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06/30/97

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: LUCKY STRIKE

ALTERNATE NAMES:
KYLE ASBESTOS MINES
SLOAN CREEK GROUP
KENNEDY GROUP

GILA COUNTY MILS NUMBER: 332A

LOCATION: TOWNSHIP 6 N RANGE 14 E SECTION 15 QUARTER SE
LATITUDE: N 33DEG 51MIN 30SEC LONGITUDE: W 110DEG 53MIN 55SEC
TOPO MAP NAME: MCFADDEN PEAK - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
ASBESTOS LONG FIBER
ASBESTOS LONG FIBER

BIBLIOGRAPHY:
USGS MCFADDEN PEAK QUAD
See: — ADMMR LUCKY STRIKE MINE FILE
STEWART L A CHRYS-ASB DEPTS AZ USBM IC 7706
1955 P 79
WILSON E D ASB DEPTS AZ AZBM BULL 126 1928
P 79
ADMMR "U" FILE
SEE ADMMR SLOAN CREEK GROUP MINE FILE
USGS MF 1162-B
USGS MF 1162-H

SLOAN CREEK MINE

GILA COUNTY
SIERRA ANCHA DIST.

War Minerals Report 373 (1945) U.S. w lithop

See: USBM - R. I. 4100, Aug. 1947
USBM.- I. C. 7706, p 82, Jan. 1955

ABM Bull. 126, p. 27, 50, 79, 96.

Maps- upstairs in flat file storage - Drawer 7

OWNER: Kyle Asbestos Mines (Jan. 1958)
Roger Q. Kyle
Box 302, Globe, Ariz. (1-1960)

MEN WORKING: 4

OPERATOR: ROGER KYLE

LEWIS A. SMITH - 1-10-58

On
Active Mine List 2-1959, 2-1960

Active property March 17, 1960.

LEWIS A. SMITH - GLOBE ASMOA

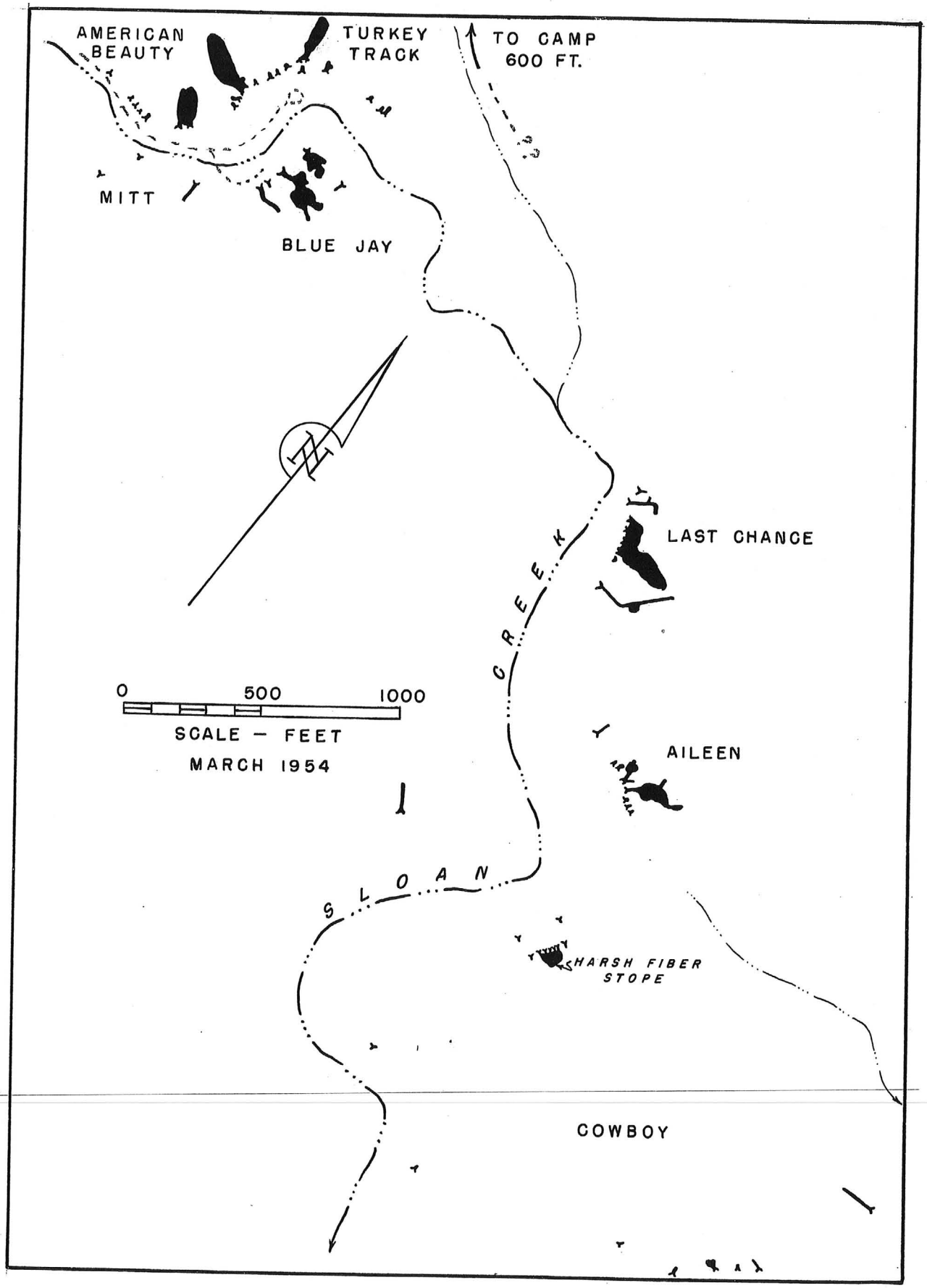


FIGURE 27. - SKETCH LOCATION MAP
WORKINGS OF SLOAN CREEK GROUP

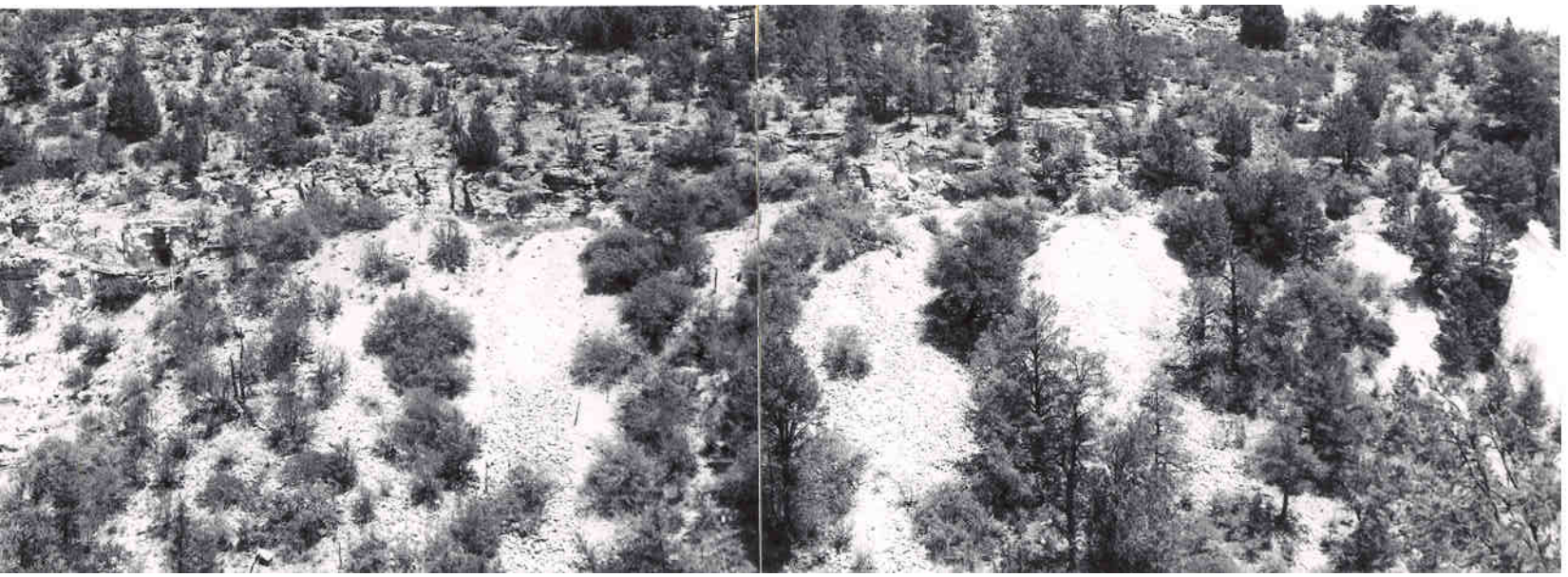
MEMORANDUM

July 21, 1960

Kyle Asbestos Mines of Arizona, Globe, Arizona.

Roger Kyle said he had delivered 8 tons of No. 2 asbestos to the stockpile. This leaves 2 tons to be delivered before a year is up.

LEWIS A. SMITH
Field Engineer



REPORT ON THE KYLE GROUP OF ASBESTOS MINES

BY

J. S. COUPAL, MINING ENGINEER

Covering the Miami Asbestos Mines,
The Pueblo Group, the Sloan Creek
Group and The Kyle Asbestos Mill.

SUMMARY AND CONCLUSIONS With proper equipment, management and systematic development and operation this group of asbestos claims should produce in excess of 3,000 tons of asbestos per year. It should be possible to more than double this production and maintain the increased production for many years if the continuity of the ore bearing zones persist, as is indicated, and is proven by future development.

The question may be reasonably asked, "Why has it not been done before?" The answer is simple and obvious when some of the factors are considered. Roger Q. Kyle, the owner, started from scratch on these claims. The production has paid for the development without the use of outside capital. This has necessarily limited the work to the most accessible areas for quick production and has not permitted the extensive preparatory work necessary for large scale operations. Most of the mining has been done by hand steel.

Another factor which permits a production of 3,000 tons or more per year as estimated is the increased yield and the handling of lower grade ores which has been made possible by the mechanical cobbing and segregating process developed by Mr. Kyle. A permit for the use of this patented process is granted for the operation of the properties covered by this report. A description of the process is made a part of the report.

MIAMI ASBESTOS MINES

LOCATION The property consists of seven unpatented mining claims, located in the southern foothills of the Sierra Ancha Mountains at an elevation of about 5,000 feet above sea level. It is reached by 1½ miles of mine road from the Globe-Pleasant Valley highway at a point 42 miles in a northerly direction from Globe. The highway is a county graded road and the property can be reached direct by car.

The claims are located, as is customary, in the Globe asbestos area, with the long axis of the claims on the dip and at right angle to the strike of the outcrop. Six of the claims side line each other and thus cover a distance of 3,600 feet along the outcrop. The seventh claim is for camp purpose and its side line adjoins the end line of the northern claims. The discovery hole on the claim is usually located on the outcrop and about 200 feet from the end line, so as to provide dump space on the claim, and thus give about 1300 feet in length along the dip. Located in this manner no conflicts occur on extra lateral rights as the end line limitations are vertical planes.

Title to the claims are in the name of Roger Q. Kyle of Globe, Arizona and are recorded in the Gila County Recorder's Office, Globe, Arizona.

HISTORY OF PRODUCTION Mr. Kyle reports a production of 45 tons of asbestos from this property of which four tons were No. 1 crude, 25 tons of No. 2 crude and the balance No. 3 and No. 4.

ORE OCCURRENCE The general geology is typical of the Globe-Asbestos area with a basement of a diabase sill under the serpentinized mescal limestone. This group is located about 1½ miles from the property known as the American Ores or International Asbestos Group at an elevation of several hundred feet below the main workings of the American Ores property. The occurrence of this same ore horizon is reported on the American Ores property, at approximately 500 feet lower than the main workings, but has not been developed on that property.

On the Miami Asbestos group there are six ore horizons, the lower one occurring about one foot above the diabase sill and the others spaced at from 3 to 5 feet intervals above it. This makes an ore horizon of from 20 to 25 feet in thickness. The limestone is thin bedded in structure and the serpentinized ore strata vary from 6 inches to 18 inches in thickness.

The development work is limited to the two lower ore strata which are exposed in the three tunnels. The bedding of the lime and the ore strata dip from 12 to 18 degrees and the tunnels follow this dip into the hill. On claim No. 3 the tunnel is 80 feet long and a small amount of stoping has been done. The stoped area is irregular and covers not more than 1000 square feet beyond the tunnel.

On No. 4 claim is another tunnel of about 35 feet in length, following the two lower ore strata. On No. 5 claim is a 40 foot tunnel.

On the other claims only location and discovery holes have been opened up on the outdrop of the lower strata.

In all workings the strata show the occurrence of asbestos to be continuous and in no instance has the serpentinized asbestos bearing area pinched out. The fiber varies from knife blade thickness to 1½ inches in each one of the strata. It is sometimes concentrated in one streak and in other places distributed in closely spaced gash veinlets from knife blade thickness to 1/8 inch and larger.

In the area exposed by the tunnels, the stopes and on the shallow surface cuts an average total length of fiber in any one of the six ore bearing strata would be between 1/2 and 3/4 of an inch. The outcrop is continuous for the 3600 feet in length and shows the irregular surface erosion typical of the serpentine zones.

From the limited development it is impossible to estimate tonnage. The three tunnels are spaced about 600 feet apart and were naturally started on

good surface showings. The persistence of the ore bearing zone is well established but there is no way, without extensive development, of showing whether or not the whole area can be profitably mines.

The average of 1/2 to 3/4 of an inch of asbestos in each of the six ore bearing strata is conservative. This would give a production of from 12" x 12" x 3 to 4½ inches of asbestos for each square foot of surface and to recover it would call for the excavation of 20 to 25 cubic feet of rock. A square foot of asbestos 1 inch in thickness will weigh approximately 12 pounds, in place. Assuming the ore zones to be continuous and to maintain the averages shown in the exposures accessible an estimate of the possible tonnage of asbestos in the six claims reaches the fantastic figure of from 84,000 to 126,000 tons.

Just what factor to apply to such an estimate is impossible to determine. It is my belief that the property should be capable of producing at least 500 tons per year. There are so many factors involved in any estimate and such limited data to base figures on that the 500 tons per year is not much more than a guess, but seems within reasonable attainment, and may by intensive development and operation greatly exceed this amount.

The work on this property has all been done by hand drilling and chiefly as assessment, hence the limited production. The percentage of No. 3 crude asbestos is larger in this property than in any of the others. The problem of mining a 20 to 25 foot thickness of rock presents no serious difficulties if properly directed and engineered.

PUEBLO ASBESTOS GROUP

The Pueblo Group consists of 14 claims on the east slope of Center Mountain. They are reached by 5 miles of trail, from the end of a three mile mine road which starts east from the Globe-Pleasant Valley highway at a point 55 miles northerly from Globe. The first three miles of mine road can be made by car. The trail is made by horseback and the asbestos and supplies are packed in by burro.

A mine road for cars and trucks can be made direct to the camp on the Pueblo Group at comparatively low cost. With the exception of two or three short stretches each of from 100 to 200 feet in length the road making can be done by bulldozer. The short stretches mentioned will call for rock work with drilling and blasting. Proper grades can be established for hauling heavy loads. The first 3½ miles of trail to the summit of a saddle can be easily made and the rock cuts will be on balance of 1½ miles to camp. Center Mountain which is a quartzite mesa has an elevation of 7600 feet and the main workings of the Pueblo claims are at about 6500 feet elevation.

Title to the claims is held by Roger Q. Kyle of Globe and records of location are on file in the Gila County Recorder's Office at Globe, Arizona. A map is available showing the relative location of the claims.

PRODUCTION The production from this group as reported by the owner, Roger Q. Kyle, is in excess of 300 tons, of which 25 per cent was No. 1 crude and 75

per cent No. 2 crude. Of the 25 per cent of No. 1 crude at least 50 per cent was three inch fiber. The reject containing the No. 3 crude went as waste - along with some No. 2 crude due to the costly burro pack to the main road.

ORE OCCURRENCE The asbestos zone occurs in the mescal limestone just above the contact with the underlying diabase sill. The contact of the diabase and the limestone occurs on 11 of the claims. The total length of the exposure on the claims is about 7000 feet. Three of the claims are located off of the contact with their end lines adjoining so as to cover approximately 3000 feet along the dip of the ore horizon. The balance of the claims are located with side lines adjoining so that each claim covers 600 feet on the outcrop and 1300 feet on the dip, allowing 200 feet for dump.

There are three zones in the limestone in which the asbestos occurs. Most of the development and production has been on the lower zone. This consists of four strata, the lower one being from six to eight feet above the underlying diabase and the other three at intervals of from three to five feet above. The middle zone is about 150 feet above the lower zone and is partially developed by three tunnels. The third or upper zone is 50 feet above the middle and has had only a small amount of work done on it.

On No. 9 claim most of the mining and development occur. Here an irregular tunnel and stope extend 305 feet into the hillside from the outcrop. Three of the ore bearing strata in the lower zone have been worked from this tunnel. Other tunnels are located on No. 7 which is in about 90 feet; on No. 8 is a 30 foot tunnel and on No. 11 a 95 foot tunnel. All of these with the exception of the tunnel on No. 11 are in ore. The No. 11 tunnel is a development tunnel, driven through slide rock and soil in order to get into solid lime at a point near the diabase contact.

On No. 10 and No. 11 claims is a quarry cut, about 800 feet in length and showing three of the lower strata.

Several dikes of diabase cut across the bedding of the limestone, which dips at from 5 to 10 degrees from the horizontal into the mesa. The major diabase dike is located near the common side line between No. 6 and No. 7 claim. Near the diabase dikes the occurrence of higher grade asbestos in the various strata is characteristic of this and the other mines.

At no place on the exposures of the various serpentine strata has the asbestos pinched out. The serpentine strata vary from 6 inches to three feet in thickness. The asbestos occurs in gash veinlets from knife blade thickness up to fiber lengths of three and four inches. The asbestos is usually concentrated in zones within the serpentine of from two to three inches in width which make hand cobbing of the serpentine effective.

The continuity of the asbestos cannot be definitely established due to the large area and the limited amount of development. The various zones, however, can be traced over the entire distance of the outcrop.

The Pueblo Group are located on the east side of the terraced area below Center Mountain Mesa. On the south side of the mesa, a distance of about 7500 feet from the Pueblo group is the Reynold Falls (Buffalo Asbestos) Group of claims. On the Reynolds Falls the diabase and the lower zone of asbestos production are at about the same elevation as on the Pueblo. Both contacts on the two groups show such persistance in length and continuity that it is reasonable to assume that at least the serpentinized zone will be continuous between the two groups.

The prospective area thus is large and as developments proceed it may be advisable to locate additional claims, ending lining the present claims of the Pueblo group so as to cover the entire intervening area between the two groups.

From the limited amount of development it is impossible to estimate the probable tonnage which can be produced from this group. There undoubtedly will be some areas which will not be profitable to mine. Present developments and exposures do not show these, however, and, as in the other properties covered in this report, any estimate based on the average thickness of asbestos exposed by the development if applied to the entire area covering the serpentinized zone would show such fantastic figures as to probable tonnage that they would justly be incredible.

OPERATION The development of this property has been carried on from the returns obtained from asbestos produced and little or no outside capital has been spent. Hence the work has been limited to the readily accessible productive areas and no preparatory work or development work has been done. It is only within the past few months that any exploration work has been carried forward and that has been done on the 95 foot tunnel on the No. 11 claim. Throughout the entire district work has been limited to taking out ore from madily accessible and productive areas.

PROBABLE PRODUCTION In the exposed workings the average amount of fiber in each one of the four strata of the lower zone will be from 1/2 to 3/4 inch. In the four strata the total would be from two to three inch of fiber in each square surface of area. This will call for the removal or excavation of 18 to 20 cubic feet of rock for each square foot of asbestos two to three inches in thickness. It calls for the excavation of approximately 90 tons of rock for each ton of asbestos produced. With in excess of 3600 feet of outcrop of probable productive area an annual production of 1000 tons asbestos, of all three grades, seems well within reason and attainable by proper equipment, preparation and development of the property. This calls for the excavation of about 300 tons of rock per day. As development proceeds this production may be increased several fold if the continuity persists, as is indicated by the present showings.

GENERAL OPERATING CONDITIONS The operating conditions are favorable for year around work. Water is available for domestic and mine work from numerous springs and it is stated that their flow is continuous. Timber for mine use is abundant on the property. There are at present five camp buildings, which would serve

for preliminary work but increased camp facilities would be necessary in order to step production up to the 1000 tons per year basis.

The road and trail are inadequate for enlarged operations. The cost of construction of a good road to the property would not be excessive and survey should be made for a road which would follow along the contact of the diabase and lime which would not only provide good operating facilities but would be productive of an appreciable tonnage of asbestos and would be a valuable piece of surface development of prospective ground.

A report by Smith-Emery Company, Chemists and Engineers, of 920 Santee Street, Los Angeles, California, field work by W. C. Bass, engineer, in July 1932, was submitted to me and checked on the ground. It has been found substantially correct in its details and repetition of the facts mentioned in the report are not deemed necessary in this statement.

SLOAN CREEK GROUP

The Sloan Creek Group of claims have been examined and accurately reported on by Dr. Eldred D. Wilson, Geologist, of the Arizona Bureau of Mines, on pages 73 to 76 of Bulletin No. 126, Asbestos Deposits of Arizona, published in 1929 by the Arizona Bureau of Mines, Tucson, Arizona. A copy of the Bulletin is available and repition of facts contained therein are not deemed necessary.

A report by Julius Sanchez, Mining Engineer, who at one time operated the property was made in May 1921 and has been checked on the property, and the statement of facts contained in the report have been found correct and accurate.

ORE OCCURRENCES The area covered by the 12 claims making up the Sloan Group may be considered as three distinct mesas, formed by the erosion of Sloan Creek. On the north portion of the group Sloan Creek runs east and west along the common end lines of the American Beauty and the Turkey Track claims to the north and the Mitt and Bluejay claims to the south. Cloan Creek then flows south along the east side line of the Bluejay claim and the east endllines of the Jackrabbit and Asbestos Springs claims. On the east side of Sloan Creek are the Last Chance, Aileen, Cowboy, and Diabase claims whose west end lines are common with the side line of the Bluejay and the end lines of the Jackrabbit and Asbestos Springs. We may thus consider the three mesas as the North mesa which is made up of the American Beauty and the Turkey Track Claims, the West mesa, consisting of the Mitt, Bluejay, Manzanita, Jackrabbit, and Asbestos Springs claims and the East mesa covered by the Last Chance, Aileen, Cowboy, and Diabase claims. The other claim, known as the Turkey Track Campsite has been located for camp purposes.

The mesas are comparatively low and are from 75 to 125 feet above the bottom of Sloan Creek. Sloan Creek has cut through the limestone and into the underlying diabase and has left exposed on the side of the canyons the diabase contact and the various ores zones. The bedding planes of the limestones are practically level and the surface of the southern end of the east and west mesas have been eroded so that the surface of the mesas have a gentle slope to the south.

Three distinct ore bearing or serpentinized zones have been exposed on the terraced sides of the canyon. The lower zone is from two to five feet above the underlying diabase sill; the middle zone is 12 to 15 feet above the lower zone and the upper zone is about 30 feet above the middle zone.

The major part of the development has been done on the middle zone which has three well defined asbestos bearing strata. These strata are from three to four feet apart and vary from 6 to 18 inches in thickness with layers or veins of asbestos fiber irregularly distributed through the serpentinized limestone replacements. The asbestos ranges from gash veins of knife blade thickness to fibers of three and four inches in length as shown on the Cowboy claim.

Only a limited amount of development work has been done on the lower and upper zone but both of these zones are shown in numerous shallow opencuts.

On the north mesa are eight tunnels, in the middle zone, from 30 to 100 feet in length. On the west mesa there are four major tunnels, the longest being 150 feet in length, near the northern end. An opencut on the surface about the center of the Jackrabbit claim shows the serpentine exposure of the upper zone carrying asbestos. This is shown by an open pit and trench and is exposed on the surface due to the fact that the surface has been eroded in a gentle slope toward the south end of the mesa. The middle zone is opened by two short tunnels at the southern end on the Asbestos Springs claim. The open pit and trench on the middle of the Jackrabbit claim has significance in showing the continuity of the serpentine zones carrying asbestos.

The east mesa has had the major development with nine tunnels on the west terraced slope, two tunnels on the south and two tunnels and a long open quarry cut on the east end of the Cowboy claim. The major part of this work is on the middle zone.

On this group of claims there is approximately 9000 feet in length of outcrop on the middle zone alone exposed. The location of the tunnels show a wide and fairly uniform distribution of asbestos bearing serpentinized strata. An average expected yield per square foot of surface is most impossible. At one point on the Cowboy claim, on a quarry cut, 6 x 18 feet, a production of 5200 pounds of three to four inches high-grade silky fibre asbestos was produced.

From the middle zone alone, on the east mesa, which is the portion on which the major development has been performed, an average length of fiber in the faces exposed will show from one inch to one and one-half inch. To recover this fiber an excavation of approximately nine cubic feet of rock for each square foot of asbestos one inch to one and one-half inch in thickness. This calls for approximately 42 to 50 tons of rock to be moved or excavated for each ton of asbestos production.

Whether or not the average thus exposed in the present workings will be maintained and persist throughout the entire area is of course problematic.

The production from the Sloan Creek Group has been 525 tons of asbestos. Of this 20 per cent has been No. 1 crude; 50 per cent No. 2 crude and the balance 30 per cent made up of No. 3 and No. 4. The bonanza found on the quarry cut on the Cowboy claim so influenced this average that it cannot be considered an average expectancy. It indicated, however, that on this group a large percentage of No. 1 and No. 2 may be expected in general operations.

PRODUCTION With 9000 feet of outcrop exposed and readily accessible with a minimum amount of work this property should be able to reach a production of 2000 tons of asbestos per year at a minimum expense. If the continuity persists, as indicated, this yearly tonnage could be increased several fold, and maintained for many years to come.

This group can be easily put into large scale operation. The topography is gentle and the entire outcrop can be opened up by surface or quarry cuts so as to provide truck access to all parts of the outcrop and in making the cut a valuable piece of development work will be accomplished and a sizable production of asbestos made at the same time. The bed of the open cut will serve as a road. From indication it is very probable that other bonanza or high-grade sections will be exposed by such work and form starting points for early good sized production.

With the entire outcrop opened up working places would be provided for a large number of efficient and productive starting points for production.

Operating conditions are ideal. Timber is available nearby, water is ample for both domestic and mining use, hauling will be over good roads and climate conditions most favorable.

KYLE ASBESTOS MILL

The Kyle Asbestos Mill is located on a 5-acre mill site claim, about 1/2 mile from the business district of Globe, on a side hill which affords gravity flow for handling the products. The mill building is 20 x 40 feet, of framed timber construction with corrugated iron siding and roof. At the foot of the mill is a warehouse 50 x 80 feet, of steel framing with corrugated iron siding and roof and a cement floor.

The flow sheet consists of a crude ore bin for storage, with road so that ore trucks can dump direct into the bin; a 5 x 10 inch Dodge Jaw Crusher set to break to 1½ inch size; a set of El Paso Mine and Smelter Supply Co. rolls 20 x 12 inch set at 1/2 inch and followed by a similar set of rolls set at 1/16 inch; the product from the second set of rolls feeds direct to an impact screen with three screening areas, each 30 x 60 inches, which discharge into floor bins giving four products.

The first screen is 3/16 inch mesh which separates out a product called no. 4 or a middling product which must be retreated; the second screen area has a 1/4 inch screen which gives the No. 3 crude; the last screen area has a 5/8 inch screen through which the No. 2 crude passes and the oversize from this screen passes over the end and gives the No. 1 crude.

The No. 1, 2 and 3 crudes are free from serpentine, rock and dust. The No. 4 contains the fine fibers of asbestos, the crushed serpentine, other rock and dust and is conveyed to a bin which feeds direct to a swing hammer Grundler, which rotates at 3600 RPM by a direct drive motor. The discharge from the Grundler is picked up by a No. 5 exhauster and feed to a cyclone separator which discharges the air; the solid discharge from the cyclone goes to another impact screen fitted with a 20 mesh screen 30 inches wide which separates the fiberized fiber and the ground waste material. The fiberized fiber product, called No. 4 meets the Canadian screen standard 0-0-14-2 which on a pound sample shows nothing on a 1/2 inch screen, nothing on a 1/4 inch screen, 14 ounces on a 1/8 inch screen and 2 ounces through the 1/8 inch screen.

The mill is electrically driven throughout and has a capacity of 20 tons of feed per eight hour shift. Mr. Kyle claims that by replacing the present crusher with a 10 x 12 inch crusher the mill capacity can be stepped up to 100 tons of feed per 24 hour running. Automatic sacking equipment should also be added.

This mill is claimed to be the first mechanical cobbing and segregating mill and is covered by U. S. Patent No. 1790429, "Cleaning, Classifying and Grading Apparatus for Asbestos and Other Minerals". Application for patent was made in 1928 and the patent granted in 1931. The development of this process was started in 1922 by Mr. Kyle when the ore was crushed by hammer and then screened. The results obtained were such that it was decided to screen mechanically. The first mill was constructed in 1923 with jaw crusher, rolls and mechanical screening and the fiberizing of the No. 4 product followed in the same year.

From the first hand screening Mr. Kyle was able to establish a No. 3 crude which was the fiber passing through a 1/4 inch screen and contained the fiber which was too short to hand cob and gave a product free from waste. The first No. 3 crude was sold to Emsco Asbestos Company in 1922 and a new grade of asbestos was established.

Mechanically cobbed fiber is accepted by all spinners and manufacturers of asbestos products and complies with the Canadian standards. In hand cobbing the costs were formerly $4 per 100 pounds of No. 2 crude. This made the cobbing cost $80 per ton. With the mechanical cobbing the costs have been reduced to $5 per ton. In addition to this reduction in cost the process established the No. 3 crude grade. In hand cobbing about 10 per cent of the No. 2 was lost in the reject, due to the fiber adhering to the waste rock and this is now recoverable. A market has also been developed for the No. 4 or fiberized fiber. In a number of the Arizona mines the No. 3 and No. 4 grades combined should amount to two to three times the combined amount of No. 1 and No. 2 production.

The process has made it possible to handle ore zones at a profit where the percentage of No. 1 and No. 2 products were so low that they were not considered commercial. It permits the working of larger areas and the development of ore zones at low cost. In addition there is an appreciable production of fiberized fiber which is not plainly visible in the serpentine. Some of the dumps are being tested for recovery of asbestos in the former rejects.

GENERAL COMMENTS

GRADE OF ASBESTOS The asbestos produced from the Miami Group showed about 60 per cent of the product in No. 1 and No. 2 crude and 40 per cent in No. 3 crude and fiberized fiber.

The Pueblo Group produced only No. 1 and No. 2 crude, due to the fact that the long burro pack was too costly to ship the No. 3 and No. 4 crude, which went into the dump. The No. 1 crude was 25 per cent of the production and the No. 2 was 75 per cent.

It is estimated that with proper handling facilities the production from this group will be about 10 per cent No. 1 crude, 40 per cent No. 2 crude and 50 per cent No. 3 and No. 4. The increase in percentage of No. 2 will be accounted for by the recovery of a larger amount of No. 2 which formerly adhered to rock particles and was rejected and also a separation of the No. 3 which would furnish some additional No. 2.

The production of the Sloan Creek Group will be about the same as on the Pueblo.

NO. 4 FIBERIZED FIBER There is a field for the use of No. 4 fiberized fiber which should be further developed on the Pacific Coast. This is a b y-product coming from the cleaning and separation of the three standard grades and is one which will show a profit and enable larger production and the handling of lower grade ore. Intensive work on the development of a market is recommended.

PRODUCTION The Sloan Creek property offers the best opportunity to start to step up production, on a large scale and at a minimum cost. Next in line is the Pueblo group. The amount of capital available will determine the speed at which the 3000 tons or more per year production can be reached. Operations can be started on a modest scale, but it will take a longer time to reach the maximum production.

