EXHIBIT C

QUITCLAIM DEED

FOR VALUE RECEIVED, J. L. ANKER and HOWARD SHRIVER, hereby remise, release and forever QUITCLAIM unto The Flintkote Company, a corporation, having its head office located at 30 Rockefeller Plaza in the City of New York, State of New York, all of their right, title and interest in and to the following described mining claim situate in the Tuolumne Mining District, County of Tuolumno, State of California, to-wit:

> Being the "Susie Q" placer claim for building stone, being the NE¼ of NE¼ of Section 2, T. 2S., R. 15 E., M.D.M.
>
> Being the same property as per Notice of Location filed in the office of the County Recorder, Tuolumne County, California, being Recorder's No. 2679 for year 1953.

WITNESS our hands this 18th day of September, 1953.

/s/ J. L. ANKER
J. L. ANKER

/s/ HOWARD SHRIVER
HOWARD SHRIVER

STATE OF CALIFORNIA)
) ss.
County of Tuolumne)

On this 18th day of September, 1953, before me, JAMES R. HARDIN, a Notary Public in and for said county and state, personally appeared J. L. ANKER and HOWARD SHRIVER, known to me to be the persons described in and whose names are subscribed to the foregoing instrument and they duly acknowledged to me that they executed the same.

WITNESS my hand and official seal the day and year in this certificate above written.

(SEAL)

/s/ JAMES R. HARDIN
Notary Public in and for the County of Tuolumne
State of California

My commission expires: 8-5-57

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

February 8, 1954

Memorandum

To: Mr. Lawrence G. Houk, Chief, Nonmetallic Minerals Division, Defense Minerals Exploration Administration

From: Commodity Specialist, Construction and Chemical Materials Branch

Subject: Application of The Flintkote Company for exploration loan Docket No. 3202

In view of the favorable report from College Park on the iron content of the asbestos I would recommend that the field team make an examination of the prospect. It is important to note if any significant percentage of spinning fiber appears in this deposit.

OB

Oliver Bowles

EXHIBIT E

Two traverses with a magnetometer were made over the serpentine lens and onto the waste on either side. No distinction could be noted between syenite, barren serpentine, asbestos-bearing serpentine and slate. This is typical of results obtained elsewhere in California, due to the low magnetite content of these deposits.

The 40 acres contained in the N.E. 1/4 of N.E. 1/4 of Sec. 2 T. 2S., R. 15 E. were staked by Flintkote to provide additional access and working space if the property developed into a mine. Seven tons of rock must be excavated from this 40 acres before December 18 and the work recorded in Sonora in order to keep the claim in good standing.

The geological mapping indicated that the serpentine lens is somewhat narrower than previously supposed. A few tiny slate outcrops near the northwest end of the property show dips at a variable steep angle to the northeast. It is very likely that the serpentine has a similar dip. It was found possible to locate approximately the downhill contact of the serpentine by observing when waste boulders started to appear in the overburden. All the serpentine boulders above the railroad cut and the southeast 3/4 of claim "Asbestos No. 1" are barren. The asbestos-bearing serpentine is confined to a zone along the footwall (downhill) contact (see map); this zone has a length of 1700 feet and a maximum possible width of from 125 - 150 feet. Many boulders derived from here grade at least 5% asbestos in veins up to 3/8" and one pit in bedrock on "Asbestos" claim (see map) grades 6 to 7% asbestos in veins up to 1/2".

MF-103
(Revised April 1952)

UNITED STATES DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION

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

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 6 1953

Not to be filled in by applicant

Docket No. DMEA 3202
Metal or Mineral
Date Received 11-6-53
Estimated Cost
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:

The Flintkote Company - corporation, Massachusetts
30 Rockefeller Plaza
New York 20, New York

(*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. See attached sheet.

(*d*) If a partnership, add to the above statement the names and addresses of all partners.

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 See attached sheet.

(*b*) State any mine name by which the property is known.

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

(*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
See attached sheet.

(*f*) If the land consists of unpatented claims, add to the description above, the book and page numbers for each recorded location notice.

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. See attached sheet.

(*b*) State past and current production, and ore reserves, if any, giving quantities and grades.

(*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.

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

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

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

(*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.

(*c*) The work will start within ..... days and be completed within ..... 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.

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:

(*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.).

(*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.

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

(*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.

(*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.

(*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.

(*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.

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)? See attached sheet.

(*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 October 30, 1953

THE PHILTRONS COMPANY
(Applicant)

By P. C. Rowe

Executive Vice President

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

FORM MF-103 (April 1952)

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

DEPARTMENT OF THE INTERIOR
Domestic Minerals Administration
RECEIVED

The Flintkote Company
30 Rockefeller Plaza
New York 20, N. Y.

1.(c) President - I. J. Harvey, Jr., 30 Rockefeller Plaza, New York 20, New York.

Executive Vice President - P. C. Rowe, 30 Rockefeller Plaza, New York 20, New York.

Vice President - Frank H. Neher, 30 Rockefeller Plaza, New York 20, New York.

Vice President - Stuart H. Ralph, 30 Rockefeller Plaza, New York 20, New York.

Vice President - George J. Pecaro, 55th and Alameda Streets, P. O. Box 2216, Terminal Annex, Los Angeles 54, California.

Vice President - H. Lester Evans, Oak Street and Central Avenue, East Rutherford, New Jersey.

Vice President and Treasurer - C. S. Gregg, 30 Rockefeller Plaza, New York 20, New York.

Vice President and Secretary - George R. McKenzie, 30 Rockefeller Plaza, New York 20, New York.

Assistant Treasurer - D. J. McNamara, Oak Street and Central Avenue, East Rutherford, New Jersey.

Assistant Treasurer - P. F. Breen, 55th and Alameda Streets, P. O. Box 2216, Terminal Annex, Los Angeles 54, California.

Assistant Secretary - J. A. Bain, 30 Rockefeller Plaza, New York 20, New York.

3.(a) The Flintkote Company proposes to conduct a field survey of properties located in Sections 1 and 2, Township 2 South, Range 15 East, and Section 35, Township 1 South, Range 15 East, in Moccasin Quadrangle, Tuolumne County, California. The claims to be investigated are as follows:

1. Situate in Section 35, T. 1 S., R. 15 E. M.D.M. Section 1, T. 2 S. R. 15 E., M.D.M., described as follows, to wit: "Asbestos" located December 21, 1942, and Notice of Location of which is recorded in Vol. 19, of Quartz, at page 359, Tuolumne County Records.

The Flintkote Company
30 Rockefeller Plaza
New York 20, N. Y.

2. "Asbestos No. 1", located December 21, 1942, and Notice of Location of which is recorded in Vol. 19 of Quarts, at page 358, Tuolumne County Records.

3. "Access Lode", located April 5, 1943, and Notice of Location of which is recorded in Vol. 19 of Quarts, at page 365, Tuolumne County Records.

The above claims are in an area 600 feet by 1500 feet, adjacent to Moccasin Creek at an elevation of about 2000 feet as indicated on the topographical map of Moccasin Quadrangle attached hereto as Exhibit "A".

4. Being the "Susie Q" placer claim for building stone, being the NE¼ of NE¼ of Section 2, T. 2 S., R. 15 E., M.D.M.

Being the same property as per Notice of Location filed in the office of the County Recorder, Tuolumne County, California, being Recorder's No. 2679 for year 1953.

3.(b) None.

3.(c) Claims 1, 2 and 3 above are owned by Lloyd C. Ashley, Palmer C. Ashley and Robert F. Ashley, doing business in the State of California as Ashley Asbestos Association Limited. They are subject, however, to an option agreement which provides for the ultimate purchase by The Flintkote Company and which is attached hereto as Exhibit "B".

Claim No. 4 is owned by The Flintkote Company under a Quitclaim Deed given on the 18th day of September by J. L. Anker and Howard Shriver, a copy of which is attached hereto as Exhibit "C".

3.(d) See answer to (c) above.

3.(e) None.

3.(f) See answer to (e) above.

4.(a) We have no knowledge of any prior asbestos prospecting or production on this property. Mr. J. H. Setinsky, a former Vice President in charge of manufacturing of The Flintkote Company and a graduate mining engineer, visited the property with Mr. Lloyd Ashley in 1950 and recommended further exploration work. Mr. Tudor Davies, a graduate geologist and

employee of Flintkote Mines Limited, the asbestos producing subsidiary of The Flintkote Company, inspected the property on August 28, 1953 and made a report, the pertinent portions of which are attached hereto as Exhibit "D". Mr. Davies during the week of September nineteenth, spent an additional three days at the subject property, gathering further information, including a reconnaissance map of the topography and geology, an attempt at a magnetometer survey and staking additional ground. The pertinent portions of Mr. Davies report of this work is attached as Exhibit "E".

Attached as Exhibit "F"is a map prepared by the Engineering Department of Flintkote Mines Limited, showing the estimated size of the orebody.

4.(b) See answer to (a) above.

4.(c) See answer to (a) above.

4.(d) The claims are situated adjacent to a paved highway; the nearest community is Jacksonville, about four miles from the site of the claims. The nearest rail shipping point is Chinese Camp, approximately ten miles away on the Sierra Railroad of California.

4.(e) The water supply in this area is ample for the needs of asbestos milling. Actually very little water is required in the processing of asbestos fiber as it is a dry process. The property is located about two miles from the Moccasin Reservoir where power is generated. The power requirements are 25 kw. hr. per daily ton and a mill processing 1,000 tons daily would represent about 3,300 connected horsepower.

5.(a) The exploration is for the purpose of finding a commercial orebody of asbestos, particularly the higher grades such as spinning grades down to 6 grades. However, all asbestos ore bodies contain varying grades of asbestos, and the exploration and development of spinning grades of asbestos cannot be confined to a search for that grade alone and must be conducted within the broader scope of exploration for commercially feasible ore deposits. As all ore bodies contain various classes and lengths of fiber, it is the function of good milling know-how together with technical and engineering skill to sort out the fibers in such a manner that the maximum yield of the longest fiber is produced. It is the length of fiber to be produced which is determinative on the question of the economic feasibility of ore deposit development.

The Flintkote Company
30 Rockefeller Plaza
New York 20, N. Y.

5.(b) The proposed work would proceed in two phases or sections. The first work would consist of five diamond drill holes of approximately 350 feet each, as well as the use of a bulldozer in order to determine the nature of the rock beneath the overburden. (This seems to be the most feasible method of exposing hidden outcrops and will limit the amount of diamond drilling which must be done.) The diamond drill cores would be shipped to Thetford Mines, Quebec, for study in our laboratory there. It is estimated that the initial phases of this project will take three months.

