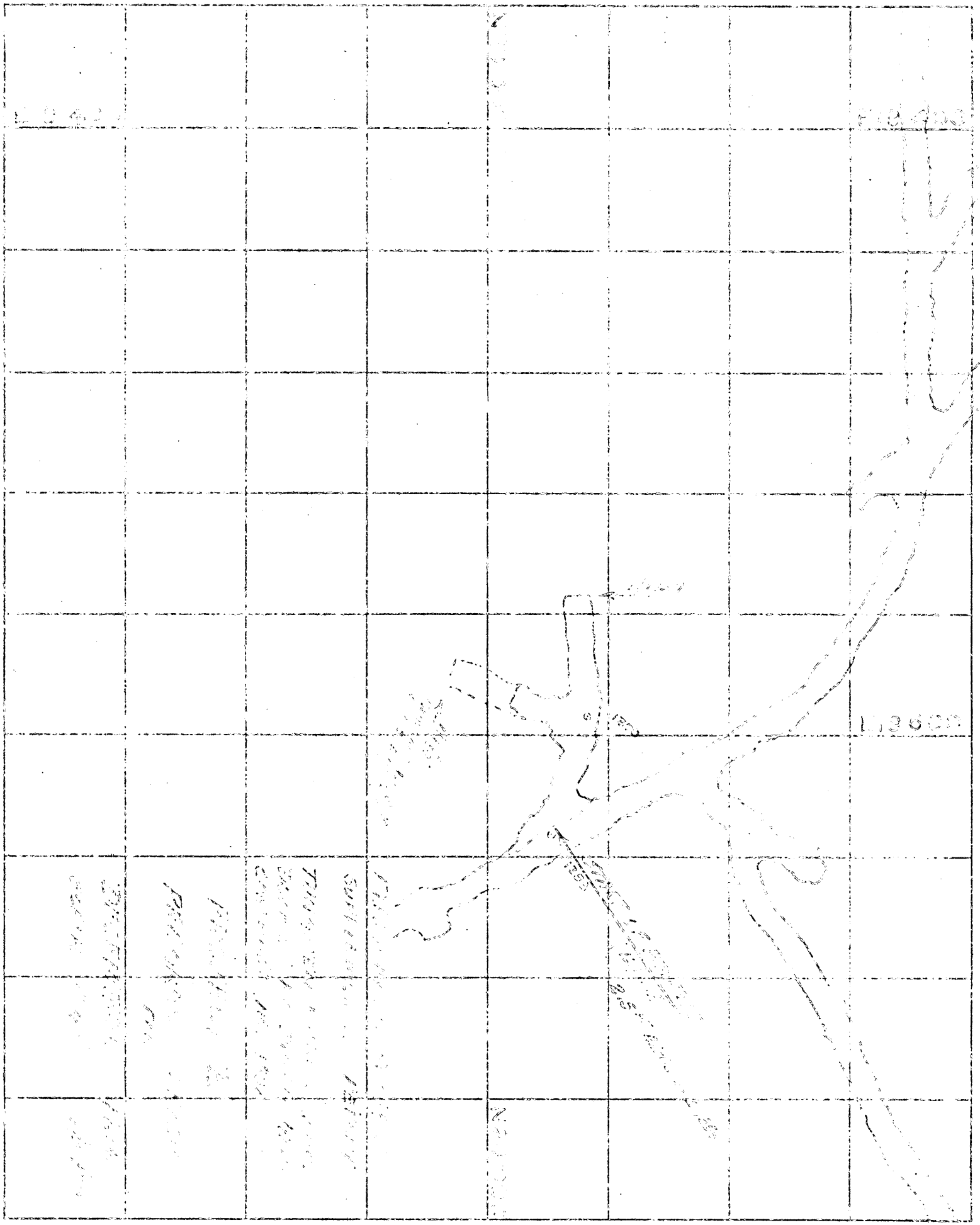
January 5, 1957

 EXPLORATION PROJECT - SUPPLEMENTAL REPORT

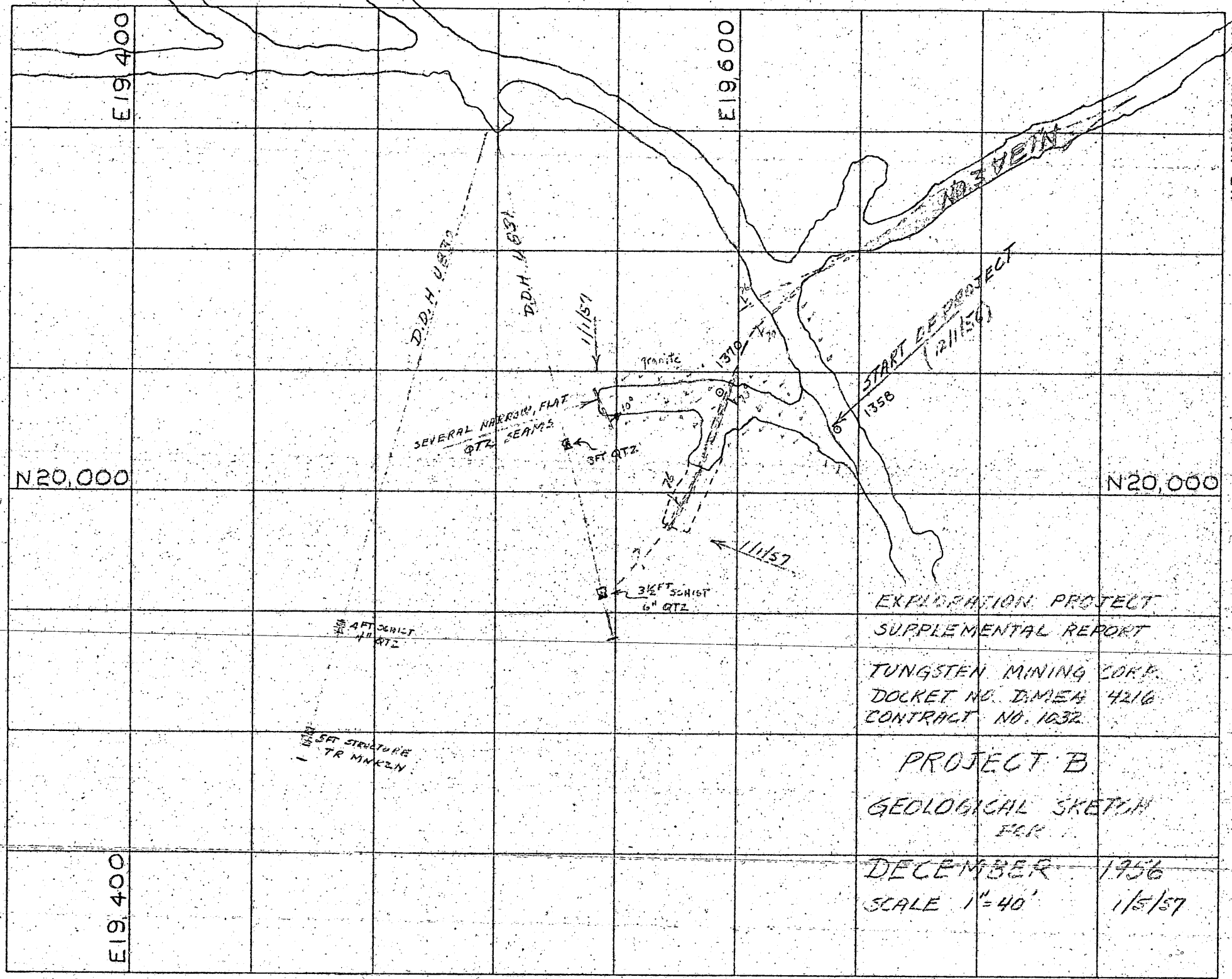
PROJECT B

As the drifting progresses it appears that the strike of the vein becomes more westerly, thus assuming a strike more nearly expected of No. 3 Vein and correlating better with the strike of No. 3 Vein as known on the 500 Level.

Crosscutting amounted to 80 feet; drifting to 42 feet, for a total advance of 122 feet. No timbering was required.



K+E ALBANENE 1000 94004
10 X 10 TRACING PAPER


E19,400
E19,600
E19,400
N20,000
N20,000
D.D.H. U870
D.D.H. U831
1/1/57
granite
1370
1358
START OF PROJECT
(2/1/56)
NO. 2 VEIN
SEVERAL NARROW, FLAT QTZ SEAMS
3FT QTZ
1/1/57
3½FT SCHIST
6" QTZ
4FT SCHIST
4" QTZ
5FT STRUCTURE
TR MNKZN
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT B
GEOLOGICAL SKETCH
FOR
DECEMBER 1956
SCALE 1"=40'
1/5/57

TUNGSTEN MINING CORP.
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HENDERSON, N. C.
TELEPHONE NO. 1100

RECEIVED
MAR 4 1957
D.M.E.A.

January 5, 1957

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of: December 1956 DMEA No. 4216 Contract No. 1032

PROJECT C

	Feet, This Month	Feet, Previous	Feet, To Date
Drifting	191	0	191
Crosscutting	0	0	0
Timbering	0	0	0
Diamond Drilling	0	0	0

Drifting was started on the dayshift of Monday, Dec. 3, 1956, starting at a point with coordinates N17,019.0, E18,292.0, and 16.8 ft ahead of survey station 1360.

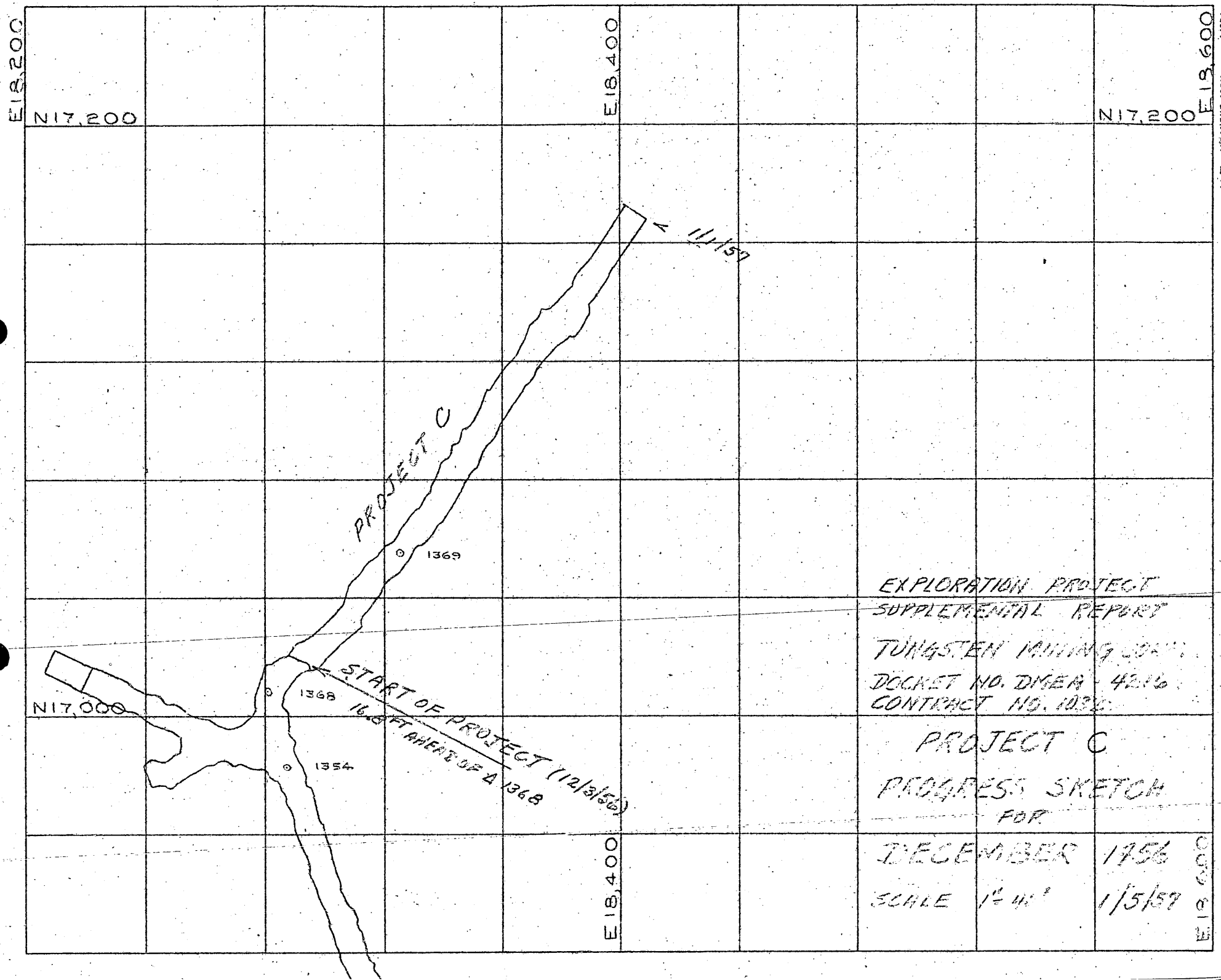
The first 25 ft of drifting was on tight structure with only traces of mineralization. The remainder of the advance was on a mineralized vein which varied in width from 1½ ft up to 3½ ft, probably averaging out 2½ ft wide; however, at the end of the month a diabase dike striking to the north west came into the drift from the right hand side and appears to cut the vein off completely.

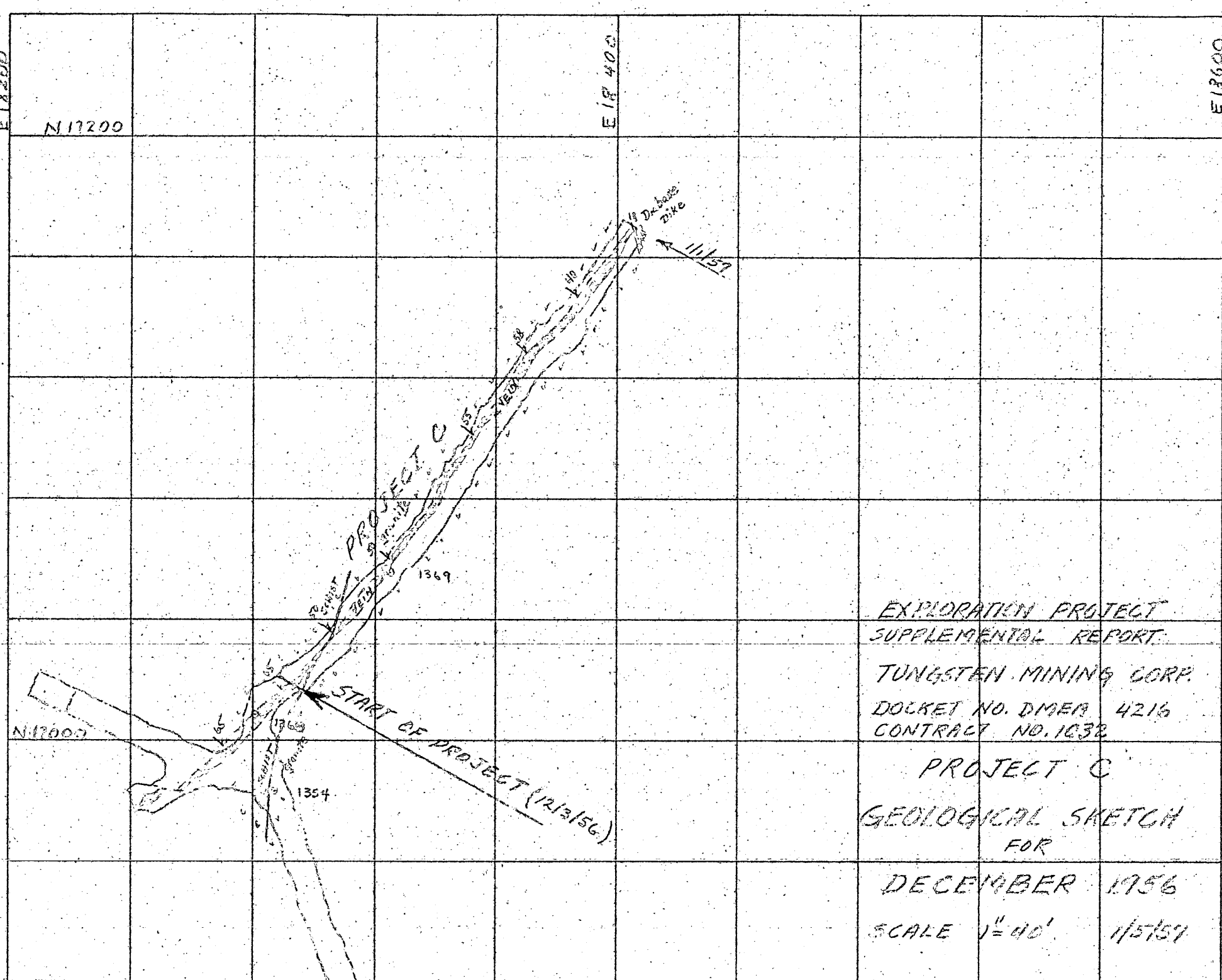
The vein also appears to have flattened somewhat. At the starting point dips were about 65 degrees to the south, but as drifting progresses, dips of 50 to 55 degrees were more common, and in one area close to the face, the vein flattened to about 40 degrees.

A few feet ahead of the starting point, the drift entered the granite-gneiss complex as expected.

As a result of the drifting on this vein, 140 tons of rock was stockpiled for ore. Car grab samples taken of this rock assayed 0.27% WO_3.

Total drift advance was 191 ft. No timbering was required.


E18,200
N17,200
E18,400
E18,600
N17,200
PROJECT C
1369
1368
1354
START OF PROJECT (12/3/56)
16.8 FT AHEAD OF Δ 1368
N17,000
E18,400
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA - 4216
CONTRACT NO. 1032
PROJECT C
PROGRESS SKETCH
FOR
DECEMBER 1956
SCALE 1" = 40'
1/5/57
E18,000


E 18200
N 17200
E 18400
E 18600
N 17000
Diabase Dike
11/1/57
PROJECT C
VEIN
1369
1354
START OF PROJECT (12/3/56)
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT C
GEOLOGICAL SKETCH
FOR
DECEMBER 1956
SCALE 1" = 40'
11/5/57

TUNGSTEN MINING CORP.
BOX 81
HENDERSON, N. C.
TELEPHONE NO. 1100

January 5, 1957

RECEIVED JAN 4 1957

EXPLORATION PROJECT - SUPPLEMENTAL REPORT

Month of: December 1956 DMEA No. 4216 Contract No. 1032

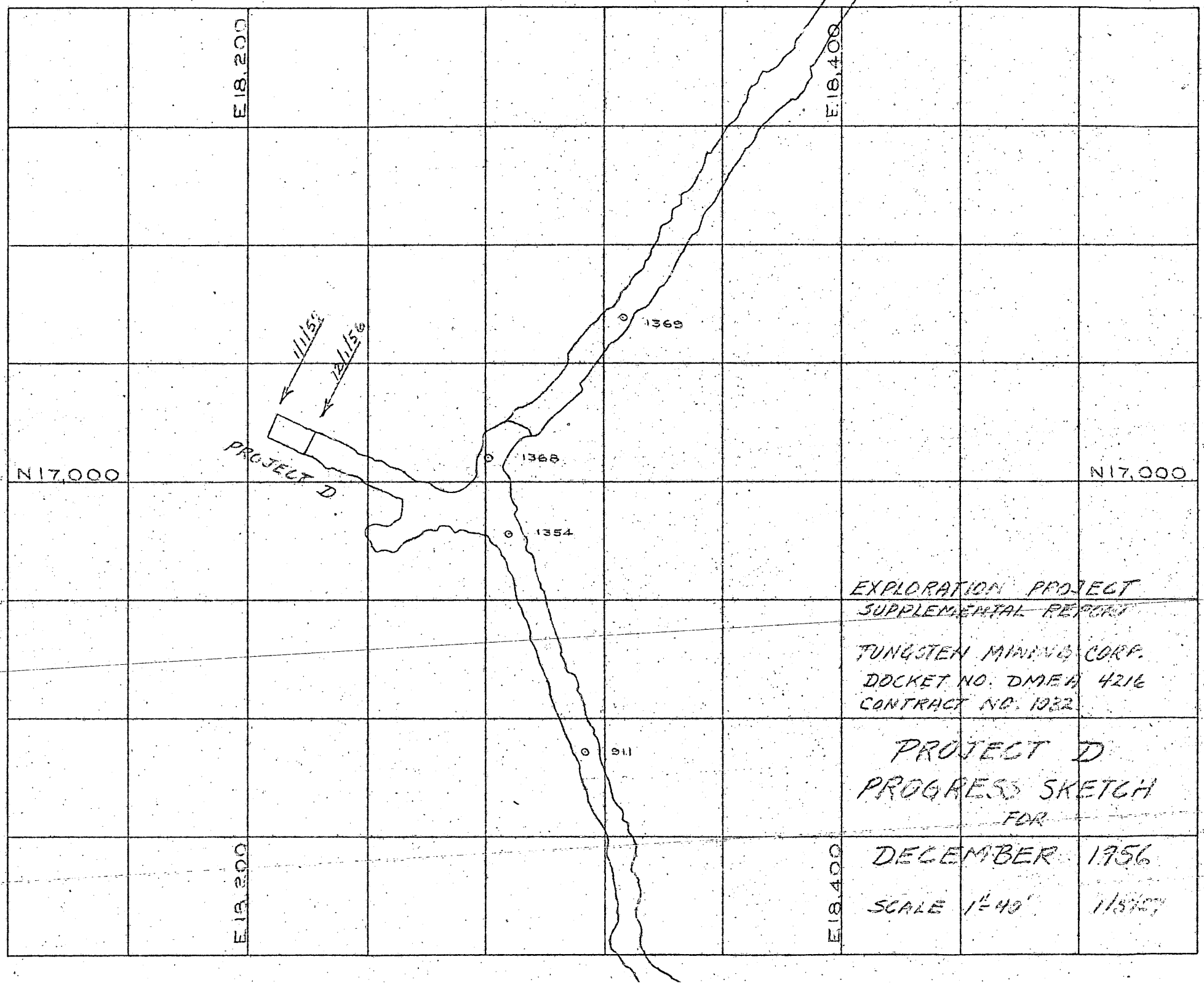
Project D

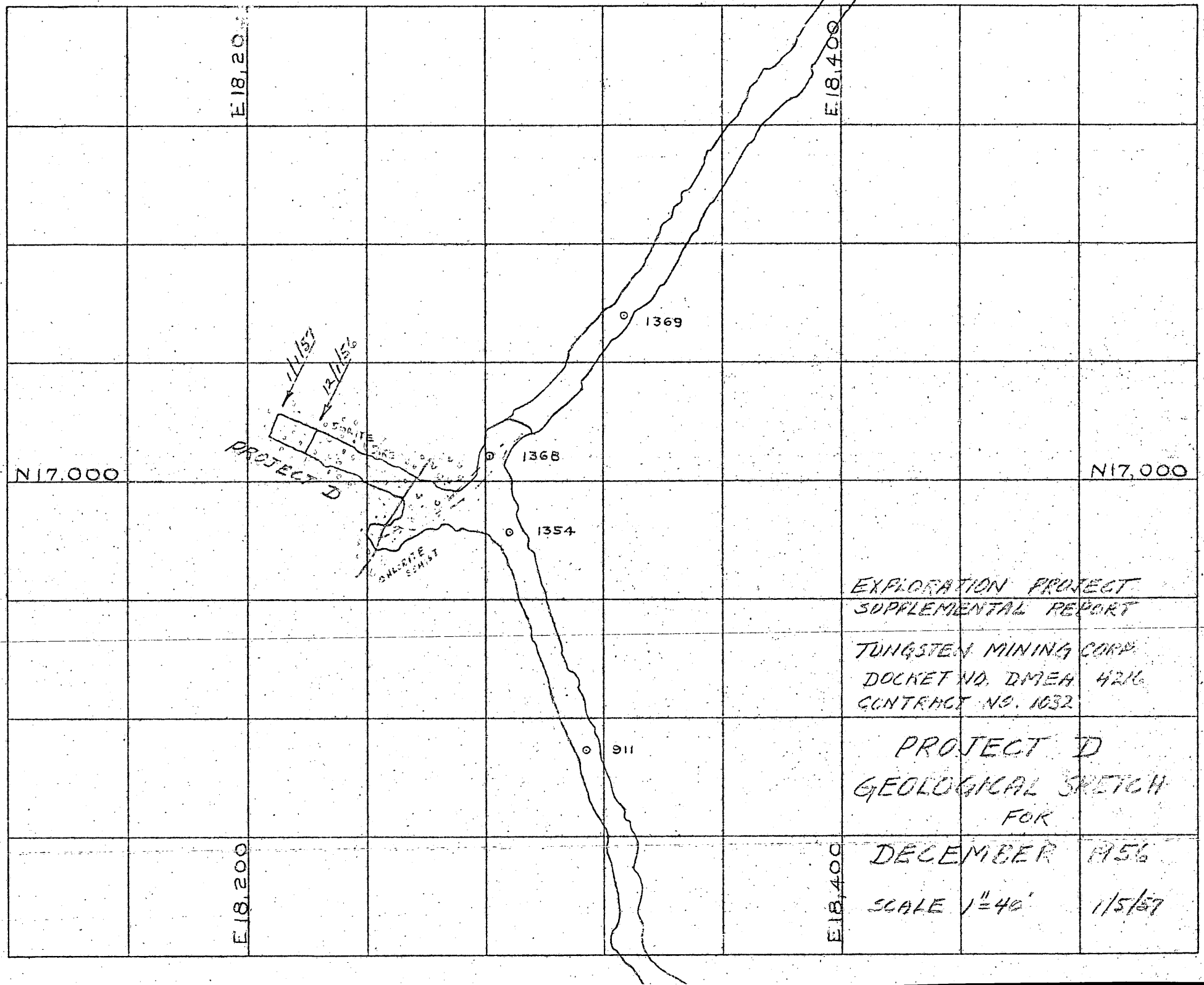
	Feet, This Month	Feet, Previous	Feet, To Date
Drifting	0	0	0
Crosscutting	13	43	56
Timbering	0	0	0
Diamond Drilling	0	0	0

Crosscutting advance was 13 feet in diorite dike which is quite blocky but appears to stand somewhat better than the first advance of 43 feet for the previous month.

During the month, 28 roof bolts were installed to support the back.

The advance was 13 ft. No mineralization was encountered, nor is expected in the dike.


E 18,200
E 18,400
N 17,000
N 17,000
E 18,200
E 18,400
1369
1368
1354
911
PROJECT D
11/1/56
12/1/56
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1322
PROJECT D
PROGRESS SKETCH
FOR
DECEMBER 1956
SCALE 1" = 40'
11/5/56


E18,200
E18,400
N17,000
N17,000
E18,200
E18,400
1369
1368
1354
911
11/1/57
12/1/56
PROJECT D
SCHISTE
SCHISTE
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT D
GEOLOGICAL SKETCH
FOR
DECEMBER 1956
SCALE 1"=40'
1/5/57

Form MF-104 (Rev.)
(April 1952)

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K-37

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of November, 1956 Docket No. DMEA - 4216 Contract No. 1032

Operator's Name Tungsten Mining Corporation Minerals Tungsten

Address Box 931, Henderson, N. C.

Contract Amount, $ 250,340.00 Government Participation: 75 % Amount, $ 187,755.00

ITEMS OF COSTS	FOR OPERATOR'S USE: Monthly Total	Totals Previously Reported	Totals To Date	FOR GOVERNMENT USE ONLY: Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent Short Form Contracts:						
Drilling						
Bulldozing						
Crosscutting						
Drifting	$ 2695.00	0.00	$2695.00			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber	$ 108.00	0.00	$ 108.00			
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	$2803.00	0.00	$2803.00	2803.00	—	2803.00

RECEIVED DEC 21 1956 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.

Date Dec. 6, 1956 Payee Tungsten Mining Corporation

Per J. R. Scott Title Vice-Pres. & Gen. Mgr.

*When a voucher is signed or receipted in the name of a company or corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary," or "Treasurer," as the case may be.

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

Pursuant to authority vested in me, I certify that this account is correct and proper for payment in the amount of:

$ 2102.25

Signature Helen R. Miller
(Authorized Certifying Officer)

Date DEC 19 1956 Vou. No. 95
(See other side)

700.75

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1032 in accordance with the terms of the contract.

Signature H. H. Barmeister Title Mining Engr. Date 12/7/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature V. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA REGION V Date DEC 18 1956

MONTHLY REPORT OF OPERATOR

The Operator (Contractor) of an exploration project is required to make a monthly report to the Government through the Regional Executive Officer. This report consists of three parts as follows:

(a) *Form MF-104—Operator's Monthly Report and Voucher.*—This form details expenditures and constitutes a voucher for reimbursing the Operator for the Government's share of costs;

(b) *Form MF-104A—Operator's Unit Cost and Progress Report.*—This is a statistical report of expenditures which shows costs for the various types of operation; and

(c) *Narrative.*—A concise narrative description of progress made, results accomplished, and any unusual difficulties encountered must be furnished as an attachment to this Report and Voucher. Wherever possible, the narrative is to be illustrated with maps or sketches showing formations penetrated and location and assays of samples taken as well as advances in workings. In the case of diamond drilling or churn drilling, the location and inclination of holes is to be shown on a map; logs and assays also are to be submitted.

The Monthly Report of Operator should be prepared in an original and four copies all of which must be sent to the Executive Officer of the Region not later than the 15th of the month following.

Preparation of Form MF-104—Operator's Monthly Report and Voucher.—All the applicable spaces in Form MF-104 should be filled in by the Operator, and the Operator or his agent should sign the certification in the lower left corner of the form.

The items of costs are arranged in the order they appear in Article 6 (a) of Form MF-200 (Revised February 1952), however, this form is readily adaptable for use in reporting activities under other contract forms.

Under Item (1) delete words "Short Form" if the contract is a sub-contract under Form MF-200; and delete word "Independent" if the contract reported is on Form MF-200 (A). Also, report work paid for on a unit basis under contract Form MF-200 as though it were performed under an independent contract.

Under Item (2) include labor, supervision and technical services incurred for the exploratory operations. Do not include labor, supervision and technical services used for work performed under items (5) and (6).

Under Item (3) include the costs of material and supplies used in the project other than that used under items (5) and (6).

Under Item (4) appear the three types of operating equipment expenditures, that is, rental, purchase and depreciation. The expenditures made for renting equipment belonging to a third party will be reported under "Rental". The amount paid or duly obligated for payment for the purchase of equipment will be reported under "Purchase". The amount of expenditures due the Operator to reimburse him for depreciation of equipment owned will be reported under "Depreciation".

Item (5) comprises costs of labor, supervision, technical services, materials, etc., which are used in the initial rehabilitation and repair of existing buildings, installations, fixtures, and equipment. These costs, therefore, should not be reported under items (2) and (3).

Item (6) includes the labor, supervision, technical services, materials, etc., used in the installation or construction of new buildings, fixed improvements, etc., necessary for the project. These costs, therefore, should not be reported under items (2) and (3).

Item (7) covers miscellaneous types of expenditure such as payroll taxes, liability insurance, workmen's compensation insurance, repairs to equipment and sampling and analysis. Only that part of payroll taxes, liability insurance and workmen's compensation which are paid by the operator should be reported under item (7). The share paid by the employee as a payroll deduction is to be included under item (2) as labor costs.

Item (8) includes any unforeseen costs not included in the other seven categories.

The original of Form MF-104 when submitted for reimbursable expenses incurred under contract Form MF-200 must be supported by original documentation or by certified copies of purchase orders, payrolls or transcripts of payrolls, unless such documentation has been waived by the Regional Executive Officer. This certification may be stated thus, "Certified True Copy (or Transcript)", followed by appropriate signature. If the Executive Officer of the Region determines that a contract under Form MF-200 should have an "on-site" audit, that is, a Government auditor should make an audit of the Operator's books and records of account, the Operator need not support his monthly voucher with original or certified documents except in cases of equipment purchases whose individual costs exceed $50.00. In these cases the original or a certified copy of the purchase order or invoice should be attached to the Monthly Voucher. N. B.—Only the *original* of Form MF-104 is required to be documented. The four copies of Form MF-104 are not to be thus supported.

Form MF-104 submitted for reimbursement under fixed price contracts on Form MF-200 (A), however, are not required to be supported by documentation of any kind. The Operator will submit his claim under item (1) of Form MF-104 by deleting as stated above the word "Independent" and by showing the number of feet or other units immediately after the appropriate descriptive word, such as, drilling, bulldozing, crosscutting, drifting, etc., and giving the "Monthly Total" amount due. "Totals Previously Reported", and "Totals to Date" columns should also be filled in.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
DEC 21 1956
D.M.E.A.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 1956 Docket No. DMEA -4216 Contract No. 1032
Operator's Name Tungsten Mining Corporation Minerals Tungsten
Address Box 931, Henderson, N. C.

OPERATION	UNIT	COSTS THIS MONTH	UNITS THIS MONTH	COSTS TO DATE	UNITS TO DATE	UNIT COSTS TO DATE	AUTHORIZED BY CONTRACT	
							Units	Unit Costs
Drifting	Feet	$2695.00	77	$2695.00	77	$35.00	6700	$35.00
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Timbering	Feet	$108.00	18	$108.00	18	$6.00	1415	$6.00
TOTAL DISTRIBUTED COSTS		$2803.00	-	$2803.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS								

The undersigned company, and the official executing this certification on its behalf, hereby certify that the information contained in this report is correct and complete to the best of their knowledge and belief.

REMARKS:

Date Dec. 6, 1956 Operator Tungsten Mining Corporation

Per J. R. Sweet Title Vice-Pres. & Gen. Mgr.
J. R. Sweet

NOTE.—Title 18, U. S. Code (Crimes), section 1001, makes it a criminal offense to make a willfully false statement or representation to any department or agency of the United States as to any matter within its jurisdiction.

(Instructions on reverse)

(For Government use only)

Drifting + crosscutting should have been separated & will be corrected on next report.

H. F. Burmeister

INSTRUCTIONS

Preparation of Form MF-104A—Operator's Unit Cost and Progress Report.—Applicable places on Form 104A should be filled in by the Operator. The purpose of this form is twofold as follows: (1) to furnish the supervising engineers and other administrators with statistical information necessary to better determine the progress of the project; and (2) to furnish more permanent information on mining costs for future use. The more important phases of operation on which permanent information is desired have been outlined in the form. There are blank lines, however, for those unusual phases which may need to be reported for a particular project. It will be necessary for the Operator to distribute his costs among the applicable phases reported with the exception of three items the costs of which are not to be distributed by the Operator. These three items are: "Operating Equipment Purchased", "Initial Rehabilitation and Repairs", and "New Buildings, Improvements, etc." The reason for not distributing these items on a monthly basis is doubtless clear to the Operator, since such distribution might well overstate the cost for any one month or period short of the entire contract period.

Form MF-104A has been designed to tie in with Form MF-104 for both monthly and cumulative costs. The "Total Costs" on Form MF-104A for each month should equal the monthly "Total Costs" as reported on Form MF-104. This is also true of the "Total Costs To Date".

In preparing Form MF-104A, it will be necessary frequently to distribute certain costs over a number of items. For instance, supervisory and engineering costs may have to be distributed over several phases, such as, drifting, crosscutting, raising, etc., provided that these items were reported active for the month. Such distributions should be made on the basis of time spent on the various phases, on man days of labor charged to such phases, or on some other equitable basis. "Operating Equipment", "Initial Rehabilitation and Repairs", and "New Buildings Improvements, etc.", will be distributed to the several phases of the project by the Washington Office of DMEA at the close of the project if determined necessary. The last two columns headed "Authorized by Contract" will be filled in by the Operator if such information is found in the contract. This information is usually a part of Exhibit "A" of the contract. A space for remarks has been provided for the use of the Operator to call attention to any unusual circumstances causing excessive or disproportionate unit costs.

