MME Form 9
Rev. Mar. 59

UNITED STATES
DEPARTMENT OF THE INTERIOR
Office of Minerals Exploration

OFFICIAL DOCKET FILE

Contract No. ~~xxxxxx~~ 1423 Idm-E1088 Docket No. ~~MME-~~ DMEA-4580

Application
- [ ] Denied
- [ ] Withdrawn

Contract
- [ ] Terminated - Not Certified
- [ ] Terminated - Certified
- [ ] Cancelled
- [ ] Royalty Agreement

The records contained in this file are marked (x) and arranged in this order:

Folder No. 1:

Left Side

- [ ] Royalty Audits
- [x] Certification of Discovery / Closing Letter 1-3-61
- [x] Cost Audits 12-7-60
- [ ] Termination Notice or Agreement / Recision Notice
- [x] Assignment of Contract
- [x] Contract Amendments
- [x] Contract with all exhibits and annexes
- [ ] Owner's Consent to Lien and Subordination Agreement
- [x] Application and Attachments

MME-63-3-16-81

Right Side

- [x] Project Summary (final) 12-12-60
- [x] Work Completed Analysis (final) 1-4-61
- All other material filed in chronological order including the following reports if checked:
- [ ] Field Team Semiannual Report for Certified Project
- [ ] Final Field Team Report (Tab)
- [x] Operator's Final Report (Tab) Oct. 1960
- [ ] Interim Field Team Reports (see 1-A)
- [ ] Operator's monthly reports and all attachments
- [x] On-site Exam. Report (Tab)
- [ ] Settlement Sheets
- [ ] Drill Logs

Additional Folders:

Left Side

Folders No. 2 and 2-A : Reports
- [ ] Analysis of Semiannual Inspection Reports
- [ ] Project Summary (Interim) by MME Engineers

Right Side

- [ ] Field Team Semiannual Report for Certified Project
- [x] Field Team Interim Reports
- [x] Operator's Monthly Reports with Transmittal, Narrative and Maps

Folders No. 3 : Maps (Use ~~pockets, folders, or~~ envelope) and Operating Agreement

Folders No. 4 : Settlement Sheets and Annual Reports on Certified Project and Analyses

Folders No. 2 and 2-A : Drill Logs

Folders No. _____ : Royalty Material

52615

Form NME 63
(May 1970)

REQUEST FOR INFORMATION ON CERTIFIED PROJECT OR PROJECT UNDER ROYALTY AGREEMENT

1. Since Aug. 17, 1968, has there been a change in ownership, lease, or sublease? *If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before.* Yes ☐ No ☒

March 10, 1981

2. Since Aug. 17, 1968, has there been any production from the land subject to the contract? Yes ☐ No ☒

A. If so and it was shipped, give quantity, value, and name and address of purchaser.

Purchaser *(name and address)*	Quantity	Value

B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity *(tons)*	Estimated Grade	Location
Ore			
Concentrates			
Other			

3. Since workings *(see* , has any production been transported through *of contract)*? Yes ☐ No ☒

If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name B. H. Putnam	*Title*
Address P. Bo. Box 906 New Albany, Ind. 47150	*Date* 3/16/81

United States Department of the Interior

GEOLOGICAL SURVEY
BOX 25046 M.S. 933
DENVER FEDERAL CENTER
DENVER, COLORADO 80225

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

Re: DMEA 4580 (zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tenn.
Contract Idm E-1088

March 10, 1981

Mr. Benjamin H. Putnam
P.O. Box 906
New Albany, Ind. 47150

Dear Mr. Putnam:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely,

J. William Hasler

J. William Hasler, Chief
Office of Minerals Exploration

RECEIVED
MAR 19 1981

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF ROYALTY REVIEW

I have reviewed the files of the Washington office pertaining to Contract Idm-81088, Docket DMEA-4580 (zinc), dated May 20, 1957, with

National Lead Company
111 Broadway
New York 6, New York
and its assignee
Benjamin H. Putnam
512 Third Street
Marietta, Ohio

for the purpose of determining the amount of royalty payable to the U. S. Government on sales of minerals from property referred to as the Puncheon Camp Creek Area located in the Copper Ridge Zinc District, Grainger County, Tennessee, during the period May 20, 1957, through December 1, 1960.

A certification of discovery or development was issued on January 3, 1961, and, in accordance with Article 6, Annexes I and II, and Amendment No. 5 of the contract, royalty is payable on all minerals produced from the land described in Article 2, as amended, of the contract for a period of 23 years from the date of the contract or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. A Report of Review dated December 7, 1960, indicated acceptable costs under the exploration contract amounting to $154,387.34; however, an aggregate of $154,357.34 only was claimed by the assignor and assignee, with the Government's contribution on a 50 percent basis being $77,178.67.

The status of the project, the scope of review, and the reasons therefor are stated on page 2.

This review established no sales subject to the Government's royalty for the period covered. Accordingly, as of December 1, 1960, the royalty account of this project was found to be:

Total Royalty Payable	$ -0-
Total Royalty Paid	-0-
Balance of Royalty Due	$ -0-

May 11, 1962

E. D. Talbert

E. D. Talbert, OME Auditor

Idm-E1088 Benjamin H. Putnam, Assignee DMEA-4580

STATUS OF PROJECT, SCOPE OF REVIEW
AND REASONS THEREFOR

This contract provides that the Operator, as principal if the producer or as surety if not the producer, shall pay to the Government a percentage royalty on all minerals produced for a maximum of 25 years from (1) the lands thereunder, and (2) any contiguous lands in which the Operator or any subsidiary acquires any interest before May 20, 1967. The term "minerals" includes limestone and dolomite products derived from processing ores.

At the time this contract was executed, the land thereunder consisted of 12 parcels of land aggregating 812 acres, more or less. Amendments to the contract added 2 parcels totalling 187 acres. Of the total of approximately 999 acres, one parcel of about 218 acres was held under an option to purchase in fee simple and the remaining tracts and acreage were held under options to purchase the mineral rights therein. Consents to Lien and Subordination Agreements were waived. All options were in the name of B. H. Putnam, but were assigned to the National Lead Company prior to execution of the exploration project contract, and re-assigned to B. H. Putnam during March 1958. The Government, in turn, approved the assignment of the contract to Benjamin H. Putnam without releasing the assignor from any of the provisions thereof.

During this review it was noted that a map, prepared by the Operator during December 1959, indicates that options were held on several parcels of land contiguous to but not included in the land under the contract. Initial options, however, may have predated the contract.

See assignment in detail dated 2/1/57

Exploration work under the contract was completed on June 29, 1960. The Operator's final geological and engineering report was received on December 1, 1960. Up to that date no ores had been produced from the property under the contract.

This review was made in lieu of an on-site audit of the Operator's accounts and records for the following reasons:

(1) No minerals have been produced from the property under the contract during the period covered by this review; and
(2) The administrative cost to the Government of an on-site royalty audit at this time would be excessive in relation to the amount of possible royalty which might be disclosed.

Docket copy

Murphy
Bud

CERTIFICATION BY THE UNITED STATES OF AMERICA OF A DISCOVERY OR DEVELOPMENT UNDER AN EXPLORATION PROJECT CONTRACT

To: Benjamin H. Putnam, Assignee
512 Third Street
Marietta, Ohio

Pursuant to the provisions of Exploration Project Contract No. Idm-E1088, dated May 20, 1957 (Docket No. DMEA-4580), hereinafter called the "contract," between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien therefor and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Exploratory core drilling from the surface indicated the presence of zinc-bearing ores occurring as replacements in dolomite breccia in the Ordovician Kingsport formation underlying the project area.

Dated: JAN 3 1961

THE UNITED STATES OF AMERICA

By George C. Selfridge
Acting Director, Office of
Minerals Exploration

FMMurphy/gla 12/9/60
GCSelfridge/gla 1/3/61
cc to: Operator (original)
National Lead Company
Clarence A. Fredell, Dir.,
TRDD, DMS, GSA
Contract Adm. & Audit Division
Fiscal Section
Docket
Director's Reading File
Mr. Johnson
Review Committee
Harold Kirkemo, USGS
Region IV
Chron

Docket copy

**CERTIFICATION BY THE UNITED STATES OF AMERICA
OF A DISCOVERY OR DEVELOPMENT UNDER
AN EXPLORATION PROJECT CONTRACT**

Murphy
Mirkemo
Dallen
Talbert

INTERIOR DEPT.
DEC 27 1960
SOLICITOR

To: Benjamin H. Putnam, Assignee
512 Third Street
Marietta, Ohio

Pursuant to the provisions of Exploration Project Contract No. Idm-E1088, dated May 20, 1957, (Docket No. DMRA-4580), hereinafter called the "contract," between you and the United States of America, hereinafter called the "Government"; to establish and fix the Government's percentage royalty on production and its lien therefor and on the land described in the contract, the Government considers and therefore certifies that discovery or development from which production may be made has resulted from the exploration work.

The nature of said discovery or development is described broadly or indicated as follows:

Exploratory core drilling from the surface indicated the presence of a significant deposit of ore-grade zinc-bearing dolomite breccia in the Ordovician Kingsport formation underlying the project area.

Dated:_____

THE UNITED STATES OF AMERICA

By_____
Acting Director, Office of
Minerals Exploration

FmMurphy/gla
12-9-60
cc to: Operator (original)
National Lead Company
Clarence A. Fredell, Dir.,
TRDD, DMS, GSA
Contract Adm. & Audit Division
Fiscal Section
Docket
Director's Reading File
Mr. Johnson
Review Committee
Harold Kirkemo, USGS
Region IV
Mr. Murphy, Code 500
Chron

Completed	Hole No.	Property	Total Depth	Remarks
8/7/59	GD-32	Green & Dalton	1125'	1011-1023.5' 1.5% Zn. Est. 1034.5'-1037' 2.5% Zn. Est. Assays 1011-1013 3.66% Zn. 1013-1015 0.64% Zn. 1015-1019 1.64% Zn. 1019-1023.5 1.70% Zn. 1034-1037 1.70% Zn.
8/26/59	GD-33	Green & Dalton	864'	Barren Hole.
9/15/59	GD-34	Green & Dalton	1022'	Barren Hole.
10/5/59	GD-35	Green & Dalton	904'	Trace Hole.
10/17/59	ST-8	Stapleton	433'	" "
10/23/59	ST-9	"	392'	mineralized (shine
10/31/59	ST-10	"	431'	Barren
11/14/59	ST 11	"	385'	mineralized (shine)
11/21/59	ST 12	"	385'	shine
12/31/59	ST 13	"	336	Barren
1/8/60	ST 14	"	343	Barren
1/15/60	ST 15	"	440	Barren
1/19/60	ST 16	"	190	1% zn @ 43'-45'
1/25/60	ST 17	"	245	Barren
1/29/60	ST 18	"	312	mineralized
2/3/60	ST 19	"	315'	mineralized (shine)
2/9/60	DJ-1	Dave Jackson	300	mineralized (shine)
2/24/60	DJ-2	" "	220	Barren
2/26/60	DJ-3	" "	331	mineralized (shine)

Hole No.	Property.	Total Depth.	Remarks.
GD-24	Green & Dalton	501'	290'- 291' 1.58% Zn. 296'- 296.5' 6.04% Zn. 302' -303.5' 1.12% Zn. 312.5'-313.5' 2.28% Zn. Average 333' -335' 2.74% Zn. 338'- 346.5' 2.00% Zn. — 346.5'-348' 1.82% Zn. 356' -365' 2.61% Zn. — 379' -379.5' 1.78% Zn. 386' -387' 5.88% Zn.
DAL-1	W. B. Dalton	410'	Blank Hole.
BUL-1	Rosa Bullen	613'	Blank Hole.
GD-25	Green & Dalton	703'	Blank Hole
GD-26	Green & Dalton 4' @ 10.36% Zn. Ore or 9' @ 5.06% Zn.	760'	665'-667' 11.90% Zn. 667'-669' 8.82% Zn. 669'-674' 0.82% Zn. 674'-678' 0.32% Zn. 678'-684' 0.16% Zn. 680'-688' 2.00% Zn. 688'-692' 1.04% Zn.
GD-27	Green & Dalton	770'	706'-707.5' 3.20% Zn.
GD-28	Green & Dalton	781'	Barren Hole
GD-29	Green & Dalton No footage GD-29 ? 14.48 Assay.	915'	793'-800' 10% Zn. Est, only 1.5' of core recovered may be ore hole.
GD-30	Green & Dalton	1,000'	852'-860' Est. 0.5% Zn. 919'-938' 5.9% Zn. 968.5'-970.5' [redacted] 2.5% Zn. Assay
GD-31	Green & Dalton	1,067'	956.5'-959.5' 4.16 % Zn. 959.5'-966' 0.24 " 966' -969.5' 1.80 " 983.5'-990.5' 0.74 " 990.5'-992.5' 0.44 " 992.5'-996' 0.68 " 996'-1001' 1.10 " 1001'-1005.5' 1.20 " 1024'-1031' 3.08 "

1049'-1050' 1.68% Zn.

DOCKET NO. DMEA-4580

SUMMARY OF DRILLING RESULTS.

Hole No.	Property	Total Depth	Remarks
CO-1	Coffman	961'	Barren Hole
CO-2	"	854'	Barren Hole
CO-3	"	617'	Barren Hole
CO-4	"	754'	Barren Hole
CO-5	"	490'	Barren Hole
CO-6	"	397'	Some Shines
CO-7	"	260'	Barren Hole
MG-1	McGinnis	591'	426'-427'--¼% Zn. est. Scattered traces and shines.
MG-2	"	510'	Barren Hole---traces.
MG-3	"	380'	Barren Hole
MG-4	"	685'	493.5'-496' Est. 1% Zn. 503.5'-504.5' Est. 0.25% Zn. 510.5'-512' Est. 0.25% Zn.
MG-5	"	830'	625.5'-627' 0.44% Zn. 672.5'-673' Est. 0.25% Zn.
JA-1	Jackson	836'	Shines and scattered traces.
JA-2	"	731'	593'-595' Est. 1% Zn. 631.5'-633' Est. 0.25% Zn.
DA-1	Dalton	872'	833'-835.5' Est. 0.25% Zn. 836.5'-838' Est. 0.50% Zn.
DA-2	"	715'	Shines at 313' and 490.5'

Stapleton Lease expires November 2, 1956.

Hole No.	Property	Total Depth	Remarks
WS-1	Winstead	910'	538' Zn shines. 766.5'-767' Est. 0.50% Zn.
ST-1	Stapleton	607'	Barren Hole
ST-2	Stapleton	210'	Barren Hole
ST-3	"	642'	Barren Hole
ST-4	"	479'	Barren Hole
ST-5	"	350'	Shines at various places.
ST-6	"	290'	Shines-221.5-226', 237'-238.5'
ST-7	"	226'	Shines-153.5', 155', 157.5'
GD-1	Green & Dalton	625'	Some shines.
GD-2	" "	534'	408.5'-410.5' Est. 1% Zn. 419'-419.5' Est. 2% Zn. 426'-427.5' Est. 1.5% Zn. 434'-435' Est. 10% Zn. 10'-6.44% Zn 437.5'-439' Est. 1% Zn. 439.5'-443' Est. 10% Zn. 12'-5.60% Zn 451'-451.5' Est. 4% Zn. 453'-453.5' Est. 3% Zn. 458'-458.5' Est. 3% Zn. 459'-462' Est. 3% Zn. 463'-464' Est. 5% Zn. 466.5'-470' Est. 10% Zn. 495'-496' Est. 3% Zn. 515'-520' Est. 3.5% Zn.
GD-3	" "	364'	245.5'-252'(6.5')--1.76% Zn.
GD-4	" "	433'	298.5'-300.5'---3.20% Zn. 305.5'-307.5'---1.03% Zn. 419'-421' ------6.86% Zn.
GD-5	" "	586'	485.5'-487'-----2% Zn. 497'-499'------10% Zn. 499'-501'-------3% Zn. 6'-4.7% Zn. 501'-502'-------1% Zn. 507.5'-509.5'---3% Zn. 512'-513.5'-----6% Zn.

Hole No.	Property	Total Depth	Remarks.
GD-6	Groom & Dalton	553'	Shines various places 526'-527.5' Est. 3% Zn. 374.5'-375' Est. 2% Zn. 399'-400' Est. 1½% Zn. 459'-459.5' Est. 3% Zn. 487'-489' Est. 3% Zn. 507'-512.5' Est. 4% Zn. Poor Core 516'-517' Est. 3% Zn. 524.5'-527.5' Est. 1½% Zn. 524'-546' very heavy FeS_2
GD-7	" "	557'	
GD-7A (9' from GD-7)	" "	541'	303'-305' Assay 0.70% Zn. 305'-307' " 1.18% Zn. 310.5'-312' " 0.50% Zn. 312'-314' " 0.88% Zn. 314'-316' " 3.52% Zn. 317'-319' " 1.58% Zn. 319'-320.5' " 0.46% Zn. 320.5'-325.5' " 0.26% Zn. 325.5'-328' " 4.26% Zn. 330.5'-333' " 0.94% Zn. 334'-335' " 2.74% Zn. 356'-358' " 1.52% Zn. 358'-360' " 2.36% Zn. 360'-363.5' " 0.14% Zn. 363.5'-364.5' " 2.90% Zn. 381.5'-383.5' " 1.14% Zn. 383.5'-386' " 1.36% Zn. 386'-390' " 0.24% Zn. 390'-394' " 2.74% Zn. 402'-403' " 1.88% Zn. 407.5'-409' " 2.70% Zn. 437.5'-438.5' " 4.10% Zn. 440'-441' " 0.50% Zn. 452.5'-453' " 1.00% Zn. 466.5'-468' " 4.20% Zn. 468'-470' " 0.38% Zn.
GD-8	" " Cy. Exp.	400'	Shines at 274.5' and 280'
GD-9	" "	544'	Shines at 418', 425.5' & 440' 416'-417' Est. 1½% Zn. 429'-432' " 3% Zn. 432'-432½' " 1% Zn. 435'-438' " 1½% Zn. 441½'-443' " 2½% Zn. 510½'-511½' " 3/4% Zn.

Assays

336.5'-337.5'	1.46% Zn
399'-400'	1.72 " "
459'-459.5'	4.48 " "
487.5'-489'	3.20 " "
507'-512.5'	4.16 } 9.5' @ 2.73% Zn
516'-517'	5.00

Assays

429'-432'	1.64% Zn.
432'-435'	0.02 " "
435'-437'	1.12 " "
437'-439'	0.88 " " } 8' @ 1.77% Zn } 14' @ 1.32% Zn.
439'-441½'	0.76 " "
441½'-443'	5.12 " "

Hole No.	Property.	Total Depth.	Remarks.		
GD-10	Green & Dalton	630'	490½'-495'	Est.	2% Zn.
			499'-500'	"	5% Zn.
			501½'-502½'	"	7% Zn.
			506½'-508'	"	4% Zn.
			587'-588'	"	2% Zn.
			592½'-593'	"	1% Zn.
GD-12	8' @ 1.93% Zn.		441'-443'	6.22% Zn.	
			445.5'-447.5'	1.30% Zn.	
			447.5'-449'	0.26% Zn.	
GD-12	" "	460'	441'-443'	Est.	6% Zn.
			Shines in some other places.		
GD-13	" "	423'	No Mineralization.		
GD-14	" "	505'	301.5'-308.5'	1.26% Zn.	
			346.5-352'	3.50% Zn.	
			365'-373'	3.52% Zn.	
			378.5'-384'	1.64% Zn.	
			395' - 401.5'	0.67% Zn.	
			409' - 410'	1.44% Zn.	
GD-14			292.5'-293.5'	2.12% Zn.	
			301.5'-303.5'	2.44% Zn.	
			305.5'-307.5'	1.40% Zn.	
			307.5'-308.25'	1.52% Zn.	
			346.5'-348.5'	1.16% Zn.	
			348.5'-350'	11.12% Zn.	
			351.5'-352'	0.54% Zn.	
			365'-367'	4.14% Zn.	
			367'-369'	6.14% Zn.	
			369'-371'	0.72% Zn.	
			371'-373'	3.10% Zn.	
			378.5'-379.5'	0.78% Zn.	
			379.5'-382'	0.12% Zn.	
			382'-384'	3.96% Zn.	
			395'-396.5'	0.80% Zn.	
			398.5'-400.5'	1.24% Zn.	
			409'-410'	1.44% Zn.	
GD-15			408.5'-411'	1.46% Zn.	
			412.5'-413.5'	0.80% Zn.	
			416'-417'	1.30% Zn.	
			418.5'-419.5'	5.52% Zn.	
			425.5'-427.5'	0.72% Zn.	

assays 490.5'-492.5' 3.02; 492.5'-495' 1.82 } 12' @ 2.18; 498.5'-499.5' 7.30; 501.5'-502.5' 8.32; 506.5'-508' 4.02 } 9.5' @ 2.28

7' - 1.26% Zn; 5½' - 3.50% Zn; 8' - 3.52% Zn; 5½' - 1.64% Zn

assays

Hole No.	Property.	Total Depth.	Remarks.
GD-16	Green & Dalton	553'	234.5'-239.5' 1.59% Zn. 245.0'-254.0' 2.47% Zn. 261.0'-267.0' 0.78% Zn. 269.0'-277.5' 2.40% Zn. 281.0'-282.0' 3.30% Zn. 308.0'-310.0' 1.06% Zn. 319.0'-321.0' 1.22% Zn. Shines in other parts of hole.
GD-17	Green & Dalton	595'	Completely Blank Hole.
GD-18	Green & Dalton	400'	203'-204' 5.36% Zn. 210'-213.5' 1.90% Zn. 214'-215' 2.46% Zn. 219.5'-232.5' 2.19% Zn. 243'-245' 3.08% Zn. 248'-251' 0.78% Zn. 257'-262' 2.44% Zn. 270'-281.5' 3.75% Zn. 289.5'-306' 3.25% Zn. 270'-306' 2.93% Zn. 340'-341.5' 0.40% Zn. 342.5'-344' 2.12% Zn.
GD-19	Ditto	264'	118'-130' Est. 2% Zn. 183'-184' Est. 1% Zn.
GD-20	Ditto	310'	204'-206' Est. 5% Zn. 222.5'-226' Est. 1% Zn. 238.5'-239.5' Est. 2.5% Zn. 242.5'-243.5' Est. 0.75% Zn. 254.5'-256.5' Est. 1% Zn.
GD-21	Ditto	365'	Blank Hole
GD-22	Ditto	315'	143.5'-155.5' 3.4% Zn. 155' -158' 1.32% Zn. 212' -214.5' 7.42% Zn. 224' Strong Shines. 228' -233' 3.2% Zn.

GD-23

241.5'-243'	3.76	9.5' @ 3.07% Zn.	320'-322'	10.04	13.5' @ 4.24% Zn.
243 '-245'	1.50		322'-323.5'	14.84	
245 '-247'	2.00		323.5'-325'	0.18	
247 '-249'	3.44		328'-330.5'	1.22	
249 '-251'	4.84		330.5'-332'	0.40	
			332'-333.5'	7.32	
258 '-258.5'	0.90				
263 '-265'	1.36		342'-343'	1.78	
265' '-267'	1.62		348.5'-349.5'	1.72	
			356'-358'	2.98	

OFFICE OF MINERALS EXPLORATION
CONTRACT ADMINISTRATION AND AUDIT DIVISION

REPORT OF REVIEW

I have reviewed the Monthly Reports of:

National Lead Company, Assignor
111 Broadway
New York, New York
and
Benjamin H. Putnam, Assignee
~~512 Third Street~~
Marietta, Ohio

pertaining to Exploration Project Contract No. Idm-81088, DMEA No. 4580, including Amendments Nos. 1 through 6, for August 1957 to June 1960, inclusive, covering a zinc project in the Puncheon Camp Creek Area, Grainger County, Tennessee.

My review included an examination of the Monthly Reports (Forms MF-104) and supporting documents, comparison of the claimed costs with the contract and pertinent schedules, verification of work performed by reference to Field Team reports and correspondence, and a determination of the reasonableness and propriety of the costs.

This review was made in lieu of a final audit of the Operator's accounts and records for the reasons given in the attached schedule.

The findings of this review are stated in the following summary and the attached schedule:

Total cost billed by Operator		$154,546.09
Exceptions:		
Prior to this review	$22.75	
Herewith	-0-	22.75
Acceptable cost claimed by Operator		154,523.34
Acceptable costs not claimed, to partially offset exceptions		22.75
Total accepted cost		154,546.09
Acceptable cost not claimed	$64.00	
Less: Offset above	22.75	41.25
Total acceptable cost, if claimed		$154,587.34

The contract calls for a 50 percent contribution of the allowable costs by the Government. Therefore, if the project is otherwise accepted as having met the terms of the contract, payments as follows are valid and proper:

Payable on audited claim	$ 77,173.05
Paid to date	72,716.09
Balance due Assignee	$ 4,456.96
Additional payable, if claimed by Assignor	$ 5.62
Additional payable, if claimed by Assignee	$ 15.00

-U.S. to Cpbd. 12/22/60
BH 5/24/61

December 7, 1960

E. D. Talbert
E. D. Talbert, OMI Auditor

MME FORM 6 REFERENCE SLIP

REV. 2-59 OFFICE OF MINERALS EXPLORATION

TO:	DATE	INITIALS
1. Mr. Johnson	12/7	
2. ~~Mr.~~ Selfridge		
3. Mr. ~~Griswold~~ Murphy		
4.		
5.		
FROM: E. D. Talbert	12/7	

FOR: Check items for action desired

____ Action ____ Reply for signature of ____

____ Approval ____ Investigate ____ Surname

____ Comment ____ Recommendations ____ Signature

____ Conference ____ Rewrite ____ File

____ Instructions ____ Your information

REMARKS:

INT.-DUP. SEC., WASH., D.C. M56300-59

Reasons for Report of Review in lieu of a final audit:

(a) the Monthly Reports were supported by documentary proof of that portion ($145,151.25) of the acceptable costs covering work performed at unit rates under independent contract;
(b) the balance ($9,236.09) of the acceptable costs was under a contract provision for payment by the Government at fixed unit costs for work performed; and
(c) the administrative cost to the Government of an audit would be excessive in relation to the estimated amount of possible further disallowances.

Exceptions prior to this review:

Hauling core and capping holes, 7 hrs. @ $3.25, claimed by Assignee in Apr. 1960 MF-104, not authorized by contract ..... $ 22.75

Acceptable costs not claimed by Assignor:

(a)	Claimed 36 assays @ $1.25/assay, i.e., $45.00, whereas allowable are analyses of 31 samples @ $1.50/sample, i.e., $46.50; difference	$ 1.50
(b)	Claimed 75 core boxes at total cost of $140.25, whereas allowable are 75 core boxes @ $2.00, or $150.00; difference	9.75
		$ 11.25

Acceptable costs not claimed by Assignee:

Claimed 191 assays @ $1.25/assay and 10 assays @ $1.00/assay, i.e., $248.75, whereas allowable are 201 samples @ $1.50/sample, i.e., $301.50; difference ..... $ 52.75

Acceptable costs, if claimed:

Category (1), Independent Contracts -		
Drilling (91 holes)	47,838' @ $2.98+	$142,596.50*
Reaming	1,266' @ 2.00	2,532.00*

Fixed Unit Costs -			
Incidental allowance	47,858'	@ $ .18	$ 8,610.84
Core boxes	150	@ 2.00	300.00
Samples analyzed	232	@ 1.50	348.00
			$154,387.34

* Actual costs invoiced by drilling contractors:

(a) Joy Manufacturing Company (20 holes) -

Drilling	13,158'	@ $3.00	$ 39,474.00
Reaming	229'	@ 2.00	458.00

(b) Putnam Drilling Company (63 holes) -

Drilling	30,914'	@ $3.00	92,742.00
Reaming	1,037'	@ 2.00	2,074.00
Hauling core & capping hole	30 hrs.	@ 3.75	112.51

(c) E. J. Longyear Company (8 holes) -

Overburden drilling	612'	@ $2.75	1,683.00
BX drilling	80'	@ 3.05	244.00
AX drilling	3,074'	@ 2.75	8,453.50
Hauling core & capping hole	31 hrs.	@ 3.25	100.75
			$145,341.76

Government's copy

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ASSIGNMENT OF CONTRACT

WHEREAS, National Lead Company, a New Jersey corporation (hereinafter called the "Assignor"), and the United States of America, acting through the ~~Department~~ of the Interior, Defense Minerals Exploration Administration (hereinafter called the "Government"), entered into Exploration Project Contract Idm-E1088 (Docket No. DMEA-4580), dated May 20, 1957, as amended (hereinafter called the "Contract"); and

WHEREAS, Benjamin H. Putnam, 170 East Pearson Street, Chicago, Illinois, (hereinafter called the "Assignee"), has acquired the Assignor's interest in the land which is the subject of the contract and desires to complete the work under the contract;

NOW THEREFORE, effective March 12, 1958, the Assignor, in consideration of the sum of One Dollar ($1.00) and other good and valuable consideration received from the Assignee, does hereby assign, transfer, and convey to the Assignee all of its right, title, and interest in the Contract: Provided, That the Government shall make payment to the Assignor on all claims and vouchers for the Government's contribution under the contract for work performed prior to said effective date, and upon payment thereof the Government shall be and is hereby released by the Assignor from all claims under the contract.

The Assignor consents to all future amendments (including a termination agreement) and assignments of the contract, and waives notice thereof.

This Assignment is subject to the written acceptance by the Assignee as set forth below, and to the written consent of the Government.

Dated this 29th day of April, 1958.

NATIONAL LEAD COMPANY
Assignor

By [signature]

Title VICE PRESIDENT

I, John J. Lawler, certify that I am the Assistant secretary of the corporation named herein; that H. C. Wildner who signed this instrument on behalf of the corporation, was then a Vice President of said corporation; that said instrument was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

John J. Lawler [corporate seal]

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ASSIGNEE'S ACCEPTANCE

The Assignee, hereby accepts the above assignment and agrees to be bound by the terms, provisions, and conditions of the Contract.

Dated this 8th day of May, 1958.

BENJAMIN H. PUTNAM
Assignee

GOVERNMENT'S CONSENT

The Government, this 14th day of April, 1958, hereby consents to the above Assignment without releasing the Assignor, National Lead Company, from any of the terms, provisions, and conditions of the Contract, and any amendment (including a termination agreement) and assignment thereof.

THE UNITED STATES OF AMERICA

By
Administrator, Defense Minerals
Exploration Administration

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A S S I G N M E N T

THIS ASSIGNMENT made and entered into this 12th day of March, 1958, by and between NATIONAL LEAD COMPANY, a corporation organized and existing under and by virtue of the laws of the State of New Jersey, with offices for the transaction of business located at 111 Broadway, New York 6, New York, hereinafter referred to as party of the first part, and B. H. PUTNAM, OPERATOR, hereinafter referred to as party of the second part,

W I T N E S S E T H:

THAT WHEREAS, party of the first part is the owner of the following described mineral option agreements covering certain lands in Union County, Tennessee, to-wit:

No.	Date	Grantor	Acres	Misc. Records Book	Page
X-272	May 9, 1956	D. M. & Laura Bryant	60	2	528
X-292	June 19, 1956	O. C. & Kate Hubbs, Jr.	60	2	458
X-300	May 28, 1956	Robert & Lallie Kitts	15	2	459
X-301	May 14, 1956	Joe S. Wolfenbarger	68	2	460
X-302	May 15, 1956	Charles & Rhrona Mynatt	34	2	462
X-303	May 14, 1956	Samuel & Salley Davis	108	2	463
X-304	May 14, 1956	Henery & Reba Davis	70	2	464
X-305	May 14, 1956	Vaughn & Ocie Nicely	25	2	465
X-306	May 15, 1956	Lester & Livy Collins	23	2	466
X-307	May 14, 1956	Ervin & Tessie Bryant	18	2	467
X-308	May 14, 1956	Edward & Sallie Hurst	60	2	468
X-309	May 15, 1956	R. B. & Cleo Merritt	50	2	469
X-311	May 17, 1956	V. M. & Thelma Gaines	50	2	470
X-312	May 18, 1956	Betty Cleveland, widow	30	2	471
X-316	May 23, 1956	David & Cecil Paul	45	2	472
X-355	Mar. 26, 1957	Dorothy C. Rucker	300	2	529

and,

WHEREAS, the tracts of lands covered by said mineral option agreements are more specifically described therein, reference being hereby made to said mineral option agreements for a more complete description of all the boundaries, terms, stipulations, covenants, and agreements therein contained.

NOW, THEREFORE, in consideration of the sum of One Dollar ($1.00) cash in hand paid this day and other good and valuable considerations, receipt of all of which is hereby acknowledged, party of the first part does hereby sell, assign, transfer and set over unto party of the second part, the above described mineral option agreements; and for the same consideration party of the first part

covenants with party of the second part, his successors and assigns, that all rentals due under said mineral option agreements have been paid and all conditions necessary to keep the same in full force have been duly performed.

IN WITNESS WHEREOF, party of the first part has hereunto caused its name to be affixed as of the day and year first above written.

NATIONAL LEAD COMPANY

By _____
Vice President

Attest:

_____
Secretary

STATE OF NEW YORK)
) SS:
COUNTY OF NEW YORK)

On this the 28th day of March, 1958, before me, the undersigned officer, personally appeared _____, who acknowledged himself to be a Vice President of NATIONAL LEAD COMPANY, a corporation, and that he as such Vice President, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as a Vice President.

In witness whereof, I hereunto set my hand and official seal.

_____
Notary Public

My commission expires:

JOSEPH LAWYER
NOTARY PUBLIC, STATE OF NEW YORK
Qualified in Kings County
Term Expires March 30, 1960

ORIGINAL FILE COPY
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A S S I G N M E N T

THIS ASSIGNMENT made and entered into this 12th day of March, 1958, by and between NATIONAL LEAD COMPANY, a corporation organized and existing under and by virtue of the laws of the State of New Jersey, with offices for the transaction of business located at 111 Broadway, New York 6, New York, hereinafter referred to as party of the first part, and B. H. PUTNAM, OPERATOR, hereinafter referred to as party of the second part,

W I T N E S S E T H:

THAT WHEREAS, party of the first part is the owner of the following described mineral option agreements covering certain lands in Grainger County, Tennessee, to-wit:

No.	Date	Grantor	Acres	Misc. Records Book	Page
X-245	Jan. 18, 1956	Wallace & Cleo Cope	160	18	342
X-246	Jan. 24, 1956	Thomas & Reba Kincaid	100	18	344
X-247	Jan. 23, 1956	Belle Kincaid, widow	125	18	346
X-249	Jan. 17, 1956	Dorsie & Thomas Scearce	35	18	347
X-250	Jan. 18, 1956	Eliza Antrican	15	18	349
X-251	Jan. 21, 1956	Claude Wolfenbarger	20	18	351
X-252	Jan. 27, 1956	A. B. & Pearley Dalton	50	18	353
X-253	Jan. 18, 1956	Starling Scearce	35	18	354
X-254	Jan. 18, 1956	Lou Coffey, widow	8	18	356
X-255	Jan. 17, 1956	John & Ida Wolfenbarger	70	18	358
X-256	Jan. 20, 1956	Hubert & Dollie Dalton	122	18	359
X-257	Jan. 20, 1956	Calvin & Pearl Berry	128	18	361
X-258	Jan. 20, 1956	Cass & Inez Myers	50	18	387
X-259	Jan. 16, 1956	Lester & Artha Scearce	100	18	388
X-260	Jan. 14, 1956	J. C. Myers	67	18	390
X-262	Jan. 23, 1956	Lissie Scearce, widow	140	18	393
X-263	Jan. 23, 1956	Ora C. Wilkinson, widow	300	18	448
X-264	Apr. 7, 1956	W. N. & Dorsia Jackson	600	18	451
X-265	Mar. 16, 1956	L. F. & Ida Mallicoat	150	18	453
X-266	Apr. 7, 1956	Herbert & Mertie Nicely	175	18	454
X-267	Feb. 29, 1956	Henry & Martha Wolfe	82	18	443
X-271	Jan. 6, 1956	Please & Jessie Dalton	115	18	492
X-273	Apr. 26, 1956	John & Mary Ruth Nicely	20	18	496
X-274	May 10, 1956	D. R. Coffman, widower	50	18	497
X-275	Apr. 26, 1956	John & Mary Ruth Nicely	6	18	499
X-276	May 7, 1956	Austin & Docie Johnson	62	18	501
X-277	May 9, 1956	A. M. Wolfenbarger, widower	42	18	502
X-279	May 7, 1956	Elvin & Bessie Jackson	105	18	506
X-280	May 7, 1956	S. S. & Sallie Breeding	51	18	507
X-281	May 7, 1956	J. C. & Imogene McGinnis	88	18	509
X-282	May 8, 1956	T. A. & Gertrude Green	88	18	511
X-283	May 8, 1956	G. H. Atkins, widower	80	18	512
X-284	May 8, 1956	Osie Acuff, widow	18	18	519
X-285	May 8, 1956	Ollie & Owen R. Acuff	30	18	520
X-287	May 7, 1956	Elmer & French Breeding	15	18	524
X-288	May 17, 1956	Dave & Mary Jackson	100	18	525
X-289	May 15, 1956	H. B. & Gynce Winstead	51	18	527
X-290	June 16, 1956	Osie Acuff, widow	18	18	531
X-291	June 18, 1956	Clay & Dixie Winstead	160	18	[illegible]
X-286	May 8, 1956	Geo. & Bessie Jackson	50	18	[illegible]

No.	Date	Grantor	Acres	Misc. Records Book	Page
X-293	June 15, 1956	D. D. & Leona Coffey	315	18	579
X-294	June 15, 1956	Alva & Alta Coffey	50	18	581
X-295	June 15, 1956	Parlin & Frances Harrell	70	18	582
X-296	June 15, 1956	J. W. & Lizzie McGinnis	50	18	584
X-297	June 15, 1956	A. B. & Mae Harrell	50	18	585
X-298	June 15, 1956	Alva & Alta Coffey	50	18	587
X-299	June 14, 1956	Roscoe & Beulah Taylor	40	18	577
X-313	May 18, 1956	Arthur & Reva Wolfenbarger	54	18	555
X-314	May 19, 1956	A. C. & Lonese Lakins	20	18	557
X-315	May 19, 1956	Tilman & Rosa Ritter	20	18	558
X-317	May 23, 1956	Enoch & Lennie Ritter	42	18	560
X-318	May 25, 1956	John & Grace Phipps	160	18	569
X-319	May 25, 1956	C. E. Standifer, widower	15	18	571
X-320	May 25, 1956	Damaris Oaks, widow	70	18	594
X-321	May 25, 1956	Rosa Bullen, widow	60	18	572
X-322	May 26, 1956	Grace Monroe, widow	35	18	574
X-323	May 26, 1956	J. L. & Dossie Qualls	40	18	576
X-324	June 15, 1956	C. W. & Lissie Coffey	107	18	589
X-325	July 26, 1956	Blake Collins, single	40	19	12
X-326	July 26, 1956	John & Mae Ogan	155	19	14
X-327	July 26, 1956	M. F. & Zelpha Collins	50	19	15
X-328	July 27, 1956	John & Mae Ogan	100	19	17
X-329	July 27, 1956	Delmas & Clara Dalton	60	19	19
X-330	July 27, 1956	Grover & Arlene Coffey	35	19	20
X-331	July 31, 1956	Jess Johnson widower	168	19	22
X-332	July 31, 1956	S. B. & Mary Winstead	80	19	24
X-344	July 30, 1956	Henry & Delia Bullen	89	19	45
X-351	Nov. 2, 1957	Viva & W. H. Stapelton	218.20	19	190
X-352	May 16, 1956	W. B. & Sarah Dalton	125	19	56
X-353	May 7, 1956	Pryor & Gracie Acuff	55	19	55
X-354	Feb. 14, 1957	William & Haner Johnson	55	19	100
X-356	Mar. 28, 1957	Carl & Hattie Holt	80	19	131
X-357	Mar. 19, 1957	Alice Dalton, et al	100	19	129
X-358	Mar. 30, 1957	Herbert & Hila Holt	55	19	136
X-359	Mar. 28, 1957	S. C. & Cora Holt	80	19	134
X-360	Mar. 28, 1957	S. C. & Cora Holt	20	19	132
X-361	June 21, 1957	Lewis & Addie Leffew	60	19	263
X-363	May 31, 1957	Lester & Amanda Brock	70	19	238
X-364	May 30, 1957	R. C. & Verdie Keck	54	19	237
X-365	June 1, 1957	Ralph & Pauline Monroe	25	19	240
X-369	July 18, 1957	Henry Cook	340	19	266
X-370	July 19, 1957	Nell Scott	100	19	275
X-371	July 19, 1957	Daniel F. Washam	250	19	305
X-372	July 26, 1957	W. T. Clark	127	19	312
X-373	July 29, 1957	H. G. Nicely	110	19	306
X-374	July 29, 1957	Ada McGinnis	40	19	307
X-375	July 30, 1957	J. T. McGinnis	140	19	315
X-376	July 30, 1957	B. C. Ritter	94	19	308
X-377	July 31, 1957	Fred Phipps	75	19	314
X-378	July 31, 1957	P. P. Phipps	100	19	313
X-379	July 31, 1957	J. T. Acuff	18	19	309
X-380	July 17, 1957	Coyle Johnson	70	19	271
X-381	July 18, 1957	Edward E. Johnson	40	19	273
X-382	July 18, 1957	Edward E. Johnson	65	19	274
X-384	Aug. 6, 1957	Billy K. Nicely	20	19	324
X-385	Aug. 7, 1957	Kenneth L. Hodge	130	19	323
X-386	Aug. 8, 1957	James Ferguson	97	19	382
X-387	Aug. 8, 1957	J. H. Atkins	40	19	322
X-388	Aug. 9, 1957	Dana Phipps	80	19	321
X-389	Aug. 10, 1957	Willis W. Clark	124	19	320
X-391	July 31, 1957	Fait & Mattie Rucker	100	19	380
X-392	July 31, 1957	Owen Acuff	20	19	311
X-393	July 31, 1957	Owen Acuff	40	19	310

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No.	Date	Grantor	Acres	Misc. Records Book	Page
X-397	Aug. 12, 1957	Maude Baker	87	19	325
X-398	Aug. 12, 1957	Carson Smith	47	19	330
X-399	Aug. 13, 1957	J. F. Davidson	170	19	316
X-400	Aug. 14, 1957	John E. Bray	200	19	317
X-401	Aug. 28, 1957	Frank H. Jordan	100	19	318
X-402	Aug. 28, 1957	Bruce Jordan	25	19	319
X-403	Aug. 30, 1957	Loyd Coffee	86	19	325
X-404	Sept. 6, 1957	Jesse & Hazel Hopson	100	19	328
X-405	Sept. 6, 1957	Pryor Lee & Edna Acuff	32	19	327
X-406	Sept. 7, 1957	Vaught & Sarah Acuff	14	19	333
X-407	Sept. 10, 1957	Wanda Acuff	14	19	326
X-408	Sept. 12, 1957	Minnie Maples	25	19	331
X-409	Sept. 17, 1957	Osie Acuff	33	19	334
X-410	Sept. 7, 1957	Wilkes S. Acuff	20	19	329
X-411	Sept. 10, 1957	Add & Otus Edmondson	25	19	332
X-412	Sept. 5, 1957	Nancy J. Bray	180	19	381
X-413	Sept. 20, 1957	Horace & Beatrice Jordan	32	19	384
X-414	Sept. 27, 1957	Atha & Delphia West	15	19	383
X-415	Sept. 6, 1957	Pryor Lee Acuff, Adm.	80		
X-417	Sept. 25, 1957	W. S. Campbell	75	19	387
X-418	Sept. 20, 1957	P. C. Stephens	80	19	415
X-419	Sept. 26, 1957	J. Cecil & Edith Ritter	150	19	385
X-420	Sept. 30, 1957	Faun Acuff Nicely	14	19	386

and,

WHEREAS, the tracts of lands covered by said mineral option agreements are more specifically described therein, reference being hereby made to said mineral option agreements for a more complete description of all the boundaries, terms, stipulations, covenants and agreements therein contained.

NOW, THEREFORE, in consideration of the sum of One Dollar ($1.00) cash in hand paid this day and other good and valuable considerations, receipt of all of which is hereby acknowledged, party of the first part does hereby sell, assign, transfer and set over unto party of the second part, the above described mineral option agreements; and for the same consideration, party of the first part covenants with party of the second part, his successors and assigns, that all rentals due under said mineral option agreements have been paid and all conditions necessary to keep the same in full force have been duly performed.

IN WITNESS WHEREOF, party of the first part has hereunto caused its name to be affixed as of the day and year first above written.

NATIONAL LEAD COMPANY

By [signature]
VICE PRESIDENT

Attest:

[signature]
Secretary

STATE OF NEW YORK)
) SS:
COUNTY OF NEW YORK)

On this the 26th day of June, 1958, before me, the undersigned officer, personally appeared H. C. Wilcken, who acknowledged himself to be a Vice President of NATIONAL LEAD COMPANY, a corporation, and that he as such Vice President, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing the name of the corporation by himself as a Vice President.

In witness whereof, I hereunto set my hand and official seal.

Notary Public

My commission expires:

RECEIVED

Government Copy

EXPLORATION PROJECT CONTRACT
BENJAMIN H. PUTNAM, ASSIGNEE
DOCKET NO. DMEA-4580

AMENDMENT No.6

It is agreed this 14th day of January, 1960, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government" and Benjamin H. Putnam, hereinafter called the "Operator" that Exploration Project Contract No. Idm-E1088 (Docket No. DMEA-4580) dated May 20, 1957, as amended, is further amended as follows:

In Annex I of the contract, there is hereby added the following parcel of land, which adjoins the original project area on the east:

Dave Jackson and Mary E. Jackson, 132 acres.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

Benjamin H. Putnam,
Assignee

THE UNITED STATES OF AMERICA

By Robert A. Lawrence
Executive Officer,
OME Field Team, Region V

Renewal of X-288 X-465

AGREEMENT

This Agreement, made and entered into this 9 th day of June, 1958, by and between

Dave Jackson and Mary E. Jackson his wife of Rt. 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of One Dollars ($ 1.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within 3 years from 5/17/59 ~~from~~ the date hereof, to purchase for the sum of One hundred fifty no/100 Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 4 th Civil District of Grainger County, State of Tennessee, containing 132 acres, more or less, and bounded generally as follows:

On the North by the lands of Alva Coffey, D. D. Coffey, W. H. Stapelton

On the East by the lands of Alva Coffey and C. W. Coffey

On the South by the lands of Blake Collins and Grover Coffey

On the West by the lands of H. B. Winstead

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred fifty ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One(1) year from this date, or pay to First Parties One hundred thirty two no/100 Dollars ($ 132.00) each year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised. Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling andprospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Dave Jackson at the above address.

made payable to _____ order and mailed _____ at _____ P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

Dave Jackson

Dave Jackson

Mary E. Jackson

Mary E. Jackson

State of Tennessee,
County of Hamilton

Personally appeared before me, Henley R. Clement, a Notary Public in and for Said County and State the within named Joe Jackson, and Mary E. Jackson, his wife

the bargainor s, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Hamilton County, Tennessee, this 9th day of June, 1955

My Commission Expires July 13 1957

Henley R. Clement
Notary Public

State of Tennessee,
County of _____

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor _____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____

My Commission Expires _____

_____
Notary Public

State of Tennessee,
County of _____

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor _____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____

My Commission Expires _____

_____
Notary Public

No. _____

OPTION CONTRACT

_____

_____

TO

_____

_____

STATE OF TENNESSEE
Hamilton COUNTY.

Register's Office

Received for record the 25th day of June, A. D. 1955

at 3:40 o'clock P. M. Noted in Note Book 7, pg. 112, and recorded in Book 1, Mortgage, Vol. 90

Fee paid, $ 3.00

Witness my hand

Register's Office

Tax _____

Sect'y Fee _____

Total _____

Government's Copy

EXPLORATION PROJECT CONTRACT
BENJAMIN H. PUTNAM, ASSIGNEE
DOCKET NO. DMEA-4580

AMENDMENT NO. 5

It is agreed this 6th day of November, 1959, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and Benjamin H. Putnam, Assignee, hereinafter called the "Operator," that Exploration Project Contract No. Idm-E1088 (Docket No. DMEA-4580), dated May 20, 1957, as amended, is further amended as follows:

1. The date fixed in Amendment No. 4 for completion of the work is extended from December 31, 1959, to June 30, 1960.

2. The maximum period for royalty payments and the liens to secure the payments thereof, provided for in Amendment No. 4, is increased from twenty-two (22) years to twenty-three (23) years from the date of the Contract.

3. It is the essence of this Contract that the work be completed before the termination of the period here fixed for completion; and if it is not so completed in the manner required by the Contract, the following provisions shall thereupon become effective:

(a) The Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated effective June 30, 1960, if the work is not completed on or before June 30, 1960.

(b) The Government will contribute only to the allowable costs of any work performed prior to June 30, 1960.

(c) The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account.

(d) The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer (for example, if the Operator either transfers or fails to retain its interest in the land), shall pay the Government the royalty on production provided for in the Contract, in the same manner and amount and for the full period provided for in the Contract, as amended, as if certification of discovery or development had been made, such certification being hereby waived by the Operator. In addition, all rights of the Government provided for in the Contract with respect to a certification of discovery or development, and all rights of the Government as to reports (including the preservation of the Operator's records), audit, and recovery of any overpayment, are preserved.

J. Lynch
Hoffman
Seller
App'd. Sol. Off.
Murphy
Swarts
Lafant
Selfridge

(e) The Operator hereby releases and agrees to save the Government harmless from all demands under and arising out of the Contract, except as otherwise provided for in this Amendment No. 5.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank C. Johnson
Acting Director, Office of
Minerals Exploration

Benjamin H. Putnam, Assignee

October 28, 1959

Docket No. DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee

JUSTIFICATION FOR AMENDMENT NO. 5

The drilling to date has shown considerable ore-grade material but not a really commercial ore body. It would be to the advantage of the Government to continue and complete the drilling with the possibility of increasing the tonnage of ore-grade material.

If the Operator should not complete the project before the revised completion date, the Government will be protected by an automatic termination and accompanying pseudo-certification. Should the work be completed, the right to certify has been preserved.

As a further coverage for the Government, the royalty payment period has been increased by one year.

W. P. Klugescheid

W. P. Klugescheid

Government's copy

Vernon
App'd. Sol. Off.
Klugscheid
Fairwell
Falkitt
Selfridge

EXPLORATION PROJECT CONTRACT
BENJAMIN H. PUTNAM, ASSIGNEE
DOCKET NO. DMEA-4580

AMENDMENT NO. 4

It is agreed this 7th day of July, 1959, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government", and Benjamin H. Putnam, Assignee, hereinafter called the "Operator", that Exploration Project Contract No. Idm-E1088 (Docket No. DMEA-4580) dated May 20, 1957, as amended, is further amended as follows:

1. The date fixed in Amendment No. 2 for completion of the work is extended from June 30, 1959, to December 31, 1959.

2. The maximum period for royalty payments and the liens to secure the payments thereof, provided for in Amendment No. 2, is increased from twenty-one (21) years to twenty-two (22) years from the date of the Contract.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
Acting Director, Office of
Minerals Exploration

Benjamin H. Putnam
Benjamin H. Putnam, Assignee

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

July 14, 1959

Memorandum

To: Operating Committee, OME, Washington, D. C.

From: Acting Executive Officer, OME Field Team, Region V

Subject: Docket No. DMEA-4580, Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect, Grainger County, Tennessee
Contract No. Idm-E1088 (Zinc)

Enclosed is a copy of a property map showing the termination dates of all leases in the area covered by the subject contract. You will note that all leases, with the exception of the W. H. Stapleton property lease, have been extended to 1962.

The present lease on the Stapleton property expires in November 1959, but we have been assured by the Operator's Chief Geologist that this lease will also be extended.

Amendment No. 4 has been submitted to the Operator for signature.

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUL 15 1959

DATE	INITIALS	CODE
7-15	gad	220
~~7-4~~	K	500

V. J. Lynch

Attachment

Government's copy

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 24 1958
DATE | INITIALS | CODE

Bartin
Johnson
App'd. Sol. Off.
Hugenschad.
Hiamed
Chambers
Selfridge

EXPLORATION PROJECT CONTRACT
BENJAMIN H. PUTNAM, ASSIGNEE
DOCKET NO. DMEA-4580

AMENDMENT NO. 3

It is agreed this 24th day of October, 1958, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, and Benjamin H. Putnam, Assignee, that Exploration Project Contract No. Idm-E1088 (Docket No. DMEA-4580), dated May 20, 1957, as amended, is further amended as follows:

In Exhibit A, under the heading Description of the Work, the third paragraph, as revised by Amendment No. 2, is further revised to read as follows:

> "A series of widely spaced dip fences shall first be drilled, not less than 1,200 feet apart. Following this preliminary work, auxiliary dip and strike fences may be drilled not less than 400 feet apart. The holes on both the preliminary and auxiliary fences shall be spaced not closer than 200 feet. However, with prior Government approval, such spacing may be reduced from 200 feet to 100 feet."

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By Frank E. Johnson
ACTING Director, Office of Minerals Exploration

Benjamin H. Putnam
Benjamin H. Putnam, Assignee

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 20 1958
DATE | INITIALS | COPY

Government's copy

Long
Dunger
App'd. Sol. Off.
Klugerchard
Chapplera
Selbridge
Johnson

EXPLORATION PROJECT CONTRACT
BENJAMIN H. PUTNAM, ASSIGNEE
DOCKET NO. DMEA-4580

AMENDMENT NO. 2

It is agreed this 6th day of June, 1958, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and Benjamin H. Putnam, Assignee, that Exploration Project Contract No. Idm-E1088 (Docket No. DMEA-4580), dated May 20, 1957, as amended, is further amended, as follows:

1. The date fixed in Article 3 of the Contract for completion of the work is extended from August 15, 1958, to June 30, 1959.

2. The maximum period for royalty payments and the liens to secure the payment thereof, provided for in Article 8(b)(2) of the Contract, is increased from twenty (20) to twenty-one (21) years from the date of the Contract.

3. In Exhibit "A", under the heading, Description of the Work, the third paragraph is revised to read as follows:

> "A series of widely spaced dip fences shall first be drilled, not less than 1,200 feet apart. Following this preliminary work, auxiliary dip and strike fences may be drilled not less than 600 feet apart. The holes on both the preliminary and auxiliary fences shall be spaced not closer than 200 feet. However, with prior Government approval, such spacing may be reduced from 200 feet to 100 feet."

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C. Mittendorf
Administrator, Defense Minerals Exploration Administration

Benjamin H. Putnam
Benjamin H. Putnam, Assignee

X-353

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 11 1958
DATE | INITIALS | CODE

AGREEMENT

This Agreement, made and entered into this 27th day of May, 19 58, by and between Pryor Acuff and Gracie Acuff, his wife, of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of One and no/100********** Dollars ($ 1.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within 3 years from 5-7-1959 from the date hereof, to purchase for the sum of One Hundred Fifty and no/100 Dollars ($150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5th Civil District of Grainger County, State of Tennessee, containing 125 acres, more or less, and bounded generally as follows:

On the North by the lands of Elvin Jackson
On the East by the lands of S. S. Breeding
On the South by the lands of Highway 131 - Own Lands
On the West by the lands of Elvin Jackson

It is understood and agreed that this option covers only the north 125 acres of the First Parties' lands and in the event this option is exercised 125 acres off the north side will be surveyed off and purchased. at option of Second party certain payments may be made in a lump of $31.25 each 3 month instead of annually.

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred Fifty and no/100 ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One Year from this date, 5-7-1959 or pay to First Parties One Hundred Twenty Five and no/100 Dollars ($ 125.00) each year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling andprospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Pryor Acuff made payable to his order and mailed to him at the above address P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

Pryor Acuff
Pryor Acuff

Gracie Acuff
Gracie Acuff

State of Tennessee,

County of Grainger

Personally appeared before me, Henley R. Clement, a Notary Public in and for Said County and State

the within named Pryor Acuff and Gracie Acuff, his wife,

the bargainor S., with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 29 day of May, 1958

My Commission Expires July 13, 1959

Henley R. Clement
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor_____, with whom I am personally acquainted, and who acknowledged that_____executed the within instrument for the purposes therein contained.

Witness my hand and official seal at_____, Tennessee, this_____day of_____, 19____

My Commission Expires _____

_____
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor_____, with whom I am personally acquainted, and who acknowledged that_____executed the within instrument for the purposes therein contained.

Witness my hand and official seal at_____, Tennessee, this_____day of_____, 19____

My Commission Expires _____

_____
Notary Public

No.....

OPTION CONTRACT

.....

TO

.....

STATE OF TENNESSEE

.....COUNTY.

Register's Office

Received for record the.....day of

.....A. D. 19.....,

at.....o'clock.....M. Noted in Note Book

.....page.....and recorded in Book

of.....Vol.....,

page.....

Fee paid, $.....

Witness my hand,

.....Register.

State Tax $.....

Clerk's Fee $.....

Total $.....

X-287

AGREEMENT

This Agreement, made and entered into this 28 th day of May, 1958, by and between

Elmer Breeding and French Breeding his wife of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of One Dollars ($ 1.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) years 5/7/1959 to purchase for the sum of One hundred f ifty Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5 th Civil District of Grainger County, State of Tennessee, containing 15 acres, more or less, and bounded generally as follows:

On the North by the lands of S. S. Breeding

On the East by the lands of S. S. Breeding

On the South by the lands of Highway 131 and Fryor Acuff

On the West by the lands of Cryor Acuff

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein mentioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One hundred fifty ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One (1) year from this date, or pay to First Parties Fif teen and no/100 Dollars ($ 15.00) each Year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Elmer Breeding at the a bove address

made payable to _____ order and mailed _____ at _____ P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

Elmer Breeding

Elmer Breeding

French Breeding

French Breeding

State of Tennessee,

County of Grainger,

Personally appeared before me, Henry R. Pleasant, a Notary Public in and for Said County and State

the within named James Reading and Frances Reading his Wife

the bargainor, with whom I am personally acquainted, and who acknowledged that They executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 27 day of May, 19 58.

My Commission Expires July 13, 1959

Henry R. Pleasant
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor _____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor _____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

No. _____

OPTION CONTRACT

_____

_____ TO

_____

STATE OF TENNESSEE

_____ COUNTY.

Register's Office

Received for record the _____ day of _____, A. D. 19____,

at _____ o'clock _____ M. Noted in Note Book _____

_____ page _____, and recorded in Book _____, Vol _____

of _____ page _____

Fee paid, $ _____

Witness my hand.

_____, Register.

State Tax $ _____

Clerk's Fee $ _____

Total $ _____

X-280

AGREEMENT

This Agreement, made and entered into this 28 th day of May, 1958, by and between

S. S. Breeding and Sallie Breeding his wife ofRoute 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of One Dollars ($ 1.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three(3) years from May 5 1959 to purchase for the sum of One hundred fifty Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5 th Civil District of Grainger County, State of Tennessee, containing 51 acres, more or less, and bounded generally as follows:

On the North by the lands of William Coffman

On the East by the lands of Carson Mc Ginnis

On the South by the lands of Highway 131 and Mary Mc Ginnis

On the West by the lands of Pryor Acuff, R. Coffman, Elvin Jackson

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practice. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined), mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred fifty ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within three(3) months from this date, or pay to First Parties Twelve and 75/100 Dollars ($ 12.75) each Three months thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to S. S. Breeding at the above address made payable to _____ order and mailed _____ at _____ P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

S. S. Breeding

Sallie Breeding

State of Tennessee,

County of Hamilton,

Personally appeared before me, Henley F. Clement, a Notary Public in and for Said County and State

the within named Gredig and Sallie Gredig, his wife

the bargainor, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Hamilton County, Tennessee, this 27 day of May, 1958.

My Commission Expires July 13, 1959

Henley F. Clement
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

No. _____

OPTION CONTRACT

_____

TO

_____

STATE OF TENNESSEE

_____ COUNTY.

Register's Office

Received for record the _____ day of _____ A. D. 19____

at _____ o'clock ____ M. Noted in Note Book _____ page _____, and recorded in Book _____, Vol. _____

of _____ page _____

Fee paid $ _____

Witness my hand,

_____, Register.

State Tax $ _____

Clerk's Fee $ _____

Total $ _____

A-274

A-274

EXTRA COPY
DMEA
RECEIVED JUN 11 1958

DATE	INITIALS	CODE

AGREEMENT

This Agreement, made and entered into this 26th day of May, 1958, by and between Clarence J. Coffman and Pauline Coffman, his wife, of Thorn Hill, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of One and no/100********** Dollars ($ 1.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) Years from the date hereof, 5/10/59 to purchase for the sum of One Hundred Fifty and no/100*** Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5th Civil District of Grainger County, State of Tennessee, containing 50 acres, more or less, and bounded generally as follows:

On the North by the lands of Elvin Jackson
On the East by the lands of S. S. Breeding
On the South by the lands of S. S. Breeding
On the West by the lands of P. H. Acuff - Elvin Jackson

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred Fifty and no/100 ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One Year from this date, or pay to First Parties Fifty and no/100********** Dollars ($ 50.00) each Year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling andprospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Clarence J. Coffman made payable to his order and mailed to him at the above address P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

Clarence J. Coffman

Clarence J. Coffman

Pauline Coffman

Pauline Coffman

State of Tennessee,

County of Grainger,

Personally appeared before me, Lesley P. Clement, a Notary Public in and for Said County and State

the within named Clarence J. Coffman and Pauline Coffman, his wife,

the bargainor s, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 2[illegible] day of May, 19 5[illegible]

My Commission Expires [illegible]

Lesley P. Clement
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor _____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor _____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

Notary Public

No. _____

OPTION CONTRACT

_____

TO

_____

STATE OF TENNESSEE

_____ COUNTY.

Register's Office

Received for record the _____ day of _____ A. D. 19____

at _____ o'clock _____ M. Noted in Note Book _____, page _____ and recorded in Book _____, Vol. _____

of _____ page _____

Fee paid. $ _____

Witness my hand _____, Register.

State Tax $ _____

Clerk's Fee $ _____

Total $ _____

X-282

AGREEMENT

This Agreement, made and entered into this 4th day of June, 1958, by and between Aaron B. Dalton and Helen B. Dalton, his wife, of Route 1, Washburn, Tennessee, T. A. Green and Gertrude Green, his wife, of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of One and no/100********** Dollars ($1.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within 3 years from 5-8-1959 from the date hereof, to purchase for the sum of One Hundred Fifty and no/100**** Dollars ($150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5th Civil District of Grainger County, State of Tennessee, containing 100 acres, more or less, and bounded generally as follows:

On the North by the lands of W. H. Stapelton
On the East by the lands of W. H. Stapleton - H. Winstead
On the South by the lands of Highway 131 - H. Winstead
On the West by the lands of Rosey Bullen - W. B. Dalton

It is understood and agreed that in the event this option is exercised the purchase price required to be paid hereunder shall be paid one half to T. A. Green and one half to Aaron B. Dalton at the addresses herein provided.

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred Fifty and no/100 ($150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One year from this date, or pay to First Parties One Hundred and no/100********** Dollars ($100.00) each year thereafter until said option is exercised or this agreement terminated. 5-18-1959

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling andprospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Aaron B. Dalton, T. A. Green, each for the rental above provided.

made payable to their order and mailed to them at the above addresses P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

T. A. Green
T. A. Green

Gertrude Green
Gertrude Green

Aaron B. Dalton
Aaron B. Dalton

Helen B. Dalton
Helen B. Dalton

State of Tennessee,

County of Grainger,

Personally appeared before me, [illegible], a Notary Public in and for Said County and State

the within named Aaron E. Dalton and Helen R. Dalton, his wife

the bargainor, S, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this [illegible] day of June, 19 58.

My Commission Expires [illegible]

[illegible]
Notary Public

State of Tennessee,

County of Grainger,

Personally appeared before me, [illegible], a Notary Public in and for Said County and State

the within named V. A. Green and Bertrude Green, his wife,

the bargainor, S, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this [illegible] day of June, 19 58

My Commission Expires [illegible]

[illegible]
Notary Public

State of Tennessee,

County of_____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named_____

the bargainor_____, with whom I am personally acquainted, and who acknowledged that_____executed the within instrument for the purposes therein contained.

Witness my hand and official seal at_____, Tennessee, this_____day of_____, 19____

My Commission Expires _____

Notary Public

No._____

OPTION CONTRACT

TO

STATE OF TENNESSEE

_____COUNTY.

Register's Office

Received for record the_____day of_____, A. D. 19____,

at_____o'clock____M. Noted in Note Book

_____, page_____, and recorded in Book

of_____, Vol._____,

page_____

Fee paid, $_____

Witness my hand,

_____, Register.

State Tax $_____

Clerk's Fee $_____

Total $_____

X-321

AGREEMENT

This Agreement, made and entered into this 28 th day of May, 19 58, by and between

Ro sa Bullen (widow) Of Route 1, Washburn, Tennessee

James Bullen Of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of One Dollars ($ 1.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) years from May 25, 1959 to purchase for the sum of One hundred fifty Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5 th Civil District of Grainger County, State of Tennessee, containing 60 acres, more or less, and bounded generally as follows:

On the North by the lands of H. Stapleton

On the East by the lands of Tom A. Green and W. B. Dalton

On the South by the lands of Highway 131 and Jess Johnson

On the West by the lands of W. B. Dalton

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined), mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One hundred fifty ($150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One (1) year from this date, or pay to First Parties sixty and no/100 Dollars ($ 60.00) each year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Rosa Bullen at the above address made payable to order and mailed at P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written:

Witnesses:

James Bullen

Rosa Bullen

Rosa Bullen

James Bullen

Stelma Bullen

State of Tennessee,

County of Franklin,

Personally appeared before me, Lenley R. Clement, a Notary Public in and for Said County and State

the within named Nell Sullen Widow, And James Sullen

the bargainor, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 5 day of June, 1958.

