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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

FILED ON VOUCHER & SCHEDULE OF PAYMENTS K- 62

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of January, 1957 Docket No. DMEA 1393 Contract No. 30-1013
Operator's Name Roland R. Berry, Inc. Minerals Copper-Zinc
Address 147 Minnesota Ave. (P.O. Box 2039) Carson, Nev.
Contract Amount, $ 10,232.00 Government Participation: 50 % Amount, $ 5,120.50

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:				OK WPK		Kelly
Drilling	-	7568.00	7568.00	0.60		Betty
Bulldozing						
Crosscutting						
Drifting						
Incidental Indirect	-	1028.36	1028.36			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes	156.75	156.00	312.75	152.00		
Liability Insurance						
[illegible]	-	125.00	125.00			
[illegible]	125.00	-	125.00	125.00		
(8) Contingencies (specify):						
TOTALS	[illegible]	9367.36	[illegible]	~~280.75~~ 277.60	9367.36	~~9648.11~~ 9644.96

RECEIVED APR 12 1957 D.M.E.A.

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

Date Feb. 16, 1957 *Payee Roland R. Berry, Inc.

Per Marion L. Hunziker Title Assistant Secretary

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

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

(Instructions on reverse)

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

$ ~~140.37~~ 138.80

Signature Helen R. Muller
(Authorized Certifying Officer)

Date APR 11 1957 Vou. No. 168
(See other side)

140.38

(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-1013 in accordance with the terms of the contract.

Signature V. J. Zapach Title MINING ENGINEER U. S. BUREAU OF MINES Date FEB 27 1957

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature Robert A. Cameron Title EXECUTIVE OFFICER DMEA REG. Date FEB 27 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

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

Month of _____ 195_ Docket No. DMEA _____

Operator's Name _____ Contract No. _____

Address _____ Minerals _____

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								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Core								
Churn								
Auger								
Stripping								
Trenching								
Test Pits								
Roads and Trails								
Total Distributed Costs								Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs								

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

Date _____ Operator _____

Per Marion L. Hurzeler 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)

RECEIVED APR 28 1957 DMEA

N. J. Lynch
MINING ENGINEER
U. S. BUREAU OF MINES

4393

ACTION ON INTERIM
OR FINAL FIELD TEAM REPORT

Date 2-12

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. Finished! N.G.
2.
3.
4.

and take appropriate action.

- - - - - - - -

Action taken by Division:

Robert E. Adams

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

February 6, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 11 1957

DATE	INITIALS	CODE
2/13	CBM	100
Region V		

Memorandum

To: R. A. Laurence, Executive Officer, DMEA

From: W. P. Williams, U. S. Geological Survey

Subject: Iterim inspection, DMEA 4393, Idm-E1013, Roland F. Beers, Inc., New Canton district, Buckingham County, Virginia, (copper-zinc).

The subject exploration project site in the vicinity of New Canton, Virginia was visited on January 30, 1957 by R. A. Laurence, Executive Officer Region V, H. L. Burmeister, U. S. Bur. Mines, and W. P. Williams, U. S. Geol. Survey. On Jan. 30 no exploration work was being conducted on the property by the Operator, and all drilling equipment had been removed from the property. Eight diamond drill holes have been completed in the project. Diamond drill core from hole no. 5 was examined and logged. Core from other holes was briefly reviewed.

On Jan. 31, 1957, the office of R. F. Beers, Inc., was visited by Burmeister and Williams. Core from hole no. 8 was examined and logged in the office; and the project was discussed with R. S. Young and V. R. Geyer, representatives of the Operator. No additional drilling under Contract Idm-E 1013 is contemplated by either the Operator or the examining team.

The Operator stated that his final report was in preparation and would be submitted at an early date. The Government's final report will be submitted to the Executive Officer as soon as possible.

W. P. Williams

W. P. Williams

RECEIVED
FEB 8 - 1957

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

Budget Bureau No. 42-R1036.5

PAID VOUCHER & SCHEDULE OF PAYMENTS K- 44

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of December, 1956 Docket No. DMEA 4393 Contract No. [illegible]
Operator's Name Roland P. Beers, Inc. Minerals Gold-Silver
Address [illegible] Ave. (P.O. Box 1019) Roy, N.M.
Contract Amount, $ 10,332.00 Government Participation: 50 % Amount, $ 5160.50

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:						
Drilling Diamond	2,887.00	5,124.00	8,012.00			
Bulldozing						
Crosscutting						
Drifting						
Incidental allowance	109.72	1,334.64	1,444.36			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
Moving in equipment	-	125.00	125.00			
Recording	56.00	-	56.00			
(8) Contingencies (specify):						
TOTALS	2,113.52	6,593.84	9,707.36	2773.52	6593.84	9367.36

RECEIVED FEB 8 1957 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date January 11, 1957 Payee Roland P. Beers, Inc.
Per Marion L. Hunziker Title Assistant Secretary-Treasurer

*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:
$ 1386.76
Signature Helen R. Meder
(Authorized Certifying Officer)
Date FEB 6 1957 Vou. No. 120
(See other side)

1386.76

(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 1013 in accordance with the terms of the contract.

Signature W. L. Burmeister Title Mining Engr. Date 1/24/57

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature W. J. Lynch Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date JAN 28 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED 1957 D.M.E.A.

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

Month of December 195 6 Docket No. DMEA 6393 Contract No. [illegible]

Operator's Name Roland E. Beers, Inc.

Address 517 Hoosick Ave. (P.O. Box 1019) Troy, N. Y.

Minerals Copper-Zinc

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								
Crosscutting								
Raising								
Shaft Assays	each	56.00	7	56.00	7	8.00		8.00
Winzes								
Drilling: Core								
Open overburden	feet	219.00	73	271.00	157	3.00		3.00
Core AX	feet	19.00	6	264.00	80	3.30		3.30
Stripping AX	feet	1997.00	663	6627.00	2209	3.00		3.00
Trenching Incidental								
Test Pits allowance	feet			903.00	1050	0.86		0.86
Roads and Trails Incidental								
Assaying AX allowance	feet	407.72	742	921.36	1396	0.66		0.66
Moving AX drill unit				125.00				125.00
Total Distributed Costs		2,773.52		9,397.36				Total Costs Authorized by Contract
Operating Equipment Purchased		None	None	None				None
Initial Rehabilitation and Repairs		None	None	None				None
New Buildings, Improvements, etc.		None	None	None				None
Total Costs		2,773.52		9,397.36				10,937.00

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.

Remarks:

Date January 11, 1957 Operator Roland E. Beers, Inc.

Per Marion L. Hunziker Title Asst. Secretary and Treasurer

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

(Instructions on reverse)

(For Government use only)

W. Burmeister

INSTRUCTIONS

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

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

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

GPO 872894

EXTRA COPY
D M E A
RECEIVED FEB 8 1957

DATE	INITIALS	CODE

PROGRESS REPORT

1 January, 1957

NEW CANTON, VIRGINIA, PROJECT

Roland P. Beers, Inc.

DMEA-4393

PROGRESS REPORT

1 January, 1957

NEW CANTON, VIRGINIA, PROJECT

Roland F. Beers, Inc.

DMEA-4393

EXTRA COPY
D M E A
RECEIVED FEB 8 1957

DATE	INITIALS	CODE

-INTRODUCTION-

Under the provisions of Stage II, DMEA contract #4393, seven hundred and forty-two (742) feet were drilled on the New Canton, Virginia, project in December, 1956. In addition to DMEA sponsored drilling, forty-five (45) feet were drilled by Roland F. Beers, Inc., in DH-7. In the December, 1956 program, three drill holes were completed (DH-5, DH-6, DH-8). Drill hole locations are shown on accompanying maps. DH-5 is on the Shipp tract; DH-6 and DH-7 are collared on land controlled by the Buckingham Mineral Syndicate; DH-8 is on the Jones tract.

DH-8 was completed on December 27th, leaving a footage balance, under Stage II, of 104 feet. By recommendation of the DMEA Field Engineer, Mr. Burmeister, a request for termination was forwarded to Mr. Robert Laurence, Knoxville, Tennessee. Authorization to terminate has not been received as of this date.

-DRILLING RESULTS-

DH-5, located on L16N at 1.70 E and inclined 60°, was planned to test the mineralized zone at a depth approximately

200 feet below the intersection in DH-2. The hole was drilled to a total inclined depth of five hundred seventy-five (575) feet. No massive sulfides are present in the core from DH-5; however, chalcopyrite in disseminated form is present in the interval 478.5'-536.5' (see attached log).

DH-6, a 45° hole, collars at L7N; 1 E and was drilled to an inclined depth of 203 feet. This drill hole, the southernmost drilled under contract #4393, was designed to test an apparent flexure in the mineralized trend. Disseminated complex sulfides are in evidence throughout nearly all of the core, and a total of approximately 6.75 feet of semi-massive to massive sulfides occur between 170 feet and 190.5 feet (see log).

DH-7 was a short (45') vertical hole drilled at .25W on L7N to establish the depth of the zone of secondary copper enrichment (see Log).

DH-8, a 60° angle hole, was drilled to a total inclined depth of 410 feet from the collar at L12.5N; 1.25 E. No massive sulfides were encountered during drilling, and the copper-bearing zone is poorly expressed, being best developed in the interval 344'-358' (see log).

-ASSAY DATA-

The following is a complete listing of core intervals submitted for assay:

Stage I

DH-1A:	344.75'-351.25'	#227*
	362.5'-369.25'	#211 N.G. Ag 3.58
DH-2:	335'-340.5'	#213 Pb 1.05 Cu 1.99 Ag 1.38
	340.5'-345.25'	#210 Not much
	349'-353'	#212 1.70 Cu
DH-3:	335'-341'	#209 N.G.

Stage II

DH-4:	181.5'-186.5'	#214 Cu 1.20 Ag 1.88
	188.25'-194.25'	#215 Cu 1.20 Ag 1.78
DH-5:	478.5'-482.5'	#220*
	493'-499'	#217*
	502'-507'	#226*
DH-6:	152'-156.5'	#223*
	160.5'-165.5'	#222*
	165.5'-171.0'	#224*
	172.0'-177.0'	#219*
	177.0'-183.0'	#225*
	188.33'-190.5'	#228*
DH-7:	39'-44'	#216*
DH-8:	344'-350'	#221*
	351'-357'	#218*

*Assay data not available this date.

All samples were submitted for copper-zinc-lead-gold-silver determination. In view of the anomalous results received from the initial assay samples (Bruce Williams Laboratories), check assays were obtained from (1) the Henry E. Wood Assaying Co., (2) Union Assay Office, Inc., and (3) Prof. W. A. Mueller. Photostatic copies of all original assay data are attached. Because of experience and the custom treatment afforded each sample, the assays prepared by Prof. Mueller are considered the most representative.

From the incomplete assay data it appears that the semi-massive to massive sulfide intersections will contain 1.0% to 1.7% copper and the disseminated zones will contain 0.50% to 1.0% copper.

-RECOMMENDATIONS-

Termination of current contract #4393 has been requested. Recommendations for further DMEA-sponsored drilling must await complete assay returns and further geophysical work, both within the area covered by DMEA contract #4393 and extensions northeast and southwest.

Respectfully submitted:

Robert S. Young
Regional Geologist

January 2, 1957

Location New[illegible]nton, Va. Angle 60° [illegible]e No. DH-5

Dep. 575' Deflection

Elev. 569.87' Logged by RSY

Footage	Description
0-4	soil
4-30.5	fine-grained chlorite schist; minor pyrite in stringers.
30.5-36.5	silicified zone; minor disseminated pyrite.
36.5-51	chlorite schist; 4" moderate pyrite with minor chalcopyrite at 40'; 1" biotite-rich zone at 43'.
51-54	chlorite-hornblende schist, medium-grained.
54-78.5	chlorite-garnet-magnetite-pyrite schist, silicified in part; up to 5% total sulfides, very minor pyrrhotite and chalcopyrite.
78.5-79	vein quartz with coarse hornblende.
79-101.75	fine-to-medium grained chlorite-hornblende schist.
101.75-102.75	silicified zone.
102.75-118	fine-grained chlorite-hornblende schist; grain size increases 116'-118'.
118-139.5	silicified zone; light to very light stringer and disseminated pyrite.
139.5-142	chlorite-biotite-garnet schist; light to moderate pyrite.
142-233	hornblende-chlorite sequence; fine-to-coarse grain gradationally; lineation good to absent; biotite in places and carries minor garnets; scattered minor pyrite.
233-257	moderately silicified schist; very minor magnetite.
257-267	chlorite schist, lightly silicified; minor magnetite and garnets.
267-274	above rock gradational into chlorite-hornblende schist carrying some biotite and light sulfides.
274-283	silicified schist.
283-294.5	medium-grained chlorite-hornblende-biotite schist.

Location [illegible] Canton, Va. Angle 60 o [illegible]e No. DH-5

Dep. 575' Deflection

Elev. 569.87' Logged by RSY

Footage	Description
294.5-375	Chlorite schist; minor biotite; light to moderate silicification; scattered sulfides; minor magnetite; silicified 371-375'.
375-457.5	medium-grained chlorite-biotite-hornblende-garnet schist; 9" vein quartz at 442.5'; 2" vein quartz at 446'.
457.5-461.25	olivine diabase dike.
461.25-478.5	chlorite schist.
478.5-481.5	contorted chlorite schist with quartz "eyes"; moderate to heavy pyrrhotite-chalcopyrite.
481.5-494	silicified chlorite-magnetite-garnet schist; minor disseminated sulfides, principally pyrite.
494-498	silicified schist; moderate disseminated pyrite with minor chalcopyrite.
498-508	contorted chlorite-biotite-magnetite schist; some silicification; carries light disseminated pyrite-pyrrhotite-chalcopyrite.
508-519	fine-grained chlorite schist.
519-523	silicified biotite schist; light disseminated chalcopyrite.
523-528	chlorite-biotite-garnet schist; minor disseminated pyrite-chalcopyrite.
528-529.75	silicified zone.
529.75-533.5	chlorite schist.
533.5-534.5	chlorite-biotite-garnet schist; garnets up to ½".
534.5-535.5	biotite zone; large chlorite blades at base with pyrrhotite-chalcopyrite blebs and large garnets.
535.5-536.5	vein quartz with pyrrhotite stringers.
536.5-571	"spotted" chlorite-biotite-garnet schist.
571-571.5	vein quartz
571.5-575	muscovite-garnet schist.
	TDA - 575'

Location Ne[illegible]nton, Va. Angle 45° [illegible]le No. [illegible]-6

Dep. 203 Deflection

Elev. 616.2' Logged by RSY

Footage	Description
0-48	soil
48-59	chlorite-hornblende schist.
59-61.5	hornblende-chlorite-biotite-garnet schist, coarse grained.
61.5-70	chlorite schist with minor magnetite; light disseminated sulfides (pyr-chalcopyr); 6" hornblendic zone at 66' with pyrrh-pyr-chalcopyr; galena on fracture surface at 69.5'.
70-71.3	silicified zone.
71.3-89.6	chlorite-garnet-magnetite schist; minor disseminated pyr-pyrrh-chalcopyr; 1' with quartz "eyes" and vugs with secondary zinc silicate at 75'.
89.6-96.5	silicified zone beginning with 4" vein quartz.
96.5-130	chlorite-garnet-magnetite schist with minor disseminated pyr-chalcopyr; 1' silicified zone at 104'.
130-143.5	chlorite-hornblende schist, partly silicified.
143.5-170	chlorite-garnet-magnetite schist, mildly silicified in places, with minor disseminated sulfides (pyr-chalcopyr); moderate dissemination begins at 161'; 1" pyrite stringers at 167.5' and 169.5'.
170-171.25	semi-massive to massive pyr-pyrrh-chalcopyr (est. 40% total sulfides).
171.25-173	chlorite schist, disseminated sulfides.
173-174	massive pyr-pyrrh-chalcopyr-sphal; cu est. 1%.
174-179	silicified zone, minor chalcopyr.
179-180.5	massive pyr-chalcopyr-sphal; 1" sphal at base.

Location New[illegible]nton, Va. Angle 45° [illegible]ole No. HH-6

Dep. 203' Deflection not measured

Elev. 616.2' Logged by RSY

Footage	Description
	continued -
180.5-188.5	chlorite-hornblende-garnet schist; light to moder te disseminated pyr-pyrrh-chalcopyr 180.5' - 183.5'.
188.5-190.5	massive pyrrh-pyr-chalcopyr-sphal.
190.5-203	"spotted" chlorite-biotite-garnet schist.
	TDA 203'.

Location New Ganton, Va. Angle 90° Hole No. DH-7

Dep. 45' Deflection not measured

Elevation 612.0' Logged by RSY

Footage	Description
0-6	soil and 6" oxidized rock.
6-30	oxidized rock varying between pure gossan and oxidized vein quartz; relict schistosity and oxidized garnets present in lower 6'.
30-45	down schistosity of chlorite-garnet-magnetite schist with moderate pyrite-chalcopyrite disseminated and in stringers; minor secondary chalcocite.
	TDA 45'.