If the results of the preliminary exploration are favorable, the second phase will be undertaken. This will consist of making ten additional diamond drilling holes, approximately 350 feet each, evaluating these cores at our Thetford Mines laboratory, and then taking a 500 ton bulk sample, shipping this sample to Thetford Mines for further evaluation and milling tests. An additional period of six months will be required to complete this program in order to confirm and evaluate the ore body properly.

5.(c) The total project should cover nine months and will be commenced promptly upon the approval of this application.

5.(d) The Flintkote Company, through its wholly-owned subsidiary, Flintkote Mines Limited, Thetford Mines, P. Q., Canada, is engaged in the mining and milling of grades of asbestos and asbestos fiber from 3Z down to SS sand. The present operation at Thetford Mines consists of open pit mining, using one Diesel shovel and one electric shovel, a fleet of carrying trucks, a mill capable of 1200 to 1300 tons per day, consisting of crushing, drying, storing, and proper grading by screens and inspiration so as to meet specifications of the various grades of fiber. In view of the world wide shortage of asbestos, this Company has undertaken an extensive exploration program and actually in the recent past has investigated considered properties in Quebec, Ontario, California and Vermont. By letter dated June 29, 1951, The Flintkote Company under application No. DMA-1097 (Asbestos) was authorized to proceed with an aerial magnetometer survey of certain areas in Vermont, receiving an exploration project contract in the amount of $12,000. These funds were not used, since after receiving the contract, it was learned that an aerial magnetometer survey had been made by another asbestos company of the same area covered by this project and the contract was cancelled by letter of Mr. C. O. Mittenderf, Director Production Expansion Division, dated July 24, 1951.

The Flintkote Company
30 Rockefeller Plaza
New York 20, N. Y.

The program will be under the supervision of Mr. H. L. Evans, Vice President in charge of manufacturing of The Flintkote Company, and he will be assisted by Mr. Gordon Gibbs, the manager of the Flintkote mining operations at Thetford Mines, and Mr. R. S. Coleman, the mine superintendent of Flintkote Mines, both of whom are graduate mining engineers with many years of operating and geological exploration experience in the asbestos field.

6.(a) It has not as yet been determined how much of the work will be let to contractors.

6.(b) The following estimates of cost are broken down into the two phases or sections explained in 5(b).

Phase One

Diamond Drilling - 5 holes, 350' @ $10		$17,500.00
Core Boxes - 70 @ $5		350.00
Core Evaluation and Shipping Expense		2,500.00
Bulldozing: 3 days @ $100/day		300.00
Engineering and Supervision		
1) 2 months' salary, Mr. Tudor Davies	$1,000	
2) Travel & Subsistence Expenses of Mr. Tudor Davies, including round trips from California to Thetford	1,000	2,000.00
Contingencies - 10%		2,265.00
Estimated Total Cost		$24,915.00

Phase Two

Diamond Drilling - 10 holes, 350' @ $10		$35,000.00
Core Boxes		1,000.00
Core Evaluation (freight)		2,500.00
Bulk Sample - 500 tons (including freight)		25,000.00
Engineering and Supervision		
1) 6 months' salary, junior engineer to supervise the work at the claim site	$2,500	
2) 2 months' salary, Mr. Tudor Davies	1,000	3,500.00
Contingencies - 10%		6,700.00
Estimated Additional Expense		$73,700.00

6.(c) See answer to (b) above.

6.(d) See answer to (b) above.

6.(e) See answer to (b) above.

The Flintkote Company
30 Rockefeller Plaza
New York 20, N. Y.

6.(f) See answer to 6(b).

6.(g) See answer to 6(b).

6.(h) See answer to 6(b).

7.(a) The applicant is prepared to invest its pro-rata share of the estimated cost of exploratory work and whatever additional capital is necessary to acquire property and construct a mill thereon, which would represent a total investment of approximately three million dollars.

This statement is based on the approval of this application and the allowance under DMEA Order No. 1 of 90 per cent of the estimated exploratory costs as requested herein.

EXHIBIT D

Favourable indications of an economic orebody are present on this property. These indications are in the form of many serpentine fragments bearing commercial quantities of fibre in veinlets up to at least 3/8 inch wide. The writer concurs with Messrs. Tonjes, Setinsky and Pecaro in recommending that Flintkote option the property. The new tentative terms are somewhat easier to live with than Ashley's former demands. Exploration would consist of bulldozing or test-pitting to bedrock to determine the serpentine contacts and permit bulk sampling, followed by diamond-drilling.

LOCATION

Ashley's three mining claims, totalling 60 acres, lie on the north east side of the Mocassin Creek valley in Sec. 35, T. 1 S., R. 15 E. and Sec. 1, T. 2 S., R. 15 E., Tuolumne County. The lower end of the access claim borders Highway 49 at elevation 1100 feet. The upper end of the claims lies at elevation 2000 feet. The nearest railway siding is at Chinese Camp, 10 miles to the west. Electric power is available 1-1/2 miles northeast from the Hetch Hetchy Power House, owned by the City of San Francisco. The old Hetch Hetchy railroad roadbed plus Ashley's new half mile long bulldozed road provide ready means of access for exploration purposes.

DESCRIPTION OF PROPERTY

No outcrops of serpentine can be seen on or in the immediate vicinity of this property. However, starting one mile southeast and extending 10 miles in the same direction, many road cuts along Highway 49 show that the serpentine mass is of con-

siderable length and hundreds of feet wide in places. One outcrop of slate is exposed in a dry creek bed on the access claim 200 yards from the Highway. The dip of the bedding is variably steep to the northeast. It is assumed that the serpentine mass would conform to this dip if it is representative of the general attitude of the bounding rocks.

On the property, many rock fragments litter the hillside which on the average approximates 25°- 30°. Most of the fragments are asbestos-bearing serpentinized peridotite and a massive white quartzite in no apparent recognizable pattern. Some of the serpentine fragments have rolled downhill below the slate outcrop. Few are to be seen as one goes very far up slope from the railway cut.

Practically all the serpentine boulders contain interesting amounts of cross fibre asbestos which attain maximum staple lengths of 3/8". Ernie Tonjes states that he has seen some rare 1/2" unbroken veins. The 3/8" veins are by no means rare. The fibre is not quite so silky and strong as at Thetford but is far from being poor quality. In attempts to reach bedrock, Mr. Ashley has dug six trenches into the hillside. None succeeded. Despite the limitations placed on a property showing only float and no bedrock, it is believed that further work on our part is warranted by the concentration of asbestos in the loose fragments and the area over which they occur. If Flintkote decides to option the property, it would be necessary for Ashley to stake more claims for protection down the dip and for tailings disposal and mill site. Also the right of way of the Hetch Hetchy railroad must be purchased from the city of San Francisco

DEPARTMENT OF THE INTERIOR
Science Minerals Administration
RECEIVED
NOV 3 1953

EXHIBIT B

THIS AGREEMENT, made and entered into in triplicate this day of , 1953,

B E T W E E N:

LLOYD C. ASHLEY, PALMER C. ASHLEY and ROBERT F. ASHLEY, doing business as "ASHLEY ASBESTOS ASSOCIATION LIMITED" in the State of California, hereinafter referred to as the "OPTIONORS"

OF THE FIRST PART

A N D:

THE FLINTKOTE COMPANY, a corporation having its head office located at 30 Rockefeller Plaza in the City of New York in the State of New York, herein acting and represented by P. C. Rowe, its Vice-President, herein duly authorised for the purposes hereof, the said company hereinafter referred to as the "OPTIONEE"

OF THE SECOND PART

WHEREAS the said Optionors represent that they are the sole owners of certain unpatented mining property in Mining District of Tuolumne in the County of Tuolumne in the State of California, described as follows, to wit:

> Situate in Section 35, T. 1 S., R. 15 E. M.D.M. Section 1, T. 2 S. R. 15 E., M.D.M., described as follows, to wit: "Asbestos" located December 21, 1942, and Notice of Location of which is recorded in Vol. 19, of Quartz, at page 359, Tuolumne County Records.
>
> "Asbestos No. 1", located December 21, 1942, and Notice of Location of which is recorded in Vol. 19 of Quartz, at page 358, Tuolumne County Records.
>
> "Access Lode", located April 5, 1943, and Notice of Location of which is recorded in Vol. 19 of Quartz, at page 365, Tuolumne County Records.

WHEREAS the Optionee desires the right to carry on certain exploration and development work and to obtain the option to purchase the mines, minerals and mining rights on the lands above described, the Optionors are willing to grant on the terms and conditions herein contained.

NOW THEREFORE THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. The Optionor undertakes to immediately provide the Optionee with all documents required by the solicitors of the Optionee, in order to establish insurable title to the property. The present option is made and entered into in consideration of the sum of One Thousand Dollars ($1,000.) from the Optionee, to be payable within sixty (60) days after the date of receipt by the Optionee of the title documents, if the Optionee is advised by its solicitors that they are satisfied as to title to the said rights. If within the said period of sixty (60) days from the delivery of the said documents the solicitors of the Optionee find certain flaws in the title or require additional information to enable them to complete their report, which flaws or which information it is, within the power of the Optionors to rectify or obtain, they shall be entitled to notify the Optionors to rectify such flaws or furnish such additional information and this the Optionor shall be bound to do. In such event and notwithstanding the expiration of the said period of sixty (60) days, the Option shall continue in force and the said One Thousand Dollars ($1,000.) shall not be payable until the said solicitors have been satisfied as to the title to the said rights and the authority of the Optionors to enter into and carry out the terms of this agreement. The Optionors shall not be held liable for damages for any reason whatsoever.

2. In consideration of the sum of One Thousand Dollars ($1,000.) mentioned in Paragraph 1, the Optionors hereby give and grant to the Optionee, or its nominee, the sole and exclusive option, irrevocable within the term limit herein for the exercise thereof and subject to the terms, provisoes and conditions hereinafter set forth, to purchase from the Optionors for the total sum of two Hundred and Fourty Thousand Dollars ($240,000.) the above mentioned mining rights together with any surface rights, water rights, and rights of way which the Optionors may possess. The Optionor agrees to grant to the Optionee the option to purchase at original cost to the Optionor any other contiguous claims which they later acquire.

3. The Optionee, or its nominee, its or his servants, agents or workmen, shall have full right and authority during a period of nine (9) months from the date of the payment of One Thousand Dollars ($1,000.) to go in and upon the said lots and to conduct all such exploration and prospecting work as the Optionee, or its nominee, may deem necessary to determine the mineral value of the said rights and the Optionee undertakes to reimburse any owners of the surface rights, other than the Optionors, for any and all damage to the trees, fences, cultivated or pasture land resulting from such entry, prospecting or any removal of ore, minerals or other matter by the Optionee, or its nominee, in, upon or from the said property, regardless of whether the damage is incidental, accidental or as a result of negligence of the Optionee.

