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02/12/91

ARIZONA DEPARTMENT OF MINES AND MINERAL RESOURCES FILE DATA

PRIMARY NAME: DENISON MINE

ALTERNATE NAMES:

MISS LOTTIE CLAIMS MS 4462  
D&W CLAIMS MS 4462  
ALVIS F DENISON  
BVD CLAIMS MS 4483

COCONINO COUNTY MILS NUMBER: 443B

LOCATION: TOWNSHIP 11 N RANGE 14 E SECTION 14 QUARTER C  
LATITUDE: N 34DEG 20MIN 26SEC LONGITUDE: W 110DEG 49MIN 19SEC  
TOPO MAP NAME: WOODS CANYON - 15 MIN

CURRENT STATUS: PAST PRODUCER

COMMODITY:

MANGANESE

BIBLIOGRAPHY:

BLM MINING DISTRICT SHEETS 159 & 170  
ADMMR DENNISON GROUP FILE  
FARNHAM, L., & STEWART, L., USBM IC 7843,  
P. 11

Republic  
6-14-1964

✓  
DENNISON (file)

COCONINO COUNTY  
HEBER DIST.

✓  
See: "MANGANESE DEPOSITS OF WESTERN ARIZ."  
USBM - I. C. 7843 (1958)

✓  
ALVIS F. DENISON, Box 91, Heber, Ariz.  
(On GSA Mn Shippers list. 7-24-58)

*Temporary*  
1275 8th St. S.W. - Albuquerque, N.M.

E&MJ 3/1966

# DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

## FIELD ENGINEERS REPORT

Mine Alvis F. Denison Mine & Mill

Date December 2, 1958

District Heber, Coconino Co.

Engineer Travis P. Lane

Subject: Visit -10-31-58

Property: 52 patented claims, 2 patented mill sites, and 19 claims for which patents have been applied for. The principal manganese showings on the claims cover parts of Sections 17, 18, 19 and 20, T. 11 N., R. 15 E. The most important workings and the mill are approximately 17 miles west of Heber. The Young-Heber road passes through a portion of the property.

Heber, Arizona,

Owner: Alvis S. Denison, As sole proprietor. His manganese operations in the area began in 1950.

Mr. Denison prevailed in 1957 in his dispute with the Forest Service which had contested his application (made in 1953) for patent of 52 mining claims and 2 mill sites. Mr. Dennison has applied for patent on 19 additional claims. He anticipates opposition by the Forest Service but feels confident these patents also will eventually be granted.

The writer visited the property on October 31, 1958 and discussed the operations with Mr. Alvis Denison. A 200 TPD mill was constructed last year and at the time of the visit was operating at capacity. Concentrate shipments are averaging  $2\frac{1}{2}$  cars per month 45% Mn concentrate. The concentrates are shipped to the Government Carlot buying station at Fort Worth, Texas.

The manganese oxide of the district occurs as sporadic fragments and masses in a thin mantle of clayey soil overlying gently dipping Coconino sandstone. Until construction of the mill Mr. Denison's crude shipments were derived from sorting of material mined from scores of widely scattered shallow pits and cuts. The mill made possible the handling of low grade material. While no definite pattern of the occurrences has been proved, some irregular continuity has been recognized in trends of narrow bands of fractures. For most of the past year mining has been done by a tractor-mounted back hoe following fracture bands and offshoots from them. Mining depth is quite shallow with maximum about 16 feet.

The mill equipment consists of an 18" Ken-Ken crusher from which a  $\frac{1}{2}$ " product is jigged in a Pan American jig, a Denver Equipment jig, and a 4 - compartment Hartz jig.

Ten men are employed.

# DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

## FIELD ENGINEERS REPORT

Mine Denison Manganese Date Sept. 7, 1960  
District Heber, Coconino Co. Engineer Travis P. Lane  
Subject: Examination - Sept. 1-2, 1960

The captioned property was first visited by the writer on Oct. 31, 1958 and the findings covered in a Department of Mineral Resources report dated Dec. 2, 1958. At the time, Mr. Alvis Denison, proprietor, had recently been granted patents on a large number of manganese lode claims in an area centered about his camp and mill; and he had applied for patents on other adjoining claims.

At the time of this visit (Sept. 1-2, 1960) the number of Denison patented claims totaled 57 and application for patent for 16 additional claims was in process. The Forest Service however is vigorously contesting the validity of these claims principally on the grounds that the deposit is placer rather than lode. These 16 claims border on or are interspersed among the existing patented claims the whole making a more or less solid block of claims with similar rock formation and manganese mineralization. While many of the patents granted to date were contested by the Forest Service it is interesting to note that there was no questioning of the validity of any of the claims because of their being located as lodes instead of placers.

The recent visit was made at the behest of J. H. Morgan, Attorney for Alvis Denison for the purpose of determining the proper classification of the manganese deposits - i.e. whether lode or placer. I drove to Denison's camp on Sept. 1, arriving about noon. Mr. Morgan was a passenger in my auto. We spent the afternoon and the major part of the next day at the property returning to Phoenix in the late afternoon of Sept. 2. We were guests of Mr. Denison at his camp during our stay.

The claims under consideration for patent are covered by Mineral Surveys Nos. 4462, 4463, and 4483. The respective claims are as follows:

M.S. No. 4462:      Miss Lottie No. 4  
                             "        "        No. 5  
                             "        "        No. 6  
                             D & W No. 4  
                             "        No. 5  
                             "        No. 6

M. S. No. 4463:      BVD No. 3  
                             "        No. 4  
                             "        No. 5  
                             Little Pine No. 7  
                             "        "        No. 8  
                             "        "        No. 9  
                             Hillcrest No.23

M.S. No. 4483:      BVD No. 1  
                             "        No. 2  
                             Hillcrest No.22

I visited each of the above claims in the company of Alvis Denison and his son William, and Mr. Morgan; and inspected exposures of formation and manganese mineralization in a large number of pits, trenches and holes, and several shafts on the claims. Most of

these openings were cleared of water and in most of them at least two walls were sufficiently clean to readily view the formation and the mode of ore occurrence. I also inspected a number of openings on patented claims adjoining the claims in question. Following is a description of the more important work places visited:

On the C & D claim No. 11 (patented) past mining operations have opened a pit some 100,000 square feet in areal extent and about 8 feet deep with however much of the floor made up of back fill. The mining method here as elsewhere on the property has been to strip off the thin mantle of overburden and then to mine the generally narrow vertical manganese stringers or groupings of stringers (veins) by means of a tractor-mounted back-hoe. A considerable number of veins was mined in this pit. The veins had a more or less parallel strike and were mined to a maximum depth of 16 feet. In order to mine to this depth the upper wall material of the hoe trenches was removed by dozer and backfilled in the pit as mining progressed.

The Miss Lottie No. 5 claim adjoins the northwest end line of the above C & D No. 11 claim and judging from the exposures in openings in the Miss Lottie No. 5 claim near the common end line the manganese mineralization extends into this as yet undeveloped claim. The shallow openings on Miss Lottie No. 5 as well as in several cuts and trenches on Miss Lottie No. 6 (west of No. 5) and Miss Lottie No. 4 (east of No. 5) show compacted clay and weathered sandstone in place with some of the cuts showing a good sprinkling of manganese in the ends and also in the dumps.

