8/2/56

Keep on top

Mr. Martin:

Reviewing case for almost the past year:

8/29/55 - We sent SPECIAL AGREEMENT CONCERNING LAND to Northfield to sign & transmit to Calera to sign and return to us.

1/6/56 - Follow-up sent to Northfield.

1/9/56 - NORTHFIELD said agreement sent to CALERA on 9/13/55.

1/13/56 - We asked Clarke of CALERA for the special agreement.

1/17/56 - Clarke advised he will hold agreement till negotiations completed with Northfield -- whatever that may mean.

☐ Audited

☐ Certified

W[illegible] ANALYSIS SHEET - DMEA PROJECT[illegible]

Analysis as of JAN 31, 1955

Incl. Voucher for _____

☐ Actual Cost

☑ Agreed Unit Costs

Name CALERA MINING Co

Docket No. 3143

State IDAHO

Commodity COBALT COPPER

Idm-E No. 645

OPERATION	AUTHORIZED Units THRU APR.	AUTHORIZED Cost 30, 1955	COMPLETED Units	COMPLETED Cost	NET COST 30
Drifting & Crosscutting	1,460'	69,280.67	4/30 1,460' 814'	41,168.18	
Raising					
Shafts					
Winzes					
Drilling (Specify) DIAMOND Sta 1	8,576.5	62,554.94	8,576.5	62,554.94	
" Stage 2	767.5'	2,595.85	98'	331.46	
Surface Excavation		10,262.59		10,262.59	
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) ASSAYING. St. 1		7,038.00		6,582.00	
St. 2		975.00		522.00	
Totals		152,707.05		121,421.17	

THRU 4/30/55

Prepared by DKC

☐ Audited

☐ Certified

Name Orlena Mining Co

State Idaho

W[illegible] ANALYSIS SHEET - DMEA PROJECT[illegible]

Analysis as of 12-16-54

Incl. Voucher for Oct 54

Commodity Cobalt-copper

☐ Actual Cost

☐ Agreed Unit Costs

Docket No. 3143

Idm-E No. 645

OPERATION	AUTHORIZED Units	AUTHORIZED Cost	COMPLETED Units	COMPLETED Cost	NET COST
Drifting & Crosscutting	6000	169762	472	21812	21812
Raising					
Shafts					
Winzes					
Drilling (Specify) Diamond	8700	64802	7684	53484	53484
Long hole	10500	35513	98	2916	2916
Surface Excavation		10263		10263	10263
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Assaying		27,000		6399	6399
Totals		407,340		94874	94874

Prepared by _____

Stage I

Ins. Co	Mortgage	Other
10263	8700 - 60,552	9300
	4,250	
	64,802	

Stage II

Note	Long holder	Other
213210	10500 - 35513	17700
56552		
269,762		

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

1201 N. Division St.
Spokane 2, Washington

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 6 1957

DATE	MINES	CODE
5/7	Corr	100
5/13	WSM	400

April 18, 1957

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: D. D. Walker, Mining Engineer, Bureau of Mines

Subject: Supplement to final inspection report, Docket No. DMEA-3143 (cobalt-copper), Calera Mining Company, Blackbird Mine, Lemhi County, Idaho, Contract No. Idm-E645

This is an addendum to the final inspection report of January 14, 1957 and is written for the purpose of stating units of work completed in Stage I, which are as follows:

	Authorized	Completed
Bulldozing	864 hrs.	864 hrs.
Surface diamond drilling	8576.5 ft.	8576.5 ft.
Reaming	1145 ft.	1145 ft.
Assays	3100 units	2346 units
Underground diamond drilling	664.38 ft.	612 ft.

D. D. Walker

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Turner
Docket
Walker

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

1201 N. Division St.
Spokane 2, Washington
January 14, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 7 1957

DATE	INITIALS	CODE
2/8	[illegible]	100
2/11	C	220

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: D. D. Walker, Mining Engineer, Bureau of Mines

Subject: Final inspection, Docket No. DMEA-3143 (cobalt-copper), Calera Mining Company, Blackbird Mine, Lemhi County, Idaho, Contract No. Idm-E645

The property was visited January 10, 1957. Mr. Cecil Whitley, mine engineer, was present. No DMEA exploration is in progress.

The raise from the 7675 level to locate the top of the ore zone was completed at 130 feet. A general type section for the Blacktail ore zone is: Overburden - 10 feet; leached zone - 50 feet; secondary enriched zone - 80 feet; primary ore zone - undetermined.

Additional development in the Blacktail zone consisted of 182 feet of drifting on the 7265 level and completion of the diamond drill program on the 7540 and 7675 levels to delineate the ore body.

The study to determine the feasibility of an open pit mine in the Blacktail area continues. An important phase of this study will get underway in January when about 1200 tons of secondary ore from stopes in the Blacktail zone will be milled independent of other mine ore. This ore, because of its enriched copper content, has created difficulty in milling in the past, and its amenability to separation will be an important factor in the success of open pit mining at Calera.

Summary of DMEA production from Blacktail Zone

Month	Tons	Weighted average assay Cobalt	Copper
2/1/55 thru 9/15/56	5509	0.65%	2.44%
9/15-9/30	1181	0.47%	1.46%
October	1558	0.78%	3.33%
November	1911	0.72%	2.06% ?
December	2569	0.95%	2.79%
Total	12,728	0.72%	2.47%

Royalty due the Government on this production is estimated at about $15,000.00.

The status of the contract is:

Date of contract: December 9, 1953
Termination date: December 9, 1956
Amount of contract: $407,340.00
Amount spent: 265,519.83 (as vouchered thru Oct. 1956)

Total work units completed to December 9, 1956

	Authorized	Completed
Stage I		
Trenching, surface diamond drilling and reaming		Yes
Assays	3100 units	2346 units
Underground diamond drilling	664 feet	612 feet
Stage II		
Drift and crosscut	6,000 feet	3,369 feet
Assays	5,900 units	2,338 units
Normal timber	5,000 feet	2,195.3 feet
Heavy timber	750 "	Yes
Framing	1,150 sets	447 sets
Diamond drilling	10,500 feet	6,671.5 feet
Rock bolts		348
Spiling	500 feet	Yes

D. D. Walker

D. D. Walker

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Turner
Docket
Walker

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.

1201 N. Division St.
Spokane 2, Washington
December 20, 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: D. D. Walker, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA-3143 (cobalt-copper), Calera Mining Company, Blackbird Mine, Lemhi County, Idaho, Contract No. Idm-E645

The property was inspected December 6. Mr. Cecil Whitley, mine engineer, was present. No exploration under the DMEA contract was done during November.

Three stopes are now operating on the Blacktail (DMEA) 7400 level, and a fourth is under preparation. On the 7540 and 7675 levels diamond drilling on 25-foot centers to delineate the ore body is almost complete. A raise has been started on the 7675 level to locate the top of the ore zone and bottom of the leached zone. Calera is considering the possibility of using open pit methods in this area and is conducting research to determine if they will be feasible. On the 7265 level an additional 230 feet of development drift has been driven.

A total of 1,911 tons of ore was produced from the Blacktail area during November. The weighted average assay was 0.72% cobalt. It was not calculated for copper at the time of my visit. The copper content varies from 1% to 5%, however.

The status of the contract is given on the attached sheet.

D. D. Walker

D. D. Walker

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Docket
Walker

RECEIVED
DEC 31 1956
D.M.E.A.

Contract No. Idm-E645

Date of contract: December 9, 1953
Termination date: December 9, 1956
Amount of contract: $407,340.00
Amount spent: 265,519.83 (thru Oct. 1956)

Total work units completed to December 6 are:

	Authorized	Completed
Stage I		
Trenching, surface diamond drilling and reaming		Yes
Assays	3100 units	2374 units
Underground d.d.	664 feet	612 feet
Stage II		
Drift and crosscut	6000 feet	3373 feet
Assays	5900 units	2346 units
Normal timber	5000 feet	2195.3 feet
Heavy "	750 "	Yes
Framing	1150 sets	447 sets
D.D.	10,500 feet	6671.5 feet
Rock bolts	—	348
Spiling	500 feet	Yes

Summary of DMEA Production from Blacktail Zone

Month	Tons	Average Weighted Assay Cobalt	Average Weighted Assay Copper
Feb. 1, 1955 thru Sept. 15, 1956	5509	0.65%	2.44%
Sept. 15 - Sept. 30	1181	0.47%	1.46%
October	1558	0.78%	3.33%
November	1911	0.72%	2.50% (estimated)

RECEIVED DEC 31 1956 DMEA

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~

1201 N. Division St.
Spokane 2, Washington
November 30, 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: D. D. Walker, Mining Engineer, Bureau of Mines

Subject: Interim inspection report, Docket No. DMEA-3143 (cobalt-copper), Calera Mining Company, Blackbird Mine, Lemhi County, Idaho, Contract No. Idm-E645

The property was inspected November 6. Mr. Cecil Whitley, mine engineer, was present.

Work on the DMEA project consisted of a 550-ft. diamond drill hole at right angles to the 74/843 HW drift. This hole was drilled horizontal on a bearing of N. 45° E. An ore zone approximately 20 feet thick was encountered at 100 feet from the collar of the hole.

All three new development headings in the Blacktail (DMEA) zone were advanced.

The 7265	level	advanced	137	feet
7540	"	"	257	"
7675	"	"	258	"
Total advance			652	"

The 7675 heading is now down and diamond drilling operations are being conducted there.

Stoping operations are proceeding on the 7400 level. A development and ventilation raise has been advanced 88 feet toward the 7540 level.

DMEA production for the last half of September was 1,181 tons of ore having a weighted average value of 0.47% Co and 1.46% Cu. Production for October was 1,558 tons averaging 0.78% Co and 3.33% Cu.

RECEIVED DEC 16 1956 DMEA

Status of the contract is:

Date of contract: December 9, 1953
Termination date: December 9, 1956
Amount of contract: $407,340.00
Amount spent: 263,197.62 (thru Sept. 1956)

Total work units completed to November 6 are:

	Authorized	Completed
Stage I		
Trenching, surface diamond drilling, and reaming		Yes
Assays	3100 units	2374 units
Underground diamond drilling	664 feet	612 feet
Stage II		
Drift and crosscut	6000 feet	3373 feet
Assays	5900 units	2091 units
Normal timber	5000 feet	2195.3 feet
Heavy timber	750 feet	Yes
Framing	1150 sets	447 sets
D.D.	10,500 feet	6221.5 feet
Rock bolts	--	--
Spiling	500 feet	Yes

D. D. Walker

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Docket
Walker

ACTION ON INT. IM
OR FINAL FIELD TEAM REPORT
Date 10-4

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

Note comments in report regarding:

1. Getting ready to stope
2.
3.
4.

and take appropriate action.

- - - - - - - -

Action taken by Division:

Robert E. Adams

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~

RECEIVED
OCT - 8 1956

1201 N. Division St.
Spokane 2, Washington
September 27, 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: D. D. Walker, Mining Engineer, Bureau of Mines

Subject: Interim inspection report, Docket No. DMEA-3143 (cobalt-copper), Calera Mining Company, Blackbird Mine, Lemhi County, Idaho, Contract No. Idm-E645

The property was inspected September 18. Mr. Cecil Whitley, mine engineer, Mr. E. B. Douglas, mine manager, and Mr. George Deacon, chief accountant, were present.

Work on the 74/843 HW drift consisted of 110 feet of drifting. Most of the roof was supported by rock bolts; a total of 144 were required. About 20 feet from the present face bad ground was encountered and four spiled timber sets were required. All this work was done in August. Calera is suffering from a heavy labor turnover and at present does not have enough miners to keep the drift going.

A check of the July drifting revealed that Calera had drifted 120 feet rather than the 90 feet reported.

Other work in the Blacktail zone (DMEA area) done on company account consists of 4,000 feet of road and 3,000 feet of power line over the hill from and to the north of the present mine. The sand fill system also has been advanced over the hill to three new portal sites and is about 75% complete.

Work is now progressing on the three new portal sites. The 7675 portal site was leveled, track laid, and portal advanced 90 feet. The 7265 portal site was cleared and the miners are placing track and preparing to collar the adit. The work on this adit is now being contracted out to Boyles Bros. The site for the 7125 portal has been cleared and work on it will start in the spring.

Underground work in the Blacktail zone also showed good progress. Calera is now developing the DMEA orebody for mining and should be stoping before the 1st of the year. A raise from the 7400 to the 7540 was holed. This raise was partly in ore. There are three stopes being prepared and about 30 feet of raising done on stope preparation.

On the 7400 level two 60-foot crosscuts have been run out to test the ore zone. Sixty-foot diamond drill holes on 25-foot centers are being drilled on both sides of the drift for the same purpose. An ore bin is being installed at the 7400 portal and is about 30% complete. Blacktail ore from this bin will be hauled to the mill by truck.

The 7540 level is in bad ground and advance is slow. A small amount of diamond drilling on 25-ft. centers is being done on this level.

Since February 1, 1955, Calera has mined 5,509 tons of development ore which is subject to DMEA royalty. The weighted average assay for this ore is 0.65% cobalt and 2.44% copper.

Workmanship is satisfactory.

Total work units completed to September 18 are:

Date of contract: December 9, 1953
Expiration date: December 9, 1956
Amount of contract: $407,340.00
Amount spent: 256,812.10 (thru July 1956)

	Authorized	Completed
Stage I		
Trenching, surface diamond drilling and reaming		Yes
Assays	3,100 units	2,374 units
Underground diamond drilling	664 feet	612 feet
Stage II		
Drift and crosscut	6,000 feet	3,373 feet
Assays	5,900 units	2,091 units
Normal timber	5,000 feet	2,195.3 feet
Heavy "	750 "	Yes
Framing	1,150 sets	447 sets
D.D.	10,500 feet	5,671.5 feet
Rock bolts		348
Spiling	500 feet	Yes

D. D. Walker

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Docket
Walker

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

RECEIVED
OCT - 8 1956

October 1, 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: Howard B. Nickelson and D. R. MacLaren, Geologists, U. S. Geological Survey

Subject: Interim inspection report, Docket No. DMEA-3143 (Cobalt-Copper), Calera Mining Company, Blackbird Mine, Lemhi County, Idaho, Contract Idm-E645.

The property was visited on September 20, 1956. Mr. Cecil Whitley, company engineer, accompanied the writers. The DMEA work on the 7400 level was inspected and Mr. Whitley showed us the three new portal sites from which the company has started to develop the ore found by the DMEA on the 7400 level. The tunnel sites are north of the older mine working near the upper end of the Big Deer Creek drainage system.

The only work being done on the DMEA project is a diamond drill hole approximately 150 feet from the face of the drift off the 74/787 crosscut. The ground at the face of this drift is heavy and some spilling will have to be done to advance the drift.

Distribution:
DMEA (Orig. & 3)
USBM (2)
USBM (AD)
Docket
Nickelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~
So. 157 Howard Street
Spokane 4, Washington

September 10, 1956

WSM

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: Howard B. Nickelson, Geologist, U. S. Geological Survey

Subject: Interim inspection report, Docket No. DMEA-3143 (Cobalt-Copper), Calera Mining Co., Blackbird Mine, Lemhi County, Idaho, Contract No. Idm-E645.

The property was inspected August 28, 1956. Mr. Cole, company geologist, accompanied the examiner. The DMEA and company work on the 7400 level was briefly inspected. The drift of 74-787 HW Crosscut intersected faulted ground and the advance is slow due to sloughing ground. A small vein had been intersected.

The company is rapidly developing the ore body from the 7400 N Drift. This ore body has been drifted on practically its full length, as indicated by diamond drilling. A raise has been driven to the 7540 level, several stopes have been started, and additional diamond drilling has been completed. A drift on the 7540 level has exposed the same ore body, and stopes are being developed above this drift. The company has started a new portal on the 7600 level.

Mr. Cole roughly estimated more than 4,000 tons of ore has been mined from their exploration and development work. No royalty payments have been received from this production because a satisfactory method of payment between the Government and the company has not yet been agreed upon. ?

On February 8, 1956, a method of computing royalty due the Government, satisfactory to the Field Team and the Operator, was submitted to Washington for consideration. ?

Distribution:
DMEA (Orig. & 3)
USBM (2)
USBM (AD)
Docket
Nickelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~

1201 N. Division St.
Spokane 2, Washington
August 13, 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: D. D. Walker, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA-3143 (cobalt-copper), Calera Mining Co., Blackbird Mine, Lemhi County, Idaho, Contract No. Idm-E645

The Blackbird mine was visited August 1. Mr. Cecil Whitley, mine engineer, and Mr. W. C. Cole, mine geologist, were present.

The 74/843 HW drift was advanced 90 feet during the reporting period. About 10 feet of marginal ore was exposed at 35 to 45 feet back of the present face. Approximately 29 tons of this ore, assaying 0.2 to 0.4 percent cobalt and 1.08 to 1.86 percent copper were milled. Some diamond drilling may be done on the showing.

Total work units completed to August 1 are:

	Authorized	Completed
Stage I		
Trenching, surface d.d. and reaming		Yes
Assays	3100 units	2374 units
Underground d.d.	664 feet	612 feet
Stage II		
Drift and crosscut	6000 feet	3229 feet
Assays	5900 units	2033 units
Normal timber	5000 feet	2115 feet
Heavy "	750 "	Yes
Framing	1150 sets	442 sets
D.D.	10,500 feet	5671.5 feet
Rock bolts		83
Spiling	500 feet	Yes

D. D. Walker

D. D. Walker

RECEIVED
AUG 27 1956

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Docket
Walker

3143

ACTION ON INSPECT.
OR FINAL FIELD TEAM REPORT
Date [illegible]

Referred to:

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

Note comments in report regarding:

1. A little hard to
2. follow without a
3. sketch
4.

and take appropriate action.

- - - - - - - - - -

Action taken by Division:

Sketch attached for review by Command then returned to Div. Files
hrsay

Robert E. Adams

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~

1201 N. Division St.
Spokane 2, Washington
July 17, 1956

RECEIVED
AUG 6 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

WSM

From: D. D. Walker, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA 3143 (cobalt-copper), Calera Mining Co., Blackbird Mine, Lemhi County, Idaho, Contract No. Idm-E645

The Blackbird mine was visited July 6 with A. L. Service, Bureau of Mines engineer. Mr. Cecil Whitley, mine engineer, was present.

In March a drill hole from the face of the crosscut which was then out 900 feet cut a 2' - 2½' vein at 10 feet from the crosscut face. Another vein was picked up at 175-181 feet from the face. The present drift is being driven between and parallel to the veins on a general northwest heading.

The 74/787 HW crosscut was advanced 8 feet on a northwest heading. At this point, with a total length of 946 feet, it was redesignated as the 74/834 Hanging Wall drift north. The drift was then driven 115 feet in a contorted garnet schist. The schist was cut by irregular quartz zones showing some replacement by cobalt and copper minerals. Total drifting for the month was 123 feet, and it was necessary to stand 114 feet of timber for ground support.

The total work completed to July 6 is:

		Authorized	Completed
Stage I			
	Trenching, surface DD and reaming		Yes
	Assays	3100 units	2374 units
	Underground DD	664 ft.	612 ft.

		Authorized	Completed
Stage II			
	Drift and crosscut	6000 ft.	3139 ft.
	Assays	5900 units	2033 units
	Normal timber	5000 ft.	2115 ft.
	Heavy timber	750 "	Yes
	Framing	1150 sets	442 sets
	DD	10,500 ft.	5671.5 ft.
	Rock bolts		83
	Spiling	500 ft.	Yes

D. D. Walker

D. D. Walker

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
Docket
Walker
M/D

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~

1201 N. Division St.
Spokane 2, Washington
June 21, 1956

RECEIVED
JUL 2 - 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: D. D. Walker, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA 3143 (cobalt-copper), Calera Mining Company, Blackbird Mine, Lemhi County, Idaho, Contract No. Idm-E645

The Blackbird mine was visited on June 6. Cecil Whitley, mine engineer, was present.

Project work completed during the reporting period consisted of 32 feet of advance in the 74/787 H.W. crosscut. The crosscut is being turned to the northwest. Twenty-eight feet of normal timber (5 framed sets) were placed in the crosscut.

No diamond drilling was done during the reporting period. A few samples were taken but assay returns had not been received.

Eighteen feet of drift shown on the January MF-104 forms was disallowed by the DMEA Field Team. The Calera Co. has corrected the records by deducting this footage and its cost from totals previously reported.

The total work completed to June 6 is:

		Authorized	Completed
Stage I			
	Trenching, surface D.D. and reaming		Yes
	Assays	3100 units	2346 units
	Underground D.D.	664 ft.	612 ft.

Stage II	Authorized	Completed
Drift and crosscut	6,000 ft.	3,016 ft.
Assays	5,900 units	2,033 units
Normal timber	5,000 feet	2,061 feet
Heavy timber	750 "	Yes
Framing	1,150 sets	420 sets
D. D.	10,500 feet	5,671.5 ft.
Rock bolts		83
Spiling	500 "	Yes

D. D. Walker

D. D. Walker

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
DDW/he

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~

1201 N. Division St.
Spokane 2, Washington
May 17, 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: A. L. Service, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA-3143 (cobalt-copper), Calera Mining Company, Blackbird Mine, Lemhi County, Idaho, Contract No. Idm-E645

The Blackbird mine was visited on May 14. Cecil Whitley, mine engineer, and W. C. Cole, mine geologist, were present.

The only project work completed during the reporting period was a small amount of diamond drilling from the 7400 N drift. The logs were not available at the time.

No drifting or crosscutting has been done. The exploratory crosscuts from the north-south drift in the new ore body have not been started.

The total work completed to May 14 is:

		Authorized	Completed
Stage I			
	Trenching, surface d.d. & reaming		Yes
	Assays	3,100 units	2,346 units
	Underground d.d.	664 feet	612 feet
Stage II			
	Drift and crosscut	6,000 feet	3,002 feet
	Assays	5,900 units	2,033 units
	N. timber	5,000 feet	2,033 feet
	H. timber	750 "	Yes
	Framing	1,150 sets	415 sets
	D.D.	10,500 feet	5,671.5 feet
	Rock bolts		83
	Spiling	500 feet	Yes

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
ALS/he

A. L. Service

3143

Date 4-13

Forwarded to:

1. ~~[illegible]~~
2. ~~Mr. Johnson~~
3. ~~[illegible]~~
4. Docket Control Mails and Files
5. Division
6. Docket Control Mails and Files

Note comments in report regarding:

1. good results
2.
3.
4.

and take appropriate action.

- - - - - -

Action taken by Division:

ROBERT E. ADAMS

Initials

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~

RECEIVED
APR 12 1956

1201 N. Division St.
Spokane 2, Washington
March 19, 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: A. L. Service, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA-3143 (cobalt-copper), Calera Mining Company, Blackbird mine, Lemhi County, Idaho, Contract No. Idm-E645

The Blackbird mine was visited on March 12. Mr. Cole, geologist, and Mr. Whitley, mine engineer, were present.

The drift to the north ore body is out 300 feet and the Operator intends to crosscut the zone at regular intervals to investigate the ore body and for headings to facilitate future mining. All of this work is being done on company account.

The 74/787 hanging wall crosscut has advanced to 900 feet from the main 7400 drift. A diamond drill hole has been drilled ahead and a 2 to 2½-ft. vein of ore was picked up about 10 feet from the face and another at 175 to 181 feet out. Further drilling is planned to determine the best heading for further crosscutting.

The total units of work that have been completed to March 1 are:

		Authorized	Completed
Stage I			
	Trenching, diamond drilling and reaming		Yes
	Assays	3,100 units	2,346 units
	U.G.D.D.	664 feet	612 feet
Stage II			
	Drift and crosscut	6,000 feet	2,960 feet
	Assays	5,900 units	1,757 units
	Normal timber	5,000 feet	2,033 feet
	Heavy "	750 "	Yes
	Spiling	500 "	Yes
	Framing	1,150 sets	415 sets
	D.D.	10,500 feet	4,796 feet

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D--AD--ALS/he

A. L. Service
A. L. Service

3143

Date 2-21

Referred to:

1. ~~Mr. McCormick~~
2. ~~Mr. Johnson~~
3. ~~Mr. Chambers~~
4. ~~Docket Control Mails and Files~~
5. ~~Current Mails - Division~~
6. Docket Control Mails and Files

Note comments in report regarding:

1. Expiration date of contract is 12/9/55 ?!
2.
3.
4.

and take appropriate action.

Action taken by Division:

Please see me

WSM

ROBERT E. ADAMS

Initials

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
~~WASHINGTON 25, D.C.~~

1201 N. Division St.
Spokane 2, Washington
February 15, 1956

RECEIVED
FEB 21 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: A. L. Service, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA 3143 (cobalt-copper), Calera Mining Company, Blackbird Mine, Lemhi County, Idaho, Contract No. Idm-E645

The Blackbird mine was visited on February 7; Mr. Cecil Whitley, mine engineer, was present.

The project work was not inspected but Mr. Whitley reported that the crosscut from the 7400 N drift to the north ore zone had been advanced about 25 feet through comparatively stable ground. This crosscut will be driven to the ore zone, then a drift will be driven on strike to further explore the area.

Diamond drilling from the 7400 north drift is continuing. The drilling is aimed at exploring the main ore zone that was picked up to the north and the smaller zone that was located to the southeast.

The total work units that have been completed to February 7, excepting the diamond drilling, are:

		Authorized	Completed
Stage I			
	Trenching, diamond drilling & reaming		Yes
	Assays	3100 units	2346 units
	U.G.D.D.	664 feet	612 feet
Stage II			
	Drifting & crosscutting	6000 feet	2923 feet
	Assays	5900 units	1307 units
	Normal timber	5000 feet	1932.3 feet
	Heavy timber	750 "	710.5 "
	Spiling	500 "	Yes
	Framing	1150 sets	396 sets
	D.D.	10,500 feet	3223.5 feet (as of 1/1/56)

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
ALS/he

A. L. Service
A. L. Service

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

~~WASHINGTON 25, D.C.~~

1201 N. Division St.
Spokane 2, Washington
January 20, 1956

RECEIVED
FEB 13 1956

MEMORANDUM

To: DMEA Field Team, Region I, Northwest District

From: A. L. Service, Mining Engineer, Bureau of Mines

Subject: Interim inspection, Docket No. DMEA-3143 (cobalt-copper), Calera Mining Company, Blackbird mine, Lemhi County, Idaho, Contract No. Idm-E645

An inspection of the project work at the Blackbird mine was made on January 10, accompanied by E. W. Parsons, Bureau of Mines engineer. Mr. E. B. Douglas, manager, Cecil Whitley, engineer, and W. C. Cole, geologist, were present.

Additional drilling on the ore zone northeast of the 7400 N drift has been completed and proved a length of 400 feet and an average width of 31 feet of good grade cobalt-copper ore. Further drilling is planned in order to determine the effect of a north-south trending fault that apparently limits the zone at the east end. A smaller zone of good grade has been located by preliminary diamond drilling south of the 7400 N drift. Additional drilling is proposed to further delineate this zone.

A crosscut from the 7400 N drift has been started, and the north ore body will be explored on this level by a drift. A ventilation and supply raise will be driven from the face of the 7400 N drift to the surface.

Advance in the 74/787 hanging wall crosscut is progressing concurrently with the other work. The advance for December was 191 feet which puts the face about 800 feet from the 7400 N drift. Upon completion of the crosscut, 1200 feet of drifting remains to complete this phase of the project work.

Funds allotted for heavy timbering and spiling have been expended and an application for additional footage has been received. This request is being considered by the Field Team.

All work is progressing at a normal rate and the workmanship is satisfactory.

The project work units completed to January 1 are:

	Authorized	Completed
Stage I		
Trenching, diamond drilling and reaming		Yes
Assays	3100 units	2346 units
U.G.D.D.	664 feet	612 feet
Stage II		
Drifting & crosscutting	6000 feet	2888 feet
Assays	5900 units	1307 units
Normal timber	5000 feet	1932.3 feet
Heavy "	750 "	710.5 "
Spiling	500 "	Yes
Framing	1150 sets	396 sets
D.D.	10,500 feet	3223.5 feet

A. L. Service

Orig. & 3 cys - Wash.
USGS (2)
DMEA
M/D
AD
ALS/he

OFFICIAL FILE COPY
O. M. E.
RECEIVED FEB 2 1959

DATE	INITIALS	CODE
2-2	C	220
"	[illegible]	110
"	[illegible]	800
2/5	WSM	400
		225

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: July 1 to December 31, 1958

Date of examination: No examination made.

Operator: Calera Mining Company, Cobalt, Idaho

Mine name: Blackbird

County and State: Lemhi County, Idaho

Docket number and commodity: DMEA-3143 (cobalt-copper)

Contract number: Idm-E645

Date of contract: December 9, 1953

Date of certification: September 16, 1957

Expiration date of royalty payments: December 9, 1966

Total amount of contract: $407,340.00

Total expenditures under contract: 265,519.83

Amount of Government participation @ 70%: 185,863.88

Royalty payments this period: $ 60,898.32

Previous royalty payments: 124,965.56

Total royalty payments to date: 185,863.88

Percent of Government participation repaid: 100%

Royalty due on production to date: none

Royalty remarks: Government participation paid up in full during current reporting period.

Signed: Wm. M. Romischer (Engineer)

Distribution:
OME (4)
USGS (2)
USBM (AD)
USBM (2)

DMEA Form 18
Feb. 58

DEFENSE MINERALS EXPLORATION ADMINISTRATION

ANALYSIS OF SEMIANNUAL REPORT OF CERTIFIED PROJECT

Prepare in duplicate. File original in Official Docket. Send copy

To: Statistics Branch (Code 210)

From: Division of Iron and Ferro-Alloys

Report Period
1.1-6.30.58

DMEA No.	Operator	Contract No.
3143	Calera Mining Company	E645

ORE ESTIMATES

	Tons	Analysis
DMEA	700,000	0.80% Co, 2.33% Cu
Operator to date	245,000	0.80 " 2.33 "
Total	945,000	0.80 " 2.33 "
Production to date	161,729 *	0.80 " 2.33 "
Ore in ground	783,271	0.80 " 2.33 "

INVESTMENT

Type	Size		Feet	Cost
Shafts				
Winzes	6' x 8'		344 @ $125.00	$ 43,000.00
Drifts and Crosscuts	8' x 9.5' 7' x 8'		1,035 @ 75.00 6,275 @ 50.00	77,625.00 313,750.00
Raises	4' x 4'		1,908 @ 40.00	76,320.00
Drilling	Type D. D.	AX	3,214 @ 3.45	11,088.30
Rehabilitation	Description			

FACILITIES

Mine Plant		
Mill		
Roads		

REMARKS

*Tons produced adjusted to "Official grade"

cc to ad. Chandler 8/21/58

Prepared by Stephen P. Holt Date 8.21.58
Stephen P. Holt

31398

RECEIVED JUL 31 1958

DATE	INITIALS	CODE
7/31	C	220
31	Com	100
"	[illegible]	110
8/1	[illegible]	800
	WSM	400

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: January 1 to June 30, 1958

Date of exam: June 10, 1958

Operator: Calera Mining Company, Cobalt, Idaho

Mine name: Blackbird

County and State: Lemhi County, Idaho

Docket number and commodity: DMEA-3143 (cobalt-copper)

Contract number: Idm-E645

Date of contract: December 9, 1953

Date of certification: September 16, 1957

Expiration date of royalty payments: December 9, 1966

Total amount of contract: $407,340.00

Total expenditures under contract: 265,519.83

Amount of Government participation @ 70%: 185,863.88

Royalty payments this period: $ 54,871.96 (thru May '58)

Previous royalty payments: 70,093.60

Total royalty payments to date: 124,965.56

Percent of Government participation repaid: 67.23%

Royalty due on production to date: none

Royalty remarks: none

Royalty audit made by C. A. Turner on June 24, 1958.
Report in preparation.