4. It is agreed that any time before the said date of the expiry of this agreement, the Optionee, or its nominee, shall be entitled to exercise the right of option hereby granted and in such event the purchase price hereinabove stipulated shall thereupon become due and payable.

5. It is further agreed that the Optionee, or its nominee, during the currency of this option, shall have the exclusive possession of the said property (subject always to the rights of any owners of the surface rights other than the Optionors) and may possess, remove and dispose of such quantities of minerals as it or he may consider desirable for determining the mineral value of the said property, and in particular, but without in any way limiting the generality of the foregoing, the Optionee, or its nominee, shall be at liberty to mine and ship ore, minerals or other matter to an amount not exceeding one thousand (1,000) tons and in the event of the non-exercise of this option the Optionee, or its nominee, shall not be under any obligation to reimburse the Optionors in respect of the ore, minerals or other matter so shipped.

T.D. /s/
P.A. /s/
R.F.A./s/
L.C.A./s/

6. All notices and payments required to be given by the Optionee, or its nominee, to the Optionors shall be properly given if contained in a registered letter, deposited in any one of Her Majesty's Post Offices in the Province of Quebec, postage prepaid addressed as follows:

Mr. Palmer C. Ashley
1211 Hill Street
Santa Monica, Calif.

and the time of the respective receipt of such notice shall be deemed to be four (4) days after the time of such deposit of the letter.

7. And it is hereby agreed and understood that in the event of the expiration and lapse of this option all plant, equipment, machinery, apparatus, buildings or other property which may have been erected, installed or brought upon the said lots by the Optionee, or its nominee, shall be and remain the property of the Optionee, or its nominee, respectively, irrespective of their character as real or personal property, provided, however, that the Optionee, or its nominee, shall remove all such plant, equipment, machinery, apparatus, buildings and other property from the said lots within the period of ninety (90) days from the date of the expiration or lapse of this option, and in default thereof any such plant, equipment, machinery, apparatus, buildings and other property remaining upon the said lots after the expiration of the said period of ninety (90) days shall become and be the property of the Optionors.

8. The Optionors hereby covenant and agree that the Optionee may register the present agreement by memorial and the Optionee binds and obliges himself that should it at any time decide to abandon the present agreement it will forthwith register the documents necessary to effect the cancellation of the said registration.

9. The Optionors covenant and agree with the Optionee not to encumber the said property after the execution of this agreement and during the period that the same is in effect.

10. It is distinctly understood and agreed that this is an Option Agreement only and that nothing herein contained or the payment of any part of the purchase price or monies for application toward the purchase price or the observance of the conditions herein contained shall, prior to the formal exercise of this option, obligate the Optionee to pay any further money or monies, as the case may be, or to expend any monies or any further monies, as the case may be, in exploration, development and/or mining work unless the Optionee shall see fit so to do.

11. During the option period, the Optionee agrees to furnish to the proper authorities certification of all the necessary proofs of labor for the annual expenditures and assessment as required by the revised statutes of the United States and the laws of the State of California for the purpose of holding said claims.

12. It is further agreed that in the event of lapse of this option that the Optionee will submit to the Optionors, within two weeks of the date of expiration, a complete and true copy of all the Optionee's maps, plans, test results, diamond-drill logs and other findings pertaining to the mineral value of the property and resulting from their investigations during the option period.

13. The Optionors hereby bind and oblige themselves that should the Optionee give formal notice at any time of its exercise of this option they will, forthwith, execute all documents necessary to convey to the Optionee a good title, free and clear, franc et quitte, of all hypothecs, charges and encumbrances of the rights which form the object of this agreement.

14. Time shall be of the essence of this agreement and of the said option hereby granted.

This agreement shall extend to include, enure to the benefit of and be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

IN WITNESS WHEREOF the parties hereto have executed this agreement as of the day, month and year hereinabove set forth.

WITNESSES:

Witnesses as to the signatures of the Optionors

/s/ T. DAVIES

/s/ A. C. JEWETT

/s/ LLOYD C. ASHLEY
Lloyd C. Ashley

/s/ T. DAVIES

/s/ A. C. JEWETT

/s/ PALMER C. ASHLEY
Palmer C. Ashley

/s/ T. DAVIES

/s/ A. C. JEWETT

/s/ ROBERT F. ASHLEY
Robert F. Ashley

OPTIONORS

THE FLINTKOTE COMPANY

EXECUTIVE VICE PRESIDENT

STATE OF CALIFORNIA, }
} ss.
County of Los Angeles }

On this 16 day of September, A.D., 1953, before me, KENNETH O. GRUBB, a Notary Public in and for said County and State, personally appeared LLOYD C.ASHLEY, PALMER C. ASHLEY, and ROBERT F. ASHLEY, known to me, to be the persons whose names are subscribed to the within Instrument, and acknowledged to me that they executed the same.

(SEAL)

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

/s/ KENNETH O. GRUBB
Notary Public in and for said County and State.

My Commission Expires Aug. 11, 1957

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

June 1, 1954

Memorandum

To: Mr. Lawrence G. Houk, Director, Non-Metallic Minerals Division, Defense Minerals Exploration Administration

From: Commodity Specialist, Construction and Chemical Materials Branch

Subject: Docket No. DMEA 3202 - Asbestos
The Flintkote Company
Tuolumne County, California
Ashley Asbestos Property

I have read the field team report on this property, dated May 14, 1954, and I concur in the recommendation that Stage 1 of the program, involving the sinking of five 350-foot drill holes with subsequent bulldozing, be carried out. It appears, however, from documents previously received that the application has already been denied on the basis that the fiber is not of stockpile grade.

This deposit is in the large serpentine area of Northern California which bears promise of having deposits of commercial-grade asbestos somewhere within its borders, and, in view of our overwhelming dependence upon foreign supplies, it is highly desirable that exploratory work be conducted at several points in the area. Apparently more stringent rules are now in effect limiting exploration to deposits of stockpile-grade asbestos. I realize that such regulation must be necessary, but it is unfortunate that the possibilities of this deposit cannot be explored with DMEA assistance.

Oliver Bowles

Mr. James D. Moran
The Flintkote Company
30 Rockefeller Plaza
New York 20, New York

Re: Docket No. DMTA-3202 - Asbestos
The Flintkote Company
Ashley Asbestos Property
Tuolumne County, California

Dear Mr. Moran:

Your application for aid for an exploration project and other reports available to us in Washington relating to the subject property have been reviewed.

Projects approved by the Defense Minerals Exploration Administration must, in its judgment, show definite promise of yielding materials of acceptable grade in quantities that will significantly improve the mineral supply position for the National Defense Program.

Careful study of all our information indicates to us that the probability of disclosing significant reserves of stockpile grade asbestos by your proposed program is not sufficiently promising to justify Government participation. We regret to advise you, under these circumstances, that your application for exploration assistance is denied.

We wish to thank you for your interest in the Defense Minerals Program and for bringing your property to our attention.

Sincerely yours,

C. O. Mitteneder

Administrator

LGHouk:gad 5/18/54
Copy to: Admr. R. File
Docket File
Operating Committee
Field Team, Region III
Dr. Bowles, 3516
Mr. Larrabee, G-232 GSA Bldg.
Mr. Houk

May 19, 1954

Memorandum

To: Administrator

From: Nonmetallic Minerals Division

Subject: A denial of exploration assistance and summary report.

1. DMEA Docket No. 3202 - Asbestos
   Property: Ashley Asbestos Association Ltd.
   Tuolumne County, California

   Applicant: The Flintkote Company
   30 Rockefeller Plaza
   New York 20, New York

2. Application, Form MF-103, dated October 30, 1953

   Applicant's proposal Phase I and Phase II:

(a) Preparation of D.D. sites	$300.00
(b) Diamond drilling 15 holes 350' each or 5,250 ft. @ $10.00/ft.	52,500.00
(c) Core preparation, sampling evaluation, etc.	31,350.00
(d) Supervision and travel	5,500.00
(e) Contingencies	8,965.00
	$98,615.00

3. A chemical analysis of the asbestos sample submitted to College Park indicates that it is acceptable from the standpoint of the iron content.

4. Mr. Jesse M. Weaver, Asbestos Consultant for Emergency Procurement services examined a sample from the property and submits the following comments:

   1. The sample is chrysotile similar to that produced at Thetford Quebec.
   2. It is not a stockpile grade.
   3. It could be used for the making of asbestos paper or millboard, for which the material would be suitable.
   4. It is also suitable for the manufacture of roofing paint, asphalt tile and roofing cement.
   5. Mr. Weaver further states, "If in the operation of the deposit it yielded any textile grade fiber its quality probably would be suitable for all asbestos textile products not intended for electrical purposes.

5. Because the asbestos fiber is not of a stockpile grade, the Nonmetallic Minerals Division recommends denial of the application for exploration assistance.

James Hopkins
Nonmetallic Minerals Division

JHopkins:gad 5/19/54

Copy to: Admr. R. File
Mr. Houk

FICE OF THE DIRECTOR

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON 25, D. C.

April 22, 1954

Mr. C. O. Mittendorf
Administrator
U. S. Department of the Interior
Defense Minerals Exploration Administration
Washington 25, D. C.

Dear Mr. Mittendorf:

In accordance with your letter of April 19 regarding asbestos fiber extraction by the Bureau of Mines I have authorized Mr. Ambrose to perform such work on a reimbursable basis. Your organization will be billed on Form 1080 when the work is completed.

Sincerely yours,

J. J. FORBES

Director

April 14, 1954

Mr. Houk telephoning Mr. Clarence M. Chaffee, Chief, Ores Section, Emergency Procurement Service, GSA.

Mr. Chaffee: .....there are several grades in connection with that:
P-3R1
C & G-1
Grade C & P-1
C & G-2
then crude 1 and crude 2 spinning grades of which comes from South Africa.

Mr. Houk: As far as 3-Z ?

Mr. Chaffee: 3-F to 3-T.

Mr. Houk: Have you ever bought Canadian?

Mr. Chaffee: No - too much iron.

Mr. Houk: If we had a domestic deposit that produced spinning grade who would they sell to?

Mr. Chaffee: Not at present. They sold their product to Bell Asbestos.

Mr. Houk: Who was that?

Mr. Chaffee: The seller of that commodity to Bell? Cassiar - that was iron free textile spinning length.

Mr. Houk: Under the Defense Production Act we can only give assistance to those properties that may produce strategic asbestos. How would we go about having a sample evaluated?