- D & W No. 3 claim: A narrow trench 20' long by 8' deep has been made on a stringer of manganese and a short distance beyond one end of the trench a shaft has been put down 55'. The shaft is sunk on a stringer of manganese and at 48' a drift had followed it for 16' and two men were continuing with the work at the time of visit. The stringer could be seen cutting 2 firm layers of sandstone just above the start of the drift and there were pieces of chert on the dump along with soft sandstone and clay.
- D & W No. 4: A trench 12' long and about 5' deep has been opened on the southwest half of the claim. There was water in the bottom and the banks were sloughed. The trench was apparently dug longitudinal with a vein and the dump showed a considerable amount of manganese with broken sandstone rock and some chert and clay. Some 75' north of this trench a cut 10' long by 5' wide by 4' deep showed a 6' vertical band of manganese mineralization in a formation in place composed of bedded hard and soft sandstone, clay and some chert. A similar showing is visible in a nearby trench in a clay and sandstone formation.
- D & W No. 5: A cut 12' long, 10' deep and about 10' wide exposed a narrow vertical vein of manganese cutting alternate beds of clay, hard and soft sandstone and thin layer of chert. The soil overburden here was about 4' deep.
- BVD No. 3 Claim: Near the east end of the claim a cut and fill area along new highway construction shows much manganese in the fill material. The fill has covered exposures stated to show good manganese interbedded with sandstone. Mr. Denison has a photograph (taken before filling) supporting this statement.
- BVD No. 4: Shallow holes No. 1, 2 & 3 in the northwest portion of the claim showed hard and some fractured sandstone with manganese, all in place. Holes 6, 7 and several others showed manganese on the dump along with both hard and fractured sandstone chunks.

- A crosscut trench 45' long near the southeast corner of the claim intersects an 18" vein of manganese in its eastern end. This is at the top of inclined strata of hard sandstone which is exposed for the full length of the trench. In the same trench and some 10' west from the above showing a 24" wide vertical band of manganese mineralization is intersected in the hard sandstone. The west end of the cut was discontinued in sandstone which was too hard to dig mechanically.
- BVD No. 5: No. 6 trench in the northeast portion of the claim is 12' long, about 6' wide, and about 10' deep and shows the formation in place composed of hard and soft weathered sandstone with a vertical 10 to 12" vein of manganese clearly visible in each end of the trench. Two nearby holes expose a similar vein (possibly the same vein) in the same sort of formation. Also, near here, hole No. 1 is 9' deep and very clearly shows in the north wall a vertical vein of manganese mineralization 18" to 24" wide in fractured sandstone.
  - Little Pine No. 7 Claim: Trench No. 9 and several nearby trenches show manganese stringers, hard and soft sandstone, and clay in place.
  - Little Pine No. 8 : Cut No. 4 is 15' by 7' wide by 8' deep and shows a vertical vein of manganese about 3' wide in the west wall in a formation of hard and soft sandstone with some clay. No. 7 trench with about the same dimensions shows several thin vertical stringers of manganese in hard sandstone. A cut 8' x 4' x 3' deep shows a 4" to 6" stringer in sandstone.
  - Little Pine No. 9: Manganese in sandstone in place is visible in a number of cuts and trenches and holes in the northeasterly portion of this claim.
  - Hillcrest No. 23 claim: The west bank of the new highway cut exposes beds of hard sandstone with considerable interbedded manganese for a length of 60'. The manganese occurrence here is said to be similar to that which is covered by fill on the east end of the adjoining BVD claim No. 3 (noted above).
  - BVD No. 1 Claim: An 80' dozer cut has been made along a hillside on this claim. The material in the cut is hard and soft sandstone with a surface cover of hard sandstone containing some lime. A vein of manganese is exposed in the bank of the cut extending from the floor to just beneath the hard sandstone cover. At the top the manganese is about 6' wide and it narrows to 8" in the bottom of the cut. On the hill above and about 100' north of the dozer cut a series of shallow trenches expose a manganese vein varying from 8" to 20" wide for a discernable length of 100'. A hole near the top of the hill shows a 15" vertical vein of manganese in a soft sandstone formation. Delineation between the vein and the enclosing rocks in this hole and in the trenches is quite sharp.
  - BVD No. 2: A number of shallow cuts on a hillside show narrow vertical stringers up to 20" in width in firm and soft weathered sandstone in place. A 12' shaft near the north side line of the claim some 500' from the northwest corner shows a grouping of stringers of manganese with overall width of 18 to 20". Continuity of the vein is indicated in other openings/a distance of 125' from the shaft where cut No. 4 shows 30" of manganese mineralization.