GPO 872894

TUNGSTEN MINING CORP.
BOX 81
HENDERSON, N. C.
TELEPHONE NO. 1100

December 6, 1956

EXPLORATION PROJECT - SUPPLEMENTARY REPORT

Month of: November, 1956 DMEA No. - 4216 Contract No. - 1032

Project A

Advance - Drifting - 34 ft.
Drift Timbered - 18 ft.

Crosscutting in Project A was started on the night shift of Monday, November 19, 1956, at coordinates N 20,019.97, E 20,583.72, and 33.4 ft. ahead of survey station 1061.

The crosscut was turned to the east to attain a bearing of N 80 E on which it will be continued through the dike. The advance was 34 ft.

The advance has all been in diabase dike which is very blocky and is continually spalling off. Timbering is required. Five sets of timber were placed, covering 18 ft. of drift timbered.

No mineralization was encountered, nor is expected in dike.

TUNGSTEN MINING CORP.
BOX 81
HENDERSON, N. C.
TELEPHONE NO. 1100

December 6, 1956

EXPLORATION PROJECT - SUPPLEMENTARY REPORT

Month of: November, 1956 DMEA No. - 4216 Contract No. - 1032

Project D

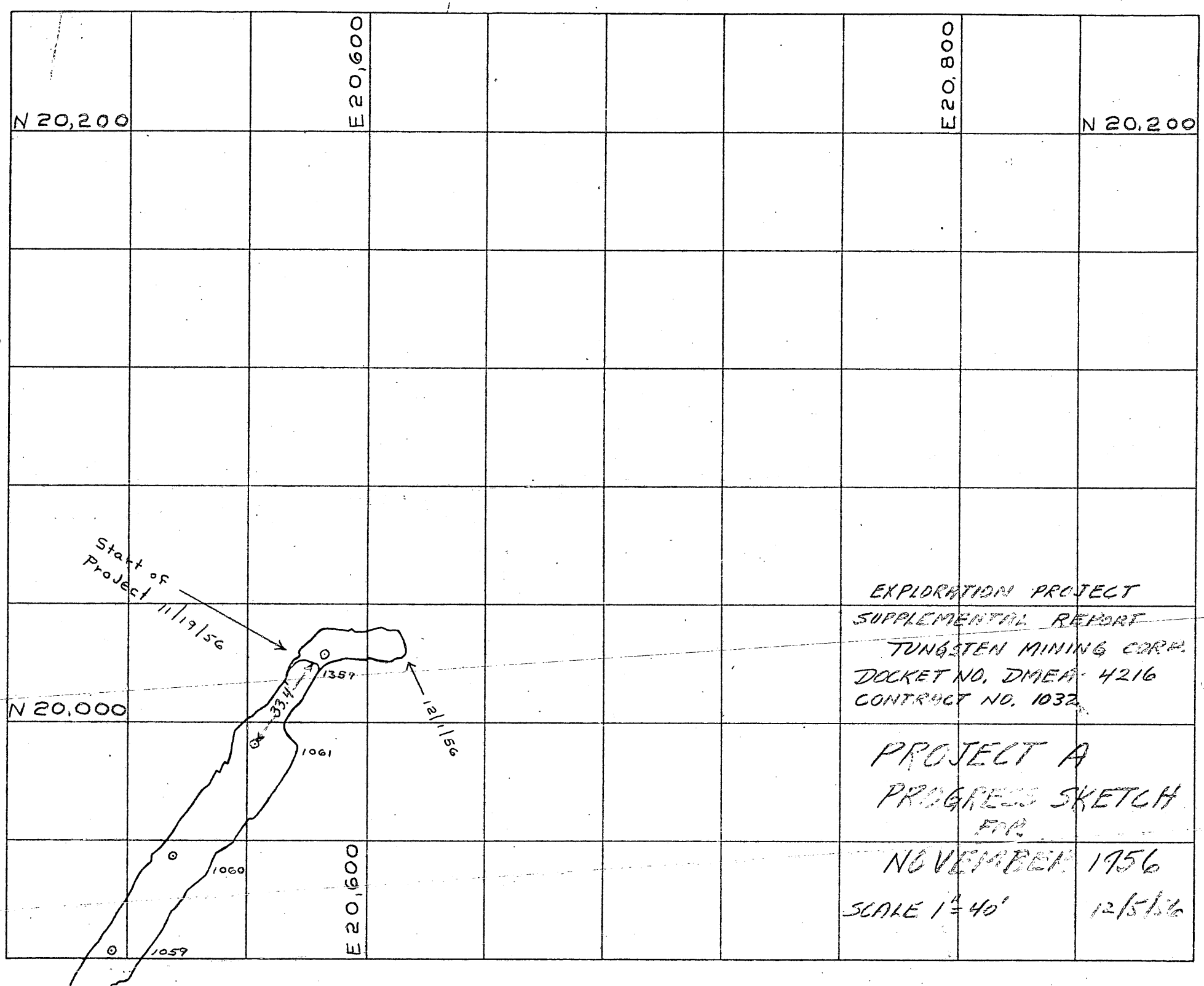
Advance - Drifting - 43 ft.
Drift Timbered - 0

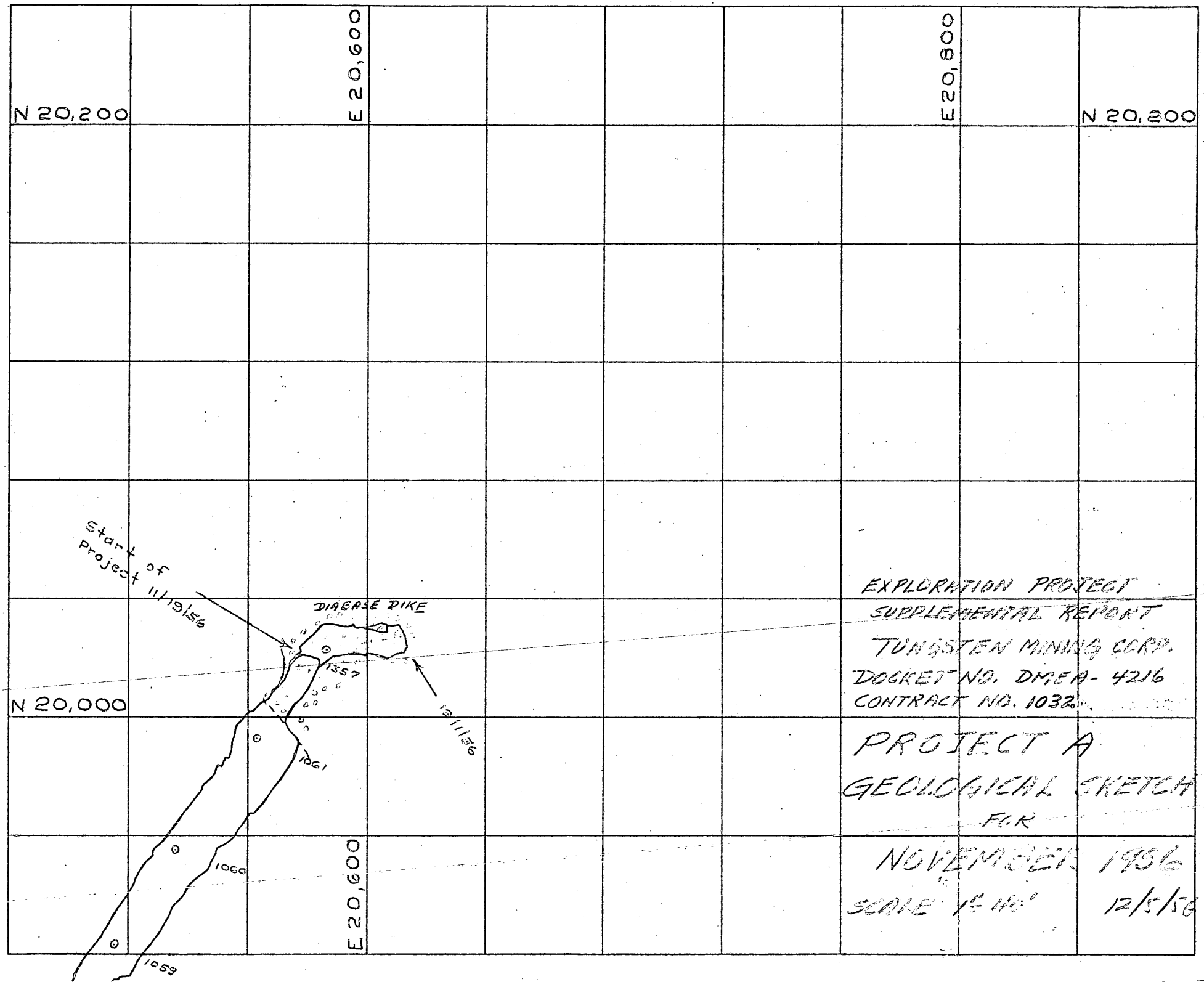
Crosscutting in Project D was started on the dayshift of Monday, November 26, 1956, on a bearing of N 65 W from a point with coordinates N 16994.63, 18,259.69 E and 30.8 ft. ahead of survey station 1354.

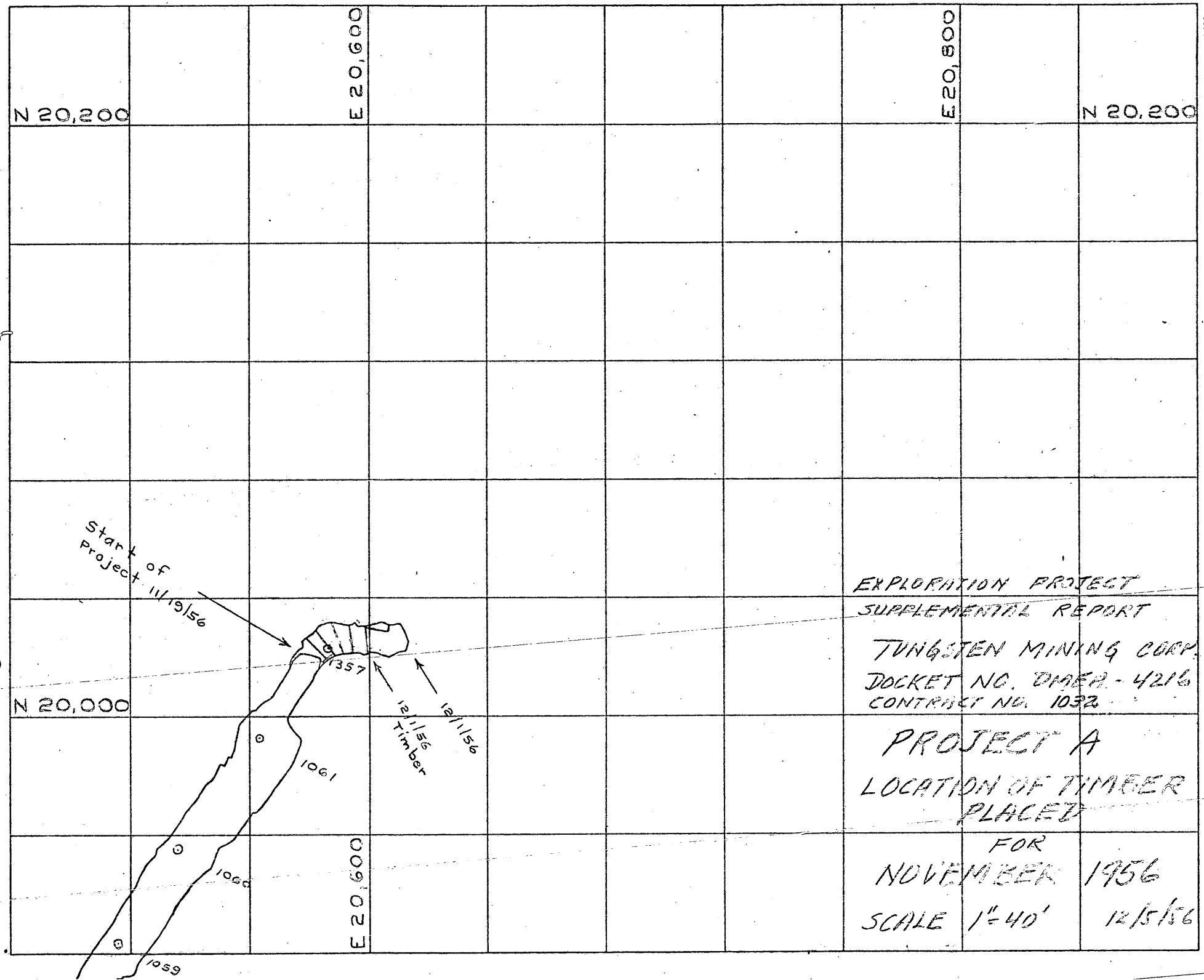
The first seven feet of advance was in dark, baked chloritic schist, the next nine feet was in rather banded diabase dike, and the remaining footage was in diorite dike.

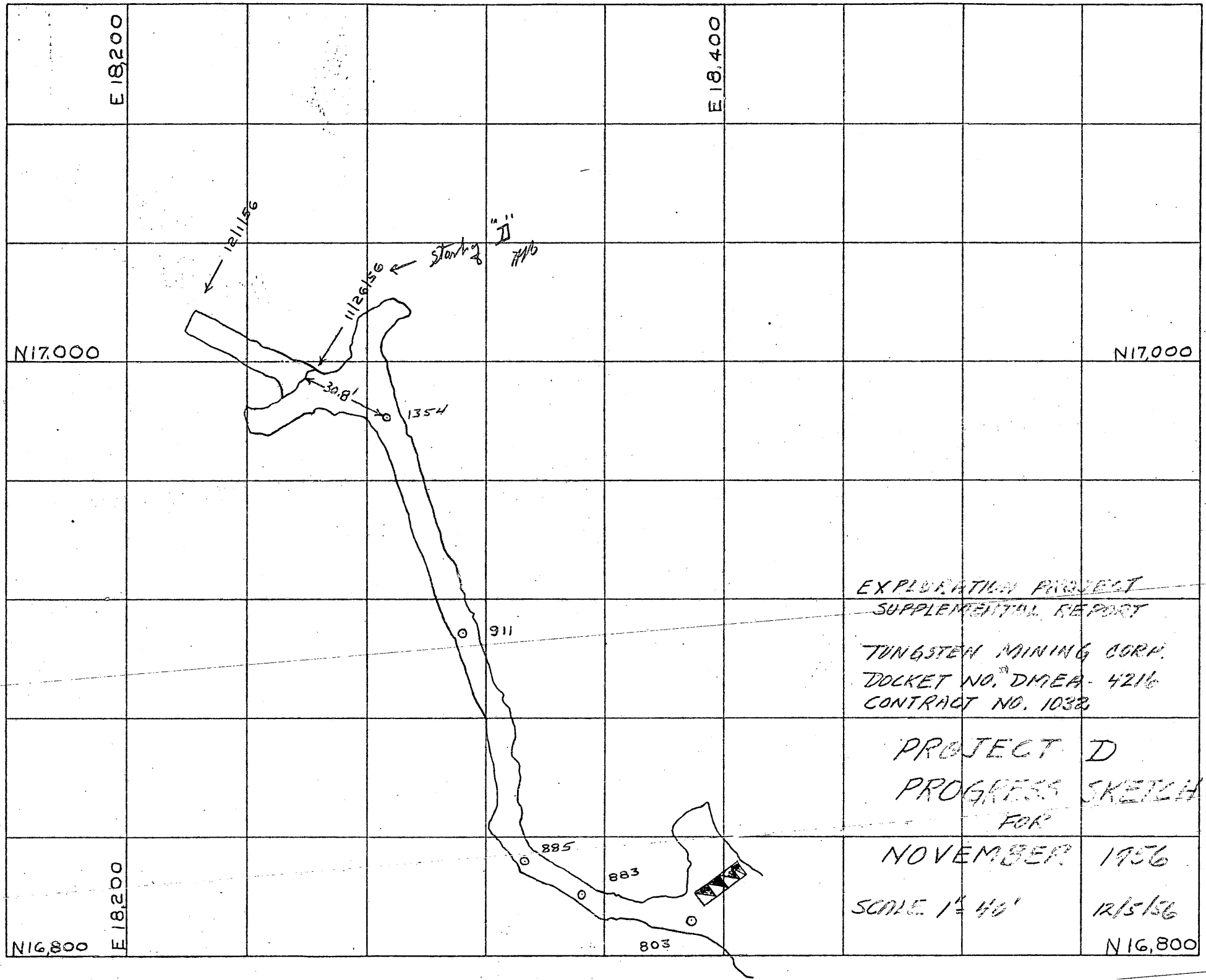
The diorite is rather blocky and timber support may be required.

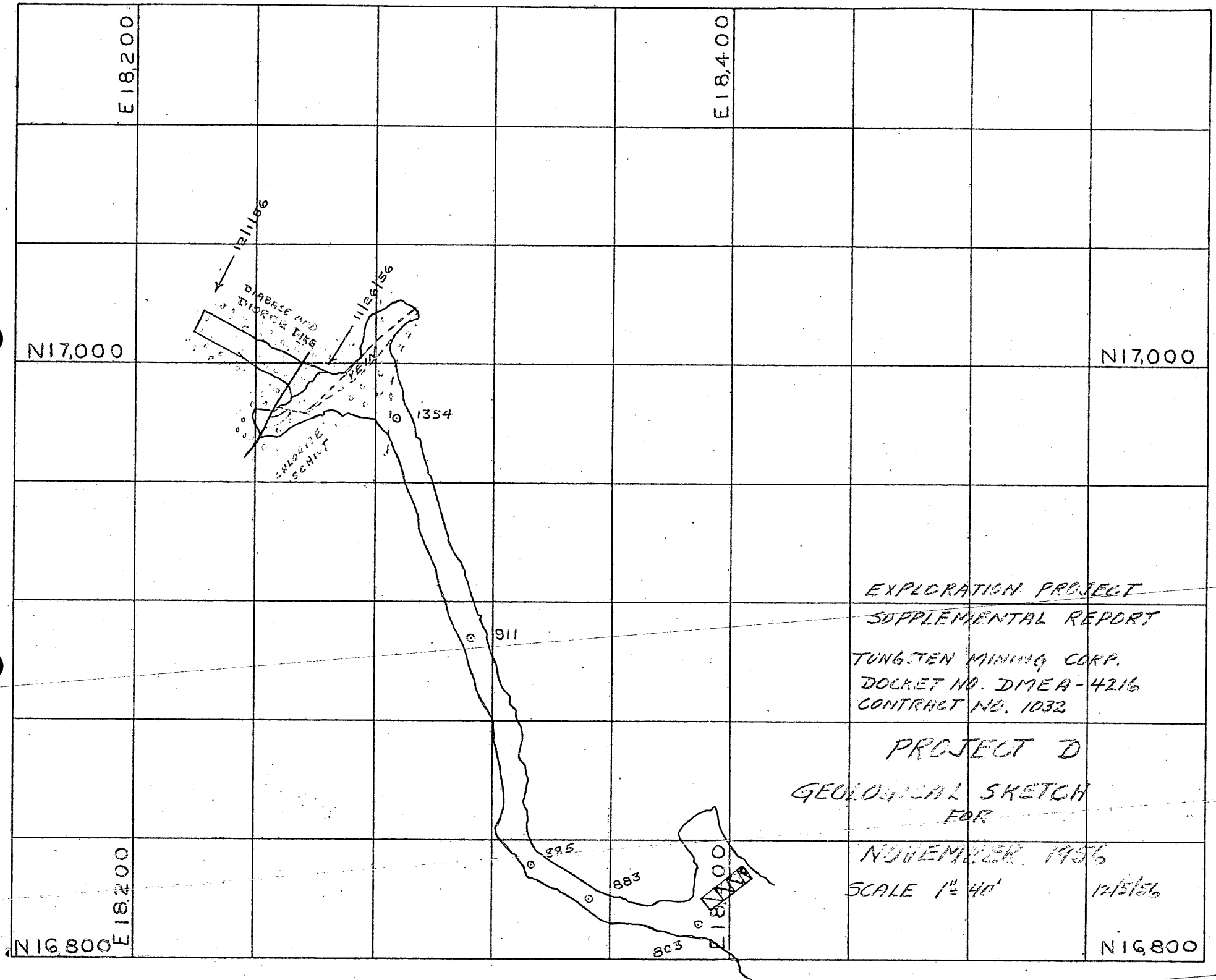
The total advance was 43 ft. No mineralization was encountered nor is expected in the dike.

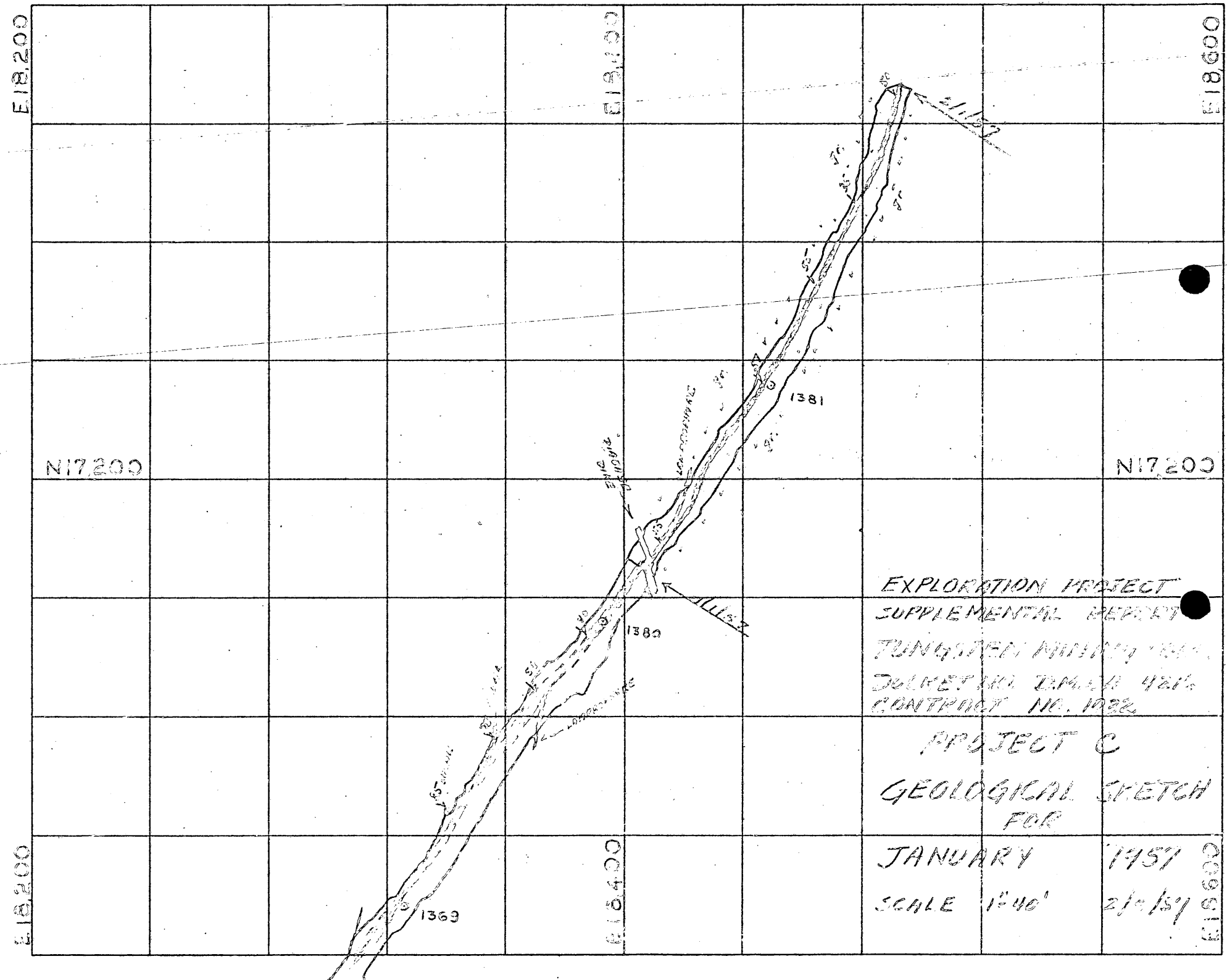

N 20,200
E 20,600
E 20,800
N 20,200
Start of Project 11/19/56
1357
33.4'
12/1/56
N 20,000
1061
1060
1059
E 20,600
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA-4216
CONTRACT NO. 1032
PROJECT A
PROGRESS SKETCH
FOR
NOVEMBER 1956
SCALE 1" = 40'
12/5/56

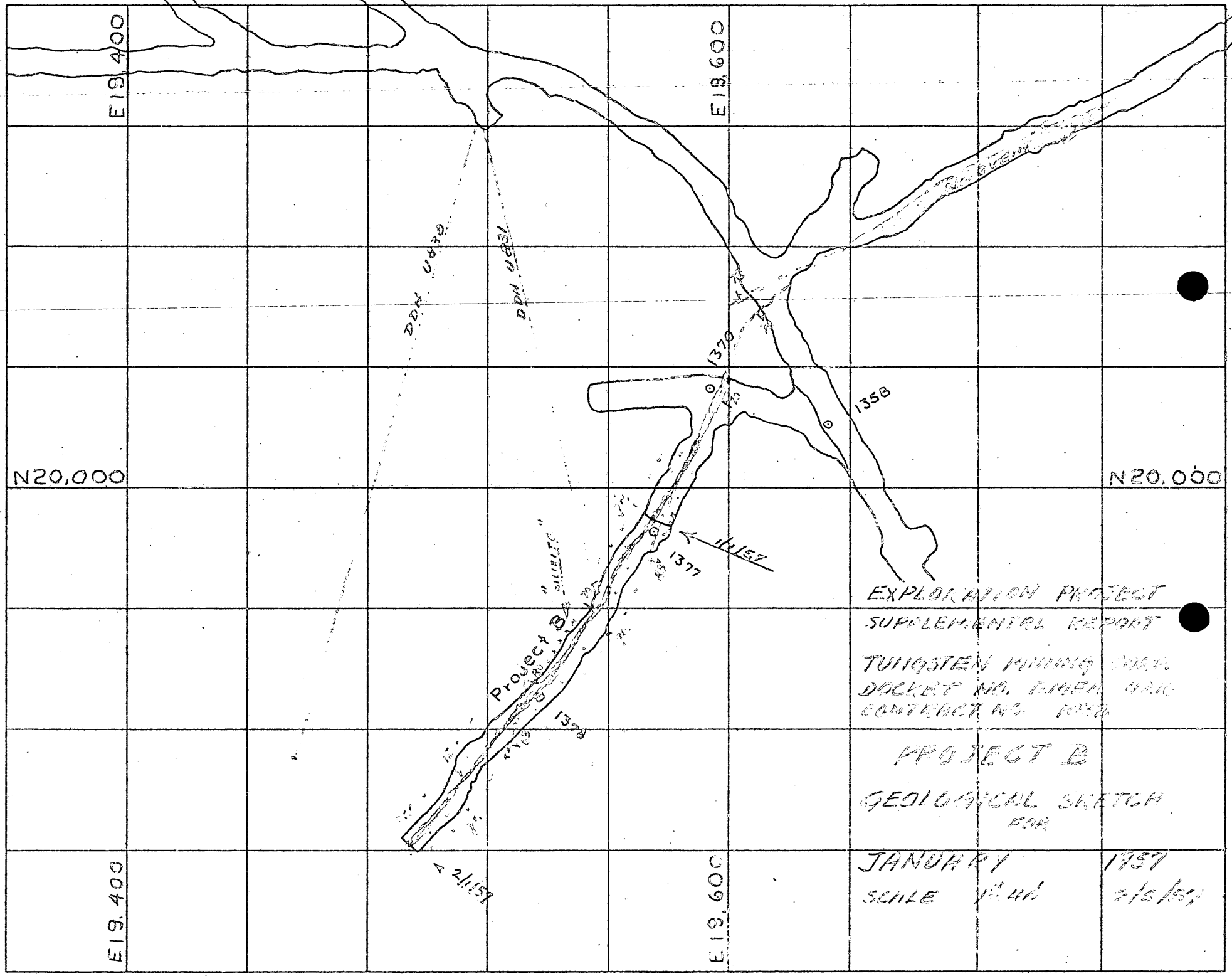

N 20,200
E 20,600
E 20,800
N 20,200
N 20,000
E 20,600
Start of Project 11/19/56
DIABASE DIKE
1357
12/11/56
1061
1060
1059
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA-4216
CONTRACT NO. 1032
PROJECT A
GEOLOGICAL SKETCH
FOR
NOVEMBER 1956
SCALE 1" = 40'
12/5/56

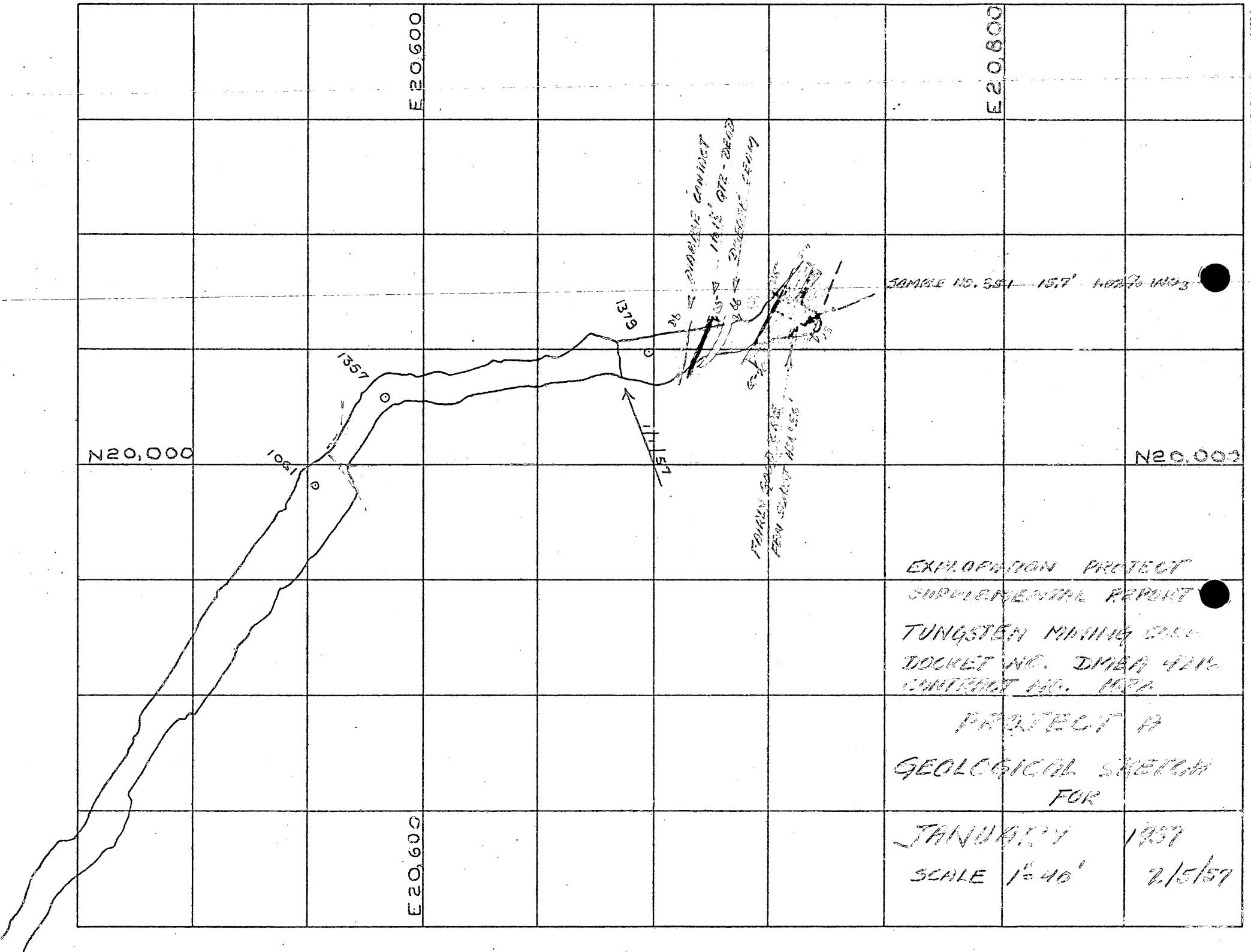

N 20,200
E 20,600
E 20,800
N 20,200
N 20,000
E 20,600
Start of Project 11/19/56
1357
12/1/56 Timber
12/1/56
1061
1060
1059
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA - 4216
CONTRACT NO. 1032
PROJECT A
LOCATION OF TIMBER PLACED
FOR
NOVEMBER 1956
SCALE 1"=40'
12/5/56

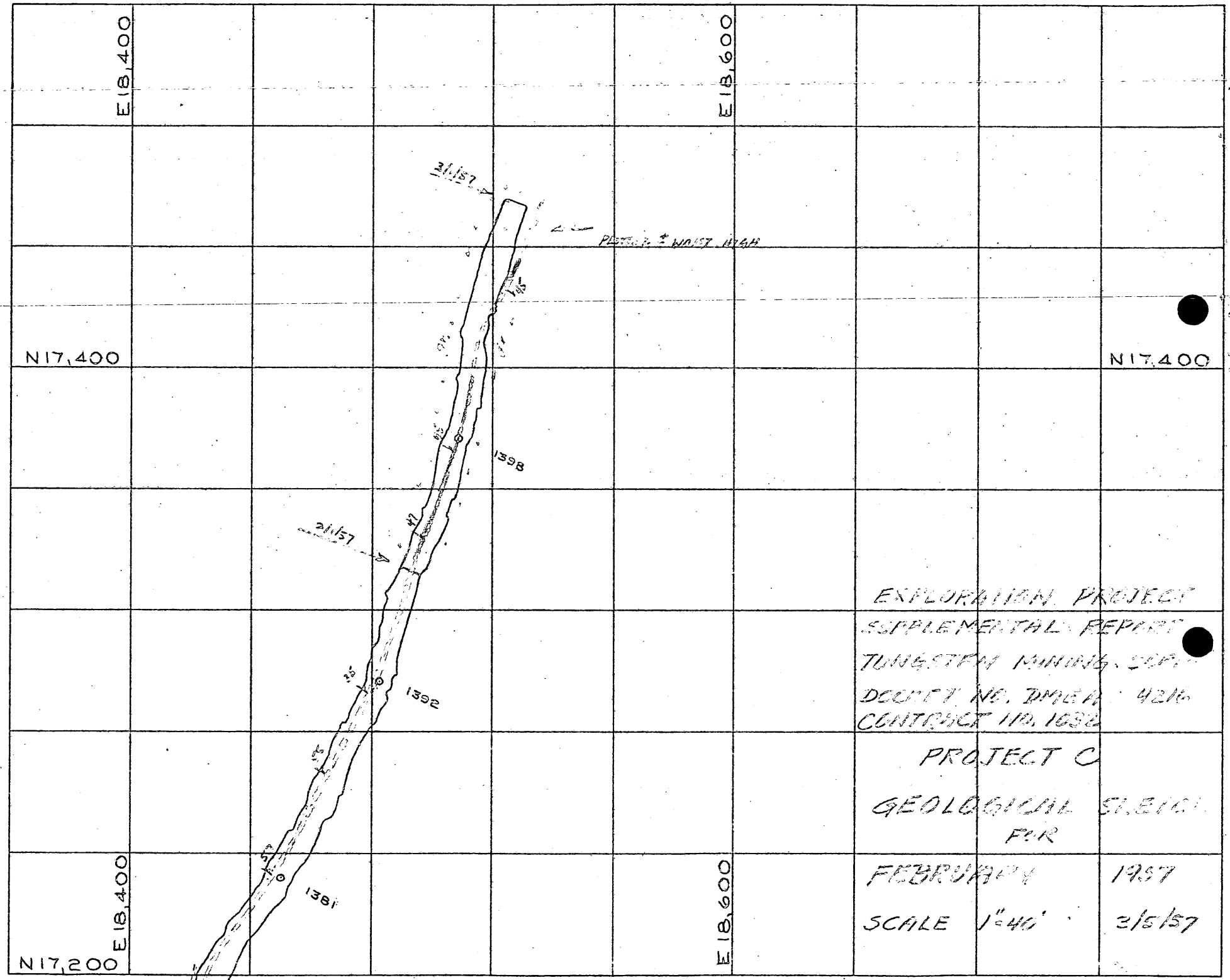

E 18,200
E 18,400
N17,000
N17,000
N16,800
E 18,200
N16,800
12/1/56
11/26/56
Starting "D" 7/10
30.8'
1354
911
885
883
803
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA-4216
CONTRACT NO. 1032
PROJECT D
PROGRESS SKETCH
FOR
NOVEMBER 1956
SCALE 1" = 40'
12/5/56