Mr. Chaffee: Send in a 5 lb. sample with a letter and we will send it on to our consultant to see if it is asbestos grade.

Mr. Houk: Any charge?

Mr. Chaffee: No charge. Send to H. C. Maull, Jr. Director of Purchase Division, GSA. Ask for it to be checked and in this instance to meet specification grade chrysotile asbestos and refer to our conversation and say you are having it done for Bureau of Mines.

Mr. Houk: Is there any public assayer who would get the asbestos out of the rock. We would have to have that done by the Bu. Mines.

Mr. Chaffee: If you want it done by commercial standpoint Raybestos Incorporated.

Mr. Houk: Do they have facilities for rock?

Mr. Chaffee: I believe so.

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

PROCUREMENT APPLICATIONS

Name of Company and Address _____

Name of Mine and Location _____

Docket No. DMA - _____ Date received by P.E.D. _____

Metals or Minerals involved _____

Length of Contract (preproduction plus production) _____

Amount of Metals or Minerals in tons, units or pounds _____

Floor price or Guaranteed price and whether or not escalated _____

Maximum Government Commitment _____

Comments on Contract: _____

_____

_____

_____

_____

_____

Date sent to Legal Division _____

Date of Recommendation to D.P.A. for Certification _____

Date Certification sent to G.S.A. by D.P.A. _____

Date signed into Contract by G.S.A. _____

Additional Remarks: _____

_____

_____

_____

_____

NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Interior—Duplicating Section, Washington, D. C.

Signed _____

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

DMEA-3202

APR 19 1954

Hon. John J. Forbes
Director, Bureau of Mines
Department of the Interior
Washington 25, D. C.

Dear Mr. Forbes:

In support of an application for aid in exploring an asbestos deposit (Docket No. DMA-3202, The Flintkote Company, Ashley Asbestos property, Tuolumne County, California), we have received a rock sample from which the asbestos fiber should be extracted for testing purposes.

Mr. Paul M. Ambrose, Chief, Minerals Technology Division, Region VIII, has indicated informally that he has the facilities and personnel to do this work on a reimbursable basis.

I would appreciate your authorizing Mr. Ambrose to do this work for DMEA when convenient on the above-mentioned basis.

The asbestos fiber should be returned to our Washington office. The reject can be discarded.

Sincerely yours,

C. O. Mittendorf

Administrator

LCHouk/CCSelfridge/gad/aef
(4/16/54)
Copy to: Admr. R. File
Docket
Oper. Committee
Mr. Paul M. Ambrose
Mr. Houk
Mr. Selfridge

UNITED STATES
DEPARTMENT OF THE INTERIOR
DEFENSE MINERALS EXPLORATION ADMINISTRATION
WASHINGTON 25, D. C. 600

April 14, 1954

Memorandum

To: Director, Bureau of Mines

From: Administrator, Defense Minerals Exploration Administration

Subject: Authorization to make separation of asbestos from rock.

Paul M. Ambrose, Chief, Minerals-Technology Division, Region VIII has indicated informally that he has the facilities and personnel to do this work on a reimbursable basis. Please authorize Mr. Ambrose to proceed with the testing. He should return the asbestos to the Washington office and discard the rejects. The samples of asbestos bearing rock are from Tuolumne County, California (DMEA-3202).

Administrator

April 14, 1954

Memorandum

To: Director, Bureau of Mines

From: Administrator, Defense Minerals Exploration Administration

Subject: Authorization to make separation of asbestos from rock.

Paul M. Ambrose, Chief, Minerals-Technology Division, Region VIII has indicated informally that he has the facilities and personnel to do this work on a reimbursable basis. Please authorize Mr. Ambrose to proceed with the testing. He should return the asbestos to the Washington Office and discard the rejects. The samples of asbestos bearing rock are from Tuolumne County, California (DMMA-3262).

Administrator

LGHouk:gad 4/14/54
Copy to: Admr. R. File
Docket File
Mr. Houk
Mr. Paul M. Ambrose
Opr. Chief.

APR 19 1954

Mr. H. C. Miller
Executive Officer, DMEA
Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Subject: Docket No. DMFA-3202 - Asbestos
The Flintkote Company
Ashley Asbestos Property
Tuolumne County, California

Dear Mr. Miller:

Receipt is acknowledged of samples of asbestos from the Ashley Asbestos Property, Tuolumne County, California.

A visual inspection of the asbestos bearing rock indicates the fiber length in most areas may pass the minimum requirements. The fiber strength appears adequate. Further testing will be required to determine its acceptability.

As the testing will require some little time, we would appreciate receiving the engineer's examination report for evaluation of the deposits.

Sincerely yours,

George C. Selfridge

Chairman, Operating Committee

Approved:

/s/ C. H. Johnson
Member, Bureau of Mines

D. M. Larrabee
Member, Geological Survey

LGHouk:gad 4/15/54
Copy to: Admr. R. File
Docket File
Operating Committee
Mr. Larrabee, G-232 GSA Bldg.
Dr. Bowles, 3516
Mr. Houk

Mr. Frank D. Lamb, Metallurgist, Region VIII, April 15, 1954
Bureau of Mines
Lawrence G. Houk, Chief, Nonmetallic Minerals Division,
Defense Minerals Exploration Administration
Docket No. DMEA-3202, Tuolumne County, California

Confirming our telephone conversation of yesterday, there are attached hereto samples of asbestos rock for separation.

One-half should be put through the rolls and one-half through the hammer mill. The one-half through the hammer mill may be screened through 1/2", 4, and 10 mesh for about two minutes to give us an idea of the length of the fiber, which, of course, would be very rough.

Attachments

LGHouk:gad 4/15/54

Copy to: Admr. R. File
Docket file
Mr. Houk

April 7, 1954.

Mr. George C. Selfridge
Chairman, Operating Committee
Defense Minerals Exploration Admin.,
Washington 25, D.C.

Subject: Docket DMEA-3202 - Asbestos
The Flintkote Company
Tuolumne County, California
Ashley Asbestos Property

Dear Mr. Selfridge:

In compliance with the request in the footnote in your letter of February 15, 1954, to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, we are mailing to you under separate cover samples of asbestos, obtained by one of our engineers, from the Ashley Asbestos property so that you can have determined its tensile strength and acceptability for stockpiling.

Please advise us of the results of the test so that the data may be included in our engineer's examination report for the subject Docket.

Sincerely yours,

A. C. Johnson
Chief, Mining Division
Region III

CC: Mr. H. C. Miller, Regional Director, Region III

FEB 1 5 1954

Mr. James D. Moran
The Flintkote Company
30 Rockefeller Plaza
New York 20, New York

Re: Docket No. DMEA-1202 - Asbestos
The Flintkote Company
Tuolumne County, California
Ashley Asbestos Property

Dear Mr. Moran:

Your application for assistance in exploring the subject property has been reviewed by the Nonmetallic Minerals Division of the Defense Minerals Exploration Administration and has been referred to Mr. H. C. Miller, Executive Officer, DMEA Field Team, Region III, 1012 Flood Building, 870 Market Street, San Francisco 2, California, for further consideration and possibly a field examination.

The Regional Office will contact you at an early date if an examination is to be made. Any assistance that you may give the members of the field team during the examination will be appreciated.

In the samples you submitted the total iron and magnetic iron are below the maximum allowable.

Sincerely yours,

C. O. Mittendorf

Administrator

LGHouk:gad 2/11/54

Copy to: Admr. R. File
Docket File
Operating Committee
Field Team, Region III
Dr. Bowles, 3516
Mr. Larrabee, G-232 GSA Bldg.
Mr. Houk

600

FEB 1 5 1954

Mr. E. C. Miller
Executive Officer, DMEA
Field Team, Region III
1012 Flood Building
870 Market Street
San Francisco 2, California

Subject: Docket No. DMEA-3202 - Asbestos
The Flintkote Company
Tuolumne County, California
Ashley Asbestos Property

Dear Mr. Miller:

Please review the subject application and arrange for a field examination if you deem it necessary.

Copies of memoranda from the Geological Survey, dated November 9, 1953, and from the Bureau of Mines, dated February 8, 1954, are enclosed for your information.

Sincerely yours,

Chairman, Operating Committee

Approved:

Member, Bureau of Mines

Member, Geological Survey

Enclosures 4

P.S. A chemical analysis of the asbestos sample submitted to College Park indicates that it is acceptable for stockpiling from the standpoint of the iron content. If practical, please supply this office with a sample of the asbestos, we will then endeavor to determine its tensile strength and acceptability for stockpiling.

LGHouk:gad
Copy to: Admr. R. File
Docket File
Operating Committee
Dr. Bowles, 3516
Mr. Larrabee, G-232 GSA Bldg.
Mr. Houk

600

JAN 1 1 1954

Mr. James D. Moran
The Flintkote Company
30 Rockefeller Plaza
New York 20, New York

Re: Docket No. DMA-3202 - Asbestos
The Flintkote Company
Tuolumne County, California

Dear Mr. Moran:

Receipt is acknowledged of the samples of asbestos bearing serpentine from Tuolumne County, California.

An examination of the samples indicates there will be sufficient material to conduct our preliminary test to determine the iron content of the asbestos.

Sincerely yours,

Lawrence G. Houk, Chief
Nonmetallic Minerals Division

LGHouk:gad 1/8/54

Copy to: Mr. T. Davies, Chief Geologist
Flintkote Mines Limited
Thetford Mines, P. Q.
Canada

Copy to: Admr. R. File
Docket File
Field Team, Region III
Dr. Bowles, 3516
Mr. Larrabee, 6-232 GSA Bldg.
Mr. Houk

January 8, 1954

Memorandum

To: Mr. Paul M. Ambrose, Chief, Metallurgical Division, Bureau of Mines, Region VIII

From: Lawrence G. Houk, Chief, Nonmetallic Minerals Division, Defense Minerals Exploration Administration

Subject: Asbestos sample - Docket No. DMEA-3202 - Asbestos
The Flintkote Company
Tuolumne County, California

Transmitted under separate cover is one bag containing asbestos rock. We would be pleased to have the approximate asbestos content of the rock, and the total iron and magnetic iron that is contained in the asbestos.

Please save the rejects of asbestos fiber, if it is possible to make the separation of the asbestos fiber from the rock.

LGHouk:gad 1/8/54
Copy to: Admr. R. File
Docket File
Mr. Larrabee, G-232 GSA Bldg.
Dr. Bowles, 3516
Mr. Houk

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

NOV 2 5 1953

Mr. James D. Moran
The Flintkote Company
30 Rockefeller Plaza
New York 20, New York

Re: Docket No. [illegible]-232 [illegible]
The Flintkote Company
Tuolumne County, California

Dear Mr. Moran:

Reference is made to our telephone conversation of November 9, 1953, requesting additional information necessary to process your application for exploration assistance.