Location	Ne[illegible]anton, Va.	Angle [illegible]	Hole No. DH-8
Depth	410 ft.	Deflection	not measured
Elev.	541 ft.	Logged by	RSY

Footage	Description
0-27	soil
27-64	very fine-grained chlorite schist; minor pyrite in stringers; silicified 34-37'; minor scattered magnetite.
64-65	hornblende-chlorite schist.
65-72	silicified schist with minor magnetite.
72-73	hornblende-chlorite schist.
73-96	hornblende-chlorite-biotite-garnet schist; silicified in places; medium to coarse grained.
96-121.5	chlorite-magnetite-garnet schist; biotitic in places; slightly silicified throughout; minor pyrite.
121.5-140.5	hornblende-chlorite schist with numerous random-oriented quartz veinlets; fine to medium grained.
140.5-143.5	silicified schist.
143.5-149.5	medium to coarse grained hornblende-chlorite schist.
149.5-171	very fine grained hornblende-chlorite schist.
171-197	medium to coarse grained hornblende-chlorite schist with biotite developments.
197-248	silicified schist; some remnants of chlorite-garnet-magnetite schist; very minor pyrite.
248-265.5	chlorite-garnet-magnetite schist; silicified in places; minor pyrite.
265.5-269	silicified zone; minor pyrite.
269-271	chlorite-garnet-magnetite schist.
271-275.25	silicified schist.

Location M[illegible] Canton, Va. Angle [illegible] Hole No. DH-8

Dep. 410' Deflection not measured

Elev. 541' Logged by RSY

Footage	Description
275.25-290.5	chlorite-garnet-magnetite schist; minor hornblende zone at top.
290.5-293	silicified schist.
293-302.5	chlorite-garnet-magnetite schist.
302.5-307	hornblende-chlorite-garnet schist.
307-321	chlorite-garnet-magnetite schist; with minor disseminated pyrite-pyrrhotite; hornblendic in places.
321-344	fine-grained chlorite-hornblende schist; very minor disseminated sulfides.
344-358	chlorite-garnet schist with light to moderate disseminated pyrite-pyrrhotite-chalcopyrite.
358-362.5	chlorite-hornblende schist.
362.5-367	silicified schist.
367-368.5	zone of coarse biotite-chlorite-garnet.
368.5-377	"spotted" chlorite-biotite-garnet schist.
377-378	coarse chlorite-biotite zone.
378-410	"spotted" chlorite-biotite-garnet schist; 4" vein quartz at 404'.

TDA 410'

December 4th, 1956.

Mr. Vaughn V. Hughey
Director Research,
Basic Inc.
Bettsville, O.

My Dear Vaughn.

Following are the analyses of the Sulphide samples you sent to this laboratory December 1st, 1956.

Our No.	2283-A	2283-B	2283-C	2283-D
Your No.	209	210	211	212
Zinc	nil	0.20 %	0.30 %	0.40 %
Lead	nil	1.00 %	0.71 %	0.74 %
Copper	0.60 %	0.80 %	0.45 %	1.70 %
Silver Oz. per ton	1.80	3.50	3.58 %	2.45
Gold	tr.	tr.	tr.	tr.

Our No.	2283-E	2283-F	2283-G
Your No.	213	214	215
Zinc	0.10 %	0.20 %	0.20 %
Lead	1.05 %	0.04 %	nil
Copper	1.40 %	1.20 %	1.20 %
Silver Oz. per ton	1.36	1.38	1.78
Gold * Oz. per ton	Tr.	tr.	0.015

* Trace, less than 20 cents per ton.

Sincerely

C. A. Mueller

ESTABLISHED 1878

GAYLE F. FARNHAM

Certificate of Assay

THE HENRY E. WOOD ASSAYING COMPANY

TELEPHONE KEYSTONE 4-4816

DENVER 4, COLORADO

733 W. COLFAX AVE.

Dec. 12, 1956

We hereby certify that the samples assayed for Rowland F. Beers, Inc. gave the following results per ton of 2000 lbs.

MARKED	GOLD OZS.	SILVER OZS.	WET LEAD PER CENT	COPPER PER CENT	ZINC PER CENT	IRON PER CENT	INSOL. PER CENT	SULPHUR PER CENT	PER CENT	VALUE
# 209			None	0.47	0.02					
210			0.03	0.52	0.03					
211			0.10	0.39	0.04					
212			0.02	1.08	0.05					
213			0.06	1.01	0.04					
214			0.02	0.91	0.08					
215			None	1.18	0.38					

Gold at $_____ per ounce
Silver at _____ per ounce
Lead at _____ per lb.
Copper at _____ per lb.
Zinc at _____ per lb.

Charges $ 11.50

The Henry E. Wood Assaying Co.

By [signature]

ENGINEERS
INSPECTIONS and TESTS

Batesville, Ark.
151 No. Central
Telephone 1309

Picher, Oklahoma
Connell Hotel Bldg.
Telephone 710

The Bruce Williams Laboratories

ESTABLISHED 1898
Main Office 618-622 Joplin Street Telephone MA 3-1556
JOPLIN, MISSOURI

CHEMISTS
INDUSTRIAL and ANALYTICAL

Emporia, Kansas
321 Union St.
Telephone 3684

St. Louis, Missouri
306 Valley Drive
Telephone Hobart 7-3226

Roland F. Beers, Inc.
416 E. Main Street
Charlottesville, Virginia

11-23-56

OUR NO.	MARK	DESCRIPTION				
753805	Sample #209	New Canton Mine	Hole #3	335'-341'	11-5-56	
806	#210		#2	340.5'-345.45'	11-5-56	
807	#211		#1A	362.5'-369.25'	11-5-56	
808	#212		#2	349'-353'	11-5-56	
809	#213		#2	335'-340.5'	11-5-56	

		753805	753806	753807	753808	753809
Zinc	Zn	1.00	0.88	0.78	0.66	0.22
Lead	Pb	0.01	0.02	0.01	0.01	0.008
Copper	Cu	*ND	*ND	*ND	*ND	*ND
Gold	Au in oz/ton	*ND	0.04	0.04	0.02	0.02
Silver	Ag in oz/ton	0.69	0.71	1.53	24.19	1.32

*ND means None Detected.

Bruce Williams

DOOOO IDC., CHICAGO

Telephone EMpire 3-3302

Hand Sample Serial 8505-10

Mine R. F. Beers, Inc.

ASSAY REPORT

UNION ASSAY OFFICE, Inc.

J. V. SADLER, President
A. C. SELBY, Vice-Pres. & Treas.
LILY M. HOTTINGER, Secretary

Salt Lake City 10, Utah

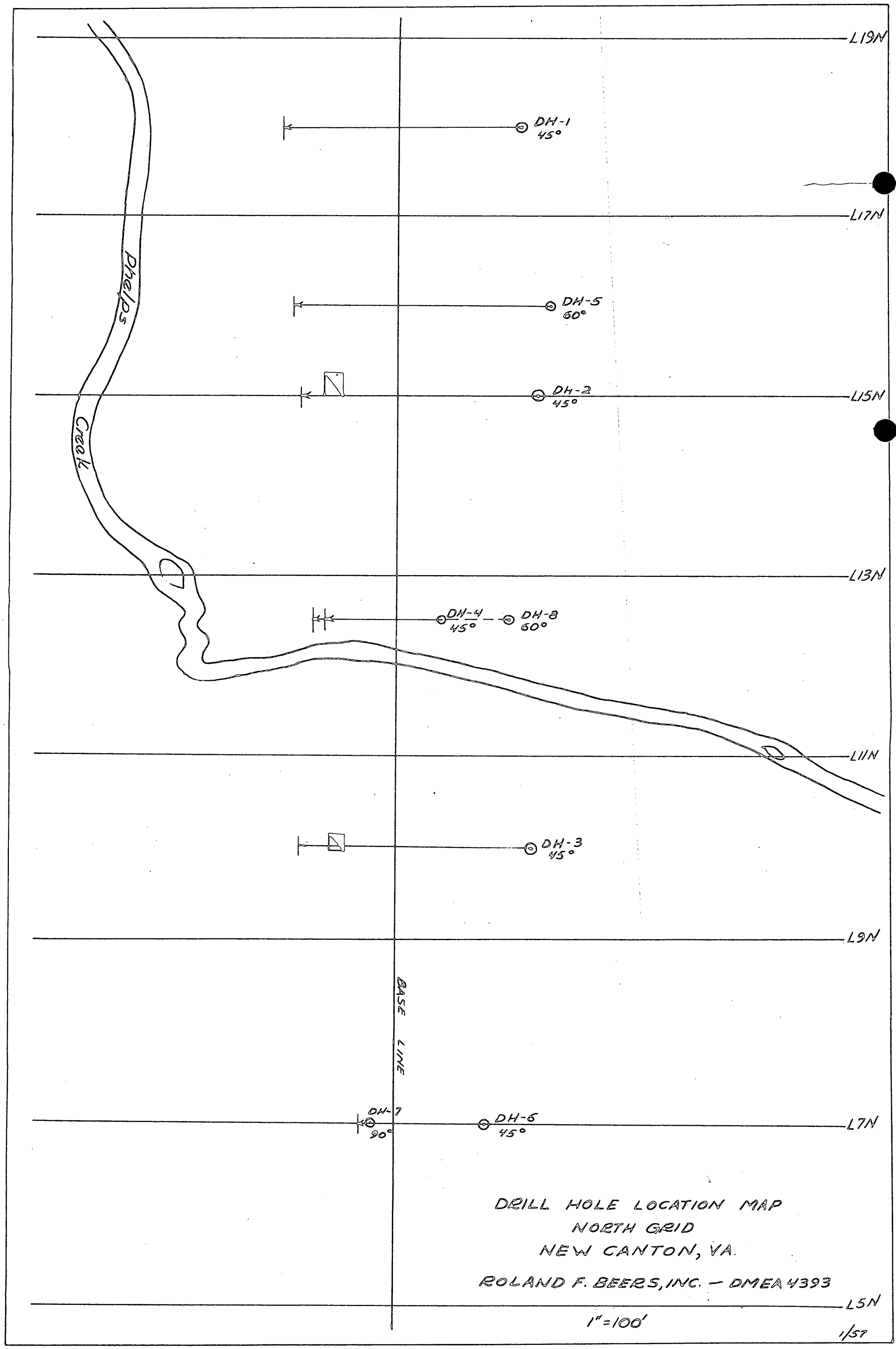
Dec. 19, 1956

RESULTS PER TON OF 2000 POUNDS

NO.	GOLD Ozs. per Ton	SILVER Ozs. per Ton	LEAD Per Cent Wet	COPPER Per Cent	INSOL. Per Cent	ZINC Per Cent	SULPHUR Per Cent	IRON Per Cent	LIME Per Cent	Per Cent	Per Cent	VALUE GOLD
212	0.005	0.5	Trace	1.63		0.7						
214	0.010	0.4	0.01	1.22		0.9						
215	0.010	0.1	0.01	1.47		1.3						

Assayer

J. V. Sadler



DRILL HOLE LOCATION MAP
NORTH GRID
NEW CANTON, VA.

ROLAND F. BEERS, INC. — DMEA 4393

1/57

ACTION ON INTERIM
OR FINAL FIELD TEAM REPORT

Date 1/2/57

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. Note results of Check Always
2.
3.
4.

and take appropriate action.

- - - - - - - -

Action taken by Division

Robert E. Adams

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

December 21, 1956

Memorandum

To: R. A. Laurence, Executive Officer, DMEA Region V

From: W. P. Williams, U. S. Geological Survey
H. L. Burmeister, U. S. Bureau of Mines

Subject: Interim project examination, DMEA 4393, Roland F. Beers, Inc., New Canton district, Buckingham County, Virginia, Contract Idm-E1013.

The subject project was inspected on December 14, 1956 by H. L. Burmeister, U.S.B.M., and W. P. Williams, U.S.G.S., in company with R. S. Young, geologist and regional manager for the Operator.

Following is a summary of the drilling completed to December 14, 1956.

Drilling Summary

Stage I					
	DDH No. 1*	Total	Depth	379	
	2	"	"	382	
	3	"	"	371	
					1,132**
Stage II					
	4	"	"	208	
	5	"	"	575	
	6	"	"	204	
	7***				
					987
Total drilling to Dec. 12, 1956				----	2,119

* DDH 1 was re-drilled by E. J. Longyear Company at no cost to either the Operator or the Government. The re-drilled hole is referred to by the Operator as no. 1-A. Total depth was 379 feet and is the depth ascribed to hole no. 1 above.

** 1,050 feet allowable under Stage I of contract.

*** DDH 7 was drilled for the Operator's own account. The hole was drilled vertically to a depth of 45 feet, on line 7 north, 25 feet west of base line, (see application map). This hole found only sparse disseminated sulphides well below ore grade.

Check assays, run by Prof. Miller of Ohio State University for Basic Refractories, Inc., and by Wood Assaying Company of Denver show assays by Bruce Williams Laboratory, Joplin, Missouri to be grossly in error.

Assays by Bruce Williams Laboratory

Sample No.	Drill Hole	% Zn	%Pb	% Cu.	oz. Au.	oz. Ag.
209	3	1.00	0.01	N.D.*	N.D.	0.69
210	2	0.88	0.02	N.D.	0.04	0.71
211	1A	0.78	0.01	N.D.	0.04	1.53
212	2	0.66	0.01	N.D.	0.02	24.19
213	2	0.22	0.008	N.D.	0.02	1.32
214	4	0.94	1.32	0.92	0.04	0.57
215	4	1.34	1.44	1.26	0.03	0.53

*Not detected.

Assays by Basic Refractories

Sample No.	Drill Hole	% Zn	% Pb	% Cu.	oz. Au.	oz. Ag.
209	3	0.00	0.00	0.60	tr.	1.80
210	2	0.20	1.00	0.80	tr.	3.50
211	1A	0.30	0.71	0.45	tr.	3.58
212	2	0.40	0.74	1.70	tr.	2.45
213	2	0.10	1.05	1.40	tr.	1.36
214	4	0.20	0.04	1.20	tr.	1.88
215	4	0.20	0.00	1.20	0.15	1.78

Assays for the same intervals as above, by Wood Assaying Company, Denver, correspond reasonably well with Basic Refractories Co. assays. Additional core has been split and sent for assay. The assays returns will be forthcoming at a later date.

On December 14, 1956 the examining team gave the Operator verbal permission to drill hole no. 8. Hole no. 8 is to be collared on line 12.5 north; 125 feet east of base line and is to be drilled from southeast to northwest at a minus 60 degree angle. The estimated total depth of hole no. 8 is about 500 feet. A balance of 513 feet of drilling remains in Stage II of the contract.

Some of the best assay values to date were obtained from hole no. 4. Hole no. 8 will be drilled near hole no. 4 but at a steeper angle.

Thus, hole no. 8 is intended to seek at greater depth an extension of the mineralized ground that was found in hole no. 4.

Errors in the Operator's monthly report for October, 1956 were brought to his attention for correction in subsequent reports. The corrections will not appear in the November report as that report had already been submitted.

The truck mounted diamond drill has been replaced by a skid-mounted drill. Drilling progress and core recovery with the present drill are good.

Summary Log D.D.H. No. 4

Depth From	Depth To	Core Rec.	Lithology
0	20	0	Overburden, no core.
20	26	6	BX core. Fine grained hornblende schist. Very sparse sulphides.
26	40	14	AX core. Same as 20-26'.
40	60	20	Light gray mica-garnet schist. Local disseminated pyrite, pyrrhotite.
60	85	25	Greenish gray mica schist, locally garnetiferous. Very sparse local dissem. pyrite and pyrrhotite.
85	143	52	Green-gray mica schist, locally garnetiferous. Sheared 123-124'. Chloritic 120-143'. Siliceous 130-134. Sulphides sparse to absent.
143	157	13	Silvery gray muscovite schist. White siliceous bands throughout. Abundant dissem. pyrite, pyrrhotite; sparse chalcopyrite.
157	185	27	Light gray muscovite-garnet schist. Abundant dissem. pyrite, pyrrhotite 177-179'. Massive pyrite, pyrrhotite, and chalcopyrite 183.5-185'
185	188	3	Green-black chlorite schist. Sulphides sparse to absent.
188	189.3	1.3	Massive pyrite, pyrrhotite, chalcopyrite. Local white quartz.
189.3	190.0	0.7	White quartz with pyrite, pyrrhotite, chalcopyrite.
190.0	193.5	3.5	Massive pyrrhotite and chalcopyrite with ± 2" thick ZnS @ 193.5'.
193.5	195	1.5	Light gray siliceous schist with scattered pyrrhotite and chalcopyrite.
195	208	13	Light gray chlorite-biotite-garnet schist. Sulphides absent. Bottom
		180.0	180/188 = 96% core recovery (for solid rock drilling)

Depth From	Depth To	Core Rec.	
0	49	0	Overburden.
49	52	3	BX core. Green-gray hornblende schist. No sulph.
52	90	38	AX core. Green-gray muscovite-chlorite schist. Loc. abundant garnets. White quartz grains up to 1½" dia @ 75-76'. Very sparse dissem. pyrite and pyrrhotite.
90	100	10	Light gray, very fine grained hornblende schist. 4" white quartz @ 90'. Very sparse dissem. chalcopyrite @ 90'. Sulphides otherwise absent.
100	130	30	Green-gray muscovite-chlorite schist. Locally abundant biotite. Local sparse pyrite, pyrrhotite.
130	145	15	Light gray-green, very fine grained hornblende-biotite schist. Very sparse dissem. pyrite, pyrrhotite, chalcopyrite.
145	160	15	Dark green-black chlorite-biotite-garnet schist. Scattered bands pyrite, pyrrhotite; sparse chalcopyrite.
160	183	23	Green-gray chlorite-muscovite-garnet schist. 2" massive pyrite and sparse chalcopyrite @ 167'; 1" @ 167½'; 5" @ 169'; 1" @ 173-174'; massive pyrite, sparse chalcopyrite and white quartz @ 179-180'. 1" ZnS @ 180'. Schist with ¼" bands pyrite, pyrrhotite, chalcopyrite @ 180-183'.
183	190	7	Dark green-black, very fine grained hornblende-biotite schist. 2" bull quartz @ 189'. Sulphides absent.
190	192	2	Massive pyrrhotite plus sparse pyrite, chalcopyrite.
192	204	12	Dark gray-green chlorite-biotite-garnet schist. Sulphides very sparse to absent.
		155	Bottom

155/155 = 100% core recovery (for solid rock drilling)

D.D.H. No. 7

Depth From	Depth To	Core Rec.	Lithology
0	6	6	Overburden.
6	30	10	Red-brown vuggy gossan. Oxidized mica-garnet schist 26-30'.
30	45	15	Chlorite-garnet-magnetite schist. Sparse dissem. pyrite, chalcopyrite. Very sparse local sooty chalcocite.
		31	31/39 = 80 percent core recovery.