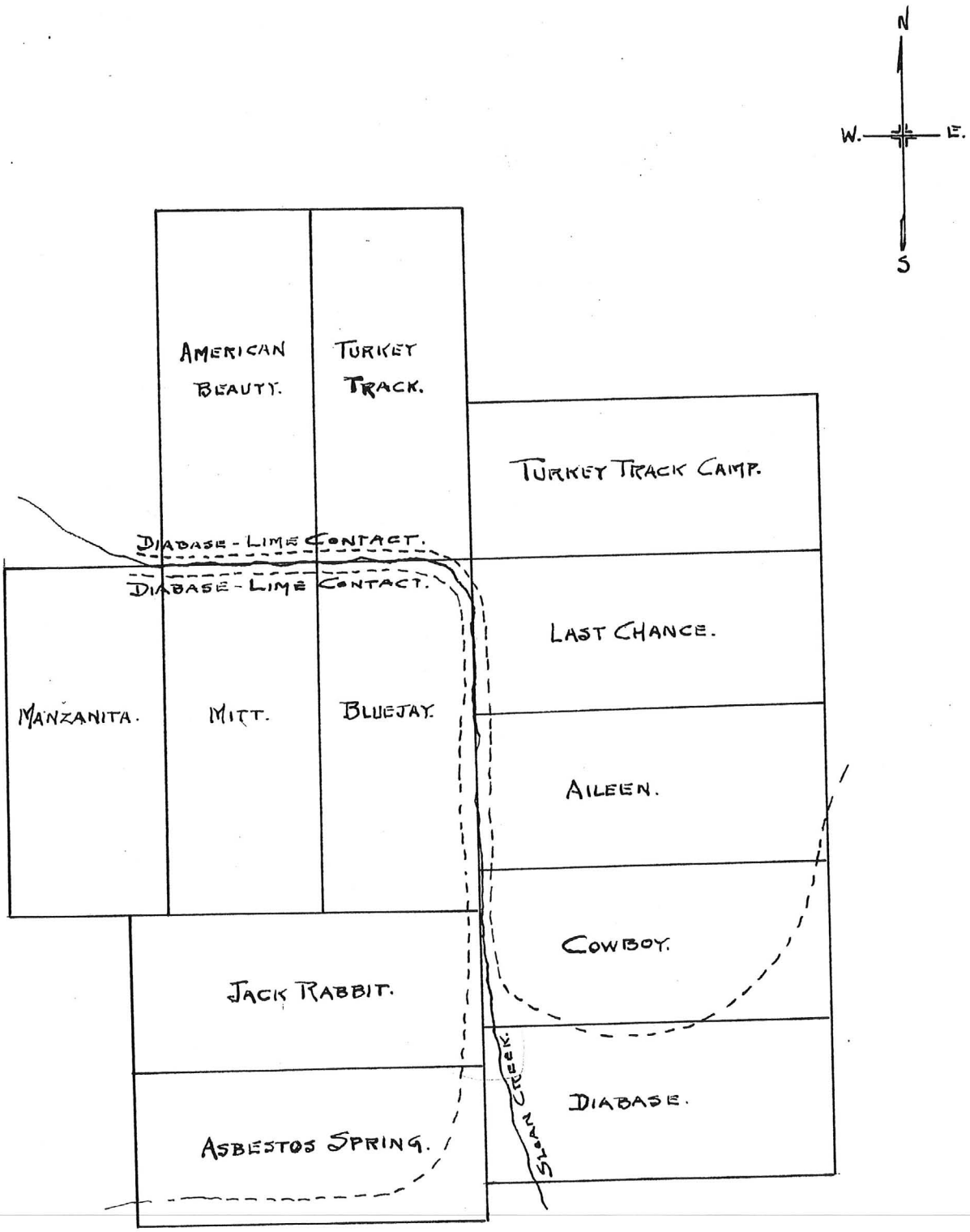
Proper engineering, planning and operation are essential to the maximum production. Ample labor is available for skilled miners from the Miami and other large mining districts.

Respectfully submitted

/s/ J. S. Coupal

By J. S. Coupal, Mining Engineer

Phoenix, Arizona
July 9, 1941



CLAIM MAP.

SLOAN CREEK GROUP.

SCALE 1" = 600 ft.

PRINTED: 11/20/2001

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USGS MF 1162-B
USGS MF 1162-H

06/30/97

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: LUCKY STRIKE

ALTERNATE NAMES:
KYLE ASBESTOS MINES
SLOAN CREEK GROUP
KENNEDY GROUP

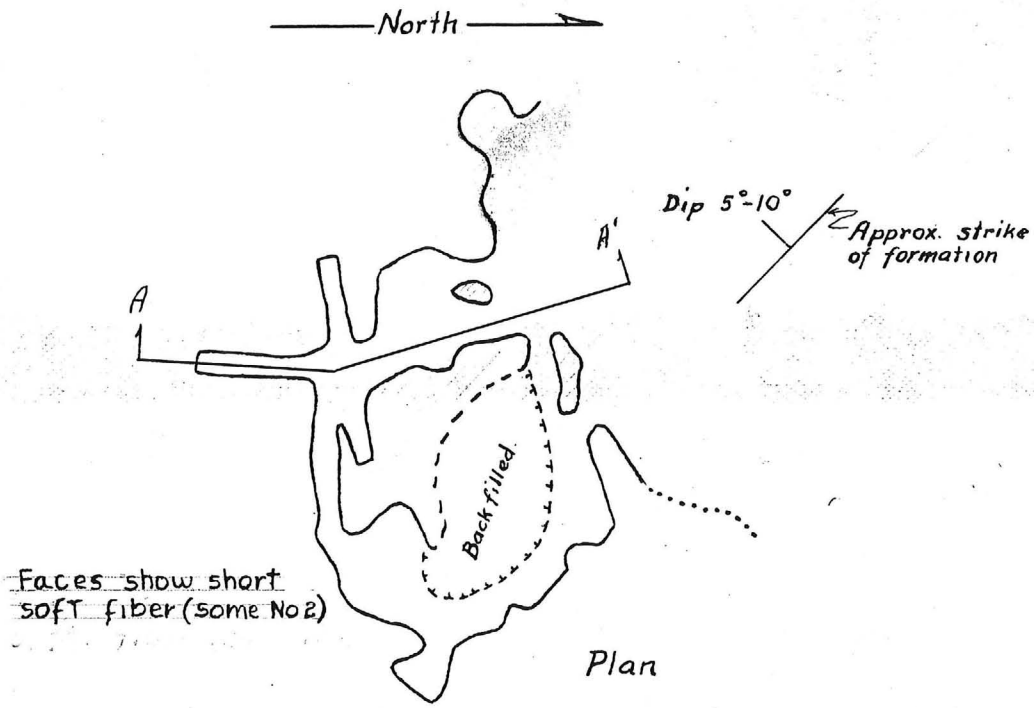
GILA COUNTY MILS NUMBER: 332A

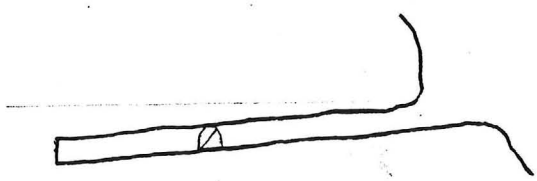
LOCATION: TOWNSHIP 6 N RANGE 14 E SECTION 15 QUARTER SE
LATITUDE: N 33DEG 51MIN 30SEC LONGITUDE: W 110DEG 53MIN 55SEC
TOPO MAP NAME: MCFADDEN PEAK - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:
ASBESTOS LONG FIBER
ASBESTOS LONG FIBER

BIBLIOGRAPHY:
USGS MCFADDEN PEAK QUAD
ADMMR LUCKY STRIKE MINE FILE
STEWART L A CHRYS-ASB DEPTS AZ USBM IC 7706
1955 P 79
WILSON E D ASB DEPTS AZ AZBM BULL 126 1928
P 79
ADMMR "U" FILE
SEE ADMMR SLOAN CREEK GROUP MINE FILE
USGS MF 1162-B
USGS MF 1162-H





Sec A-A'

MAIN STOPE (South End of Deposit)

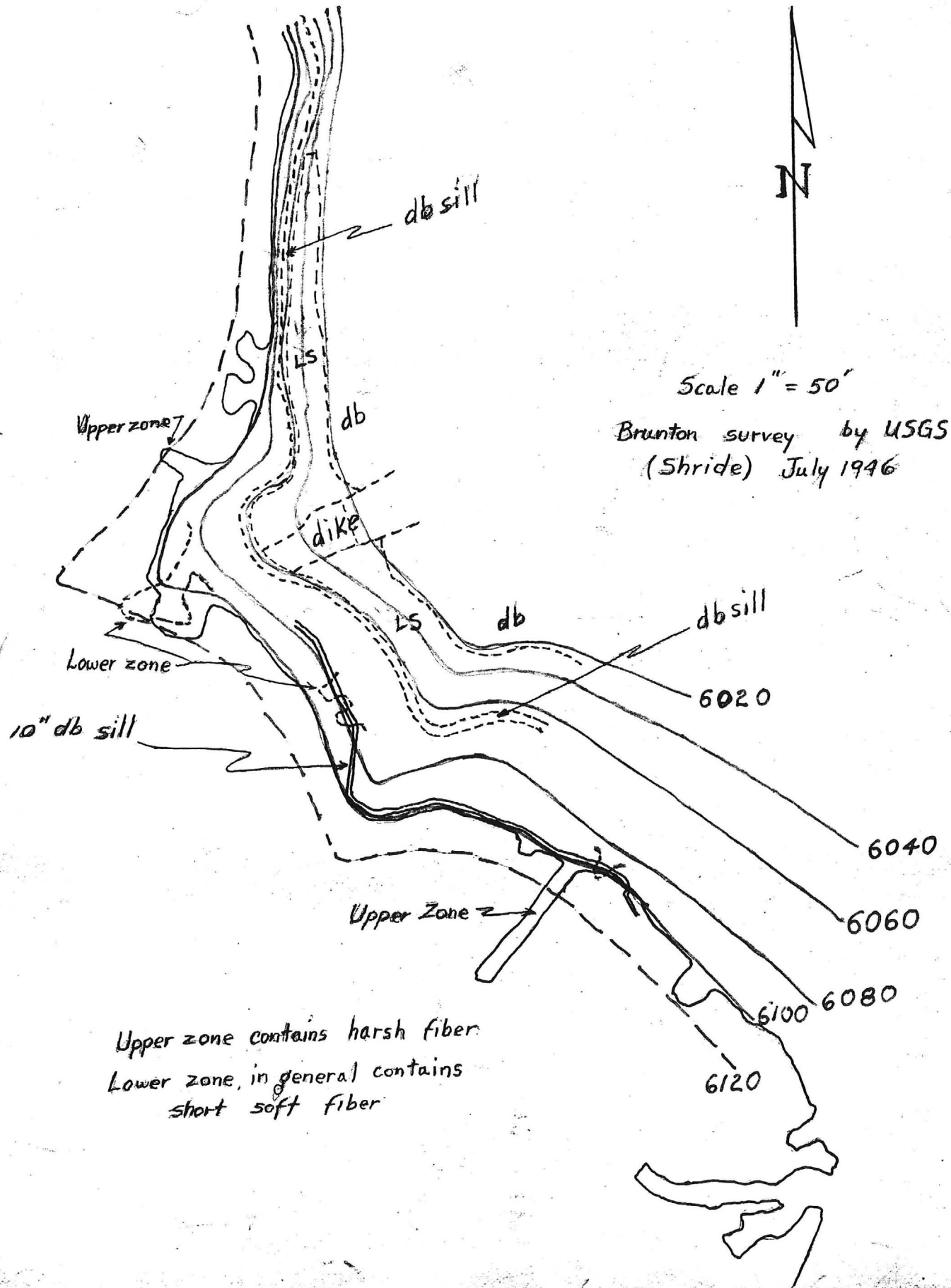
LUCKY STRIKE ASBESTOS MINE

Near Globe, Ariz.

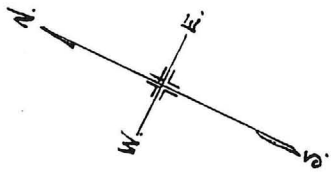
Sketch Map — Rough Brunton Control.

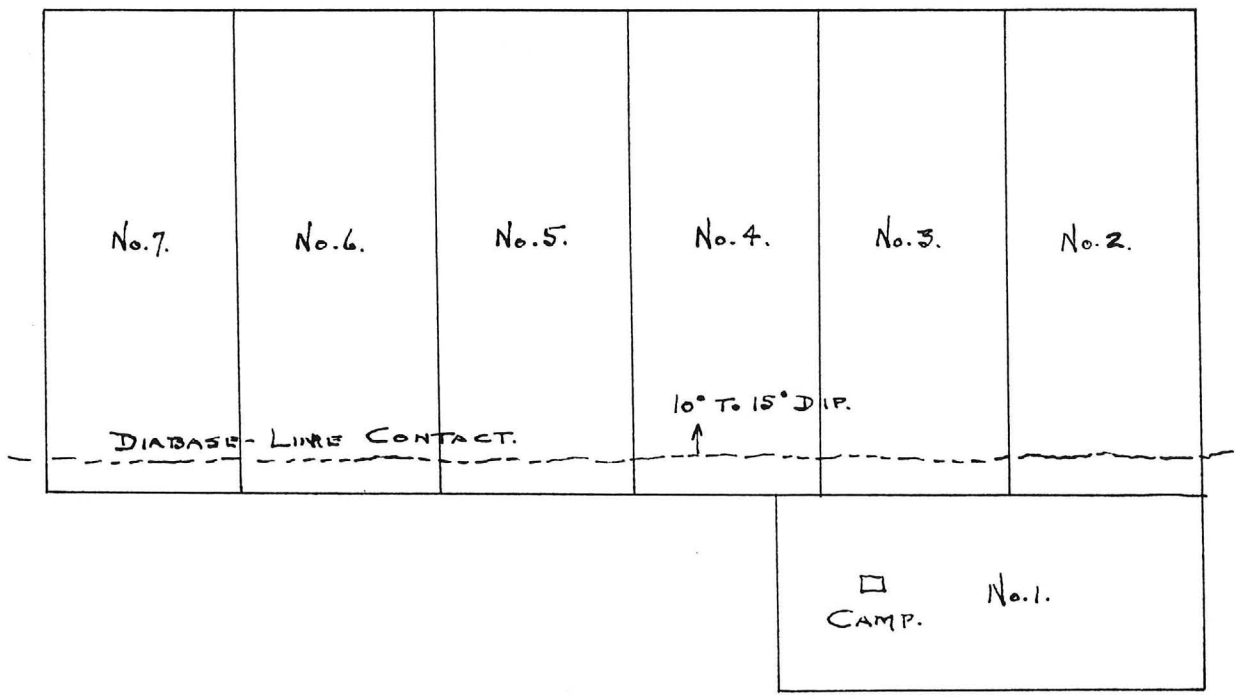
Scale 1"=50' Sept. 1943.

Lincoln A. Stewart



LUCKY STRIKE ASBESTOS DEPOSIT (NORTH END) Gila County, Arizona



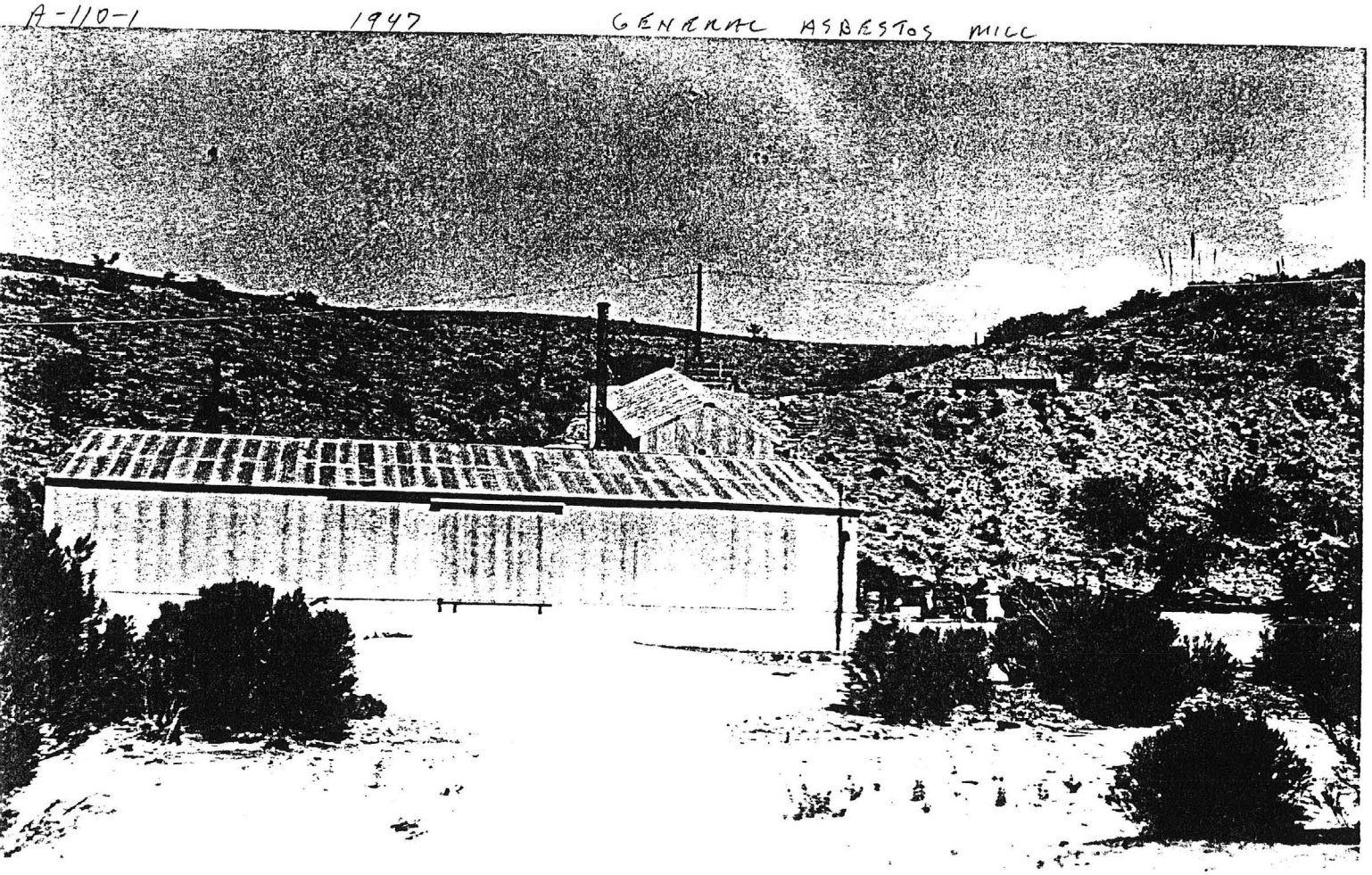


CLAIM MAP.

MIAMI ASBESTOS MINES.

SCALE 1" = 600 ft.

A-110-1 1947 GENERAL ASBESTOS MILL



LUCKY STRIKE MINE GILA COUNTY

IC 7706

ABM Bull. 126 p. 79

USGS Bull. 1027-N p. 617

USBM IC 7706 P. 79

USBM War Minerals Report 373, 1945

USBM "U" File

MILS SHEET SEQUENCE number 0040070475

USGS MF 1162-B
USGS MF 1162-H

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES

INFORMATION FROM MINE CARDS IN MUSEUM

ARIZONA

Gila Co.

N. of Roosevelt Lake
Aztec Peak
Lucky Strike Mine

MM-9339 Serpentine
9340 "
9341 "

MILS # 332A
Lucky Strike (Gila)
3-AKA's

NAME OF MINE: ~~KYLE~~ GENERAL ASBESTOS OF ARIZONA

COUNTY: GILA
DISTRICT:
METALS: ASBESTOS

OPERATOR AND ADDRESS: DATE:		MINE STATUS DATE:	
5/1/44	R.Q.Kyle, Box 302, Globe	5/1/44	Occ. Milling
2/47	Geo. Kohl, Mgr., Globe	2/47	Mining & Milling

GENERAL ASBESTOS OF ARIZONA
~~ASBESTOS MINES OF ARIZONA~~

Asbestos

Gila 4 - 2 T 6 N., R 14 E

R. Q. Kyle, Box 302, Globe '44
Sold to General Asbestos of Arizona,
Geo. Kohl, Mgr., Globe '47

KOHL, Geo., Mgr.
General Asbestos of Arizona
Globe, Arizona 1-10-47

See "Reynolds Falls"Asbestos Mine, Gila County 9-1951

General Asbestos of Arizona,
Globe

bought Kyle mines & mill

Geo. Kohl, Mgr.

Are producing asbestos 1/10/47

Dunning

Phoned Stewart of Public [illegible] re this, he advises sending [illegible] report covering the 2 mile Ext. to reach the Buckle L-Strike outcrops, & they are going to save some money out of the 19,000 to be continued on.

Mack,

Date:

Jan 7 1947

Name of Mine Asbe[illegible]s Mines of Arizona — Globe

Location Serra Ancho Mountains Luckey Strike

Operator Roger Q.Kyle.

Address BOX 302 Globe , Arizona

Metals Produced Asbestos, Tremolite, Manganeze, Gip.

Developing [Tunnels] Shipping [ ] No roads

Financing [ ] Planning Operations Soon [ ] yes

Idle [ ] yes NO roads

ML-15 ✓

Dec. 19, 1939

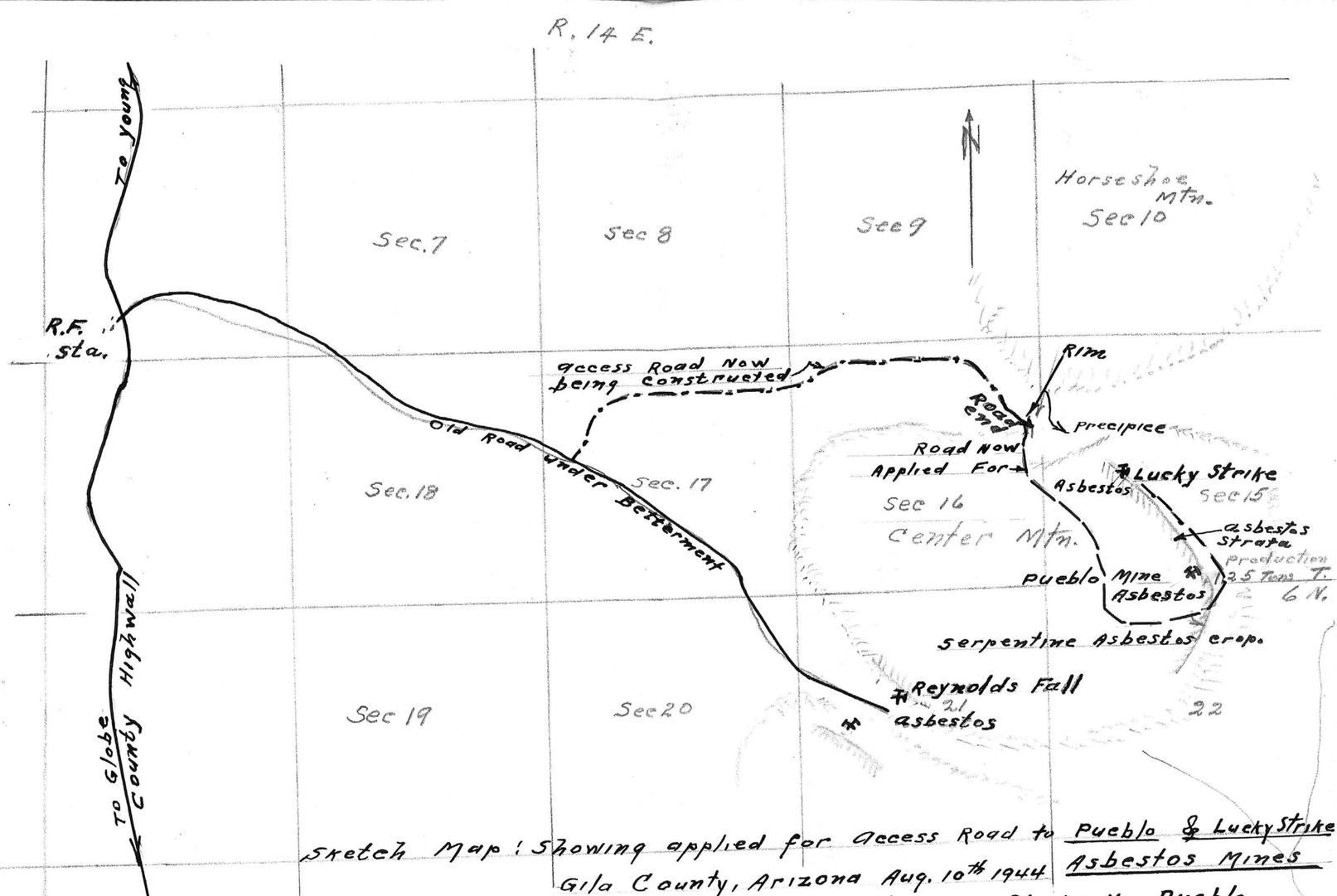
ASBESTOS - 6 claims; 3 mile trail to mine; 11 tunnels - asbestos showing in all; water plentiful throughout year; for sale, terms on application; Sierra Ancha, Gila County ML-15 OR

CAUGHLIN, T. C.
Phoenix, Arizona

Oct. 23, 1940

LUCKY STRIKE, (Sierra Ancha) Gila County.

THE MINING JOURNAL for JULY 30, 1942

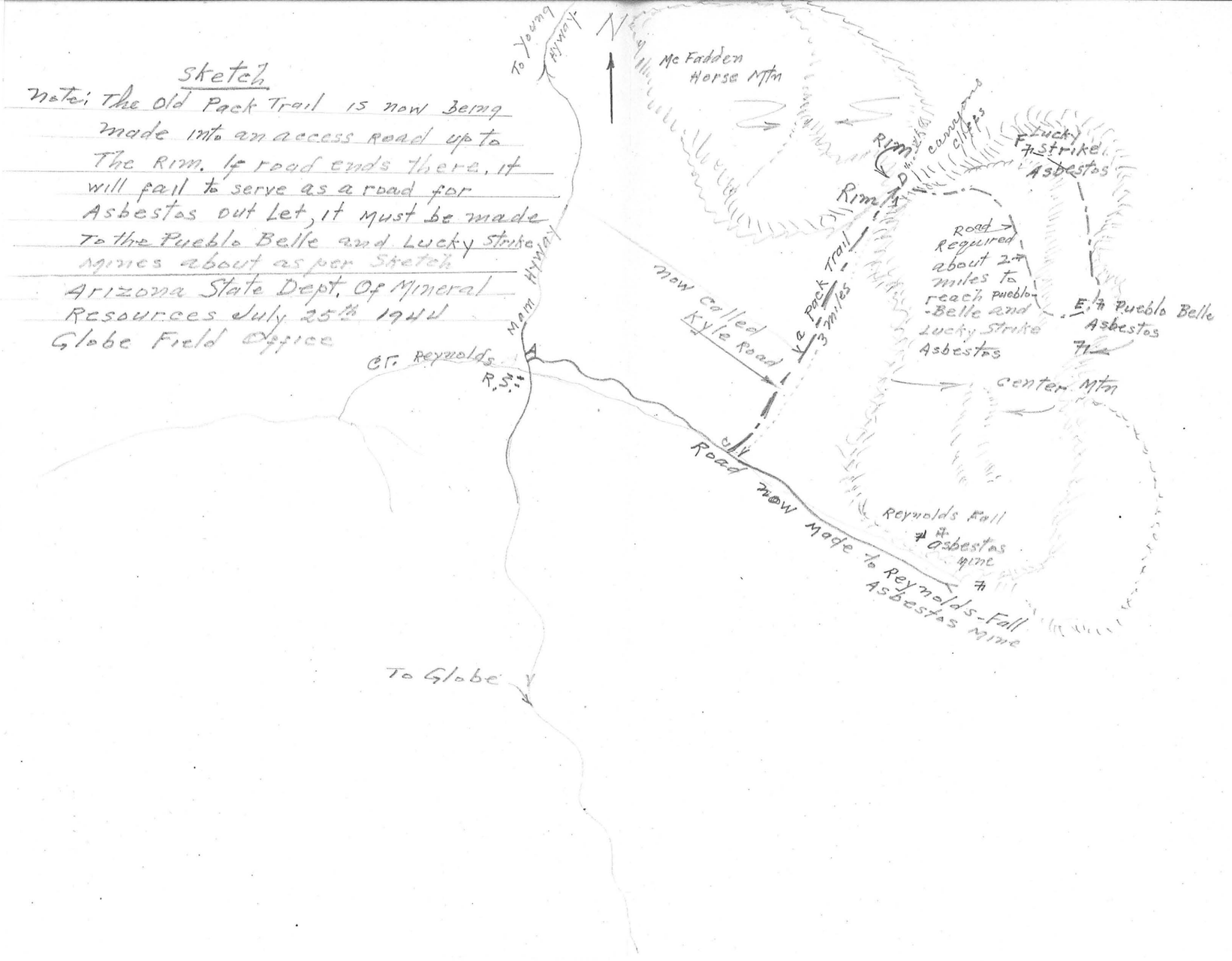


Sketch Map showing applied for Access Road to Pueblo & Lucky Strike Asbestos Mines
Gila County, Arizona Aug. 10th 1944
———— Point Rim to Lucky Strike via Pueblo
Approx. Distance 2 miles. Approx. Cost $8,000.00
State Dept. of Mineral Resources. Globe Office.

Sketch

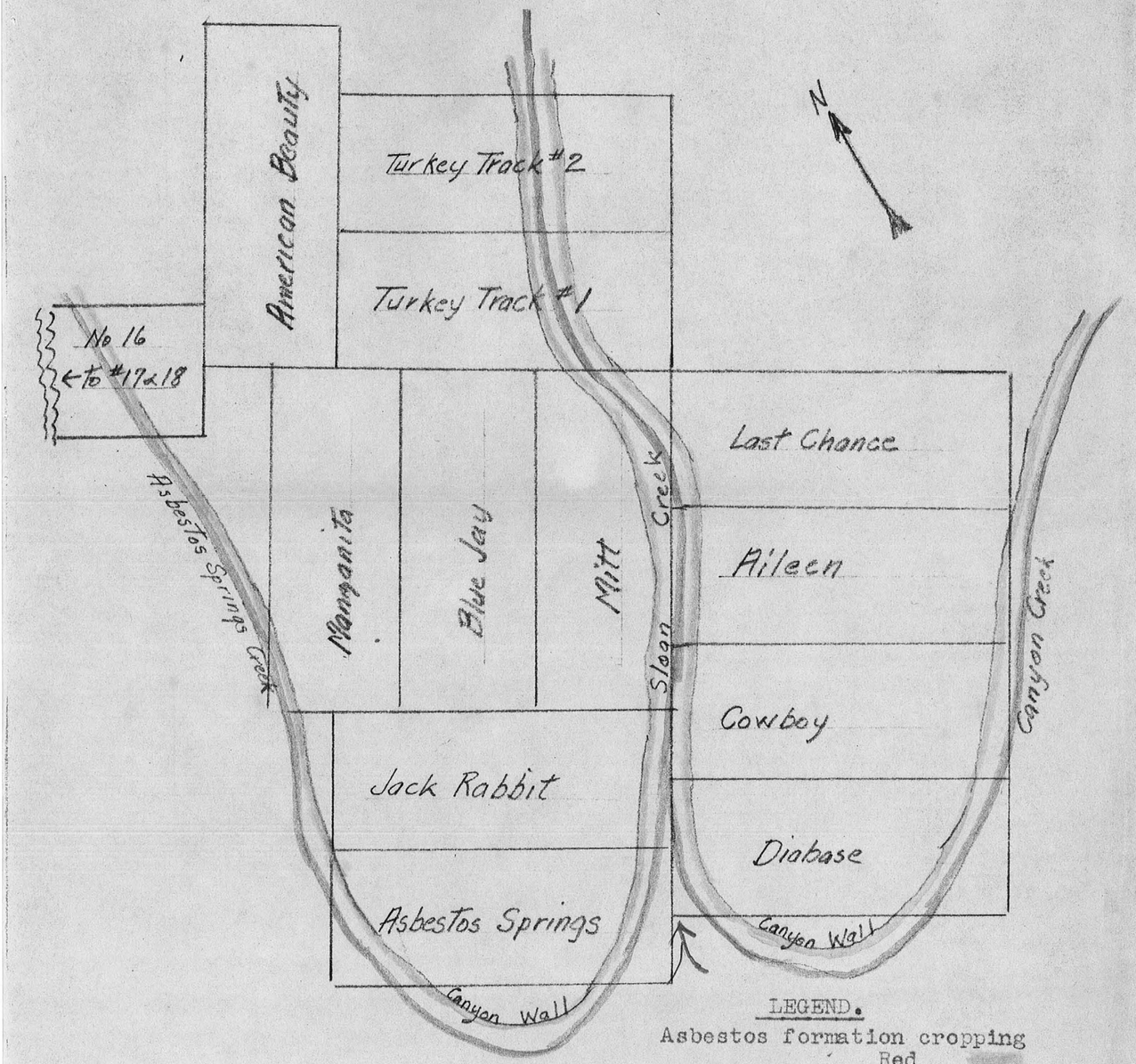
Note: The Old Pack Trail is now being made into an access road up to The Rim. If road ends there, it will fail to serve as a road for Asbestos out Let, it must be made To the Pueblo Belle and Lucky Strike mines about as per Sketch

Arizona State Dept. Of Mineral Resources July 25th 1944
Globe Field Office



KYLE ASBESTOS MINES. SLOAN CREEK & COWBOY GROUPS.
Globe/Young, Arizona.

To accompany report by Chas. H. Dunning, Sept,1955.
Scale 600' = 1".