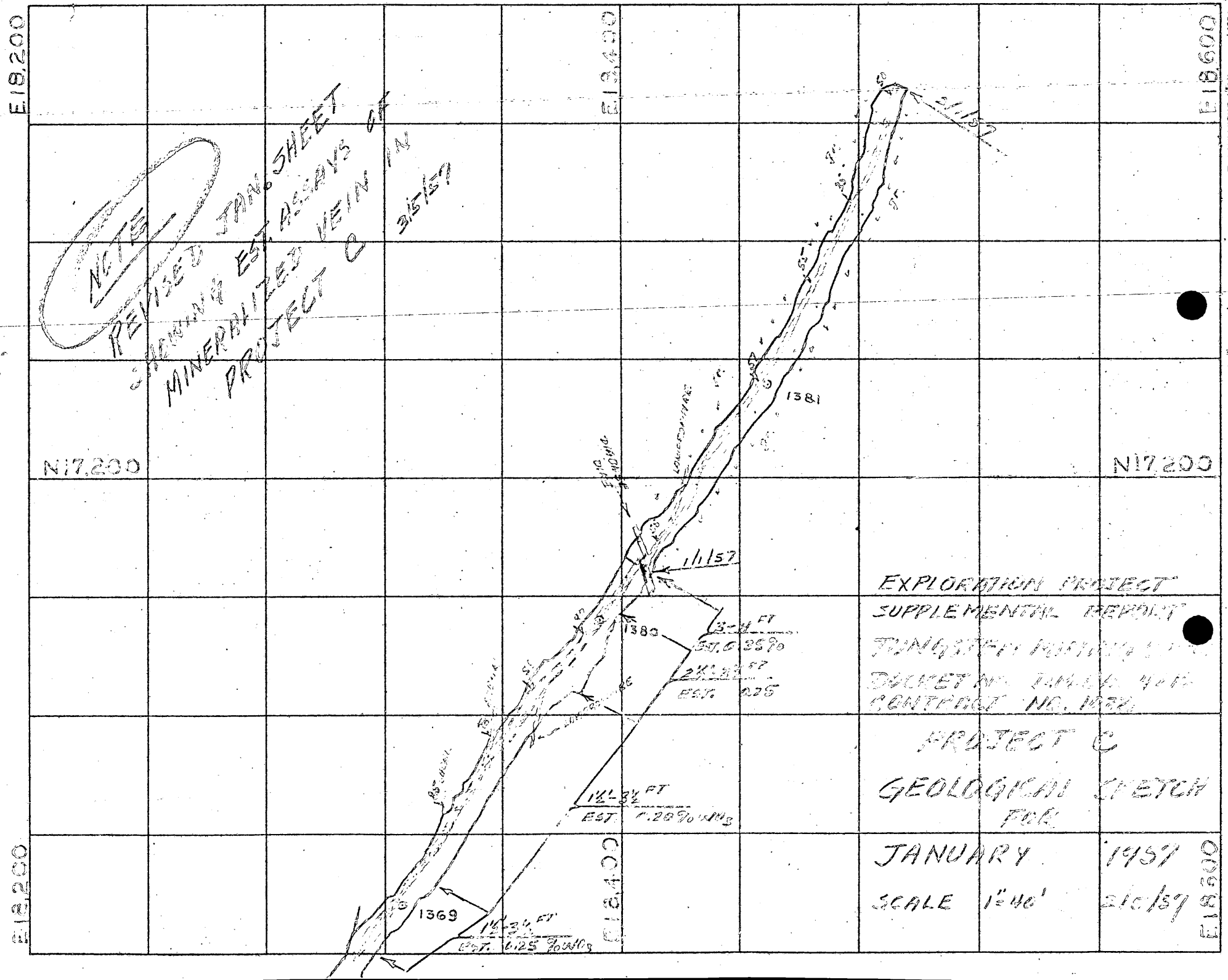

E 18,200
E 18,400
N17,000
N17,000
N16,800
N16,800
E 18,200
12/1/56
11/26/56
DIABASE AND DIORITE DIKE
SCHIST
1354
911
825
883
803
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA-4216
CONTRACT NO. 1032
PROJECT D
GEOLOGICAL SKETCH
FOR
NOVEMBER 1956
SCALE 1" = 40'
12/5/56

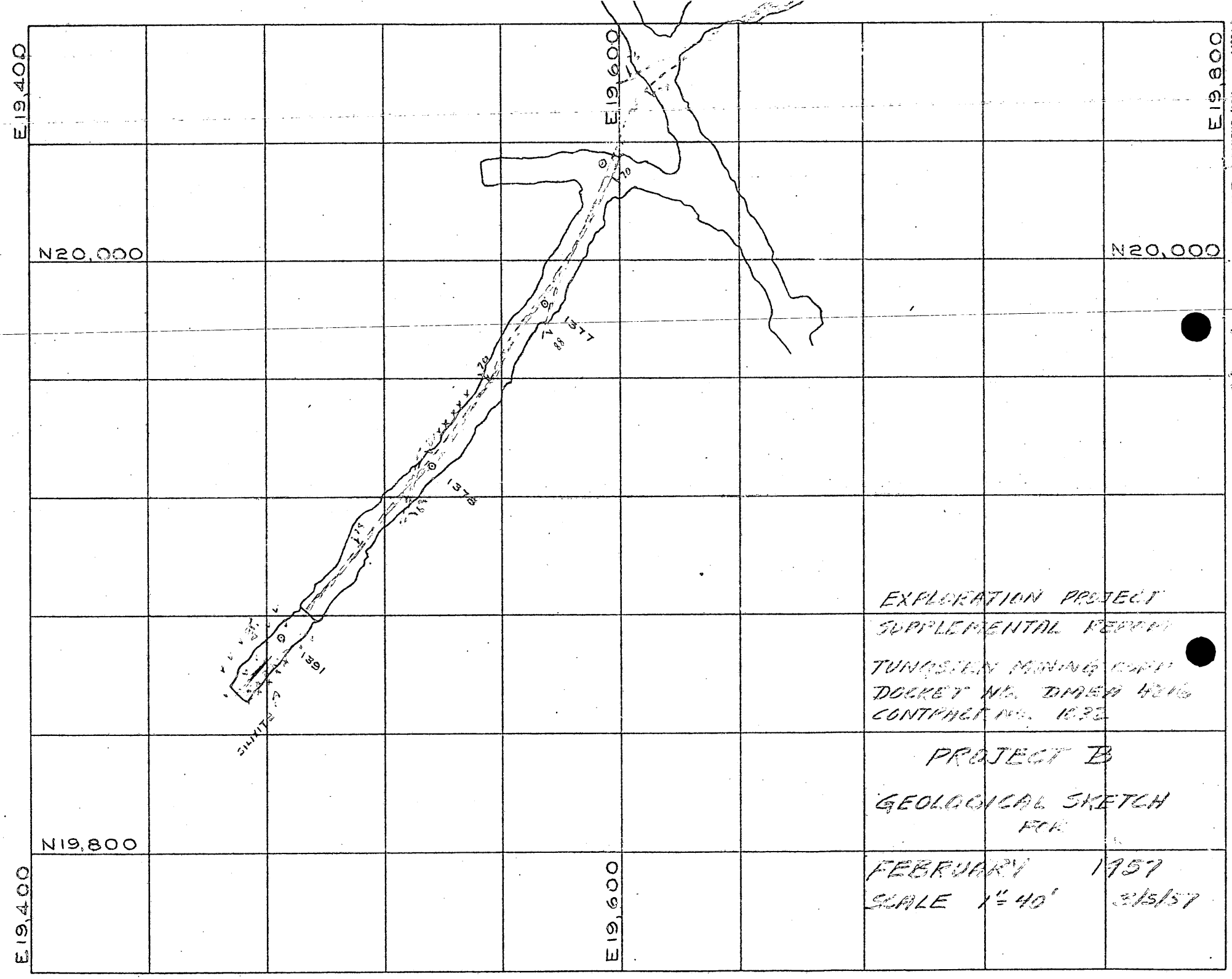

E18,200
E18,400
E18,600
N17,200
1381
1380
1369
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMG-4 4261
CONTRACT NO. 1032
PROJECT C
GEOLOGICAL SKETCH
FOR
JANUARY 1957
SCALE 1"=40'
2/6/57

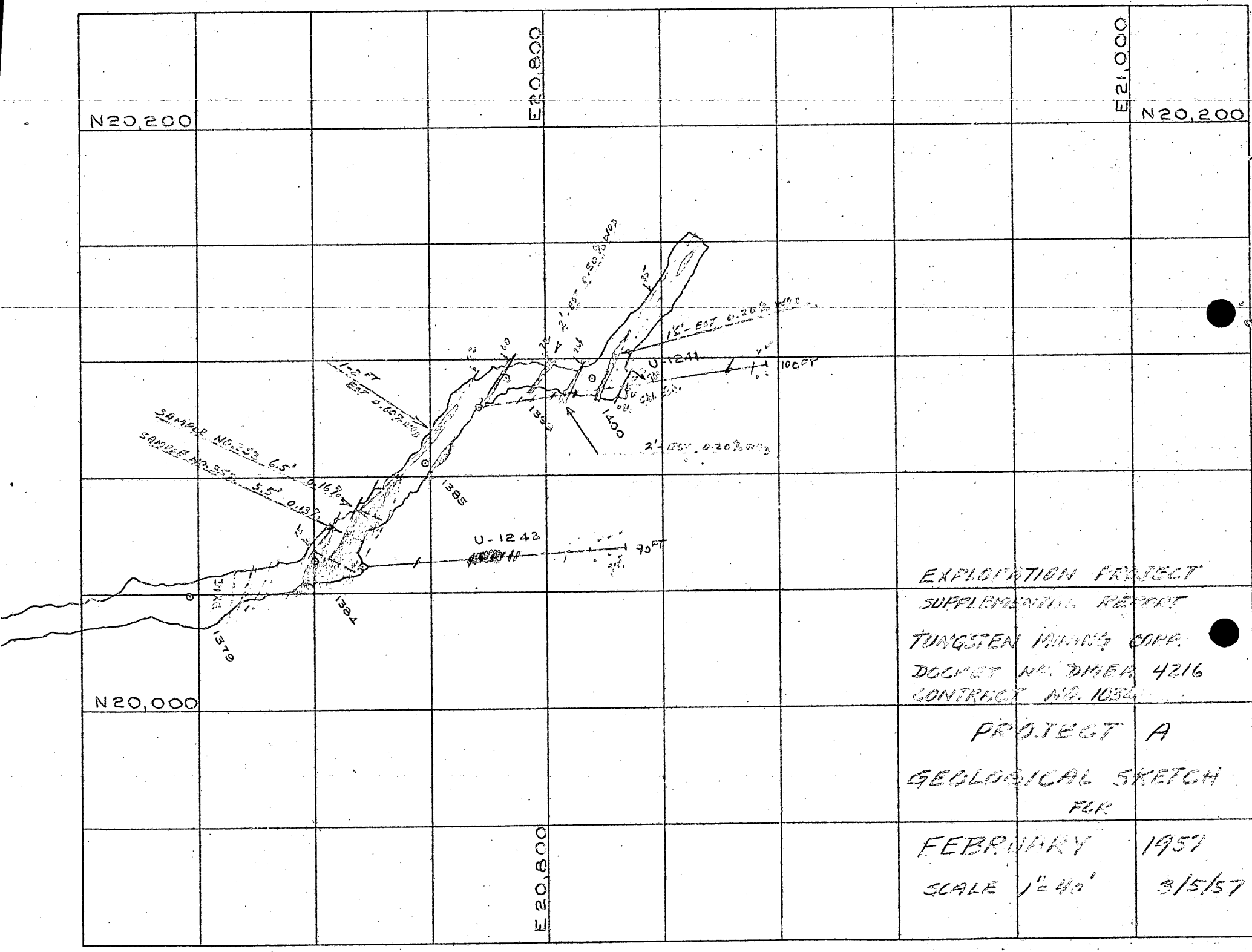

E19,400
E19,600
N20,000
N20,000
E19,400
E19,600
DDH U430
DDH U431
1370
1358
1377
1372
Project B
A 1/1/57
A 2/1/57
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
PROJECT B
GEOLOGICAL SKETCH
JANUARY
1957
SCALE

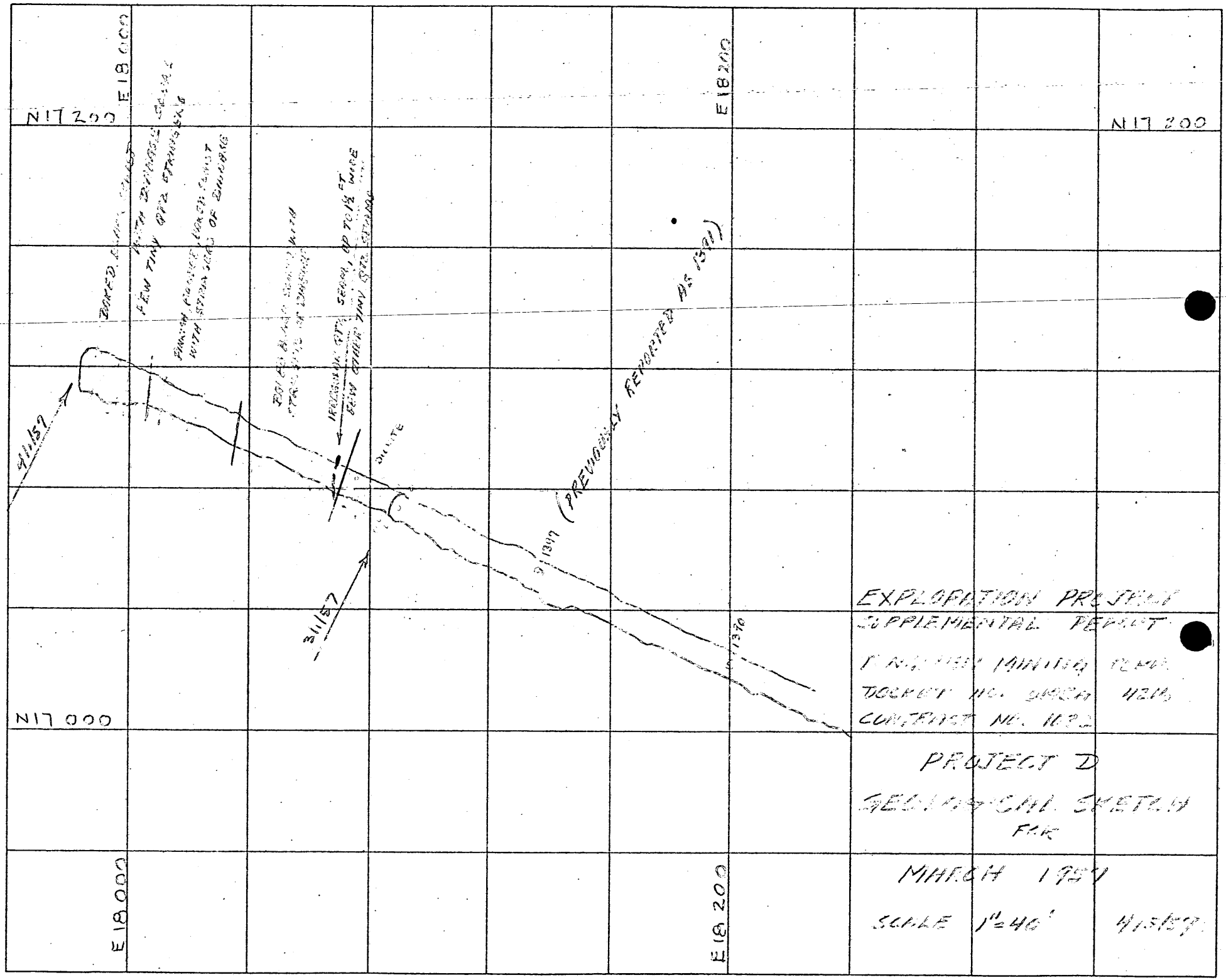

E 20,600
E 20,800
N20,000
N20,000
E 20,600
1379
1357
1061
SAMPLE NO. 551 15.7'
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CO.
DOCKET NO.
CONTRACT NO.
PROJECT A
GEOLOGICAL SKETCH
FOR
JANUARY 1957
SCALE 1" = 40'
2/15/57

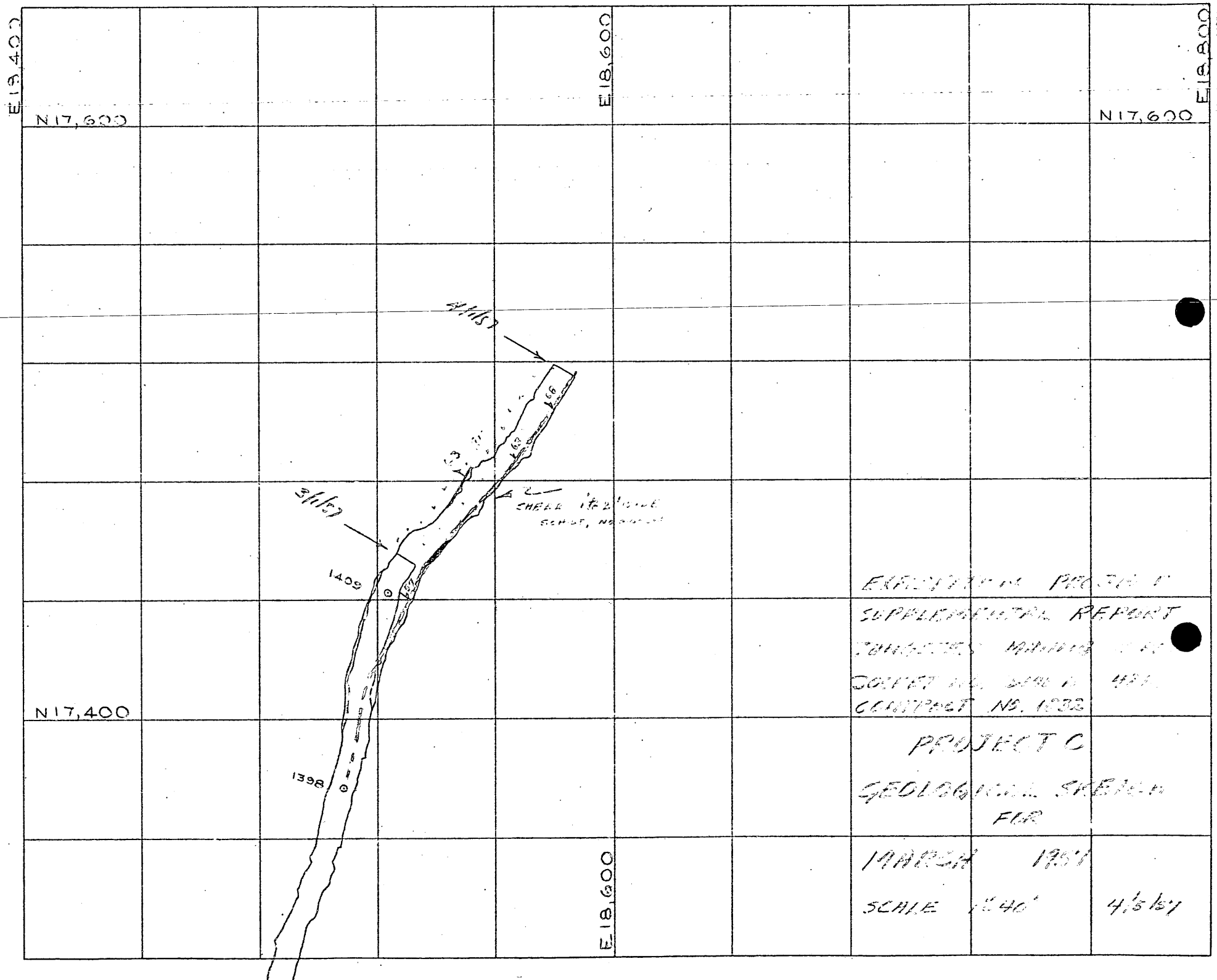

E18,400
E18,600
N17,400
N17,400
N17,200
E18,400
E18,600
21/57
21/57
PLOT 2' WAIST HIGH
1398
1392
1381
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING, SOPA
DOCKET NO. DMEA 4216
CONTRACT IDA 1032
PROJECT C
GEOLOGICAL SURVEY
FOR
FEBRUARY 1957
SCALE 1"=40' 3/5/57

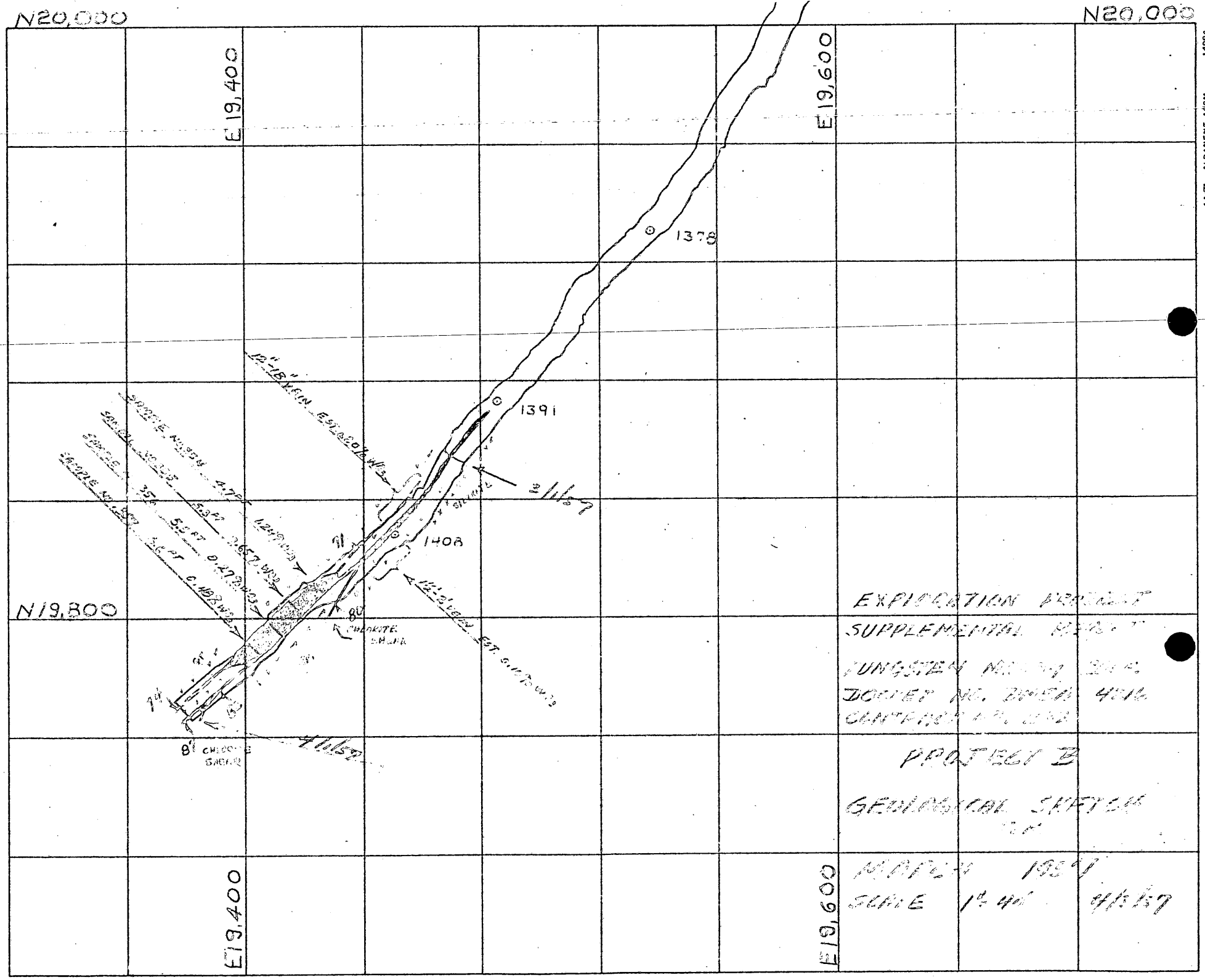

E18,200
E18,400
E18,600
N17,200
E18,200
E18,400
E18,600
NOTE
REVISED TRAN. SHEET
SHOWING EST. ASSAYS OF
MINERALIZED VEIN IN
PROJECT C 3/5/57
1381
1380
1369
1/1/57
3'-4' FT
EST. 0.35%
2'-3' FT
EST. 0.25
1½'-3½' FT
EST. 0.28% WO3
1½'-3½' FT
EST. 0.25 % WO3
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
DOCKET NO.
CONTRACT NO.
PROJECT C
GEOLOGICAL SKETCH
MAP
JANUARY 1957
SCALE 1"=40'
2/15/57

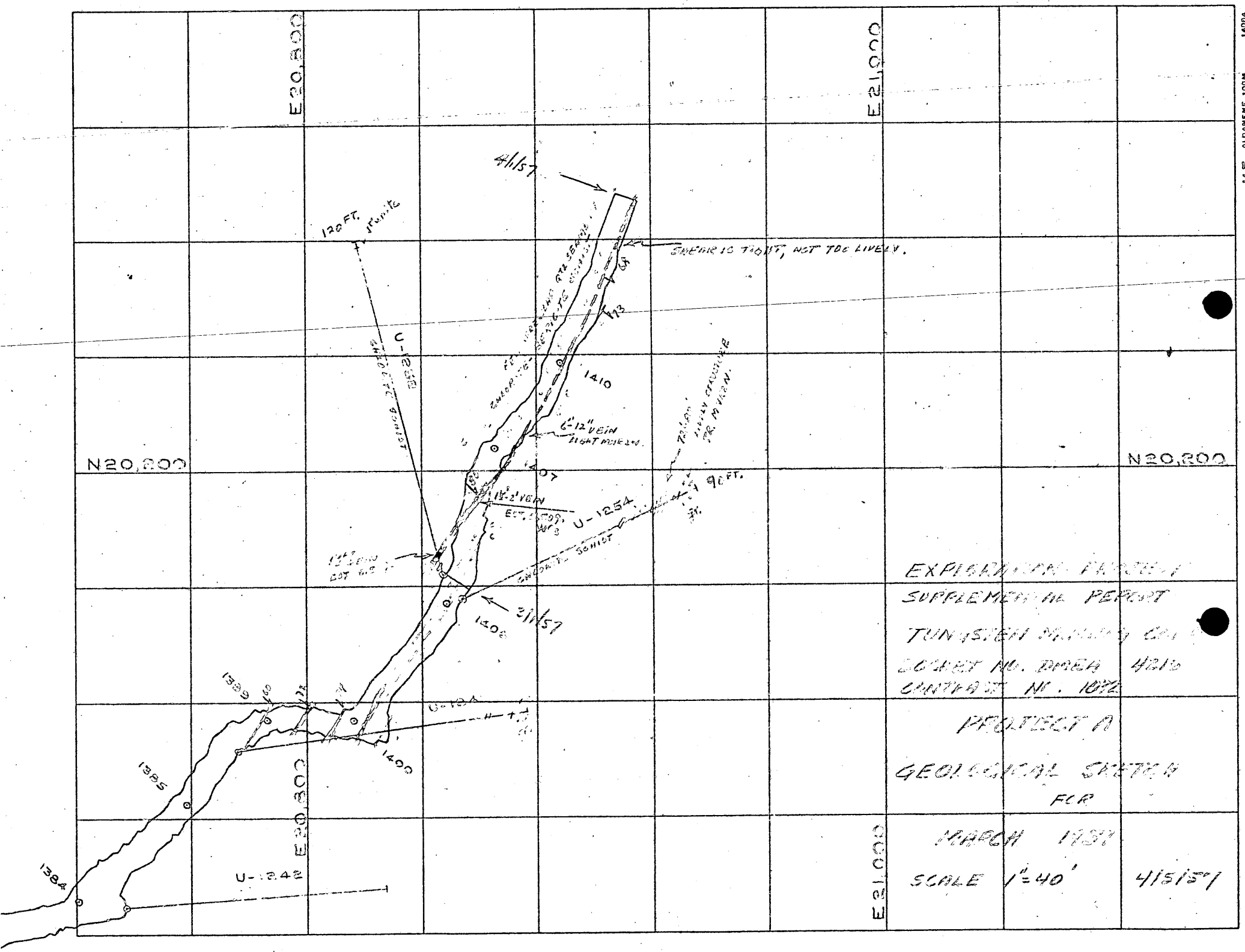

E19,400
E19,600
E19,800
N20,000
N19,800
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4016
CONTRACT NO. 1632
PROJECT B
GEOLOGICAL SKETCH
FOR
FEBRUARY 1957
SCALE 1" = 40'
3/15/57

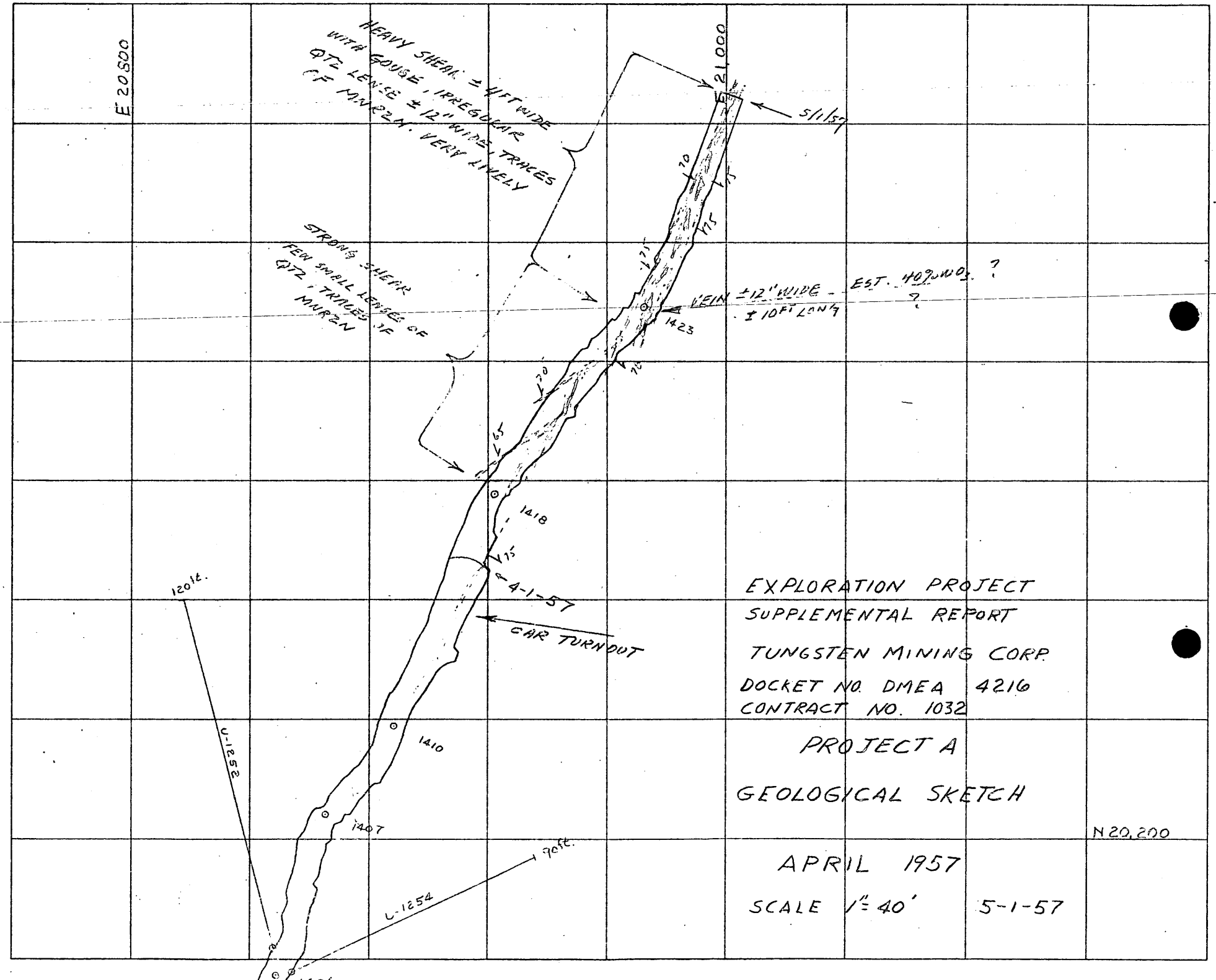

N20,200
E20,800
E21,000
N20,200
N20,000
E20,800
SAMPLE NO. 253 6.5' 0.16%
SAMPLE NO. 254 3.5' 0.13%
1-2 FT EST 0.60% WO3
2' EST 0.50% WO3
1½' EST 0.20% WO3
U-1241
100 FT
1400
2' EST 0.20% WO3
1385
U-1242
70 FT
1384
1379
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1034
PROJECT A
GEOLOGICAL SKETCH
FOR
FEBRUARY 1957
SCALE 1" = 40'
3/5/57