W. P. Williams
U. S. Geological Survey

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

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

PAID ON VOUCHER & SCHEDULE OF PAYMENTS K- [illegible]

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of [illegible], 195[illegible] 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) Independent Short Form Contracts:						
Drilling [illegible]	[illegible]	[illegible]	[illegible]			
Bulldozing						
Crosscutting						
Drifting						
[illegible]	[illegible]	[illegible]	[illegible]			
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
[illegible]		[illegible]	[illegible]			
(8) Contingencies (specify):						
TOTALS	[illegible]	[illegible]	[illegible]	2397.84	4196.00	6593.84

I certify that the above bill is correct and just and that payment therefor has not been received.
Date 12/28/56 *Payee [illegible]
Per Marion L. Henziker 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:

$ 1198.92

Signature Helen R. Miller
(Authorized Certifying Officer)

Date JAN 9 1957 Vou. No. [illegible]
(See other side)

1198.92

(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 1013 in accordance with the terms of the contract.

Signature H. L. Bannmeister Title Mining Engr. Date 12/31/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature D. Lynch Title ACTING EXECUTIVE OFFICER DMEA - REGION V Date JAN 8 1957

MONTHLY REPORT OF OPERATOR

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

Month of November 6 195[illegible] Docket No. DMEA [illegible] Contract No. [illegible]
Operator's Name [illegible] Inc. Minerals [illegible]
Address [illegible]

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								
Crosscutting								
Raising								
Shafts								
Winzes	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
Drilling: Core	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
Churn	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
Auger								
Stripping	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
Trenching								
Test Pits	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
Roads and Trails								
	[illegible]			125.00				125.00
TOTAL DISTRIBUTED COSTS		[illegible]		[illegible]				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
TOTAL COSTS		[illegible]		[illegible]				[illegible]

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 12/28/56 Operator [illegible]

Per Marion L. Hunzeker Title [illegible]

REMARKS:

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

(Instructions on reverse)

(For Government use only)

H. Burmeister 12/31/56

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

RECEIVED
JAN 11 1957
D.M.E.A.

PROGRESS REPORT

1 DECEMBER, 1956

NEW CANTON, VIRGINIA, PROJECT

Roland F. Beers, Inc.

DMEA-4393

PROGRESS REPORT

1 DECEMBER, 1956

NEW CANTON, VIRGINIA, PROJECT

Roland F. Beers, Inc.

DMEA-4393

RECEIVED JAN 11 1957 D.M.E.A.

- INTRODUCTION -

During the period 1 November - 30 November, 1956, a drilling program of 654 feet was completed on the New Canton Project, under the conditions of Stage II, DMEA contract #4393. In addition to the cooperative drilling, Roland F. Beers, Inc., drilled 50 feet deepening DH-1A and DH-3. Under Stage II drilling, one drill hole was completed (DH-4; 208' TDA), and one is in progress as of this date (DH-5). Drill hole locations are shown on an accompanying map. DH-4 collars on the Jones tract and DH-5 on the Shipp tract.

Drilling was accomplished under the following time sequence:

November 1: DH-1A completed.

November 2: DH-4 started.
November 7: DH-4 completed.

November 7: Move to DH-3 to deepen.
November 8: DH-3 deepen completed.

November 16: DH-5 started.

On the recommendation of both Beers, Inc., personnel and the Longyear drilling team, the drilling contractor provided a skid-mount rig to replace the original truck-mount rig.

Two serious breakdowns, during the work week November 19-23, greatly retarded the drilling program.

RECEIVED JAN 11 1957 D.M.E.A.

- Drilling Results -

DH-1A is a redrill of DH-1: the first 350 feet being drilled at no expense as a result of poor core recovery from DH-1. DH-1A was drilled along L 18 N from 1.25 E with an inclination of 45°N.W. Total inclined depth was 379 feet, of which 29 feet was drilled by Roland F. Beers, Inc. The zone of complex sulfides was encountered in the interval 362-368.5 feet; this interval is nearly divided by 15 inches of vein quartz. No massive sulfides are present in the core from DH-1A (see attached log and cross-section).

DH-4 was designed to test the southwestward extension of the massive sulfide zone present in DH-2. It is located at L 12.5 N - ½ E.; inclination 45°N.W.; total inclined depth 208 feet. The complex sulfide zone was encountered at 171.5 feet; it extends to 195.25 feet. Within this interval several semi-massive to massive sulfide intersections are present. Based on visual inspection, it appears that the copper and zinc content is higher in this core than any other. (See attached log and cross-section).

DH-3 was deepened to a total inclined depth of 371 feet. Disseminated complex sulfides are present in the core from 350 feet to 358.5 feet. No massive intersections were

encountered, and the best copper values occur in the interval 357.0-358.5 feet (see attached log).

DH-5 was, as of midnight November 30th, at an inclined depth of 446 feet, approximately 100-125 feet short of the anticipated intersection with the mineralized zone. This 60° angle hole is located on L 16 N at 1.70 E, and is being drilled from southeast to northwest (see attached map). No sulfide accumulations of significance are present in the core to 446 feet.

Samples from DH-1A, DH-2, DH-3, and DH-4 were submitted to the Bruce Williams Laboratories, Joplin, Mo., for assay. Assay data on seven samples from DH-1A, DH-2, DH-3, and DH-4 have been received and photostats are attached. It is possible that the assay reports are in error, (especially in copper values) and check assays are being made at this date.

- Recommendations -

With the assumption that DH-5 will be drilled to a total depth of 700 feet, 592 feet of drilling will remain available under Stage II, DMEA contract #4393. It is recommended that 500 feet of the total remainder be expended on two drill holes (DH-6 and DH-7), located as shown on accompanying map and cross-sections.

DH-6 (L 7 N; 1 E; 250') is designed to test a strong electromagnetic conductor and self-potential high between the

Johnson and McKenna shafts. This hole will be drilled under a pit (see map) which exposes 6-7 feet of gossan, and into an area which is said to have provided the high-grade ore specimens present in dump material. Further, geophysical data indicate that a small flexure may be present in this area. If so, structural dilation may have localized significant thicknesses of massive sulfides along the flexure. DH-6 will provide the desired information on this possibility.

DH-7 (L 20 N; 2 W; 250') is located to (1) derive maximum benefit of topography, (2) provide necessary data on "west wall" stratigraphy, and (3) test two electromagnetic axes outlined by a recent survey.

Respectfully submitted:

Robert S. Young
Regional Geologist

ASSAY DATA[1].

Assay No.	Sample No.	Drill Hole	Interval
753 805	209	3	335' - 341'
806	210	2	340.5' - 345.45'[2].
807	211	1A	362.5' - 369.25'
808	212	2	349' - 353'
809	213	2	335' - 340.5'
754 231	214	4	181.5' - 186.5'
232	215	4	188.25' - 194.25'

Assay No.	Zinc	Lead	Copper	Gold	Silver
753 805	1.00	0.01	ND*	ND**	0.69**
806	0.88	0.02	ND	0.04	0.71
807	0.78	0.01	ND	0.04	1.53
808	0.66	0.01	ND	0.02	24.19
809	0.22	0.008	ND	0.02	1.32
754 231	0.94	1.32	0.92	0.04	0.57
232	1.34	1.44	1.26	0.03	0.53

* ND - not detected.
** - oz. /ton.

1. see attached phtostats.
2. should read 345.25'.

INSP[illegible]

The Bruce Williams Laboratories

CHEMISTS
INDUSTRIAL and ANALYTICAL

[illegible] MA 3 1556

JOPLIN MISSOURI

151 No. C[illegible]
Telephone [illegible]

Columbia E. Beers, Inc.
416 [illegible] Street
Charlottesville, Virginia

1 -2 -56

[illegible] Kansas
321 [illegible]
Telep[illegible] 3084
St. Louis, Missouri
306 Valley Drive
Telephone Hubert 7-3226

Pi[illegible]
C[illegible] Bldg
Telephone [illegible]

OUR NO.	MARK		DESCRIPTION			
753805	Sample	#209	New [illegible]ton [illegible] hole	#3	335'-341'	11-5-56
806		#210		#2	340.5'-345.45'	11-5-56
807		#211		#1A	362.5'-369.25'	11-5-56
808		#212		#2	349'-353'	11-5-56
809		#213		#2	335'-340.5'	11-5-56

		753805	753806	753807	753808	753809
Zinc	Zn	1.00	0.58	0.78	0.66	0.22
Lead	Pb	0.01	0.02	0.01	0.01	0.008
Copper	Cu	*ND	*ND	*ND	*ND	*ND
Gold	Au in oz/ton	*ND	0.04	0.04	0.02	0.02
Silver	Ag in oz/ton	0.09	0.71	1.93	24.19	1.32

*ND means None Detected.

Bruce Williams

ENGINEERS
INSPECTIONS and TESTS

Batesville, Ark.
151 No. Central
Telephone 1309

Picher, Oklahoma
Connell Hotel Bldg.
Telephone 710

The Bruce Williams Laboratories

ESTABLISHED 1898
Main Office 618-622 Joplin Street Telephone MA 3-1556
JOPLIN, MISSOURI

CHEMISTS
INDUSTRIAL and ANALYTICAL

Emporia, Kansas
321 Union St.
Telephone 3684

St. Louis, Missouri
306 Valley Drive
Telephone Hobart 7-3226

Roland F. Beers, Inc.
416 E. Main Street
Charlottesville, Virginia

11-27-56

OUR NO.	MARK	DESCRIPTION		
754231	Sample #214	New Canton Mine	Hole #DH-4	181.5'-186.5' 11-8-56
232	215			188.25'-194.25' 11-8-56

		754231	754232
Zinc	Zn	0.94	1.34
Lead	Pb	1.32	1.44
Copper	Cu	0.92	1.26
Gold	Au	0.04 oz/ton	0.03 oz/ton
Silver	Ag	0.57 oz/ton	0.53 oz/ton

Bruce Williams

DARCO INC. - CHICAGO

Location New Canton, Virginia
Dep: 379'
Elev: 603.36'

Angle: 45°
Deflection: not measured
Logged by: RSY

Hole No. 1A

Footage	Description	cu%	zn%	auoz.	ag oz.
0-280	no core recovery; drilling with "rock" bit.				
280-318.5	chlorite schist; sparse pyrite disseminated and in stringers; 6" coarse hornblende at 310'.				
318.5-329	chlorite-garnet schist with moderate pyrite in stringers; some magnetite.				
329-336.5	diabase dike.				
336.5-348.5	chlorite-garnet-magnetite schist; silicified.				
348.5-351.25	heavy disseminated pyrite (est. 40-50%).				
351.25-365.25	silicified garnet-chlorite schist; very minor magnetite; first pyrrhotite-chalcopyrite at 357'; 6" heavy pyrite-chalcopyrite 357-357.5'; 2" vein quartz at 360.6'; heavy disseminated pyrite-chalcopyrite-pyrrhotite-galena 362-365.25'.				
365.25-366.5	vein quartz with sparse crystals of pyrite-pyrrhotite-chalcopyrite-sphalerite.				
366.5-368.5	silicified schist with pyrite-pyrrhotite-sphalerite-galena.				
368.5-371	muscovite-biotite-garnet schist.				
371-379	chlorite-biotite-garnet schist.				
	TDA 379'				

Form No. 26 9/56

Location: New Canton, Virginia
Dep: 350-371'
Elev: 551.76'
Angle: 45°
Deflection: not measured
Logged by: RAY
Hole No. 3

Footage	Description	cu%	zn%	aucn.	ag oz.
350-351.25	silicified zone, moderate pyrite (9" core recovery).				
351.25-352.75	chlorite-garnet schist; very minor discordinated sulfides.				
352.75-355.25	silicified schist, minor sulfides.				
355.25-358.5	chlorite-garnet schist grading into biotite-garnet schist (silicified); light to moderate disseminated complex sulfides; best cu at 357.0-358.5'.				
358.5-371	spotted chlorite-biotite-garnet schist.				
	TDA 371'.				

Form No. 26 9/56

Location New Canton, Virginia Angle: 45° Hole No. 4
Dep: 208' Deflection: not measured
Elev: 541.55 Logged by: RSY

Footage	Description	cu%	zn%	auoz.	ag oz.
0-26	soil				
20-22.3	silicified chlorite schist, very minor disseminated pyrite; 1" pyrite stringers at 21'.				
22.3-31.5	chlorite schist with minor biotite development; very minor disseminated pyrite.				
31.5-34.5	silicified zone; 3" heavy disseminated pyrite at 33'.				
34.5-39.25	chlorite-hornblende schist with minor disseminated magnetite; minor pyrite in stringers.				
39.25-42.5	silicified zone; minor pyrite disseminated and in stringers.				
42.5-50	very coarse-grained chlorite-biotite-garnet schist with approx. 5% pyrite and very minor chalcopyrite.				
50-52	silicified zone.				
52-61	coarse-grained chlorite-biotite-garnet schist; decrease in grain size and increase in chlorite with depth; disseminated magnetite appears at 56'.				

Form No. 26 9/56

Location New Canton, Va. Angle: 45° Hole No. 4
Dep: 208' Deflection: not measured
Elev: Logged by: RSY

Footage	Description	cu%	zn%	auoz.	ag oz.
61-69	silicified zone; first chalcopyrite and pyrrhotite appear at 68' (no concentrations).				
69-74.5	chlorite-garnet-magnetite schist; very minor pyrrhotite-chalcopyrite.				
74.5-76	silicified zone.				
76-77½	chlorite-garnet-magnetite schist; very minor pyrrhotite-chalcopyrite.				
77½-79.75	silicified zone; schistosity reversals.				
79.75-82.75	silicified chlorite-magnetite schist; 2" biotite-rich zone at 82 '; minor pyrrhotite-pyrite.				
82.75-86	silicified zone.				
86-88.5	chlorite-garnet-magnetite schist.				
88.5-89.25	silicified zone.				
89.25-91.75	coarse grained chlorite-biotite-magnetite-garnet schist.				
91.75-93	silicified schist.				
93-99	medium-grained chlorite-hornblende schist; silicified in part.				