	Tons	Analysis
Original estimate of DMEA reserves Mines ____ Survey____ Joint x	Field Team final report is in preparation.	
Preliminary estimate:	700,000	2.83% Cu 0.80% Co

Revised estimate of DMEA reserves
(Field Team)
Mines_____ Survey____ Joint ____

Increase of reserves by work performed subsequent to DMEA project work: 245,000 tons

Operator's estimate of total reserves: 945,000 tons of like grade

Operator has been drilling on the 7117 level. Additional ore reserves have not yet been evaluated.

Production of DMEA ore (this period):

	Tons	% Cu	% Co	Lbs. metal recovered Cu	Lbs. metal recovered Co
Pit	53,022	3.22	0.88	2,543,288	507,210
Underground	7,390	2.78	0.93	366,012	93,948
Total	60,412	3.17	0.88	2,909,300	601,158
(previous):					
Pit	30,935	2.68	0.73	1,179,506	274,990
Underground	39,952	2.56	0.73	1,759,680	429,068
Total	70,887	2.61	0.73	2,939,186	704,058
(to date):					
Total	131,299	2.87	0.80	5,848,486	1,305,216

Mill recoveries:

This period: 76.0% in copper, 56.3% in cobalt
Previous period: 79.4% " " 68.5% " "

Production of Operator's ore (this period): 59,094 tons

(previous): 998,292 "

(to date): 1,057,386 "

Percent of revised reserves mined: 14.9%

INVESTMENT DATA

(to date)

Winzes			
6x8', slope 30°, untimbered, rock bolted only where ground support is needed	344 feet	$125.00/ft.	=
Drifts and crosscuts			
8x9.5'	1035 feet	$75.00/ft.	=
7x8' (including necessary timber)	6275 "	50.00/ft.	=
Timbering			
Approximately	2350 feet		
Raises			
4x4' - 50° slope, timbered	1908 feet	$40.00/ft.	=
Diamond drilling (underground)			
(Since Jan. 1, 1958) AX holes	3214 feet	$3.45/ft.	=

Signed: Wm. M. Romischer (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

DMEA Form 18
Feb. 58

D[illegible]NSE MINERALS EXPLORATION ADMIN[illegible]RATION

ANALYSIS OF SEMIANNUAL REPORT OF CERTIFIED PROJECT

Prepare in duplicate. File original in Official Docket. Send copy

To: Statistics Branch (Code 210)

From: Division of Iron and ferro-Alloys

DMEA No.	Operator	Report Period	Contract No.
3143	Calera Mining Company	Thru 12/31/57	Idm-E645

ORE ESTIMATES

	Tons	Analysis
DMEA SDT	700,000	0.80% cobalt 2.33% copper
Operator to date	245,000	
Total	945,000	0.80% cobalt 2.33% copper
Production to date Pit & Underground	70,887	same
Ore in ground	874,113	same

INVESTMENT

Type	Size	Feet		Cost	
Shafts					
Winzes	6'X8'	344	$125.00/ft.	$43,000	
Drifts and Crosscuts	8'X 9.5' 7'X 8'	1,035 3,099	75.00/ft. 50.00/ft.	77,625 154,950	232,575
Raises	4'X 4' 50° slope	1,171	40.00/ft.	46,840.00	
~~Drilling~~					
Stripping					
Rehabilitation					

Type

~~No data on stripping for open pit.~~

Description

FACILITIES

Mine Plant		
Mill		
Roads		

REMARKS

Operators Final Report, 731,854 tons. 0.80% cobalt, 2.33% copper

Mill recovery. Underground ore, 70% cobalt, 80% copper
Open Pit 60% cobalt, 70% copper.

Prepared by Thos. L. Chapman Date 3/20/1958

RLC

31398

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 10 1958
DATE | INITIALS | CODE

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: July 1 to December 31, 1957

Date of exam: March 5, 1958 (supersedes report of January 10, 1958)

Operator: Calera Mining Company, Cobalt, Idaho

Mine name: Blackbird

County and State: Lemhi County, Idaho

Docket number and commodity: DMEA-3143 (cobalt-copper)

Contract number: Idm-E645

Date of contract: December 9, 1953

Date of certification: September 16, 1957

Expiration date of royalty payments: December 9, 1966

Total amount of contract: $407,340.00

Total expenditures under contract: 265,519.83

Amount of Government participation at 70%: 185,863.88

Royalty payments this period: $ 42,332.33

Previous royalty payments: 27,761.27

Total royalty payments to date: 70,093.60

Percent Government participation repaid: 37.7%

Royalty due on production to date: none

Royalty remarks:

Corrected report. See letter in folder 7 of 4

	Tons	Analysis
Original estimate of DMEA reserves Mines ____ Survey ____ Joint X	Field Team final report is in preparation.	
Preliminary estimate:	700,000	2.83% Cu 0.80% Co

Revised estimate of DMEA reserves
(Field Team)
Mines ____ Survey ____ Joint ____

Increase of reserves by work performed subsequent to DMEA project work: 245,000 tons

Operator's estimate of total reserves: 945,000 tons of like grade

Production of DMEA ore (this period):

	Tons	% Cu	% Co	Lbs. metal recovered Cu	Lbs. metal recovered Co
Pit	30,935	2.68	0.73	1,179,506	274,990
Underground	13,057	2.52	0.76	553,010	147,904
Total	43,992	2.63	0.74	1,732,516	422,894
(Previous):					
Pit	none	-	-		
Underground	26,895	2.57	0.71	1,206,670	281,164
(to date):					
Total	70,887			2,939,186	704,058

Mill recoveries:

This period: 74.7% in copper, 65.4% in cobalt
Previous ": 87.2% " " 73.7% " " (underground ore)

Production of Operator's ore

(this period):	86,421 tons
(previous):	911,871
(to date):	998,292

Percent of revised reserves mined: 7.5%

Production remarks:

INVESTMENT DATA

See report of January 10, 1958, by Wm. M. Romischer.

Signed: E. W. Parsons (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

SEMI-ANNUAL REPORT OF CERTIFIED PROJECT

Reporting period: July 1 to December 31, 1957

Date of exam: January 10, 1958

Operator: Calera Mining Company, Cobalt, Idaho

Mine name: Blackbird

County and State: Lemhi County, Idaho

Docket number and commodity: DMEA-3143 (cobalt-copper)

Contract number: Ida-E645

See corrected report of Oct. 31, 1958 attached

Date of contract: December 9, 1953

Date of certification: September 16, 1957

Expiration date of royalty payments: December 9, 1966

Total amount of contract:	$407,340.00
Total expenditures under contract:	265,519.83
Amount of Government participation at 70%:	185,863.88
Royalty payments this period:	$ 30,424.75
Previous royalty payments:	31,725.00
Total royalty payments to date:	62,149.75
Percent Government participation repaid:	33.43%

Royalty due on production to date: $7,943.85 *

Royalty remarks: *Amount of royalty due for month of December 1957. Check for payment will be sent in shortly. This amount is not included in royalty payments for this period or to date.

Semi-annual report
Contract Ida-2445, page 2

	Tons	Antimony
Original estimate of DMEA reserves (from Field Team final report) Mines ___ Survey___ Joint ___	Report in preparation.	
Revised estimate of DMEA reserves (Field Team) Mines___ Survey___ Joint ___		
Increase of reserves by work performed subsequent to DMEA project work (Operator's estimate)	798,000 tons (Blacktail ore body)	
Production of DMEA ore (this period):	43,992 tons	
(previous):	26,895	
(to date):	70,887	
Production of Operator's ore found subsequent to DMEA work (this period)	86,421 tons	
(previous)	911,871	
(to date)	998,292	
Percent of revised reserves mined:	6.15% (Operator's calculation)	

Production remarks:

INVESTMENT DATA

Shafts

No shaft sinking since DMEA program was completed.

Winzes

6x8, slope 30°, untimbered, rock bolted only where ground support is needed	344 feet	$125.00/ft.

Drifts and crosscuts (for 1957)

Drifts: 8 x 9.5'	1035 feet	$ 75.00/ft.
7 x 8' including 50% timbered	3099	50.00/ft.
Total	4134	

Raises

4x4' - 50° slope, timbered	1171 feet	$ 40.00/ft.

Signed: Wm. H. Pomischer (Engineer)

Distribution:
DMEA (4)
USGS (2)
USBM (AD)
USBM (2)

MF-500

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS ADMINISTRATION

REFERENCE SLIP

DATE 9-9

REFERRED TO:

1. ~~110~~
2. 400
3.
4.

FOR:

..... Action	..... Recommendation
..... Approval	..... Record of .....
..... Comment	..... Referring to .....
..... Conference	..... Reply for signature of .....
..... Consideration	..... Rewriting
..... Filing	..... Signature
..... Instructions	..... Suggestions
..... Investigation	..... Your information
..... Initials	
..... Mailing	
..... Previous correspondence	

REMARKS: Certification due
Operator's Final Report

Check (X) before the items needing attention.

Operator's Final Report received 4.1.57
Certification written, going through
channels —

S.P.H.

Initials of sender.

GPO 16—63815-1

Standard Form No. 1034—Revised
Form prescribed by
Comptroller General, U. S.
September 7, 1950
(Gen. Reg. No. 51, Supp. No. 11)

PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL

D. O. Vou. No. .....

Bu. Vou. No. 2035

U. S. .....
(Department, bureau, or establishment)

Voucher prepared at Spokane, Washington 9/5/57
(Give place and date)

THE UNITED STATES, Dr., Payee's Account No. Idn-2649

To Calera Mining Company
(Payee)

Cobalt Idaho
(Address) (City) (State)

PAID BY
(For use of Paying Office)

No. and Date of Order	Date of Delivery or Service	ARTICLES OR SERVICES (Enter description, item number of contract or Federal supply schedule, and other information deemed necessary) Discount Terms	QUANTITY	UNIT PRICE Cost	UNIT PRICE Per	AMOUNT Dollars	AMOUNT Cts.
	October 1956	Balance withheld under Voucher No. 1961, dated 4/2/57, adjusted to audit				499	98
		FINAL PAYMENT					
PAYMENT: Complete ☐ Partial ☐ Final ☐		Use continuation sheet(s) if necessary					
Shipped from	to	Weight	Government B/L No.		Total	499	98

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

(Sign original only)

Date ..... *Payee .....
(This certificate not required when a like certificate is made by payee on attached bill or bills)

Per ..... Title .....

(Payee must NOT use this space)

Differences .....

Account verified; correct for 499 98

(Signature or initials) .....

Contract No. Date Req. No. Date Invoice Rec'd.

Pursuant to authority vested in me, I certify that this account is correct and proper for payment.

† Approved for $ .....

By .....

Title .....

SIGN ORIGINAL ONLY

† .....
(Authorized Certifying Officer)

Title .....

Date .....

THE REVERSE OF THIS FORM MUST BE EXECUTED WHEN PURCHASES ARE MADE OR SERVICES SECURED WITHOUT WRITTEN AGREEMENT IN ANY FORM

ACCOUNTING CLASSIFICATION (For completion by Administrative Office)

Appropriation, limitation, or project symbol	Appropriation title	Limit'n. or Proj't. Amount	Appropriation Amount

Allotment symbol	Amount	Obligations liquidated	COST ACCOUNT Symbol	COST ACCOUNT Amount	OBJECTIVE CLASSIFICATION Symbol	OBJECTIVE CLASSIFICATION Amount

Paid by { Check No. ..... dated ....., 19....., for $..... } on Treasurer of the United States in favor of payee named above.
{ Cash, $....., on ....., 19.....

Payee .....
(Sign original only)

Per .....

Title .....

* 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.
† If the ability to certify and authority to approve are combined in one person, one signature only is necessary; otherwise the approving officer will sign on the line below "Approved for $.....", and over his official title.

16—22900-3

METHOD OF OR ABSENCE OF ADVERTISING

METHOD OF ADVERTISING

1. Advertising in newspapers Yes ☐ No ☐
2. (*a*) Advertising by circular letters sent to ..... dealers.
   (*b*) And by notices posted in public places Yes ☐ No ☐.

   (If notices were not posted in addition to advertising by circular letters sent to dealers, explanation of such omission must be made below.)

ABSENCE OF ADVERTISING

3. Without advertising, under an exigency of the service which existed prior to the order and would not admit of the delay incident to advertising.
4. Without advertising in accordance with .....
5. Without advertising, it being impracticable to secure competition because of .....

.....

.....

.....

.....

(Here state in detail the nature of the exigency or circumstances under which the securing of competition was impracticable under 3 and 4)

NOTE.—The above form "Method of or Absence of Advertising" is to be used when purchases are made or services secured under proper authority without written agreement in any form. In case of a written agreement (formal contract, proposal, and acceptance, or less formal agreement) Standard Form No. 1036—Revised should be used for abstracting the method of or absence of advertising and award of contract. (See General Regulations No. 51, as amended.)

16—22900-2 ☆ U. S. GOVERNMENT PRINTING OFFICE : 1950—O-75806

1201 N. Division Street
Spokane 2, Washington

August 28, 1957

Mrs. Dorothy F. Long, Certifying Officer
DMEA Field Team, Region I
1201 N. Division Street
Spokane 2, Washington

Re: Docket No. DMEA-3143 (cobalt-copper)
Calera Mining Company
Blackbird Mine
Lemhi County, Idaho
Contract No. Idm-E645

Dear Mrs. Long:

The project work under the referenced contract was performed to the satisfaction of the Government. The contract was terminated by mutual agreement effective December 9, 1956, before completion of the work. A final engineering and geological report has been received from the Operator and accepted by the Executive Officer.

The Government has no interest in supplies or equipment purchased for use on the project.

A final Field Team report will recommend Certification of Discovery.

A final Report of Review dated August 15, 1957 by DMEA Auditor C. A. Turner has been received.

As all contract requirements have been met, it is requested that final settlement of our account with the Operator be made.

Sincerely yours,

A. E. Weissenborn, Exec. Officer
DMEA Field Team, Region I

cc: DMEA (2)
USGS (2)
Contract Admin. & Audit Div. (2)
Docket

W

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

Month of October, 1956 Docket No. DMEA 3143 Contract No. Idm-E645
Operator's Name Calera Mining Company Minerals Copper & Cobalt
Address Cobalt, Idaho
Contract Amount, $ 407,340.00 Government Participation: 70 % Amount, $ 285,138.00

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) Contracts: Spiling		10,000.00	10,000.00		10,000.00	10,000.00
Short Form						
Heavy Timbering		5,250.00	5,250.00		5250.00	5250.00
Trenching		10,262.59	10,262.59		10262.59	10262.59
Freezing		2,449.56	2,449.56		2449.56	2449.56
Drifting		119,717.45	119,717.45		119717.45	119717.45
Normal Timbering		15,367.10	15,367.10		15367.10	15367.10
(2) Labor and Supervision:						
Core Drilling Stage 2	1,860.21	20,704.15	22,564.36	1860.21	20704.15	22564.36
Core Drilling Stage 1		59,692.44	59,692.44		59692.44	59692.44
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Core Drilling UCStage 1		2,069.91	2,069.91		2069.91	2069.91
Explosives						
Raising - Stage 1		2,862.50	2,862.50		2862.50	2862.50
Track						
Rock Bolts		1,231.92	1,231.92		1231.92	1231.92
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Stage 2 Taxes	462.00	6,552.00	7,014.00	462.00	6552.00	7014.00
Liability Insurance						
Sampling & Analysis Stage 1		7,038.00	7,038.00		7038.00	7038.00
(8) Contingencies (specify):						
TOTALS	2,322.21	263,197.62	265,519.83	2322.21	263197.62	265,519.83

RECEIVED APR 5 1957 D.M.E.A.

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

Date November 6, 1956 Payee Calera Mining Company

Per [signature] Title [signature]

*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)

1 cy MF 104 Narrative
drill logs + map to Washington 12-5-56

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

$ 1125.55

Signature [signature]
(Authorized Certifying Officer)

Date 4/2/57 Vou. No. 1961
(See other side)

(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. E645 in accordance with the terms of the contract.

Signature /s/ L. L. Walker Title Mining Engineer Date 12/3/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /s/ W. E. Weissenborn Title Executive Officer Date 3/25/57

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

EXTRA COPY, DMEA		
RECEIVED APR 5 1957		
DATE	INITIALS	CODE

1801 N. Division St.
Spokane 2, Washington

April 2, 1957

Calera Mining Company
Cobalt, Idaho

Re: Docket No. DMEA 3143 (Cobalt and Copper)
Contract No. Ida-3645
Monthly operating report for October 1956

Gentlemen:

The subject monthly operating report has been processed and forwarded to the Disbursing Officer for payment.

We are withholding an amount of $500, pending receipt of a final audit by a representative of the Contract Administration and Audit Division of Defense Minerals Exploration Administration. This is the customary procedure and is applicable to all contracts.

By Field Team, Region I, NW District

A. B. Weissenborn, Exec. Officer
U. S. Geological Survey

Wing G. Agnew, Member
U. S. Bureau of Mines

cc: DMEA (2)
USGS (2)
Contract Admin. & Audit Div.
D.Walker
AD

Payment is being held up as
Operator expects to ask for
a mutual termination agreement
soon.

Form MF-104A
(April 1952)

Budget Bureau No. 42-R.

RECEIVED DEC 10 1956 D.M.E.A.

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

Month of October 1956 Docket No. DMEA 3143 Contract No. Dm-2645

Operator's Name Calera Mining Company Minerals Cobalt & Copper

Address Cobalt, Idaho

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	Ft.	--	--	119,717.45	3,369	35.535	6,000	35.535
Normal Drift Tmbrg.	Ft.	--	--	15,367.10	2,195.3	7.00	5,000	7.00
Heavy Tmbrg.	Ft.	--	--	5,250.00	750	7.00	750	7.00
Spiling	Ft.	--	--	10,000.00	500	20.00	500	20.00
Framing	Sets	--	--	2,449.56	447	5.48	1,150	5.48
Assay: Stage II	Ea.	462.00	154	7,014.00	2,338	3.00	3,900	3.00
Core Drilling Stage II	Ft.	1,860.21	550	22,564.36	6,671.5	3.3822	10,500	3.3822
US DD Stage 1	Ft.	--	--	2,069.91	612	3.3822	664.38	3.3822
Supply Rockbolts	Ea.	--		1,231.92	348	3.54	--	3.54
Trenching	Hrs.	--	--	10,262.59	864	11.878	864	11.878
Drilling Stage 1	Ft.	--	--	59,692.44	8,576.5	6.96	8,576.5	6.96
Assay and Stage 1	Ea.	--	--	7,038.00	2,346	3.00	3,100	3.00
Reaming Stage 1	Ft.	--	--	2,862.50	1,145	2.50	1,145	2.50
TOTAL DISTRIBUTED COSTS		2,322.21		265,519.83				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 November 5, 1956 Operator Calera Mining Company

Per [signature] Title [signature]

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)

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

CALERA MINING COMPANY

BLACKBIRD DIVISION

COBALT, IDAHO

November 6, 1956

RECEIVED DEC 10 1956 D.M.E.A.

Mr. A. E. Weissenborn
Executive Office - Region 1
D.M.E.A. Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. D.M.E.A. 3143
Contract No. Idm-E645

Dear Mr. Weissenborn:

Enclosed are the maps and assays pertinent to the D.M.E.A. project No. 3143 for the month of October, 1956.

A long exploratory hole was drilled into the hanging wall approximately 75 feet back from the face of the drift. Several zones of ore grade and width were intersected from 9 to 94 feet. An additional narrow zone of ore grade was intersected from 236 to 239 feet. Mechanical difficulties hampered progress considerably. At 490 feet a bit was twisted off, and the hole was temporarily abandoned.

Another hole was started about 55 feet north of the long one and was drilled to 60 feet before drilling was again suspended because of the necessity of doing additional immediate drilling in the Blacktail zone.

Sincerely yours,

CALERA MINING COMPANY
BLACKBIRD DIVISION

E. B. Douglas

E. B. Douglas, Manager

EBD:srp

Enclosures

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 1
By L. K. Engel
Date September, 1956

DIAMOND DRILLING RECORD

Hole No. U-74-109 Mine Blackbird Level 7400

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
Sept 28		0-29						Bi very soft quartzite with biotite
	17085	0-5	.18	tr.		5	48	banding 45°-60° to core.
	86	5-10	tr.	tr.		5	30	core hard from 0'-5' and 24'-29'
	87	10-14	.02	tr.		4	55	possible major fault between
	88	14-17	.03	tr.		3	70	these zones - with gouge
	89	17-22	.09	tr.		5	52	present at 4', 13', and 20'-23'
	90	22-24	.07	tr.		2	60	dike material (brown at 37')
	91	24-29	tr.	tr.		5	80	recovery poor.
Sept 29		29-100						Schistose quartzite (soft) 60° to
	92	29-34	.11	.09		5	100	core with limonite staining
	93	34-39	.15	.24		5	100	brown dike from 31'-38' with
	94	39-44	.03	.05		5	95	minor sulfides and pink carbonate
	95	44-49	.03	.09		5	94	about 15° to core - fault
	96	49-54	.07	.03		5	90	gouge 40'-49' with minor sulfides
	97	54-59	.03	.03		5	60	49'-59' core has struct-
	98	59-62	.11	.10		3	100	ure between 60°-90° - milky quartz
	99	62-67	.07	.14		5	50	with 59'-67' - core
	17100	67-70	.04	.10		3	60	heavily fractured to 70' with
	01	70-73	.03	.19		3	70	limonite in fractures - fault
	02	73-78	.10	.15		5	40	gouge 77'-79' with minor
	03	78-83	.01	.03		5	80	sulfides - milky quartz
	04	83-88	.05	.14		5	80	veins 79'-83' with malachite
	05	88-92	.03	.05		4	70	staining 70'-78' - brown dike
	06	92-94	.04	.04		2	90	at 88' with gouge at 90' and
	07	94-100	.03	.11		6	33	brown dike material 90'-92'
								fault gouge 92'-93' - milky
								quartz 89'-90'.
Sept 30		100-150						Quartzite with broad biotite schist
	08	100-105	.09	.14		5	40	banding 15°-30° to core to
	09	105-111	.07	.19		6	52	120' and 70°-90° to 150'.
	10	111-115	.13	.74		4	70	limonite staining throughout
	11	115-117	.09	1.35		2	60	run core crushed - minor
	12	117-120	.01	tr.		3	100	chalcopyrite replacement to
	13	120-125	.02	.17		5	64	117' comparatively massive
	14	125-130	.02	.18		5	60	115'-117' - fault gouge at 105'
	15	130-135	.01	.03		5	76	129', 141' and 149'-150' scattered
	16	135-140	.03	.14		5	80	pyrite at 135'.
	17	140-145	tr.	tr.		5	75	
	18	145-150	.03	.03		5	64	

Hole No. U-74-109

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 1
By L. W. Sargent
Date October, 1956

Hole No. U-74-112 Mine Blackbird Level 740
Location 243 D. N.
Bearing Dip Length
Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
Oct 31		0-60						Quartzite with garnets at
	17301	0-5	.09	.14		5	60	10' in biotite schist about
	02	5-9	.20	.15		4	90	45° to core - quite numerous
	03	9-14	.21	.01		5	90	from 19'-35' becoming widely
	04	14-19	.07	.17		5	85	scattered after - grains
	05	19-24	.02	.05		5	90	of cordierite (?) quite numerous
	06	24-29	tr.	.03		5	80	36'-45' diminishing through
	07	29-35	tr.	tr.		6	67	remainder of run - some
	08	35-40	tr.	tr.		5	80	malachite and limonite
	09	40-45	tr.	tr.		5	90	striking throughout - only
	10	45-51	tr.	tr.		6	100	visible mineralization and
	11	51-56	.01	tr.		5	90	1/8" schistite stringer 45°
	12	56-60	.06	.18		4	75	to core from 9'-14'.

Hole No. U-74-112

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 1
By J. M. Sotgui
Date October, 1956

DIAMOND DRILLING RECORD

Hole No. U-74-111 Mine Blackbird Level 740

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
Oct 3		0-79						All mostly quartzite with garnets
	X71-56	0-5	.03	.15		5	50	in biotite cobalt 30°-45° to core
	57	5-9	tr.	tr.		4	75	to 29' 60° thereafter - garnets
	58	9-14	.01	.50	✓	5	50	beginning at 5' widely
	59	14-19	.33	.28		5	100	scattered throughout run
	60	19-24	.04	.18		5	100	being numerous from 14'-24' and
	61	24-29	.08	.59	✓	5	100	29'-44' fault gouge 7'-8', 14',
	62	29-34	1.06	.19	✓	5	94	17'-18'. chalcopyrite present from
	63	34-39	1.19	.47	✓	5	100	9'-24'. with some cobaltite grains
	64	39-44	.35	.16		5	82	probable ore from 24'-44' with
	65	44-49	.05	.54		5	90	chalcopyrite replacing between
	66	49-54	.01	.05		5	60	30% and 60% of biotite cobaltite
	67	54-59	1.38	.75	✓	5	80	stringers and grains through-
	68	59-64	.59	1.86	✓	5	84	out - white quartz vein 26'-29'
	69	64-69	1.44	1.33	✓	5	80	carbonate staining (green color)
	70	69-74	.02	tr.		5	82	throughout run - fault gouge
	71	74-79	.23	.11		5	66	45'-47' massive quartz
								multiples with cobaltite grains
								59'-64' diminishing through
								69' brown dike 70'-73' with
								fault gouge at 74' and 77'
								some pyrite from 74'-79' with
								malachite staining scattered
								throughout run with showing
								evident after dike.
Oct 4		79-109						Quartzite 60°-90° to core except in
	X7172	79-84	.06	tr.		5	80	presence of garnets in which
	73	84-88	.55	.19	✓	4	100	15°-20° is predominate - fault
	74	88-94	.91	.12		6	80	gouge 80'-81', 90', 95', and 108' -
	75	94-99	.04	.16		5	90	109' carbonates in fractures
	76	99-104	.05	.07		5	95	throughout with malachite
	77	104-109	.11	.14		5	60	staining prevalent in area
								of garnets which are
								endemic in occurrence
								from 94'-109' - some
								cobaltite grains scattered
								through 84'-94' - Brown
								dike 102'-104' with some
								chalcopyrite 99'-104'

Hole No. U-74-111

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 2
By I. N. Seigel
Date October, 1956

DIAMOND DRILLING RECORD

Hole No. U-74-111 Mine Blackbird Level 7400

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
October 5		109-146						Quartzite 70°-60° to core, 30°
	X7178	109-114	tr.	tr.		5	82	from 131'-136' and 60° 141'-146'
	79	114-116	tr.	tr.		2	100	widely scattered garnets
	80	116-121	tr.	tr.		5	88	in biotite to 136' appearing
	81	121-126	tr.	tr.		5	90	again at 146' - fault gouge
	82	126-131	tr.	tr.		5	80	114' & 120'-121' carbonate
	83	131-136	tr.	tr.		5	84	staining (cream color)
	84	136-141	tr.	tr.		5	82	throughout vein with
	85	141-146	tr.	tr.		5	100	malachite staining also
								throughout most of rim
								minor chalcopyrite appear
								at 109'-114' and 141'-146'
Oct 8		146-195						core is much harder here.
	X7219	146-151	tr.	tr.		5	92	Quartzite 60° to core to 156' 30°
	20	151-156	.03	.03		5	86	45° thereafter - widely
	21	156-161	.01	.04		5	80	scattered garnets through
	22	161-166	tr.	tr.		5	82	out O heavy concentration
	23	166-169	tr.	.06		3	90	from 160'-166' - grey dike
	24	169-175	tr.	tr.		6	80	154'-158' with much
	25	175-181	.06	tr.		6	80	carbonates - minor sulfides
	26	181-186	tr.	tr.		5	80	146'-151' fault gouge 152'-153'
	27	186-191	tr.	tr.		5	82	169', 175'-176', 181' and 186'
	28	191-195	tr.	tr.		4	80	heavy limonite staining
								(reddish brown) 170'-195'
Oct 9		195-210						BXR since 192' quartzite 60° to
	X7229	195-201	tr.	.03		6	70	core with scattered
	30	201-205	tr.	tr.		4	100	garnets becoming quite
	31	205-210	tr.	tr.		5	94	numerous 205'-210' core
								extremely oxidized with
								the exception of 202'-205'
								fault gouge at 206'
Oct 10		210-243						Quartzite 60° to core with garnets
	32	210-215	.02	tr.		5	96	throughout becoming abundant
	33	215-220	tr.	tr.		5	94	215'-236' fault gouge 225' and
	34	220-225	.01	tr.		5	100	241' - cobaltite grains
	35	225-230	tr.	tr.		5	90	from 236'-239' in next rock
	36	230-231		tr.	tr.	1	90	(biotite schist) white
	37	231-236	tr.	tr.		5	84	quartz vein 239' - heavy
	38	236-239	.72	.01		3	90	limonite and malachite
	39	239-243	.02	tr.		4	85	staining throughout

Hole No. U-74-111

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 3

By L. N. Seigel

Date October, 1956

DIAMOND DRILLING RECORD

Hole No. U-74-111 Mine Blackbird Level 7400

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
Oct 11		243-272						Quartzite 70°-90° to core garnets
	X7240	243-244	.01	.01		1	90	scattered throughout heavy
	41	244-249	.02	.01		5	90	limonite staining fault gouge
	42	249-250	.02	tr.		1	100	254'-255' and 258'-270' - white
	43	250-255	.04	tr.		5	80	quartz vein at 270' - minor
	44	255-260	.23	tr.		5	100	sulfides 255'-260' with native
	45	260-265	tr.	tr.		5	96	copper 260'-265' - core broken
	46	265-270	.05	tr.		5	92	up after 265'.
	47	270-272	.01	.05		2	90	
Oct 16		272-278						Quartzite 60° to core garnets
	48	272-273	tr.	.03		1	80	absent - heavy limonite staining
	49	273-278	.05	.23		5	90	throughout with some cream
								color staining (carbonate?)
								At 273'-278' - minor sulfides
								visible 273'-278' fault gouge
								273'-275' core badly crushed
								273'-278'.
Oct 18		278-299						Quartzite about 15° to core to 281'
	50	278-281	tr.	tr.		3	90	then 45° to core - scattered
	52	281-285	.03	.13		4	90	garnets in biotite schist
	53	285-289	.03	.08		4	80	extensive limonite coating
	54	289-294	tr.	tr.		5	82	throughout - gray mud 291'-296'
	55	294-299	.01	.20		5	90	with some carbonates possible
								coarse grained light greenish
								dike - mud again at 297'-299'
								gray dike (basic)
Oct 19		299-346						Schistose quartzite with some
	56	299-303	tr.	.01		4	80	scattered quartzite garnets
	57	303-308	tr.	tr.		5	84	in biotite schist 45° to core -
	58	308-314	.02	.01		6	90	gray dike material through
	59	314-317	tr.	.03		3	100	314' with some fault gouge
	60	317-320	tr.	tr.		3	90	gray dike at 320'-325' with
	61	320-325	.01	tr.		5	96	minor sulfides in heavily
	62	325-330	tr.	tr.		5	100	oxidized zone 340'-346'
	63	330-335	tr.	.04		5	98	
	64	335-340	.02	.18		5	90	
	65	340-346	.01	.03		6	90	
Oct 22		346-377						Quartzose schist with numerous
	66	346-352	tr.	tr.		6	90	garnets in biotite schist 45°
	67	352-355	tr.	.05		3	100	to core - no garnets after 358'
	68	355-358	tr.	.12		3	100	limonite staining throughout