LEGEND.
Asbestos formation cropping
Red
Drainage, blue

Lucky Strike #6

Lucky Strike #5

Lucky Strike #4

Lucky Strike #3

Lucky Strike #2

Lucky Strike #1

Puebla #12

Puebla #11

Puebla #13

Puebla #10

Puebla #14

Puebla #9

Asbestos Formation Outcrop

Puebla #8

Puebla #7

Puebla #6

Puebla #5

Puebla #4

Puebla #3

Puebla #2

Puebla #1

N

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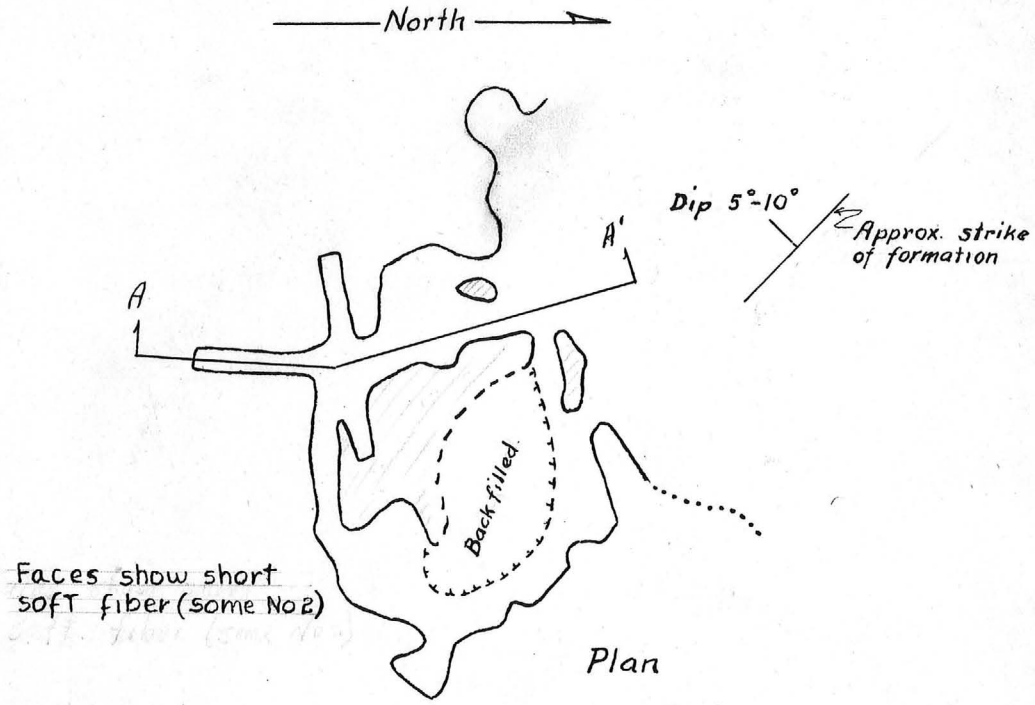

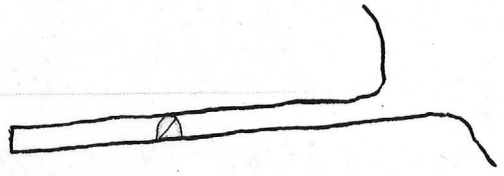

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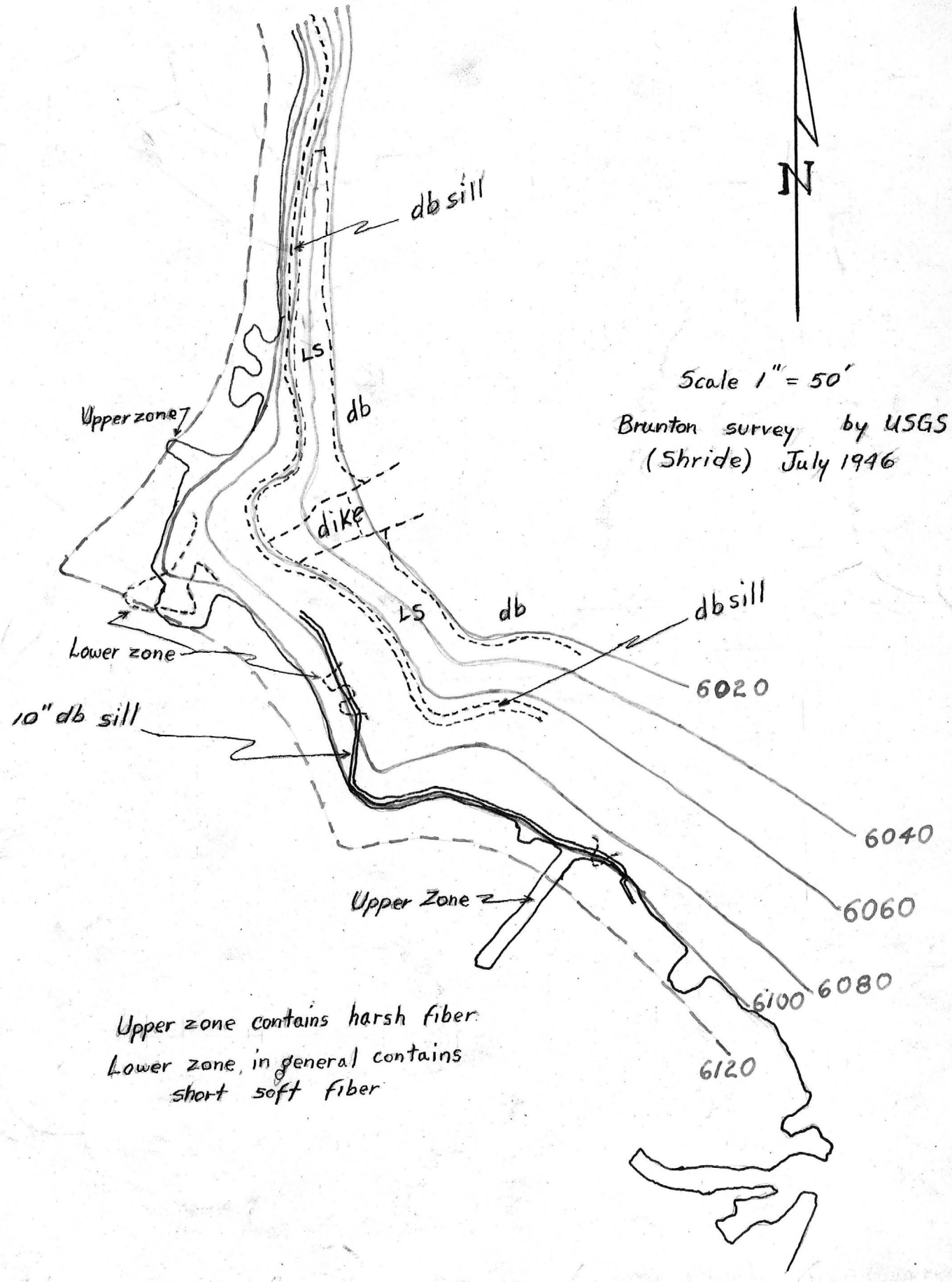
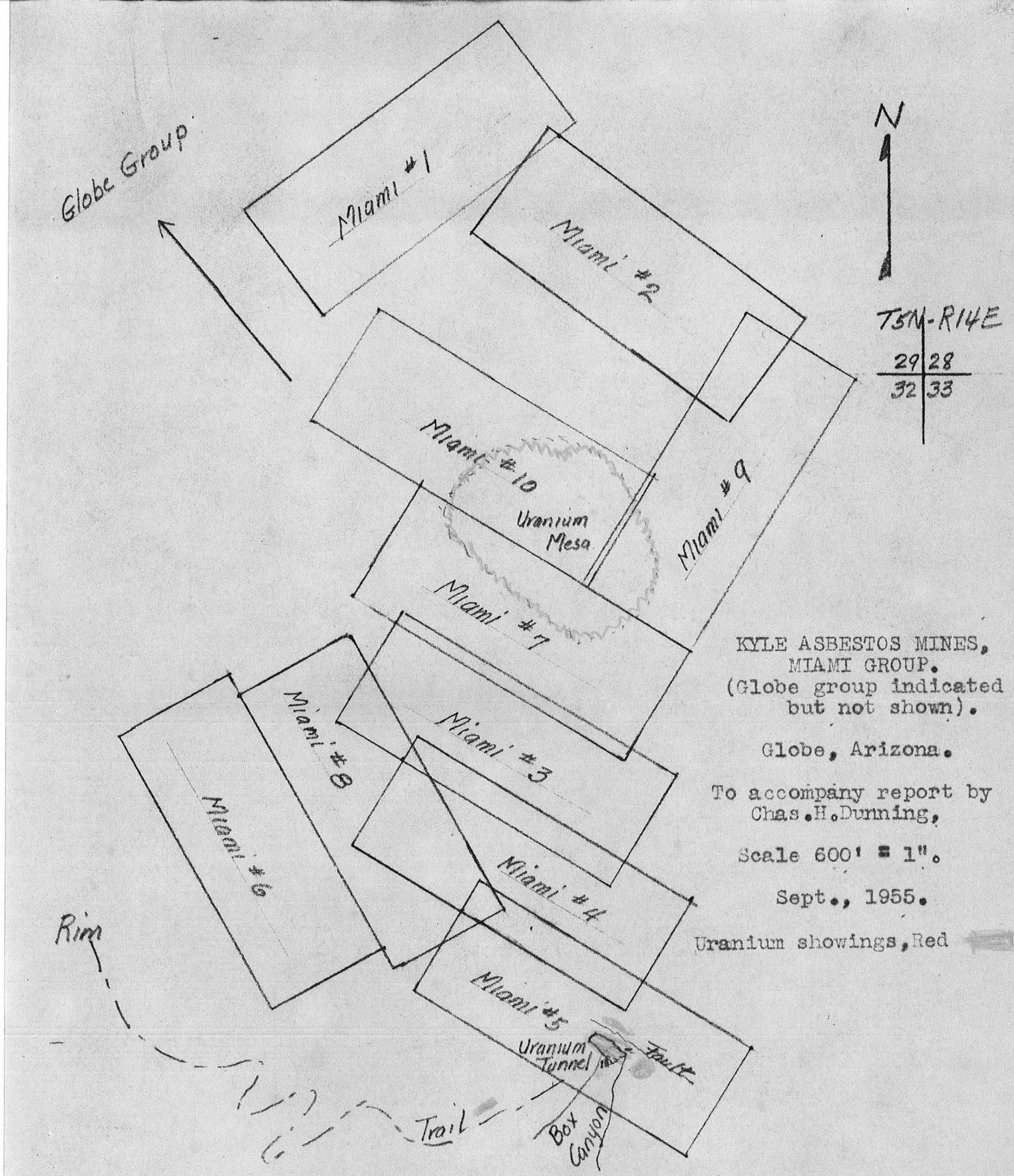


Scale 1" = 50'

Brunton survey by USGS
(Shride) July 1946

LUCKY STRIKE ASBESTOS DEPOSIT (NORTH END) Gila County, Arizona



KYLE ASBESTOS MINES,
MIAMI GROUP.
(Globe group indicated but not shown).

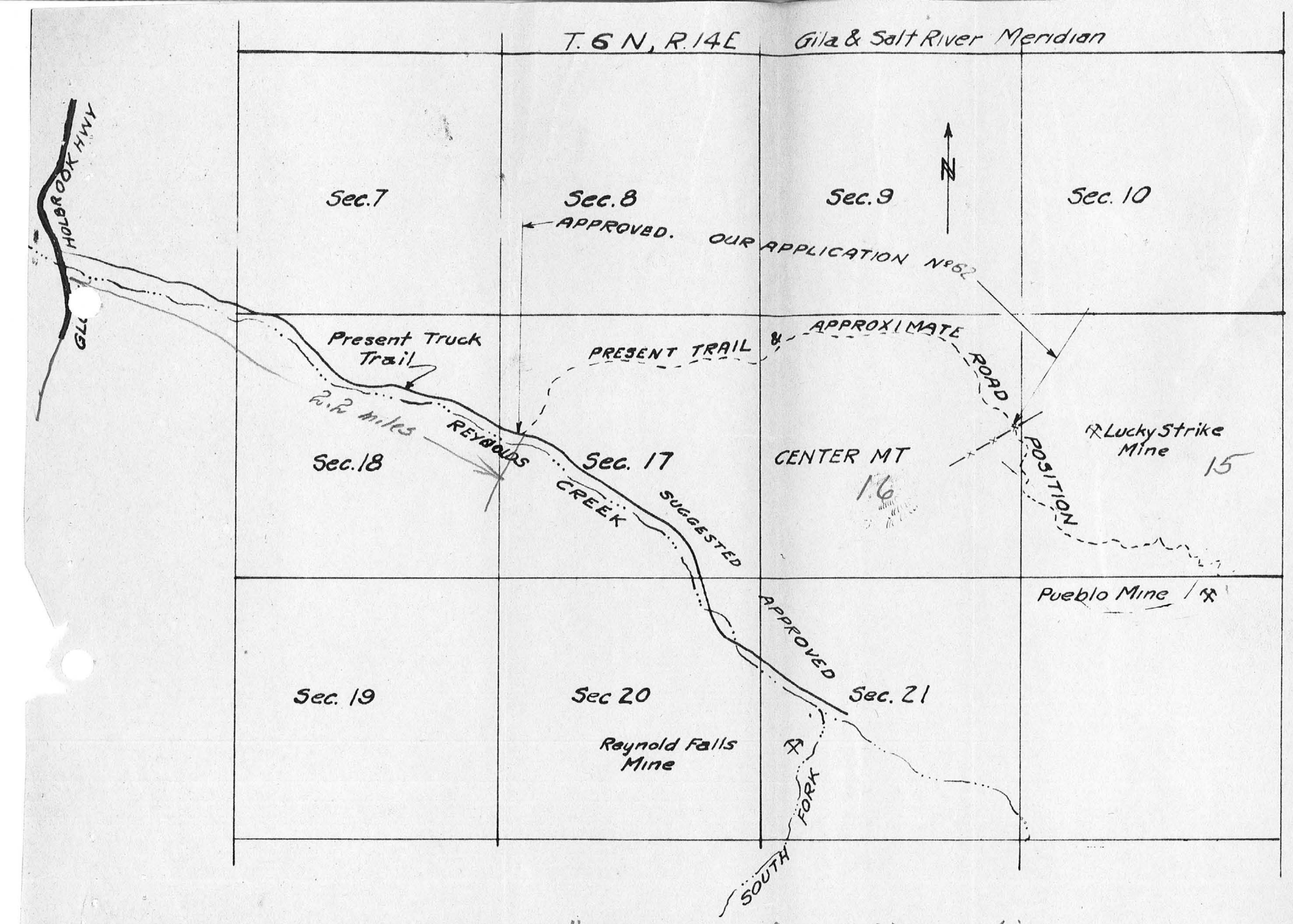
Globe, Arizona.

To accompany report by Chas.H.Dunning,

Scale 600' = 1".

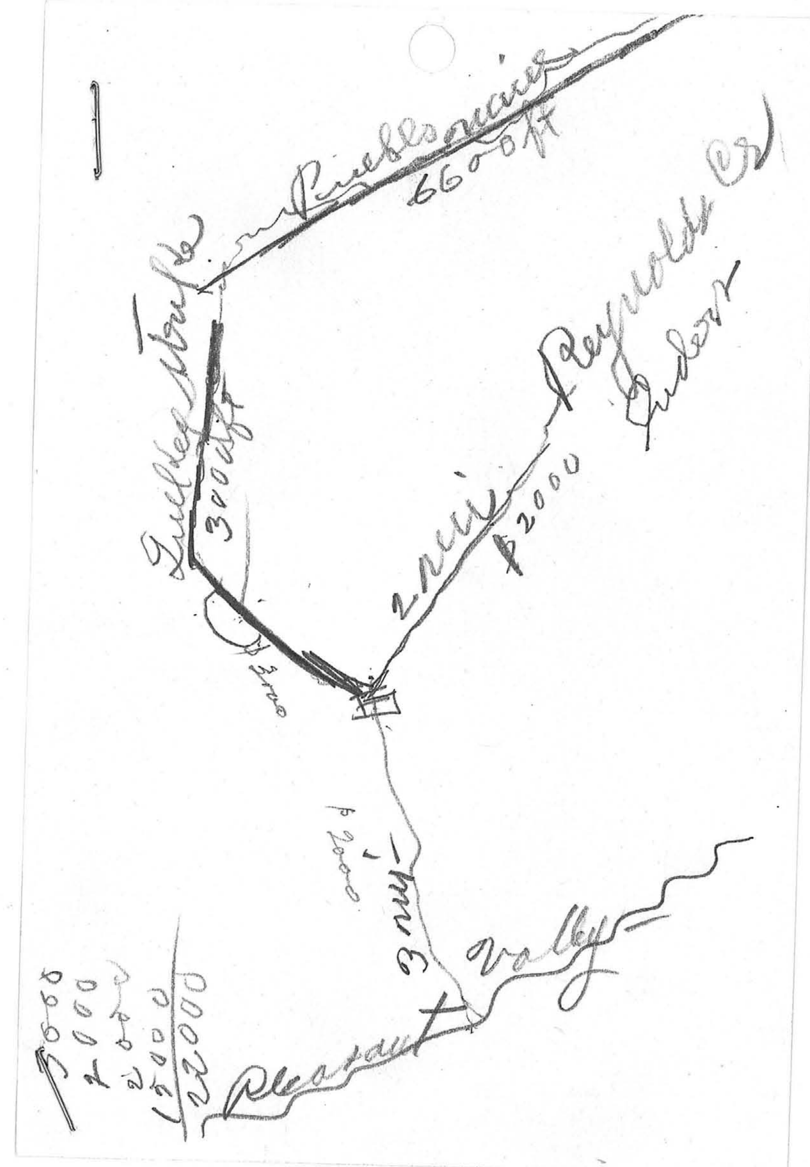
Sept., 1955.

Uranium showings, Red



DA-RM-79 "Asbestos Mines of Arig." Gila Co.

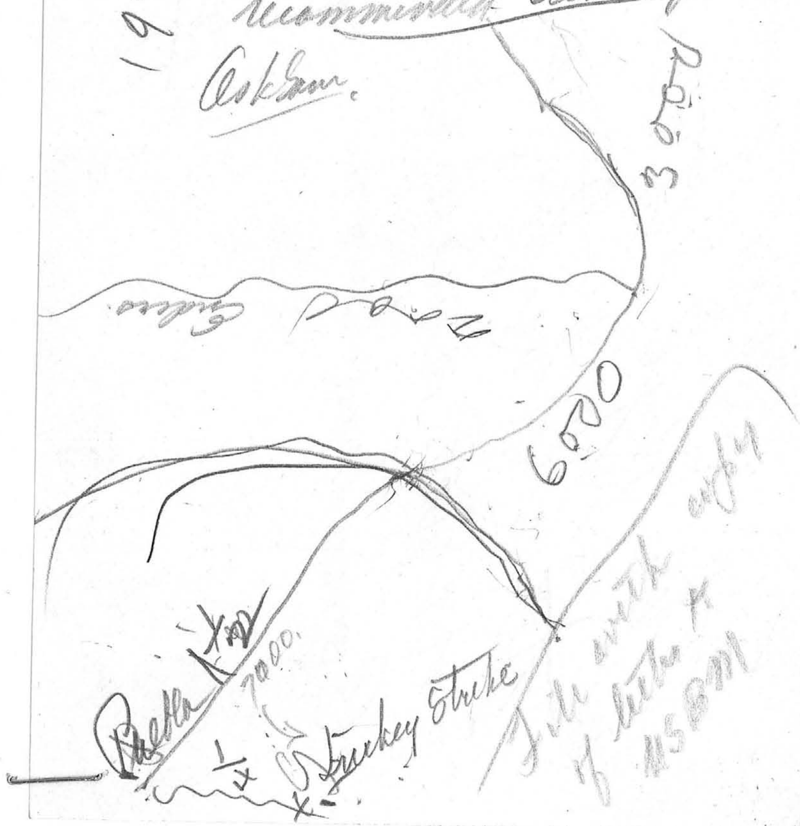
SKETCH MAP. Showing Relation of Access Roads. Not to Scale.

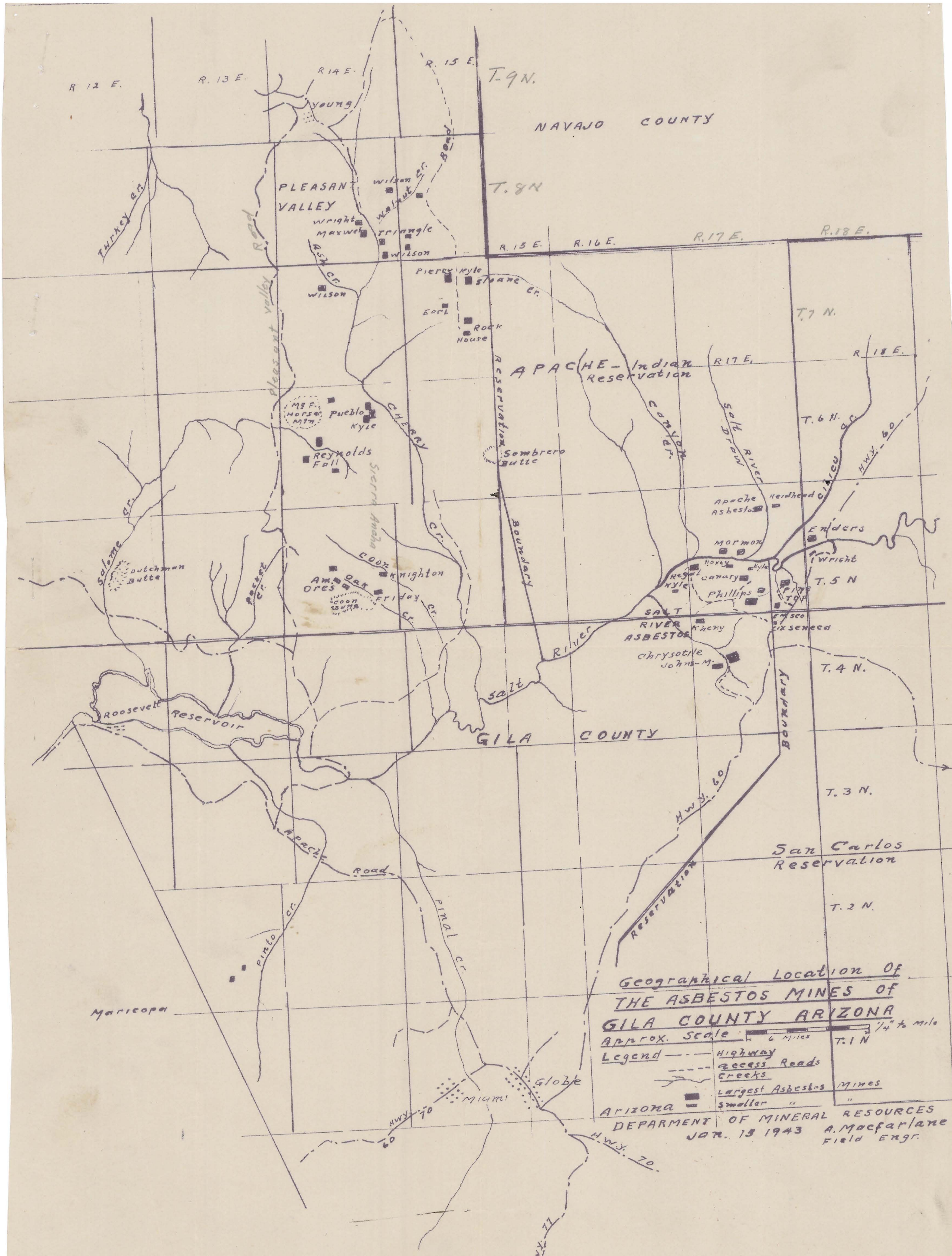


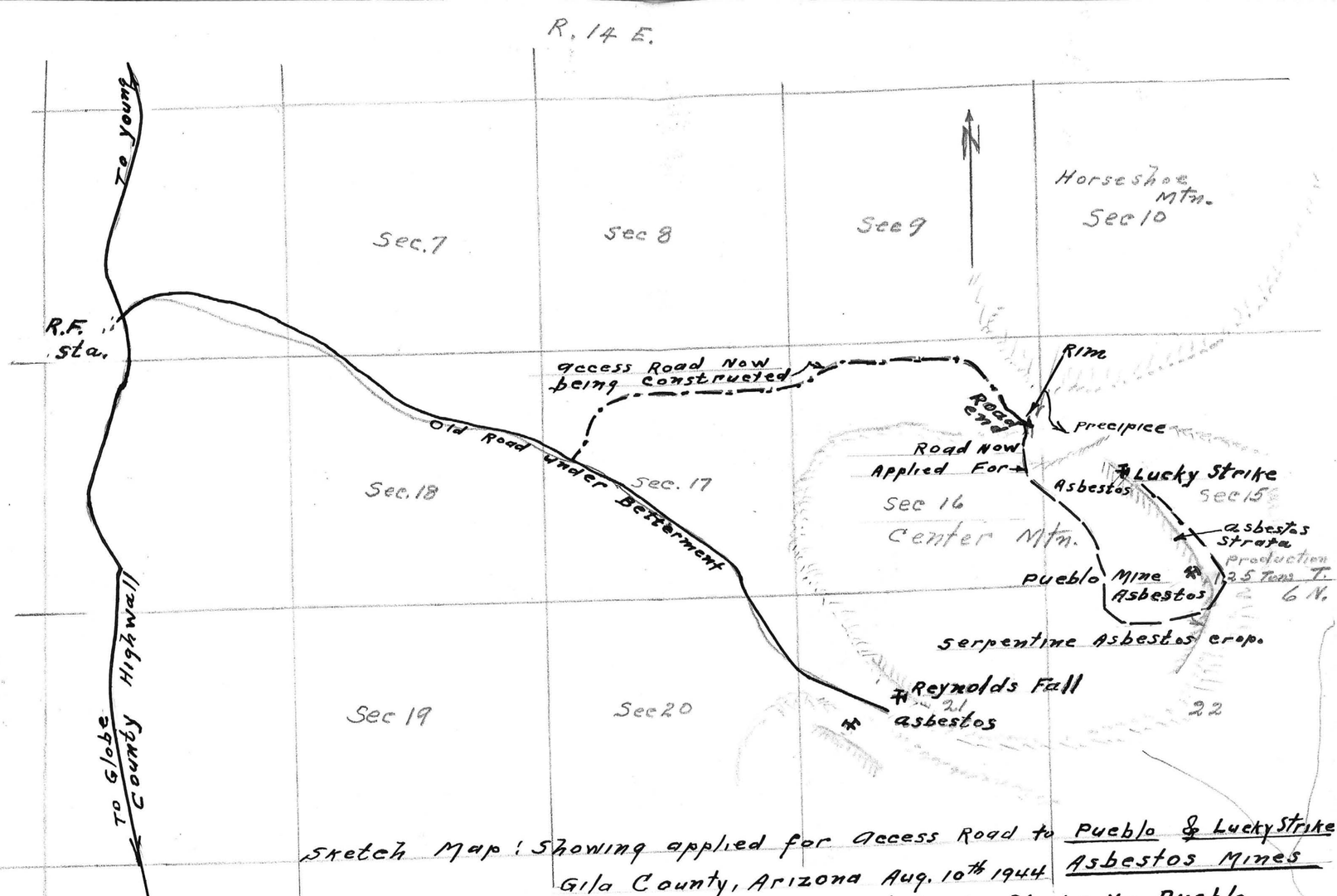
Opt. timber to Pueblo
Total off. 19,000
1,000
18,000

Asbestos Cork & Rubber recommended clear to

Ask Sam.




R. 12 E.
R. 13 E.
R 14 E.
R. 15 E.
T-9N.
NAVAJO COUNTY
Young
T. 8N
Turkey cr.
PLEASANT VALLEY
Pleasant Valley Road
Wilson cr.
Walnut cr. Road
Wright
Maxwell
Triangle
Wilson
Ash cr.
R. 15 E.
R. 16 E.
R. 17 E.
R. 18 E.
Pierce
Kyle
Sloane cr.
Wilson
Earl
Rock House
T. 7 N.
APACHE-Indian Reservation
R 17 E.
R 18 E.
Reservation Boundary
Mt F. Horse Mtn
Pueblo
Kyle
CHERRY Cr.
Reynolds Fall
Sierra Ancha
Sombrero Butte
Canyon cr.
Salt Draw
Salt River
Cibicu cr.
T. 6 N.
HWY. 60
Apache Asbestos
Reidhead
Enders
Mormon
Wright
Salome cr.
Dutchman Butte
Pocket cr.
Coon cr.
Knighton
Am. Ores
Oak
Friday cr.
Coon Butte
Moxey
Kyle
Regal
Kyle
Canary
Phillips
Pine Top
T. 5 N
SALT RIVER ASBESTOS
Khery
Emsco
Seneca
Salt River
Chrysotile
Johns-M.
T. 4 N.
Roosevelt Reservoir
GILA COUNTY
Boundary
T. 3 N.
Hwy. 60
Apache Road
San Carlos Reservation
Reservation
Pinal cr.
T. 2 N.
Pinto cr.
Maricopa
Globe
Miami
HWY. 70
60
HWY. 70
HWY. 77
Geographical Location Of
THE ASBESTOS MINES of
GILA COUNTY ARIZONA
Approx. Scale 6 Miles 1/4" to mile
T. 1 N
Legend
Highway
access Roads
Creeks
Largest Asbestos Mines
Smaller "
Arizona
DEPARMENT OF MINERAL RESOURCES
Jan. 13 1943
A. Macfarlane
Field Engr.



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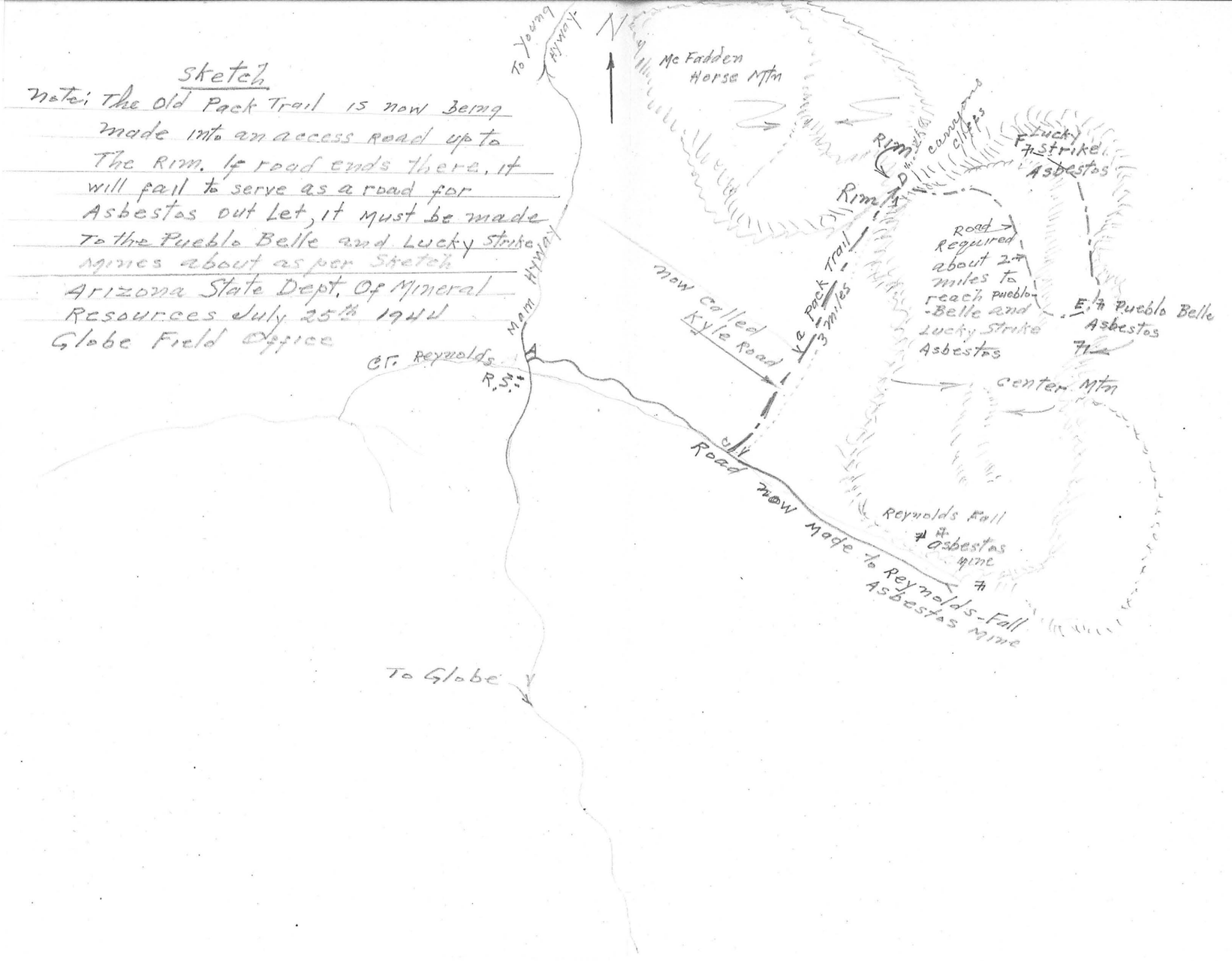