My Commission Expires July 13, 1959

Lenley R. Clement
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor _____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor _____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

No. _____

OPTION CONTRACT

TO

STATE OF TENNESSEE

_____ COUNTY.

Received for record the _____ day of _____, A. D. 19____

at _____ o'clock ___ M. Noted in Note Book

_____ page _____ and recorded in Book

of _____ Vol. _____

Page _____

Fee paid, $ _____

Witness my hand,

_____, Register.

State Tax $ _____

Clerk's Fee $ _____

Total $ _____

EXTRA COPY
DMEA
RECEIVED JUN 11 1959
DATE | REMARKS | CODE

X-279

AGREEMENT

This Agreement, made and entered into this 3rd day of June, 1958, by and between Elvin Jackson and Bessie Jackson, his wife, of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of One Dollar and no/100********** Dollars ($ 1.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within 3 years from 5-7-1959 from the date hereof, to purchase for the sum of One Hundred Fifty and no/100 Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5th Civil District of Grainger County, State of Tennessee, containing 125 acres, more or less, and bounded generally as follows:

On the North by the lands of W. R. Coffman
On the East by the lands of S. S. Breeding - D. R. Coffman - Pryor Acuff
On the South by the lands of Highway 131 - Walter Coffey
On the West by the lands of Walter Coffey - Austin Johnson

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred Fity and no/100* ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One Year from this date, or pay to First Parties One Hundred Twenty Five and no/100 Dollars ($125.00) each year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling andprospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Elvin Jackson made payable to his order and mailed to him at the above address P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

Elvin Jackson
Elvin Jackson

Bessie Jackson
Bessie Jackson

State of Tennessee,

County of Grainger,

Personally appeared before me, Finley R. Clement, a Notary Public in and for Said County and State

the within named Elvin Jackson and Bessie Jackson, his wife,

the bargainor, S. with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 5 day of June, 1958.

My Commission Expires July 15, 1959

Finley R. Clement
Notary Public

State of Tennessee,

County of,

Personally appeared before me, , a Notary Public in and for Said County and State

the within named

the bargainor, with whom I am personally acquainted, and who acknowledged that executed the within instrument for the purposes therein contained.

Witness my hand and official seal at , Tennessee, this day of , 19

My Commission Expires

Notary Public

State of Tennessee,

County of,

Personally appeared before me, , a Notary Public in and for Said County and State

the within named

the bargainor, with whom I am personally acquainted, and who acknowledged that executed the within instrument for the purposes therein contained.

Witness my hand and official seal at , Tennessee, this day of , 19

My Commission Expires

Notary Public

No.

OPTION CONTRACT

TO

STATE OF TENNESSEE

COUNTY.

Register's Office

Received for record the day of

A. D. 19

at o'clock M. Noted in Note Book

page and recorded in Book

of Vol.

page

Fee paid, $

Witness my hand,

Register.

State Tax $

Clerk's Fee $

Total $

Government Copy

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958
DATE | INITIAL | CODE

EXPLORATION PROJECT CONTRACT

NATIONAL LEAD COMPANY

Docket No. DMEA-4580

AMENDMENT No.1

It is agreed this 17th day of December 1957, between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, and the National Lead Company, that Exploration Project Contract, No. Idm-E1088(Docket No. DMEA-4580) dated May 20, 1957, be amended as follows:

In Annex I of the contract, there is hereby added the following parcel of land, shown on the map attached hereto and made a part hereof, which parcel is further identified as follows:

Name of Property Owner	Approximate Acreage
William H. Johnson	55

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute or the fixed unit cost of any item of work.

EXECUTED in sextuplicate the day and year first above written.

NATIONAL LEAD COMPANY

By [signature]
Title VICE-PRESIDENT

THE UNITED STATES OF AMERICA

By V. J. Lynch
Acting Executive Officer
Defense Minerals Exploration
Administration, Region V

z

Renewal of X-270

X-354

AGREEMENT

This Agreement, made and entered into this 14th day of February, 19 57, by and between William H. Johnson and Haner M. Johnson, his wife of Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of Thirteen and 75/100 Dollars ($ 13.75) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Two years from ~~the date hereof~~ Feb. 14, 1957, to purchase for the sum of One Hundred fifty Dollars ($ 150.00) per acre, all of the minerals (including metallic and non metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5th Civil District of Grainger County, State of Tennessee, containing 55 acres, more or less, and bounded generally as follows:

On the North by the lands of Austin Johnson

On the East by the lands of Highway and John Hayse

On the South by the lands of Highway 133 and Roe Wolfenbarger

On the West by the lands of Roe Wolfenbarger

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred Fifty ($150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within Three months from ~~this date~~ Feb. 14, 1957, or pay to First Parties Thirteen and 75/100 Dollars ($ 13.75) each three months thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to William H. Johnson made payable to his order and mailed to him at the above address P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses: To mark,

Roe Wolfenbarger

W. H. Phillips

William H. Johnson

William H. Johnson

Haner M. Johnson

Haner M. Johnson

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958

DATE	INITIALS	CODE

State of Tennessee,

County of Grainger,

Personally appeared before me, Kurt Loefenberger, a Notary Public in and for Said County and State the within named William H. Johnson, Hazel M. Johnson the bargainor, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Washburn, Tennessee, this 4th day of Feb, 1957

My Commission Expires Jan. 9th 1960

Kurt Loefenberger
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State the within named _____ the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State the within named _____ the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

No. _____

OPTION CONTRACT

TO

STATE OF TENNESSEE
Grainger COUNTY.

Register's Office

Received for record the 11th day of February, A. D. 1957, at 1:15 o'clock P. M. Noted in Note Book F, page 58, and recorded in Book Deed of Mortgages, Vol. 19, page 100

Fee paid, $2.75

Witness my hand, Alice Brady Register.

State Tax $

Clerk's Fee $

Total $

OFFICIAL FILE COPY
DMEA
RECEIVED JA[illegible]

DATE	[illegible]	[illegible]

Government's copy

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RECEIVED JUN 5 1957

DATE	INITIALS	CODE

MF-200
(Revised June 1954)

Docket No. DMEA - 4580

Commodity Zinc

Contract No. Idm-E 1087

UNITED STATES OF AMERICA
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

EXPLORATION PROJECT CONTRACT[1]

It is agreed this 20 MAY 1957 day of ....., 195..., between the United States of America, acting through the Department of the Interior, Defense Minerals Exploration Administration, hereinafter called the "Government," and [2] NATIONAL LEAD COMPANY, a New Jersey corporation, whose mailing address is 111 Broadway New York 6, New York, hereinafter called the "Operator," as follows:

ARTICLE 1. *This contract* is entered into under the authority of the Defense Production Act of 1950, as amended. It consists of this form (MF-200), the attached Exhibit "A," Annex I, ~~and~~, Annex II, and map.

The Operator shall not transfer or assign this contract or any right thereunder without the written consent of the Government.

ARTICLE 2. *Operator's property rights.*—(a) The land which is the subject of this contract (hereinafter called "the land") is in the State of Tennessee, County of Grainger, and is described in Annex I.[3]

(b) The Operator represents and undertakes that:

(1) The Operator is the [4] See Annex I of [5] See Annex I in the land, in possession and entitled to possession for all of the purposes of this contract, under and by virtue of a [6] See Annex I, [7] ..... recorded in Book ....., page ....., official records of said County; and

(2) The Operator's right, title, or interest (whether as owner, lessee, or otherwise) is subject only to the following claims, liens, or encumbrances: Interests of owners of land listed in Annex I

(c) The Subordination Agreement of the holder of any claim, lien, or encumbrance listed above, and (if the Operator does not hold the legal title) the Consent to Lien of any holder of the legal title

[1] If sufficient space is not provided in any blank, use an extra sheet of paper and refer to it in the blank.
[2] Insert name, and if an organization, its nature (corporation and place of incorporation, partnership with names of partners, etc.).
[3] State on a separate sheet marked "Annex I" the legal description or enough to identify the property, particularly excluding any areas from which the production is not to be subject to the Government's percentage royalty.
[4] Insert "owner," "lessee," "contract purchaser," "locator," etc.
[5] Insert "the entire interest," "the mineral rights," "an undivided one-third," etc.
[6] Insert "deed," "lease," "contract," "location notice," "patent," etc.
[7] If not recorded, so indicate by inserting "un."

of the land (lessor, seller, optionor, etc.), are attached, as follows: **Consent to Lien and Subordination Agreements of owners of land are waived.**

(a) The Operator shall preserve and maintain his right, title, and interest in the land and his right to the possession thereof for the purposes of this contract, and shall devote the land and all existing improvements, facilities, buildings, installations, and appurtenances to the purposes of this contract. Until the lapse of the time within which the Government may make a certification of discovery or development without any such certification having been made, and after any such certification has been made, the Operator shall neither transfer, convey, nor surrender the land nor any right, title, or interest therein, nor permit nor suffer any claim, lien, or encumbrance thereon, without expressly referring to and providing in the instrument of conveyance, lien, or encumbrance for the preservation of the Government's right to a percentage royalty on production and lien for the payment thereof. If the Government makes no certification of discovery or development within the time limited in Article 8, it shall thereafter have no claim against the land or any production therefrom except for any production referred to in Article 8(b)(1). **See Annex I.**

ARTICLE 3. *The exploration project.*—The project is a search for indicated or undeveloped deposits of **Zinc**. The work to be performed is described in Exhibit "A." The Operator on or before **60 days after date of contract** shall commence the work, and on or before **15 mos. after date of contract** (unless the Operator's obligation to prosecute the work is terminated—see Article 10) shall ~~either~~ have completed the work ~~and shall have incurred allowable costs (see Article 8) in a sum not less than the estimated total allowable costs set forth in Exhibit "A."~~ **See Article 13 and Annex II.**

ARTICLE 4. *Performance of the work.*—(a) *Operator's responsibility.*—The work shall be performed with reasonable diligence, efficiently, expertly, in a workmanlike manner, in accordance with good mining standards and State regulations for health and safety and for liability insurance covering employment; and with suitable and adequate equipment, facilities, materials, supplies, and labor, to bring it to completion within the time fixed.

(b) *Independent contracts.*—To the extent that the allowable costs are estimated in Exhibit "A" with express reference to performance by independent contractors on a unit-price basis (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations), the work may be so performed; but if the reference in Exhibit "A" to any such independent contract requires the Government's approval thereof, payments under such contract will not be allowable costs unless the Government gives its written approval of the contract. Any such independent contract shall refer to some specific and identifiable part of the work, and shall be subject to all of the pertinent terms and conditions of this exploration contract; but the Government shall not be considered a party thereto, and its rights under this contract, including the right to terminate its contributions, shall not be affected thereby. Regardless of the provisions of any such independent contract and regardless of the Government's approval thereof, the Government will participate in payments to the independent contractor only on account of work performed in accordance with the provisions of this exploration project contract, and only to the extent that the Government deems the unit prices for the work under the independent contract to be reasonable.

(c) *Government may inspect.*—The Operator shall consult with and inform the Government on all phases of the work as it progresses. The Government may enter at all reasonable times to inspect the work under the contract, and also after a certification of discovery or development to inspect production operations and underground workings. The operator shall provide the Government with all reasonable means of access for such inspections.

ARTICLE 5. *Contribution by the Government.*—The estimated total allowable cost of the project, set forth in Exhibit "A," is the sum of $**170,125.00**. The Government shall contribute **50** percent of the allowable costs as they are incurred in a total sum not in excess of $**85,062.50**: *Provided,* That until the Operator has rendered to the Government his final report, and any final auditing required by the Government has been made, and a final settlement of the contract has been made, the Government may withhold from the last

voucher or vouchers such sums as it sees fit not in excess of 10 percent of the estimated total cost of the work or not in excess of the amount of the Government's contribution to the cost of property which is or may become subject to disposal as provided in Article 9(c), whichever is greater. The Government will make its contribution on the basis of the monthly vouchers referred to in Article 7(b), but all payments by the Government are provisional only, subject to audit, until the account between the Operator and the Government is finally audited and settled. "Costs incurred" mean costs that have been paid or have become due and payable, or that in the opinion of the Government have become an obligation. The Government may make payments directly to independent contractors and suppliers for the account of the Operator rather than to the Operator.

ARTICLE 6. *Estimated costs.*—(a) *Categories of costs.*—The allowable costs of the work to which the Government shall contribute are limited to those that are direct, reasonable, necessary, and that are estimated in Exhibit "A" by categories as specified in this article. If any category or subcategory is omitted from the estimate of costs, or if the word "none" is annexed to the listing thereof, costs under such category or subcategory are not allowable. Any excess over any estimate which is indicated as the maximum of any category, subcategory, or item, either as to requirement or related cost, and any excess over the estimated total allowable cost of the work, shall not be allowable. Any excess over the estimate of any category, subcategory, or item, either as to requirement or related cost, not indicated as a maximum shall be allowable within the limit of the estimated total allowable cost of the work. To the extent that excesses over maximums other than the estimated total allowable cost of the work may be necessary for the performance of the work, the Operator shall incur such excesses for his own account without contribution by the Government; ~~but except for any such necessary excesses in categories, subcategories, or items thereunder the Operator is not obligated to incur more than his agreed percentage of the estimated total allowable cost of the work.~~ **See Article 13 and Annex II.**

To the extent specified in this article or in Exhibit "A" the following categories, subcategories, and elements thereof are maximums; but if not so specified either here or in Exhibit "A" they are not maximums, and may be exceeded within the limit of the estimated total allowable cost of the work:

CATEGORY (1)—INDEPENDENT CONTRACTS.—Work to be performed under independent contracts (see Article 4(b)). The estimated total amount of this category and the estimated cost of each unit of work for performance under an independent contract are maximums. **See Article 13 and Annex II.**

CATEGORY (2)—PERSONAL SERVICES.

Subcategory (a)—Supervision.—All elements of this subcategory (number of supervisors, periods of employment, rates of pay, and total) are maximums.

Subcategory (b)—Technical services.—All elements of this subcategory (number of technicians, periods of employment, rates of pay, and total) are maximums.

Subcategory (c)—Labor.

CATEGORY (3)—OPERATING MATERIALS AND SUPPLIES.—Includes such items as drill bits and steel, explosives, fuel, pipe, power, small tools costing less than $50 each, timber, track.

CATEGORY (4)—OPERATING EQUIPMENT.

Subcategory (a)—Rental.—The number of each object to be rented [6 mine cars, 1 truck], the rate of rental [$100 per month, $5 per hour], and the total of this subcategory are maximums.

Subcategory (b)—Purchases.—The estimated total of this subcategory is a maximum.

Subcategory (c)—Depreciation.—All elements of this subcategory (time periods, rate of depreciation, and subcategory total) are maximums.

CATEGORY (5)—INITIAL REHABILITATION AND REPAIRS.—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

Subcategory (a)—Initial rehabilitation and repairs of existing buildings, fixtures, and installations (exclusive of mine workings).—The estimated total of this subcategory is a maximum.

Subcategory (b)—Initial rehabilitation and repairs of operating equipment.—The estimated total of this subcategory is a maximum.

CATEGORY (6)—NEW BUILDINGS, FIXTURES, AND INSTALLATIONS (EXCLUSIVE OF MINE WORKINGS).—Estimates under this category include all requirements and related costs, such as labor, materials and supplies, and supervision at a rate not higher than provided for in Category (2), and shall not be duplicated under any other category. The estimated total of this category is a maximum.

CATEGORY (7)—MISCELLANEOUS.—Repairs and maintenance (other than initial) of operating equipment, analytical work, prints and other reproductions, accounting, Operator's share of payroll taxes, liability insurance covering employment, travel, communications, and any other items of requirement or cost that do not fall within any of the first 6 categories.

THE ESTIMATED TOTAL ALLOWABLE COST of the work is a maximum.

(b) *Nonallowable costs.*—The following costs are not allowable for contribution by the Government:

(1) *Costs of the land,* such as rental, depreciation, depletion, or other cost of acquiring, owning, or holding possession;

(2) *Indirect costs,* such as general overhead, corporate management, interest, taxes (other than payroll and sales taxes), insurance (other than liability insurance covering employment), damages to persons, damages to property (other than necessary repairs or replacements of equipment or other property used in the work);

(3) *Previous work* performed or costs incurred before the date of this contract; and

(4) *Deferred payments.*—Any costs incurred by the Operator under any rental-purchase agreement, installment-purchase agreement, or any agreement for the purchase of goods under the provisions of which payment of the full purchase price is deferred more than 90 days from the delivery of the goods; unless the purchase agreement is approved by the Government in writing.

(c) *Reductions in costs.*—The Operator shall account for and give the Government credit for any incidental benefits, credits, or money received in the ordinary course of business in prosecuting the work (as by salvage or sale of materials or equipment, furnishing of room or board, furnishing of power or services to third persons, rebates or discounts on purchases, etc.), in the same ratio in which the Government contributes to costs; and such amounts shall be treated as a reduction in costs incurred so that they are available for use within the limit of the original estimated total cost. This provision does not apply to receipts from production which are subject to the Government's percentage royalty under the provisions of Article 2. 8. **See Article 13 and Annex II.**

ARTICLE 7. *Reports, accounts, audits.*—(a) *Operator's records.*—The Operator shall keep suitable records and accounts of the work performed and of any production in which the Government may have an interest; and shall preserve those with respect to work performed for at least three years after final payment by the Government, and those with respect to production for at least three years after any obligation to pay royalties to the Government has terminated. The Government may inspect and audit said records and accounts at any time, either by itself or by a certified public accountant. If the Government elects to audit said records and accounts relating to the exploration work by certified public accountant, it may do so as a cost of the work to which the Operator shall contribute. The Comptroller General of the United States or his representative, until the expiration of said three-year periods, shall have access to and the right to examine any pertinent books, documents, papers, and records of the Operator. All of the Operator's vouchers and records and accounts relating thereto and the Government's payments thereof remain subject to adjustment until final audit by the Government. If work under this contract is carried on in conjunction with any other operations, or if labor, supervision, services, materials, supplies, equipment, facilities, or other requirements for carrying on the work are also used in connection with other operations, the costs shall be segregated and accounted for on a basis and by methods and accounts that are satisfactory to and approved by the Government.

(b) *Progress reports and vouchers.*—The Operator shall provide the Government with five copies of monthly progress reports in three sections as follows: (1) Operator's Monthly Report and Voucher showing detailed costs incurred during the reporting period; (2) Operator's Unit Cost and Progress Report showing the various types of work performed during the reporting period and costs incurred for each type of work; and (3) a Narrative Report of the work performed during the reporting period including adequate engineering-geological maps or sketches, drill hole logs and locations, and assay reports on samples taken concurrently with advance in mineralized ground. (Forms for reporting under (1) and (2) above will be provided by the Government.)

(c) *Final report.*—Upon completion of the work or termination of the Government's obligation to contribute to costs, the Operator shall furnish the Government with five copies of a final report (in addition to the final progress report and voucher). This final report shall include a geological and engineering evaluation of the results of the work performed under the contract with an estimate of the ore reserves resulting from such work, complete assay data, adequate geological and engineering maps or sketches, and a summary of the work performed and related costs incurred.

(d) *Report of sales.*—The Operator shall provide the Government with suitable accounting and documentary evidence covering all production to which the Government's percentage royalty relates, such as copies of smelter or concentrator settlement sheets, and certified accounts of production and sale or other disposition of production.

(e) *Compliance with requirements.*—If in the opinion of the Government any of the Operator's reports, records, or accounts are insufficient or incomplete, or if the Operator fails to make them, the Government may procure the making or completion of such with suitable attachments as an expense of the work to which the Operator shall contribute. The Government may withhold approval and payment of any vouchers relating to insufficient or incomplete reports, records, or accounts.

ARTICLE 8. *Repayment by Operator.*—(a) *Certification.*—If the Government considers that a discovery or development from which production may be made has resulted from the work, the Government, at any time not later than six months after a sufficient final report and final account (see Article 7) has been rendered, may so certify in writing to the Operator. Such certification shall describe broadly or indicate the nature of the discovery or development.

(b) *Royalty on production.*—The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer, shall pay to the Government a royalty on all minerals mined or produced from the land, as follows: (1) regardless of any certification of discovery or development, from the date of the contract until the lapse of the time within which the Government may make such certification, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first; or (2) if the Government makes a certification of discovery or development, within a period of ~~six~~ 20 years from the date of the contract, or until the total net amount contributed by the Government without interest is fully repaid, whichever occurs first. **See Article 13 and Annex II.**

(c) *Basis for computation.*—The Government's royalty shall be a percentage of the gross proceeds (including any bonuses, premiums, allowances, or other benefits) from the production sold, in the form sold (ore, concentrates, metal, or equivalent), at the point of delivery (the f. o. b. point); *except,* that charges of *the buyer* arising in the regular course of business, and shown as deductions on the buyer's settlement sheets, on account of the cost of treatment processes performed by *the buyer,* sampling and assaying to determine the value of the production sold, and freight paid by *the buyer* to a carrier (not the Operator), shall be allowed as deductions in arriving at the "gross proceeds" as that term is used herein. Any costs of treatment processes, sampling or assaying, or transportation, performed or paid by the Operator or by anyone other than the buyer, are not deductible in arriving at the "gross proceeds" as that term is here used. The term "treatment processes," as here used, means those processes (such as milling, concentrating, smelting, refining, or equivalent) applied to the crude ore or other production after it is extracted from the ground, to put it into a commercially marketable form; excluding fabricating or manufacturing. **See Article 13 and Annex II.**

(d) *Unsold production.*—If any production (ore, concentrates, metal, or equivalent), after the lapse of six months from the date the ore was extracted from the ground, remains neither sold nor used by the Operator in integrated manufacturing or fabricating operations (for instance, if it is stockpiled), the Government, at its option, as long as it so remains, may require the computation and payment of its royalty on the value of such production in the form (ore, concentrates, metal, or equivalent) it is in when the Government elects to require computation and payment. If any production is used by the Operator in integrated manufacturing or fabricating operations before the Government makes its election, the Government's royalty on such production shall be computed on the value therof in the form in which and at the time when it is so used. "Value" as here used means what is or would be gross income from mining operations for percentage depletion purposes in Federal income tax determination, or the market value, whichever is greater.

(e) *Percentages of royalty.*—The percentages of the Government's royalty shall be as follows:

One and one-half (1½) percent of amounts ("gross proceeds" or "value") not in excess of eight dollars ($8.00) per ton of production in the form in which sold, held, or used, plus one-half (½)

percent for each additional full fifty cents ($0.50) by which such amounts exceed eight dollars ($8.00) per ton, but not in excess of five (5) percent of such amounts.

(For instance: the royalty on an amount of five dollars ($5.00) per ton would be one and one-half (1½) percent; on an amount of ten dollars ($10.00) per ton, three and one-half (3½) percent.)

(f) *Time for computation and payment.*—The Government's royalty shall be computed and paid currently upon each lot sold, held, or used in integrated operations, as the case may be, as above provided in this article.

(g) *Lien for payment.*—To secure the payment of its percentage royalty, there is hereby granted to the Government a lien upon the land or the Operator's interest in the land and upon any production of minerals therefrom, until the royalty claim is extinguished by lapse of time or is fully paid.

(h) *Notice to purchasers.*—The Operator shall give notice of the Government's claim for royalty to any purchaser of the production, and shall authorize and direct such purchaser to pay the royalty directly to the Government and to furnish the Government with copies of the settlement sheets. If the records of any production and sales or other disposition of production, whether the production is by the Operator or by others, are not made available to the Government, the amount of the royalty may be estimated by the Administrator, Defense Minerals Exploration Administration, or his successor, and his estimate thereof shall be final and binding upon the Operator.

(i) *No obligation to produce.*—Nothing in this contract is to be construed as imposing any obligation on the Operator or the Operator's successor in interest to engage in any production operations.

(j) *Government not obligated to buy.*—Nothing in this contract shall be construed as imposing any obligation on the Government to purchase any minerals mined or produced from the land.

ARTICLE 9. *Interests in purchased property.*—(a) *Title and ownership.*—All costs under this contract shall be incurred by the Operator in the Operator's own name and for the Operator's own account; but any property acquired to the cost of which the Government contributes shall belong to the Operator and the Government jointly in proportion to their respective contributions, although title thereto shall be taken in the name of the Operator.

(b) *Preservation of property.*—Until the final disposal of any property in which the Government has an interest the Operator shall preserve and protect same for the best interest of the Government, any reasonable and necessary costs thereof to be treated as an allowable cost of the project. After the completion of the work or termination of the Government's obligation to contribute, or when such property is not in use for or needed for the work, the Operator shall neither use it without the written consent of the Government nor without paying a reasonable rental to be fixed by the Government for its interest.

(c) *Disposal of property.*—Upon the completion of the work or termination of the Government's obligation to contribute to costs, or when the property is no longer needed for the work, the Operator shall promptly dispose of salable or salvageable property in which the Government has an interest for the joint account of the Government and the Operator, either by return to the vendor, by sale to others, or purchase by the Operator or the Government at a price at least as high as could be obtained from others, unless the Government in writing waives its interest in any such property. Without advance approval of the sales price by the Government the Operator shall not sell at any price any item of property the cost of which was more than $500, and shall not sell at less than 25 percent of the purchase price any item of property which cost $500 or less. The Government, in lieu of approving the sales price for any such item, may itself purchase the item at the best price which the Operator is able to obtain or himself cares to give. Property remaining upon any termination of the work shall be considered in groups or categories (such as drill steel, or explosives, or pipe, or rails), and if the original cost of the remaining unexpended portion of any such group or category is less than $50, the Government waives its interest therein. If necessary to accomplish the disposal of any item the Operator shall dismantle and sever it from the land, the cost thereof to be treated as a cost of the project.

(d) *Default of the Operator re disposal.*—If within 90 days after the completion of the work or termination of the Government's obligation to contribute to costs, or after the property is no longer needed for the work, or after such further time as the Government may in writing allow, the Operator has failed to sell or otherwise liquidate or dispose of any property in which the Government has an interest, the Government, at any time prior to final settlement under the contract, may pursue one of the following two courses: (1) the Government, by written notice to the Operator, may place upon such property what in its opinion is a fair valuation thereof, not in excess of the cost less 1.66 percent per month from the

date such property was purchased under this contract to the termination of said 90-day period; and such property shall thereupon be considered and accounted for as having been purchased by the Operator at the valuation so fixed by the Government; or (2) the Government may enter and take possession of such property wherever it may be found, and remove and dispose of it for the joint account of the parties.

ARTICLE 10. *Termination of the Government's obligations.*—(a) If in the opinion of the Government operations at any time have failed to achieve anticipated results that indicate the probability of making a worthwhile discovery, and in the opinion of the Government further operations are not justified, the Government may give the Operator written notice thereof, and thereupon: (1) the Government shall be free of all obligation to contribute to costs not then incurred other than such as may be allowable under the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting.

(b) If in the opinion of the Government the Operator is in any manner in default under the terms of the contract, the Government may give the Operator written notice of such default with a specification of reasonable time within which the default must be cured; and if the Operator fails to cure such default as required, thereupon: (1) the Government shall be relieved of all obligation to contribute to costs not incurred when the notice was given, other than such as may be allowable by the provisions of the contract as necessary and incidental to winding up, reporting, and accounting; and (2) the Operator shall be free of all obligation to prosecute the work other than such as may be necessary and incidental to winding up, reporting, and accounting. The remedy provided for the Government in this paragraph "(b)" is in addition to any other remedy provided in this contract, and in addition to any other remedy the law may provide for breach of contract.

(c) The giving of any notice by the Government under the provisions of this Article 10 shall not affect the Government's rights as provided for in the contract with respect to a percentage royalty, and such rights shall be fully preserved.

ARTICLE 11. *Notices to be given by the Government* may be delivered to the Operator, or may be sent by registered mail addressed to the Operator at his mailing address stated in this contract. If mailed, notices are deemed to have been delivered five days after the date of mailing.

ARTICLE 12. *Officials not to benefit.*—No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this contract or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this contract if made with a corporation for its general benefit.

ARTICLE 13. *Changes and added provisions.*—
See Annex II attached hereto as a part hereof.

Ryhin
Hanger
Hugeschaid
Kimmel
Fallert
Selfridge
Johnson

Executed in sextuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By C O Mitteudorf
Administrator, Defense Minerals Exploration Administration

NATIONAL LEAD COMPANY
(Operator)

By H C Wildner

Title Vice President

I, J J Lawler, certify that I am the assistant secretary of the corporation named as Operator herein; that H. C. Wildner who signed this contract on behalf of the Operator, was then a Vice President of said corporation; that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

J J Lawler

[CORPORATE SEAL]

U. S. GOVERNMENT PRINTING OFFICE 16—70617-1

EXPLORATION PROJECT CONTRACT
NATIONAL LEAD COMPANY
DOCKET NO. DMEA-4580

ANNEX I

The land referred to in Article 2 of the contract is shown on the map entitled "Revised Exploration Program, Puncheon Camp Creek Project, Grainger County, Tennessee," attached hereto and made a part hereof. It comprises a total of 812 acres, more or less, consisting of 12 parcels of land, in Grainger County, Tennessee. The Operator has the right to explore for minerals pursuant to option-purchase agreements described below, assigned to him by B. H. Putnam, the optionee named in all of said agreements, in an instrument dated February 1, 1957.

All recording references in agreements are to the land record books in the Register's office of Grainger County, Tennessee.

Agreement granting right to explore for Minerals and the Option to purchase the entire fee simple estate.

1. Agreement between Viva M. and W. H. Stapleton and B. H. Putnam, dated November 2, 1956, as extended by an agreement dated March 21, 1957, extending the option period to November 2, 1958. The agreement is recorded in Miscellaneous Book 19, page 46. 218.20

Agreements granting the right to explore for Minerals and the Option to purchase the Mineral Rights.

1. Agreement between Elvin Jackson and Bessie Jackson, his wife, and B. H. Putnam, dated May 7, 1956, which expires May 7, 1959. The agreement is recorded in Misc. Book 18, page 506. 105.

2. Agreement between Elmer Breeding and French Breeding, his wife, and B. H. Putnam, dated May 7, 1956, which expires May 7, 1959. The agreement is recorded in Misc. Book 18, page 524. 15

3. Agreement between S. S. Breeding and Sallie Breeding, his wife, and B. H. Putnam, dated May 7, 1956, which expires May 7, 1959. The Agreement is recorded in Misc. Book 18, page 507. 51

4. Agreement between Austin Johnson and Docie Johnson, his wife, and B. H. Putnam, dated May 7, 1956, which expires May 7, 1959. The agreement is recorded in Misc. Book 18, page 501. 45

5. Agreement between D. R. Coffman, widower, and B. H. Putnam, dated May 10, 1956, which expires May 10, 1959. The agreement is recorded in Misc. Book 18, page 497. 25

6. Agreement between Rosa Bullen, widow, and James Bullen, and B. H. Putnam, dated May 25, 1956, which expires May 25, 1959. The agreement is recorded in Misc. Book 18, page 572. 60

7. Agreement between T. A. Green and Gertrude Green, his wife, and B. H. Putnam, dated May 8, 1956, which expires May 8, 1959. The agreement is recorded in Misc. Book 18, page 511. 58

8. Agreement between Prior Acuff and Gracie Acuff, his wife, and B. H. Putnam, dated May 7, 1956, which expires May 7, 1959. The agreement is recorded in Misc. Book 18, page 504. 45

9. Agreement between W. B. Dalton and Sarah J. Dalton, his wife, and B. H. Putnam, dated May 16, 1956, which expires May 16, 1959. The agreement is recorded in Misc. Book 18, page 553. 79

10. Agreement between J. C. McGinnis and Imogene McGinnis, his wife, and B. H. Putnam, dated May 7, 1956, which expires May 7, 1959. The agreement is recorded in Misc. Book 18, page 509. 62

11. Agreement between H. B. Winstead and Gynce Winstead, his wife, and B. H. Putnam, dated May 15, 1956, which expires May 16, 1959. The agreement is recorded in Misc. Book 18, page 527. 51

SPECIAL AGREEMENT CONCERNING LAND

1. In the event the Operator or any subsidiary thereof at any time during the period expiring ten years from the date of this contract acquires any interest, title, or equity, in any lands contiguous to the premises described in this contract, it is agreed that such contiguous lands shall thereupon become subject to the provisions of this contract and the parties hereto shall promptly execute amendments to this contract listing such contiguous lands as land included in this contract.

2. It is further agreed that the Operator may, at any time before the expiration of sixty days following the conclusion or termination of exploration work performed pursuant to the terms of this contract, request the Government to delete from this contract such lands described in the option agreements listed in this Annex I,

or in any amendments thereto, as have no known value for mineral production. The Government will promptly prepare amendments removing the specified lands from the contract, which amendments shall provide that the Operator:

(a) certifies the lands have no known value for mineral production;

(b) has, prior to the execution of the respective amendment, surrendered or otherwise disposed of all of its interest, title, and equity in such land, and any minerals produced therefrom, including any option, lease or permit thereto, without any consideration whatsoever, including future compensation, for such surrender or disposition, other than relief from the cost of maintaining such interest;

(c) agrees that no benefit from such land or any production of minerals therefrom will accrue to the Operator or to any of its subsidiaries, directly or indirectly, during the period expiring twenty years from the date of this contract; and

(d) agrees that if the Operator or any of its subsidiaries acquires any interest, title, or equity in such land or any minerals produced therefrom, or derives any benefit therefrom, before the expiration of twenty years from the date of this contract, the land with respect to which such interest, title, or equity is acquired, and any minerals produced therefrom, shall be deemed subject to this contract and any certification of discovery or development from the date that the Operator or its subsidiaries acquired such interest, title, or equity, or any benefit therefrom, until the expiration of twenty years from the date of this contract, or until the total amount contributed by the Government without interest is fully repaid, whichever occurs first.

EXPLORATION PROJECT CONTRACT
NATIONAL LEAD COMPANY
DOCKET NO. DMEA-4580

ANNEX II

1. In Article 3, the words following the reference to Article 10 are deleted, and the following words are substituted: "shall have completed the work."

2. In Article 6(a), that part of the last sentence in the first paragraph beginning after the semicolon is deleted.

3. Categories (2) through (7) of Article 6(a) are deleted.

4. In Article 6(c), the words "Article 9" are changed to "Article 8."

5. In Article 8(b): (1) the word "minerals" includes limestone and dolomite products produced in processing the ore; and (2) the words "ten years" are changed to "twenty years."

6. The following clause is added to Article 8(c):

"Provided, however, That so long as the Operator operates smelting facilities as an integrated part of its business, the settlement made by the Operator's smelter to its mine or mill on the ore or concentrates subject to the Government's royalty shall be, for the purpose of calculating the royalty payable to the Government under this contract, on the same settlement basis that the said smelter makes to its independent suppliers under the schedule most favorable to any independent supplier; or, should gross income from mining operations for percentage depletion purposes in Federal income tax determination show a greater value for ore or concentrate sales than that value which would result from applying the smelter schedule most favorable to an independent supplier, the greater value will be used as the basis for calculating royalty payable to the Government."

7. In addition to the costs of work estimated in Exhibit "A" by categories of actual costs, the costs of work requirements specified in Exhibit "A" as "Fixed Unit Costs" are allowable costs of the project. The Government will contribute to the fixed unit costs as work units are performed. A "Fixed Unit Cost" is an agreed price for each unit of work to be performed regardless of costs incurred by the Operator. Costs set forth in Exhibit "A" include all allowable costs of the work to be performed under the contract.

8. Notwithstanding any other provision of the contract, the allowable unit cost per foot of a drilling item is the average unit cost per foot computed on the basis of all the actual unit costs of said drilling item incurred by the Operator: Provided, That the Government will not contribute to any portion of an average unit cost of a drilling item that exceeds the estimated unit cost of said item set forth in the contract.

EXPLORATION PROJECT CONTRACT
NATIONAL LEAD COMPANY
DOCKET NO. DMEA-4580

EXHIBIT "A"

Description of the Work

The purpose of the project is to explore for ores of zinc by diamond drilling (and such churn drilling of overburden as may be required).

Zinc ores in the Copper Ridge Belt occur in the Kingport dolomites and limestones, and the Mascot dolomite of the Knox group. In the area in which the project is to be performed, the formations dip southeasterly at an angle of about 36 degrees.

A series of widely spaced dip fences shall first be drilled, not less than 1,200 feet apart. Following this preliminary work auxiliary fences may be drilled, not less than 600 feet apart. The holes on both the preliminary and the auxiliary fences shall be spaced not closer than 200 feet. However, with prior Government approval, such spacing may be reduced from 200 to 100 feet.

It is estimated that approximately 80 holes will be required, having an average depth of about 600 feet, with the greatest depth for any hole being approximately 1,000 feet. Not more than 50,000 feet of drilling shall be performed.

The approximate locations of the initial holes are shown on the attached map, but the actual locations, directions, inclinations, and depths of all holes are subject to prior Government approval.

All diamond drilling shall be done with AX size, or larger, coring bits, except where it is necessary to use an EX size bit in order to complete a hole. All drill holes shall be logged and all drill core shall be made available to the Government for examination. All significantly mineralized core, in lengths not to exceed five feet, shall be split and one half thereof shall be properly sampled and the sample analyzed for zinc.

In significantly mineralized ground, if core recovery is poor and sludge samples are taken, both the core and sludge shall be split and one half thereof properly sampled and the sample analyzed for zinc.

The remaining half of all significantly mineralized core samples, and sludge samples where taken, shall be furnished to the Government upon request.

All assays shall be reported monthly to the Government, together with drill logs and proper plan maps and sections showing the progress of the work and sample locations.

All work of drilling and sample preparation shall be properly supervised by competent engineers and geologists.

Drill holes shall be reamed and cased or cemented and redrilled as necessary.

Drilling shall not be done at locations closer than 200 feet from a boundary of the land described in Annex I.

Estimated Costs of the Project

Actual Costs

Category (1) Independent Contracts

Overburden drilling and diamond drilling to approximately 1000-foot depth, 50,000 feet @ $3.00/ft. 1/ 3/	$150,000.00	
Reaming AX hole to receive AX casing 5,000 feet @ $2.00/ft.	10,000.00	$160,000.00

The above rates include charges for cementing and redrilling, water supply, changing of locations, and all other charges which may be incurred by the diamond drilling contractor.

Neither the cost nor the value of casing left in drill holes at the option of the Operator will be accepted as a charge to the contract.

Categories (2) through (7) None

Fixed Unit Costs (See Article 13 of the contract)

Incidental allowance 2/ for each foot of drilling completed, 50,000 feet @ $0.18/ft.	$9,000.00	
Core Boxes - 150 @ $2.00/each	300.00	
Sample analyses - 550 @ $1.50/each sample	825.00	$ 10,125.00
Estimated Total Cost of the Project		$170,125.00
Government's Participation @ 50%		$ 85,062.50

1/ See Article 13.

2/ Includes all costs that might otherwise be allowable costs of the project under Categories (1) through (7) of Article 6(a), except as otherwise scheduled in Exhibit "A".

3/ Any drilling with EX size bit will be at a maximum rate of $2.80 per foot.

COPY

NATIONAL LEAD COMPANY
Mining Department
111 Broadway
New York 6, N.Y.

April 4, 1957

Mr. W. R. Griswold
Defense Minerals Exploration Adm.
U. S. Department of the Interior
Washington 25, D. C.

Re: IDM-E1022 & E1002

Dear Mr. Griswold:

In confirmation of our telephone discussions of this date I enlcose six copies of an assignment between B. H. Pytnam, Operator, and National Lead Company, relative to certain mineral rights in Grainger County, Tenn.

I trust this will meet with your requirements.

Yours very truly,

Signed/ John S. Holland

JOHN S. HOLLAND

JSH:ms
Enc.

OFFICIAL FILE COPY
DMEA
RECEIVED APR 8 1957

DATE	INITIALS	CODE

A S S I G N M E N T

THIS ASSIGNMENT made and entered into this 1st day of February, 1957, by and between B. H. PUTNAM, OPERATOR, hereinafter referred to as party of the first part, and NATIONAL LEAD COMPANY, hereinafter referred to as party of the second part,

W I T N E S S E T H:

THAT WHEREAS, party of the first part is the owner of the following described mineral option agreements covering certain lands in Grainger County, Tennessee, to-wit:

	No.	Date	Grantor	Acres	Misc. Records Book	Page
	X-245	Jan. 18, 1956	Cleo & Wallace Cope, et al	160	18	342
	X-246	Jan. 24, 1956	Thomas & Reba Kincaid	100	18	344
	X-247	Jan. 23, 1956	Belle Kincaid, et al	125	18	346
	X-249	Jan. 17, 1956	Dorsie & Thomas Scearce	35	18	347
	X-250	Jan. 18, 1956	Eliza Antrican, et al	15	18	349
	X-251	Jan. 21, 1956	Claude Wolfenbarger	20	18	351
	X-252	Jan. 27, 1956	A. B. & Pearley Dalton	50	18	353
	X-253	Jan. 18, 1956	Starling Scearce	35	18	354
	X-254	Jan. 18, 1956	Lou Coffey, widow	8	18	356
	X-255	Jan. 17, 1956	John Wolfenbarger	70	18	358
	X-256	Jan. 20, 1956	Herbert & Dollie Dalton	122	18	359
	X-257	Jan. 20, 1956	Calvin & Pearl Berry	128	18	361
	X-258	Jan. 20, 1956	Cass & Inez Myers	50	18	387
	X-259	Jan. 16, 1956	Lester & Artha Scearce	100	18	388
	X-260	Jan. 14, 1956	J. C. Myers, widower	67	18	390
	X-262	Jan. 23, 1956	Lizzie Scearce, et al	140	18	393
	X-263	Jan. 23, 1956	Ora C. Wilkinson	300	18	448
	X-264	Apr. 7, 1956	W. N. & Dorsia Jackson	600	18	451
	X-265	Mar. 16, 1956	L. F. & Ida Mallicoat	150	18	453
	X-266	Apr. 7, 1956	Herbert & Mertie Nicely	175	18	454
	X-267	Feb. 29, 1956	Henry L. Wolfe, et al	82	18	443
	X-271	Jan. 6, 1956	Please & Jessie Dalton	115	18	492
	X-273	Apr. 26, 1956	John & Mary Nicely	20	18	496
4580	X-274	May 10, 1956	D. R. Coffman, widower	50 25	18	497
	X-275	Apr. 26, 1956	John & Mary Nicely	6	18	499
4580	X-276	May 7, 1956	Austin & Docie Johnson	62 45	18	501
	X-277	May 9, 1956	A. M. Wolfenbarger	42	18	502
4580	X-278	May 7, 1956	Pryor & Gracie Acuff	20 45	18	504
4580	X-279	May 7, 1956	Elvin & Bessie Jackson	105	18	506
4580	X-280	May 7, 1956	S. S. & Sallie Breeding	51	18	507
4580	X-281	May 7, 1956	J. C. & Imogene McGinnis	88 63	18	509
4580	X-282	May 8, 1956	T. A. & Certrude Green	88 58	18	511
	X-283	May 8, 1956	G. H. Atkins, widower	80	18	512
	X-284	May 8, 1956	Osie Acuff, widow	18	18	519
	X-285	May 8, 1956	Ollie & Owen Acuff	30	18	520
	X-286	May 8, 1956	Geo. & Bessie Jackson	50	18	522
4580	X-287	May 7, 1956	Elmer & French Breeding	15	18	524
4580	X-288	May 17, 1956	Dave & Mary Jackson Amend No. 6	~~100~~ 132	18	525
4580	X-289	May 15, 1956	H. B. & Gynce Winstead	51	18	527
	X-290	June 16, 1956	Osie Acuff, widow	18	18	591
	X-291	June 18, 1956	Clay & Dixie Winstead	160	18	592

No.	Date	Grantor	Acres	Misc. Records Book	Page
X-293	June 15, 1956	D. D. & Leona Coffey	315	18	579
X-294	June 15, 1956	Alva & Alta Coffey	50	18	581
X-295	June 15, 1956	Parlin & Frances Harrell	70	18	582
X-296	June 15, 1956	J. W. & Lizzie McGinnis	50	18	584
X-297	June 15, 1956	A. B. & Mae Harrell	50	18	586
X-298	June 15, 1956	Alva & Alta Coffey	50	18	587
X-299	June 14, 1956	Roscoe & Beulah Taylor	40	18	577
4580 X-310	May 16, 1956	W. B. & Sarah Dalton	125 77	18	553
X-313	May 18, 1956	Arthur & Reva Wolfenbarger	54	18	555
X-314	May 19, 1956	A. C. & Lonese Lakins	20	18	557
X-315	May 19, 1956	Tilman & Rose Ritter	20	18	558
X-317	May 23, 1956	Enoch & Lennie Ritter	42	18	560
X-318	May 25, 1956	John & Grace Phipps	160	18	569
X-319	May 25, 1956	C. E. Standifer, widower	15	18	571
X-320	May 25, 1956	Damaris Oakes, et al	70	18	594
4580 X-321	May 25, 1956	Rosa Bullen, widow	60	18	572
X-322	May 26, 1956	Grace & W. L. Monroe	35	18	574
X-323	May 26, 1956	J. L. & Dossie Qualls	40	18	576
X-324	June 15, 1956	C. W. & Lizzie Coffey	107	18	589
X-325	July 26, 1956	Blake Collins, single	40	19	12
X-326	July 26, 1956	John & Mae Ogan	155	19	14
X-327	July 26, 1956	M. F. & Zelphia Collins	50	19	15
X-328	July 27, 1956	John & Mae Ogan	100	19	17
X-329	July 27, 1956	Delmas & Clara Dalton	60	19	19
X-330	July 27, 1956	Grover & Arlene Coffey	35	19	20
X-331	July 31, 1956	Jess Johnson	168	19	22
X-332	July 31, 1956	S. B. & Mary Winstead	80	19	24
X-344	July 30, 1956	Henry & Delia Bullen	89	19	45
4580 X-351	Nov. 2, 1956	Viva & W. H. Stapleton	218.20	19	46
4580 X-352	Feb. 14, 1957	Wm. & Haner Johnson Amend No. 1	55	19	

and,

WHEREAS, the tracts of lands covered by said mineral option agreements are more specifically described therein, reference being hereby made to said mineral option agreements for a more complete description of all the boundaries, terms, stipulations, covenants and agreements therein contained.

NOW, THEREFORE, in consideration of the sum of One Dollar ($1.00) cash in hand paid this day and other good and valuable considerations, receipt of all of which is hereby acknowledged, party of the first part does hereby sell, assign, transfer and set over unto party of the second part, the above described mineral option agreements; and for the same consideration, party of the first part covenants with party of the second part, its successors and assigns, that all rentals due under said mineral option agreements have been paid and all conditions necessary to keep the same in full force have been duly performed.

IN WITNESS WHEREOF, party of the first part has hereunto caused his name to be affixed as of the day and year first above written.

B. H. Putnam, Operator

STATE OF OHIO)
)
COUNTY OF WASHINGTON)

I, Robert V. Benjamin, a Notary Public in and for the State and County aforesaid, do hereby certify that the foregoing instrument was produced before me in my office in said State and County and was acknowledged by B. H. Putnam, Operator, to be his free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and seal this 1st day of February, 1957.

Robert V. Benjamin, Notary Public

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 1, POST OFFICE BLDG.
KNOXVILLE 2, TENNESSEE

WASHINGTON 25, D.C.

RECEIVED DEC 21 1956 D.M.E.A.

December 18, 1956

Memorandum

To: Operating Committee, DMEA - Washington

From: Acting Executive Officer, DMEA - Region V - Knoxville, Tenn.

Subject: DMEA application - B. H. Putnam, Applicant. Puncheon Camp Creek, Grainger County, Tennessee

Transmitted are three copies of the subject application with All pertinent information attached. Legal description of these properties are contained in the deeds of conveyance, copies of which are attached.

We have retained a copy for our files.

V. J. Lynch

V. J. Lynch

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Form Approved.
Budget Bureau No. 42-R1035.2.

RECEIVED DEC 21 1956 D.M.E.A.

RECEIVED DEC 21 1956 D.M.E.A.

APPLICATION FOR AID IN AN EXPLORATION PROJECT, PURSUANT TO DMEA ORDER 1, UNDER THE DEFENSE PRODUCTION ACT OF 1950, AS AMENDED

Not to be filled in by applicant

Docket No. DMEA 458Q
Metal or Mineral Zinc
Date Received 12-21-56
Estimated Cost $175,553.85
Participation (Government %)

INSTRUCTIONS

1. *Name of applicant.*—(*a*) State here your full legal name, in the form in which you will wish to contract, and your mailing address: Benjamin H. Putnam, Operator
512 Third Street
Marietta, Ohio

(*b*) If other than an individual, add to your name above whether a corporation, partnership, etc., and the name of the State in which incorporated or otherwise organized.

(*c*) If a corporation, add to above statement, titles, names and addresses of officers. Not applicable

(*d*) If a partnership, add to the above statement the names and addresses of all partners. Not applicable

2. *General.*—Read DMEA Order 1, "Government Aid in Defense Exploration Projects," before completing this application. Submit this application and all accompanying papers in quadruplicate (four copies), with your name and address on each sheet of the application and on all accompanying papers. Where sufficient space is not provided on the form for all required information, state it on an accompanying paper, with a reference in each case to the instruction to which it refers by number. Comply with all applicable instructions; or, if not applicable, so state. File the application with Defense Minerals Exploration Administration, Department of the Interior, Washington 25, D. C., or with the nearest field executive officer thereof.

3. *Applicant's property rights.*—(*a*) State the legal description of the land upon which you wish to explore, including all land which you possess or control that may be benefited by the exploration, and excluding any land or interest in land which is not to be included in the exploration project contract Refer to accompanying Section 3(a).

(*b*) State any mine name by which the property is known. Not applicable

(*c*) State your interest in the land, whether owner, lessee, purchaser under contract, or otherwise

(*d*) If you are not the owner, submit with this application a copy of the lease, contract, or other document under which you control the property.

(*e*) If you own the land, describe any liens or encumbrances on it Not applicable

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice. Not applicable

4. *Physical description.*—(*a*) Describe in detail any mining or exploration operations which have been or now are being conducted upon the land, including existing mine workings and production facilities. State your interest, if any, in such operations. Also describe accessibility of mine workings for examination purposes. Refer to geologic report

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades. Not applicable

(*c*) Describe the geologic features of the property, including mineralization, type of deposit (vein, bedded, etc.), and your reasons for wishing to explore. Illustrate with maps or sketches. Send with your application (but not necessarily as a part of it) any geologic or engineering report, assay maps, or other technologic information you may have, indicating on each whether you require its return to you. Refer to accompanying geologic report

(*d*) State the facts with respect to the accessibility of the project: Access roads, distances to shipping, supply and residence points. Refer to attached Section 4(d)

(*e*) State the availability of manpower, materials, supplies, equipment, water, and power.

Refer to attached Section 4(e)

Sphalerite

5. *The exploration project.*—(*a*) State the mineral or minerals for which you wish to explore Sphalerite

(*b*) Describe fully the proposed work, including a map or sketch of the property showing a plan (and cross sections if needed) of any present mine workings, and the location of the proposed exploration work as related to such features as contacts, veins, ore-bearing beds, etc. Refer to accompanying geologic report

(*c*) The work will start within 60 days and be completed within 105 months from the date of an exploration project contract.

(*d*) State the operating experience and background of the applicant with relation to the ability to carry out such exploration project, and also that of the person or persons who will supervise the operations. Refer to attached Section 5(d)

6. *Estimate of costs.*—Furnish a detailed estimate of the costs of the proposed work (you will have to use a separate sheet), under the following headings. Add the totals under all headings to give the estimated total cost of the project: Section (6)

(*a*) *Independent contracts.*—(Note.—If the applicant does not intend to let any of the work to contractors, write "none" after this item. To the extent that the work is to be contracted, do not repeat the cost of the contract-work in subsequent items.) State the cost of any proposed independent contracts for the performance of all or any part of the work, expressed in terms of units of work (such as per foot of drilling, per foot of drifting, per hour of bulldozer operations, per cubic yard of material moved, etc.). Refer to attached Section 6(a)

(*b*) *Labor, supervision, consultants.*—Include an itemized schedule of numbers, classes and rates of wages, salaries or fees for necessary labor, supervision and engineering and geological consultants. Refer to attached Section 6(b)

(*c*) *Operating materials and supplies.*—Furnish an itemized list, including items of equipment costing less than $50 each, and power, water and fuel. Refer to attached Section 6(c)

(*d*) *Operating equipment.*—Furnish an itemized list of any operating equipment to be rented, purchased, or which is owned and will be furnished by the Operator, with the estimated rental, purchase price, or suggested use-allowance based on present value, as the case may be. Not applicable

(*e*) *Rehabilitation and repairs.*—Furnish a detailed list showing the cost of any necessary initial rehabilitation or repairs of existing buildings, installations, fixtures, and movable operating equipment, now owned by the Operator and which will be devoted to the exploration project. Not applicable

(*f*) *New buildings, improvements, installations.*—Furnish a detailed list showing the cost of any necessary buildings, fixed improvements, or installations to be purchased, installed or constructed for the benefit of the exploration project.

(*g*) *Miscellaneous.*—Furnish a detailed list showing the cost of repairs to and maintenance of operating equipment (not including initial rehabilitation or repairs of the Operator's equipment), analytical work, accounting, workmen's compensation and employers' liability insurance, and payroll taxes. See attached Section 6(9)

(*h*) *Contingencies.*—Give an estimate of any necessary allowances for contingencies not included in the costs stated above.

NOTE.—No items of general overhead, corporate management, interest, taxes (other than payroll and sales taxes), or any other indirect costs, or work performed or costs incurred before the date of the contract, should be included in the estimate of costs. Not applicable

7. (*a*) Are you prepared to furnish your share of the cost of the proposed project in accordance with the regulations on Government participation (Sec. 7, DMEA No. 1)? Yes

(*b*) How do you propose to furnish your share of the costs?

[X] Money [ ] Use of equipment owned by you [ ] Other

Explain in detail on acompanying paper.

CERTIFICATION

The undersigned, whether as an individual, corporate officer, partner, or otherwise, both in his own behalf and acting for the applicant, certifies that the information set forth in this form and accompanying papers is correct and complete, to the best of his knowledge and belief.

Dated December 17, 1956

(Applicant)

By

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.

U. S. GOVERNMENT PRINTING OFFICE 16—66551-1

B. M. PUTNAM, OPERATOR
BOX 617
MARIETTA, OHIO

SECTION 4 (d)

Ready access to this prospect may be had by traveling a black-top road which leads southwest from Thorn Hill, Grainger County, Tennessee (on Tenn. 131) for a distance of five and one-half (5½) miles to the Puncheon Camp Creek Road. The black-top road which leads from Thorn Hill to the southwest joins U. S. Highway 61 about sixteen (16) miles southwest of the prospect.

The nearest rail shipping point is Washburn Station on the Southern Railway, six (6) miles southwest of the prospect. Supply and residence points are at Knoxville about thirty-five (35) miles to the southwest and at Morristown, some twenty-one (21) miles to the south.

RECEIVED
DEC 21 1956
D.M.E.A.

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OMO ATTERNAM

E. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

SECTION 4 (e)

Manpower is in good supply in the area. Materials, supplies, and equipment are readily available within a radius of fifty (50) miles. Water for drilling purposes is not plentiful but is adequate.

The nearest power supply is the Tate Springs Sub-Station which is eight (8) miles southeast of the center of the prospect.

RECEIVED DEC 21 1956

B. H. PUTNAM, OPERATOR
BOX 617
MARIETTA, OHIO

SECTION 5 (d)

The applicant is the owner and operator of oil and gas properties in Ohio, West Virginia, Illinois, Michigan, Alabama, and Oklahoma; high-calcium limestone deposits in Alabama; high-silica sand deposits in Indiana; mineral leases and mineral options on private lands in North Carolina and Tennessee and prospecting permits for radioactive materials on lands acquired by the Federal Government in North Carolina and Tennessee. The applicant has been engaged in such operations for the past thirty-five (35) years.

The applicant discovered and developed the Putnam Gas Field located in Ohio and West Virginia with the aid of associates. The applicant as operator of these properties drilled three (3) tests with an average depth of six thousand (6000) feet to the Clinton sandstone, sixty-six (66) wells with an average depth of four thousand one hundred (4100) feet to the Oriskany sandstone, and seventy-one (71) wells with an average depth of one thousand nine hundred (1900) feet to the Berea sandstone. The total amount of drilling is about 425,000 feet. The development of these properties was commenced in 1950 and is at the present time substantially complete.

The applicant owns in fee-simple, a large high-silica sand deposit in Harrison County, Indiana. This property is adjacent to the Ohio River and a large pilot plant is now being assembled to test and clean the sand for use in the glass industry.

The applicant has drilled a high-calcium limestone property which he owns in Madison County, Alabama. This property lies beside the navigable Tennessee River and the N C & St L Railway. Large quantities of carbide-quality limestone are at present indicated on this strategically located property.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

The applicant has under lease the oil and gas rights of three thousand five hundred (3500) acres of land in Mobile county, Alabama, which appears at this time to have a considerable value. The property is very near the recent major oil discovery at Citronelle.

The applicant holds mineral options and mineral leases on twenty (20) zinc prospects in East Tennessee and is in the process of evaluating them.

The personnel who have been involved in the exploratory activities on the Luncheon Camp Creek Prospect are as follows:

H. B. Burwell — Geologist — formerly Oklahoma District Geologist for Shell Oil Co. — formerly State Geologist of Tennessee — actively associated with the applicant for six (6) years.

William T. Hill — formerly Mining Geologist with American Zinc Co. in East Tennessee — geologist with the Tennessee Division of Geology in East Tennessee.

Fredrick T. Fischer — Geologist — formerly with U. S. Geological Survey — associated with the applicant for six (6) years.

John W. Spears — Geologist — associated with applicant for five (5) years.

Donald G. Christy — Mining Engineer — formerly associated with Reserve Mining Co., of Minnesota.

Robert V. Benjamin — Attorney — Head of Land and Legal Departments.

It is proposed that this project be under the direct supervision of William T. Hill.

ACTUAL MINERAL
TO YOU
ASK ATTORNEY

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

SECTION 6

The estimated costs for the various parts of Section 6 are listed and tabulated below:

Costs for Section 6(a)	$164,000.00
Costs for Section 6(b)	9,850.65
Costs for Section 6(c)	643.20
Costs for Section 6(g)	1,060.00
	175,553.85

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

SECTION 6(a)

Attached are three (3) bids for core drilling in the Muchacho Camp Creek Area:

E. J. Longyear Company

Joy Manufacturing Company

Putnam Drilling Company

The total amount of drilling recommended in the exploratory program of the Geologic Report is 50,000 feet.

50,000 feet of AX core hole @ $3.00 per foot	$150,000.00
7,000 feet of reaming AX hole @ $2.00 per foot	14,000.00
Total estimated drilling costs	$164,000.00

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

Longyear

E. J. LONGYEAR COMPANY
General Offices, Foshay Tower
Minneapolis 2, Minnesota, U. S. A.
TELEPHONE: FEDERAL 2-2447 • CABLE LONGCO

November 21, 1956

Mr. B. H. Putnam
170 East Pearson
Chicago, Illinois

DIAMOND DRILLING - PUNCHEON CAMP AREA - GRAINGER COUNTY, TENNESSEE

Dear Mr. Putnam:

1. In response to your recent request, we are pleased to present below proposal for your contemplated exploratory drilling program which is to be carried out in the above-described area.

2. We understand that the work as now planned will consist of a series of AX-size vertical core holes ranging up to a maximum depth of 1,000 feet, with a minimum aggregate footage of 10,000 feet; and that the drilling will be in the Mascot-Kingsport formation, which contains only a minor amount of chert. We further understand that the drill site is accessible to truck transportation; and that the water required for the drilling operations is available within a maximum distance of 2,000 feet of any proposed drill hole.

3. For this work we propose to furnish two complete Longyear diamond core drill units, together with the necessary accessory equipment required to accomplish the work as planned. We further propose to supply all service equipment required for moving the equipment from one location to another, and other services and facilities needed in connection with supplying water for our drilling purposes. We also propose to operate the drills on a two shift basis providing sufficient experienced drillers are available.

4. We will carry public liability insurance covering personal injury and property damage, and Workmen's Compensation insurance, and also, all-risk insurance on the drilling equipment protecting against loss by theft, fire, flood, land-slides and other similar hazards.

We will also assume and pay any and all Old Age Benefit, Unemployment and Social Security taxes and contributions imposed by federal or state authorities.

Certificates showing the coverage referred to will be furnished upon request.

5. Based upon the conditions as outlined above and on our examination of the drill site, we are pleased to quote as follows:

a) Overburden Drilling

0 to 100 feet in depth, measured from the collar of the hole.....$3.00 per foot

B. H. PUTNAM, OPERATOR
BOX 637
MARIETTA, OHIO

b) Diamond Core Drilling

Top of Ledge to 1000 feet in depth, measured from the collar of the hole -

AX-size, recovering core approximately 1-3/16" in diameter.....$3.50 per foot

BX-size, recovering core approximately 1-5/8" in diameter.....$3.90 per foot

c) Reaming and casing operations - Top of Ledge to 1,000 feet in depth -

Ream AX hole to receive AX casing.....$1.75 per foot

d) Drill hole inclination tests.....$6.75 per hour

e) Delays for your convenience or for which you are responsible.....$6.75 per hour

f) Casing left in drill holes at your request:

AX-size.....$1.54 per foot
BX-size.....$1.96 per foot

6. The above-quoted drilling rates are based on wages currently being paid in the Southeast District. If during the life of this project it becomes necessary for us to adjust the wages being paid our workmen because of demands of labor union or otherwise, it is understood and agreed that the Longyear Company reserves the right to increase drilling rates to cover resultant additional operating expenses.

7. Invoices covering the work performed will be submitted as soon as possible after the first of each month, and will become due the twentieth day of the month following the date of invoice.

8. Drill cores will be turned over to your representative in core boxes furnished by you at each drill hole location.

9. We appreciate the opportunity to consider this work. Should our proposal be found acceptable, we are prepared to commence the drilling operations within a maximum of thirty days after receipt of official notice to proceed.

Sincerely,

E. J. LONGYEAR COMPANY

J. J. Gleason, Manager
Contract Drilling Division

ACCEPTED:

B. H. PUTNAM

_____

Date: _____

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

JOY MANUFACTURING COMPANY
900 WOODLAND AVENUE
MICHIGAN CITY, INDIANA

EXECUTIVE OFFICES
HENRY W. OLIVER BUILDING
PITTSBURGH 22, PA.

November 20, 1956

AIR MAIL

Mr. B. H. Putnam
Blount National Bank Bldg.
Maryville, Tenn.

Dear Mr. Putnam:

In compliance with your request, we wish to set forth below, prices and conditions covering a minimum of 10,000 feet of drilling for the exploration of zinc deposits near Thornhill, Tennessee.

On the condition that you will guarantee us a minimum of 10,000 feet of drilling, we will undertake the proposed work at a price of $3.00 per ft. for drilling with "AX" fittings in holes not to exceed a depth of 1,000 ft. If it is your desire to save cores of the drilling, then it will be necessary that you furnish the proper containers for same.

In the event it becomes necessary to ream the "AX" holes for "AX" casing, then the price for such reaming will be at the rate of $2.00 per ft. In the event it becomes necessary to cement the drill holes, then such work will be performed at $7.50 per hour.

We will furnish for this proposed drilling the necessary labor, material and water for drilling purposes.

We are in a position to furnish one or two Joy #12-B gasoline driven core drills complete with operating equipment, and will conduct the drilling operations on the basis of two 8-hour shifts per day per drill, and six days per week. We can start the work on very short notice.

Thanking you for giving us an opportunity of quoting on your requirements, we are,

Yours very truly,

JOY MANUFACTURING COMPANY

W. J. Pilarski, Mgr.
Contract Drill Division

WJP/et

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

PUTNAM DRILLING COMPANY

DRILLING CONTRACTORS
MARIETTA, OHIO

November 27, 1956

Mr. B. N. Putnam
P.O. Box 550
Maryville, Tennessee

Dear Mr. Putnam:

In reply to your recent request for a bid on core drilling your zinc properties at Punchbowl Camp Creek, Grainger County, Tennessee, we are pleased to submit the following:

We propose to furnish complete Longyear diamond-core drilling units, and the equipment and casing which is necessary for their proper operation. Also, we will furnish all water, pumping equipment necessary for the operation of these drills, and trucks for their transportation. These units will be operated on a two 8-hour shift, 5 days per week basis.

We will carry proper Public Liability Insurance, Workmen's Compensation, and will pay Old Age Benefits, Unemployment and Social Security taxes and others required by the U. S. Government or the State of Tennessee.

We will leave AX casing in the hole at your request and you will be charged $1.50 per foot.