Hole No. U-74-111

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 4
By L. M. Seigel
Date October, 1956

DIAMOND DRILLING RECORD

Hole No. U-74-111 Mine Blackbird Level 7400
Location
Bearing Dip Length
Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
Oct 22		346-371 (cont)						
	X7369	358-363	.01	.03		5	86	considerably less than
	70	361-365	tr.	.02		2	100	preceding run-white
	71	365-369	tr.	tr.		4	90	quartz vein 370'-371'
	72	369-371	.02	.14		2	100	
Oct 23		371-389						White quartz vein to 374'-.
	73	371-374	.04	.05		3	90	numerous garnets in biotite
	74	374-379	tr.	tr.		5	100	schist 45° to core - limonite
	75	379-384	tr.	.07		5	96	coating throughout
	76	384-389	tr.	tr.		5	90	
Oct 24		389-418						Quartzite with few garnets 45°
	77	389-396	.03	.04		7	90	to core - heavy limonite
	78	396-400	tr.	tr.		4	100	staining.
	79	400-407	tr.	tr.		7	80	
	80	407-413	tr.	tr.		6	85	
	81	413-418	tr.	tr.		5	100	
Oct 26		418-428						Quartzite scattered garnets
	82	418-422	tr.	tr.		4	95	in biotite schist 45° to
	83	422-425	.02	.03		3	100	core - white quartz vein
	84	425-428	.01	.01		3	100	422-425'.
Oct 29		428-467						
	85	428-433	tr.	tr.		5	100	Quartzite with widely scattered
	86	433-440	tr.	tr.		7	90	garnets 45° to core to 433
	87	440-443				3	100	70°-90° rest of run with
	88	443-446	tr.	.01		3	90	garnets ending at 456' -
	89	446-449	tr.	.01		3	100	white quartz vein 440'-443'
	90	449-456	.03	.10		7	100	with core sulfides 463'-467'
	91	456-460	tr.	tr.		4	95	in heavily oxidized core.
	92	460-463	tr.	.01		3	100	
	93	463-467	tr.	.04		4	90	
Oct 31		467-490						Quartzite 70°-90° to core light
	94	467-471	tr.	tr.		4	90	limonite and malachite staining
	95	471-477	tr.	.01		6	100	with chlorite in white quartz
	96	477-484	.03	tr.		7	90	470'-472'.
	97	484-490	tr.	tr.		6	95	

Hole No. U-74-111

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
OCT 22 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of September, 1956 Docket No. DMEA 3143 Contract No. Idu-2645
Operator's Name Calera Mining Company Minerals Copper & Cobalt
Address Cobalt, Idaho
Contract Amount, $ 407,340.00 Government Participation: 70 % Amount, $ 285,138.00

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 Contract: Drilling		10,000.00	10,000.00		10000.00	10000.00
Heavy Timbering		5,250.00	5,250.00		5250.00	5250.00
Trenching		10,262.59	10,262.59		10262.59	10262.59
Framing		2,449.56	2,449.56		2449.56	2449.56
Crosscutting		119,717.45	119,717.45		119717.45	119717.45
Drifting		15,367.10	15,367.10		15367.10	15367.10
Normal Timbering						
(2) Labor and Supervision:						
Core Drilling - Stage II	1521.99	19,182.16	20,704.15	1521.99	19182.16	20704.15
Core Drilling - Stage I		59,692.44	59,692.44		59692.44	59692.44
Labor						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Core Drilling UC Stage I		2,069.91	2,069.91		2069.91	2069.91
Explosives						
Ramping - Stage I		2,862.50	2,862.50		2862.50	2862.50
Track						
Rock Bolts		1,231.92	1,231.92		1231.92	1231.92
(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 - Stage II	279.00	6,273.00	6,552.00	279.00	6273.00	6552.00
Liability Insurance						
Sampling & Analysis Stage I		7,038.00	7,038.00		7038.00	7038.00
(8) Contingencies (specify):						
TOTALS	1800.99	261,396.63	263,197.62	1800.99	261396.63	263197.62

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

Date October 5, 1956 *Payee Calera Mining Company

Per [signature] Title [signature]

*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:

$ 1260.69

Signature [signature]
(Authorized Certifying Officer)

Date 10/16/56 Vou. No. 1894
(See other side)

(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 645 in accordance with the terms of the contract.

Signature 151 David D Walker Title Mining Engr Date 10/15/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 151 A. E. Weissenborn Title Executive Officer Date 10/16/56

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
OCT 22 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of September 1956 Docket No. DMEA 3143 Contract No. Idm-1645
Operator's Name Calera Mining Company Minerals Cobalt & Copper
Address Cobalt, Idaho

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	Ft.	---	---	119,717.45	3369	35.535	6000	35.535
Normal Drift Timbering	Ft.	---	---	15,367.10	2195.3	7.00	5000	7.00
Heavy Timbering	Ft.	---	---	5,250.00	750	7.00	750	7.00
Spiling	Ft.	---	---	10,000.00	500	20.00	500	20.00
Framing	Sets	---	---	2,449.56	447	5.48	1150	5.48
Assaying Stage II	Ea.	279.00	93	6,552.00	2184	3.00	5900	3.00
Core Drilling Stage II	Ft.	1521.99	450	20,704.15	6121.5	3.3822	10500	3.3822
Underground DD Stage I	Ft.	---	---	2,069.91	612	3.3822	664.38	3.3822
Rockbolts	Ea.	---	---	1,231.92	348	3.54	---	3.54
Trenching	Hrs.	---	---	10,262.59	864	11.878	864	11.878
Drilling - Stage I	Ft.	---	---	59,692.44	8576.5	6.96	8576.5	6.96
Assays Stage I	Ea.	---	---	7,038.00	2346	3.00	3100	3.00
Reaming - Stage I	Ft.	---	---	2,862.50	1145	2.50	1145	2.50
TOTAL DISTRIBUTED COSTS		1800.99		263,197.62				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 October 5, 1956 Operator Calera Mining Company

Per [signature] Title [signature]

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)

/s/ David D Walker

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

CALERA MINING COMPANY

BLACKBIRD DIVISION

COBALT, IDAHO

RECEIVED
OCT 22 1956

October 5, 1956

Mr. A. E. Weissenborn
Executive Office - Region 1
D.M.E.A. Field Team
South 157 Howard Street
Spokane 8, Washington

Dear

Re: Docket No. D.M.E.A. 3143
Contract No. Idm-E645

Dear Mr. Weissenborn:

Enclosed are the map and assays pertinent to the D.M.E.A. Project No. 3143 for the month of September 1956.

Work in the 74/843 H. W. Drift North was suspended to allow diamond drilling of the area. The first hole, drilled to the northwest approximately 100 feet from the 74/787 crosscut, intersected no significant mineralization and was completed at 150 feet. A second hole drilled in the same direction 100 feet northwest of the first hole crossed a mineralized zone from 85-100 feet with an average grade of 0.65% Co and 0.11% Cu. A third hole in the opposite direction found no significant mineralization, although assays are incomplete.

A long hole (approximately 600 feet) to the northeast is planned to intersect the mineralized zone found in the second hole and to explore deeply into the hanging wall.

Sincerely yours,

CALERA MINING COMPANY
BLACKBIRD DIVISION

E. B. Douglas by
E. B. Douglas, Manager G. B. Deacon

EBD:jm
enclosures

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 1
By L. H. Voigel
Date September 1956

DIAMOND DRILLING RECORD

Hole No. U-74-110 Mine Blackbird Level 7400

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

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OCT 22 1956

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
Sept. 20	X7007	0-5	.06	.07		5	50	BXH biotite schist with few garnets structure 30° to core minor sulfides
		5-19						BXH biotite schist with garnets
	8	5-9	.02	.18		4	75	more prevalent fault gouge
	9	9-12	.04	.69		3	70	8'-12' and 16'-17' minor chalcopyrite
	10	12-19	.08	.01		7	64	replacement 9'-12'
		19-104						Biotite schist with garnets through
	17	19-24	.03	.08		5	96	out run structure 30°-45°
	18	24-29	.04	.37		5	90	fault gouge 27'29' with
	19	29-34	.23	.98		5	70	minor chalcopyrites 29'-38'-
	20	34-39	.09	.66		5	50	limonite staining to this
	21	39-44	.03	tr		5	74	point fault gouge 38'-39'-
	22	44-49	.06	.13		5	30	47'50'-54'56' and 65'-66'-
	23	49-54	.04	.08		5	40	while quartz vein at 68'
	24	54-59	.02	.06		5	42	more fault goge at77'
	25	59-64	.04	tr		5	40	84-86' and 100'-104' structure
	26	64-66	.01	.11		2	100	70° from 76'-95' - 45° there
	27	66-71	.06	tr		5	50	after diminishing garnets
	28	71-76	.13	.36		5	60	from 81' to 104'.
	29	76-81	.08	.19		5	60	
	30	81-86	tr	tr		5	60	
	31	86-91	tr	tr		5	70	
	32	91-93	tr	.03		2	80	
	33	93-98	.05	.08		5	80	
	34	98-104	.04	.09		6	40	
Sept. 24		104-142						Quartzite (soft) 60° to core fault
	X7042	104-109	.01	.03		5	56	gouge at 140',113'-115',118'
	43	109-114	.03	.03		5	70	while quartzpebbles 110'-
	44	114-119	.02	.06		5	72	few garnets to 114'-
	45	119-124	.06	.08		5	80	Schistose quartzite with many
	46	124-129	.03	.16		5	86	garnets 60° to core to 129'
	47	129-134	.05	.13		5	82	no garnets after 129' minor
	48	134-139	.04	.07		5	84	chalcopyrite replacement 114'-119',
	49	139-142	tr	tr		3	80	125'129'.
Sept. 26		142-150						Quartzite 129'-150' 30° to core
	51	142-146	.02	tr		4	100	smoky quartz vein 139'-140' quite
	52	146-150	tr	.10		4	75	soft core ground up after
								129' fault gouge 144'-145' and
								150.

Hole No. U-74-110

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 1
By Lu M. Seigel
Date September, 1956

DIAMOND DRILLING RECORD

Hole No. U-74-108 Mine Blackbird Level 7400

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
9-26	X7053	0-5	.07	.19		5	80	BXR biotite schist many garnets
								30° to core - with some
								chalcopyrite replacement.
		5-51						BXC biotite schist 30° to core,
	X7054	5-8	.05	.49		3	90	few garnets from 8' to 16'
	X7055	8-11	.01	.14		3	100	becoming quite numerous
	X7056	11-16	tr.	.07		5	80	from 16'-46', chalcopyrite
	X7057	16-21	.02	.14		5	84	to 11' - fault gouge 20', 24' and
	X9058	21-26	.16	.41		5	80	30' to badly broken core and
	X7059	26-31	tr.	.07		5	76	very soft 26'-31', possible
	X7060	31-36	.01	.10		5	78	major fault in this region
	X7061	36-41	.06	.82		5	80	sulfides present from 36'-41'
	X7062	41-46	.01	.11		5	88	
	X7063	46-51	tr.	tr.		5	78	
		51-75						Quartzite 60° to core - few garnets
	X7064	51-56	.11	.23		5	82	Malachite staining to end
	X7065	56-61	.03	.38		5	80	of run - fault gouge 60'-61'-
	X7066	61-64	tr.	tr.		3	100	63', 66'-67', and 68' chalco-
	X7067	64-69	.30	.14		5	90	pyrite replacement 69'-75'
	X7068	69-72	tr.	.02		3	80	with cobaltite grains 72'-75'
	X7069	72-75	.04	.25		3	100	extremely scattered.
		75-115						Schistose quartzite with average
	X7070	75-80	.01	.04		5	70	garnets 60°-90° to core
	X7071	80-85	.16	tr.		5	90	brown dike 75'-77' fault
	X7072	85-90	.83	tr.		5	86	gouge 77'-78' with minor
	X7073	90-95	.51	.15		5	80	sulfides in dike - little or
	X7074	95-100	.61	.17		5	78	no garnets from 80'-115'
	X7075	100-105	.02	.03		5	76	brown dike 89' - fault gouge
	X7076	105-110	.04	.08		5	80	91'-92' - sulfides with some
	X7077	110-115	tr.	.04		5	92	cobaltite grains 85'-100' - fault
								gouge 105', 110' and 115'.
9-27		115-150						Quartzose schist with thick biotite
	X7078	115-120	tr.	tr.		5	84	banding 70°-90° to core to 125'
	X7079	120-125	tr.	tr.		5	80	with malachite staining 45°
	X7080	125-130	.03	.05		5	90	to 140' and 30° to 150' - fault
	X7081	130-135	.01	tr.		5	100	gouge 126', 128-130' - few
	X7082	135-140	tr.	tr.		5	98	garnets at 124' - absent 130' -
	X7083	140-145	tr.	tr.		5	90	135' - average garnets 135'-140'
	X7084	145-150	tr.	tr.		5	80	none after - brown dike 132'-137'
								fault gouge 133'-134' and 139

Hole No.

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

400

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

Budget Bureau No. 42-R1036.5

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OCT 8 1956

Month of August, 1956 Docket No. DMEA 3143 Contract No. Idm-E645
Operator's Name Calera Mining Company Minerals Copper & Cobalt
Address Cobalt, Idaho
Contract Amount, $ 407,340.00 Government Participation: 70 % Amount, $ 285,138.00

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: Spiling		10,000.00	10,000.00		10000.00	10000.00
~~Drifting~~ Heavy Timbering		5,250.00	5,250.00		5250.00	5250.00
~~Bulldozing~~ Trenching		10,262.59	10,262.59		10262.59	10262.59
~~Crosscutting~~ Framing	21.92	2,427.64	2,449.56	21.92	2427.64	2449.56
Drifting	3,908.85	115,808.60	119,717.45	3908.85	115808.60	119717.45
Normal Timbering	105.00	15,262.10	15,367.10	105.00	15262.10	15367.10
(2) Labor and Supervision:						
~~Core Drilling~~ Stage 2		19,182.16	19,182.16		19182.16	19182.16
~~Core Drilling~~ Stage 1		59,692.44	59,692.44		59692.44	59692.44
~~Technical Services~~						
(3) Operating Mat'ls. and Supplies:						
~~Core Drilling~~ U.G. Stage 1		2,069.91	2,069.91		2069.91	2069.91
Explosives						
~~Reaming~~ Stage 1		2,862.50	2,862.50		2862.50	2862.50
Track						
Rock Bolts	509.76	722.16	1,231.92	509.76	722.16	1231.92
(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~~ Stage II	39.00	6,234.00	6,273.00	39.00	6234.00	6273.00
Liability Insurance						
Sampling & Analysis Stage I		7,038.00	7,038.00		7038.00	7038.00
(8) Contingencies (specify):						
TOTALS	4,584.53	256,812.10	261,396.63	4584.53	256812.10	261396.63

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

Date Sept. 7, 1956 *Payee Calera Mining Company

Per [signature] Title [signature]

*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:

$3209.17

Signature [signature]
(Authorized Certifying Officer)

Date 10-2-56 Vou. No. 1880
(See other side)

(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. E645 in accordance with the terms of the contract.

Signature S1 David D Walker Title Mining Engr. Date 9-27-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature S1 Wing G. Agnew Title Acting Exec Date 10/2/56

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
SEP - 8 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of August 1956 Docket No. DMEA 3143 Contract No. Idm-E 645

Operator's Name Calera Mining Company Minerals Cobalt & Copper

Address Cobalt, Idaho

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	Ft.	3,908.85	110	119,717.45	3,369	35.535	6,000	35.535
Normal Drift Tmbrg.	Ft.	105.00	15	15,367.10	2,195.3	7.00	5,000	7.00
Heavy Timbering	Ft.	--	--	5,250.00	750	7.00	750	7.00
Spiling	Ft.	--	--	10,000.00	500	20.00	500	20.00
Framing	Sets	21.92	4	2,449.56	447	5.48	1,150	5.48
Stage 11	Ea.	39.00	13	6,273.00	2,091	3.00	5,900	3.00
Core Stage11	Ft.	--	--	19,182.16	5,671.5	3.3822	10,500	3.3822
Auger D.D. Stage1	Ft.	--	--	2,069.91	612	3.3822	664.38	3.3822
Rockbolts		509.76	144	1,231.92	348	3.54	--	3.54
Trenching	Hrs.	--	--	10,262.59	864	11.878	864	11.878
Stagel Core	Ft.	--	--	59,692.44	8,576.5	6.96	8,576.5	6.96
Stage 1	Ea.	--	--	7,038.00	2,346	3.00	3,100	3.00
Reaming Stage 1	Ft.	--	--	2,862.50	1,145	2.50	1,145	2.50
TOTAL DISTRIBUTED COSTS		4,584.53		261,396.63				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 September 7, 1956 Operator Calera Mining Company

Per [signature] Title [signature]

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)

/s/ David A Walker
Mining Engr

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

CALERA MINING COMPANY

BLACKBIRD DIVISION

COBALT, IDAHO

RECEIVED
OCT - 8 1956

September 5, 1956

Mr. A. E. Weissenborn
Executive Office - Region 1
D.M.E.A. Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. D.M.E.A. 3143
Contract No. Idm-E645

Dear Mr. Weissenborn:

Enclosed are map and assays pertinent to the D.M.E.A. Project No. 3143 for the month of August 1956.

During the month the 74/843 H. W. Drift North was advanced 110 feet. A total of 144 rock bolts were installed to stabalize the weak ground. At a point approximately 20 feet from the present face of this drift, badly fractured and sheared ground was encountered which required the driving of spiling. Four sets of spiled drift timber were stood.

The development of the Blacktail orebody was continued. This work consisted of constructing an access road and collaring a drift at the 7675 elevation, which was advanced 18 feet. Preparatory work for collaring a drift at the 7265 elevation was 70 per cent completed. Drifting was continued on the 7540 Level. A stope raise was collared and advanced 11 feet on the 7400 Level.

Sincerely yours,

CALERA MINING COMPANY
BLACKBIRD DIVISION

E. B. Douglas, Manager

EBD:jm
enclosures

ASSAY RECORD
CALERA MINING CO.

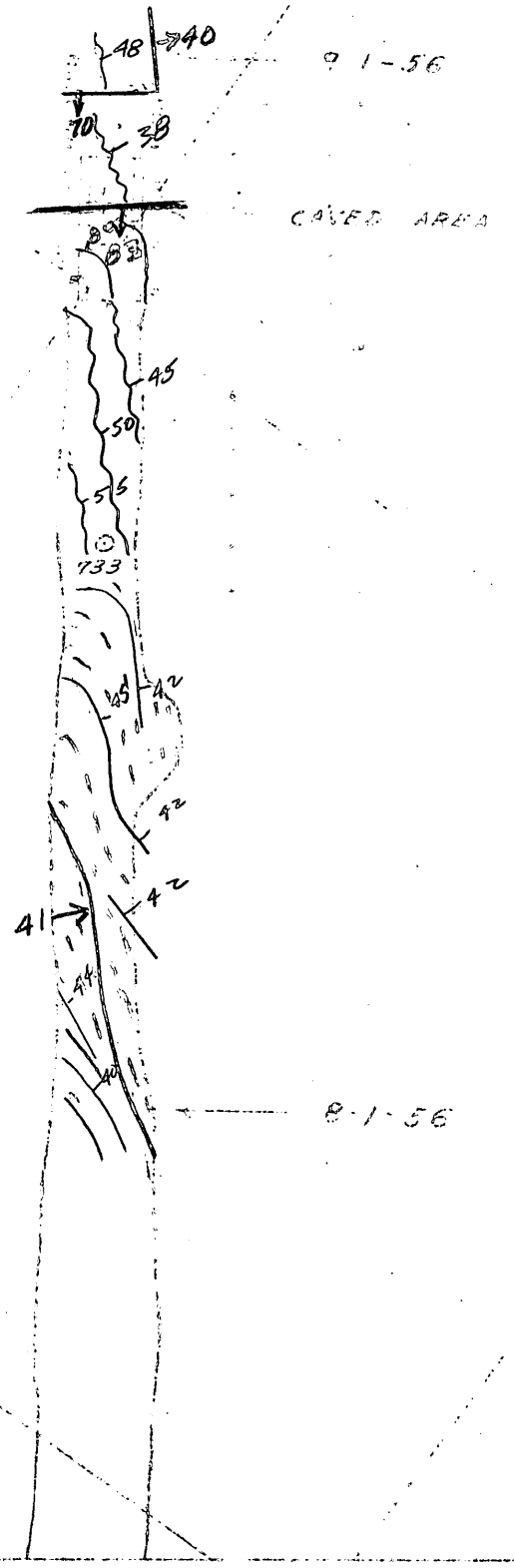
Chute Sect. _____ Level 7400

August, 1956 Working 8-3 D. N.

RECEIVED OCT - 8 1956

Date	Sample Number	Location From	Location To	Kind	Wth.	% Co	% Cu	Oz. Au		REMARKS
8-2	10741A	726	#60½	Chip	6	tr.	tr.			Face
8-5	10748A	728	#86	"	4	.12	.65			"
8-6	13145A	726	#93	"	5	tr.	tr.			"
8-7	13148A	"	#98	"	6½	.26	.15			"
8-9	12204A	"	#116	"	7	.06	.02			"
8-13	12211A	"	#125	"	7	.04	.08			"
8-15	12215A	"	#140	"	7	.06	.17			"
8-16	12219A	"	#144	"	6½	.07	tr.			"
8-17	12222A	"	#149	"	4	.09	.18			" L to R
	B	"	"	"	7	.36	.02			"
8-18	12225A	"	#154	"	3	.14	.08			" "
	B	"	"	"	7	.31	.08			" "
8-19	12227A	"	#166	"	6	.07	tr.			

RECEIVED
OCT - 8 1956



CALERA MINING COMPANY
BLACKBIRD DIVISION

741243 H.W. D.N.

DMEA 3143

SCALE 1" = 20'

DATE 8-21-56

DRAWN BY RV

File No.
DMEA
3143

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

RECEIVED
SEP 10 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of July, 1956 Docket No. DMEA 3143 Contract No. Idm-R645
Operator's Name Calera Mining Company Minerals copper & cobalt
Address Cobalt, Idaho
Contract Amount, $407,340.00 Government Participation: 70 % Amount, $285,138.00

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: Sniling		10,000.00	10,000.00		10000.00	10000.00
Heavy Timbering		5,250.00	5,250.00		5250.00	5250.00
Trenching		10,262.59	10,262.59		10262.59	10262.59
Crosscutting	5.48	2,422.16	2,427.64	5.48	2422.16	2427.64
Drifting	4,264.20	111,544.40	115,808.60	4264.20	111544.40	115808.60
Normal Timbering	35.00	15,227.10	15,262.10	35.00	15227.10	15262.10
(2) Labor and Supervision:						
Coredrilling Stage 2		19,182.16	19,182.16		19182.16	19182.16
" Supervision " 1		59,692.44	59,692.44		59692.44	59692.44
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Coredrilling Stage 1UC		2,069.91	2,069.91		2069.91	2069.91
Explosives						
Reaming Stage 1		2,862.50	2,862.50		2862.50	2862.50
Track						
Rock Bolts	428.34	293.82	722.16	428.34	293.82	722.16
(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 Stage 11	51.00	6,183.00	6,234.00	51.00	6183.00	6234.00
Liability Insurance						
Sampling & Analysis Stage 1		7,038.00	7,038.00		7038.00	7038.00
(8) Contingencies (specify):						
TOTALS	4,784.02	252,028.08	256,812.10	4784.02	252028.08	256812.10

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

Date August *Payee Calera Mining Company

Per [signature] Title [signature]

*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:

$ 3348 81

Signature [signature]
(Authorized Certifying Officer)

Date 9-7-56 Vou. No. 1862
(See other side)

(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. E645 in accordance with the terms of the contract.

Signature /S/ David D. Walker Title Mining Engr Date 8-29-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Wing G. Agnew Title Acting Exec Date 8-30-56

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
SEP 10 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of July 1956 Docket No. DMEA 3143 Contract No. Idm-R645

Operator's Name Calera Mining Company Minerals cobalt & copper

Address Cobalt, Idaho

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	Ft.	4,264.20	120	115.808.60	3259	35.535	6000	35.535
Normal Drift Tmbrg.	Ft.	35.00	5	15,262.10	2180.3	7.00	5000	7.00
Heavy Timbering	Ft.	--	--	5,250.00	750	7.00	750	7.00
Spiling	Ft.	--	--	10,000.00	500.00	20.000	500	20.00
Framing	Sets	5.48	1	2,427.64	443	5.48	1150	5.48
Assay Stage 11	Ea.	51.00	17	6,234.00	2078	3.00	5900	3.00
Stage 11	Ft.	--	--	19,182.16	5671.5	3.3822	10.500	3.3822
Stage I	Ft.	--	--	2,069.91	612	3.3822	664.38	3.3822
Rockbolts		428.34	121	722.16	204	3.54	--	3.54
	Hrs.	--	--	10,262.59	864	11.878	864	11.878
Core	Ft.	--	--	59,692.44	8576.5	6.96	8576.5	6.96
Stage I	Ea.	--	--	7,038.00	2346	3.00	3.000	3.00
Reaming Stage 1	Ft.	--	--	2,862.50	1145	2.50	1.145	2.50
TOTAL DISTRIBUTED COSTS		4,784.02		256,812.10				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.

Date August 1956 Operator Calera Mining Company

Per [signature] Title [signature]

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)

/s/ David D Walker

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

CALERA MINING COMPANY

BLACKBIRD DIVISION

COBALT, IDAHO

RECEIVED
SEP 10 1956

August 2, 1956

Mr. A. E. Weissenborn
Executive Office - Region 1
D.M.E.A. Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. D.M.E.A. 3143
Contract No. Idm-E645

Dear Mr. Weissenborn:

Enclosed are the map and assays pertinent to D.M.E.A. Project No. 3143 for the month of July 1956.

During the month the 74/843 H. W. Drift North was advanced 120 feet. One set of drift timber and 121 rock bolts were installed to support the weak rock which was encountered.

The development of the Blacktail ore body, which is part of this D.M.E.A. project, was continued on Calera's account. The recent development consisted of a total of 356 feet of drift on the 7540 Level, a service raise connecting the 7400 and 7540 Levels, and the driving of three crosscuts - two on the 7400 Level and one on the 7540 Level. The installation of one stope chute on the 7400 Level was 75 per cent completed.

Sincerely yours,

CALERA MINING COMPANY
BLACKBIRD DIVISION

E. B. Douglas

E. B. Douglas, Manager

EBD:jm
enclosures--

ASSAY RECORD
CALERA MINING CO.

RECEIVED
SEP 10 1956

Chute Sect. July, 1956 — Level 7400

DMEA #3143 — Working 643 Drift North

Date	Sample Number	Location From	Location To	Kind	Wth.	% Co	% Cu	Oz. Au		REMARKS
7-6	10703A	712	#120	Chip	4	09	15			Face L to R
	B	"	"	"	2	64	1 04			" " "
	C	"	"	"	3½	07	10			" " "
7-8	10628A	"	#132½	"	6	04	02			" " "
	B	"	"	"	1	62	1 58			" " "
	C	"	"	"	2½	07	27			" " "
7-10	10710A	"	#143	"	6½	21	1 23			" " "
7-11	10631A	"	#162	"	6	tr	tr			" " "
7-12	10632A	"	#168	"	7	18	43			" " "
7-16	10638A	"	#180	"	7	12	09			" " "
7-17	10640A	"	#185	"	7	07	16			" " "
7-17	10647A	719	#103	"	4	40	11			" " "
7-20	B	"	"	"	2	26	1 08			" " "
7-22	10721A	"	#109	"	7	04	tr			" " "
7-24	10724A	"	#116	"	6	34	186			" " "
7-26	10732A	"	#121	"	5	28	74			" " "
7-30	10736A	"	#133	"	6	05	19			" " "

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RECEIVED
JUL 23 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of June, 1956 Docket No. DMEA 3143 Contract No. Idm-R645
Operator's Name Calera Mining Company Minerals Copper & Cobalt
Address Cobalt, Idaho
Contract Amount, $407,340.00 Government Participation: 70 % Amount, $285,138.00

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) Building Short Form Contracts:		10,000.00	10,000.00		10000.00	10000.00
Heavy Timbering		5,250.00	5,250.00		5250.00	5250.00
Trenching		10,262.59	10,262.59		10262.59	10262.59
Framing	120.56	2,301.60	2,422.16	120.56	2301.60	2422.16
Drifting	4370.81	107,173.59	111,544.40	4370.81	107173.59	111544.40
Normal Timbering	798.00	14,429.10	15,227.10	798.00	14429.10	15227.10
(2) Labor and Supervision:						
Core Drilling Stage 2		19,182.16	19,182.16		19182.16	19182.16
" Supervision " " 1		59,692.44	59,692.44		59692.44	59692.44
Technical Services						
(3) ~~Operating Motor and Supplies~~						
Core Drilling UG Stage 1		2,069.91	2,069.91		2069.91	2069.91
Explosives						
Raising Stage 1		2,862.50	2,862.50		2862.50	2862.50
Track						
Rock Bolts		293.82	293.82		293.82	293.82
(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 Stage 11	84.00	6,099.00	6,183.00	84.00	6099.00	6183.00
Liability Insurance						
Sampling & Analysis Stage 1		7,038.00	7,038.00		7038.00	7038.00
(8) Contingencies (specify):						
TOTALS	5373.37	246,654.71	252,028.08	5373.37	246654.71	252028.08

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

Date July 7, 1956 Payee Calera Mining Company

Per [signature] Title [signature]

*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:

$3761 36

Signature [signature]
(Authorized Certifying Officer)

Date 7-20-56 Vou. No. 1822
(See other side)

(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. E645 in accordance with the terms of the contract.