, Hillcrest No. 22: A large manganese bearing area in the southeasterly portion of this claim is indicated in a cut 50' long by 8' wide and averaging 3 to 4' deep, and in several nearby cuts. The manganese occurs in stringers and as chunks and boulders in hard sandstone in place. The dump contains much manganese and many scattered large pieces have been strewn about the rims of the openings. The manganese here contains much more silica than in other parts of the property.

#### CONCLUSIONS:

The country rock in which the Denison manganese deposits occur is primarily sandstone with some interbedding of chert and compacted clay. Layers of fractured sandstone are common and much of the sandstone near the surface is disintegrated to a soft rock and even to sand by weathering. The manganese mineralization is wide-spread over the area occurring largely as vertical stringers and narrow veins and also occasionally as interbeds between layers of country rock.

In no place did I see evidence that the manganese or its enclosing material had been transported for any distance from its source by water, wind, slide or other natural action. Movements of this sort are the general characteristic of placer deposits. By contrast the manganese mineralization here occurs either in vein form with continuity along strike, with steep or vertical attitude and with distinct separation of the vein material from the enclosing rock; or, less frequently, the occurrence is in beds embraced within the mass of the bedded country rock. In places the vertical veins are seen to pass through alternate differing layers of material, i.e. hard, soft or broken sandstone, compacted clay beds, and thin layers of chert.

An exception to the common type of placer with the characteristics noted above would be a "residual" placer which is one derived from weathering of rock in situ. In this instance however while weathering is present (as in the cappings of most vein deposits) the vein-form of the deposits with valuable mineralization confined within certain wall limits and bordered by barren material, effectively rules out the designation residual placer.

The distinction between lode and placer has been a subject of continuing controversy since Congress passed the Mining Act of 1872, which is the basis of our present day mining law. Innumerable interpretations of the definition of "lodes" or "veins" have been made in court decisions. One which seems apt in this situation is noted at page 645 of the Pacific Reporter to wit: (excerpts, with underlining by the writer) "And, when this act speaks of veins or lodes in place, it means such as lie in a fixed position in the general mass of the country rock or in the general mass of the mountain ..." -- "and then I want to say that by 'rock in place' I do not mean merely hard rock, merely hard quartz, but any combination of rock, broken up, mixed with minerals and other things" ... --- "Excluding the waste slide or debris on the surface of the mountain all things in the mass of the mountain are in place."

If validity of the Denison claims can be attacked on the ground that they should have been located as placer claims instead of lode claims then one could with infinitely greater propriety challenge the vast majority of the lode claims which support our multi-billion dollar uranium industry. The uranium producing formations are with few rare exceptions sandstone, limestone, mudstone, siltstone, claystone and plain sand and clay with mineralization in most cases clearly occurring in and along ancient stream channels and in pot holes, washes, buried gullies, and in lake beds.

Year	No. of Mines	ore Grade	Cocorino		Marais	
			L.T. Ore - Tons	Value	Tons	Value
1954	5	29.25	69	\$2705.	\$39/T	<del>None reported MV</del>
		89.12	389	\$29966.	\$77/T	do
1955	?		"Small quantities"	\$5,000?		<del>None reported</del>
1956	?		"Substantial quantity"			Mn, S+G, Coal and silver totalled ± \$77,000 Mn pit. well under 50,000.
1957	"Remison mine + mill"		"Value less than coal. Coal prod. less than 20M. Mn ore was mined, milled & shipped.			" " \$15M?
1958	?		"Value above coal but coal less than in 1957 + 11%. Manganese ore + Conc. produced			" " 20M?