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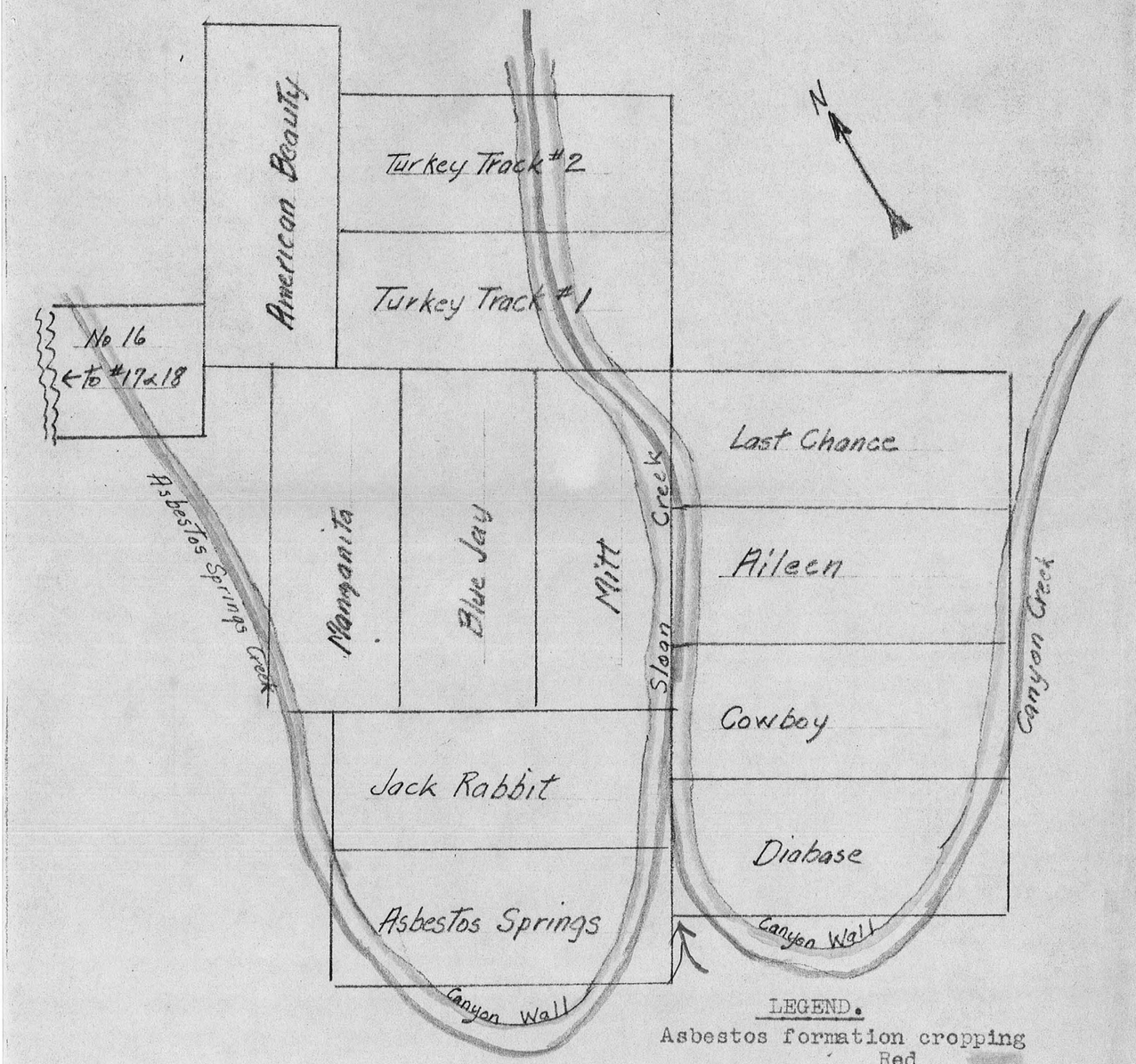

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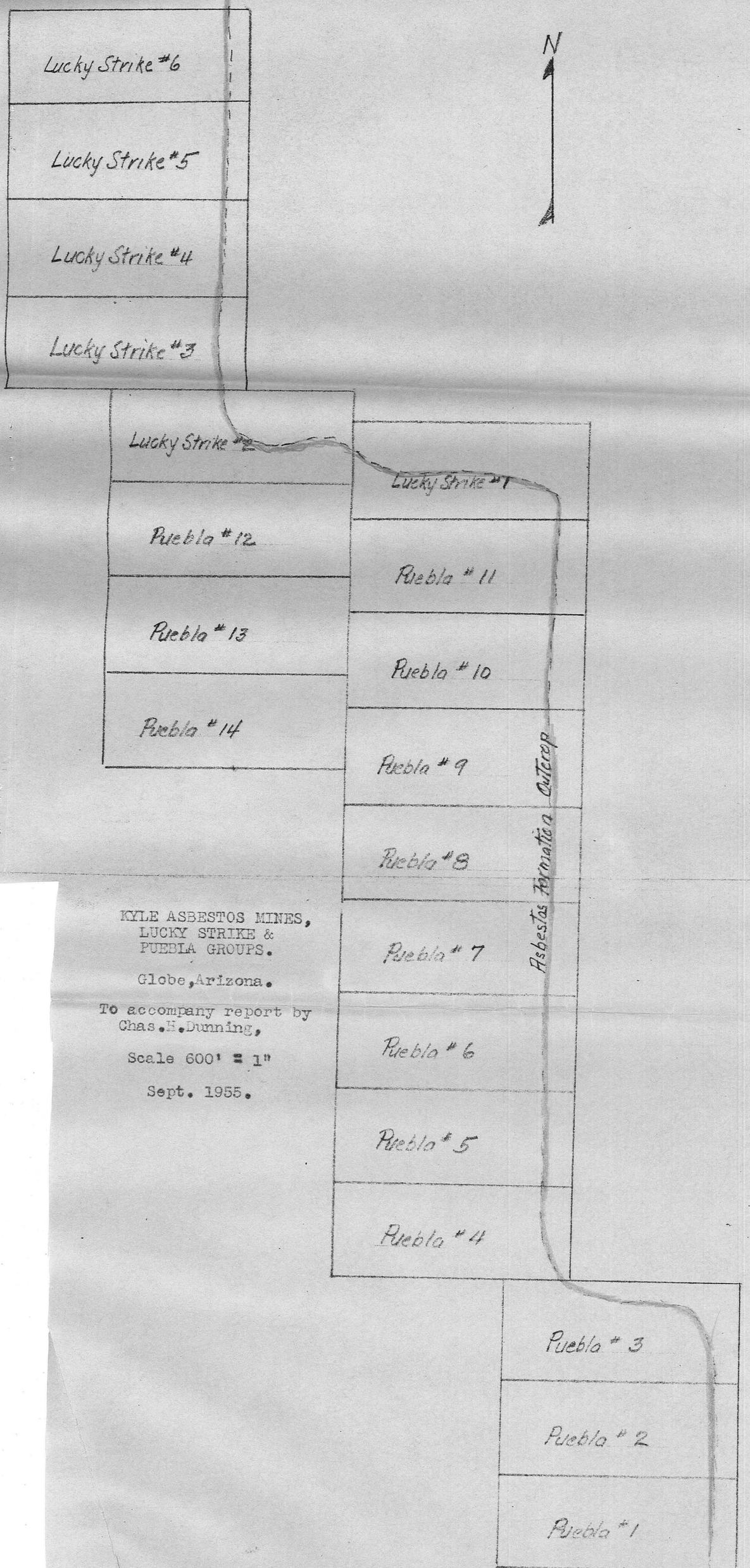
Drainage, blue



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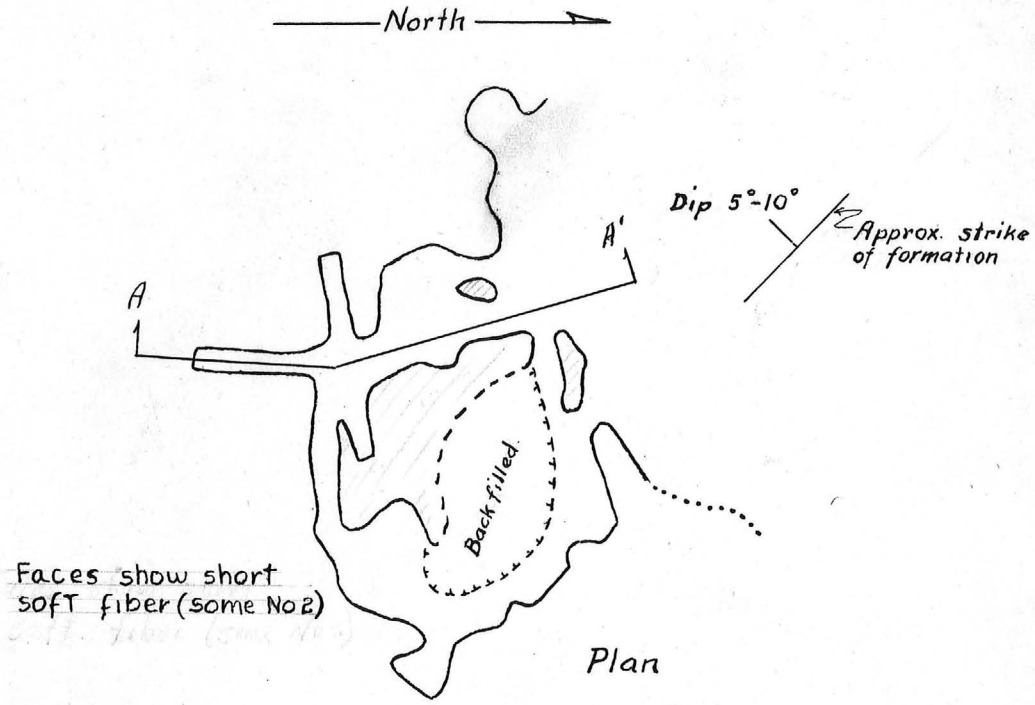

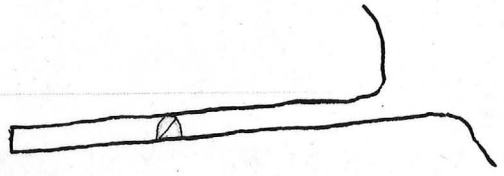

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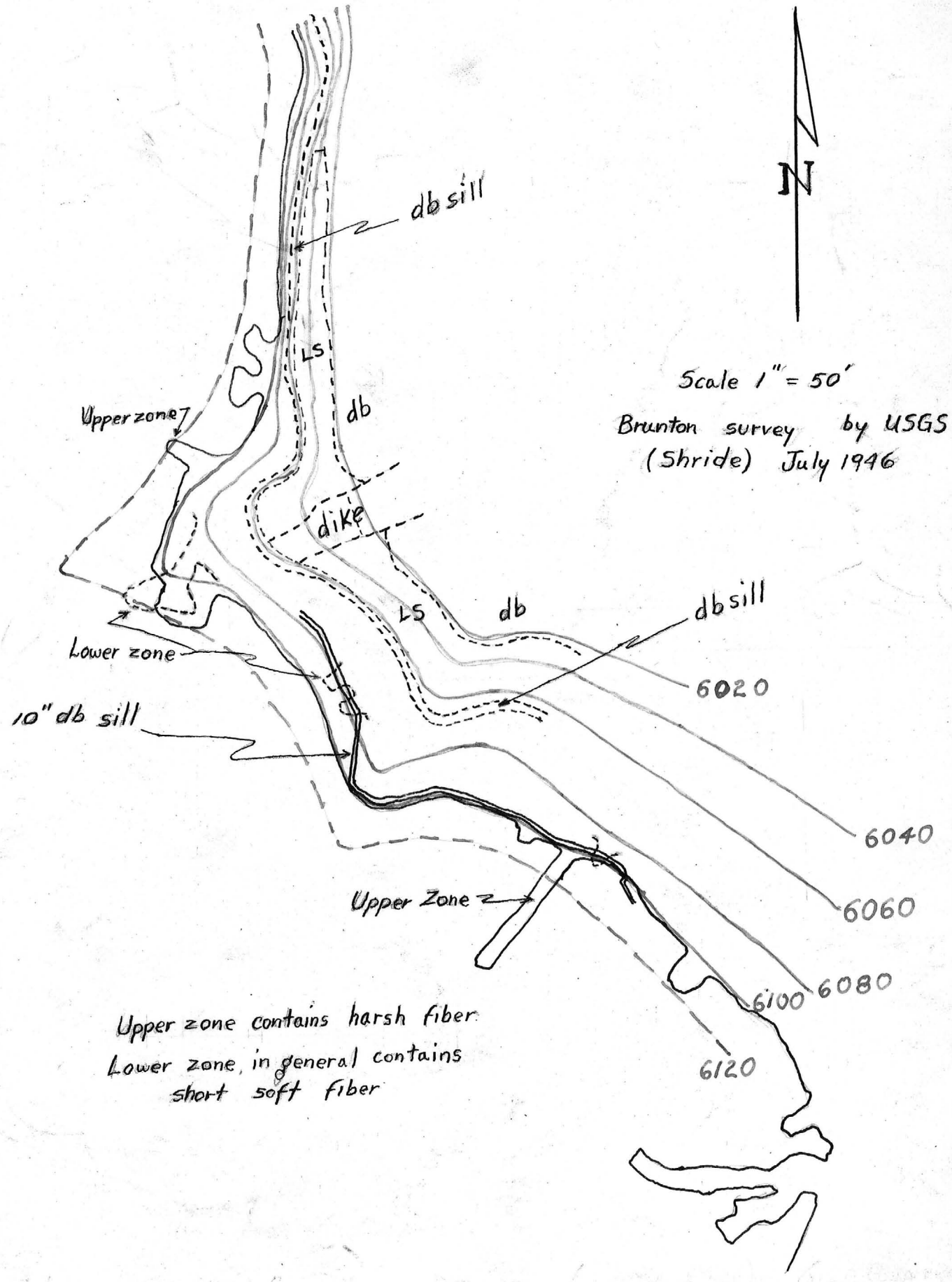

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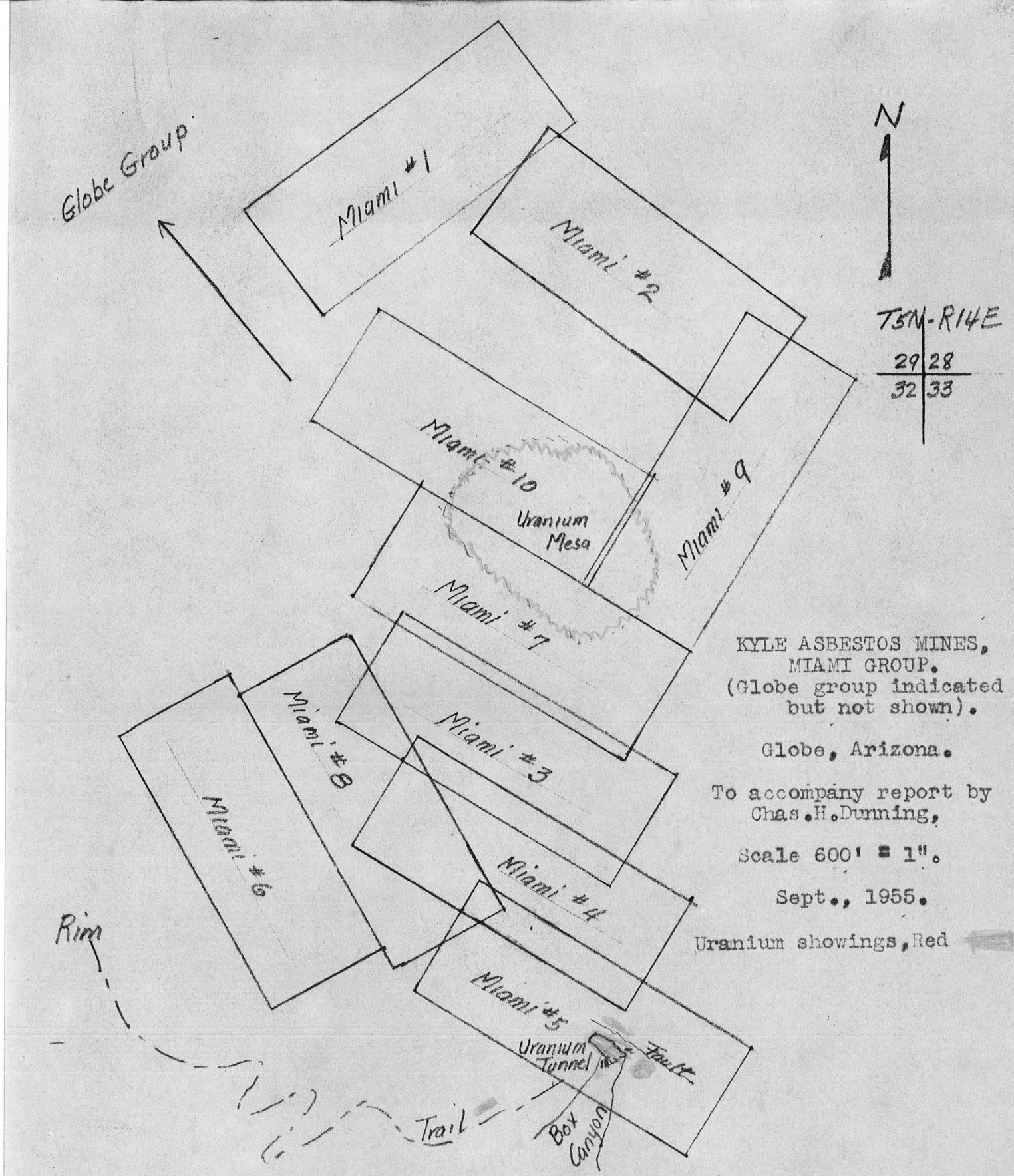

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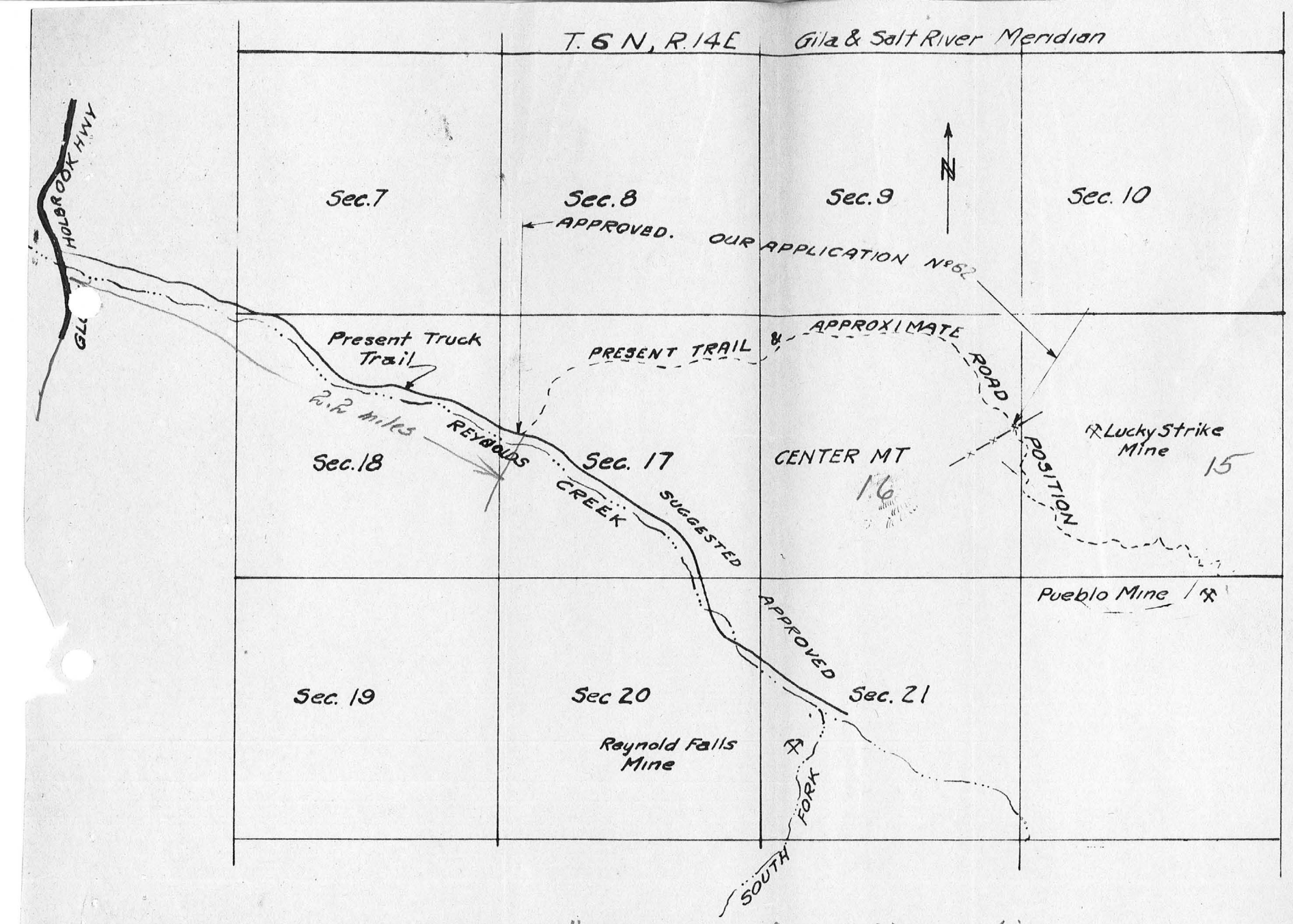

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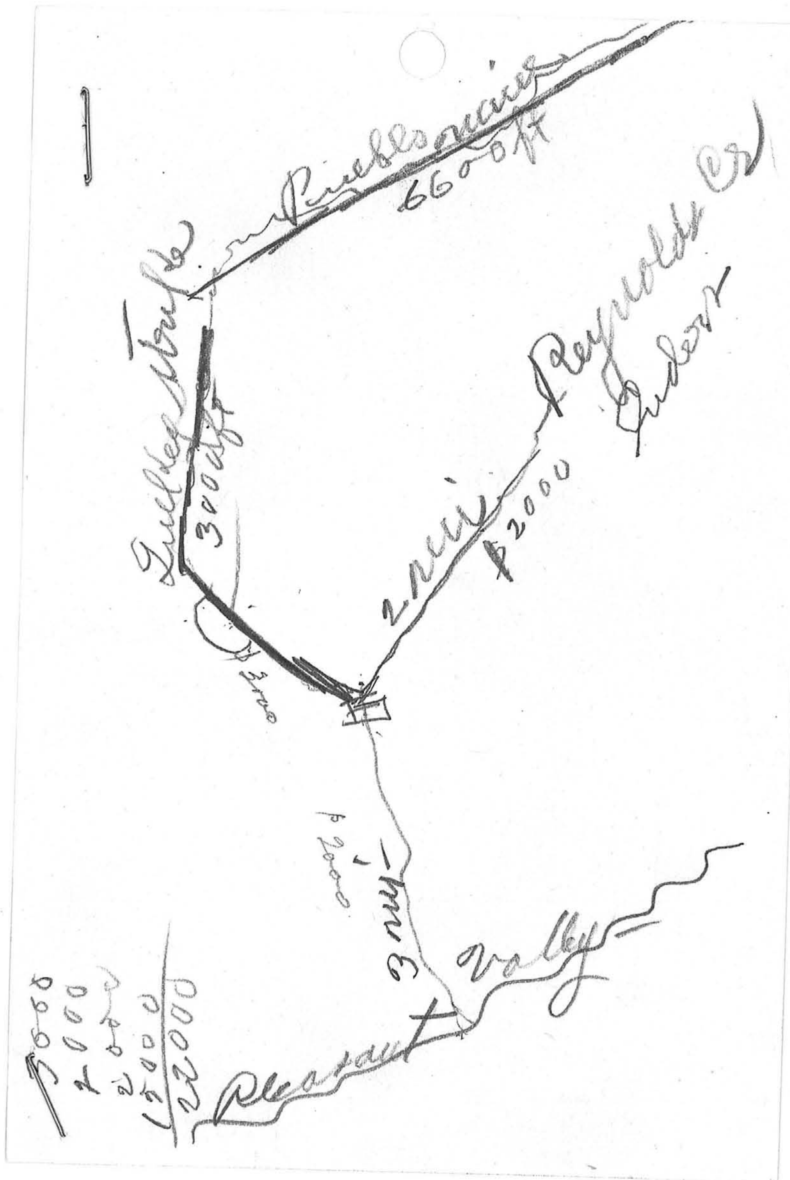
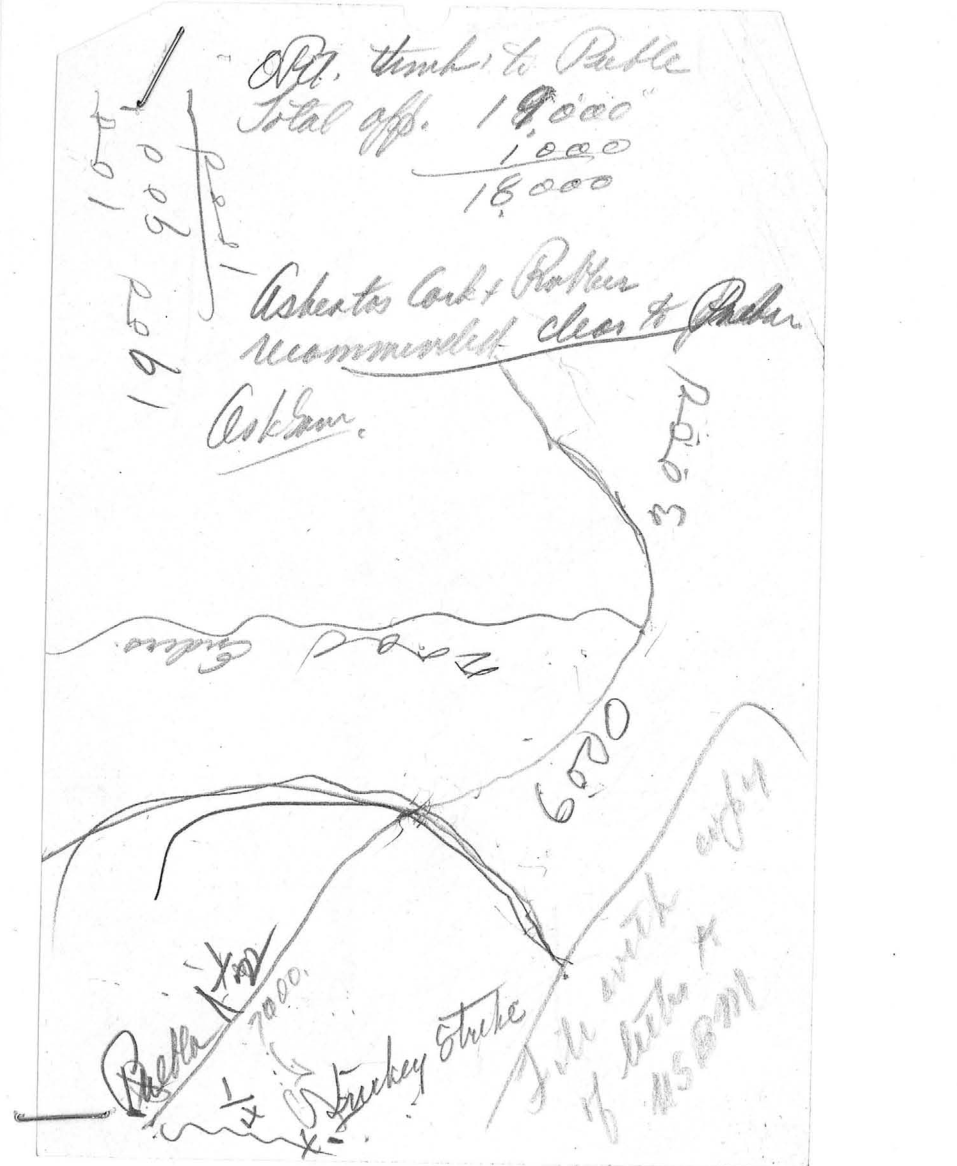

6600 ft
3000 ft
Reynolds Cr
$2000
3 mi
Pleasant Valley
22000


Total off. 19,000
1,000
18,000
recommended clear to
3000
6000

LUCKY STRIKE MINE

GILA COUNTY

Roger Kyle reported that he had a magnetite bed, 8-18 ft. thick and extending over a considerable length of outcrops (at least 2,000 ft.). According to Kyle samples of the iron outcrop ran about 60 percent of iron. The Pueblo and Lucky Strike asbestos mines are in Secs. 15, 22, T6N, R14E. Kyle stated that the asbestos and iron deposits are for sale.
LAS Memo 5-19-61

Roger Kyle reported that Cerro Corp. and Colorado Fuel and Iron Co. had been quite interested, even though a considerable drilling program was indicated in order to establish reserve figures and average grade.
Memo LAS 1-18-62

Kyle reported that CF&I samples indicated that his iron deposit ran 51% iron, 0.05 percent Mn, 14.6% S_1O_2, 0.03 percent Al_2O_3, 0.010 percent phosphorous, and 0.01 percent S_1O_2.

ARC Laboratories, in Phoenix, gave 66.56 percent of iron on one sample. According to Kyle the deposit could be made to produce 1000 tons per day. This estimate was made by a CF&I engineer.
Memo LAS 9-26-62

R. C. Brooks said CF&I had examined the iron ore exposures at the Lucky Strike and Pueblo mines and reported that the samples showed good grade (56-61 percent iron). Kyle stated that the potential reserves appeared to be large. The iron bed replaced a certain Mescal horizon near to a diabase sill.

Kyle said that the outcrop intermittently occurred over a length of several thousand feet around mesas that border a branch of Cherry Creek. He wishes to sell the properties but so far has not found a buyer.
LAS 1-30-64

LUCKY STRIKE MINE

GILA COUNTY

Owner: Kyle Asbestos Mines (Jan. 1958)

Mineral: Asbestos

Men Working: 3

Operator: Roger Kyle, Box 302, Globe, Arizona

LAS 1-10-58

Active Mine List Feb. 1959

This property active March 17, 1960

LAS ASMOA - Globe

LUCKY STRIKE MINE GILA COUNTY

Abstract from "Arizona Iron Ore Deposits" in IRON COMMODITY file: Pueblo and Lucky Strike Asbestos Mines are in the Sierra Mountains (Sec. 15,22, T6N, R14E). These have a magnetite bed which has replaced mescal limestone. Roger Kyle reports that the bed is 8 to 18 feet thick and extends intermittently over a considerable outcrop length. The material, according to him, assayed around 60 percent iron. Reserves are unknown. (Kyle Asbestos Mines of Arizona, P.O. Box 302, Globe, Arizona.)

Asbestos Mines

Gila County

Dept. of Interior, Bureau of Mines, War Minerals Report, #370 =(Nov. 1942) 18 pages, 5/3/77 a.p.

MEMO

May 23, 1961

KYLE ASBESTOS

Lewis A. Smith

Kyle Asbestos Company of Arizona is offering its asbestos and iron deposits for sale either as a package deal or in groups: -

(1) The Upper Cherry Creek Group (3 mines)

(2) Seneca, and Sierra Ancha Asbestos Group (5 mines)

(3) Iron deposits on the Lucky Strike and Pueblo Groups (Sierra Ancha west of Cherry Creek)

(4) Asbestos Mill

It is suggested that any interested party contact Roger Q. Kyle, Globe, Arizona.

Asbestos Mines of Arizona

DEPART NT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine

Date August 9, 1944

District

Engineer Andrew Macfarlane

Subject: Statement Supporting the Application of Roger Kyle of Globe, Arizona for the Extension of Access Road Designated DA-RM-79 from point marked "Rim" on Attached Sketch, to Reach the Asbestos Mines Called Pueblo and Lucky Strike.

The above named two asbestos mines cannot be placed in profitable production until they are served by a practical trucking road which reaches to the main openings of the mines.

At a past period immediately prior to 1941 an asbestos fiber production of approximately 300 tons No. 1 and No. 2 soft fiber was mined and transported over the mountain on pack animals to the trail connection of the Reynolds Falls trucking road, thence by truck to mill at Globe.

The foreign price then obtained for this fiber milled and graded was about double that obtainable since 1941 from domestic fabrication of asbestos goods, and labor and supply conditions were then normal.

The owner of these asbestos mines is now and has been for the past 30 years one of the main independent asbestos miners and millers of Gila County, Arizona and is anxious to place the above named mines again into operation on being given an access road to same. He owns a competent asbestos mill at Globe, Arizona and ample mining equipment to carry on the work of asbestos production.

It was understood by the applicant and the State Department of Mineral Resources that the former application, now docketed under heading DA-RM-79 and approved by all the Bureaus controlling access roads, that this road was authorized to start at Reynolds Falls Ranger Station junction, with the county and state highway, thence easterly by south over the Reynolds Falls road 2.2 miles, thence new road from old trail junction point to follow upwards and easterly to rim, thence southeasterly to Pueblo Mine, thence north about 1/2 to the Lucky Strike asbestos.

It is further declared that the Center Mountain belt, wherein are situated the Reynolds Falls asbestos mine on the south, the Pueblo on the east slope, and the Lucky Strike on the north slope, is an area favorable to the existence of important asbestos bodies and should afford future opportunities of gainfull employment. The road requested will make this region readily accessible to early production and needed future explorations for the fiber.

COPY

c

ASBESTOS MINES OF ARIZONA
Roger Q Kyle, Owner

MINING, BUYING, SELLING, CLEANING
GRADING, MILLING ASBESTOS

GLOBE, ARIZONA

May 11, 1943

Office of Price Administration
Federal Office Building No. 1
Washington, D. C.

Re: 677:APW
MMB-327

Attention: John D. Sumner
Price Executive
Non-Ferrous Metals Branch

Gentlemen:

This will acknowledge receipt of your letter of May 1, regarding price regulation No. 327, which went into effect on February 22, 1943. I am writing you what the present asbestos situation is today.

I didn't sell any asbestos last year (1942). There are about 30 asbestos properties here in this district. I have 6 properties of my own. All of the properties are closed down except the Johns-Manville, who have their own factories. They are an asbestos combine or trust, and own mines in Canada and Africa. Since they have their own factories, they will not buy from us, and the independent manufacturer can not buy from us because if he does, when he goes back to the trust to renew his next year's contract, they tell him they have sold all their asbestos. So he doesn't buy from us for fear the trust will cut him off. The only time any of the big manufacturers buy here is when they have to have asbestos free from iron for some electrical job.

Throughout the United States, small producers have been asking for stock piles of different war minerals. Before the war I got what money I had together, and built an asbestos mill for cleaning, grading and classifying asbestos into different grades, and got a patent on the mill. I started a stock pile for the other small producers and myself. I bought their asbestos and shipped it with mine in car load lots. Up to this time none of us small producers were able to sell any asbestos to the trust or independent manufacturers, so we exported to Germany and Japan long before the war started. Now they are shooting it back at us. Of course the same thing happened in lots of other things. I tried to get something done in Washington since the war to get another market, but didn't accomplish anything. I understand most of the heads of the asbestos department in Washington are former employees of some of the asbestos manufacturers. Those manufacturers tell the Washington heads that we don't know how to mine it and grade and clean it, which is just an alibi, because when they do buy a little for electrical insulation, they don't complain then, and some of them won't buy it unless I grade and clean it.