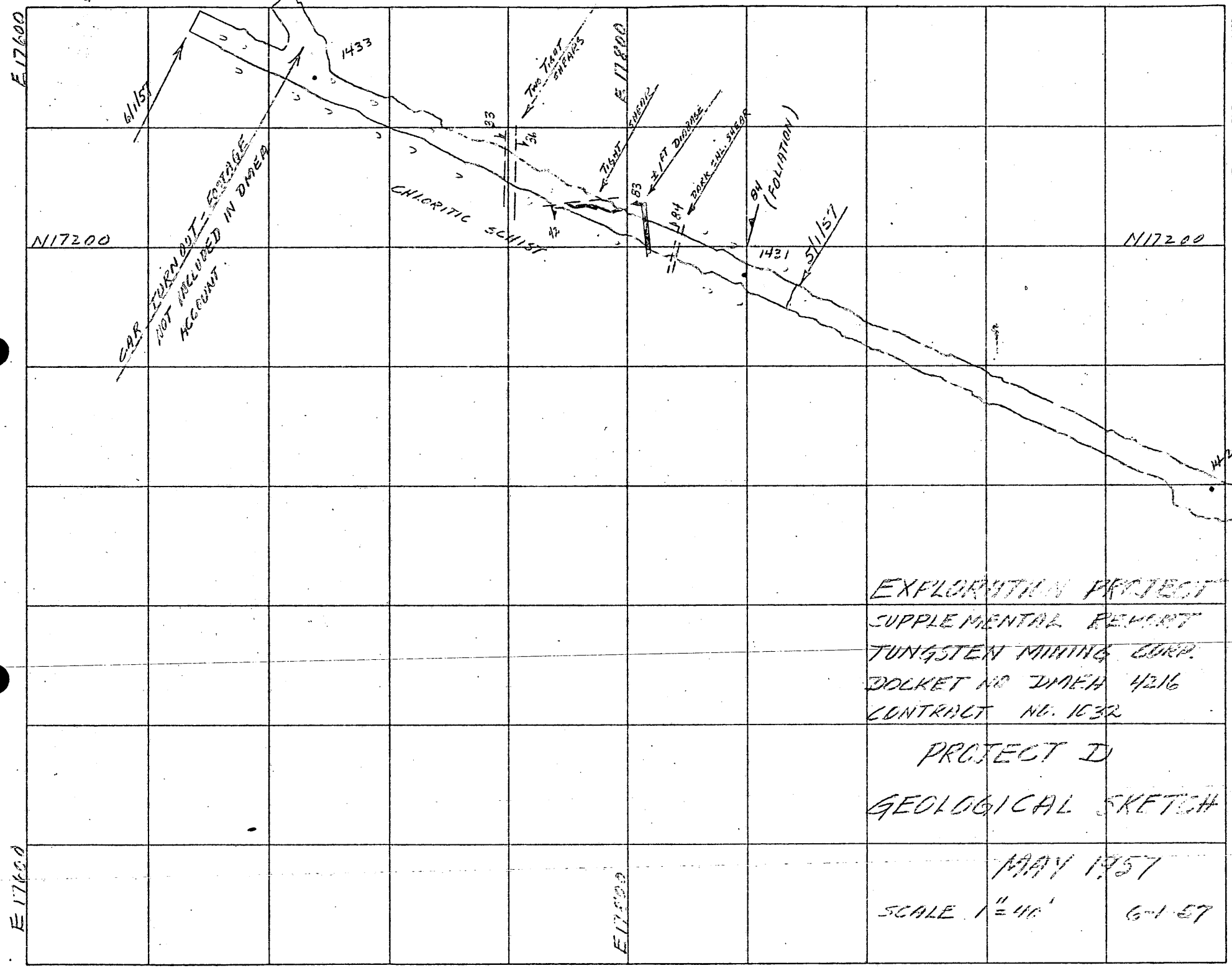

N17 200
E18 000
E18 200
N17 000
E18 000
E18 200
N17 200
BORED SHAFT
FEW TINY QTZ STRINGERS
FINISH PORTION WITH SPRAY SEAL OF SHOTCRETE
SERIES OF TINY QTZ STRINGERS
SHEAR
(PREVIOUSLY REPORTED AS 1391)
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
PROJECT D
GEOLOGICAL SKETCH
MARCH 1951
SCALE 1" = 40'


E19,400
E18,600
E19,800
N17,600
N17,600
N17,400
E18,600
1409
1398
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
CONTRACT NO. 1032
PROJECT C
GEOLOGICAL SURVEY
FOR
MARCH 1957
SCALE 1" = 40'
4/5/57

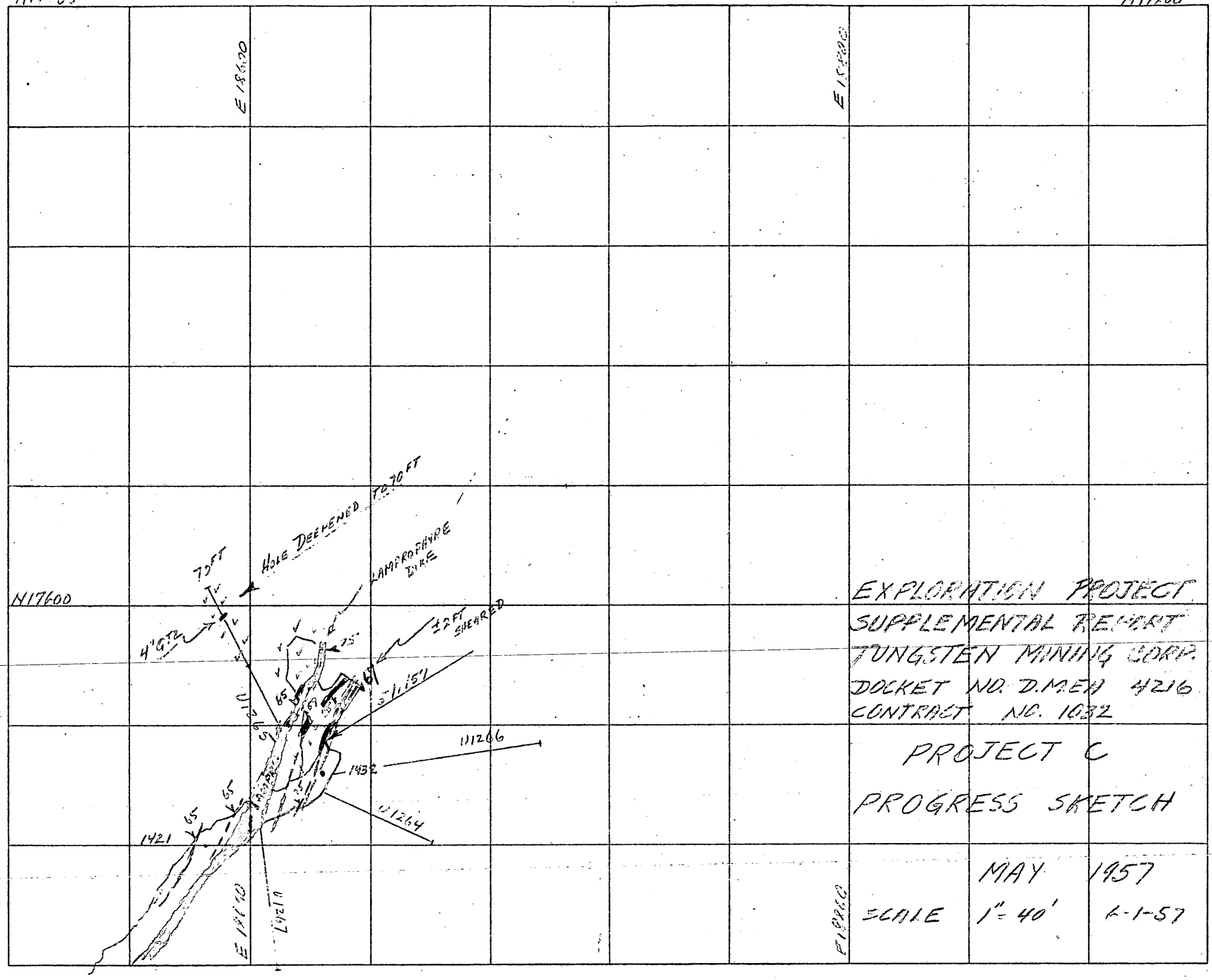

N20,000
N20,000
E19,400
E19,600
1378
1391
1408
N19,800
E19,400
E19,600
EXPLORATION PROJECT
SUPPLEMENTAL
PROJECT B
GEOLOGICAL SKETCH
SCALE 1" = 40'

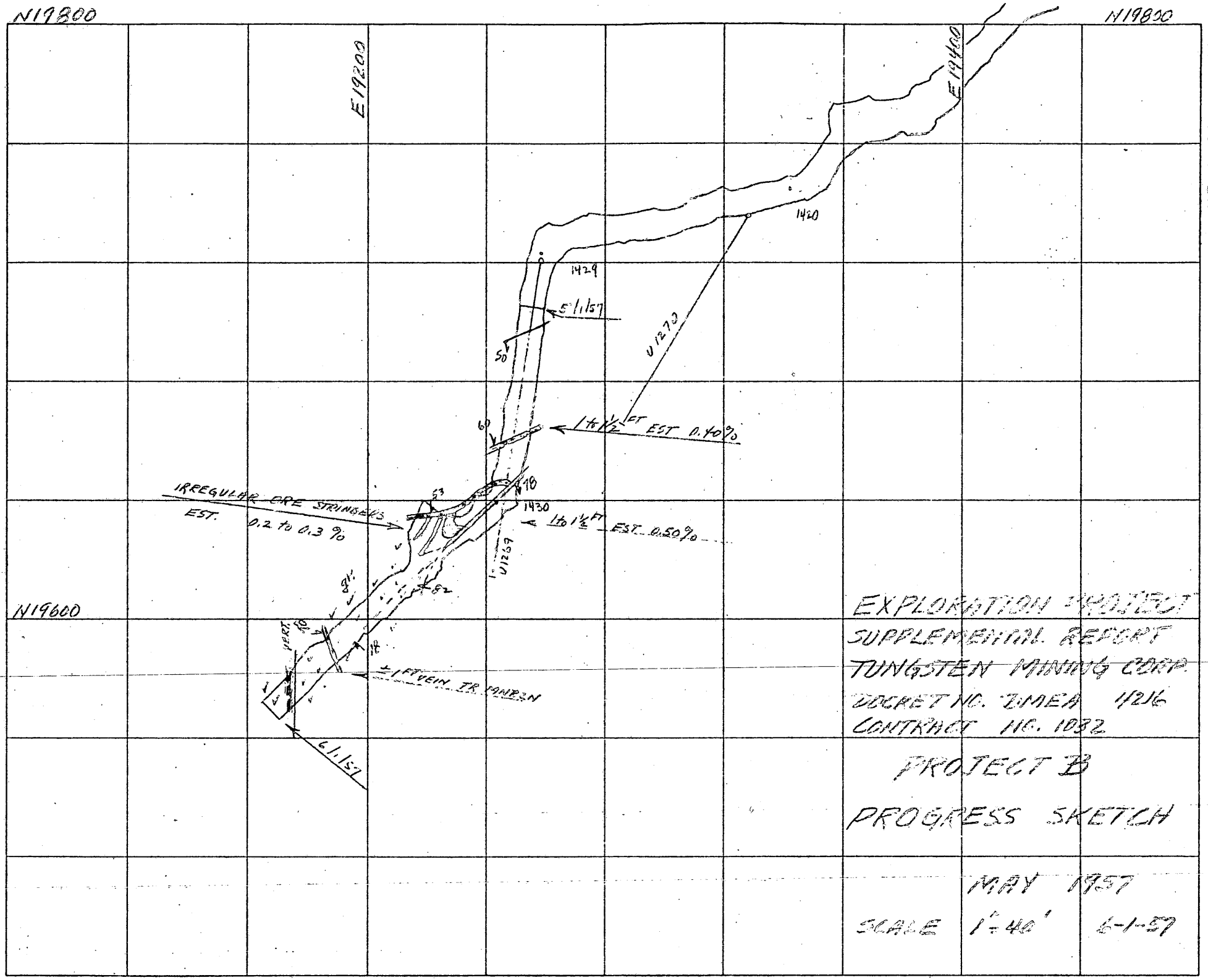

E20,800
E21,000
N20,800
4/1/57
120 FT.
SHEAR IS TIGHT, NOT TOO LIKELY.
U-1258
1410
6"-12" VEIN
1407
90 FT.
U-1254
3/1/57
1408
1399
1400
1385
1384
U-1242
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CO.
DOCKET NO. DMEA 4216
CONTRACT NO. 1072
PROJECT A
GEOLOGICAL SKETCH
FOR
MARCH 1957
SCALE 1" = 40'
4/5/57

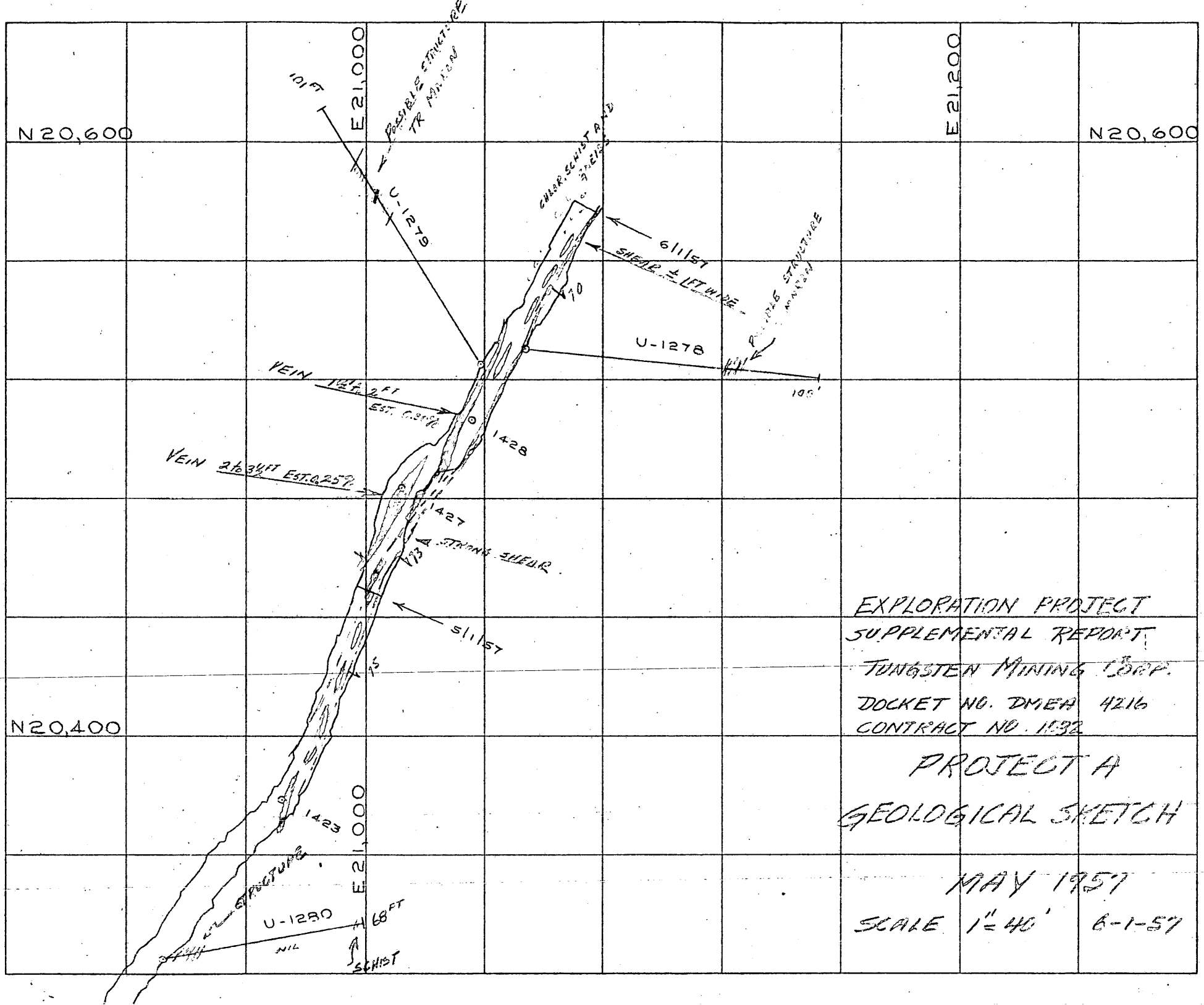

E 20500
HEAVY SHEAR ± 4FT WIDE
WITH GOUGE, IRREGULAR
QTZ LENSE ± 12" WIDE, TRACES
OF MARZN. VERY LIVELY
STRONG SHEAR
FEW SMALL LENSES OF
QTZ, TRACES OF
MARZN
21,000
5/1/57
70
75
75
75
VEIN ±12" WIDE - EST. 40% WO3. ?
± 10FT LONG
1423
70
65
1418
75
4-1-57
CAR TURNOUT
120ft.
U-1252
1410
1407
90ft.
U-1254
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT A
GEOLOGICAL SKETCH
N 20,200
APRIL 1957
SCALE 1" = 40'
5-1-57

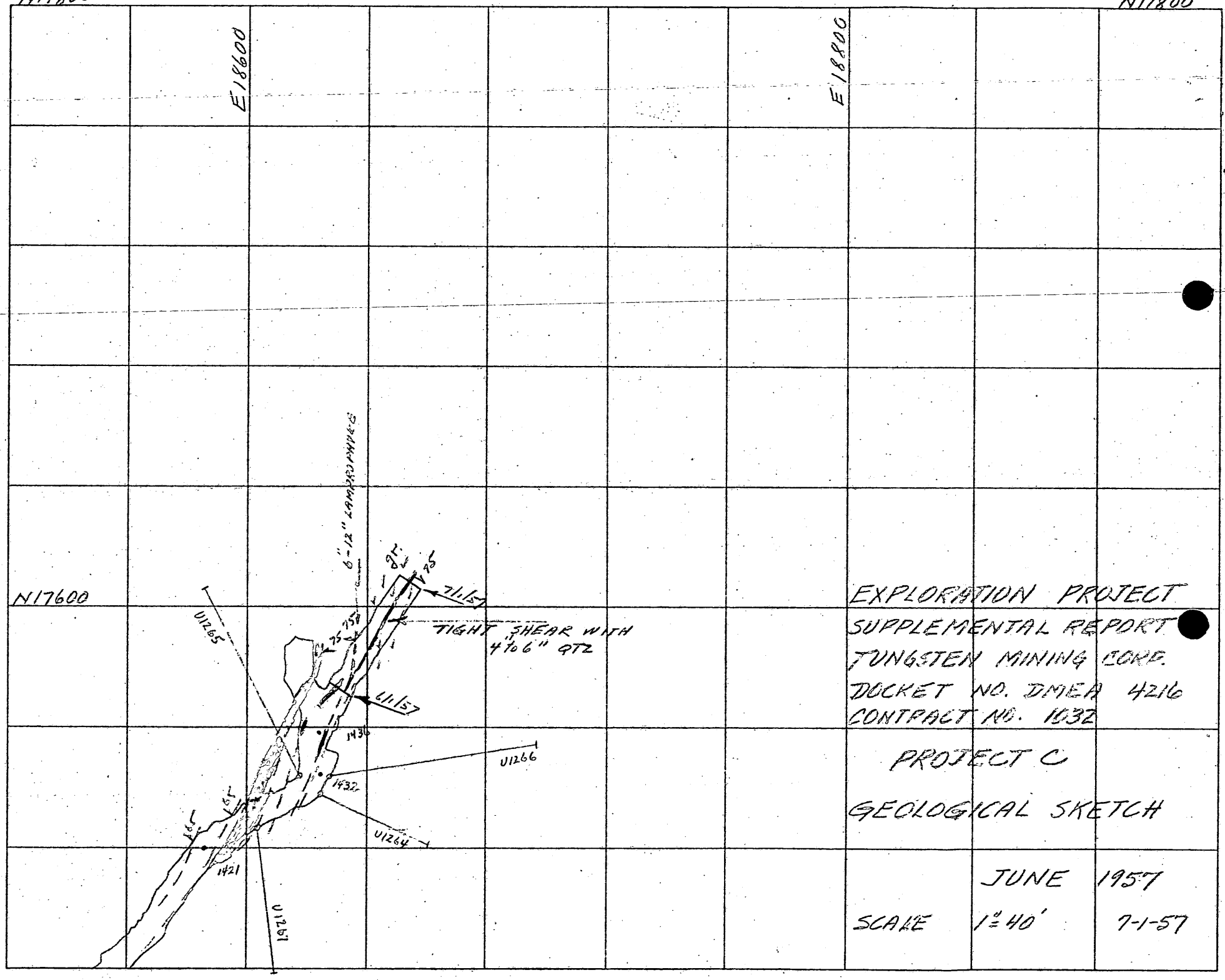


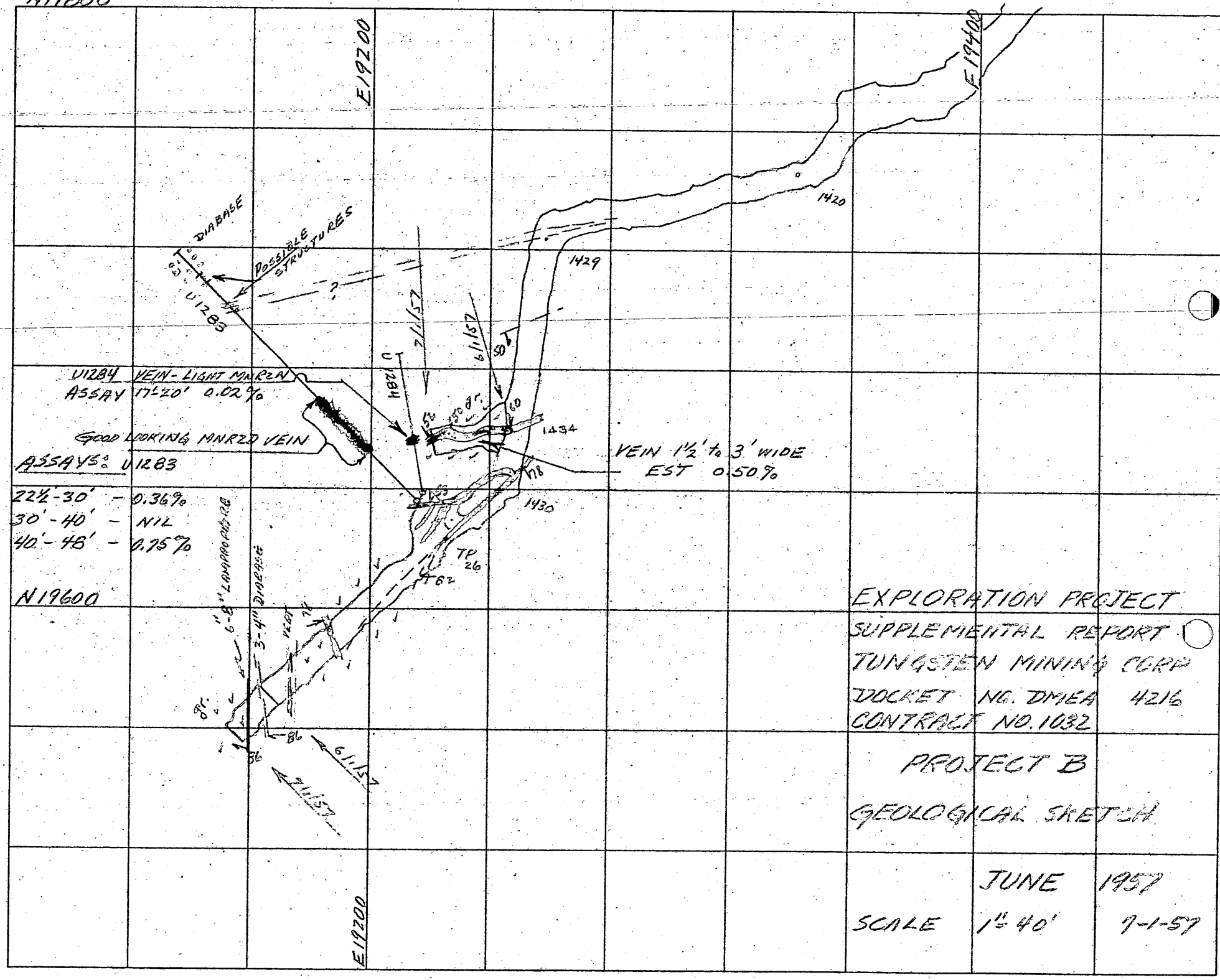
K+E ALBANENE 196M TRACING PAPER 14084

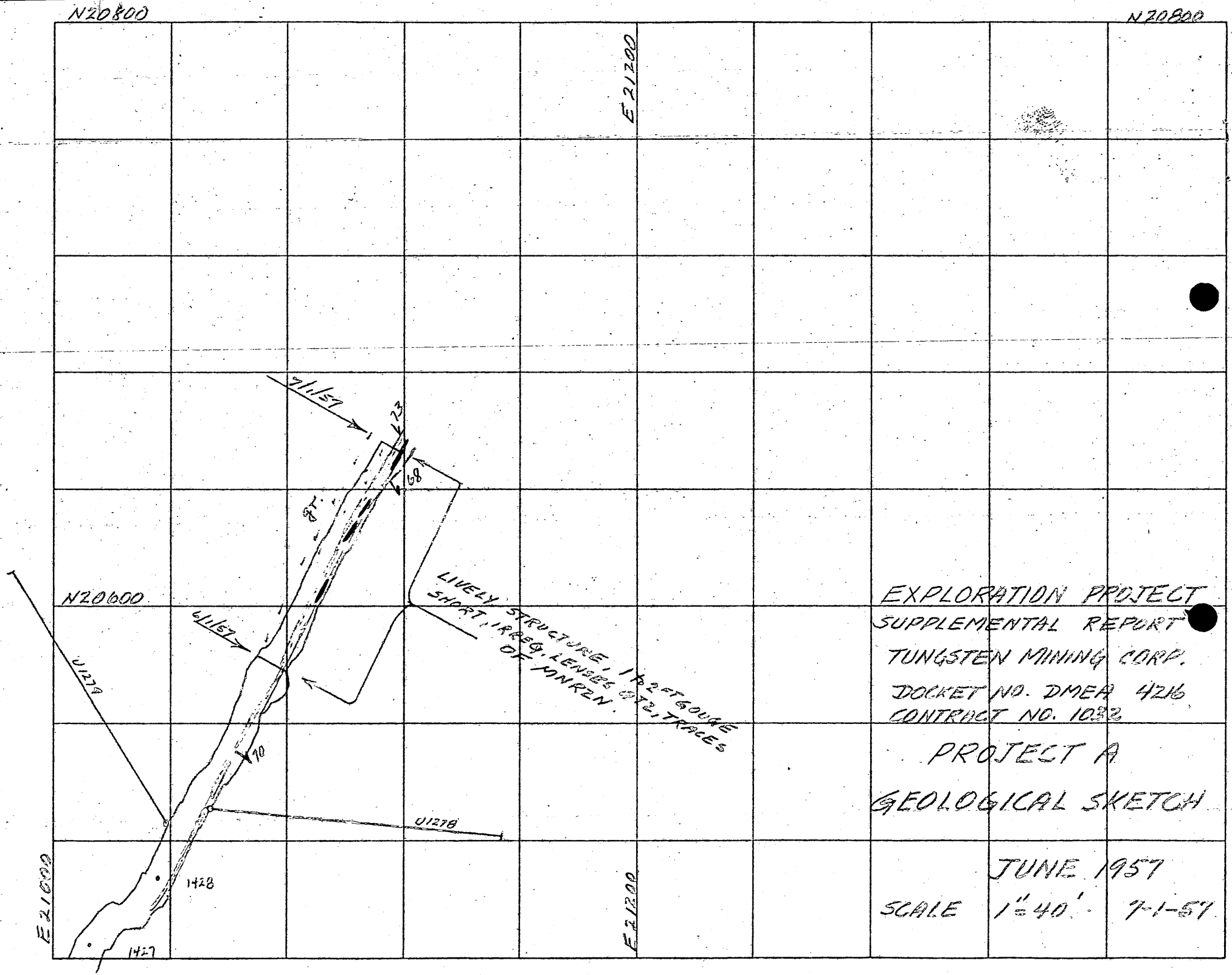

N17900
N17200
E 18600
E 19200
N17600
E 18100
E 19200
HOLE DEEPENED TO 70 FT
LAMPROPHYRE DIKE
73 FT
4" GTZ
12 FT SHEARED
25
65
65
65
65
65
65
1421
1432
N1266
N1264
N1271
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. D.MEM 4216
CONTRACT NO. 1032
PROJECT C
PROGRESS SKETCH
MAY 1957
SCALE 1" = 40'
4-1-57

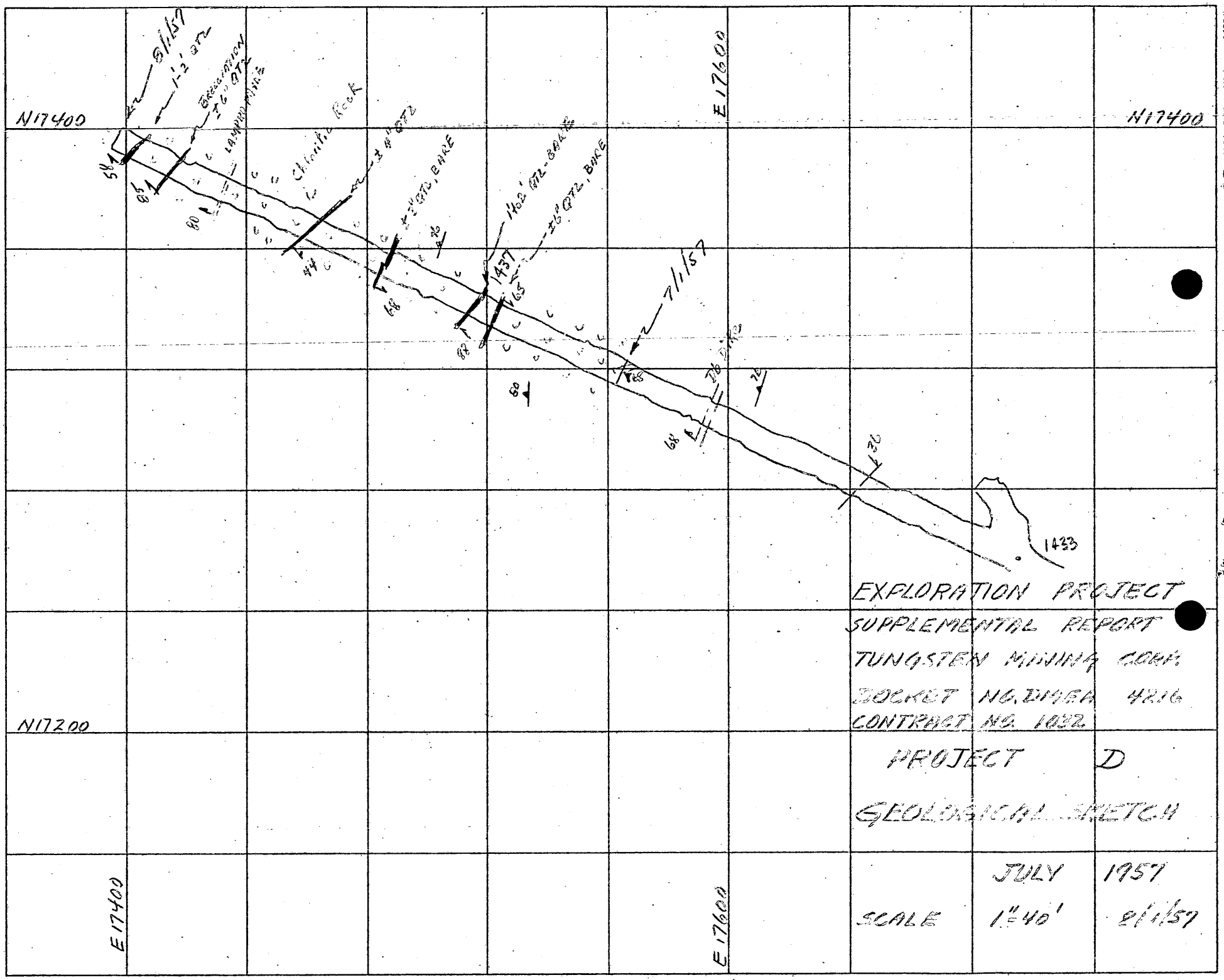

N19800
N19800
E19200
E19400
1420
1429
5'/1/57
50
U1270
60
1 to 1½ FT EST 0.40%
IRREGULAR ORE STRINGERS
EST. 0.2 to 0.3 %
53
18
1430
1 to 1½ FT EST. 0.50%
U1269
82
N19600
VERT.
10
18
±1 FT VEIN IN MANRIN
6/1/57
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. ZMEA 1/216
CONTRACT NO. 1032
PROJECT B
PROGRESS SKETCH
MAY 1957
SCALE 1" = 40'
6-1-57

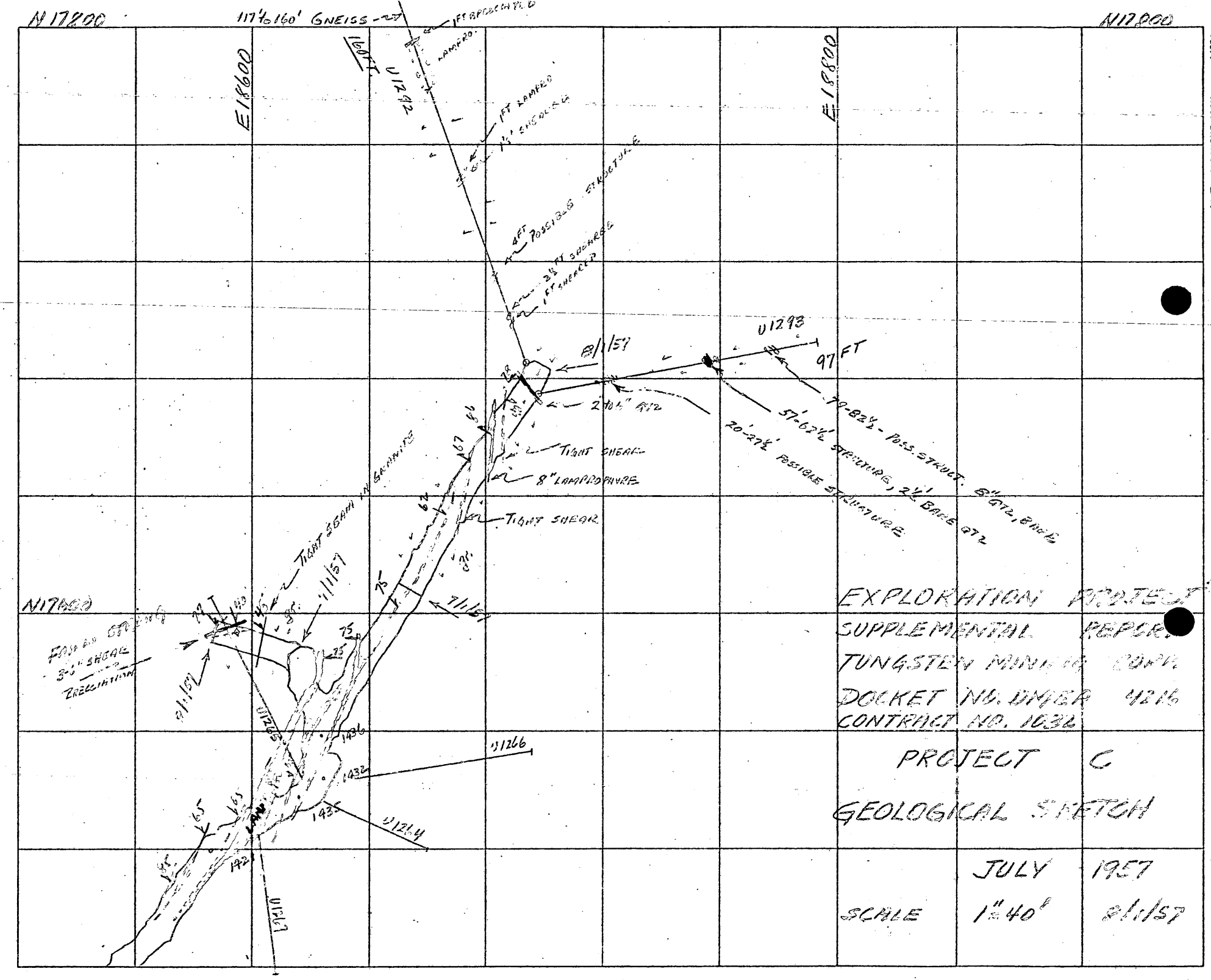

N20,600
E21,000
E21,200
N20,600
N20,400
E21,000
101 FT
POSSIBLE STRUCTURE
TR MINERAL
U-1279
CHLOR. SCHIST AND
6/1/57
SHEAR ± 1 FT WIDE
70
U-1278
VEIN
EST. 0.25%
1428
VEIN 2 to 3½ FT EST. 0.25%
1427
173
STRONG SHEAR
5/1/57
75
1423
STRUCTURE
U-1280
68 FT
NIL
SCHIST
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT A
GEOLOGICAL SKETCH
MAY 1957
SCALE 1" = 40'
6-1-57