Your present option covering the three important claims does not provide a sufficient length of time nor is it a sufficient interest in the land for the purposes of an exploration project contract.

This office would be pleased to receive a representative sample of the asbestos taken from the bedrock together with any analyses relating to the iron content of the asbestos. Your application fails to mention the size of the diamond drill core to be taken. The price of $10.[illegible] per foot for diamond drilling appears to be excessive for drilling in this type of material. We would be pleased to receive any information you may have to justify these costs.

Inasmuch as your application was received subsequent to November 3, Midnight, the effective date of Amendment No. 3 of DMEA Order-1, which alters Section 7 of DMEA Order-1 in which the Government participation is reduced from 90% to 75% in the case of asbestos (chrysotile only), please indicate in your letter that you wish to have your application processed under this new rate. Under Amendment No. 3 of DMEA Order-1, exploration assistance in the case of asbestos (chrysotile only) is limited to those deposits which may produce a substantial quantity of spinning grade low iron asbestos of the type of material being accepted now for the National Stockpile.

Sincerely yours,

SIGNED

Lawrence C. [illegible]
Chief
Nonmetallic Minerals Division

LCHouk/AEKane/ema 11-24-53
Copy to: Docket
Adm. R. File
(2) Field Team, Region III
Dr. Bowles, 3516
Mr. Larrabee,
G-232 GSA Bldg.
Op. Comm.
Mr. Houk
A.E.Kane
J.L. Hoffland
Chron. Pending

November 12, 1953

Memorandum

To: The Administrator
Through: Mr. L. G. Houk

From: Chief Counsel

Subject: The Flintkote Company
Docket No. DMEA-3202 (Asbestos)

Mr. Houk has requested me to give my opinion of the sufficiency of the interest of the applicant in the real property involved in order to obtain an Exploration Project Contract.

Claim No. 4 is owned by the applicant, and there is no doubt that a contract can be written with respect to it.

Claims Nos. 1, 2, and 3 are owned by Lloyd C., Palmer C., and Robert F. Ashley, and are subject to an option agreement with the applicant. The copy of this agreement in our files bears no date except the year 1953, but it is acknowledged on September 16, 1953. Under this agreement,

(1) The applicant agrees to pay $1,000 within 60 days after receipt of satisfactory title documents from the owners.

(2) For this $1,000, the applicant obtains the option to purchase for $240,000 the owners' mining, surface, and water rights, and rights-of-way.

(3) For 9 months after payment of the $1,000, the applicant is authorized to go upon the property and do exploration work to determine the mineral value of the rights. During this period, the applicant must exercise its option to purchase the claims, but is authorized to remove not in excess of 1000 tons of ore.

Consequently, it is plain that, with respect to claims Nos. 1, 2, and 3, all that the applicant has here is a lease for 9 months (if the $1,000 has been paid), with an option to purchase. Under these circumstances, an Exploration Project Contract may be entered into with the applicant only if the applicant—

(1) furnishes a sufficient guaranty of performance or performance bond; or

(2) if the work can be performed in 9 months, obtains an Owners' Consent to Lien; or

(3) obtains a 10-year lease, or purchases the property.

Albert E. Kane

for J. L. Hofflund
Chief Counsel

AEKane:ep

Copy to: Mails & Files
Mr. Houk
Mr. Hofflund
Mr. Kane
Chron.

November 12, 1953

Memorandum

To: The Administrator
Through: Mr. L. G. Houk

From: Chief Counsel

Subject: The Flintkote Company
Docket No. DMEA-3202 (Asbestos)

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(1) furnishes a sufficient guaranty of performance or performance bond; or

(2) if the work can be performed in 9 months, obtains an Owners' Consent to Lien; or

(3) obtains a 10-year lease, or purchases the property.

Albert E. Kane

for J. L. Hofflund
Chief Counsel

AEKane:ep

Copy to: Mails & Files
Mr. Houk
Mr. Hofflund
Mr. Kane
Chron.

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

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
RECEIVED
NOV 10 1953

IN REPLY REFER TO: G-MD-CAM

Memorandum November 9, 1953

REVIEW OF APPLICATION DMEA-3202 (asbestos)

To: L. G. Houk, Defense Minerals Exploration Administration
From: D. M. Larrabee, U. S. Geological Survey
Applicant's name and address: Flintkote Company, 30 Rockefeller Plaza, New York 20, New York.
Name of property: Asbestos, Asbestos No. 1, and Access Lode.
Location of property: Tuolumne County, California.
Summary of applicant's proposal:

Stage 1. 5 core drill holes @ 350' each.
Bulldozer trenching to bedrock.

Stage 2. 10 drill holes @ 350' each.
500 ton bulk sample.

Sources of information on applicant's property:
U. S. G. S. Folio 41, Sonora quadrangle shows serpentine area.

Comments:

1. Inasmuch as this application was received by DMEA November 6, I assume that the Government participation would be 75%, not 90%.

2. Cost of core drilling, and of core boxes, appear excessive by 50%, generally. Is there a special reason for this, and if so, what? One-half mile of water line is not too bad.

3. What size core?

4. Core shipping expense looks very high.

5. Total expenses for such a small job look way out of line. (It would be interesting to know what the company would budget this job for, if on its own.)

6. No target is given, but one is assumed. What are the anticipated grade and reserves?

7. Is this short (-½") fiber really strategic. There is some doubt as to its spinning qualities. Flintkote's main interest is in shorter fibers for roofing and siding, is it not?

RECOMMENDATION:

Request additional data on points raised under comments, before submitting to the Field Team for an examination.

D. M. Larrabee

Larrabee:jeh
11/9/53
cc: Director's reading 4212
Branch reading 4212
DMEA 3
Larrabee G-230

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

November 12, 1953

Memorandum

To: The Administrator
Through: Mr. L. G. Houk

From: Chief Counsel

Subject: The Flintkote Company
Docket No. DMEA-3202 (Asbestos)

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Claims Nos. 1, 2, and 3 are owned by Lloyd C., Palmer C., and Robert F. Ashley, and are subject to an option agreement with the applicant. The copy of this agreement in our files bears no date except the year 1953, but it is acknowledged on September 16, 1953. Under this agreement,

(1) The applicant agrees to pay $1,000 within 60 days after receipt of satisfactory title documents from the owners.

(2) For this $1,000, the applicant obtains the option to purchase for $240,000 the owners' mining, surface, and water rights, and rights-of-way.

(3) For 9 months after payment of the $1,000, the applicant is authorized to go upon the property and do exploration work to determine the mineral value of the rights. During this period, the applicant must exercise its option to purchase the claims, but is authorized to remove not in excess of 1000 tons of ore.

Consequently, it is plain that, with respect to claims Nos. 1, 2, and 3, all that the applicant has here is a lease for 9 months (if the $1,000 has been paid), with an option to purchase. Under these circumstances, an Exploration Project Contract may be entered into with the applicant only if the applicant—

(1) furnishes a sufficient guaranty of performance or performance bond; or

(2) if the work can be performed in 9 months, obtains an Owners' Consent to Lien; or

(3) obtains a 10-year lease, or purchases the property.

Albert E. [illegible]

for J. L. Hofflund
Chief Counsel

Novemb[illegible]9, 1953 - 10 A.M.

Mr. Jim Moran of the Flintkote Company calling Mr. Houk

Mr. Moran: I understand you talked with Mr. Clark on Friday.

Mr. Houk: Yes I did and there are somethings I wish to discuss with you. First of all the option you have on the property.

Mr. Moran: We have not executed it.

Mr. Houk: You must have a definite interest in the land in the form of a lease and it must last for the total length of the contract we prefer a ten year lease. However, if you get an Owner's Consent to Lien signed that will cover for a shorter period of time, say a three year lease.

Mr. Moran: We are going to buy the property if it has sufficient indications of a profitable operation. We do all our exploration work by option.

Mr. Houk: Many companies do do that, however, the amount of money the Government puts into a deal like this must be protected . We have certain regulations and our lawyers insist that there must be sufficient interest in the land either by a ten year lease or a shorter lease and an Owner's Consent to Lien.

Mr. Moran: If the exploration work is going to take six months and you have an option to buy the property that should be sufficient.

Mr. Houk: I read over your option but the lawyers have not had a chance to look it over yet. It is only until December 18th.

Mr. Moran: It could be extended. If you determine how long you require.

Mr. Houk: I think the option can be amended by the payment of certain funds to the Owners. Don't you have 60 days.

Mr. Moran: I forget the specific terms. That is one of the reasons we waited so long.

Mr. Houk: You waited three days too long otherwise it would have been 90-10 it is now 75-25 by directive from the Office of Defense Mobilization. Will the Owners execute an Owner's Consent to Lien?

Mr. Moran: That is a document that does not mean anything. We will buy it under the option.

Mr. Houk: We cant deal in what might transpire. The Government's interest must be protected. If a certification of discovery is made the owners must agree that any production therefrom is subject to a 5% royalty. That is our requirement and We have to have it.

Mr. Moran: Send me the forms that cant telegraph their consent to you can they.

Mr. Houk: No the forms must be signed.

DEFENSE MINERALS ADMINISTRATION

97023

PRODUCTION EXPANSION DIVISION

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Name of Mine and Location _____

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Additional Remarks: _____

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NOTE: If application is denied, or if it is recommended for change into exploration, etc., please state under additional remarks.

Interior—Duplicating Section, Washington, D. C.

Signed _____

Mr. Houk: As to the quality of the asbestos - you make no statement as to the amount of spinning grade that is in the deposit. Have you taken samples as to the float. Also a statement as to the amount of iron in the asbestos.

Mr. Moran: For the purpose of verifying the magnetometer?

Mr. Houk: It is an exploration program and is tied to the stockpile program. That is material that can go into the National stockpile the Munitions Board have indicated that 2% is not eligible. If this material is high iron there is a possibility that it is not eligible for exploration assistance. I think that would have to be decided first of all.

Mr. Moran: Let me make a list. Samples, amount of iron, and Owner's Consent to Lien.

Mr. Houk: You give a figure of $10 a foot for diamond drilling that seems high for that area. If you can justify all well and good. You dont anticipate the size of the core you anticipate taking. You state here in the text of the report in Exhibit D, no outcrop of surpentine is seen in the immediate vicinity of this property. Later on you say pit in bed-rock much fiber 67% there is a conflict between that statement and the statement in the text.