Cores will be delivered to your agent in core boxes furnished by you at the location of the drilling rig.

Monthly statements will be presented on the 1st of each month and will be payable by the 10th of the following month.

Subject to the above conditions, we agree to quote as follows:

Minimum footage	None
AX size from surface	$ 5.00
Reaming AX hole to receive AX casing	2.00
Cementing holes, per each	15.00

We agree to start work ten (10) days after your acceptance of this bid and our proper notification.

Very truly yours,

PUTNAM DRILLING COMPANY

Ben Putnam Jr

Ben Putnam, Jr.

BPJ:wlo

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BOX 647
MARIETTA, OHIO

SECTION 6(b)

We proposed to use the following personnel in the course of the project:

Engineer

To survey proposed drilling locations. To resurvey drilled locations.

The estimated time required for his services for the complete project is 40 days. Salary $733.20, workman's compensation $6.38 employer's liability insurance $13.93 and other payroll taxes $36.66. Total $780.17

Two helpers to aid the Engineer for 40 days. Wages $[illegible].00 workman's compensation $5.57, employer's liability insurance $12.20 and other payroll taxes $32.00. Total $689.77

Transportation for the above men to and from work for [illegible] days $160.00

Total engineering costs $1629.94

Geologist

His duties will be to log core, split core and serve as field supervisor for the operator. It is estimated that all of his time will be required for the duration of the project. It is also estimated that at the rate of 60 feet per day (2 shifts) per drilling rig and by using 4 rigs that the 50,000 feet of hole can be drilled in 208 working days. At 5 working days per week this will require 41 weeks or approximately 10 months. In accordance with this estimate charges for the geologist services will be as follows:

Salary $500.00, workmen's compensation $15.50, employer's liability insurance $9.50, other payroll taxes $25.00. Total per month is $550.00

10 months at $550.00 $5504.00

Transportation for 208 days at $4.00 per day 832.00

Total for the geologist $6336.00

SECTION 6(b) Continued

Supervisor

The Supervisor will be directly in charge of the project for the operator and it is estimated that he will spend 2 days per week on this project. Thus a total of 80 days time should be charged to the project.

For 80 days time: Salary $1152.00, workman's compensation $12.63 employer's liability insurance 27.48, other payroll taxes 72.60.

Total	1564.71
Transportation for 80 days @ 4.00 per day	320.00
Total for Supervisor	1884.71
Total for geological and engineering work	$7965.94
Total estimated costs for Section 6(b)	9850.65

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

SECTION 6(c)

It is estimated that we will need 134 core boxes:

134 core boxes 14.80 1043.20

This includes one (1) box per hole for mineralized core and 50 boxes for 1500 feet of core saved for stratigraphic purposes.

B. H. PUTNAM, OPERATOR
BOX 637
MARIETTA, OHIO

SECTION 6(g)

It is estimated that we will need about 530 zinc analyses:

530 analyses @ $2.00 $1060.00

Workman's compensation, employer's liability insurance and payroll taxes figures will be found in Section 6(b).

ROCKWELL INTERNATIONAL
CO. INC.
OHIO ATTENTION

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

Section 3 (a)

The land included in this application totals 781.20 acres, more or less, and comprise the following twelve properties, all of which are located in the 4th Civil District of Grainger County, Tennessee:

Name	Acres
Viva and W. H. Stapleton	218.20
Elvin Jackson, et ux.	105.00
Elmer Breeding, et ux.	15.00
S. S. Breeding, et ux.	51.00
Austin Johnson, et ux.	45.00
D. R. Coffman	25.00
Rosa Bullen	29.00
T. A. Green, et al	58.00
Pryor Acuff, et ux.	45.00
W. B. Dalton, et ux.	77.00
J. C. McGinnis, et ux.	62.00
H. B. Winstead, et ux.	51.00
	781.20

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The legal description of these properties are contained in the deeds of conveyance, copies of which are attached hereto. A map showing the location of the above properties, and other, marked Plate 1 is included in the geological report which is a part of this application. The land lines as shown on this map were surveyed in accordance with accepted surveying methods.

attachment for Sec 3(a)

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

EXTENSION OF AGREEMENT

THIS AGREEMENT, made and entered into this 21st day of MARCH, 1957, by and between VIVA M. STAPLETON and W. H. STAPELTON, her husband, of Knoxville, Tennessee, hereinafter referred to as parties of the first part, and B. H. PUTNAM, of Chicago, Illinois, hereinafter referred to as party of the second part,

W I T N E S S E T H:

WHEREAS, on the 2nd day of November, 1956, the parties of the first part executed in favor of party of the second part, a mineral option agreement covering and affecting the following described property, to-wit:

Situated in the Fourth Civil District of Grainger County, State of Tennessee, containing 218.20 acres, more or less, and being more particularly described as follows:

> Beginning on an iron pin, Southeast corner of the land herein described, said iron pin being 12 feet East of wire fence; thence South 63 West 587 feet to an iron pin; thence South 59-30 West crossing the road 443 feet to an iron pin in the old road; thence South 39-15 West 299 feet to an iron pin in the old road; thence South 56 West 583 feet to a set stone and white walnut tree; thence North 64-30 West 135 feet to a marked walnut tree; thence North 72-45 West 433 feet to a marked double black oak tree; thence North 13-30 West 603 feet to chestnut stumps; thence 87 West 956 feet to a set stone; thence South 74-45 West 786 feet to an iron pin; thence North 30-15 West 600 feet to a large chestnut stump and small maple tree; thence South 86 West 1260 feet to a large chestnut stump; thence North 29-15 West 600 feet to an iron pin and rock pile; thence North 74 East 656 feet to two small walnut trees; thence North 70 East 355 feet to a marked ash tree; thence North 64 East 166 feet to a large chestnut stump; thence North 64 East 257 feet to a large poplar stump; thence North 66-30 East 238 feet to a hickory tree; thence North 61-45 East 109 feet to an iron pin; thence North 54-30 East 432 feet to an iron pin; thence North 4-15-West 566 feet to a set stone; thence North 61 East 930 feet crossing the road and creek to T.V.A. corner; thence South 39-30 East 315 feet to a marked elm tree; thence South 42-30 South 42-30 West 68 feet to an iron pin in the road; thence South 36 East 300 feet to a point in the center of the road; thence South 42 East 406 feet to an iron pin in the center of the road; thence North 54 East 247 feet to a white oak tree or stump; thence North 29 East 412 feet to a hickory tree or stump; thence South 29 East 660 feet to a marked black oak tree; thence North 54 East 253 feet to an iron pin; thence South 42-30 East 1100 feet to a marked hickory; thence South 42-30 East 269 feet to a marked

hickory; thence South 42-30 East 933 feet to the point of beginning, containing 218.20 acres, more or less. Reference is made to a plat prepared by O. O. Graham, Civil Engineer, dated October, 1944.

Viva Mallicoat Stapleton acquired title to the above described premises by Deed of B. B. Mallicoat, Trustee and W. H. Stapleton, Trustee, dated May 29, 1943, and Recorded in the Register's Office for Grainger County, Tennessee in Deed Book 72, Page 368.

Said mineral option agreement is duly recorded in the Office of the Register of Deeds for Grainger County, Tennessee in Volume 19, Page 46, of the Miscellaneous Records.

WHEREAS, the aforesaid mineral option agreement stipulates and provides that the same shall continue for the term and period of One (1) year from its date, and it is the mutual desire of the parties hereto to extend and continue said mineral option agreement beyond said term of One (1) year.

Therefore, it is covenanted and agreed by and between the parties hereto that, for and in consideration of the price and sum of One Dollar ($1.00) cash in hand paid this day, the receipt of which is hereby acknowledged, [illegible] the aforesaid mineral option agreement and all the rights and privileges, conditions and agreements therein contained and recited are hereby extended and continue for a period of [illegible] year____ from and after [illegible], that is, from [illegible] to [illegible], said lease to be and remain in full force and effect for the term of this extension over and beyond the original term therein specified.

IN WITNESS WHEREOF, parties of the first part have hereunto set their hands the day and year first above written.

Viva M. Stapleton

W. H. Stapleton

STATE OF TENNESSEE)
)
COUNTY OF KNOX)

Personally appeared before me Fred R. Burris

a Notary Public in and for said County and State the within named VIVA M. STAPLETON AND W. H. STAPLETON, the bargainors, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Knox County, Tennessee, this 21st day of March, 1957.

Fred R. Burris
Notary Public

My commission expires: 7-21-58

2

CLERK AND MASTER'S DEED. (Box 106-2 Printed 11-42) 69731 MARSHALL & BRUCE CO. NASHVILLE

This Indenture, Made the 31st day of October, A.D. 19 56, between Emert Tate, Clerk and Master of the Chancery Court at Rutledge Tennessee for Grainger County, Tennessee, of the first part, and Elvin Jackson and wife Bessie Jackson of Grainger County, State of Tennessee, of the second part,

Witnesseth: That by a decree of said Court, rendered at the May Term, 19 50 in the cause of Vallen Waller, Et Al. Complainants and Lona Waller McGinnis, Et Al. Defendants and entered on page 108 of Minute Book "Q", the said Clerk and Master did, on the 19th. day of August, 19 50, sell at public auction the real estate hereinafter described to the said Elvin Jackson and wife Bessie Jackson for Seven Thousand Three Hundred and 00/100 ----------($7,300.00) Dollars, as appears from the report of said Clerk and Master, made in said cause to the November Chambers Term, 19 50, and entered on page 140 of Minute Book AA, and the said Elvin Jackson and wife Bessie Jackson having paid the sum of Seven Thousand Three Hundred and 00/100 ($7,300.00) Dollars, ~~XXX~~

As required by the decree of said Court, confirming said report:

Now, therefore, in order to carry into effect said sale, in pursuance of said decree, and in consideration of the sum of Seven Thousand Three Hundred and 00/100 ($7,300.00) Dollars, paid to said Clerk and Master, the receipt of which is hereby acknowledged, and

the said Emert Tate, as such Clerk and Master, doth hereby transfer and convey to the said Elvin Jackson and wife Bessie Jackson and their heirs and assigns, forever, said tract or parcel of land, situated in the County of Grainger and State of Tennessee, and bounded and described as follows, viz.:

Consisting of two tracts located in the Fifth Civil District of Grainger County, Tennessee, in the Puncheon Camp, Church Community in Clinch Valley, adjoining the lands of Dr. A. D. Simmons, Pryor Acuff, R. D. Coffman, Scott Breeding, Austin Johnson, Walter Coffey, and Mack Waller.

FIRST TRACT: Situated in the Fifth Civil District of Grainger County, Tennessee in the Puncheon Camp, Church Community, in Clinch Valley. Bounded on the North by the lands of Dr. A. D. Simmons, on the South by the Clinch Valley Highway; on the East by the lands of Pryor Acuff, R. D. Coffman, Scott Breeding and perhaps others; and on the West by Austin Johnson and perhaps others, consisting of One hundred Acres more or less.

SECOND TRACT: Situated in the Fifth Civil District of Grainger County, Tennessee in Clinch Valley and in the Puncheon Camp Church Community, bounded on the North by the Clinch Valley

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

[illegible] South by the lands of Walter Coffey and Mack Waller; on the East by the lands of Pryor Acuff, and on the West by the lands of Walter Coffey, Mack Waller, containing Five (5) Acres, more or less.

To Have and to Hold said real estate, with all the hereditaments and appurtenances thereto belonging, to the said Elvin Jackson and wife Bessie Jackson and to their heirs and assigns, forever, in as full and ample a manner as the said Emert Tate, as such Clerk and Master can, or ought to, under authority of law and said decrees convey the same, but not further or otherwise.

In Witness Whereof, the said Emert Tate, Clerk and Master as aforesaid, hath hereunto set his hand, the date first above written.

Emert Tate
Clerk and Master.

Deputy Clerk and Master.

STATE OF TENNESSEE, COUNTY.

Personally appeared before me, Edward L. Roach Clerk of the County Court of said County, the within named Emert Tate Clerk and Master, the bargainor, with whom and whose official character I am personally acquainted, and who acknowledged that he executed the foregoing Deed for the purpose therein contained.

Witness my hand and seal, at office, this 31st. day of October, 1956

Edward L. Roach
County Court Clerk

STATE OF TENNESSEE,
GRAINGER COUNTY.

Register's Office, 19

I, Alice Brady, Register for said County, do certify that the foregoing Deed and Certificate are registered in said office in Book No., page, that they were received, 19, at o'clock M., and entered in Note Book, page

EMERT TATE
Clerk and Master.
TO
ELVIN JACKSON and wife
BESSIE JACKSON

DEED

RECEIVED
DEC 21 1956
U.M.E.A.

(Box 106-2) MARSHALL & BRUCEBO, NASHVILLE

B. H. PUTNAM CALCULATOR
BOX 647
MARIETTA, OHIO

WARRANTY DEED

P.H. Acuff & Wife
—TO—
Elmer Breeding & Wife

REGISTER'S OFFICE
State of Tennessee, } ss.
County of Grainger

Received for record the 12th day of August A. D. Nineteen Hundred 52 and at 12:40 o'clock P. M. Noted in Note Book E Page 261 and Recorded in Book of Deeds Vol. 57 Page 24

Witness my hand.

Fee Paid $2
J. D. Brady Register

State Tax, ... $ 2.40
County Tax, ...
Clerk's Fee 50
Total . . . . . $ 2.90

I CERTIFY THAT THE CONSIDERATION OR VALUE OF THE TRANSFER TAX ON THE WITHIN DEED HAS BEEN PAID
WITNESS MY HAND
THIS 12 DAY OF August 1952
J. D. Brady, REGISTER

8-12-1952 H.A. etax
8-12-1952 G.A.
8-12-1952 H.A
8-12-1952 G.A.

S. B. Newman & Co., Knoxville, Tenn.

THIS INDENTURE, made this 12 day of August A. D. 19 52 between P.H.Acuff and wife Gracie Acuff

of Grainger Co. in the State of Tennessee of the first part, and Elmer Breeding and wife French Breeding

of Grainger County ,Tennessee of the second part.

WITNESSETH, That the said parties of the first part, for and in consideration of the sum of Sixteen hundred dollars cash in hand

to them in hand paid by the said parties of the second part, the receipt of which is hereby acknowledged.

~~and to secure the payment of said note a specific lien is hereby retained on the property here conveyed,~~ have granted, bargained, sold, conveyed, and do hereby grant, bargain, sell and convey unto the said parties of the second part, the following described premises, to-wit, situate in District No. 5

Grainger County,Tennessee,beginning on a set stone on the north side of highway No.133, Thence northward to a cedar tree,Thence northward to a wild cherry,Thence northward to the center of puncheon camp creek. Thence Eastward with the said creek to the S.S.Breeding line,Thence Southward with the said S.S.Breeding line to highway no.133. Thence Westward with said highway to the beginning,concaining (15) acres more or less.

This is a portion of the lands conveyed to P.H.Acuff from Lula Epperson Dated June 24 th 1927,Recorded inbook of deeds,vol.56 page 430,in registers office Grainger County Tennessee.

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B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

with the hereditaments and appurtenances thereto appertaining hereby releasing all claims to Homestead and Dower therein. TO HAVE AND TO HOLD the said premises to the said part ies of the second part, their heirs and assigns forever.

And the said part ies of the first part for themselves and for their Heirs, Executors and Administrators do hereby covenant with the said part ies of the second part their heirs and assigns that they are lawfully seized in fee simple of the premises above conveyed and have full power, authority and right to convey the same, that said premises are free from all incumbrances

and that they will forever warrant and defend the said premises and the title thereto against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, The said part ies of the first part have hereunto set their hand s and seal s the day and year first above written.

P. H. Acuff (L. S.)
Gracie Acuff (L. S.)
(L. S.)
(L. S.)

STATE OF _____ County } SS.

Personally appeared before me _____ a Notary Public in and for said County the within named bargainor _____

with whom I am personally acquainted, and who acknowledged that he executed the within instrument for the purposes therein contained.

Witness my hand and official seal at office, this _____ day of _____ A. D. Nineteen Hundred and _____

_____ Notary Public

STATE OF Tennessee
Grainger County } SS.

Personally appeared before me Garrett L. Hopson a Notary Public in and for said County the within named bargainors P.H. Acuff and wife Gracie Acuff

with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained. And Gracie Acuff wife of the said P.H. Acuff having appeared before me privately and apart from her husband, said Gracie Acuff acknowledged the execution of the said deed to have been done by her freely, voluntarily and understandingly, without compulsion or constraint from her husband, and for the purposes therein expressed.

Witness my hand and official seal at office, this 12 th day of August A. D. Nineteen Hundred and fifty two.

Garrett L. Hopson.
Notary Public

my com. expires Jan. 3, 1954.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

5

40 11-5-40
M.W. J.2.N.

WARRANTY DEED

THIS DEED, between J. T. Wolf and Ethel Wolf his wife and Mandy Wolf unmarried, all of Berea, Ky.

of the first part, and Scott Breeding of Thorn Hill Tenn.

of the second part

WITNESSETH, that the said party of the first part, in consideration of Eighteen Hundred Dollars, ($1800.00) Nine Hundred Dollars of which is paid in cash, the receipt of which is hereby acknowledged, and the balance to be paid in three equal annual installments, the deferred payments being represented by three notes bearing 2% interest a lien being retained to secure payment.

the receipt of which is hereby acknowledged, do hereby sell, grant and convey to the party of the second part his heirs and assigns the following described property, viz: situated in District, (Old 11) of Grainger County Tennessee and known as the Claiborn Wolf farm, lying on both sides of Punchenon Camp Creek, and being bounded as follows: Beginning at a stone on the South side of the Valley Road, thence 61-1/2 W. 32 poles to where three walnuts, a post oak and a chinquepin once stood, thence N. 38 W. 57 poles and 21 links to to some sycamore saplings at the creek, by reversing this last line 1 pole and 9 links, then running S 64 W. 70 poles it will reach the sycamore and beech corner, but meandering up the creek 75 poles will reach the sycamore and beech, thence N. 49 E. 68 poles to a stone, thence N. 41 W. 121 poles and 14 links to hickory saplings and a blackgum on the top of copper ridge, thence N. 48 E. 32 poles to a stake and pointer thence S. 41 E. 215 poles to a stone at the valley road, thence S. 61-1/2 W. 32 poles to the beginning corner, containing 51 acres more or less, being the same land deeded by James Wolf etc to J. B. Wolf by deed bearing date Jan. 4th. 1893 and being recorded in Grainger County, Tenn in Book No. 27 pages 108 and 109. and one half of which was sold by J. B. Wolf to J. T. Wolf, (Reference below, and the remainder being conveyed by will to J. T. Wolf will being recorded in Will Book No page Grainger County Clerks office.

and being a portion of the same tract of land conveyed to the party of the first part by J. B. Wolf by deed bearing date, 11 day of March 1915 which is duly recorded in the Grainger County Clerk's office in Deed Book No. 47 on page 433,

B. H. PUTNAM, OPERATOR
BOX 617
MARIETTA, OHIO

To have and to hold the same, with all appurtenances thereto belonging to the second party, _____ heirs and assigns forever, with covenant of "General Warranty."

In testimony whereof, witness our signature this 5th day of Nov. 1940.

J. T. Wolfe

Ethel Wolfe

Mandy Wolfe

(Box 174-4.) MARSHALL & BRUCE CO., NASHVILLE

State of Tennessee, Madison County.

Personally appeared before me Edward L. Roberts, a Notary Public in and for said County and State, the within named J. T. Wolfe and wife, Ethel Wolfe, and Mandy Wolfe the bargainors with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained. And Ethel Wolfe, wife of the said J. T. Wolfe, having personally appeared before me, privately and apart from her husband, the said Ethel Wolfe acknowledged the execution of said instrument to have been done by her freely, voluntarily, and understandingly, without compulsion or constraint from her said husband, and for the purposes therein expressed.

Witness my hand and official seal, at Rerea, Kentuckey ~~Tennessee~~ this 9th day of November 1940

Edward L Roberts Notary Public.

My Commission expires 5th day of November, 1942

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

County of [illegible]

I, Edward L. Roberts, Notary Public in and for the County and State aforesaid do certify that the foregoing Deed from J. T. Wolf, Ethel Wolf and Mandy Wolf.

to Scott Breeding

was on the 5th day of Nov. 1940 produced to me and signed and acknowledged by J. T. Wolf and Ethel Wolf his wife, and Mandy Wolf.

to be their act and deed in due form of law and the same is with this certificate duly certified to the proper office for record.

Given under my hand this 14th day Nov. 1940

Edward L. Roberts
Notary Public

My commission expires [illegible] 1942

DEED

FROM

J. T. Wolf etc.

TO

Scott Breeding.

ACKNOWLEDGED BY

STATE TAX	2.70
CLERK'S FEE	.15
TOTAL	$2.85

I hereby that the Consideration Tax on the within deed has been paid. Witness my hand this 14 day of Nov. 1940

W. L. Hamill
Clerk

RECORDED IN

Deed Book No. 67

Page 431

REGISTER'S OFFICE
STATE OF TENNESSEE
GRAINGER COUNTY

Received for record the 14 day of Nov. 1940 at 10:05 o'clock A M.

Noted in Note Book D page 230 and recorded Book of Mar. Deeds, vol. 67 page 431

Witness my hand: Fee $1.50

J J Bradley Register.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

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DEC 21 1955
USAMBGH
DIVISION

4

WARRANTY DEED

Lurs Ruth, et al.

—TO—

Austin Johnson, et ux.

REGISTER'S OFFICE
State of Tennessee, } ss.
County of Grainger

Received for record the 12 day of December A. D. Nineteen Hundred and 41 at 4 o'clock P. M. and Noted in Note Book D. Page 282 and Recorded in Book of Deeds Vol. 70 Page 516

Witness my hand.

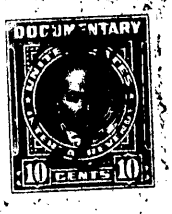
Fee Paid $1.60

State Tax,
County Tax,
Clerk's Fee,
Total,

Tax on the within has been paid.

Witness my hand this 12 day of Dec. 1941

W. J. Graves, CLERK



WARRANTY DEED — Tenn. Office Supply, Knoxville

THIS INDENTURE, made this 29th day of November A. D. 1941 between Lura Waller Ruth and W. R. Ruth, her husband, Grover Waller and wife, Mary Waller, Mertie Waller Ruth, a widow, Maggie Waller Rush and husband, Harris Rush, John Waller and wife, Gladys Waller, Mack Waller and wife, Venilla Waller, Clayton Waller and wife, Zola Waller, Lester Waller and wife, Cecil Waller, Carson Waller and wife, Edith Waller, Lonnie Waller a single woman,
of Various Counties in the State of Tennessee

of the first part, and Austin Johnson and wife, Docia Johnson,

of Grainger County, Tennessee of the second part.

WITNESSETH, That the said parties of the first part, for and in consideration of the sum of Eleven Hundred and No/100 Dollars

to them in hand paid by the said parties of the second part, the receipt of which is hereby acknowledged

~~and to secure the payment of said note a specific lien is hereby retained on the property here conveyed,~~

have granted, bargained, sold conveyed, and do hereby grant, bargain, sell and convey unto the said parties of the second part, the following described premises, to-wit, situate in District No. Five (formerly the 12th) of Grainger County, Tennessee, and known as the W. D. Waller Farm, bounded on the North by the lands of Mrs. Simmons; and the East by the lands of H. N. Waller, and on the South by the Clinch Valley Highway, and on the West by the lands of H. N. Waller; and described by metes and boinds thusly: BEGINNING ON A Dogwood and two Chestnut Sprouts on the North Boundry lien and being the N. E. Corner to Lot No. 2; them with lot of sameS. 17½ East 197 Poles to a Stake; thence South 50 W. 3 poles and 8 links to a large Whiteoak on the north bank of Puncheon Camp Creek; thence up the center of said creek to a rock at South Edge of said creek, and near an old "House Course", and distance being South 42½ West 19 poles; thence South 25 E. to a point in the center of Clinch Valley Highway; thence with the meanders of said highway eastwardly to a ppint in the center of said hoghway in the W. D. Waller and H. N. Waller division line; thence North 32 Degs. W. about 49 poles to a Crooker Sycamore on the bank of the creek; thence down the center of said creek to a whireoak on the south side of the creek, and in a short bend of said creek, course and distance being N. 19 East 11 and 3/5 poles, about 10 feet below a large Buckeye on the north bank of creek, course and distance being N. 66½ East 24 poles; then North 17½ West 202 poles to a Stake on the North Boundry line on the north side of Ridge; thence South 50 W. 30 poles to the point of beginning, containing Forty-five (45) acres, be the same more or less.

RECEIVED
DEC 21 1956
U.M.E.A.

B. H. PUT[illegible]
BOX 647
MARIETTA, OHIO

For title and last conveyance, see deed of L. F. Waller, to W. H. Waller, dated Nov. 15th 1894, which deed is of record in the Register's Office in Grainger County, Tennessee, in Warranty Deed Book Vol. 28 at page 242, to which reference is hereby made.

with the hereditaments and appurtenances thereto appertaining, hereby releasing all claims to Homestead and Dower therein. TO HAVE AND TO HOLD the said premises to the said parties of the second part, their heirs and assigns forever.

And the said parties of the first part for themselves and for their Heirs, Executors and Administrators do hereby covenant with the said parties of the second part their heirs and assigns that they are lawfully seized in fee simple of the premises above conveyed and that they have full power, authority and right to convey the same, that said premises are free from all incumbrances

and that they will forever warrant and defend the said premises and the title thereto against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, The said parties of the first part have hereunto set their hands and seals the day and year first above written.

~~Signed, sealed and delivered in presence of~~

Lura Waller Ruth	Clayton Waller (L. S.)
W. R. Ruth	Zola Waller (L. S.)
Merite Waller Ruth	Lester Waller (L. S.)
	Cecil Waller (L. S.)
Maggie Waller Rush	Carson Waller
Farris Rush	Edith Waller
John Waller	Lonnie Waller
Gladys Waller	Grover Waller
Mack Waller	Mary Waller
	Venilla Waller

STATE OF TENNESSEE
Washington County) SS.

Personally appeared before me a Notary Public in and for said County the within named bargainor Grover Waller and Mary Waller, his wife, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at office, this 3rd day of ~~November~~ December A. D Nineteen Hundred and Forty-one.

R. L. Hodges
Notary Public.

My Com. expires 31st day of January 1941

STATE OF TENNESSEE
GRAINGER COUNTY. } SS

Personally appeared before me, C. K. Ellis, a Notary Public in and for said County and State, the within named bargainors, Lura Waller Ruth, W. R. Ruth, Merite Waller Ruth, Maggie Waller Rush, Farris Rush, John Waller, Gladys Waller, Mack Waller, Clayton Waller, Zola Waller, Lester Waller, Cecil Waller, Carson Waller, Edith Waller and Lonnie Waller, with whom I am personally acquainted, and who acknowledged that they executed the within instrument doe the purpose therein contained.

Witness my hand and official seal, at Office in Rutledge, Grainger County, Tennessee, on this 29th day of November 1941.

C. K. Ellis
Notary Public.

My Commission expires Oct. 14th 1942.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

WARRANTY DEED

Lula Epperson

To

D. R. & C. C. Coffman

REGISTER'S OFFICE,

State of Tennessee, } SS.

County of Grainger

Received for record the 28 day of June A. D. Nineteen Hundred and 26 at 9:45 o'clock A. M.

Noted in Note Book ... Page 214 and

Recorded in Book of Deeds Vol. 56 Page 43

Witness my hand.

Fee Paid 1.25

J. J. Brady Register

State Tax, ... $0.40

County Tax, ... 0.10

Clerk's Fee, ... 0.82

Total, ... $0.82

I certify that the consideration tax on the within deed has been paid. Witness my hand this 28 day of June 1926

D. Beeler Clerk

WARRANTY DEED—101-5-25-2M S. B. Newman & Co., Printers and Binders, Knoxville, Tenn.

THIS INDENTURE, made this 14 day of June A. D. 1926 between Lula Epperson

of Grainger County in the State of Tennessee of the first part, and D. R. Coffman and C. C. Coffman

of Grainger County Tennessee of the second part

WITNESSETH, That the said party of the first part, for and in consideration of the sum of Twenty Hundred Dollars

to us in hand paid by the said parties of the second part, the receipt of which is hereby acknowledged

~~and to secure the payment of said note a specific lien is hereby retained on th oproperty here conveyed,~~ hath granted, bargained, sold, and conveyed, and doth hereby grant, bargain, sell and convey unto the said parties of the second part, the following described premises, to-wit; situate in District No. 5 of Grainger County Tennessee a certain Piece or Parcel of Land Lying and Being on the South Side of Cupies Ridge Bounded as follows Beginning on a Set Stone Corner of J. A. Epperson Lula Epperson and Walf thence North West from the Corner of Walfs and J. A. Epperson and Lula Epperson to a Set Stone in the corner of Epperson and Walfs Line on the North Side of the creek on the Side of Cupies Ridge thence North with Epperson and Walfs Line to the corner of Epperson Walker and Walf thence South West with Walfs

B. H. PUTNAM, OPERATOR
BOX 617
MARIETTA, OHIO

FORM 66

STATE OF TENNESSEE, GRAINGER COUNTY

Personally appeared before me, Vaughn Acuff, [illegible] said County and State, the within named [illegible] Vanilla Haller [illegible] the bargainor, with whom I am personally acquainted, and who acknowledged that she executed the within instrument for the purposes therein contained.

Witness my hand and [illegible] at Rutledge, Tennessee

this 5 [illegible] October [illegible] 1941

My Commission expires October 5, 1942 Vaughn Acuff, Notary Public.

B. H. PUTNAM, OPERATOR
BOX 0[illegible]7
MARI[illegible]OHIO

and T. Hesson Line to a set stone between J. et. T. Hesson and Lula T. Hesson thence with said a traditional line made between J. et. T. Hesson and Lula T. Hesson to a set stone the beginning corner of this tract of land containing 25 acres more or less. Being my company to X. J. and W. T. Hesson by his a assignee a title of J. et. T. Hesson Hesson as it was delivered to me

with the hereditaments and appurtenances thereto appertaining, hereby releasing all claims to Homestead and Dower therein. **TO HAVE AND TO HOLD** the said premises to the said parties of the second part their heirs and assigns forever.

And the said parties of the first part for themselves and for their Heirs, Executors and Administrators do hereby covenant with the said parties of the second part their heirs and assigns that they are lawfully seized in fee simple of the premises above conveyed and have full power, authority and right to convey the same, that said premises are free from all incumbrances,

and that they will forever warrant and defend the said premises and the title thereto against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, The said parties of the first part have hereunto set their hand and seal the day and year first above written.

Signed, sealed and delivered in presence of

Lula Hesson (L. S.)

(L. S.)

(L. S.)

(L. S.)

State of Tennessee
Lauderdale County } SS.

Personally appeared before me R. L. McGinnis a Notary Public in and for said County the within named bargainors Lula T. Hesson with whom I am personally acquainted, and who acknowledged that he executed the within instrument for the purposes therein contained.

Witness my hand and official seal at office, this 14 day of June A. D. Nineteen Hundred and 1926

R. L. McGinnis
Notary Public
My Commission Expires July 1928

State of
County } SS.

Personally appeared before me a Notary Public in and for said County the within named bargainors

with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purpose therein contained. And wife of the said having appeared before me privately and apart from her husband, said acknowledged the execution of the said deed to have been done by her freely, voluntarily and understandingly, without compulsion or constraint from her said husband, and for the purposes therein expressed.

Witness my hand and official seal at office, this day of
A. D. Nineteen Hundred and

Notary Public.

State of
County } SS

I, Clerk of the Court in and for the County and State aforesaid, the same being a court of record having a seal, do hereby certify that by and before whom the foregoing acknowledgment was taken, was at the time of taking the same, a Notary Public residing in said County and was duly authorized by the laws of said state to take and certify acknowledgments or proofs of deeds of lands in said state. And further, that I am well acquainted with the handwriting of said and that I verily believe that the signature to said certificate of acknowledgment is genuine.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the seal of the said Court this, the day of A. D. Nineteen Hundred and

Clerk.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

W. B. Acuff, et ux. et al., | WARRANTY - DEED
To | U. S. Revenue Stamps for $1.50 attached to this instrument.
Rosa Bullen. | 5th. District. 29 acres.

THIS INDENTURE, made this 2nd day of April A. D. 1936 between W. B. Acuff and wife Mattie Acuff; C. M. Jones and wife Laura Jones and V. D. Majors and wife Mary Majors of Grainger County in the State of Tennessee of the first part, and Rosa Bullen, her heirs and assigns of Grainger County, Tennessee of the second part.

WITNESSETH, That the said parties of the first part, for and in consideration of the sum of Thirteen hundred ($1300.00) Dollars to them in hand paid by the said party of the second part, the receipt of which is hereby acknowledged hath granted, bargained, sold, conveyed, and do hereby grant, bargain, sell and convey unto the said party of the second part, the following described premises, to-wit, situate in District No. Five Grainger County Tennessee, consisting of two tracts.

TRACT NO. 1; Bounded and described as follows;- Bounded on the north by the lands of W. S. Malliceat; on the west by the lands of W. J. Dalton; on the south by the lands of M. Bullen; on the east by W. J. Dalton and Edd Hurst, containing 25 acres, be the same more or less, This being a apart of the same lands conveyed by M. Bullen and wife Rosa Bullen and C. E. Bullen and wife C. V. Bullen to C. M. Jones, W. B. Acuff and V. D. Majors, by deed dated March 11th, 1935 and registered in the Register's office of Grainger County Tennessee, in Warranty deed book Vol. 64 page 7.

Tract No. 2; Bounded and described as follows: Beginning at the pike road, running southwardly with Wolf's line to the old public road and with said public road eastward to Pike Road, then with said pike road westward to the beginning, containing by estimation four acres more or less—It is the intention of this deed to convey all the land owned by the parties of the first part between the new pike road and the old valley road.

with the hereditaments and appurtenances thereto appertaining, hereby releasing all claims to Homestead and Dower therein. TO HAVE AND TO HOLD the said premises to the said party of the second part, her heirs and assigns forever.

And the said parties of the first part for themselves and for their Heirs, Executors and Administrators do hereby covenant with

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

the said party of the second part her heirs and assigns that they are lawfully seized in fee simple of the premises above conveyed and that they have full power, authority and right to convey the same, that said premises are free from all incumbrances and that they will forever warrant and defend the said premises and the title thereto against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, The said parties of the first part hath hereunto set their hands and seal the day and year first above written.

Signed, sealed and delivered in presence of)
N. S. Ruth)
W. B. Acuff)
Witnesses to Laura Jones mark

W. B. Acuff (L. S.)
Hattie Acuff (L. S.)
C. H. Jones (L. S.)
Laura her x mark Jones (L. S.)
V. D. Majors
Mary Majors

STATE OF Tennessee)
)SS.
Grainger County)

Personally appeared before me Vaughn Acuff, a Notary Public in and for said County the within named bargainors W. B. Acuff & Wife Hattie Acuff, C. H. Jones & wife Laura Jones and V. D. Majors and wife Mary Majors with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained. And Hattie Acuff, Laura Jones and Mary Majors wife of the said W. B. Acuff, C. H. Jones & V. D. Majors having appeared before me privately and apart from her husband, said Hattie Acuff, Laura Jones and Mary Majors acknowledged the execution of the said deed to have been done by her freely, voluntarily and understandingly, without compulsion or constraint from her said husband, and for the purposes therein expressed.

Witness my hand and official seal at office, this 10 day of April A. D. Nineteen Hundred and 36

Vaughn Acuff
Notary Public

My commission expires October 5, 1938.

I CERTIFY that the Consideration Tax on the within deed has been paid. Witness my hand this 18" day of April, 1936.

W. I. Daniel CLERK

Received for record the 18" day of April, 1936, at 9:00 O'clock A. M. and noted in Note Book D. at page 100.

J. J. Brady Register.

D. A. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

STATE OF TENNESSEE,)

COUNTY OF GRAINGER.)

I, Alice Brady, Register in and for said County, do hereby certify that the foregoing is a true and correct copy of the Deed from W. B. ACUFF, ET UX, ET AL, To ROSA BULLEN as the same appears of record in Book of Deeds, Vol. 64, pages 35 & 36 of the Register's Office of Grainger County.

Witness my hand and seal at office in Rutledge, in the County aforesaid this the 1st Day of November, A. D. 1956.

Alice Brady,
Register.

B. H. PUTNAM, OPERATOR.
BOX 647
MARIETTA, OHIO

8

WARRANTY DEED

Thomas Green and wife.

—TO—

Aaron B. Dalton and wife.

Washburn

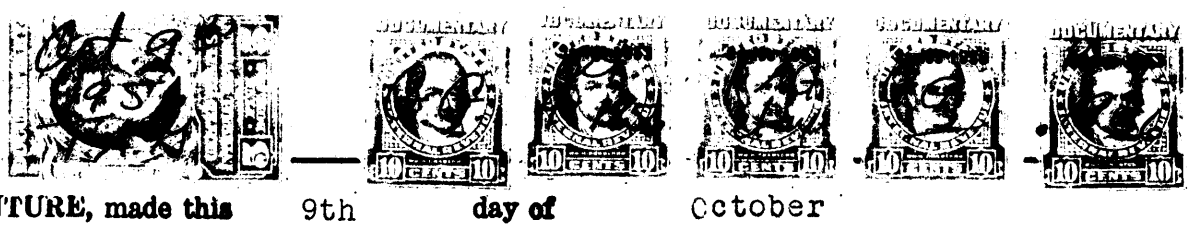
REGISTER'S OFFICE, ss.
State of Tennessee,
County of Grainger

Received for record the 9th day of October A. D. Nineteen Hundred and 56 at 4:25 o'clock P. M.
Noted in Note Book F Page 47 and
Recorded in Book of Deeds Warranty
Vol. 85 Page 598
Witness my hand.
Fee Paid $2.00 Alice Brady Register

State Tax, $ 7.50
County Tax, .50
Clerk's Fee,
Total, $ 8.00

I CERTIFY THAT THE CONSIDERATION TAX ON THE WITHIN DEED HAS BEEN PAID. WITNESS MY HAND THIS 19 DAY OF 1956
E. J. Powell CLERK

WARRANTY DEED



THIS INDENTURE, made this 9th **day of** October

A. D. 19 **between** T. A. GREEN and wife, GERTRUDE GREEN,

of Grainger County in the State of Tennessee

of the first **part, and** AARON B. DALTON and wife, HELEN B. DALTON,

of Grainger County in the State of Tennessee, of **the second part.**

WITNESSETH, that the said parties of the first part, for and in consideration of the sum

of One Dollar and other valuable considerations

to them in hand paid by the said parties of the second part, the receipt of which is hereby

acknowledged, and the assumption of that certain note at Citizens Bank and Trust Company ~~of Citizens Bank & Trust Company~~ of Rutledge, Tennessee, in the sum of Fifteen Hundred ($1500.00) Dollars, and,

for the remainder said Second Parties have executed and deliveres their purchase-money note in the sum of Thirty-five Hundred Dollars, due and payable $500.00, annually with interest from date, the first installment falling due on January 1st 1958.

and to secure the payment of said note a specific lien is hereby retained on the property here conveyed,

have granted, bargained, sold, conveyed, and do hereby grant, bargain, sell and convey unto the

said parties of the second part, the following described premises, to wit, situate in

District No. Five of Grainger County, Tennessee

Situated in the Dotson Camp-Ground Communitym bounded on the North by the lands of the late S. W. Malicoat; on the South by the Clinch Valley Pike Road; on the East by the lands of Winstead and/ Stapleton and on the West by the lands of W. B. Dalton, and more particularly described to-wit:

BEGINNING on a corner between late J. W. Dalton and S. W. Malicoat farms; ~~xxxxxxxxxxxxxxxxxxxxxxxx~~, now W. B. Dalton and W. H. Stapleton; thence running southwardly with the said W. B. Dalton Line to the Creek; thence down said creek to the " Old Public Road"; thence southwardly with the center of said road, as it meanders, to the Clinch Valley Pike Road; thence eastwardly with said pike road to the H. B. Winstead - formerly S. W. Malicoat- line and corner; thence northwardly with said Winstead's line to the Creek, and continuing on same course with W. H. Stapleton's line to a corner near a barn on top of Copper Ridge, thence westwardly with the line of said Stapleton to the point of Beginning, containing 58 acres, more or less.

First Parties reserve 50% interest and rights in all mineral products that may be extracted from said premises.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

8

For further and more complete description and for Title, reference is here made to the following Deeds of Record in the Register's Office in and for said County and State, in Deed Book 80 Vol. 80, Page 462, Book , Vol. , Page , Book , Vol. , Page ;

with the hereditaments and appurtenances thereto appertaining, hereby releasing all claims to Homestead and Dower therein. TO HAVE AND TO HOLD the said premises to the said part ies of the second part, their heirs and assigns forever.

And the said part ies of the first part for themselves and for their Heirs, Executors and Administrators do hereby covenant with the said part ies of the second part their heirs and assigns that they are lawfully seized in fee simple of the premises above conveyed and have full power, authority and right to convey the same, that said premises are free from all incumbrances except the reservation herein before mentioned,

and that they will forever warrant and defend the said premises and the title thereto against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, The said part ies of the first part have hereunto set their hand s and seal s, the day and year first above written.

Signed, sealed and delivered in the presence of

Thomas Greene (L. S.)

Gertrude Greene (L. S.)

(L. S.)

(L. S.)

STATE OF TENNESSEE,
County of Grainger } ss.

Personally appeared before me, C. K. Ellis, a Notary Public of said County and State, the within named bargainer s Thomas Green and Gertrude Green with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at office this 9th day of October, A. D. 1956.

My Commission Expires Jan. 6th 1959. Notary Public.

STATE OF TENNESSEE,
County of } ss.

Personally appeared before me, , a Notary Public of said County and State, the within named bargainers

with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained. And , wife of the said

having appeared before me privately and apart from her said husband, the said

acknowledged the execution of said Deed to have been done by her freely, without fear or compulsion or threats from her husband, and for the purposes therein expressed.

Witness my hand and official seal at office this day of A. D. 19

My Commission Expires Notary Public.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

WARRANTY DEED

James A. Epperson & Wife

—TO—

P. H. Acuff

REGISTER'S OFFICE,
State of Tennessee, } ss.
County of .....

Received for record the ..... day of
..... A. D. Nineteen Hundred
and ..... at ..... o'clock ..... M.
Noted in Note Book ..... Page ..... and
Recorded in Book of Deeds .....
Vol. ..... Page .....
Witness my hand.
Fee Paid ..... Register

State Tax, ... $.....
County Tax, ...
Clerk's Fee, ...
Total, ... $.....

S. B. NEWMAN & CO., KNOXVILLE, TENN.

WARRANTY DEED. Form 101T—9-29—4M. S. B. NEWMAN & CO., KNOXVILLE, TENN.

THIS INDENTURE, made this 20th day of November A. D. 19 31 between James A. Epperson & Wife

of Grainger County in the State of Tennessee of the first part, and P. H. Acuff

of Grainger County, Tennessee of the second part.

WITNESSETH, That the said parties of the first part, for and in consideration of the sum of One Thousand Dollars ($1,000.00)

to them in hand paid by the said party of the second part, the receipt of which is hereby acknowledged

~~and to secure the payment of said note a specific lien is hereby retained on the property here conveyed,~~

have granted, bargained, sold, conveyed, and do hereby grant, bargain, sell and convey unto the said party of the second part, the following described premises, to-wit, situate in District No. 5 Grainger County Tennessee. Bounded and described as follows: Beginning in a bat stone in George Bullen's line, running with said Bullen line to said Bullen road, Thence westward with said Public road to H. N. Haller's line, Thence northward with said Haller line to H. N. Haller corner, Thence Eastward to D. R. Coffman's line, Thence with said Coffman line to J. T. Wolfe's line, Thence with said Wolfe line to Brumbelow Camp creek, Thence Eastward with said Creek to P. H. Acuff's line,

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

thence with said cruff line to the beginning corner, containing 45 acres, more or less.

with the hereditaments and appurtenances thereto appertaining, hereby releasing all claims to Homestead and Dower therein. TO HAVE AND TO HOLD the said premises to the said party of the second part, his heirs and assigns forever.

And the said parties of the first part for themselves and for their Heirs, Executors and Administrators do hereby covenant with the said party of the second part his heirs and assigns that they are lawfully seized in fee simple of the premises above conveyed and they have full power, authority and right to convey the same, that said premises are free from all incumbrances

and that they will forever warrant and defend the said premises and the title thereto against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, The said parties of the first part have hereunto set hands and seals the day and year first above written.

Signed, sealed and delivered in presence of

James A Epperson (L. S.)
Hattie Epperson (L. S.)
(L. S.)
(L. S.)

STATE OF ..... County } SS.

Personally appeared before me ..... a Notary Public in and for said County the within named bargainor .....

with whom I am personally acquainted, and who acknowledged that ..... he ..... executed the within instrument for the purposes therein contained

Witness my hand and official seal at office, this ..... day of .....

A. D. Nineteen Hundred and .....

.....
Notary Public

STATE OF Tennessee
Grainger County } SS.

Personally appeared before me Garrett L. Hopson a Notary Public in and for said County the within named bargainors James A. Epperson + wife Hattie Epperson,

with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained. And Hattie Epperson wife of the said James A. Epperson having appeared before me privately and apart from her husband, said Hattie Epperson, acknowledged the execution of the said deed to have been done by her freely, voluntarily and understandingly, without compulsion or constraint from her said husband, and for the purposes therein expressed.

Witness my hand and official seal at office, this 20th day of November

A. D. Nineteen Hundred and Thirty one Garrett L. Hopson
Notary Public

My Com. Expires. Jan. 7. 1934.

RECEIVED
DEC 21 1956
D.M.E.A.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

To Have and to Hold said real estate, with all the hereditaments and appurtenances thereto belonging, to the said W. B. Dalton and wife, Sarah J. Dalton and to their heirs and assigns, forever, in as full and ample a manner as the said Emert Tate, as such Clerk and Master can, or ought to, under authority of law and said decrees convey the same, but not further or otherwise.

In Witness Whereof, the said Emert Tate, Clerk and Master as aforesaid, hath hereunto set his hand, the date first above written.

Emert Tate
Clerk and Master.

Deputy Clerk and Master.

STATE OF TENNESSEE, Grainger COUNTY.

Personally appeared before me, C. K. Ellis Notary Public ~~Clerk of the County Court~~ of said County, the within named Emert Tate Clerk and Master, the bargainor, with whom and whose official character I am personally acquainted, and who acknowledged that he executed the foregoing Deed for the purpose therein contained.

Witness my hand and seal, at office, this 17 day of April, 1946

My commission expires Oct. 14, 1947 C. K. Ellis, Notary Public

STATE OF TENNESSEE, Grainger COUNTY. } Register's Office, Dec 30, 1947

I, J. J. Brady, Register for said County, do certify that the foregoing Deed and Certificate are registered in said office in Book No. 77, page 118, that they were received 23rd of December, 1947, at 2:40 o'clock P. M., and entered in Note Book F, page 120

J. J. Brady

DEED

TO

Clerk and Master.

State Tax — 1.65
Clerk's Fee .15
Total 1.80

I CERTIFY THAT THE CONSIDERATION OR VALUE OF THIS TRANSFER IS EQUAL TO OR GREATER THAN THE AMOUNT SHOWN HEREIN.
TAX ON THE WITHIN DEED IN THE AMOUNT OF $ HAS BEEN PAID
THIS 23 DAY OF December 1947
J. J. Brady CLERK.

(Box 106-2) MARSHALL & BRUCKER, NASHVILLE

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

CLERK AND MASTER'S DEED. (Box 106-2 Printed 11-42) 69721 MARSHALL & BRUCE CO. NASHVILLE

This Indenture, Made the 17th day of April, 1946, A.D. 19 46, between Emert Tate Clerk and Master of the Chancery Court at Rutledge, Tenn. for Grainger County, Tennessee, of the first part, and W. B. Dalton and wife, Sarah J. Dalton of Grainger County, State of Tennessee, of the second part,

Witnesseth: That by a decree of said Court, rendered at the November Term, 19 44, in the cause of Tilman Dalton ET AL Complainants and Walter Dalton ET AL Defendants and entered on page 467 of Minute Book P, the said Clerk and Master did, on the 26 day of January, 19 45, sell at public auction the real estate hereinafter described to the said R. W. Dalton and wife, Sarah J. Dalton for Eleven Hundred Dollars and No/100 ($1,100.00) Dollars, as appears from the report of said Clerk and Master, made in said cause to the May term Term, 19 45, and entered on page 42 of Minute Book AA, and the said W. B. Dalton and wife, Sarah J. Dalton having paid the sum of Three Hundred and No/100 Dollars, and Executed notes for the remainder.

as required by the decree of said Court, confirming said report:

Now, therefore, in order to carry into effect said sale, in pursuance of said decree, and in consideration of the sum of Eleven Hundred and No/100 Dollars, paid to said Clerk and Master, the receipt of which is hereby acknowledged, and

the said Emert Tate, as such Clerk and Master, doth hereby transfer and convey to the said W. B. Dalton and wife, Sarah J. Dalton and their heirs and assigns, forever, said tract or parcel of land, situated in the County of Grainger and State of Tennessee, and bounded and described as follows, viz.:

BEGINNING at a stone at the side of the Valley Road; thence S. 44¼ W. 17 poles to a stone at the side of the road; thence N. 41 W. 251 poles to a stake and pointers; thence N. 45 E. 2 and 3/8th poles to a Hickory and Mulberry sprout; thence S. 34 E. 8 poles to a Chesnut and Hickory sprout; thence S. 89½ E. 18 poles to a stake and pointers; thence S. 41 E. 230 poles to the BEGINNING, containing 25 acres more or less.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

WARRANTY DEED.

W. J. Loatten & Wife
TO
W. B. Loatten

STATE OF TENNESSEE
Grainger COUNTY.
REGISTER'S OFFICE.

Received for record the 30 day of April, A.D. 193 4, at 9:30 o'clock A. M.; noted in Note Book B, page 44, and recorded in Book of Deeds 61, page 480

Fee paid, $ 1.25 pd.

Witness my hand. J. J. Brady, Register.

State Tax	$ .08
County Tax	1.5
Clerk's Fee	
Total	$ 2.3

McQUIDDY PRINTING CO., NASHVILLE

50 W. J. Loatten Apr. 4

The previous and last instrument, a warranty deed is registered in this office in Book of Deeds Vol. 35, at page 86. This April 30, 1934.

J. J. Brady, Register.

EAST TENNESSEE WARRANTY DEED. Form 220. McQUIDDY PRINTING CO., Nashville, Tenn.

WARRANTY DEED.

THIS INDENTURE, Made this 9th day of March, A.D. 193 4, between W. J. Loatten and Wife Synthia Loatten of Grainger County, in the State of Tennessee, of the first part, and W. B. Loatten of Grainger County Tenn of the second part,

Witnesseth, That the said parties of the first part, for and in consideration of the sum of One Dollar and for Looking after me and my Wif and Getting wood and helping us when we are sick and Lived to in hand paid by the said party of the second part, the receipt of which is hereby acknowledged,

~~and to secure the payment of said note a specific lien is hereby retained on the property conveyed,~~

have granted, bargained, sold, and conveyed, and do hereby grant, bargain, sell, and convey, unto the said party of the second part the following-described premises—to wit: Situate in District No. 5 of Grainger County Tennessee a Certain Piece or Parcel of Land Bounded as follows Beginning on a Set Stone in Mr. Bullen Line thence with Said Bullen Line to a Hickory thence N. 71 E. 120 Steps to a Set Stone thence South 47 E. 68½ P. to a Set Stone thence Southward to a Sycamore in the Bend of the Road thence Southward to a Shaing thence up the North Bank of Pinehain Branch Creek to a Black Walnut thence Northward a Bunt 9 P. to a Mulberry Below Ridge Road Thence thence Northward a Bunt 16 P. to a Set Stone thence North Westward 17 P. to the Beginning Containing 11 Acres More or Less

Witness Used and needs Stood that W. B. Loatten is to have full Possession and Control of Said Lands But W. J. Loatten and Wif is to have Rents off of Said Land as Long as they Live this is to Be W. B. Loatten Shares of W. J. Loattens Real Estate

B. H. PUTNAM, OPERATOR
BOX C.7
MARIETTA, OHIO

7

for full description of said land look for former deeds

with the hereditaments and appurtenances thereto appertaining, hereby releasing all claim to homestead and dower therein; which land was conveyed to W. J. Coltan, by deed of W. D. Simmons, registered in Book No. ____, page ____ in the Register's Office of Grainger County, Tennessee. To have and to hold the said premises to the said part of the second part, his heirs and assigns, forever.

And the said parties of the first part, for themselves and for their heirs, executors, and administrators, do hereby covenant with the said part of the second part, his heirs and assigns, that we are lawfully seized in fee simple of the premises above conveyed, and have have full power, authority, and right to convey the same; that said premises are free from all incumbrances.

and that we will forever warrant and defend the said premises and the title thereto against the lawful claims of all persons whomsoever.

In Witness Whereof, the said parties of the first part have hereunto set their hand and seal the day and year first above written.

Signed, sealed, and delivered in presence of

his
W. J. + Coltan (L. S.)
mark
Syntha Coltan (L. S.)
mark
(L. S.)
(L. S.)

STATE OF ____, ____ County. } ss.

Personally appeared before me, ____, a Notary Public in and for said County, the within-named bargainors, ____ with whom I am personally acquainted, and who acknowledged that he executed the within instrument for the purposes therein contained.

Witness my hand and official seal, at office, this ____ day of ____ A.D. 193__.

____, Notary Public.

STATE OF Tennessee, Grainger County. } ss.

Personally appeared before me, R. L. McGinnis, a Notary Public in and for said County, the within-named bargainors, W. J. Coltan and his Syntha Coltan with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained. And Syntha Coltan, wife of the said W. J. Coltan, having appeared before me privately and apart from her husband, the said W. J. Coltan, acknowledged the execution of the said Deed to have been done by her freely, voluntarily, and understandingly, without compulsion or constraint from her said husband, and for the purposes therein expressed.

Witness my hand and official seal, at office, this 9th day of March, A.D. 193.4

My Commission Expires Sept 1934 R. L. McGinnis, Notary Public.

STATE OF ____, ____ County. } ss.

Personally appeared before me, ____, a Notary Public in and for ____ County aforesaid, ____ subscribing witnesses to the within Deed, who, being first sworn, deposed and said that they are acquainted with ____ the bargainor, and that ____ the same in their presence to be ____ act and deed upon the day it bears date.

Witness my hand and official seal, at office, this ____ day of ____

B. H. PUTNAM. OPERATOR
BOX 647
MARIETTA, OHIO

Mail to Maine

WARRANTY DEED

W. J. Dalton & Wife

—TO—

W. B. Dalton & Wife

REGISTER'S OFFICE,
State of Tennessee, } ss.
County of Grainger

Received for record the 7th day of February A. D. Nineteen Hundred and 34 at 1:15 o'clock P. M.
Noted in Note Book B Page 34 and
Recorded in Book of Deeds Vol. 61 Page 386
Witness my hand.
Fee Paid $1.25
J. J. Brady Register

State Tax,	$ .05
County Tax,	
Clerk's Fee,	.15
Total,	$ .20

I certify that the within instrument has been duly registered, and the tax on the property herein conveyed has been paid.
This 7 day of Feb 1934
J. J. Brady

WARRANTY DEED—Form 101T—10-33—4M. S. B. Newman & Co., Knoxville, Tenn.

THIS INDENTURE, made this 2ND day of December A. D. 19 33 between W. J. Dalton & Wife Cynthia Dalton,

of Grainger Co in the State of Tennessee of the first part, and W. B. Dalton & Wife, Sarah Dalton,

of Grainger Co. Tennessee of the second **part.**

WITNESSETH, That the said parties of the first part, for and in consideration of the **sum** of Fifty dollars ($50.00)

to them in hand paid by the said parties of the second part, the receipt of which is hereby acknowledged

~~and to secure the payment of said note a specific lien is hereby retained on the property here conveyed~~

have granted, bargained, sold, conveyed, and do hereby grant, bargain, sell and convey unto the said parties of the second part, the following described premises, to-wit, situate in District No. 5. Grainger County, Tennessee. Beginning at puncheon camp creek in the H. Bullen line. Thence northward 34. poles to a set stone in H. Bullen line. Thence eastward 17. Poles to a set stone. Thence southeastward about 16. poles to a mulberry below ridge road. Thence Southward about 9 poles to a black walnut on bank of puncheon camp creek. Thence up puncheon camp creek about 8 poles to the beginning containing one acre more or less.

The parties of the first part are conveying to the parties of the second part a right-of-way from their back or home out to the old public road, as conveyed by Wiley P. Simmons to parties of first part.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

Deed [illegible] W. J. Dalton by Wesley Simmons. Registered in book of warranty deeds Vol. 35, page 86. Grainger Co. Tenn.
The parties of the first part, reserves a right of way across the above tract of land as the ridge road now runs.

with the hereditaments and appurtenances thereto appertaining, hereby releasing all claims to Homestead and Dower therein. TO HAVE AND TO HOLD the said premises to the said part ies of the second part, their heirs and assigns forever.

And the said part ies of the first part for themselves and for their Heirs, Executors and Administrators do hereby covenant with the said part ies of the second part their heirs and assigns that they are lawfully seized in fee simple of the premises above conveyed and have full power, authority and right to convey the same, that said premises are free from all incumbrances

and that they will forever warrant and defend the said premises and the title thereto against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, The said part ies of the first part have hereunto set hand s and seal s the day and year first above written.

Signed, sealed and delivered in presence of
W. B. Walton
Garrett L. Hopson,

W. J. Dalton his X mark (L. S.)
Cynthia Dalton her X mark (L. S.)
(L. S.)
(L. S.)

STATE OF ..... County } SS.

Personally appeared before me ..... a Notary Public in and for said County the within named bargainor .....
with whom I am personally acquainted, and who acknowledged that ..... he ..... executed the within instrument for the purposes therein contained.

Witness my hand and official seal at office, this ..... day of .....
A. D. Nineteen Hundred and .....

Notary Public

STATE OF Tennessee
Grainger County } SS.

Personally appeared before me Garrett L. Hopson a Notary Public in and for said County the within named bargainors W. J. Dalton & Cynthia Dalton
with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained. And Cynthia Dalton wife of the said W. J. Dalton having appeared before me privately and apart from her husband, said Cynthia Dalton acknowledged the execution of the said deed to have been done by her freely, voluntarily and understandingly, without compulsion or constraint from her said husband, and for the purposes therein expressed.

Witness my hand and official seal at office, this 2nd day of December
A. D. Nineteen Hundred and thirty-three Garrett L. Hopson
Notary Public

My Com. expires Jan. 7. 1934.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

WARRANTY DEED

Z. E. Overholt and wife.

—TO—

W. B. Dalton and wife.

REGISTER'S OFFICE,
State of Tennessee, } ss.
County of Grainger

Received for record the 20" day of January A. D. Nineteen Hundred and 50. at 1:50 o'clock P. M.
Noted in Note Book E. Page 185 and
Recorded in Book of Deeds
Vol. 79 Page 198
Witness my hand.
Fee Paid $1.50
J. J. Brady Register

State Tax, ... $ 2.25
County Tax, ...
Clerk's Fee, ... .15
Total, ... $ 2.40

WARRANTY DEED—Form No.

THIS INDENTURE, made this 20th day of January

A. D. 1950 between Z. E. Overholt and wife, Martha E. Overholt,

of Grainger County in the State of Tennessee
of the first part, and W. B. Dalton and wife, Sarah J. Dalton,

of Grainger County in the State of Tennessee the second part.

WITNESSETH, That the said parties of the first part, for and in consideration of the sum

of One Dollar and other valuable considerations

to them in hand paid by the said parties of the second part, the receipt of which is hereby acknowledged, x x x x x x x x x x

~~and to secure the payment of said note as specific lien is hereby retained on the property here conveyed~~ x

have granted, bargained, sold, conveyed, and do hereby grant, bargain, sell and convey unto the said parties of the second part, the following described premises, to-wit, situate in District No. Five of Grainger County, Tennessee.

That certain tract or parcel of land, lying on the north side of Clinch Valley Highway, and the south side of Copper Ridge, and,

Bounded on the North by the farm known as Simmons Farm; on the South by Clinch Valley Highway or Pike Road; on the East by the lands of W. B. Dalton, second party, and on the West by the lands of J. C. McHinnis, containing Forty (40) acres, be the same more or less.

For title and last conveyance reference is made to deed of W. H. Johnson and wife, to First Parties, under date of July 22nd 1946, which deed is of recoed in the Register's Office in Grainger County, Tennessee, in Deed Book Vol. 74 at page532,

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

For further and more complete description and for Title, reference is here made to the following Deeds of Record in the Register's Office in and for said County and State, in Deed Book Vol. 74, Page 532, Book , Vol. 74, Page 138, Book Vol. , Page ;

with the hereditaments and appurtenances thereto appertaining, hereby releasing all claims to Homestead and Dower therein. TO HAVE AND TO HOLD the said premises to the said parties of the second part, their heirs and assigns forever.

And the said parties of the first part for themselves and for their Heirs, Executors and Administrators do hereby covenant with the said parties of the second part their heirs and assigns that they are lawfully seized in fee simple of the premises above conveyed and have full power, authority and right to convey the same, that said premises are free from all incumbrances, except the 1950 State and County Assessments and Taxes, which said Second Parties hereby assume,

and that they will forever warrant and defend the said premises and the title thereto against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, The said parties of the first part have hereunto set their hands and seals the day and year first above written.

Signed, sealed and delivered in the presence of

Z. E. Overholt (L. S.)
Martha E. Overholt (L. S.)
(L. S.)
(L. S.)

STATE OF TENNESSEE,
County of Grainger } ss.

Personally appeared before me, C. K. Ellis, a Notary Public of said County and State, the within named bargainors, Z. E. Overholt and wife, Martha E. Overholt,

with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at office this 20th day of January A. D. 1950.

My Commission Expires Oct. 14th 1950. C. K. Ellis Notary Public.

STATE OF TENNESSEE,
County of } ss.

Personally appeared before me, , a Notary Public of said County and State, the within named bargainors

with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained. And , wife of the said

having appeared before me privately and apart from her said husband, the said

acknowledged the execution of said Deed to have been done by her freely, voluntarily, and understandingly, without compulsion or constraint from her husband, and for the purposes therein expressed.

Witness my hand and official seal at office, this day of A. D. 19

My Commission Expires Notary Public.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

4835

WARRANTY DEED

W. H. Johnson, et ux

TO

Carson McGinnis, et ux.

STATE OF TENNESSEE

Grainger COUNTY.

Register's Office.

Received for record the 22nd day of March, A.D. 1944 at 10:40 o'clock A.M. Noted in Note Book F, page 8, and recorded in Book of Deeds Vol. 73, page 154

Fee paid, $1.25

Witness my hand, J. J. Brady, Register

State Tax $ .73

Clerk's Fee $ .45

Total $ 1.88

Paid this 22 day of March, 19 44

Ed Daniel
County Court Clerk.

(Box 409-1) MARSHALL & BRUCE CO. NASHVILLE

EAST TENNESSEE WARRANTY DEED. (For Typewriter.) (Box 409-1) MARSHALL & BRUCE CO. NASHVILLE

WARRANTY DEED

This Indenture, Made this 22nd day of March, A.D. 19 44, between

W. H. Johnson and wife, Hannah Johnson,

of Grainger County, in the State of Tennessee, of the first part, and Carson McGinnis and wife, Imogene McGinnis, of Grainger County, Tennessee, of the second part,

Witnesseth: That the said party of the first part, for and in consideration of the sum of One Dollar ~~and the assumption of the remainder of a first~~ them in hand paid by the said parties of the second part, the receipt of which is hereby acknowledged,

and the assumption of the ramainder of a first mortgage loan note outstanding against the tract of land hereinafter described, and other tracts, held by the Federal Land Bank of Louisville, Ky. under trust deed executed by Cleveland E. Bullen and wife and H. Bullen and wife, dated ____day of _____19____, and of record in Trust Deed Bilk Vol. _____at page _____, in the Register's Office in Grainger County, Tennessee,

have granted, bargained, sold, and conveyed, and do hereby grant, bargain, sell, and convey unto the party of the second part, the following described premises, to wit, situate in District No.:

A one-third undivided interest in

Grainger County, Tennessee, and bounded and described as follows:

Beginning on a stake in the center of Clinch Valley Road, thence northwardly with the meanders of the said road as follows:

to a rock in the line of Sam Minch to a fence; thence with said fence and line 210 poles to a stake corner on top of Pepper Ridge, J. Johnny Simmons' line; thence Westward with said Simmons' line 24-3/4 poles to a rock corner in Claibourne Wolfe line; thence continuing with said Claibourne Wolfe's line to the point of beginning, containing 30 acres, more or less.

B. H. PUTNAM, OPERATOR
BOX 617
MARIETTA, OHIO

3

with the hereditaments and appurtenances thereto appertaining, hereby releasing all claim to homestead and dower therein; which land was conveyed to W, H, Johnson, and Second Parties by deed of J. W. Hoskins and wife, Bonnie, registered in Book No. 69, page 563 in the Register's Office of Grainger County, Tennessee. To Have and to Hold the said premises to the said parties of the second part, their heirs and assigns, forever.