Form No. 26 9/56

Location New Canton, Va. Angle: 45° Hole No. 4
Dep: 208' Deflection: not measured
Elev: Logged by: RSY

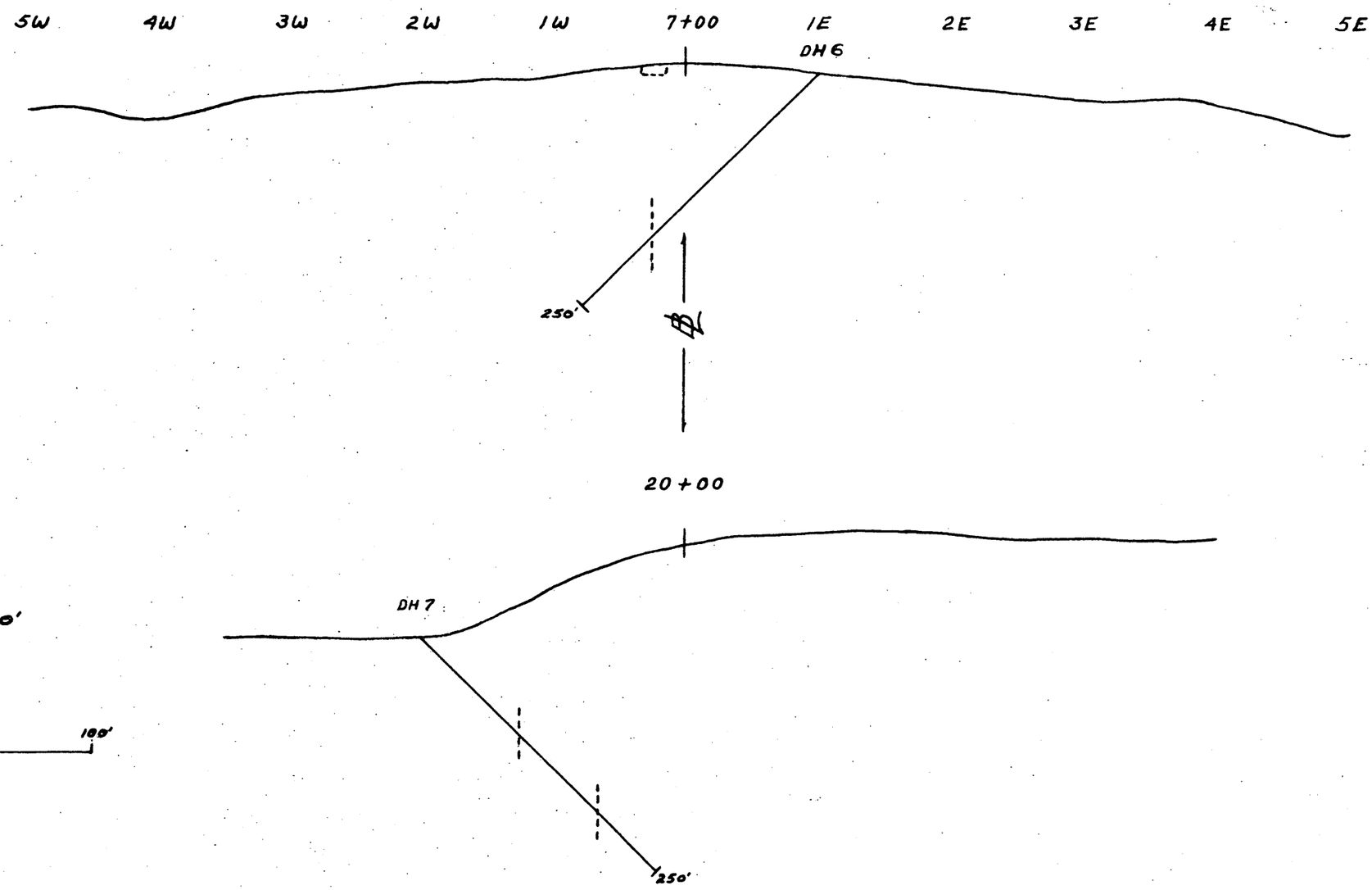
Footage	Description	cu%	zn%	auoz.	ag oz.
99-143	silicified chlorite-magnetite-garnet schist; increase in pyrite and magnetite at approx. 108', sparse pyrite-pyrrhotite; thin quartz veins parallel schistosity 142-143'.				
143-153	chlorite-magnetite-garnet schist.				
153-170	silicified schist.				
170-171.5	chlorite-garnet schist; moderate to heavy pyrite-pyrrhotite.				
171.5-184	chlorite-magnetite-garnet schist; mostly silicified; light to moderate disseminated pyrite-pyrrhotite-chalcopyrite-sphalerite.				
184-186	semi-massive to massive pyrite-pyrrhotite-chalcopyrite-sphalerite.				
186-188.75	chlorite-magnetite-garnet schist; moderate disseminated complex sulfides.				
188.75-189.25	semi-massive complex sulfides, mainly pyrite-chalcopyrite.				
189.25-190.25	silicified schist; heavy disseminated complex sulfides.				

Form No. 26 9/56

Location New Canton, Va. Angle: 45° Hole No. 4
Dep: 208' Deflection: not measured
Elev: Logged by: RSY

Footage	Description	cu%	zn%	auoz. ag oz.
190.25-192.75	semi-massive to massive pyrrhotite-pyrite-chalcopyrite-sphalerite.			
192.75-194.25	silicified zone; light to moderate disseminated complex sulfides.			
194.25-204	muscovite-biotite-garnet schist.			
204-205	chlorite-garnet schist.			
205-208	muscovite-biotite-garnet schist.			
	TDA 208'.			

Form No. 26 9/56

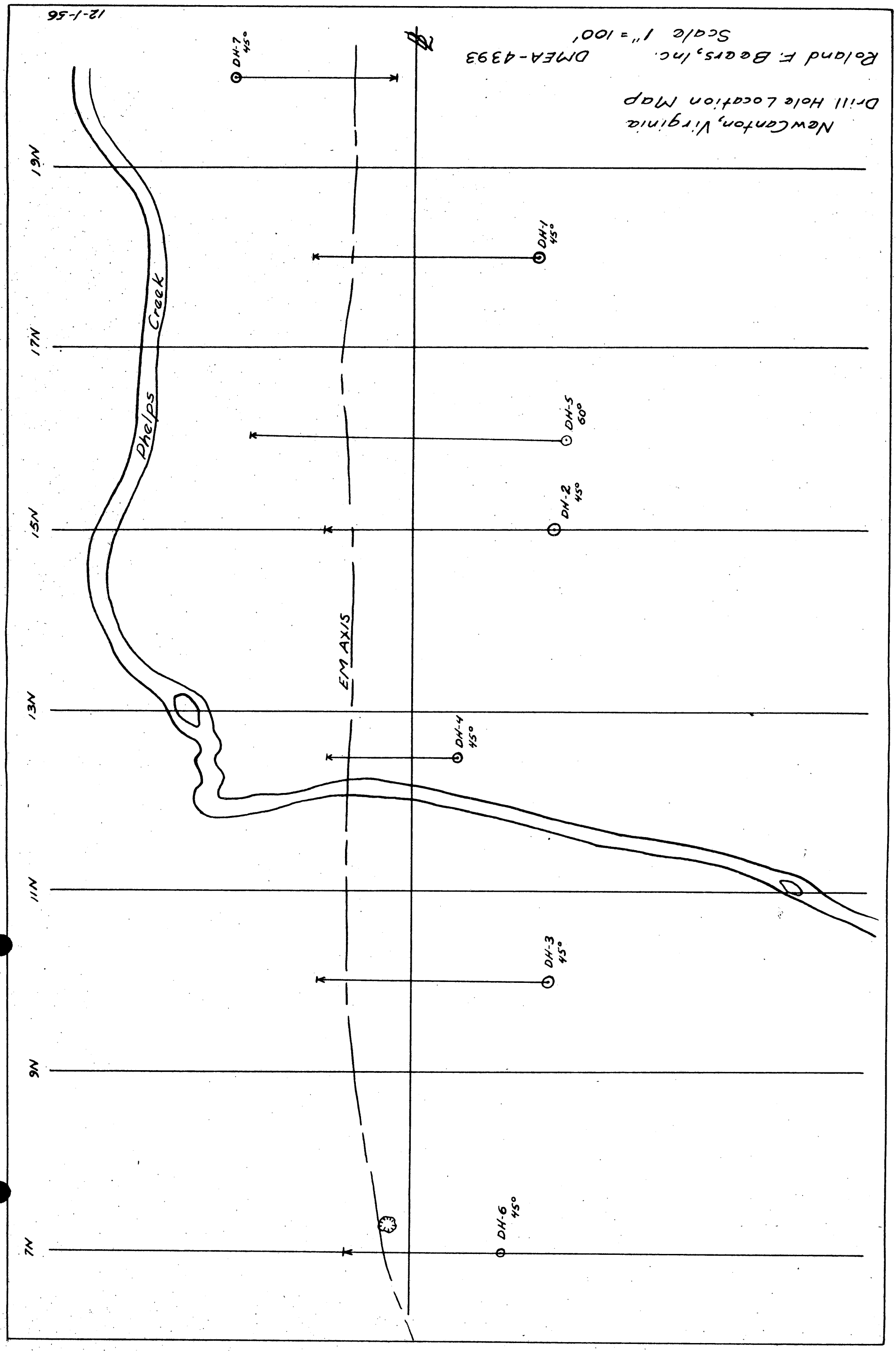


Profiles and Cross-sections of Proposed Drill Holes DH-6 & 7.

New Canton, Va.

DMEA-4393

Roland F. Beers, Inc.


Newcanton, Virginia
Drill Hole Location Map
Roland E. Boors, Inc.
DMEA-4393
Scale 1" = 100'
12-1-56
DH-7 45°
DH-1 45°
DH-5 60°
DH-2 45°
DH-4 45°
DH-3 45°
DH-6 45°
EM AXIS
Phelps Creek
19N
17N
15N
13N
11N
9N
7N

RECEIVED DEC 11 1956 DMEA

Memorandum December 10, 1956

To: A. A. Laurence, Executive Officer, DMEA Region V

From: W. P. Williams, U. S. Geological Survey

Subject: Interim report, DMEA 4393, Roland F. Beers, Inc., New Canton district, Buckingham County, Virginia, Contract Idm-E1013.

Through information gained from frequent telephone calls from the Operator, a three-way telephone conference on Dec. 4, 1956 between R. S. Young, geologist for Operator, H. L. Burmeister, U.S.B.M., and W. P. Williams, U.S.G.S., and a telephone call from R. S. Young to the writer on Dec. 6, 1956, the status of the project on this date is as follows:

Diamond drill holes nos. 1-5, inclusive, have been completed.

Drilling Summary

Stage I					
	DDH No. 1	Total	Depth	379'	
	2	"	"	382'	
	3	"	"	371'	
					1,132'
Stage II					
	4	"	"	208'	
	5	"	"	575'	
					783'
	Total drilling to date				1,915'

Abundant disseminated and massive sulphides, including chalcopyrite, were penetrated in holes nos. 2 and 4. Disseminated sulphides, including sparse chalcopyrite, were found in holes nos. 1, 3, and 5.

Seven assay samples have been taken from holes nos. 1, 2, 3, and 4 and sent to Basic Refractories, Inc., Cleveland, Ohio and Bruce Williams Laboratories, Joplin, Mo. Assay returns from Bruce Williams Laboratories appear to be in error as no copper was detected in samples from hole no. 2. Check samples have been sent to Henry E. Wood Assaying Co., Denver, Colorado. No assay returns have been received to date from

Wood Co., or Basic Refractories. Assays and geologic logs to date are being submitted by the Operator in his November, 1956, monthly report.

Hole no. 5 was completed on Dec. 6, 1956. On Dec. 4, 1956, verbal permission was given the Operator to drill hole no. 6. Hole no. 6 will be collared on Line 7 north, 100' east of base line, at a minus 45° inclination, and drilled SE to NW. (See application map, or attached map.)

Drill hole no. 6 will test the ground between the Johnson and McKenna shafts from whence came high grade ore in the old days. Evidence of the possible existence of ore in the area is afforded by the presence of an old prospect pit near the proposed location of hole no. 6. The pit shows a 6 to 7 foot thickness of gossan with some disseminated sulphides. The total depth of hole no. 6 is expected to be only about 250 feet.

The Operator expects his contractor, L. J. Longyear Co., to begin drilling hole no. 6 on or about Dec. 11, 1956.

W. P. Williams

cc: R. A. Laurence, Knoxville (3)
H. L. Burmeister, U.S.B.M.
Docket file
WPWilliams:pbb
G: 12/10/56

RECEIVED
DEC 12 1956
U.S. Geological Survey
Denver Office
Denver, Colo.

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

Budget Bureau No. 42-R1036.5

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

RID ON VOUCHER & SCHEDULE
AYMENTS K-

OPERATOR'S MONTHLY REPORT AND VOUCHER

Month of October, 1956 Docket No. DMEA 4393 Contract No. Idm-E 1013
Operator's Name Roland F. Beers, Inc. Minerals Copper-Zinc
Address 447 Pinewoods Ave. (P.O. Box 1019) Troy, N.Y.
Contract Amount, $ 10337.00 Government Participation: 50 % Amount, $ 5168.50

ITEMS OF COSTS	FOR OPERATOR'S USE			FOR GOVERNMENT USE ONLY		
	Monthly Total	Totals Previously Reported	Totals To Date	Approved Monthly Total	Approved Totals Previously Reported	Approved Totals To Date
(1) Independent ~~Short Form~~ Contracts:				12/18/56 WPK		
Drilling	3315.50	None	$3315.50	3293.00		3293.00
Bulldozing						
Crosscutting						
Drifting						
Incidental allowance	903.00	None	903.00	903.00		903.00
(2) Labor and Supervision:						
Labor						
Supervision						
Technical Services						
(3) Operating Mat'ls. and Supplies:						
Timber						
Explosives						
Pipe						
Track						
(4) Operating Equipment:						
Rental						
Purchase						
Depreciation						
(5) Initial Rehabilitation and Repairs						
(6) New Bldgs., Improvements, etc.						
(7) Miscellaneous:						
Repairs to Equipment						
Sampling and Analysis						
Payroll Taxes						
Liability Insurance						
(8) Contingencies (specify):						
TOTALS	4218.50	None	4218.50	4196.00		4196.00

RECEIVED DEC 14 1956 D.M.E.A.

I certify that the above bill is correct and just and that payment therefor has not been received.
Date Nov. 9, 1956 *Payee Roland F. Beers, Inc.
Per Marion L. Hunziker Title Assistant Secretary-Treasurer

*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:
$ 2098.00
Signature Helen R. Meiter
(Authorized Certifying Officer)
Date DEC 11 1956 Vou. No. 92
(See other side)

1 9/9 2098.00

(For Government use only)

CERTIFICATION BY GOVERNMENT REPRESENTATIVE:

I certify that to the best of my knowledge and belief the contractor submitting this voucher is operating a Defense Minerals Exploration Administration project under Contract No. E 1013 in accordance with the terms of the contract.

Signature H. A. Burmeister Title Mining Eng'r Date 12/3/56

APPROVAL BY DMEA EXECUTIVE OFFICER OR ALTERNATE:

Signature ..... Title ..... Date .....

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 MFF104A
(April 1952)

Budget Bureau No. 42-R1151.2

RECEIVED DEC 14 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 4993 Contract No. DMA-S 1013
Operator's Name Roland F. Beers, Inc. Minerals Copper-Zinc
Address 467 Pinewoods Ave. (P.O. Box 1010), Troy, N. Y.

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		None	None	None	None	None	None	None
Crosscutting		None	None	None	None	None	None	None
Raising		None	None	None	None	None	None	None
Shafts		None	None	None	None	None	None	None
Winzes		None	None	None	None	None	None	None
Drilling: Core	Ft.	4218.00	1050	4218.00	1050	4.017+	2550	4.053+
Churn		None	None	None	None	None	None	None
Auger		None	None	None	None	None	None	None
Stripping		None	None	None	None	None	None	None
Trenching		None	None	None	None	None	None	None
Test Pits		None	None	None	None	None	None	None
Roads and Trails		None	None	None	None	None	None	None
		None	None	None	None	None	None	None
TOTAL DISTRIBUTED COSTS		4218.00	1050	4218.00				TOTAL COSTS AUTHORIZED BY CONTRACT
Operating Equipment Purchased		None	None	None				None
Initial Rehabilitation and Repairs		None	None	None				None
New Buildings, Improvements, etc.		None	None	None				None
		None	None	None				None
TOTAL COSTS		4218.00		4218.00				10537.00

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 November 9, 1956 Operator Roland F. Beers, Inc.
Per Marion L. Munzeker Title Assistant Secretary-Treasurer

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)

This is approved subject to subtraction of $22.50 for hole survey which is not an allowed contract cost. The total voucher amount should be $4196.00

H. Barmeister

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

Copies to: R. A. Laurence
V. J. Lynch
Jay L. Chambers (2)
H. L. Burmeister
Norris files
Day files

Region V

P. O. Box 217
December 11, 1956

Roland F. Beers, Inc.
P. O. Box 1019
Troy, New York

Gentlemen:

Reference is made to your October Voucher covering contract Idm-F1013, DMA Docket No. 4393, which was received in this office today for payment.

The voucher is being processed today for payment in the amount of $2,098.00, which is 50% (fifty percent) of the approved monthly total of $4,196.00 as follows:

Overburden			
Hole 1	18 ft.	Total of 60 feet at $3.00/ft.	$ 180.00
Hole 2	8 ft.		
Hole 3	34 ft.		
BX Drilling			
Hole 1	34 ft.	Total of 62 feet - reduced to 60 feet at $3.30/ft. Contract calls for 60 feet.	198.00
Hole 2	12 ft.		
Hole 3	16 ft.		
AX Drilling			
Hole 1	298 ft.	Total of 960 feet - reduced to 930 feet at $3.00/ft. Necessary to dis-allow 30 feet because contract states "The total length of the three holes shall not exceed 1,050 feet, including over-burden drilling."	2790.00
Hole 2	362 ft.		
Hole 3	300 ft.		
Mobilization of diamond Drilling equipment			125.00
Incidental allowance 1050 feet at $0.86/ft.			903.00
		Approved Monthly Total	$ 4,196.00

Your MF-104A covering the month of October does not reflect unit cost. For your information and guidance we are attaching a corrected copy of your October MF-104A for your use in preparing the November voucher.

Very truly yours,

Helen R. Miller
Administrative Assistant

Form MF-104A
(April 1952)

Budget Bureau No. 42-R1151.2

CORRECTED COPY - SAMPLE

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

OPERATOR'S UNIT COST AND PROGRESS REPORT

RECEIVED DEC 4 1956

Month of October 1956 Docket No. DMEA 4393 Contract No. 10-11013
Operator's Name Roland P. Beers, Inc. Minerals Copper-Zinc
Address 147 Pinewoods Ave. (P. O. Box 1019), Troy, N. Y.