Signature 151 David D Walker Title Mining Engr Date 7-19-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 151 Wm G Agnew Title Acting Exec Date 7-19-56

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
JUL 23 1956

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of June 1956 Docket No. DMEA 3143 Contract No. Idm-E645
Operator's Name Calera Mining Company Minerals Cobalt & Copper
Address Cobalt, Idaho

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	Ft.	4370.81	123	111,544.40	3139	35.535	6000	35.535
Crosscutting	Ft.	798.00	114	15,227.10	2175.3	7.00	5000	7.00
Raising	Ft.	----	---	5,250.00	750	7.00	750	7.00
Shafts	Ft.	----	---	10,000.00	500.00	20.00	500	20.00
Winze	Sets	120.56	22	2,422.16	442	5.48	1150	5.48
Drilling: Core	Ea.	84.00	28	6,183.00	2061	3.00	5900	3.00
Drilling: Core	Ft.	----	---	19,182.16	5671.5	3.3822	10.500	3.3822
Drilling: D.D.	Ft.	----	--	2,069.91	612	3.3822	664.38	3.3822
Stripping		----	---	293.82	83	3.54	---	3.54
Trenching	Hrs.	----	---	10,262.59	864	11.878	864	11.878
Test Pits	Ft.	----	---	59,692.44	8576.5	6.96	8576.5	6.96
Roads and Trails	Ea.	----	---	7,038.00	2346	3.00	3,100	3.00
Reaming - Stage 1	Ft.	----	---	2,862.50	1145	2.50	1145	2.50
Normal Drift Timbering								
Heavy Timbering								
Spiling								
Framing								
Assay Stage II								
Drilling Core Stage II								
Rock Bolts								
Stage 1 Core								
Assay Stage 1								
TOTAL DISTRIBUTED COSTS		5,373.37	[illegible]	252,028.08				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		5373.37		252028.08				407340.00

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 July 7, 1956 Operator Calera Mining Company
Per [signature] Title [signature]

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)

/s/ David D Walker

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

CALERA MINING COMPANY

BLACKBIRD DIVISION

COBALT, IDAHO

RECEIVED

JUL 23 1956

July 6, 1956

Mr. A. E. Weissenborn
Executive Office - Region 1
D.M.E.A. Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. D.M.E.A. 3143
Contract No. Idm-E645

Dear Mr. Weissenborn:

Enclosed are the maps and assays pertinent to the D.M.E.A. Project No. 3143 for the month of June, 1956.

During the month the 787 H.W. Crosscut was advanced 8 feet at which point it was named the 843 H.W. drift north and advanced 115 feet for a total of 123 feet. This heading encountered a moderately faulted and contorted Garnet Schist cut by some irregular Quartz zones and replaced by some Cobalt-Copper mineralization at one place on the turn to the north west. The general incompetency of the ground required the standing of 23 sets of timber.

No diamond drilling was done under the D.M.E.A. contract.

Sincerely yours,

CALERA MINING COMPANY
BLACKBIRD DIVISION

E. B. Douglas, Manager

EBD:jm
encl--

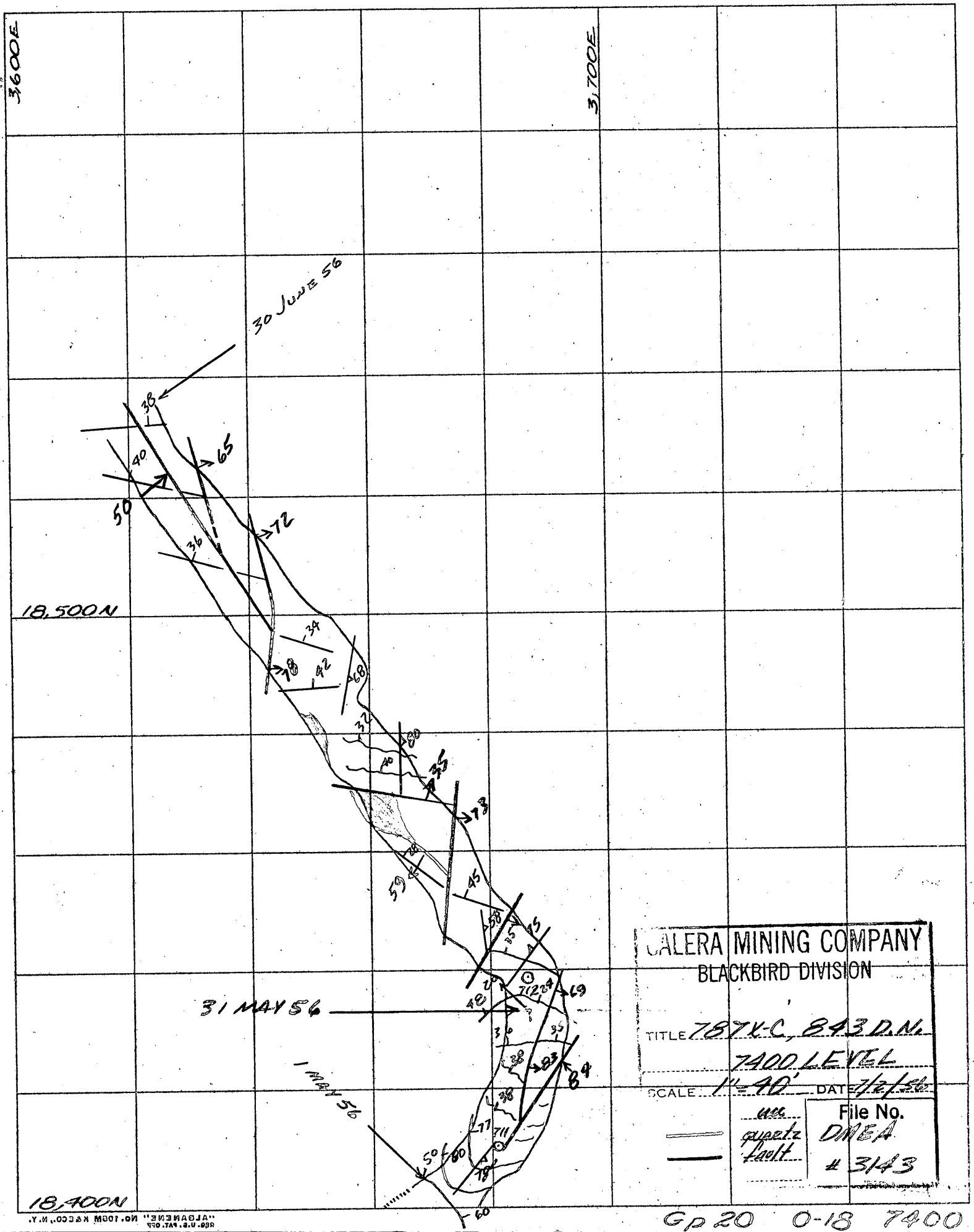
ASSAY RECORD
CALERA MINING CO.

RECEIVED JUL 23 1956

Chute Sect. [illegible] Level [illegible]

[illegible] Working [illegible]

Date	Sample Number	Location From	Location To	Kind	Wth.	% Co	% Cu	Oz. Au		REMARKS
[illegible]	[illegible]	75	81½	Chip	04	01	23			Chip. Left Rib
	A	81½	87½			62	67			
[illegible]	[illegible]	0.5			5	03	08			
	B	5	10		5	07	18			
6-25	12050C	10	15		5	Tr	07			Right Rib
	B	15	20		5	01	03			
	A	20	25		5	03	08			
	12049C	25	30		5	Tr	Tr			
	B	0	6		6	01	Tr			
	A	6	12		6	07	18			
	12048C	12	18		6	Tr	Tr			
	B	18	24		6	Tr	06			
	A	24	30		6	02	49			Left Rib
[illegible]	10601A	10	17	Muck	7	02	30			Muck
6-25	12047C									Chip. Left Rib
	B	36	42	Chip	6	Tr	18			Right Rib
	A	42	48		6	13	16			
	12046C	48	54		6	06	1 25			
	B	54	60		6	02	04			
	A	60	66		6	Tr	07			
6-25	10613A				5	03	43			Face. L. to R.
	B				34	03	07			
6-25	12045C	66	72		6	01	21			Right Rib.
	B	72	78		6	Tr	27			
	A	78	84		6	01	15			
6-26	10624A	84	90	Muck	6	11	06			Muck
6-26	[illegible]	78	84		6	20	33			
6-28	[illegible]	95	102		7	22	07			
5-30	[illegible]	102	108		6	08	31			



Gp 20 0-18 7400

(Rev.)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

RECEIVED
JUL 2 - 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of May, 1956 Docket No. DMEA 3143 Contract No. Idm-R645
Operator's Name Calera Mining Company Minerals Copper and Cobalt
Address Cobalt, Idaho
Contract Amount, $ 407,340.00 Government Participation: 70 % Amount, $ 285,138.00

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) Short Form Contracts:						
Spiling		10,000.00	10,000.00			
Timbering		5,250.00	5,250.00			
Trenching		10,262.59	10,262.59			
Framing	27.40	2,274.20	2,301.60			
Drifting	1,137.12	106,036.47	107,173.59			
Normal Timbering	196.00	14,233.10	14,429.10			
(2) Labor and Supervision:						
Core Drilling Stage2		19,182.16	19,182.16			
Core " " 1		59,692.44	59,692.44			
(3) Core Stage1		2,069.91	2,069.91			
Explosives						
Reaming Stage 1		2,862.50	2,862.50			
Track						
Rock Bolts		293.82	293.82			
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Stage 11		6,099.00	6,099.00			
Liability Insurance						
Sampling & Analysis Stage 1		7,038.00	7,038.00			
(8) Contingencies (specify):						
TOTALS	1,360.52	245,294.19	246,654.71	1360.52	245294.19	246654.71

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

Date June 6, 1956 Payee Calera Mining Company

Per [signature] Title [signature]

*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:

$ 952 36

Signature [signature]
(Authorized Certifying Officer)

Date 6-26-56 Vou. No. 1805

(See other side)

(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 645 in accordance with the terms of the contract.

Signature /S/ David D Walker Title Mining Engr Date 6-21-56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ A. E. Wessenborn Title Exec Officer Date 6/25/56

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

RECEIVED
JUL 2 - 1956

Month of May 1956 Docket No. DMEA 3143 Contract No. [illegible]-R645
Operator's Name Calera Mining Company Minerals Cobalt & Copper
Address Cobalt, Idaho

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	Ft.	1137.12	32	107,173.59	3016	35.535	6000	35.535
Normal Timbering	Ft.	196.00	28	14,429.10	2061.3	7.00	5000	7.00
Heavy Timbering	Ft.	---	--	5,250.00	750	7.00	750	7.00
Spiling	Ft.	---	--	10,000.00	500.00	20.00	500	20.00
Framing	Sets	27.40	5	2,301.60	420	5.48	1150	5.48
Assay Stage 11	Ea.	---	--	6,099.00	2033	3.00	5900	3.00
Drilling Core Stage 11	Ft.	---	--	19,182.16	5671.5	3.3822	10500	3.3822
Underground D.B. Stage 1	Ft.	---	--	2,069.91	612	3.3822	664.38	3.3822
Rock Bolts		---	--	293.82	83	3.54		3.54
Trenching	Hrs.	---	--	10,262.59	864	11.878	864	11.878
Drilling Core Stage1	Ft.	---	--	59692.44	8576.5	6.96	8576.5	6.96
Assay Stage1		---	--	7,038.00	2346	3.00	3100	3.00
Reaming Stage 1	Ft.	---	--	2,862.50	1145	2.50	1145	2.50
TOTAL DISTRIBUTED COSTS		1360.52		246,654.71				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 6, 1956 Operator Calera Mining Company
Per [signature] Title [signature]

REMARKS: 18 ft. of disallowed drfftting amounting to $639.63 was subtracted from total drifting before computing this months costs.

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)

151 David D Walker

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

CALERA MINING COMPANY

BLACKBIRD DIVISION

COBALT, IDAHO

RECEIVED

JUL 2 - 1956

June 4, 1956

Mr. A. E. Weissenborn
Executive Office - Region 1
D.M.E.A. Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. D.M.E.A. 3143
Contract No. Idm-E645

Dear Mr. Weissenborn:

Enclosed are the monthly and progress reports pertinent to the D.M.E.A. project No. 3143 for the month of May, 1956.

No diamond drilling was done under the D.M.E.A. contract.

In the latter part of the month work was resumed in the 74/787 E. W. crosscut. This heading was advanced 32 feet in waste. Because of the small amount of advance no maps are included with this report.

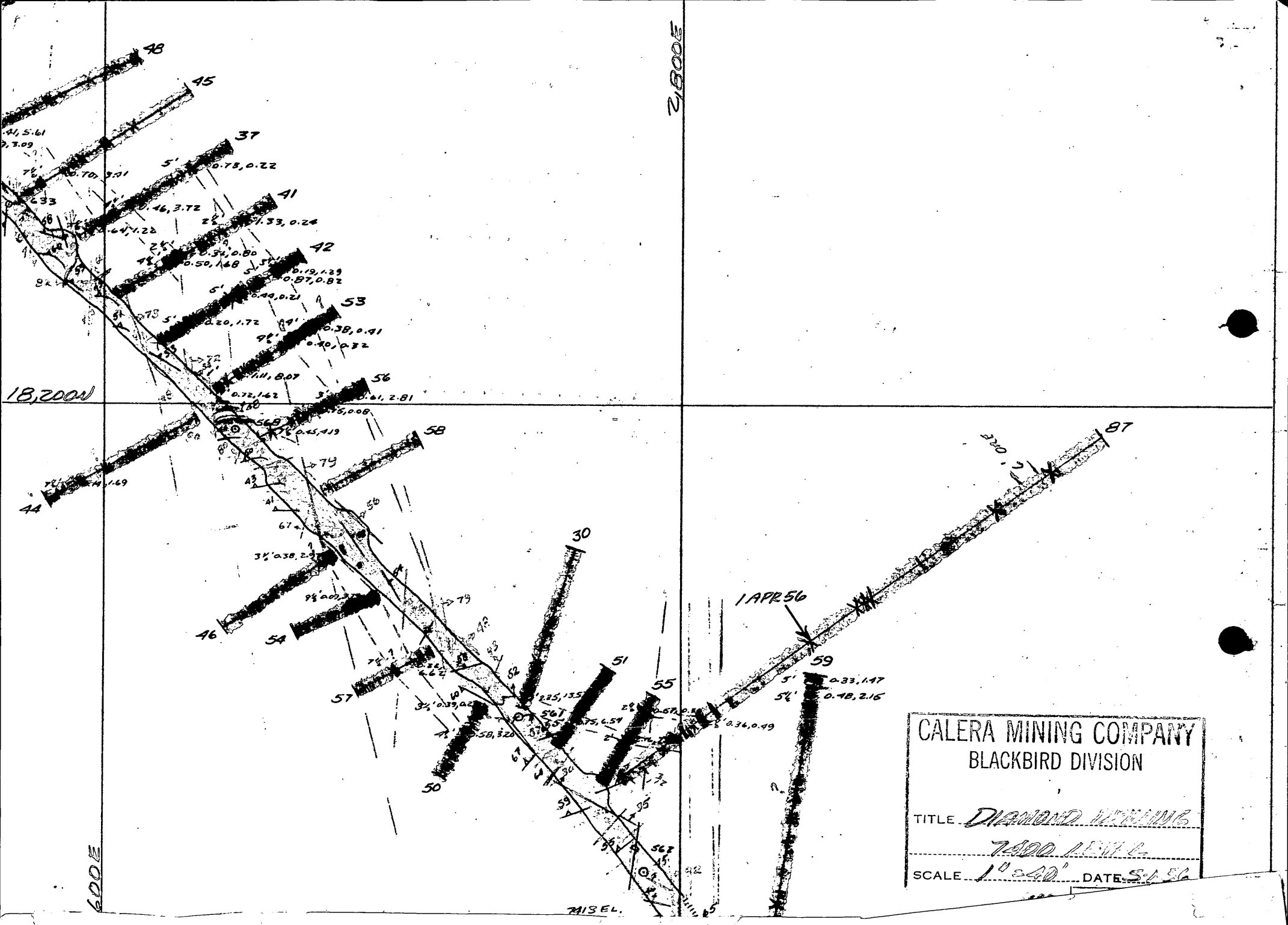
We have corrected the records by deducting 18 feet of drift that was shown in our January, 1956 report, and was disallowed by the government officials.

Sincerely yours,

CALERA MINING COMPANY
BLACKBIRD DIVISION

E. E. Douglas, Manager

EED/jm
encls--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1 APR 56
CALERA MINING COMPANY
BLACKBIRD DIVISION
TITLE DIAMOND DRILLING
7400 LEVEL
SCALE 1" = 20'
DATE Sept 56

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

RECEIVED
MAY 31 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of April 1956 Docket No. DMEA 3143 Contract No. IDM-E645
Operator's Name Calera Mining Company Minerals Copper & cobalt
Address Cobalt, Idaho
Contract Amount, $ 407,340.00 Government Participation: 70 % Amount, $ 285,138.00

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~~ Selling Contracts:		10,000.00	10,000.00		10000.00	10000.00
Short Form ~~Drilling~~ Heavy timbering		5,250.00	5,250.00		5250.00	5250.00
Bulldozing trenching		10,262.59	10,262.59		10262.59	10262.59
~~Crosscutting~~ Framing		2,274.20	2,274.20		2274.20	2274.20
Drifting		106,676.10	106,676.10		106036.47	106036.47
Normal Timbering		14,233.10	14,233.10		14233.10	14233.10
(2) ~~Labor and Supervision:~~ Core drilling stage 2	591.89	18,590.27	19,182.16	591.89	18590.27	19182.16
Labor						
Supervision		59,692.44	59,692.44		59692.44	59692.44
Technical Services						
(3) ~~Operating Mat'ls. and Supplies:~~ core drilling stage 1		2,069.91	2,069.91		2069.91	2069.91
Timber						
Explosives						
~~Pipe~~ Reaming stage 1		2,862.50	2,862.50		2862.50	2862.50
Track						
rock bolts		293.82	293.82		293.82	293.82
(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~~ Stage 2	171.00	5,928.00	6,099.00	171.00	5928.00	6099.00
Liability Insurance						
Sampling & analysis stage 1		7,038.00	7,038.00		7038.00	7038.00
(8) Contingencies (specify):						
TOTALS	$ 762.89	245,170.93	$245,933.82	762.89	244531.30	245294.19

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

Date May 6, 1956 Payee Calera Mining Company

Per [signature] Title [signature]

*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:

$ 5311.02

Signature [signature]
(Authorized Certifying Officer)

Date 5/23/56 Vou. No. 1780
(See other side)

(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 645 in accordance with the terms of the contract.

Signature Alfred R. Service Title Mining Engr Date 5/18/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Wing G. Agnew Title Acting Exec. Officer Date May 21-56

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 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
MAY 31 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of April 1956 Docket No. DMEA 3143 Contract No. IDME 645

Operator's Name Calera Mining Company Minerals Cobalt & copper

Address Cobalt, Idaho

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	Ft.			$ 106,676.10				
Normal					3,002	$ 35.535	6,000	35.535
Timbering	Ft.			14,233.10	2033.3	7.00	5,000	7.00
Heavy Timber	Ft.			5,250.00	750	7.00	750	7.00
Spilling	Ft.			10,000.00	500.00	20.00	500	20.00
Framing	sets			2,274.20	415	5.48	1,150	5.48
Assay stage	each	171.00	57	6,099.00	2,033	3.00	5,900	3.00
II drilling core	Ft.	591.89	175	19,182.15	5671.5	3.3822	10,500	3.3822
Churn state 2								
Underground dd	Ft.			2,069.91	612	3.3822	664.38	3.3822
stage 1								
Rock bolts				293.82	83	3.54		3.54
Trenching	Hrs.			10,262.59	864	11.878	864	11.878
Drilling core	Ft.			59,692.44	8576.5	6.96	8576.5	6.96
Roads and Trails	each			7,038.00	2,346	3.00	3,100	3.00
Reaming stage 1	Ft.			2,862.50	1,145	2.50	1,145	2.50
TOTAL DISTRIBUTED COSTS		762.89		$ 245,933.82				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 6, 1956 Operator Calera Mining Company

Per [signature] Title [signature]

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)

/s/ Alfred R Service

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

CALERA MINING COMPANY

BLACKBIRD DIVISION

COBALT, IDAHO

RECEIVED
MAY 31 1956

April 30, 1956

Mr. A. E. Weissenborn
Executive Office - Region 1
D.M.E.A. Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. D.M.E.A. 3143
Contract No. Idm-E645

Dear Mr. Weissenborn:

Enclosed are the maps and assays pertinent to the D.M.E.A. Project No. 3143 for the month of March, 1956.

No headings were advanced under the D.M.E.A. contract.

Diamond drilling amounted to 175 feet for the month.

The hole drilled northeast from the south end of the Blacktail zone to test the hanging wall was completed. No mineralization of significance was intersected in the hanging wall, and the Blacktail zone itself proved to be narrow and low grade at this point.

The second up-hole drilled at 78½° over the north end of the Blacktail zone was also completed. This hole intersected 14 feet of ore of very good grade and with some secondary copper enrichment.

Drilling on the 7400 Level has been suspended for the present to allow the advance of development headings.

Sincerely yours,

CALERA MINING COMPANY
BLACKBIRD DIVISION

E. B. Douglas, Manager

EBD:srp

Enclosures

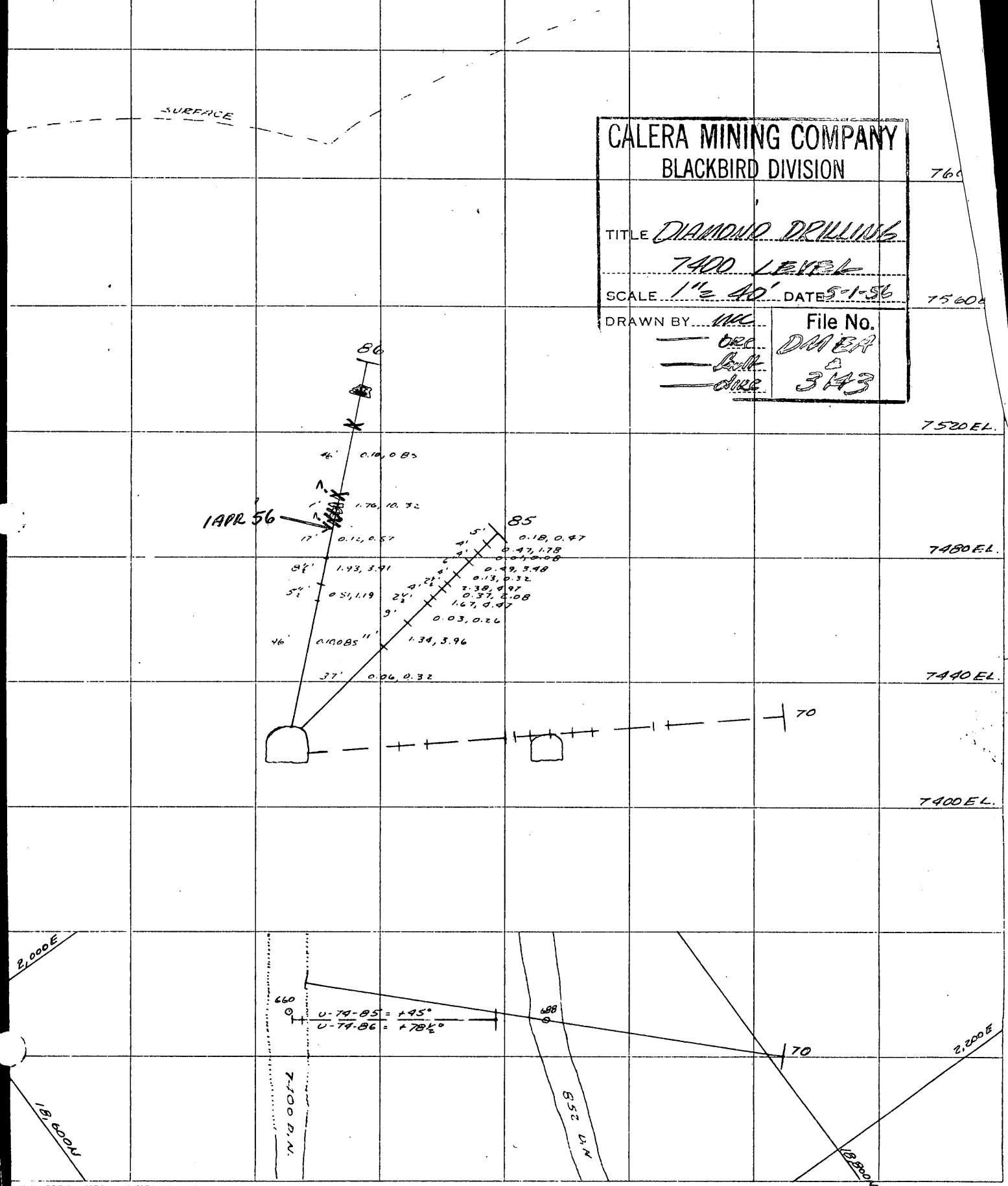
CALERA MINING COMPANY
BLACKBIRD DIVISION

TITLE DIAMOND DRILLING
7400 LEVEL

SCALE 1" = 40' DATE 5-1-56

DRAWN BY MCC
DRC
Draft
Chkd

File No.
DM 87
3143



SCALE 1" = 40 FT. SECTION THROUGH U-74-85,86 LOOKING N.W.

CALERA MINING COMPANY
BLACKBIRD DIVISION

RECEIVED
MAY 3 1 1956

Sheet No. 2
By F. J. Cox & W. C. Co
Date 1956

DIAMOND DRILLING RECORD

Hole No. U-74-84 Mine Blackbird Level 7400

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
3-22	X5154	84-87	.48	.14		3	57	
	X5155	87-92	1.07	.08		5	42	
	X5156	92-97	.14	.52		5	46	
3-28	X5192	97-126	.18	tr		.29	47	Schistose quartzite. This core
	X5193	97-126	.01	tr		29	47	was scattered by the tram.
	X5194	97-126	tr	tr		29	47	samples are taken over
								the whole distance.
		126-141						Schistose quartzite. 4" fault
	X5195	126-130	.02	tr		4	100	at 130'.
	X5196	130-135	.19	.10		5	72	
	X5197	135-141	.25	tr		6	83	
	X5198	141-145	.16	tr		4	65	Fault gouge and brown mica dike.
		145-166						Schistose quartzite with
	X5199	145-150	.03	.05		5	100	scattered quartz and
	X5200	150-155	tr	tr		5	100	carbonate.
	X5101	155-161	tr	tr		6	72	
	X5102	161-166	tr	tr		5	64	
3-29		166-199½						Schistose quartzite generally banded
	X5103	166-170	tr	tr		4	75	75° to core, core broken, some
	X5104	170-176	.02	.08		6	75	white quartz at 168 ft, and 172½ ft.
	X5105	176-182	.02	.15		6	50	a little irregular carbonate 193-198
	X5106	182-188	.04	.09		6	50	ft., scattered minor sulfidw mineral-
	X5107	188-194	.01	.03		6	75	ization throughout, possible faults
	X5108	194-199½	.01	tr		5½	82	at 170 ft, 176½ ft, definate large
								fault with brown dike material
								at 184 ft- 185½ ft., possible
								fa.lts at 187 ft., 192 ft.
	X5109	199½-202	.03	.15		2½	88	Scattered broken brown dike material
								at beginning of run, a little broken
								white, quartz, possible fault near
								end.

Hole No. U-74-84

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 1
By F. J. Cox
Date March 1956

DIAMOND DRILLING RECORD

Hole No. U-74-85 Mine Blackbird Level 7400
Location 7400 D.N.
Bearing N37E Dip -450 Length 89
Latitude of Collar 18,686½N Departure of Collar 2,065E Elevation 7425

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
3-20		0-5						NX schistose quartzite 45-60° to core with minor sulphide stringers., ½" inch of chalcocite at 4'.
	X4841	0-2	.02	.75		2	95	
	X4842	2-5	.02	.07		3	92	
		5-13						BX same. Almost normal to core.
	X4843	5-9	.06	.19		4	93	
	X4844	9-13	.07	.27		4	80	
		13-24						AX Same.
	X4845	13-18	.04	.73		5	76	
	X4846	18-21½	.17	.68		3½	86	
	X4847	21½-24	.03	.17		2½	100	
3-21		24-40						Same More sulfides appear and limonite stain in fractures.
	X5067	24-27	.07	.26		3	97	
	X5068	27-29	.08	.91		2	85	
	X5069	29-32	.04	.24		3	90	
	X5070	32-37	.06	.06		5	80	
	X5071	37-40	.76	2.35		3	63	
3-22	X5094	40-43	2.57	8.38		3	97	Massive quartz, chalcopyrite cobaltite vein. 15% chalcocite in the copper minerals.
	X5095	43-43½	2.34	6.62		½	80	Mineralized schistose quartzite.
3-23		43½-57						Schistose quartzite mineralized with chalcopyrite and cobaltite stringers.
	X5163	43½-48	.80	1.81		4½	98	
	X5164	48-53	.04	.22		5	96	
	X5165	53-57	.01	.32		4	98	
	X5166	57-59½	1.67	4.47			96	Well mineralized zone cobaltite & chalcopyrite with limonite in vugs and minor chalcocite.
	X5167	59½-63½	.37	2.08		4	98	Schistose quartzite mineralized with chalcopyrite and cobaltite stringers
3-27	X5184	63½-66	2.38	4.97		2½	76	Well mineralized zone with secondary cu and fe minerals
	X5185	66-70	.13	.32		4	57	Schistose and quartzite with quartz, cobaltite and chalcopyrite stringers
	X5186	70-71½	.35	8.86		1½	60	Quartz, chalcocite, limonite vein.

Hole No.

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 2
By F. J. Cox
Date 1956

DIAMOND DRILLING RECORD

Hole No. U-74-85 Mine Blackbird Level 7400

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
3-27		71½-89						Schistose quartzite with
	X5187	71½-76	.53	1.69		4½	73	quartz, chalcopyrite, cobaltite
	X5188	76-80	.01	.08		4	55	stringers.
	X5189	80-84	.47	1.78		4	50	
	X5190	84-89	.18	.47		5	64	

Hole No. U-74-85

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 1
By W. C. Cole & J.Y. Greene
Date April 1956

DIAMOND DRILLING RECORD

Hole No. U-74-86 Mine Blacktail Level 7400
Location 7400 D.N.
Bearing N37E Dip -78½° Length 119
Latitude of Collar 18,683N Departure of Collar 2,063E Elevation 7426

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	"C" Series Geology and Remarks
4-2	X5410	0-3	tr	tr		3	67	BX schistose quartzite 60°-65° to core, scattered minor mineralization
		3-46½						AX broken schistose quartzite 60° to core, scattered minor mineralization possible fault 11½-12½ ft.
	X5411	3-9	tr	.12		6	42	
	X5412	9-13	tr	tr		4	50	
	X5413	13-18	.13	.51		5	50	
	X5414	18-23	.07	.15		5	60	
	X5415	23-29	.03	.07		6	42	
	X5416	29-35	.09	.99		6	42	
	X5417	35-41	.15	.33		6	67	
	X5418	41-46½	.51	1.19	.128	5½	73	
	X5419	46½-50	3.00	6.00	.236	3½	71	Quartz-sulfides with a little calcocite
	X5420	50-55	1.18	1.61	.354	5	90	Schistose quartzite 30% replaced by quartz-sulfide stringers 30°-60° to core, possible fault at 52½ ft.
		55-72						Schistose quartzite 60° to core with scattered minor sulfide mineralization, possible fault gouge at 68 ft., quartzose schist 69-72 ft. (fault zone?)
	X5421	55-59	tr	.32		4	100	
	X5422	59-64	.08	.52		5	30	
	X5423	64-68	.26	.67		4	100	
	X5424	68-72	.14	.80		4	50	
	X6501	72-73	1.76	10.32		1	50	Massive sulfides in quartzite, partly oxidized; banding 70 to 50° to core.
	X6502	73-77	.22	1.63		4	50	Schistose quartzite 70°-90° to core, minor sulfides; sludge only at 76 ft to 77 ft.
	X6503	77-82	.15	.74		5	30	Quartzite 80° to core, very minor sulfides
	X6504	82-87	.03	.24		5	70	Quartzite 40°-60° to core, oxidized material at 87 ft.
	X6505	87-91	.14	1.13		4	65	Quartzite 50°-80° to core. oxidized sulfides at 89 ft.
	X6506	91-105	.12	.84		14	40	Quartzite with partly oxidized massive sulfides from 91 ft to 93 ft. from 93 ft to 105 ft is quartzite 20°-45° to core, minor sulfides gouge at 99 ft.
	X6507	105-115	.14	1.87		10	35	Quartzite 50° to core, massive brown mica dike at 108 ft to 111 ft.
	X6508	115-119	.07	.25		4	38	Quartzite 45° to 60° to core.