Mr. Moran: Those reports were taken verbatim. There were two reports that I have attached there.

Mr. Houk: Exhibit E was the magnetometer work. I get the impression there is no outcrop at all.

Mr. Moran: I have a feeling that the map was made up after Mr. Davis' second visit to the property. In the basic discussion I think you will find August ? he spent three days there. I forget the exact date. Let me see if I can get it. Here it is. Mr. Davis during the week of September 19.

Mr. Houk: Your pit in bed-rock in asbestos claim. So there is agreement there. No agreement between the two reports.

Mr. Moran: Let me ask you about time on this thing. Let us assume we have everything, how long will it take generally speaking?

Mr. Houk: Your application is sent to the Bureau of Mines and the Geological Survey and they search their records and send in their remarks. That takes from 5 days to a week and they make recommendations and ask that we get in touch with you to supply the needed information. Then it is sent to the field team for examination when available. The field team consists of a member from the Geological Survey and the Bureau of Mines and they write a report. The time lapses are in sending it to California and its return here. Takes from a month to 6 weeks then it comes back here and is reported to the Bu. Mines and Survey for their recommendations. If a contract should be written we draw up a contract and that should be a matter

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of a week or 10 days. Say a matter overall of 6 weeks to 2 months.

Mr. Moran: Nothing can be done to expedite?

Mr. Houk: No we have other applications received before yours and each application has to be sent through. Do you anticipate snow there?

Mr. Moran: I dont know.

Mr. Houk: Diamond drilling can be accomplished but it is rather difficult, it makes rather a chore to get the holes pulled down.

Mr. Moran: Will the Owner's Consent to Lien hold up the application?

Mr. Houk: We can process the application if you will get us some samples. If iron free and percentage of spinning grade.

Mr. Moran: Let me put that down. Spinning grade, iron content, snow, diamond drilling size.

Mr. Houk: Also a letter from the drilling contractor making a firm bid on the area. Boyles Bros. are out there and have been bidding.

Mr. Moran: That is not necessary to process the application. A letter from the contractor and the Owner's Consent to Lien we will get them.

Mr. Houk: Iron content and amount of spinning grade.

Mr. Moran: Would you say otherwise the amount of information is sufficient.

Mr. Houk: You want to spend $100,000. Nothing but boulders except this one pit in the bed rock. I got the impression 6 or 7 pits. Only one in the area outlined as the maximum size of the ore body.

Mr. Moran: I think that map was prepared by our department.

Mr. Houk: I thought another map was available.

Mr. Moran: I dont think we will have anything more detailed than that. Thank you and send me those forms.

Mr. Houk: I will send them.

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Interior—Duplicating Section, Washington, D. C.

Mr. Houk returning Mr. Clark of the FLINTKOTE COMPANY'S call.

Mr. Clark: Hello Mr. Houk, I am with the Flintkote Company. I am the Washington Representative.

Mr. Houk: I have looked over your application and have not had sufficient time to study it to a great extent. However, there has to be a clarification of the lease. You must have a sufficient interest in the land for the purpose of an exploration contract. There must be a lease of sufficient duration to complete the exploration project and in addition an owner's consent to lien signed by the owners of the property in which he indicates he would be willing to pay 5% royalty on all production if there is any production on the property.

Mr. Clark: When did you receive these new ones.

Mr. Houk: These came in today.

Mr. Clark: That is the one they called me about today. They said they sent it in.

Mr. Houk: It was sent from the New York office.

Mr. Clark: I dont know about these things until they get into them.

Mr. Houk: You must have sufficient interest in the land before we can process your application. Your option does not give you a sufficient interest in the land.

Mr. Clark: Tell me something. Have you had any experience with that land in that area. Several weeks ago we had a grant up in New England. We found Ruberoid had an application on the same spot. We are not anxious to spend Government funds any more than our own.

Mr. Houk: On this particular property. This is the processing, the information you have supplied us with will go to the Bureau of Mines and they will furnish us with any information they have. The Geological Survey will process it through their records to see if they have any information on the property.

Mr. Clark: How long will it take? There seems to be some urgency in this thing.

Mr. Houk: According to your lease you must move seven tons of rock before December 18th. That is, I believe, in the nature of assessment work on the claims. We dont participate in anything for the purposes of maintaining a lease.

Mr. Clark: Well I will call New York. How do you spell you name? What is that number?

Mr. Houk: H-o-u-k. My number is RE-7-1820, X-2971. Are you here in Washington?

Mr. Clark: Yes. They said they had filed this thing and asked me to check.

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Interior—Duplicating Section, Washington, D. C.

Signed _____

Mr. Houk: You have diamond drilling at $10 a foot. You must classify that and explain why $10 a foot for that type of work. Other contracts on drilling don't run that high. You have BX $4.50 to $5.50

Mr. Clark: Must be expensive diamonds.

Mr. Houk: $16 a carat. We also want the size of the drill core you anticipate taking. The application states there are no out-crops of surpentine in the immediate vicinity of the property and you have made a survey and we would like more of a justification as to why you feel it is a worthwhile project. If you give us more time to study we will have more questions for you.

Mr. Clark: You have enough.

Mr. Houk: We also would like information on why you think there is fiber there.

Mr. Clark: If we spend 25% of the cost we think we are justified.

Mr. Houk: Well we must justify to the Office of Defense Mobilization and the General Accounting Office. Have you samples of the asbestos from this property, could we obtain samples from you of the asbestos from this property?

Mr. Clark: Do we claim asbestos.

Mr. Houk: Yes. Have you made any analysis of the iron content of the asbestos in this particular area.

Mr. Houk: What do you people make principally?

Mr. Clark: Roofing and siding and asphalt tiles.

Mr. Houk: Where are your plants?

Mr. Clark: Bedford.

Mr. Houk: No operation in the U. S.?

Mr. Clark: Rutherford, N. J., Chicago, and New Orleans.

Mr. Houk: Are you tied up with Keese Madison?

Mr. Clark: No. They go into weaving and we dont.

Mr. Houk: The only thing we are interested in is the percentage that would qualify for spinning grade. That has to be clarified. Will you endeavor to get me that information.

Mr. Clark: Is this spinning grade lower than that you used to have.

Mr. Houk: It has now been indicated that we are to required our funds to be kept to chrysotile. Amosite and Crocidolite are out.

Mr. Clark: We might produce spinning fiber out there.

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Interior—Duplicating Section, Washington, D. C.

Mr. Houk: You don't even have a surpentine outcrop. Do they know our program has been reduced to 75% participation?

Mr. Clark: They know this has been reduced to 75% participation.

Mr. Houk: Talk to them and have them call me.

Mr. Clark: I will have Jim Rand call you. I am not qualified to answer these questions.

Mr. Houk: Have him call me Monday.

Mr. Clark: What is your room number?

Mr. Houk: 4637, Interior Bldg.

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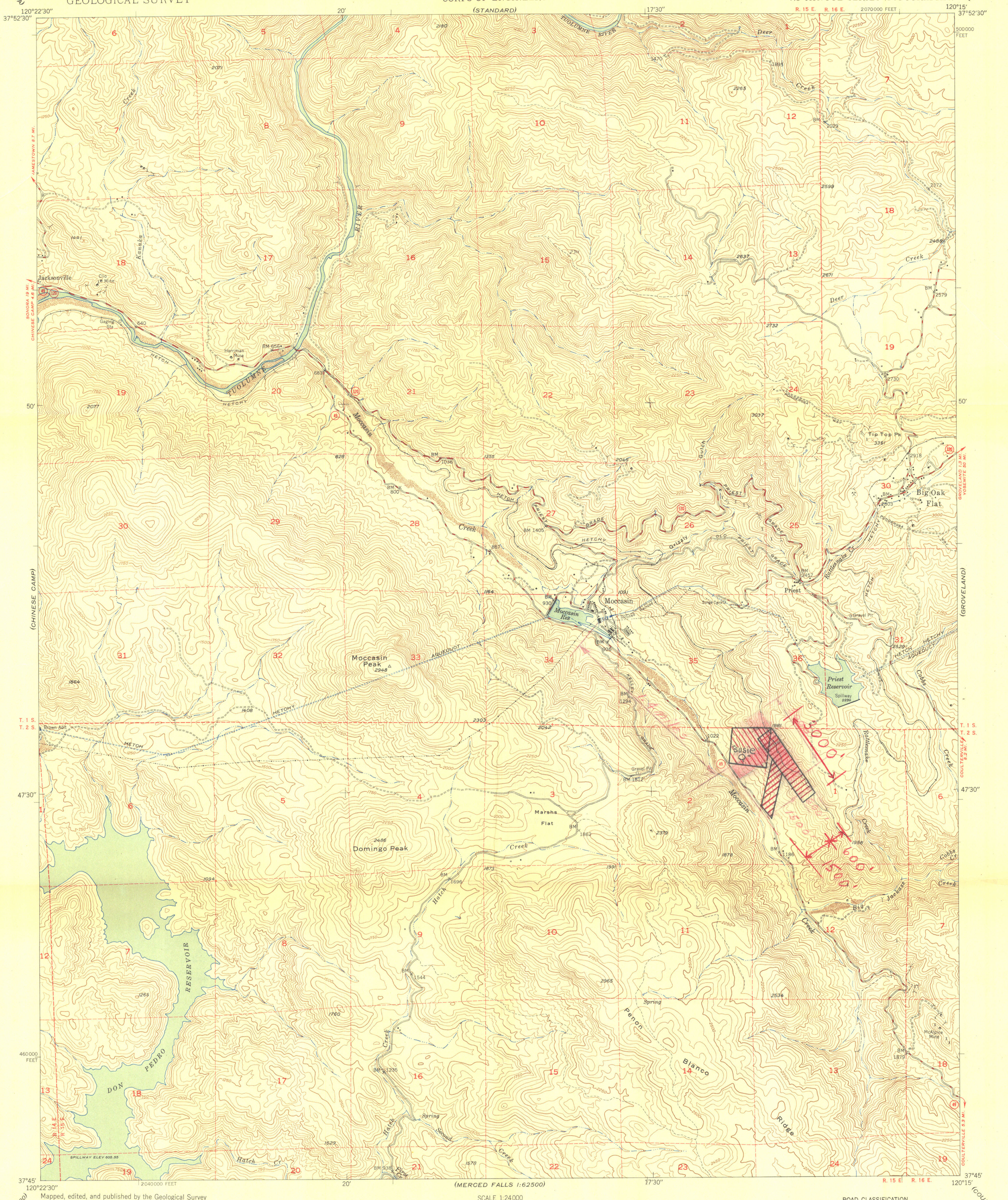
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

UNITED STATES
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS

MOCCASIN QUADRANGLE
CALIFORNIA—TUOLUMNE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



Mapped, edited, and published by the Geological Survey

Control by USGS and USC & GS

Topography from aerial photographs by multiplex methods
Aerial photographs taken 1945. Field check, 1948

Polyconic projection. 1927 North American datum
10,000-foot grid based on California coordinate system, zone 3

Dashed land lines indicate approximate location

TRUE NORTH
MAGNETIC NORTH
17½°
APPROXIMATE MEAN DECLINATION, 1948

SCALE 1:24000

1 ½ 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETER

CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS

FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON 25, D. C.