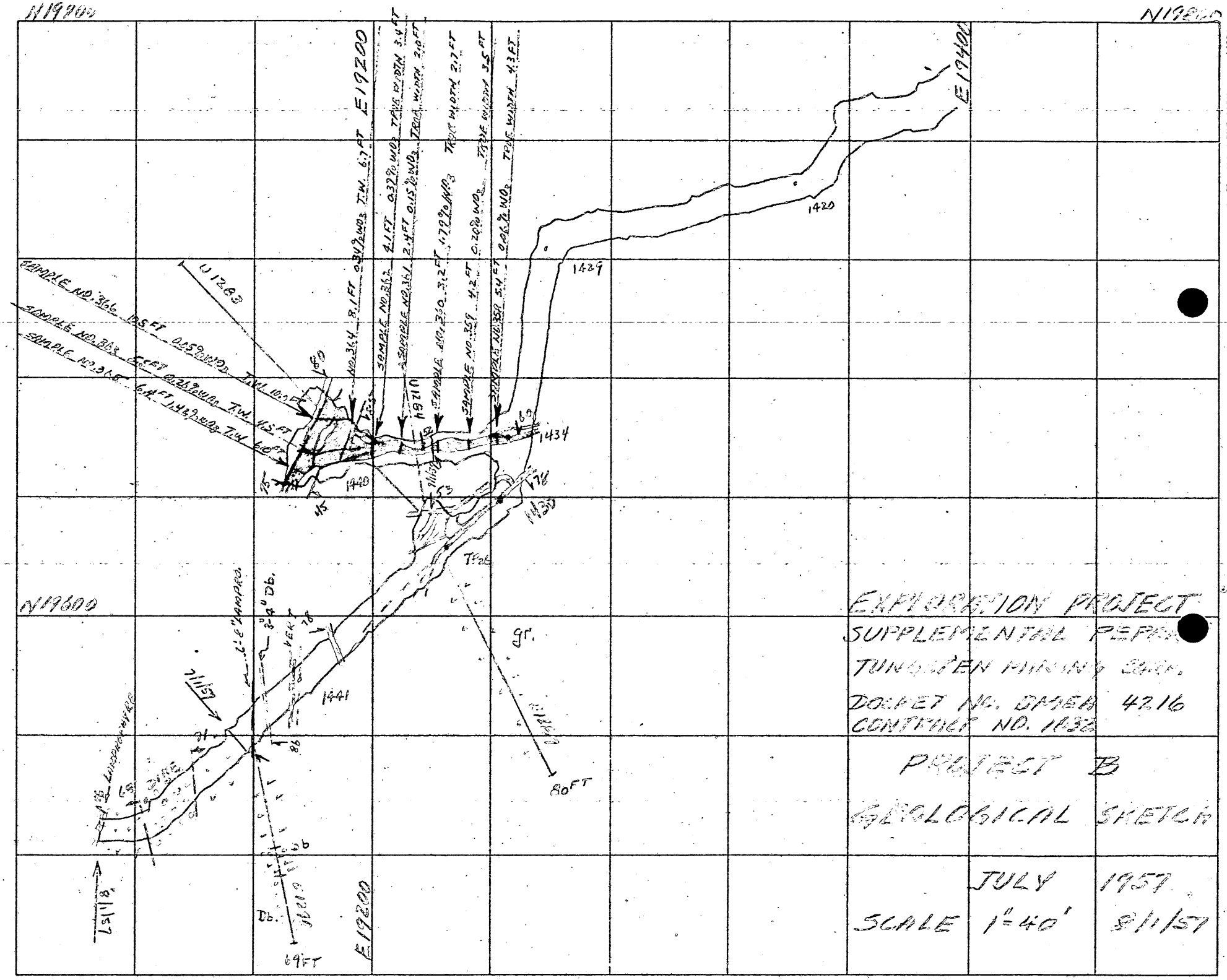

N17800
N17800
E18600
E18800
N17600
6"-12" LAMPRO DIKES
TIGHT SHEAR WITH
4"to 6" QTZ
U1265
U1266
U1264
U1261
1436
1432
1421
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT C
GEOLOGICAL SKETCH
JUNE 1957
SCALE 1" = 40'
7-1-57

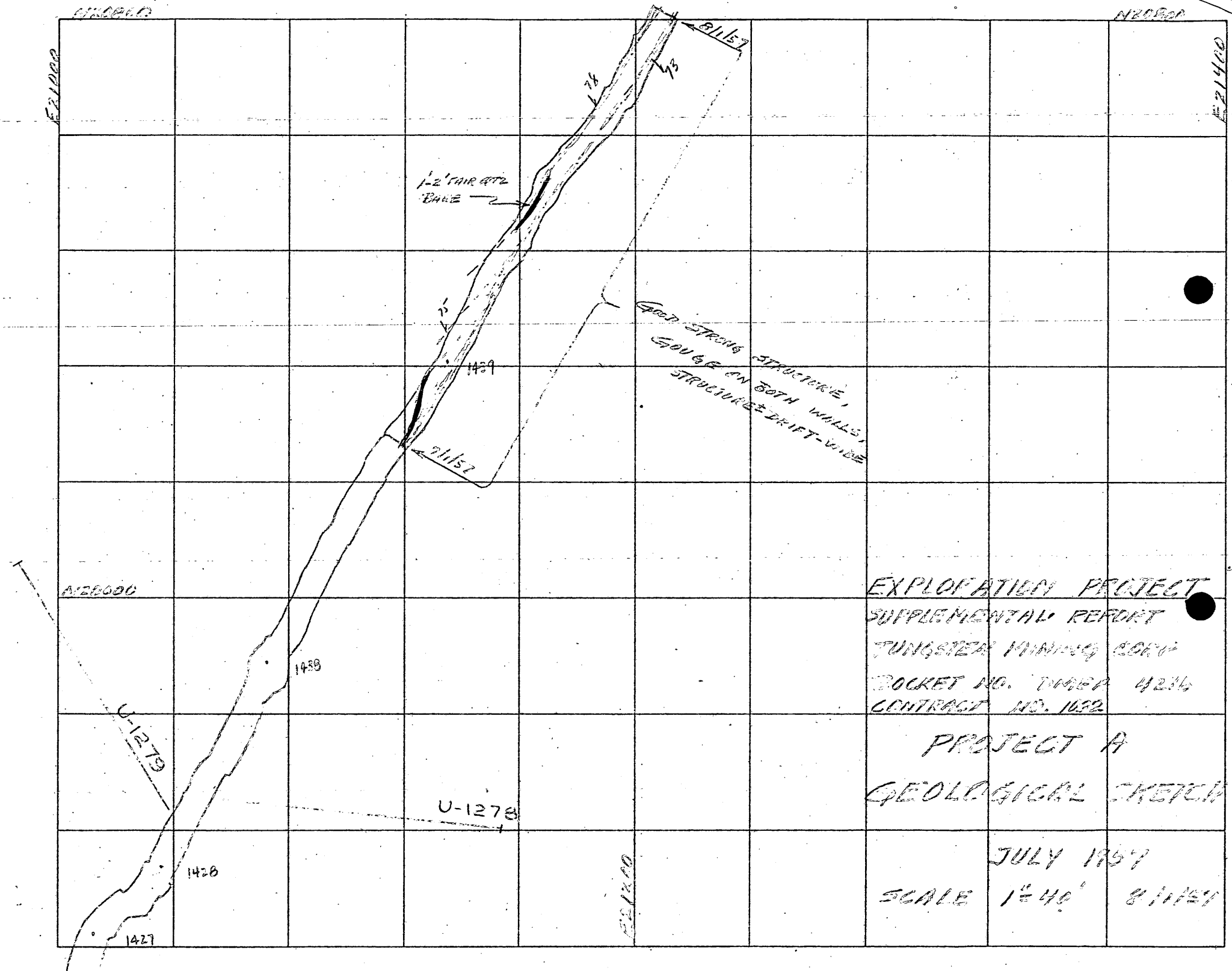

N19800
E19200
E19400
1420
1429
1434
1430
DIABASE
POSSIBLE STRUCTURES
U1283
U1284
VEIN - LIGHT MNRZN
ASSAY 17'-20' 0.02%
GOOD LOOKING MNRZD VEIN
ASSAYS: U1283
22½'-30' - 0.36%
30'-40' - NIL
40'-48' - 0.75%
VEIN 1½' to 3' WIDE
EST 0.50%
TP 26
N19600
6-8" LAMPRO DIKE
3-4" DIABASE
E19200
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT B
GEOLOGICAL SKETCH
JUNE 1957
SCALE 1" = 40'
7-1-57

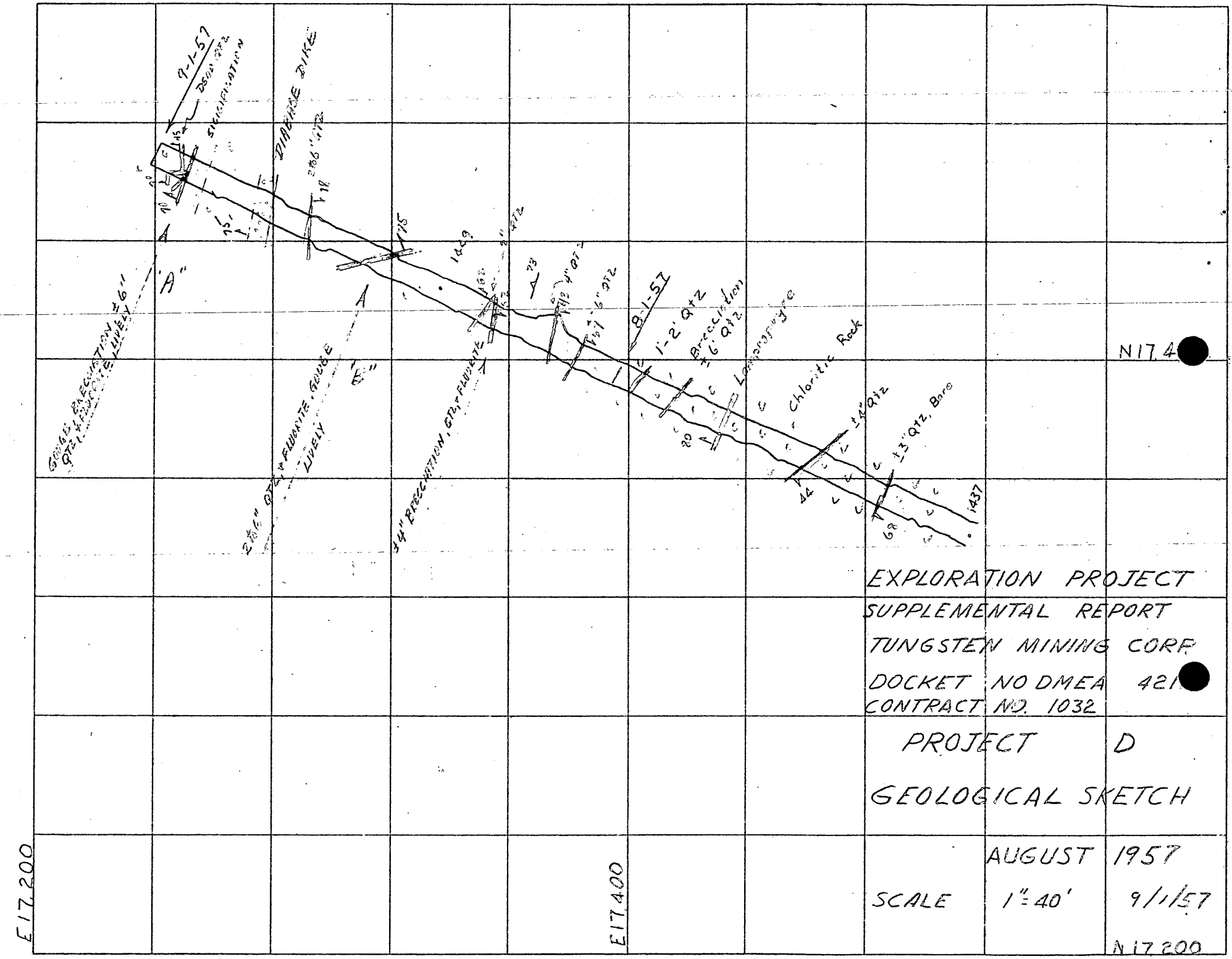

N20800
N20800
E21200
N20600
E21000
E21200
7/1/57
6/1/57
123
68
70
U1279
U1278
1428
1427
LIVELY STRUCTURE, 1½-2FT GOUGE
SHORT, IRREG. LENSES & STRINGERS
OF MNRZN.
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 426
CONTRACT NO. 1032
PROJECT A
GEOLOGICAL SKETCH
JUNE 1957
SCALE 1"=40'
7-1-57


N17400
N17200
E17400
E17600
8/1/57
1-2' QTZ
Brecciation
±6" QTZ
Lamprophyre
Chloritic Rock
±4" QTZ
±3" QTZ, BARE
1437
±6" QTZ, BARE
7/1/57
1433
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT D
GEOLOGICAL SKETCH
JULY 1957
SCALE 1"=40'
8/1/57


N17800
117'±160' GNEISS
N17800
E18600
E18800
U1242
160 FT
1 FT BROECHPLD
LAMPRO.
1 FT LAMPRO
1½' SHEARED
4 FT POSSIBLE STRUCTURE
2½ FT SHEARED
1 FT SHEARED
U1293
97 FT
8/1/57
2'±0½" QTZ
TIGHT SHEAR
8" LAMPROPHYRE
TIGHT SHEAR
TIGHT SEAM IN GRANITE
7/1/57
9/1/57
FAULT OPENING
3'±' SHEAR
TRELLISATION
U1265
U1266
U1264
U1267
LAMP
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. UNEA 4216
CONTRACT NO. 1032
PROJECT C
GEOLOGICAL SKETCH
JULY 1957
SCALE 1" = 40'
8/1/57


N19800
N19600
E19200
E19400
1420
1429
1434
1440
1441
1439
SAMPLE NO. 366 10.5 FT 0.05% WO3 T.W. 10.5 FT
SAMPLE NO. 363 5.5 FT 0.05% WO3 T.W. 4.5 FT
SAMPLE NO. 365 6.4 FT 1.42% WO3 T.W. 6.0 FT
SAMPLE NO. 364 8.1 FT 0.34% WO3 T.W. 6.7 FT
SAMPLE NO. 362 4.1 FT 0.32% WO3 TRUE WIDTH 3.4 FT
SAMPLE NO. 361 2.4 FT 0.15% WO3 TRUE WIDTH 2.0 FT
SAMPLE NO. 360 3.2 FT 1.77% WO3 TRUE WIDTH 2.7 FT
SAMPLE NO. 359 4.2 FT 0.20% WO3 TRUE WIDTH 3.5 FT
SAMPLE NO. 358 5.4 FT 0.05% WO3 TRUE WIDTH 4.3 FT
U1263
U1264
DIKE
Db.
80 FT
69 FT
8/1/57
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. SMSA 4216
CONTRACT NO. 1032
PROJECT B
GEOLOGICAL SKETCH
JULY 1957
SCALE 1" = 40'
8/1/57


N28800
N28600
E21000
E21400
E21200
8/1/57
7/1/57
78
43
1-2' TAIR QTZ BANDE
1429
1428
1427
U-1279
U-1278
GOOD STRONG STRUCTURE, GOUGE ON BOTH WALLS, STRUCTURE DRIFT-WIDE
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4236
CONTRACT NO. 1632
PROJECT A
GEOLOGICAL SKETCH
JULY 1957
SCALE 1" = 40' 8 FEET



EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO DMEA 421
CONTRACT NO. 1032

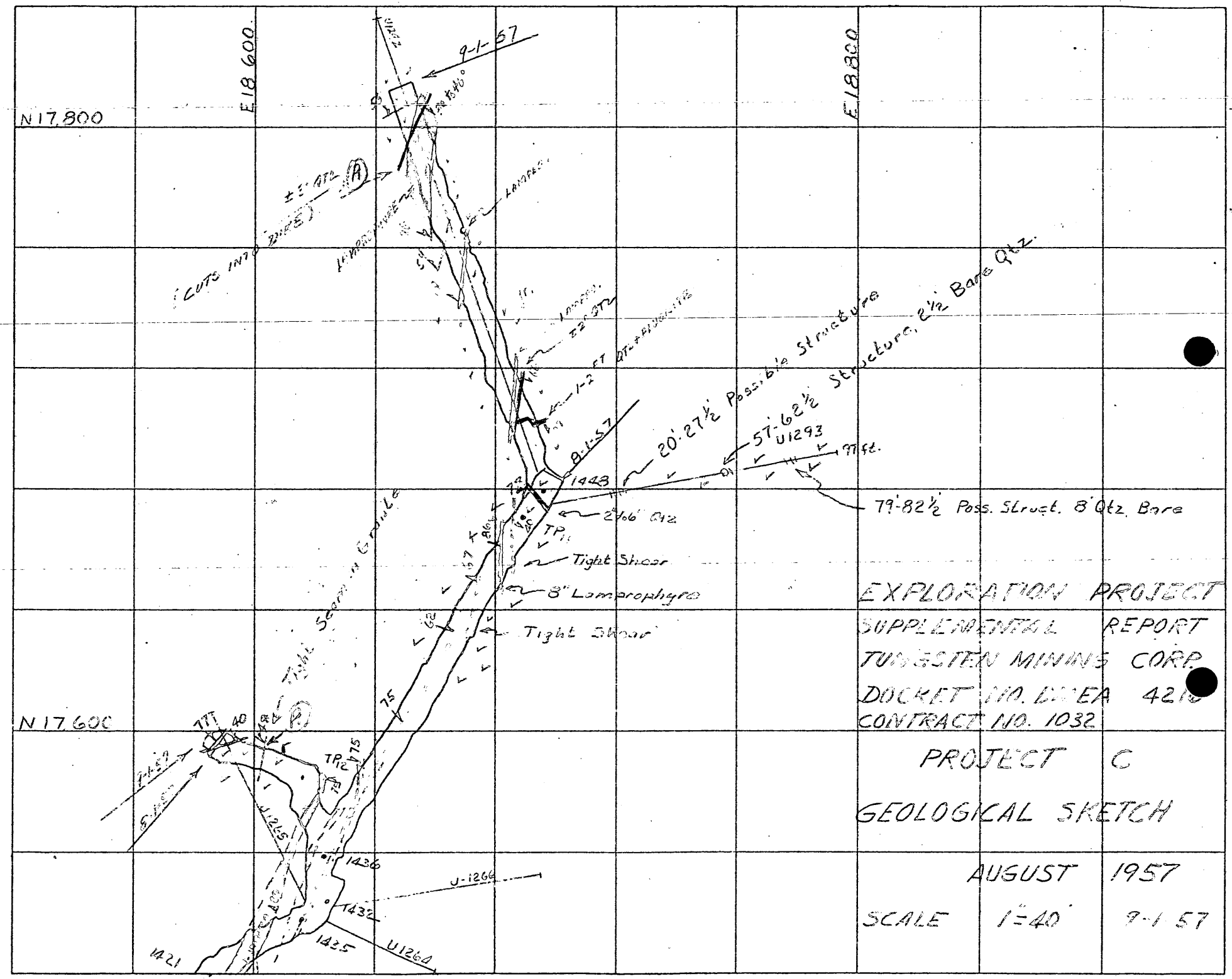
PROJECT D

GEOLOGICAL SKETCH

AUGUST 1957

SCALE 1" = 40' 9/1/57

K+E ALBANENE 1694 TRACING PAPER



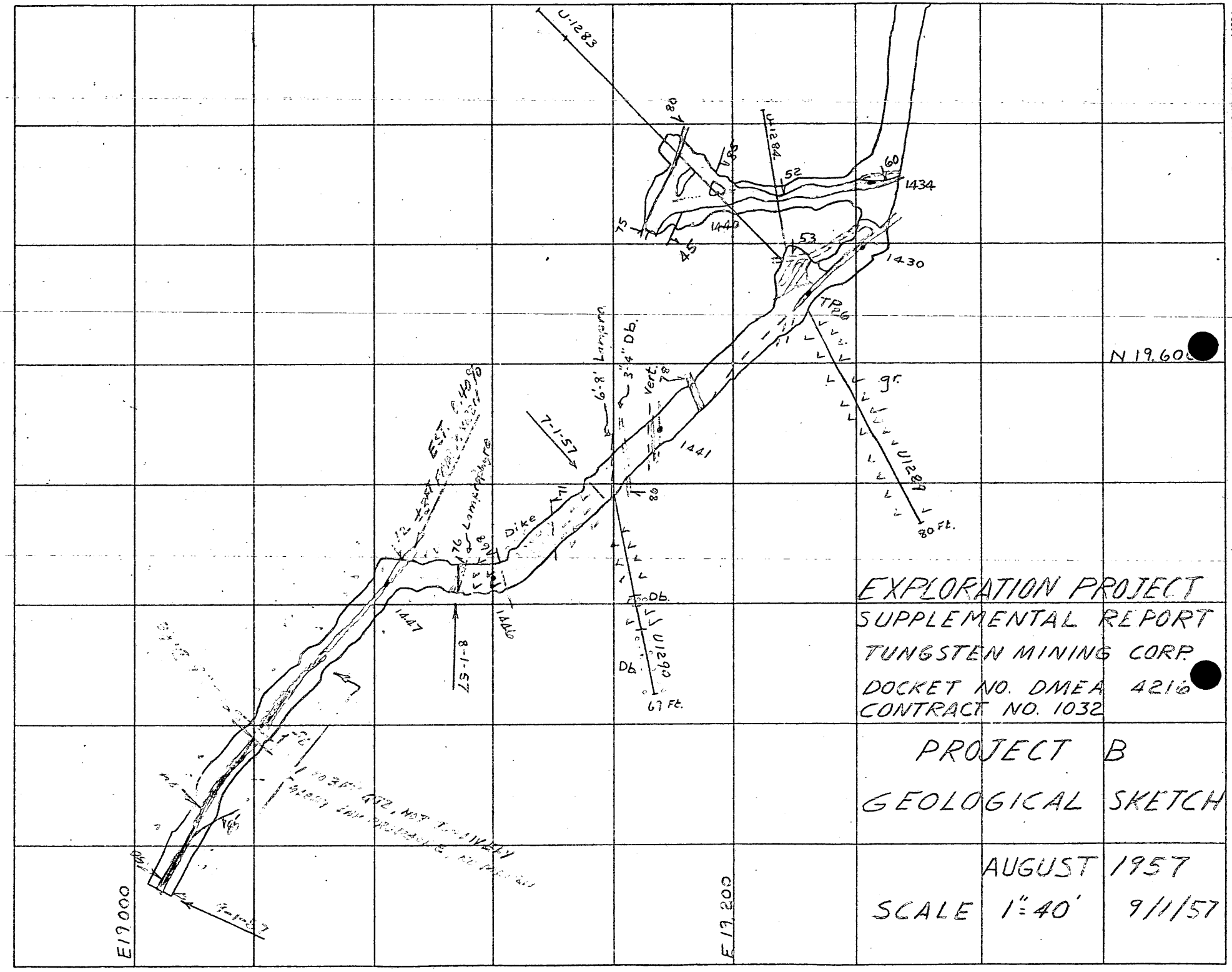
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 421
CONTRACT NO. 1032

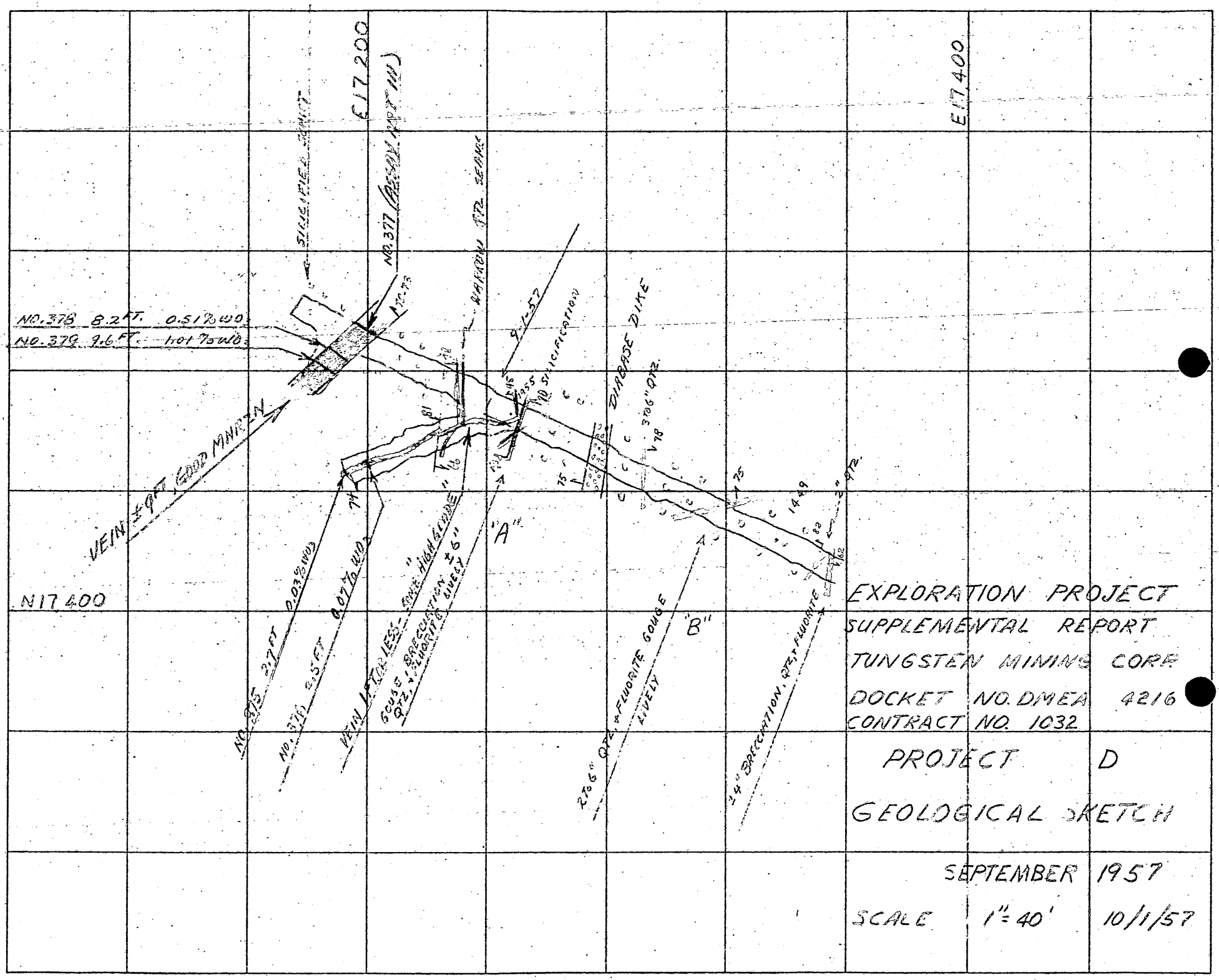
PROJECT C

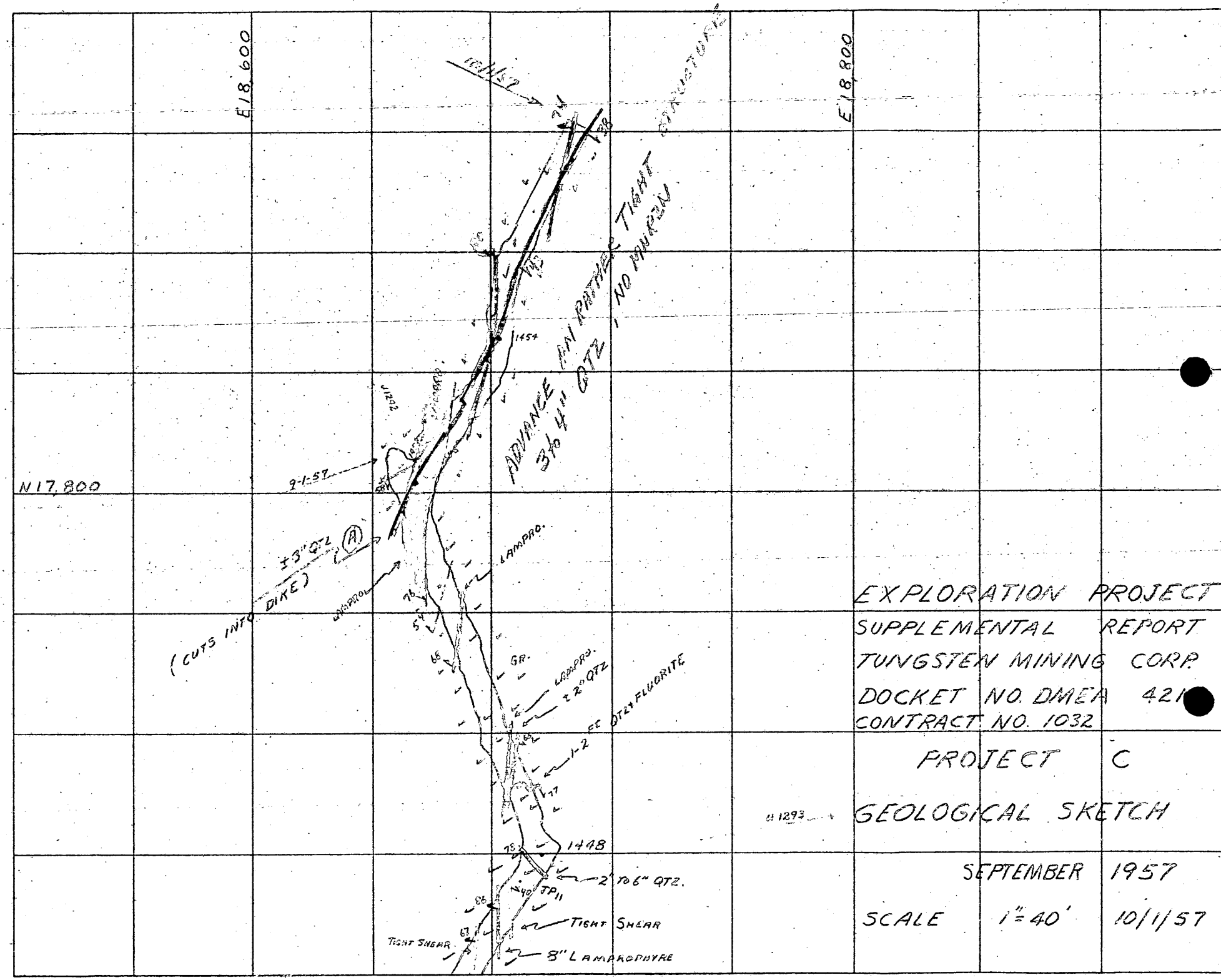
GEOLOGICAL SKETCH

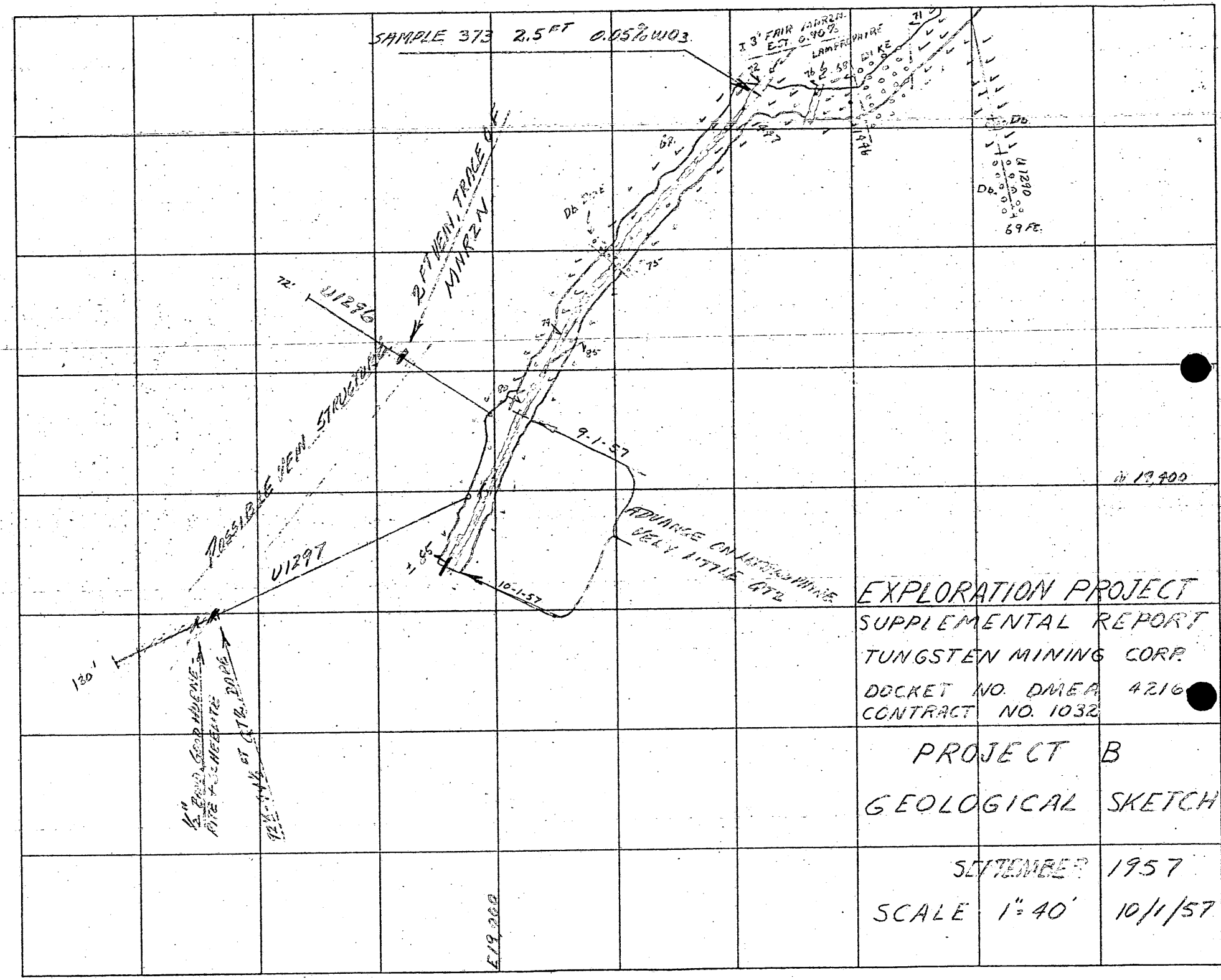
AUGUST 1957

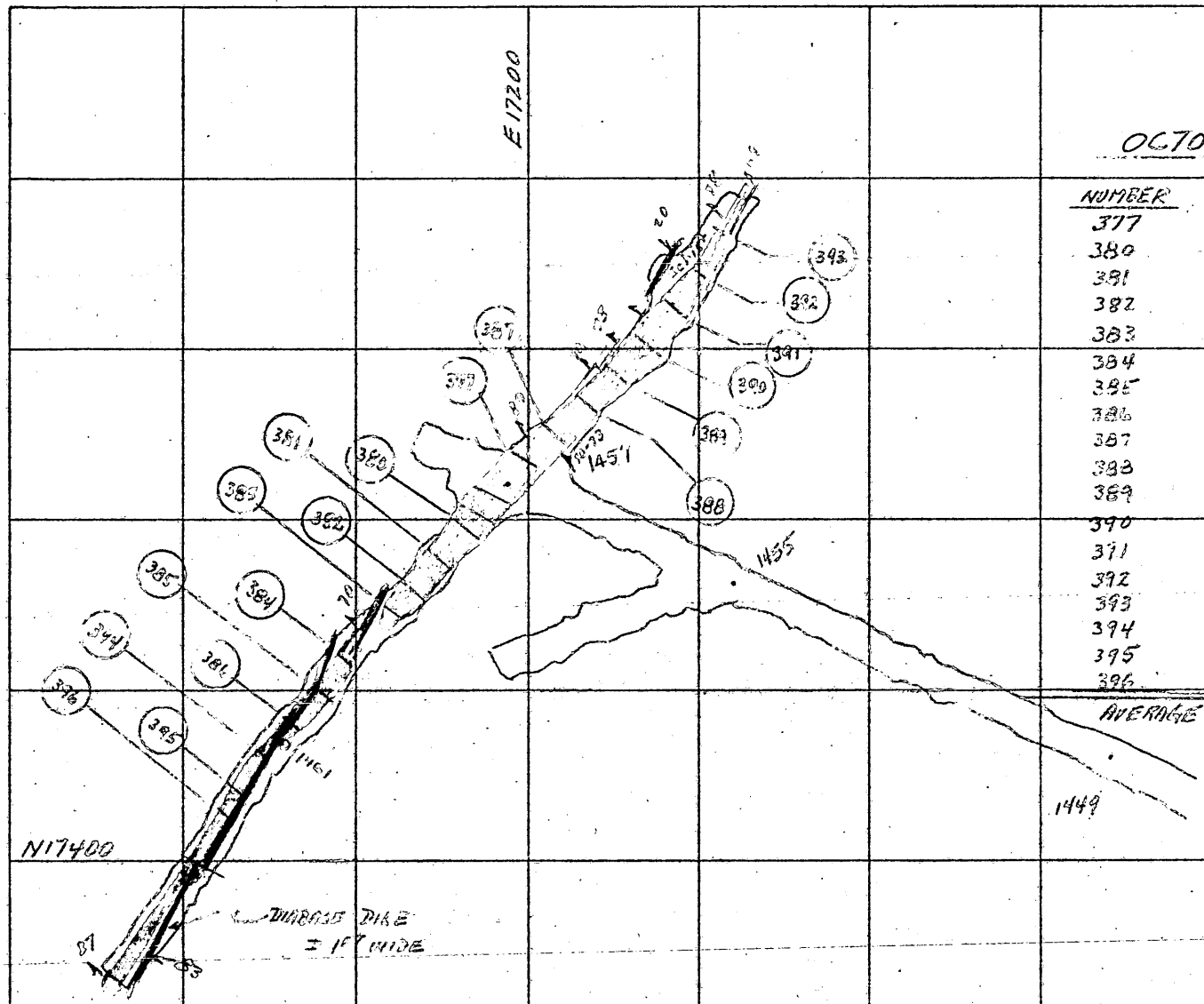
SCALE 1"=40' 9-1-57


U-1283
U-1284
U-1289
U-1290
1434
1430
1440
1441
1447
1446
TP26
N 19,600
E 19,000
E 19,200
80 Ft.
67 Ft.
Db.
Dike
Lamprophyre
3'-4" Db.
Vert.
7-1-57
8-1-57
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT B
GEOLOGICAL SKETCH
AUGUST 1957
SCALE 1" = 40'
9/11/57