Mines Bill 327 went into effect, and in the last three weeks, some of us have had letters from some of the manufacturers wanting to buy asbestos. Last year some of the small producers had to sell way below market price to pay their bills. One had to sell No. 2 crude at $250.00 per ton, and another at $275.00 per ton, when the quotation price was $365.00. Now these manufacturers want them to sell at $250 and $275. You can readily see how unfair Bill 327 is. It costs more than that to produce it. I guess the manufacturers framed the bill. Before the war we small producers got the refuse labor that the copper mines didn't want at $4.00 per day. Now there aren't any miners at all and we have to pay $7.00 for what we can get. So we couldn't get the job done and all closed down, and will have to stay closed until the government establishes a fair market price for asbestos. I lost several thousand dollars last year, and of course do not have money to buy mining equipment. We realize that the African asbestos has or soon will be cut off.

I don't suppose our ships will go by Cape Town any more. They will probably go through Gibralter, saving ten thousand miles. If the Arizona asbestos cost fifty cents per pound, it would be cheaper than going 16,000 miles to Rodesia, South Africa, running the risk of submarines. I believe some of the very best asbestos properties are in this district. I haven't the money to operate mine. The Government can take them and mine and mill and work them for the duration of the war and pay me a royalty. I do not feel that I could operate them in a big enough way to help the Government get the needed supply of asbestos now that it is necessary for war material as it would require more capital than I have.

I think a fair price for all of us producers of asbestos would be as follows:

Crude No. 1 soft asbestos	$900.00 per ton F.O.B. Globe
Crued No. 2 soft asbestos	$500.00
Crude No. 3 soft asbestos	$150.00
Fiberized No. 4 soft	$100.00
Crude No. 1 harsh asbestos	$300.00
Crude No. 2 harsh asbestos	$200.00
Crude No. 3 harsh asbestos	$ 75.00
Fiberized No. 4 harsh	$ 50.00

My mill makes all these grades, and is located in Globe, and has electrical power, is made of steel and iron, and will handle all the asbestos these properties can produce. With very little more expense, it could be enlarged to handle the asbestos for all the other small producers, 20 tons of crude each day, and 300 days per year, would be 6,000 tons. That is the present capacity.

I have tried in vain in Washington to have the Government demand that on government projects domestic asbestos, produced in the United States, be used when available, but got no cooperation. I suppose that Bill 327 on asbestos was framed by the manufacturers instead of the producers. On government projects only American citizens are hired, but not American produced material. Does it seem fair that we producers in Arizona mine asbestos and let the manufacturers tell us what price we can sell it for when the price they want is below cost production? All of the producers have closed down and most of them are working in the copper mines. There will be no more cheap asbestos like there was last year. We have to pay $7.00 a day, as Arizona miners wear shoes and are not like the African asbestos miners. All of the money is made on the manufacturing end and not on the mining end.

We haven't roads to some of our properties and have to pack supplies in by burro, including truck, pipe, gasoline, explosives, lumber, etc. In Canada they have railroads into the mines and the high grade asbestos is 1/2 of 1%. They get 1 ton of Grade No. 1 and 2 for every 200 tons they mine. Our Arizona high grade is 30% and the other 70% is thrown over the dump because it would have to be packed out. Arizona asbestos runs higher than the Canadian and Canadian and African asbestos is not any longer than in Arizona, despite what the manufacturers say. For 20 years I have been trying to get the forest to build some cheap access roads in the asbestos district. Mr. Kirby, Chief Forester of the Tonto Forest Reserve, is against roads to mines. When the C.C.C. Camps were in the district, I tried to get them to build some roads, but with no luck. I have tried to co-operate with Mr. Kirby in every way, but he is strictly against mining, although Arizona is 7% a mining state. Now that the government has appropriated ten million dollars to build access roads, the forest officials are trying to have the money diverted to build ranch and timber roads that would mutually benefit them. I think the War Production Board should advise Mr. C. L. McLane, Bureau of Roads in Phoenix, to get immediate action on the access roads into the asbestos districts. To one of the asbestos districts, they could put in a road 39 miles long at a cost of $1,000 per mile, which would be a year around road and cut the distance 40 miles, as the present road is blocked with snow for 3 months. If these roads were built, then the mines could operate in case of emergency to help the government.

Mr. Sumner, if I can be of any assistance to you for any further information, do not hesitate to call on me.

Very truly yours,

(Signed) Roger Q. Kyle
ROGER Q. KYLE

RQK'b

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date 6-10-1939

Mine LUCKY STRIKE

District

Location Sierra Ancha

Former name

Owner W. W. POINDEXTER

Address Box 1207, Globe, Arizona.

Operator

Address

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals Asbestos

Men Employed

Production Rate

Mill: Type & Cap.

Power: Amt. & Type

Operations: Present

Operations Planned

Number Claims, Title, etc. Six claims. Good.

Description: Topog. & Geog. High rough mountain, heavy timbers. Plenty of water.

Mine Workings: Amt. & Condition 11 tunnels; good asbestos in all tunnels ready for production. Very best grade to be had in Arizona.

(over)

Geology & Mineralization Serpentine with diorite

On all claims all around mountain.

Ore: Positive & Probable, Ore Dumps, Tailings

Mine, Mill Equipment & Flow Sheet

Road Conditions, Route 3 mile good trail.

Water Supply Plentiful the year round.

Brief History

Special Problems, Reports Filed

Remarks We are told they are the best in state, and I know the fiber stands the best test o any in Gila County.

If property for sale: Price, terms and address to negotiate. For sale for $10,000.00. Terms.

Signed W. W. POINDEXTER

Use additional sheets if necessary.

W W Pomdexter

6 claims
Lucky Strike

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
OWNERS MINE REPORT

Date 6-10 39

Mine asbestos

District

Location Sierra Ancha

Former name Lucky Strike

Owner W W Poindexter

Address Box 1207, Globe

Operator Closed

Address

President

Gen. Mgr.

Mine Supt.

Mill Supt.

Principal Metals asbestos

Men Employed

Production Rate

Mill: Type & Cap.

Power: Amt. & Type

Operations: Present

Operations Planned

6 Number Claims, Title, etc. good

Description: Topog. & Geog. High rough mountain heavy timber Plenty of Water

Mine Workings: Amt. & Condition 11 Tunnels Good asbestos in all Tunnels ready for production Very best grade to be had in arizona

(over)

Geology & Mineralization Sarpentine with Tourtz Band

On all sides all around mountain

Ore: Positive & Probable, Ore Dumps, Tailings

Mine, Mill Equipment & Flow Sheet

Road Conditions, Route 3 Mile Good Trail

Water Supply Plentiful year round

Brief History

Special Problems, Reports Filed

Remarks We are told they are the best in state and 2 soon the best out of any in Gila County

If property for sale: Price, terms and address to negotiate. for sale for 10000 terms

Signed W W Pinder

Use additional sheets if necessary.

March 20, 1944

MEMORANDUM

ACCESS ROAD
ROGER KYLE ASBESTOS

TO: W. C. Broadgate

FROM: J. S. Coupal

I am enclosing copy of certain correspondence from Roger Kyle, owner of the Pueblo Asbestos Mine.

Roger Kyle made an application for an access road and filed it with the Forest Service August 6, 1943. It was recorded as Project DA-RM-79, filed by Roger Kyle on the Pueblo Asbestos Mine, the Lucky Strike Asbestos Mine, the Pueblo Bell Mine and I believe included the Reynold Falls Mine.

As per a summary of the shipments which Roger Kyle submitted there has been over $60,000 of asbestos shipped from these properties and I know from personal examination that this has been from a very limited amount of work.

The application for this road was rejected in a letter from A. S. Knoizen to Thomas McDonald, Public Road Commissioner, on February 1, 1944. I believe the rejection was on the basis that an insufficient quantity of asbestos had been developed and that the small showing did not justify the building of an access road.

Roger Kyle tries to set forth in his letters the fact that adverse reports were rendered on these properties by the engineer from the U. S. Bureau of Mines whom he claims was a former employee of the Johns-Manville Company and implies that the bad reports were made for ulterior motives. Disregarding this entirely, I can state that there is a large potential tonnage of asbestos which can be mined from the asbestos properties located in the district covered by this access road project and that there is sufficient justification of ore showing there to justify access roads.

Can you advise me what steps can be taken to reopen or have a reconsideration made of this project so that it might come up for reconsideration when and if additional access road funds are made available?

Copies of this memorandum and of the memorandum from Roger Kyle are being sent to Senators Carl Hayden and Ernest McFarland.

JSC:LP

304 xxx

March 20, 1944

Honorable Ernest McFarland
United States Senate
Washington, D. C.

Dear Senator McFarland:

I am enclosing copy of a memorandum I have just written to W. C. Broadgate regarding the access road to the Roger Kyle and other asbestos properties in the Sierra Ancha district. I am also enclosing the correspondence from Roger Kyle regarding this.

In my memorandum to Broadgate I have asked him to discuss this situation with you and I hope we may find ways and means of getting a reconsideration.

Very truly yours,

J. S. Coupal, Director

JSC:LP
Enc.

304 xxx

March 20, 1944

Mr. Roger Q. Kyle
Box 302
Globe, Arizona

Dear Roger:

I have written a memorandum to W. C. Broadgate and to Senators Carl Hayden and Ernest McFarland regarding a reconsideration of the access road project for the Pueblo asbestos and the other properties in that area.

I will keep you advised as to any results.

Yours very truly,

J. S. Coupal, Director

JSC:LP

Copy for Mr Coupal

E(V)
ROADS & TRAILS-Tonto
Mineral Access Roads
Cherry Creek Road #202

March 10, 1944

Mr. Roger Q. Kyle
Box 302
Globe, Arizona

Dear Sir:

Your letter of March 6 is received. I am sorry that I was not in the office at the time of your recent call here.

I hardly know how to be of assistance in this matter, as the Forest Service makes no recommendations, - either for or against, - mineral access road applications. In this connection I might explain that the Forest Service would not be qualified to pass judgment on mineral values, as we have no mining engineer, so the procedure is set up for the U. S. Bureau of Mines, which has a corps of well qualified mining engineers, to make examinations and reports. Those reports are sent to the War Production Board, where decision and final approval or disapproval is made.

The State Department of Mineral Resources has assisted with the handling of many of these mineral access roads cases so they are quite familiar with the procedure. I know, too, that both Mr. Charles F. Willis and Mr. J. S. Coupal are interested in these matters and are rendering every possible assistance to mine operators. Therefore, it would be my suggestion that you seek advice from them. I know they will help you if they can.

Very truly yours,

F. Lee Kirby

Forest Supervisor

United States Senate

COMMITTEE ON INTERSTATE COMMERCE

March 27, 1944

Mr. J. S. Coupal, Director
Department of Mineral Resources
304 Home Builders Building
Phoenix, Arizona

Dear Mr. Coupal:

I am in receipt of your letter and enclosures of March 20th, referring to the access road to the Roger Kyle and other asbestos properties in the Sierra Ancha district.

Mr. Broadgate is out of town for a day or so, but I shall be glad to help him in this matter as soon as he returns. I sincerely hope you may be successful in securing a reconsideration.

With kindest regards, I remain

Yours very truly,

Ernest W McFarland

Ernest W. McFarland

EWM:p

United States Senate

COMMITTEE ON APPROPRIATIONS

March 24, 1944

Mr. J. S. Coupal, Director
Department of Mineral Resources
State of Arizona
304 Home Builders Building
Phoenix, Arizona

My dear Sam:

I have just received your letter of March 20, and since Bill is out of the City at present I am taking the Roger Kyle access case up directly with Mr. Arthur S. Knoizen, Director of the Mining Division at the War Production Board. As soon as I have a report from Mr. Knoizen, as to whether he feels this application can be reopened for reconsideration, I shall write you further.

With kindest personal regards, I am,

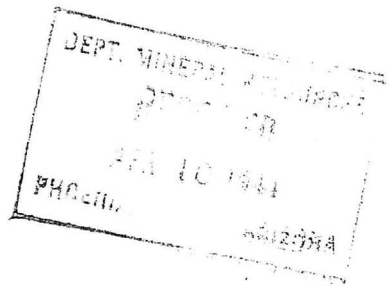
Yours very sincerely,

Carl Hayden

United States Senate

COMMITTEE ON APPROPRIATIONS

April 5, 1944



Mr. J. S. Coupal, Director
Department of Mineral Resources
State of Arizona
304 Home Builders Building
Phoenix, Arizona

My dear Mr. Coupal:

In the absence of Senator Hayden, who is now in Arizona, and with reference to his letter to you of March 24th, I am taking the liberty of transmitting herewith a reply just received from A. S. Knoizen, Director of the Mining Division at the War Production Board, with regard to Arizona Access Road Project No. DA-RM-79.

You will note that Mr. Knoizen's office is going to review this case once again and will apparently give some attention to whatever recommendations may be submitted by the Asbestos Section of the W.P.B. As soon as this office has a further report I shall let you know what can be done.

With every good wish, I am

Yours very sincerely,

Don A. Gustin

Don A. Gustin,
Secretary to Senator Hayden.

WAR PRODUCTION BOARD

WASHINGTON, D. C.

March 30, 1944

CONSERVATION DIVISION
1500 H STREET NW.

The Honorable
Carl Hayden
United States Senate

Re: Access road to the Pueblo Asbestos Mine and Lucky Strike Asbestos Mine in Gila County, Arizona. Project No. DA-RM-79

Dear Senator Hayden:

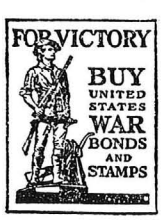
This will acknowledge receipt of your letter of March 24, together with enclosures concerning the Pueblo Asbestos Mine and Lucky Strike Asbestos Mine in Arizona.

The original application for this project was considered in conjunction with the Asbestos Section of the War Production Board and it was determined that these mines are not of sufficient importance to justify the expenditure of access road funds.

However, we are reviewing the information submitted by you and shall collaborate with the Asbestos Section and as soon as a final decision is made, we shall report further to you in connection with this proposed project.

Respectfully yours,

A. S. Knoizen,
Director,
Mining Division



United States Senate

COMMITTEE ON APPROPRIATIONS

April 15, 1944

Mr. J. B. Bryan, Director
Department of Mineral Resources
State of Arizona
304 Home Builders Building
Phoenix, Arizona.

My dear Mr. Bryan:

Referring to my letter of April 5, I am glad to be able to send you the attached memorandum report from the Director of the Mining Division of the War Production Board with regard to mine access road project DA-AR-70. If there is anything more Senator Hayden can do to be of assistance in the matter, please call upon him.

With kindest personal regards, I am,

Yours very sincerely,

Don A. Gustin

Don A. Gustin
Secretary to Senator Hayden

WAR PRODUCTION BOARD

WASHINGTON, D. C.

April 10, 1944

~~CONSERVATION DIVISION~~
~~1700 H STREET NW.~~

The Honorable
Carl Hayden
United States Senate

Re: Access road to the Lucky Strike, Pueblo, and Reynolds Falls Mines in Gila County, Arizona. Project No. DA-AM-79

Dear Senator Hayden:

This is in further reply to your letter of March 24 concerning an access road to serve various asbestos mines in Gila County, Arizona.

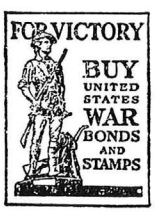
We have completed our study in connection with this application. In conjunction with the Cork and Asbestos Division of the War Production Board, and based on additional information furnished, and on reports made by the Bureau of Mines, we have as of this date recommended that this proposed access road be constructed.

We are returning the enclosures which you submitted to this office.

Respectfully yours,

A. S. Knoizen,
Director,
Mining Division

Attachment



CLASS OF SERVICE

This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

WESTERN UNION

1201

A. N. WILLIAMS, PRESIDENT
NEWCOMB CARLTON, CHAIRMAN OF THE BOARD
J. C. WILLEVER, FIRST VICE-PRESIDENT

SYMBOLS

DL=Day Letter
NL=Night Letter
LC=Deferred Cable
NLT=Cable Night Letter
Ship Radiogram

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination

DA39 WM18

SNQ SNA56 GOVT DL=SN WASHINGTON DC 18 106P 1944 AUG 18 AM 11 22

ANDREW MACFARLANE=

DEPARTMENT OF MINERAL RESOURCES 304 HOME BUILDERS BLDG PHOENIX ARIZ=

WPB RECOMMENDED IMPROVEMENT FOUR POINT TWO MILES EXISTING ROAD AND CONSTRUCTION THREE MILES NEW ROAD ESTIMATED COST NINETEEN THOUSAND DOLLARS. THEY SUGGEST YOU CONTACT DISTRICT ENGINEER PUBLIC ROADS ADMINISTRATION. MINING DIVISION REQUESTING REPORT FROM WASHINGTON OFFICE PRA FOR DETAILS UNKNOWN=

GEORGE SOULE.

Phone L-2137

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

August 9, 1944

Mr. W. C. Broadgate
Box 868
Prescott, Arizona

Dear Broadgate:

Mr. Dunning has turned over the Kyle road matter entirely to me and I will endeavor to assemble the practical elements attending this asbestos road.

Mr. Coupal made a thorough examination of the Pueblo asbestos mine, the date of his report being July 1941. In this report he stated that the past production of the Pueblo asbestos was in excess of 300 tons of No. 1 and No. 2 crude soft fiber. Only these two high grade classes were shipped from this property as a six mile rugged trail precluded the packing up of the No. 3 and 4 grades and bi-products.

We are, I believe, entirely correct in stating that the Pueblo Mine is of present value and a potential strata from which greater quantities of asbestos fiber will be produced.

The enclosed blue print shows the terminus of the access road, Project No. DA-RM-79, and I am definitely informed by Brannen, the Forest Service engineer now directing the construction of this road, that said road ends at the point marked "rim" on the blue print enclosed.

You will note by the letter of April 12, 1944, signed by Don A. Gustin, Secretary to Senator Hayden, that this road Project DA-RM-79 is authorized to be constructed from Reynolds Falls ranger station and to terminate at the Pueblo and Lucky Strike asbestos mines and not at the point marked "rim" almost two miles short of reaching the mine. The point marked "rim" on the map is perhaps over 1,000 feet higher than the nearest Lucky Strike asbestos mine and approximately 1/2 mile distant, and, as you and I know, it would be an expensive and impractical piece of engineering for a poor man to undertake to follow the suggestion contained in the letter of the Bureau of Mines, Tucson Office, dated August 1, 1944, to build an aerial tramway to raise and drag up this almost precipitous mountain side the asbestos output from these two mines.

We believe we are correct in stating that only their project engineer, Mr. Stewart of the U. S. Bureau of Mines, has ever visited the Pueblo and Lucky Strike asbestos properties and it certainly was a very unfortunate choice in the selection of Mr. Stewart by the Bureau of Mines to pass judgment on asbestos mines in Gila County of individuals in view

of his immediate past connection with the Johns-Manville asbestos interests of the same district, and even though said project engineer may have acted in good faith, it is certainly now unfortunate that the recommendation made by the Bureau of Mines, Tucson Office, should terminate the road still distant nearly two miles from the asbestos mines for which the road was applied for.

There is no sound reasoning why one dollar of the Government's money should be spent on this road unless it shall be completed to near the openings on and within these asbestos properties.

The price of raw asbestos existent during the past four years does not allow of aerial tramways, requiring continued use of power, to pull asbestos up from a thousand feet below, or the use of pack animals to transport the asbestos 1-1/2 or 2 miles to the end of the access road now being built. No practical tramway could be built for less than $15,000 or $20,000 and its use would only mean continued expense.

Referring to a letter addressed to Hon. Carl Hayden as of April 10 from Mr. A. S. Knoizen, director of Mining Division, W.P.B., Washington, from which we quote:

"Re: Access road to the Lucky Strike, Reynolds and Pueblo Mines.

"We have completed our study in connection with this application. In conjunction with the Cork and Asbestos Division of the W.P.B. and based on additional information furnished and on reports made by the Bureau of Mines we have as of this date recommended that the proposed access road be constructed."

You will note, Bill, that it is clearly stated that the road goes to the Pueblo and Lucky Strike Mines.

About three weeks ago I interviewed Mr. Kirby, Forest Superviser of that district, and he assured me that the road was to terminate at these mines. Four days later I interviewed Mr. Brannen, the engineer in charge of this access road project, and he stated definitely that his orders and that the appropriation were only authorized to reach that point marked "rim". There is certainly a contradiction between the letters of the W.P.B. and the instructions the road enginner Brannen has.

We are therefore asking that the work of building this road shall continue from the point marked "rim" onto the two mines in question as we contend that that is the legal status of this appropriation for this access mine road. It is very unsound business to terminate a road up at a high point in the forest as there it will serve but very little purpose and certainly will not serve the asbestos belt with a road as originally intended.

We are making up a new application for the extension of the road from the point marked "rim" to reach, first of all, the Pueblo, then the Lucky Strike Mine. However, I feel that this should be unnecessary -- that the proper department or departments should instruct the Forest Service

August 19, 1944

Mr. G. L. McLane, Senior Highway Engineer
Public Roads Administration
P. O. Box 70
Phoenix, Arizona

Dear Mr. McLane:

At the request of Mr. Roger Q. Kyle we are enclosing application for access road with accompanying sketch and statement by Andrew Macfarlane, Field Engineer.

Yours very truly,

Chas. H. Dunning
Director

CHD:LP

engineer and superviser to carry on the construction work of Project No. DA-RM-79., until these mines have been reached.

Kindly advise this office in this whole matter just as soon as you possibly can.

Yours very truly,

Andrew Macfarlane
Field Engineer

AM:lp

April 17, 1944

Mr. Don A. Gustin
Office of Senator Carl Hayden
U. S. Senate
Washington, D. C.

Dear Mr. Gustin:

Thank you for your letter of April 12 with the information on the access road to the Lucky Strike, Pueblo and Reynolds Falls asbestos mines, Project No. DA-RM-79.

This is very good news and we have forwarded it to the interested parties.

Yours very truly,

J. S. Coupal, Director

JSC:LP

April 17, 1944

Mr. Roger Kyle
Globe, Arizona

Dear Roger:

I have just had a letter from Senator Carl Hayden's office with an enclosure of a letter from A. S. Knoizen, Director, Mining Division, W.P.B., which I quote as follows:

> "We have completed our study in connection with this application. In conjunction with the Cork and Asbestos Division of the War Production Board, and based on additional information furnished, and on reports made by the Bureau of Mines, we have as of this date recommended that this proposed access road be constructed."

I am very glad that your road has been recommended and the next problem is to find out where the money is coming from to build the road. Our latest information is that there has been no definite earmarking of the $30,000,000 road appropriation to the Public Roads Administration, which makes it uncertain how much of that money will be available for mine access roads. However, the first hurdle has been made and the road approved.

Yours very truly,

J. S. Coupal, Director

JSC:LP

April 15, 1944

Mr. Roger Kyle
Globe, Arizona

Dear Roger:

I have just received a confidential memorandum from Broadgate regarding your access road as follows:

> "The Cork Asbestos Division kept their promise to me (after I put them on the spot and in a quandry) and approved the road.
>
> "W.P.B. Mining Division has followed suit and everything should be O.K."

I am hoping that this will clear up the whole situation.

Yours very truly,

J. S. Coupal, Director

JSC:LP

Washington, D.C.
April 12, 1944

SUBJECT: Kyle-Phillips Globe area access road to asbestos.

The Cprk-Asbestos Division kept its promise to me (after I put them on the spot and in a quandary) and approved the road. WPB Mining Division has followed suit and everything should be OK.

Bill Broadgate

They will get letters from the Senators to this effect.

April 12, 1944

Mr. Roger Q. Kyle
Globe
Arizona

Dear Mr. Kyle:

I have received an acknowledgement of my letter to Senator Hayden on the access road project D-RM-79, Pueblo Asbestos and Lucky Strike Asbestos. I wish to quote from a letter received by Senator Hayden from A. S. Knoizen, Director, Mining Division, War Production Board regarding their action:

> "The original application for this project was considered in conjunction with the Asbestos Section of the War Production Board and it was determined that these mines are not of sufficient importance to justify the expenditure of access road funds.
>
> "However, we are reviewing the information submitted by you and shall collaborate with the Asbestos Section and as soon as a final decision is made, we shall report further to you in connection with this proposed project."

I hope that your application will get further and more careful consideration from the Asbestos Section. They have copies of your correspondence, and, whereas abuse does not help in such cases, I believe a true statement of the facts such as rendered may clear this up.

Very truly yours,

J. S. Coupal
Director

JSC:JES

July 29, 1944

MEMORANDUM

TO: Andrew Macfarlane

FROM: Chas. H. Dunning

Will you please send in as quickly as possible the story as far as you know it regarding the Kyle road?

CHD:LP

Washington, D.C.
June 21, 1944

SUBJECT: Roger Kyle access road.

There is no deliberate attempt to hold this case up. There has been some delay, I understand, due to non-receipt of some critical material. A letter went to the field office June 14th to push this.

I shall have another report soon, but check again from that end and tell me if the road is not started soon.

Bill Broadgate

Washington, D.C.
June 11, 1944

SUBJECT: Roger Kyle Access Road

I shall look into this right away.

Bill Broadgate

MEMORANDUM May 5, 1944

TO: BILL BROADGATE

KYLE MINE ACCESS ROAD

FROM: J.S.COUPAL

We have contacted the Public Roads Administration and are informed by them that this road project has been rejected or rather that the last information they had on hand was that the road was rejected.

It occurs to me that under the new procedure where a road project gets its first approval for consideration by the WPB, it may be that either the field examination by the Bureau of Mines as to mineral or the field examination by the Bureau of Public Roads as to concentration may be adverse. I believe this should be investigated.

TOUT MINE ACCESS ROAD

Work has already started on this road. It will probably be completed within a very short time.

COPPER WORLD ACCESS ROAD

Work has already been started on the Copper World Access Road.

J. S. Coupal

JSC:JES

MEMORANDUM

June 5, 1944

TO: BILL BROADGATE

FROM: J. S. COUPAL

SUBJECT: KYLE ACCESS ROAD

I have just talked with the Grazing Service and also with the Tonto National Forest Service regarding this Kyle access road in Gila County and am not at all satisfied with the reports given.

The Grazing Service, of course, had nothing to report excepting that they stated that the road had passed all approvals. A report from the Tonto Forest Service indicates that they know the road has been approved but that there was no money available for this work or at least that they had not been notified that the money was available

For some unknown reason, the actual starting of this work has been held up, either the Forest Service not knowing the procedure or there is some reason they do not care to state. I believe it would be worthwhile to investigate why the work has not started since authorization has been given all along the line.

J. S. Coupal

JSC:JES

Washington, D.C.
April 4, 1944

SUBJECT: Roger Kyle, Access Road

As you know, this road was turned down in March, largely due to the fact that the Bureau of Mines, in approving such a road, would in effect be reversing itself in its opinion on the Globe asbestos district.

On the otherhand, I figured that WPB must approve, or it would be on the spot for, in effect, reversing itself in its approval of a custom mill for the area.

So I talked to the chief of the Asbestos-Cork Division, whom I know, and found that they had the docket pocketed and were doing nothing with it on the theory that they could not certify any longer that asbestos is critical, although they would like all they can get. (this situation is due to certain substitutions which have been made in spinning)

I pointed out that WPB would look like Hell if they approved the expenditure of a hundred thousand for a project and then refused approval of roads for serving the mill with custom ore.

(I know that there is little chance of Kyle furnishing Michault with any)

But WPB said, on that basis, it would approve the road. I will wait a few days and then check up with the Mining Division, which must get this approval from Asbestos. I told Don Gustin (Hayden has gone West) what the deal is and he is also going to contact Knoizen.

Will let you know what we get.

I also reported to McFarland, as that **** Kyle sends letters to everyone. I suppose I should have checked with Murdock and Harless too, but they are both gone and their offices would not know what to do with such an inquiry anyway.

Bill Broadgate

Washington, D.C.
May 15, 1944

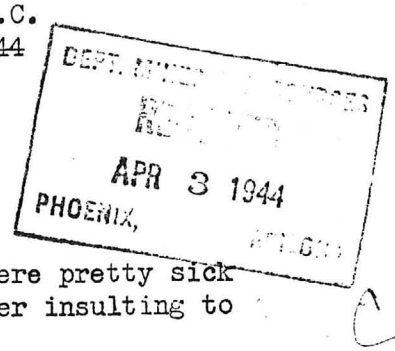
SUBJECT: Kyle Access Road

After your memo saying this had been turned down, I checked up again and it was as I told you in a previous memo.... the road was approved and it was released for construction May 3rd.

If there is anything wrong, WPB would like to know right away.

Bill Broadgate

Washington, D.C.
March 31, 1944



SUBJECT: Roger Kyle Access Road

I am going into this. Kyle has made people here pretty sick with his perpetual griping and has been rather insulting to the Senators.

I don't think much of these shotgun tactics, expecting me to work on matters which the Senators and Representatives have also been saddled with. Sometimes I am able to gather in all the ends and handle the thing single, reporting to them, and sometimes it results in confusion and duplication which the Departments are not fond of.

It is much better to let me have a case, and then I can bring which of the Senators, Representatives or Committees to bear which I feel will advance the case suitably.

But Kyle is a tough assignment for anyone.

Anyway, I will see what can be done. The Bureau of Mines made such a bad job of their exploration that it reacts against the whole district.

Bill Broadgate

304xxx

April 5, 1944

Mr. Roger Kyle
Globe, Arizona

Dear Roger:

I have had acknowledgment from Broadgate and from Senator Hayden and Senator McFarland of our letters regarding your application for an access road.

Broadgate states that it is rather a tough assignment but that he will keep at it and see what action he can get. With several different people working on it there is apt to be confusion which does not help getting the results desired. Nevertheless, Broadgate will try to coordinate their activities and see what can be done.

The exploration work performed by the Bureau of Mines in the area did not make it look any too favorable but in spite of this, we will keep busy and try for results.

Yours very truly,

J. S. Coupal, Director

JSC:LP

Washington, D. C.
Nov 6, 1944

Dear Chuck,

I think you or Macfarlane can better handle this matter direct with Kyle, so am routing all the papers through you to return to him.

I had Hayden's office inquire for me of Public Roads Administration if, with the cancellation of the 1½ miles, money would be returned. To my surprise I find that the appropriation of $19,000 was intended only to reach to the rim in spite of Kyle's application and my understanding.

Consequently a new project will have to be set up for the 1½ miles. Kyle's letter states that "If they have spent most of the money, of course you will have to ask for an additional appropriation, etc". As you know, I cannot initiate a new project here. It must originate in the field.

I cannot judge as to the discrepancy in the estimates between Coupal's statement that the road can be built "at comparatively low cost", Kyle's statement that it would cost only $4,000 and the PRA estimate of $15,000 which they have stuck to right along.

But, in the present asbestos situation, I am sure no approval can be had for a $15,000 road of 1½ miles

length to serve just the Pueblo mine, and I feel any such application would be time wasted.

Furthermore, you will note that Kyle's shipment sheets are old. WPB feels that packing 1½ miles can be done as easily now as in 1940. What assurance is there that the mine would be operated for a substantial period after the road is built? Confidentially, as you probably know, Kyle has indicated something of a persecution complex which has not helped his case here at any time. Whether or not he is justified is aside from the point.

If he wishes to file an application for a new road from the rim to the mine, providing a low cost route can be determined, and the estimate of production will justify it, I shall be glad to try and fight it out with WPB asbestos, though not with too much optomism.

A tram of some kind probably could be constructed cheaper than $15,000, don't you think? Of course I don't know the terrain.

Bill Broadgate

November 16, 1944

Mr. Roger Q. Kyle
Box 302
Globe, Arizona

Dear Mr. Kyle:

Broadgate has sent back to us the file you sent him on your road matter together with a letter of which we are enclosing a copy, and which speaks for itself.

You might talk this over with Macfarlane and arrive at some conclusion as to the next move.

It doesn't look good and I am at a loss to know just what to do. Be assured we still want to help.

Yours very truly,

Chas. H. Dunning
Director

CHD:LP
Enc.

P.S. We will hold your file in this office, awaiting your further advice.

Asb mine of (Ariz)

November 1, 1944

Mr. William Broadgate
Washington, D. C.

Dear Mr. Broadgate:

A copy of your letter of October 25th to the Department of Mineral Resources, in regard to Reynolds Creek-Pueblo Asbestos Mine access road, has been received.

I put in my application for Reynolds Creek Ranger Station road to the Reynolds Creek Asbestos Mine, Pueblo Asbestos Mine and Lucky Strike Asbestos Mine. I own the Pueblo Asbestos Mine; I haven't any interest in the Lucky Strike or the Reynolds Creek properties. When I put in my application it was for a road to all three mines. The old road ran to the Reynolds Creek Asbestos mine, five miles from the ranger station, where the new road starts. This part of the road has been completed. Two miles this side of the Reynolds Creek Mine is where the road turns off to go to the Pueblo Mine, which is four and one-half miles to the Pueblo Mine from the turn off. The Lucky Strike is a half mile from the Pueblo Mine. The same road that goes to the latter would be used for the Lucky Strike Mine. The Lucky Strike is owned by a Mr. Hill in Phoenix, Arizona.

I put in my application to the Bureau of Mines to spend $1,000 per mile on the old road to the Reynolds Creek Asbestos Mine (five miles, $5,000) and $2,000 per mile on three miles of the Pueblo Asbestos Mine road that would take the Pueblo road up to the summit rim. It should not cost more than that ($6,000) and spend the other $7,000 on the mile and a half to the Pueblo Mine and half mile over to the Lucky Strike Asbestos Mine. I understand that Lincoln Stewart, who had charge of the Asbestos Department, changed the application so that the road would only go to the summit rim, a mile and a half this side of the Pueblo Asbestos Mine.