1953 Boyle, Mng. Co. Campbell-Remison + Johnson-Hayden shipped "several hundred tons" ore + conc. L.G.

1952 Produced 47 T Mn<sup>ore</sup> ave. 40.6 Mn.

1951 A.F. Remison shipped Mn ore containing (natural) 52 percent Mn. Total for state was 224 T. Ferruginous 173 T. Met.

~~1944, 9, 50 None reported for state.~~

Year	Tons	Grade	IC 7843	Ferruginous	Met.
1947	62 T	ferruginous	55	118	173
1948	240	"	0	214	214
1949	223	"	0	208	208
1950	222	"	0	198	198

Cocorino shipped part of state

Year	10-35%	+35%
1928	214	3507
1929	45	2655
1930	0	311
1932	0	2630
1943	7989	5160
1944	285	7606
1945	50	975
1946	0	0
State totals	83	

Long Valley region. I.C. 7843. (Est up to '54 4000 T \$300,000)

Period of greatest activity - WWII (Claimed \$70,000 to 1946 from file)

Indicated production up to 1954 totalled ± 3300 T sorted 40% + ± 700 T Conc 32+2%.

Two groups - Remison Manganese Co., and L.E. Shoup.

About 3700 T 40%. Remison to '54 Shoup claimed 600 T to '54

Heber Dist I.C. 7843

Patrick est. ± 600 T. 40-45% up to '54

Record shows Alvin - shipped 87 T - 30% in 1953, of which Patrick claims to have mined last 4 mos '54 D+P - produced about 75 T

Long Valley & Heber probably less than \$500M total. Guess - 460,000



STATE OF ARIZONA  
DEPARTMENT OF MINERAL RESOURCES  
MINERAL BUILDING, FAIRGROUNDS  
PHOENIX, ARIZONA



In the matter of Forest Contest against Alvis Dennison's application to patent certain manganese claims in the vicinity of Heber, Arizona:

. . . . .

The contestant charges separately and collectively that:

- a. A valid discovery of mineral does not exist within the limits of any of the claims
- b. The land embraced within the limits of these claims is non-mineral in character.



ALVIS F. DENISON  
CONTRACTOR

127 ~~SO~~ EIGHTH STREET SW  
ALBUQUERQUE, NEW MEXICO

August 10, 1953

Temp. address:  
P.O.Box 103  
Fort Wingate New Mex

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

ATTENTION MR. R.I.C.MANNING

Dear Mr. Manning:

I am very sorry to have missed you at the mines when you were out there. It will be August 21st before I am out there again. I will be in camp around one in the afternoon--or at least I plan to be there then--and I would be happy to meet you there at that time to go over anything you want to see about.

Let me know at my temporary address if this time is workable for you.

Very truly yours,

*Alvis F. Denison*

Alvis F. Denison

AFD/m

July 21, 1953

MEMO TO ROGER:

Please note attached clipping. This is something the Department should look into for if there are any violations of the forest lands as is indicated by this story, then something should be done about it to see that holders of mining claims stay within their rights. It is just such things as this that are causing the demand for the Hope Bill. The particular group referred to in this clipping should be contacted to show the difference between the D'Ewart Bill and the Hope Bill. The Forest Service is misleading all of these people into endorsing the Hope Bill.

As I have stated before, it is not advisable to go after these people from the point of view that they are all wrong, but to show them what the answer to their problem is in a way which will help the legitimate mine operator and at the same time get rid of those who are abusing their rights. Just because a few people flaunt the laws is no reason why all of the innocent should suffer. The greater amount of bureaucratic regulations we get on mining on public lands, the greater amount the cattlemen and stockmen can expect insofar as they are concerned. In other words, the legislation proposed is the start of bureaucratic regulations which will evidently extend down to minute details and everybody using the public lands.

I will greatly appreciate having a report from you on your contacts with the Arizona Wool Growers Association and the Sitgreaves National Forest Advisory Council. We are facing a tough fight on the subject of future mining on the National Forests and do not want to leave anything undone. We certainly do not want to condone any miner's mis-use of public lands, yet at the same time we do not want to restrict the operations of legitimate developers.