And the said parties of the first part, for themselves ~~and for~~ their heirs, executors, and administrators, do hereby covenant with the said parties of the second part, their heirs and assigns, that they are lawfully seized in fee-simple of the premises above conveyed, and they have full power, authority, and right to convey the same; that said premises are free from all encumbrances other than above set forth.

and that they will forever warrant and defend the said premises and the title thereto against the lawful claims of all persons whomsoever.

In Witness Whereof the said parties of the first part have hereunto set their hands and seals the day and year first above written.

W H Johnson (L. S.)

Signed, sealed, and delivered in presence of: Hannah Johnson her X mark (L. S.)

(L. S.)

(L. S.)

STATE OF TENNESSEE
Grainger County. } ss.

Personally appeared before me, Garrett L. Hopson, a Notary Public in and for said County, the within named bargainors W. H. Johnson and wife, Hannah Johnson,

with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at office this 22nd day of March, A.D. 1944.

My Commission Expires 12-19-45, 19..... Garrett L. Hopson, Notary Public.

STATE OF
County. } ss.

Personally appeared before me, , a Notary Public in and for said County, the within named bargainors,

with whom I am personally acquainted, and who acknowledged that he executed the within instrument for the purposes therein contained. And , wife of the said , having appeared before me privately and apart from her husband, the said , acknowledged the execution of the said Deed to have been done by her freely, voluntarily, and understandingly, without compulsion or constraint from her said husband and for the purposes therein expressed.

Witness my hand and official seal at office this ..... day of ....., A.D. 19.....

My Commission Expires....., 19..... ....., Notary Public.

STATE OF
County. } ss.

Personally appeared before me, , a Notary Public in and for County aforesaid and , subscribing witnesses to the within Deed, who, being first sworn, deposed and said that they are acquainted with the bargainor, and that he acknowledged the same in their presence to be act and deed, upon the day it bears date.

Witness my hand and official seal at office this ..... day of ....., A.D. 19.....

My Commission Expires....., 19..... ....., Notary Public.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

CLERK AND MASTER'S DEED. (Box 106-2) 9E907. MARSHALL & BRUCE CO. NASHVILLE

This Indenture, Made the 10th. day of January, A.D. 1945, between Emert Tate, Clerk and Master of the Chancery Court at Rutledge, Tenn. for Grainger County, Tennessee, of the first part, and Carson McGinnis and wife Imogene McGinnis of Grainger County, State of Tennessee, of the second part,

Witnesseth: That by a decree of said Court, rendered at the May Term, 1944, in the cause of Claby Harville, Admr. Complainant and Hannah Harville, Et Al. Defendant S and entered on page 440 of Minute Book "P", the said Clerk and Master did, on the 11th. day of March, 1944, sell at public auction the real estate hereinafter described to the said Carson McGinnis and wife Imogene McGinnis for Thirteen Hundred Ten and 00/100 ($1310.00) ---------- Dollars, as appears from the report of said Clerk and Master, made in said cause to the May Term, 1944, and entered on page of Minute Book "P", and the said Carson McGinnis and wife Imogene McGinnis having paid the sum of Thirteen Hundred Ten and 00/100 ($1310.00). Dollars, ~~and~~

~~and the~~ decree of said Court, confirming said report:

Now, therefore, in order to carry into effect said sale, in pursuance of said decree, and in consideration of the sum of Thirteen Hundred Ten and 00/100 -- Dollars, paid to said Clerk and Master, the receipt of which is hereby acknowledged, and

the said Emert Tate, as such Clerk and Master, doth hereby transfer and convey to the said Carson McGinnis and wife Imogene McGinnis and their heirs and assigns, forever, said tract or parcel of land, situated in the County of Grainger and State of Tennessee, and bounded and described as follows, viz.:

Said property so sold is that certain tract of land lying in the Fifth Civil District of Grainger County, Tennessee. Bounded and described as follows:

BEGINNING at a set stone at the side of the road, thence running South 61 and 1/4 Deg. W. 6 1/3 poles to a persimon; thence S. 81 and 1/4 W. 14 poles to a stone at the side of the road; thence N. 41 W. 215 poles to a stake and pointers; thence N. 48 E. 18 poles to a stake and pointers; thence s. 41 E. 220 poles to the pint of BEGINNING

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

To Have and to Hold said real estate, with all the hereditaments and appurtenances thereto belonging, to the said Carson McGinnis and wife Imogene McGinnis

and to their heirs and assigns, forever, in as full and ample a manner as the said Emert Tate, as such Clerk and Master can, or ought to, under authority of law and said decrees convey the same, but not further or otherwise.

In Witness Whereof, the said Emert Tate, Clerk and Master as aforesaid, hath hereunto set his hand, the date first above written.

Emert Tate
Clerk and Master.

Deputy Clerk and Master.

STATE OF TENNESSEE, GRAINGER COUNTY.

Personally appeared before me, N. A. Daniel, Clerk of the County Court of said County, the within named Emert Tate, Clerk and Master, the bargainor, with whom and whose official character I am personally acquainted, and who acknowledged that he executed the foregoing Deed for the purpose therein contained.

Witness my hand, at office, this 10th. day of Januray, 19 45

N. A. Daniel, Deputy Clerk

STATE OF TENNESSEE,
Grainger County. } Register's Office, February 8th, 1945

I, J. J. Brady, Register for said County, do certify that the foregoing Deed and Certificate are registered in said office in Book No. 73, page 351, that they were received January 10, 19 45, at 11:00 o'clock A.M., and entered in Note Book "E", page 26.

Fee paid $1.25

J. J. Brady, Register.

EMERT TATE Clerk and Master.
TO
CARSON McGINNIS AND WIFE
IMOGENE McGINNIS

DEED

1.97
.15
2.12

RECEIVED 21 1956 D.M.E.A.

P. Rodgers

REGISTRATION SERVICE CO., NASHVILLE

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

WARRANTY DEED

Mrs. B. L. McDonald,

—TO—

H. B. Winstead and wife.

REGISTER'S OFFICE,
State of Tennessee, } ss.
County of Grainger.

Received for record the 23rd day of October A. D. Nineteen Hundred 42 at 9:00 o'clock A. M. and Noted in Note Book D Page 305 and Recorded in Book of Deeds Vol. 71 Page 434

Witness my hand.

Fee Paid 1.40

J. F. Brady Register

State Tax,	$ 3.00
County Tax,	
Clerk's Fee,	.15
Total,	3.15

23 Oct
H. J. Barnie 42

WARRANTY DEED—Form 101T—5M.—5-28-41—Box 36. S. B. Newman & Co., Knoxville, Tenn.

THIS INDENTURE, made this 22 day of October A. D. 19 42 between Mrs. B. L. McDonald (Widow)

of Knoxville, in the State of Tennessee of the first part, and H. B. Winstead and wife, Jynee Winstead

of Grainger County, Tennessee of the second part.

WITNESSETH, That the said party of the first part, for and in consideration of the sum of Two Thousand ($2,000.00) Dollars; Three Hundred ($300.00) Dollars of which is

to her in hand paid by the said parties of the second part, the receipt of which is hereby acknowledged, and for the remainder payment, five (5) notes are executed in equal amounts of $340.00 with interest from date, due respectively ~~in one, two, three, four and five years~~ January 1st., 1944; 1945; 1946; 1947 and 1948; one note and the interest on one note to be paid each year as stipulated, and in case of default of payment of any note, all notes become due and payable at time of said default of the payment of either of said notes,

and to secure the payment of said notes a specific lien is hereby retained on the property here conveyed, has granted, bargained, sold, conveyed, and do es hereby grant, bargain, sell and convey unto the said parties of the second part, the following described premises, to-wit, situate in District No. four (4) of Grainger County, Tennessee, and bounded and described as follows:

Situated in Clinch Valley and bounded on the north by W. S. Mallicoat; on the east by W. T. Clark and Robert Corbin; on the south by Rankin Acuff, and on the west by the Epperson farm (now or formerly owned by the Citizens Bank and Trust Company) and C. E. Bullen, containing 150 acres, more or less.

The land herein conveyed is ~~a portion of~~ the above described land, ~~which was conveyed to the party of the first part, the portion~~ land herein conveyed being more fully bounded and described by survey, made by L. J. Parrott, surveyor, as follows:

BEGINNING on a stake, with a cedar pointer, Harrell's corner, running along an old rail fence S. 59 W. 59 poles to a corner fense post, Harrell's corner; thence along a wire fence south 14 west 17¾ poles to a fence post; thence with Carson McGinnis' line along an old rail fence south 2 deg. west 13 poles and 23 links to a cedar, said McGinnis' corner; thence south 21 west 6 poles to a cedar; thence south 18 east 4-1/2 poles to a cedar; thence north 67½ east 1 pole and 15 links to a cedar; thence along a conditional line and wire fense south 9½ east 46 poles to a stake, Austin Johnson and McGinnis' corner; thence south 2½ west 44 poles to a set stone; T.V.A. corner; thence

B. H. PUTNAM, OPERATOR
BOX 047
MARIETTA, OHIO

north 28¼ west 35 poles and 11 links along fence north [illegible] poles and [illegible] 1 links to a stake; thence north 88 west 38 poles to a set stone T.V.A. corner and a large water oak; thence north [illegible] crossing the pike 8 poles to a set stone, T.V.A. corner and [illegible] Hurst corner; thence north 61 east 64 poles and 15 links to a [illegible] beam stump; thence south 76½ east 5 poles and 15 links to a stake; thence north 53½ east 8 poles and 5 links to a stake; thence north 61 east 17 & 1/2 poles to a white oak, Arnwine's corner; thence south 85 east 17 poles to the creek; thence down said creek as it meanders 30 poles to a point in the old road bed; thence [illegible] the old road bed north 55 east 30 poles to a stake where a beech formerly stood; thence north 63 east 35 poles and 15 links to [illegible] at a wire fence; thence north 30½ east 22 poles to a [illegible] thence south 41 east 42-1/2 poles to the beginning, containing [illegible] as surveyed by L. J. Parrott, but the School lot conveyed hereby, being the same lands conveyed to first party Sept. 8, 1938, by deed of B. L. McDonald, recorded in Book 71, page 334.

with the hereditaments and appurtenances thereto appertaining, hereby releasing all claims to Homestead and Dower therein. TO HAVE AND TO HOLD the said premises to the said part ies of the second part, their heirs and assigns forever.

And the said party of the first part for herself and for her Heirs, Executors and Administrators do es hereby covenant with the said part ies of the second part their heirs and assigns that she is lawfully seized in fee simple of the premises above conveyed and has full power, authority and right to convey the same, that said premises are free from all incumbrances

and that she will forever warrant and defend the said premises and the title thereto against the lawful claims of all persons whomsoever.

IN WITNESS WHEREOF, The said part y of the first part has hereunto set her hand and seal the day and year first above written.

Signed, sealed and delivered in presence of

Mrs B. L. McDonald (L. S.)
(L. S.)
(L. S.)
(L. S.)

STATE OF TENNESSEE, Grainger County } SS.

Personally appeared before me Arnold Roach, a Notary Public in and for said County the within named bargainor Mrs. B. L. McDonald,

with whom I am personally acquainted, and who acknowledged that she executed the within instrument for the purposes therein contained.

Witness my hand and official seal at office, this 22nd. day of October, A. D. Nineteen Hundred and Forty-two(1942).

Arnold Roach
Notary Public

My commission expires August 5, 1944.

STATE OF _____ County } SS.

Personally appeared before me _____ a Notary Public in and for said County the within named bargainors _____

with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained. And _____ wife of the said _____ having appeared before me privately and apart from her husband, said _____ acknowledged the execution of the said deed to have been done by her freely, voluntarily and understandingly, without compulsion or constraint from her said husband, and for the purposes therein expressed.

Witness my hand and official seal at office, this _____ day of _____ A. D. Nineteen Hundred and _____

Notary Public

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

Section 3(d)

Attached hereto are copies of the two instruments under which applicant controls the property. They are as follows:

1. Agreement with property owner.

2. Operating agreement.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

REGISTER'S OFFICE
STATE OF TENNESSEE
GRAINGER COUNTY
Received for record the 13th day of Nov. 1956 at 9:10 o'clcok a.m. Noted in Note Book F page 49 and recorded Book at Misc. Deeds, vol, 19 page 46.
Witness my hand Alice Brady Registor

OPTION ON REAL ESTATE

THIS INDENTURE WITNESSETH: THAT VIVA M. STAPLETON AND W.H. STAPLETON, her husband, of 146 Leonard Place, Knoxville 17, Tennessee, hereinafter called grantors, for and in consideration of Five Hundred Dollars ($500.00) in hand paid, and for other valuable consideration, all of which grantors hereby acknowledge as sufficient and receipt of which is hereby acknowledged, herely give and grant to B.H. PUTNAM, of 170 East Pearson Street, Chicago 11, Illinois, hereinafter called grantee, the sole and exclusive right and option at any time within One (1) Year from the date hereof, to purchase the entire fee simple estate in and to the following real estate, situated in the Fourth Civil District of Grainger County, Tennessee, and described as follows, to wit:

Beginning on an iron pin, Sotheast corner of the land herein described, said iron pin being 12 feet East of wire fence; thence South 63 West 587 feet to an iron pin; thence South 59-30 West crossing the road 443 feet to an iron pin in the old road; thence South 39-15 West 299 feet to an iron pin in the old road; thence South 56 West 583 feet to a set stone and white walnut tree; thence North 64-30 West 135 feet to a marked walnut tree; thence North 72-45 West 433 feet to a marked double black oak tree; thence North 13-30 West 603 feet to chestnut stumps; thence 87 West 956 feet to a set stone; thence South 74-45 West 786 feet to an iron pin; thence North 39-15 West 600 feet to a large chestnut stump and small maple tree; thence South 86 West 1260 feet to a large chestnut stump; thence North 29-15 West 600 feet to an iron pin and rock pile; thence North 74 East 656 feet to two small walnut trees; thence North 70 East 355 feet to a marked ash tree; thence North 64 East 166 feet to a large Chestnut stump; thence North 64 East 257 feet to a large poplar stump; thence North 66-30 East 238 feet to a hickory tree; thence North 61-45 East 109 feet to an iron pin; thence North 54-30 East 432 feet to an iron pin; thence North 4-15 West 566 feet to a set stone; thence North 61 East 930 feet crossing the road and creek to T.V.A. corner; thence South 39-30 East 315 feet to a marked elm tree; thence South 42-30 West 68 feet to an iron pin in the road; thence South 36 East 300 feet to a point in the center of the road; thence South 42 East 406 feet to an iron pin in the center of the road; thence North 54 East 247 feet to a white oak tree or stump; thence North 29 East 412 feet to a hickory tree or stump; thence South 29 East 660 feet to a marked black oak tree; thence North 54 East 253 feet to an iron pin; thence South 42-30 East 1100 feet to a marked hickory; thence South 42-30 East 269 feet to a marked hickory; thence South 42-30 East 933 feet to the point of BEGINNING, containing 218.20 acres, more or less. Reference is made to a plat prepared by O.O.Graham, Civil Engineer, dated October, 1944.

Viva Mallicoat Stapleton acquired title to the above described premises by Deed of B.B. Mallicoat, Trustee and W.H. Stapleton, Trustee, dated May 29, 1943, and Recorded in the Register's Office for Grainger County, Tennessee in Deed Book 72, Page 368.

RECEIVED NOV 21 1956 G.M.E.A.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

upon the terms and conditions following:

In the event the asid grantee shall elect to exercise this option to purchase said real estate, said grantee shall notify the grantors in writing of the grantee's intention to purchase said real estate. The mailing of a written notice of election to purchase by depositing the same in the United States mail with prepaid postage, addressed to the grantors, or delivery of such written notice to the grantors or any one of them at any time within the life of this optoin shall be sufficient notice under this option. After the giving of notice to purchase, the grantors agree to convey said real estate to the grantee by good and sufficient warranty deed, free from all liens and encumbrances of every kind, and at that time the grantee agrees to pay the grantors as consideration for said real estate the sum of $60,000.00 Dollars.

Grantee and his nominees or assigns are hereby given the right to enter upon said real estate at any and all times during the life of this option to drill and explore said real estate. The grantee and his nominees or assigns shall take reasonable care in going upon the real estate herein described in this option and shall pay all damages to growing crops, timber, fences, and other improvements which may be caused by operations under this agreement. The grantors shall retain possession of said real estate until the title is approved and deed is executed and delivered and shall be entitled to the rents and profits accuring on said real estate up to the time of such transfer of title, except such rights of possession as are given grantee for testing or exploring, as herein provided.

The rights and privileges herein given shall be covenants running with the land and shall be binding upon the grantors, their heirs, administrators, successors and assigns.

IN WITNESS WHEREOF, the said grantors herinabove named, have hereunto set their hand and seals this 2nd day of November, 1956

Viva M. Stapleton

W. H. Stapleton

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

State of Tennessee,

County of Knox,

Personally appeared before me, Viva M. Stapleton,

a Norary Public in and for Said County and State the within named _____

_____

the bargainor _____, with whom I am personally acquainted, and

who acknowledged that _____ executed the

within instrument for the purposes therein contained.

Witness my hand and official seal at Knox County, Tennessee, this

2nd day of November, 1956.

My Commission Expires _____

_____

Notary Public

State of Tennessee,

County of Knox,

Personally appeared before me, Mamie Schneider,

a Notary Public in and for Said County and State the within named _____

Viva M. Stapleton and W. H. Stapleton

the bargainor ~~s~~ _____, with whom I am personally acquainted, and

who acknowledged that they _____ executed the within

instrument for the purposes therein contained.

Witness my hand and official seal at Knox County, Tennessee, this

2nd day of November, 1956.

My Commission Expires July 23rd/957

Mamie Schneider

Notary Public

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

E-379

AGREEMENT

This Agreement, made and entered into this 7 th day of May, 19 56, by and between

Elvin Jackson and Bessie Jackson his wife of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of Twenty six 25/100 Dollars ($ 26.25) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) years from the date hereof, to purchase for the sum of One hundred fifty Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5 th Civil District of Grainger County, State of Tennessee, containing 105 acres, more or less, and bounded generally as follows:

On the North by the lands of Pryor Acuff, Rynard Coffeman S.S. Breeding

On the East by the lands of Pryor Acuff

On the South by the lands of Walter Coffey, Austin Johnson

On the West by the lands of Austin Johnson

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred fifty ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within Three (3) months from this date, or pay to First Parties Twenty six and 25/100 Dollars ($ 26.25) each three months thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Elvin Jackson at the above adress

made payable to _____ order and mailed _____ at _____ P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

Elvin Jackson

Elvin Jackson

Bessie Jackson

Bessie Jackson

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

Z-279

State of Tennessee,

County of Grainger,

Personally appeared before me, Chas. V. Fisher, a Notary Public in and for Said County and State

the within named Elvin Jackson and Bessie Jackson his wife

the bargainor, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 7 th day of May, 195

My Commission Expires 10/10/57

Chas. V. Fisher
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

No. Z-279

OPTION CONTRACT

TO

STATE OF TENNESSEE

Grainger COUNTY.

Register's Office

Received for record the 29th day of May, A. D. 195?, at 8:05 o'clock A. M. Noted in Note Book F, page 38, and recorded in Book of Misc., Vol. 18, page 506.

Fee paid, 2.75

Witness my hand,

Alice Brady Register.

State Tax $

Clerk's Fee $

Total $

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

X-287

AGREEMENT

This Agreement, made and entered into this 7 th day of May, 19 56, by and between

Elmer Breeding and French Breeding his wife, of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of Fifteen n0/100 Dollars ($ 15.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) years from the date hereof, to purchase for the sum of One hundred fifty Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests mineral rights and mining rights in and to the following described lands:

Situated in the 5 th Civil District of Grainger County, State of Tennessee, containing 15 acres, more or less, and bounded generally as follows:

On the North by the lands of S. S. Breeding

On the East by the lands of S. S. Breeding

On the South by the lands of Highway 131 and Pryor Acuff

On the West by the lands of Pryor Acuff

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One hundred fifty ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One (1) year from this date, or pay to First Parties Fifteen and n0/100 Dollars ($ 15.00) each Year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Elmer Breeding at the above adress

made payable to _____ order and mailed _____ at _____ P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

Elmer Breeding

Elmer Breeding

French Breeding

French Breeding

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

X-287

State of Tennessee,

County of Grainger,

Personally appeared before me, Chas. V. Fisher, a Notary Public in and for Said County and State

the within named Elmer Breeding and French Breeding his wife

the bargainor S, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 7 th day of May, 19 56

My Commission Expires 10/ 10/ 57

Chas. V. Fisher
Notary Public

State of Tennessee,

County of,

Personally appeared before me, , a Notary Public in and for Said County and State

the within named

the bargainor, with whom I am personally acquainted, and who acknowledged that executed the within instrument for the purposes therein contained.

Witness my hand and official seal at, Tennessee, this day of, 19

My Commission Expires

Notary Public

State of Tennessee,

County of,

Personally appeared before me, , a Notary Public in and for Said County and State

the within named

the bargainor, with whom I am personally acquainted, and who acknowledged that executed the within instrument for the purposes therein contained.

Witness my hand and official seal at, Tennessee, this day of, 19

My Commission Expires

Notary Public

No. X-287

OPTION CONTRACT

TO

STATE OF TENNESSEE

Grainger COUNTY.

Register's Office

Received for record the 29th day of June, A. D. 1956, at 1:05 o'clock A. M. Noted in Note Book F, page 38, and recorded in Book M.S.S., Vol. 18 of page 524

Fee paid, $2.75

Witness my hand, Alice Brady, Register.

State Tax

Clerk's Fee

Total

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

X-280

AGREEMENT

This Agreement, made and entered into this 7 th day of May, 1956, by and between

S. S. Breeding and Sallie Breeding his wife Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of Twelve and 75/100 Dollars ($12.75) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) years from the date hereof, to purchase for the sum of One hundred fifty Dollars ($150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5 th Civil District of Grainger County, State of Tennessee, containing (51) acres, more or less, and bounded generally as follows:

On the North by the lands of William Coffman

On the East by the lands of Carson Mc Ginnis

On the South by the lands of Highway 131 and Mary Mc-Ginnis

On the West by the lands of Pryor Breeding, R. Coffman, Elvin Jackson

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred fifty ($150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within three(3(months from this date, or pay to First Parties twelve and 75/100 Dollars ($12.75) each three(3) months thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to S.S. Breeding at the above adress

made payable to _____ order and mailed _____ at _____ P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

S. S. Breeding

S. S. Breeding

Sallie Breeding

Sallie Breeding

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

State of Tennessee,

County of Grainger,

Personally appeared before me, Chas V. Fisher, a Notary Public in and for Said County and State

the within named D. B. Brooding and Sallie Brooding his wife

the bargainor B., with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 7 th day of May, 19 56.

My Commission Expires 10/ 10/ 57

Chas. V. Fisher
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor _____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor _____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

No. Z-280

OPTION CONTRACT

TO

STATE OF TENNESSEE

Grainger COUNTY.

Register's Office

Received for record the 29th day of June, A. D. 1956,

at 9:05 o'clock A.M. Noted in Note Book F, page 38, and recorded in Book M.S. Vol. 18 of page 507

Fee paid, $2.75

Witness my hand. Alice Brady, Register.

State Tax $

Clerk's Fee $

Total $

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

AGREEMENT

This Agreement, made and entered into this 7 th day of May, 19 56 by and between

Austin Johnson and Docie Johnson his wife of Route 1, Washburn, Tennessee.

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of fifteen and 50/100 Dollars ($ 15.50) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within three (3) from the date hereof, to purchase for the sum of One hundred fifty Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 4 th Civil District of Grainger County, State of Tennessee, containing 62 acres, more or less, and bounded generally as follows:

On the North by the lands of P. Williams and Willman Coffman

On the East by the lands of Melven Jackson

On the South by the lands of Highway 131 and Walter Coffee

On the West by the lands of W. H. Johnson

Second: During the term of this option or any extension thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One hundred fifty ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within three (3) months from this date, or pay to First Parties fifteen and 50/100 Dollars ($ 15.50) each three months thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Austin Johnson at the above adress

made payable to order and mailed at P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

Austin Johnson

Austin Johnson

Docie Johnson

Docie Johnson

Doesn't check good?

OK

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

2-276

State of Tennessee,

County of Grainger,

Personally appeared before me, Chas. V. Fisher, a Notary Public in and for Said County and State

the within named Austin Johnson and Docie Johnson his wife

the bargainors, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 7 th day of May, 1956.

My Commission Expires 10/10/57

Chas. V. Fisher
Notary Public

State of Tennessee,

County of,

Personally appeared before me, , a Notary Public in and for Said County and State

the within named

the bargainor, with whom I am personally acquainted, and who acknowledged that executed the within instrument for the purposes therein contained.

Witness my hand and official seal at, Tennessee, this day of, 19.

My Commission Expires

Notary Public

State of Tennessee,

County of,

Personally appeared before me, , a Notary Public in and for Said County and State

the within named

the bargainor, with whom I am personally acquainted, and who acknowledged that executed the within instrument for the purposes therein contained.

Witness my hand and official seal at, Tennessee, this day of, 19.

My Commission Expires

Notary Public

No. 1

OPTION CONTRACT

TO

STATE OF TENNESSEE

Grainger COUNTY.

Register's Office

Received this 29th day of May A. D. 1956

at 7:05 o'clock A M. Noted in Note Book

F page 38 and recorded in Book Misc. Vol. 18

page 501

Fee paid, $

Witness my hand.

Alice Brady Register.

State Tax $

Clerk's Fee $

Total $

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

E-219

AGREEMENT

This Agreement, made and entered into this 10 the day, 1956, by and between

D. R. Coffman (widower) of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of fifty and no/ 100 Dollars ($ 50.00) each to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) years from the date hereof, to purchase for the sum of One hundred fifty Dollars ($150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5 th Civil District of Grainger County, State of Tennessee, containing 50 acres, more or less, and bounded generally as follows:

On the North by the lands of Elvin Jackson

On the East by the lands of S. S. Breeding

On the South by the lands of S. S. Breeding

On the West by the lands of P. H. Acuff and Elvin Jackson

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One hundred fifty ($ 150.00 per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One (1) year from this date, or pay to First Parties Fifty and no/100 Dollars ($ 50.00) each Year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to D. R. Coffman at the above address made payable to _____ order and mailed _____ at _____ P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witness:

D R Coffman

D. R. Coffman

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

State of Tennessee,

County of Grainger,

Personally appeared before me, Chas. V. Fisher, a Notary Public in and for Said County and State

the within named D. R. Coffman (widower)

the bargainor ....., with whom I am personally acquainted, and who acknowledged that he executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 10 th day of May, 19 55

My Commission Expires 10/ 10/ 57

Chas. V. Fisher
Notary Public

State of Tennessee,

County of ....,

Personally appeared before me, ..., a Notary Public in and for Said County and State

the within named .....

the bargainor ....., with whom I am personally acquainted, and who acknowledged that ..... executed the within instrument for the purposes therein contained.

Witness my hand and official seal at ....., Tennessee, this ..... day of ....., 19....

My Commission Expires .....

Notary Public

State of Tennessee,

County of ....,

Personally appeared before me, ..., a Notary Public in and for Said County and State

the within named .....

the bargainor ....., with whom I am personally acquainted, and who acknowledged that ..... executed the within instrument for the purposes therein contained.

Witness my hand and official seal at ....., Tennessee, this ..... day of ....., 19....

My Commission Expires .....

Notary Public

No. L-274

OPTION CONTRACT

TO

STATE OF TENNESSEE

Grainger COUNTY.

Register's Office

Received for record the 29th day of June, A. D. 1956, at 9:05 o'clock A. M. Noted in Note Book F, page 38 and recorded in Book M, Vol. 18, page 497

Fee paid, $2.75

Witness my hand, Alice Brady, Register.

State Tax .....

Clerk's Fee .....

Total .....

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

X-321

AGREEMENT

This Agreement, made and entered into this 25 th day of May, 19 56, by and between

Rosa Bullen (widow) of Washburn, Rt. 1, Tennessee
James Bullen of Rt. 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of Sixty and no/100 Dollars ($ 60.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) years from the date hereof, to purchase for the sum of One hundred fifty Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 4 th Civil District of Grainger County, State of Tennessee, containing 60 acres, more or less, and bounded generally as follows:

On the North by the lands of H. Stapleton
On the East by the lands of Tom A. Green and W. B. Dalton
On the South by the lands of Highway 131 and Jess Johnson
On the West by the lands of W. B. Dalton

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One hundred fifty ($ 150.00 per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One year from this date, or pay to First Parties sixty and no/100 Dollars ($ 60.00) each year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Rosa Bullen at the above address

made payable to _____ order and mailed _____ at _____ P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

Rosa Bullen
Rosa Bullen

James Bullen
James Bullen

b. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

State of Tennessee,

County of Grainger,

Personally appeared before me, Chas V. Fisher, a Notary Public in and for Said County and State

the within named Rosa Bullen (widow) and James Bullen her son

the bargainors, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 7 th day of September 1956

My Commission Expires 10/10/57

Chas V. Fisher
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

Notary Public

No. _____

OPTION CONTRACT

TO

STATE OF TENNESSEE

COUNTY.

Register's Office

Received for record the _____ day of _____, A. D. 19____,

at _____ o'clock _____ M. Noted in Note Book _____, page _____, and recorded in Book _____, Vol _____

of _____ page _____

Fee paid. $ _____

Witness my hand.

_____, Register.

State Tax $ _____

Clerk's Fee $ _____

Total $ _____

B. H. PUTNAM, OPERATOR
BOX 617
MARIETTA, OHIO

No. X-282. T. A. Green, et ux.

EXPLANATORY NOTE

Our option agreement was obtained from T. A. Green, et ux. on May 8th, 1956. Subsequent to that date on October 9th, 1956 Mr. Green sold the property covered by our option agreement to Aaron B. Dalton and Helen B. Dalton, his wife, reserving one-half of the mineral rights. At the present time the mineral rights under this property are owned one-half by T. A. Green, et ux. and one-half by Aaron B. Dalton, et ux., subject to the rights granted B. H. Putnam by the forementioned option agreement.

Robert V. Benjamin

Robert V. Benjamin
Attorney for B. H. Putnam

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

AGREEMENT

This Agreement, made and entered into this 8 th day of May, 1956, by and between

T. A. Green and Gertrude Green his wife of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of Twenty two no/100 Dollars ($ 22.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three(3) years from the date hereof, to purchase for the sum of One hundred fifty Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5 th Civil District of Grainger County, State of Tennessee, containing 88 acres, more or less, and bounded generally as follows:

On the North by the lands of H. Stapelton

On the East by the lands of H. Stapelton and H. Winstead

On the South by the lands of Highway 131 and Jess Johnson

On the West by the lands of Rosey Bullon and W. B. Dalton

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred fifty ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within Three months from this date, or pay to First Parties Twenty two and no/100 Dollars ($ 22.00) each three months thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to T. A. Green at the above adress made payable to _____ order and mailed _____ at _____ P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

T. A. Green

T. A. Green

Gertrude Green

Gertrude Green

RECEIVED DEC 21 1956

See next sheet for Deed

OK

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

State of Tennessee,

County Grainger,

Personally appeared before me, Chas. V. Fisher, a Notary Public in and for Said County and State

the within named T. A. Green and Gertrude Green his wife

the bargainors, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 8 th day of May, 1956.

My Commission Expires 10/ 10/ 57

Chas. V. Fisher
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor ____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor ____, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

No. _____

OPTION CONTRACT

TO

STATE OF TENNESSEE

Grainger COUNTY.

Register's Office

Received for record the 29th day of June, A. D. 19 56, at 9:05 o'clock A. M. Noted in Note Book F, page 38, and recorded in Book Misc. Vol. 18, page 511.

Fee paid, $ 2.75

Witness my hand, Alice Brady, Register.

State Tax $ _____

Clerk's Fee $ _____

Total $ _____

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

X 278

AGREEMENT

This Agreement, made and entered into this 7 th day of May, 19 56, by and between

Pryor Acuff and Gracie Acuff his wife of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of Fifty five no/100 Dollars ($ 55.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) years from the date hereof, to purchase for the sum of One hundred fifty Dollars ($ 150.00) per acre, all [illegible] minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5 th Civil District of Grainger County, State of Tennessee, containing (55) acres, more or less, and bounded generally as follows:

On the North by the lands of Elwin Jackson

On the East by the lands of S. S. Breeding

On the South by the lands of Highway 131 and Pryor Acuff

On the West by the lands of Elwin Jackson

It is understood and agreed that the above land owner,, leases all his land, North of Highway 131, on Coper Ridge, to B. H. Putnam.

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One hundred fifty ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One (1) year from this date, or pay to First Parties Fifty five no/100 Dollars ($ 55.00) each Year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to Pryor Acuff at the above address.

made payable to _____ order and mailed _____ at _____ P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

OK

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

Pryor Acuff

Gracie Acuff

Total Acres 155 acres

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

State of Tennessee,
County of Grainger,

Personally appeared before me, Char. V. Fisher, a Notary Public in and for Said County and State

the within named Pryor Acuff and Gracie Acuff

the bargainor, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 29th day of May, 19 56.

My Commission Expires 10/ 10/ 57

Char. V. Fisher
Notary Public

State of Tennessee,
County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor_____, with whom I am personally acquainted, and who acknowledged that_____executed the within instrument for the purposes therein contained.

Witness my hand and official seal at_____, Tennessee, this_____day of_____, 19____.

My Commission Expires _____

_____
Notary Public

State of Tennessee,
County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor_____, with whom I am personally acquainted, and who acknowledged that_____executed the within instrument for the purposes therein contained.

Witness my hand and official seal at_____, Tennessee, this_____day of_____, 19____.

My Commission Expires _____

_____
Notary Public

No.....

OPTION CONTRACT

TO

STATE OF TENNESSEE

.....COUNTY.

Register's Office

Received for record the.....day of

.....A. D. 19.....,

at.....o'clock.....M. Noted in Note Book

.....page.....and recorded in Book

of.....Vol.....,

page.....

Fee paid, $.....

Witness my hand,

.....Register.

State Tax $.....

Clerk's Fee $.....

Total $.....

RECEIVED
DEC 21 1956
G.M.E.A.

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

AGREEMENT

This Agreement, made and entered into this 16th day of May, 19 56, by and between

W. B. Dalton and Sarah J. Dalton, his wife, of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of One Hundred Twenty Five Dollars ($125.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) Years from the date hereof, to purchase for the sum of One Hundred Fifty***** Dollars ($150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5th Civil District of Grainger County, State of Tennessee, containing 125 acres, more or less, and bounded generally as follows: 105a. Tract 20a. Tract

On the North by the lands of W. Stapleton - Wm. Coffman Rosie Bullen - W. Stapleton

On the East by the lands of Rosie Bullen T. A. Green

On the South by the lands of Highway 131 Rosie Bullen - T. A. Green

On the West by the lands of J. C. McGinnis Rosie Bullen

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred Fifty and no/100********** ($150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One (1) Year from this date, or pay to First Parties One Hundred Twenty Five and no/100****** Dollars ($125.00) each Year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to W. B. Dalton

made payable to his order and mailed to him at the above address P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

W. B. Dalton
W. B. Dalton

Sarah J. Dalton
Sarah J. Dalton

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

State of Tennessee,

County of Grainger,

Personally appeared before me, Shirley R. Clement a Notary Public in and for Said County and State

the within named Ira B. Dalton and Sarah J. Dalton, his wife,

the bargainor S....., with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 16 day of Nov, 1956

My Commission Expires July 13, 1959

Shirley R. Clement
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor_____, with whom I am personally acquainted, and who acknowledged that_____executed the within instrument for the purposes therein contained.

Witness my hand and official seal at_____, Tennessee, this_____day of_____, 19____.

My Commission Expires _____

_____
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor_____, with whom I am personally acquainted, and who acknowledged that_____executed the within instrument for the purposes therein contained.

Witness my hand and official seal at_____, Tennessee, this_____day of_____, 19____.

My Commission Expires _____

_____
Notary Public

No.....

OPTION CONTRACT

.....

TO

.....

STATE OF TENNESSEE

.....COUNTY.

Register's Office

Received for record the.....day of

.....A. D. 19.....,

at.....o'clock.....M. Noted in Note Book

.....page.....and recorded in Book

.....of.....Vol.....,

page.....

Fee paid, $.....

Witness my hand,

.....Register.

State Tax.....$.....

Clerk's Fee.....$.....

Total.....$.....

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

AGREEMENT

This Agreement, made and entered into this 7 th day of May, 19 56, by and between

J. C. Mc -Ginnis and Imogene Mc-Ginnis his wife of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of Twenty two n0/100 Dollars ($ 22.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) years from the date hereof, to purchase for the sum of One hundred fifty Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 5 th Civil District of Grainger County, State of Tennessee, containing 88 acres, more or less, and bounded generally as follows:

On the North by the lands of Coffee farm

On the East by the lands of Walter Dalton, Jonnie Ogens, S. S. Breeding

On the South by the lands of Jonnie Ogens

On the West by the lands of S. S. Breeding

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One HUnired fifty ($ 150.00) per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within Three months from this date, or pay to First Parties Twenty two n0/100 Dollars ($ 22.00) each three months thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to J. C. Mc-Ginnis at the above adress made payable to _____ order and mailed _____ at _____ P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

ok

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

J. C. Mc Ginnis

J. C. Mc-Ginnis

Imogene Mc Ginnis

Imogene Mc-Ginnis

b. ... TNAM, OPERATOR
BOX 647
MARIETTA, OHIO

X-281

State of Tennessee,

County of Grainger,

Personally appeared before me, Chas. V. Fisher, a Notary Public in and for Said County and State

the within named J. C. McGinnis and Imogene McGinnis his wife

the bargainor, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County, Tennessee, this 7th day of May, 19 56

My Commission Expires 10/ 10/ 57

Chas. V. Fisher
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____

My Commission Expires _____

_____
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____

My Commission Expires _____

_____
Notary Public

No. X-281

OPTION CONTRACT

TO

STATE OF TENNESSEE

Grainger COUNTY.

Register's Office

Received for record the 29th day of May, A. D. 1956

at 9:05 o'clock A. M. Noted in Note Book F, page 38, and recorded in Book Misc, Vol. 18, of page 509

Fee paid, $2.75

Witness my hand, Alice Brady, Register.

State Tax $

Clerk's Fee $

Total $

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

AGREEMENT

This Agreement, made and entered into this 15 th day of May, 19 56, by and between

H. B. Winstead and Gynce Winstead his wife of Route 1, Washburn, Tennessee

hereinafter referred to as Parties of the First Part, and B. H. PUTNAM, Chicago, Illinois, hereinafter referred to as Party of the Second Part.

Witnesseth:

First: That First Parties, for and in consideration of the sum of Fifty One and no.100 Dollars ($ 51.00) cash to them in hand paid by Second Party, the receipt of which is hereby acknowledged, do hereby grant unto Second Party, the exclusive right, at any time within Three (3) Years from the date hereof, to purchase for the sum of One hundred fifty Dollars ($ 150.00) per acre, all of the minerals (including metallic and non-metallic ores, rock and substances, oil and gas), mineral interests, mineral rights and mining rights in and to the following described lands:

Situated in the 4 th Civil District of Grainger County, State of Tennessee, containing 51 acres, more or less, and bounded generally as follows:

On the North by the lands of Dave Jackson and R. N. Stapleton

On the East by the lands of ~~Grover Coffey~~ Dave Jackson

On the South by the lands of Highway 131 and ~~Jose Johnson~~ and G. C. Coffey

On the West by the lands of T. A. Green

Second: During the term of this option or any extensions thereof, Second Party shall have the exclusive right to prospect and drill for minerals (as hereinbefore defined) contained in the lands herein optioned, with churn drills, diamond drills and/or other prospecting methods, provided the same be done in such a manner as to do the least damage to the surface of said lands commensurate with good prospecting practices. Second Party shall be liable for all actual damages done to growing crops and fences, as the result of said drilling.

Third: If this option is not exercised, Second Party agrees to fill up, or plug in a suitable manner, all drill holes, unless First Parties designate one or more of such holes to be left open for use as water wells, or other purpose of First Parties, in which event First Parties shall pay for the casing.

Fourth: In order to exercise said option Second Party shall give notice in writing to First Parties, either by delivering the same to them personally, or, by registered mail to their usual place of residence. Within thirty days after receiving such notice First Parties shall execute and deliver a general warranty deed to the Second Party, or any person designated by Second Party, said deed to convey all of the minerals (as hereinabove defined,) mineral interest, mineral rights and mining rights in and to said lands, free of all liens and encumbrances.

Upon receipt of said deed Second Party shall make payment to First Parties of a sum equivalent to One Hundred fifty ($ 150.00 per acre, (the acreage to be ascertained by instrumental survey made at the expense of Second Party) for the minerals (as hereinabove defined), mineral interests, mineral rights and mining rights in and to said lands.

Fifth: Second Party agrees to exercise such option within One (1) year from this date, or pay to First Parties Fifty one and no/100 Dollars ($ 51.00) each Year thereafter until said option is exercised or this agreement terminated.

Sixth: All machinery, equipment, tools, etc., taken upon said lands shall be deemed to be the property of Second Party, and in the event this option is not exercised, Second Party shall have the right during the term hereof, or any extensions thereof, and for a reasonable time thereafter, to remove all such machinery, tools, etc., from said lands.

Seventh: If this option is exercised, the Second Party shall have the free right to enter, at anytime and from time to time, upon the surface of said lands for the purpose of drilling and prospecting for, and mining and removing all of said minerals (as hereinabove defined) contained in said lands. Second Party shall also have the right to transport minerals (as hereinabove defined) from other lands of Second Party or third persons, over, under and across said lands, and to bring said minerals to the surface thereof and remove the same therefrom. It is agreed, however, that Second Party shall be liable to First Parties for actual damages that may occur to the surface of said lands or the improvements thereon, as the result of such drilling, prospecting and mining operations, or in the moving of minerals and materials across said surface.

Eighth: Payment of all moneys due under this option may be made, by cash or check, to H. B. Winstead at the above address

made payable to ..... order and mailed ..... at ..... P. O.

Ninth: This agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, executors, administrators, successors and assigns, it being expressly understood that the second party shall have the right to assign this option to any person or corporation it sees fit.

In Witness Whereof the First Parties have hereunto set their hands on the day and year first above written.

Witnesses:

H. B. Winstead

H. B. Winstead

Gynce Winstead

Gynce Winstead

RECEIVED DEC 21 1956 U.M.E.A.

B. H. PUTNAM, OPERATOR
BOX 617
MARIETTA, OHIO

7-289

State of Tennessee,

County of Grainger,

Personally appeared before me, Chas. V. Fisher, a Notary Public in and for Said County and State

the within named H. B. Winstead and Gynce Winstead his wife

the bargainor, with whom I am personally acquainted, and who acknowledged that they executed the within instrument for the purposes therein contained.

Witness my hand and official seal at Grainger County Tennessee, this 15 th day of May, 19 56.

My Commission Expires 10/ 10/ 57

Chas. V. Fisher
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

State of Tennessee,

County of _____,

Personally appeared before me, _____, a Notary Public in and for Said County and State

the within named _____

the bargainor, with whom I am personally acquainted, and who acknowledged that _____ executed the within instrument for the purposes therein contained.

Witness my hand and official seal at _____, Tennessee, this _____ day of _____, 19____.

My Commission Expires _____

_____
Notary Public

No. 7-289

OPTION CONTRACT

TO

STATE OF TENNESSEE

Grainger COUNTY.

Register's Office

Received for record the 5th day of July, A. D. 1956, at 9:00 o'clock A. M. Noted in Note Book F, page 39, and recorded in Book Misc. Vol. 18, page 527

Fee paid, $2.75

Witness my hand,

Alice Brady, Register.

State Tax $

Clerk's Fee $

Total $

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

GEOLOGIC REPORT ON THE PULASKI AND CRUSE CREEK AREA, [illegible] COUNTY TENNESSEE INCLUDING THE RESULTS OF A GEOCHEMICAL SURVEY AND A PROPOSED EXPLORATION PROGRAM

by

William T. Hill and others

Geologists for

T. H. Putnam, Operator

Maryville, Tennessee

November, 1956

[illegible]
[illegible]
OHIO ATT[illegible]

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

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SUMMARY

The Puncheon Camp Creek prospect is located in the Copper Ridge zinc district along Tennessee Highway 131 five miles southwest of Thorn Hill, Tennessee. Investigations were begun to determine if commercial deposits of zinc are present. The examination consisted of detailed geologic mapping and prospecting, followed by a geochemical survey.

Approximately 2400 soil samples were taken and analyzed for zinc. Plotting and contouring of the zinc values revealed the presence of several positive soil anomalies.

Fifty thousand (50,000) feet of drilling is recommended in order to determine if commercial mineralization is present.

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OHIO STATE

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

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Illustrations

Plate 1. Land and Geochemical Map of Puncheon Camp Creek Prospect Showing Properties Controlled By Agreements with Option to Purchase Mineral Rights; Percentage of Zinc in Soil and Location of Proposed Diamond Drill Holes.
2. Map of Puncheon Camp Creek Prospect and Adjacent Area Showing Geology and Percentage of Zinc in Soil.

Figure 1. Map of Copper Ridge Zinc District ---------- 1A

ATLAS MINERALS
BOX 400
OAKS, PENNSYLVANIA

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

INTRODUCTION

The Copper Ridge zinc district extends for 35 miles along Copper Ridge (Figure 1). The ridge rises near the junction of Roane, Loudon, Anderson, and Knox counties and continues northeastward in a relatively straight line into Virginia. Throughout its length in Tennessee the ridge maintains an average elevation of about 1,600 feet. It is broken through transversely by numerous stream-cuts. The ridge is a structural unit made up of a sequence of Cambrian formation which included the Rome shale, the Rutledge limestone, the Rogersville shale, the Maryville limestone, the Nolichucky shale, the Maynardville limestone, and the Cambro-Ordovician Knox dolomite, all striking northeast and dipping at variable angles to the southeast. The Knox dolomite forms the crest of the southeast slope of the ridge and continues to the southeast into the valley where it is overlain by the Chickamauga limestone.

The Knox group in this region has been divided into five formations, named in descending order: Mascot, Kingsport, Longview, Chepultepec, and Copper Ridge.

The portion of the ridge in which zinc mineralization has been found extends from Washburn Station in Grainger County to the Tennessee-Virginia line. Sphalerite occurs in beds ranging from the Chepultepec dolomite to the middle part of the Mascot dolomite, although the greater portion of the mineralization occurs in the basal limestone section of the Kingsport formation and the basal Mascot dolomite. The geology and mineralization is similar to that in the Mascot-Jefferson City zinc district to the southwest.

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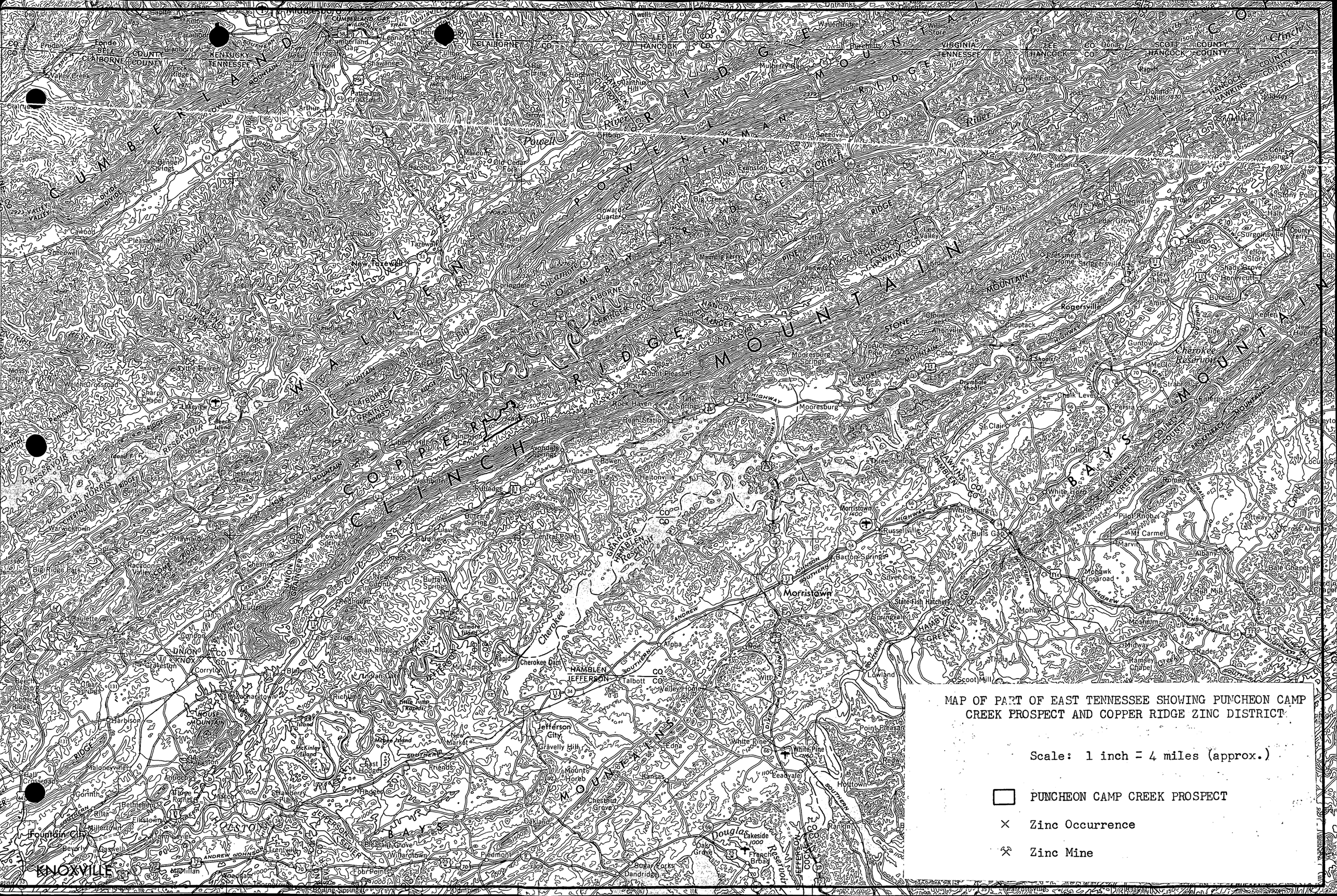
NO 208
[illegible]

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO


MAP OF PART OF EAST TENNESSEE SHOWING PUNCHEON CAMP CREEK PROSPECT AND COPPER RIDGE ZINC DISTRICT
Scale: 1 inch = 4 miles (approx.)
PUNCHEON CAMP CREEK PROSPECT
Zinc Occurrence
Zinc Mine
KNOXVILLE
Morristown
Rogersville
Mooresburg
Jefferson City
Cherokee Reservoir
Douglas Reservoir
Powell
Clinch
Cherokee Dam
Fountain City

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DEC 21 1956

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

The Puncheon Camp Creek prospect is located in Grainger County 5 miles southwest of Thorn Hill, Tennessee. The properties lie 17 miles southwest of the Flat Gap mine owned and operated by the New Jersey Zinc Company and 15 miles north of Jefferson City, Jefferson County, Tennessee. The tract consists of approximately 781.2 acres that lies both northeast and southwest of Puncheon Camp Creek (Plate 1).

GEOLOGY

The Puncheon Camp Creek properties are underlain by the Ordovician Knox dolomite and Chickamauga limestone. The Knox underlying the properties can be divided into the Chepultepec dolomite, Longview dolomite, Kingsport formation, and the Mascot dolomite (Plate 2).

Chepultepec dolomite

The Chepultepec dolomite is the lowermost unit studied. It consists of a 750 foot thick section of light-gray fine-grained dolomite with occasional beds of dark gray dolomite, and coarse-grained dolomite (locally termed "recrystalline"). Sandstone beds are common in the lower 250 feet of the unit, the thickest of which are quartzitic. The base of the Chepultepec is marked by a thick sandstone underlain by prominent oolitic chert layers.

Thin beds of brecciated dolomite and recrystalline occur sporatically throughout the Chepultepec. The breccias are sealed with white gangue dolomite and occasionally pyrite. Approximately 110 feet above the base of the unit, a 3 foot thick bed of fine-grained recrystalline occurs that is brecciated and sealed with white gangue dolomite and sphalerite. The mineralized bed was traced from Puncheon Camp Creek for a distance of 450 feet to the northeast where it disappears under the soil.

B. H. PUTNAM, OPERATOR
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MARIETTA, OHIO

Longview dolomite

The Longview dolomite consists of a 375 foot thick section of light-to medium-gray fine-grained dolomite interbedded with brownish fine-grained limestone that has in part been recrystallized to medium- to coarse-grained siliceous dolomite. The limestones are more abundant in the upper part of the formation.

The Longview outcrops along Puncheon Camp Creek and the adjacent slopes. Away from these exposures outcrops are lacking and the presence of the formation is indicated only by its residual products. Owing to the siliceous nature of the formation, the soil overlying the bedrock contains large quantities of large white chert blocks and nodules that vary in size from a fraction of an inch to several feet in diameter. This cherty soil can be mapped as a unit.

Kingsport formation

Kingsport limestone: The Longview is overlain by the Kingsport formation which, for convenience, was subdivided into a lower 120 foot thick limestone member and an upper dolomite member.

Along Puncheon Camp Creek the Kingsport limestone consists essentially of recrystalline with a few beds of limestone. On the northeast and southwest slopes above the creek, several beds of limestone are present that appear to be equivalent to some of the recrystalline beds in the creek.

Like the underlying Longview, exposures of the basal Kingsport limestone are rare. The soil differs somewhat from Longview soil in that it is not as cherty. Due to the present of the cherty Longview on the uphill side, a great deal of the Kingsport residuum has been thinly covered by Longview chert, masking the true physical character of the limestone soil.

MARIETTA, OHIO

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

At various localities in the Copper Ridge District, zinc mineralization occurs in the basal Kingsport limestone. Many of the deposits are almost confined to this horizon.

In 1918, C. B. Comstock conducted some prospecting on the northeast side of the creek. Two open cuts were made in the dolomite, one near the top of the member in a recrystalline bed and the other approximately 75 feet stratigraphically lower. Both cuts are filled in and no attempt was made to expose the rock. In the south cut, numerous boulders lying on the dump consisted of recrystalline that is well mineralized with sphalerite. The same stratigraphic zone is exposed in the road cut on the southwest side of the creek. The outcrop consists entirely of recrystalline with small amounts of sphalerite. The mineralized zone was traced to the southwest for a distance of 150 feet where it disappeared under the soil. Approximately 50 feet southwest of the exposure in the road cut the mineralized zone is four feet thick and is heavily mineralized.

The contact between the Kingsport limestone and the Longview dolomite is an arbitrary one and is placed at different stratigraphic horizons by different observers. For convenience, the contact between a siliceous bed of recrystalline overlain by a light-gray dolomite bed was selected as the top of the Longview dolomite.

<u>Kingsport dolomite</u>: The Kingsport limestone is overlain by a section of light-to medium-gray fine-grained dolomite that is approximately 135 feet thick.

The top of the Kingsport dolomite is marked by a 3 to 6 inch heavy sandy dolomite that is in part sealed with white chert ("chert-matrix" sandstone). The chert-matrix is exposed in place only at Luncheon Camp Creek. Elsewhere, the presence of the horizon is indicated by blocks and slabs of sandstone in the residuum. Due to the presence of similar

POWELL MARTIN H. S.
BOX 103
OHIO ATTERBAM

B. H. PUTNAM, OPERATOR
BOX 647
MARIETTA, OHIO

type sandstones in the overlying Mascot formation, it was found to be impossible to trace the "chert-matrix" sand everywhere along strike. Where in doubt, the sandstone occurring highest on the hill (lowest stratigraphically) was mapped as the Mascot-Kingsport contact.

Throughout the Copper Ridge district, the Kingsport dolomite is locally brecciated, the breccia varying in thickness from a few inches to 100 or more feet. The breccias are usually sealed with a gangue consisting of white dolomite and locally sphalerite and pyrite. The breccia normally occurs within a single bed or series of beds which may extend along strike for hundreds of feet.

At Puncheon Camp Creek, the basal part of the dolomite is well-brecciated and sealed with gangue dolomite. The brecciated zone is exposed for several hundred feet along strike both northeast and southwest of the creek exposure. On the northeast bank of the creek, approximately 3 feet of the breccia is mineralized with sphalerite. The mineralized zone was traced to the northeast for a distance of 75 feet where it pinched out.

Mascot dolomite

The Mascot dolomite is a well-bedded light-grey fine-grained dolomite, commonly slightly coarser and darker below the middle of the formation than above. Chert is not as abundant as it is in the Longview dolomite and as a result, the Mascot residuum consists essentially of a reddish clayey soil with some chert.

Outcrops of the Mascot dolomite are common and occur throughout the strike length of the property. The best exposures occur along Puncheon Camp Creek and the adjacent slopes. Observed brecciation is limited to the lower part of the formation.

OHIO ATTIGAM

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BOX 647
MARIETTA, OHIO

On the northeast side of the creek bank, a small "cut" occurs at the base of the formation. The dolomite is brecciated and mineralized with sphalerite. The mineralized zone outcrops sporatically over a strike length of 450 feet to the northeast. Several trenches were dug 400 feet northeast of the creek bank occurrence in an unsuccessful attempt to determine the thickness. The excavations encountered large irregular boulders of well-mineralized brecciated dolomite and occasional boulders of calamine and smithsonite.

Chickamauga limestone

The Chickamauga limestone lies unconformably on the Mascot dolomite. Locally, the unconformable relationships are not marked and the limestone appear to be conformable with the underlying dolomite.

In this area, the Chickamauga consists of interbedded lense-like beds of fine-grained gray limestone, coarse-grained gray to pink fossiliferous limestone and shaly nodular limestone. No systematic attempt was made to study the relationships of the different beds to each other.

Structure

The average strike of the rocks in the Puncheon Camp area is N 63° E and the dip is 36° south. Locally the strike varies from N 47° E to N 71° E. From the community of Puncheon Camp to Dotson Camp Ground the strike varies from N 59° E to N 61° E. Further to the northeast, the strike swings slightly northeastward and averages N 68° E to the end of the area investigated.

The slight changes in strike and dip suggest that the overall structure may be a series of slightly folded northward trending anticlines and synclines. Such structures may account for some of the brecciation of the dolomite.

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BOX 647
MARIETTA, OHIO

Twenty-eight hundred feet southwest of Dotson Creek, mapping of the Mascot-Chickamauga contact revealed the presence of a northwest trending tear fault that has displaced the southwest block approximately 50 feet to the north.

GEOCHEMICAL WORK

Sampling and Analytical Methods Used

Following the geologic mapping and prospect examination, two lines were surveyed along the trace of the outcrop, one along the Kingsport limestone and the other along the bottom of the Mascot formation. Samples were then taken at 100-foot intervals (stations) along these lines. In order to insure better coverage, additional samples were taken 100 feet from each station at right angles to the surveyed line.

Individual samples were taken by driving a 1-1/4" steel rod into the ground for several feet, removing the rod, and picking up the sample with a beveled pipe of lesser diameter. Extreme care was taken to select samples relatively free of chert and organic materials; consequently the depth of sampling had to be varied from 2 to 4 feet.

The samples were then analyzed for zinc. The method used is similar to the one described by Lakin, Stevens, and Almond (1949), except a standard soil sample# (previously determined to have a zinc content of .03%) was analyzed as a control with each seven samples.

Results Obtained

Plotting of the zinc content of the samples on a map revealed the presence of a series of positive soil anomalies along the Mascot-Kingsport contact, and the top of the Kingsport limestone along the entire length of the property for a distance of 7,00 feet.

[illegible]
[illegible]
[illegible]

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BOX 647
MARIETTA, OHIO

Additional samples were taken both north and south of the original sampling pattern until the entire anomalous areas were outlined (Plates 1 & 2). As a result of this work the anomalies which previously appeared to be scattered were enlarged and localized into several larger anomalies.

A large anomaly with a strike length of 2400 feet and a dip length of 1750 feet, occurs on the southwesternmost portion of the property. Zinc values range from .07% to .30%. Plotting and contouring of the samples revealed several closely spaced "highs" of .30% values surrounded by lower anomalous values.

Northeast of this anomaly, smaller but significant anomalies occur along strike for a distance of 2800 feet.

Beginning on the southwest end of the Stapleton farm and continuing to the northeast along strike for a distance of 2300 feet practically the entire outcrop of the Kingsport and adjacent formations is anomalous. Zinc values range from .07 to .30%.

EXPLORATORY CORE DRILLING PROGRAM

Proposed Drilling

In order to determine if commercial mineralization exists on the Punchson Camp properties, 50,000 feet of core-drilling is proposed. The tentative locations of eighty-four holes are shown on Plate 1.

The proposed drilling pattern was designed to insure adequate coverage of the entire area since the nature of the ore bodies is unknown.

The holes will vary from 300 feet in depth near the Kingsport limestone-dolomite contact to 1000 feet near the Mascot-Chickamauga contact.

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BOX 647
MARIETTA, OHIO

Due to the occurrence of zinc mineralization in the Kingsport limestone the holes should be drilled into the Kingsport limestone and bottomed approximately 125 feet below the Kingsport limestone-dolomite contact.

Rights of the operator

The location, and bottoming depth of the holes are only tentatively proposed. It must be understood that the drilling pattern may be altered, determined by the results of the previously-drilled holes.

The holes will not be bottomed by a pre-determined depth but on the basis of stratigraphy and mineralization.

The project may be abandoned during the progress of the exploration program if it becomes mutually agreeable to both the operator and the government that the results of the core drilling are not satisfactory and that the chances of finding commercial mineralization are poor.

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BOX 647
MARIETTA, OHIO

0-80	Overburden
-82	Dol, lt gray, lt mott opening @ 82', weathered
-90	Dol, lt-med gray, lt banded, wh gangue-filled fractures @ 84½-85, oxid opening @ 87' mott from 88-90 wh eyelets @ 90' (36° dip @ 84')
-92	Dol, med gray, scatt wh eyelets
-96?	Dol, med-dk gray, mott toward base (75% core loss 92-120)
	Dol, lt-med gray, lt banded; scatt ss @ 100'? oxid in places
-120	Dol, med-gray, mott toward base
-122½	Dol, med gray, wh gangue fractures, some vugular; dk ch over TGS @ base FeS_2 shines @ 121
-130	Dol, lt-med gray, lt mott; oxid 124½-126½; TGS @ 126; FeS_2 shines @ 128
-135	Dol, med gray, w/lt gray mott; scatt wh vug eyelets; lt shears, high angle oxid 134 to base; heavy ss over TGS @ base
-141	Dol, lt gray, mott w/lt-med gray silica upper 1'; gangue-filled fract. upper 1'; scatt lt oxid fract below; ch @ 136½; drusy vug @ 138; FeS_2 in fractures @ 128½; chert @ 140; 2" green sh @ base FeS_2 shines @ 128½
-144	Dol, lt gray
-144½	Dol, med gray; thin blue ch @ base FeS_2 shines @ 144, 144½
-145	Dol, lt-med gray, wh gangue fract w/ FeS_2 @ 145½; gmy ch @ base FeS_2 est ½ % 144½-145
-145½	Dol, lt-med gray, lt banded, blue ch @ 145½
-146½	Dol, lt-med gray, FeS_2 in gangue-filled fract TGrayS @ base FeS_2 shine @ 146
-147	Chat, blue, brecciated, sealed w/wh gangue & silica
-148	Dol, lt gray, blue ch @ base
-149½	Dol, lt-med gray, wh gangue fractures @ 149 w/ FeS_2; oxid shears; chert @ base FeS_2 shines @ 149, 150
-156½	Dol, med gray, banded; blue ch @ 150; 1" GS @ 152½; TGS @ 153½, 155 & 156 scatt ss @ 156' T Gray S @ base (41° dip @ 156')
-157	Dol, med gray, scatt ss grains, brecciated & sealed w/gray shale
-159	Dol, med gray, scatt ss throughout
-159½	Dk gray, sh & dk chert
-161	Dol, lt-med gray, ch nod @ 160 & 160½
-169½	Dol, lt gray, ch @ 166, 166½, 167½ and 168
-171	Dol, lt gray, banded; oxid high angle shear @ 170; ch @ 170½
-173	Dol, lt gray, mott (marbled); ss @ 172½; blue ch @ base
-180	Dol, lt tan-gray, scattered open fractures; blue-gray ch @ 175 is brecciated & sealed w/silica; ch @ 175½, 177, & 179 (50% core loss 175-180)
-182	Dol, lt-med gray, brecciated w/wh gangue FeS_2 shines 182
-185	Dol, lt-med gray, strong shearing @ 183' high angle; vugular siliceous @ 183½ shearing 185½-185
-185½	Dol, lt-med gray, mott, brecciated w/wh gangue <u>ZnS - 185-185½ est 2%</u>
-190	Dol, lt-med tan-gray, lt-banded, "crackle" w/wh gangue to 188' oxid; T Gray S @ 189½ & @ base
-191	Dol, lt-med gray, TGS @ base
-194	Dol, lt-med gray, banded, scatt gangue-filled fractures; lge vugular wh eyelets @ 193½'; "dry breccia" to 194 TGS @ base (39° dip @ 192')
-198½	Dol, lt-med tan-gray; lt band @ top ch nod @ 194½, vugular; scatt lt vertical shears; ch @ 197 & 197½; oxid 197-198½; thin CM ss @ 198½
-202	Dol, lt gray, banded,
-204½	Dol, lt-med gray, v. lt "blotchy"; mott to 204½ TGS @ base Tr FeS_2 @ 203½
-205½	Dol, lt-med blue-gray, lt fract normal to bedding; lt breccis w/wh gangue 205-205½ <u>ZnS shines @ 205'</u>

ST-11 (Cont'd.)