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								
Crosscutting								
Raising								
Shafts								
Winzes								
Drilling: Overburden	60 ft.	180.00	60 ft.	180.00	60 ft.	3.00/ft.	ft.	3.00
BX drilling	60 ft.	198.00	60 ft.	198.00	60 ft.	3.30/ft.	ft.	3.30
AX drilling	930 ft.	2790.00	930 ft.	2790.00	930 ft.	3.00/ft.	ft.	3.00
Incidental drilling								
allowance	1050 ft.	903.00	1050 ft.	903.00	1050 ft.	0.86/ft.	ft.	0.86
Mobilization equip.		125.00		125.00				
Total Distributed Costs		4,196.00						Total Costs Authorized by Contract
Operating Equipment Purchased								
Initial Rehabilitation and Repairs								
New Buildings, Improvements, etc.								
Total Costs		4,196.00						

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 November 9, 1956 Operator Roland P. Beers, Inc.
Per /s/ Marion L. Hunziker Title Assistant Secretary-Treasurer

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

PROGRESS REPORT

1 November, 1956

NEW CANTON, VIRGINIA, PROJECT

Roland F. Deere, Inc.

DMEA-4393

- Introduction -

During the period 28 September - 31 October, 1956, a drilling progress of 1,082 feet was completed on the south grid, New Canton, Virginia. The total footage was nearly equally distributed among three drill holes. The drill hole locations are shown on accompanying maps. Two holes were drilled on the Shipp property and one on the Jones property. Because of poor core recovery in a critical zone, DH-1 was in the process of being redrilled as of midnight, 31 October.

Of the total 1,082 feet, 1,050 feet of drilling was accomplished under DMEA contract No. 4393. The drilling took place under the following chronology:

Contract approval: 24 September

Start DH-1: 28 September
Completed DH-1: 2 October

Start DH-2: 3 October
Completed DH-2: 11 October

Start DH-3: 12 October
Completed DH-3: 23 October

Start DH-2 (deepen): 24 October
Completed DH-2 (deepen): 26 October

Start DH-1 (redrill): 29 October
Completed DH-1 (redrill): 1 November

The drilling contractor, R.J.Longyear Co., provided a truck-mounted diamond drill which operated on two eight-hour shifts five days per week.

- Drilling Results -

Significant sulfide mineralization was encountered in each of the three drill holes (see attached logs and cross sections). However, additional drilling above the initial 350 feet per hole was or will be required to completely penetrate the mineralized zone. Overall mineralization consists of two general types: (1) pyrite or pyrite-magnetite, and (2) pyrrhotite-pyrite-chalcopyrite-sphalerite. Pyrite and pyrite-magnetite zones form the east wall and the complex sulfides mark the west wall.

The general stratigraphic sequence, as illustrated on accompanying cross-sections, consists of two gross units: (a) chlorite and chlorite-garnet schist and (b) muscovite-biotite-garnet schist. The chlorite schist is the host for sulfide mineralization and is referred to as the "east wall rock." Garnetiferous and silicified zones are abundant in the chlorite schist section. Neither has proved stratigraphically important. A zone of magnetite-bearing chlorite schist is thought to occupy approximately the same stratigraphic interval throughout the area of drilling. This zone also carries moderate to heavy disseminated pyrite.

The "west wall rock" is essentially barren of sulfides and consists of distinctive muscovite-biotite-garnet schist.

Sulfide mineralization occurs in the chlorite schist, principally adjacent to the west wall rock. Mineralization of primary importance forms a zone of massive and/or disseminated pyrrhotite-pyrite-chalcopyrite-sphalerite-galena. Although this complex sulfide zone is present in all three drill holes, the intersection in DH-2 is most important. Visual estimates of two massive zones (9" at 344.5' and 3.5' at 349') indicate a copper content of approximately 1% and a zinc content of approximately 0.25%. Copper content of the disseminated zone from 331' to 344.5' is estimated at 0.50%.

Two drill holes, DH-2 and DH-1 redrill, completely penetrated the mineralized zone. Because of incomplete stratigraphic data, DH-3 was stopped prior to reaching the muscovite-biotite-garnet schist, which marks the barren west wall. Deepening of DH-3 to complete the mineralized section will depend on data obtained from DH-4 (Stage II).

- Recommendations -

Diamond drilling of the New Canton prospect, prior to midnight October 31, 1956, has revealed the presence of a zone of massive and disseminated complex sulfide mineralization over a length of 800 feet and with true widths of up to 15 feet. Core from DH-2 contained nearly 5 feet of massive complex sulfides.

On the basis of the proved length and width of the mineralized section together with the fact that chalcopyrite predominates among the desirable base-metal sulfides, it was recommended to the DMSA inspection team (Messrs. Burrelster and Williams, Nov. 1, 1956) that Stage II drilling be immediately inaugurated. This recommendation was accepted, and by mutual agreement Stage II drilling commenced with DH-4 on November 2, 1956. This drill hole (DH-4) is located at ½ E on L 12.5W, inclination 45°, bearing N.54°W., maximum depth 300 feet. DH-4 is designed to test the southwestward extent of the massive sulfide zone encountered in DH-2, 250 feet northeastward.

If sulfides are encountered in DH-4 comparable in composition and thickness to those in the core from DH-2, it is recommended that DH-3 be deepened by a maximum of 100 feet and that a deep hole be drilled in the vicinity of L 15 or 17 W to test the depth and possible pitch of the sulfide zone. The precise location of this deep hole will depend on data drawn from DH-4 and the deepened DH-3.

Respectfully submitted:

Robert S. Young,
Regional Geologist

Roland P. Ziers, Inc.
Charlottesville, Va.

November 3, 1956

Location New Canton, Virginia Angle: 45° Hole No. 1
Dep: 350' Deflection: 1°
Elev: Logged By: RSY

Footage	Description	cu %	zn %	au oz.	ag oz
0 - 12	soil				
12 - 43	chlorite-garnet schist; minor disseminated pyrite; core recovery of 15' in the interval 13-43'.				
43 - 57	chlorite-garnet schist; sulfides disseminated and in thin stringers; minor magnetite; sulfides (pyrite and chalcopyrite) est. at less than 2%.				
57 - 70.5	chlorite schist with thin quartz stringers; garnet zone at 62-67'.				
70.5 - 71	semi-massive pyrite, highly silicified; very minor sphalerite.				
71 - 78.5	chlorite-garnet schist.				
78.5 - 102.5	chlorite-garnet schist, very minor magnetite; silicified in places; disseminated sulfides total less than 1%; 6" biotite-rich zone at 88'.				
102.5 - 135	chlorite-garnet schist; very minor sulfides; numerous qtz stringers; 1" qtz vein at 121'.				
135 - 137.5	silicified zone; pyrite disseminated and in stringers.				
137.5 - 339	chlorite-garnet schist; silicified zone 145.3-147.3'; moderate disseminated pyrite-chalcopyrite (est. 3% total) 151.5-156'; 2" heavy disseminated pyrite at 164'; 6" disseminated pyrite-pyrrhotite-chalcopyrite at 191.5'; 6" disseminated pyrite-pyrrhotite-chalcopyrite at 204'; 1" complex				

Form No. 26 9/56

Location New Canton, Virginia Angle: 45° Hole No. 1
Dep: 350' Deflection: 10°
Elev: Logged By: RSY

Footage	Description	cu %	zn %	au oz.	ag oz
	(DH-1 continued)				
	sulfide stringers in the interval 223-223.5'; 5" heavy disseminated pyrite at 286'. Core loss of 6' in the interval 255-272'; 17' in the interval 291-311'.				
339 - 350	Heavy pyrite, disseminated and in stringers; traces of chalcopyrite; moderate magnetite; est 15% total sulfides.				
	TDA 350 feet.				

Form No. 26 9/56

Location New Canton, Virginia Angle: 45° Hole No. 2
Dep: 382' Deflection: not measured
Elev: Logged By: RSY

Footage	Description	cu %	zn %	au oz.	ag oz
0 - 8	soil				
8 - 57	fine-grained chlorite schist; gradational garnet zones; minor pyrite stringers.				
57 - 60	silicified zone; very minor disseminated sulfides; core loss of 1' in the interval 53-62'.				
60 - 72	chlorite schist.				
72 - 91	chlorite-biotite zone; heavy fractures healed with vein quartz; pyrite-pyrrhotite-chalcopyrite bleb at 74'; minor pyrite stringers; core loss of 4' in the interval 71-83'.				
91 - 94.5	silicified chlorite-biotite schist; 3" semi-massive pyrite-chalcopyrite at 95'; minor pyrite stringers.				
99 - 187	chlorite schist with gradational biotite developments; 2" disseminated chalcopyrite at 174' and 175'; core loss of 7' in the interval 123-133', 6' in the interval 133-143'.				
187 - 191	silicified zone; moderate disseminated sulfides, principally pyrite.				
191 - 203	knotty chlorite-garnet-biotite schist; moderate disseminated pyrite-chalcopyrite-sphalerite; core loss of 2' in the interval 194-203'.				
203 - 275	chlorite schist; gradational garnet zones; light disseminated pyrite throughout.				

Form No. 26 9/56

Location New Canton, Virginia Angle: 45° Hole No. 2
Dep: 382 ' Deflection: not measured
Elev: Logged By: RSY

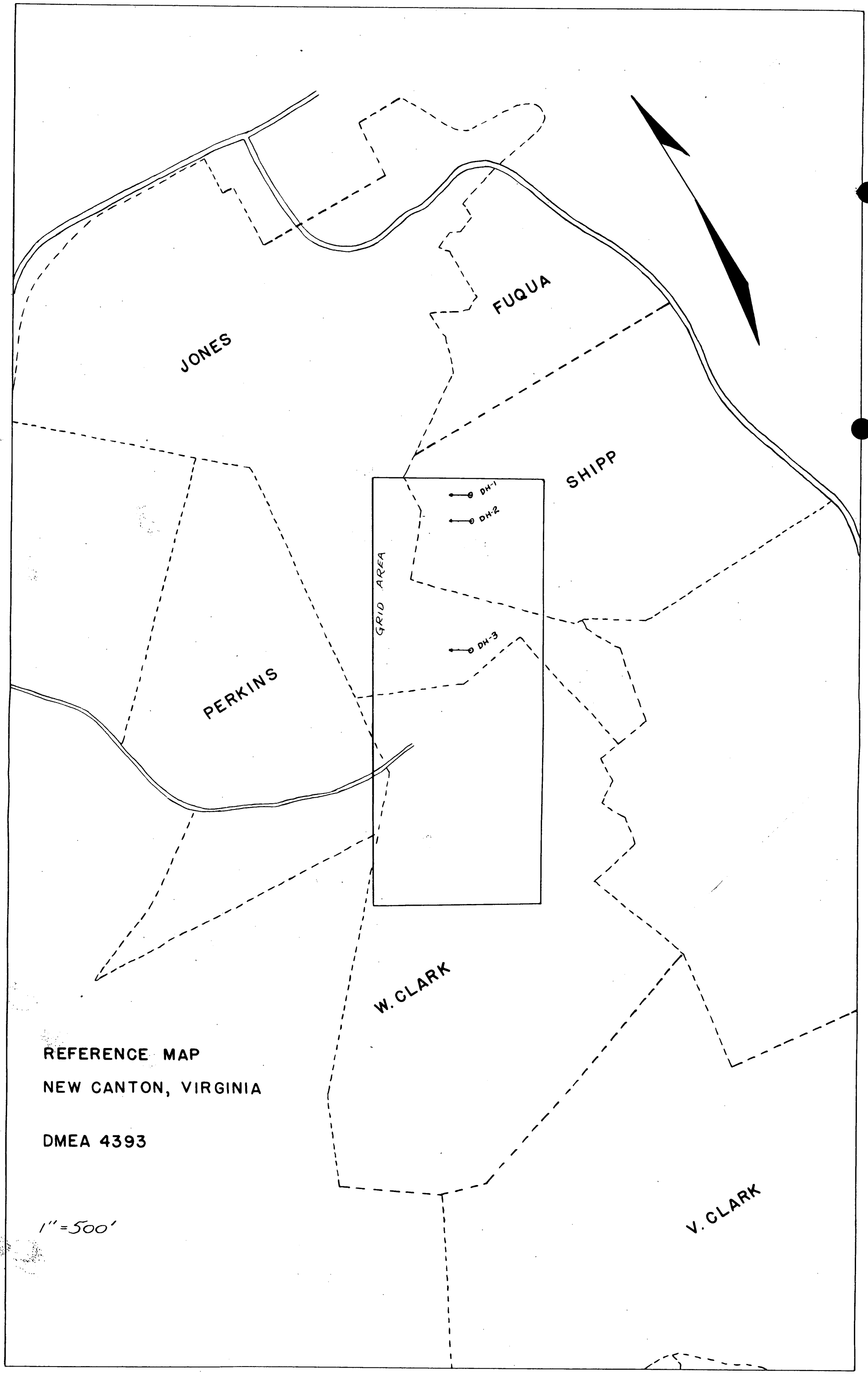
Footage	Description	cu %	zn %	au oz.	ag oz
275-283	diabase dike.				
283-292	chlorite schist; silicified for most part; moderate dissemination of pyrite and magnetite (core loss of 4 feet 322-331')				
331-344.5	chlorite schist gradational into silicified zone at about 336 feet; light to moderate dissemination of pyrite-pyrrhotite-chalcopyrite-sphalerite; semi-massive pyrite at 337.5-339.5.				
344.5-345.25	massive pyrite-pyrrhotite-chalcopyrite. cu.est. 1%.				
345.25-349	barren silicified zone.				
349-352.5	massive pyrrhotite-pyrite-chalcopyrite-sphalerite. cu.est. 1%.				
352.5-359	muscovite-biotite-garnet schist; biotite "eyes."				
359-365	chlorite-garnet schist.				
365-382	spotted muscovite-biotite-garnet schist.				
	TDA 382 feet.				

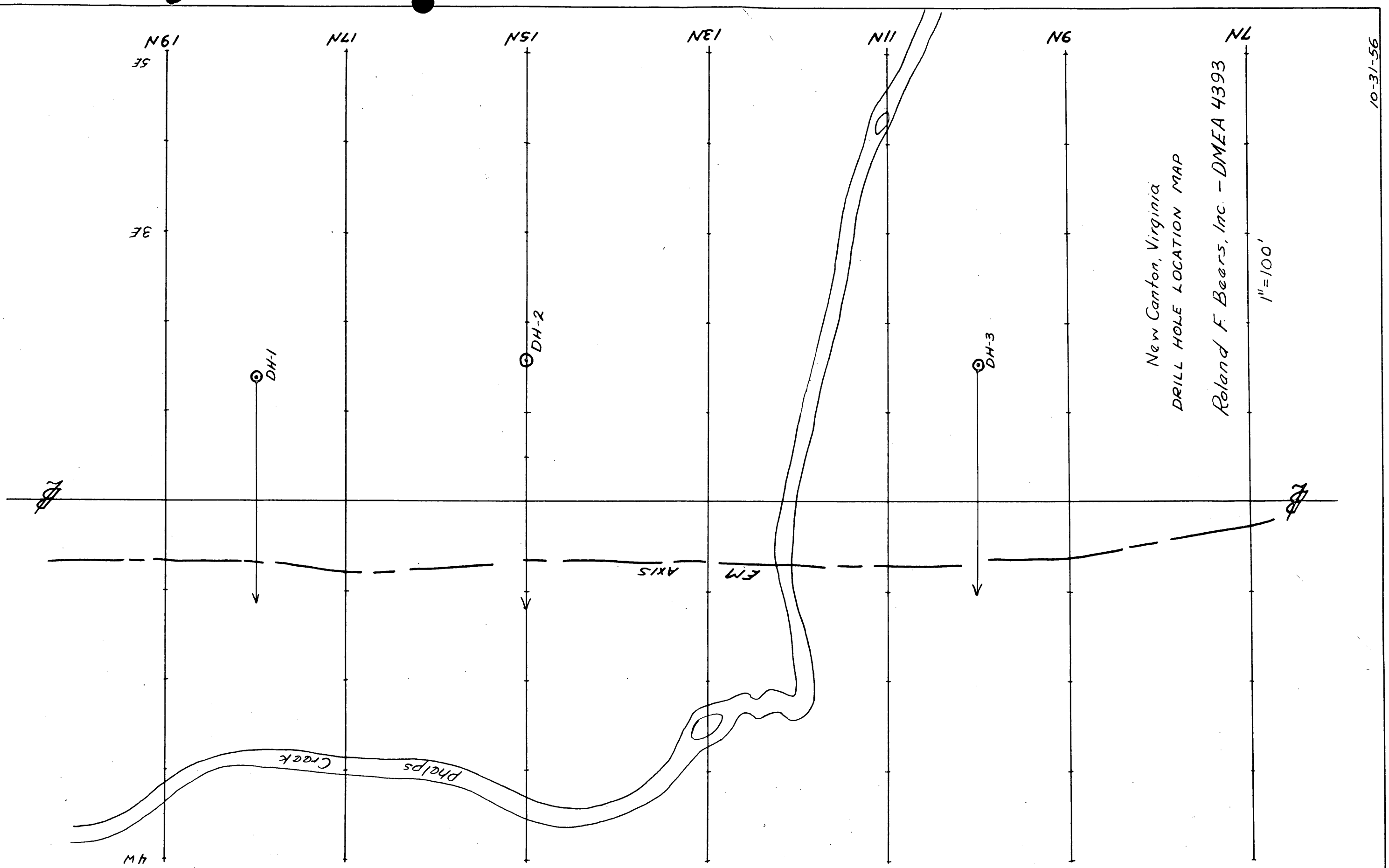
Form No. 26 9/56

Location New Canton, Virginia Angle: 45° Hole No. 3
Dep: 350' Deflection: not measured
Elev: Logged By: RSY

Footage	Description	cu %	zn %	au oz.	ag oz
0-32	soil				
32-54	chlorite-hornblend schist (altered); very minor pyrite (core loss 12 feet).				
54-73	diabase dike.				
73-77	altered chlorite schist.				
77-203	diabase dike; core recovery very poor throughout.				
203-210	altered chlorite schist; minor pyrrhotite and chalcopyrite.				
210-334	chlorite schist; sporadic gradational garnet zones; dark development (fine-grained hornblend ?) 294-300'; silicified zones at 265-267'; 286-287'; 308-311'.				
334-344	silicified chlorite schist with magnetite; disseminated pyrite-pyrrhotite-chalcopyrite.				
344-348	chlorite schist; minor pyrite.				
348-348.75	diabase dike.				
348.75-350	chlorite schist; 4 inches moderate disseminated pyrite at 349'.				
	TDA 350 feet.				