With kindest personal regards, I am

Sincerely,

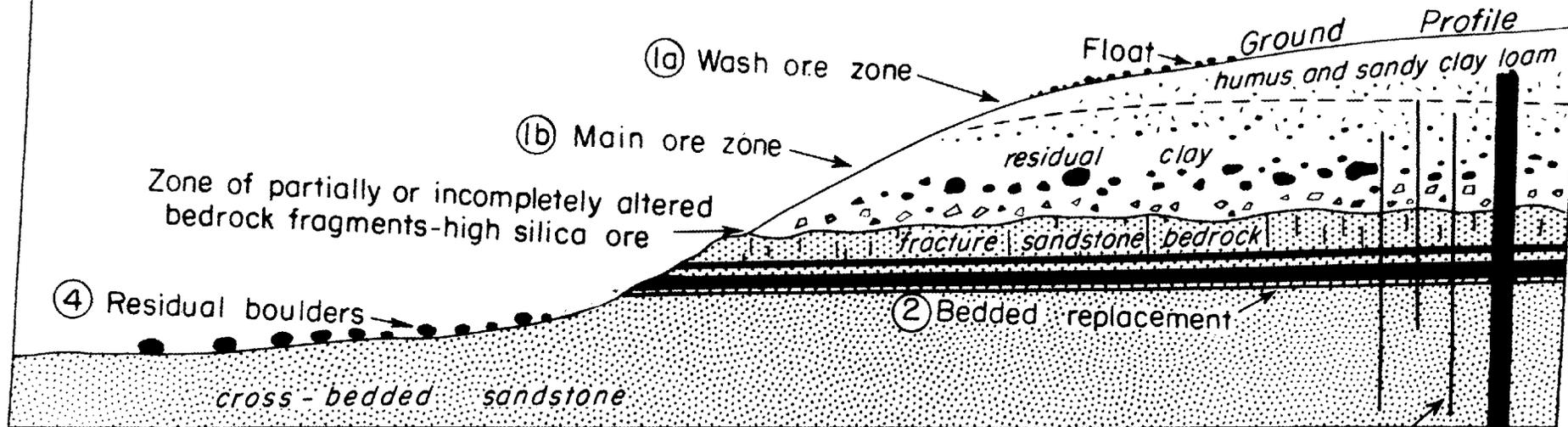
*Charlie*

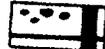
Charles F. Willis

NORTH

SOUTH

Toward Mogollon Rim  
Beds dip 1-2° away from rim



 Ore  
 Sandstone

- Form of deposits
1. Residual mantle
  2. Bedded replacement
  3. Fracture fillings
  4. Residual boulders and float

0 5 10 15 20 FEET  
 Horizontal and vertical scale

C. S. 1953

UNITED STATES

v.

ALVIS F. DENISON ET AL.

A-29884, etc. Decided APR 24 1964

Mining Claims: Discovery--Mining Claims: Determination of Validity

Although a mining claim may have been valid in the past because of a discovery on the claim of a valuable deposit of mineral, the mining claim will lose its validity if the mineral deposit ceases to be valuable because of a change in economic conditions.

Mining Claims: Discovery--Mining Claims: Determination of Validity

Mining claims located for manganese must be declared null and void for lack of a discovery where, although manganese was sold from some of the claims and other claims in the vicinity during World War II and the post-war period when a Government buying program was in existence, the evidence shows that since the end of the buying program in 1959 the price of manganese has dropped 50 percent and sales of domestic manganese have ceased and there is no reasonable prospect of a future market, the need for manganese being supplied by higher grade imported manganese.