-214 Dol, lt gray, banded, scatted lt shears & vugular wh eyelets; ZnS in v lt "crackle"; TGS @ 209½; ZnS shines @ 208'
lt "crackle" to breccia from 210½-211; scatt ss @ 210½; strong shearing below ZnS 210½-211, est ½%
Brecciated from 212½ - 213½ sealed w/ coarse wh gangue & re-xl T Gray S @ 213½ scatt ss below to base

-214½ Chert, blue & dol, lt-med gray, brecciated & sealed w/re-xl, green sh & silica "Dry Breccia" ZnS shine @ 214½

-215 Chert, blue-gray, brecciated & sealed w/coarse wh gangue & some lt gray re-xl ZnS 214½-215, est ½%

-217 Dol, lt-med gray, lt banded, "crackle" w/wh gangue TGS @ base ZnS 215½-216, est ½%

-219 Dol, lt-med green-gray, mott lt brecciated 218-219, sealed w/wh gangue TGS @ base FeS_2 shines @ 218½ ZnS shines @ 218

-220½ Dol, lt-med gray, lower half brecciated & sealed w/wh gangue & re-xl; tr FeS_2 in gangue Tr FeS_2 @ 220-220½

-225 Dol, med tan-gray, brecciated & sealed wh/ coarse wh gangue pltly vugular, ZnS in ganue lower 1' sealed w/re-xl & green dol. ZnS 221½-223½ est 1½%

-226½ Dol, lt-med tan-gray, lt band

-231 Dol, lt-med gray, mott @ base

-233½ Dol, med gray

-234½ Dol, lt-med gray, brecciated w/wh gangue FeS_2 shines @ 234

-237 Dol, lt-med gray, lt shears high angle, scatt SS grains @ 235½, ss @ 236½; brecciated @ 236½ & sealed w/very coarse wh gangue calcite & dol; T Gray S @ base FeS_2 shines @ 236½

-240 Dol, lt-med green gray, sacchroidal; lt "crackle"; TGS @ 238½, brecc. & sealed w/wh gangue, re-xl & silica 239-240

-243 Dol, lt-med gray, mott; scatt wh eyelets; vug @ 242

-243½ Dol, med tan-gray, brecc. sealed w/green shale

-244 green sh

-246½ Re-xl, brown, mott

-247 Dol, lt-med green-gray

-250½ Semi-re-xl, med gray-green; oxid fract. w/wh gangue @ 249

-253 Dol, lt-med gray, lt mott high-angle fract filled w/coarse wh gangue @ 251' (76°) other open un-healed fractures also 70-80° FeS_2 shines in gangue @ 251

-254 Dol, med tan-gray; few wh eyelets GS @ base

-255 Dol, med gray-green, argillaccous,

-258 Dol, med-dk gray, mott brecciated upper ½ ' w/wh gangue-filled fract @ 256; brecc 257-base

-259 Re-xl, brown, brecciated w/wh gangue & re-xl

-259½ Dol, med-brown-gray, GS @ base

-261½ Re-xl, brown, mott "crackle" scatt vugs

-262½ Dol, lt-med gray

-263 Re-xl, tangray, brecc @ base & ss @ base "Dry breccia" below for½'

-264 Re-xl, lt-med gray-green, strong mott

-266 Semi-re-xl, gray, w/green sh partings; large gangue filling w/ tr FeS_2 Tr FeS_2 @ 265

-269 Re-xl, brown, mott, vuggy; lt gray ch @ base

-270 Dol, med tan, lt banded

-270½ Dol, med tan & ch brecc & sealed w/ blk re-xl & silica "Dry Breccia" TGS @ base

-271 Dol, lt-med gray, banded

-272 Re-xl, lt-med tan-gray; scatt small vugs

-274 Re-xl, brown, scatt small vugs

-279 Re-xl, lt-med tan-gray, mott wh gangue-filled fract @ 274½; TGS over blue ch @ base

-279½ Dol, med gray

ST-11 (Cont'd.)

-282 Re-xl, lt-brown, mott w/wh
-288 Re-xl, green-tan, mott w/green sh; scatt "crackle" ZnS shine @ 286½
-289½ Re-xl, brown
-290 Dol, lt-med gray, scatt ss over TGS @ base
-291 Re-xl, tan-green w/green sh partings
-295 Dol, lt-med gray-green, mott, w/scatt "crackle"
-295½ Re-xl, brown & tan mott. TGS @ base
-297 Dol, dk brown-gray, scatt vug eyelets & "crackle" ch @ 296½
-298 Dol, terra cotta, brecciated, w/re-xl, & green sh TGS @ base
-303 Dol, terra cotta, TGS @ 299 & @ base
-303½ Re-xl, red-tan
-304 Semi-re-xl, dark gray
-305 Dol, med gray, TGS @ base
-305½ Dol, terra cotta
-311½ Dol, lt-med gray, mott, TGS @ 308, banded to base TGS @ base
-314 Dol, reddish-tan
-315½ Dol, lt-med gray, brecciated & sealed w/coarse wh gangue dol, vugular
-316½ Dol, lt-med gray, lt banded, brecciated & sealed w/ re-xl & silica " Dry Breccia"
-317½ Re-xl, tan
-318 Re-xl, tan, & chert, blue gray, brecciated & sealed w/re-xl & silica "Dry Breccia"
-323 Dol, lt-med gray, brecciated & sealed w/re-xl, silica & dk sh to green sh "Dry Breccia"
-324 Re-xl, lt tan-gray, w/vugular wh mott; chert @ base
-326 Dol, lt-med tan-gray, brecciated & sealed w/ silica, re-xl, & green sh " Dry Breccia"
-327 Re-xl, med tan, mott
-331 Re-xl, w lt tan-gray, mott w/wh TGS @ 327½, 328½ & @ base
-338 Dol, terra cotta & med dk gray, brecc & sealed w/re-xl, silica & green sh; scatt ss grains @ 332½ 1" GS @ base Trace ZnS @ 331 & 331½
-334 Re-xl, lt green, v highly siliceous
-337½ Re-xl, v lt gray, mott & "crackle"
-339½ Re-xl, brown, "crackle" w/ wh gangue
-340½ Re-xl, lt gray, w/vugular wh gangue "crackle" FeS_2 shines @ 339½-40½
-341 Re-xl, brown
-342 Re-xl, tan-gray, to lt gray, scatt ss @ base ZnS 341-342 est 1½%
-343 Re-xl, tan-gray to lt; strong mott TBS @ base
-344 Re-xl, lt tan-gray, scatt vug siliccous"blotches"
-345 Re-xl, lt tan-gray; vugular
-347 Dol, lt-med gray, lt band; upper pt vugular, scatt ss grains below to base
-349½ Re-xl, lt gray, TBS @ 348½
-350½ Chert, brown banded
-351½ Re-xl, lt gray, coarse, mott; vugular wh eyelets; TBS @ base
-352 Re-xl, brown & lt gray, mott, w/green sh stringers
-354 Re-xl, lt-green-gray, w/green sh parting; blue chert @ 352½
-358 Dol, brown-gray, scatt wh shears, siliceous from 356 60 base
-362 Dol, med gray; lt crackle 349-60
-364 Dol, med-dk gray; shearing 363½ & 364½
-365 Chert, lt gray to dk gray
-365½ Re-xl, tan, T Gray S @ base
-366½ Semi-re-xl; lt-med gray
-371½ Dol, lt-med gray, mott, ch @ 367½ TBS @ 368 Silicepus 368-69 w/scatt ss grains
-375 Re-xl, brown, lt "crackle"
-377 Re-xl, lt tan-gray, lt mott siliceous
-380 Re-xl, med gray, mott, same silica
-384 Dol, lt-med gray, scatt wk shears
-385 Dol, med gray, vug wh eyelet

B. H. Putnam

Copper Ridge Project - Puncheon Camp Creek

DMEA Idm - E 1088

Hole No.	ST - 12	Collared:	11 - 16 - 59
Farm:	W. D. Btapleton	Bottomed:	11 - 21 - 59
Location:	N 50,089.84'	Depth:	385'
	E 46,793.94'	Casing:	BX - 93'; AX - 140'
Elevation:	1,427.36'	Reaming:	15'
Drilled by:	Putnam Drilling Co.	Cement:	None
Logged by:	F. T. Fischer		

Top Kingsport	88' Est.
Top "R" Bed	245'
Top "S" Bed	319½'
Base Kingsport	369'

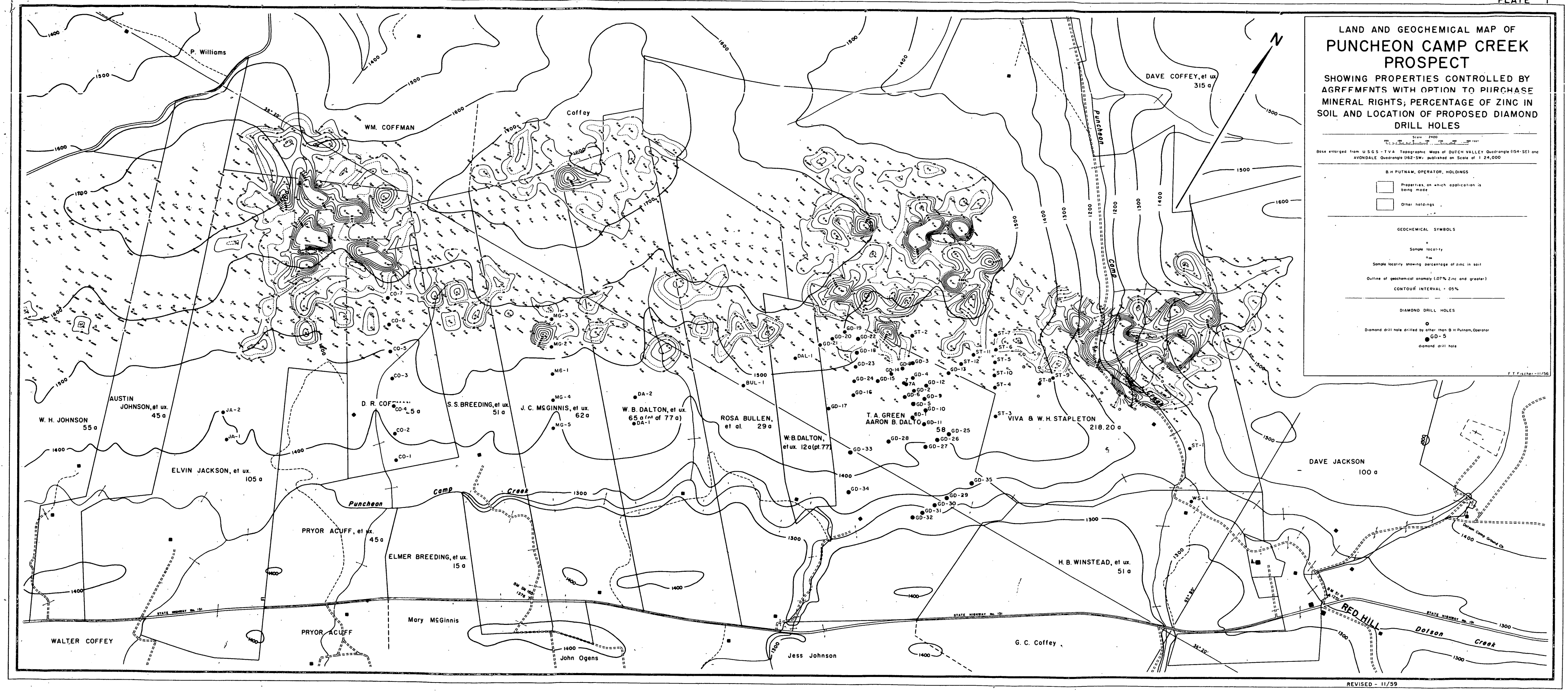
0-93	Overburden
-112	Dol, lt-med gray, heavy ss @ top? oxid throughout (90% core loss 93-112')
-117?	Dol, med-dk gray, mott openings
-125	Dol, lt-med gray; ss @ base (75% core loss 112-125')
-128	Dol, lt-med gray, lt banded @ top; oxid 128; scatt oxid fract 36° dip @ 135'
-131½	Cavity
-132½	Dol, med gray
-138	Cavity
-142	Dol, med gray, scatt lt "crackle" w/wh gangue & FeS_2 shines
-145	Dol, med-dk gray, wh "blotchy" & eyelets
-146½	Dol, med gray, scatt wh eyelets & traces FeS_2 in eyelets: GS w/ss grains @ base
-147½	Dol, lt-med gray, mott; TGS @ 147'
-152	Dol, lt gray, mott, scatt wh gangue w/ FeS_2
-155½	Dol, lt-med gray, lt "crackle" w/wh gangue & FeS_2
-157½	Dol, lt gray, chert @ 156½ and @ base
-161	Dol, med gray, brecciated and sealed w/ wh gangue FeS_2 shines in gangue FeS_2 157½-158½, Est 1%
-164	Dol, med gray, banded, scatt ss @ 162½ over lt "crackle"; ss scatt to base TGS over ch @ base
-165	Green shale (4") over dk chert; chert fractured & filled w/ green shale
-169½	Dol, lt-med gray, scatt lt high-angle fract some healed w/wh gangue; ch @ 167½ & 169; TGS @ base
-175½	Dol, lt gray, mott, scatt lt "crackle", blue ch @ 173½, lt band below; TGS over wh ch @ base
-179	Dol, lt-med gray, lt band to mott; ss @ 178½; ch over TGS @ base
-184	Dol, lt-med gray; ch @ 182½ & 183½
-185	Dol, lt gray, v highly siliceous; wh "blotchy", TGS @ base
-186½	Dol, med-dk gray; T Gray S @ base 36° dip @ 186'
-188	Dol, lt-med gray, vugular wh xl eyelets @ top
-189	Dol, med gray, lt band
-193½	Dol, lt gray, banded; ch nod @ 190, 191 & 191½; ss in TGS @ base
-197½	Dol, lt-med gray, TGS @ 194, banded toward base
-203	Dol, lt gray, mott, ss @ 198; ch @ 198½, 199, 199½ & 200; shear zone @ 200½ ch below & @ 202½ & 203; ss @ base
-205½	Dol, lt-med gray, lt banding
-207	Dol, lt tan-gray wh "blotchy"
-209½	Dol, med tan-gray, mott, T Gray S @ 207½; brecciated w/wh gangue from 209-209½
-213½	Dol, lt-med gray, banded, scatt eyelets; scatt ss over TGS over ch @ base 40° dip @ 210'
-215	Dol, lt gray, scatt lt "crackle"; oxid @ top
-218	Dol, lt-med gray, banded, thin breccia w/green sh & ss grains @ 216
-219½	Dol, med gray, scatt ss grains; blue fract ch @ base
-223	Dol, lt-med gray
-225	Dol, lt-med green-gray; lt mott, scatt wk FeS_2 shines @ base
-226	Dol, lt-med gray, wh coarse-gangue eyelets, vugular; "blotchy" w/lt gray silica to base; dk ch @ base
-230	Dol, lt-med brown-gray, ch nod @ 228, lt banded below to ch @ base
-238	Dol, lt gray, siliceous mott above TGS w/SS grains @ 231; T Gray S @ 234½; lt banding 236-base
-240	Dol, lt-med gray, mott, lt "crackle"
-244	Dol, lt-med gray, lt mott, wh breccis @ base, w/ few scatt ss grains
-245	Green & dk sh , brecciated & sealed w/ shale, dk
-246½	Re-xl, brown, mott "crackle" @ base , over GS
-247½	Dol, dk gray, mott
-251	Dol, lt-med gray, mott; small wh eyelets @ 250; 1" GS @ base

ST-12 (Cont'd.)

-252½	Dol, lt-med green-gray, lt mott scatt traces FeS_2 throughout, T Gray S @ base 40° dip @ 252'	
-257	Dol, med-dk gray, scchroidal, mott; to semi-re-xl @ 255-256; med brown- gray to base	
-257½	Green shale & dk sh, brecc & sealed w/ dk sh; scatt frag re-xl,	
-258½	Re-xl, med gray, banded, to lt-med tan-gray below	
-259	Semi-re-xl, lt-med green-gray, lt band	
-261	Re-xl, brown, vugular wh eyelets & cracks throughout	
-262	Dol, lt-med gray, ½" GS @ base	
-262½	Chert, blue-gray, brecc & sealed w/ lt-med tan re-xl & ss grains	
-263	Re-xl lt tan-gray, green & dk sh @ base	
-264	Re-xl, med-tan-gray, w/ v lt "crackle"	
-265½	Semi-re-xl, lt-med green-gray	
-267	Semi-re-xl, lt-med gray, mott, wk "crackle" @ top; brecc lower 6" & sealed w/ re-xl	
-268	Re-xl, brown, mott, w/ wh gangue eyelets	
-268½	Dol, lt-med tan; ss grains in base; basal pt brecc sealed w/green sh	
-269	Shale, green; dk sh @ base	
-270	Dol, lt-med gray, TGS @ base	
-273	Re-xl, lt-brown, mott	
-277½	Re-xl, tan, mott	
-279	Semi-re-xl, lt tan lt crackle to vug gangue breccis-filling @ base	
-279½	Dol, lt-med tan; chert nod in middle, TGS @ base	
-280	Re-xl, tan	
-281	Re-xl, lt gray, v. strong fine mott, T Gray S @ base	
-282	Re-xl, tan, to brown	
-284½	Re-xl, tan, mott w/ green	
-286½	Dol, lt-med gray, lt mott	
-287	Re-xl, brown, fine breccia w/ vug wh gangue	
-292½	Dol, lt-med gray-green, TGS @ 288, few scatt ss grains above; lt "crackle" below	
-294	RE-xl, dk brown, strong mott, thin gray dol brecc w/coarse wh gangue @ 293; FeS_2 shines in gangue	
-297	Dol, dk gray, lt "crackle" throughout & scatt wh shears; ch @ 295½; brecc below w/ wh gangue, vugular	
-299½	Dol, dk gray, lt "crackle"	
-300	Ls, lt gray brecc & sealed w/ silica & blk jasperoid	
-301½	Ls, lt tan gray, w dk sh partings, T Gray S @ 301½ thin brecc w/ wh gangue below dk sh & jasperoid @ base	
-302	Ls, tan-gray plty fragmental	
-303	Ls, brown, w/ blk sh partings 2" black sh @ base	
-303½	Re-xl, ran w blk sh ptings	
-307	Semi-re-xl, dk gray, mott few scatt wh eyelets	ZnS shines 307½
-308½	Re-xl, lt tan-gray, brecciated w/ wh gangue	FeS_2 307-308½, Est 2%
-310	Dol, sacchroid, lt-med gray, "crackle"	ZnS shines 309½
-311	Semi-re-xl, brown, bfecc ch & re-xl, @ base sealed w/ FeS_2 wh gangue re-xl & silica	FeS_2 310½-311, Est 5%
-314½	Dol, med gray, brecc w/wh gangue, re-xl	FeS_2 shines 311½, 312 & 312½
-318½	Dol, lt-med gray, "crackle"; thin brecc @ 316 " dry w/ FeS_2; brecc w/ wh gangue from 317-18, and w/ re-xl, blk jasperoid & wh gangue @ base	FeS_2 shines @ 316
-319½	Dol, med gray, brecc & sealed w/ re-xl, silica & blk jasperoid; pre-brecc "crackle" throughout	ZnS traces @ 319½
-321	Re-xl, lt-med tan-gray, scatt "crackle"	
-326	Ls, lt tan-gray, frag to mott	

ST-12 (Cont'd.)

-327	Dol, med-dk gray, scatt ss & ch @ base	36° dip @ 326½
-339½	Ls, lt tan-gray, TGS @ 332'	
-341	Re-xl, tan	
-341½	Dol, med gray	
-346	Ls, tan-gray, banded	
-349	Is, lt tan-gray	
-350	Re-xl, lt tan, vug, "crackle"	
-367½	Ls, lt tan-gray; banded w/ scatt ss 350-351; banded 355-356; TGS @ 358, 359 & 360	
-369	Semi-re-xl, med gray	
-373½	Dol, lt-med gray, scatt wh high angle shears; v highly siliceous 372-372½	
-374	Dol, med gray, T Gray S @ 373½	
-378½	Dol, med tan-gray, lt scatt shears	
-379½	Chert, blue, 1" bedded silica in middle; TBS @ base	
-385	Dol, lt-med gray, mott, scatt wh gangue fract	


LAND AND GEOCHEMICAL MAP OF
PUNCHEON CAMP CREEK PROSPECT
SHOWING PROPERTIES CONTROLLED BY AGREEMENTS WITH OPTION TO PURCHASE MINERAL RIGHTS; PERCENTAGE OF ZINC IN SOIL AND LOCATION OF PROPOSED DIAMOND DRILL HOLES
Scale 1"=400'
Base enlarged from U.S.G.S.-T.V.A. Topographic Maps of DUTCH VALLEY Quadrangle (154-SE) and AVONDALE Quadrangle (162-SW), published on Scale of 1:24,000
B.H. PUTNAM, OPERATOR, HOLDINGS
Properties, on which application is being made
Other holdings
GEOCHEMICAL SYMBOLS
Sample locality
Sample locality showing percentage of zinc in soil
Outline of geochemical anomaly (.07% Zinc and greater)
CONTOUR INTERVAL = 05%
DIAMOND DRILL HOLES
Diamond drill hole drilled by other than B.H. Putnam, Operator
GD-5
diamond drill hole
F.T. Fischer-11/56
N
P. Williams
WM. COFFMAN
Coffey
DAVE COFFEY, et ux. 315 a
W. H. JOHNSON 55 a
AUSTIN JOHNSON, et ux. 45 a
ELVIN JACKSON, et ux. 105 a
D. R. COFFEY 5 a
S. S. BREEDING, et ux. 51 a
J. C. McGINNIS, et ux. 62 a
W. B. DALTON, et ux. 65 a (int of 77 a)
ROSA BULLEN, et al. 29 a
W. B. DALTON, et ux. 12 a (pt. 77)
T. A. GREEN
AARON B. DALTO
58
VIVA & W. H. STAPLETON 218.20 a
DAVE JACKSON 100 a
PRYOR ACUFF, et ux. 45 a
ELMER BREEDING, et ux. 15 a
H. B. WINSTEAD, et ux. 51 a
WALTER COFFEY
PRYOR ACUFF
Mary McGinnis
John Ogens
Jess Johnson
G. C. Coffey
RED HILL
Puncheon Camp Creek
Dotson Creek
STATE HIGHWAY No. 131
Puncheon Camp Creek Co.
REVISED - 11/59

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 14 1960

DATE	INITIALS	CODE

BERGHA MINERAL DIVISION

THE NEW JERSEY ZINC COMPANY

AUSTINVILLE, VA.

October 7, 1959

Regional Executive Officer
Defense Minerals Exploration Admn.
Room 2-B, Post Office Building
Knoxville 2, Tennessee

Subject: September Monthly Report and Quarterly Summary, Chaffin Tract, Austinville, Va., DMEA 5008, Contract IDM-E-1204

Dear Sir:

Attached is our September Monthly Report and Quarterly Summary of the exploration work on the Chaffin Tract, Austinville, Virginia.

Very truly yours,

W. L. Albers
General Superintendent

WHoratioBrown:rjl
In quintuplicate
Attachments

RECEIVED
OCT 7 - 1959
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

B.H. Putnam DDH-ST-11

Copper Ridge Project - Puncheon Camp Creek

DMEA Idm - E 1088

Hole No.:	ST-11	Collared:	11-2-59
Farm:	W. D. Stapleton	Bottomed:	11-14-59
Location:	N 50,172.96	Depth:	385'
	E 46,847.08	Casing:	BX - 80'; AX - 120'
Elevation:	1439.41'	Reaming:	None
Drilled by:	Putnam Drilling Co.	Cement:	None
Logger by:	F. T. Fitcher		

Top Kingsport	77' est
Top "R" Bed	244'
Top "S" Bed	316½'
Base Kingsport	354'

United States Department of the Interior
GEOLOGICAL SURVEY
BOX 25046 M.S. 933
DENVER FEDERAL CENTER
DENVER, COLORADO 80225

IN REPLY REFER TO:

March 25, 1981

M E M O R A N D U M

To: Robert Edwards, Branch of Financial Management

From: J. William Hasler, Chief, Office of Minerals Exploration JWH

Subject: DMEA 4580 (zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tenn.
Contract Idm E-1088

The certification period for the subject contract expired May 20, 1980.

We have had considerable problems in locating Mr. Putnam to ascertain the status of the project and property. We finally contacted him and received an answer on Form MME 63 dated March 16, 1981, indicating that the ownership still remains the same and that there has been no production since our last answered inquiry of August 17, 1968; consequently no royalties are due the government.

Please provide me with the principal balance and accrued interest on the subject contract in order that we can write-off this contract.

JWH:js

cc: OMR - A.T. Ovenshine
CMR - R.B. Taylor

Written off as of March 31, 1981
Principal $77,178.67
No Interest

United States Department of the Interior

GEOLOGICAL SURVEY
BOX 25046 M.S. 933
DENVER FEDERAL CENTER
DENVER, COLORADO 80225

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

Re: DMEA 4580 (zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tenn.
Contract Idm E-1088

March 10, 1981

Mr. Benjamin H. Putnam
P.O. Box 906
New Albany, Ind. 47150

Dear Mr. Putnam:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely,

J. Williams Hasler

J. William Hasler, Chief
Office of Minerals Exploration

RECEIVED
MAR 19 1981

Form MME 63
(May 1970)

REQUEST FOR INFORMATION ON CERTIFIED PROJECT OR PROJECT UNDER ROYALTY AGREEMENT

1. Since Aug. 17, 1968, has there been a change in ownership, lease, or sublease? *If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before.* Yes ☐ No ☒

March 10, 1981

2. Since Aug. 17, 1968, has there been any production from the land subject to the contract? Yes ☐ No ☒

A. If so and it was shipped, give quantity, value, and name and address of purchaser.

Purchaser *(name and address)*	Quantity	Value

B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity *(tons)*	Estimated Grade	Location
Ore			
Concentrates			
Other			

3. Since workings *(see* , has any production been transported through *of contract)*? Yes ☐ No ☒

If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value

Submitted by:

Name B. H. Putnam	*Title*
Address P. Bo. Box 906 New Albany, Ind. 47150	*Date* 3/16/81

RECEIVED
MAR 16 1981

Receipt of
Certified Mail
sent to Putnam.

Put in file

SENDER: Be sure to follow instructions on other side

PLEASE FURNISH SERVICE(S) INDICATED BY CHECKED BLOCK(S)
(Additional charges required for these services)

☐ Show address where delivered ☐ Deliver ONLY to addressee

CERTIFIED MAIL, C. **RECEIPT**
Received the numbered article described below

No. 13

REGISTERED NO. 32453

CERTIFIED NO.

INSURED NO.

DATE DELIVERED

SIGNATURE OR NAME OF ADDRESSEE *(Must always be filled in)*

1 X J. E. Hubi

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

2

SHOW WHERE DELIVERED *(Only if requested, and include ZIP Code)*

3

NEW ALBA MAR 13 1981 USPO

2-27-81

Located Harold Burwell, geologist (listed under H.B.) in Huntsville Ala. Address: 830 Burwell Rd., Huntsville 35749 Telephone (205) 852 7372.

He gave me most current info on Putnam who is NOT in Owensboro, Ky. Apparently Putnam is on the move all the time. But I talked to him personally to verify his current telephone and address:

Benjamin H. Putnam
P.O. Box 906
New Albany, Ind. 47150
telephone (812) 944 1843

(He will be out of town next week - when you return).

Each man wanted to know why I called and I merely explained that you were closing out some old contracts and that is all that I knew - and that you would be in touch with them.

jane

2/26/81

Jane:

I talked with Mr. William Hill

of The New Jersey Zinc Company,
Gulf & Western Natural Resources Group
1st American Center, Nashville Tennessee
about DMEA docket 4580 (Zinc)
Benjamin H. Putnam, Assignee
Luncheon ~~Creek~~ Camp Creek Area
Grainger County, Tennessee
Contract Idm-E 1088.

He informed me that as far as he knows, B. H. Putnam still owns the property but has since gone broke. He worked with Putnam on the contract but hasn't seen him in many years. He thinks Putnam now lives in Owensboro Kentucky. He thinks he would be listed as B.H. Putnam OWENSBORO 42301

A Harold Buswell was a geologist who worked with Putnam and he possibly lives in Huntsville, Alabama, according to William Hill

I would appreciate it if you can trace these two people down, like addresses and telephone numbers.

Robert Jawonek Knoxville Tenn.
615-525-2353
FTS. 8-854-4011

2/25/81

DMEA 4580 (Zinc)
National Lead Company
Benjamin H Putnam Assignee
Putnicheon Camp Creek
Grainger County Tenn.
Control Idn-E1088

nothing going

Bill Hill - M (N.G.Z.)
Nashville
Clarksville

9-1-

Was with Putnam

- Gulf & Western AIME
SEG

(now) (Idk opened) pd. 86.
Tenn.
8-222 3011

Tenn
9-615 5551212

Tenn
Bob Hardy so Indiana
State Geol

Bill Hardeman
M Nashville area) x24-1798
1979 Econ Geol
William T. Hull
152 Cherokee Drive
Hendersonville TN 37075
852-5022 Nashville

1975
~~William T. Hull~~
~~220 Jackson Ave~~
~~Goodlettsville Tn. 37030~~

8

Wm T. Hill no answer

Bob Hersey - State Geol. Tenn.
FTS: 8-853-2726
8-615- 8-852-5022
Bill Hardeman 741-2726

Hershey -

Mineral -
New Jersey Zinc

615-735-1222
209 Industrial Drive
Carthage, Tenn 37030

Ray Gilbert - N.J Zinc
9-1-615-558-1212

852-5022
Fred Mauck - N.J. Z
Mulvaney
259-1000 1st American Center

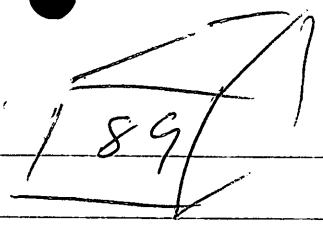
Sec Geol Fred Fischer Knowledge

Allen Hazel.

Bill

Idle
Thor

Fred Main - - -



Fred Fischer -

Bill Hill 21 yrs. -

(Sam Moore)

Owensburg Kentucky -
Hornell -
Street -
B. H. Putman. Purchased Main

(Harold Burwell - Huntsville Ala. -)

Tom Miller

(L 1 & G 2 $ 14.30)

Al Buell 115 Doeling

Main Bar of Box Elder County
Box Elder Co. -
Hale G 2 1967
L-1 1967

UNITED STATES
DEPARTMENT OF THE INTERIOR
[illegible] EXPLORATION

Memorandum

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
U. S. GEOLOGICAL SURVEY
ROOM 11 POST OFFICE BLDG.
KNOXVILLE, TENN. 37902

OFFICIAL COPY
O. M. E.
RECEIVED
MAY 11 1967
INITIALS | CODE
5/12 | 10
HR | 220

May 10, 1967

Memorandum

To: Frank E. Johnson, Chief, Office of Minerals Exploration
U. S. Geological Survey, Washington, D. C. 20242

From: Robert A. Laurence, Branch of Resources Research
U. S. Geological Survey, Knoxville, Tenn. 37902

Subject: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract Idm-E1088

and

DMEA-5026 (Zinc)
Benjamin H. Putnam
Luttrell Prospect
Union County, Tennessee
Contract Idm-E1215

Replying to your memo of May 5, following is the information usually obtained from the Operator:

(1) Apparently there has been no change in ownership of any tracts in these projects.

The New Jersey Zinc Co. completed some exploratory drilling in the Luttrell area during 1966, but not on any land included in DMEA-5026.

(2) There definitely has been no production from land subject to these contracts.

As no representative of Putnam or National Lead is available in Tennessee, and a visit to the area obviously would not produce results commensurate with the expense, this information was obtained from the New Jersey Zinc Company by telephone.

I understand that B. H. Putnam has a new address; if I can get it I will send it to you.

Robert A. Laurence
Robert A. Laurence
Geologist

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

U. S. GEOLOGICAL SURVEY
ROOM 11 POST OFFICE BLDG.
KNOXVILLE, TENN. 37902

June 10, 1966

Memorandum

To: Frank E. Johnson, Chief, OME, Washington, D. C.

From: Robert A. Laurence

Subject: DMEA-4580, Idm-E1088 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tennessee

DMEA-5026, Idm-E1215 (Zinc)
Benjamin H. Putnam
Luttrell Prospect
Union County, Tennessee

OFFICIAL COPY
O. M. E.
RECEIVED
JUN 13 1966
FILE CODE
6/13 ~~120~~ ~~110~~ HK 120 K 120 220

Replying to your memo of June 2, following is information usually obtained on Form 63:

(1) Apparently there has been no change in ownership. Putnam probably still owns the mineral rights on the Green and Dalton tracts (DMEA-4580). The New Jersey Zinc Company has been doing some drilling in the vicinity of Luttrell, Tenn., but apparently not on land included in DMEA-5026.

(2) There definitely has been no production from land subject to these contracts.

As no representative of Putnam is available in Tennessee, and a visit to the area obviously would not justify the expense, this information was obtained from The New Jersey Zinc Company by telephone.

Robert A. Laurence
Robert A. Laurence
Geologist

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code

MAY 5 1967

Memorandum

To: R. A. Laurence, U. S. Geological Survey
Knoxville, Tennessee

From: Chief, Office of Minerals Exploration

Subject: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract Idm-X1088

and

DMEA-5026 (Zinc)
Benjamin H. Putnam
Luttrell Prospect
Union County, Tennessee
Contract Idm-X1215

Will your office please check again on the subject contracts and report to the Washington office as you have done in the past.

FRANK E. JOHNSON

Frank E. Johnson

cc: Director's Reading File
Division File
Econ. Geol. File
OME Reading
DMEA Docket 4580
" Docket 5026
130
120M (2)

MMerrithew/mm (5/5/67)

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
6/2	R M Smith	120
6/2/66	Kisberno	120 K
		110
		220

Memorandum

To: R. A. Laurence, U. S. Geological Survey
Knoxville, Tennessee

From: Chief, Office of Minerals Exploration

Subject: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract Idm-E1088

and

DMEA-5026 (Zinc)
Benjamin H. Putnam
Luttrell Prospect
Union County, Tennessee
Contract Idm-E1215

Please refer to our memorandum of May 20, 1965, and your reply of May 25. Will your office please check again on these two contracts as you did before.

FRANK E. JOHNSON

Frank E. Johnson

cc: Director's Reading File
Division File
Economic Geology File
DMEA Docket 4580
" " 5026
OME Reading File
130
120M

MMerrithew/mm (~~XXXXXX~~ (6/2/66)

23263

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 11 POST OFFICE BLDG.
KNOXVILLE TENN. 37902

OFFICIAL COPY
O. M. E.
RECEIVED
MAY 26 1965

INITIALS	CODE
ama	800
5/27	120
	120
	220

May 25, 1965

Memorandum

To: George C. Selfridge, Chief, Division of Exploration Operations, Office of Minerals Exploration
Washington, D. C. 20240

From: Robert A. Laurence
U. S. Geological Survey

Subject: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract Idm-E1088

and

DMEA-5026 (Zinc)
Benjamin H. Putnam
Luttrell Prospect
Union County, Tennessee
Contract Idm-E1215

So far as I can learn, from use of the telephone and not visiting the Copper Ridge area, there has been no change of ownership of any properties in the two subject contracts since my memo of May 5, 1964. Putnam still owns the Green and Dalton tracts, and New Jersey Zinc Company has not reacquired any of the leases which they dropped.

There has been no production from any of the properties in either of these two contracts.

Robert A. Laurence

Robert A. Laurence

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

ROOM 11 POST OFFICE BLDG.
KNOXVILLE TENN. 37902

May 5, 1964

OFFICIAL FILE COPY O. M. E. RECEIVED MAY 6 1964		
DATE	INITIALS	CODE
5/6		800
		~~500~~
		220

Memorandum

To: W. R. Griswold
Division of Field Operations, OME

From: Robert A. Laurence

Subject: DMEA-4580 (Zinc)
~~Benjamin H.~~ Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract Idm-E1088

and

DMEA-5026 (Zinc)
Benjamin H. Putnam
Luttrell Prospect
Union County, Tennessee
Contract Idm-E1215

B. H. Putnam no longer has a representative in this area, so I have been unable to get any first-hand information about his activity (or lack of it) in the two areas cited. After completion of the DMEA work, he exercised his option on the Green and Dalton tracts (DMEA-4580) and purchased the mineral rights to these; so far as I can learn he still owns them. Most of the other options in these two areas were assigned to New Jersey Zinc Company; their chief geologist, A. D. Hoagland told me that they have released all these options.

There has been no production from either of the two project areas. New Jersey Zinc did a little drilling in the area, before dropping the options.

Robert A. Laurence
Robert A. Laurence

IOME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
	GCS	130
5/20	Johnson	110
	[illegible]	100
		220
		[illegible]

MAY 20 1965

Memorandum

To: R. A. Laurence, U. S. Geological Survey
Knoxville, Tennessee

From: Chief, Division of Exploration Operations

Subject: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract Idm-E1088

and

DMEA-5026 (Zinc)
Benjamin H. Putnam
Luttrell Prospect
Union County, Tennessee
Contract Idm-E1215

Please refer to our memorandum of April 16, 1964, and to your reply of May 5. Will your office please check annually on these two contracts as you did before.

George C. Selfridge (gla)

GCSelfridge/mm (5/20/65)
cc: Director's Reading File
Review Committee
✓Docket 4580
Docket 5026
Mr. Selfridge
120M (2)

23263

MME Form 7
(2/63)

OFFICIAL FILE COPY

Date	Surname	Code
4/15	Tallant	800
"	[illegible]	130
	[illegible]	110
4/15	Johnson	100
		220
4/16	[illegible]	

APR 1 6 1964

Memorandum

To: R. A. Laurence, U. S. Geological Survey, Knoxville, Tennessee

From: Acting Chief, Division of Field Operations, Office of Minerals Exploration

Subject: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract Idm-E1088

and

DMEA-5026 (Zinc)
Benjamin H. Putnam
Luttrell Prospect
Union County, Tennessee
Contract Idm-E1215

We have been unable to get any reply from Form 63's sent out on the Putnam dockets. Inquiries to Agent J. E. Dubin, New Albany, Indiana, have not been answered, although we have received receipts for registered mail signed for by Mr. Dubin.

Can you give us any information as to possible activity on the referenced properties?

W. R. Griswold
mm

WRGriswold/mm
4/14/64
cc: Director's Reading File
Review Committee
Docket 4580
Docket 5026
Code 500 (2)

23263

~~Secured~~

220

#1-INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Deliver *ONLY* to addressee

☐ Show address where delivered

(Additional charges required for these services)

RETURN RECEIPT

Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE *(must always be filled in)*

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

DATE DELIVERED

3/3/64

ADDRESS WHERE DELIVERED *(only if requested in item #1)*.

C55—16—71548-4 GPO

4580

DMEA 4580

Murphy
320

#1-INSTRUCTIONS TO DELIVERING EMPLOYEE

☐ Deliver *ONLY* to addressee ☐ Show address where delivered

(Additional charges required for these services)

RETURN RECEIPT

Received the numbered article described on other side.

SIGNATURE OR NAME OF ADDRESSEE *(must always be filled in)*

4580

SIGNATURE OF ADDRESSEE'S AGENT, IF ANY

B H Putnam

DATE DELIVERED

2-12-63

ADDRESS WHERE DELIVERED *(only if requested in item #1)*

J Ederbu

C55—16—71548·4 GPO

DMEA: 4580
and DMEA 5026

Hold
for annual report
of Field Office

See Memo May 20, 1965
and reply May 25, 1965.

Re: DMEA-4580

For a contract that doesn't expire until 1980, its rather early in the game to lose track of the Operator.

No return receipt for 9/18/63 Form 63 is in file. This form was addressed to Chicago, although prior return receipt indicates delivery actually effected in New Albany, Ind.

Mining World directory does not disclose present address of Putnam or his Putnam Drilling Co.

Talbert
2/26/64

PS: Possibly Form 63 should be sent to National Lead Company.

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

February 27, 1964

REGISTERED MAIL
RETURN RECEIPT REQUESTED

Re: BMFA-4580 (Zinc)
Benjamin H. Putnam, Assigne
Puncheon Camp Creek Area
Grainger County, Tenn.
Contract Idm-B1038

Mr. J. E. Dubin
Agent for Benjamin H. Putnam
New Albany, Indiana

Dear Sir:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Division of Minerals

Shorthand —

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since January 1, 1961, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. Since January 1, 1961, has there been any production from the land subject to the contract? Yes ☐ No ☐

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value
_____		
_____	_____	_____

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity		Estimated Grade	Location
Ore	_____	Tons	_____	_____
Concentrates	_____	Tons	_____	_____
Other	_____	Tons	_____	_____

3. Since _____, has any production been transported through _____ workings (see _____ of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4511

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

September 18, 1963

Re: [illegible]-4580 (Zinc)
Benjamin E. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

REGISTERED MAIL
RETURN RECEIPT REQUESTED

Mr. Benjamin E. Putnam
170 East Pearson Street
Chicago 11, Illinois

Dear Sir:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Similar sets of MEX Form 63 applicable to the above-referenced Contract were forwarded to you on November 20, 1962, and again by registered mail on February 7, 1963. The latter set was received by your agent, J. E. Dubin.

This office has the administrative responsibility in connection with all Defense Minerals Exploration Administration contracts. Therefore, it is essential that you complete and return the enclosed request for information forms to this office for our records.

Sincerely yours,

s/F. M. Murphy

F. M. Murphy, Acting Chief
Division of Minerals

MME Form 63
Revised 3-62

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since January 1, 1961, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. Since January 1, 1961, has there been any production from the land subject to the contract? Yes ☐ No ☐

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value
_____	_____	_____
_____	_____	_____

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity	Estimated Grade	Location
Ore	_____ Tons	_____	_____
Concentrates	_____ Tons	_____	_____
Other	_____ Tons	_____	_____

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4512

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

February 7, 1969

Re: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1083

REGISTERED MAIL
RETURN RECEIPT REQUESTED

Mr. Benjamin H. Putnam
170 East Pearson Street
Chicago 11, Illinois

Dear Mr. Putnam:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Division of Minerals

MME Form 63
Revised 3-62

DMEA-4580
Idm-E1088

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since January 1, 1961, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. Since January 1, 1961, has there been any production from the land subject to the contract? Yes ☐ No ☐

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value
_____	_____	_____
_____	_____	_____

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity	Estimated Grade	Location
Ore	_____ Tons	_____	_____
Concentrates	_____ Tons	_____	_____
Other	_____ Tons	_____	_____

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4512

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

November 26, 1962

Re: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Ida-E1083

Mr. Benjamin H. Putnam
170 East Pearson Street
Chicago 11, Illinois

Dear Mr. Putnam:

After the completion of the approved exploration work under the contract identified above, we asked to be informed about changes in the status of the property and production from it during the period of royalty obligation.

To assist you to furnish this information and to assure the accuracy of our records, please answer the questions on the back of this letter and return two copies to this office with copies of any pertinent documents.

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Division of Minerals

MME Form 63
Revised 3-62

DMEA-4580
Idn-E1008

REQUEST FOR INFORMATION ON CERTIFIED PROJECT AND PROJECT UNDER ROYALTY AGREEMENT

1. Since January 1, 1961, has there been a change in ownership, lease, or sublease? If yes, please state details of the transaction below and provide a true or signed copy of the pertinent documents, unless they have been provided before. Yes ☐ No ☐

2. Since January 1, 1961, has there been any production from the land subject to the contract? Yes ☐ No ☐

   A. If so and it was shipped, give quantity, value, and name and address of purchaser.

	Quantity	Value
_____	_____	_____
_____	_____	_____

   B. If stockpiled awaiting sale, state quantity, grade, and location.

Type	Quantity	Estimated Grade	Location
Ore	_____ Tons	_____	_____
Concentrates	_____ Tons	_____	_____
Other	_____ Tons	_____	_____

3. Since , has any production been transported through workings (see of contract)? Yes ☐ No ☐

   A. If so, state quantity, value, and disposition of material.

Disposition of Material	Quantity	Value
_____	_____	_____

Submitted by:

Name _____ Title _____

Address _____ Date _____

4511

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
5/15	GCS	120
		220

MAY 15 1962

Memorandum

To: Chief, Fiscal Section, Division of Administrative Services, Office of the Secretary

From: Chief, Division of Field Operations, OME

Subject: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract Idm-E1088

Enclosed for your files is the original of a Report of Royalty Review on the subject contract.

George C. Selfridge

(GCS)

Enclosure

GCSelfridge/hb (5/15/62)
cc to: Docket DMEA-4580
Director's Reading File
CA&A Division
GCSelfridge
R. A. Laurence, USGS, Reg. IV, w/cy of Report of Royalty Review dtd 5/11/62 & orig. cy of memo dtd 5/11/62 to Chf., Div. of Field Operations from CA&A Division.
Avery Reed, USBM, Reg. IV, w/cy of ea. item sent to Mr. Laurence.

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
		220

MAY 11 1962

Memorandum

To: Chief, Division of Field Operations

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract Idu-81083

Enclosed are the original and two copies of a Report of Royalty Review covering the subject Region IV contract. If you concur in the facts stated therein, please make the following distribution:

(a) Original to the Fiscal Section, Division of Administrative Services, Office of the Secretary; and

(b) Two copies to Region IV files.

This report is for OME record purposes only; therefore, no copy has been provided for the Operator.

As evidence of your concurrence, a copy of your memorandum transmitting the original of the report to the Department's Fiscal Section should be furnished this Division. If for any reason you do not concur, the original and both copies should be returned to this Division with your comments.

Enclosures

EDTalbert/ama 5-11-62

cc:
Docket
Director's Reading File
CA & A Division
Mr. Rothrock

43683

MME Form 7
(10-58)

Docket 4580

OFFICIAL FILE COPY

Date	Surname	Code
		800
6/4	Murphy	500
		500
	Selfridge	120
		110
		220

JUN 14 1961

Mr. Benjamin H. Putnam
170 East Pearson Street
Chicago 11, Illinois

Re: DMRA-5026 (Zinc)
Benjamin H. Putnam
Luttrell Prospect
Union County, Tennessee
Contract Idm-K1215
and
DMRA-4422 (Zinc)
Benjamin H. Putnam, Assignee
Thorn Hill Area
Grainger County, Tennessee
Contract Idm-K1022

Dear Mr. Putnam:

The following information is furnished in reply to your June 9 letter, in confirmation of a telephone conversation with Mr. Selfridge, inquiring as to the necessity for continuance of the surety bonds under the referenced contracts.

By the terms of Amendment No. 2 to contract Idm-K1215, all minerals produced from the land under this contract are subject to a percentage royalty until the Government's $2,747.33 contribution is repaid or June 30, 1974, whichever occurs first. Therefore, the surety bond under this contract remains in full force until the fulfillment of one of these conditions. This information was furnished the American Surety Company of New York in a letter dated May 12, 1960, a copy of which was sent to you.

In regard to contract Idm-K1022, my letter to you under date of November 7, 1960, stated that the Government retains no claim or lien against the property under this contract or any production therefrom. The letter, a copy of which was sent to the American Surety Company of New York, further stated that we were closing our books and records on the project. Accordingly, the obligation under the surety bond is void.

43683

Our records show that you are the Assignee-Operator under the following described contract:

DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

A certification of discovery or development covering the land under the contract was issued on January 3, 1961. A letter of the same date, transmitting the certification, stated that all minerals produced until May 20, 1980, are subject to the Government's percentage royalty until $77,173.05 is repaid. A copy of this letter was sent to the National Lead Company, which remains as surety under the contract in accordance with the provisions of the Government's April 14, 1958, consent to its assignment of the contract to you. No surety bond is involved in this contract.

Incidentally, due to the recent payment to you of an additional $5.62, the amount repayable by royalty under contract Idm-E1088 is now $77,178.67.

Our records also indicate that you provided a surety bond for the following described contract:

DMEA-4381 (Zinc)
National Lead Company, Assignee
Indian Creek Area
Grainger County, Tennessee
Contract Idm-E1002

The Government's May 3, 1957, consent to your assignment of this contract did not release this surety. However, by letter dated November 5, 1958, you were furnished a copy of a letter of the same date to the National Lead Company, wherein it was stated that the Government retains no lien or claim against the property and we were closing our books and records on the project. Therefore, the obligation under the surety bond is void.

I believe the foregoing answers all the questions presented both in your letter and in the telephone conversation with Mr. Selfridge. If, however,

additional information is desired, please do not hesitate in making inquiry.

Sincerely yours,

(signed) FRANK E. JOHNSON

ACTING Director

EDTalbert/hb (6/13/61)
Copy to: Dockets DMEA-4381, DMEA-4422,
DMEA-4580, and DMEA-5026
Director's Reading File
CA&A Division
Acting Field Officer, Region IV (2)

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
6/14	GCS	120
6/14	[illegible]	500
6/14	[illegible]	500
		110
		220

June 9, 1961

Memorandum To Files:

Re: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

Mr. Putnam telephoned on June 9 to ask the writer how long surety bonds had to be carried. He explained that none of his engineers were available to take care of such matters. He mentioned that he had bonds Nos. 10-580-434 and 10-560-719 on which he was paying a premium of $27.47 and $148.22, respectively. He also mentioned the Puncheon Camp Creek Prospect contract and asked if the bond would have to be continued if he bought the property outright. The writer replied that the matter would have to be taken up with the Solicitor's office before a reply could be made. He said that there was no hurry as the property would not be bought before next year. He was also wondering if a bond would have to be carried if the property were bought under lease and option making periodic purchase payments; thus, the title would be left in the owner's name who would pay the mineral taxes. The writer promised to submit his questions to the Legal Division for a decision and then let him know.

On investigation in readying a reply to his letter of the same date, it was learned that the Puncheon Camp Creek Prospect contract did not involve a surety bond.

George C. Selfridge

George C. Selfridge
Chief, Division of Field Operations

GCSelfridge/hb (6/12/61)
Copy to: Director's Reading File
Dockets DMEA-4381, DMEA-4422,
DMEA-4580, and DMEA-5026
CA&A Division
G. C. Selfridge

43683

OFFICIAL FILE COPY
O. M. E.
RECEIVED JUN 12 1961
DATE

BENJAMIN H. PUTNAM
170 EAST PEARSON STREET
CHICAGO 11, ILLINOIS

Mr. George C. Selfridge
U.S. Department of Interior
Office of Minerals Exploration
Washington 25, D. C.

Dear Mr. Selfridge:

Confirming our telephone conversation of this morning concerning the following Lease Bonds as carried with American Surety Company, namely:

Policy No.	Amount	Date
10-580-434	$ 2,747.33	6/20/61 to 6/20/62 Contract IDM-E 1215 Zinc
10-560-719	14,822.48	10/18/60 to 10/18/61 Contract IDM-E 1022

Is it necessary for us to continue to have these bonds in force and on what date should they be cancelled. Also does this apply to any other bonds which may be in force and when should they be cancelled?

Would appreciate your forwarding any correspondence to me at the above address.

Sincerely yours,

B. H. PUTNAM

BHP:jd

June 9, 1961

NATIONAL LEAD CO

ST. LOUIS SMELTING AND REFINING DIVISION

FREDERICKTOWN, MISSOURI

May 19, 1961

P.O. BOX [illegible]

United States
Department of the Interior
Office of Minerals Exploration
Washington 25, D.C.

Attn: Mr. George C. Selfridge, Chief
Division of Field Operations

Re: DMEA - [illegible] (Zinc)
Contract [illegible]

Gentlemen:

A copy of the Report of Review pertaining to the subject contract was recently forwarded to us by our New York Office.

It appears that an additional $5.52 is due us following the Report of Review. We, therefore, make claim for this amount.

Please send your check to us for my attention.

Very truly yours,

E.A. Burns
Chief Accountant

[illegible]

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
5/22	gad	VVO

MAY 2 2 1961

Memorandum

To: Chief, Fiscal Section
Division of Administrative Services
Office of the Secretary

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

Attached are the original and two thermofax copies of a letter dated May 19, 1961, from the National Lead Company, Fredericktown, Missouri, claiming an additional $5.62 under the subject DMEA contract. This amount is stated on a Report of Review dated December 7, 1960, as being payable to the National Lead Company if claimed.

Please make the requested payment and return the thermofax copies of the claim letter to OME after notation thereon of your voucher number and date.

Attachment

EDTalbert/cac
May 22, 1961

cc to: Docket
Director's Reading File
CA & A Division
Acting Field Officer, Region IV (2)

43683

NATIONAL LEAD COMPANY
ST. LOUIS SMELTING AND REFINING DIVISION
FREDERICKTOWN MISSOURI
P.O. BOX 551
TELEPHONE 666

May 19, 1961

5/22 gad
5/22 [illegible]
V.P.
800
500

United States
Department of the Interior
Office of Minerals Exploration
Washington 25, D.C.

Attn: Mr. George C. Selfridge, Chief
Division of Field Operations

Benz Putnam

Re: DMEA - 4580 (Zinc)
Contract IDM-K1088

Gentlemen:

A copy of the Report of Review pertaining to the subject contract was recently forwarded to us by our New York Office.

It appears that an additional $5.62 is due us following the Report of Review. We, therefore, make claim for this amount.

Please send your check to us for my attention.

Very truly yours,

F.A. Buerke
Chief Accountant

FAB:mcc

NATIONAL LEAD COMPANY
MINING DEPARTMENT
111 BROADWAY
NEW YORK 6, N.Y.

GLOYD M. WILES
MANAGER

OFFICIAL FILE COPY
O. M. E
RECEIVED JAN 12 1961

DATE	INITIALS	
1-18	gad	220
1/19	[illegible]	800
1-13	Murphy	500
		220

January 10, 1961

United States Department of the Interior
Office of Minerals Exploration
Washington 25, D.C.

Attention: Mr. George C. Selfridge,
Acting Director

RE: DMEA - 4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

Dear Sirs:

This will acknowledge your letter of January 3, 1961, transmitting a copy of certification of discovery or development to the Operator under the contract referred to above.

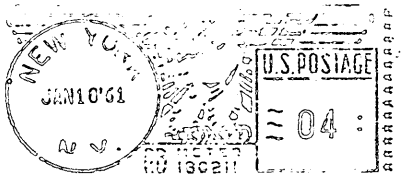
Yours very truly,

Gloyd M. Wiles

GMW:ACB

CC: Mr. J.J.Lawlor

NATIONAL LEAD COMPANY
111 Broadway
NEW YORK 6, N. Y.



U. S. Department of the Interior

Office of Minerals Exploration

Washington 25, D.C.

Attention: Mr. George C. Selfridfe,
Acting Director

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
12/23	Murphy	500
	[illegible]	500
	[illegible]	140
	[illegible]	140
[illegible]	[illegible]	800
1/3/61	[illegible]	130
1/3-61	[illegible]	110
1-3	gad	220
		500

Mr. Benjamin H. Putnam
512 Third Street
Marietta, Ohio

JAN 3 1961

Re: IMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

Dear Mr. Putnam:

Enclosed is a certification of discovery or development that covers all the land described in Article 2 of the contract.

By the terms of the Exploration Project Contract, as amended, and the certification, all minerals mined or produced from May 20, 1957, to May 20, 1980, are subject to the Government's percentage royalty as set forth in the contract until the sum of $77,173.05 is repaid to the Government. 77,178.67

Royalty payments should be made to the Field Officer, OME, Region IV, Room 11, Post Office Building, Knoxville 2, Tennessee, by the purchaser, with checks drawn payable to the Office of Minerals Exploration. The purchaser should be advised to deduct royalties from the amount due on each shipment and send the check directly to the Field Officer. Each check should be accompanied by suitable sales evidence - such as copies of settlement sheets - showing the name of the purchaser, the quantity and grade of the products sold, and the price and charges, certified to be correct by the purchaser.

You are requested to notify the Field Officer of any changes in ownership or production rights that may have any effect on the Government's right to its percentage royalty. Your attention is called particularly to Article 2(d) of the contract relating to the preservation of the Government's right to a percentage royalty on production. Also when production starts, please notify the Field Officer. Thereafter, if production ceases for any extended period, please notify him accordingly at six-month intervals.

FMMurphy/gla
12-23-60

Sincerely yours,

/s/ George C. Schridge

Acting Director

cc to: National Lead Company, Assignor
Director's Reading File
Frank E. Johnson
Review Committee
Region IV
CA&A Division
Enclosure
Harold Kirkemo, USGS
Docket
Chron

43683

Re DMEC-4580

File for reference

Mr. Selfridge:

Instead of mentioning amount repayable, letters should have stated "amount contributed by Govt."

However, I suggest we let it go. Then, if either assignee or assignor claim additional amounts, amend the letters at a later date.

Talbut
12/29/60

MNE Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
1/3/61	FMurphy	500
	Gerrard	500
	See attached	140
		~~140~~
1/3/61	on leave	800
1/3/61	GCS	130
1/3/61	on leave	110
1-3	gad	220
		500

JAN 3 1961

National Lead Company
111 Broadway
New York 6, New York

Re: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

Gentlemen:

Enclosed is a copy of a certification of discovery or development, with copy of covering letter of today to the Operator, which has been issued pursuant to the terms of the above-referenced contract.

This correspondence relates to the subject contract signed by your company under the date of May 20, 1957, the assignment of which to Benjamin H. Putnam was approved by the Government on April 14, 1958, without releasing the Assignor (National Lead Company) from any of the terms, provisions, and conditions of the contract. The Government's prior lien on the land and upon any production therefrom will continue in existence for the length of time mentioned in the enclosed copy of the letter to the Operator. You are obligated during that period to commit no act and to assert no claim in conflict with the Government's rights under the agreement signed by the company, and to give advance notice of the Government's rights to any transferee or lessee of any part of your interest in the land or the production therefrom.

Sincerely yours,

/s/ George C. Selfridge

Acting Director (SLB)

Enclosures
FMMurphy/gla 12-23-60
GCSelfridge/gla 1-3-61
cc to: Director's Reading File
Frank E. Johnson
Review Committee
Region IV
Harold Kirkemo, USGS
CA&A Division
Docket
Chron

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
12/23	Murphy	500
	Wilson	500
	Sellers	140
		140
	Talbot	800
		130
		110
		220
		500

National Lead Company
111 Broadway
New York 6, New York

Re: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

Gentlemen:

Enclosed is a copy of a certification of discovery or development, with copy of covering letter of today to the Operator, which has been issued pursuant to the terms of the above-referenced contract. This correspondence relates to the subject contract signed by your company under the date of May 20, 1957, the assignment of which to Benjamin H. Putnam was approved by the Government on April 14, 1958, without releasing the Assignor (National Lead Company) from any of the terms, provisions, and conditions of the contract. The Government's prior lien on the land and upon any production therefrom will continue in existence for the length of time mentioned in the enclosed copy of the letter to the Operator. You are obligated during that period to commit no act and to assert no claim in conflict with the Government's rights under the agreement signed by the company, and to give advance notice of the Government's rights to any transferee or lessee of any part of your interest in the land or the production therefrom. In the event the Government is not paid royalty on production under the contract, it may look to your company for payment thereof.

Sincerely yours,

Acting Director

Enclosures

FMMurphy/gla
12-23-60

cc to: Director's Reading File
Frank E. Johnson
Review Committee
Region IV
Harold Kirkemo, USGS
CA&A Division
Docket
Chron

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
12/23	Murphy	500
	[illegible]	500
	[illegible]	140
	[illegible]	140
12/29	Talbert	800
12/30	[illegible]	130
1/3/61	Dubrave	110
1-3	gad	220
		500

JAN 3 1961

Mr. Clarence A. Fredell
Director, Technical Research and
Development Division
Defense Materials Service
General Services Administration
6018 GSA Building
Washington 25, D. C.

Re: IMEA-4580 (Zinc)
Benjamin M. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

Dear Mr. Fredell:

I am enclosing one copy of a certification of discovery or development relating to the subject exploration contract.

The contract, dated May 20, 1957, covered an exploration project estimated to cost $170,125.00, with Government participation amounting to $85,062.50. Total accepted costs of the project were $154,387.34, of which the Government's share amounts to $77,193.67.

The project work covered 14 tracts of land aggregating 936 acres in the Copper Ridge zinc district of eastern Tennessee. The area lies about five miles southwest of the village of Thorn Hill on Tennessee Highway 131 and U. S. 25 E. Work completed consisted of core drilling 91 holes, aggregating 47,838 feet, on widely-spaced fences. In addition, Mr. Putnam drilled six holes, totalling 3,351 feet, during the contract period without IMEA aid.

Geologic studies of the contract drilling indicated the presence of one ore body estimated to contain 450,000 tons of ore averaging 3% zinc on the Green-Dalton tract. The indicated trend of this body to the southeast on subordinated land was not explored. Additional closer spaced drilling will probably increase the estimated ore reserves in the above-mentioned deposit and might find other ore bodies in the project area.

FMMurphy/gla
12-23-60

Sincerely yours,

/s/ George C. Schilling (2/2)
Acting Director

cc to: Director's Reading File
Frank E. Johnson
Review Committee
Region IV
Harold Kirkemo, USGS
Docket
Chron

Enclosure

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
12/22	GCS	120
12/22	[illegible]	124
	[illegible]	500
12/22	[illegible]	220
		500

DEC 22 1960

Memorandum

To: Mr. Robert A. Laurence
U. S. Geological Survey
Room 11, Post Office Building
Knoxville 2, Tennessee

From: Chief, Division of Field Operations

Subject: Records for Region IV, OME, Knoxville Official File
DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Punchbowl Camp Creek Prospect
Grainger County, Tennessee
Contract Ldm-21088

Attached are a Report of Review dated December 7, 1960, with original transmittal memorandum of December 7, 1960, a copy of the Operator's final voucher with narrative for June 1960, a copy of a memorandum dated December 19, 1960, to the Chief, Fiscal Section, Division of Administrative Services, Office of the Secretary, approving payment of the final voucher, a copy of a letter dated December 19, 1960, to the Assignee-Operator from the Chief, Division of Field Operations, and a copy of a letter dated December 19, 1960, to the Assignor from the Chief, Division of Field Operations.

/s/ George C. Selfridge

Attachments

(HB)

GCSelfridge/hb (12/22/60)
Copy to: Docket DMEA-4580
Director's Reading File
CA&A Division
G. C. Selfridge
Chron

43683

Cal

DEC 19 196

Mr. Benjamin H. Putnam, Assignee
512 Third Street
Marietta, Ohio

Re: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

Dear Mr. Putnam:

Enclosed for your information and files is a copy of a Report of Review on the project costs under the subject contract. The balance due of $4,456.96 will be paid shortly.

Sincerely yours,

George C. Selfridge

Chief, Division of Field Operations

Enclosures

LGHouk/GCSelfridge/gla/fw-12/16/60

cc: Docket (white)
Director's Read File
CA&A Division
Reg. IV (1)
Fiscal Section, Div. Admin. Services
Mr. Houk (pink surname copy)
Chron.

Cie 210

National Lead Company, Assignor
111 Broadway
New York, New York

Re: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Punsheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

Gentlemen:

Enclosed for your information and files is a copy of a Report of Review on the project costs under the subject contract.

Sincerely yours,

George C. Selfridge

Chief, Division of Field Operations

Enclosure

LGHouk/GCSelfridge/gla/fw-12/16/60

cc: Docket (white)
Director's read. file
CA&A Division
Reg. IV (1)
Fiscal Section, Div. Admin. Services
Mr. Houk (pink surname copy)
Chron.

Memorandum

To: Chief, Fiscal Section, Division of Administrative Services, Office of the Secretary

From: Chief, Division of Field Operations, OME

Subject: [illegible]-4380 (Zinc)
Benjamin H. Putnam, Assignee
Purchase Camp Creek Prospect
Grainger County, Tennessee
Contract I[illegible]-[illegible]

Attached is the original of a Report of Review by the Contract Administration and Audit Division, OME, on the project costs under the subject contract in which we concur. The original (with supporting documents) and two copies of the final voucher (June 1960) accompany the report.

The indicated balance due the Operator may be paid.

George C. Selfridge

Attachments

LGHouk/GCSelfridge/gla/fw-12/16/60
cc: Docket (white)
Director's Reading File
CA&A Division
Reg. IV (with copy of Report of Review)
Mr. Houk (pink surname copy)
Chron.

Docket

PROJECT SUMMARY REPORT

By: F. M. Murphy December 12, 1960

1. DMEA-4580 (Zinc)
Contract Idm-E1088

Operator:

Original: National Lead Company
111 Broadway, New York 6, N. Y.

Assignment of contract to Benjamin H. Putnam, 512 Third Street, Marietta, Ohio, effective March 12, 1958, approved by Administrator, DMEA, April 14, 1958.

Operator's Property Rights: (Includes lands added in amendments).