ROAD CLASSIFICATION

HARD-SURFACE ALL WEATHER ROADS		DRY WEATHER ROADS
Heavy-duty	4 LANE / 2 LANE	Improved dirt
Medium-duty	4 LANE / 2 LANE	Unimproved dirt
Loose-surface, graded, or narrow hard-surface		

U. S. Route State Route

MOCCASIN, CALIF.
N3745—W12015/7.5

PRINTED 1949

THE TOPOGRAPHIC MAPS OF THE UNITED STATES

The United States Geological Survey is making a series of standard topographic maps to cover the United States. This work has been in progress since 1882, and the published maps cover more than 47 percent of the country, exclusive of outlying possessions.

The maps are published on sheets that measure about 16½ by 20 inches. Under the general plan adopted the country is divided into quadrangles bounded by parallels of latitude and meridians of longitude. These quadrangles are mapped on different scales, the scale selected for each map being that which is best adapted to general use in the development of the country, and consequently, though the standard maps are of nearly uniform size, the areas that they represent are of different sizes. On the lower margin of each map are printed graphic scales showing distances in feet, meters, miles, and kilometers. In addition, the scale of the map is shown by a fraction expressing a fixed ratio between linear measurements on the map and corresponding distances on the ground. For example, the scale $\frac{1}{62,500}$ means that 1 unit on the map (such as 1 inch, 1 foot, or 1 meter) represents 62,500 of the same units on the earth's surface.

Although some areas are surveyed and some maps are compiled and published on special scales for special purposes, the standard topographic surveys and the resulting maps have for many years been of three types, differentiated as follows:

1. Surveys of areas in which there are problems of great public importance—relating, for example, to mineral development, irrigation, or reclamation of swamp areas—are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{31,680}$ (1 inch = one-half mile) or $\frac{1}{24,000}$ (1 inch = 2,000 feet), with a contour interval of 1 to 100 feet, according to the relief of the particular area mapped.

2. Surveys of areas in which there are problems of average public importance, such as most of the basin of the Mississippi and its tributaries, are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile), with a contour interval of 10 to 100 feet.

3. Surveys of areas in which the problems are of minor public importance, such as much of the mountain or desert region of Arizona or New Mexico, and the high mountain area of the northwest, are made with sufficient detail to be used in the publication of maps on a scale of $\frac{1}{125,000}$ (1 inch = nearly 2 miles) or $\frac{1}{250,000}$ (1 inch = nearly 4 miles), with a contour interval of 20 to 250 feet.

The aerial camera is now being used in mapping. From the information recorded on the photographs, planimetric maps, which show only drainage and culture, have been made for some areas in the United States. By the use of stereoscopic plotting apparatus, aerial photographs are utilized also in the making of the regular topographic maps, which show relief as well as drainage and culture.

A topographic survey of Alaska has been in progress since 1898, and nearly 44 percent of its area has now been mapped. About 15 percent of the Territory has been covered by maps on a scale of $\frac{1}{250,000}$ (1 inch = nearly 3 miles). For most of the remainder of the area surveyed the maps published are on a scale of $\frac{1}{250,000}$ (1 inch = nearly 4 miles). For some areas of particular economic importance, covering about 4,300 square miles, the maps published are on a scale of $\frac{1}{62,500}$ (1 inch = nearly 1 mile) or larger. In addition to the area covered by topographic maps, about 11,300 square miles of southeastern Alaska has been covered by planimetric maps on scales of $\frac{1}{125,000}$ and $\frac{1}{250,000}$.

The Hawaiian Islands have been surveyed, and the resulting maps are published on a scale of $\frac{1}{62,500}$.

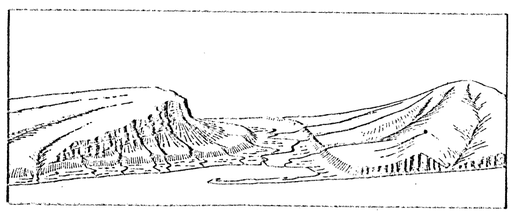
A survey of Puerto Rico is now in progress. The scale of the published maps is $\frac{1}{30,000}$.

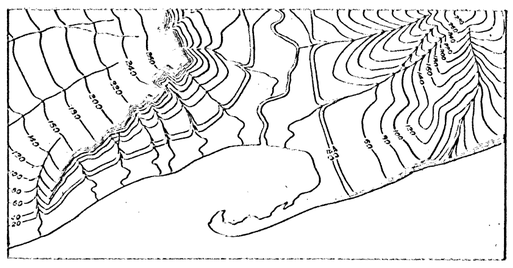
The features shown on topographic maps may be arranged in three groups—(1) water, including seas, lakes, rivers, canals, swamps, and other bodies of water; (2) relief, including mountains, hills, valleys, and other features of the land surface; (3) culture (works of man), such as towns, cities, roads, railroads, and boundaries. The symbols used to represent these features are shown and explained below. Variations appear on some earlier maps, and additional features are represented on some special maps.

All the water features are represented in blue, the smaller streams and canals by single blue lines and the larger streams by double lines. The larger streams, lakes, and the sea are accentuated by blue water lining or blue tint. Intermittent streams—those whose beds are dry for a large part of the year—are shown by lines of blue dots and dashes.

Relief is shown by contour lines in brown, which on a few maps are supplemented by shading showing the effect of light thrown from the northwest across the area represented, for the purpose of giving the appearance of relief and thus aiding in the interpretation of the contour lines. A contour line represents an imaginary line on the ground (a contour) every part of which is at the same altitude above sea level. Such a line could be drawn at any altitude, but in practice only the contours at certain regular intervals of altitude are shown. The datum or zero of altitude of the Geological Survey maps is mean sea level. The 20-foot contour would be the shore line if the sea should rise 20 feet above mean sea level. Contour lines show the shape of the hills, mountains, and valleys, as well as their altitude. Successive contour lines that are far apart on the map indicate a gentle slope, lines that are close together indicate a steep slope, and lines that run together indicate a cliff.

The manner in which contour lines express altitude, form, and grade is shown in the figure below.





The sketch represents a river valley that lies between two hills. In the foreground is the sea, with a bay that is partly enclosed by a hooked sand bar. On each side of the valley is a terrace into which small streams have cut narrow gullies. The hill on the right has a rounded summit and gently sloping spurs separated by ravines. The spurs are truncated at their lower ends by a sea cliff. The hill at the left terminates abruptly at the valley in a steep scarp, from which it slopes gradually away and forms an inclined tableland that is traversed by a few shallow gullies. On the map each of these features is represented, directly beneath its position in the sketch, by contour lines.

The contour interval, or the vertical distance in feet between one contour and the next, is stated at the bottom of each map. This interval differs according to the topography of the area mapped: in a flat country it may be as small as 1 foot; in a mountainous region it may be as great as 250 feet. In order that the contours may be read more easily certain contour lines, every fourth or fifth, are made heavier than the others and are accompanied by figures showing altitude. The heights of many points—such as road intersections, summits, surfaces of lakes, and benchmarks—are also given on the map in figures, which show altitudes to the nearest foot only. More precise figures for the altitudes of benchmarks are given in the Geological Survey's bulletins on spirit leveling. The geodetic coordinates of triangulation and transit-traverse stations are also published in bulletins.

Lettering and the works of man are shown in black. Boundaries, such as those of a State, county, city, land grant, township, or reservation, are shown by continuous or broken lines of different kinds and weights. Public roads suitable for motor travel the greater part of the year are shown by solid double lines; poor public roads and private roads by dashed double lines; trails by dashed single lines. Additional public road classification if available is shown by red overprint.

Each quadrangle is designated by the name of a city, town, or prominent natural feature within it, and on the margins of the map are printed the names of adjoining quadrangles of which maps have been published. More than 4,100 quadrangles in the United States have been surveyed, and maps of them similar to the one on the other side of this sheet have been published.

Geologic maps of some of the areas shown on the topographic maps have been published in the form of folios. Each folio includes maps showing the topography, geology, underground structure, and mineral deposits of the area mapped, and several pages of descriptive text. The text explains the maps and describes the topographic and geologic features of the country and its mineral products. Two hundred twenty-five folios have been published.

Index maps of each State and of Alaska and Hawaii showing the areas covered by topographic maps and geologic folios published by the United States Geological Survey may be obtained free. Copies of the standard topographic maps may be obtained for 10 cents each; some special maps are sold at different prices. A discount of 40 percent is allowed on an order amounting to $5 or more at the retail price. The discount is allowed on an order for maps alone, either of one kind or in any assortment, or for maps together with geologic folios. The geologic folios are sold for 25 cents or more each, the price depending on the size of the folio. A circular describing the folios will be sent on request.