Form No. 26 9/56


JONES
FUQUA
SHIPP
PERKINS
GRID AREA
DH-1
DH-2
DH-3
W. CLARK
V. CLARK
REFERENCE MAP
NEW CANTON, VIRGINIA
DMEA 4393
1" = 500'


New Canton, Virginia
DRILL HOLE LOCATION MAP
Roland F. Beers, Inc. - DMEA 4393
1" = 100'
10-31-56
N19
N17
N15
N13
N11
N6
N1
5E
3E
DH-1
DH-2
DH-3
℄
℄
EM AXIS
Phelps Creek
4W

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

RECEIVED
NOV 9 1956
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

Memorandum November 7, 1956

To: R. A. Laurence, Executive Officer, DMEA Region V

From: H. L. Burmeister, U. S. Bureau of Mines; W. P. Williams, U. S. Geological Survey

Subject: Interim Report on Operating Contract

Docket No. DMEA-4393 (copper, zinc)
Contract No. Idm-E 1013
Roland F. Beers, Inc.
New Canton Area - Buckingham County, Virginia

This project was visited by W. P. Williams, geologist, and H. L. Burmeister, engineer, on November 1 and 2, 1956.

The primary purpose of the visit was to log core and determine if sufficient mineralized material had been found by Stage I drilling to justify further exploration under Stage II of the contract.

As has been previously reported, core recovery from hole no. 1 was so unsatisfactory that the E. J. Longyear Co. agreed to either wedge the hole or drill a new hole at their own expense. The Longyear Co. elected to drill a complete new hole rather than wedge. This new hole, designated as no. 1A, is collared approximately 10 feet west of the collar of no. 1, and on the same bearing and inclination as no. 1.

Hole 1A intercepted the footwall at 370 feet and was drilled to bottom at 379 feet, while the geologist and engineer were at the drill.

After logging all core it was decided that the results obtained in Stage I drilling justified further exploration by entering Stage II. The examining team gave the operator's representative and geologist, Mr. R. S. Young, verbal permission on Nov. 1, 1956, to commence Stage II drilling.

The decision of the examining team to allow additional drilling is based in large part on the strongly mineralized intersection obtained in hole no. 2. A penetration of a total of about 50 feet of abundant,

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

disseminated sulphides with chalcopyrite was obtained in hole no. 2. Within the strongly mineralized 50 feet a total of about 3½ feet consisted of massive pyrite, pyrrhotite and chalcopyrite.

The possibility exists that the sulfides in hole no. 2 comprise only a small pod of small longitudinal extent. The corresponding zone in holes nos. 1 and 3 was much more weakly mineralized which indicates small lateral extent. On the other hand, geologic structures in the vicinity as well as structure of the ore bodies to the south in the Dillwyn area suggest that an ore body on the operator's property will pitch to the northeast from 30 to 60 degrees. If so, hole no. 1 may have passed above the highest grade rock. With such a pitch in mind, it appears that the best approach for finding an extension of the massive sulfides in hole no. 2 would be a fourth hole located between holes nos. 2 and 3 and pointed so as to intersect the mineralized zone at a point as high or higher than in hole no. 2.

Permission was given the operator to drill hole no. 4 which is to be collared at a point midway between holes nos. 2 and 3 and 80 feet SE of the base line (contract map). The hole is to be drilled a maximum length of 300 feet at a minus 45° inclination and on a northwest bearing. The footwall should be intersected at a vertical depth of 150 feet below surface.

Permission was also given to drill another hole, no. 5, if significant mineralized material is intercepted by hole no. 4. The exact location, inclination, and depth of no. 5 will, if drilled, be governed by results obtained in no. 4. Hole no. 5 would however be drilled between holes nos. 1 and 2 with the purpose of exploring the mineralized zone down the pitch if such is indicated by no. 4 in conjunction with no. 2. Hole no. 5 would be drilled on an inclination between 45° and 60° on a NW bearing to a length of approximately 700 feet.

The operator states that core samples of the mineralized sections of core obtained in Stage I will be sent for assay on Nov. 3.

Hole No. 1

Depth From	Depth To	Core Rec.	Summary Log
0	12	0	Overburden
12	18	2.0	NX core. Oxidized, crumbly mica schist. No sulph.
18	37	8.0	BX core. Core ground. Rusty green-gray oxidized mica schist. No sulphides .
37	51	12	BX core. Dark green hornblende schist. Garnetiferous. Sparse sulfides.

Hole No. 1 (Cont'd)

Depth From	Depth To	Core Rec.	Summary Log
51	151	100	Dark green to greenish gray hornblende schist, mostly garnetiferous. Sparse disseminated pyrite and pyrrhotite thru-out. Specks chalcopyrite @ 94'-97'; 121'.
151	210	50	Silvery gray-green mica schist. Disseminated sparse pyrite, pyrrhotite and very sparse chalcopyrite.
210	282	65	Green to black hornblende-mica schist, mostly garnetiferous. Very sparse local pyrite, pyrrhotite, chalcopyrite.
282	311	13	Silvery gray-green garnetiferous mica schist. Sparse disseminated pyrite, pyrrhotite, and chalcopyrite.
311	337	26	Dark green to black hornblende schist. Sps. sulfides. No cu.
337	350	13	Gray-green garnetiferous chlorite schist. Abundant disseminated pyrite, pyrrhotite, magnetite and sparse chalcopyrite.
			Bottom
		289	
			289/350 = 82.5 % core recovery

Hole No. 1-A (re-drilled)

Depth From	Depth To	Core Rec.	Summary Log
0	280	0	Drilled with non-core bit.
280	318	38	Dark green to black hornblende schist. Sulfides sparse to absent.
318	370	52	Light gray-green mica-garnet schist. Abdt. sulfides throughout. Sps. chalcopyrite @ 357-358'. Dissem. chalcopyrite @ 363½', 365', 369'.
370	379	9	Green to black chlorite schist. Garnetiferous. No sulfides.
			Bottom
	99	99	
			100% core recovery

Hole No. 2

Depth From	Depth To	Core Rec.	Summary Log
350	352.5	2.5	Massive pyrrhotite, pyrite, local chalcopyrite.
352.5	359	6.0	Gray schist, garnetiferous. Sulfides sparse to absent.
359	365	6.0	Biotite-garnet schist. Sulfides sparse to absent.
365	372	4.5	Light gray-green mica-garnet schist. Sparse pyrite and pyrrhotite.
372	382	9.5	Like 365-372. Sulfides very sparse to absent.

Hole No. 3

Depth From	Depth To	Core Rec.	Summary Log
0	32	0	Overburden
32	50	5	BX core. Gray-green, fine-grained hornblende-mica schist. No sulfides noted.
50	56	5	AX core. Like 32-50'.
56	204	123	Green to black, fine to very fine-grained basic dike. Locally altered and crumbly. Schistose structure 73-76'. Much altered and core ground up 90-112. Very scattered small grains pyrite, pyrrhotite, chalcopyrite.
204	290	83	Light green to gray chlorite-mica-garnet schist. Local sparse pyrite, pyrrhotite, and chalcopyrite.
290	330	38	Greenish gray hornblende schist. Sulfides very sparse to absent.
330	350	19	Silvery gray mica schist. Local abundant white quartz veinlets. Locally abundant sulfides and magnetite. Sparse scattered chalcopyrite. Six inch basic dike @ 347'.
			Bottom
	350	273	
			273/350 = 78% core recovery

Core recovery in hole no. 3 was, on the whole, not good. Most of the unretrieved core, however, as can be seen on the log of hole no. 3, was lost in the basic dike zone. Good core recovery was accomplished in the important potential ore zone.

The log of hole no. 3 shows that the hole was unfortunately stopped before the potential ore zone was completely penetrated. For

complete results hole no. 3 should be deepened. Because the hole was stopped short of its objective as a result of the operator's inadvertence, it is not recommended that DMEA participate in any expenditures involved in moving the drill back to hole no. 3 and re-entering the hole. DMEA would be justified in participating in the cost of the actual drilling and coring in deepening the hole.

H. L. Burmeister

W. P. Williams

W. P. Williams

RECEIVED
NOV 9 1956
U. ... Geology
Knoxville, Tenn.

ACTION ON INTERIM 4393
OR FINAL FIELD TEAM REPORT
Date 11-5

Referred to:

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

Note comments in report regarding:

1. Note lack of supervision, although contract provides
2. for such "at all times by competent engineers and geologists"
3. Talbot 11/6/56
4.

and take appropriate action.

- - - - - - - -

Action taken by Division:

F.T. has already made the absence field.

Robert E. Adams

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
WASHINGTON 25, D. C.

IN REPLY REFER TO:

RECEIVED
NOV 5 1956
D.M.E.A.

October 29, 1956

Memorandum

To: R. A. Laurence, Executive Officer, DMEA Region V

From: W. P. Williams, U. S. Geological Survey

Subject: Interim inspection, DMEA 4393, Idm-E 1013, Roland F. Beers, Inc., New Canton district, Buckingham County, Virginia. (Copper-zinc)

The subject project was visited and inspected by the writer on Oct. 23 and 24, 1956. The writer was accompanied part of the time by Mr. V. R. Geyer, Geologist, R. F. Beers, Inc.

Stage I of Contract Idm-E 1013 provides for a total of 1,050 feet of core drilling. The contract specifies that the drilling shall be done in three holes, all at minus 45° inclination, and that each hole shall have an inclined length of about 350 feet.

On this date a total of 1,082 feet of drilling has been completed. Three holes have been drilled at locations shown on the map accompanying the contract. The drilling sequence, however, was reversed from that on the map. Consequently, hole no. 3 on the Contract map was drilled first and is now known as hole no. 1; hole no. 2 is unchanged; and hole no. 1 on the map was drilled last and is now referred to as no. 3.

Hole no. 1: Total depth - 350 feet. Results from the hole are inconclusive because 17 feet of core from the ore zone was ground up and lost. Disseminated sulfide minerals are present in some of the core recovered. From brief examination all the core recovered is hornblendic and/or chlorite schist. None of the core recovered appears to be of ore grade. Sludge samples are not being collected by the Operator.

RECEIVED
NOV 1 - 1956
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

RECEIVED
NOV 5 1956
D.M.E.A.

Summary Log - hole no. 2

Depth (ft.) From	To	Core rec. (ft.)	Description
0	8	0	Soil and overburden. No core.
8	20	12	BX core. Green to greenish black chlorite schist. Very sparse pyrite, pyrrhotite, chalcopyrite.
20	33	13	AX core. Green and gray fine grained hornblende-biotite schist. Very sparse sulfides.
33	49	16	Gray to greenish gray chlorite(?) schist. Sparse sulfides.
49	173	99	Green and gray fine-grained hornblende-biotite schist. Scattered 1/16" to 3/4" white quartz veins. Sparse disseminated sulfides nearly throughout. Coarse, 1/4" dia; dissem. pyrrhotite and chalcopyrite @ 75'. Coarse pyrrhotite and sparse chalcopyrite @ 103', @ 109'. Sparse dissem. chalcopyrite and sphalenite(?) @ 110'.
173	216	43	Gray and gray-green chlorite-garnet schist. Fairly abundant sulfides @ 190-203'.
216	223	7	Gray green hornblende-biotite schist. Sparse sulfides.
223	248	25	Light green to brownish green chlorite schist. Sparse grains and stringers of sulfides.
248	271	23	Green and greenish gray hornblende-biotite schist. Sparse dissem. sulfides.
271	275	4	Green-gray chlorite and garnet schist. Sparse sulfides.
275	283	6	Dark green to black, very fine grained basic dike. No sulfides noted.
283	336	49	Light grayish green chlorite-garnet schist. Abundant pyrrhotite, pyrite, and sparse chalcopyrite.
336	345	9	White to gray quartz vein. Abundant, locally massive, pyrrhotite and chalcopyrite @ 339-345'.
345	349	4	White and gray massive quartz. Barren.
349	350	1	Massive pyrrhotite, pyrite and chalcopyrite.
		311	

311/342 = 91 percent core recovery.

On October 25, 1956, after completion of hole no. 3, the diamond drill was moved back to hole no. 2. Hole no. 2 was re-entered and deepened to a total depth of 382 feet. V. R. Geyer, Operator's geologist, reports that 3 feet of massive pyrrhotite and chalcopyrite were cored from 350 to 353. Core from 353 to 382 consisted of essentially barren chlorite schist.

Hole no. 3: Total depth - 350 feet. A preliminary summary of hole no. 3 is as follows:

0 - 20'	Overburden
20 - 56'	Schist
56 - 73'	basic dike
73 - 77'	gneiss with traces of pyrite
77 - 203'	basic dike
203 - 350'	chlorite-garnet schist

No significant amounts of sulfide minerals were found in hole no. 3.

At the completion of the deepening operation on hole no. 2 the drill was moved back to hole no. 1 on Oct. 26. At hole no. 1 a new hole was collared. Intentions are to re-drill hole no. 1 to a depth of 280 feet with a non-core bit. From that point core will be taken through the possible ore zone. This maneuvre is intended to make up for loss of critical core in the original hole no. 1.

The project suffers from inexperienced drilling personnel and lack of supervision. It is my understanding that cost of re-drilling hole no. 1 will be borne by E. J. Longyear Co., drilling contractor for the project. It is my information that hole no. 2 was stopped by the driller at a critical point in massive sulfides for the reason that a geologist was not present (during the night shift) to issue instructions to continue drilling until the potential ore zone was penetrated. I do not recommend that DMEA participate in any costs involved in relocating the drill and deepening hole no. 2.

Geologic logs of the completed drilling will be submitted in a later report. The core will be split by Government representatives and sent for assaying as soon as possible.

W. P. Williams

W. P. Williams

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
ROOM 13 POST OFFICE BLDG.

RECEIVED
OCT 30 1956

October 25, 1956

Memorandum

To: Mr. H. L. Burmeister, U. S. Bureau of Mines

From: Executive Officer, DMEA Field Team, Region V

Subject: DMEA-4393, Idm-E1013 (Copper, zinc)
Roland F. Beers, Inc., Troy, New York
New Canton area, Buckingham County, Virginia

The interim report on this project has been forwarded to Washington. I am happy to learn that Longyear has agreed to wedge hole no. 1 and re-drill the ore zone.

Is there any possibility of deepening hole no. 2, so as to drill into the footwall of the massive sulphide zone? An amendment could be prepared if this would result in exceeding the 1050-foot maximum provided for Stage I.

The long delay in sending you the contract was the result of the operator holding it for a long time before signing and returning it. Also, he had to provide a performance bond before we could forward it for signature.

Robert A. Laurence

RAL/mg
cc - Operating Committee (2)
Lynch
file

Interim Report on Operating Contract

Docket No. DMEA-4393 (cupper, zinc)
Contract Idm-E1013
Roland F. Beers, Inc. New Canton Area,
Buckingham County, Virginia

RECEIVED
OCT 29 1956

This project was visited on October 18 and 19, 1956.

Work on this contract started September 29, probably after the operator had signed the contract but before it was sent to the Executive Officer. Diamond drilling under this contract has proceeded with continuing unreasonable loss of core. Little or no corrective measures were taken by the operator's representative after being advised how to do this by both the engineer and geologist.

Hole No. 1, drilled to 350' in schist, resulted in a core recovery of 93%, the 23 feet of core lost having been at critical points. From 255' to 272' there was a loss of 6' and from 291' to 311' there was a loss of 16½' of core. The 3½' section recovered between 291' and 311' contains some zinc and pyrrhotite mineralization. From 338' to 350' disseminated iron and copper sulphides are present in an amount estimated at about 15%; copper content is estimated at not to exceed 1%. The mineralized zone contains abundant small crystals of garnet and magnetite.

Hole No. 2 was drilled 350' in schist and into the mineralized target zone area except for one narrow diabase dike intercept. The diabase contains small disseminated crystals of chalcopyrite and garnet; no heat effect is in evidence at the diabase-schist contact. Core recovery was far more satisfactory in this hole. From 336' to 346' the mineralized schist may contain slightly more than 1% Cu, and about 0.5% Zn; from 346' to 348½', barren highly silicified schist; 348½' to end of hole at 350', massive pyrrhotite and chalcopyrite. The hole bottomed in this massive sulphide.