Agreements to explore and option to purchase mineral rights on the following land in Grainger County, Tennessee, for the Viva M. and W. H. Stapleton tract the option is to purchase the entire fee simple estate.

Owners	Acres in tract
D. R. Coffman	25
Austin & Docie Johnson	45
Pryor & Gracie Acuff	45
Elvin & Bessie Jackson	105
S. S. & Sallie Breeding	51
J. C. & Imogene McGinnis	62
T. A. & Gertrude Green, and A. B. Dalton	58
Elmer & French Breeding	15
Dave & Mary Jackson	~~100~~ 132
H. B. & Gynee Winstead	51
W. B. & Sarah Dalton	77
Rosa Bullen, Widow	~~29~~ 60
Viva & W. H. Stapleton	218
William & Hance Johnson	55
Total	~~936~~ 999 acres

2. Contract dated May 20, 1957.

The project work started on July 17, 1957, and was completed on June 29, 1960.

Amendments:

No. 1, dated December 17, 1957, adds W. H. Johnson tract.
No. 2, dated June 6, 1958, allows auxiliary strike as well as "dip" fences.
No. 3, dated October 24, 1958, revises spacing of holes on dip and strike fences.
No. 4, dated July 7, 1959, extends completion date from June 30 to December 31, 1959, and increases royalty period to 22 years.
No. 5, dated November 6, 1959, extends completion date to June 30, 1960, the royalty period to 23 years, and contains a pseudo-certification if all work is not completed by June 30, 1960.

Final Reports:

Operator's received December 5, 1960. The report is considered acceptable by OME.

Work Authorized

A series of widely spaced dip fences not less than 1,200 feet apart, then drill auxiliary dip and strike fences not less than 600 feet apart with holes spaced not less than 200 feet apart, except that with prior Government approval the spacing may be reduced to 100 feet.

Estimated Costs

AX diamond drilling 50,000 feet @ $3.00/ft.	$150,000.00
Reaming for AX casing, 5,000 feet @ $2.00/ft.	10,000.00
Incidental allowance for each foot of hole completed, 50,000 feet @ $0.18/ft.	9,000.00
Core boxes, 150 @ $2.00/each	300.00
Sample analyses, 550 @ $1.50/sample	825.00
Total	$170,125.00
Government participation @ 50%	$85,062.50

Acceptable Costs

	Units	Unit Cost	Total
Diamond drilling	47,838'	$2.98/ft.	$142,596.50
Reaming	1,266'	2.00/ft.	2,532.00
Incidental allowance	47,838'	0.18/ft.	8,610.84
Core boxes	150	2.00/box	300.00
Sample analyses	232	1.50/sample	348.00
Total acceptable cost			$154,387.34
Government participation @ 50%			77,193.67

3. Audit Report of Review, dated December 7, 1960.

Total cost billed by Operator	$154,346.09
Exceptions: (hauling core, capping holes)	- 22.75
Acceptable costs not claimed (assays & core boxes)	+ 64.00
Total acceptable costs if claimed	$154,387.34
Paid to date	77,716.09
Balance due Assignee	4,456.96
Additional payable if claimed:	
By Assignor	5.62
By Assignee	15.00

4. Certification, dated **January 3, 1961**

5. Excerpts from Operator's Final Report:

> The Puncheon Camp Creek area explored under this contract lies in the Copper Ridge zinc district along Tennessee Highway 131, five miles southwest of Thorn Hill, and about 12 miles southwest of the area drilled under Contract Idm-E1176 (DMEA 4850) by New Jersey Zinc Company.
>
> The area is underlain by Ordovician Chicamauga limestone and the Mascot, Kingsport, and Longview dolomite formations in decending order. The potential zinc (sphalerite) bearing horizons are in the Kingsport formation which is divided into an upper and lower member at the top of the "R" bed of shaly

coarse crystalline dolomite which may be brecciated. The upper member averages 140 feet in thickness and the lower, 100 feet.

During the period of the contract, 97 holes were drilled in the project area, 91 with Government aid and six by B. H. Putnam for his own account. Prior to the contract (1953), New Jersey Zinc Company drilled 16 holes in the Stapleton tract. Geologic studies of the contract drilling results indicate the presence of an ore body 1,400 feet in length averaging 100 feet in width and 16 feet in depth in the T. A. Green-A. B. Dalton tract. This ore body, estimated at 450,000 tons averaging 3% zinc may continue southeast into the H. B. Winstead tract.

6. Conclusion:

Aside from the holes indicating the above-mentioned ore body, one hole J. A.-7 on the Elvin Jackson tract penetrated eight feet of material assaying 12.76% zinc. Drilling to intersect an extension of this mineralization was not successful. The other holes were barren or indicated minor zinc mineralization. However, these holes are so widely spaced it is possible that they could have missed other ore bodies that might occur in the project area.

F M Murphy

F. M. Murphy

F. M. Murphy:kb - 12-12-60
cc to: Docket
Mr. Johnson
Director's reading file
Mr. Murphy
Chron.

17

OFFICE OF MINERALS EXPLORATION

WORK COMPLETED ANALYSIS

X Certified 1-3-61

After final audit or review report is received, prepare in duplicate. File original in official docket. Send copy to Code 210.

Operator: Benjamin H. Putnam, Assignee

Actual Cost: X

State: Tennessee — Grainger County

Agreed Unit Cost:

Final Report of Audit:

Commodity: Zinc

Docket No.: DMEA-4580

Final Report of Review: 12-7-60

Contract No.: Idm-E 1088

Type of Work (Use these categories only)	Authorized by Contract and Amendments		Completed and Paid for		Net cost after sale of Gov't. Property
	Units (Feet)	Cost 1/	Units	Cost 1/	
Drifting & Crosscutting					
Raising					
Shafts					
Winzes					
Drilling (Specify) AX - Core	50,000	169,000	47,838	153,740	153,739.34
Surface Excavation					
Underground Excavation					
Roads and Trails					
Operating Equipment Purchased					
Surface Rehabilitation & Repairs					
Underground Rehabilitation					
New Building, Improvements, etc.					
Other (Specify) Core boxes $2.00/each		300		300	300.00
Analyses $150/sample		825		348	348.00
Totals		$170,125		$154,388	2/ 154,387.34

1/ Round off to dollars.
2/ Net cost total must agree with final report of audit or review.

Prepared by J. M. Murphy Date 1/4/61

52616

MMI Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
12-7	gad	220
		1V0
		500
		1V4

DEC 7 1960

Memorandum

To: Chief, Division of Field Operations

From: E. D. Talbert, Acting Chief (Signed) E. D. Talbert
Contract Administration and Audit Division

Subject: DMSA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

As requested by Mr. Houk's July 26 memorandum, a Report of Review in lieu of a final audit of the subject contract has been prepared. The original and three copies are attached.

If you concur in the facts as stated in this Report of Review, please make the distribution authorized by section 4 of OMS Circular 2, dated February 17, 1960. If for any reason you do not concur, please return the original and all copies to this Division with your comments.

The extra copy of the Report of Review is for forwarding to the Operator-Assignor (National Lead Company) as notification that an additional amount of $5.62 is payable upon claim of the $11.25 in acceptable costs stated in the schedule attached thereto.

The original and three copies of the final MF-104 and attachments are returned.

Attachments

EDTalbert/ama
December 7, 1960

Copy to: Docket
Director's Reading File
CA & A Division
Mr. Rothrock

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
ROOM 11 POST OFFICE BLDG
KNOXVILLE 2, TENN.

IN REPLY REFER TO:

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 5 1960

DATE	INITIALS	CODE
12-5	gad	110
		~~140~~
12/6	[illegible]	~~800~~
		~~124~~
		500

Memorandum

To: Mr. George C. Selfridge, Chief
Division of Field Operations, OME, Washington, D. C.

From: Robert A. Laurence

Subject: Operator's Final Report, DMEA-4580, Idm-E1088 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect, Grainger County, Tennessee

Enclosed are three copies of the Operator's final report on the Puncheon Camp Creek prospect, which were received today.

Robert A. Laurence

Robert A. Laurence

(See red-round folder marked Folder 1-A)

OPERATOR'S FINAL REPORT

OFFICIAL FILE COPY
O. M. -
RECEIVED OCT 3 1960

DATE	INI	
10-3	gad	VVO
	DEF	800
10-3	Murphy	500

REGION IV

SEP 30 1960

Mr. Roy E. Roach
Chief Accountant
Benjamin H. Putnam
P.O. Box 647
Marietta, Ohio

Re: DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract Idm-E1088

Dear Mr. Roach:

Reference is made to the letter of August 24, 1960, from Robert A. Laurence requesting the final operator's report on the subject contract. We shall be pleased to receive this report as soon as practicable.

Sincerely yours,

Lawrence G. Houk

Lawrence G. Houk
Acting Field Officer
Region IV

LGHouk/fw-9/28/60

cc: OME Washington Office (2)
Reg. IV (2)
Chron - Mr. Houk

1 V 4

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 25 1960

DATE	INITIALS	CODE
8-25	gad	220
8/26	[illegible]	800
		500

Room 11, Post Office Building
Knoxville 2, Tennessee

August 24, 1960

Mr. Roy E. Roach, Chief Accountant
B. H. Putnam, Operator
P. O. Box 647
Marietta, Ohio

Re: DMA-4580 (Zinc)
Punchson Camp Creek
Grainger County, Tennessee
Contract No. Ids-E1088
DMA-5026 (Zinc)
Luttrell Area
Union County, Tennessee
Contract No. Ids-E1215

Dear Mr. Roach:

Reply to your letter of August 15 has been delayed because I was out of the city. We received your final geologic and engineering report on the Luttrell project (DMA-5026) on April 15, 1960, and it was accepted by the Government. We have not yet received the final report on Punchson Camp Creek (DMA-4580) on which drilling has only recently been completed.

Very truly yours,

Robert A. Lawrence

RAL/mg
cc - Mr. L. C. Houk (2)
Mr. V. J. Lynch
Mr. Helmuth Hedou, Jr.
Files

124

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 1, POST OFFICE BLDG.
KNOXVILLE 2, TENNESSEE

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 16 1960

DATE	INIT.	CODE
8-16	gad	VVO
8/16	[illegible]	800
8/17	[illegible]	800

August 15, 1960

Memorandum

To: L. G. Houk, Acting Field Officer, Region IV

From: V. J. Lynch, Knoxville, Tennessee

Subject: Assay Verification-DMEA-4580, Idm-E1088-Zinc. B. H. Putnam, Puncheon Camp Creek Area, Grainger County, Tennessee.

Mr. Fred Fischer, representing B. H. Putnam was requested to submit certification for assays vouchered in May 1960. The samples for May were analyzed by New Jersey Zinc Company and a certification to this effect will be sent direct to you within the next few days.

V. J. Lynch

V. J. Lynch

OFFICIAL FILE COPY
O. M. F.
RECEIVED AUG 3 1960

DATE	IN	
8-3	gad	770
8-4	407	800
		500

AUG 3 1960

Memorandum

To: Mr. Victor Lynch, Region IV

From: Lawrence G. Houk, Acting Field Officer, Region IV

Subject: Assay verification — DMFA-4580 (Zinc)
Benjamin R. Putnam
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract No. 1088

The May, 1960 voucher did not have assay certificates for the ten assays vouchered. Perhaps your file may contain these, if not we will require the certificates from the company if they are to be paid for these assays.

LGHouk:gad 8/3/60

Copy to: Dir. R. File
Wash. office
Chron.

(See L. G. Houk memo August 18, 1960, to Fiscal Section, and attachment, filed with May 1960 voucher)

JUL 28 1960
O.M.E.

July 26, 1960

Memorandum

To: Contract Administration & Audit Division
Office of Minerals Exploration, Washington, D. C.

From: V. J. Lynch, Mining Engineer- Knoxville, Tenn.

Subject: Final Monthly Report & Voucher - DMEA-4580 (zinc)
B. H. Putnam, Operator
Puncheon Camp Creek Area, Grainger County, Tenn.
Idm-E1088.

Work on the subject contract was completed June 30, 1960.

The number of units of work completed by the Operator and accepted by the Field Team are as follows:

Diamond drilling	47,838 feet
Feet of hole reamed	1,266 "
Samples analyzed	237
Core boxes used	150

An acceptable final engineering and geological report was received DEC 1 1960.

The total amount of $72,716.09 has been paid todate to the Operator; $4,445.57 having been withheld pending final audit or review.

A report of Review is requested.

The original and three copies of the June 1960 final monthly report and voucher are enclosed.

L. G. Houk
Acting Field Officer
OME, Region IV

VJL/zm
Houk--3
Lynch
Knoxville File

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 1, POST OFFICE BLDG.
KNOXVILLE 2, TENNESSEE

June 22, 1960

Memorandum

To: L. G. Houk, Acting Field Officer, Region IV

From: OME Office - Knoxville, Tennessee, Region IV

Subject: Operator's Monthly Report and Voucher-May 1960
DMEA-4580, Idm-E1088, B. H. Putnam
Puncheon Camp Creek Area

Enclosed is the original and three copies of the subject report. Government participation $4,545.37. Please notify this office if any change is made in the totals.

V. J. Lynch

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 1, POST OFFICE BLDG.
KNOXVILLE 2, TENNESSEE

Sent to Spokane 7/6/60

June 21, 1960

Memorandum

To: L. G. Houk, Acting Field Officer, OME, Region IV

From: Robert A. Laurence, Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088(zinc) B. H. Putman, Assignee
Puncheon Camp Creek Area, Grainger County, Tenn.

We were advised today that the Operator expects to complete the current holes at this project about the 25th of June. As there is insufficient time to complete a new hole, work will be stopped at that time. The Operator estimates that nearly 90% of the proposed work will have been completed.

Robert A Laurence

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 25 1960

DATE	INITIALS	CODE
5-25	gad	120
5-25	[illegible]	500

REGION IV
Room 11, Post Office Building
Knoxville 2, Tennessee

MAY 25 1960

Mr. Roy E. Roach
Chief Accountant
Benjamin H. Putnam, Assignee
P. O. Box 647
Marietta, Ohio

Re: DMRA-4380 (Zinc)
Benjamin H. Putnam, Assignee
Punchbowl Camp Creek Prospect
Grainger County, Tennessee
Contract 14-2100

Dear Mr. Roach:

Your letter of May 21 was referred to me by Robert A. Lawrence on May 23.

The March voucher of DMRA-4380, Punchbowl Camp Creek Prospect, was delayed pending receipt of the Operator's final reports on DMRA-4422, Thorn Hill Area, and DMRA-5026, Luttrell Prospect. These reports received on April 13 have been accepted and the March voucher has been approved for immediate payment.

Sincerely yours,

Lawrence G. Houk
Acting Field Officer

LGHouk/fw-5/25/60
cc: GARA Div.
Reg. IV (2)
Mr. Selfridge
Chron (Mr. Houk)

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 1, POST OFFICE BLDG.
KNOXVILLE 2, TENNESSEE

May 19, 1960

Memorandum

To: L. G. Houk, Acting Field Officer, OME - Washington

From: V. J. Lynch, U. S. Bureau of Mines, OME - Knoxville

Subject: Monthly Reports & Vouchers. April 1960.

Attached are four copies each of the following vouchers:

DMEA-4580, Idm-E1088 (zinc) B. H. Putnam, Puncheon Camp Creek, Grainger County, Tennessee
Government's participation--$4,072.39.

DMEA-4850, Idm-E1147 (zinc) The New Jersey Zinc Company Little WAr Creek Area Hancock County, Tennessee
Government participation---$3,464.52

Please return copy for this office.

V. J. Lynch

z

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 1, POST OFFICE BLDG.
KNOXVILLE 2, TENNESSEE

April 22, 1960

OFFICIAL FILE COPY
O. M. E.
RECEIVED APR 25 1960

DATE	INITIALS	CODE
4-25	gad	990
4/29	[illegible]	800
4-26	[illegible]	~~500~~

Memorandum

To: L. G. Houk, Acting Field Officer, OME-Region IV
Washington, D. C.

From: V. J. Lynch, OME Office-Knoxville, Tennessee

Subject: March Monthly Report & Voucher: DMEA-4580, Idm-E1088
B. H. Putnam, Puncheon Camp Creek Area
Grainger County, Tennessee

Enclosed are the original and two copies of the subject monthly report. Government participation $743.50.

V. J. Lynch

zm.
cc
~~Regional~~
Review Com.-2
Lynch
Files

BENJAMIN H. PUTNAM
170 EAST PEARSON STREET
CHICAGO 11, ILLINOIS

OFFICIAL FILE COPY
O. M. E.
RECEIVED APR 25 1960

DATE	INITIALS	CODE
4-25	gad	VVO
4/25		800
4-26		500

Mr. Frank E. Johnson,
Acting Director
Office of Minerals Exploration
Washington 25, D. C.

Re: DMEA-4580 (zinc)
Puncheon Camp Creek area
Grainger County, Tennessee
Contract Idm-E1088

Dear Mr. Johnson:

I hereby designate Raymond Eddy or Frederick T. Fischer as my agent to sign OME documents such as monthly reports, vouchers, etc. for the above mentioned project.

Very truly yours,

B. H. PUTNAM

BHP:jd

April 22, 1960

CC - Mr. Robert A. Laurence
Knoxville, Tennessee

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 1, POST OFFICE BLDG.
KNOXVILLE 2, TENNESSEE

OFFICIAL FILE COPY
O. M. E.
RECEIVED APR 25 1960

DATE	INITIALS	CODE
4-25	gad	220
4/25	[illegible]	800
4/26	[illegible]	500

April 20, 1960

Mr. B. H. Putnam
170 East Pearson Street
Chicago 11, Illinois

Re: DMEA-4580 (zinc)
Puncheon Camp Creek area
Grainger County, Tennessee
Contract Idm-E1088

Dear Mr. Putnam:

I have been advised by O.M.E's Washington office that it will be necessary for you to write a letter authorizing someone else to sign OME documents - such as monthly voucher, unless you wish to sign them personally. If you wish to designate one or more individuals at Jefferson City or Thorn Hill to sign these documents as your agent, please write a letter to Mr. Frank E. Johnson, Acting Director, Office of Minerals Exploration, Washington 25, D. C., giving the name of the authorized agent or agents.

Sincerely yours,

Robert A. Laurence

RAL/zm
cc
L.G. Houk
F. Johnson

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

ROOM 11 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
O. M. E.
RECEIVED APR 7 1960

DATE	INITIALS	CODE
4-7	gad	VVO
4/7	kaw	800
4/8	[illegible]	500

April 5, 1960

Memorandum

To: Operating Committee, OME - Washington

From: OME Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088 (zinc) B. H. Putnman, Assignee Chicago, Illinois. Puncheon Camp Creek Area, Grainger County, Tennessee

We are now advised that the Operator does not plan to assign the options in this contract area to The New Jersey Zinc Co., until after completion of the project. Other Putnam options on Copper Ridge have already been transferred to The New Jersey Zinc Company. Supervision of the Puncheon Camp Creek project will continue in the hands of Putnam's former geologists, W. T. Hill and Frederick Fischer.

Thus, no assignment of the Puncheon Camp Creek project seems to be necessary.

Robert A. Laurence
Robert A. Laurence
Executive Officer, OME-Reg.V

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

OFFICIAL FILE COPY O. M. E. RECEIVED MAR 21 1960		
DATE	INITIALS	CODE
3/21	RCW	225
		120
3/22		110
		500
		500
C.		

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 11 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

March 18, 1960

Memorandum

To: Operating Committee, OME Washington, D. C.

From: OME Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088(zinc) Benjamin H. Putnam, Chicago, Illinois, Assignee
Puncheon Camp Creek area, Grainger County, Tennessee

We have been advised by the Operator that he is negotiating with The New Jersey Zinc Company to transfer his interests in the Copper Ridge zinc district, including the Puncheon Camp Creek area, to that Company. Within the past six months, the Operator's two geologists in Tennessee, William Hill and Fred Fischer have resigned to accept employment with The New Jersey Zinc Company.

We have also been advised by New Jersey Zinc, through A. D. Hoagland, Chief Geologist, that they are interested in acquiring Putnam's properties, records, drill cores, etc., including assignment of the subject contract.

Three possibilities are being considered, with regard to the Puncheon Camp Creek area:

(1) Putnam will retain all property options until DMEA contract is completed, but The New Jersey Zinc will conduct the project for the Operator and will take over the options after the contract is terminated and, presumably, certified.

(2) Putnam will retain the options on Green Dalton, W. B. Dalton and Rosa Bullen properties; transfer all other options to New Jersey Zinc now; DMEA contract would be assigned to The New Jersey Zinc Company.

(3) Putnam will transfer all options to The New Jersey Zinc Company now; DMEA contract to be assigned.

We advised both Mr. Putnam and Mr. Hoagland that a written request for the assignment should be made, if either the second

or third alternative is followed. It is probable that The New Jersey Zinc's legal representative will call on OME's Washington staff for further information before completing the negotiations with Putnam.

Robert A. Laurence

Robert A. Laurence
Executive Officer, OME
Region V

V. J. Lynch

V. J. Lynch, Member
Bureau of Mines

MME Form 7
(10-58)

Docket No. DM[illegible]

OFFICIAL FILE COPY

Date	Surname	Code
3/17	Talbot	800
	[illegible]	500
	[illegible]	500
3/18	[illegible]	130
"	Johnson	110
3/18	gad	220

MAR 18 1960

Memorandum

To: Executive Officer, OME Field Team, Region V

From: Chairman, Operating Committee, OME

Subject: Docket No. DMEA-4422 (Zinc)
Benjamin H. Putnam, Assignee
Thorn Hill Area
Grainger County, Tennessee
Contract No. Idm-E1022
and
Docket No. DMEA-5026 (Zinc)
Benjamin H. Putnam
Luttrell Prospect
Union County, Tennessee
Contract No. Idm-E1215
and
Docket No. DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract No. Idm-E1088

A Termination Agreement on the first listed of the subject contracts was executed on February 5, 1959. The last project work was performed during September 1957. No funds have been withheld to insure the submission of the Operator's final report and, to date, it has not been received.

The second listed of the subject contracts was terminated under the terms of Amendment No. 2 for failure to resume work by March 9, 1959. The last project work was performed during August 1958. No funds have been withheld (in fact, a preliminary audit review indicates an overpayment of $5.90), and the Operator's final report has not been received.

The last listed of the subject contracts is in an active status with work only about three-fourths completed; however, under the provisions of Amendment No. 5, it will be terminated effective June 30, 1960.

43683

Considering all of the above facts, it appears appropriate to withhold further payments to the Operator under the last listed contract until the Operator's final reports on the other two projects are received. Please advise the Operator accordingly.

/s/ George C. Selfridge (HB)

APPROVED:

P. F. Yopes (HB)
Member, Bureau of Mines

W. P. Williams (HB)
Member, Geological Survey

EDTalbert/ama
March 17, 1960

Copy to: Docket - DMEA-5026
Director's Reading File
CA & A Division
Operating Committee
Mr. Bishop, USBM
Mr. Kirkemo, USGS
Mr. Rothrock, Room 7334, Interior

MME Form 7
(10-58)

Date	E COPY	Code

February 8, 1960

Memorandum

To: Hazel Berry, Secretary
Operating Committee

From: Grace L. Ault, Secretary
Division of Minerals

Subject: Amendment to contract

Mr. Murphy has reviewed and approved Amendment No. 6, dated January 14, 1960, to Contract No. Idm-E1088 (Docket No. DMEA-4580) Benjamin H. Putnam, Assignee, which was executed by the Operator and the Executive Officer, Region V.

GLAult/a
cc to: Docket
Chron

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 11 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

February 2, 1960

OFFICIAL FILE COPY
O. M. E.
RECEIVED FEB 4 1960

DATE	INITIALS	CODE
2/4	RCW	225
2/5	Murphy	500

Memorandum

To: Operating Committee, OME - Washington

From: Acting Executive Officer, OME - Region V

Subject: Signed Amendment No.6. DMEA-4580, Idm-E1088-zinc
B. H. Putnam, Assignee. Grainger County, Tennessee

Attached are the Government and Audit copies of the subject signed amendment.

The usual distribution of the other copies has been made.

V. J. Lynch

V. J. Lynch

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 11 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 18 1960

DATE	INITIALS	CODE
1-18	gad	rvo
		~~130~~
1/18	[illegible]	800
1/20	[illegible]	500

January 15, 1960

Memorandum

To: Operating Committee, OME - Washington

From: OME Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088(zinc) Benjamin H. Putnam, Assignee. Puncheon Camp Creek area, Grainger County, Tennessee.

Enclosed are two copies of a letter from the Operator's geologist, requesting addition of the Dave Jackson tract to the contract area. This tract was held under option by the Operator, prior to the date of the contract, and the option was renewed on June 9, 1958, so it does not come under the "automatic" inclusion provision. We have discussed this with Mr. Fischer and we agree that it is desirable to add this tract. In order to explore the area east of Puncheon Camp Creek, holes may be needed within 200-feet of the Jackson boundary, or actually on the Jackson tract.

In accordance with Order 2834, Section 2 (a) (3), we have prepared Amendment No.6, and sent it to the Operator for signature.

Enclosed are one copy each of the option agreement, and a map showing location of the Jackson tract.

[illegible]

Yes, However, the Special Agreement provision states that such land shall promptly be included in the contract by amendment.

[illegible]

Robert A. Laurence
Robert A. Laurence
Executive Officer, OME, Region V

V. J. Lynch
V. J. Lynch, Member
U. S. Bureau of Mines

Agreement 6/9/58 & map F.T. Fisher 2-23-58 left-hand side to be attached to Amd. #6

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 18 1960

DATE	INITIALS	CODE

P. O. Box 65
Thorn Hill, Tennessee

Mr. Robert A. Laurence
U. S. Department of the Interior
Office of Minerals Exploration
Room 11, Post Office Building
Knoxville 2, Tennessee

Re: DMEA Docket 4580 (Zinc) Idm-E-1088
Puncheon Camp Creek Area
Grainger County, Tennessee

Dear Mr. Laurence:

Enclosed are two copies of the mineral option covering the Dave Jackson tract of 132 acres. Also enclosed is a map showing the relationship of this tract to the Puncheon Camp Creek contract area to which it is adjacent.

It is our desire to add this Dave Jackson tract to the acreage covered by the contract in order that we may better explore the area east of Puncheon Camp Creek. Present data indicate the possibility of mineralization trending toward this tract.

Sincerely yours,

Frederick T. Fischer

Frederick T. Fischer

January 13, 1960

RECEIVED

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION

ROOM 11 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 18 1960

DATE	INITIALS	CODE

January 14, 1960

Mr. B. H. Putnam
170 East Pearson St.
Chicago 11, Illinois

Re: DMEA-4580, Zinc. Idm-E1088
Puncheon Camp Creek area
Grainger County, Tennessee
Amendment No.6

Dear Mr. Putnam:

As requested in a letter from Mr. Fischer, dated January 13, 1960, I have prepared Amendment No.6 to the Puncheon Camp Creek contract, adding the Dave Jackson tract to the project area.

If the proposed amendment meets with your approval, please sign all copies, keep the Operator's copy and return all the others to me. If any part of it does not have your approval, please return all copies unsigned, with suggested changes for our consideration.

Sincerely yours,

Robert A. Laurence
Executive Officer, OME
Region V.

RAL/zm
cc
F. Fischer
Opr. Com-2
Lynch
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

December 9, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 11 1959

DATE	INITIALS	CODE
12-11	gad	VVO
12-14	Murphy	FOO

Memorandum

To: Operating Committee, OME - ~~Washington~~ Washington

From: Executive Officer, Region V - Knoxville

Subject: DMEA-4580, Idm-E1088 (zinc) B. H. Putnam, Assignee
Amendment No. 5. Puncheon Camp Creek, Tennessee

Attached is the signed Government and Audit copy of the subject amendment.

The usual distribution of the other copies has been made.

Robert A. Laurence

Robert A. Laurence

zm

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-S POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
O. M. E.
RECEIVED DEC 10 1959

DATE	INITIALS	CODE
12-10	gad	VVC
12/9	[illegible]	800
12/11	[illegible]	[illegible]

December 8, 1959

Mr. B. H. Putnam
170 East Pearson St.
Chicago 11, Illinois

Re: DMEA-4580, Idm-K1088-sinc
Puncheon Camp Creek
Grainger County, Tennessee

Dear Mr. Putnam:

May I point out that time is running out on this contract? Unless Amendment No.5, which I sent you on November 9, is signed and returned to me the contract will expire on December 31 in accordance with the terms of Amendment No.4. We consider the remaining drilling to be well worth doing, and I hope you will execute the amendment promptly.

I understand that the drill rig is currently out of operation, for repairs. Because of the impending expiration date, and the probability that your November voucher may therefore be the final one, I must hold it in suspense until work is resumed. When drilling starts again, provided either that Amendment No.5 has been executed, or there is sufficient time to complete a hole before December 31, we will process the November voucher for payment.

With best wishes of the season, I am

Sincerely yours,

Robert A. Laurence
Executive Officer, OME
Region V

RAL/sm
cc
Opr. Com-2
Fischer
Finance
Lynch
Files

Executed Amt #5 Recd. 12/11/59

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
11/6	Murphy	500
	Lynaw	500
11/6	Talbot	800
11/6	[illegible]	130
11/6	Jones	110
11/10	RCW	220
		225

500

NOV 6 1959

Memorandum

To: Executive Officer, OME Field Team, Region V

From: Chairman, Operating Committee, OME

Subject: Docket No. DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract No. Idm-E1088

In accordance with the request of the Operator, dated October 5, 1959, and your recommendation, dated October 12, we are enclosing the original and four copies of proposed Amendment No. 5 (2 pages) to the above contract, signed by the Acting Director for the Government. We are also enclosing two extra copies for the use of the Field Team.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute all the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendations concerning any modifications.

(S)

George C. Selfridge

Enclosures

APPROVED:

Frank D. Lamb

Member, Bureau of Mines

Harold Kirkemo

Member, Geological Survey

FMMurphy/gla 11-6-59
cc to: Director's Reading File
Operating Committee
Mr. Bishop, USBM
Mr. Kirkemo, USGS
Docket
Chron

43683

Re: Proposed Amend. 5 to DMEA-4580

Pls. note this contract dated May 20, 1959, originally required completion by Aug. 20, 1958 of approx. 80 holes, total not more than 50,000 feet.

Two extensions of completion date have heretofore been given. Yet, through Sept. 1959 only 56 holes aggregating 33,836' have been drilled.

Talbut
11/6/59

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10/28	[illegible]	500
10/30	[illegible]	140
	[illegible]	
	[illegible]	
	App'd. Sol. Off.	

October 28, 1959

Memorandum,

To: Associate Solicitor, Division of Mineral Resources

From: W. R. Griswold, Chief
Division of Minerals, OME

RECEIVED
ASSOC. SOLICITOR
MINERAL RESOURCES

Subject: Preparation of Amendment No. 5
Docket No. DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract No. Idm-E1088

FROM SOLICITOR
NOV 5 - 1959
FOR SIGNATURE

Will you kindly prepare Amendment No. 5 in accordance with the following draft:

EXPLORATION PROJECT CONTRACT
BENJAMIN H. PUTNAME, ASSIGNEE
DOCKET NO. DMEA-4580

AMENDMENT NO. 5

It is agreed this _____ day of _____, 1959, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government," and Benjamin H. Putnam, Assignee, hereinafter called the "Operator," that Exploration Project Contract No. Idm-E1088 (Docket No. DMEA-4580), dated May 20, 1957, as amended, is further amended as follows:

1. The date fixed in Amendment No. 4 for completion of the work is extended from December 31, 1959, to June 30, 1960.

2. The maximum period for royalty payments and the liens to secure the payments thereof, provided for in Amendment No. 4, is increased from twenty-two (22) years to twenty-three (23) years from the date of the Contract.

8623

3. It is the essence of this Contract that the work be completed before the termination of the period here fixed for completion; and if it is not so completed in the manner required by the Contract, the following provisions shall thereupon become effective:

(a) The Contract and all obligations of the parties thereunder, except as otherwise herein expressly provided, shall be and are hereby terminated effective June 30, 1960, if the work is not completed on or before June 30, 1960.

(b) The Government will contribute only to the allowable costs of any work performed prior June 30, 1960.

(c) The Operator shall promptly perform all winding-up and settlement actions provided for in the Contract, including the rendering of the final report and final account.

(d) The Operator, as principal if the Operator is the producer, or as surety if the Operator is not the producer (for example, if the Operator either transfers or fails to retain its interest in the land), shall pay the Government the royalty on production provided for in the Contract, in the same manner and amount and for the full period provided for in the Contract, as amended, as if certification of discovery or development had been made, such certification being hereby waived by the Operator. In addition, all rights of the Government provided for in the Contract

with respect to a certification of discovery or development, and all rights of the Government as to reports (including the preservation of the Operator's records), audit, and recovery of any overpayment, are preserved.

(e) The Operator hereby releases and agrees to save the Government harmless from all demands under and arising out of the Contract, except as otherwise provided for in this Amendment No. 5.

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By_____
Acting Director, Office of
Minerals Exploration

_____
Benjamin H. Putnam, Assignee

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 11 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

October 12, 1959

OFFICIAL FILE COPY O. M. E. RECEIVED OCT 14 1959		
DATE	INITIALS	CODE
10/14	RCW	225
		~~120~~
10/15	[redacted]	500

Memorandum

To: Operating Committee, OME -Washington, D. C.

From: Executive Officer, OME - Region V - Knoxville, Tenn.

Subject: DMEA-4580, Idm-E1088-Zinc. B. H. Putnam, Chicago, Ill. Puncheon Camp Creek, Grainger County, Tennessee

Enclosed are the original and one copy of the Operator's request for an extension of time to complete this project, as discussed in the Field Team's memorandum of October 2.

We consider this to be a reasonable request, and it is certainly in the Government's interest to continue the authorized drilling as long as good chances of increasing the tonnage of ore-grade material remain. The Operator has been carrying out this work satisfactorily with a single drill rig.

Therefore, approval of the Operator's request of an extension to June 30, 1960 is recommended.

Robert A. Laurence

Robert A. Laurence

BENJAMIN H. PUTNAM
170 EAST PEARSON STREET
CHICAGO 11, ILLINOIS

Mr. Robert A. Laurence
U.S. Department of Interior
Office of Minerals Exploration
Room 11 Post Office Building
Knoxville 2, Tennessee

Re: DMEA-4580 (zinc) Idm-E1088
Puncheon Camp Creek Area
Grainger County, Tennessee

Dear Mr. Laurence:

We estimate that approximately 39,000 feet of the 50,000 feet of core drilling authorized under the above mentioned contract will be completed by the expiration date, December 31, 1959. By continuing with one drill rig for another six months at the present average rate of 1380 feet per month, an additional 8280 feet could be completed by June 30, 1960.

It would not be practical to speed up the rate of drilling so as to complete the entire footage by December 31, 1959. We consider that the results to date justify continuation of the project, therefore, we request an amendment to the contract extending the time for completion to June 30, 1960.

Sincerely ~~yours,~~

B. H. PUTNAM

BHP:jd

October 5, 1959

RECEIVED
OCT 12 1959
U. S. Geological Survey
Geologic [illegible]
Knoxville, Tenn.

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 11 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 5 1959

DATE	INITIALS	CODE
10/5	RCW	225
		130
10/6	[illegible]	[illegible]

October 2, 1959

Memorandum

To: Operating Committee, OME - Washington, D. C.

From: OME Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088 (zinc) B. H. Putnam, Chicago, Ill. Puncheon Camp Creek area, Grainter County, Tenn.

The Operator estimates that about 39,000 feet of the authorized 50,000 feet at this project, will be completed by December 31, 1959, the expiration date authorized by Amendment No.4. The Operator wants to continue drilling and, unless very unfavorable results are obtained in the next three months, we would favor continued drilling too. A substantial tonnage of ore-grade material, but not a commercial orebody, has been discovered and more drilling in favorable areas may increase this tonnage. The Operator was asked to submit a written request, which we will forward.

Purpose of this memo is to inquire whether an extension to June 30, 1960 may be approved. Our recommendation will accompany the Operator's request.

Robert A. Laurence

Robert A. Laurence
Executive Officer, OME
Region V

V. J. Lynch

V. J. Lynch, Member
Bureau of Mines

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 5 1959

DATE	INITIALS	CODE

October 2, 1959

Mr. B. H. Putnam
170 East Pearson St.
Chicago 11, Illinois

Re: DMEA-4580 (zinc) Idm-E1088
Puncheon Camp Creek area
Grainger County, Tennessee

Dear Mr. Putnam:

As discussed at our conference today with you and your staff, I understand that you will soon request an extension of the completion date of the Puncheon Camp Creek project beyond December 31, 1959.

Please send me your request at your earliest convenience, as the Field Team does not have the authority to approve this extension and we must forward it to Washington for approval.

It was a pleasure to discuss the projects with you and the others, and I hope you'll visit us again soon.

Sincerely yours,

Robert A. Laurence
Executive Officer, OME
Region V

RAL/xx
cc
Opr. Com-2
Lynch
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

August 10, 1959

Memorandum

To: Operating Committee - OME - Washington, D. C.

From: Executive Officer, OME - Region V - Knoxville, Tenn.

Subject: Amendment No.4 - DMEA-4580, Idm-E1088-zinc.
B. H. Putnam, Assignee
Puncheon Camp Creek, Grainger County, Tennessee

Attached are the Government and Audit copies of the signed subject amendment.

The usual distribution of the other copies has been made by this office.

Robert A. Laurence
Robert A. Laurence

OFFICIAL FILE COPY
O. M. E.
RECEIVED AUG 12 1959

DATE	INITIALS	CODE
8-12	gad	120
"	K	500

Form 7
(5-58)

OFFICIAL FILE COPY

Date	Surname	Code
7/7	Klugescheid	500
	Mr. Gravel	500
7/7	Talbert	800
7/7	GCS	130
"	Johnson	110
		~~200~~
		~~110~~
7-7	gad	220
		500

500

JUL 7 1959

Memorandum

To: Executive Officer, OME Field Team, Region V

From: Chairman, Operating Committee, OME

Subject: Docket No. DME-4580, Benjamin H. Putnam, Assignee, Puncheon Camp Creek Prospect, Grainger County, Tennessee, Contract No. Idm-E1088, Zinc.

We are enclosing the original and four copies of proposed Amendment No. 4 (one page) to the above contract, signed by the Acting Director for the Government. We are also enclosing two extra copies for the use of the Field Team.

It was not possible to accede to the request of the Operator, dated April 30, 1959, and your recommendation, dated May 5, 1959. As DMEA is in process of liquidation, a further extension than the one proposed in the amendment is not advisable. However, this extension of time will certainly permit a considerable amount of drilling even at the present rate of progress and, if they should put another drill to work, it should be possible to finish the drilling completely.

We note that the leases and options have run out in many cases and in others payments would be necessary. We have no information that these requirements have been complied with or of renewals but we would assume that everything is in order. It would be well to inquire if everything is all in good order before submitting the proposed amendment to the Operator. Kindly advise us as to the status of the agreements.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute all the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendations concerning any modifications.

Enclosures
APPROVED:

Frank D. Lamb (246)
Member, Bureau of Mines

Harold Kirkemo (245)
Member, Geological Survey

WPKlugescheid/er 7-7-59 (S) George C. Selfridge (246)

Copy to: Docket
Dir Read File
Op. Committee
Mr. Bishop, USBM
Mr. Kirkemo, USGS
Chron.

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF THE SOLICITOR
WASHINGTON 25, D. C.

JUL 6 1959

Memorandum

To: Acting Director, Office of Minerals Exploration

From: Acting Associate Solicitor, Division of Mineral Resources

Subject: Amendment No. 4, Docket No. DMEA-4580, Benjamin H. Putnam, Assignee, Puncheon Camp Creek Prospect, Grainger County, Tennessee, Contract No. Idm-E1088

We have drafted in final form the subject amendment pursuant to the memorandum to the Associate Solicitor, Mineral Resources dated July 2, 1959. The draft submitted by Mr. Griswold has been followed but we note the following matter is required for the completion of the document:

There are several agreements in the file which permit the operator to either purchase the mineral rights or pay annual rentals after certain dates. It may be that the operator has exercised his rights under the agreements or kept the agreements alive by paying the annual rentals but information to this effect should be obtained from the field and placed in the file.

Joseph M. Hernon
Joseph M. Hernon

Attachment

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code
7/2	Klugescheid	500

500

July 2, 1959

Memorandum

To: Acting Associate solicitor, Division of Minerals Resources

From: Chief, Division of Minerals

Subject: Preparation of Amendment No. 4, Docket No. DMEA-4580, Benjamin H. Putnam, Assignee, Puncheon Camp Creek Prospect, Grainger County, Tennessee, Contract No. Idm-E1088, Zinc.

Will you kindly prepare Amendment No. 4 as follows:

EXPLORATION PROJECT CONTRACT
BENJAMIN H. PUTNAM, ASSIGNEE
DOCKET NO. DMEA-4580

AMENDMENT NO. 4

It is agreed this _____ day of _____, 1959, between the United States of America, acting through the Department of the Interior, Office of Minerals Exploration, hereinafter called the "Government", and Benjamin H. Putnam, Assignee, that Exploration Project Contract No. Idm-E1088 (Docket No. DMEA-4580), dated May 20, 1957, as amended, is further amended as follows:

1. The date fixed in Amendment No. 2 for completion of the work is extended from June 30, 1959 to December 31, 1959.

2. The maximum period for royalty payments and the liens to secure the payments thereof, provided for in Amendment No. 2, is increased from twenty-one (21) years to twenty-two (22) years from the date of the Contract.

43683

This amendment shall not be construed to increase the estimated total cost of the project, the aggregate total amount which the Government may be required to contribute, or the fixed unit cost of any item of work.

Executed in quintuplicate the day and year first above written.

THE UNITED STATES OF AMERICA

By_____
Acting Director, Office of
Minerals Exploration

_____
Benjamin H. Putnam, Assignee

W. R. Griswold

WPKlugescheid/er
CC: Docket
Air Read File
Chron.

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code

June 30, 1959

Memorandum for the Files

From: W. P. Klugescheid, Mining Engineer
Division of Minerals, OME

Subject: Justification for Amendment No. 4, for Docket No. DMEA-4580, Benjamin H. Putnam, Assignee, Puncheon Camp Creek Prospect, Grainger County, Tennessee, Contract No. Idm-E1088, Zinc.

Progress on this project has been slow due to the depressed condition of the zinc market. The Operator requested a years extension of completion time in a letter dated April 30, 1959.

The Field Team recommended that the request be complied with and stated that it would be much easier to recommend a certification if there were some additional data to go on.

It is not considered feasible to grant this much additional time as the DMEA program is being liquidated but it was deemed possible to extend the completion time for six months.

This will be of mutual benefit to both the Operator and the Government as by drilling with only one drill a considerable number of holes could be drilled and if two drills were put to work it would be about possible to complete the program in the time allowed.

An additional year has been added to the royalty payment period.

No. pseudo certification has been tacked to the amendment as it is intended that this project be certified.

W. P. Klugescheid

W. P. Klugescheid

WPK/er
CC: Docket
Dir Read File
Chron.

43683

MME Form 7
(10-58)

OFFICIAL FILE COPY

Date	Surname	Code

June 30, 1959

Memorandum for the Dockets

From: Chief, Division of Base Metals

Subject: Phone Conversation with Executive Officer of Region V on
Docket No. 4286 (Zinc)
The New Jersey Zinc Company
Big War Creek Area
Hawkins and Hancock Counties, Tennesee
Contract No. Idm-E982

and

Docket No. DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract No. Idm-E1088

Mr. Lynch of Region V, phoned regarding the two referenced dockets. He was advised that we could not grant Putnam the requested year's extension of completion time but that perhaps a six months extension might be considered.

Re the New Jersey Zinc application for Termination Agreement, he was advised that this was in process.

W. R. Griswold

WRG/er
CC: Dockets (2)
Dir Read File
Chron.

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

May 22, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 25 1959

DATE	INITIALS	CODE
5/26	a	220
		500

Memorandum

To: Operating Committee, OME, Washington, D. C.

From: Field Team, OME, Region V, Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088 (Zinc)
Benjamin H. Putnam, Assignee, Chicago, Illinois
Puncheon Camp Creek Area, Grainger County, Tennessee

Reference is made to your memorandum of May 15:

Attached are two copies of a map showing location of all holes drilled in the Green-Dalton area of this contract, including no. 29 which is now in progress.

All holes drilled since the latest map was submitted are on this map, so that adding these to your existing maps will give the complete picture.

We again recommend approval of the time extension as requested by the Operator on April 30.

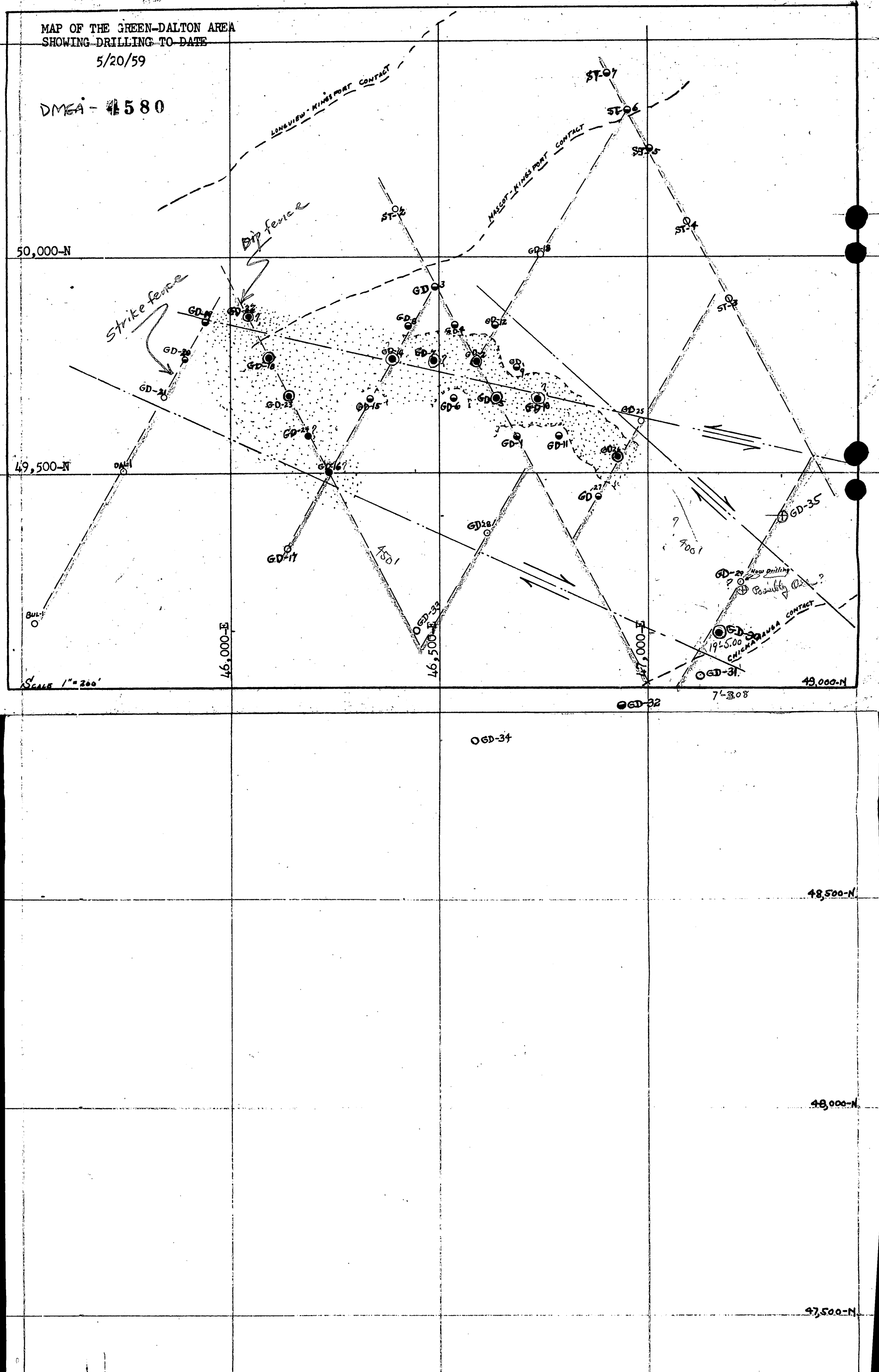
Robert A. Laurence
Robert A. Laurence
Executive Officer

V. J. Lynch
V. J. Lynch
Member, Bureau of Mines

Enclosures 2

MAP OF THE GREEN-DALTON AREA
SHOWING DRILLING TO DATE
5/20/59

DMEA - 4580



OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 25 1959

DATE	INITIALS	CODE

DMGA - 0 8 5 0

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 25 1959

DATE	INITIALS	CODE

OFFICIAL FILE COPY

Date	Surname	Code
5-15	Klugescheid	500
	Gravinell	500
5/15		130
"	Johnson	110
		~~100~~
		~~HB~~
5/15		220
		500

500

MAY 15 1959

Memorandum

To: Executive Officer, OME Field Team, Region V

From: Chairman, Operating Committee, OME

Subject: Docket No. DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract No. Idm-E1088

We refer to the request for an amendment, dated April 30, 1959, and your memorandum recommending approval thereof, dated May 5.

Will you kindly send us a map with all the holes drilled to date plotted thereon. This map should also be provided with the coordinate lines so that we will be able to plot the positions of future holes as the work progresses.

We have not received a map showing the positions of the drill holes for a long time and we can neither form a true picture of the results to date without one, nor can we decide whether the request should be granted or not.

/s/ George C. Selfridge

(HB)

APPROVED:

(sgd.) G. W. Josephson (HB)
Member, Bureau of Mines

Thor H. Kiilsgaard (HB)
Member, Geological Survey

WPKlugescheid/er 5-15-59
Copy to: Docket
Dir Read File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

43683

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 7 1959

DATE	INITIALS	CODE
5/7	G	220
		130
~~5/8~~	~~Kley~~	~~500~~

May 5, 1959

Memorandum

To: Operating Committee, OME, Washington 25, D. C.

From: Field Team, OME, Region V, Knoxville 2, Tennessee

Subject: Docket No. DMEA-4580, Contract No. Idm-E1088 (Zinc)
B. H. Putnam, Operator, Chicago, Illinois
Puncheon Camp Creek Area, Grainger County, Tennessee

Enclosed are the original and one copy of a letter from the Operator requesting a one-year extension for the subject contract.

Results to date have been encouraging, but it is doubtful if they would support certification of discovery at this time. We think there is a reasonable probability that completion of the project would result in a discovery.

Progress has been slow on this project because the Operator, in common with other Operators of zinc-lead contracts, has had to cut costs and reduce staff. We agree with Mr. Hill's proposal to proceed slowly enough to allow careful determination of each drill site on the basis of previously completed holes; however, we do think that two drill rigs, operating in separate parts of the area, would not be inconsistent with such a program. The 1500-foot per month average is apparently based on operation of a single drill rig.

In summary, we recommend approval of the request for an extension of time because (1) it would not be feasible to complete the authorized drilling before June 30, 1959, and (2) the amount of drilling which can be feasibly completed before that date will be inadequate to determine the zinc potential of the project area.

Robert A. Laurence
Robert A. Laurence
Executive Officer

V. J. Lynch
V. J. Lynch
Member, Bureau of Mines

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 7 1959

DATE	INITIALS	CODE

May 5, 1959

Mr. William T. Hill
Box 61
Thorn Hill, Tennessee

Re: Docket No. DMA-4580 (Zinc)
B. H. Putnam, Operator
Puncheon Camp Creek Area,
Grainger County, Tennessee
Contract No. Idm-51088

Dear Mr. Hill:

Your letter of April 30, requesting a one-year extension of time for completion of the Puncheon Camp Creek project has been forwarded to our Washington office, as the Field Team does not have the authority to approve such extensions.

We will notify you as soon as a decision is received.

Sincerely yours,

Robert A. Laurence
Executive Officer
OME Field Team, Region V

RAL/mg
cc - Operating Committee (2)
Mr. B. H. Putnam
Mr. V. J. Lynch
File

OFFICIAL FILE COPY
O. M. E.
RECEIVED MAY 7 1959

DATE	INITIALS	CODE

RECEIVED
MAY 4 - 1959
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

Mr. Robert A. Laurence
Executive Officer, OME
Region V
Knoxville, Tennessee

RE: ~~DMEA-4580~~, Idm-E-1088 - Zinc
~~Puncheon~~ Camp Creek Area
Grainger County, Tennessee

Dear Mr. Laurence,

The expiration date of the Puncheon Camp Creek contract is June 30, 1959. If we continue to drill 1500 feet per month, by June 30th we will have completed approximately 30,000 feet of the allotted 50,000 feet of drilling.

We feel that, to date, the program has been successful. Of the last twenty-seven holes drilled on the Green-Dalton farm, eleven have penetrated commercial mineralization, twelve non-commercial mineralization, and four holes were blank. This indicates that 85% of the area drilled is mineralized, and 40% of the area contains commercial mineralization. Ore penetration thicknesses range from 8½ feet to 36 feet, averaging 15 feet. The average grade is 3.08% zinc. It is our opinion that further drilling in this area will reveal a similar amount of mineralization.

The area east of where we are presently drilling (Stapleton farm and vicinity) has a great deal of potential. We recently obtained from New Jersey Zinc Company the drill logs of the holes they had drilled on the Stapleton farm. This information, coupled with our previous knowledge of the geochemistry and geology will be of a great benefit in the exploration of this area.

Drilling by National Lead Company on the west end of the project disclosed the presence of zinc mineralization in the vicinity of the "Elvin Jackson" anomaly. As you know, this area was not adequately explored. Exploration below this anomaly may disclose the presence of an ore body.

Our present rate of drilling (1500 feet per month) has proved to be very satisfactory to us. This allows us ample time to study each hole in detail and to fit it into the pattern. Rather than "plaster" the area with needless holes, as is usually the case with an intense drilling program, we would rather carefully study the previous drilling results before selecting the next drilling site. In our opinion, this approach increases the odds for a successful exploration program.

In summary, by June 30, 1959, we will have drilled approximately 30,000 feet of the 50,000 feet of the Puncheon Camp Creek contract. To date, it is our opinion that the program has been successful, but further drilling is necessary to test the areas adjacent to where we have been drilling. We feel that it is to our advantage as well as the government's to continue the present program.

By continuing the present rate of drilling, we should complete the program by June 1960. We are requesting that the expiration date of the contract be extended for an additional year to June 1960.

Very truly yours,

William T. Hill

WTH:JH

April 30, 1959

OFFICIAL FILE COPY
O. M. E.
RECEIVED JAN 21 1959

DATE	INITIALS	CODE
1-21	C	220
		500

Cy Sent to Selfridge

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

January 19, 1959

Memorandum

To: Operating Committee, OME - Washington 25, D. C.

From: OME Field Team, Region V - Knoxville, Tennessee

Subject: Mining World, January 1959

Your attention is directed to page 38 of the January "Mining World," in which the Puncheon Camp Creek project of B. H. Putnam (DMEA-4580), although not mentioned by name, is selected as the "Eastern Discovery of the Year."

We consider this somewhat like counting chickens before they are hatched (in fact, almost before the eggs have been laid), but at least it's nice to have a DMEA project recognized in such terms. The Operator's tentative estimate of reserves discovered to date is 300,000 tons of 3.5% zinc.

Robert A. Laurence
Robert A. Laurence
Executive Officer, OME
Region V

V. V. Lynch
V. V. Lynch, Member
Bureau of Mines

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

Office of Minerals Exploration
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
O. M. E.
RECEIVED NOV 24 1958

DATE	INITIALS	CODE
11-24	C	220
11-25	[illegible]	500

November 21, 1958

Memorandum

To: Operating Committee, OME, Washington, D. C.

From: Executive Officer, OME, Region V, Knoxville, Tennessee

Subject: Signed Amendment No. 3, DMEA-4580, Idm-E1088
Benjamin H. Putnam, Assignee
Puncheon Camp Creek area (zinc), Grainger County, Tennessee

Transmitted are the Government and Audit copies of the subject amendment.

The usual distribution of the other copies has been made by this office.

Robert A. Laurence
Robert A. Laurence

Enclosures 2

IMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10-23	Klugescheid	500
	Arnold	500
10-23	Chambers	800
10/24	[illegible]	130
"	[illegible]	110
		~~[illegible]~~
10/27	"	225
		500

500

OCT 24 1958

Mr. Robert A. Laurence
Executive Officer
OME Field Team, Region V
Room 2-B, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. LMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract No. Idm-E1088

Dear Mr. Laurence:

In accordance with your memorandum, dated October 3, 1958, we are enclosing the original and four copies of a proposed Amendment No. 3 (one page) to the above contract, signed by the Acting Director, for the Government. We are also enclosing two extra copies of the amendment for the use of the Field Team.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory and cannot be amended within your delegated authority, return all copies with your recommendations concerning any modifications.

Sincerely yours,

George C. Selfridge

ACTING Chairman, Operating Committee (GCS)

WRKlugescheid/er 10-23-58

Copy to: Docket
Dir. Read.File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Crhon.

Enclosures

APPROVED:

Richard H. Mott (GCS)
Member, Bureau of Mines

N. E. Nelson (GCS)
Member, Geological Survey

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

October 23, 1958

Memorandum for the Docket

From: W. P. Klugescheid, Division of Base Metals

Subject: Justification for Amendment No. 3 for Docket No. DMEA-4580, Benjamin H. Putnam, Puncheon Camp Area, Grainger County, Tennessee, Contract No. IdmCE1088, Zinc.

The Operator has requested that dip and strike fences be drilled on 400 foot centres instead of the 600 foot centres as stated in the contract.

Review of the recent drilling suggests that, because of the narrow ore-shoots, the 400-foot spacing is preferable.

In our letter to the Field Team, dated July 9, 1958, we mentioned, in the seventh paragraph, that if the 600-foot spacing was found to be unsatisfactory we would be glad to prepare an amendment authorizing the 400-foot spacing which has been prevalent in most of our other contracts.

We agree with the Operator and the Field Team that the 400-foot spacing would be more satisfactory and useful.

W.P.Klugescheid
W. P. Klugescheid

WPK/er
Copy to: Docket
Dir. Read.File
Chron.

8623

IMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
10/15	Klugesched	500

500

October 15, 1958

Memorandum

To: Associate Solicitor, Division of Minerals Resource

From: W. R. Griswold, Base Metals Division

Subject: Preparation of Amendment No. 3 for Docket No. DMEA-4580, Benjamin H. Putnam, Assignee, Puncheon Camp Creek Prospect, Grainger County, Tennessee, Contract No. Idm-E1088, Zinc.

Will you kindly prepare an amendment for the cited contract as follows:

In Amendment No. 2 change paragraph 3 to read as follows:

3. In Exhibit "A", under heading, Description of the Work the third paragraph is revised to read as follows:

"A series of widely spaced dip fences shall first be drilled, not less than 1,200 feet apart. Following this preliminary work, auxiliary dip and strike fences may be drilled not less than 400 feet apart. The holes on both the preliminary and auxiliary fences shall be spaced not closer than 200 feet. However, with prior Government approval, such spacing may be reduced from 200 feet to 100 feet."

WPKugesched/er
Copy to:Docket
Direc. Read. File
Chron.

W. R. Griswold

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
OFFICE OF MINERALS EXPLORATION
ROOM 2-B POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
O. M. E.
RECEIVED OCT 6 1958

DATE	INITIALS	CODE
10/6	C	220
		130
~~10/8~~	~~Klay~~	~~300~~

October 3, 1958

Memorandum

To: Operating Committee, OME - Washington

From: OME Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088-zinc. Benjamin H. Putnam, Assignee Puncheon Camp Creek Prospect, Grainger County, Tennessee.

Reference is made to the third paragraph of your letter of July 9, 1958.

Review of the recent drilling suggests that, because of narrow ore-shoots, the 400-foot spacing of both dip and strike fences is preferable to the 600-foot spacing originally provided. Therefore, we recommend preparation of an amendment to the subject contract, authorizing this spacing. The Operator has requested the amendment, and we are in agreement.

Robert A. Laurence
Robert A. Laurence
Executive Officer, OME
Region V

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

September 10, 1958

Memorandum

To: The File

From: W. R. Griswold, Director
Division of Base Metals

Subject: Phone call from Laurence, Region V, 9-8-58

Docket No. DMEA-4580 (Zinc)
Contract No. Idm-E1088
Benjamin H. Putnam, Assignee

Mr. Laurence phoned from Knoxville stating that the Field Team desired to approve a strike fence which would not be completely normal to a dip fence, possibly at 60 degrees to the dip fence, rather than 90 degrees.

I told him that I had expected this problem to arise, sooner or later. However, since the contract does not stipulate 90 degree angles between dip and strike fences, and since the proposed holes would essentially be considered as a strike fence, I could see no objection, if the Field Team had what they believed to be a good and specific reason for their approval.

WRG.

W. R. Griswold

8623

B. H. Putnam, Operator
Box 65
Thorn Hill, Tennessee

RECEIVED AUG		
DATE	INITIALS	CODE
8/25	C	220
8/26	EEF	800
		500

August 20, 1958

NLVA
AUG 22
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region V
Knoxville 2, Tennessee

DMEA-4580 E1088

Dear Bob:

I have just returned from a trip to upper New York State to consult Leroy Scharon on the possibilities of detail electrical resistivity work as a guide to ore in the Puncheon Camp Creek area. Leroy feels, as we do, that the possibilities of this type of geophysical work is very good especially since our recent study of the geology of the area appears to conform with his previous electrical work.

Our plan was to begin this work immediately and to do the electrical work on very close spaced intervals, both vertically and horizontally. This work will have to be done in a great deal more detail than the previous work.

Upon my return, the lines to be surveyed were planned. It was not until this time that we learned that 75% of the brushing and surveying would be on cultivated land that was either in corn or tobacco. Since the lines were to be closely spaced, it would mean almost total destruction of the crops.

I discussed this situation with Mr. Putnam and he feels as I do, that we will have to wait until the crops have been harvested before proceeding with this work.

Our recent studies of the geology in the Green-Dalton-Stapleton area has been very productive. Although this work is far from being complete, we feel that we have learned more during this recess than we had learned during the past several years. We are now compiling our notes into a comprehensive report which you or your field team may see at any time during its development.

Our work has progressed to the stage where we feel that some more drilling is in order. We are now in the process of moving the drill onto the Green-Dalton farm and if all goes well, we should collar hole GD-12 today. The location is 100 feet north of GD-9 and will be the first hole on a strike fence between the Green-Dalton dip fence and the Stapleton dip fence. This location was discussed with Larry Shirley and Dewey Amos during their last visit to the project.

Our recent drilling at Luttrell has been the most exasperating that we have ever experienced. Of all of the drilling that I have observed on Copper Ridge and in the Mascot-Jefferson City District, I have never seen any that is as difficult as it is at Luttrell. On the last hole, we were forced to start over three times before we were able to complete the hole. On our last "skid", we moved 260 feet

away from the previous location in an attempt to avoid the bad ground only to find that conditions were no better. The cavity riddled ground is not limited to the upper one-hundred feet as is normally the case but extends hundreds of feet in depth, even below the lowest elevation in the area.

It appears to us that the entire area is underlain by this condition and in order to avoid the $10-15/foot drilling costs that we are experiencing, a new drilling approach will have to be made. We do not feel that the difficulty is unique to us since our crews, both drillers and helpers, are made up of drillers that have worked for both Joy and Longyear in this area and have had a great deal of experience in drilling in difficult areas. We are now working on a new approach to the problem in hopes that we can correct this situation.

Best regards,

W. T. Hill

W. T. Hill

WTH:jlc

CC: B. H. Putnam
H. B. Burwell

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED JUL 14 1958

DATE	INITIALS	CODE
7/14	C	220
2/5	[illegible]	500

July 11, 1958

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088-zinc. B. H. Putnam, Assignee
Puncheon Camp Creek, Grainger County, Tennessee

Reference is made to your letter of July 9.

We received the Operator's May voucher on June 1 and held it up, pending discussion of our memorandum to you dated June 11. As a result of that discussion, we forwarded the voucher to the Finance Office on June 27, approving payment for holes through GD-6, and disallowing payment for GD-7, 7A, 8 and 9. We also advised the Operator that GD-10 and GD-11 would not be approved for payment.

Drilling is temporarily suspended, while the Operator is getting started at the Luttrell project. The Operator's geologist has been advised that when work has been resumed at Puncheon Camp, no holes on similarly close spacing will be approved for payment.

After we have completed a review of these holes drilled at the Operator's own expense, there may be recommendations for a closer spacing of fences; if so we will write at that time.

Robert A. Laurence
Robert A. Laurence, Executive Officer, DMEA - Region V

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
7/8	Hugenschaid	500
	Brown	500
7/9	[illegible]	130
7/11	Johnson	110
"	Wheelwright	100
7/10	J.G.	220
		500

500

JUL 9 1958

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Punchbeon Camp Creek Prospect
Grainger County, Tennessee
Contract No. Idm-E1088

Dear Mr. Laurence:

We refer to the Operator's letter dated June 7, 1958, and your memorandum of June 11.

Referring to the map showing the holes drilled on the Stapleton farm and the Green-Dalton farm, we have the original dip fence consisting of Holes GD-1 through GD-5. Of these Holes GD-2 and GD-5 were ore holes. GD-1 was a shine hole and GD-3 and GD-4 showed non-commercial mineralization.