Hole No. U-74-86

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 1
By W. C. Cole & J.Y. Greene
Date April 1956

DIAMOND DRILLING RECORD

Hole No. U-74-87 Mine Blackbird Level 7400
Location 7400 D. N.
Bearing N54E Dip 42° Length 202
Latitude of Collar 18,071½N Departure of Collar 2,778½E Elevation 7412

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	"C" Series Geology and Remarks
4-2	X5133	0-4	.06	.17		4	37	3" Casing shoe - brecciated quartzite with some sulfide mineralization 65°-70° to core, core very broken
		4-14						NX Schistose quartzite banded 45°-50° to core, somewhat contorted, brecciated with some quartz-sulfide mineralization 10-11 ft., 4" bleaching with ½" chalcopyrite in center at 13 feet.
	X5134	4-6½	tr	tr		2½	100	
	X5135	6½-9	tr	tr		2½	100	
	X5136	9-11½	.02	.19		2½	100	
	X5137	11½-14	tr	.58		2½	100	
		14-19						Schistose quartzite 50°-60° to core with scattered quartz-sulfide mineralization especially 18-19 ft.
	X5138	14-16½	.07	.43		2½	80	
	X5139	16½-19	.08	.60		2½	80	
	X5140	19-24	.02	1.10		5	8	Very broken quartz-sulfides
	X5141	24-26	.04	.03		2	75	Quartzose schist banded 30° to core, fault gouge with brown dike material 24-24½ ft.
	X5142	26-29	.05	.04		2	67	Brecciated quartzite with some sulfide mineralization and a few pods brown mica, 26-27 ft., schistose brown basic dike 27-28 ft., schistose quartzite 45° to core with some carbonate 28-29 ft.
	X5143	29-31½	tr	tr		2½	20	Broken quartzite 29-31 ft., brown dike material 31-31½ ft.
	X5144	31½-34	tr	.04		2½	16	Brecciated quartzite with some quartz-sulfide mineralization banding 80° to core.
	X5145	34-36½	.36	.49		2½	40	Massive sulfides with some unreplaced schist and much carbonate.
		36½-45						Major fault zone, much gouge and breccia, brown dike material 41-45 ft., broken quartzite 39-41 ft.
	X5146	36½-41	.03	tr		4½	49	
	X5147	41-45	.05	tr		4	50	
		45-75						Broken quartzite with indistinct banding almost parallel to core possible fault gouge at 53½ ft. core vary broken.
	X5148	45-51	tr	tr		6	42	
	X5149	51-56	tr	tr		5	50	
	X5150	56-60	.07	tr		4	38	
	X5401	60-64	tr	tr		4	13	
	X5402	64-70	.01	tr		6	22	
	X5403	70-75	tr	tr		5	40	

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 2
By W. C. Cole
Date

DIAMOND DRILLING RECORD

Hole No. U-74-87 Mine Level
Location
Bearing Dip Length
Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	Geology and Remarks
		75-101						BX broken quartzite with
	X5404	75-81	tr	tr		6	25	banding nearly parallel to
	X5405	81-86	.02	.04		5	20	core, fault gouge 79-81 ft.
	X5406	86-91	.09	.01		5	26	100-101 ft., a little minor
	X5407	91-96	tr	tr		5	40	sulfide mineralization at 88½ ft.
	X5408	96-101	tr	tr		5	50	6" fault gouge at 103 ft., 105½-
	X5409	101-106	tr	.05		5	50	106 ft.
	X6530	106-115	.02	tr		10	65	BX quartzite 30° to 50° to
	X6531	115-126	.02	.01		10	80	core, quartz and carbonates
	X6532	126-131	tr	tr		5	100	along fractures 30° to
	X6533	131-141	tr	tr		10	75	80° to core, gouge at
	X6534	141-151	tr	.04		10	80	158 ft. to 159 ft., and at 181 ft;
	X6535	151-161	.04	.10		10	70	core badly fractured
	X6536	161-168	.04	tr		7	86	from 174 ft. to 202 ft.
	X6537	168-179	tr	.08		11	73	
	X6538	179-187	tr	tr		8	81	
	X6539	187-195	tr	tr		8	75	
	X6540	195-202	tr	.04		7	86	

Hole No. U-74-87

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 1
By F. J. Cox
Date March 1956

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DIAMOND DRILLING RECORD

Hole No. U-74-84 Mine Blackbird Level 7400
Location 7400 D.N.
Bearing S64½W Dip 0° Length 202
Latitude of Collar 17,862½N Departure of Collar 2936 E Elevation 74 KR

Date	Sample No.	Depth From — To	Assay Value % Co	% Cu	Oz. Au	Ft.	% C. R.	"C" Series Geology and Remarks
3-20		0-9						NX Reaming shell. Schistose
	X4848	0-3	.01	.04		3	70	quartzite 30° to core.
	X4849	3-6	tr	tr		3	23	
	X4850	6-9	tr	tr		3	33	
		9-32½						NX same. Fault 9½-11 and 3" fault
	X5051	9-11	.03	tr		2	85	at 21'.
	X5052	11-14	.30	tr		3	60	
	X5053	14-16	.01	.03		2	40	
	X5054	16-19	.04	.05		3	60	
	X5055	19-21	.01	tr		2	95	
	X5056	21-24	.08	.03		3	60	
	X5057	24-26	.06	tr		2	100	
	X5058	26-28½	.04	tr		2½	88	
	X5059	28½-31	.43	.03		2½	92	
	X5060	31-32½	.18	.18		1½	100	
3-20	X5061	32½-34	.49	1.90				Altered pyrite mineralization.
		34-45						Schistose quartzite slightly
	X5062	34-36½	.17	.26		2½	100	mineralized with quartz and
	X5063	36½-39	.06	tr		2½	96	sulfides.
	X5064	39-42½	.06	.04		3½	94	
	X5065	42½-45	.09	.18		2½	96	
	X5066	45-46	.26	.13		1	100	Brown mica dike.
3-21		46-65						Schistose quartzite 50° to
	X5072	46-48	.06	tr		2	100	core. Quartz-carbonate
	X5073	48-50	.10	.11		2	100	vein and fault 50½-51½.
	X5074	50½-51½	.07	tr		1½	87	
	X5075	51½-54	.04	tr		2½	100	
	X5076	54-56	.05	.07		2	90	
	X5077	56-60	.03	tr		4	89	
	X5078	60-62½	tr	tr		2½	92	
	X5079	62½-65	.02	.02		2½	92	
3-22		65-77						Same
	X5096	65-67½	tr	tr		2½	88	
	X5097	67½-70	.01	tr		2½	84	
	X5098	70-72½	tr	tr		2½	80	
	X5099	72½-75	.02	tr		2½	80	
	X5100	75-77	.01	.02		2	90	
		77-97						BX Same Minor mineralization
	X5151	77-79	.01	tr		2	90	
	X5152	79-82	.01	tr		3	33	
	X5153	82-84	.03	tr		2	60	

Hole No. U-74-84

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.5

RECEIVED
MAY 8 - 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of [redacted] 195[redacted] Docket No. DMEA[redacted]
Operator's Name [redacted]
Address [redacted]
Contract Amount, $[redacted] Government Participation [redacted] %

Contract No. [redacted]
Minerals [redacted]
Amount, $[redacted]

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
[redacted] (1) Independent Contractors:	$ [redacted]	$ [redacted]	$ [redacted]		10000.00	10000.00
Short Form						
[redacted] Timbering		[redacted]	[redacted]		5250.00	5250.00
[redacted] Bulldozing		[redacted]	[redacted]		10262.59	10262.59
[redacted] Crosscutting		[redacted]	[redacted]		2274.20	2274.20
Drifting		[redacted]	[redacted]		106036.47	106036.47
[redacted] Timbering		[redacted]	[redacted]		14233.10	14233.10
[redacted] (2) Labor and Supervision:						
[redacted] Labor	2367.54	[redacted]	[redacted]	2367.54	16222.73	18590.27
[redacted] Supervision		[redacted]	[redacted]		59692.44	59692.44
[redacted]						
(3) Operating Materials and Supplies:						
[redacted] Timber		[redacted]	[redacted]		2069.91	2069.91
[redacted] Explosives						
[redacted] Pipe		[redacted]	[redacted]		2862.50	2862.50
Track						
[redacted]		[redacted]	[redacted]		293.82	293.82
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
[redacted] Freight	657.00	5271.00	[redacted]	657.00	5271.00	5928.00
Liability Insurance						
[redacted]						
[redacted]		7038.00	7038.00		7038.00	7038.00
(8) Contingencies (specify):						
TOTALS	[redacted]	[redacted]	[redacted]	3024.54	241506.76	244531.30

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

Date April 4, 1956 *Payee [redacted]

Per [signature] Title [signature]

*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:

$ 2117 18

Signature [signature]
(Authorized Certifying Officer)

Date 5/3/56 Vou. No. 1765
(See other side)

(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 645 in accordance with the terms of the contract.

Signature /S/ Alfred L. Service Title Mining Engr Date 4/30/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ A. E. Weissenborn Title Exec. Officer Date 4/30/56

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 8 - 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of [redacted] 195[redacted] Docket No. DMEA [redacted] Contract No. [redacted]
Operator's Name [redacted]
Address [redacted]
Minerals [redacted]

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								
[redacted]	ft.			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	ft.			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	ft.			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Shafts [redacted]	ft.			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Winzes [redacted]	[redacted]			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Drilling: [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	ft.	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	ft.			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Stripping [redacted]				[redacted]	[redacted]	[redacted]		[redacted]
Trenching								
[redacted]	[redacted]			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	ft.			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	ft.			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
[redacted]	ft.			[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Total Distributed Costs		[redacted]		[redacted]				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 [redacted] Operator [redacted]

Per [signature] Title [signature]

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)

/s/ Alfred R. Service

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

CALERA MINING COMPANY

BLACKBIRD DIVISION

COBALT, IDAHO

RECEIVED

MAY 8 - 1956

April 8, 1956

Mr. A. E. Weissenborn
Executive Office - Region 1
D.M.E.A. Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. D.M.E.A. 3143
Contract No. Idm-E645

Dear Mr. Weissenborn:

Enclosed are the maps and assays pertinent to the D.M.E.A. Project No. 3143 for the month of March, 1956.

No headings were advanced under the D.M.E.A. contract.

Diamond drilling amounted to 700 feet for the month.

Drilling of the Horseshoe zone from the 74/787 crosscut was completed. A zone about 6 feet wide striking north 75° west was found 175 feet beyond the face of the crosscut. At best the zone is of moderate grade.

A hole was drilled southwest from the collar of the 74/787 crosscut to complete the drilling between the Brown Bear and Blacktail zones. Two mineralized zones were intersected about 50 feet apart. The first zone is too low grade to be of much consequence, but the second is of good grade and 8 feet wide. However, the rest of the drilling in this area indicated the mineralization to be rather narrow and discontinuous at this elevation.

A hole is now being drilled to test the hanging wall of the Blacktail zone on both sides of a north trending major fault. So far only mineralization of very low grade has been found.

A hole was drilled at plus 45° from the 7400 drift north above the 74/852 drift north and found the Blacktail zone to be 47 feet thick, of good grade, and dipping about 40° along this plane. A second hole at plus 78½° has so far intersected 14 feet of ore of good grade.

Sincerely yours,

CALERA MINING COMPANY
BLACKBIRD DIVISION

E. B. Douglas

E. B. Douglas, Manager

EBD:srp

Enclosures

RECEIVED
MAY 8 - 1956

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 1
By F. J. Cox
Date March, 1956

Hole No. U-74-83 Mine Blackbird Level 7400
Location
Bearing Dip Length
Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
3-3	X4343	0-1	.01	.34		1	100	Core corrd. Cornutiferous schist with garnet sands 50° to core. Mineralized with chalcopyrite & cobaltite.
		1-21						Hole case. Mineralized zones 2'-4', 9'-10, 11-12, 17'-19½.
	X4344	1-2'	.06	tr.		1'	87	
	X4345	2'-4'	.12	.76		2	100	
	X4346	4'-7	tr.	tr.		2½	86	
	X4347	7-9½	tr.	.04		2½	96	
	X4348	9'-10	tr.	.43		1	100	
	X4349	10-11	tr.	.03		1	100	
	X4350	11-12	.63	.23		1	100	
	X4351	12-15	.03	.14		2	97	
	X4352	15-17½	tr.	tr.		2½	96	
	X4353	17½-19½	.03	.99		2	85	
	X4354	19'-21	tr.	.03		1	00	
3-4		21-61						Cornutiferous schist with blue crystals, scattered chalcopyrite mineralization, may be some cobaltite present. Fault 29-30.
	X4368	21-23	tr.	tr.				
	X4369	23-25	tr.	.01		2	100	
	X4370	25-27	tr.	.01		2	100	
	X4371	27-30	tr.	tr.		3	90	
	X4372	30-32½	tr.	tr.		2½	100	
	X4373	32½-35	.01	tr.		2½	100	
	X4374	35-37	.21	.02		2	85	
	X4375	37-39½	.08	.60		2½	100	
	X4376	39½-42	.06	1.14		2½	100	
	X4377	42-44½	tr.	tr.		2½	100	
	X4378	44½-47	.03	.38		2½	100	
	X4379	47½-49½	tr.	.03		2½	100	
	X4380	49½-52	tr.	tr.		2½	100	
	X4381	52-54½	tr.	tr.		2½	100	
	X4382	54½-57	.03	.09		2½	100	
	X4383	57-59				2	100	
	X4384	59-61	tr.	tr.		2	100	
3-7		61-74						Case. Mineralized zone 63-66.
	X4165	61-63½	tr.	tr.		2½	100	
	X4166	63½-66	tr.	tr.		2½	96	
	X4167	66-69	tr.	tr.		3	97	
	X4168	69-71½	tr.	.06		2½	96	
	X4169	71½-74	.11	.14		2½	96	

Hole No. U-74-83

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 2
By F. J. Cox
Date March, 1956

Hole No. U-74-63 Mine Blackbird Level 7400
Location
Bearing Dip Length
Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
3-7		74-79						A vein containing crystals of
	14150	74-76	.07	tr.		2	100	muscovite, carbonates, quartz
	14389	76-79	.04	tr.		3	93	& possibly apatite. Also an
								unidentified brown, relatively
								soft mineral with good
								cleavage on one surface.
		79-106						Garnetiferous schist with
	14390	79-82	.04	.07		3	97	very minor chalcopyrite.
	14391	82-84	tr.	tr.		2	100	Brown dike 93'-94', 103'-104',
3-9	14274	84-86	.08	.19		2	100	105-106.
	14275	86-89	tr.	tr.		3	100	
	14276	89-92½	tr.	.07		3½	94	
	14277	92½-95	.03	tr.		2½	96	
	14278	95-97	.05	.15		2	100	
	14279	97-100	tr.	tr.		3	93	
	14280	100-103	.01	tr.		3	97	
	14281	103-106	.09	.08		3	100	
3-13		106-145						Garnetiferous schist with
	14286	106-108	tr.	tr.		2	90	blue crystals. Some xeno-
	14287	108-110	tr.	tr.		2	95	liths of carbonate. 135-145
	14288	110-112½	tr.	tr.		2½	100	sheared & faulted zone.
	14289	112½-115	tr.	tr.		2½	96	
	14290	115-117	tr.	tr.		2	100	
	14291	117-119½	tr.	tr.		2½	96	
	14292	119½-122	tr.	tr.		2½	92	
	14293	122-124	.05	.07		2	95	
	14294	124-126½	.05	.10		2½	100	
	14295	126½-129	tr.	tr.		2½	96	
	14296	129-131	tr.	tr.		2	100	
	14297	131-133	tr.	tr.		2	100	
	14298	133-135	tr.	tr.		2	90	
	14299	135-137	tr.	tr.		2	80	
	14300	137-139	.11	.51		2	85	
3-14	14802	139-142	.58	.45		3	93	
	14803	142-145	.10	.05		3	90	
		145-157						Garnetiferous schist with
	14804	145-148	.06	.07		3	97	minor chalcopyrite mine-
	14805	148-151	.02	.07		3	100	ralization.
	14806	151-154	.05	.17		3	100	
	14307	154-157	.01	.04		3	97	

Hole No. U-74-63

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 3
By F. J. Cox
Date March, 1956

Hole No. U-74-03 Mine Blackbird Level 7400
Location
Bearing Dip Length
Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
3-15		157-197						Same except no mineralization
	4808	157-159	tr.	tr.		2	100	and brown dike with
	4809	159-162	tr.	tr.		3	100	carbonates 185-187'.
	4810	162-165	tr.	tr.		3	93	
	4811	165-167½	tr.	tr.		2½	96	
	4812	167½-170	.04	.04		2½	96	
	4813	170-172	tr.	tr.		2	90	
	4814	172-174	tr.	tr.		2	100	
	4815	174-176½	tr.	tr.		2½	96	
	4816	176½-179	tr.	tr.		2½	100	
	4817	179-181	tr.	tr.		2	95	
	4818	181-183	tr.	tr.		2	95	
	4819	183-185	tr.	tr.		2	100	
	4820	185-187½	.07	.03		2½	88	
	4821	187½-190	tr.	tr.		2½	92	
	4822	190-192	tr.	tr.		2	100	
	4823	192-194	tr.	tr.		2	100	
	4824	194-197	tr.	tr.		3	87	
	4825	197-199	tr.	.03		2	95	Is same. Fault at 199.
		199-227						Same except limonite stain
	4826	199-202½	.02	tr.		3½	94	in fractures. Brown dike
	4827	202½-207	tr.	tr.		4½	96	207-208'.
	4828	207-208½	tr.	tr.		1½	93	
	4829	208½-213	tr.	tr.		4½	98	
	4830	213-217	tr.	tr.		4	95	
	4831	217-221	tr.	tr.		4	93	
	4832	221-225	tr.	tr.		4	93	
3-16	4833	225-227½	tr.	tr.		2½	100	
		227½-244½						Same except badly sheared
	4834	227½-230	tr.	tr.		2½	60	& broken core. 8" fault
	4835	230-235	tr.	tr.		5	90	at 241. Small brown dike 241'.
	4836	235-241	tr.	tr.		6	83	
	4837	241-244½	.01	tr.		3½	94	
		244½-253						Dark gray fine grained sediment
	4838	244½-248	tr.	tr.		3½	100	with garnets up to two
	4839	248-251	tr.	tr.		3	100	millimeters in diameter.
	4840	251-253	tr.	tr.		2	100	Lenslike of quartzite
								scattered in sediment.

Hole No. U-74-03

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 1
By [illegible]
Date [illegible]-1-56

Hole No. U-74-B2 Mine Blackbird Level 760

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	[illegible]	% C. R.	Geology and Remarks
[illegible]-19-56	[illegible]761	[illegible]-1	[illegible]	tr		1	50	[illegible] starting [illegible].
		1-55						[illegible]motiferous [illegible]
	[illegible]762	1-3	[illegible]	[illegible]		2	20	[illegible] with [illegible] [illegible]
	[illegible]763	3-6	[illegible]	[illegible]		5	[illegible]	[illegible]rite 1-[illegible]. [illegible] structure
	[illegible]764	6-9	[illegible]	[illegible]		1	100	50 to [illegible]. The [illegible]
	[illegible]765	9-11	[illegible]	[illegible]		1	100	occur in bands with the
	[illegible]766	11-13	tr	[illegible]		2	70	black [illegible]. The [illegible]
	[illegible]767	13-1[illegible]	[illegible]	[illegible]		3	50	range from 1 millimeter to
	[illegible]768	1[illegible]-18	[illegible]	tr		2	100	15 millimeters in thickness.
	[illegible]769	18-21	[illegible]	[illegible]		3	75	The [illegible] range in size
	[illegible]770	21-[illegible]	tr	tr		[illegible]	90	from 3 millimeter to
	[illegible]771	[illegible]-26	[illegible]	[illegible]		2	80	3 millimeters in diameter.
	[illegible]772	26-29	tr	tr		3	87	Blue crystals [illegible]
	[illegible]773	29-33	[illegible]	tr		[illegible]	70	various intervals. They are
	[illegible]774	33-35	tr	tr		[illegible]	[illegible]	either feldspars or
	[illegible]775	35-38	tr	tr		[illegible]	10	altered mafic minerals
	[illegible]776	38-4[illegible]	tr	tr		[illegible]	76	
	[illegible]777	4[illegible]-43	tr	tr		[illegible]	76	
	[illegible]778	43-45	tr	tr		[illegible]	77	
	[illegible]779	45-48	tr	tr		[illegible]	77	
	[illegible]780	48-5[illegible]	tr	tr		[illegible]	[illegible]	
	[illegible]781	[illegible]-53	tr	tr		[illegible]	[illegible]	
	[illegible]782	53-55	tr	tr		[illegible]	[illegible]	
[illegible]-[illegible]-56		55-109						[illegible] - [illegible] with
	[illegible]783	55-58	tr	tr		[illegible]	[illegible]	[illegible]rite 71-7[illegible].
	[illegible]784	58-6[illegible]	[illegible]	[illegible]		[illegible]	100	75-7[illegible] and 1[illegible]-1[illegible]5.
	[illegible]785	6[illegible]-63	[illegible]	[illegible]		[illegible]	100	
	[illegible]786	63-65	[illegible]	[illegible]		[illegible]	[illegible]	
	[illegible]787	65-68	[illegible]	[illegible]		[illegible]	77	
	[illegible]788	68-71	[illegible]	[illegible]		[illegible]	71	
	[illegible]789	71-73	tr	[illegible]	tr	[illegible]	[illegible]	
	[illegible]790	73-75	tr	tr		[illegible]	[illegible]	
	[illegible]791	75-78	[illegible]	tr	tr	[illegible]	66	
	[illegible]792	78-81	tr	[illegible]		[illegible]	63	
	[illegible]793	81-83	[illegible]	[illegible]		[illegible]	72	
	[illegible]794	83-86	tr	[illegible]		[illegible]	72	
	[illegible]795	86-88	[illegible]	[illegible]		[illegible]	[illegible]	
	[illegible]796	88-91	tr	tr		[illegible]	80	
	[illegible]797	91-93	[illegible]	tr		[illegible]	[illegible]	
	[illegible]798	93-96	[illegible]	tr		[illegible]	[illegible]	
	[illegible]799	96-98	tr	[illegible]		[illegible]	100	

Hole No. U-74-B2

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 2
By F. J. Cox
Date February, 1956

Hole No. U-71-82 Mine Blackbird Level 7400
Location
Bearing Dip Length
Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Pb.	% C. R.	Geology and Remarks
2-2	4700	98-100	.01	tr		2	100	
	4701	100-103	tr	tr		3	53	
	4702	103-105	.00	2.49	tr	2	22	
	4703	105-107	.02	.04		3	94	
2-2	4706	107-110				1	00	Bl altered brown diss with chlorite.
		110-111						Bl. Cupriferous sulphide with
	4707	111-112	tr	.00		0	00	dance veinlets and altera-
	4708	112-114	tr	tr		1	98	tion halos. Possible fault
	4709	114-116	tr	tr		2	04	115-117
	4710	116-117	tr	tr		2	04	
	4711	117-119	tr	tr		2	00	
	4712	119-121	tr	tr		2	02	
	4713	121-126	tr	tr		2	96	
	4714	126-127	tr	tr		2	96	
	4715	127-131	tr	tr		2	96	
	4716	131-134	tr	tr		2	96	
	4717	134-136	tr	tr		2	100	
	4718	136-137	tr	tr		2	100	
	4719	137-141	tr	tr		2	95	
	4720	141-144	.01	tr	nil	3	97	Very altered [illegible] with
								[illegible] some min[illegible] so lit[illegible]
								[illegible] mineral. It contains a
								small count of chalco-
								pyrite. Small inclusions
								of altered diabase or be
								[illegible]. [illegible] This fault is
								[illegible] at [illegible].
2-3		144-1[illegible]						Back to very siliceous rock
	47[illegible]	144-147	[illegible]	tr		[illegible]	00	containing small green
	47[illegible]	147-150	.00	tr		3		diabase and c[illegible] crystals.
	4733	150-153	.00	tr		[illegible]	04	
	4734	153-157	tr	tr		1	00	Altered and partially silicified
								[illegible] vein with chlorite
								and pyrite
		157-172						Cupriferous sulphide zone with
	4735	157-159	.07	tr		[illegible]	96	blue green [illegible], 6 inch
	4736	159-159½	tr	tr		[illegible]	96	fault at 158 and 172.
	4737	159-161	.00	.07		3	07	
	4738	161-164	tr	tr		[illegible]		
	4739	164-166	tr	tr				

Hole No. U-71-82

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 3
By [illegible]
Date February, 1956

Hole No. U-74-82 Mine Blackbird Level 7400
Location
Bearing Dip Length
Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
2-3	4740	166-168	tr	tr		2	85	
	4741	168-172	.07	.20		4	75	
2-7		172-[illegible]						very [illegible] pyritiferous
	5303	172-175	.8	181	tr	3	84	sulfide, faulted zones
	5304	175-177	.95	1.10	.02	2	100	175-177, [illegible]-180, 189, 191
	5305	177-179	.09	tr	tr	2	100	& traces of [illegible]
	5306	179-181	.8	.35	tr	2	100	vein at 193, [illegible]
	5307	181-184	1.07	.07	.06	3	80	mineral, sulfid and
	5308	184-186	.04	.07	.16	1	93	brecciated. Low [illegible]
	5309	186-188	.06	.04		2	96	mineralization 181-186
	5310	188-191	.06	.03		2	80	
	5311	191-193	.04	.02		2	75	
	5312	193-195	.04	.06		2	100	
	5313	195-197	tr	tr		2	96	
	5314	197-[illegible]	.10	.18		2	96	
	5315	[illegible]-203	.06	.03		3	97	
	5316	[illegible]-205	tr	tr		2	94	
	5317	[illegible]-[illegible]	tr	tr		2	94	
2-8	5318	[illegible]-10	tr	tr		3	70	Gray mineral pyritiferous sulfid
	5319	10-11	tr	tr		1	67	Gray to green diss. 3" fault zone 4-11.
	5320	11-12	tr	tr		1	80	Gray sulfid lightly [illegible] some [illegible]
		12-26						
	5321	12-[illegible]	tr	tr		2	76	[illegible] limonite stain
	5322	25-26	tr	tr		3	100	in the fracture. Some
	5323	26-[illegible]	tr	tr		2	90	[illegible] 3" fault zone.
	5324	[illegible]-[illegible]	tr	tr		2	98	
	5325	[illegible]-[illegible]	tr	tr		3	73	
		26-33						[illegible]
	5326	[illegible]-[illegible]	.02	.06		4	70	[illegible] and fractured. [illegible]
	5327	[illegible]-33	.02	tr		3	67	stain continues.
	5328	33-37				4	55	[illegible]
	5329	37-39	.03	tr				[illegible]
		39-44						limonite stained pyritiferous sulfid.
	[illegible]	39-41	tr	.04		2	76	
	[illegible]	41-44	tr	tr		2	70	
	[illegible]	44-47	tr	tr		3	85	
	[illegible]	47-51	.01	tr		3	80	
	[illegible]	51-55	tr	tr		4	100	

Hole No. U-74-82

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 4
By T. J. Cox
Date February 21, 1950

Hole No. U-74-62 Mine Blackbird Level 7400

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
		255-279½						Hornblendic, altered and brecciated
	14524	255-257	tr	tr		2	100	garnetiferous schist.
	14525	257-260	tr	tr		3	87	6 inches of brown dike
	14526	260-262	tr	.1		2	96	262-262½, and 274½-275. Bleached
	14527	262-263	.4	.5		1	100	schist 273-78 without garnets.
	14528	263-266	tr	tr		3	100	One with altered crystals of
	14529	266-269	tr	tr		3	100	hornblende or tourmaline.
	14530	269-273	.1	tr		4	75	
	14531	273-274	tr	tr		1	50	
	14532	274-276	tr	tr		2	100	
	14533	276-279	tr	tr		3	100	
	14534	279-282	tr	tr				Bleached schist giving it a
								cherty appearance and tex-
								ture. Some disseminated
								sulphide present. 3 inches
								of brown dike at 282.
		282-304						Well indurated garnetiferous
	14535	282-286	tr	.03		4	95	schist. A few amygdules
	14536	286-290	.1	.1		4	100	of quartzite present.
	14537	290-294	tr	tr		4	100	
	14538	294-299	tr	tr		5	100	
	14539	299-304	tr	tr		5	100	

Hole No. U-74-62

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

Budget Bureau No. 42-R1036.4
Approval expires 6-30-53.

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

RECEIVED
APR 26 1956

Month of [illegible], 1956 Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Minerals [illegible]
Address [illegible]
Contract Amount, $[illegible] Government Participation: [illegible] % Amount, $[illegible]

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) [illegible]		[illegible]	[illegible]		10 000.00	10 000.00
[illegible]					5250.00	5250.00
[illegible]		[illegible]	[illegible]		10262.59	10262.59
[illegible]	49.32	[illegible]	[illegible]	49.32	2224.88	2274.20
Drifting	1,563.54	105,112.30	106,676.10	1563.54	104472.93	106036.47
[illegible]	336.00	[illegible]	[illegible]	336.00	13897.10	14233.10
(2) [illegible]:						
[illegible]	1,343.30	[illegible]	[illegible]	1843.30	14379.43	16222.73
Supervision		[illegible]	[illegible]		59692.44	59692.44
Technical Services						
(3) [illegible]:						
[illegible]		[illegible]	[illegible]		2069.91	2069.91
Explosives						
[illegible]		[illegible]	[illegible]		2862.50	2862.50
Track						
[illegible]	293.82		293.82	293.82		293.82
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
[illegible]	540.00	[illegible]	[illegible]	540.00	4731.00	5271.00
Liability Insurance						
[illegible]						
[illegible]		[illegible]	[illegible]		7038.00	7038.00
(8) Contingencies (specify):						
TOTALS	[illegible]	[illegible]	[illegible]	4625.98	236 880.78	241 506.76

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

Date March 6, 1956 *Payee [illegible]

Per [illegible] Title [illegible]

*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)

1044a, narrative
Maps & D D logs to [illegible] 4/3/56

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

$3238 19

Signature [illegible]
(Authorized Certifying Officer)

Date 4-20-56 Vou. No. 1757
(See other side)

(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. E6445 in accordance with the terms of the contract.