Hole No. 3 was being drilled in a diabase dike at the time of visit. This hole was drilled through 20' of overburden; 20' to 24' was schist, 24' to 203' diabase dike. At 203' the drill again entered schist and was still in the same material at 230' when the engineer left. Comparing the contact with schistosity, the strike of the dike appears to be at only a small angle from bearing of the hole. This probably accounts for the long diabase intercept although the hole may be down the dip of the dike. While in dike material the core recovery was less than 80%.

After examination of core in all holes it is concluded that loss of core has been due partially to an excess of pressure but mostly to the fact that a swivel core barrel has not been used.

At the completion of hole No. 1 the operator's representative, Mr. Young, was advised to have the drilling contractor use only a swivel core barrel and "M" series type bits, and to reduce drill pressure. This was not done.

On this visit it was found that Mr. Wm. Ward, the area superintendent for Longyear Co., had set up the drill at hole No. 1 and had not again contacted the drillers or the Beers Company until the drill motor broke down upon completion of hole No. 2. At this time no effort was made to increase core recovery.

On Oct. 19 the engineer telephoned Mr. Ward from the Beers Co. office and advised him that proper equipment would have to be supplied immediately and core recovery improved or drilling would probably be stopped. Mr. Ward stated that he thought a swivel barrel was on the job. This was not the case and should have been known since Mr. Ward set up the job personally. Mr. Ward assured the engineer that proper equipment would be immediately supplied. It was also arranged that the Longyear Co. will at their own cost wedge hole No.1 at a point above the lost core and make another ore zone intercept.

After completion of hole No. 3, hole No. 1 will be wedged. After wedge-drilling No. 1 hole No. 2 will be advanced at Beers Company expense, through the mineralized zone and into the footwall. It is estimated that this work will be completed on or about October 30 at which time entrance into Stage II must be considered.

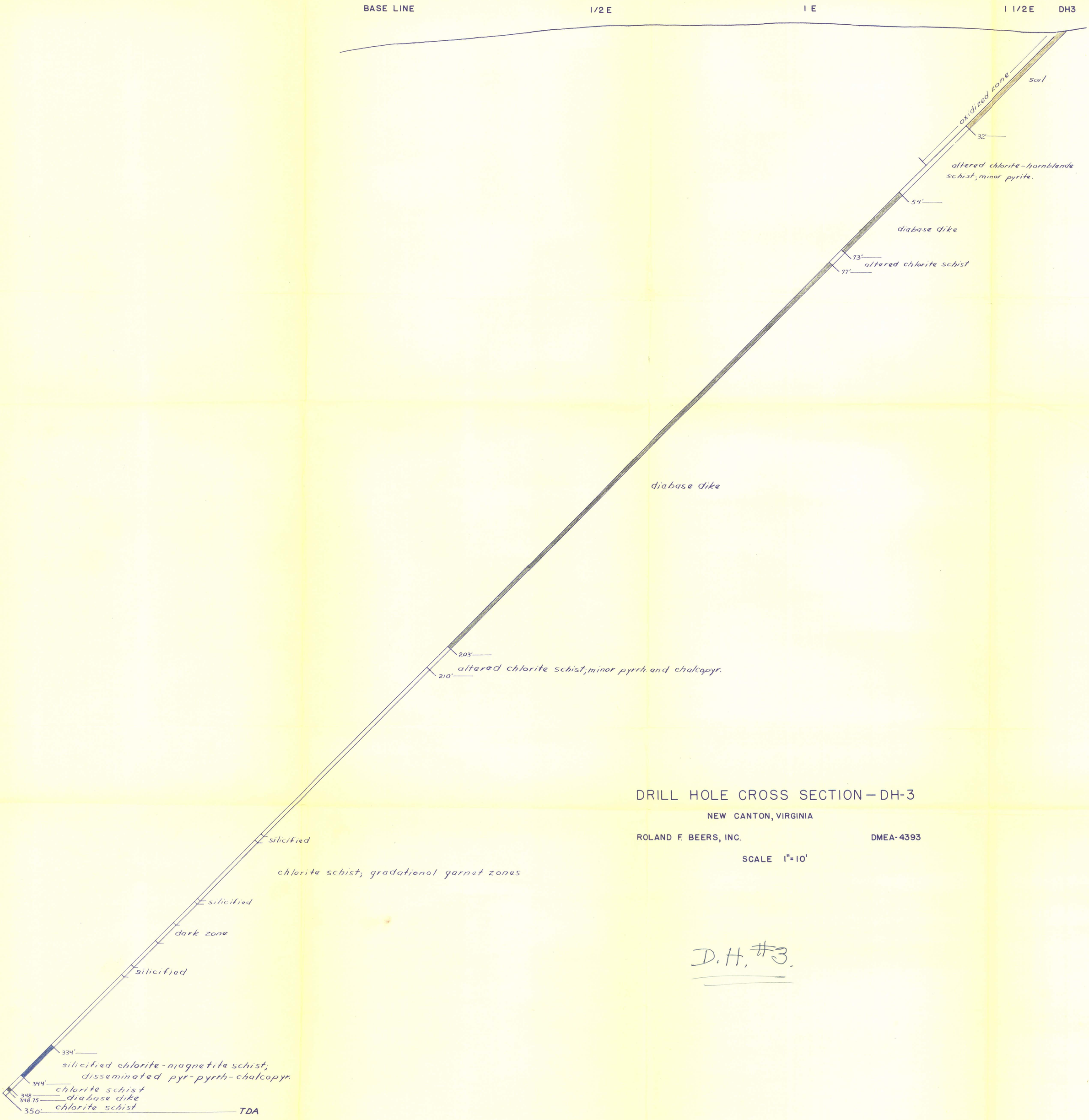
At the time of visit it was found that Basic Refractories Co. has a substantial interest in Beers, Inc. The following personnel of Basic Refractories were on the project at the time of visit: Mr. R. F. Schurtz, assistant vice president, Mr. H. C. Lee, vice president, both with offices in Cleveland, Ohio, and Mr. Conrad Martin, consulting geologist, Reno, Nevada. These gentlemen all were apparently encouraged with results obtained to date. Mr. Lee informed the engineer that the name Basic Refractories has just been changed to Basic, Inc.

During the Field Team's examination drill holes were so laid out that an estimated 50' would be in the footwall. It now appears that both the Beers Co. and the Government examiners misinterpreted the anomalies' projection of the mineralized zone by about 50 feet.

H. L. Burmeister

H. L. Burmeister

October 23, 1956



DRILL HOLE CROSS SECTION — DH-3

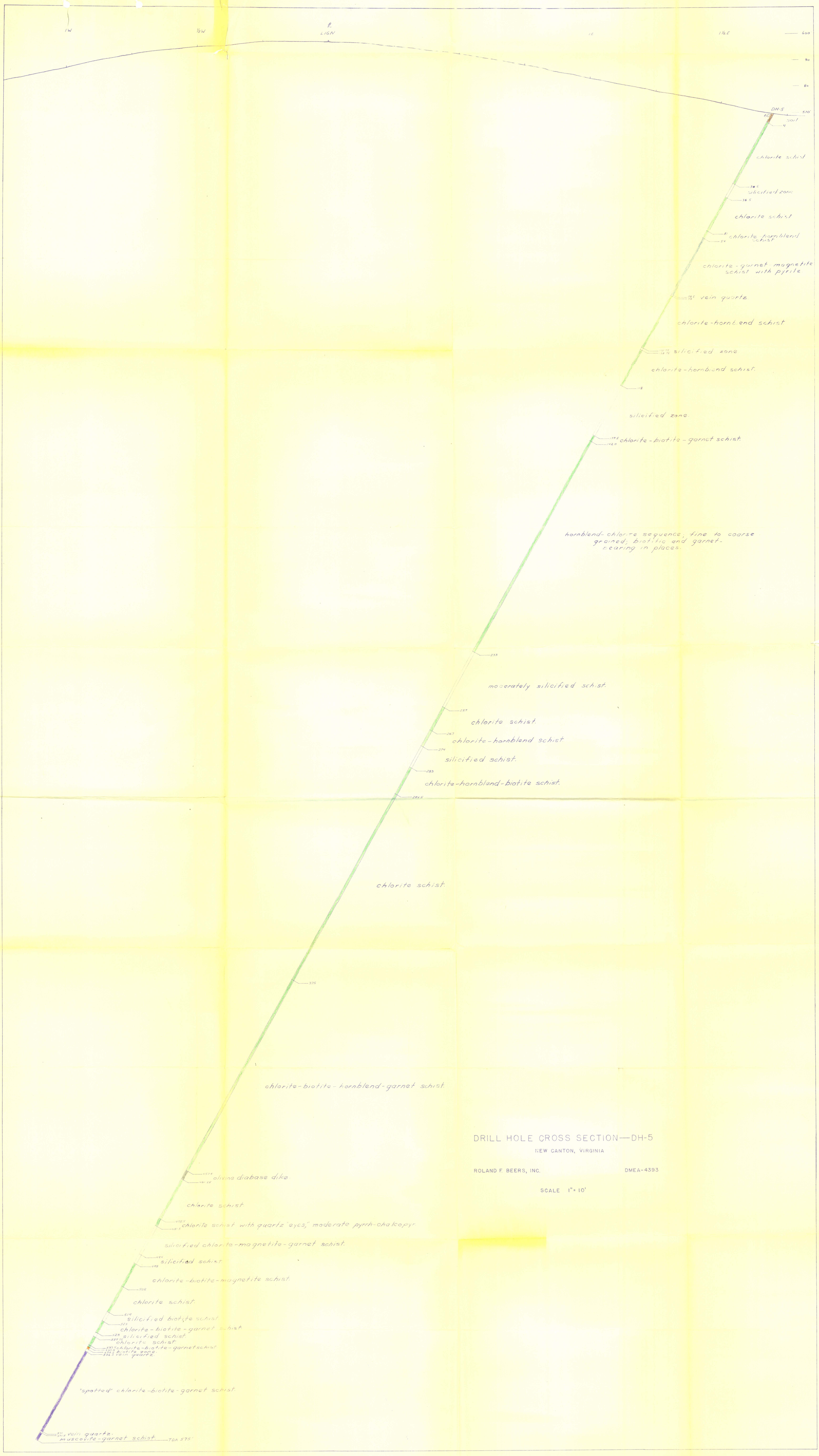
NEW CANTON, VIRGINIA

ROLAND F. BEERS, INC.

DMEA-4393

SCALE 1" = 10'

D.H. #3.

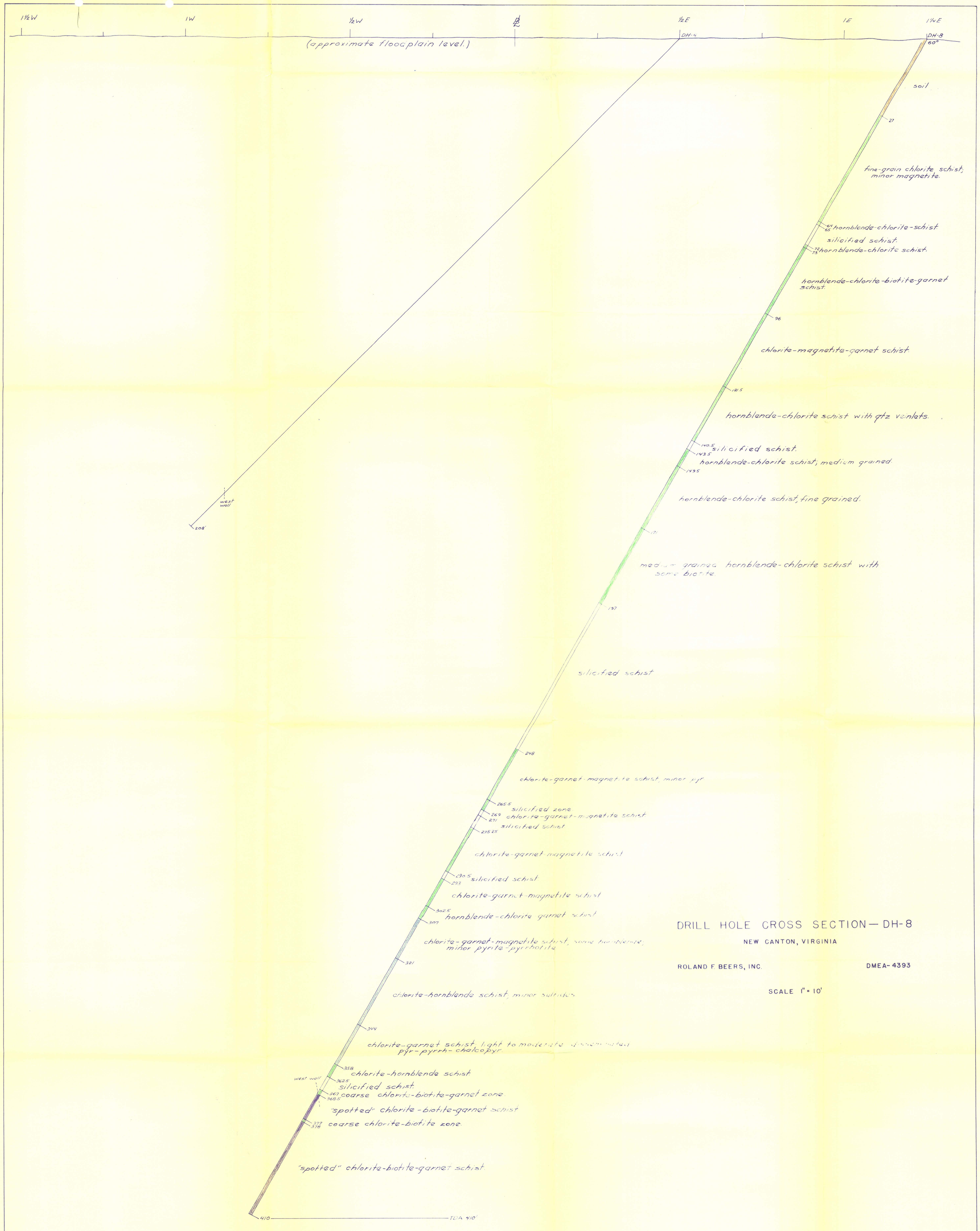


DRILL HOLE CROSS SECTION—DH-5

NEW CANTON, VIRGINIA

ROLAND F. BEERS, INC. DMEA-4393

SCALE 1" = 10'



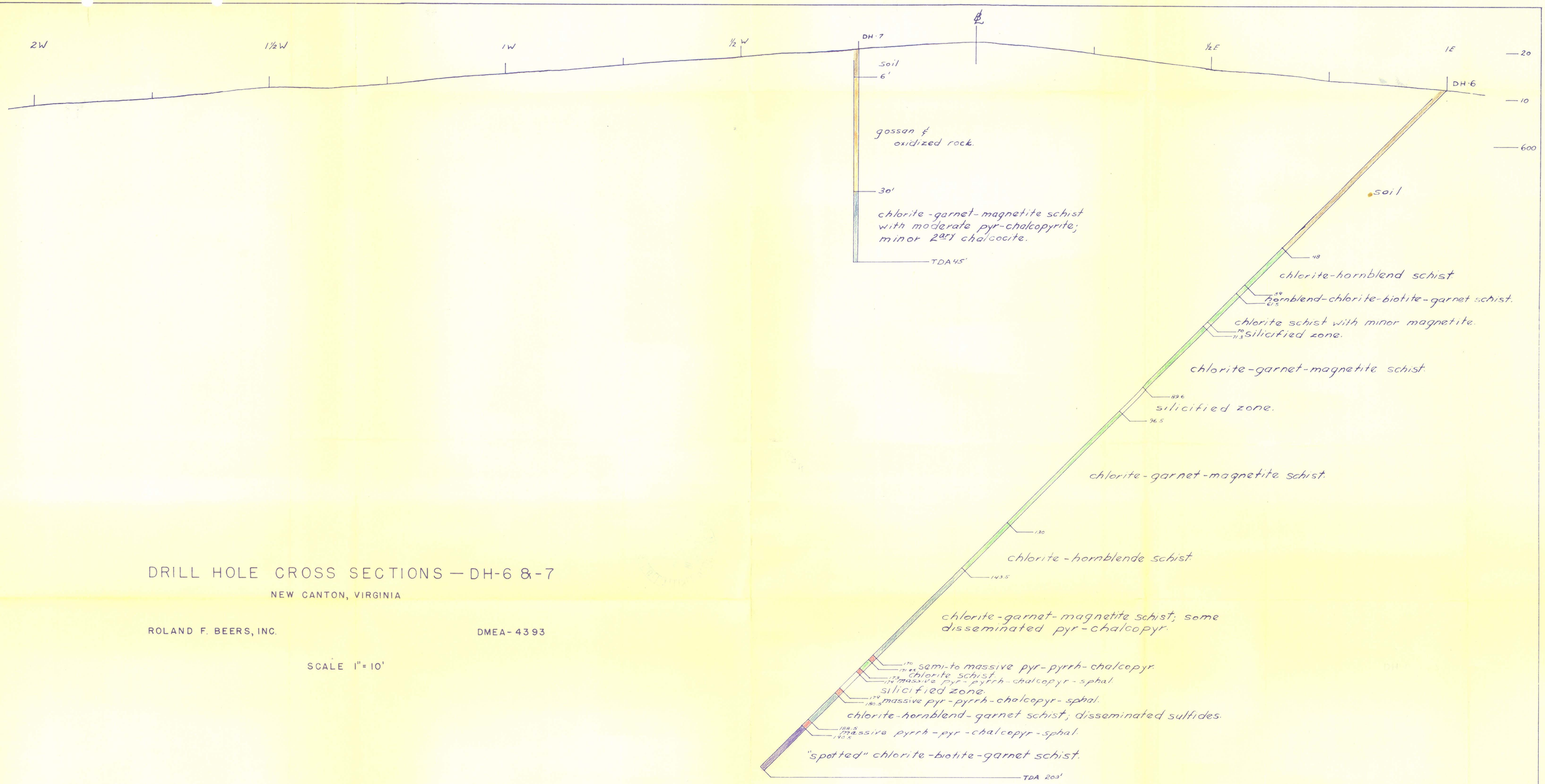
DRILL HOLE CROSS SECTION — DH-8

NEW CANTON, VIRGINIA

ROLAND F. BEERS, INC.