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
OFFICE OF THE SECRETARY  
WASHINGTON, D.C. 20240

A-29884

United States  
v.  
Alvis F. Denison

: Arizona Contests Nos.  
: 10406-10408, 10426 and  
: 10427, 10507, and 10560

A-29983

United States  
v.  
Leo E. Shoup

: Lode mining claims  
: declared valid in part  
: and invalid in part

A-30190

United States  
v.  
Reid Smith

A-30210

United States  
v.  
Estate of Robert F. Beecroft

: Affirmed in part;  
: reversed in part

APPEALS FROM THE BUREAU OF LAND MANAGEMENT

Separate contest proceedings<sup>1/</sup> initiated by the United States Forest Service, Department of Agriculture, were brought

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<sup>1/</sup> The contest numbers, mineral patent application numbers, and the names of the claims involved are set forth in the appendix by the claimant's name and the appeal numbers listed above, together with a general description of the sections where the claims are located. Also listed in the appendix are the dates of the hearing examiners' decisions, with the action taken therein, and the dates of the decisions of the Assistant Director, Bureau of Land Management, with the action taken on the appeals from the hearing examiners' decisions.

against certain lode mining claims located in Coconino County, Arizona, within either the Coconino or Sitgreaves National Forests, following the filing of mineral patent applications for the claims by the locators or their successors in interest. In all the proceedings, the Forest Service charged basically that the claims were invalid because no valid discovery, within the meaning of the mining laws,<sup>2/</sup> existed on the claims, and because the lands were nonmineral in character. In the proceedings against Leo E. Shoup's mining claims, a third charge was made that patent was not sought in good faith because the applicant seeks ownership of the land for purposes other than mining. Separate hearings were held on the charges in each case.

In two of the proceedings, those involving claimants Reid Smith and the Estate of Robert F. Beecroft, the hearing examiners dismissed the contests on the ground that the claims were valid. The Assistant Director, Bureau of Land Management, affirmed those actions, finding that there was a discovery as required by the mining laws on each claim. The Forest Service has appealed to the Secretary of the Interior from the Assistant Director's decisions.

In the proceeding involving Leo E. Shoup's mining claims, the hearing examiner found that there was not a valid discovery of a

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<sup>2/</sup> Rev. Stat. §§ 2319, 2320, 2325 (1875), 30 U.S.C. §§ 22, 23, and 29 (1956).

vein or lode in rock in place bearing a valuable mineral deposit and declared the claims to be null and void. On the charge that there was not good faith he ruled that there was no showing that the claimant had not located the claims in good faith and therefore evidence which was produced at the hearing showing his intent to sell the claims after patent was obtained was not sufficient ground for invalidating the claims. The Assistant Director affirmed the decision on the first ground but held that it was unnecessary, therefore, to make a ruling on the good faith question. Shoup has appealed to the Secretary from that decision, requesting a reversal or a rehearing.

In the proceeding involving Alvis F. Denison's mining claims, the hearing examiner found that none of the claims had mineralization of value or extent as lodes in rock in place, rather than as placers, sufficient to constitute lode discoveries, and rejected Denison's mineral patent applications. The Assistant Director in effect reversed that decision as to the question whether the claims may be considered as lodes or whether they are actually placers and vacated the decision as to four of the sixteen claims involved, finding that there was a valid lode discovery on those claims. However, he affirmed the action of the hearing examiner in declaring the other claims to be null and void for lack of discovery by finding that there was no discovery on them. Both the Forest Service and Denison have appealed from that decision.

All of the claims in these proceedings were located for, and the claimants allege them all to be valuable for, manganese. The Shoup, Smith, and Beecroft claims lie in adjoining townships and the Denison claims are about 40 miles distant. In all of these cases, the Forest Service has raised a central issue as to what criteria should be applied to determine whether there has been a valid discovery. It contends that the Bureau improperly failed to consider present economic conditions in determining whether the mineral deposits on the claims are "valuable" within the meaning of the mining laws and that the Bureau improperly relied only on past economic conditions and hypothetical possibilities in the future. It contends that there is no general market in this country for manganese of the quality and quantity that may be found on these claims, that market conditions are depressed due to the availability of imported manganese of a much higher quality at cheaper prices and the termination of the United States Government's stockpiling program in manganese, with manganese currently being declared in excess quantities in the stockpiles.