E17200
E17400
N17400
SILICIFIED SHEAR
NO. 377 (ASSAY RPT IN)
SHADOW QTZ. SEAM
NO. 378 8.2 FT. 0.51% WO3
NO. 379 9.6 FT. 1.01% WO3
VEIN ±90' GOOD MIN'N
DIABASE DIKE
NO SILICIFICATION
"A"
"B"
NO. 375 2.7 FT 0.03% WO3
NO. 376 4.5 FT 0.07% WO3
VEIN LATERALLY LESS - SOME HIGH GRADE
GOUGE & BRECCIATION ±6"
QTZ. & FLUORITE GOUGE
LIVELY
2.7-6" QTZ. & FLUORITE GOUGE
LIVELY
24" BRECCIATION, QTZ. & FLUORITE
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT D
GEOLOGICAL SKETCH
SEPTEMBER 1957
SCALE 1" = 40'
10/1/57


E18,600
E18,800
N17,800
ADVANCE AN RATHER TIGHT
3½ 4" QTZ, NO MINERAL
STRUCTURE
1454
J1292
9-1-57
±3" QTZ
(A)
(CUTS INTO DIKE)
LAMPRO.
GR.
±2" QTZ
FL QTZ+FLUORITE
1-2
1448
2' TO 6" QTZ.
TIGHT SHEAR
8" LAMPROPHYRE
J1293
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 421
CONTRACT NO. 1032
PROJECT C
GEOLOGICAL SKETCH
SEPTEMBER 1957
SCALE 1" = 40'
10/1/57


SAMPLE 373 2.5 FT 0.05% WO3
3' FAIR MNRZN. EST. 0.90%
LAMPROPHYRE DIKE
DIKE
U1296
U1290
69 FT.
2 FT VEIN, TRACE OF MNRZN
POSSIBLE VEIN STRUCTURE
U1297
9-1-57
10-1-57
ADVANCE ON LAMPROPHYRE VERY LITTLE GTZ
130'
E 19,200
N 19,400
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT B
GEOLOGICAL SKETCH
SEPTEMBER 1957
SCALE 1" = 40'
10/1/57



OCTOBER SAMPLING

NUMBER	FT.	% WO3
377	9.0	1.20
380	7.6	1.37
381	7.0	0.77
382	7.7	0.89
383	2.8	0.37
384	3.6	0.11
385	5.3	1.36
386	4.3	0.86
387	8.3	0.74
388	7.7	1.68
389	7.1	0.84
390	9.0	1.26
391	8.5	1.78
392	3.0	1.06
393	1.5	1.08
394	2.5	0.81
395	2.2	0.77
396	2.6	0.58
AVERAGE	5.55 FT	1.08 %

EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032

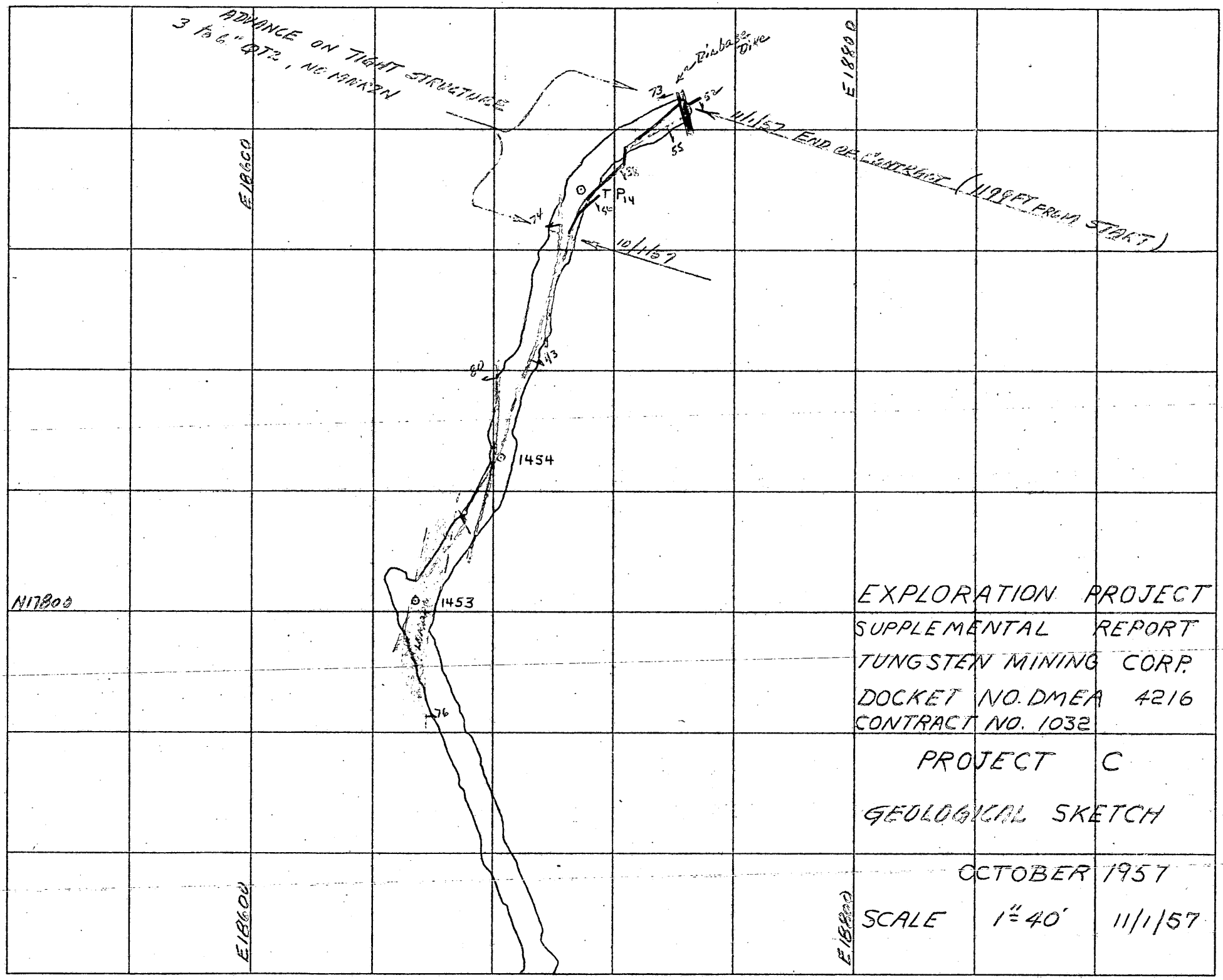
PROJECT D

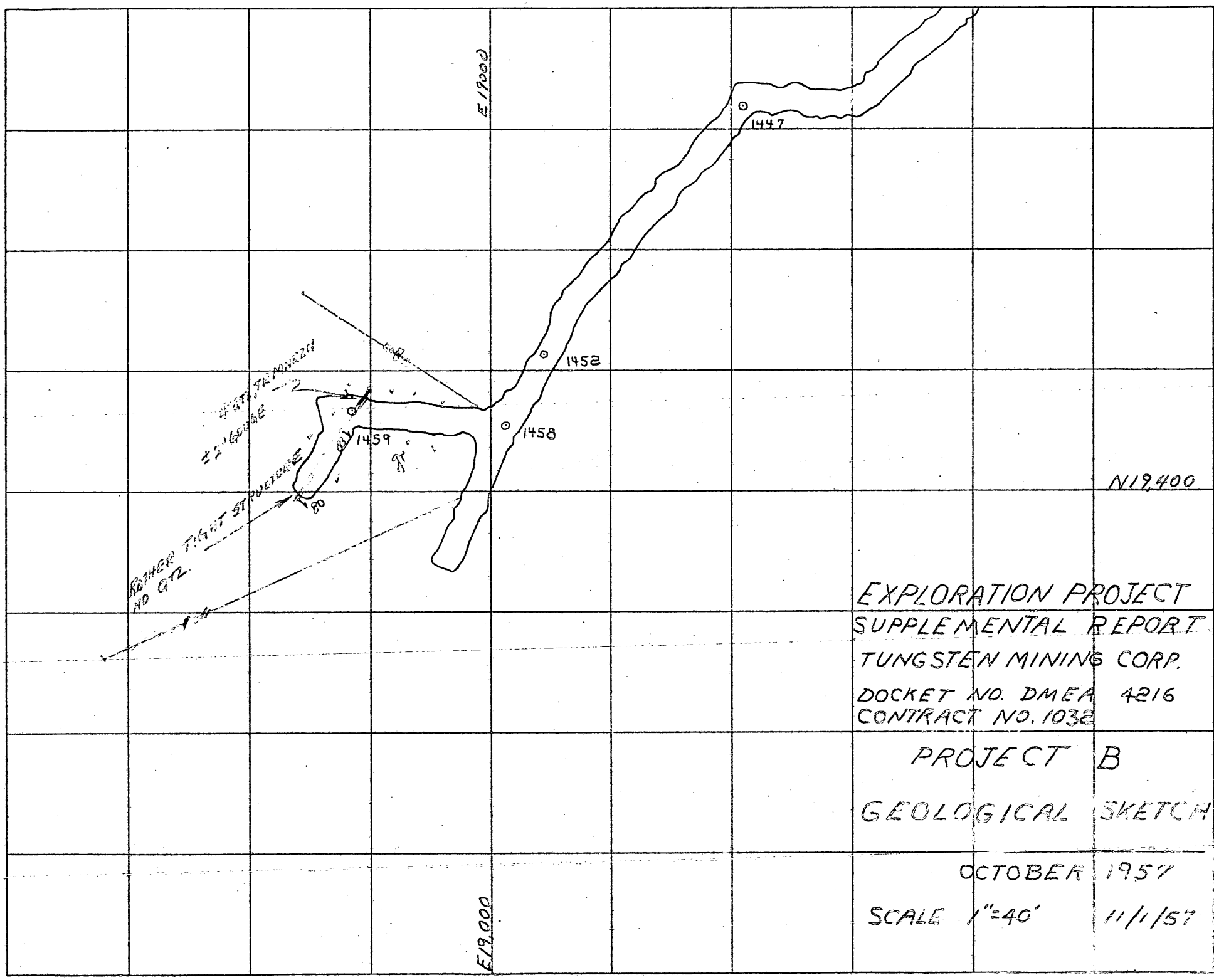
GEOLOGICAL SKETCH

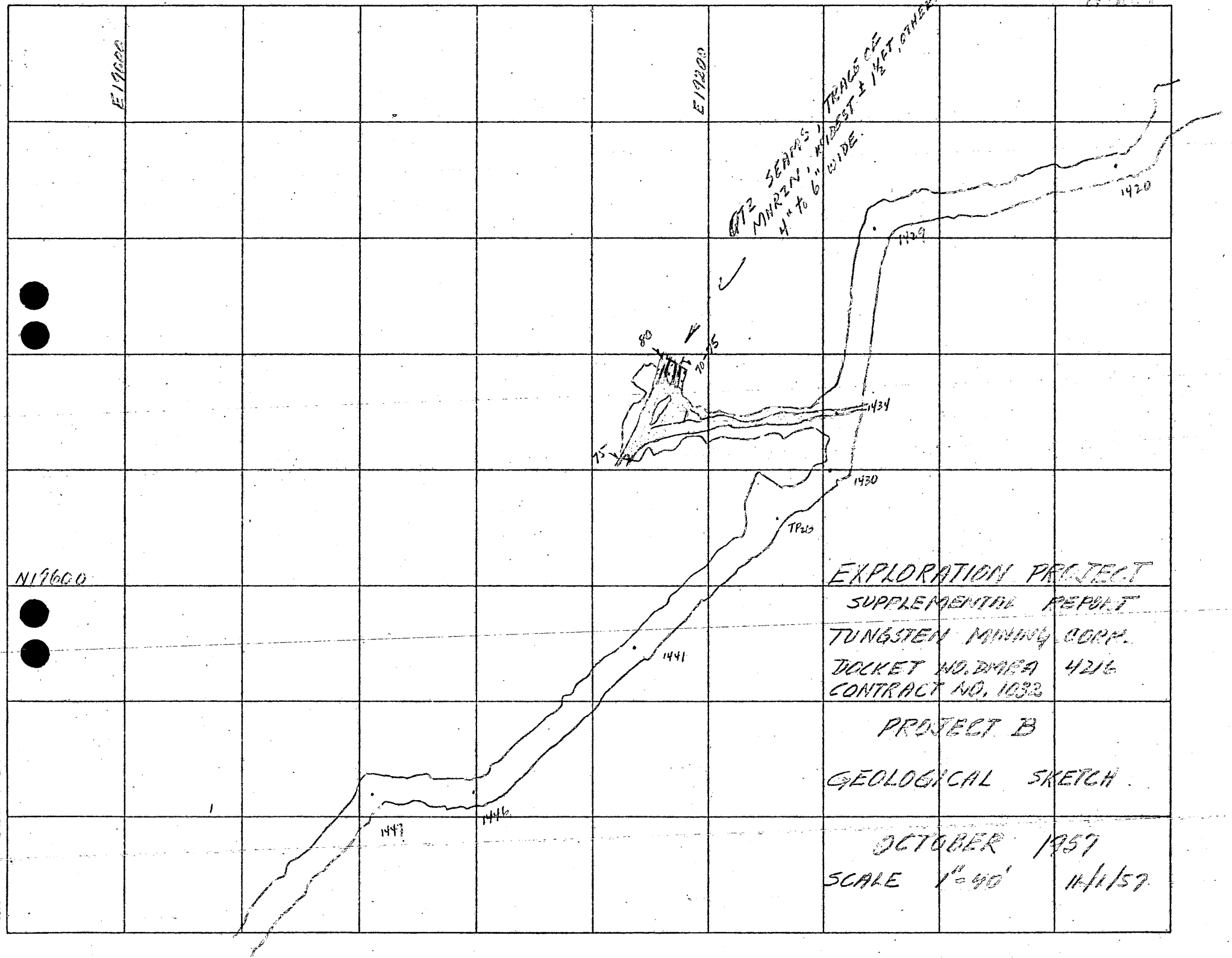
OCTOBER 1954

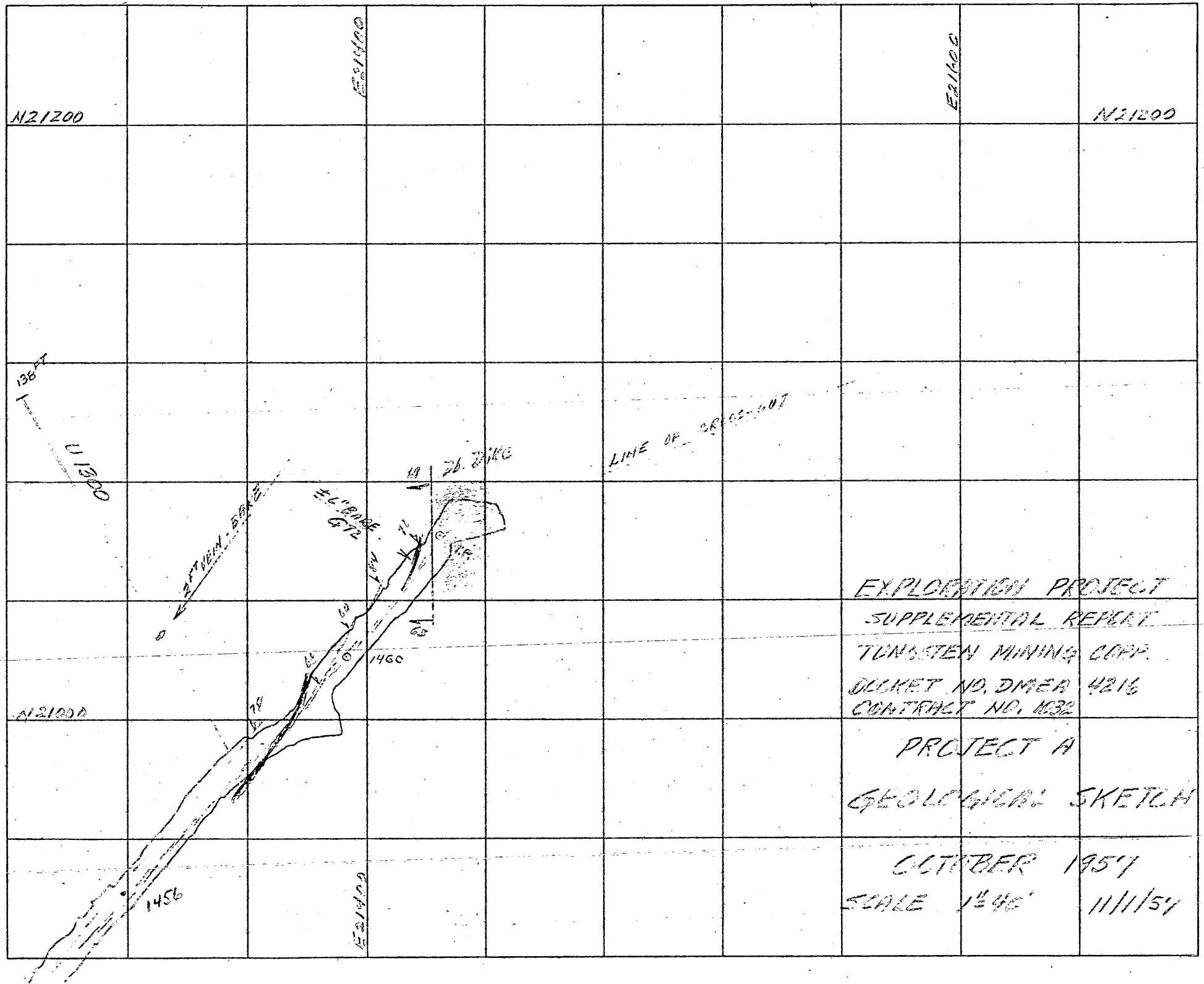
SCALE 1" = 40' 11/1/57

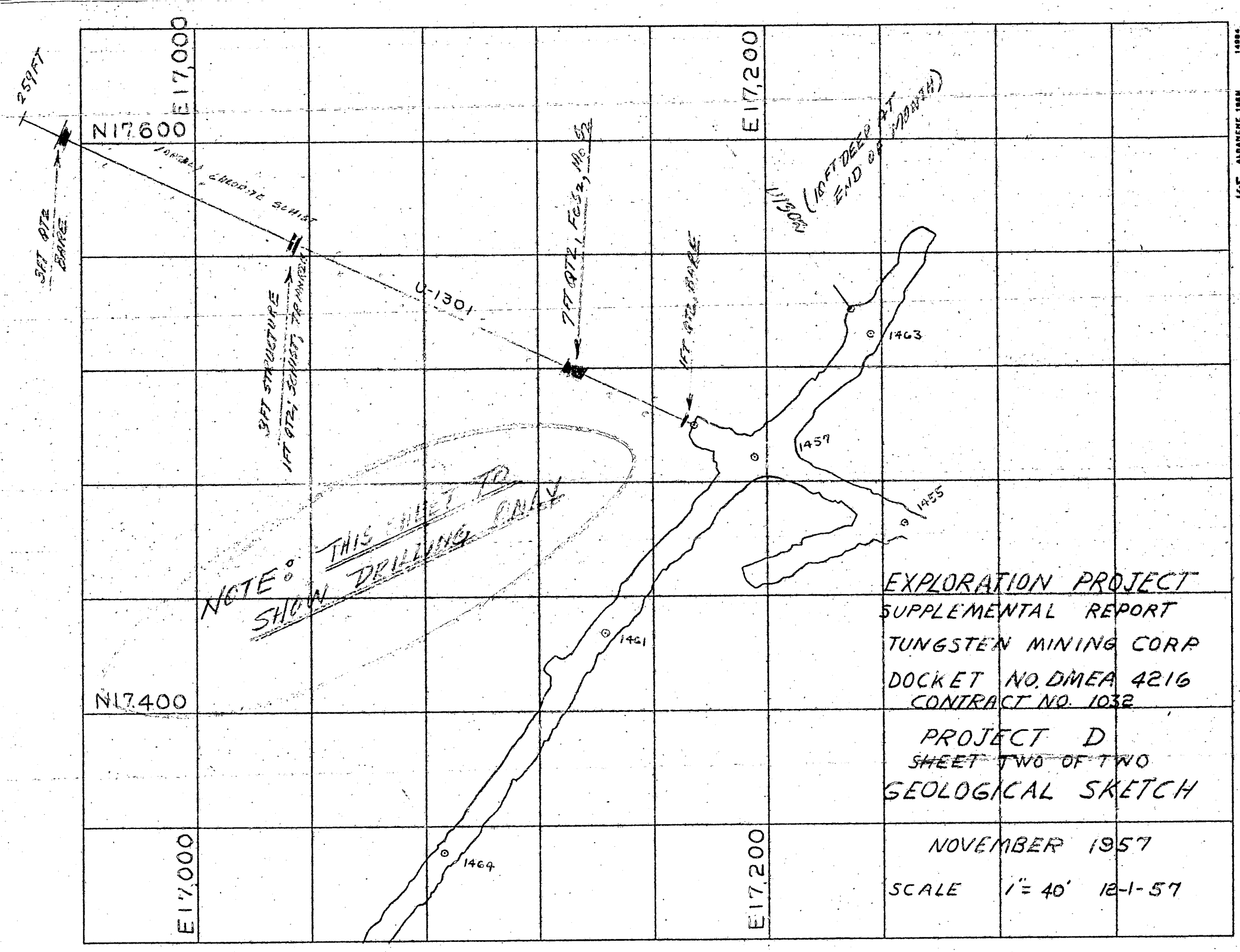
K+E ALBANENE 100M TRACING PAPER 14934

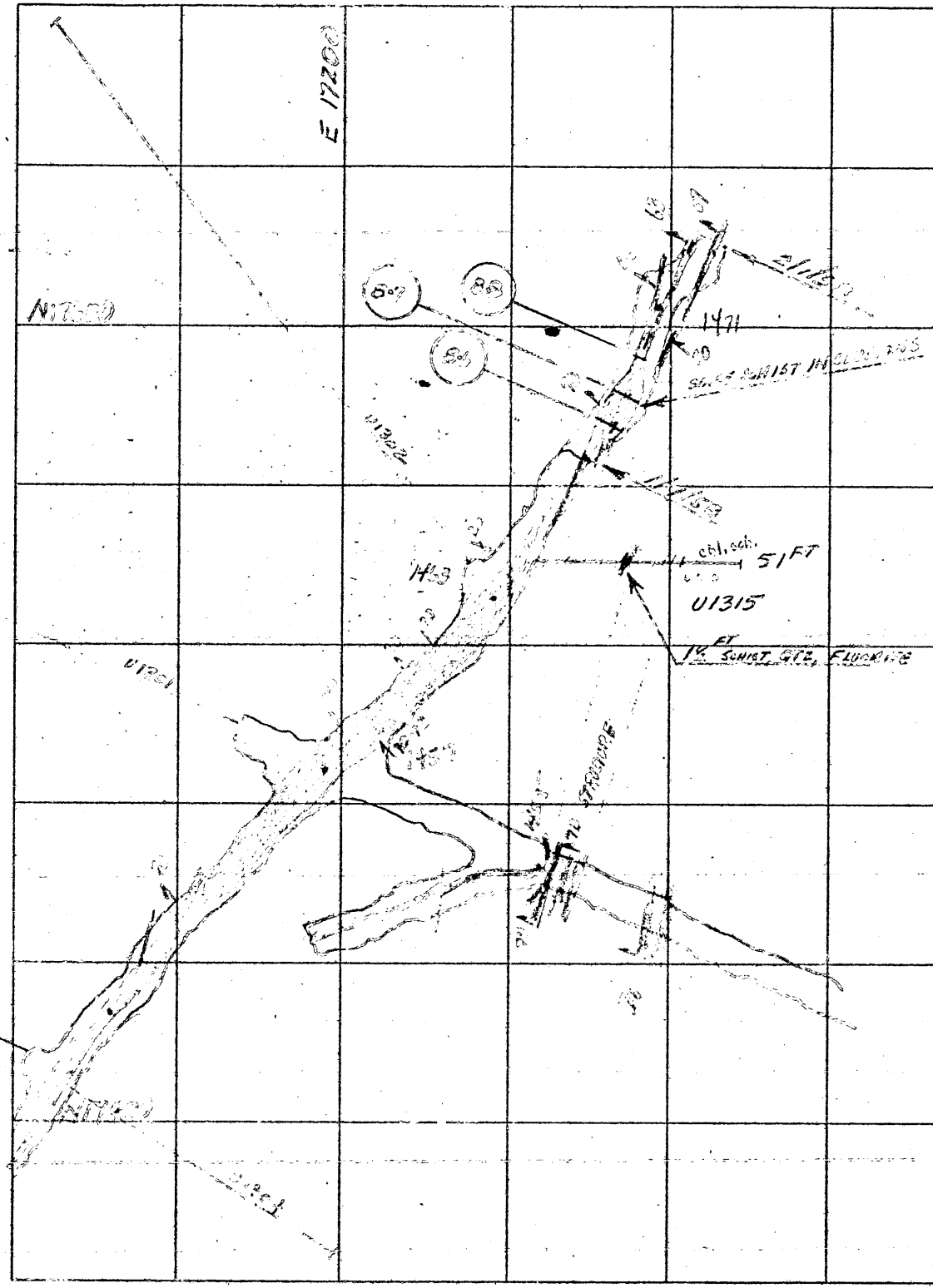

ADVANCE ON TIGHT STRUCTURE
3 to 6" QTZ, NO MARKER
Diabase Dike
11/1/57 END OF CONTRACT (1199 FT FROM START)
10/1/57
E18800
E18600
E18600
N17800
1454
1453
T
P14
73
52
55
74
60
43
76
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT C
GEOLOGICAL SKETCH
OCTOBER 1957
SCALE 1" = 40'
11/1/57


E19000
1447
1452
1458
1459
N19400
E19,000
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT B
GEOLOGICAL SKETCH
OCTOBER 1957
SCALE 1"=40'
11/1/57


E19600
E19200
N19600
BTZ SEAMS, TRACE OF MINRZN, MIDDST. 1½ FT, OTHERS 4" to 6" WIDE.
80
70-75
75
1434
1430
TP26
1441
1446
1447
1429
1420
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT B
GEOLOGICAL SKETCH
OCTOBER 1957
SCALE 1" = 40'
11/1/57


N21200
E21400
E21600
N21200
135 FT
U 1300
LINE OF CROSS-CUT
26. DIKE
19
#1 BARE
G72
1460
N21000
1456
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT A
GEOLOGICAL SKETCH
OCTOBER 1957
SCALE 1" = 40'
11/1/57


E17,000
E17,200
N17,600
N17,400
259 FT
5 FT QTZ BARRE
PORPHYRITIC DIORITE SCHIST
U-1301
3 FT STRUCTURE
1 FT QTZ, SCHIST, TOURMALINE
7 FT QTZ, FeS2, No. 52
1 FT QTZ, BARRE
1 FT DEEP AT END OF MONTH)
1463
1457
1455
1461
1464
NOTE: THIS SHEET TO SHOW DRILLING ONLY
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT D
SHEET TWO OF TWO
GEOLOGICAL SKETCH
NOVEMBER 1957
SCALE 1" = 40' 12-1-57



JANUARY		SAMPLING
NO.	FT.	%
66	5.4	0.65
67	7.1	0.98
85	1.5	1.43
3	14.5 FT	0.88%

NOTE: THIS SHEET JAN. '58 SHOWING D.D.H. U1315 DRILLED IN FEBRUARY 1958

EXPLORATION PROJECT

SUPPLEMENTAL REPORT

TUNGSTEN HUNTERS CORP.

DIGEST No. DM-58-4306

CONTRACT No. 1035

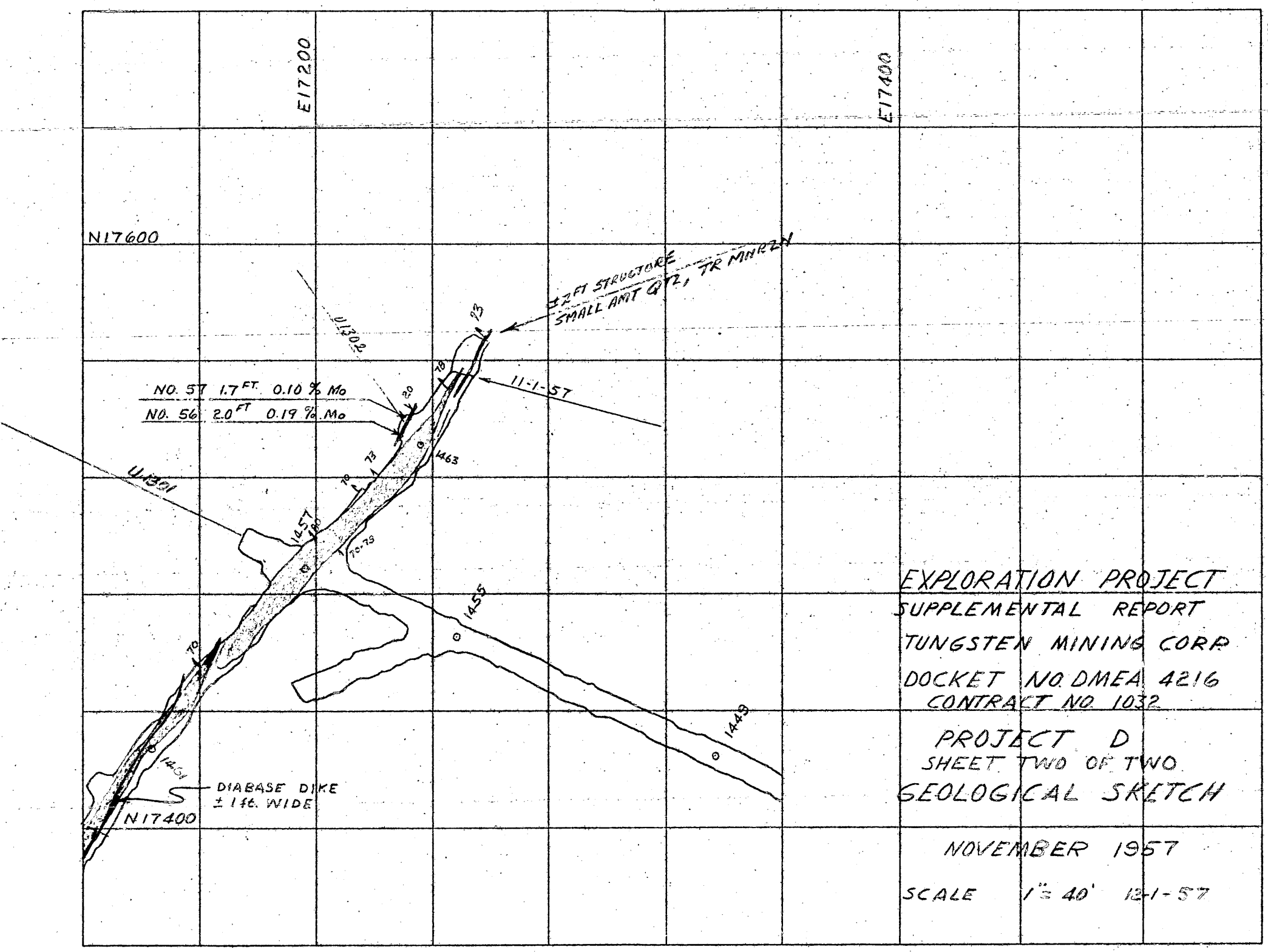
PROJECT

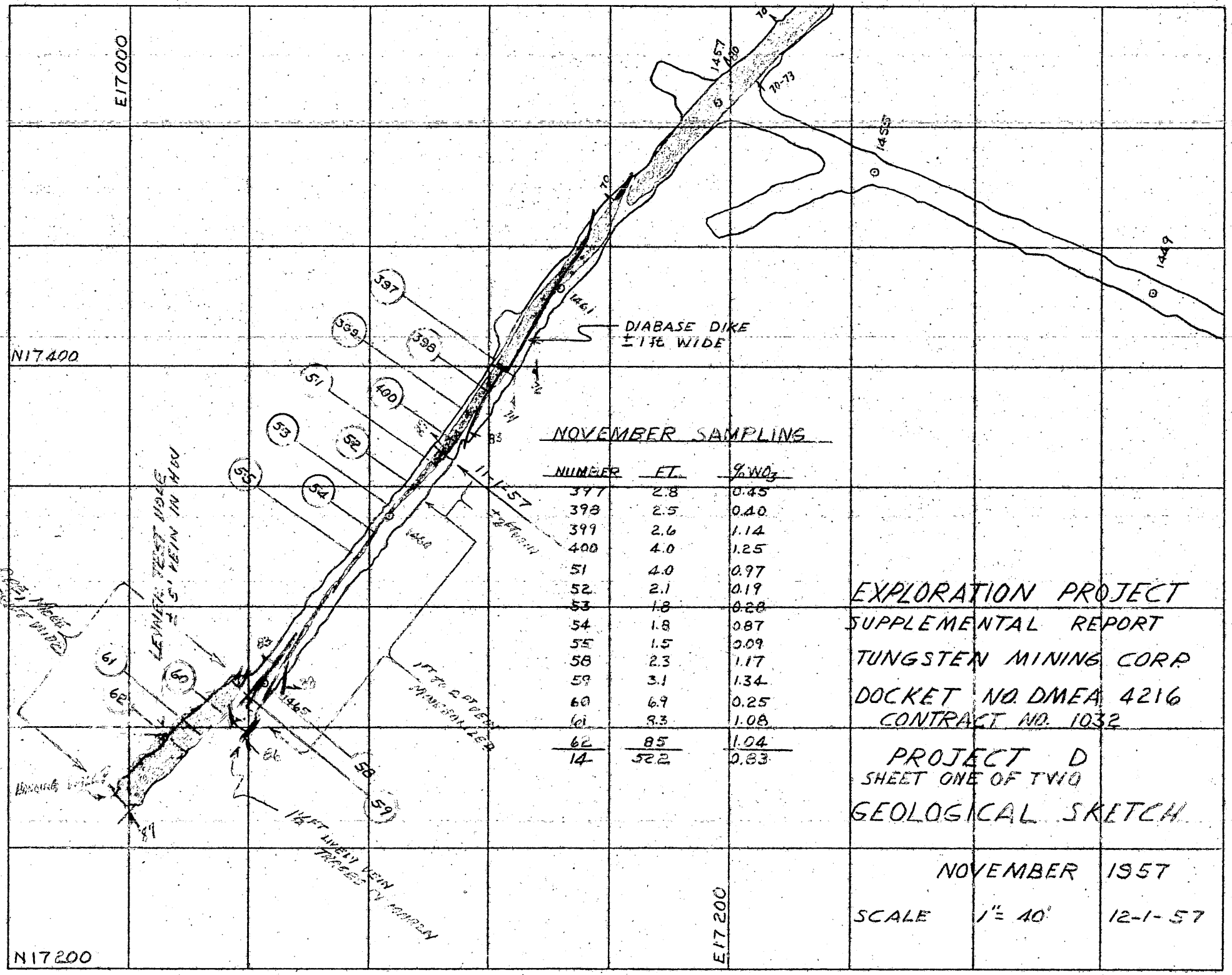
GEOLOGICAL SKETCH

(SHEET 2 OF 2)