Signature /S/ Alfred R. Service Title Mining Engr. Date 3/30/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature /S/ Wing G. Agnew Title Acting Exec. Officer Date 4/20/56

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 83-38476

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED
APR 6 - 1956

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

February
Calera Mining Company
Cobalt, Idaho

Idt. 8645
Cobalt & Copper

Month of _____ 195____ Docket No. DMEA _____ Contract No. _____
Operator's Name _____ Minerals _____
Address _____

OPERATION	Unit	Costs This Month	Units This Month	Costs To Date	Units To Date	Unit Costs To Date	Authorized by Contract	Unit Costs
Crosscut H, Timbering	Ft.	336.00	48	14,253.10	2033.5	7.00	6,000	35.535
Timber	Ft.			5,250.00	750	7.00	5,000	7.00
Drifting Spiling	Ft.			10,000.00	500.00	20.00	750	7.00
Crosscutting	Ft.						500	20.00
Raising Stage II	Feet	49.32	9	2,274.20	413	5.48	1,150	5.48
Raising Stage II	Each	540.00	180	5,271.00	1757	3.00	5,000	3.00
Underground Drilling Stage II	Ft.	1,843.30	545	16,222.73	4796.5	3.3822	10,500	3.3822
Drilling Diamond Core Stage I	Ft.			2,069.91	612	3.3822	664.3	3.3822
Churn		293.82	83	293.82	83	3.54		3.54
Drilling Stage I	Hrs.			10,262.39	864	11.878	864	11.878
Blasting Stage I	Ft.			59,692.44	8576.5	6.96	8,576.5	6.96
Trenching Stage I	Each			7,038.00	2346	3.00	3,100	3.00
Test Pits	Ft.			2,862.50	1145	2.50	1,145	2.50
Roads and Trails		$4,625.98		$342,146.39				
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. Calera Mining Company

Date _____ Operator _____
Per _____ Title _____

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) Payment [illegible] until amendment extending time is received.

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

CALERA MINING COMPANY

BLACKBIRD DIVISION

COBALT, IDAHO

RECEIVED
APR 6 - 1956

March 8, 1956

Mr. A. E. Weissenborn
Executive Office - Region 1
D.M.E.A. Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. D.M.E.A. 3143
Contract No. Idm-E645

Dear Mr. Weissenborn:

Enclosed are the maps and assays pertinent to the D.M.E.A. Project #3143 for the month of February, 1956.

The 74/787 H. W. Crosscut was advanced 44 feet in the early part of the month and stopped at the projection of the hanging wall mineralized zone for the purpose of diamond drilling. This heading continued to advance through a sheared, faulted and fractured garnet schist that required the driving of spiling. A total of nine sets of drift timber were stood.

From this heading a hole was drilled to 294 feet by the end of the month. Narrow zones of ore grade were intersected at 9½ feet, 175 feet and 181 feet. The last two zones would constitute 9½ feet of better than ore grade. The hole is being continued to approximately 300 feet, and another hole will be drilled to intersect this mineralization 100 feet to the northwest.

Drilling in the Blacktail zone was completed for the present. The long hole to prospect the hanging wall was completed at 502 feet with no further mineralization of significance found. Two hundred feet to the southeast another hole was drilled into the hanging wall for a distance of 226 feet. Two zones of ore grade and width were crossed.

Sincerely yours,

CALERA MINING COMPANY
BLACKBIRD DIVISION

E. B. Douglas

E. B. Douglas, Manager

EBD:srp

Enclosures

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 1
By [illegible] C. Cole
Date January, 1956

Hole No. C-71-78 Mine Blackbird Level

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
1/3	3307	0-5	.03	.03		5	60	Schistose quartzite broken 50°-65° to core, a little brown biotite [illegible] material at 5ft.
1/5	3309	5-9	.05	.03		4	80	5-8ft. schistose brown biotite dips 50° (?) to core such carbonate, broken quartzite 8-9ft.
		9-40						All schistose quartzite broken generally 65° to core, brecciated and contorted in places. Possible faults at 11 ft, 14 ft, 25ft.
	3310	9-14	.04	.10		5	100	
	3311	14-19	.03	.07		5	100	
	3312	19-24	.05	.3[illegible]		5	100	
	3313	24-29½	.0[illegible]	.1[illegible]		5½	100	
	3314	29½-35	.0[illegible]	.07		5½	100	
	3315	35-40	tr.	tr.		5	100	
		40-49						Quartzite contact grading into contorted
	3316	40-43	.03	.05		3	100	quartzite centered silicification
	3317	43-46	.11	.63		3	94	and sulfide mineralization with some
	3318	46-49	.05	.04		3	94	chalcocite 43-46 ft.
1/8		49-71						Schistose quartzite generally 45°-60° to
	3335	49-54½	.05	.04		5½	85	core, brecciated in places and generally
	3336	54½-60	.04	.06		5½	85	contorted possible faults at 53, 59 ft.,
	3337	60-65½	.05	.04		5½	85	scattered minor mineralization (some
	3338	65½-71	.19	.08		5½	85	cuprite coatings included) core
								generally very broken.
1/10		71-85						Schistose quartzite broken 50° to core
	3373	71-75	tr.	tr.		4	90	71-75ft., gradually changing to 30°
	3374	75-80	.03	tr.		5	90	to core 80-85 ft. core fairly broken
	3375	80-85	.02	tr.		5	90	
1/12		85-111						Very broken quartzite broken 30°-45° to
	3391	85-90	.03	.13		5	45	core with scattered irregular sulfide
	3392	90-95	tr.	tr.		5	44	mineralization. 92-93ft. ground to mud
	3393	95-100	.03	.15		5	20	(fault zone)
	3394	100-105	.03	.04		5	20	
	3395	105-109	.03	.05		4	30	
1/17	3523	109-111	.03	.03		2	80	Schistose quartzite 45° to core
	3524	111-114½	.50	1.65	tr.	3½	77	Schistose quartzite partly replaced by quartz-sulfides 60°-90° to core.
		114½-124						Very broken quartz with a little possible chalcocite
	3325	114½-119½	.07	.16		5	94	
	3326	119½-122	.08	.19		2½	52	
	3327	122-124½	.07	.06		2½	36	

Hole No. C-71-78

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 2
By [illegible]
Date January, 1956

Hole No. [illegible]-74-78 Mine _____ Level _____
Location _____
Bearing _____ Dip _____ Length _____
Latitude of Collar _____ Departure of Collar _____ Elevation _____

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
10/20	[illegible]58	1[illegible]4-1[illegible]	.07	[illegible]		5[illegible]	46	[illegible] (urtzite vit) contorted banding.
			[illegible]					
	[illegible]	114,-119	.1[illegible]	.[illegible]4				
	[illegible]	119,-12[illegible]	.09	.[illegible]7				
	[illegible]5[illegible]	1[illegible]4,-1[illegible]0	.1[illegible]	.46				

Hole No. _____

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 1
By [illegible]
Date [illegible]

Hole No. [illegible] Mine [illegible] Level [illegible]

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	[illegible]	% C. R.	Geology and Remarks
1/17	[illegible]	0-1	.02	.02		1	50	[illegible] 65° to core
								core
		[illegible]						[illegible]
	[illegible]	[illegible]	.05	[illegible]		[illegible]	05	65° to core, [illegible]
	[illegible]	[illegible]	.05	[illegible]		[illegible]	70	[illegible]
	[illegible]	[illegible]	.02	[illegible]		[illegible]	80	[illegible]
	[illegible]	[illegible]	.05	.05		[illegible]	00	[illegible]
	[illegible]	[illegible]	.05	[illegible]		[illegible]	05	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	05	[illegible]
	[illegible]	[illegible]	.03	.03		[illegible]	00	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	00	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	00	[illegible]
	[illegible]	[illegible]	.03	.05		[illegible]	00	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	00	
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	00	
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	05	
	[illegible]	[illegible]	[illegible]	.06		[illegible]	00	
	[illegible]	[illegible]	.05	.05		[illegible]	00	
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	07	
	[illegible]	[illegible]	.05	.07		[illegible]	100	
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	100	
	[illegible]	[illegible]	.03	.10		[illegible]	50	
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	00	
	[illegible]	[illegible]	.03	4.03	tr.	[illegible]	100	[illegible]
								[illegible]
1/19		[illegible]						[illegible]
	[illegible]	[illegible]	.01	6.01	tr.	[illegible]	100	[illegible]
	[illegible]	[illegible]	.00	.10	tr.	[illegible]	100	[illegible]
	[illegible]	[illegible]	.02	1.00	tr.	[illegible]	100	
	[illegible]	[illegible]	.00	.00	.00	1	100	[illegible]
								[illegible]
		[illegible]						[illegible]
	[illegible]	[illegible]	.00	.00	tr.	[illegible]	100	[illegible]
	[illegible]	[illegible]	.07	4.07	.06	[illegible]	100	
	[illegible]	[illegible]	.00	.00	tr.	[illegible]	100	[illegible]
		[illegible]						[illegible]
	[illegible]	[illegible]	.17	.00	.00	[illegible]	50	[illegible]
	[illegible]	[illegible]	.05	.03	tr.	[illegible]	100	[illegible]
	[illegible]	[illegible]	.17	4.00	tr.	[illegible]	100	[illegible]
	[illegible]	[illegible]	.00	.03	tr.	[illegible]	100	[illegible]
	[illegible]	[illegible]	.00	.00	tr.	[illegible]	100	[illegible]
	[illegible]	[illegible]	.11	.05	tr.	[illegible]	100	

Hole No. [illegible]

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. [illegible]
By [illegible]
Date

Hole No. [illegible] Mine Level

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	[illegible]	% C. R.	Geology and Remarks
		[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]	[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]	[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]	[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]	[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]	[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]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]

Hole No. U-74-80

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. [illegible]
By [illegible]
Date

Hole No. [illegible] Mine Level

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	[illegible]	% C. R.	Geology and Remarks
		[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]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	
1/24		[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]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
								[illegible]
1/25		[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]	[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]		[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]

Hole No. [illegible]

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. [illegible]
By [illegible]
Date
Level

Hole No. [illegible] Mine
Location
Bearing Dip Length
Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	[illegible]	% C. R.	Geology and Remarks
	[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]	
	[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]		5	[illegible]	[illegible]
								[illegible]
								[illegible]
		[illegible]						[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible] 2	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		5	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]
		[illegible]						[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		5	[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]
	663	[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]	[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]

Hole No. [illegible]

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 5
By [illegible]
Date

Hole No. Mine Level
Location
Bearing Dip Length
Latitude of Collar Departure of Collar. Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
	[illegible]	[illegible]	[illegible]	[illegible]		5	[illegible]	[illegible]
								[illegible] to core.
		[illegible]						[illegible] to core.
	[illegible]	[illegible]	.05	[illegible]		5	73	Fault at [illegible] ft.
	[illegible]	[illegible]	[illegible]	[illegible]		5	60	

Hole No. [illegible]

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 1
By [illegible] C. Cole
Date February, 1956

Hole No. D-74-81 Mine Blackbird Level 7400
Location
Bearing Dip Length
Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
								[illegible] series
2/8	[illegible]157	0-5	.01	Tr.		5	10	3" core - broken schistose quartzite, fault gouge at [illegible] ft.
		5-26						Very broken quartzite with contorted banding, scattered minor quartz-sulfide mineralization possible fault at 15½ ft.
	[illegible]158	5-10	.03	.15		5	40	
	[illegible]159	10-15	.03	.33		5	33	
	[illegible]160	15-17	.02	.07		2	35	
	[illegible]161	17-22	.03	.01		3	50	
	[illegible]162	22-26	.03	.03		4	60	
		26-50						Very broken quartzite with scattered sulfide mineralization, fault gouge at 37½ ft., rather soft unaltered looking argillite [illegible]-44½ ft., a little quartz-chalcopyrite carbonate at 47½ ft.
	[illegible]163	26-30	.09	.36		4	63	
	[illegible]164	30-32½	.03	.03		2½	50	
	[illegible]165	32½-37½	.02	.04		5	50	
	[illegible]166	37½-40	.07	.03		2	50	
	[illegible]167	42½-44½	.02	.36		4	65	
	[illegible]168	44½-50	.06	.01		5	30	
		50-58½						Fault gouge and brown dike material
	[illegible]169	50-54½	.02	.01		4	80	
	[illegible]170	54½-58½	.09	.14		4	75	
	[illegible]171	58½-60½	.04	.03		2	100	Contorted quartzite with some irregular sulfide mineralization
		60½-76						Schistose quartzite banded 60° to core with some quartz-sulfide chalcopyrite stringers, especially 65½-67½.
	[illegible]172	60½-65½	.31	.04		5	50	
	[illegible]173	65½-67½	1.00	.08		2	90	
	[illegible]174	67½-70½	.37	.13		3	100	
	[illegible]175	70½-73½	.04	1.90		3	100	
	[illegible]176	73½-76	.05	.27		2½	100	
	[illegible]177	76-79	.04	3.01		3	100	Brecciated quartz-sulfide vein, much pyrite
		79-85						Schistose quartzite with progressively less quartz-sulfide mineralization banding generally 60° to core.
	[illegible]178	79-82	.51	1.17		3	100	
	[illegible]179	82-85	.16	.33		3	100	
	[illegible]	85-87	.03	.11		2	100	Broken schistose quartzite banded 65° to core
	[illegible]181	87-89	.21	1.27		2	100	Quartzite partially replaced by quartz-sulfide-sulfite stringers, fragment of gray-green-brown dike at 87 ft. resembling usual schistose brown tanks dike but less altered much carbonate.

D-74-81
Hole No.

CALERA MINING COMPANY
BLACKBIRD DIVISION

Sheet No. 2

By [illegible]

Date

DIAMOND DRILLING RECORD

Hole No. [illegible]-74-41 Mine Level

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	ft.	% C. R.	Geology and Remarks
		[illegible]-114						Broken quartzite generally broken 60° to
	[illegible]	[illegible]-93	.03	.01		4	100	core, fragments of gray-green-brown
	[illegible]	[illegible]-95	[illegible]	.07		2	100	dike at 92 ft., 95ft., 99-101 ft., 104ft.
	[illegible]	95-9[illegible]	[illegible]	[illegible]		3	100	1[illegible] ft., 108 ft., 110 ft., this dike
	[illegible]	[illegible]-101	[illegible]	Tr.		3	100	material may be caving and flows on
	[illegible]	101-103	[illegible]	.03		2	100	each run into the hole.
	[illegible]	103-106	[illegible]	Tr.		3	100	
	[illegible]	107-109	.07	.02		3	100	
	[illegible]	109-112	Tr.	Tr.		3	100	
	[illegible]	112-114	Tr.	Tr.		2	100	
	[illegible]	114-118	Tr.	Tr.		4	75	RR quartzite quartzite rather irregularly
								fractured, broken 45°-60° to core, core
								very broken
		118-124						Chlorite brown basic dike
	[illegible]	124-131	[illegible]	Tr.		3	94	
	[illegible]	131-134	[illegible]	Tr.		3	66	
		134-142						Quartzite - no distinct banding
	[illegible]	142-147	Tr.	Tr.		2	80	
	[illegible]	147-150	Tr.	Tr.		3	90	
2/10		150-145						Chlorite quartzite broken 60°-65° to core
	[illegible]	150-157	[illegible]	Tr.		5	50	some coatings on some fracture
	[illegible]	157-[illegible]	[illegible]	Tr.		5	90	surfaces, core generally broken. Pentlandite
	[illegible]	160-145	[illegible]	Tr.		3	100	found 156-157, 1 pits at 15[illegible] ft., 3yrt.
	[illegible]	145-160	[illegible]	1.5[illegible]		1½	1.0	Contorted quartzite with some chalcopyrite
								mineralization especially just adjacent
								to dike.
	[illegible]	160-143	[illegible]	[illegible]		1½	67	Chlorite brown basic dike with many
								scattered crystals of carbonate.
		143-161						Chlorite quartzite dip varying 60° to
	[illegible]	161-15[illegible]	[illegible]	[illegible]		4	100	core at 145 ft., 50° to core at 100 ft.,
	[illegible]	15[illegible]-156	[illegible]	[illegible]		4	100	a few small stringers of pyrite and
	[illegible]	[illegible]-157	.7[illegible]	[illegible]		2	[illegible]	quartz around 160 ft.
	[illegible]	157-161	1.55	[illegible]		2	75	

Hole No. [illegible]-74-41

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

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Sheet No. 3
By [illegible]
Date

Hole No. [illegible]-81 Mine Level

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
		151-163						Chlorite Quartzite bands 40° to core,
	[illegible]55	[illegible]-16[illegible]	.[illegible]	.[illegible]		[illegible]	100	core generally very broken especially
	[illegible]56	1[illegible]-167	.01	Tr.		[illegible]	82	173-18[illegible] ft. Positive break at [illegible] ft.,
	[illegible]57	167-173	.02	.09		5	73	possible fault zone 17[illegible]-1[illegible] ft.,
	[illegible]	173-178	.04	Tr.		5	60	fragment of brown dike at 1[illegible] ft.
	[illegible]59	178-180	.04	Tr.		[illegible]	88	
	[illegible]60	180-183	.03	.03		[illegible]	52	
	[illegible]61	183-185	.03	.[illegible]		[illegible]	90	Broken section with some sulphide mineralization
								in center and scattered from edge of
								massive sulphides throughout fault zone
								183-185 ft.
		185-197						Brown Quartzite banded 60° to core,
	[illegible]62	185-187	.[illegible]	.01		1[illegible]	80	sulphides from basic dike 185-189 ft.
	[illegible]63	187-19[illegible]	.[illegible]	.[illegible]		9	80	
	[illegible]64	19[illegible]-197	.[illegible]	Tr.		5	80	Sulphides from basic dike 65° to core 192-195 ft. Brown Quartzite banded 55° to core 195-197 ft., Quartzite somewhat
[illegible]-13		197-204						Chlorite Quartzite with some thin chert
	[illegible]66	197-[illegible]	Tr.	Tr.		3[illegible]	[illegible]	bands 60°-65° to core
	[illegible]67	[illegible]-204	Tr.	Tr.		4	75	
		204-[illegible]						Brown basic dike darker and more brecciated
	[illegible]	204-209	.1[illegible]	Tr.		4[illegible]	100	along edges, this zone more broken
	[illegible]69	209-213	.1[illegible]	.[illegible]		4[illegible]	100	green in center, 6" in place has
	[illegible]70	213-21[illegible]	.1[illegible]	.[illegible]		5	100	black grains instead of chert with
								carbonate, fair amount carbonate
								throughout, fault at 2[illegible] ft.
		21[illegible]-226						Broken Quartzite banded 40°-45° to core
	[illegible]72	21[illegible]-22[illegible]	.[illegible]	.07		3[illegible]	80	
	[illegible]73	22[illegible]-226	.03	Tr.		4	80	

[illegible]-81
Hole No.

ASSAY RECORD
CALERA MINING CO.

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APR 6 - 1956

Chute Sect. February, 1956 Level 7600

Drift C3143 Working 7077-C

Date	Sample Number	Location From	Location To	Kind	Wth.	% Co	% Cu	Oz. Au		REMARKS
2/8	X4152	~~#118~~ #169	#120½	Chip	7½	tr.	tr.			Right rib
	X4153	#120½	#128	"	7½	04	10			Left rib
	X4154	#128	#135½	"	7½	01	09			" "
	X4155	#135½	#143	"	7½	02	02			" "
	X4156	#143	#150	Muck	7	09	43			
2/13	X4865	#150	#161	"	11	13	29			

Form M[illegible] 104 (Rev.)
(A[illegible] 1952)

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Budget Bureau No. 42-R1036.4
Expires 6-30-53.

RECEIVED
APR 26 1956

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1956 Docket No. DMEA 3143 Contract No. Idm-[illegible]
Operator's Name Calera Mining Company Minerals [illegible] Copper
Address [illegible], Idaho
Contract Amount, $[illegible] Government Participation: [illegible] % Amount, $[illegible]

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		10,000.00	10,000.00		10000.00	10000.00
Drilling Heavy Timbering	276.50	4,973.50	5,250.00	276.50	4973.50	5250.00
Bulldozing Trenching		10,262.59	10,262.59		10262.59	10262.59
Crosscutting Raising	54.80	2,170.08	2,224.88	54.80	2170.08	2224.88
Drifting	2,467.45	102,625.11	105,112.56	1847.82	102625.11	104472.93
Normal Timbering	371.00	13,526.10	13,897.10	371.00	13526.10	13897.10
(2) Labor and Supervision: Labor Core Drilling State II	3,476.90	10,902.53	14,379.43	3476.90	10902.53	14379.43
Supervision Core Drilling State I		59,692.44	59,692.44		59692.44	59692.44
Technical Services						
(3) Operating Mat'ls. and Supplies: Timber Core Drilling State I		2,069.91	2,069.91		2069.91	2069.91
Explosives						
Pipe Core Drilling State I		2,862.50	2,862.50		2862.50	2862.50
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 State II	810.00	3,921.00	4,731.00	810.00	3921.00	4731.00
Liability Insurance						
Core Drilling Analysis State I		7,038.00	7,038.00		7038.00	7038.00
(8) Contingencies (specify):						
Totals	7,476.65	230,043.76	237,520.41	6837.02	230043.76	236880.78

I certify that the above bill is correct and just and that payment therefor has not been received.
Date February 8 *Payee Calera Mining Company
Per [illegible] Title [illegible]

*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:

$4785 91

Signature [illegible]
(Authorized Certifying Officer)

Date 4-20-56 Vou. No. 1757
(See other side)

Iowa - [illegible]
& maps to Washington 4/3/56

(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 645 in accordance with the terms of the contract.

Signature 151 Alfred R. Service Title Mining Engr. Date 2/21/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature 151 Wing G. Agnew Title Acting Exec. Officer Date 4/20/56

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 83-38476

RECEIVED
APR 2 6 1956

DMEA Field Team, Region I, NM District

April 20, 1956

Certifying Officer, Region I

Contract Idm-1645, Golern Mining Co. Monthly operating report for January 1956.

The subject operating report has been received and processed for payment.

A deletion of $639.63 has been made from the costs claimed for drifting and crosscutting. This covers 16 ft. of crosscut in the 74/852 Drift North which Government representatives feel should be classified as development work rather than as exploration.

Myrtle Purdy

cc: Operator
DMEA (2)
USGS (2)

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.1
Approval expires 6-30-53.

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

RECEIVED
APR 6 - 1956

Month of January 195 6 Docket No. DMEA 3143 Contract No. 1d-645
Operator's Name Calera Mining Company Minerals Cobalt and
Address Cobalt, Idaho Copper

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	ft.	2,457.45	70	105,112.56	2950	35.635	6000	35.535
Crosscutting Timbering	ft.	371.00	53	13,897.10	1965.3	7.00	5000	7.00
Raising Heavy Timbering	ft.	276.50	39.5	5,250.00	750	7.00	750	7.00
Shafts Spiling	ft.			10,000.00	500.00	20.00	500	20.00
Winzes Framing	Sets	54.00	10	2,224.88	406	5.48	1150	5.48
Drilling: Core Stage II	ft.	810.00	270	4,731.00	1577	3.00	5900	3.00
Drilling: Chip Stage II	ft.	3,476.90	1028	14,379.43	4251.5	3.3822	10500	3.3822
Underground Auger Stage I	ft.			2,069.91	612	3.3822	664.38	3.3822
Stripping								
Trenching	hrs.			10,262.59	864	11.878	864	11.878
Drilling: Pits Core Stage I	ft.			59,692.44	8576.5	6.96	8576.5	6.96
Roads and Trails Stage I	ft.			7,038.00	2346	3.00	3100	3.00
Sounding Stage I	ft.			2,862.50	1145	2.50	1145	2.50
Total Distributed Costs	$	7,476.65		$ 237,520.41				Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs	$	7,476.65		$ 237,520.41				

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 February 2 Operator Calera Mining Company

Per [signature] Title [signature]

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)

Payment is being held up until Government extending time is required

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 83-38475

CALERA MINING COMPANY

BLACKBIRD DIVISION

COBALT, IDAHO

RECEIVED
APR 6 - 1956

February 3, 1956

Mr. A. E. Weissenborn
Executive Office - Region 1
D.M.E.A. Field Team
South 157 Howard Street
Spokane 8, Washington

Re: Docket No. D.M.E.A. 3143
Contract No. Idm-E645

Dear Mr. Weissenborn:

Enclosed are the maps and assays pertinent to the D.M.E.A. Project No. 3143 for the month January, 1956.

Work on the D.M.E.A. Project was continued on a three shift basis for the month. The 74/787 H.W. Crosscut was advanced 52 feet. This heading continued to advance through a sheared and fractured zone that requires the driving of spiling.

The 74/852 Drift North was collared and advanced 18 feet. This is being driven to examine the ore body in the northwest area of the D.M.E.A. Project that was found by the underground diamond drilling.

Diamond drilling amounted to 1,028 feet for the month. Drilling to the north from the face of the 7400 drift north intersected 5½ feet of ore. Four holes on the south end of the newly explored part of the Blacktail zone indicate the ore zone in this area to be of good grade but rather irregular in shape. Hole U-74-80 was extended to 500 feet to test the hanging wall of the zone and intersected mineralization revealed in the surface trenches and missed by surface drilling. However, the ore intersected is rather narrow and low grade. Drilling of the footwall so far shows a similar type of mineralization.

Another hole was completed in the area between the Brown Bear and Blacktail ore zones and also located mineralization which appears to be discontinuous and of marginal grade.

Very truly yours,

CALERA MINING COMPANY
BLACKBIRD DIVISION

E. B. Douglas

E. B. Douglas, Manager

EBD:srp

Enclosures

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 1
By [illegible]
Date December 1955

Hole No. [illegible]-7-75 Mine Blackbird Level 7400
Location 7400 [illegible]
Bearing [illegible] Dip [illegible] Length
Latitude of Collar 17,677N Departure of Collar [illegible] Elevation [illegible]

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	(°C° Series) Geology and Remarks
12-21	[illegible]251	0-3	.02	tr		3	63	[illegible] contorted [illegible] quartzite 20°-45° to core.
		3-7						[illegible] contorted [illegible] quartzite
	[illegible]	7-[illegible]	tr	tr		4	89	irregularly banded 20°-45° to core, minor
	[illegible]53	[illegible]-13	.05	.[illegible]		5	10	sulfide mineralization, at 29 ft.
	[illegible]254	13-18	.03	tr		5	[illegible]	
	[illegible]255	18-23	.04	tr		5	[illegible]	
	[illegible]256	23-28	tr	tr		5	67	
	[illegible]258	28-34	tr	.[illegible]		5	82	
	[illegible]258	34-37	tr	.05		3	73	
12-23		37-[illegible]						broken quartzite 75°-[illegible]° to core (banding)
	[illegible]719	37-42	tr	tr		5	61	minor sulfide mineralization at 54 ft., possible fault at 5[illegible] ft.
	[illegible]720	42-47	.07	.15		5	[illegible]	
	[illegible]721	47-52	.[illegible]	.11		5	16	
	[illegible]722	52-57	.11	.[illegible]		5	30	
	[illegible]723	57-62	.03	.11		5	44	
	[illegible]724	62-66	.02	tr		4	50	
	[illegible]725	66-71	.01	.05		4	5	
12-29		71-77						Very broken quartzite
	[illegible]271	71-74	.03	.06		4	30	
	[illegible]272	74-77	tr	tr		3	7	
	[illegible]273	77-80	.08	.05		3	75	[illegible] schistose brown basic dike with carbonate along schistosity in lenses 65° to core.
	[illegible]274	80-86	.01	tr		6	[illegible]	Contorted quartzite banded generally 70° to core.
	[illegible]275	86-87	1.29	.27		1	53	Quartz-sulfide - cobaltite stringers in quartzite.
		87-112						Broken quartzite bands generally 65°-70°
	[illegible]276	87-92	.03	.13		4	85	to core, fragments of brown basic dike
	[illegible]277	92-96	.07	.[illegible]		4	43	95-96 ft., some irregular quartz-sulfide
	[illegible]278	96-100	.[illegible]	.13		4	50	mineralization 96-100 ft, possible fault
	[illegible]279	100-103	.12	.36		3	13	at 117 ft.,
	[illegible]280	103-107	.06	tr		4	10	
	[illegible]281	107-112	.05	.05		5	20	
1-3		112-123						Very broken quartzite, scattered quartz-sulfide mineralization.
	[illegible]294	112-115	.10	1.16		3	57	
	[illegible]295	115-120	.02	.22		5	14	
	[illegible]296	120-123	.02	.02		3	64	

Hole No. [illegible]-7-7

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CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. _____

By [illegible]. C. Cole

Date January 1956

Hole No. [illegible]-7[illegible]-75 Mine [illegible] Lockbird Level 74[illegible]

Location _____

Bearing _____ Dip _____ Length _____

Latitude of Collar _____ Departure of Collar _____ Elevation _____

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	ft.	% C. R.	Geology and Remarks
1-3	[illegible]3297	123-126[illegible]	.1[illegible]	.1[illegible]		3[illegible]	57	Schistose brown basic dike with some sulfide (?) replacement, fault at 126[illegible] ft.
	[illegible]298	126[illegible]-132	.75	.3[illegible]		5[illegible]	55	Contorted and brecciated quartzite with irregular cobaltite and chalcopyrite, possible brown dike material 129[illegible]-13[illegible] ft.
	[illegible]3299	132-135[illegible]	.12	.07		3[illegible]	71	Schistose brown basic dike with some sulfide (?) replacement.
		135[illegible]-148						Contorted schistose quartzite 45°-[illegible]° to core with progressively less scattered sulfide mineralization.
	[illegible]	135[illegible]-139	.03	.31		3[illegible]	[illegible]	
	[illegible]3301	139-142	.4	.75		3	1[illegible]	
	[illegible]3302	142-145	.01	.1[illegible]		3	67	
	[illegible]3303	145-148	.02	.15		3	83	
				[illegible]				
	[illegible]3726	47-52	.15	.08				
	[illegible]3727	52-57	.07	[illegible]				
	[illegible]3728	66-7[illegible]	.1[illegible]	.1[illegible]				
	[illegible]3746	74-77	.09	.07				
	[illegible]3747	1[illegible]-1[illegible]	.24	.2[illegible]				
	[illegible]3748	1[illegible]-107	.14	.1[illegible]				
	[illegible]3749	107-11[illegible]	.09	.12				
	[illegible]3[illegible]	115-12[illegible]	.1[illegible]	.0[illegible]				

Hole No. [illegible]-7[illegible]-75

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 2
By [illegible]
Date [illegible]