At about this point we received the request for authorization of the use of strike fences. We prepared the amendment using the contract as a model, which authorized initial dip fences 1200 feet apart, with the holes on the fences 200 feet apart but, permitting 100 feet spacing on the fences with the approval of the Government. The fences following the preliminary wide-spaced ones were to be not closer than 600 feet apart and the holes on the fences could again be drilled as close as 100 feet apart with the permission of the Government. We followed this same procedure with the amendment, authorizing the dip and strike fences to be not closer than 600 feet apart. This spacing may possibly be too wide for this particular work and we would have been glad to have authorized the fences on 400 foot spacing but, as no mention was made along these lines we assumed that the original plan was satisfactory.

8623

Again referring to the map, Holes GD-6, GD-7, and GD-8 are equivalent to another dip fence spaced only about 85 feet to the west of the original one. The hole which the Operator seems to be drilling at the present time east of GD-6 about 200 feet would indicate that the pattern being followed is drilling on 100 foot grids and this is precisely what we cannot permit.

If a strike fence were drilled with a starting point taken as GD-3 and drilling were done both to the east and to the west, it would show the rake of the ore body no matter how it goes. If the ore body is not of sufficient extent in these two directions on the northern limit, then a strike fence through GD-1 should give the required information. If neither of these fences is successful, then the ore body is probably too small to be of any significant value anyway. In any case there is always a chance with a dip fence further to the west. The Stapleton dip fence rather rules out work on the east unless the spacing between fences were less than 400 feet.

The original drilling pattern was agreed upon by the Operator after discussion with the Field Team, and modification of the original plan was granted by Amendment No. 2. The Operator can have very little cause for complaint as we see it.

As mentioned previously in this letter, it may be that dip and strike fences on 600 foot spacing are somewhat widely separated to explore certain areas properly. If you wish to request 400 foot spacing for the fences, we would be willing to prepare an amendment to this effect.

We cannot pay for the drilling of Holes GD-7, GD-8, and any holes 200 feet further to the east which the Operator now has in mind, as they do not and would not conform to the conditions of the contract.

We would be glad to consider any reasonable request for an amendment which the Operator might wish to make but we cannot agree to drilling on 100 foot grids or random drilling.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JLB)

WPKlugescheid/er 7/8/58

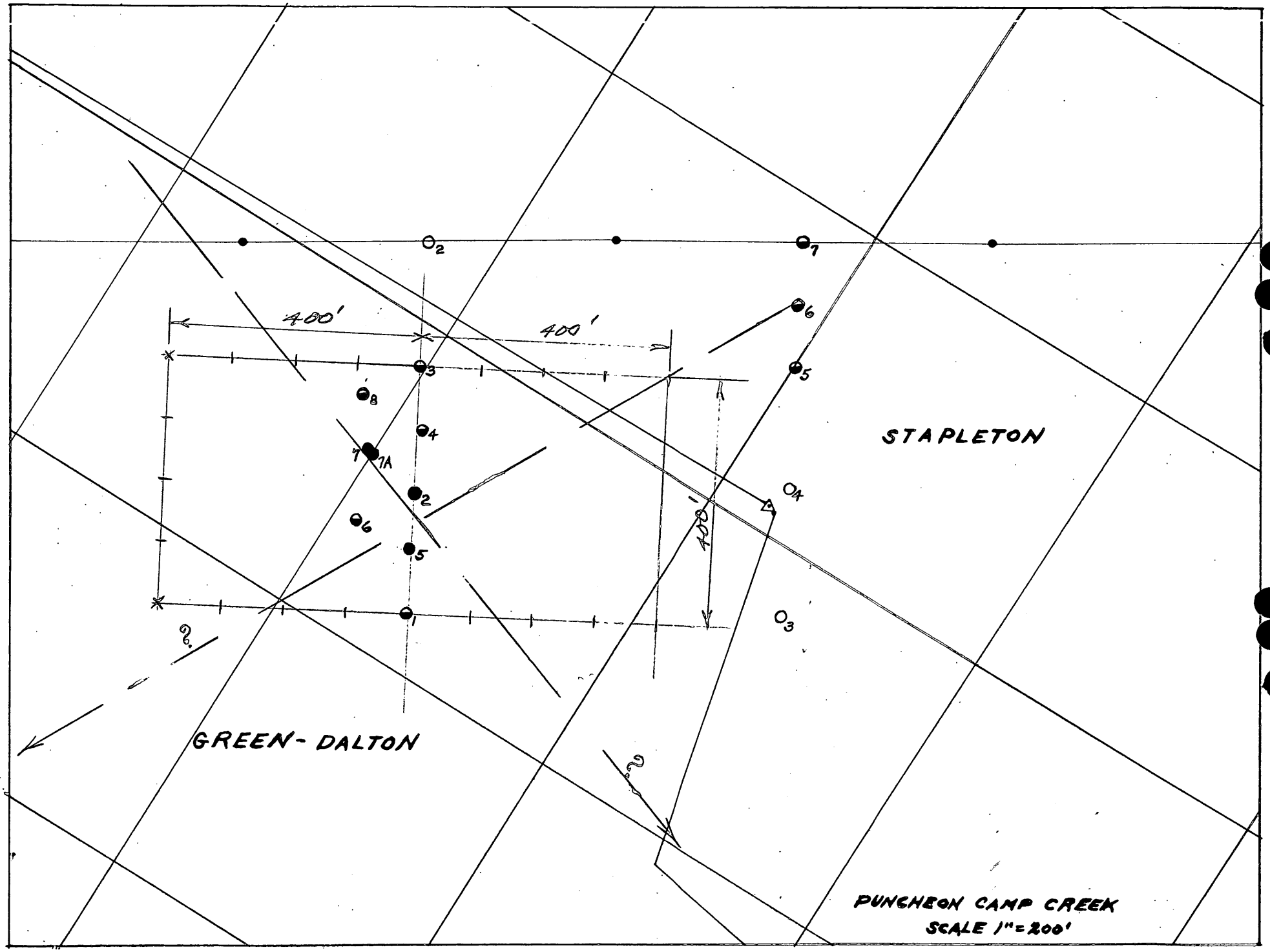
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

Enclosures

APPROVED:

Frank D. Lamb (JLB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JLB)
Member, Geological Survey


400'
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STAPLETON
GREEN-DALTON
PUNCHEON CAMP CREEK
SCALE 1" = 200'

EXTRA COPY
DMEA
RECEIVED JUN 12 1958

DATE	INITIALS	CODE

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

June 18, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 20 1958

DATE	INITIALS	CODE
6/20	C	220
6/24	Klug	500

Memorandum

To: Operating Committee, DMEA - Washington

From: Executive Officer, DMEA - Region V - Knoxville

Subject: Signed Amendment No.2. DMEA-4580, Idm-E1088-zinc
Benjamin H. Putnam, Assignee -Puncheon Camp Creek

Transmitted are the Government and Audit copies of the subject amendment.

The usual distribution of the other copies has been made by this office.

Robert A. Laurence

Robert A. Laurence

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 13 1958

June 11, 1958

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Field Team, DMEA, Region V, Knoxville, Tennessee

Subject: Docket No. DMEA-4580, Contract No. Idm-E1088 (Zinc)
B. H. Putnam, assignee, Chicago, Illinois
Puncheon Camp Creek area, Grainger County, Tennessee

Enclosed are the original and two copies of a letter from the Operator, discussing the need for a modification of the drilling pattern at Puncheon Camp Creek.

On May 6, we requested an amendment, authorizing drilling on strike fences with minimum hole spacing of 100 feet. Because of the long delays which had occurred under National Lead, the present Operator was anxious to get started and, with our approval, drilled Hole GD-6 as the start of a new strike fence, without waiting for the amendment (understanding that payment could not be made if the amendment should not be approved).

Hole GD-6 was a "shine" hole, and study of this core by the Operator's geologists indicated GD-7 to be the best location to attempt to determine the rake of the orebody, since GD-6 indicated it did not rake southwesterly, as previously supposed. GD-7 was an ore hole, but core recovery was poor in the ore zone, and the contractor (at its own expense) redrilled it at GD-7a, 10 feet east of GD-7. GD-7a was an even better ore hole, having over 200 feet of mineralized rock including several runs of ore grade and thickness. The Operator now postulated a southeasterly rake, and drilled GD-8, which turned out to be a shine hole. They next want to drill holes along strike to the northeast, 200 feet east of GD-6 and GD-7. We are in agreement with the Operator's reasoning on this, and consider the holes to be justified, although GD-6 was the only one of the westerly group of holes which we actually approved in advance. Once the trend or rake of the ore shoot is determined, a wider spacing can be used.

As pointed out in our memorandum on DMEA-4153 (New Jersey Zinc Company), the restriction of holes to 100-foot spacing on dip and strike fences which may not be closer than 400 feet, makes it quite difficult to explore an ore shoot of the type we encounter in many of the Copper Ridge prospects. The Thorn Hill contract (DMEA-4422) is worded to provide the required flexibility to meet these conditions. It says, simply that "the hole locations shown on the map may be changed by the Operator in the light of results obtained as the work progresses, if such change is approved in advance by the Government. The locations, inclinations and depths of all holes shall be subject to prior Government approval." If possible, we would like to see this sort of flexibility restored to this and other Copper Ridge contracts. Also, we would like your opinion as to whether holes GD-7 and GD-8 and holes 200 feet east of these should be paid for. GD-6 was 553 feet deep, GD-7 was 557 feet deep. GD-7 was drilled to a lower stratigraphic zone because it kept encountering ore in the Longview formation, hence it was as deep as GD-6 even though it collared up-dip from it. GD-8 was somewhat shallower. Holes on strike from GD-7 and GD-8 should have about the same depths.

Robert A. Laurence

Robert A. Laurence
Executivd Officer

V. J. Lynch

V. J. Lynch, Member
Bureau of Mines

Enclosures 3

B. H. PUTNAM, OPERATOR
Thorn Hill, Tenn.
TA-8-5220
TELEPHONE XXXXXXXXX
P.O.Box 65
XXXXXXXXX

DMEA
RECEIVED JUN 13 1958

DMEA 4580 (zinc)
Idm E 1088

Mr. Robert A. Laurence
U.S.Geological Survey
Post Office Building
Knoxville, Tennessee

Dear Bob;

Enclosed is a map showing the locations of holes that we have drilled on the Green-Dalton farm and the adjacent Stapleton farm.

As you can see from the map, we have drilled several holes off of the pattern that was recommended in the original contract. After considerable drilling in the Puncheon Camp Creek area and many other areas, both DMEA and company projects, we came to the conclusion that the rake of the orebodies in the Copper Ridge District varied from area to area and consequently, the initial patterns might have to be altered if the project was to be successful. In one area, where dip fences would intersect most sizeable ore "shoots", the initial drilling pattern might be fine. In another area, where the ore shoots rake steeply down dip, widely spaced dip fences might entirely miss relatively large orebodies. If the latter situation proved to be true at Puncheon Camp Creek, this would alter an entire program.

With this in mind, we decided that we would have to take a fence on which we had found ore and drill around it until we had some idea of the rake. Then we could move a considerable distance away from the body and intersect it with fewer holes.

To date we have drilled three (3) holes: GD-6, GD-7, and GD-8, on the west side of the fence. We are now drilling a hole east of the fence and opposite GD-6. When we have determined the rake, we plan to move the prescribed distance from the body and attempt to intersect it.

Best Regards,

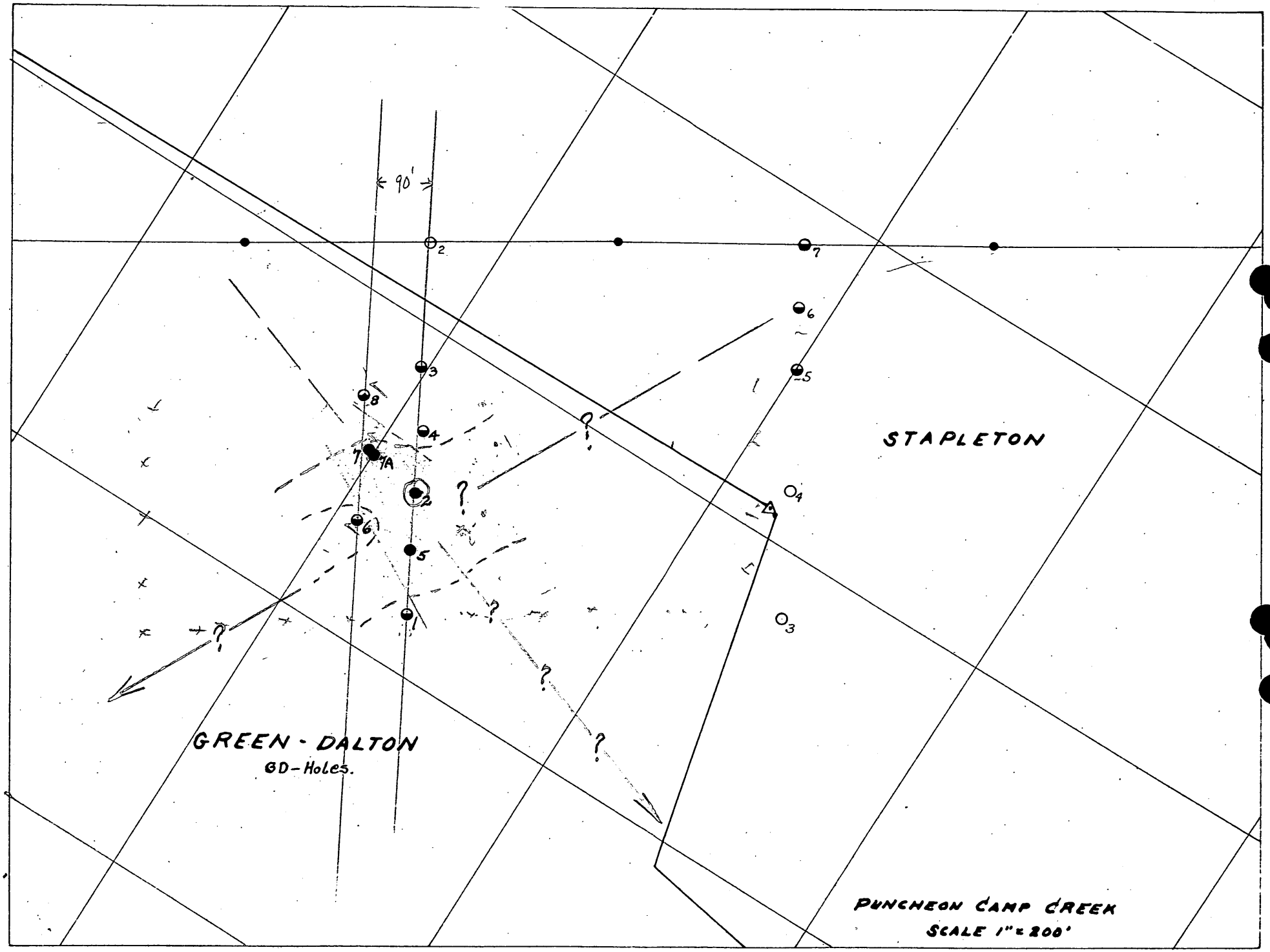
Bill Hill

Bill Hill

June 7, 1958

WTH/ftf

RECEIVED
JUN 9 1958
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.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2
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3
STAPLETON
GREEN - DALTON
GD-Holes.
PUNCHEON CAMP CREEK
SCALE 1" = 200'

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 13 1958
DATE CODE

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

June 9, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 11 1958

DATE	INITIALS	CODE
6/11	C	220
~~6/12~~	~~1 Cy~~	~~500~~

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Field Team, DMEA, Region V, Knoxville, Tennessee

Subject: Docket No. DMEA-4580, Contract Idm-E1088 (Zinc)
B. H. Putnam, Assignee, Chicago, Illinois
Puncheon Camp Creek Area, Grainger County, Tennessee

Enclosed are the original and two copies of a letter from the Operator, and one copy of each of the seven option extensions, referred to in that letter. Additional extensions will be forwarded when they are received.

Robert A. Laurence
Robert A. Laurence
Executive Officer

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

Enclosures 10

TELEPHONE
FR 4-6761

P. O. BOX 647

B. H. PUTNAM
MARIETTA, OHIO

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 11 1958
DATE | INITIAL | CODE

Mr. Robert A. Laurence
Executive Officer, DMEA
Region V
Post Office Building, Room 13
Knoxville, Tennessee

Dear Mr. Laurence,

We have recently been working on extensions of the mineral option agreements included in the Puncheon Camp Defense Minerals Exploration Project Contract. To date, ten of these agreements have been extended as follows:

Name	Original Expiration Date	Extended To
Pryor Acuff	May 7, 1959	May 7, 1962
Elmer Breeding	May 7, 1959	May 7, 1962
S. S. Breeding	May 5, 1959	May 5, 1962
Clarence J. Coffman (formerly D. R. Coffman)	May 10, 1959	May 10, 1962
Aaron B. Dalton (formerly T. A. Green)	May 8, 1959	May 8, 1962
Elvin Jackson	May 7, 1959	May 7, 1962
Rosa Bullen	May 25, 1959	May 25, 1962
W. B. Dalton	May 16, 1959	May 16, 1962
Austin Johnson	May 7, 1959	May 7, 1962
J. C. McGinnis	May 7, 1959	May 7, 1962

There are two options yet to be extended, the H. B. Winstead and the Viva M. Stapleton. In all probability an extension of the Winstead option will be obtained in the near future. We feel that the Stapleton's will go along on extending their agreement if we find that additional time is necessary on their property.

Copies of the agreements of extension are enclosed for all of the properties above listed except the W. B. Dalton, Austin Johnson and J. C. McGinnis. The options on these three properties are in the process of being notarized and upon completion, we will forward you copies for your record.

Very truly yours,

Robert V. Benjamin

Robert V. Benjamin

RVB:lt

June 7, 1958

RECEIVED
JUN 9 1958

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/6	Klugescheid	500
	[illegible]	500
6-6	[illegible]	800
6/6	[illegible]	130
"	[illegible]	110
"	[illegible]	100
6/9	[illegible]	220
		500

500

JUN 9 1958

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4580 (Zinc)
Benjamin H. Putnam, Assignee
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract No. Idm-E1088

Dear Mr. Laurence:

As recommended in your memorandum of May 6, 1958, and in your phone conversation with Mr. Griswold on May 16, 1958, we have prepared a proposed Amendment No. 2 to the cited contract. The original and four copies are enclosed, which have been signed by the Administrator for the Government. We are also enclosing two extra copies for the use of the Field Team.

If the amendment meets with your approval, kindly present it to the Operator for approval and signature and, when completed, distribute the copies in the usual manner. In the event that the amendment is not satisfactory, and cannot be amended within your delegated authority, return all copies to us with your recommendations for any modification.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)

WPKlugescheid/er 6/6/58

Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

Enclosures
APPROVED:

Frank D. Lamb (FDL)
Member, Bureau of Mines

Thor H. Kiilsgaard (THK)
Member, Geological Survey

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
	Klugescheid	

500

May 19, 1958

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Director, Division of Base Metals

Subject: Preparation of Amendment No. 2 for Docket No. DMEA-4580, Benjamin H. Putnam, Puncheon Camp Creek, Grainger County, Tennessee, Contract No. Idm-31088, Zinc.

Will you kindly prepare Amendment No. 2 for the cited contract as follows:

In Exhibit "A" under the heading, Description of the Work:

1. The third paragraph,

"A series of widely spaced dip fences shall first be drilled not less than 1,200 feet apart. Following this preliminary work auxiliary fences may be drilled, not less than 600 feet apart. The holes on both the preliminary and the auxiliary fences shall be spaced not closer than 200 feet. However, with prior Government approval, such spacing may be reduced from 200 to 100 feet."

is revised to read:

"A series of widely spaced dip fences shall first be drilled, not less than 1,200 feet apart. Following this preliminary work auxiliary dip and strike fences may be drilled not less than 600 feet apart. The holes on both the preliminary and auxiliary fences shall be spaced not closer than 200 feet. However, with prior Government approval, such spacing may be reduced from 200 feet to 100 feet."

The completion date is to be changed to June 30, 1959, and the royalty payment period shall be increased to 21 years.

WPKlugescheid/er
Copy to: Docket
Chron.

W. R. Griswold

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

May 19, 1958

Memorandum for the Dockets

From: Director, Division of Base Metals

Subject: Phone conversation about two dockets.

DMEA-4422 (Zinc)
Benjamin H. Putnam
Thorn Hill Area
Grainger County, Tennessee
Contract No. Idm-E1022

and

DMEA-4580 (Zinc)
Benjamin H. Putnam
Puncheon Camp Creek Area,
Grainger County, Tennessee
Contract No. Idm-E1088

On May 16, 1958, the undersigned phone Mr. Laurence, Executive Officer, Region V, at Knoxville relative to the two cited projects, which had been assigned to Benjamin H. Putnam by National Lead Company.

Certain amendment requests were pending. Mr. Laurence requested that DMEA-4580 be amended as per previously requested on May 6, 1958, but that he would submit a new request covering DMEA 4422. On 4580 the completion date to be changed to 6/30/59.

W R Griswold

W. R. Griswold

WRG/er
Copy to: Dockets (2)
Chron.

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 18 POST OFFICE BLDG.
WASHINGTON 25, D. C.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 14 1958

DATE	INITIALS	CODE
5/14	C	220
5/14	Key	500

May 12, 1958

Memorandum

To: Operating Committee, DMEA - Washington

From: Executive Officer, DMEA - Region V - Knoxville, Tenn.

Subject: Assignment of Contract and Assignee's Acceptance - DMEA-4580, Idm-E1088-zinc. Grainger County, Tenn. B. H. Putnam, Operator.

Attached is the Government and Audit copies of the subject assignment.

Robert A. Laurence

Robert A. Laurence

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED MAY 8 1958

DATE	INITIAL	CODE
5/8	C	220
5/8	[illegible]	120
	[illegible]	500

May 6, 1958

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088-Zinc. B. H. Putnam, Assignee
Puncheon Camp Creek area, Grainger County, Tennessee

Drilling results to date indicate the need for some holes aligned on strike fences, as well as dip fences, because of the probability of ore shoots whose plunge is more nearly parallel to dip than to strike. This is similar to the situation on other Copper Ridge areas such as Big War Creek (DMEA-4286) and Independence (DMEA-4153).

Therefore, we request preparation of an amendment authorizing the Operator to drill on strike fences, with a minimum hole spacing of 100 feet, with Government approval.

No.

Robert A. Laurence

Robert A. Laurence, Executive Officer
DMEA Field Team, Region V

V. J. Lynch

V. J. Lynch, Member
Bureau of Mines

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/14	Griswold	500
4-14	Chambers	800
4/14	GCS	130
"	Johnson	110
"	Matthews	100
4/15		220
		500

500

APR 14 1958

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4580 (Zinc)
National Lead Company
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract No. Idm-K1088

Dear Mr. Laurence:

As recommended in your April 2 memorandum, we have prepared an Assignment of Contract covering the cited project. The original and four copies are enclosed, which have been signed by the Administrator for the Government. Also we are enclosing two extra copies for the Field Team use.

If it meets with your approval, all copies should be presented to both parties concerned for their signature. In the event that you do not approve of the assignment terms, all copies should be returned to us with your comments.

As soon as the assignments have been effected, we will then take up the matter of the recommended amendments.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (HB)

WRGriswold/er 4/14/58

Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

Enclosures
APPROVED:

Frank D. Lamb (HB)
Member, Bureau of Mines

Thor H. Kiilsgaard (HB)
Member, Geological Survey

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED APR 11 1958

DATE	INITIALS	CODE
4/11	C	220
4/11	Reb	

April 9, 1958

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region V

Subject: Docket No. DMEA-4580, Contract No. Idm-E1088 (Zinc)
National Lead Company, New York, New York
Puncheon Camp Creek Area, Grainger County, Tennessee

Mr. B. H. Putnam just called to advise me that drilling at Puncheon Camp was resumed yesterday, with one drill now in operation at hole no. GD-3, 200 feet north of GO-2 on the same fence.

Robert A. Laurence

Robert A. Laurence

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code

500

April 7, 1958

Memorandum

To: Associate Solicitor, Division of Minerals Resources

From: Director, Division of Base Metals

Subject: Preparation of Assignment of Contract for Docket Nos. DMEA-4422 and DMEA-4580, National Lead Company.

Will you kindly prepare an Assignment of Contract, for each of the two cited projects, from the National Lead Company to Benjamin H. Putnam.

Effective as of March 12, 1958.

W. R. Griswold

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

ORIGINAL FILE COPY
DMEA
RECEIVED APR 4 1958
DATE | INITIAL | CODE
4-4 | C | 220
4-4 | WPL | 500

April 2, 1958

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088 (zinc) National Lead Co., New York, N.Y. Puncheon Camp Creek Area, Grainger County, Tennessee

Enclosed is a copy of the assignment between National Lead Company and B. H. Putnam, transferring all the option agreements in Grainger County, Tennessee to B. H. Putnam, Operator.

We recommend assignment of this contract to D. H. Putnam, Operator effective March 12, 1958. Also, we recommend preparation of an amendment extending the date for completion from August 20, 1958 to August 20, 1959, as it would be impractical to complete the project any sooner.

Also enclosed is a copy of a similar assignment covering Union County (farther southwest along Copper Ridge) although there are no DMEA projects in that county,

Robert A. Laurence

Robert A. Laurence, Executive Officer
DMEA Field TEam, R gion V

V. J. Lynch

V. J. Lynch, Member
Bureau of Mines

4580

15 months after [illegible] 20, 1957 or
August 20, 1958.

[illegible] Suite - original five fences = 10 holes
average depth 600 feet would give 6000 feet of
drilling

[illegible] Lease expires November 2, 1958
Drilling began July 17, 1957.

(Began)	Jan 1958	— 2,281'
	Dec 1957	— 1,132'
38 wells shown	Nov.	— 2,471'
8 holes calculated for	Oct.	— 3,096'
[illegible]	Sept.	— 1,552'
[illegible]	August	— 1,517'

6) 11,999' = 2,000'/mo.

[illegible] be permitted to drill off [illegible]
[illegible]

RECEIVED APR 2 1958
DATE

March 31, 1958

Mr. Cloyd M. Wiles, Manager
Mining Department
National Lead Company
111 Broadway
New York 6, New York

Re: Docket No. DMEA-4380 (Zinc)
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract No. Idm-E1088

Docket No. DMEA-4422 (Zinc)
Thorn Hill area
Grainger County, Tennessee
Contract No. Idm-E1022

Dear Mr. Wiles:

Your letter of March 27, requesting assignment of the two cited exploration project contracts to Mr. B. H. Putnam has been forwarded to our Washington office, along with Mr. Putnam's letter indicating his willingness to accept assignment of the contracts. If the Washington office approves the request, an assignment, acceptance and consent (similar to those by which DMEA-4381, Idm-E1002 and DMEA-4422, Idm-E1022 were assigned to National Lead Co.) will be prepared and submitted to Mr. Putnam and National Lead Company for execution.

Mr. Putnam advised me by telephone that he is forwarding to me copies of the instruments assigning the leases to him. No action on preparation of the contract assignment can be taken until these instruments are received by our Washington office, but I assume that we will have them in a day or so.

As for DMEA-4381, Idm-E1002 (Indian Creek), that contract has been completed and therefore does not need to be assigned. However, no final geologic and engineering report has been received, and one should be submitted promptly, as provided in the contract.

Sincerely yours,

Robert A. Laurence
Executive Officer
DMEA Field Team, Region V

RAL/mg
cc - Operating Committee (6)
Mr. B. H. Putnam

Official -

4/31 Filing 500

March 31, 1958

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Field Team, DMEA, Region V, Knoxville Tennessee

Subject: Docket No. DMEA-4422, Contract No. Idx-E1022 (Zinc)
National Lead Company, assignee
Thorn Hill area, Grainger County, Tennessee
Docket No. DMEA-4500, Contract No. Idx-E1083 (Zinc)
National Lead Company
Puncheon Camp Creek area, Grainger County, Tennessee

Enclosed is a letter from the Operator, requesting assignment of the two cited contracts to Mr. E. M. Putnam. As soon as we receive copies of the lease assignments, we will forward them to you, with our recommendation for assignment of these two contracts to E. M. Putnam.

Mr. Putnam indicated in a telephone call today that he hopes to start drilling by April 8 or 9.

Robert A. Laurence
Executive Officer

W. J. Lynch, Member
Bureau of Mines

RAL/mg
Enclosure
cc - Operating Committee (3)
Mr. Lynch
File

NATIONAL LEAD COMPANY
MINING DEPARTMENT
111 BROADWAY
NEW YORK 6, N.Y.

GLOYD M. WILES
MANAGER

March 27, 1958

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region V,
U. S. Department of the Interior
Room 13, Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-4580 (Zinc)
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract No. Idm-E1088

Docket No. DMEA 4381 (Zinc)
Indian Creek Area
Grainger County, Tennessee
Contract Idm-E1002

Docket No. DMEA-4420 (Zinc)
Thorn Hill Area
Grainger County, Tennessee
Contract No. Idm-E1022

Dear Mr. Laurence:

This is in reply to your letter of March 14, 1958 to Mr. W. Church Holmes concerning the above listed subjects.

As you know, National has returned the leases to Mr. B. H. Putnam and associates and we now wish to request your cooperation in assisting us to return the two contracts stipulated as DMEA-4381 (Idm-E1002) and DMEA-4422 (Idm-E1022) which were originally assigned to National Lead Company as successor in interest to Mr. Putnam. We should also like to assign DMEA-4580 (Idm-E1088) to Mr. Putnam as successor in interest to National Lead.

Your advice on how to proceed with these transfers will be greatly appreciated.

Yours very truly,

GMW:ACB
CC - Mr. B.H.Putnam

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICE OF THE DIRECTOR
DMEA
RECEIVED MAR 24 1958

DATE	INITIALS	CODE
3/24	C	
3/25	[illegible]	500

March 20, 1958

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088(zinc) National Lead Company, New York, N.Y. Puncheon Camp Creek, Grainger County, Tennessee

Enclosed are the original and 2 copies of a letter from B. H. Putnam, indicating a willingness to accept assignment of the subject contract.

In a telephone call yesterday, Mr. G. M. Wiles of National Lead said that no action on the request can be taken until the Executive Committee of the Company approves it, and he had no idea how soon that would be.

Mr. Putnam is anxious to get the drilling resumed, and may begin before the contract assignment is approved. He was warned that he might have to bear the cost of such drilling until actual execution of the assignment, acceptance and consent. However, we feel that he should be encouraged in this laudable effort to keep the project alive, especially in view of the short life of the Stapleton option and the probability that it cannot be renewed, therefore we will recommend that the assignment of the contract be made effective March 7, which we understand is the effective date of National Lead's return of the options.

Also enclosed is a copy of a letter from National Lead to Mr. Putnam. It is our understanding that this letter provided the 15-day notice required in the agreement between National Lead Company and B. H. Putnam.

Robert A. Laurence
Robert A. Laurence
Executive Officer, DMEA
Region V.

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

BENJAMIN H. PUTNAM
170 EAST PEARSON STREET
CHICAGO 11, ILLINOIS

OFFICIAL MAIL
DMEA
RECEIVED MAR 24 1958
DATE | INITIALS | CODE

Mr. Robert A. Laurence
DMEA Field Team, Region V
Post Office Building - Room 13
Knoxville 2, Tennessee

Dear Mr. Laurence:

On February 21, 1958 we received notice from the National Lead Company of their intention to cancel their contract with us covering mineral option agreements in the Copper Ridge, Tennessee area, per our contract dated February 1, 1957.

The assignments for the return of these options have been prepared by us at their request and were delivered to Mr. Gloyd Wiles, head of their Mining Department, in New York on March 11, 1958.

This letter is to inform you that we will accept these assignments when they are properly signed and returned to us from their New York office.

National Lead was again requested, while I was in New York, to send you written notice of the cancellation of our contract.

Sincerely yours,

B. H. PUTNAM

BHP:jd
Enc.

March 18, 1958

RECEIVED
MAR 19 1958
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

NATIONAL LEAD COMPANY

MINING DEPARTMENT

111 BROADWAY

NEW YORK 6, N.Y.

W. CHURCH HOLMES
ASSISTANT MANAGER

REGISTERED LETTER
RETURN RECEIPT REQUESTED

FEBRUARY 21, 1958

DMEA
RECEIVED MAR 24 1958

DATE	INITIALS	CODE

Mr. Benjamin H. Putnam
170 East Pearson Street
Chicago 11, Illinois

Dear Mr. Putnam:

In confirmation of Mr. Wiles' telephone conversation with you yesterday, kindly accept this letter as notice of the intention of National Lead Company to cease further work in all of the areas along Copper Ridge, Tennessee, covered by the agreement between yourself and National Lead Company dated February 1, 1957.

The necessity of forwarding this notice is regretted and please be assured we are most anxious to cooperate with you in putting the project again under your direction.

Very truly yours,

W. Church Holmes

WCH:AK

Operating Committee

ORIGINAL FILE COPY
DMEA
RECEIVED MAR 21 1958

DATE		CODE
3/21	C	226
3/21		800
3/24		500

March 19, 1958

Air Mail

Mr. Benjamin H. Putnam
170 East Pearson Street
Chicago 11, Illinois

Re: Docket No. DMEA-4580 (Zinc)
National Lead Company
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract No. Idm-E1088

Dear Mr. Putnam:

Mr. Miles telephoned me today, to say that it would be several days before the request to assign the exploration contracts to you would be approved by the Executive Committee of National Lead Company. After that, he will send me written notice.

I have received your letter of March 18, and the copy of the analyses from hole GD-2.

Sincerely yours,

Robert A. Laurence
Executive Officer
DMEA Field Team, Region V

RAL/mg
cc - Operating Committee (2)
Mr. V. J. Lynch
File

Operating Comm

OFFICIAL FILE COPY
DMEA
RECEIVED 17 1958

DATE		FILE
3/17	C	220
3/18	407	800
3/18	Plwy	500

March 14, 1958

Mr. W. Church Holmes, Assistant Manager
Mining Department
National Lead Company
111 Broadway
New York 6, New York

Re: Docket No. DMEA-4580 (Zinc)
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract No. Idm-E1088

Dear Mr. Holmes:

Mr. B. H. Putnam has advised me that you have notified him of National Lead Company's intention to withdraw from the Copper Ridge area and has forwarded to me a copy of your letter to him, dated February 21, 1958, signifying your intention of returning all the leases on Copper Ridge to him under terms of your agreement with Mr. Putnam dated February 1, 1957.

I wish to call to your attention Article 1, sentence 2, and Article 2d of Exploration Project Contract No. Idm-E1088. Under these provisions the Operator (National Lead Company) cannot simply walk off and abandon its contract with the Government. It should be noted that Mr. Putnam is not a party to the cited contract, as he was in the case of Idm-E1002 (DMEA-4381) and Idm-E1022 (DMEA-4422) which were assigned to National Lead Company as successor in interest to B. H. Putnam.

We will be glad to consider, and to refer to our Washington office for appropriate action, a request to assign the two uncompleted Copper Ridge contracts (Idm-E1022 and Idm-E1088) to Mr. Putnam, but we cannnot do so without a request from National Lead Company. Therefore, will you please send me at once a letter explaining what you wish to do with these contracts and how the Government's interest is to be protected when your interest in the land is surrendered?

Sincerely yours,

Robert A. Laurence
Executive Officer
DMEA Field Team, Region V

RAL/mg
cc - Operating Committee (2)
Mr. V. J. Lynch File

March 12, 1958.

Memorandumffor the Files

From: W. P. Klugescheid, Division of Base Metals

Subject: Phone conversation concerning Docket No. DMEA-4580, National Lead Company, Puncheon Camp Creek Area, Grainger County, Tennessee (Zinc)

On this date Mr. Klugescheid called Mr. Robert A. Laurence in Knoxville to inquire as to the present status of the cited contract. Mr. Laurence said that this project was being dropped by the National Lead Company and was being turned back to Mr. B. H. Putnam. Mr. Laurence had not received this news from the National Lead Company but had been informed of this action by Mr. Putnam. To date Mr. Laurence has not received any communication from the Lead Co. Mr. Laurence had written a letter, dated February 28, 1958, in which he communicated this news to the Operating Committee but as it came under the heading of DMEA-4422 it was not on record in this file. A copy of the cited letter is now on file with this docket.

Mr. Laurence mentioned that good ore had been found in Hole GD-2 on the Dalton-Green Lease and that they had an intercept of 50' which was estimated to run 4% Zinc. The assay results have as yet not been received. Mr. Putnam apparently wishes to continue with the projects and wishes to do further work on the Indian Creek Project which is considered completed.

W. P. Klugescheid

W. P. Klugescheid

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
[redacted]
KNOXVILLE 2, TENN.

February 28, 1958

DMEA-4580

34 [redacted]

[redacted]

Operating Committee, DMEA, Washington, D. C.

[redacted] Field Team, DMEA, Region V, Knoxville, Tennessee

[redacted] Docket No. DMEA-4022, Contract No. Idg-21022 (Zinc)
National Lead Company, assignee
Thorn Hill area, Grainger County, Tennessee

We have been advised [illegible], by Mr. B. H. Putnam that National Lead Company advised him on February 20th that they are [illegible] all work on Copper Ridge, and are returning the various [illegible] to him, in accordance with their agreement of February 1. [illegible] of this has come to us from National Lead.

Mr. Putnam wants to continue this project, as well as the [illegible] on Copper Ridge (DMEA-4381, 4580) but obviously the [illegible] Hill drilling cannot be [illegible] by March 1, as provided in Amendment No. 2.

We will advise you further on this when we hear from [illegible] We expect to confer with Mr. Putnam and his staff next

Robert [illegible]
Executive [illegible]

V. J. [illegible]
Bureau of [illegible]

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED FEB 10 1958
DATE | INITIALS | CODE
2/10 | C | 220

February 7, 1958

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Field Team, DMEA, Region V, Knoxville, Tennessee

Subject: DMEA-4580, Idm-E1088 (Zinc)
National Lead Company, New York, N. Y.
Puncheon Camp Creek Area, Grainger County, Tennessee

The purpose of this memorandum on the subject project is similar to that of this same date on DMEA-422--to point up certain problems and request possible action for their alleviation.

1) The contract on the subject project was effective May 20, 1957, drilling started on July 17, 1957, and is scheduled for completion on November 20, 1958. The rate of progress was predicated on the use of four drill rigs on a 3-shift per day basis. To date approximately only 25 percent of the drilling footage (12,000 feet of 50,000 feet) has been used and the project period is past its mid-point. Since the start of drilling in July a maximum of only two drills has been used at any one time, both on a 2-shift per day rate. However, the two drills were operating concurrently only about half the time. Since about the first of the year only one drill has been operating. It is at once obvious that the present rate of drilling or even the return to the rate of two or even four drills will not permit the completion of 50,000 feet in the allotted time.

2) The slowness in the rate of drilling seems to derive from a reluctance on the part of the Operator to engage in more aggressive exploration. This lack of aggressiveness is due chiefly to the direct dependence for decisions on precise locations of new hole-sites upon an absentee consultant residing and working in California. As indicated in the memorandum on DMEA-422, C. D. Hulin, the consultant, visits the projects only infrequently and when contacted by phone will frequently delay the naming of locations which

at times requires the placement of drills and crews on standby. The local representatives of the Operator have no authority whatsoever to locate holes even when it is obvious that a standard offset of 100 or 200 feet in a fence is what is needed.

3) To date only one rather indefinitive hole has been completed on the Stapleton tract at the northeastern end of the project area. You may recall that the original option on this property was due to expire on November 2, 1957. When this option was extended to November 2, 1958, one of the original plans for the project was to concentrate at least a part of the initial drilling in the area of the Stapleton tract in order that sufficient data would be available for the Operator to make an early decision on the tract. The one hole drilled on the Stapleton property was done before Hulin submitted his project plan calling for a concentration of effort to the southwest. Although there is sufficient time in the contract to drill out the Stapleton area as well as complete the whole 50,000 feet, there is no indication that work on the Stapleton tract is planned or that the rate of drilling will be speeded up. If this situation is allowed to continue, it is obvious that the Operator will have to request a time extension to complete the drilling, and will then be faced with insufficient data on the Stapleton property before expiration of the option.

In conclusion it is apparent that the major difficulties on this project, as with the other National Lead DMEA projects in this district, develop chiefly because day-today control of the project is handled at a distance rather than residing in an on-site project chief concerned only with local affairs. Plans frequently await long distance decision that many times are not in accord with the opinion of the local representatives more familiar with the technical problems of the project as well as with the nature and operations of DMEA contracts. In addition, there is again the tendency of the Operator, chiefly his New York office, not to consider seriously that the commencement and completion dates named in a contract are of any significance.

The Operator should be requested to submit a revised schedule of completion of the project, with justification. We would not want to insist upon completion of the entire remaining 38,000 feet in the next six months, but we do think a revised completion date should be set now, in order to permit an orderly scheduling of the remaining drilling, and we do think that the drilling on the Stapleton tract should be completed at least two months before expiration of the option (November 2) because of the possibility that the Stapleton family may refuse to extend it. Past experience indicates that it would do no good for us to present this request to the Operator's local field office.

Robert A. Laurence
Robert A. Laurence
Executive Officer

W. A. Beck for
V. J. Lynch, Member
Bureau of Mines

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

January 22, 1958

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 24 1958

DATE	INITIALS	CODE
1/24	C	220
		130
1/24		500

Approved: W.P.Kingsbury

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: Amendment No. 1. National Lead Company, Assignee
Puncheon Camp Area, Grainger County, Tennessee (zinc).
DMEA-4580, Idm-E1088

Transmitted are two copies of the subject amendment signed by H. C. Wildner, Vice President of National Lead Co., one copy of the land option, and two copies of a map showing the location of the property.

The usual distribution of the other copies has been made by this office.

V. J. Lynch

V. J. Lynch, Acting Executive Officer
DMEA Field Team, Region V

S. C. Bergman

S. C. Bergman, Geologist
Geological Survey

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
WASHINGTON 25, D.C.
KNOXVILLE 2, TENN.

ORIGINAL COPY
DMEA
RECEIVED DEC 16 1957

DATE	INITIALS	CODE
12/16	C	220
12/16	EEF	800
~~12/23~~	~~Klag~~	~~300~~

December 10, 1957

Mr. G. G. Bryan
National Lead Company
P. O. Box 61
Thorn Hill, Tennessee

Re: Docket No. DMEA-4580 - Zinc
Puncheon Camp Creek Area
Grainger County, Tennessee
Contract No. Idm-E1088

Dear Mr. Bryan:

In reference to your letter of December 5, 1957 on the Puncheon Camp drilling:

This letter will constitute our approval of the five holes recommended by Mr. Hulin in his letter of December 1, 1957 to Mr. Wiles. In addition to these holes, we would like to recommend at least one additional hole on line GP-8 200 feet southeast of the Base Line, and at least two additional holes on line GP-3 (1200 feet SW of line GP-5), one on the Base Line and the other 200 feet southeast of the Base Line.

This letter will also constitute approval for a hole on the Austin Johnson property to test the strong resistivity low as was discussed at Thorn Hill on December 3. The location of this hole will, of course, have to be at least 200 feet from the project property line unless the W. H. Johnson tract is amended into the contract area.

Sincerely yours,

Robert A. Laurence
Executive Officer
DMEA Field Team, Region V

HW/mg
cc - Operating Committee (2)
Mr. V. J. Lynch
Mr. Helmuth Wedow, Jr.
Mr. L. E. Shirley
File

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

ORIGINAL FILE COPY
DMEA
RECEIVED DEC 9 1957

DATE		CODE
12/9	C	220
12/9		800
~~12/9~~	~~[illegible]~~	~~580~~

December 5, 1957

Mr. G. G. Bryan
National Lead Company
P.O. Box
Thorn Hill, Tennessee

Re: DMEA-4580(zinc)
Puncheon Camp Creek Area
Grainger County, Tennessee
Idm-E1088

Dear Mr. Bryan:

Thanks for sending me the two copies of Dr. Hulin's recommendations for additional drill holes at Puncheon Camp Creek.

Mr. Wedow and Mr. Shirley are in the field and will return Monday. I will review these proposals with them, and we will get in touch with you early in the week.

I expect to be away on leave from December 10 through January 2, and in that period Mr. Lynch will be the Acting Executive Officer. His telephone number is 5-5376.

Sincerely yours,

Robert A. Laurence
Executive Officer, DMEA
Region V

RAL/sm
cc
Lynch
Shirley
Files
Opr. Com.-2

NATIONAL LEAD COMPANY

MINING DEPARTMENT

111 BROADWAY
NEW YORK 6, N.Y.

OFFICIAL FILE COPY
DMEA
RECEIVED DEC 9 1957

DATE	INITIALS	CODE

Thorn Hill, Tenn.
December 5, 1957

Robert A. Laurence
Executive Officer
DMEA Region 5 Field Office
Post Office Building
Knoxville, Tenn.

Re: DMEA-4580, Idm-E1088-Zinc.
Puncheon Camp Creek Area

Dear Mr. Laurence:

Enclosed herewith are two copies of a memorandum from Dr. Hulin giving the location of four proposed drill holes at Puncheon Camp Creek together with his geological reasoning therefore.

You will note that two of these (on geophysical traverse no. 8) are 600 feet northeast of our MG fence on geophysical traverse no. 7 and are the ones we discussed at the time of your visit on Tuesday of this week. The other two are on geophysical traverse no. 1, approximately 1200 feet southwest of our CO fence on GP-5.

At this writing, it appears that Dr. Hulins' tentatively located hole CO-8, 100 feet northwest of CO-7, may not be drilled since CO-7 is now in the "S" bed and has encountered no mineralization.

I believe you will find the information contained in the attached memorandum sufficiently detailed and I sincerely hope that it meets your requirements and that you will be able to approve these hole locations.

With best regards

Sincerely yours,

G.G. Bryan

cc/ Mr. Wiles
Dr. Hulin

GGB:jlc

RECEIVED
DEC - 6 1957
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

RECEIVED
DEC - 6 1957
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

OFFICIAL FILE COPY
DMEA
RECEIVED DEC 9 1957
DATE | INITIAL | CODE

35 Eucalyptus Path
Berkeley 5, California
December 1, 1957

Mr. Gloyd M. Wiles
National Lead Company
111 Broadway
New York 6, N.Y.

DMEA-4580, Idm-E1088-Zinc

Drill Hole Locations, Puncheon Camp.

I wish to submit the following locations for additional drill holes in the Puncheon Camp area.

On geophysical section 8.
No. 1 - 600 feet southeast of Base Line.
No. 2 - 400 feet southeast of Base Line.

On geophysical section 3.
No. 1 - 600 feet southeast of Base Line.
No. 2 - 400 feet southeast of Base Line.

On geophysical section 5.
Drill hole 500 feet northwest of Base Line and 100 feet northwest of CO-7 which is not yet drilled. This hole (CO-8?) is contingent (1) upon a fair showing of zinc being logged in hole CO-7 and (2) upon the reasonable probability that the hole will penetrate the Kingsport at least as high stratigraphically as the top of the R bed, the determination to be based upon a section constructed through CO-6 and CO-7 following completion of the latter hole. The hole should not be drilled unless both requirements are fulfilled.

The portion of the Puncheon Camp leases upon which attention is now centered is represented by an area which is bounded on the southwest by a fault striking about N 15° W which crosses the GP base line in the vicinity of GP section 3, and bounded on the northeast by a second fault striking about N 60° W which crosses the GP base line in the vicinity of a point some 300 feet east of GP section 8. The wedge or block of ground between these faults has been displaced to the northwest (relative movement). The outcrop of the Kingsport Formation between these limiting faults is well marked by geochemical anomalies.

Cutting across the wedge of ground referred to above there occurs an important zone of strike faulting and shearing. On the ground this zone of strikes faulting is visibly expressed in the topography and it is likewise reflected in the logging of certain holes which have been drilled.

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DEC - 6 1957
U.S. Geological Survey
Denver, Colo.

In addition there is evidence for a somewhat widely spaced series of minor oblique faults or fissures which are weakly expressed in the topography. These oblique faults strike roughly east-west and occur north of the zone of strike faulting, merging with that zone in the area eastward from GP section 7.

On GP section 7, drill holes MG-5 and MG-4 penetrate the zone of strike faulting. Both holes are to be regarded as good prospect holes showing appreciable zinc mineralization and pyritization. Holes MG-1, MG-2 and MG-3 are north of the zone of strike faulting but are in the area where a number of oblique faults and fissures occur. Each of these holes shows minor zinc mineralization and pyrite, with the best showing being in hole MG-1 which is closest to the zone of strike faulting.

On GP section 5 the zone of strike faulting is penetrated by holes CO-2 and CO-4. Holes CO-1 and CO-2 in and south of the zone of strike faulting showed traces of zinc in the Mascot while hole CO-4 logged abundant pyritization. Holes CO-3 and CO-5 (log of CO-5 not yet received) are relatively "dry" holes with no zinc. These holes are north of the zone of strike faulting and well south of the southernmost oblique fault. In contrast hole CO-6 (log not yet received) which is close to the southernmost oblique fault is showing some zinc.

In the initial stage of drilling in the Puncheon Camp area the effort is being made to locate the test holes on geophysical sections, this in order to obtain some correlation between the drilling results and the geophysical work.

The two holes on GP section 8 as proposed herein are planned to penetrate the zone of strike faulting. In that sense they are to be compared to holes MG-4 and MG-5, but are more favorably located in terms of structure than the MG holes in that the holes on section 8 will test a portion of the zone of strike faulting within which oblique faults and fissures come in from the west. Moreover a minor flexure in the beds occur in the vicinity of section 8 which may have had a favorable effect on the ground preparation requisite to mineralization. The holes on section 8 are located about 500 feet from the fault which bounds on the northeast the wedge shaped area on which interest now centers. This fault may likewise have had an effect on favorable ground preparation. GP section 9 lies beyond this fault.

The two holes on GP section 3 as proposed herein are again planned to penetrate the zone of strike faulting, and this at a location close to the fault (150 to 200 feet) which bounds the wedge shaped area on the southwest. In the immediate area penetrated by these holes there is also indicated a minor flexure of the beds which may represent a favorable influence.

In the area discussed in this memorandum the holes which have been drilled have collectively given a rather clear picture of the structural associations favored by the zinc mineralization. Based upon this it is believed that the holes proposed herein as well as holes which may be planned in the future can be rather closely limited to locations which are potentially favorable, thus greatly increasing the chance of success in the drilling program.

Sincerely,

Carlton D. Hulin

cc/ G.G. Bryan - Thorn Hill

RECEIVED
DEC - 6 1957
U. S. Geological Survey
Geology Division
Knoxville, Tenn.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
6/7	Klugescheid	500
	Shiawa	500
6/10	GCS	120
"	Johnson	10
"	Butterworth	100
6/12	C	325
		577

500

JUN 10 1957

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Building
Knoxville 2, Tennessee

Re: Docket No. DMEA-4580 (Zinc)
National Lead Company
Puncheon Camp Creek Prospect
Grainger County, Tennessee
Contract No. Idm-E1088

Dear Mr. Laurence:

Enclosed are the Field Team and Finance Office copies of the cited contract, signed by the Operator and the Government.

We are also enclosing an unsigned copy of the contract for the use of the Field Team.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (GCS)
WRKlugescheid/er 6/7/57
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

Enclosures

APPROVED:

Frank D. Lamb (GCS)
Member, Bureau of Mines

Thor H. Kiilsgaard (GCS)
Member, Geological Survey

8623

NATIONAL LEAD COMPANY

MINING DEPARTMENT

111 BROADWAY

NEW YORK 6, N.Y.

REGISTERED -
RETURN RECEIPT REQUESTED

JUNE 3, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED JUN 5 1957

DATE	INITIALS	CODE
6/5	C	220
6/5	B	215
~~6/6~~	~~Mary~~	~~580~~

MR. C. O. MITTENDORF, ADMINISTRATOR,
DEFENSE MINERALS EXPLORATION ADMINISTRATION,
UNITED STATES DEPARTMENT OF INTERIOR,
WASHINGTON 25, D.C.

RE: DOCKET NO. DMEA-4580 (ZINC) -

DEAR MR. MITTENDORF:

WE ENCLOSE HEREWITH FIVE COMPLETELY EXECUTED COPIES OF THE ABOVE CONTRACT DATED MAY 20, 1957 ENTERED INTO BETWEEN THE GOVERNMENT AND NATIONAL LEAD COMPANY.

WE HAVE RETAINED "OPERATOR'S COPY" FOR OUR FILES.

SINCERELY YOURS,

John S. Holland

JOHN S. HOLLAND

JSH:JBL

ENCLOSURES - 5

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/10	Klugescheid	500
	[illegible]	500
5/14	Talbert	800
5/17	Lellouche	130
	[illegible]	
	[illegible]	
5/17	Johnson	110
"	Mittendorf	100
5/21	C	225
		500.

MAY 20 1957

Mr. Gloyd M. Wiles, Manager
Mining Department
National Lead Company
111 Broadway
New York 6, New York

Re: Docket No. DMEA-4580 (Zinc)
National Lead Company
Puncheon Camp Creek Prospect
Grainger County, Tennessee

Dear Mr. Wiles:

In reference to the application of B. H. Putnam, dated December 17, 1956, which has been assigned to your company, we are enclosing the original and five copies of a proposed long-form contract signed by the Administrator, Defense Minerals Exploration Administration, for an exploration project on the cited property.

The contract consists of the form, Annex I (three pages), Annex II (two pages), Exhibit "A" (three pages), and one map. If it meets with your approval, will you kindly sign all copies, retain the "Operator's Copy" for your files, and return the others to us. In the event that you do not approve of any of the contract provisions, please return all copies to us with your comments.

The diamond drilling costs are based on the bid submitted by the Putnam Drilling Company.

Sincerely yours,

C. O. Mittendorf (for)

Administrator

Enclosures

WPKlugesuhied/er 5/10/57
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgarrd, USGS
Region V (2)
Chron.

8623

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
5/9	Klugescheid	500
5/10	Zusinel	500
5/14	Talbert	800
5/17	Selfridge	120
"	Johnson	110
"	Matteson	100
		225
		500

500

MAY 20 1957

Mr. Robert A. Laurence
Executive Officer
DMEA Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMEA-4580 (Zinc)
National Lead Company
Puncheon Camp Creek Prospect
Grainger County, Tennessee

Dear Mr. Laurence:

As requested by the Applicant, we are forwarding the original and five copies of a proposed long-form contract to its New York City office.

We are enclosing two extra copies, minus the form, for the Field Team use. This material consists of Annex I (three pages), Annex II (two pages), Exhibit "A" (three pages), and one map.

Sincerely yours,
George C. Selfridge
(ESF)

Chairman, Operating Committee
WPKlugescheid/er 5/10/57
Copy to: Docket
Admr R File
Op. Committee
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

Enclosures

APPROVED:
Frank D. Lamb
(ESF)
Member, Bureau of Mines
Thor H. Kiilsgaard
(ESF)
Member, Geological Survey

8623

Note:

(1) Description of work states map. depths of approximately 1000', but estimate of cost limits depth to maximum of 1,000'. (Fld. Team mems 5/12/57 states some holes may go a few feet over 1000')

(2) Footnote 3/ more properly should state merely

"$2.80 for EX size".

Delete provided clause in 1st paragraph page 1 of Exh. 2, Exh. A.

Talbert
5/14/57

[illegible]

[illegible] @ 200'

Opening —

First Dempo top drilling half way between line with 2 longest holes @ 200'

EXPLORATION PROJECT CONTRACT
NATIONAL LEAD COMPANY
DOCKET NO. DMEA-4580

EXHIBIT "A"

Description of the Work

The purpose of the project is to explore for ores of zinc by diamond drilling (and such churn drilling of overburden as may be required).

Zinc ores in the Copper Ridge Belt occur in the Kingsport dolomites and limestones, and the Mascot dolomite of the Knox group. In the area in which the project is to be performed, the formations dip southeasterly at an angle of about 36 degrees.

A series of widely spaced dip fences shall first be drilled, not less than 1,200 feet apart. Following this preliminary work auxiliary fences may be drilled, not less than 600 feet apart. The holes on both the preliminary and the auxiliary fences shall be spaced not closer than 200 feet. However, with prior Government approval, such spacing may be reduced from 200 to 100 feet.

It is estimated that approximately 80 holes will be required, having an average depth of about 600 feet, with the greatest depth for any hole being approximately 1,000 feet. Not more than 50,000 feet of drilling shall be performed.

The approximate locations of the initial holes are shown on the attached map, but the actual locations, directions, inclinations, and depths of all holes are subject to prior Government approval.

All diamond drilling shall be done with AX size, or larger, coring bits, except where it is necessary to use an Ex size bit in order to complete a hole. All drill holes shall be logged and all drill core shall be made available to the Government for examination. All significantly mineralized core, in lengths not to exceed five feet, shall be split and one half thereof shall be properly sampled and the sample analyzed for zinc.

In significantly mineralized ground, if core recovery is poor and sludge samples are taken, both the core and sludge shall be split and one half thereof properly sampled and the sample analyzed for zinc.

EXPLORATION PROJECT CONTRACT
NATIONAL LEAD COMPANY
DOCKET NO. DMEA-4580

EXHIBIT "A"

Description of the Work

The purpose of the project is to explore for ores of zinc by diamond drilling (and such churn drilling of overburden as may be required).

Zinc ores in the Copper Ridge Belt occur in the Kingsport dolomites and limestones, and the Mascot dolomite of the Knox group. In the area in which the project is to be performed, the formations dip southeasterly at an angle of about 36 degrees.

A series of widely spaced dip fences, not less than 600 feet apart, shall be drilled, with holes spaced not closer than 100 feet on the fences, unless the Government approves, in advance, closer fence spacing.

It is estimated that approximately 80 holes will be required, having an average depth of about 600 feet, with ~~a maximum~~ the greatest depth for any hole ~~of~~ approximately 1,000 feet. Not more than 50,000 feet of drilling shall be performed: ~~Provided, however, That the Operator may, upon the written approval of the Government, perform more than 50,000 feet of drilling so long as the estimated total cost of all work under the contract is not exceeded.~~

The approximate locations of the initial holes are shown on the attached map, but the actual locations, directions, inclinations, and depths of all holes are subject to prior Government approval.

All diamond drilling shall be done with AX size, or larger, coring bits, except where it is necessary to use an EX size bit in order to complete a hole. All drill holes shall be logged and all drill core shall be made available to the Government for examination. All significantly mineralized core, in lengths not to exceed five feet, shall be split and one half thereof shall be properly sampled and the sample analyzed for zinc.

In significantly mineralized ground, if core recovery is poor and sludge samples are taken, both the core and sludge shall be split and one half thereof properly sampled and the sample analyzed for zinc.

The remaining half of all significantly mineralized core samples, and sludge samples where taken, shall be furnished to the Government upon request.

All assays shall be reported monthly to the Government, together with drill logs and proper plan maps and sections showing the progress of the work and sample locations.

All work of drilling and sample preparation shall be properly supervised by competent engineers and geologists.

Drill holes shall be reamed and cased or cemented and redrilled as necessary.

Drilling shall not be done at locations closer than 200 feet from a boundary of the land described in Annex I.

Estimated Costs of the Project

Actual Costs

Category (1) Independent Contracts

Overburden drilling and diamond drilling to 1000-foot depth, 50,000 feet @ $3.00/ft.[1/]	[3/]$150,000.00	
Reaming AX hole to receive AX casing 5,000 feet @ $2.00/ft.	10,000.00	$160,000.00

The above rates include charges for cementing and redrilling, water supply, changing of locations, and all other charges which may be incurred by the diamond drilling contractor.

Neither the cost nor the value of casing left in drill holes at the option of the Operator will be accepted as a charge to the contract.

Categories (2) through (7) None

Fixed Unit Costs (See Article 13 of the contract)

Incidental allowance[2/] for each foot of drilling completed, 50,000 feet @ $0.18/ft.	9,000.00

Core Boxes - 150 @ $2.00/each	$ 300.00	
Sample analyses - 550 @ $1.50/each sample	825.00	$ 10,125.00
Estimated Total Cost of the Project		$170,125.00
Government's Participation @ 50%		$ 85,062.50

1/ See Article 13.

2/ Includes all costs that might otherwise be allowable costs of the project under Categories (1) through (7) of Article 6(a), except as otherwise scheduled in Exhibit "A".

3/ Any drilling with EX size bit will be paid at a maximum rate of $2.80 ~~$0.20 less~~ per foot ~~than that done with AX size bit.~~

EA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
4/19	Klugescheid	500

500

April 19, 1957

Memorandum

To: Associate Solicitor, Division of Mineral Resources

From: Chief, Base Metals Division

Subject: Preparation of Contract for Docket No. DMEA-4580, National Lead Company, Puncheon Camp Creek Prospect, Grainger County, Tennessee, Zinc.

Will you please prepare a contract for the cited application. A draft of the contract, Exhibit "A", Annex I, Annex II, and the necessary number of maps are attached to this memorandum. Consents to Lien and Subordination Agreements have been waived.

W. R. Griswold

WPKlugescheid/er

Copy to: Docket
Chron.

8623

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED APR 10 1957

DATE	INITIALS	CODE
4/10	C	220
4/10	WRK	700

April 8, 1957

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Field Team, Region V, DMEA, Knoxville, Tennessee

Subject: Docket No. DMEA-4580 (Zinc) Benjamin H. Putnam
Puncheon Camp Creek prospect, Grainger County, Tennessee

In reply to your letter of March 28, 1957 on the subject application:

The discrepancy in acreages has been reviewed in detail with representatives of the Applicant. According to the information received it appears that the major number of the discrepancies are between the acreages listed under Deed and Lease. This is the case in the six properties listed as Austin Johnson, D. R. Coffman, Pryor Acuff, J. C. McGinnis, W. B. Dalton (2 tracts), and Green and A. B. Dalton. In these cases the higher acreage figure shown in the lease was received verbally from the Property Owner at the time the lease was drawn, and it is on this figure that rentals are paid. In other words the word of the Property Owner was taken for the acreage he held. However, when and if the Operator decides to exercize his option, then a property survey is to be made and payments for the mineral and mining rights will be made on the basis of the survey (see Fourth item of option agreements).

In the case of the property of H. B. Winstead showing a greater acreage in the deed than in the lease, the lands on the north side of State Highway 131 (51 acres) and included in the application are the residue of the 73 acres shown in the deed, the amount of 150 acres being in error. On January 10, 1945 H. B. Winstead conveyed 22 acres to Shields Winstead, et ux (Vol. 73, p. 358, Deed Records, Grainger County, Tennessee). This tract was then sold at a later date to the present property owner, G. C. Coffey. As shown on the Applicant's property map, the G. C. Coffey tract is under lease but not included in the application.

The problem of the Rosa Bullen tract is a case where the property owner apparently managed to file a lower acreage for tax assessment purposes. The correct acreage is 60 acres as shown on the lease as scaled from the map.

The property map submitted by the Applicant was prepared from a plane table survey, consequently the acreages as scaled from it should be roughly correct. However, the figures shown on the map for the various tracts was not a scaled amount but was the amount shown in the deeds.

Robert A. Laurence
Robert A. Laurence
Executive Officer

V. J. Lynch
V. J. Lynch
Member, Bureau of Mines

APR 5 1957

Mr. John Holland
Mining Department
National Lead Company
111 Broadway
New York 6, New York

Dear Mr. Holland:

Referring to our phone conversation of April 4, 1957, regarding copies of land option transfers from Benjamin H. Putnam to your Company, copies of the unrecorded transfers will be sufficient for our present purpose. However, after the recordings have been made please advise us accordingly, giving us place of recording, book and page numbers, etc.

Sincerely yours,

W. R. Griswold

W. R. Griswold, Chief
Base Metals Division

WRGriswold/er 4/5/57
Copy to: Docket
Admr R File
Base Metals
Region V (2)
Chron.

AEC Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
2/27	Klugerchield	500
2/27	Kriemel	500
3/27	Selbridge	130
"	Johnson	110
"	Hettendorf	100
2/28	C	225

500

MAR 28 1957

Mr. Robert A. Laurence
Executive Officer
DMRA Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

Re: Docket No. DMRA-4580 (Zinc)
Benjamin H. Putnam
Puncheon Camp Creek Prospect
Grainger County, Tennessee

Dear Mr. Laurence:

While processing the cited application, discrepancies as shown in the following table were noted. As this application is now to be taken over by National Lead Company, we wish to be prepared to process the new application as soon as the assignment is completed.

Lessor	ACREAGE In Deed	In Lease	Section 3(a) Application	on Map	Scales Roughly
Austin Johnson	45	62	45	45	45
*Elvin Jackson	105	105	105	105	
D. R. Goffman	25	50	25	25	25
Pryor Acuff	45	55	45	45	45
*Elmer Breeding	15	15	15	15	
*S. S. Breeding	51	51	51	51	
J. C. McGinnis	62	88	62	62	
W. B. Dalton (2 Tracts)	77 (4 deeds)	125?	77?	77	77
Rosa Bullen	29	60?	29?	29	60
Green & Aaron Dalton	58	88	58	58	58
*Viva & W. H. Stapleton	218.2	218.2	218.2	218.2	
M. D. Winstead	150 or 73?	51	51	51	
Totals	880.2	968.2	781.2	781.2	

The acreages given in Section 3(a) of the application check the ones given on the property map. In this same section there is a sentence which reads as follows: "The land lines as shown on this map were surveyed in accordance with accepted surveying methods." Are we to understand from this that these tracts were surveyed by Mr. Putnam's organization and, if so, why is there such a large discrepancy in the Rosa Bullen tract? Ordinarily we assume that the leases are more or less correct, but in this case they do not check at all in a number of cases.