JANUARY 1958

SCALE 1" = 80'


E17200
E17400
N17600
N17400
±2 FT STRUCTURE
SMALL AMT QTZ, TR MNRZN
U1302
U1301
11-1-57
NO. 57 1.7 FT. 0.10 % Mo
NO. 56 2.0 FT 0.19 % Mo
73
78
20
1463
1457
180
70-79
1455
1449
1461
DIABASE DIKE
± 1 ft. WIDE
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT D
SHEET TWO OF TWO
GEOLOGICAL SKETCH
NOVEMBER 1957
SCALE 1" = 40' 12-1-57



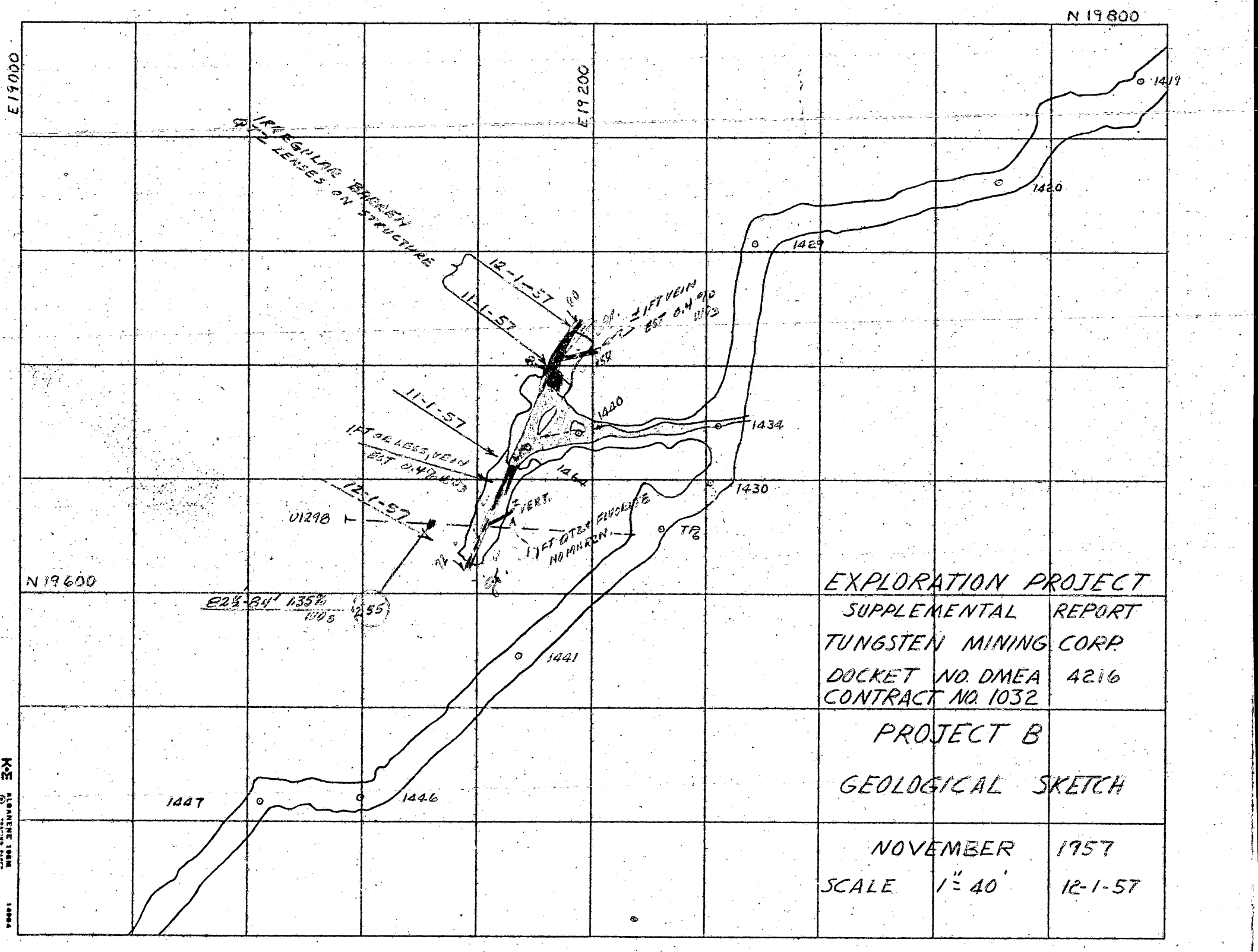
NUMBER	FT.	% WO_3
397	2.8	0.45
398	2.5	0.40
399	2.6	1.14
400	4.0	1.25
51	4.0	0.97
52	2.1	0.19
53	1.8	0.28
54	1.8	0.87
55	1.5	0.09
58	2.3	1.17
59	3.1	1.34
60	6.9	0.25
61	8.3	1.08
62	8.5	1.04
14	52.2	0.83

EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032

PROJECT D
SHEET ONE OF TWO
GEOLOGICAL SKETCH

NOVEMBER 1957

SCALE 1" = 40' 12-1-57



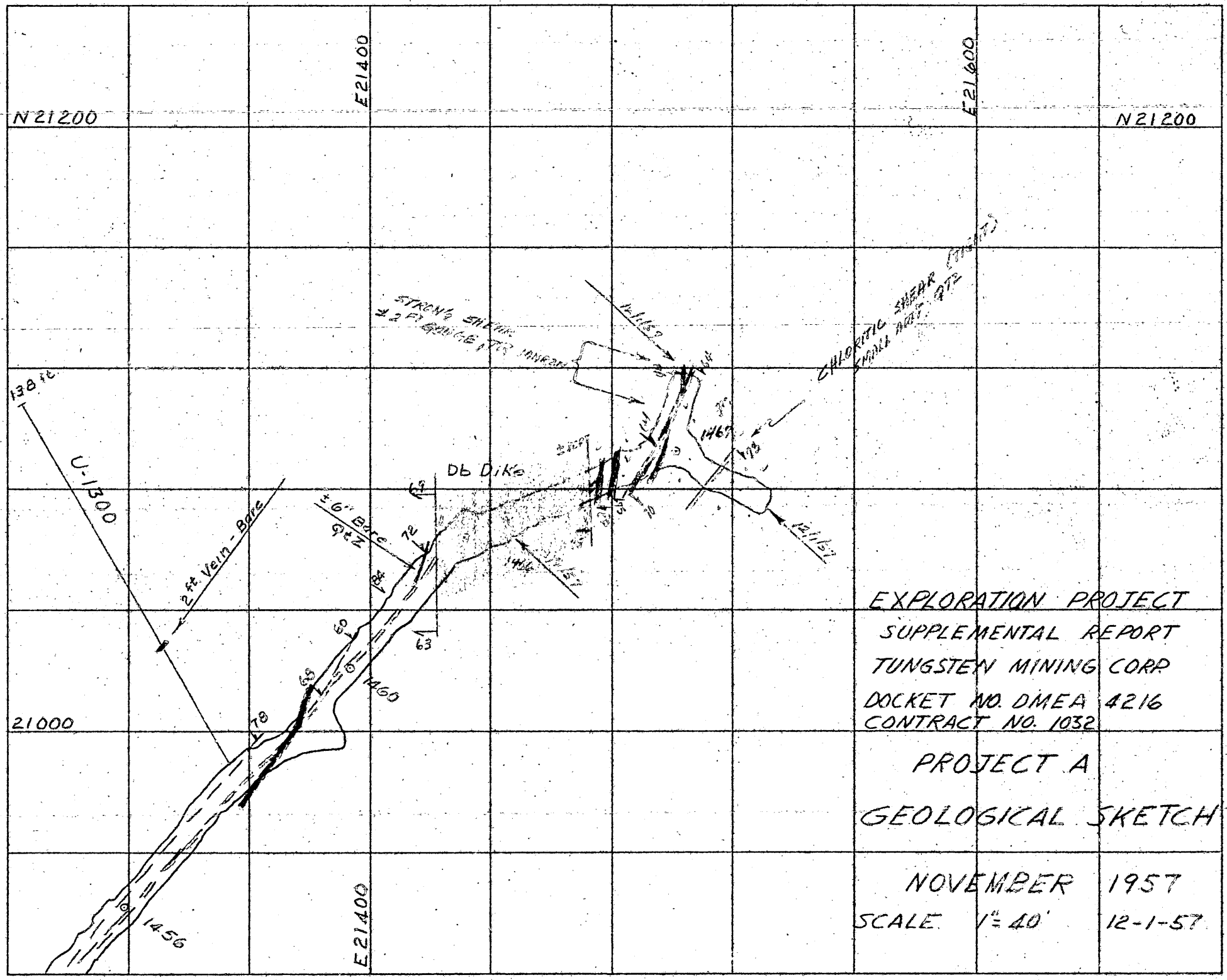
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1032

PROJECT B

GEOLOGICAL SKETCH

NOVEMBER 1957

SCALE 1" = 40' 12-1-57



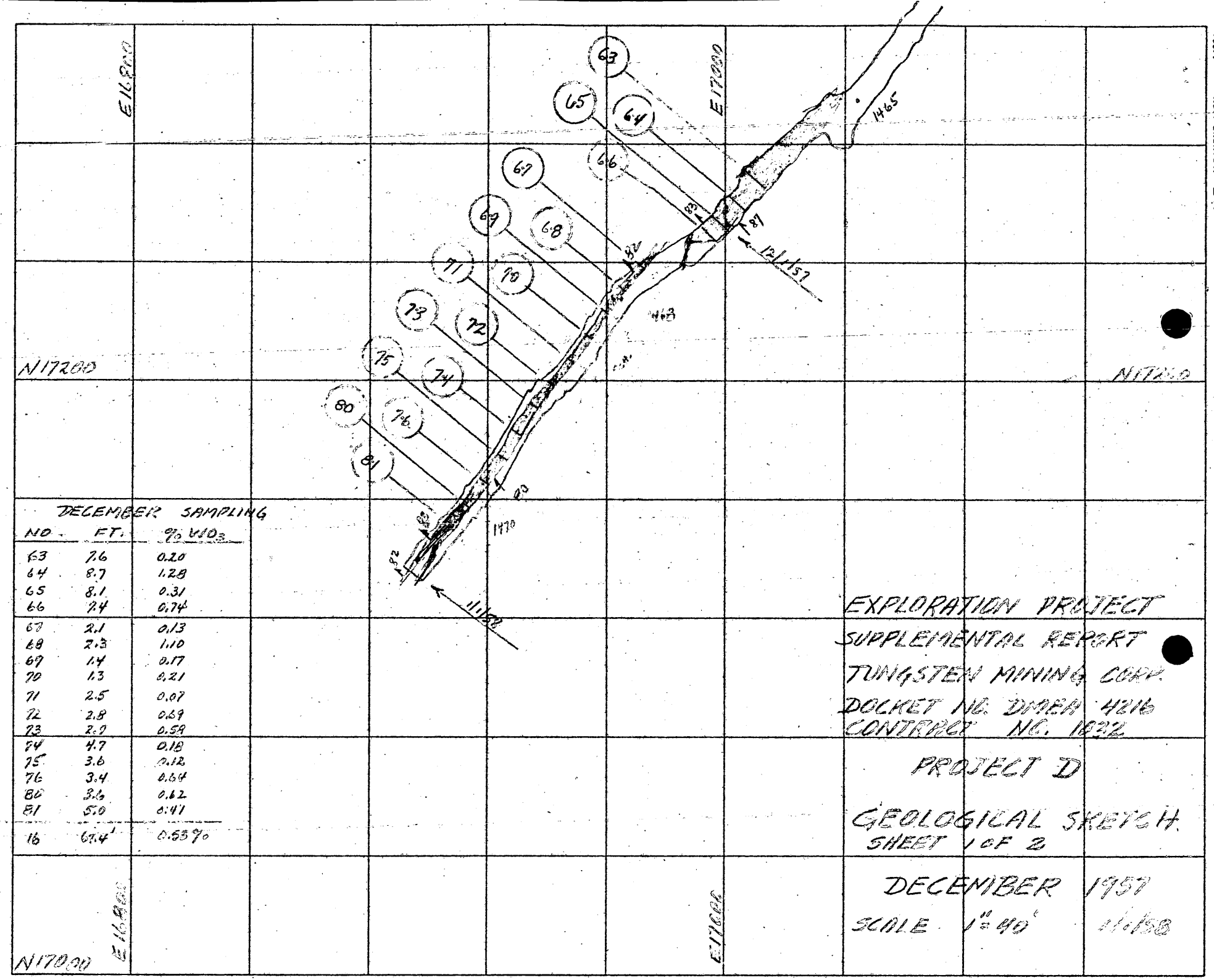
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP
DOCKET NO. DMEA 4216
CONTRACT NO. 1032

PROJECT A

GEOLOGICAL SKETCH

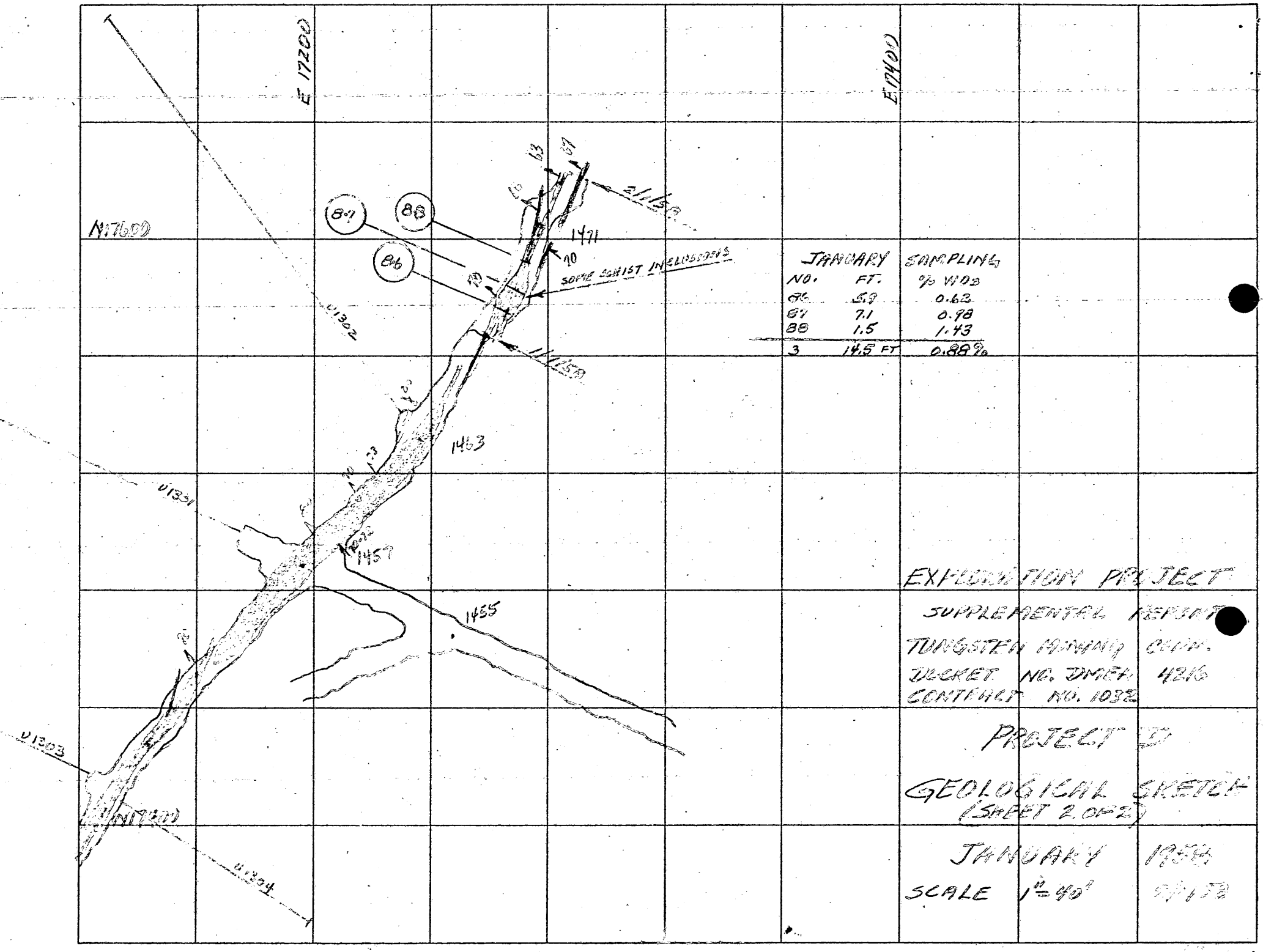
NOVEMBER 1957

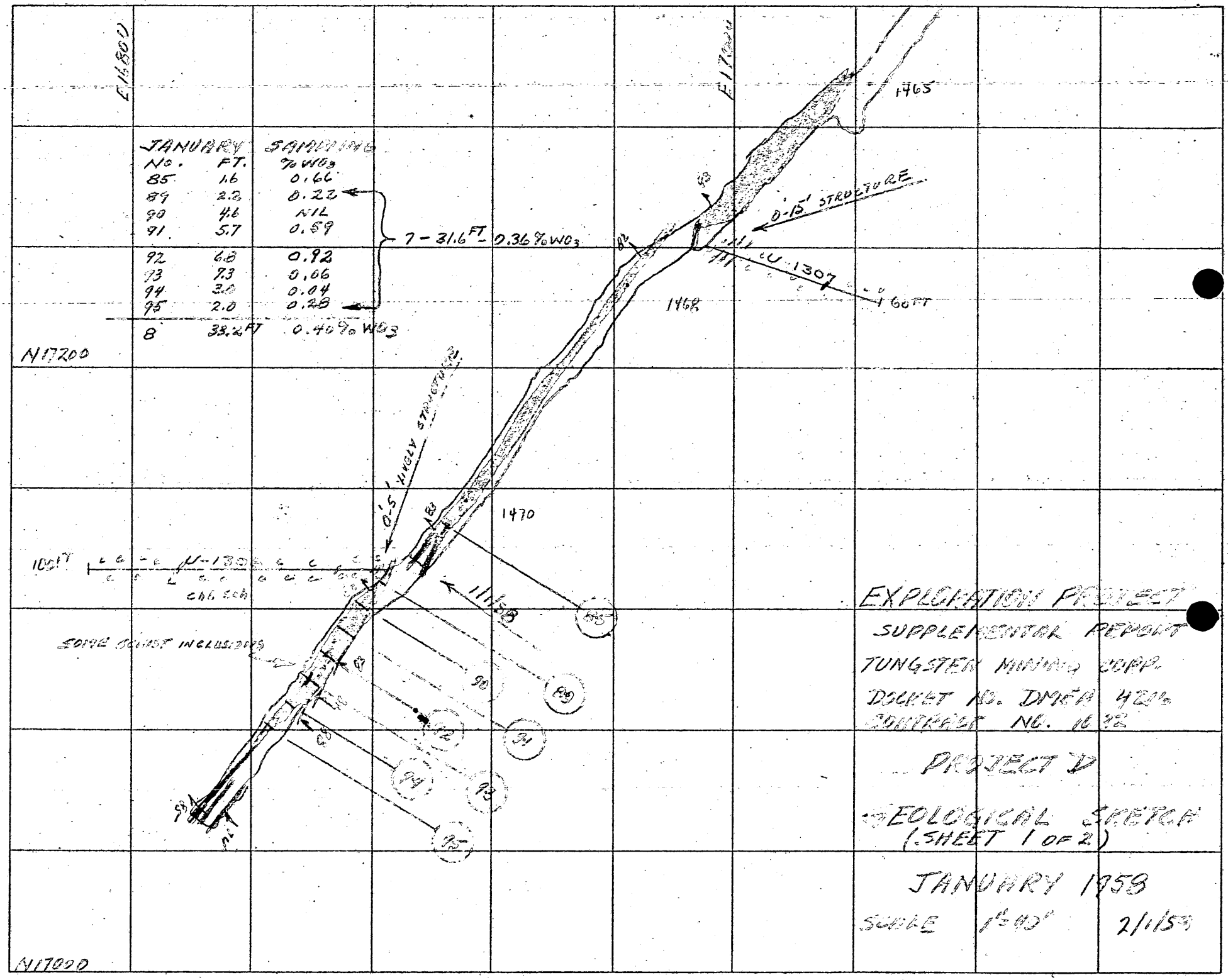
SCALE 1" = 40' 12-1-57

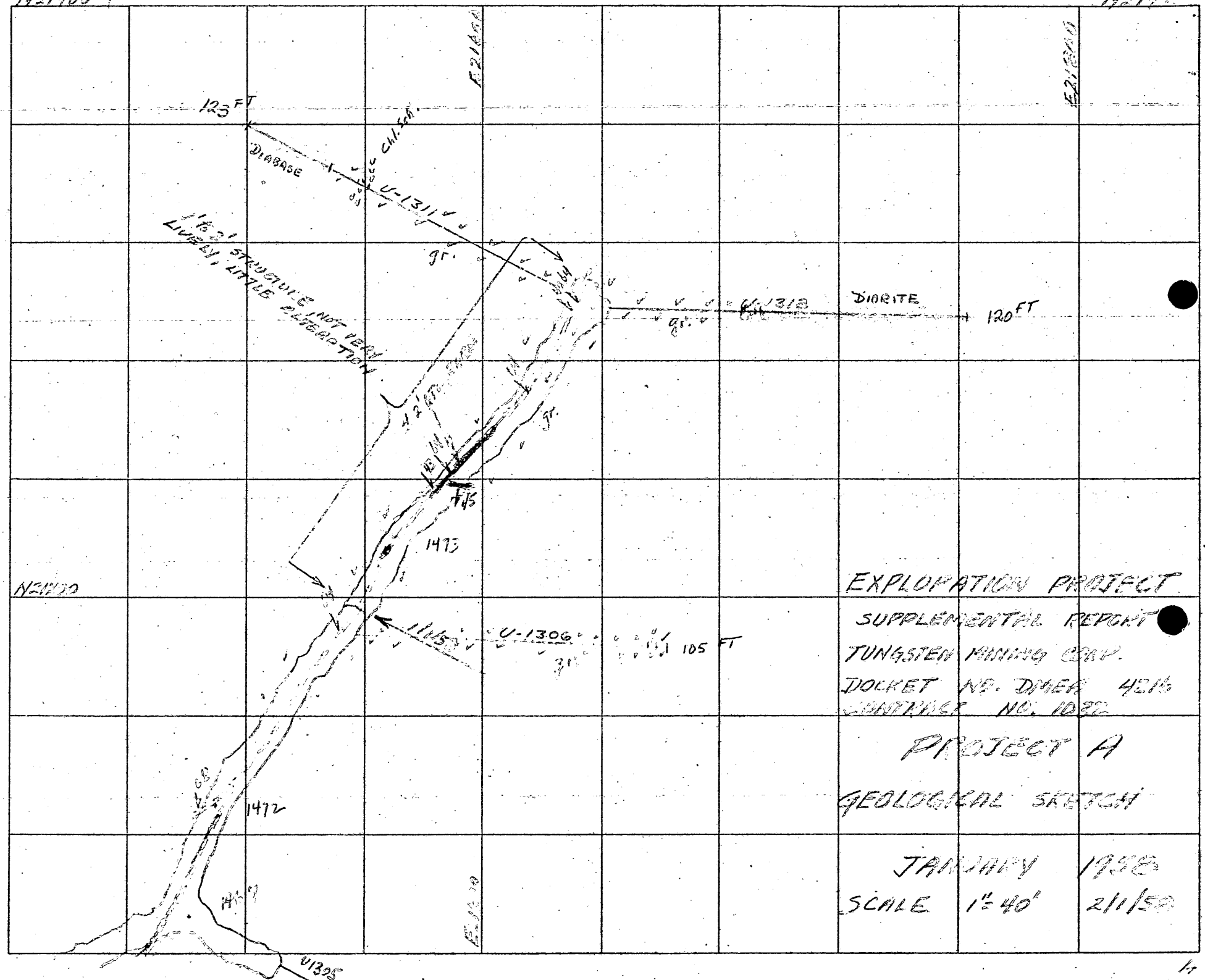


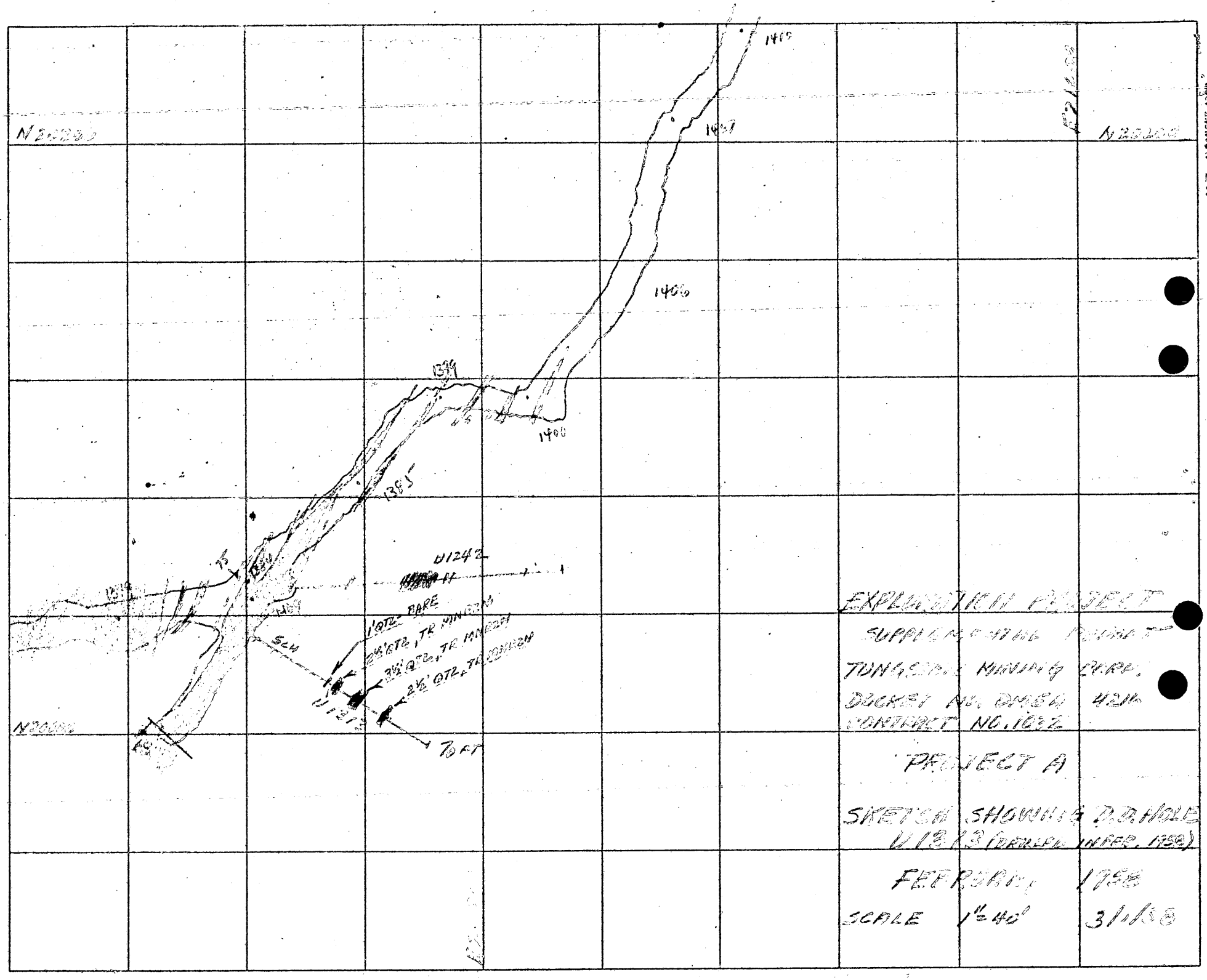
DECEMBER SAMPLING

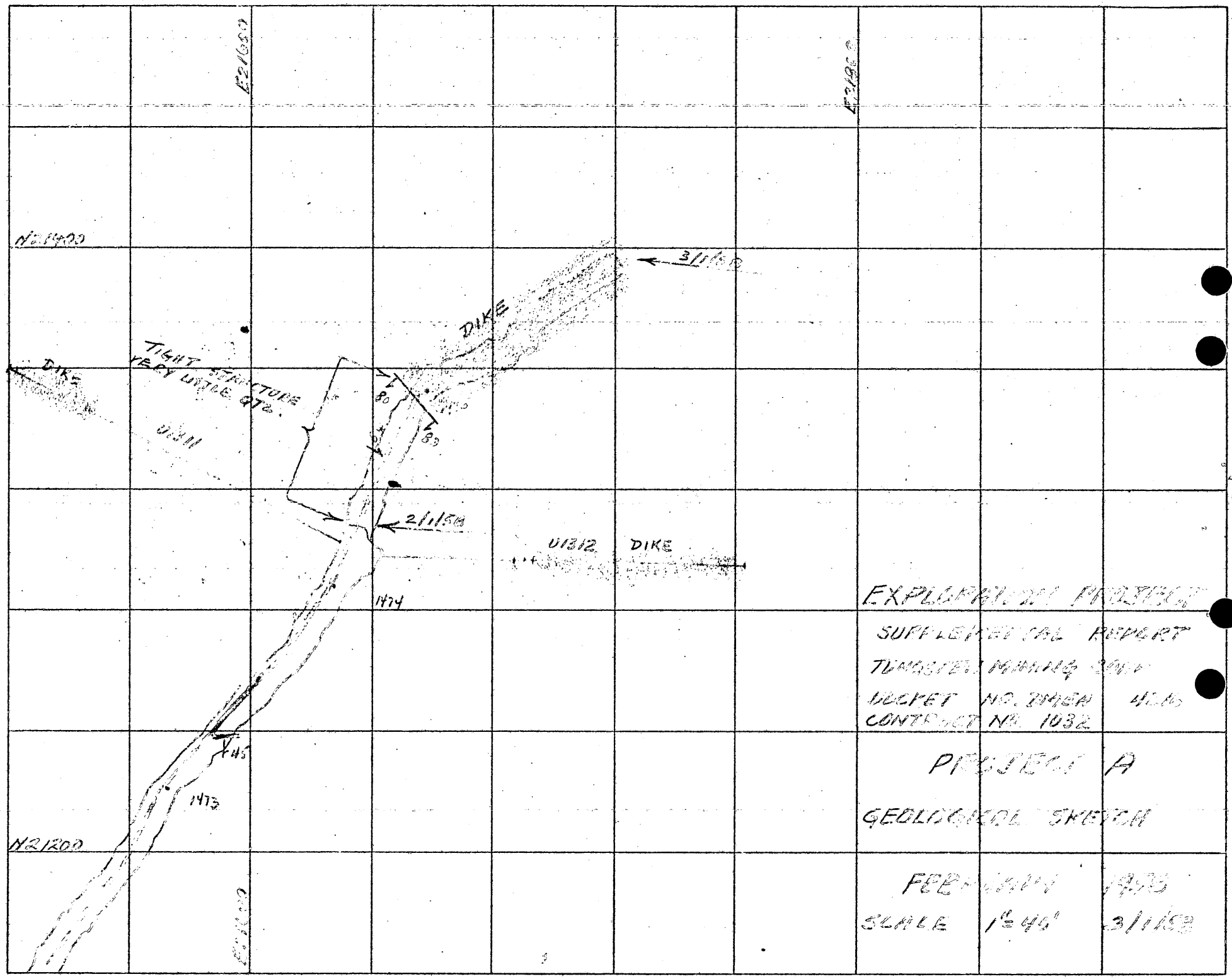
NO.	FT.	% WO_3
63	7.6	0.20
64	8.7	1.28
65	8.1	0.31
66	7.4	0.74
67	2.1	0.13
68	2.3	1.10
69	1.4	0.17
70	1.3	0.21
71	2.5	0.07
72	2.8	0.69
73	2.7	0.59
74	4.7	0.18
75	3.6	0.12
76	3.4	0.64
80	3.6	0.62
81	5.0	0.41
16	67.4'	0.53%