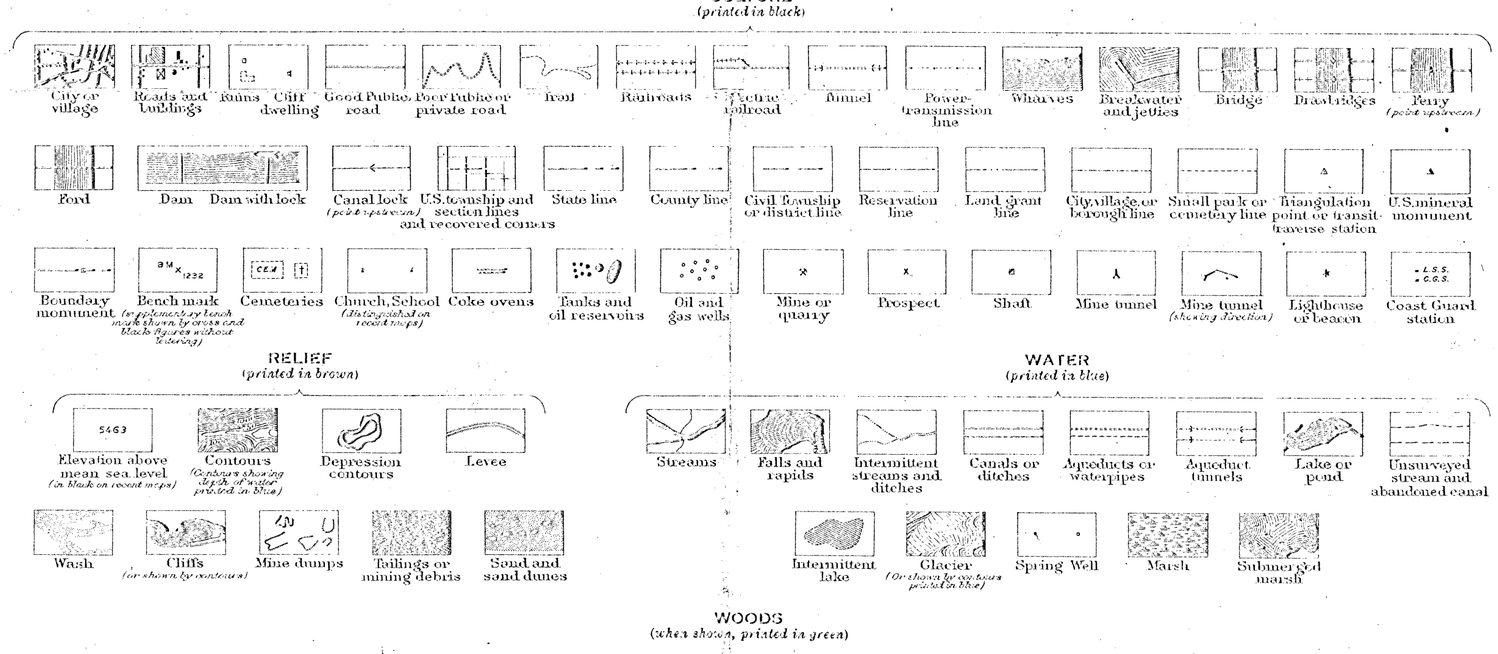
Applications for maps or folios should be accompanied by cash, draft, or money order (not postage stamps) and should be addressed to

THE DIRECTOR,
United States Geological Survey,
Washington, D. C.

November 1937.

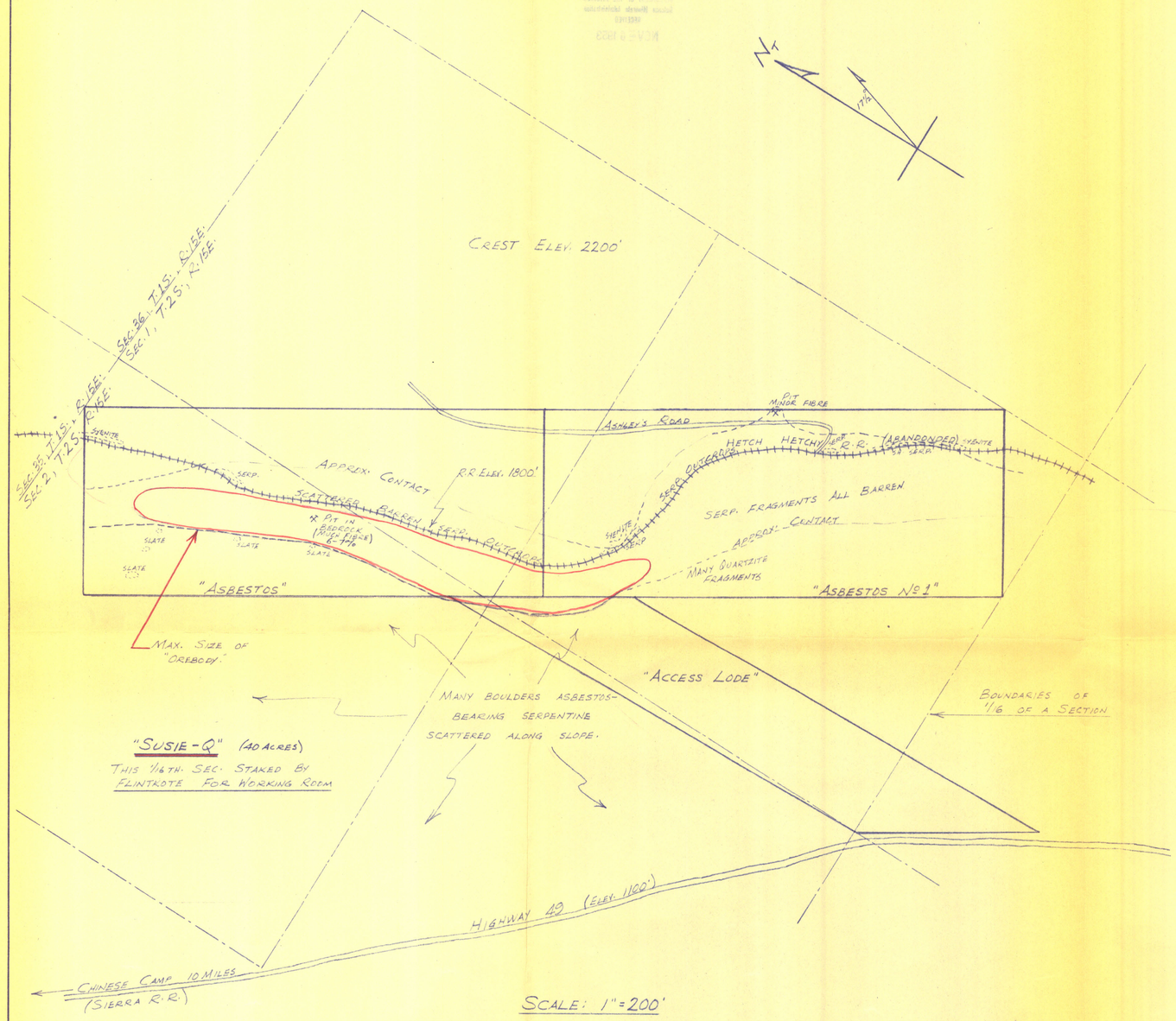
NOTE:—Effective on and after October 1, 1916, the price of standard topographic quadrangle maps will be 20 cents each, with a discount of 20 percent on orders amounting to $10 or more at the retail rate.

STANDARD SYMBOLS

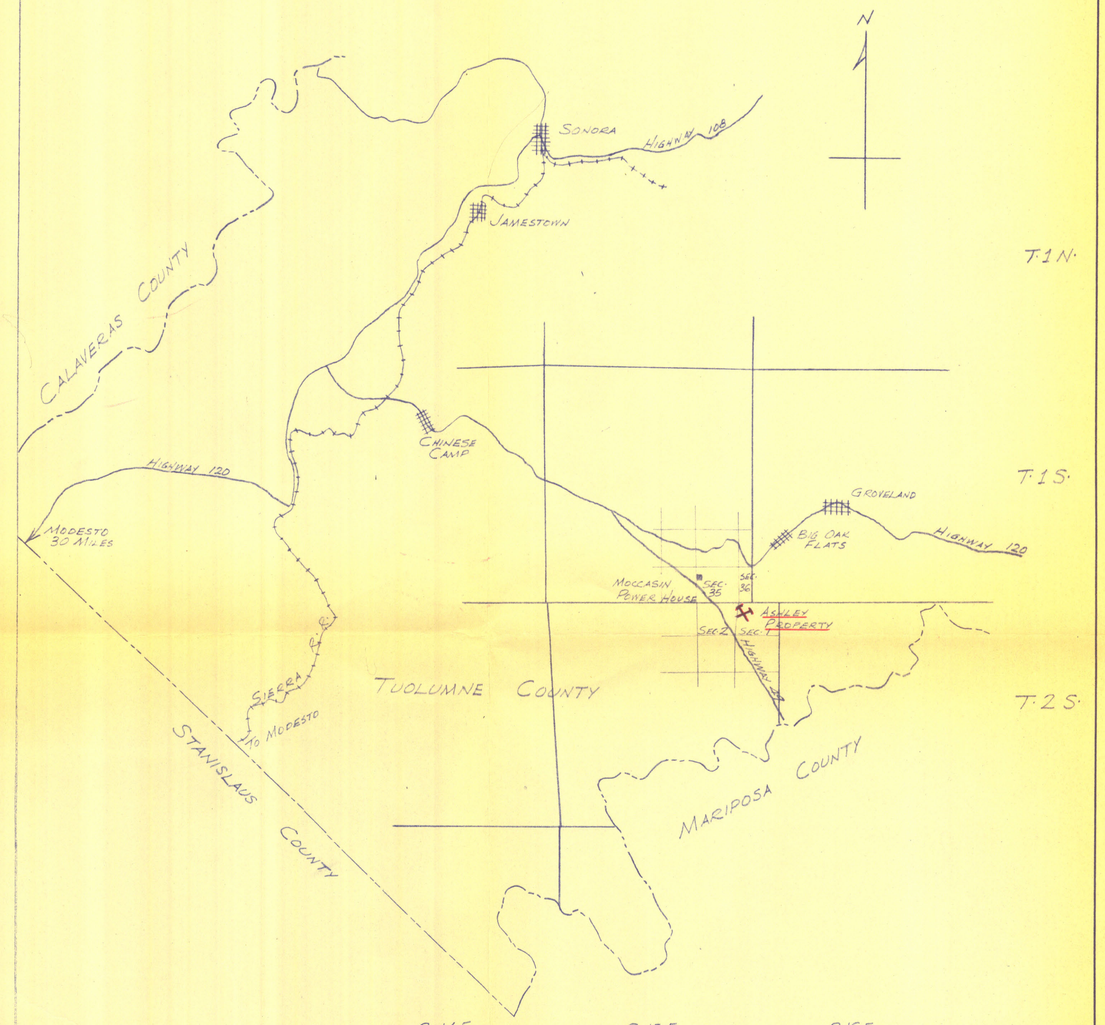


FORM MF-103 (April 1952)
THE FLINTKOTE COMPANY
TUOLUMNE COUNTY, CALIF.
EXHIBIT "A"

DEPARTMENT OF THE INTERIOR
Defense Minerals Administration
Washington
NOV 3 1953



SCALE: 1" = 200'



SCALE: 1" = 2 MILES

DATE	DESCRIPTION OF CHANGES	BY	CHK'D	APP'D

ENGINEERING DEPARTMENT

FLINTKOTE MINES LIMITED

THETFORD MINES, QUEBEC, CANADA

ASHLEY ASBESTOS PROPERTY
TUOLUMNE CO., CALIF.

DRAWN BY T.D.	CHECKED BY	EX-24
SCALE: AS SHOWN	APPR'D BY	
DATE: SEPT. 28 '53		

K. & E. CO., MONTREAL. 1987