DMEA-4393

SCALE 1" = 10'



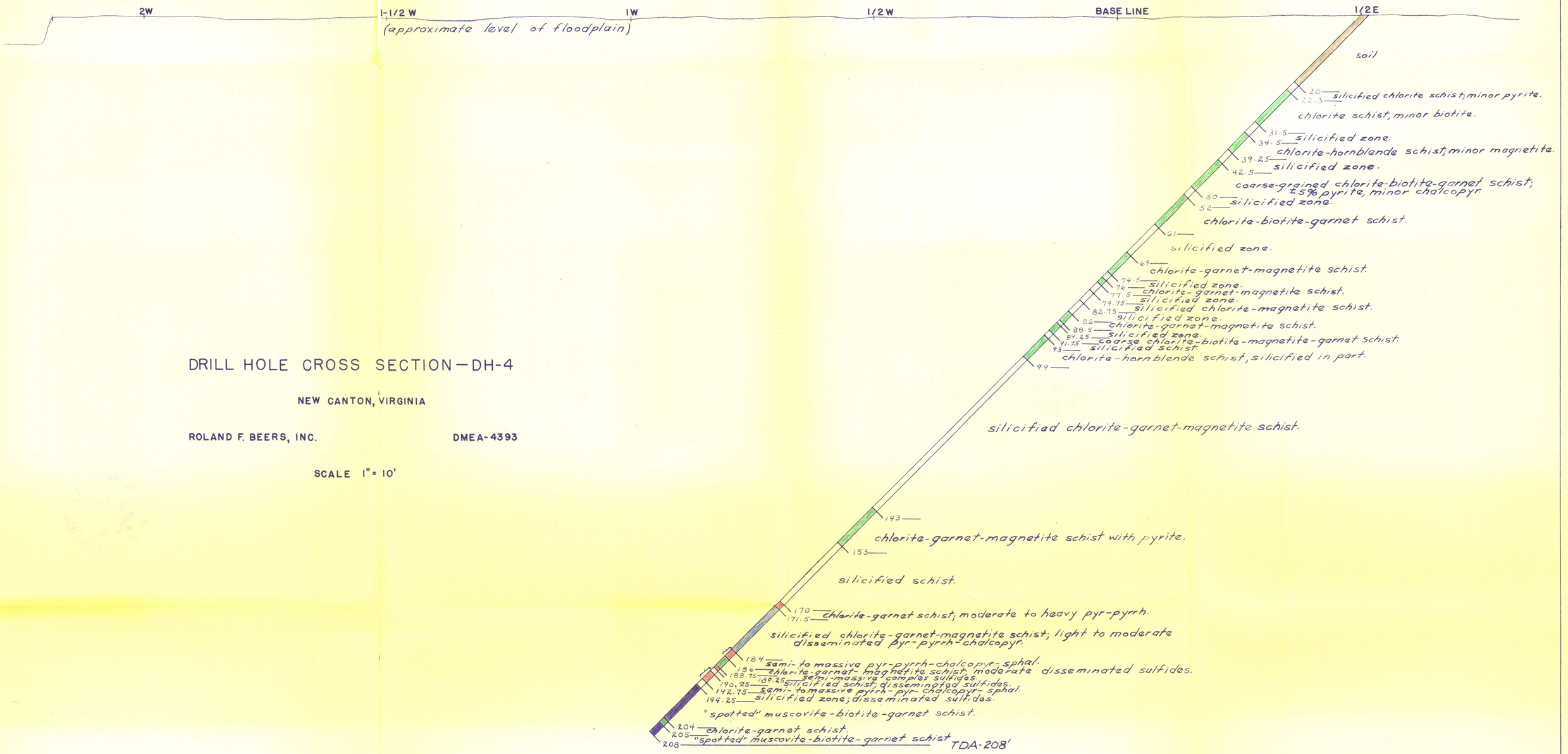
DRILL HOLE CROSS SECTIONS — DH-6 & -7

NEW CANTON, VIRGINIA

ROLAND F. BEERS, INC.

DMEA-4393

SCALE 1" = 10'



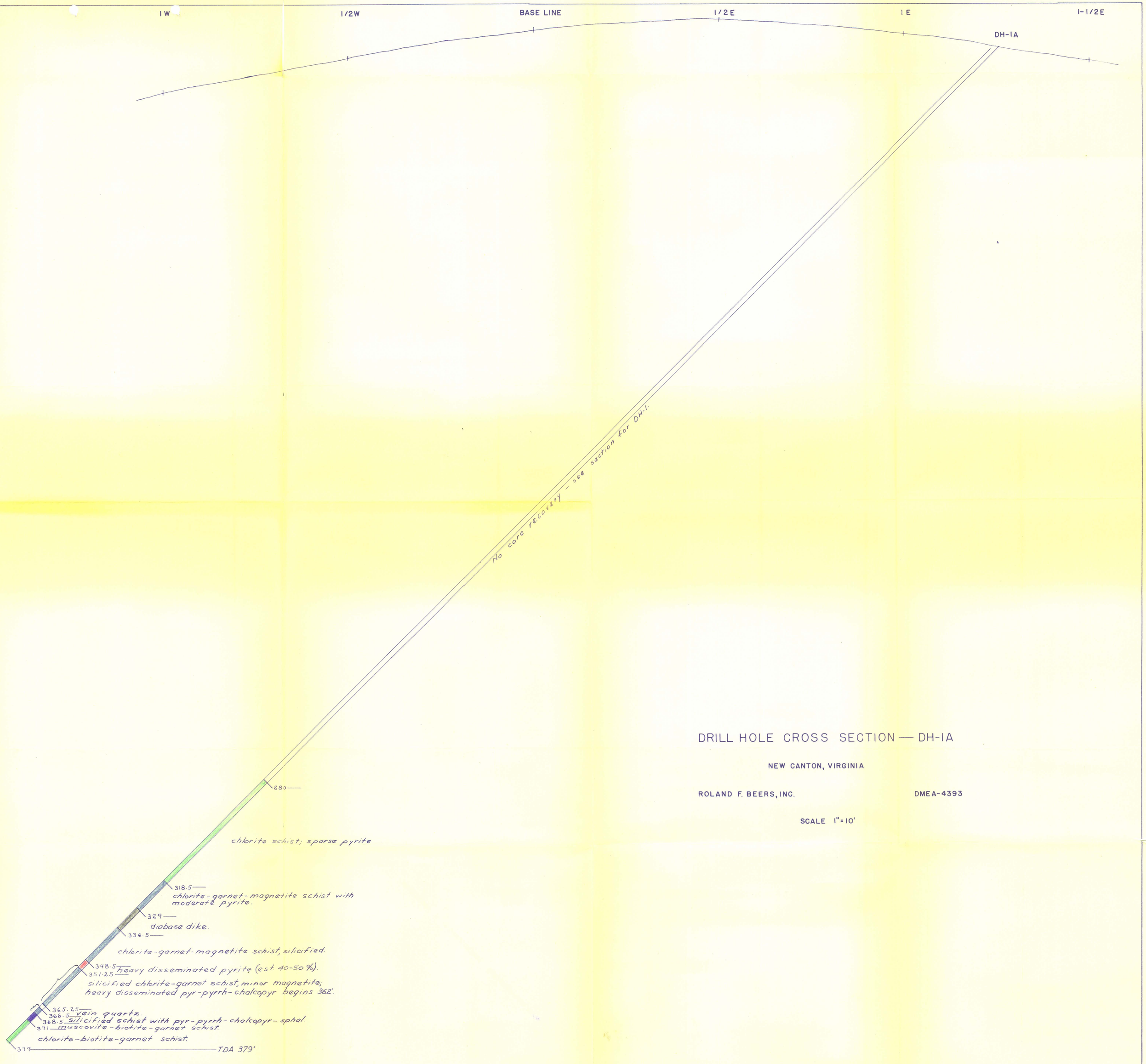
DRILL HOLE CROSS SECTION—DH-4

NEW CANTON, VIRGINIA

ROLAND F. BEERS, INC.

DMEA-4393

SCALE 1" = 10'



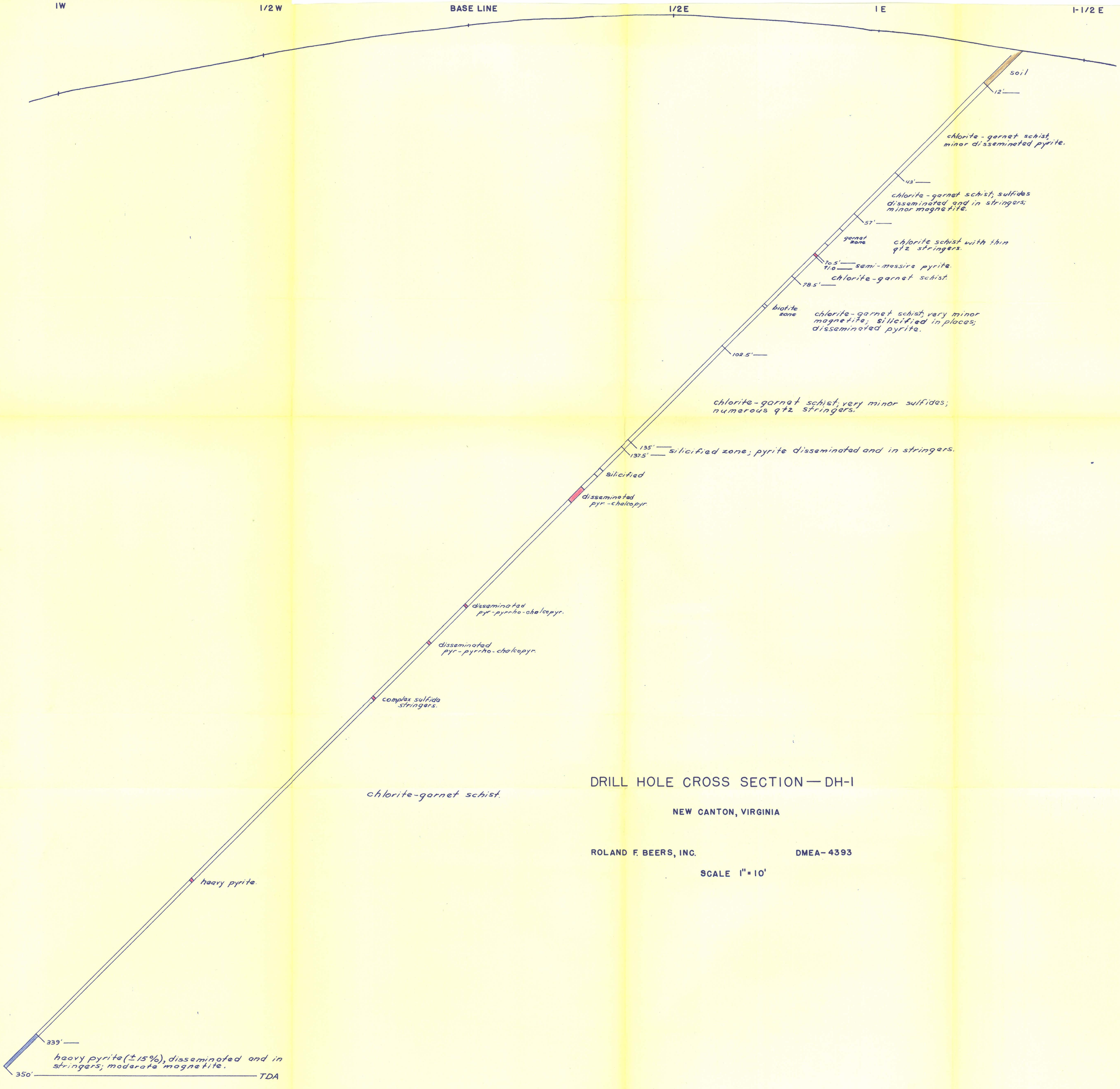
DRILL HOLE CROSS SECTION — DH-1A

NEW CANTON, VIRGINIA

ROLAND F. BEERS, INC.

DMEA-4393

SCALE 1" = 10'



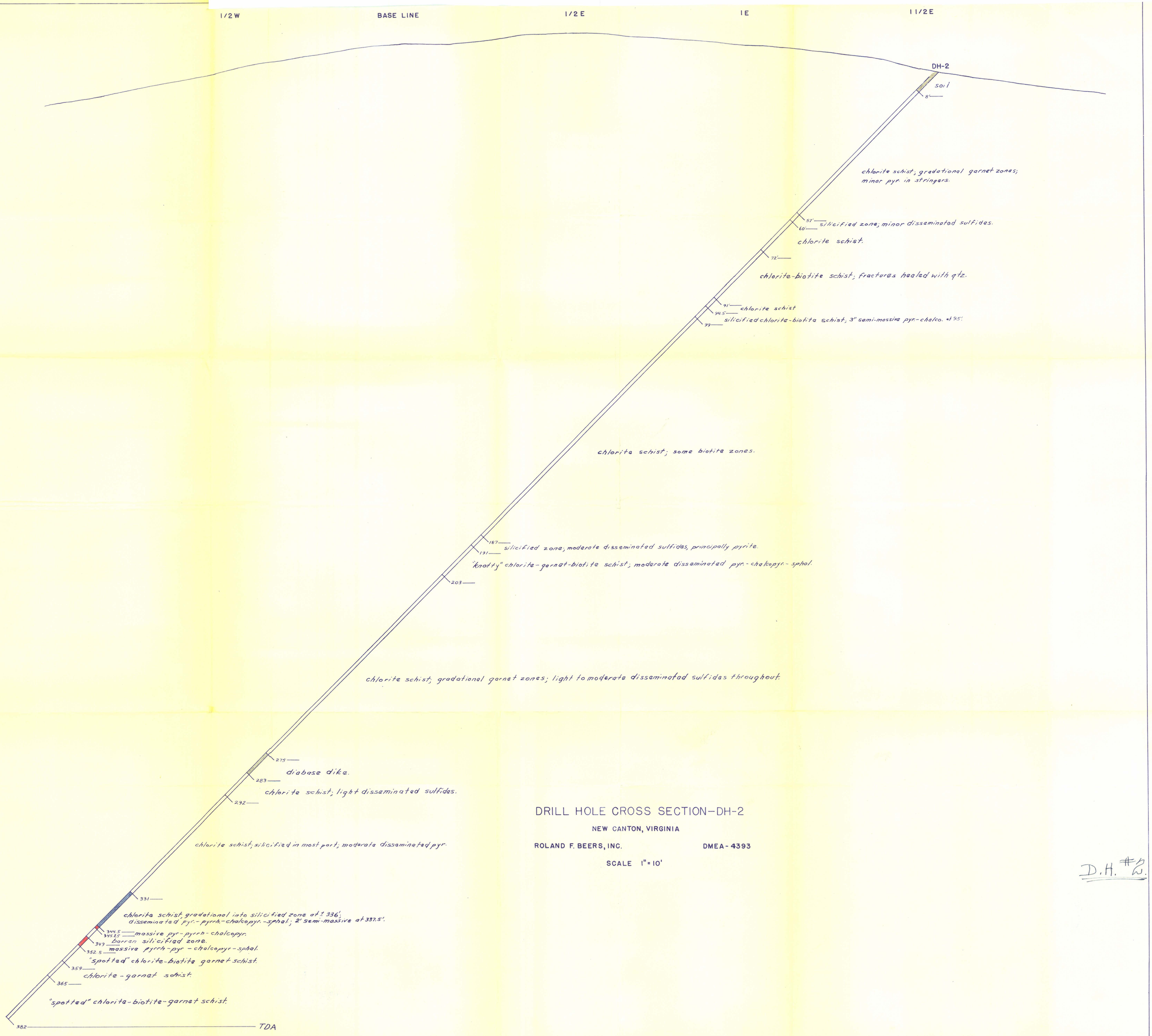
DRILL HOLE CROSS SECTION — DH-1

NEW CANTON, VIRGINIA

ROLAND F. BEERS, INC.

DMEA-4393

SCALE 1" = 10'



DRILL HOLE CROSS SECTION—DH-2

NEW CANTON, VIRGINIA

ROLAND F. BEERS, INC. DMEA-4393

SCALE 1" = 10'

D.H. #2 W.