Hole No. C-7-77 Mine [illegible] Level
Location
Bearing Dip Length
Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.		% C. R.	Geology and Remarks
1-3		0-10						[illegible] schistose quartzite 30° to core
	[illegible]42	[illegible]-5	.08	.37		5	70	
	[illegible]43	5-10	.07	[illegible]		5	80	
1-5		10-[illegible]						[illegible] schistose quartzite generally 30° to core, scattered minor sulfide mineralization, possible fault at 1[illegible] ft.
	[illegible]	10-15	.04	[illegible]		5	70	
	[illegible]	15-[illegible]	.01	[illegible]		5	30	
	[illegible]	[illegible]-25	.04	[illegible]		5	50	
	3338	25-[illegible]	.10	[illegible]		5	100	
1-8		[illegible]-76						Schistose quartzite somewhat contorted, generally 30° to core, faults at 35 ft, [illegible]2-3 ft., 47 ft, [illegible] ft (with brown clay material), core very broken [illegible]-[illegible] ft, fault zone [illegible]-[illegible] ft, mineralization in fault zone 67-[illegible] ft, schistose brown [illegible] 74-77 ft, with faults on both sides, small fault at [illegible] ft.
	[illegible]	10-35	.03	.24		5	90	
	[illegible]	35-[illegible]	.03	[illegible]		5	90	
	[illegible]	40-45	.02	[illegible]		5	90	
	[illegible]	45-50	.04	.07		5	90	
	[illegible]	50-55	.03	.07		5	90	
	[illegible]	55-[illegible]	.03	.04		5	90	
	3325	60-65	[illegible]	[illegible]		5	90	
	3326	65-[illegible]	.03	1.56		5	90	
	3327	70-75	.04	.40		5	90	
	3328	75-78	.10	.04		5	100	
	3329	78-[illegible]	.14	5.[illegible]	tr	2	90	Schistose quartzite 30°-40° to core with some sulfide mineralization.
		80-92						Schistose quartzite, associated with scattered mineralization, fault zone 8[illegible]-86 ft., quartzose schist 90-92 ft., possible fault at 88 ft.
	3330	80-83	.10	.26		3	74	
	3331	83-88	.02	.21		4	80	
	332	88-92	.05	.19		4	76	
	3333	92-94	.05	.31		2	90	
	3334	94-97	1.19	4.90	.020	3	100	Quartz-chalcopyrite - cobaltite vein with some unaltered quartzose schist, fault zone (mineralized) 94-96 ft.
1-10	3336	97-100	.30	1.04	tr	2	80	Quartzose schist 30° to core with quartz cobaltite sulfide mineralization 30° to core, possible fault 97-99 ft.
		100-101						Quartzose schist generally 30° to core with scattered parallel mineralization, possible large fault at 1[illegible] ft., faults at 110-111 ft., 110, 1[illegible]-1[illegible] ft.
	3965	100-103	.08	.52		3	87	
	3966	103-108	.10	.03		5	86	
	3967	108-113	.05	.51		5	87	
	3968	113-117	.02	.15		6	87	
	3969	117-119	.05	1.36		2	85	
	3970	119-122	tr	.66		3	87	
	3971	122-127	.03	.34		5	86	

Hole No. C-7-77

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CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. [illegible]
By [illegible] C. Cole
Date

Hole No. 1-74-77 Mine [illegible] Level

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
1-17	[illegible]972	12[illegible]-131	.03	.55		4[illegible]	87	
		131-156						Schistose quartzite generally banded
	4318	131-136	.01	.09		3[illegible]	09	30° to core, scattered minor mineralization
	4319	136-140	.10	.20		4	10[illegible]	fault gouge at 1[illegible]3 ft.,
	4320	140-145	tr	.05		5	10[illegible]	possible fault low angle to core at 15[illegible] ft
	4321	145-150	.06	.23		5	9[illegible]	a little bleached 151-152 ft, fault gouge
	4322	150-154	.19	.45		4	88	at 151 ft.
1-20		156-196						Quartzite banded 25° to core, broken and
	4351	156-160	.02	.02		6	10[illegible]	generally iron stained along fracture
	4352	160-166	.01	.14		6	10[illegible]	surfaces. Banding 20° to core 156-169 ft.
	4353	166-172	tr	.13		6	10[illegible]	30° to core 1[illegible]-1[illegible] ft possible fault
	4354	172-178	.01	.88		6	10[illegible]	163-164 ft., white [illegible] to 191-192 ft,
	4355	178-184	.03	1.38		6	59	fault at 17[illegible] ft.
	4356	184-1[illegible]	.21	[illegible].03		6	50	
	4357	19[illegible]-196	.04	.7		6	67	

Hole No. [illegible]

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. 2
By W. C. Cole
Date January 1956

Hole No. D-74-79 Mine Blackbird Level 7400

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
1-8		0-45						Schistose quartzite, somewhat contorted generally banded 20° to core.
	X3340	0-3	tr	tr		3	89	
	X3341	3-7	tr	tr		3	89	
	X3342	7-10	tr	tr		3	89	
	X3343	10-14	tr	tr		3	89	
	X3344	14-17	tr	tr		3	89	
	X3345	17-21	tr	.03		3	89	
	X3346	21-24	tr	tr		3	89	
	X3347	24-30	tr	tr		5	89	
	X3348	30-35	.04	tr		5	90	
	X3349	35-40	.07	tr		5	90	
	X3350	40-45	tr	tr		5	90	
1-10		45-112						Schistose quartzite generally 30° to core 45-48 ft., 30°-90° to core 48-67 ft., too broken to see banding angle 67-80 ft., 20° to core 80-87 ft., somewhat contorted, too broken to see banding angle 87-105 ft 20° to core 105-112 ft., fault gouge at 51 ft., a little carbonate at 50 ft, fragments of brown schistose dike 70-71 ft., fault 75-77 ft., fault gouge and breccia alternating with quartzite 80-93 ft., faults at 102-103 ft, 109-110 ft., (low angle).
	X3951	45-49	tr	tr		4	85	
	X3952	49-54	tr	.21		5	84	
	X3953	54-59	tr3	tr9		5	84	
	X3954	59-64	tr	tr		5	84	
	X3955	64-69	tr	tr		5	80	
	X3956	69-74	.22	.22		5	49	
	X3957	74-80	.16	.54		5	49	
	X3958	80-85	tr	tr		5	49	
	X3959	85-91	.11	.05		5	49	
	X3960	91-96	.48	.22		5	49	
	X3961	96-101	.11	tr		5	49	
	X3962	101-107	.02	tr		5	50	
	X3963	107-112	.03	tr		5	70	
1-12		112-132						Broken quartzite, contorted banding, minor mineralization.
	X3976	112-117				5	50	
	X3977	117-122	.01	tr		5	50	
	X3978	122-127	tr	tr		5	50	
	X3979	127-132	.01	.04		5	60	
	X3980	132-137	.06	.07		4	60	Schistose brown basic dike alternating with brown quartzite (with some sericite) banding 30°-90° to core
	X3981	137-139	.08	.02		2	65	Broken quartzite with minor sulfide mineralization.
	X3982	139-141	.71	.02		2	70	Quartzose schist with quartz-sericite stringers generally 45° to core.
		141-166						Brecciated contorted quartzite banding.
	X3983	141-144	.05	.28		3	73	Generally 30° to core, a little sericite quartz-sulfide mineralization.
	X3984	144-146	.05	.69		2	75	

D-74-79

Hole No.

CALERA MINING COMPANY
BLACKBIRD DIVISION

DIAMOND DRILLING RECORD

Sheet No. [illegible]
By G. C. Cole
Date

Hole No. U-74-79 Mine Level

Location

Bearing Dip Length

Latitude of Collar Departure of Collar Elevation

Date	Sample No.	Depth From — To	Assay Value % Co.	% Cu.	Oz. Au.	Ft.	% C. R.	Geology and Remarks
	13985	146-148	.08	.05		2	75	Concentrate 146-148 ft., 152-155 ft.
	13986	148-151	.1	tr		3	73	
	13987	151-155	.13	.05		4	73	
	13988	155-158	tr	tr		3	73	
	13989	158-162	tr	tr		4	73	
	13990	162-166	tr	tr		4	73	

U-74-79

Hole No.

ASSAY RECORD
CALERA MINING CO.

RECEIVED
APR 6 - 1956

Chute Sect. January 1956 Level 740

[illegible] Working 767 [illegible]

Jan 1955

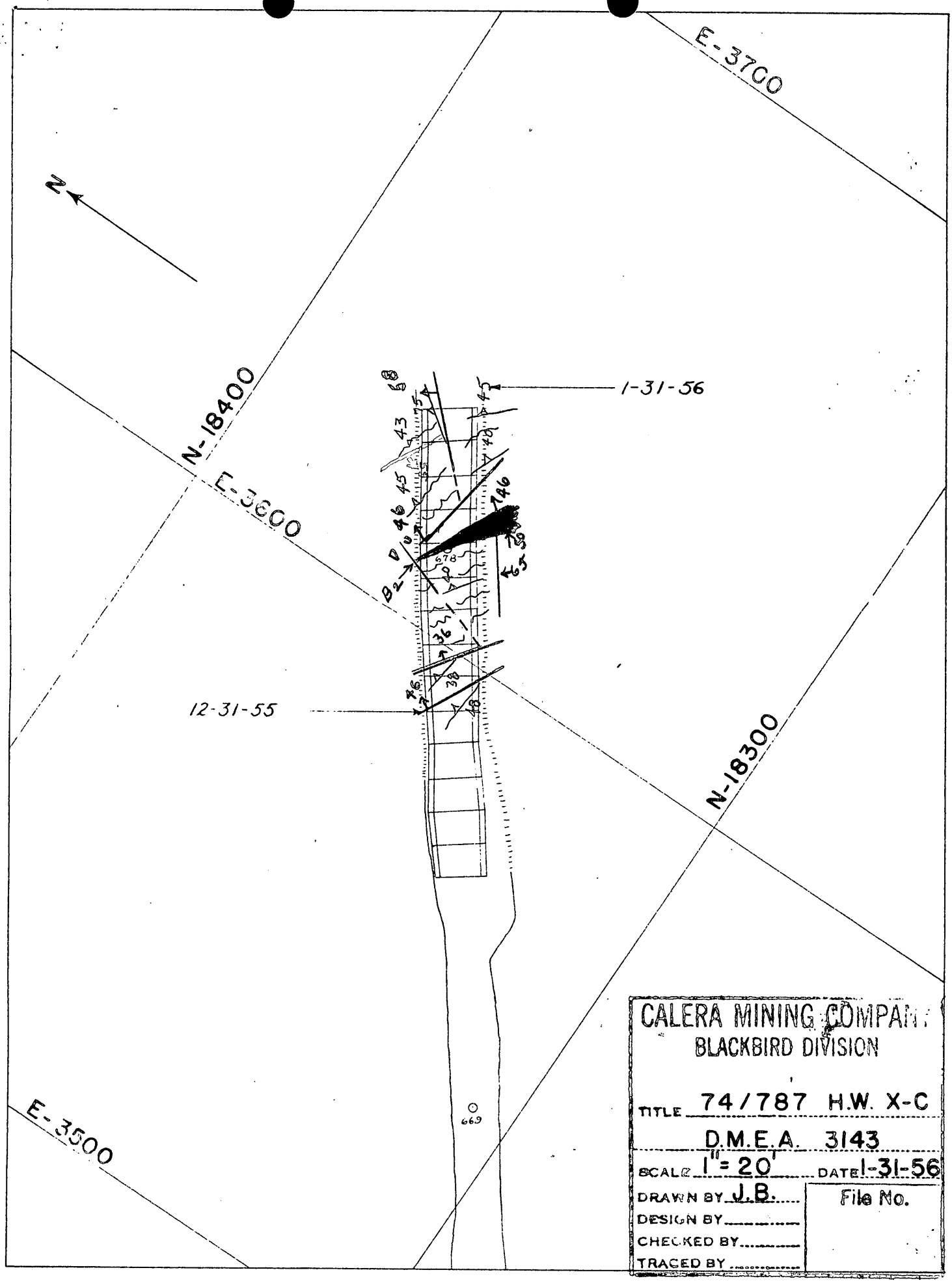
Date	Sample Number	Location From	Location To	Kind	Wth.	% Co	% Cu	Oz. Au		REMARKS
2-2	[illegible]77	4[illegible] #64	#72	[illegible]	6	0.1	tr			
"	[illegible]80	#72	#78	"	6	0.4	0.8			
1-22	[illegible]88	#78	#84	[illegible]	6	[illegible]	0.2			
2-2	[illegible]81	#84	#93	[illegible]	9	0.1	tr			
	[illegible]13	#93	100	[illegible]	7	0.3	13			
	[illegible]37	#100	#108	"	8	0.1	11			
	[illegible]51	#108	#113	"	5	0.3	10			
2-2	[illegible]78	#113	#121	"	8	0.1	[illegible]			

ASSAY RECORD
CALERA MINING CO.

Chute Sect. January 1956 Level 7400

[illegible] 3143 Working 052 drift north

Date	Sample Number	Location From	Location To	Kind	Wth.	% Co	% Cu	Oz. Au		REMARKS
1-6	23337					.05	.06			[illegible]
2-2	23076	#12	#18			.03	tr			(Measured along C.L. from 7400 D.R.
2-2	23077	#18	#24			.07	tr			(left rib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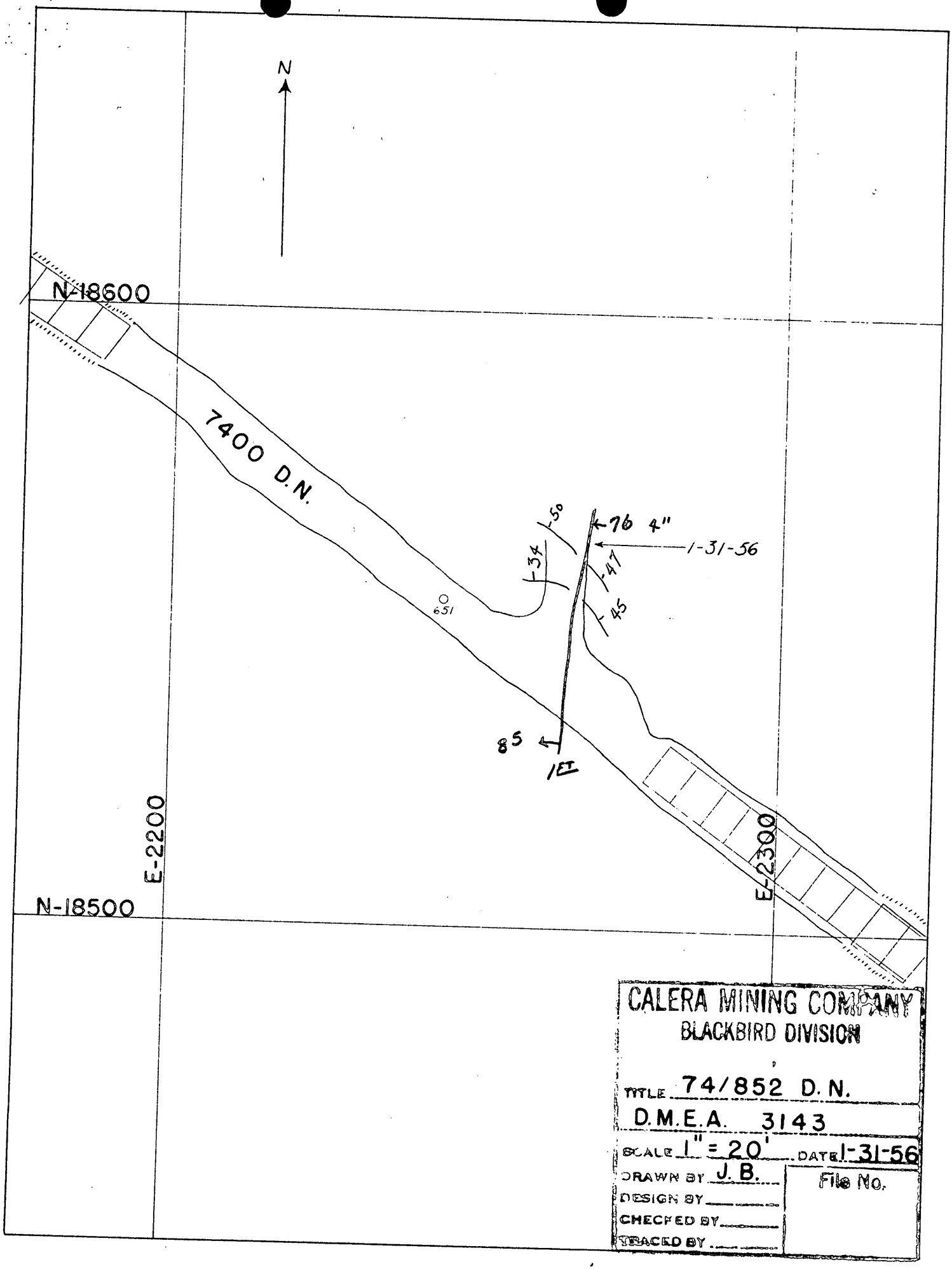
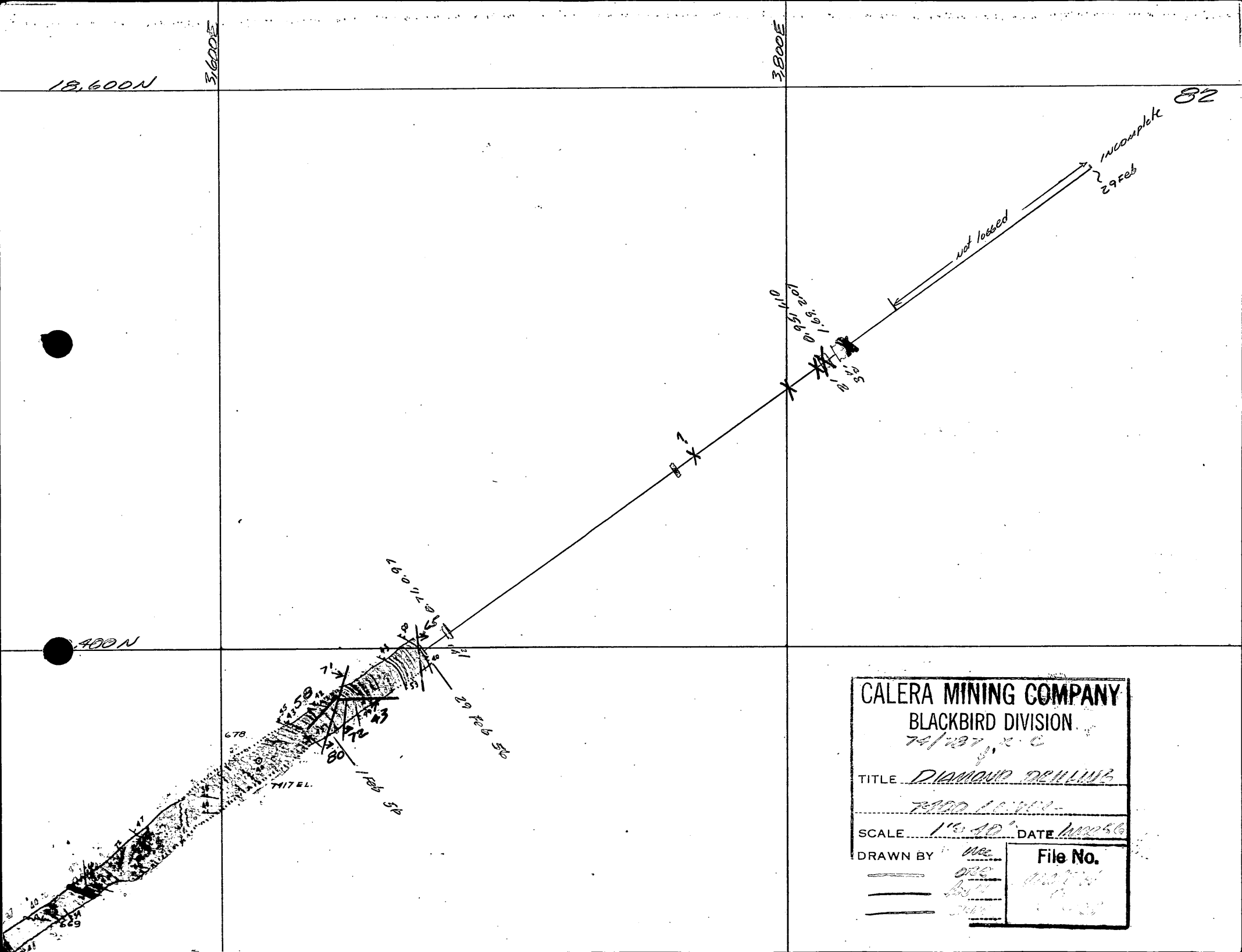
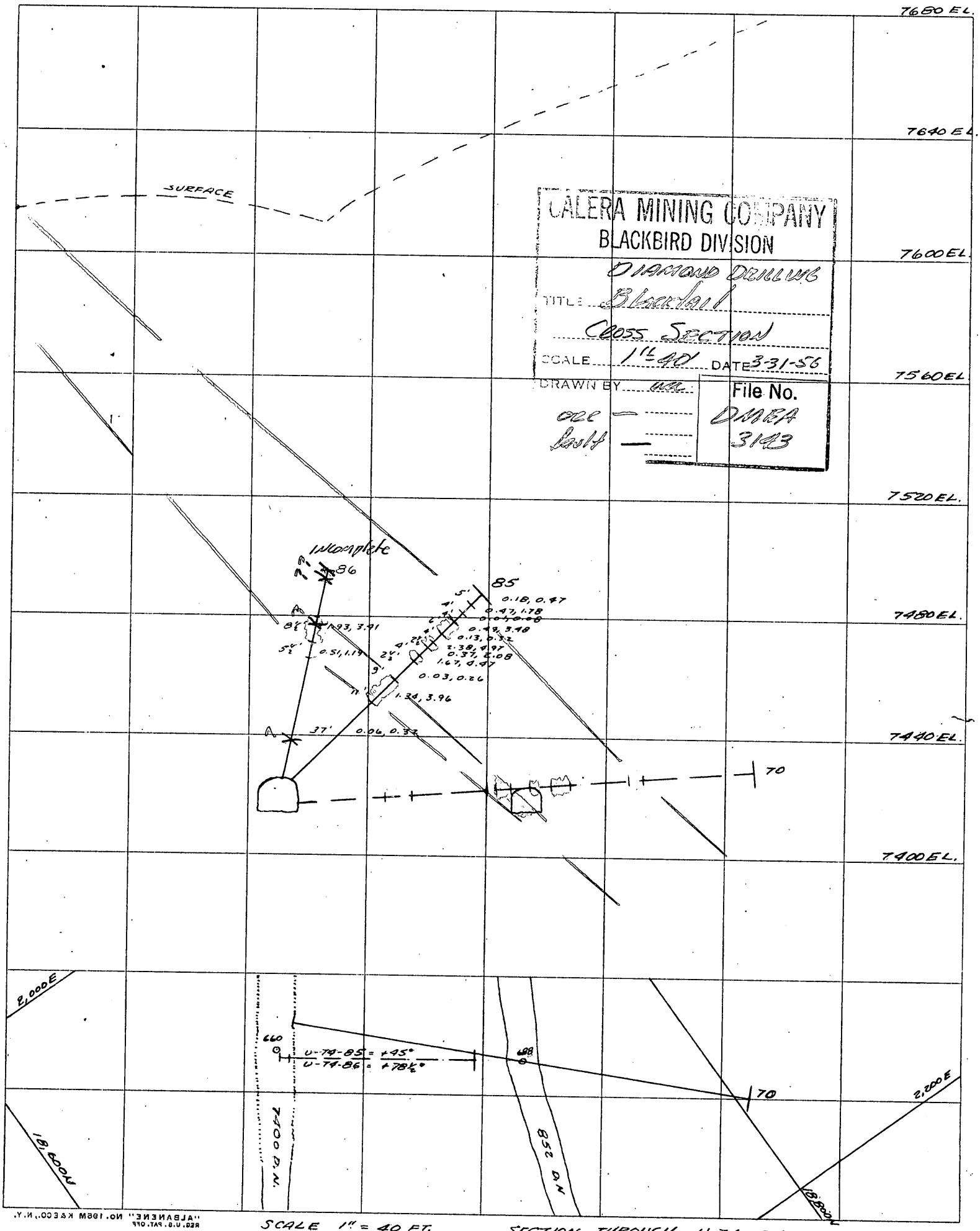
N
N-18400
E-3600
1-31-56
12-31-55
N-18300
E-3500
CALERA MINING COMPANY
BLACKBIRD DIVISION
TITLE 74/787 H.W. X-C
D.M.E.A. 3143
SCALE 1" = 20'
DATE 1-31-56
DRAWN BY J.B.
DESIGN BY
CHECKED BY
TRACED BY
File No.

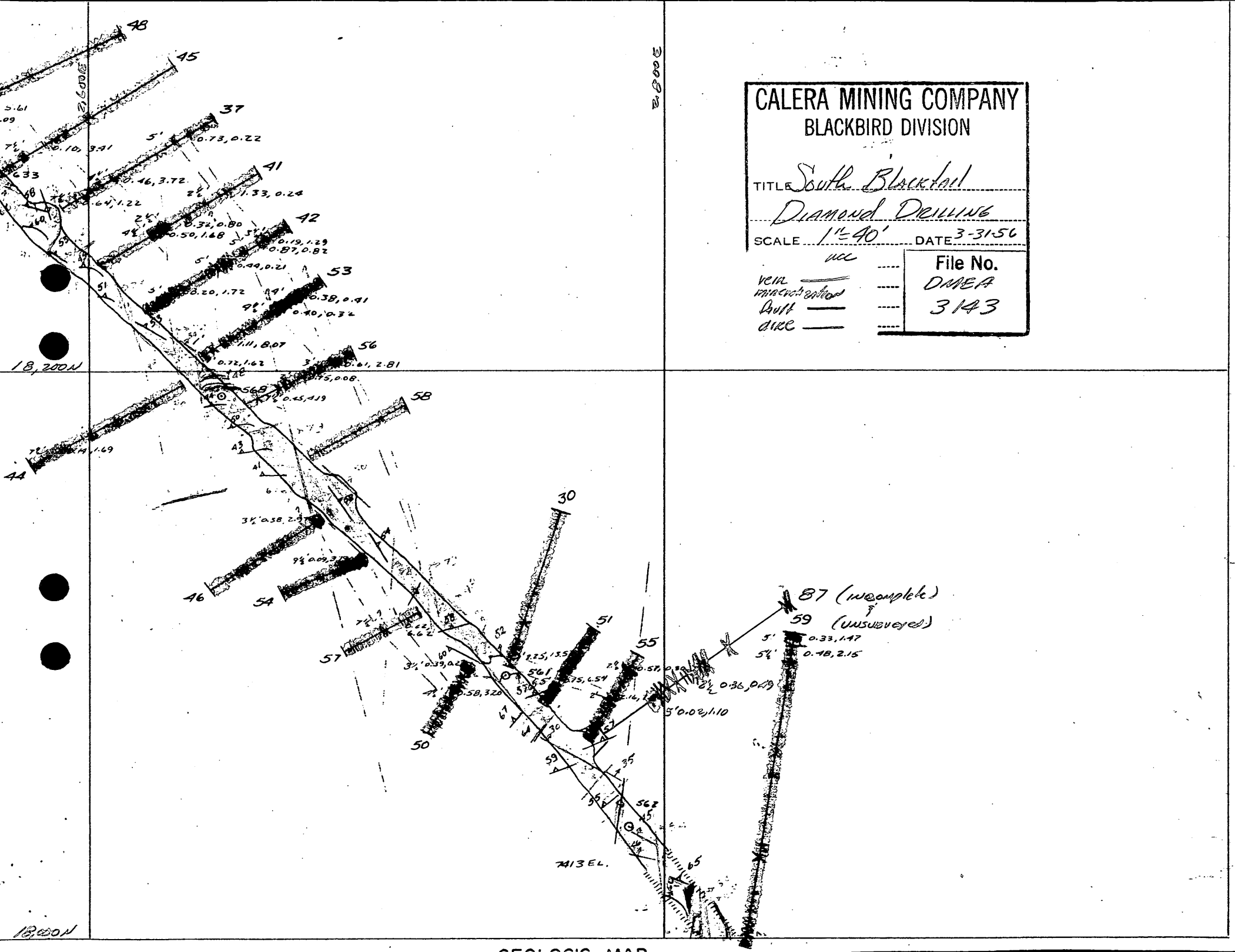

N
N-18600
7400 D.N.
-50
76 4"
1-31-56
-34
-47
-45
651
85
1ET
E-2200
E-2300
N-18500
CALERA MINING COMPANY
BLACKBIRD DIVISION
TITLE 74/852 D. N.
D.M.E.A. 3143
SCALE 1" = 20'
DATE 1-31-56
DRAWN BY J. B.
DESIGN BY
CHECKED BY
TRACED BY
File No.

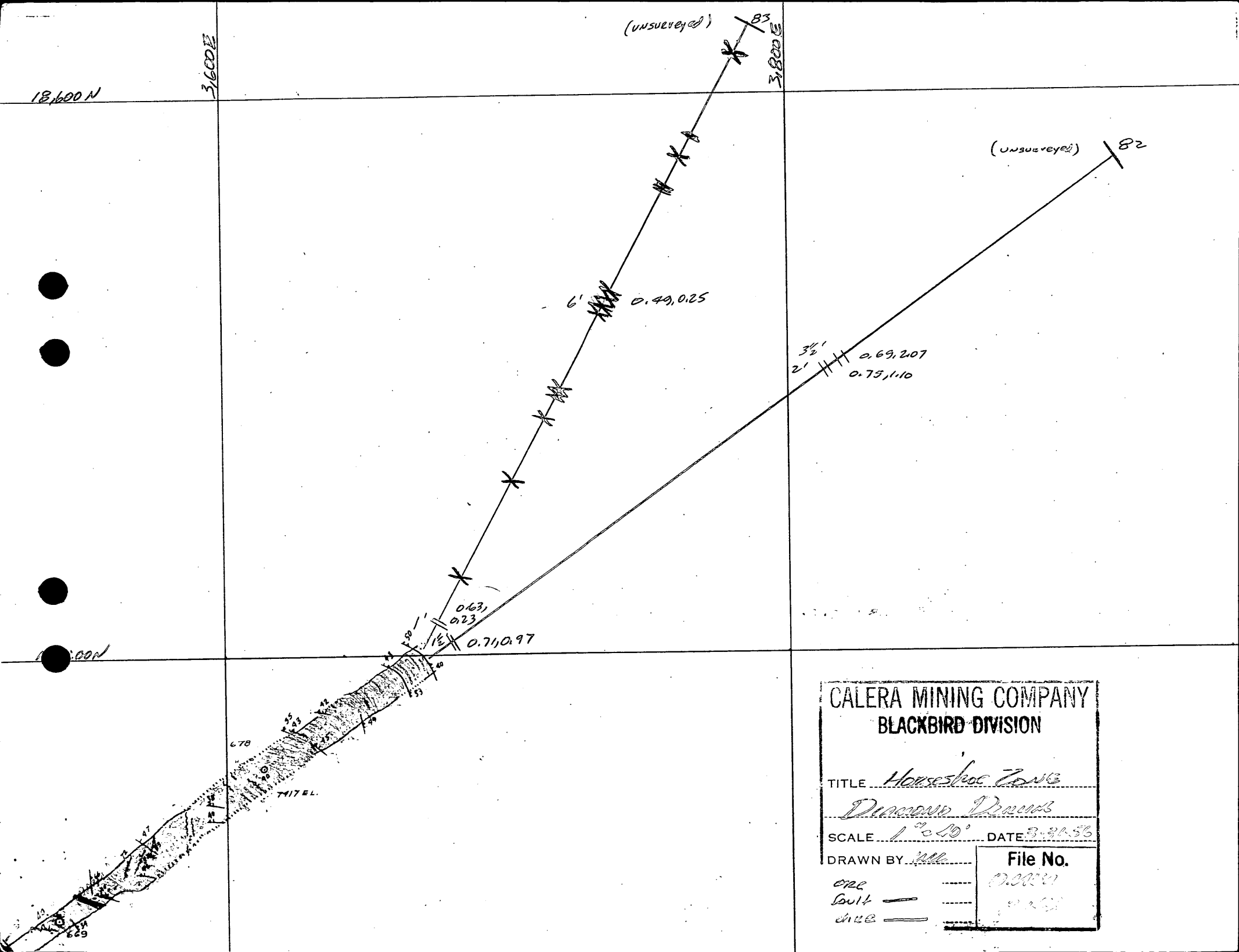

18,600N
3,600E
3,800E
82
incomplete
29 Feb
not logged
29 Feb 56
1 Feb 56
678
MITEL.
CALERA MINING COMPANY
BLACKBIRD DIVISION
TITLE DIAMOND DRILLING
SCALE 1" = 40'
DATE
DRAWN BY
File No.