You will find enclosed a copy of my letter to Mr. Fisher, Vice-President of Johns-Manville Company. This letter will show why Mr. Stewart has tried to stop the road that I am trying to get. If you will recall, at the last meeting at Phoenix I told you how Phillips took his 30x30 and made Stewart run the tunnel where he would get some asbestos. Johns-Manville local manager here recommended Stewart for the job of spending the $200,000 for the Bureau of Mines. I have had interviews with some of the Johns-Manville officers and they say they didn't have anything to do with this dirty work. I think they are going to clean house in that district in the near future and it would not be a bad idea for the Bureau of Mines to have a house cleaning too.

This man Stewart is doing everything he can to keep me from getting the road. Johns-Manville bought my asbestos prior to June, 1942, and at that time they were figuring on buying my asbestos properties and mill. They quit buying my asbestos, thinking they would get a cheaper price on my properties.

You will find enclosed statements of sales of asbestos I made to them and most of this asbestos came from the Pueblo mine mountain which has asbestos outcropping on both sides and on one end asbestos is exposed around the canyon wall. When you have made a copy of my sales of asbestos to Johns-Manville, please send them back to me for my files.

Stewart ran the tunnel mentioned in my letter to Vice-President Fisher on the Sloan Creek property and not the Pueblo Mine. Center Mountain is an asbestos bearing mountain and is a big asbestos deposit about a mile or more square; the largest asbestos deposit in Arizona. Reynolds Creek Asbestos Mine is located at the southwest side of the Center Mountain tunnels, running toward the Pueblo Mine, which is on the east side of Center Mountain. The asbestos outcrops at the Pueblo Mine for 6600', and the Lucky Strike, join the Pueblo mine on the north side of Center Mountain and the asbestos outcrops for 3000' along the canyon wall. It would not be any use running the road to the summit rim and not going on to the Pueblo and Lucky Strike Asbestos Mines. If they have spent most of the money, of course you will have to ask for an additional appropriation to complete the road to the Pueblo and Lucky Strike Mines.

I thank you for what you have already done. I know where this road was first applied for. It was denied and later you got the Asbestos Cork Rubber Company to recommend the money for its construction.

Not one pound of Crude No. 1 & 2 has Johns-Manville produced since they closed down in 1931. All the Arizona asbestos, free of iron, the world has had for electrical use for the last twelve years came from Phillips and myself. But when Johns-Manville buy it, and it gets back to their factories, they say it came from their own asbestos mines in Arizona.

Respectfully submitted,

Roger K Boyle

rqk-m
encls.

Copy

CHD.

Oct. 25, 1944

SUBJECT: Reynolds Falls Asbestos Access Road. DA-RM-79

I understand this road will reach the Pueblo Mine. That the Reynolds Falls Mine will produce only 3 tons of ore per day and that Public Roads has been informed there is no intent to operate the Lucky Strike Mine in which Kyle has an interest.

The additional 1½ miles of road will cost $15,000, according to PRA estimates, and the asbestos situation now is so non-critical that WPB will not approve such an expenditure on a new application for the small amount of fibre to be produced from Reynolds Falls.

I am inquiring of PRA if the agency intends to return part of the appropriation if this additional road is not built, or if they are intending to spend the whole amount on the road to the rim.

If all the money is needed for the road now proposed, there will be no chance to get an additional $15,000 in my judgement, although if an additional project was filed I should try to get it approved. I had some trouble getting the original project approved when the asbestos was more critical. But if there will be money left over in case this 1½ miles is not built, I may stand some chance of insisting that the original specifications of the project be carried out.

If you can give me any further information which might be helpful I shall be glad to have it, as you see this needs a lot of support.

It is a lousy deal if the whole sum has been diverted to the rest of the road, but that fact will not get $15,000 appropriated in addition.

Bill Broadgate

Copy mailed Kyle - 10-30-44 JP

October 19, 1944

MEMORANDUM

TO: W. C. Broadgate

FROM: Chas. H. Dunning

Please get after the Department of Public Roads in Washington for a decision relative to the extending of the Reynolds Falls asbestos road down to the Lucky Strike mine of Roger Kyle. We were promised the extension of this road some time ago but the office of Mr. McLane here in Phoenix states that they have no advice nor authorization yet from the department in Washington.

You will recall that the original application for this road was to go to the Pueblo and Lucky Strike asbestos mines as well as the branch that goes to Reynolds Falls, but that the U. S. Bureau of Mines or some other department only authorized the road to be constructed to the saddle or rim high above the Lucky Strike mine, leaving a gap of 2 or 3 miles from the rim down to the Lucky Strike without road. The work of constructing this road up to the saddle or rim is now about 50% completed.

What we require is the assurance that this road will be built to the Lucky Strike, and if there isn't enough money in the appropriation for this road construction, that a few thousand be added to the original appropriation. However, we believe the original appropriation was sufficient if properly expended to carry the road to the Lucky Strike via the Pueblo asbestos mines.

In conclusion, please do all you can to get McLane's office authorized to continue the road to the Lucky Strike.

AM:LP
cc: Mr. Roger Kyle

July 14, 1944

Mining Division
Room 1027 Tempo R

Mr. W. C. Broadgate, Technical Consultant
Special Committee to Study Problems of
American Small Business
United States Senate
Washington, D. C.

Re: Access road to the Lucky Strike, Pueblo, and Reynolds Falls Mines in Gila County, Arizona. Project No. DA-RM-79

Dear Mr. Broadgate:

This is in further reply to your letter of June 12 concerning the status of an access road to serve certain asbestos mines in Gila County, Arizona. This letter will confirm verbal information furnished your office to the effect that the Public Roads Administration advised us that construction of this proposed project was to start July 1, 1944 and to be completed approximately September 30, 1944.

We trust this is the information you desire.

Very truly yours,

H. B. Hudson,
Chief,
Access Roads Section

Asb Mines of Ariz

Nov. 4, 1944

Dear Chuck,

I received a package from Roger Kyle today with a covering letter saying you had forwarded to him my memo on the access road. I have not felt well enough to analyze the data, but will do so on Monday. A glance at the letter, however, makes me think he has not provided much support. I am afraid that his opinion as to what the road should cost will not weigh very heavy against the estimates officially made.

However, more on this when I can look into it and when I hear from the PRA as to the expenditure and what money will be left if any.

Bill Broadgate

11-4-39

Johns-Manville Corporation

to

Roger Q. Kyle

31	Tons No. 2 Arizona Crude Asbestos @ $325.00 per ton		10,075 00

10-19-40

Johns-Manville Corp.
New York, N.Y

3¼	Tons No. 1 Crude Asbestos	@ $750.00 per ton	2437 50
15½	" No. 2 " "	325.00 " "	5037 50
6	" Marsh " "	240.00 " "	1440 00
			8915 00

Sept.4,1941

To
Johns-Manville Corp
22 E.40th St.
New York, N.Y.

21	Tons-Kyle Harsh White Crude Asbestos	@ $225.00	4725 00
6½	Tons-Kyle Harsh Green Crude Asbestos	@ 240.00	1560 00
5½	Tons-Kyle No. 2 soft	@ 525.00	1787 50
7	Tons-Kyle No. 2 short	@ 275.00	1925 00
			9997 50

12-26-39

Johns-Manville Corp.
to
Roger Q. Kyle

22	tons crude No. 3 Asbestos	@ $ 75.00	1650.00
11	" crude No. 2 W. Asbestos	@ 200.00	2200 00
10	" crude No. 2 Harsh asbestos	@ 200.00	2000 00
			5850 00

June 5, 1941

Johns-Manville Corp
New York. N.Y.

27	Tons - 2 Crude Asbestos, soft @	$325.00	8775.00
14	" Crude asbestos, harsh @	240.00	3360 00
			12,135.00

May 15, 1934

Southern Asbestos Company
Charlotte, N. C.

To

ROGER Q. KYLE
Globe, Arizona

30	Tons No. 2 Asbestos fiber, Order No.7112 @ $275.00 per ton	8250.00
1	Ton No. 1 Asbestos fiber @ $600.00	600.00
		8850 00

ENDERS

July 1, 1941

176	Lb.	No. 1	Asbestos	$88.00
3000	"	No. 3	"	1500.00
3500	"	No. 2	"	1750.00
4400	"	No. 4	"	1100.00
				$3375.00

Aug. 17, 1941

130	Lb.	No. 1	Asbestos	65.00
2818	"	No. 2	"	1409.00
1879	"	No. 3	"	939.00
2700				675.00
				3088.00

July 29, 1944

Mr. J. H. Hedges
U. S. Bureau of Mines
Tucson, Arizona

Dear Mr. Hedges:

Mr. Roger Kyle has been in the office concerning some trouble regarding the access road to his Pueblo Asbestos Mine in Gila County.

Mr. Kyle states that this road was designed to go on through to his Pueblo Mine and the Lucky Strike Asbestos Mine, but as it finally wound up is now authorized to go only to the Summit, which will leave these mines out on a limb with no benefit whatsoever from the road. The only benefit would be to the Forest Service.

He states that the road would not have been approved except that it was designed to serve these mines, and that the total amount of money to reach these mines was appropriated, but now this total money is to be applied to a portion of the road only, and is in excess of the requirements for that portion.

Will you let us have the facts of this matter as you know them.

Yours very truly,

Chas. H. Dunning, Director

CHD:LP

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
TONTO NATIONAL FOREST

ADDRESS REPLY TO
FOREST SUPERVISOR
AND REFER TO

PHOENIX, ARIZONA

E(V)
ROADS & TRAILS-Tonto
Mineral Access Roads
Pueblo Belle-Lucky Strike-
Reynolds Falls Group
(Proposed)
Project No. DA-RM-79

February 23, 1944

Mr. Roger Q. Kyle
P. O. Box 302
Globe, Arizona

Dear Mr. Kyle:

I am sorry to inform you that your application for a road to the Pueblo Belle Mine has been denied by the War Production Board.

For your information I quote A. S. Knoizen, Director, Mining Division, War Production Board, of February 1, 1944 to Thomas H. MacDonald, Commissioner of Public Roads:

> "We have considered this application in conjunction with the Asbestos Section and from information available to us, it is our opinion that the possibility of these mines supplying any substantial quantities of asbestos suitable for the war effort is very remote.
>
> "Therefore, we do not consider this project as being essential to the war effort and it is the recommendation of the War Production Board that this application be denied."

Very truly yours,

F. Lee Kirby

Forest Supervisor

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
TONTO NATIONAL FOREST

ADDRESS REPLY TO
FOREST SUPERVISOR
AND REFER TO

PHOENIX, ARIZONA

E(V)
ROADS & TRAILS-Tonto
Mineral Access Roads
Cherry Creek Road #202
(Proposed)

February 19, 1944

Mr. Roger Q. Kyle
Globe, Arizona

Dear Sir:

Your letter of February 17 is received.

At the present time Mr. F. C. Brannen, Road Engineer from the Regional Forest Office at Albuquerque, is making his headquarters here in Phoenix, primarily for the purpose of handling mineral access roads matters. Mr. Brannen is on a field trip right now, but it is expected that he will be back in Phoenix on Monday, February 21, and your letter will be referred to him.

Very truly yours,

J. Lee Kirby

Forest Supervisor

ASBESTOS MINES OF ARIZONA
ROGER Q. KYLE, OWNER

MINING, BUYING, SELLING, CLEANING,
GRADING, MILLING ASBESTOS

CABLE ADDRESS
"ASBKYLE"

GLOBE, ARIZONA September 10, 1943

Mr. A. R. Fisher, Vice-President
Johns-Manville
22 East 40th Street
New York, New York

Dear Mr. Fisher:

I am very sorry I did not have the pleasure of meeting you when here this summer. There were several matters I would have liked to discuss with you in regard to the asbestos in this district. Therefore, I am taking the liberty of writing you personally.

A Mr. Lincoln Stewart, a former employee of your Company, was put in charge of spending the $200,000.00 government money doing exploratory and development work in this asbestos district. He has been very unfortunate in developing any asbestos on several of the properties, and one of mine in particular, in which I am very much interested. There is a big mesa and the asbestos outcrops continuously on both ends and one side of this mesa. On the east end the asbestos is 3" long right on the surface. Mr. Stewart promised to run the tunnel at this particular place, in the presence of two geologists.

Before starting the tunnel Mr. Shoemaker, Mr. Knucky and he had a conference. Just what took place I do not know, but when Mr. Stewart started the tunnel he went around on the side of the mesa where there was no asbestos formation; not even serpentine. One of the geologists told Mr. Stewart at the time he would not find any asbestos there. Mr. Steward replied he knew that, but said he was going to run the tunnel there just the same. Later on Mr. Shoemaker came to Globe and I told him that Stewart was running the tunnel on my property where he knew he wouldn't find any asbestos, trying to give my property a black eye. I told Mr. Shoemaker I thought I could have Mr. Stewart pulled for sabotage. Stewart went out the next day and had them change from that tunnel to another place where there was a rock slide - another hopeless location.

At first they thought they were just double crossing a poor prospector, Roger Kyle, but when they found out it was an act of sabotage when they were misusing government money that was appropriated for the development of asbestos in time of war, that changed the picture.

If you desire any more information you can get it from Mr. Shoemaker and Mr. Knucky, because I have discussed the situation with both of them. There are other facts I am holding back until the proper time comes.

I could close up the entrance to both of these tunnels and make a place for storing supplies and tools but it might be worth more to me to leave them open. They won't hurt the property because there is plenty of asbestos exposed in other tunnels. Those two tunnels cannot be erased; they are land marks and as good evidence as I want.

Now that Mr. Stewart is a former employee of your Company I thought you might have some influence in getting him to go back up to my property and run the tunnel where he promised to run it. Of course I don't care whose money he uses and I thought Mr. Shoemaker or Knuckey might have some other dirty job they want to get done and might need Mr. Stewart. If you can't persuade Mr. Stewart to do this, I will have to turn all the information over to Senator Harry S. Truman of Missouri and the F. B. I. and see if they can't have Mr. Stewart moved to McNeil Island; he shouldn't mind, it is all government work. When this investigation is over somebody will do some accounting.

I can't imagine anyone stooping so low as that. I thought Mr. Shoemaker and Mr. Knucky had shown how little principle they had when they quit buying asbestos from me when they knew how badly it is needed by the government. Mr. Shoemaker and Mr. Knucky have broken their pick with me and all the rest of us small producers here.

If you can get Mr. Stewart to run the tunnel where he promised I will bury the hatchet. I don't expect to do any more business of any kind with your Company.

Very truly yours,

RQK-m

ROBER Q. KYLE

ASBESTOS MINES OF ARIZONA
ROGER Q. KYLE, OWNER

MINING, BUYING, SELLING, CLEANING,
GRADING, MILLING ASBESTOS

CABLE ADDRESS
"ASBKYLE"

GLOBE, ARIZONA

March 8, 1944.

Mr. F. Lee Kirby,
Chief Forester Supervisor,
Tonto National Forest,
Phoenix, Arizona.

Dear Sir:

In regard to the proposed road from the Reynolds Creek Ranger Station on the Young-Globe Highway, to the Pueblo Asbestos Mine, Luckey Strike, and the Reynolds Asbestos Mine.

In 1942 there was $200,000.00 appropriated to develop asbestos properties in this district, and I understand Johns-Manville Company was to have the spending of this money. As there was some opposition, the Johns-Manville Company selected Mr. Lincoln Stewart of the Bureau of Mines, a former employe of the Johns-Manville Company, for this work.

When Mr. Stewart went to work on the Guy Phillips property he wouldn't work where Phillips wanted him to, and he wouldn't work where there was any chance to get asbestos. One day Guy Phillips took his 30-30 and was waiting for Stewart to come up the trail from where they were running the tunnel. Stewart's truck driver saw Phillips and ask him what he was doing with the 30-30, and he said he was going to kill Stewart when he came up the trail, as Stewart was trying to give his property a 'black eye', and didn't want asbestos to show up on his property. The truck driver persuaded Phillips to go back to the house. When Stewart came up the trail from the tunnel, the truck driver told him what Phillips was going to do, so the next day Stewart told Phillips that he hadn't found any asbestos in the tunnel and said he would work where Phillips wanted him to work, and they found a lot of good asbestos.

When Stewart came to my place, Sloan Creek, he promised to run the tunnel where I had asbestos three inches long, but when he started to run the tunnel, he went around on the back side where there wasn't any asbestos formation. Further information is in my letter to Mr. Fisher of the Johns Manville Company.

In June 1942, the Johns-Manville Company had their Geologist make an examination of the Sloan Creek property, Pueblo Mine and the Reynolds Creek Mine, my asbestos mill and other properties, with the intention of buying at the time I gave them prices. Mr. Art Enders of the Reynolds Creek Mine, Johns-Manville, had promised to buy two more car loads of asbestos from me while they were making the examination. When the examination was completed, they quit buying asbestos from us, and started the 'old

ASBESTOS MINES OF ARIZONA
ROGER Q. KYLE, OWNER

MINING, BUYING, SELLING, CLEANING,
GRADING, MILLING ASBESTOS

CABLE ADDRESS
"ASBKYLE"

GLOBE, ARIZONA

#2 - Mr. F. Lee Kirby.

squeeze game', closed us all down. We can't sell our asbestos, and the Government needs it badly, and have restricted the use of all asbestos that is imported into the United States.

I am enclosing a copy of my letter to Mr. Fisher, Vice-President of the Johns-Manville Company. I am also sending a copy of my sale of asbestos to Johns-Manville Company.

The Geologist, Government and individuals, has said that the deposit of asbestos between Reynolds Creek Asbestos Mine and the Pueblo Mine was the biggest deposit in Arizona, a mile through the mountain. Mr. Stewart agreed until I called his hand on the dirty work he was pulling in this district on the small asbestos producers. Mr. Stewart is a Johns-Manville tool. He was to have run tunnels on the Earl Pierce and Roy Wilson properties, but when I showed him up to the asbestos producers, he was afraid to run the tunnels on these properties.

Mr. Kirby, I am sorry to have to go into detail to explain why Mr. Stewart turned in poor reports on the Pueblo, Luckey Strike and Reynolds Creek Asbestos Mines. I know you have done all you can to help us get this proposed road. If you wish, you may copy my letters and send them to the War Production Board, or any other office.

If I can be of any further assistance to you in connection with the proposed road, I will be glad to do what I can.

Yours verytruly,

Roger Q. Kyle.

RQK:M

ASBESTOS MINES OF ARIZONA

ROGER Q. KYLE, OWNER

MINING, BUYING, SELLING, CLEANING,
GRADING, MILLING ASBESTOS

CABLE ADDRESS
"ASBKYLE"

GLOBE, ARIZONA
Mar. 12 1944

4

Mr. J.S. Coupal, Engineer.
Dept. Mineral Resources Arizona.
Pheonix Arizona.

Dear Mr. Coupal :

Enclosed find copy of letter to Mr. F.Lee Kirby and the copy of the letter I wrote the Johns - Manville CO.
You may send a copy to our senators.

I will see you this coming week .

I thank you.

Yours Very Truly.
Roger Q. Kyle
Roger Q. Kyle.

ASBESTOS MINES OF ARIZONA

ROGER Q. KYLE, OWNER

MINING, BUYING, SELLING, CLEANING,
GRADING, MILLING ASBESTOS

CABLE ADDRESS
"ASBKYLE"

GLOBE, ARIZONA
Mar. 12 1944

Mr. Charles F. Willis .
Arizona Small Mine Operators
520-428 Title and Trust Bldg.
Pheonix Arizona.

Dear Mr. Willis .

I am inclosing a letters and data that I want you to refer to Mr. Broadgate in Washington and also to our senators, .

Since I showed up Mr. Lincon Stewart, he has turn in a bad report on the asbestos properties Mentioned in my letter to Mr. Kirby the amount of asbestos sold off the Pueblo mine is enough to went Johns-Manville CO have their tool Lincon Stewart turn in a bad report.

What I went is to go abouve Stewart's and have this road put in when they make the next appropriation for access mining roads.

I will be over some time this week and call on you, and talk things over.

I thank you ,

Yours Very Truly
Roger Q. Kyle
Roger Q. Kyle.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine KYLE ASBESTOS ROAD

Date July 29th, 1944

District Sierra Ancha, Gila County, Arizona.

Engineer A. Macfarlane

Subject: The Instructions the U.S.Forrest Dept. Of Interior have, To Terminate the road at point-marked RIM .

Department Of Mineral Resources
304 Home Builders Bldg.
Phoenix, Arizona.

Gentlemen;

About a year and one-half ago, I was instructed by the Department to examine the Reynolds Fall Asbestos mine ,also the road leading to same, from the main County road to Young, the junction point being Reynolds Fall Ranger Sta.

I drove over this branch road leading from the Rangers Station, up over easy grades to A.Enders cottage this being a distance of about 5 miles,the road is winding and then was rather full of small mud holes,following the snow melting and rains of the month of Jany. 1943 .

Due to two or three large trees fallen and blocking the road just above the cottage, I left my auto and proceeded on foot to the mine; this road follows a generally easterly by south course and offers no very difficult elements at any place along its entire route from the Rangers Station about 6 miles to reach the mine.

Covering a period of years, fully 500 tons of Asbestos fibre were trucked out during the mostly dry seasons and firm conditions of this road; and in order to make this road a good trucking road (continued wet period excepted) a further betterment by way of widening right-of-way, drainage and blading, all not to exceed $1,000.00 per mile, should make this Reynolds Fall Asbestos road,a good enough mine road.

At a point about 3 miles easterly from the Rangers Station an old pack trail, starts and following a generally east by north route for 3 miles reaches a summit or divide marked on the accompanying sketch as the Rim.

This old trail route is now being built into an access road and according to the Roger Kyle application for road to the Lucky Strike and Pueblo Belle asbestos mines, this road was to be continued about 2 miles further to reach these Asbestos properties.

My personal interview with the Engineer in charge of this work,of a few days ago, discloses that the instructions he has, and which is claimed to be in conformity with the appropriation of some $19.000.00 made for the betterment and new road construction, now refered to as the Kyle Road; that the termination of this access road, is to be at the Rim.

It was stated by this engineer, that the road is terminated at the point called the Rim by reccomendation of a Field Engr. working out of the Tucson office of the U.S.Bureau Of Mines.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine KYLE ACCESS ROAD — Date

District Sierra Ancha, Gila Co. Ariz. — Engineer

Subject: #2

It has been estimated by the Applicant and now confirmed by the writer, that this peice of new access road from Reynolds Fall road up to the Rim should cost about $2,500.00 per mile, for the 3 miles, and that an additional $2,000. per mile for 2 miles would construct the continuation of this road from Rim to the Pueblo and Lucky Strike Asbestos mines.

To terminate the road at the Rim, is to keep the last two named Asbestos mines in a non-prductive state, as the price of Asbestos Fibre for the past 3 years, does not allow of extravagant production costs; while these two mines during the past years of 1915 to 1935 yeilded several hundred tons Fibre, pack -ed out a distance of 5 or 6 miles; the price of Asbestos during that time,was almost three times higher than the Fibre price of the past 3 years, and labor was abundant and all costs much less then.

It was in conformity to the obtaining a road from these mines to the County Highway, that Mr Kyle made application for this access road.

No doubt the Engineer of the Bureau Of Mines, rendered a report that the Lucky Strike and Pueblo Belle Asbestos properties, were of little value as early producers of Fibre; this in the face of well substantiated reports that these two mines have in the past yeilded an important quantity of valuable asbestos.

There certainly are no sound business reasons to support the act of terminating this mine access road some 2 miles distant from the mines to be served.

There seems to be a difference in the conception of the termination points of this Kyle Access road, as the Forrest Supervisor informed the writer, that the road was to be built into the two Asbestos mines above named; the writer then interviewing the Road Engr. in charge some 4 days later, learned from this engineer,that the road would terminate at the rim.

It is the opinion of the writer, that the $19,000. appropriation of which actually only $18,000. is available for road construction per inform-ation given by the Road Engr. is sufficient to construct the entire Kyle access road, providing no unnecessary spending is made on the branch road leading to the Reynolds Fall mine.

The Reynolds Fall road will be only infrequently used and the probable tonnage of Fibre does not justify an expensive branch road, when the usual truck trail road, will allow of the transportation of the Asbestos, at just as low a cost, from this mine.

I reccomend that steps are taken now to procure the completing of the Kyle road, to the main openings of the Pueblo Belle and Lucky Strike mines.

Arizona Department Of Mineral Resources
Globe Field Office.

DEPARTMENT OF MINERAL RESOURCES
STATE OF ARIZONA
FIELD ENGINEERS REPORT

Mine

District

Subject:

Date July 30th, 1944

Engineer A. Macfarlane

Mr Dunning;

The enclosed report to you on the Kyle Asbestos road gives you the low down on its status, copies of this report, should go to the Asbestos Cork and Rubber Div. of W P B and to Broadgate.

The sketch map in the rough should be printed I made that from notes of my field examination of this road on July 26th, .

I leave for Safford, Duncan and Clifton, thence Klondyke and back to Globe about the 5th, I need at least two days in this office before the convention in Phoenix.

Have three recent examinations to yet map and report, so it will be 10 days before I can clean my desk, but will find time to contact some Mica boys.

Dont advise sending mail to me at Duncan or any other of the Eastern points, as I must get back into Globe by the night of the 5th, and will then be sure to get all my mail.

Thanks.

A. Macfarlane Field Engr.

November 1, 1944

Mr. William Broadgate
Washington, D. C.

Dear Mr. Broadgate:

A copy of your letter of October 25th to the Department of Mineral Resources, in regard to Reynolds Creek-Pueblo Asbestos Mine access road, has been received

I put in my application for Reynolds Creek Ranger Station road to the Reynolds Creek Asbestos Mine, Pueblo Asbestos Mine and Lucky Strike Asbestos Mine. I own the Pueblo Asbestos Mine; I haven't any interest in the Lucky Strike or the Reynolds Creek properties. When I put in my application it was for a road to all three mines. The old road ran to the Reynolds Creek Asbestos mine, five miles from the ranger station, where the new road starts. This part of the road has been completed. Two miles this side of the Reynolds Creek Mine is where the road turns off to go to the Pueblo Mine, which is four and one-half miles to the Pueblo Mine from the turn off. The Lucky Strike is a half mile from the Pueblo Mine. The same road that goes to the latter would be used for the Lucky Strike Mine. The Lucky Strike is owned by a Mr. Mill in Phoenix, Arizona

I put in my application to the Bureau of Mines to spend $1,000 per mile on the old road to the Reynolds Creek Asbestos Mine (five miles, $5,000) and $2,000 per mile on three miles of the Pueblo Asbestos Mine road that would take the Pueblo road up to the summit rim. It should not cost more than that ($6,000) and spend the other $7,000 on the mile and a half to the Pueblo Mine and half mile over to the Lucky Strike Asbestos Mine. I understand that Lincoln Stewart, who had charge of the Asbestos Department, changed the application so that the road would only go to the summit rim, a mile and a half this side of the Pueblo Asbestos Mine.

You will find enclosed a copy of my letter to Mr. Fisher, Vice-President of Johns-Manville Company. This letter will show why Mr. Stewart has tried to stop the road that I am trying to get. If you will recall, at the last meeting at Phoenix I told you how Phillips took his 30x30 and made Stewart run the tunnel where he would get some asbestos. Johns-Manville local manager here recommended Stewart for the job of spending the $200,000 for the Bureau of Mines. I have had interviews with some of the Johns-Manville officers and they say they didn't have anything to do with this dirty work. I think they are going to clean house in that district in the near future and it would not be a bad idea for the Bureau of Mines to have a house cleaning too.

This man Stewart is doing everything he can to keep me from getting the road. Johns-Manville bought my asbestos prior to June, 1942, and at that time they were figuring on buying my asbestos properties and mill. They quit buying my asbestos, thinking they would get a cheaper price on my properties.

You will find enclosed statements of sales of asbestos I made to them and most of this asbestos came from the Pueblo mine mountain which has asbestos outcropping on both sides and on one end asbestos is exposed around the canyon wall. When you have made a copy of my sales of asbestos to Johns-Manville, please send them back to me for my files.

Stewart ran the tunnel mentioned in my letter to Vice-President Fisher on the Sloan Creek property and not the Pueblo Mine. Center Mountain is an asbestos bearing mountain and is a big asbestos deposit about a mile or more square; the largest asbestos deposit in Arizona. Reynolds Creek Asbestos Mine is located at the southwest side of the Center Mountain tunnels, running toward the Pueblo Mine, which is on the east side of Center Mountain. The asbestos outcrops at the Pueblo Mine for 6600', and the Lucky Strike, join the Pueblo mine on the north side of Center Mountain and the asbestos outcrops for 3000' along the canyon wall. It would not be any use running the road to the summit rim and not going on to the Pueblo and Lucky Strike Asbestos Mines. If they have spent most of the money, of course you will have to ask for an additional appropriation to complete the road to the Pueblo and Lucky Strike Mines.

I thank you for what you have already done. I know where this road was first applied for. It was denied and later you got the Asbestos Cork Cutter Company to recommend the money for its construction.

Not one pound of Crude No. 1 & 2 has Johns-Manville produced since they closed down in 1931. All the Arizona asbestos, free of iron, the world has had for electrical use for the last twelve years came from Phillips and myself. But when Johns-Manville buy it, and it gets back to their factories, they say it came from their own asbestos mines in Arizona.

Respectfully submitted,

rqk-m
encls.

ASBESTOS MINES OF ARIZONA
ROGER Q. KYLE, OWNER

MINING, BUYING, SELLING, CLEANING,
GRADING, MILLING ASBESTOS

CABLE ADDRESS
"ASBKYLE"

GLOBE, ARIZONA July 26,1945

Arizona Small Mine Operators.

To PAY DIRT
520 Title & Trust Building
Phoenix,Arizona

Attn: Mr. Chas.F.Willis
Secretary

Gentlemen:

In your letter in the July 23rd issue, you have brought up for discussion a chan e in the method of holding and retaining mining claims. I am glad you've done this, because as you say, when the method was first put in effect it served the purpose. That was when a prospector located a couple of claims; there was surface showings that he worked for ore he could mine and sell but that day has gone. At that time he had two or three claims, because nothing but high gra e ore could be mined and packed out to the railroad. In mining his high grade ore he did his assessm nt work; $100.00 per claim, which was all right but that was before low grade ore was ever thought of beingmined. Now, since new methods of recovering low grade ore have been developed, a company won't think of buying two or three claims to operate, they are looking for large deposits in twenty to one hundred claims, of 1% and 2% ore. That being the case it would be impossible for a small company to do that much assessment work per year, much less a prospector.

If I understand the requirements correctly it is necessary to show mineral in place and that the applicant has spent in development on this claim the sum of $500.00. If that is true why can't he be allowed to pay the taxes on that claim and stop digging these ten foot holes, which many are doing. The reason so few claims are patented is that after the locator has spent $500.00 in development, it will cost him about $40 .00 to get it patented. I realize patented land has to be surveyed, but why couldn't the claim holder be allowed to pay taxes on that claim whether it was patented or not? ome Deputy, Engineer, Recorder or official could take the measurements and see if the claim holder had spent the $500.00 in development. Part of the taxes collected from th se eligible claims, could pay an engineer to do the inspection work that would have to be done. The amount of money it costs today to have a claim patented is exhorbitant; no one can afford to pay it, especially a prospector.

When this war is ever a lot of people who have claims and been able to sell their ore, will find they can't sell it any more because manufacturers can get it from foreign countries, where labor is cheap, for much less. But why should they have to sit and wait until we have another war!

Yet they have to do this $100.00 assessment work on each and every claim ever year and they can't sell the ore they take out doing the assessment ork. hy be so unfair and require assessment work when the prospector has spent $500.00 in development work, which is required before he can obtain a patent? hy can't he pay the tax, patent or no patent, and stop digging ten foot holes that don't do the property or anyone else any good.

Of course, the claim holder located his claim to try and promote a sale. ell, what is wrong with that? very body is tryin to promote a deal in some kind of business and you can't expect a prospector to work a big mine. romotion is necessary to r ise money to mine with the same as real estate dealers and any other business.

There are very few mining deals made where the claims have been patented before the sale to the big operators. hen a man takes up a home stead he has cer ain requirements to meet before he can prove up on it and sell it. But when he meets those requirements he generally keeps on making improvements for his own use or so he can sell it. claim holder will naturally do the same thing. everal times in the last twenty years I have had as much as $40,000.00 of ore sacked and ready to ship and in one instance had to hold it six years. nd yet I had to do assessment work. ow is that fair, when I had already spent several thousand dollars on each and every claim; lots more than the amount required to have them patented.

Several years back the overnment helped the cattlemen and farmers; bought the cattle and hogs and then killed them. They paid the farmer for his cotton and then plowed up every other row.

They never helped the small miners in any way; they didn't lift the injustice of doing assessment work. The manufacturers have placed a high duty on all manufactured goods coming in to the U. .A. to keep up the high price of manufactured goods and at the same time allowed all the raw material of urope to be dumped in the U. .A. on top of our raw material and make us sell below production cost. Our raw material is taxed to help maintain this overnment and European raw material comes free. It looks like we Small Mine Operators should get busy and do something.

I would like to hear from some of the others; maybe they can figure something better.

Yours truly,

rqk-m

Roger R. Kyle

ROGER Q. KYLE

FEDERAL WORKS AGENCY
PUBLIC ROADS ADMINISTRATION

481 Ariz. DA RM 79

P. O. Box 70
Phoenix, Arizona
August 23, 1944

Mr. Roger Q. Kyle
Box 302
Globe, Arizona

Dear Sir:

I have just received through Mr. Chas. H. Dunning your application on Form PR DA 3, for an extension of the mine access road to serve the Lucky Strike and Pueblo Mines.