8623

The Winstead deed probably does not refer to the present land area and is of no value as far as this application is concerned, and the lease and map do check. Those leases marked with an asterisk (*) are all right and require no further attention. The worst cases are the Rosa Bullen tract and the W. B. Dalton tracts. The four deeds in the two Dalton tracts do give a total of 77 acres. There still remains the error on the map and application in the Rosa Bullen lease.

It would appear that the acreages in the leases were more or less guessed at when the leases were made and are not really correct.

Will you please look into this matter for us and give us the correct figures as soon as possible so that we will be able to process the application without delay.

We have just received your memorandum, dated March 22, 1957, and the letters of Mr. B. H. Putnam and Mr. H. C. Wildner concerning the transfer of the options and the application to the National Lead Company.

The new reference will be:

Docket No. DMA-4580 (Zinc)
National Lead Company
Funcheon Camp Creek Prospect
Grainger County, Tennessee

We will process the application in the name of National Lead Company, but before it is submitted for final processing it will be necessary for the company to furnish proof that it is in legal possession of the option agreements.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (JHB)

APPROVED:

Frank D. Lamb (JHB)
Member, Bureau of Mines

Thor H. Kiilsgaard (JHB)
Member, Geological Survey

WPKlugescheid/bjl (3/27/57)
Copy to: Docket
Admr. R. File
Op. Committee
Base Metals
Mr. Kiilsgaard
Mr. Bishop
Chron.

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

OFFICIAL FILE COPY
DMEA
IN REPLY REFER TO
RECEIVED MAR 26 1957

DATE	INITIALS	CODE
3/26	C	220
3/26	WPK	500

March 26, 1957

Re: DMEA 4580
B. H. Putnam
Puncheon Camp Area
Grainger County, Tenn.
Appl. Est. $175,553.85
Rec'd Est. 170,380.00, zinc

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of Field Team Report

The applicant requested assistance in prospecting a tract by drilling, part of which has been drilled by New Jersey Zinc Company.

The examiners recommend a modified drilling program totalling about the same footage. Reference to the interim reports of March 4, 1957, shows that of 20 holes totalling 10,867 feet drilled in the B. H. Putnam tracts, DMEA 4381 and 4422, only 1 hole has been classified as an ore hole and 11 have shown mineralization.

I concur with the recommendation of the Field Team.

N. E. Nelson

N. E. Nelson

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY DMEA RECEIVED MAR 25 1957		
DATE	INITIALS	CODE
3/25	C	220
3/25	WPK	580

March 22, 1957

Memorandum

To: Operating Committee, DMEA, Washington, D. C.

From: Executive Officer, DMEA Field Team, Region V

Subject: Docket No. DMEA-4580 - Zinc
B. H. Putnam, Marietta, Ohio
Puncheon Camp Area, Grainger County, Tennessee

Enclosed is a letter from the Applicant, enclosing a new agreement with Viva M. and W. H. Stapleton, extending the Applicant's option to November 2, 1958.

Robert A. Laurence

Robert A. Laurence

Enclosures 2

Leave placed in appli.

716
TELEPHONE ~~VANDERGRIFT~~

B. H. PUTNAM, OPERATOR
~~MARYVILLE, TENNESSEE~~
Morristown, Tennessee

2047
P. O. BOX ~~[illegible]~~

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 25 1957

DATE	INITIALS	CODE

Mr. Robert A. Laurence
D.M.E.A. Field Office
Post Office Building
Knoxville, Tennessee

Dear Mr. Laurence:

With respect to our Puncheon Camp D.M.E.A. application we wish to notify you that the Viva M. and W. H. Stapelton option agreement has been extended for a period of one year. The original option agreement would have expired November 2, 1957. Under the terms of the extension agreement the expiration date of this agreement is now the 2nd day of November, 1958.

Aphotostatic copy of the agreement of extension is herewith enclosed for your records. The original instrument of extension will be sent to the Grainger County Register of Deeds for recording. Upon the completion of the recording of this instrument the recording data will be forwarded to you.

If there is any other information we can furnish you with please let us know.

Very truly yours,

B. H. Putnam

By Robert V. Benjamin
Robert V. Benjamin

March 22, 1957

RVB:

RECEIVED
MAR 22 1957
U. S. Geological Survey
Geologic Division
Knoxville, Tenn.

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM 13 POST OFFICE BLDG.
KNOXVILLE 2, TENN.

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 25 1957

DATE	INITIALS	CODE
3/25	C	220
3/25	WPK	500

March 22, 1957

Memorandum

To: Operating Committee, DMEA - Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: Benjamin H. Putnam properties in Tennessee (zinc)
DMEA-4381, Idm-E1002, Indian Creek area
DMEA-4422, Idm-E1022, Thorn Hill area
DMEA-4580, Puncheon

Reference is made to our memorandum of March 21, 1957.

Enclosed are letters from B. H. Putnam and National Lead Company, requesting an assignment of the subject contracts to National Lead Company.

We suggest that any correspondence concerning further documentary evidence of the transfer of leases should be handled directly between the Washington office and Mr. Wildner, of National Lead Company to save time.

Robert A. Laurence

Robert A. Laurence
Executive Officer, DMEA
Region V

Wm. A. Beck

Wm. A. Beck, for V. J. Lynch
Member, Bureau of Min es

Operating Comm.

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 25 1957

DATE	INITIALS	CODE
3/25	C	220
		500

March 22, 1957

Mr. Benjamin H. Putnam
170 East Pearson Street
Chicago 11, Illinois

Dear Mr. Putnam:

We have forwarded your letter of March 15 and Mr. Wildner's of March 19, requesting assignment of your DMEA exploration project contracts to National Lead Company, to our Washington office for appropriate action. I do not anticipate any delays in approval of the necessary assignment and acceptance papers.

Mr. Benjamin came in yesterday to tell me that he had obtained a one year extension of the Stapleton lease in the Puncheon Camp area. This was welcome news.

It was a pleasure to meet you last week, and I hope you'll drop in again whenever you are in Knoxville.

Sincerely yours,

Robert A. Laurence
Executive Officer
DMEA Field Team, Region V

RAL/mg
cc - Operating Committee (3)
Lynch
File

March 22, 1957

EXTRA COPY
DMEA
RECEIVED MAR 25 1957

DATE	INITIALS	CODE

Mr. W. C. Wildner
Vice President
National Lead Company
111 Broadway
New York 6, New York

Dear Mr. Wildner:

Your request for assignment of the B. H. Putnam exploration contracts has been forwarded to our Washington office for appropriate action. If they approve the request, they will prepare the assignment and acceptance papers for signature by you and Mr. Putnam. It is probable that they will require a copy of your agreement with Mr. Putnam which transfers the options to your Company.

It was a pleasure to meet with Mr. Miles and Mr. Bryant on their recent visit, and we will be pleased to meet any other representatives or consultants of the Company at any time.

Very truly yours,

Robert A. Laurence
Executive Officer
DMEA Field Team, Region V

RAL/mg
cc - Operating Committee (3)
Lynch
Files

NATIONAL LEAD COMPANY

111 BROADWAY

NEW YORK 6, N.

H. C. WILDNER
VICE PRESIDENT

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 25 1957

DATE	INITIALS	CODE

March 19, 1957

Mr. Robert Laurence
D.M.E.A. Field Office
Post Office Building
Knoxville, Tennessee

Dear Mr. Laurence:

As you know from the discussion with our representatives, we wish to accept transfer of mineral option agreements from Benjamin H. Putnam in connection with his Indian Creek and Thorn Hill D.M.E.A. exploration contracts, as well as that included in the Puncheon Camp D.M.E.A. application, now pending.

We have made an arrangement with Mr. Putnam to carry on the exploration programs previously outlined by him, and will appreciate your allowing us to accept the transfers as stipulated above.

Yours very truly,

H. C. Wildner
Vice President

GMW:pg

RECEIVED
MAR 22 1957
U. S. Geologic Division
Knoxville, Tenn.

BENJAMIN H. PUTNAM
170 EAST PEARSON STREET
CHICAGO 11, ILLINOIS

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 25 1957

DATE	INITIALS	CODE

Mr. Robert Laurence
D.M.E.A. Field Office
Post Office Building
Knoxville, Tennessee

Dear Mr. Laurence:

This is to advise you that with your permission we are proposing to transfer our mineral option agreements included in our Indian Creek and Thorn Hill D.M.E.A. Exploration Project Contracts and those mineral option agreements included in our Puncheon Camp D.M.E.A. Application to the National Lead Company.

We would very much appreciate your cooperation in effecting this transfer.

Very truly yours,

B.H. Putnam

BHP/ms

March 15, 1957

RECEIVED
MAR 22 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 20 1957

DATE	INITIALS	CODE
3/21	C	220
3/21	WPK	500

March 20, 1957

Re: DMEA 4580; Zinc; amended to &170,380
B. H. Putnam, Marietta, Ohio
Puncheon Camp area
Grainger County, Tenn.

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, USBM

Subject: Review of Field Team report of 3/12/57 (received 3/19/57) on application.

The applicant on the basis of several geochemical anomalies proposed 84 holes, each 300 to 1,000 feet deep, on a 781 acre tract, in the southwestern part of the Copper Ridge-Zinc district.

Helmuth Wedow, Jr. (USGS) and V. J. Lynch (USBM) examined the property, noting that the geologic setting of the project was well described by the applicant. It was noted that in addition to anomalous quantities of zinc in the Kingsport formation, that the Stapleton tract has some surface mineralization and was the site of a reported discovery by the New Jersey Zinc Co. in 1952. It is further reported that New Jersey Zinc Co. planned to again lease the properties but lost in a race to do so to the Putnam enterprise. The field team approves an exploration program, but suggests a modification in the drill pattern. They suggest an initial 7 lines of holes at 1,200-foot intervals across the strike of the formations, with holes in the individual fence at about 200-foot intervals rather than at 300 feet as proposed in the application. The modification is justified by the field examiners observation that elsewhere in the Copper Ridge ore shoots might be missed by drilling at a 300-foot interval. The field examiners concluded the 50,000 feet of proposed drilling appears adequate for the revised pattern.

I concur in the recommendation of the field examiners, and field team as to drilling program and costs and recommend the preparation of a contract. It might be the item of cost "reaming to size AX @ $2.00 a foot" will need clarification, for since no EX drilling is proposed it is not clear what is to be reamed.

O. M. Bishop

O. M. Bishop

Copy to: Division of Minerals
Mr. Killsgaard
Mr. Lamb
Mr. Bishop
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
ROOM POST OFFICE BLDG.
KNOXVILLE 2, TENN.

WASHINGTON 25, D. C.

March 12, 1957

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 14 1957

DATE	INITIALS	COST
3/14	C	220
		130
3/18	C	220
3/18	WPK	500

Memorandum

To: Operating Committee, D.M.E.A. Washington

From: DMEA Field Team, Region V - Knoxville, Tennessee

Subject: Field Examination Report, DMEA-4580(Zinc)
B. H. Putnam, Marietta, Ohio. Puncheon Camp Area,
Grainger County, Tennessee

Enclosed are four copies of the subject report, and nine extra copies of Figure 2 which shows a revised drilling pattern worked out by the Field Examiners and the Applicant's geologists.

It should be noted that estimated costs are for drill holes of 1000 feet or less depth. It is not anticipated that any will exceed that depth, and no bid on deeper drilling was requested. The contract should permit deeper drilling, in case some holes have to go a few feet beyond the 1000 to cut the ore zone, even though the Government will contribute only to $3 per foot for this deeper drilling.

We recommend approval of the application.

Robert A. Laurence
Robert A. Laurence
Executive Officer, DMEA
Region V

V. J. Lynch
V. J. Lynch, Member
Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
3-18-57
(date)

ON-SITE Report

OFFICIAL FILE COPY
D M E A
RECEIVED MAR 14 1957

DATE	INITIALS	CODE
		130
		220

UNITED STATES
DEPARTMENT OF THE INTERIOR

DEFENSE MINERALS EXPLORATION ADMINISTRATION

FIELD EXAMINATION REPORT, REGION V

On

DMEA-4580 (Zinc) PUNCHEON CAMP CREEK AREA
Grainger County, Tennessee

By

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

and

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

Reviewed by
DMEA OPERATING COMMITTEE
3-18-57
(date)

March 8, 1957

FIELD EXAMINATION REPORT

DMEA-4580 (Zinc)

Applicant: Benjamin H. Putnam, Chicago, Illinois

Location: Puncheon Camp Creek area, Grainger County, Tennessee

Summary and recommendations

Known occurrences of zinc mineralization and the discovery of significant geochemical anomalies showing from 700 ppm to more than 3000 ppm zinc in the Puncheon Camp Creek area, Grainger County, Tennessee indicate the strong possibility that one or more bodies of commercial grade zinc ore may be found in the area. Changes have been suggested in the general lay-out of the drilling pattern originally proposed by the Applicant; the changes being based chiefly on the experience obtained to date on other DMEA zinc projects in the Copper Ridge district. Approval of the proposal to explore the Puncheon Camp Creek area, using the revised drilling pattern, is strongly recommended.

Introduction

The writers, accompanied by Messrs. W. T. Hill and J. W. Spears, geologists for the Applicant, spent about two hours in the subject area on January 23, 1957. Subsequently, several hours were spent with the Applicant's geologists in discussion of the drilling plan proposed for the exploration of the area.

The Puncheon Camp Creek area is about 5 to 7 miles southwest of Thorn Hill, a small settlement at the junction of U. S. Highway 25-E and Tennessee State Highway 131 (Clinch Valley Road). It lies in the southwestern

portion of the Copper Ridge zinc district. The Applicant is currently exploring, with DMEA assistance, two other Copper Ridge prospects in the same general part of the district--the Thorn Hill area (DMEA-4422) and the Indian Creek area (DMEA-4381), about 6 and 12 miles respectively northeast of the subject area. The New Jersey Zinc Company's Flat Gap mine is about 18 miles northeast of the Puncheon Camp Creek area. This latter company is also conducting the exploration of numerous other promising areas, both with and without DMEA assistance, in the Copper Ridge belt. The location of the Puncheon Camp Creek area and its relation to other DMEA contracts and applications in the Copper Ridge district are shown in figure 1.

Accessibility

Access to the Puncheon Camp Creek area is afforded by Tennessee State Highway 131 (Clinch Valley Road) from Thorn Hill on U. S. Highway 25-E or by the same State Highway from the southwest. The nearest railhead is on a branch of the Southern Railway at Washburn Station, approximately 5 miles southwest of the proposed project area. Gravel or dirt roads maintained by the County as well as numerous farm lanes give direct access to the area from the State Highway. Most of the water for drilling will be pumped from Puncheon Camp Creek or from various ponds in sinkholes within the area.

Property rights

According to the letter of January 11, 1957 from the DMEA Operating Committee referring the application to the Field Team and a review of the Applicant's leases, most of the agreements with the property owners

are in order. The Applicant was queried about the missing deed book and page numbers of the Pryor Acuff tract. Search for this information showed that the deed to this tract had not been previously recorded. Therefore, the Applicant had it recorded at the Grainger County Courthouse on February 25, 1957 at 3:10 p.m., where it is noted in Notebook F, Page 59 and recorded in the Book of Deeds, Warranty Volume 86, Page 161.

When questioned about the short option on the Stapleton tract, the Applicant's representatives indicated that an extension is being requested. They also indicated that the project drilling, should a contract be granted, would be initiated on the Stapleton tract, particularly if it is not possible to obtain an extension, and the Applicant must exercise his option at the expiration of his present agreement with the property owner.

Geologic Setting

The geology of the Puncheon Camp Creek area is well described in the Applicant's geologic report by W. T. Hill and others. The general geology of the Copper Ridge zinc district has been described previously by Rodgers (see "Geologic map of the Copper Ridge district, Hancock and Grainger Counties, Tennessee": U. S. Geological Survey Strategic Minerals Investigations Preliminary Map). Briefly, the Copper Ridge zinc district lies in the Copper Creek thrust sheet of East Tennessee. This thrust sheet contains rocks varying in age from Cambrian to Carboniferous, although the stratigraphic units directly involved in the Puncheon Camp Creek area are the Cambrian Copper Ridge dolomite and the Lower Ordovician Chepultepec, Longview, Kingsport, and Mascot formations--all of the Knox group, and the Middle Ordovician units of the Chickamauga limestone.

The structure of the rocks in the vicinity of the project area is essentially monoclinal in the Copper Creek thrust sheet with strikes averaging about N. 60° E. and dips varying from 25 to 45 degrees to the southeast. Tear faults with relatively minor displacement may be present locally. In addition, brecciated zones in the Knox dolomites lying parallel to or cutting across the bedding at a low angle suggest the presence of bedding plane faults.

Exploration Program

The first recorded exploration for zinc in the Puncheon Camp Creek area was in 1918. Several open cuts were made at the W. S. Mallicoat prospect (see Tenn. Div. of Geology Bull. 31, pp. 83-84) on Puncheon Camp Creek on what is now the Stapleton farm about 0.2 mile below the mouth of Dotson Creek. In 1944 this prospect was mapped in considerable detail by the U. S. Geological Survey (see "The W. S. Mallicoat zinc prospect", by V. E. Nelson and Irving Gladstone: U. S. Geological Survey Strategic Minerals Investigations Preliminary Map, unpublished). Nelson and Gladstone did not recommend additional work at this prospect at the time of their examination.

Drilling by the New Jersey Zinc Company on the Stapleton tract (see Plate 1 of Applicant's Geologic Report) about 1952 is reported to have shown some mineralization in holes that probably reached depths of 300 to 400 feet. Although the New Jersey Zinc Company dropped their leases in the immediate area after the completion of eight holes, it is also reported that they were planning to re-lease the Stapleton farm as well as the adjacent Jackson tract at about the time that the Applicant had taken his leases in the area.

In 1956 the Applicant conducted geologic studies in the Puncheon Camp Creek area. These studies included a geochemical soil survey, chiefly along the favorable zone in the lower part of the Kingsport formation, although at selected localities the soil sampling program straddled all the formations of the Knox group from the uppermost part of the Copper Ridge dolomite to the lower half of the Mascot dolomite (see Plate 2 of Applicant's Geologic Report). In addition to the sphalerite occurrences revealed by previous prospecting, the Applicant's study also showed the presence of zinc mineralization in strata in the vicinity of the Kingsport-Mascot contact and in the basal part of the Chepultepec formation.

On the basis of the geochemical soil anomalies (from 700 ppm to over 3000 ppm zinc) and the surface showing of zinc mineralization, as well as the general favorability of the Copper Ridge district as a whole, the Applicant believes that the Puncheon Camp Creek area may contain significant bodies of commercial grade zinc ore. The proposal in the application is to explore by diamond drilling for commercial ore bodies that lie chiefly in the main favorable zone of the district in the lower part of the Kingsport formation. The drilling pattern proposed in the application consists of a series of dog-leg fences at intervals of 600 feet along the strike with the holes spaced on 300-foot centers in the fences (see Plate 1 of Applicant's Geologic Report). Review of the proposed drilling, chiefly in the light of the results obtained from other DMEA drilling on favorable areas in the Copper Ridge district, indicates to the examiners that the proposed pattern should be changed. The available data from the other areas suggests that ore bodies in this district generally occur as narrow shoots (100 to 300 feet wide) that are more likely to plunge into the dip at a low angle to the strike

of the enclosing rock or may be essentially parallel to this strike, rather than plunging at a high angle down the dip. Thus, the proposed drilling in the Puncheon Camp Creek area may obtain more satisfactory results if the initial pattern used is a series of widely spaced dip fences within which the holes are relatively closely spaced. Later, intermediate fences may be drilled with their position and hole spacing being governed by the results obtained from the initial widely spaced fences. Suggested locations for seven initial dip fences spaced at about 1200-foot intervals along the strike are shown on figure 2. It is further suggested that the fences numbered 1, 2, 4, and 6 be the first to be drilled. Holes on these fences should be spaced about 200 feet apart with closer spacing where necessary to obtain sufficient preliminary data for the prediction of attitude and shape of possible ore shoots. In general, however, the drilling pattern should be sufficiently flexible to permit such modification as may be necessary as the exploration progresses.

The depths of the holes in the suggested revision of the drilling pattern remains the same as that proposed in the application, namely 300 to 1,000 feet and averaging about 600 feet. The 50,000 feet of drilling proposed in the application appears to be adequate for the revised program. The change in the drilling pattern has been discussed at length with the Applicant's representatives and they are in full agreement with the revision as proposed by the Field Team.

Estimated costs for the proposed project are as follows:

Actual Costs

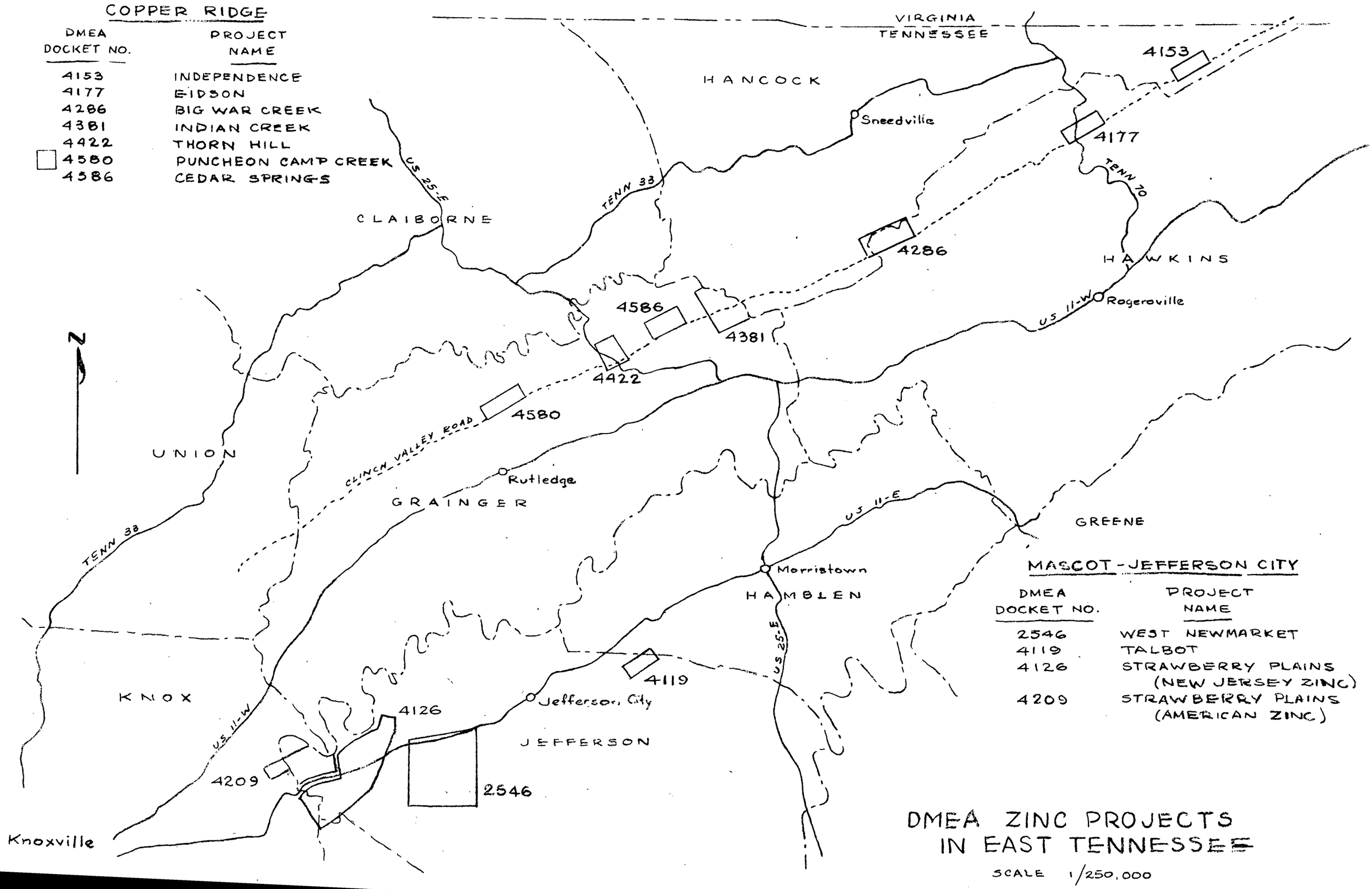
Independent Contracts

Diamond drilling		
50,000 feet, size AX diamond drilling at $3.00 a foot	$150,000.00	
5,000 feet, reaming to size AX @ $2.00 a foot	10,000.00	
Total diamond drilling		$160,000.00
Fixed Unit Costs		
1 - Geologist, full time, 10 months @ $500/Mo.	5,000.00	
1 - Surveyor and 2 helpers (40 days)	1,380.00	
Clerical help and drafting, 10 months @ $50/Mo.	500.00	
Transportation expense (12,500 miles @ 8¢) - ?	1,000.00	
Core Boxes - 150 @ $2.00 each	300.00	
Insurance and payroll taxes	250.00	
Miscellaneous costs	850.00	
Total Fixed Unit Costs		9,280.00
Sample Analyses		
550 analyses @ $2.00 each		1,100.00
Total Estimated Cost of Project		$170,380.00

Helmuth Wedow, Jr., Geologist
U. S. Geological Survey

V. J. Lynch, Mining Engineer
U. S. Bureau of Mines

FIGURE 1


COPPER RIDGE
DMEA DOCKET NO.
PROJECT NAME
4153 INDEPENDENCE
4177 EIDSON
4286 BIG WAR CREEK
4381 INDIAN CREEK
4422 THORN HILL
4580 PUNCHEON CAMP CREEK
4586 CEDAR SPRINGS
VIRGINIA
TENNESSEE
HANCOCK
Sneedville
CLAIBORNE
US 25-E
TENN 33
TENN 70
HAWKINS
Rogersville
US 11-W
UNION
CLINCH VALLEY ROAD
Rutledge
GRAINGER
TENN 38
US 11-E
GREENE
Morristown
HAMBLEN
US 25-E
KNOX
US 11-W
Jefferson City
JEFFERSON
Knoxville
N
MASCOT-JEFFERSON CITY
DMEA DOCKET NO.
PROJECT NAME
2546 WEST NEWMARKET
4119 TALBOT
4126 STRAWBERRY PLAINS (NEW JERSEY ZINC)
4209 STRAWBERRY PLAINS (AMERICAN ZINC)
DMEA ZINC PROJECTS IN EAST TENNESSEE
SCALE 1/250,000

OFFICIAL FILE COPY
DMEA
RECEIVED MAR 14 1957

DATE	INITIALS	CODE

DMEA Form 7
(12-56)

500

OFFICIAL FILE COPY

Date	Surname	Code
1/11/57	Klugerichard	~~500~~
	Kraynak	~~500~~
1/11	Selfridge	~~130~~
1/11	J Spencer	~~110~~

1/14 CW ~~300~~ ~~225~~ 500

Mr. Robert A. Laurence
Executive Officer
Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

JAN 11 1957

Re: Docket No. DMEA-4580 (Zinc)
Benjamin H. Putnam
Puncheon Camp Creek Prospect
Crainger County, Tennessee

Dear Mr. Laurence:

The cited application for exploration assistance is being referred to your office for consideration, a field examination of the property if warranted, and recommendation.

The agreement with Viva and W. H. Stapleton is a one year option to buy, dated November 1956. This should be investigated as to the possibility of getting an extension, as there will be little time remaining for work by the time that the contract is processed completely, should one be granted.

We will require the deed book and page numbers for the registration of the deed to the property of Pryor Acuff (45 acres).

You will note that the agreements with Austin Johnson, D. R. Coffman, Rosa Bullen, T. A. Green, Pryor Acuff, W. B. Dalton, and J. C. McGinnis contain greater acreages than those submitted by Mr. Putnam for use under the contract. This is, of course, quite proper.

You will also note that after the agreement was made with Mr. Putnam, T. A. Green sold his property to Aaron B. Dalton but retained 50 per cent of the mineral rights for himself. We have consulted the legal division concerning this transaction and they have given us the following opinion: This sale does not affect the rights of Mr. Putnam under the agreement but if at some future time he should wish to renew the agreement, he would have to deal with two parties.

86

The costs seem to be reasonable except that, with a geologist constantly in attendance, it would seem as though even a part-time supervisor is unnecessary.

Copies of memoranda dated December 28, 1956, and January 7, 1957, by N. E. Nelson, Geological Survey, and O. M. Bishop, Bureau of Mines, respectively, are enclosed for your information. We are also enclosing one extra copy of the application for the use of the Field Team.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee (SHB)

Enclosures

APPROVED:

Frank D. Lamb

Member, Bureau of Mines (SHB)

Thor H. Kiilsgaard

Member, Geological Survey (SHB)

WPKlugescheid/er 1/11/57

Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Chron.

DMEA Form 7
(12-56)

OFFICIAL FILE COPY

Date	Surname	Code
1/11/57	Klugescheid	500
	Irwin	500
1/11	Selfridge	130
1/14	Johnson	110
	Kiilsgaard	225
	Kamb	500

500

JAN 11 1957

Mr. Benjamin H. Putnam
512 Third Street
Marietta, Ohio

Re: Docket No. DMEA-4580 (Zinc)
Benjamin H. Putnam
Puncheon Camp Creek Prospect
Grainger County, Tennessee

Dear Mr. Putnam:

Your application for Government assistance to explore the cited property has been reviewed by the Base Metals Division of the Defense Minerals Exploration Administration and has been referred to:

Mr. Robert A. Laurence
Executive Officer
Field Team, Region V
Room 13, Post Office Bldg.
Knoxville 2, Tennessee

If the Field Team requires additional information concerning your application, they will contact you at an early date.

Sincerely yours,

Frank E. Johnson (for)

ACTING Administrator

WPKlugescheid/er 1/11/57

Copy to: Docket
Admr R File
Op. Committee
Base Metals
Mr. Bishop, USBM
Mr. Kiilsgaard, USGS
Region V, (2)
Chron.

R.G.

8623

Properties in Grainger County, Tennessee.

	Name.			Acres Given.		Deeds.	Leases.
218.20	Viva and W. H. Stapleton	(a) 72		368	218.20	Nov. 2, 1956. 1 yr.	218.20
105.00	Elvin Jackson and Wife	Misc. 18	(a)	506	105.00	105.00	105.00
15.00	Elmer Breeding and Wife	(a) 82		64	15.00	15.00 mineral 3 yrs.	15.00
51.00	S. S. Breeding and Wife	(Misc.) 67	(a)	431	51.00	51.00 mineral 3 yrs.	51.00
45.00	Austin Johnson and Wife	70	(a)	516	45.00	45.00 mineral 3 yrs.	62.00 ?
25.00	D. R. Coffman	56	(a)	43	25.00	25.00 mineral 3 yrs.	50.00 ?
29.00	Rosa Bullen	64	(a)	35+36	29.00	29.00 mineral 3 yrs.	60.00 ?
58.00 50%	T. A. Green, et al	85	(a)	598	58.00	58.00 mineral 3 yrs.	58.00 ?
45.00	Pryor Acuff and Wife	86	(a)	161	45.00	45.00 mineral 3 yrs.	55.00 ?
77.00	W. B. Dalton and Wife	77 61 (a) 61 79	(25A) (11A) (1A) (40A)	118 480 386 198	77.00	77.00 mineral 3 yrs.	125.00 ?
62.00	J. C. McGinnis and Wife	73 (a) 73	(37½A) ?	154 351	62.00	? 62.00 mineral 3 yrs.	88.00 ?
51.00	H. B. Winstead and Wife	71	(a)	434	51.00	? mineral 3 yrs.	51.00
	Total				781.20		

X 37½ [illegible] remainder not defined as to acreage.

Y [illegible] acreage does not check - some typing [illegible].

Z [illegible] Deed.

(a) Register Office, Grainger County, Tennessee

Geologic Section

Chickamauga Limestone

Knox Dolomite,

(Brecciated) Mineralized

some mineralization (Brecciated)

135' Kingsport Dolomite

Kingsport Formation

120' Kingsport Limestone mineralized in places (Brecciated)

115' Longview Dolomite

750' Chapel Hill Dolomite.

3' mineralized

100'

IN REPLY REFER TO:

OFFICIAL FILE COPY
D M E A
RECEIVED JAN 3 1957

DATE	INITIALS	CODE
		500

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

December 28, 1956

Re: DMEA 4580
Benj. H. Putnam
Puncheon Creek Tract
Grainger Co. Tenn.

Memorandum

To: W. R. Griswold, Defense Minerals Exploration Administration

From: N. E. Nelson, U. S. Geological Survey

Subject: Review of application.

The applicant now requests assistance in prospecting a third Grainger Co. tract, by drilling.

General conditions appear to be similar to those obtaining at the Thorn Hill and Indian Creek prospects, 5 and 11 miles to the north of east respectively. Geochemical prospecting has been done and, as at the other prospects, anomalous amounts of soil zinc are indicated at numerous places in the tract. Eight diamond drill holes have been drilled in the Stapleton sub-tract by others than the applicant. No information concerning results is given.

Only preliminary reports concerning E 1002, Indian Creek, and Contract E 1022, Thorn Hill, are at hand.

Perhaps enough information is now available to permit an appraisal of the results of the geochemical prospecting as indicators of zinc mineralization down dip of the anomalies. Also it may now be possible to make a preliminary evaluation of the general potential of the district.

Referral of the application to the Field Team for appropriate action.

N. E. Nelson

N. E. Nelson

IN REPLY REFER TO:

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

EXTRA COPY
D M E
RECEIVED

DATE	INITIALS	CODE

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Referral of the application to the Field Team for appropriate action.

cc: O. M. Bishop, 3617
Director's reading file (4212)
Branch reading file (4212)
DMEA (3)
Chron. file
Docket File

N. E. Nelson

N. E. Nelson

NENelson:btr
G 12/28/56

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

OFFICIAL FILE COPY
DMEA
RECEIVED JAN 7 1957

DATE	INITIALS	
1/7	WPK	500

January 7, 1957

Re: DMEA 4580; Zinc; $175,533.85
Benjamin H. Putnam
Puncheon Camp Creek Area
Grainger County, Tenn.

Memorandum

To: W. R. Griswold, DMEA

From: O. M. Bishop, Branch of Base Metals

Subject: Review of application dated December 17, 1956, received January 2, 1957.

The applicant requests assistance in drilling 50,000 feet of AX core hole in a 781-acre tract which has been the site of geologic mapping and geochemical testing. The applicant has mapped several positive soil anomalies on the basis of some 2,400 soil samples on the outcropping Mascot-Kingsport contact and the upper part of the Kingsport limestone along the 7,400-foot length of the property.

The exploration envisioned consists of 84 holes ranging from 300 to 1,000 feet deep, and the hole pattern is designed to cover the 781-acre tract.

I recommend referral to the Field Team and review of the application in the light of recent exploration experience in the Copper Ridge District.

O. M. Bishop

O. M. Bishop

Copy to: Division of Minerals
Mr. Kiilsgaard
Mr. Lamb
Mr. Bishop
Files

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

EXPEDITE COPY
JAN 7 1957

January 7, 1957

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O. M. Bishop

O. M. Bishop

Copy to: Division of Minerals
Mr. Kiilsgaard
Mr. Lamb
Mr. Bishop
Files

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

December 21, 1956

Mr. Benjamin H. Putnam,
512 Third Street
Marietta, Ohio

Subject: DMEA-4580

Dear Mr. Putnam:

Your application for exploration assistance, dated December 21, 1956 submitted to our office at Knoxville, Tennessee has been assigned Docket Number DMEA-4580 and referred to the Base Metals Division in the Washington office. Kindly identify all future correspondence relating to your application by this Docket Number.

Sincerely yours,

Allen S. Dakan, Director
Operations Control and
Statistics Division

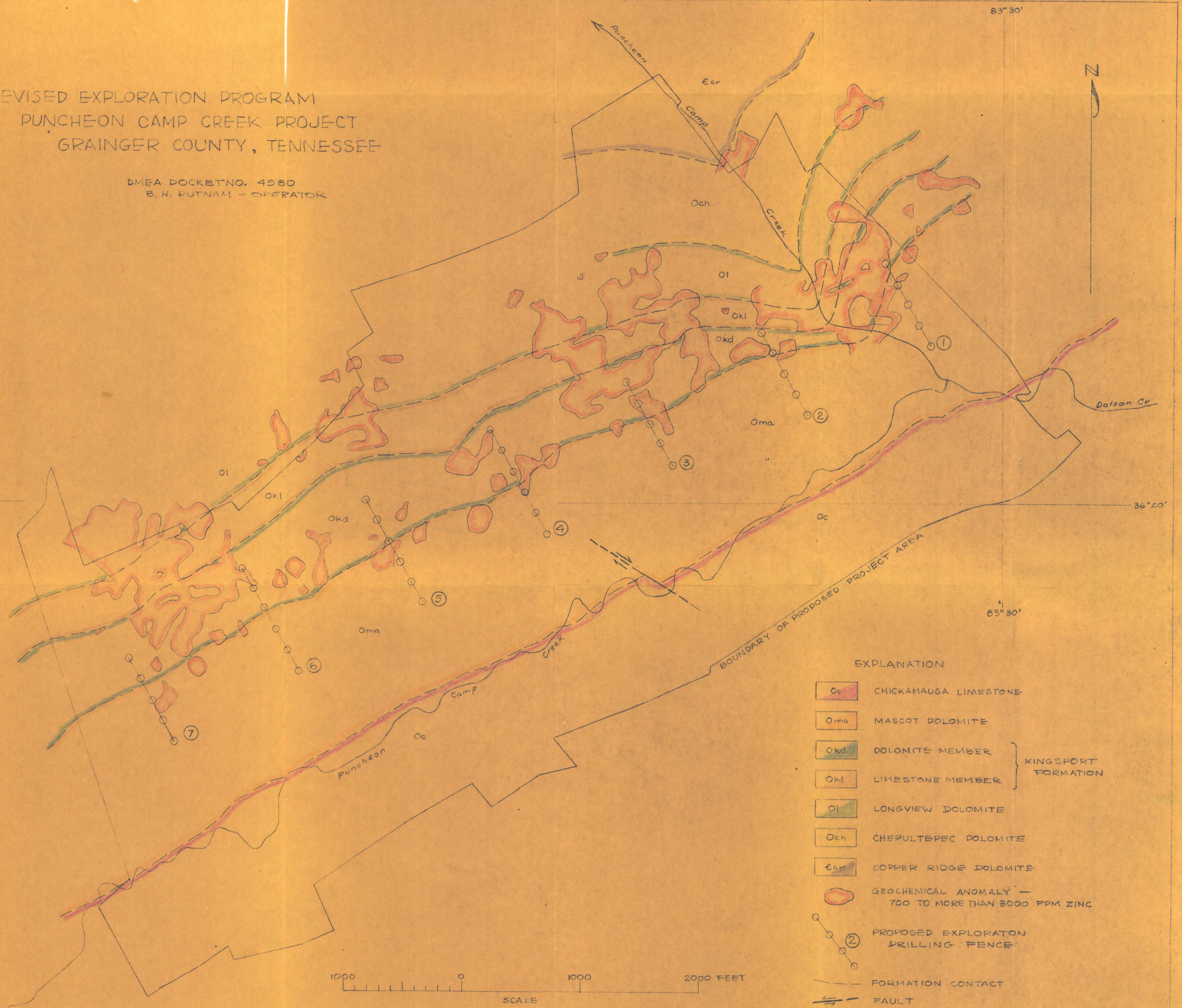
Copy to:

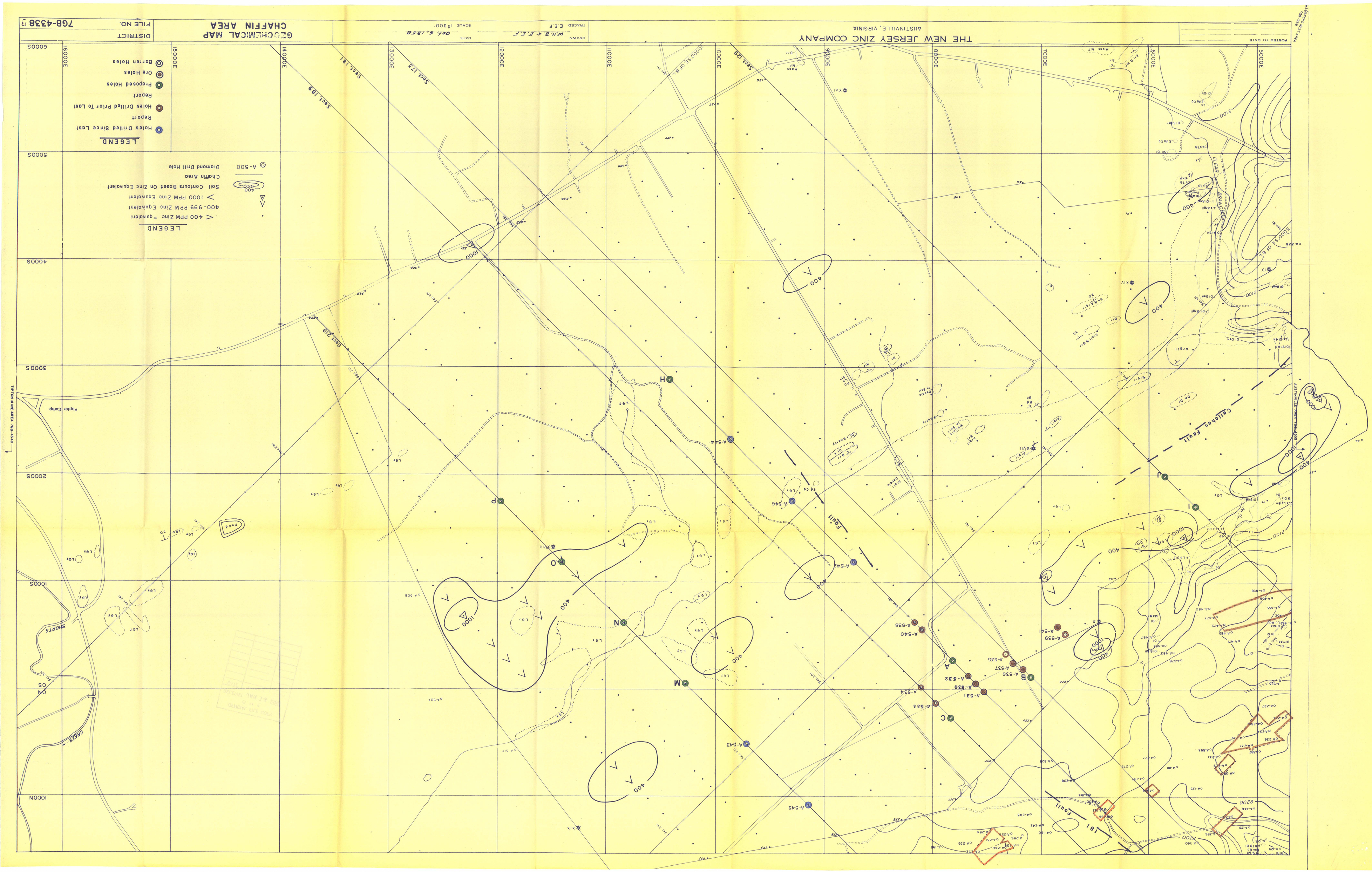
6416

FIGURE 2

REVISED EXPLORATION PROGRAM
PUNCHEON CAMP CREEK PROJECT
GRAINGER COUNTY, TENNESSEE

DMEA DOCKET NO. 4580
B. H. PUTNAM – OPERATOR




THE NEW JERSEY ZINC COMPANY
AUSTINVILLE, VIRGINIA
GEOCHEMICAL MAP
CHAFFIN AREA
DISTRICT
FILE NO. 7GB-4338
POSTED TO DATE
DRAWN W.H.B. & E.E.F.
DATE Oct. 6, 1958
TRACED E.E.F.
SCALE 1" = 300'
LEGEND
< 400 PPM Zinc Equivalent
400-999 PPM Zinc Equivalent
> 1000 PPM Zinc Equivalent
Soil Contours Based On Zinc Equivalent
Chaffin Area
A-500 Diamond Drill Hole
LEGEND
Holes Drilled Since Last Report
Holes Drilled Prior To Last Report
Proposed Holes
Ore Holes
Barren Holes
Sect. 189
Sect. 181
Sect. 173
Sect. 129
Sect. 219
Equit
Equit
Equit
Calhoun Fault
Poplar Camp
Pond
SHORTS CREEK
CLEAR BRANCH
TIPTON MINE AREA 7GB-4340
5000E
6000E
7000E
8000E
9000E
10000E
11000E
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13000E
14000E
15000E
16000E
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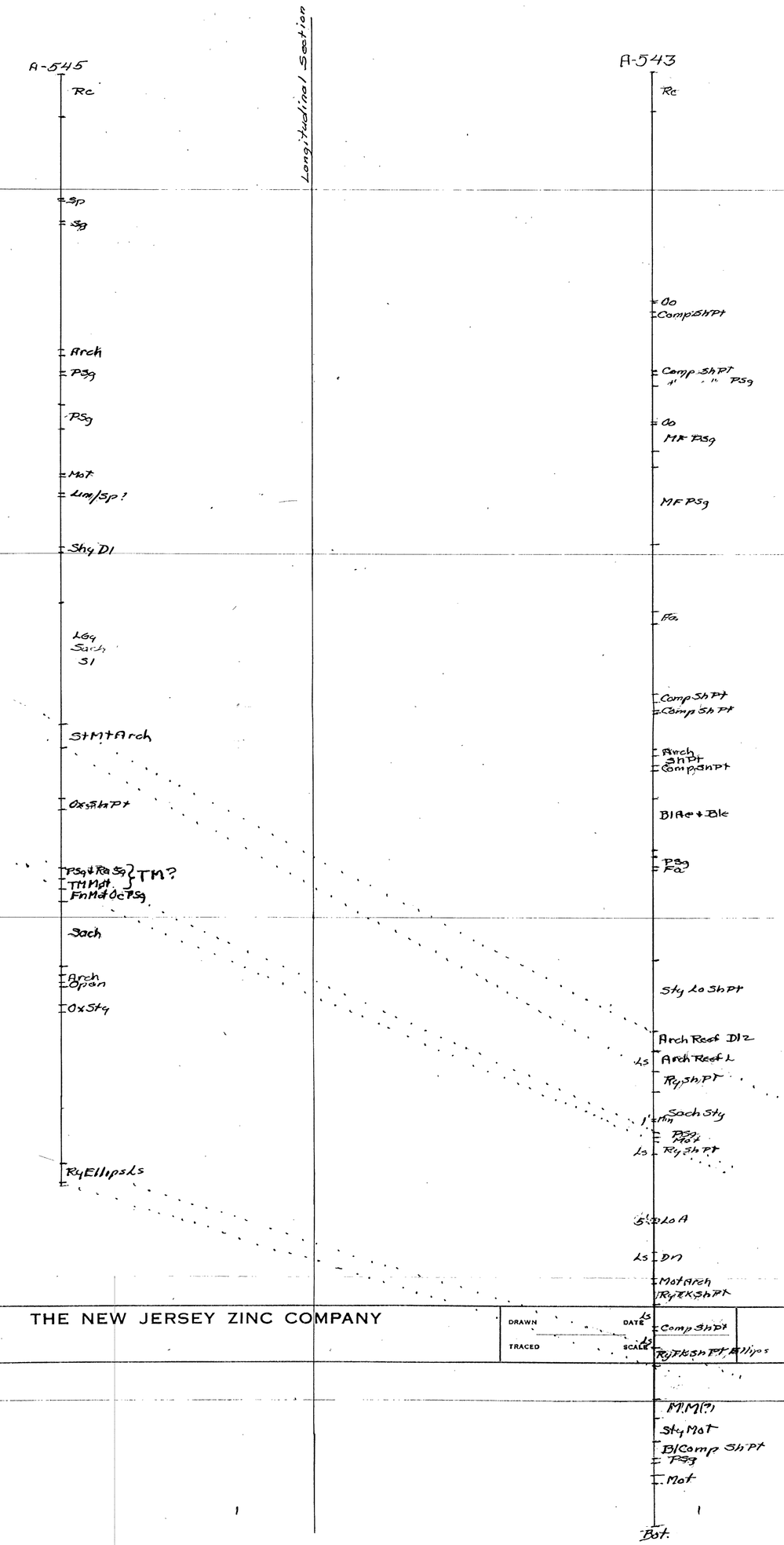
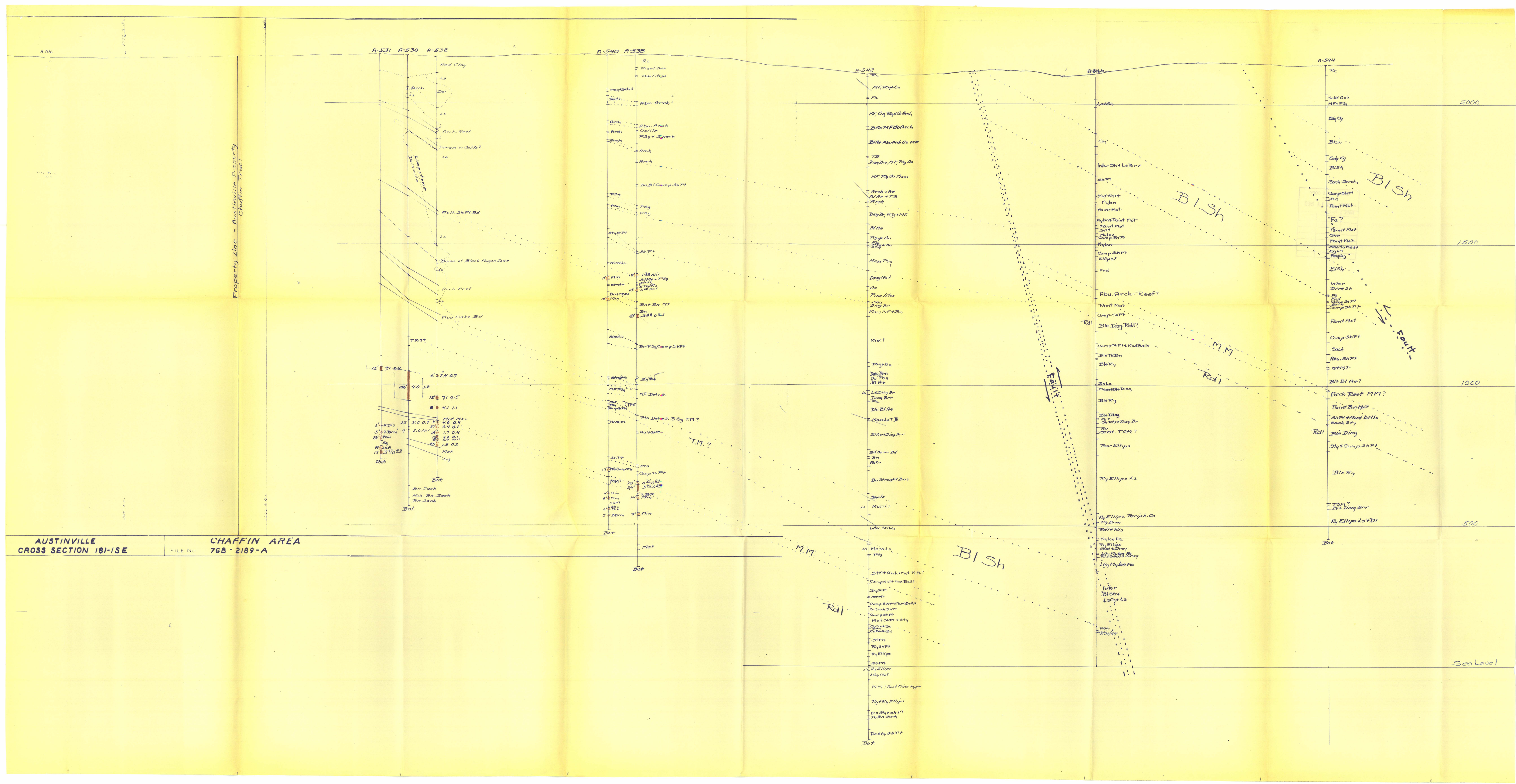
1000S
2000S
3000S
4000S
5000S
6000S



POSTED TO DATE	THE NEW JERSEY ZINC COMPANY	DRAWN / DATE / TRACED / SCALE	CHAFFIN SECTION 219	DISTRICT / FILE NO.

HOWARD BUTTON CO., INC., N. Y.

X5607A 750 2-52



AUSTINVILLE
CROSS SECTION 181-1SE

FILE NO. 7GB - 2189-A

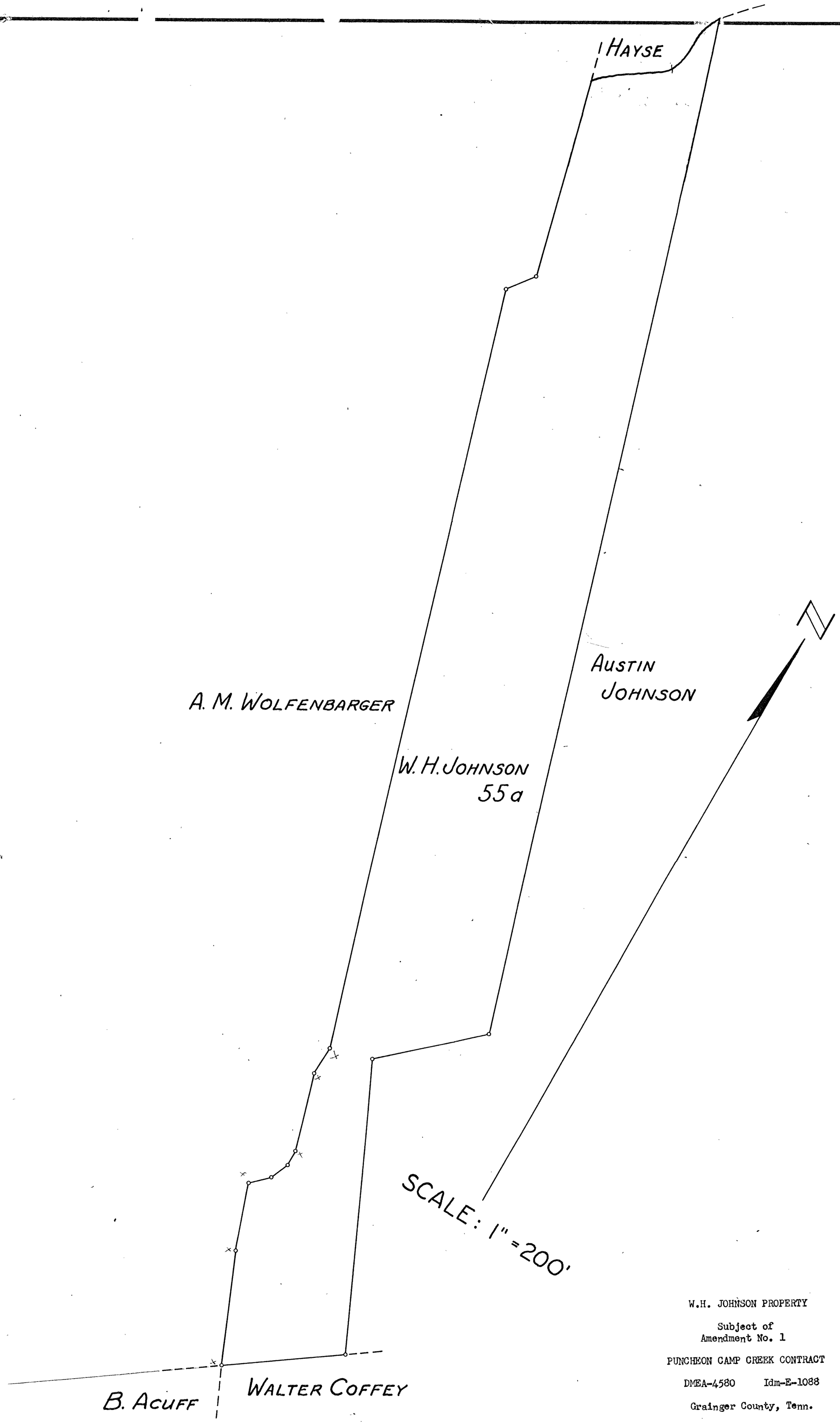
CHAFFIN AREA

FIGURE 2

REVISED EXPLORATION PROGRAM
PUNCHEON CAMP CREEK PROJECT
GRAINGER COUNTY, TENNESSEE

DMEA DOCKET NO. 4880

NATIONAL LEAD COMPANY



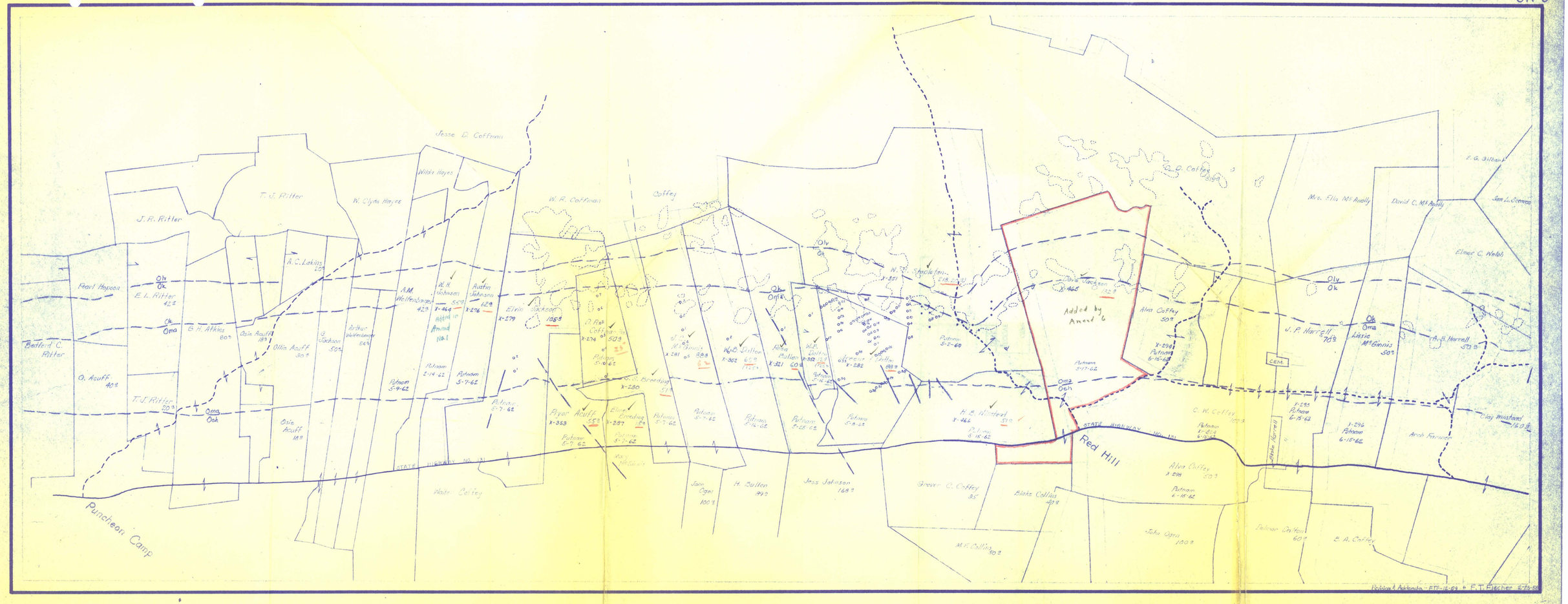
W.H. JOHNSON PROPERTY

Subject of
Amendment No. 1

PUNCHEON CAMP CREEK CONTRACT

DMEA-4580 Idm-E-1088

Grainger County, Tenn.


Jesse D. Coffman
Willis Hayes
T. J. Ritter
W. Clyde Hayes
J. R. Ritter
W. R. Coffman
Coffey
Olv
Ok
Pearl Hysson
E. L. Ritter 42a
A. C. Lakins 104a
A. M. Wolfenbarger 42a
W. H. Johnson 55a X-464
Austin Johnson 62a X-206
Added in Amend No. 1
Elvin Jackson 105a X-279
D. Floe Coffman 50a X-274
Putnam 5-10-62
Ok
Omz
G. H. Atkins 80a
Osie Acuff 18a
Ollie Acuff 30a
G. Jackson 50a
Arthur Wolfenbarger 54a
Putnam 5-9-62
Putnam 5-14-62
Putnam 5-7-62
Putnam 5-7-62
Bedford C. Ritter
O. Acuff 40a
T. J. Ritter 50a
Omz
Ooh
Osie Acuff 18a
Flyor Acuff 55a X-353
Elmer Breeding 8a X-287
Putnam 5-7-62
Putnam 5-7-62
Putnam 5-7-62
Putnam 5-7-62
Putnam 5-14-62
Putnam 5-25-62
Putnam 5-8-62
Putnam 5-8-62
Putnam 5-2-60
Ok
Omz
Ooh
Olv
Ok
W. H. Smith 20a X-281
W. B. Sutter 67a 175a X-302
Ross Breeding 51a X-280
Ross Breeding 8a X-287
Putnam 5-7-62
Putnam 5-7-62
Putnam 5-14-62
Putnam 5-25-62
Putnam 5-8-62
Putnam 5-8-62
Putnam 5-2-60
Ollie Sutter 60a X-321
Ollie Sutter 175a X-282
Ollie Sutter 88a
Putnam 5-16-62
W. T. Shipleton 118a X-351
H. B. Woodard 51a X-466
Putnam 5-15-62
Davis Jackson 153a X-465
Added by Amend 6
Putnam 5-17-62
Omz
Ooh
Alva Coffey 50a X-296 Putnam 6-15-62
C. W. Coffey 100a
Putnam 6-8-62
STATE HIGHWAY NO. 131
Red Hill
Alva Coffey 50a X-298 Putnam 6-15-62
Mrs. Ella McAnally
David C. McAnally
E. G. Gilbert
Sam L. Scoggins
Elmer C. Welch
Olv
Ok
J. P. Harrell 70a
CEM
Lake Harrell
Ok
Omz
Lissie McGinnis 50a
A. B. Harrell 53a
X-295 Putnam 6-15-62
X-296 Putnam 6-15-62
Clay Mustard 16a
Arch Farmer
Water Coffey
Vaty McGinnis
John Ogan 100a
H. Butler 199a
Jess Johnson 168a
Grover C. Coffey 35
Blake Collins 40a
M. F. Collins 50a
John Ogan 100a
Delman Dutton 60a
E. A. Coffey
Puncheon Camp
Pelham & Ashcraft - FTF-12-59 & F. T. Fischer 2-15-62

CH-6

Land Map of Puncheon Camp Creek Area
Scale 1" = 660'
Outline of DMEA Area.
Added by ↑ Amendment No. 6
Jesse D. Coffman
Wilda Hayes
W. Clyde Hayes
T. J. Ritter
J. R. Ritter
W. R. Coffman
Coffey
D. D. Coffey 315a
Mrs. Ella McAnally
David C. McAnally
E. G. Gilbert
Sam L. Sconce
Elmer C. Welch
A. C. Lakins 20a
Pearl Hopson
E. L. Ritter 42a
Bedford C. Ritter
G. H. Atkins 80a
Osie Acuff 18a
Ollie Acuff 90a
G. Jackson 50a
Arthur Wolfenbarger 54a
A. H. Wolfenbarger 42a
W. H. Johnson 55a
Austin Johnson 62a
O. Acuff 40a
T. J. Ritter 30a
Osie Acuff 18a
Oly / Ok
Ok / Oma
Oma / Och
X-464
X-276
X-279 Elvin Jackson 105a
X-274 D. R. Coffman 50a
J. C. McGinnis 88a
W. B. Dalton 65a (125a)
Rosa Bullen 60a
X-352 W. B. Dalton 12a (125a)
X-282 Greene & Dalton 88a
X-280
X-281
X-321
S. S. Breeding 51a
X-351 W. H. Stapleton 218.20a
X-465 Dave Jackson 100a
X-294 Alva Coffey 50a
X-295 Partin Harrell 70a
X-296 J. W. McGinnis 50a
A. B. Harrell 50a
CEM.
X-324 C. W. Coffey 107a
X-466 H. B. Winstead 51a
X-353 Pryor Acuff 55a
Elmer Breeding 15a
X-287
X-352
Mary McGinnis
Red Hill
X-298 Alva Coffey 50a
Blake Harrell
Clay Winstead 160a
Arch Farmer
Putnam 5-9-62
Putnam 2-14-62
Putnam 5-7-62
Putnam 5-10-62
Putnam 5-16-62
Putnam 5-25-62
Putnam 5-8-62
Putnam 5-15-62
Putnam 11-2-59
Putnam 5-17-62
Putnam 6-15-59
Putnam 6-15-62
State Highway No. 131
Puncheon Camp
Waite Coffey
Grover C. Coffey 35
Blake Collins 40a
M. F. Collins 50a
Shields Winstead
John Ogen 100a
Delmar Dalton 60a
B. A. Coffey
E. T. Fischer