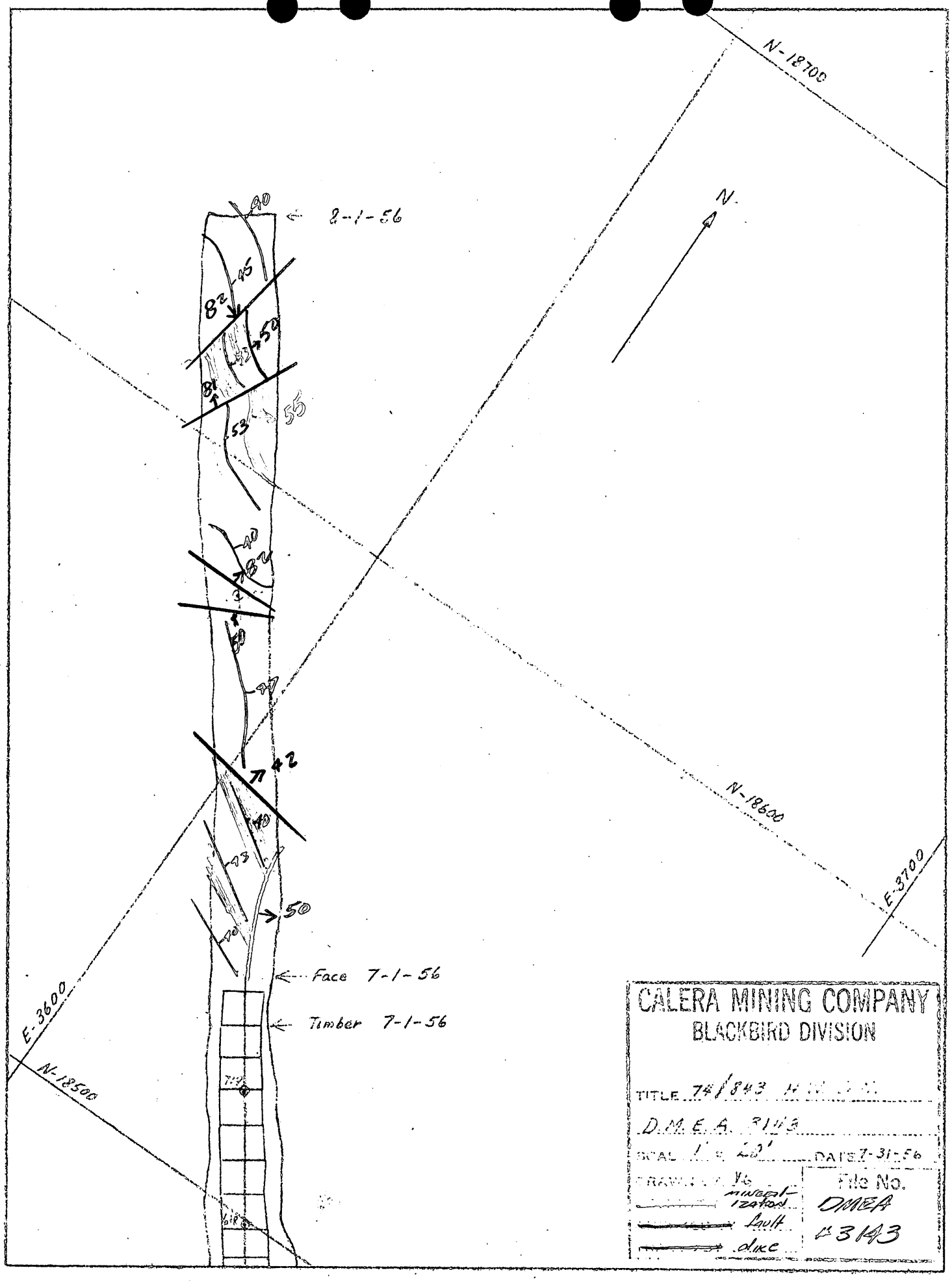


SCALE 1" = 40 FT.

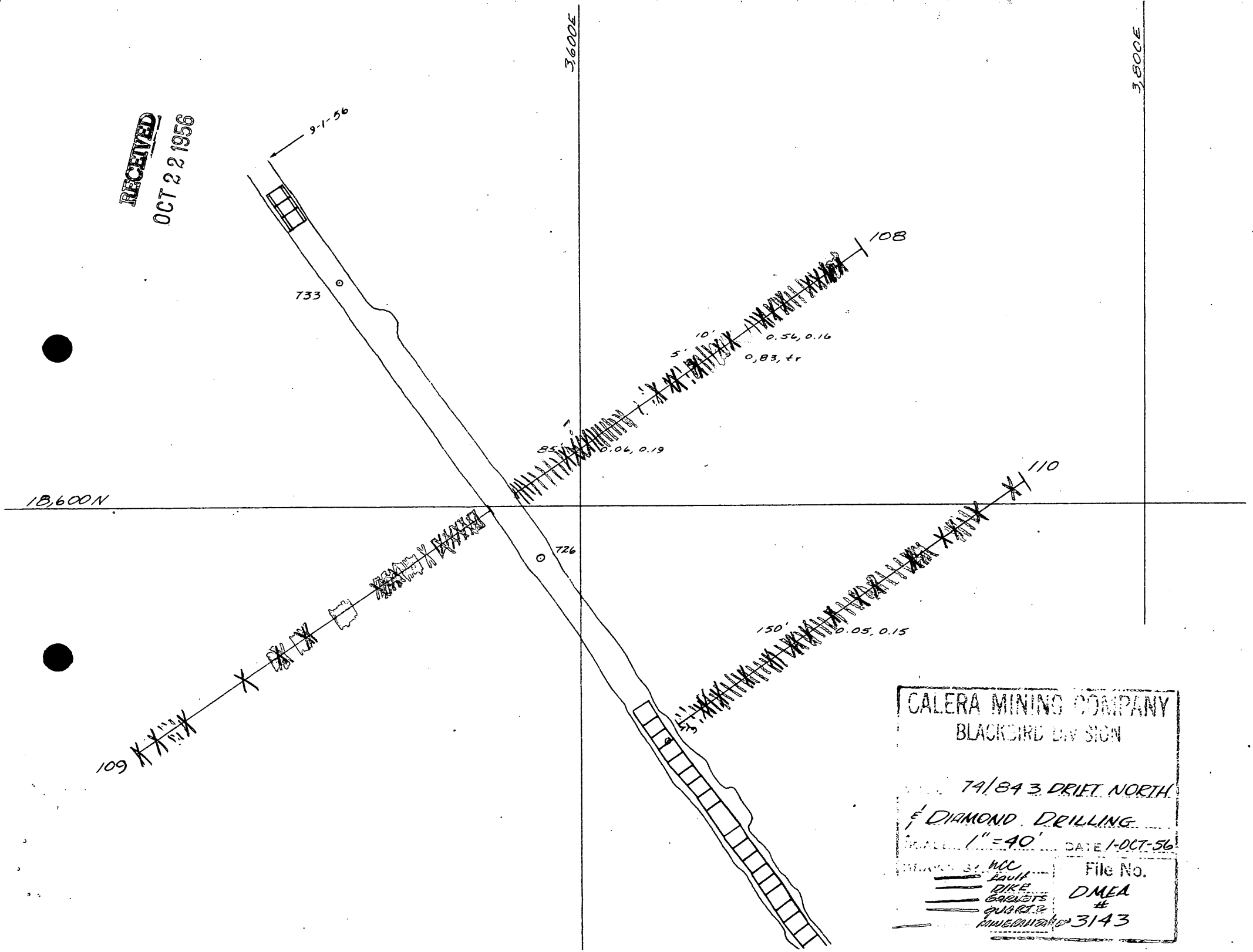
SECTION THROUGH U-74-85,86 LOOKING N.W.

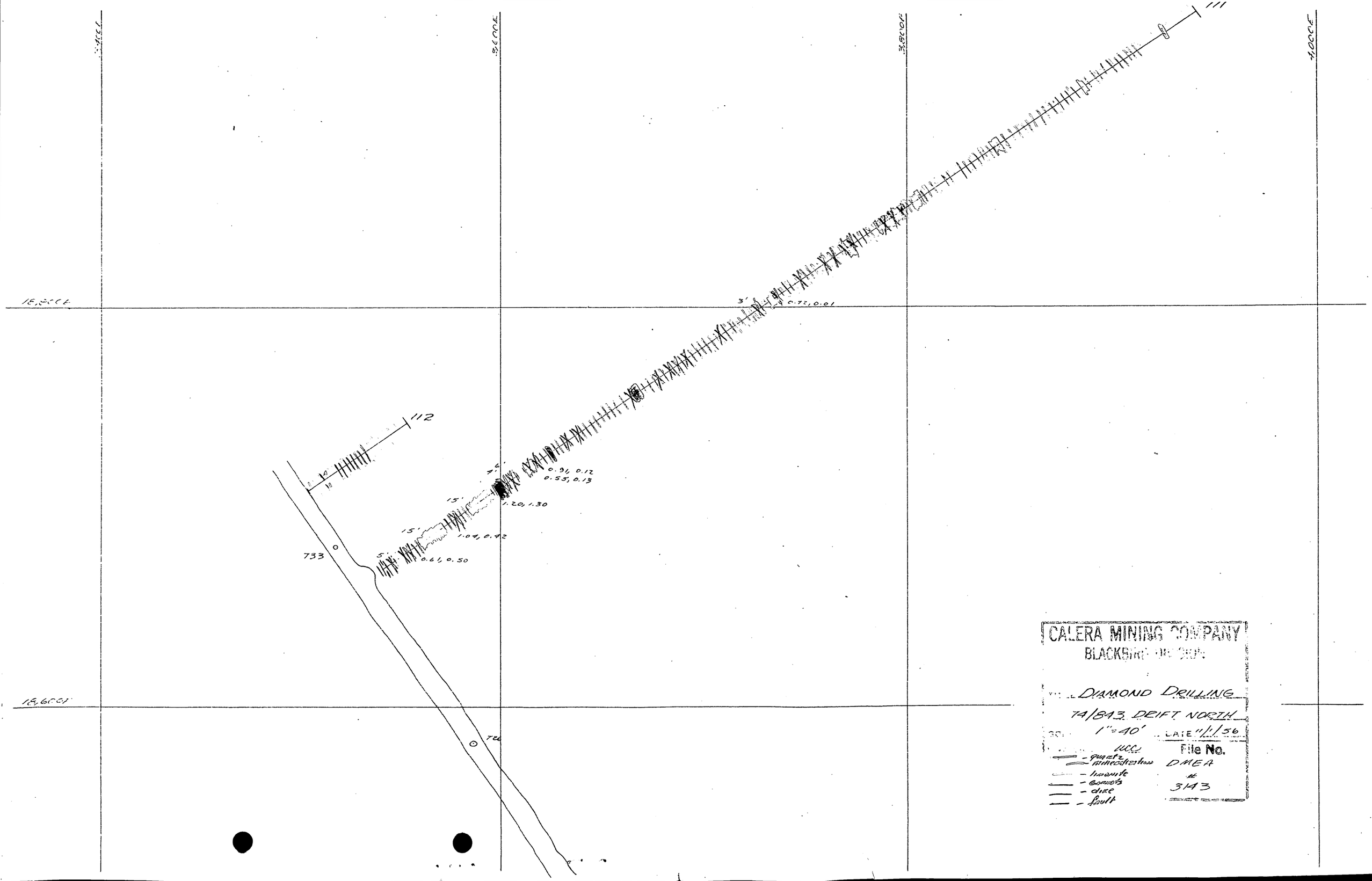

CALERA MINING COMPANY
BLACKBIRD DIVISION
TITLE South Blacktail
Diamond Drilling
SCALE 1" = 40'
DATE 3-31-56
vein
mineralization
fault
dike
File No.
DMEA
3143
2,600E
2,800E
18,200N
18,000N
7413 EL.
48
45
37
41
42
53
56
58
44
46
54
57
50
30
51
55
65
87 (incomplete)
59 (unsurveyed)


18,600 N
3,600 E
3,800 E
(unsurveyed)
83
(unsurveyed)
82
6'
0.49, 0.25
3½'
2'
0.69, 2.07
0.75, 1.10
0.63, 0.23
1'
1½
0.71, 0.97
678
TM7 EL.
629
CALERA MINING COMPANY
BLACKBIRD DIVISION
TITLE Horseshoe Zone
Diamond Drill
SCALE 1" = 40'
DATE 3-31-56
DRAWN BY
File No.
ore
fault
dike


N-18700
N
2-1-56
90
45
82
50
53
81
55
40
82
50
47
42
40
43
50
40
Face 7-1-56
Timber 7-1-56
N-18600
E-3700
E-3600
N-18500
CALERA MINING COMPANY
BLACKBIRD DIVISION
TITLE 74/843
D.M.E.A. 3143
SCALE 1" = 20'
DATE 7-31-56
mineralization
fault
dike
File No.
DMEA
#3143

RECEIVED
OCT 22 1956




111
3'
0.72, 0.01
112
4'
0.91, 0.12
0.55, 0.13
15'
1.20, 1.30
15'
1.04, 0.42
5'
0.61, 0.50
733
726
CALERA MINING COMPANY
DIAMOND DRILLING
74/843 DRIFT NORTH
1"=40'
DATE 11/1/56
File No.
DMEA
#
3143
- quartz
- mineralization
- limonite
- garnets
- dike
- fault

DEPARTMENT OF THE INTERIOR

BUREAU OF MINES

224 NEW CUSTOMHOUSE
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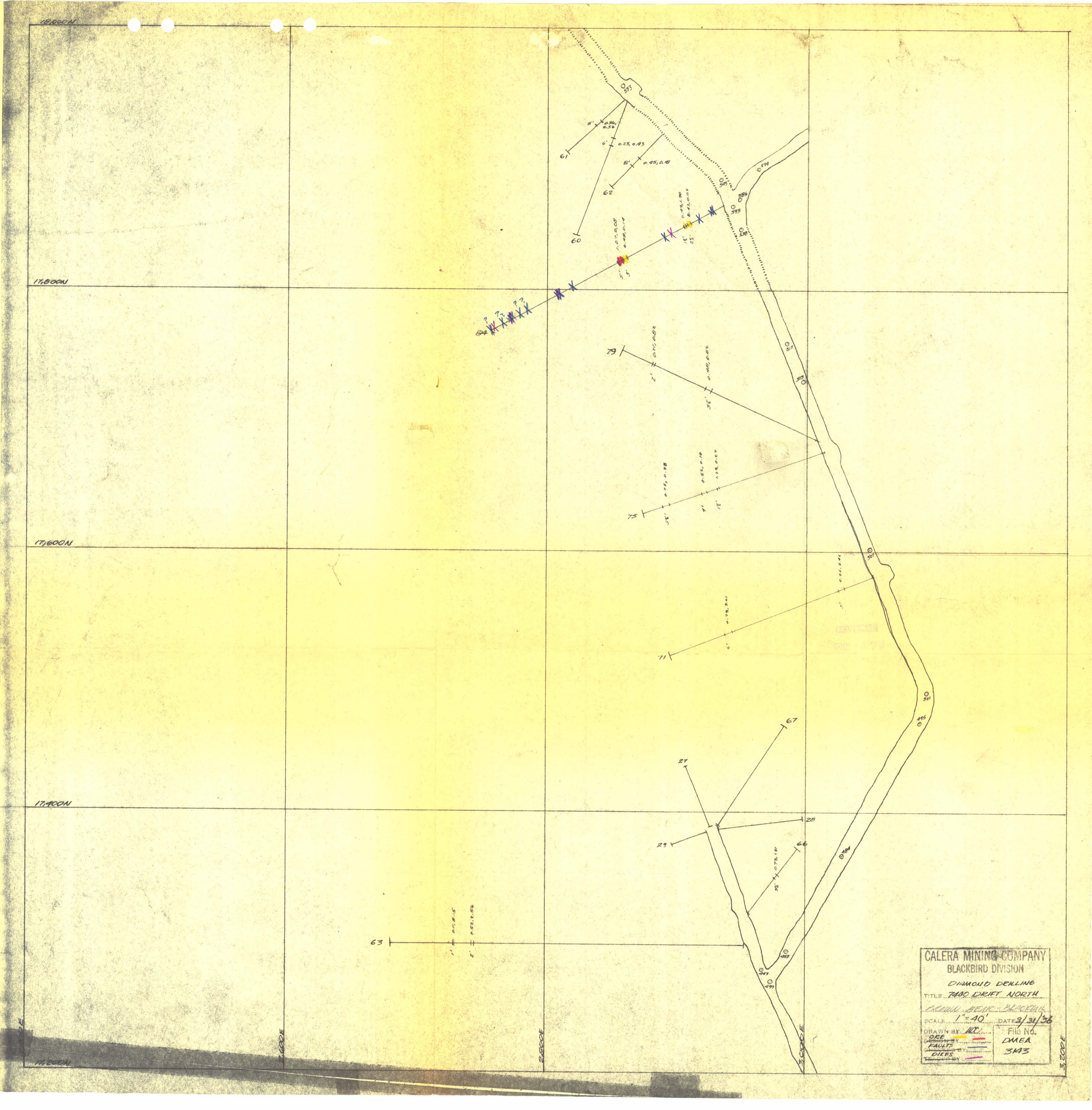
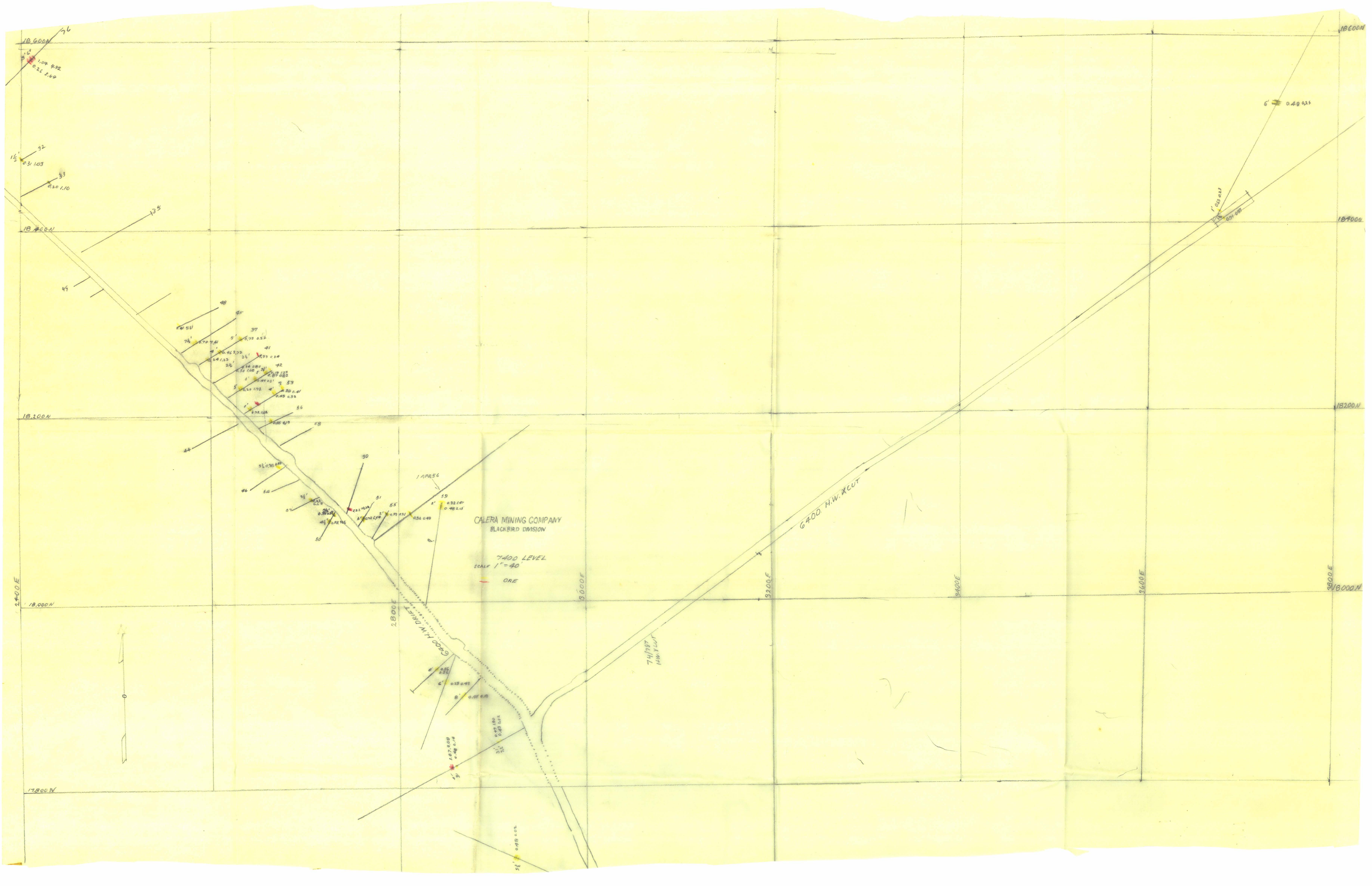
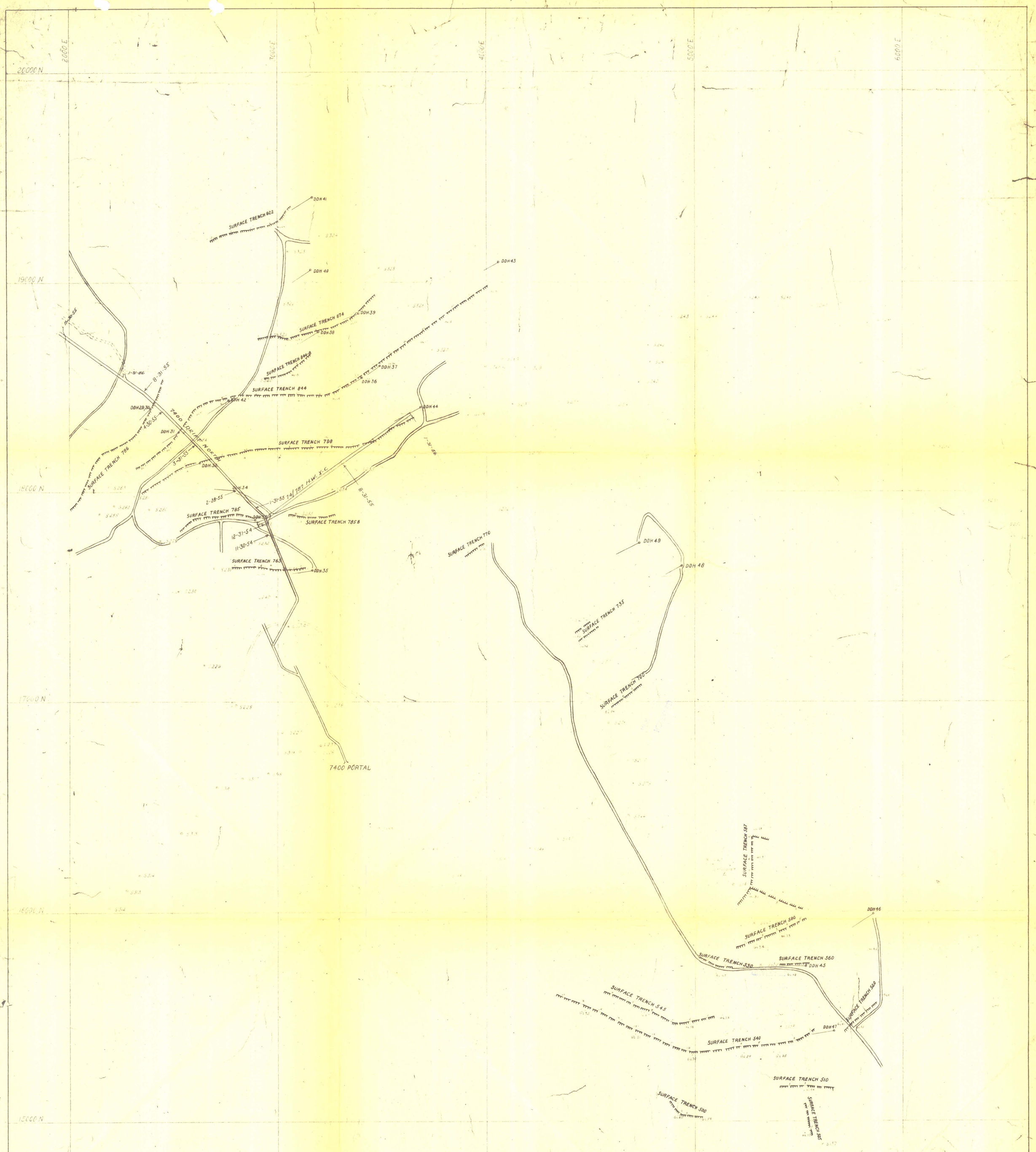
Via Air Mail

Chairman, Operating Committee
Defense Minerals Exploration Admn.
U. S. Department of the Interior
Interior Building
Washington 25, D. C.


18,000N
17,800N
17,600N
17,400N
17,200N
1,000E
2,000E
3,000E
3,200E
CALERA MINING COMPANY
BLACKBIRD DIVISION
DIAMOND DRILLING
TITLE 7400 DRIFT NORTH
BROWN BEAR - BLACKTAIL
SCALE 1" = 40'
DATE 3/31/36
DRAWN BY
ORE
FAULTS
DIKES
File No.
DMEA
3143


CALERA MINING COMPANY
BLACKBIRD DIVISION
7400 LEVEL
SCALE 1" = 40
ORE
6400 H.W. DRIFT
6400 H.W. XCUT
1 APR 56
18,600N
18,400N
18,200N
18,000N
17,800N
2400E
2800E
3000E
3200E
3400E
3600E
3800E



D.M.E.A.

DIAMOND DRILL HOLES

AND

SURFACE TRENCHES

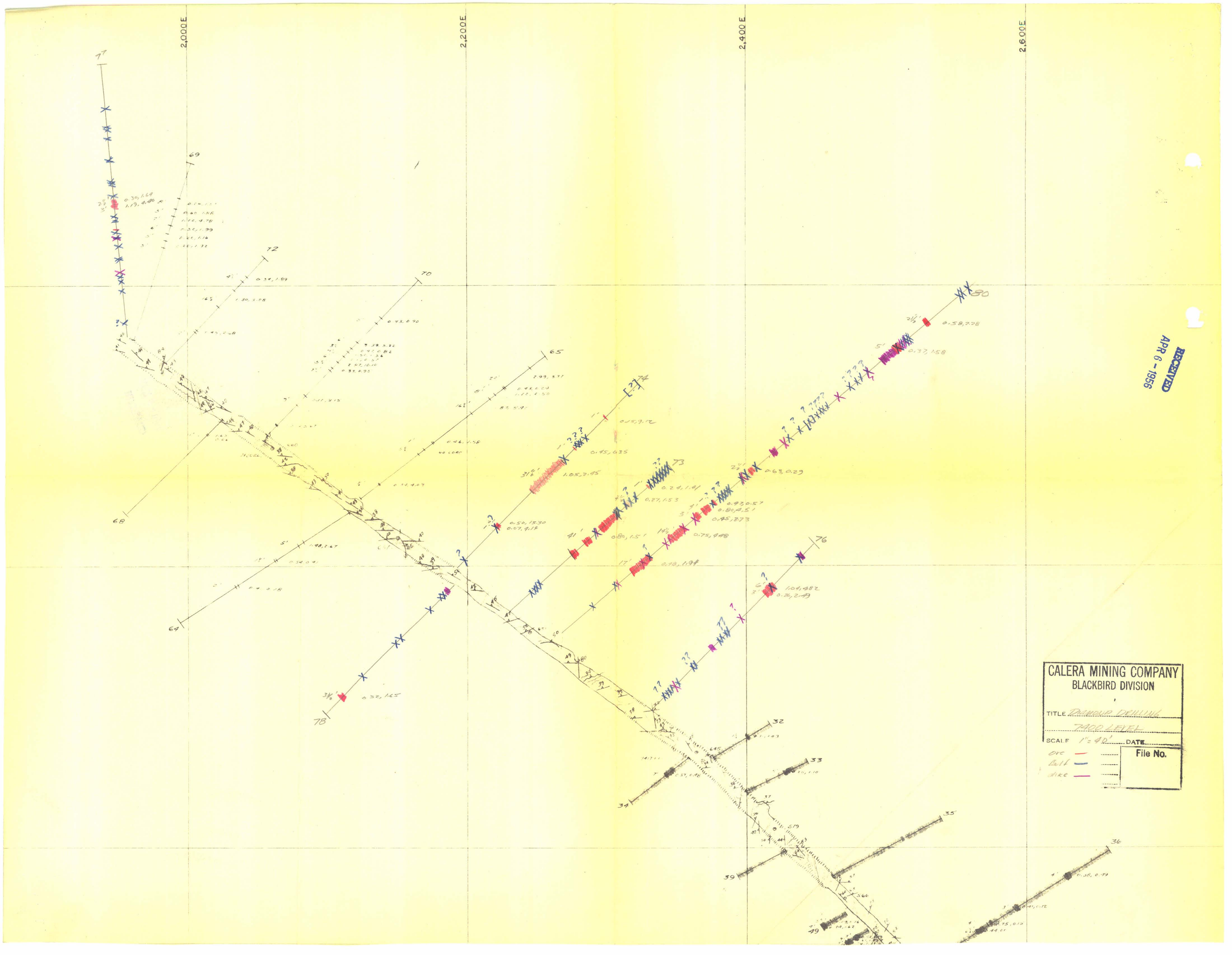
CALERA MINING COMPANY

BLACKBIRD DIVISION

SCALE 1" = 200' DATE 11-31-56

DRAWN BY W.C.G.

18,000 N
17,800N
17,600N
17,400N
17,200N
2,600E
2,800E
3,000E
3,200E
DIAMOND DRILLING
7400 DRIFT NORTH
1" = 40'
ORE
FAULTS
DIKES
DMEA
3A3


2,000E
2,200E
2,400E
2,600E
CALERA MINING COMPANY
BLACKBIRD DIVISION
TITLE DIAMOND DRILLING
7400 LEVEL
SCALE 1" = 40'
DATE
ore
Bolt
dike
File No.
RECEIVED
APR 6 - 1955