In addition to the information shown on form PR DA 3 the following data is required.

1. What mining equipment is now available at each mine?

2. What additional equipment will be required to carry on production?

3. Is the necessary labor available without drawing from other essential activities?

Your application will be forwarded as soon as the above data is received.

Very truly yours,

G. L. McLANE
Senior Highway Engineer

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES

SOUTHWEST EXPERIMENT STATION
Box 4097
UNIVERSITY STATION

TUCSON, ARIZONA

August 1, 1944

Mr. Chas. H. Dunning, Director
Department of Mineral Resources,
304 Home Builders Bldg.,
Phoenix, Arizona.

Dear Mr. Dunning:

Acknowledgment is made of your letter of July 29 to Mr. Hedges about access roads to the Pueblo and Lucky Strike mines in Gila County.

This office received two PR-DA-1's bearing on the matter. One of these involved access to the mines above and the other access to the Reynolds Falls mine. All three properties are reached from the Globe-Holbrook highway and all three make use of the same truck trail for a distance of about 2.2 miles. This trail goes to the Reynolds Falls.

As one project, we recommended improvement of the trail and construction of about 3 miles of spur road running from the trail toward the Lucky Strike and Pueblo, this spur to terminate at a drift fence separating two cattle ranges. The enclosed sketch shows the situation and the recommendations made.

From the end of the spur road, the Lucky Strike can be reached by an aerial tram about a quarter of a mile long, and the Pueblo by about 1.5 miles of pack trail. To build roads from the drift fence all the way in to these properties would be a very costly undertaking and one which our examining engineer did not think justified by the showings on the properties.

Yours very truly,

Thomas C. Denton

Thomas C. Denton, Mining Engineer,
For J. H. Hedges, District Engineer.

ASBESTOS SURVEY

NAME OF PROPERTY KYLE ASBESTOS MINES OF ARIZONA

OWNER - Name ROGER KYLE
P.O. BOX 302
Address GLOBE, ARIZ

TYPE OF ORE: CHRYSOTILE

Length of Fibre 3"

Soft → Hard ↗

OPERATOR: Name

Address

SOFT & SEMI — SLOAN CREEK ASBESTOS MINES
SOFT — LUCKY STRIKE (CHERRY CREEK SLOPE VIA REYNOLDS CREEK)
SOFT & SEMI. — PUEBLO ASB. MS
SOFT — GLOBE ASB. MS. (BELOW AMERICAN ORES)
MIAMI ASB. MS.
SOFT — SALT RIVER GROUP (BELOW CANADIAN)
SOFT — RIVER GROUP (CANADIAN-REGAL)
SOFT & HARSH — CLIFF ASB. MS. (CORRAL CREEK)

PRODUCTION (tons of crude ore)

Past NO IDEA

Present ✓ ✓
Monthly

Estimated Future Production ✓ ✓
Monthly

ORE RESERVES:

Ore in Place DO NOT HAVE ESTIMATE

Probable Ore ✓ ✓ ✓ ✓

IS YOUR ORE THE TYPE THAT COULD BE MILLED WITH OTHER ORE IN YOUR DISTRICT?

YES

MILL
10 T ORE/8 HR
CUSTOM MILLING
SOME TO ~~STOCK~~ WAREHOUSE

Signed: Roger R. Kyle

March, 1954

Arizona Department of Mineral Resources
Phoenix, Arizona

Kyle Asbestos Mines of Arizona

Owner & Operator--Roger Q. Kyle,
P. O. Box 302,
Globe, Arizona

Properties--as described by Mr. Kyle
Sloan Creek Asbestos Mines, Sloan Creek, soft and semi-soft
Lucky Strike Mine, Cherry Creek slope via Reynolds Creek, soft
Pueblo Asbestos Mines, " " " " " , soft and semi-soft
Globe Asbestos Mines, below American Ores, soft
Miami Asbestos Mines, below American Ores, soft
Salt River Group, below Canadian Mine, soft
River Group, between Canadian and Regal Mines, soft
CliffAsbestos Mines, west side of Corral or Regal Creek, soft and harsh
Has a mill in Globe with a capacity of 10 tons per 8 hours and does custom milling, as well as milling his own fiber.
At present is doing assesment work on the Salt River Group and/or River Group by extending the road which passes the Canadian Mine.
At present has two men at Sloan Creek, only one of whom was present at time of visit The mine in which the work was being done had meager showings of fiber on the level at which the work was being done, but the miner said there was another vein about 8 feet above the present workings which he planned to explore as well. The producti here at the present is very low.
Mr. Kyle generally opens the road to the Lucky Strike Mine-Pueblo Asbestos Mines are in the spring. Neither property was visited on the advice of Mr. Lincoln Stewart of US Bur. of Mines due to road conditions.
Mr. Kyle's conversation concerning his properties was not productive of information regarding his production or sales, but was at length concerning the past etc. Mr. Kyle is one of the oldest producers in the business and has reportedly been very successful, but no geat tonnage or reserves could be established or infered from the brief visit to Sloan Creek or the conversation.

ASBESTOS MINES OF ARIZONA

ROGER Q. KYLE, OWNER

MINING, BUYING, SELLING, CLEANING,
GRADING, MILLING ASBESTOS

CABLE ADDRESS
"ASBKYLE"

GLOBE, ARIZONA

P.O. Box 302

February 23rd, 1948

Mr. Chas.H. Dunning, Director,

Department of Mineral Resources,
State of Arizona,
Mineral Building, Fairgrounds,
Phoenix, Arizona

Dear Mr. Dunning:

Thank you for your letter of the 20th. In regard to the map of the proposed roads discussed, I am attaching another copy of the map.

I hope it will be in time for presentation to Representative Murdock.

Very truly yours,

ASBESTOS MINES OF ARIZONA

Roger Q. Kyle

Roger Q. Kyle, Owner

RQK/GK

(Copy-November 4, 1947)

November 20, 1947

Arizona Small Mine Owners
P.Y. Ellt
520 Title and Trust Building
Phoenix, Arizona

Attention: Mr. Charles F. Willis
Secretary

Dear Mr. Willis:

I would appreciate it very much if you would forward this to the Select Committee on Small Business in Washington, as a suggestion in my letter of October 28.

All unpatented claims are sold by giving a quit-claim deed which are legal and bonafide; if anything is done about the holding of mining claims in Washington, someone will have to get a bill up for the law-makers to be put through the House and the Senate. I would suggest-----

When a man locates a claim and does his location work on each and every claim and when he has expended Five Hundred Dollars per claim in development work on a group of claims,-all in one claim or on a number of claims,-but the amount must be equal to Five Hundred Dollars per claim (in other words, if a man had five claims, he could spend the Twenty-Five Hundred Dollars on one claim or as many of the claims as he desires) and when this development work has been done, the Government should then give him a quit-claim deed. The claim would not have to be surveyed or patented; the Government could set the value of a claim at the minimum of One Hundred Dollars per claim, and the claim holder would have to pay taxes on it, the same as anyone else does on other property. When the home-steader proves up on his land, he begins to pay taxes; the homesteader doesn't have to have his land patented or surveyed. Why shouldn't the same apply to a claim holder?

Very truly yours,

Roger J. Kyle

R.J.K:krb

CHARLES H. DUNNING
MINING ENGINEER
PHOENIX, ARIZONA

OFFICE
817 W. MADISON ST.
PHONE ALPINE 3-6272

RESIDENCE
1635 W. EARLL DR.
PHONE AMHERST 5-1132

copy of original sealed in this file

Mr. Virgil J. Bolgen, Jr.,
Petro-Min Associates,
Morton, Ill.

Dear Mr. Bolgen:

Pursuant to your request I have made an examination of the Roger Kyle Asbestos and Uranium Holdings in the general vicinity of Globe, Arizona.

Purpose of Examination

The purpose of the examination was to check and bring up-to-date a report on the above situation made by engineer J. S. Coupal (now deceased) in 1941 and also take into consideration the uranium aspects, which at that time were not known or considered.

May I say in predication that I found no fault with the Coupal report. However, there have been so many changes in the physical and economic picture since 1941 that it seems better to write a new report, with new descriptions, rather than merely refer to and comment on the Coupal report.

Claim Groups

The Kyle interests comprise three widely separated groups of mining claims, each of which is divided into two sub groups. These groups have a combined area of over 1000 acres and are known as follows:

Miami and Globe Asbestos
Sloan Creek and Cowboy
Lucky Strike and Pueblo

More details regarding each group or sub-group will be brought forth under respective headings, and a small scale claim map of each group is attached.

CHARLES H. DUNNING
MINING ENGINEER

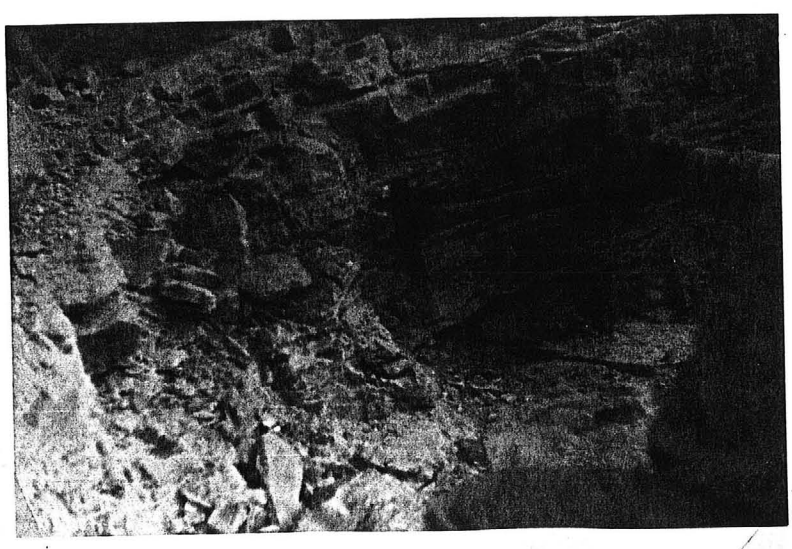
Asbestos and General Geology

The asbestos (chrysotile) in the Globe area occurs in more or less flat seams in flat veins of serpentine, in the Mescal limestone formation. The Mescal Limestone is of Cambrian age and lies between a thick bed of Dripping Springs quartzite below, and Troy quartzite above. Underlying the Dripping Springs is a basement of diabase.

On intrusion, the large mass of diabase found vents as flat sills in the bedding planes of the old sediments; and also appears as more vertical dykes and necks. The metamorphic conditions caused by these diabase injections have altered some planes of the limestone to serpentine, and in turn altered some planes of the serpentine to chrysotile. The chrysotile asbestos does not appear in direct contact between the diabase and the lime but does appear in the vicinity of the diabase intrusions.

The reasons why these intrusions have caused the alteration from limestone to serpentine to asbestos are not fully understood, but the association is empirical, and the presence of a diabase sill or dyke is a guide marker for finding an economic strata of asbestos.

As a general rule there are three strata of serpentine carrying asbestos, and each of these may include several sub-strata of asbestos. The serpentine strata may be separated by 4 to 8 feet of barren limestone, and within any serpentine strata, which are generally from 6 feet to 12 feet thick, there may be from one to several veinlets of asbestos each of which may have a thickness from 1/8 inches to several inches.



Serpentine vein, carrying asbestos in typical Mescal Limestone formation.

CHARLES H. DUNNING
MINING ENGINEER

The whole terrain has been highly faulted but usually in very large blocks. Steep canyons appear where faults have produced weaknesses, sometimes with hundreds of feet of displacement, often with none. Some large blocks have been uplifted into mountains, such as, for instance, where the American Ores Mine is some 1200 feet vertically above Kyle's Miami Mine, but only a couple of miles distant horizontally.

The marker of the Vescal limestone bed which lies on the cliff - producing thick bed of Dripping Springs quartzite - is readily distinguished no matter at what elevation. The faulting is generally in such large blocks that it has not caused mining difficulties.

The asbestos seams continually change, even over short distances. The wide and good spots sooner or later pinch down, and the poorest places may quickly change into the best. One must consider and deal in averages. It is not tenable that the good spots pinch down and stay that way. Assume, for instance, that one were approaching the situation from the other direction.

And yet there is a remarkable persistance to these serpentine strata and their included asbestos streaks. They will pinch and swell and the "pay streak" may jump from one strata to another, but the zones are seemingly continuous. Whether or not an exposure is pay ore depends on where nature or man happened to cut it.

Chrysotile Asbestos - Markets - Economics

The term "asbestos" is not a technical mineral name but is applied to any of several minerals having the well known fibrous qualities. The best and most important of these is chrysotile, and it is chrysotile and no other that occurs in the Globe area.

Globe area chrysotile is the only iron free asbestos available throughout the world. And iron free asbestos is essential for such uses as electrical insulation (when a heat resistant insulation is necessary); and in our present day complex economy demands for such are rapidly increasing.

Canada supplies the bulk of general asbestos but it contains considerable iron which technicians have not yet been able to

CHARLES H. DUNNING
MINING ENGINEER

dollars. He has spent over $75,000.00 on roads, several hundred thousand on development, and built a mill with a probable value of $50,000.00.

He has never kept development much ahead of extractive mining, but has had so many places to mine, that when the fiber seams at one spot pinched down he simply moved to another.

Most of his mining is done by the leasing system with Mexican miners. A crew is allotted a certain piece of ground. They are furnished mining supplies and paid for the fiber they get out, after it is milled, at approximately one third the market price. This matter will be discussed in more detail later on.

Kyle discloses a rich underlying vein that he had covered up, so his lessors would not demand that they leave less profitable locations and be permitted to mine it.

CHARLES H. DUNNING
MINING ENGINEER

economically remove. In South Africa there is a deposit from which the iron can be removed at a cost, but Britain takes all of it. In northern Canada there is said to be a deposit that is quite iron free, but facilities and climatic conditions preclude production. So, for natural iron free asbestos, essential for many of our present and future needs, the entire world appears to look toward Globe, Arizona.

Chrysotile asbestos is graded according to the length of the fiber, which in turn is determined by the width of the seam in the mine, as the fibers occur crosswise in the veinlet. The present market for fiber is as follows:

Grade	Fiber length	Price per ton
No. 1	3/4" and longer	$ 1,500.00
No. 2	1/2" to 3/4"	900.00
No. 3	1/8" to 1/2"	450.00
No. 4	Shorts, fiberized and screened	250.00
Waste for plaster, etc.		80.00

For proportions and average values see chapter on economics.

History of Kyle Holdings

Roger Kyle first started to produce asbestos in the Globe area before World War I. His operations since that time have been sporadic as the price of fiber at times during the past years has been comparatively low, and there have been periods when it was not profitable to mine from such remote areas. This was especially true before there were roads and before haulage trucks had reached their present state of perfection. Sometimes he packed his ore over 10 miles on burros and then sold it for less than one third its present price.

From time to time he picked up additional groups of claims, either by location or purchase, and he has generally maintained the policy of plowing back profits into the purchase of additional property.

Kyle has produced a total of over 1500 tons of asbestos which at present prices would have a value of over one million

CHARLES H. DUNNING
MINING ENGINEER

Further Details - Each Group

Miami and Globe Asbestos. The Miami group consists of 10 mining claims situated about 45 miles north of Globe in the foothills of the Sierra Anchas.

Here there are generally five streaks of ore cropping in a canyon. They have a steeper dip than usual (about 15 degrees) which makes mining into the cliff rather difficult without mechanical equipment.

There are 3 tunnels or inclines from 35 to 80 feet long. Most of the available ore in, or accessible from the tunnels, has been gouged out; but there are a few places where a total thickness of more than 2 inches of fiber is exposed, permitting immediate profitable mining.

Total exposure of the asbestos "formation" is several thousand feet, so the potential production is high. The quality of the fiber is not as good as in the other Kyle holdings.

The Globe group adjoins the Miami group on the north and consists of six mining claims. Here the canyon wall exposure has been worked rather extensively. There is little left in these particular workings, and little incentive to push them further. However, the topography causes the outcrop to swing around a ridge of land, and on the other side of the ridge Mr. Kyle has started a tunnel which immediately went into wide high grade fiber. This appears to be a lower zone - not touched in the older workings - and could easily be the start of a new mine.

Miami Uranium. Although nearly all the Kyle holdings have possibilities of uranium where the Dripping Springs quartzite underlies the Mescal limestone and overlies the diabase, there are two places on the Miami group that constitute real discoveries.

On Miami #5 a box canyon has cut through the quartzite with shear walls on each side and at the head, about 250 feet high. This head wall of the box is a fault, and the rock in the vicinity of the fault contains commercial uranium ore. A short tunnel parallel to the fault has been driven at the bottom of the canyon, and a general sample of the muckpile from that excavation assayed (chemical) .18% U_3O_8. A more selected piece assayed .28%.

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MINING ENGINEER

The same radioactivity exists upward along the fault, above the tunnel, but further up, and in other directions the terrain is inaccessible. Uranium concentration is often associated with faulting in the D S quartzite.

Adjoining this location on the south and west are claims of a uranium company that are being diamond drilled at present. I was reliably informed that so far the drills have proven an orebody 42 feet in thickness, by 150 feet long, by 60 feet wide, without the limits in width yet being reached. This averaged .27% U_3O_8 and would constitute over 30,000 tons. Uranium of .20% content has a value of $25.00 per ton, including bonuses.

On the Miami # 9 and # 10 there is a flat mesa of over 20 acres all of which is radioactive to the extent of 5 to 10 time background count. This is not commercial but is highly interesting exploration territory. (More under Recommendations).

Sloan Creek and Cowboy Groups. These groups consist of 15 claims and are located north and east of Young, Arizona, and west of the Apache Indian Reservation.

Here nature has assisted in development by cutting Sloan Creek completely through a large mesa, so that the ore outcrops on both canyon walls of Sloan Creek as well as in the more natural walls of the mesa on either side. (See map).

Typical gouging in cliff for asbestos

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Mining here has been in the usual pattern and is being carried on very successfully at present by Mexican lessors, who are getting out about 2 tons per month per man with crude equipment and as much avoidance of hard labor as possible.

The exposed pregnant area in this group is enormous - probably over 20,000 linear feet - and the veins are remarkably persistent. The veins are usually flat but at the spot now being worked a large block of the limestone has slumped and tilted, causing a downward dip, that should require power hoisting.

The Cowboy mesa situation is unique in that the mesa has a slight slope to the south whereas the asbestos formation is level, causing the veins to outcrop on top of the mesa. While these outcrops are generally covered with thin overburden they have been dug into and exposed in places. The situation should be ideal for open pit mining and will be further discussed under Recommendations.

The Lucky Strike and Pueblo Groups. These groups are situated 8 miles east of a point 55 miles north of Globe on the Globe-Young Highway. The group comprises 20 claims and covers the outcrop of the lime-diabase contact in Cherry Creek Canyon for a total length of about 12,000 feet, most of which is tentative asbestos bearing.

The outcrop has been worked in the usual pattern of short adits and slopes from the canyon wall. Production has been considerable.

There are many spots throughout these workings where commercial ore is immediately available, together with the ever present plan of driving these adits further, finding new exposures of commercial size underneath talus fills, and exploring parallel zones above or below those being worked. The possibilities for new discoveries are practically unlimited.

The following picture shows The Lucky Strike workings - which are the zig-zag white line below right center. Photo from Kyles approaching road - 1200 feet vertically above. Cherry Creek in the bottom at center. Other mountain ranges in background.

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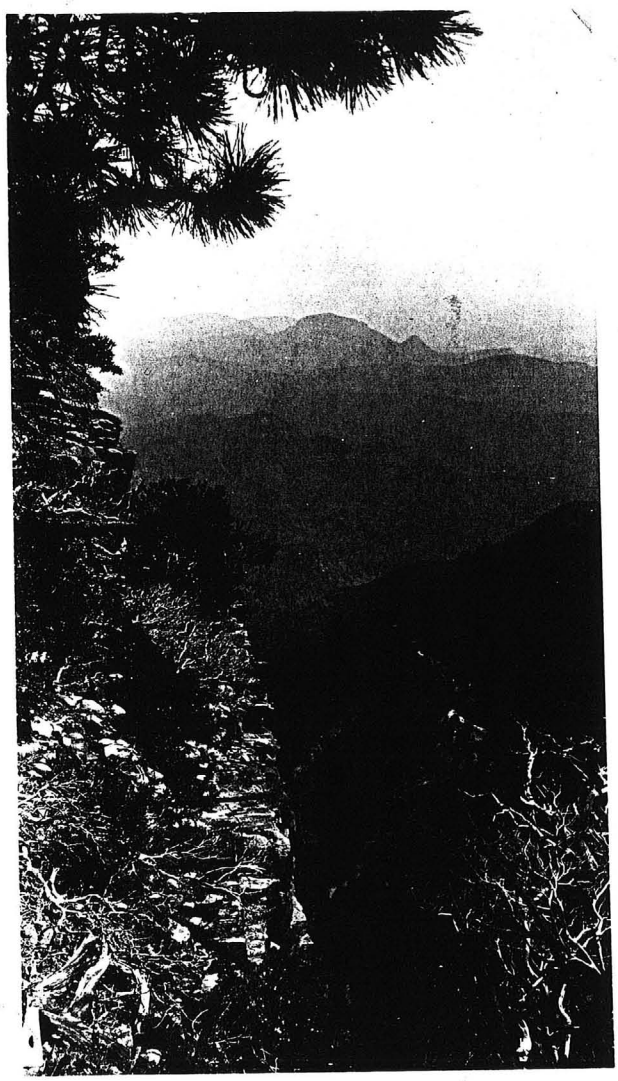

General Economics

One must bear in mind that it is the nature of the asbestos seams to continually change - from good to bad and from bad to good, as mentioned under geology. No definite factor can be given as to what percentage of a given area will be profitably productive - my guess would be about 25% in an overall picture. From this should be deducted areas existing so far into the cliff side that development and extractive mining would cost more than the proceeds. This still leaves sufficient potential areas throughout the Kyle holdings to produce many thousands of tons.

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There are enough spots at present existing in all the workings to easily produce 10 tons per day of crude mined ore, without counting the heavier possibilities of open pits and heavy but mechanized side hill cuts. Development by punching edits ahead, opening up open pits or side hill quarry cuts, should be kept well ahead of extractive mining, and it seems entirely conservative to assume that such policy would continuously maintain an ore supply ahead.

Let us, therefore, base an economic problem on the production of 10 tons per day of mined crude. The following factors then pertain:

The products from crude mine run average: 10% - #1; 30% - #2; 30% - #3; 25% of 30% filter fiber; and 75% of 30% plaster sand waste. The products from one ton would be:

10% # 1 @ $1500.	$ 150.00
30% # 2 @ 900.	270.00
30% # 3 @ 450.	135.00
7.5% filter @ $250.	18.00
22.5% plaster waste @ $20.	4.50
100.0 total, per 1 ton as mined,	$ 577.50

Thus each ton as mined, sorted, and hauled, brings on the average $575.00; and each ton of recovered fiber, after eliminating waste, would average $800.00. This gives us a basis on which to evaluate the fiber strata in place.

A square foot of fiber in place, one (1) inch thick will weigh 11 pounds (gravity 2.60) which at $800.00 per ton would be $.40 per pound, or $5.60 per square foot per inch.

Considering the general overall average cost of mining, hauling and milling, it would take one (1) inch thickness of average fiber to pay such costs and the excavation and hauling of 8 cubic feet of waste rock. Therefore, if we have one (1) inch of average fiber, in an ordinary edit height of 6 feet, it should pay to mine; and if a combined thickness of 3 inches or more is available in several streaks it would pay to mine up to 25 feet in thickness in an open quarry or pit. These rules should provide a quick visual appraisal of any location or situation at any time - but, of course, some judgment must be used.

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Possibly 25% of the present Kyle workings present such a picture at this time. In the remaining 75% exploratory adits (dead work) would have to be driven on in, until the fiber seams swell again.

Mr. Kyle has given his lessors a sliding scale price for the fiber he recovers from the ore that they mine. This amounts to about one-third of his selling price. This system has worked well and should be continued in special places. At the same time there are many places where mechanization should produce larger quantities at less cost.

However, assuming a mining cost of $200.00 per ton (based on the Kyle leases), hauling $10.00 and milling $10.00, there would remain an average profit of $350.00 per ton, which on a production of only 10 tons per day, would be considerable.

We must consider that the Kyle holdings have a theoretical outcrop of potential formation over 50,000 feet long. This has been sparsely prospected and gauged at. We should also consider that there are over 1000 acres of covered beds. It is evident then that the possible, probable, and positive resources should sustain such an operation for an indefinite period.

There are several other asbestos mines and producers in the Globe area. Most of them are limited to one claim and some of them have produced for years from one claim. Without being sure of my facts it seems that the Kyle holdings amount to more potential asbestos producing territory than all other holdings combined.

The Kyle Mill

The proper milling of asbestos is quite simple, but does have to be done right to get the most out of the ore and produce acceptable grades. The Kyle mill consists of a crusher, two sets of rolls, a screening device, hammer mill for fiberizing the first reject, and cyclone for separating some fiber from rock particles.

Mr. Kyle has proven that the use of rolls is superior to other crushing devices used in the past. And he has invented, used and patented (now expired) a special screen that accomplishes its purpose exceptionally well. This series of screens is actuated by

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cams that produce an up and down motion, which settles the dirt and crushed rock through the fluffy fiber and the screen, and at the same time has a longitudinal motion with a bump, which moves the fiber along the face of the screens.

Grades 1, 2 and 3 are produced directly. Number 4, containing the crushed rock and some fine or short fiber, is sent to the hammer mill, where the fiber portion is fluffed up, and then recrecned. About 25% of its own weight turns out to be a short fiber which is in demand for wine filtration, for, being iron free it is required and in demand for such purpose.

The final waste is used as plaster sand and has some superior qualities over ordinary sand. It is stickier and easier handled by amateurs and if properly advertised and marketed should command a better price in our present "do it yourself" economy.

The present mill has a capacity of about 1½ tons per hour. Screen sizes must be changed when #4 is fiberized and re-run, requiring rehandling and loss of time. Additional bins should be installed, and possibly another set of fine rolls, and a secondary screen for the #4. This would bring greater economy and increase capacity.

Recommendations

A corporation's primary purpose is usually to produce profits for its stockholders. To do so an operating plan may be quite different from Kyle's past methods - he seems to be somewhat allergic to profits - but at some situations his methods are ideal. Four different types of operations would seem to be required to fit the various situations - each in its place - to produce satisfactory profits:

(1) Kyles method of leasing alloted areas and buying the product.
(2) Partial mechanization with lessors. Where air drilling equipment, air hoists, track, cars, etc. would enable lessors to make "wages" on a poorer showing than ordinarily required, such should be provided.
(3) Bench or quarry style mining in cliffs with power equipment. It is feasible to run benches up to 50 feet in height.

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The waste matter can be shot and then bulldozed or power shovelled out of the way instead of being hand-handled. The pay streak is then carefully removed. Then another layer of waste may be drilled and blasted. Such a bench may be carried until the face is 50 feet high, and in some cases, where the dip is right, there could be another bench above or below. Adit mining would then follow.

(4) Bulldozer or shovel work from the surface down. In this case the excavation should be preceded by trenching or drilling to locate the desirable seams so they will not be disturbed when removing waste.

Development work by adits, cliff exposures, or surface trenches should be kept well ahead of extractive mining. Mr. Kyle, from his long experience, has developed a "nose for ore". He will be 75% right when he suggests that a certain heading will come into new ore, or that there is an additional seam above or below. He should be retained, if possible, to guide new exploration.

By using all of the above methods in their proper places it should be easy to produce 10 tons per day of mill feed, and some might be considerably enhanced as exploratory development proceeds.

This report will not attempt to advise specific locations for mining or development. But certainly as many more lessors as practical should be obtained, the Lucky Strike and Pueblo seem ideal for cliff benches, and the Cowboy for open pit work. On the Cowboy mass I would advise first putting in test trenches through all layers of fiber with a bulldozer. These could be up to 25 feet deep economically. This would tell you just what you have there and facilitate the intelligent removal of waste matter without disturbing the asbestos.

Uranium Exploration and Development. On the Miami # 5 there is commercial ore in the bottom of the canyon. A road to this spot would be quite expensive. Pattern diamond drilling would also be expensive as the location is some 250 feet below the rim. And no-one ever produced ore through a drill hole.

I would advise placing a compressor at the top of the rim, running a pipe line down to the location, repairing the trail, acquiring a few burros, driving the present tunnel and also crosscuts and raises, packing out the ore so produced and hauling it to the Government buying depot at Globe. Actual shipments are the best samples in the world.

After development has progressed a bit, an underground diamond drill could be used in the workings, to delineate the orebody.

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by holes at all angles. If a sufficient body of ore is proven, a shaft could then be sunk for extractive mining.

On the Miami Hos. 9 and 10, where a considerable area on the mass is "active", I would advise making a grid survey with a counter and working out anomalies. This might be followed with drill holes.

The entire Pripping Springs quartzite area in Arizona is potential uranium ground, and it underlies the Mescal limestone on all the Kyle claims, although sometimes separated by diabase sills. While I was not shown any other hot spots, intelligent prospecting of all accessible areas is advisable.

Conclusion

If properly managed I can see no reason why the Kyle interests should not be productive of substantial and sustained profits.

Respectfully submitted,

September 4, 1955.

SLOAN CREEK MINE

GILA COUNTY
SIERRA ANCHA DIST.

War Minerals Report 373 (1945) U.S. Bureau of Mines

See: USBM - R. I. 4100, Aug. 1947
USBM.- I. C. 7706, p 82, Jan. 1955

ABM Bull. 126, p. 27, 50, 79, 96

Maps- upstairs in flat file storage - Drawer 7

OWNER: Kyle Asbestos Mines (Jan. 1958)
Roger Q. Kyle
Box 302, Globe, Ariz. (1-1960)

MEN WORKING: 4

OPERATOR: ROGER KYLE

LEWIS A. SMITH - 1-10-58

On
Active Mine List 2-1959, 2-1960

Active property March 17, 1960.

LEWIS A. SMITH - GLOBE ASMOA

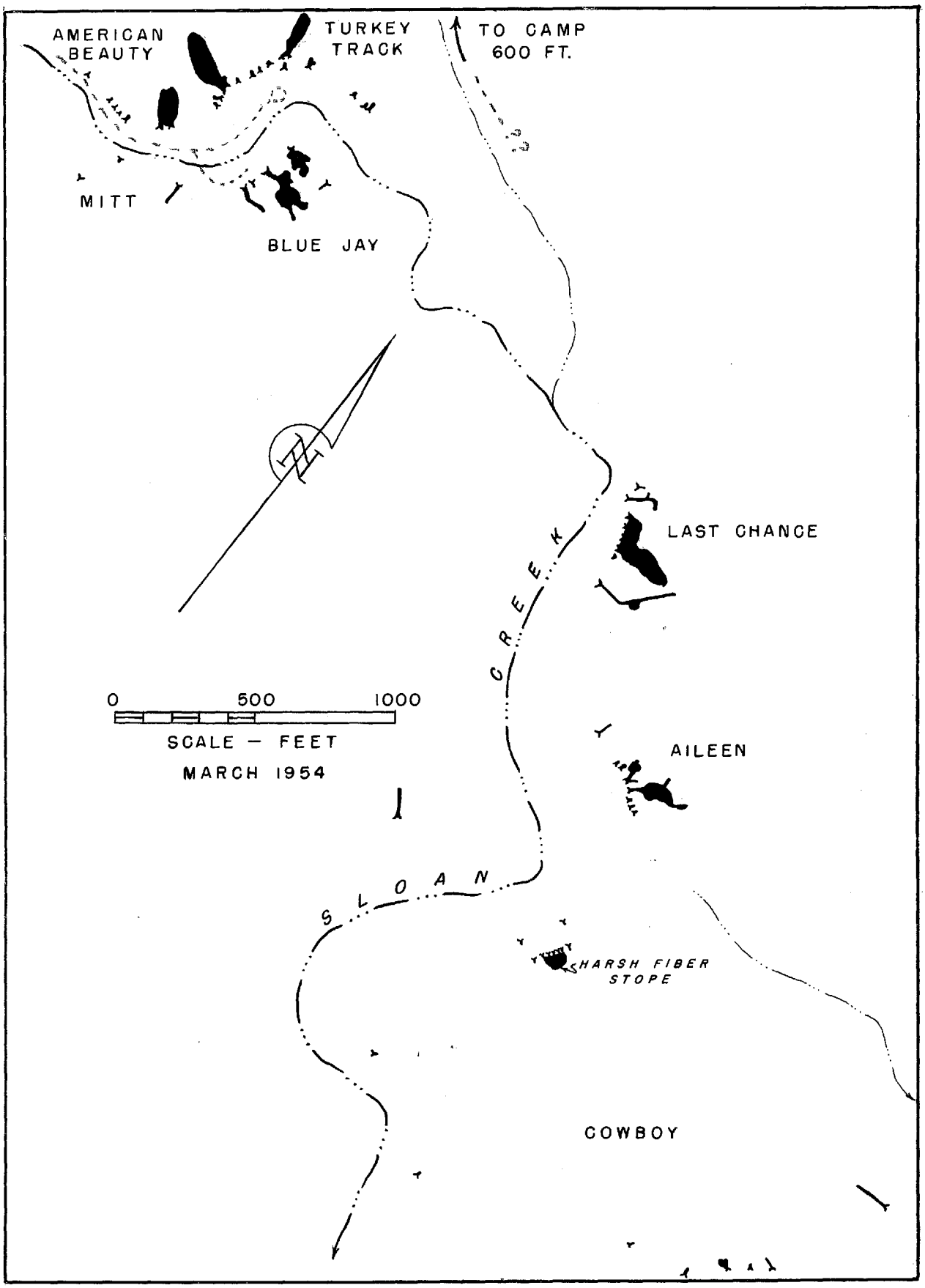


FIGURE 27. - SKETCH LOCATION MAP
WORKINGS OF SLOAN CREEK GROUP

MEMORANDUM

July 21, 1960

Kyle Asbestos Mines of Arizona, Globe, Arizona.