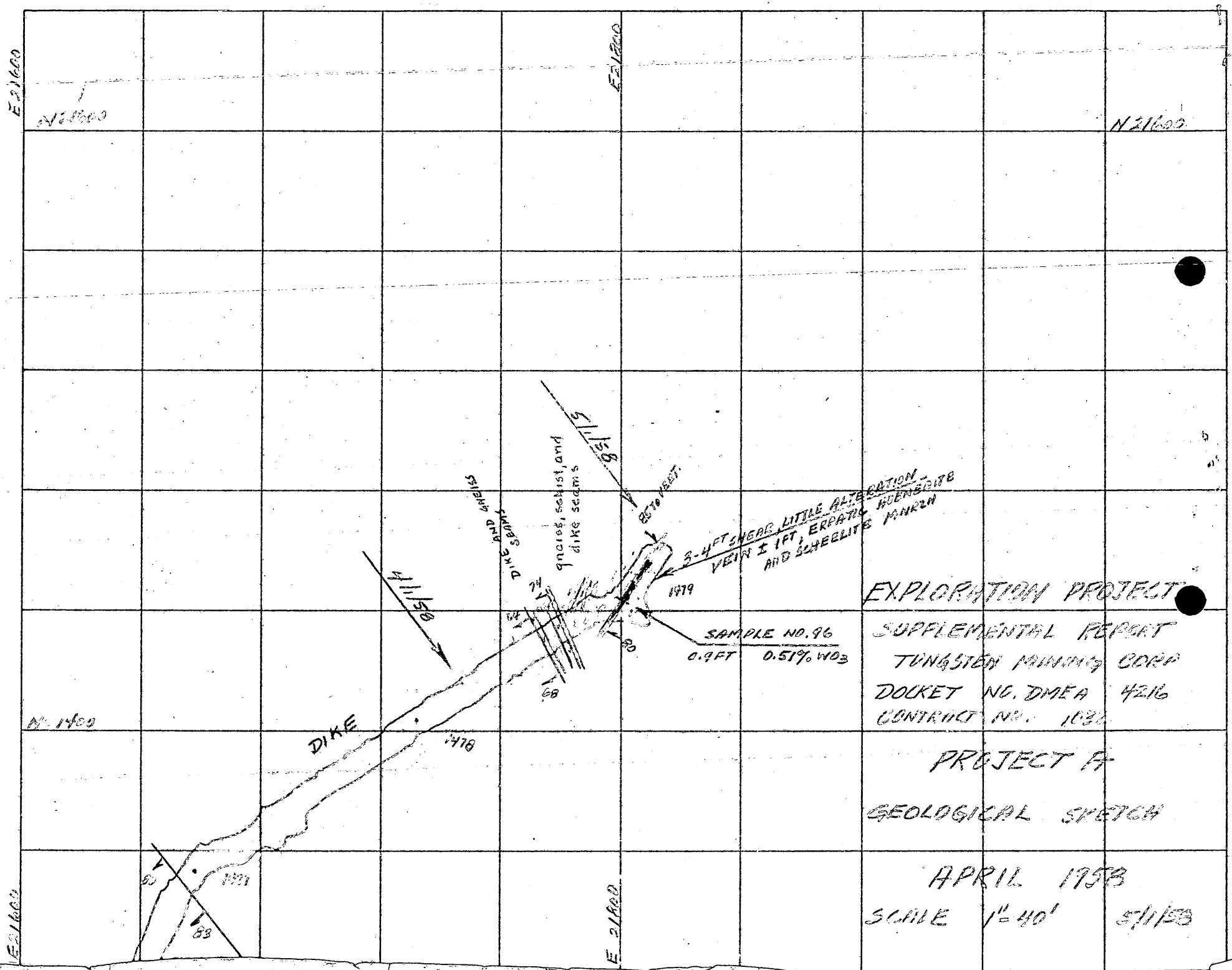

E 17200
E 17400
N 17600
N 17400
U1302
U1331
U1303
U1304
87
88
86
63
67
1471
10
SOME SCHIST INCLUSIONS
1463
1459
1455
JANUARY SAMPLING
NO. FT. % WO3
86 5.9 0.62
87 7.1 0.98
88 1.5 1.43
3 14.5 FT 0.88%
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEX 4216
CONTRACT NO. 1032
PROJECT D
GEOLOGICAL SKETCH
(SHEET 2 OF 2)
JANUARY 1954
SCALE 1" = 40'

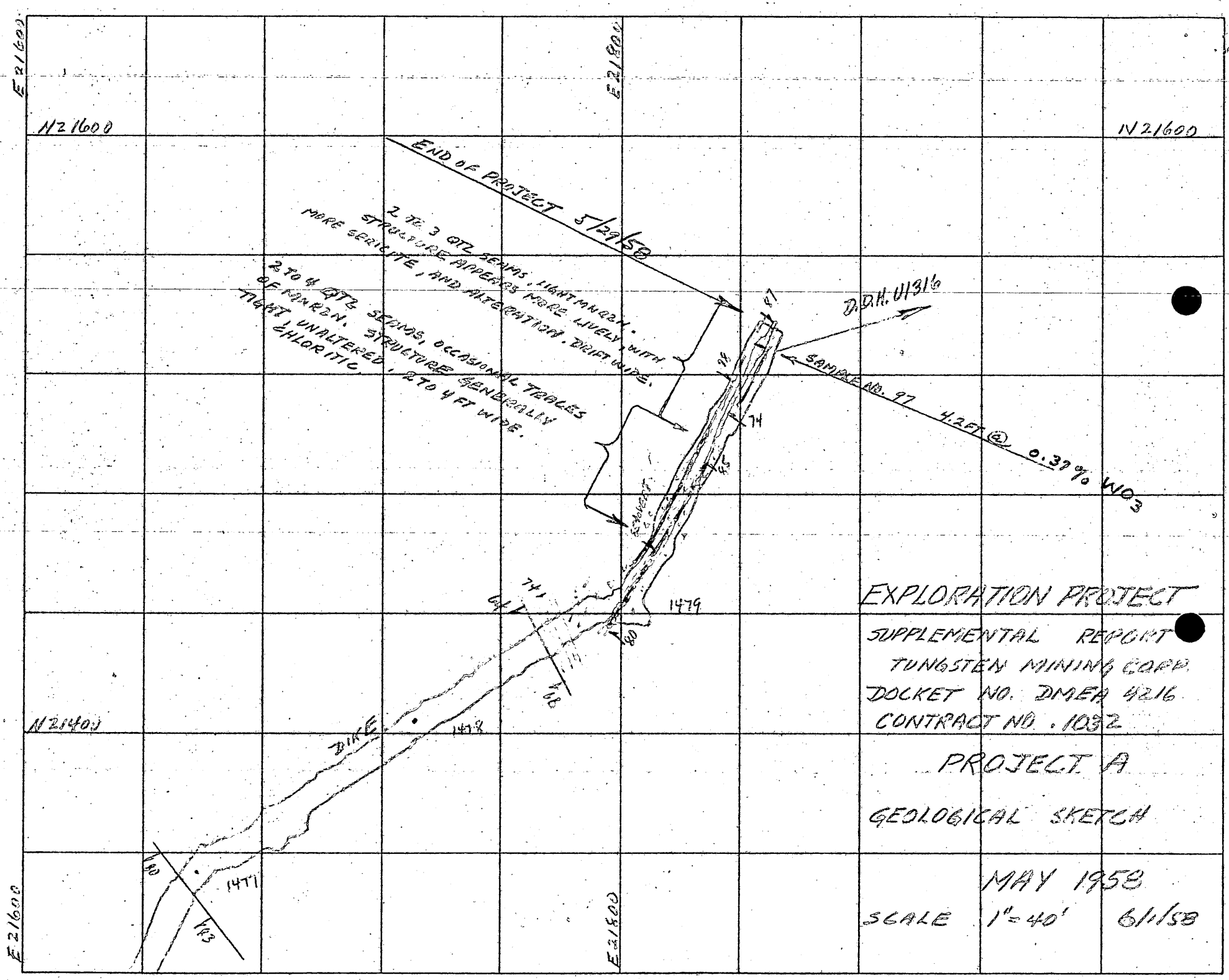

E 16,800
E 17,000
JANUARY SAMPLING
No. FT. % WO3
85 1.6 0.66
89 2.2 0.22
90 4.6 NIL
91 5.7 0.59
7 - 31.6 FT - 0.36 % WO3
92 6.8 0.92
93 7.3 0.06
94 3.0 0.04
95 2.0 0.28
8 33.2 FT 0.40 % WO3
N 17,200
N 17,000
1465
1468
1470
0-15' STRUCTURE
0-5' HIGHLY STRUCTURED
U-1307
60 FT
U-1300
100 FT
CHG SCH
SOME SCHIST INCLUSIONS
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4226
CONTRACT NO. 16 22
PROJECT D
GEOLOGICAL SKETCH
(SHEET 1 OF 2)
JANUARY 1958
SCALE 1" = 40'
2/1/59


N21400
N21700
E21600
E21800
123 FT
DIABASE
chl. sch.
U-1311
gr.
STRUCTURE NOT VERY LIKELY, LITTLE ALTERATION
U-1312
DIORITE
120 FT
gr.
1473
N2100
U-1306
105 FT
1472
U1305
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216
CONTRACT NO. 1022
PROJECT A
GEOLOGICAL SKETCH
JANUARY 1958
SCALE 1" = 40'
2/11/58


N 20000
N 25000
N 20000
1400
1400
1400
1400
1385
1385
1400
U1242
BARE
1' QTZ
2½' QTZ, TR MINERAL
3½' QTZ, TR MINERAL
2½' QTZ, TR COPPER
SLM
70 FT
EXPLORATION PROJECT
SUPPLEMENTARY REPORT
TUNGSTEN MINING CORP.
DOCKET NO. DMSA 4214
CONTRACT NO. 1032
PROJECT A
SKETCH SHOWING D.D. HOLE
U1242 (DRILLED MARCH 1958)
FEBRUARY 1958
SCALE 1" = 40' 31/1/58


E21600
E21800
N21400
N21200
DIKE
TIGHT STRUCTURE
VERY WHITE QTZ.
DIKE
U1311
U1312
DIKE
1474
1473
EXPLORATORY PROJECT
SUPPLEMENTAL REPORT
DOCKET NO.
CONTRACT NO. 1032
PROJECT A
GEOLOGICAL SKETCH
FEBRUARY
SCALE 1" = 40'


E 21600
N 21600
N 21600
N 1400
E 21600
E 21600
DIKE
DIKE and SEAMS
gneiss, schist, and dike seams
4/1/58
5/1/58
8570 VERT.
3-4 FT SHEAR, LITTLE ALTERATION
VEIN 1 FT, ERRATIC HUEBNERITE
AND SCHEELITE MINERAL
1479
1478
1477
SAMPLE NO. 96
0.9 FT 0.51% WO3
EXPLORATION PROJECT
SUPPLEMENTAL REPORT
TUNGSTEN MINING CORP
DOCKET NO. DMEA 4216
CONTRACT NO. 1032
PROJECT A
GEOLOGICAL SKETCH
APRIL 1958
SCALE 1" = 40'
5/1/58



EXPLORATION PROJECT

SUPPLEMENTAL REPORT

TUNGSTEN MINING CORP.

DOCKET NO. DMEA 4216

CONTRACT NO. 1032

PROJECT A

GEOLOGICAL SKETCH

MAY 1958

SCALE 1" = 40' 6/1/58

DMEA-4216, TUNGSTEN MINING CORP.

INTERIM REPORT 5-9-57

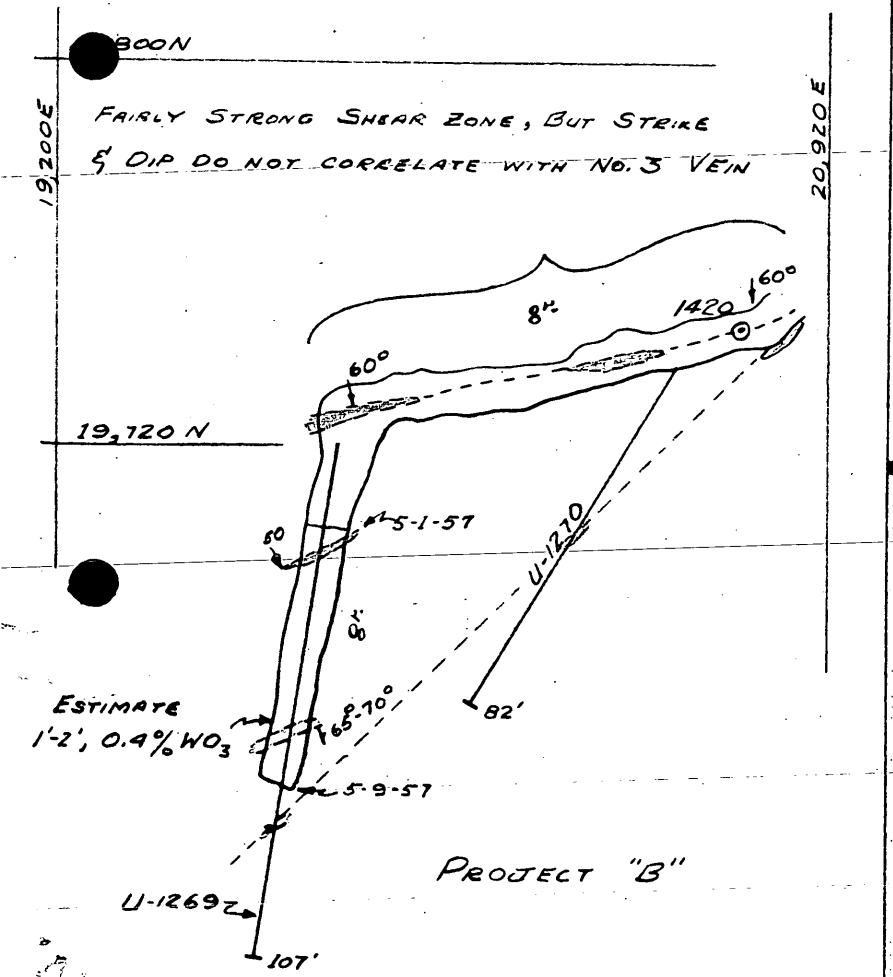
WO_3 MINERALIZATION

QUARTZ

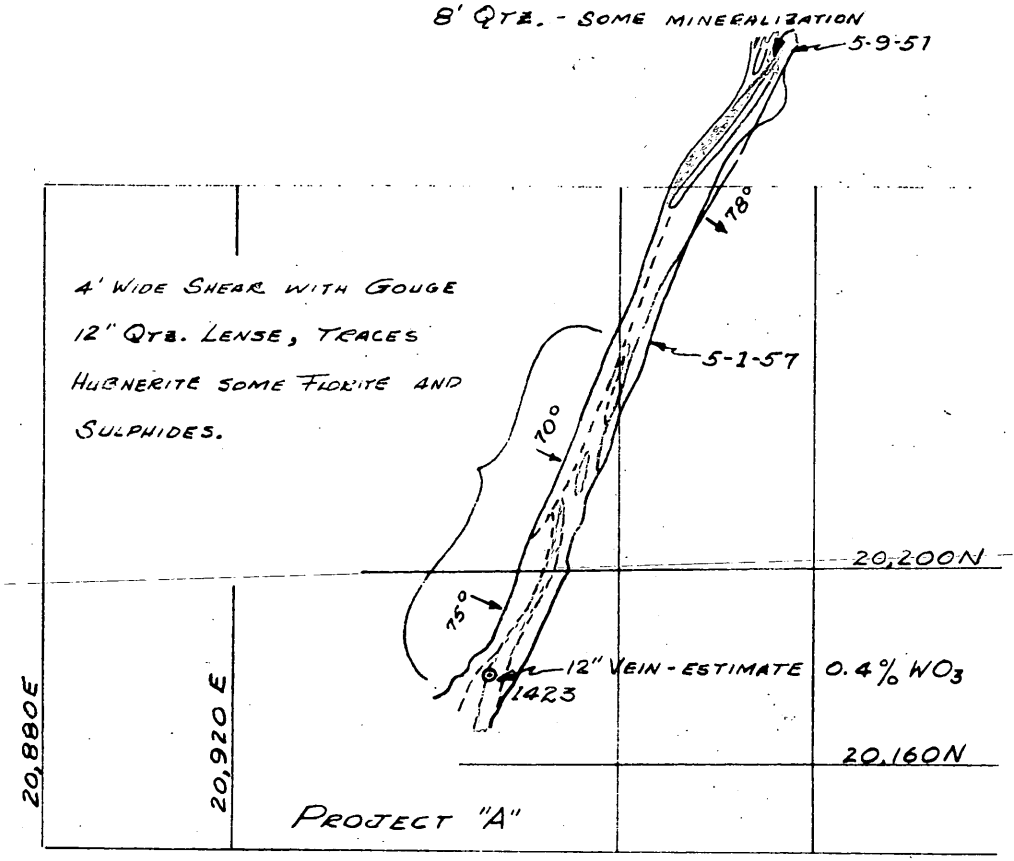
SCALE:

0 INCH 1

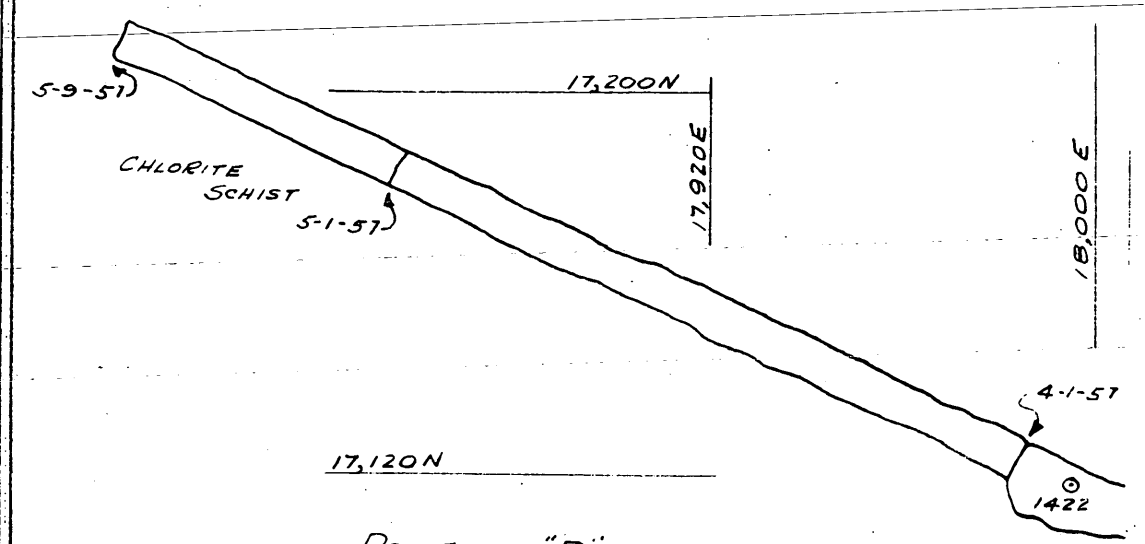
0 FEET 40



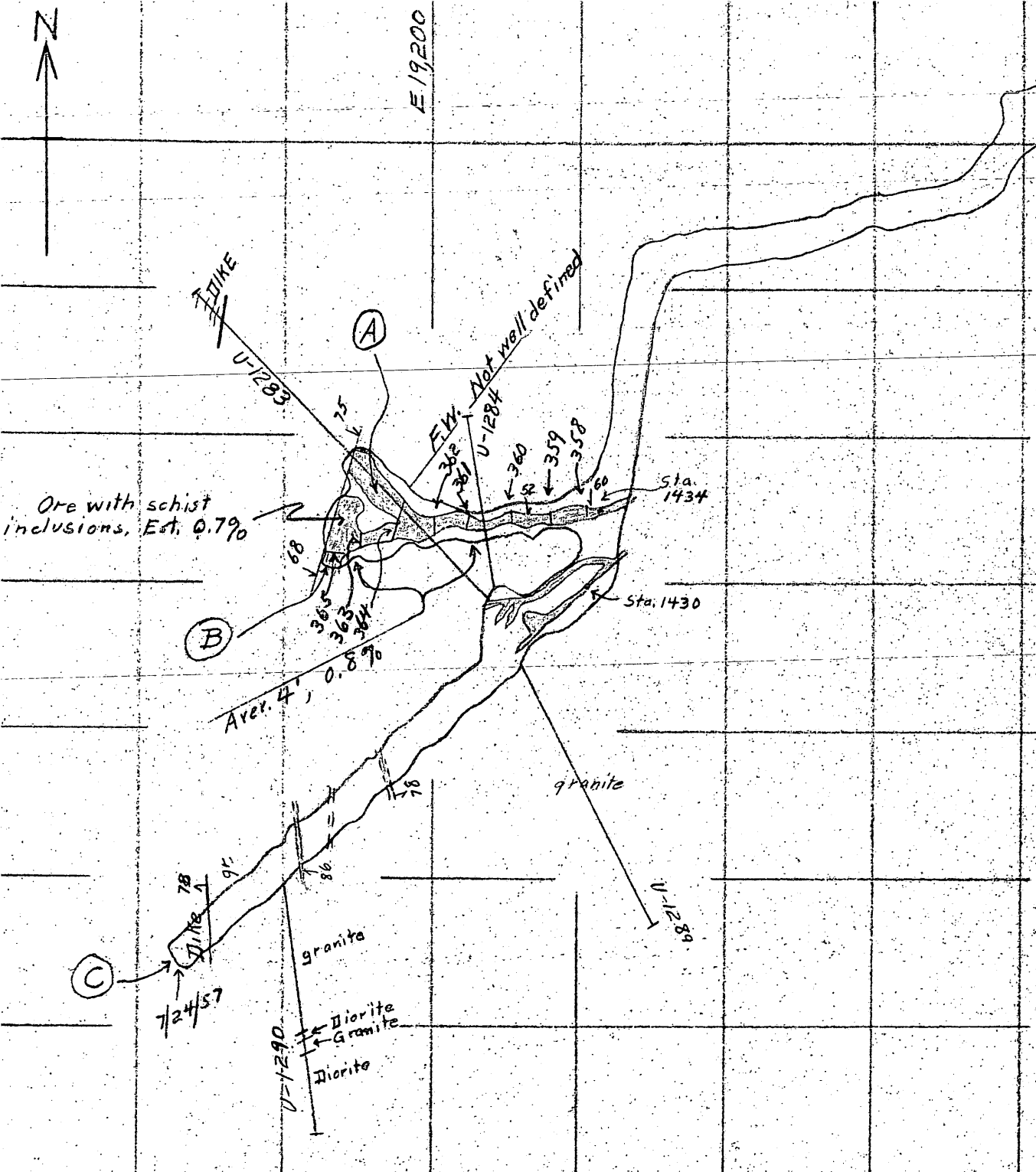
PROJECT "B"



PROJECT "A"



PROJECT "D"

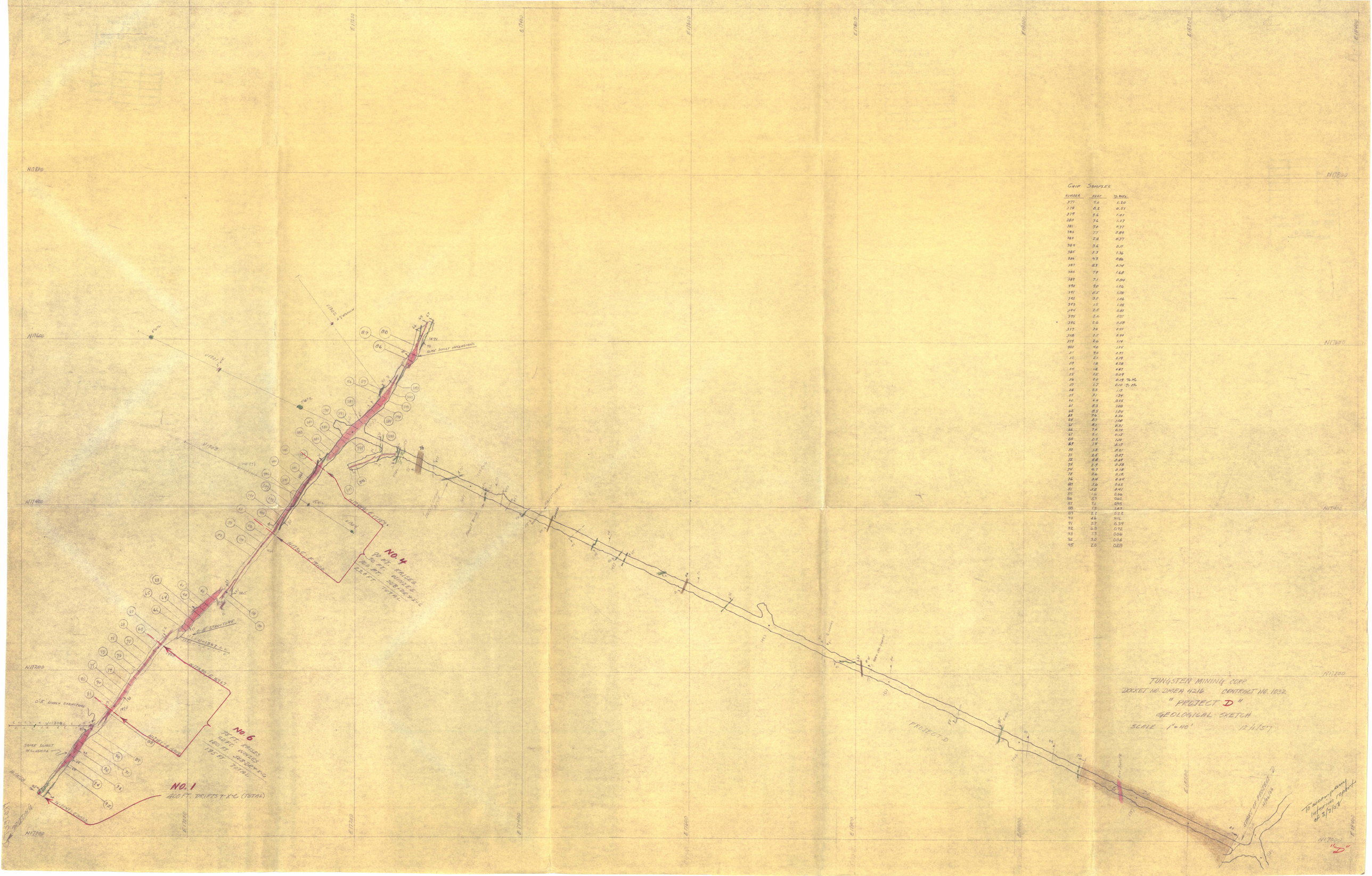


SAMPLE	WIDTH SAMPLED	% WO_3 ASSAY	TRUE WIDTH
358	5.4'	0.06	4.3'
359	4.2	0.20	3.5
360	3.2	1.79	2.7
361	2.4	0.15	2.0
362	4.1	0.37	3.4
363	5.5	0.26	4.5
364	8.1	0.34	6.7
365	6.4	1.42	6.0

TUNGSTEN MINING CORP.
DMEA-4216
PROJECT-"B"

1"=40' July 24, 1957

FIG.-1

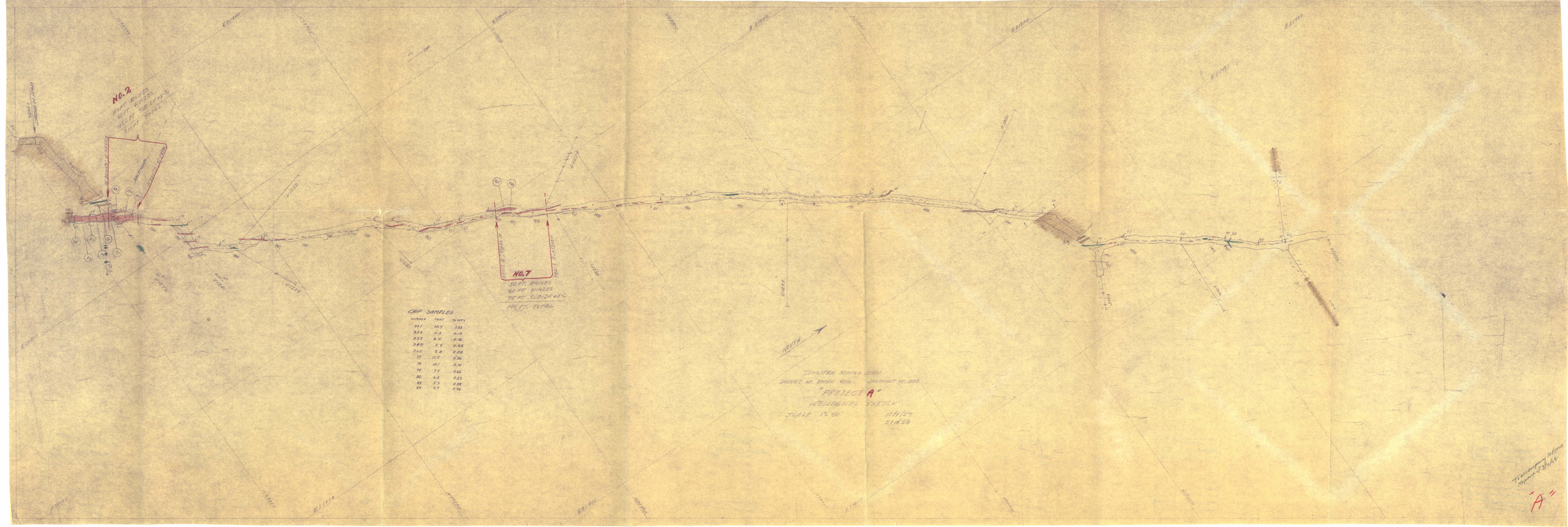


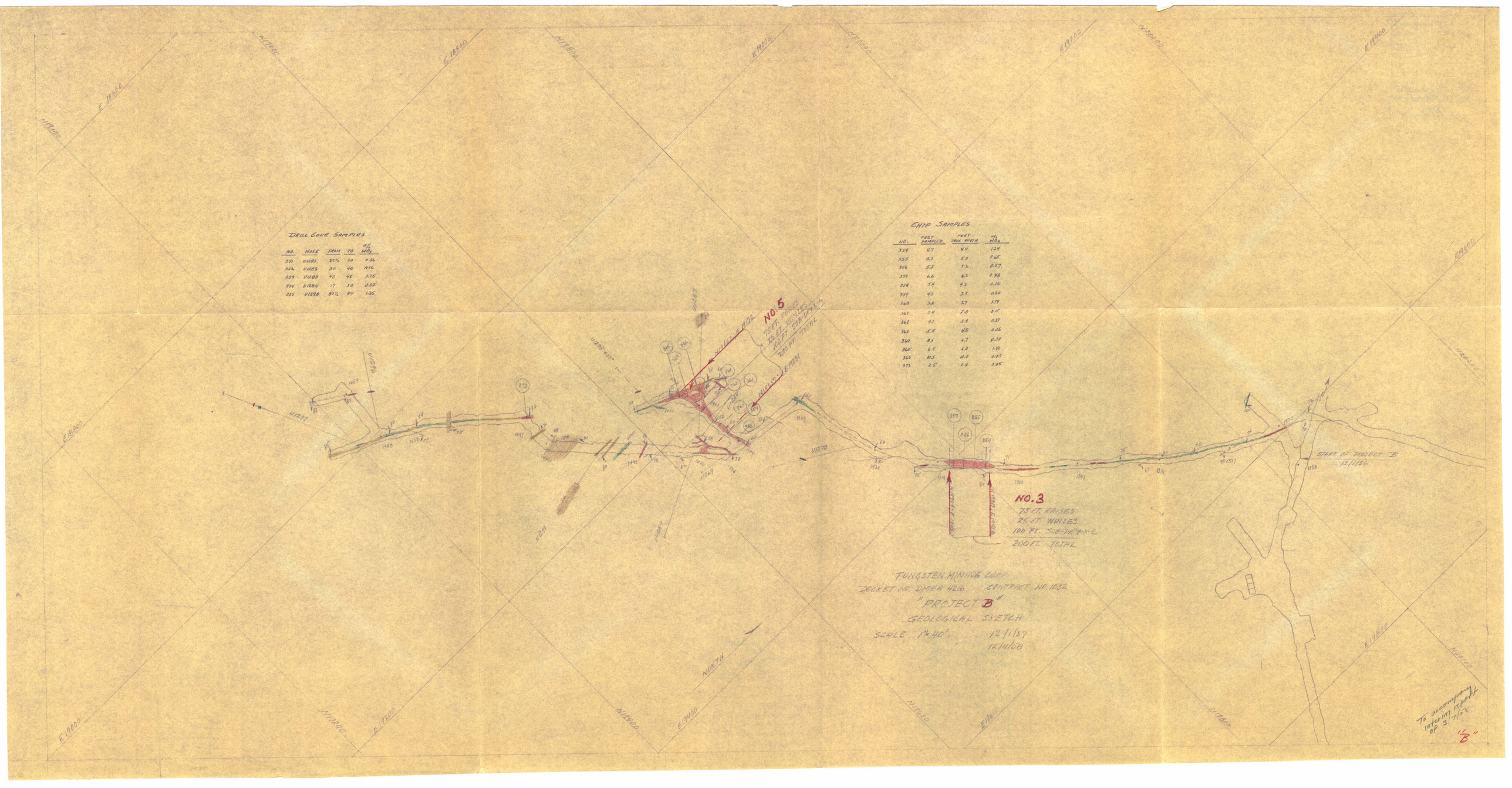
GRID SAMPLES

NUMBER	FEET	% WOL
377	9.0	1.20
378	6.2	0.51
379	9.6	1.41
380	7.6	1.37
381	7.0	0.77
382	7.7	0.89
383	7.8	0.37
384	3.6	0.11
385	5.7	1.36
386	4.3	0.86
387	8.3	0.74
388	7.9	1.68
389	7.1	0.84
390	9.0	1.26
391	8.5	1.70
392	3.0	1.06
393	1.5	1.08
394	2.5	0.81
395	2.2	0.71
396	2.6	0.58
397	2.8	0.95
398	2.5	0.80
399	2.6	1.14
400	4.0	1.25
51	9.0	0.37
52	6.1	0.19
53	1.8	0.28
54	1.8	0.87
55	1.5	0.09
56	2.0	0.19 Tr. Mo
57	1.7	0.10 Tr. Mo
58	2.3	1.17
59	3.1	1.34
60	4.9	0.25
61	8.3	1.08
62	8.5	1.84
63	7.6	0.24
64	8.7	1.40
65	8.1	0.31
66	7.4	0.74
67	2.1	0.13
68	2.3	1.08
69	1.4	0.17
70	1.8	0.21
71	2.5	0.47
72	2.8	0.49
73	2.9	0.58
74	4.7	0.18
75	3.6	0.15
76	3.9	0.49
80	5.6	0.12
81	5.2	0.41
85	1.6	0.96
86	5.1	0.62
87	7.1	0.95
88	1.5	1.43
89	2.2	0.25
90	4.6	NIL
91	5.7	0.39
92	6.8	0.72
93	7.3	0.06
94	5.0	0.06
95	2.0	0.28

TUNGSTEN MINING CORP.
DOCKET NO. DMEA 4216 CONTRACT NO. 1032
"PROJECT D"
GEOLOGICAL SKETCH
SCALE 1" = 40' 12/1/57

To accompany interim report of 3/9/58


No. 2
WORK RAISES
WORK RAISES
150 FT. SLOPE
3 FOOT TUNNEL
No. 7
50 FT. RAISES
30 FT. RAISES
75 FT. SLOPE ETC.
145 FT. TOTAL
CHIP SAMPLES
NORTH
TUNGSTEN MINING CORP.
DOCKET NO. 30021 4214 CONTRACT NO. 1882
"PROJECT A"
GEOLOGICAL SKETCH
SCALE 1" = 40'
12/11/57
2/14/58
"A"


DRILL CORE SAMPLES
NO. HOLE FROM TO % WO3
251 U1281 22½ 30 0.36
252 U1283 30 40 NIL
253 U1283 40 48 0.75
254 U1284 17 20 0.02
255 U1298 82½ 84 1.35
CHIP SAMPLES
NO. FEET SAMPLED FEET TRUE WIDTH % WO3
354 4.7 4.4 1.24
355 5.3 5.0 0.65
356 5.5 5.2 0.27
357 6.6 6.2 0.48
358 5.4 4.3 0.06
359 4.2 3.5 0.20
360 3.8 2.7 1.19
361 2.4 2.0 0.15
362 4.1 3.4 0.37
363 5.5 4.5 0.26
364 8.1 4.7 0.34
365 6.4 6.0 1.46
366 10.5 10.0 0.25
373 2.5 2.4 0.05
NO. 5
75 FT. RAISES
25 FT. WINZES
100 FT. SUB-DR. & X-C.
200 FT. TOTAL
NO. 3
75 FT. RAISES
25 FT. WINZES
100 FT. SUB-DR. & X-C.
200 FT. TOTAL
START OF PROJECT "B"
12/11/56
U1277
U1276
U1270
U1269
U1268
U1267
U1266
U1265
U1264
U1263
U1262
U1261
U1260
U1259
U1258
U1257
U1256
U1255
U1254
U1253
U1252
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U1243
U1242
U1241
U1240
U1239
U1238
U1237
U1236
U1235
U1234
U1233
U1232
U1231
U1230
U1229
U1228
U1227
U1226
U1225
U1224
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U1222
U1221
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U1219
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U1217
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U1209
U1208
U1207
U1206
U1205
U1204
U1203
U1202
U1201
U1200
U1199
U1198
U1197
U1196
U1195
U1194
U1193
U1192
U1191
U1190
U1189
U1188
U1187
U1186
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U1183
U1182
U1181
U1180
U1179
U1178
U1177
U1176
U1175
U1174
U1173
U1172
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U1170
U1169
U1168
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U1164
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To accompany Interim report of 5/1/58
"B"