Roger Kyle said he had delivered 8 tons of No. 2 asbestos to the stockpile. This leaves 2 tons to be delivered before a year is up.

LEWIS A. SMITH
Field Engineer

Lucky Strike Panorama
A-180-95
S L O A N C R E E K

Blue Jay Looking S75°E
A-180-96

A-180-97
Turkey Track Looking SW

REPORT ON THE KYLE GROUP OF ASBESTOS MINES

BY

J. S. COUPAL, MINING ENGINEER

Covering the Miami Asbestos Mines,
The Pueblo Group, the Sloan Creek
Group and The Kyle Asbestos Mill.

SUMMARY AND CONCLUSIONS With proper equipment, management and systematic development and operation this group of asbestos claims should produce in excess of 3,000 tons of asbestos per year. It should be possible to more than double this production and maintain the increased production for many years if the continuity of the ore bearing zones persist, as is indicated, and is proven by future development.

The question may be reasonably asked, "Why has it not been done before?" The answer is simple and obvious when some of the factors are considered. Roger Q. Kyle, the owner, started from scratch on these claims. The production has paid for the development without the use of outside capital. This has necessarily limited the work to the most accessible areas for quick production and has not permitted the extensive preparatory work necessary for large scale operations. Most of the mining has been done by hand steel.

Another factor which permits a production of 3,000 tons or more per year as estimated is the increased yield and the handling of lower grade ores which has been made possible by the mechanical cobbing and segregating process developed by Mr. Kyle. A permit for the use of this patented process is granted for the operation of the properties covered by this report. A description of the process is made a part of the report.

MIAMI ASBESTOS MINES

LOCATION The property consists of seven unpatented mining claims, located in the southern foothills of the Sierra Ancha Mountains at an elevation of about 5,000 feet above sea level. It is reached by 1½ miles of mine road from the Globe-Pleasant Valley highway at a point 42 miles in a northerly direction from Globe. The highway is a county graded road and the property can be reached direct by car.

The claims are located, as is customary, in the Globe asbestos area, with the long axis of the claims on the dip and at right angle to the strike of the outcrop. Six of the claims side line each other and thus cover a distance of 3,600 feet along the outcrop. The seventh claim is for camp purpose and its side line adjoins the end line of the northern claims. The discovery hole on the claim is usually located on the outcrop and about 200 feet from the end line, so as to provide dump space on the claim, and thus give about 1300 feet in length along the dip. Located in this manner no conflicts occur on extra lateral rights as the end line limitations are vertical planes.

Title to the claims are in the name of Roger Q. Kyle of Globe, Arizona and are recorded in the Gila County Recorder's Office, Globe, Arizona.

HISTORY OF PRODUCTION Mr. Kyle reports a production of 45 tons of asbestos from this property of which four tons were No. 1 crude, 25 tons of No. 2 crude and the balance No. 3 and No. 4.

ORE OCCURRENCE The general geology is typical of the Globe-Asbestos area with a basement of a diabase sill under the serpentinized mescal limestone. This group is located about 1½ miles from the property known as the American Ores or International Asbestos Group at an elevation of several hundred feet below the main workings of the American Ores property. The occurrence of this same ore horizon is reported on the American Ores property, at approximately 500 feet lower than the main workings, but has not been developed on that property.

On the Miami Asbestos group there are six ore horizons, the lower one occurring about one foot above the diabase sill and the others spaced at from 3 to 5 feet intervals above it. This makes an ore horizon of from 20 to 25 feet in thickness. The limestone is thin bedded in structure and the serpentinized ore strata vary from 6 inches to 18 inches in thickness.

The development work is limited to the two lower ore strata which are exposed in the three tunnels. The bedding of the lime and the ore strata dip from 12 to 18 degrees and the tunnels follow this dip into the hill. On claim No. 3 the tunnel is 80 feet long and a small amount of stoping has been done. The stoped area is irregular and covers not more than 1000 square feet beyond the tunnel.

On No. 4 claim is another tunnel of about 35 feet in length, following the two lower ore strata. On No. 5 claim is a 40 foot tunnel.

On the other claims only location and discovery holes have been opened up on the outdrop of the lower strata.

In all workings the strata show the occurrence of asbestos to be continuous and in no instance has the serpentinized asbestos bearing area pinched out. The fiber varies from knife blade thickness to 1½ inches in each one of the strata. It is sometimes concentrated in one streak and in other places distributed in closely spaced gash veinlets from knife blade thickness to 1/8 inch and larger.

In the area exposed by the tunnels, the stopes and on the shallow surface cuts an average total length of fiber in any one of the six ore bearing strata would be between 1/2 and 3/4 of an inch. The outcrop is continuous for the 3600 feet in length and shows the irregular surface erosion typical of the serpentine zones.

From the limited development it is impossible to estimate tonnage. The three tunnels are spaced about 600 feet apart and were naturally started on

good surface showings. The persistence of the ore bearing zone is well established but there is no way, without extensive development, of showing whether or not the whole area can be profitably mines.

The average of 1/2 to 3/4 of an inch of asbestos in each of the six ore bearing strata is conservative. This would give a production of from 12" x 12" x 3 to 4½ inches of asbestos for each square foot of surface and to recover it would call for the excavation of 20 to 25 cubic feet of rock. A square foot of asbestos 1 inch in thickness will weigh approximately 12 pounds, in place. Assuming the ore zones to be continuous and to maintain the averages shown in the exposures accessible an estimate of the possible tonnage of asbestos in the six claims reaches the fantastic figure of from 84,000 to 126,000 tons.

Just what factor to apply to such an estimate is impossible to determine. It is my belief that the property should be capable of producing at least 500 tons per year. There are so many factors involved in any estimate and such limited data to base figures on that the 500 tons per year is not much more than a guess, but seems within reasonable attainment, and may by intensive development and operation greatly exceed this amount.

The work on this property has all been done by hand drilling and chiefly as assessment, hence the limited production. The percentage of No. 3 crude asbestos is larger in this property than in any of the others. The problem of mining a 20 to 25 foot thickness of rock presents no serious difficulties if properly directed and engineered.

PUEBLO ASBESTOS GROUP

The Pueblo Group consists of 14 claims on the east slope of Center Mountain. They are reached by 5 miles of trail, from the end of a three mile mine road which starts east from the Globe-Pleasant Valley highway at a point 55 miles northerly from Globe. The first three miles of mine road can be made by car. The trail is made by horseback and the asbestos and supplies are packed in by burro.

A mine road for cars and trucks can be made direct to the camp on the Pueblo Group at comparatively low cost. With the exception of two or three short stretches each of from 100 to 200 feet in length the road making can be done by bulldozer. The short stretches mentioned will call for rock work with drilling and blasting. Proper grades can be established for hauling heavy loads. The first 3½ miles of trail to the summit of a saddle can be easily made and the rock cuts will be on balance of 1½ miles to camp. Center Mountain which is a quartzite mesa has an elevation of 7600 feet and the main workings of the Pueblo claims are at about 6500 feet elevation.

Title to the claims is held by Roger Q. Kyle of Globe and records of location are on file in the Gila County Recorder's Office at Globe, Arizona. A map is available showing the relative location of the claims.

PRODUCTION The production from this group as reported by the owner, Roger Q. Kyle, is in excess of 300 tons, of which 25 per cent was No. 1 crude and 75

per cent No. 2 crude. Of the 25 per cent of No. 1 crude at least 50 per cent was three inch fiber. The reject containing the No. 3 crude went as waste - along with some No. 2 crude due to the costly burro pack to the main road.

ORE OCCURRENCE The asbestos zone occurs in the mescal limestone just above the contact with the underlying diabase sill. The contact of the diabase and the limestone occurs on 11 of the claims. The total length of the exposure on the claims is about 7000 feet. Three of the claims are located off of the contact with their end lines adjoining so as to cover approximately 3000 feet along the dip of the ore horizon. The balance of the claims are located with side lines adjoining so that each claim covers 600 feet on the outcrop and 1300 feet on the dip, allowing 200 feet for dump.

There are three zones in the limestone in which the asbestos occurs. Most of the development and production has been on the lower zone. This consists of four strata, the lower one being from six to eight feet above the underlying diabase and the other three at intervals of from three to five feet above. The middle zone is about 150 feet above the lower zone and is partially developed by three tunnels. The third or upper zone is 50 feet above the middle and has had only a small amount of work done on it.

On No. 9 claim most of the mining and development occur. Here an irregular tunnel and stope extend 305 feet into the hillside from the outcrop. Three of the ore bearing strata in the lower zone have been worked from this tunnel. Other tunnels are located on No. 7 which is in about 90 feet; on No. 8 is a 30 foot tunnel and on No. 11 a 95 foot tunnel. All of these with the exception of the tunnel on No. 11 are in ore. The No. 11 tunnel is a development tunnel, driven through slide rock and soil in order to get into solid lime at a point near the diabase contact.

On No. 10 and No. 11 claims is a quarry cut, about 800 feet in length and showing three of the lower strata.

Several dikes of diabase cut across the bedding of the limestone, which dips at from 5 to 10 degrees from the horizontal into the mesa. The major diabase dike is located near the common side line between No. 6 and No. 7 claim. Near the diabase dikes the occurrence of higher grade asbestos in the various strata is characteristic of this and the other mines.

At no place on the exposures of the various serpentine strata has the asbestos pinched out. The serpentine strata vary from 6 inches to three feet in thickness. The asbestos occurs in gash veinlets from knife blade thickness up to fiber lengths of three and four inches. The asbestos is usually concentrated in zones within the serpentine of from two to three inches in width which make hand cobbing of the serpentine effective.

The continuity of the asbestos cannot be definitely established due to the large area and the limited amount of development. The various zones, however, can be traced over the entire distance of the outcrop.

The Pueblo Group are located on the east side of the terraced area below Center Mountain Mesa. On the south side of the mesa, a distance of about 7500 feet from the Pueblo group is the Reynold Falls (Buffalo Asbestos) Group of claims. On the Reynolds Falls the diabase and the lower zone of asbestos production are at about the same elevation as on the Pueblo. Both contacts on the two groups show such persistance in length and continuity that it is reasonable to assume that at least the serpentinized zone will be continuous between the two groups.

The prospective area thus is large and as developments proceed it may be advisable to locate additional claims, ending lining the present claims of the Pueblo group so as to cover the entire intervening area between the two groups.

From the limited amount of development it is impossible to estimate the probable tonnage which can be produced from this group. There undoubtedly will be some areas which will not be profitable to mine. Present developments and exposures do not show these, however, and, as in the other properties covered in this report, any estimate based on the average thickness of asbestos exposed by the development if applied to the entire area covering the serpentinized zone would show such fantastic figures as to probable tonnage that they would justly be incredible.

OPERATION The development of this property has been carried on from the returns obtained from asbestos produced and little or no outside capital has been spent. Hence the work has been limited to the readily accessible productive areas and no preparatory work or development work has been done. It is only within the past few months that any exploration work has been carried forward and that has been done on the 95 foot tunnel on the No. 11 claim. Throughout the entire district work has been limited to taking out ore from readily accessible and productive areas.

PROBABLE PRODUCTION In the exposed workings the average amount of fiber in each one of the four strata of the lower zone will be from 1/2 to 3/4 inch. In the four strata the total would be from two to three inch of fiber in each square surface of area. This will call for the removal or excavation of 18 to 20 cubic feet of rock for each square foot of asbestos two to three inches in thickness. It calls for the excavation of approximately 90 tons of rock for each ton of asbestos produced. With in excess of 3600 feet of outcrop of probable productive area an annual production of 1000 tons asbestos, of all three grades, seems well within reason and attainable by proper equipment, preparation and development of the property. This calls for the excavation of about 300 tons of rock per day. As development proceeds this production may be increased several fold if the continuity persists, as is indicated by the present showings.

GENERAL OPERATING CONDITIONS The operating conditions are favorable for year around work. Water is available for domestic and mine work from numerous springs and it is stated that their flow is continuous. Timber for mine use is abundant on the property. There are at present five camp buildings, which would serve

for preliminary work but increased camp facilities would be necessary in order to step production up to the 1000 tons per year basis.

The road and trail are inadequate for enlarged operations. The cost of construction of a good road to the property would not be excessive and survey should be made for a road which would follow along the contact of the diabase and lime which would not only provide good operating facilities but would be productive of an appreciable tonnage of asbestos and would be a valuable piece of surface development of prospective ground.

A report by Smith-Emery Company, Chemists and Engineers, of 920 Santee Street, Los Angeles, California, field work by W. C. Bass, engineer, in July 1932, was submitted to me and checked on the ground. It has been found substantially correct in its details and repetition of the facts mentioned in the report are not deemed necessary in this statement.

SLOAN CREEK GROUP

The Sloan Creek Group of claims have been examined and accurately reported on by Dr. Eldred D. Wilson, Geologist, of the Arizona Bureau of Mines, on pages 73 to 76 of Bulletin No. 126, Asbestos Deposits of Arizona, published in 1929 by the Arizona Bureau of Mines, Tucson, Arizona. A copy of the Bulletin is available and repition of facts contained therein are not deemed necessary.

A report by Julius Sanchez, Mining Engineer, who at one time operated the property was made in May 1921 and has been checked on the property, and the statement of facts contained in the report have been found correct and accurate.

ORE OCCURRENCES The area covered by the 12 claims making up the Sloan Group may be considered as three distinct mesas, formed by the erosion of Sloan Creek. On the north portion of the group Sloan Creek runs east and west along the common end lines of the American Beauty and the Turkey Track claims to the north and the Mitt and Bluejay claims to the south. Cloan Creek then flows south along the east side line of the Bluejay claim and the east endlines of the Jackrabbit and Asbestos Springs claims. On the east side of Sloan Creek are the Last Chance, Aileen, Cowboy, and Diabase claims whose west end lines are common with the side line of the Bluejay and the end lines of the Jackrabbit and Asbestos Springs. We may thus consider the three mesas as the North mesa which is made up of the American Beauty and the Turkey Track Claims, the West mesa, consisting of the Mitt, Bluejay, Manzanita, Jackrabbit, and Asbestos Springs claims and the East mesa covered by the Last Chance, Aileen, Cowboy, and Diabase claims. The other claim, known as the Turkey Track Campsite has been located for camp purposes.

The mesas are comparatively low and are from 75 to 125 feet above the bottom of Sloan Creek. Sloan Creek has cut through the limestone and into the underlying diabase and has left exposed on the side of the canyons the diabase contact and the various ores zones. The bedding planes of the limestones are practically level and the surface of the southern end of the east and west mesas have been eroded so that the surface of the mesas have a gentle slope to the south.

Three distinct ore bearing or serpentinized zones have been exposed on the terraced sides of the canyon. The lower zone is from two to five feet above the underlying diabase sill; the middle zone is 12 to 15 feet above the lower zone and the upper zone is about 30 feet above the middle zone.

The major part of the development has been done on the middle zone which has three well defined asbestos bearing strata. These strata are from three to four feet apart and vary from 6 to 18 inches in thickness with layers or veins of asbestos fiber irregularly distributed through the serpentinized limestone replacements. The asbestos ranges from gash veins of knife blade thickness to fibers of three and four inches in length as shown on the Cowboy claim.

Only a limited amount of development work has been done on the lower and upper zone but both of these zones are shown in numerous shallow opencuts.

On the north mesa are eight tunnels, in the middle zone, from 30 to 100 feet in length. On the west mesa there are four major tunnels, the longest being 150 feet in length, near the northern end. An opencut on the surface about the center of the Jackrabbit claim shows the serpentine exposure of the upper zone carrying asbestos. This is shown by an open pit and trench and is exposed on the surface due to the fact that the surface has been eroded in a gentle slope toward the south end of the mesa. The middle zone is opened by two short tunnels at the southern end on the Asbestos Springs claim. The open pit and trench on the middle of the Jackrabbit claim has significance in showing the continuity of the serpentine zones carrying asbestos.

The east mesa has had the major development with nine tunnels on the west terraced slope, two tunnels on the south and two tunnels and a long open quarry cut on the east end of the Cowboy claim. The major part of this work is on the middle zone.

On this group of claims there is approximately 9000 feet in length of outcrop on the middle zone alone exposed. The location of the tunnels show a wide and fairly uniform distribution of asbestos bearing serpentinized strata. An average expected yield per square foot of surface is most impossible. At one point on the Cowboy claim, on a quarry cut, 6 x 18 feet, a production of 5200 pounds of three to four inches high-grade silky fibre asbestos was produced.

From the middle zone alone, on the east mesa, which is the portion on which the major development has been performed, an average length of fiber in the faces exposed will show from one inch to one and one-half inch. To recover this fiber an excavation of approximately nine cubic feet of rock for each square foot of asbestos one inch to one and one-half inch in thickness. This calls for approximately 72 to 50 tons of rock to be moved or excavated for each ton of asbestos production.

Whether or not the average thus exposed in the present workings will be maintained and persist throughout the entire area is of course problematic.

The production from the Sloan Creek Group has been 525 tons of asbestos. Of this 20 per cent has been No. 1 crude; 50 per cent No. 2 crude and the balance 30 per cent made up of No. 3 and No. 4. The bonanza found on the quarry cut on the Cowboy claim so influenced this average that it cannot be considered an average expectancy. It indicated, however, that on this group a large percentage of No. 1 and No. 2 may be expected in general operations.

PRODUCTION With 9000 feet of outcrop exposed and readily accessible with a minimum amount of work this property should be able to reach a production of 2000 tons of asbestos per year at a minimum expense. If the continuity persists, as indicated, this yearly tonnage could be increased several fold, and maintained for many years to come.

This group can be easily put into large scale operation. The topography is gentle and the entire outcrop can be opened up by surface or quarry cuts so as to provide truck access to all parts of the outcrop and in making the cut a valuable piece of development work will be accomplished and a sizable production of asbestos made at the same time. The bed of the open cut will serve as a road. From indication it is very probable that other bonanza or high-grade sections will be exposed by such work and form starting points for early good sized production.

With the entire outcrop opened up working places would be provided for a large number of efficient and productive starting points for production.

Operating conditions are ideal. Timber is available nearby, water is ample for both domestic and mining use, hauling will be over good roads and climate conditions most favorable.

KYLE ASBESTOS MILL

The Kyle Asbestos Mill is located on a 5-acre mill site claim, about 1/2 mile from the business district of Globe, on a side hill which affords gravity flow for handling the products. The mill building is 20 x 40 feet, of framed timber construction with corrugated iron siding and roof. At the foot of the mill is a warehouse 50 x 80 feet, of steel framing with corrugated iron siding and roof and a cement floor.

The flow sheet consists of a crude ore bin for storage, with road so that ore trucks can dump direct into the bin; a 5 x 10 inch Dodge Jaw Crusher set to break to 1½ inch size; a set of El Paso Mine and Smelter Supply Co. rolls 20 x 12 inch set at 1/2 inch and followed by a similar set of rolls set at 1/16 inch; the product from the second set of rolls feeds direct to an impact screen with three screening areas, each 30 x 60 inches, which discharge into floor bins giving four products.

The first screen is 3/16 inch mesh which separates out a product called no. 4 or a middling product which must be retreated; the second screen area has a 1/4 inch screen which gives the No. 3 crude; the last screen area has a 5/8 inch screen through which the No. 2 crude passes and the oversize from this screen passes over the end and gives the No. 1 crude.

The No. 1, 2 and 3 crudes are free from serpentine, rock and dust. The No. 4 contains the fine fibers of asbestos, the crushed serpentine, other rock and dust and is conveyed to a bin which feeds direct to a swing hammer Grundler, which rotates at 3600 RPM by a direct drive motor. The discharge from the Grundler is picked up by a No. 5 exhauster and feed to a cyclone separator which discharges the air; the solid discharge from the cyclone goes to another impact screen fitted with a 20 mesh screen 30 inches wide which separates the fiberized fiber and the ground waste material. The fiberized fiber product, called No. 4 meets the Canadian screen standard 0-0-14-2 which on a pound sample shows nothing on a 1/2 inch screen, nothing on a 1/4 inch screen, 14 ounces on a 1/8 inch screen and 2 ounces through the 1/8 inch screen.

The mill is electrically driven throughout and has a capacity of 20 tons of feed per eight hour shift. Mr. Kyle claims that by replacing the present crusher with a 10 x 12 inch crusher the mill capacity can be stepped up to 100 tons of feed per 24 hour running. Automatic sacking equipment should also be added.

This mill is claimed to be the first mechanical cobbing and segregating mill and is covered by U. S. Patent No. 1790429, "Cleaning, Classifying and Grading Apparatus for Asbestos and Other Minerals". Application for patent was made in 1928 and the patent granted in 1931. The development of this process was started in 1922 by Mr. Kyle when the ore was crushed by hammer and then screened. The results obtained were such that it was decided to screen mechanically. The first mill was constructed in 1923 with jaw crusher, rolls and mechanical screening and the fiberizing of the No. 4 product followed in the same year.

From the first hand screening Mr. Kyle was able to establish a No. 3 crude which was the fiber passing through a 1/4 inch screen and contained the fiber which was too short to hand cob and gave a product free from waste. The first No. 3 crude was sold to Emsco Asbestos Company in 1922 and a new grade of asbestos was established.

Mechanically cobbed fiber is accepted by all spinners and manufacturers of asbestos products and complies with the Canadian standards. In hand cobbing the costs were formerly $4 per 100 pounds of No. 2 crude. This made the cobbing cost $80 per ton. With the mechanical cobbing the costs have been reduced to $5 per ton. In addition to this reduction in cost the process established the No. 3 crude grade. In hand cobbing about 10 per cent of the No. 2 was lost in the reject, due to the fiber adhering to the waste rock and this is now recoverable. A market has also been developed for the No. 4 or fiberized fiber. In a number of the Arizona mines the No. 3 and No. 4 grades combined should amount to two to three times the combined amount of No. 1 and No. 2 production.

The process has made it possible to handle ore zones at a profit where the percentage of No. 1 and No. 2 products were so low that they were not considered commercial. It permits the working of larger areas and the development of ore zones at low cost. In addition there is an appreciable production of fiberized fiber which is not plainly visible in the serpentine. Some of the dumps are being tested for recovery of asbestos in the former rejects.

GENERAL COMMENTS

GRADE OF ASBESTOS The asbestos produced from the Miami Group showed about 60 per cent of the product in No. 1 and No. 2 crude and 40 per cent in No. 3 crude and fiberized fiber.

The Pueblo Group produced only No. 1 and No. 2 crude, due to the fact that the long burro pack was too costly to ship the No. 3 and No. 4 crude, which went into the dump. The No. 1 crude was 25 per cent of the production and the No. 2 was 75 per cent.

It is estimated that with proper handling facilities the production from this group will be about 10 per cent No. 1 crude, 40 per cent No. 2 crude and 50 per cent No. 3 and No. 4. The increase in percentage of No. 2 will be accounted for by the recovery of a larger amount of No. 2 which formerly adhered to rock particles and was rejected and also a separation of the No. 3 which would furnish some additional No. 2.

The production of the Sloan Creek Group will be about the same as on the Pueblo.

NO. 4 FIBERIZED FIBER There is a field for the use of No. 4 fiberized fiber which should be further developed on the Pacific Coast. This is a b y-product coming from the cleaning and separation of the three standard grades and is one which will show a profit and enable larger production and the handling of lower grade ore. Intensive work on the development of a market is recommended.

PRODUCTION The Sloan Creek property offers the best opportunity to start to step up production, on a large scale and at a minimum cost. Next in line is the Pueblo group. The amount of capital available will determine the speed at which the 3000 tons or more per year production can be reached. Operations can be started on a modest scale, but it will take a longer time to reach the maximum production.

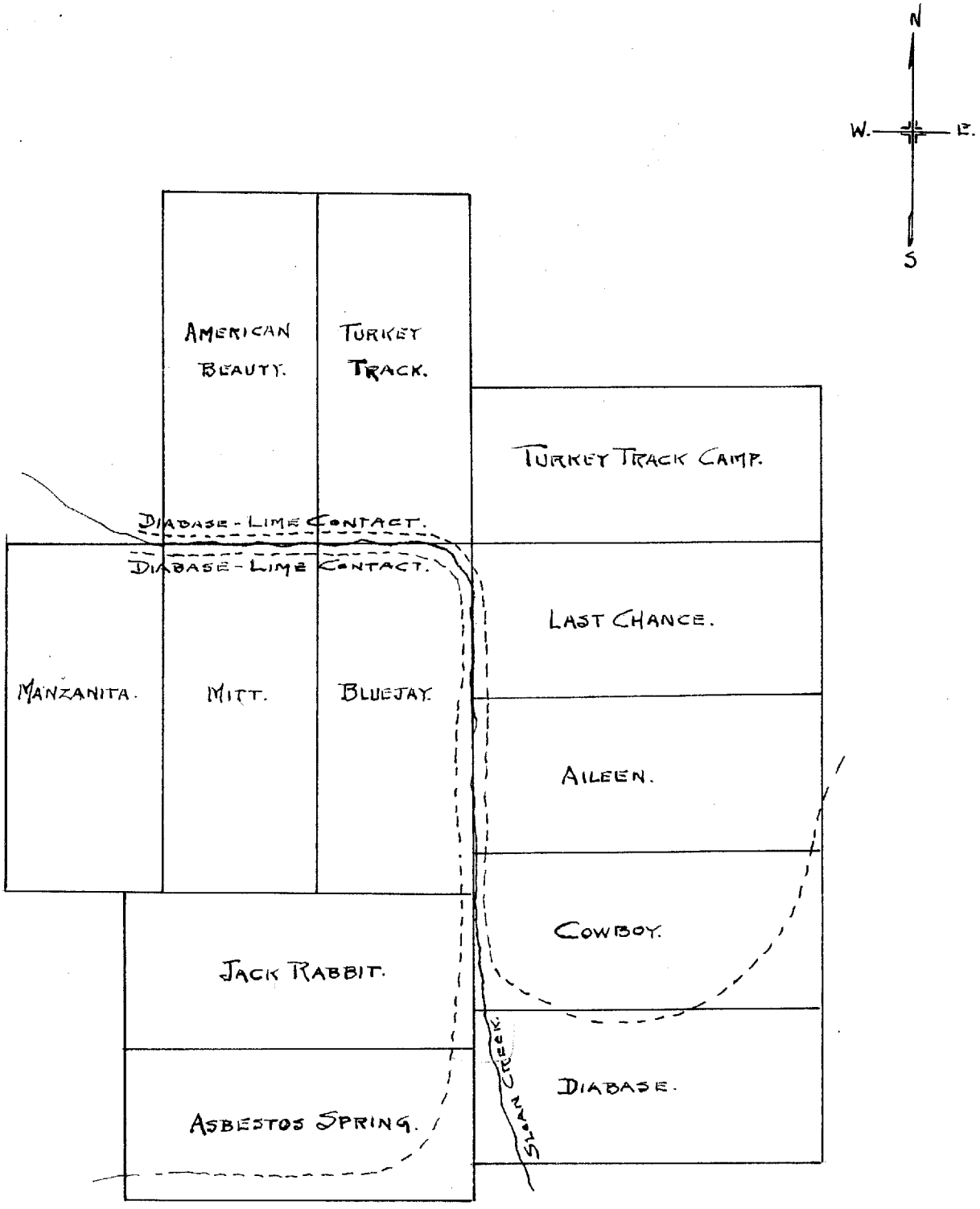
Proper engineering, planning and operation are essential to the maximum production. Ample labor is available for skilled miners from the Miami and other large mining districts.

Respectfully submitted

/s/ J. S. Coupal

By J. S. Coupal, Mining Engineer

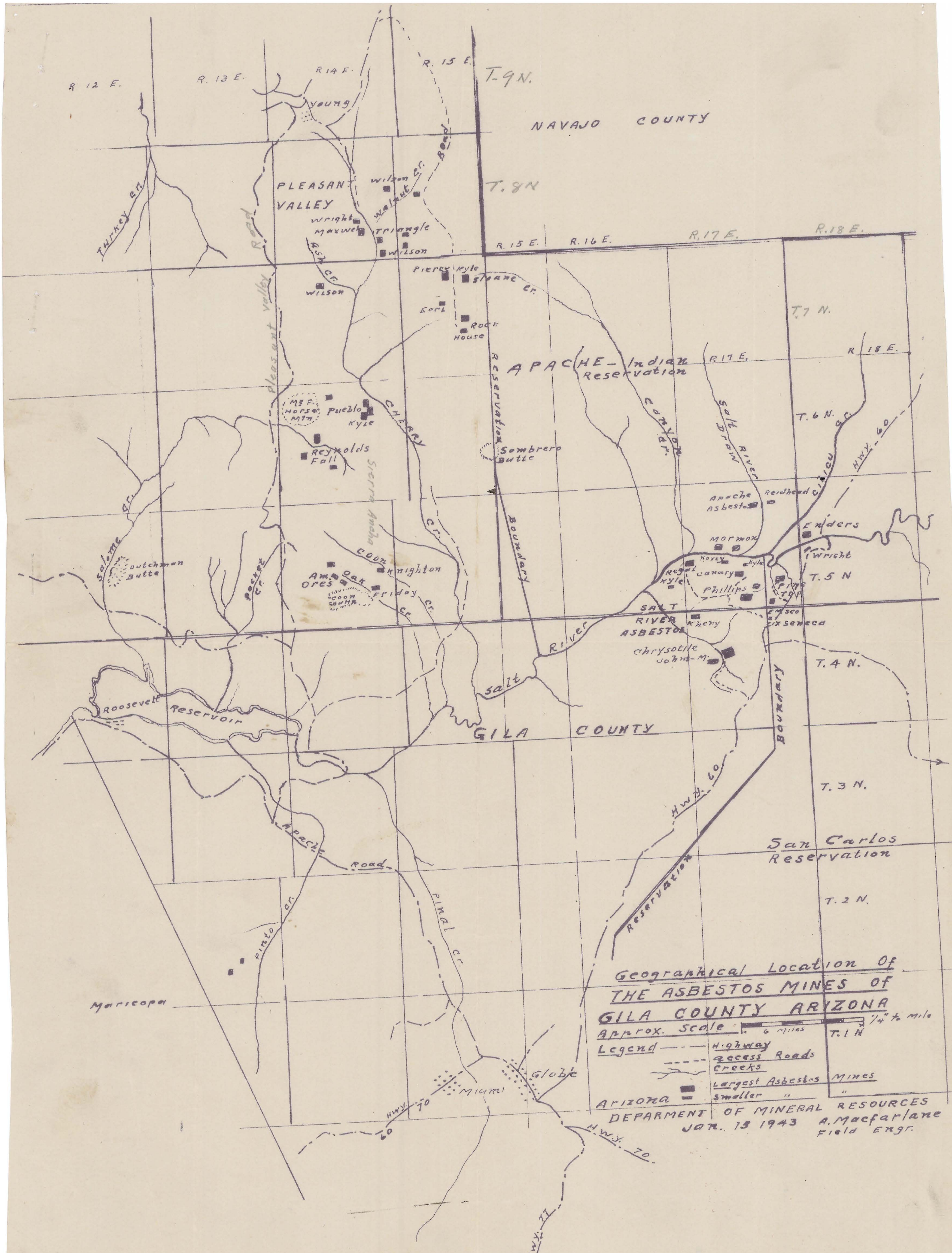
Phoenix, Arizona
July 9, 1941



CLAIM MAP.

SLOAN CREEK GROUP.

SCALE 1" = 600 ft.



R. 12 E.
R. 13 E.
R 14 E.
R. 15 E.
T. 9 N.
NAVAJO COUNTY
Young
Turkey cr.
PLEASANT VALLEY
Pleasant Valley Road
Wilson
Wilson cr.
Walnut cr. Road
Wright
Maxwell
Triangle
Wilson
Ash cr.
T. 8 N
R. 15 E.
R. 16 E.
R. 17 E.
R. 18 E.
Pierce
Kyle
Sloane cr.
Wilson
Earl
Rock House
T. 7 N.
APACHE-Indian Reservation
R 17 E.
R 18 E.
Reservation Boundary
Canyon cr.
Salt Draw
Salt River
T. 6 N.
Cibicu cr.
HWY. 60
Mt F. Horse Mtn
Pueblo
Kyle
CHERRY cr.
Reynolds
Fall
Sierra Ancha
Sombrero Butte
Apache Asbestos
Reidhead
Enders
Mormon
Wright
Salome cr.
Dutchman Butte
Pocket cr.
Coon cr.
Knighton
Am. Ores
Oak
Coon Butte
Friday
Cr.
Moxey
Kyle
Regal
Kyle
Canary
Phillips
Pine Top
T. 5 N
SALT RIVER ASBESTOS
Emsco
Khery
Seneca
Chrysotile
Johns-M.
River
Salt
T. 4 N.
Roosevelt Reservoir
GILA COUNTY
Boundary
Hwy. 60
T. 3 N.
Apache Road
Pinal cr.
San Carlos Reservation
Reservation
T. 2 N.
Pinto cr.
Maricopa
Geographical Location Of
THE ASBESTOS MINES Of
GILA COUNTY ARIZONA
Approx. Scale
6 Miles
1/4" to mile
T. 1 N
Legend
Highway
access Roads
Creeks
Largest Asbestos Mines
Smaller "
Globe
Miami
HWY. 70
60
Arizona
DEPARMENT OF MINERAL RESOURCES
Jan. 13 1943
A. Macfarlane
Field Engr.
H.W.Y. 70
HWY. 77