The mining claimants object to these contentions. Generally, the claimants allege that manganese is a mineral having intrinsic value and that therefore marketability need not be shown, citing a Solicitor's opinion of September 20, 1962 (69 I.D. 145), and that the test of discovery as enunciated in the leading case of

Castle v. Womble, 19 L.D. 455, 457 (1894), requires only that a prudent man have a reasonable prospect of success in developing a "valuable" mine and not a "profitable" mine, as contended by the Forest Service.

Although in these cases there does appear to be a diversity in the quality and quantity of manganese present on the claims, which may to a certain extent account for the differences in the rulings of the hearing examiners and the Assistant Director in these cases, there also appears to be some inconsistency in the application of the prudent man test to these cases. Because of the importance of the central issue raised by the Forest Service and similarities in these cases as to the nature of the minerals involved, their disposition, and their commercial usage and marketability, and because several of the witnesses testified in two or more of the hearings,<sup>3/</sup> these cases have been consolidated for consideration of the appeals.

The prudent man test, as originally stated in Castle v. Womble, supra, is:

"where minerals have been found and the evidence is of such a character that a person of ordinary prudence would be justified in the further expenditure of his labor and

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<sup>3/</sup> Alvis Denison testified for the claimants in all four cases, John Beecroft for the claimants in all but the Denison case, and H. J. Vander Veer for the claimants in the Smith and Beecroft cases. Joseph H. Morgan and Donald J. Morgan were counsel for the claimants in all the cases.

means, with a reasonable prospect of success, in developing a valuable mine, the requirements of the statute have been met." (P. 457.)

This test has been quoted or cited with approval by the United States Supreme Court in Chrisman v. Miller, 197 U.S. 313, 322 (1905), and other cases, most recently in Best v. Humboldt Placer Mining Co., 371 U.S. 334, 335 (1963).

After establishment of the basic rule on discovery, the Department was confronted with situations in which applications for mineral patent were filed for claims which might previously have been valuable for gold but which were not shown to be valuable for gold at the time of the applications for patent. In United States v. Margherita Logomarcini, 60 I.D. 371 (1949), the Department held that before a patent can be issued it must be shown as a present fact that the claim is valuable for minerals. The Department held to the same effect in United States v. Lem A. and Elizabeth D. Houston, 66 I.D. 161 (1959), pointing out that although a mining claimant need not apply for a patent to his claim he exposes himself to the chance that at some time the conditions on his claim will no longer support the issuance of a patent. Both the Logomarcini and the Houston decisions were cited for these propositions by the Supreme Court in Best v. Humboldt Mining Co., supra at 336.

In the Houston case, the Department cited as precedent not only the Logomarcini case but also the cases of United States v.

Pumice Sales Corporation, A-27578 (July 28, 1958), and United States v. Alonzo A. Adams, A-27364 (July 1, 1957). The Pumice case, unlike the others, involved mining claims located for a mineral of widespread occurrence, pumice. The validity of such claims depends upon an affirmative showing of a present demand or market for the mineral. Foster v. Seaton, 271 F. 2d 836 (D.C. Cir. 1959). In the Pumice case it was shown that pumice from one of the claims had been sold and used for commercial purposes in the past but that operations were then shut down and no present demand existed for the pumice. The Department held that although the claims may have been valid in the past they had become invalid for lack of a discovery. The Pumice case did not involve applications for patent.

The Adams case involved applications for patent to gold placer claims. The Department held the claims to be null and void for the reason that the evidence showed that the gold values on the claims were so low in comparison to the cost of operations required to recover the gold that a prudent man would not be justified in the further expenditure of labor and means with a reasonable prospect of developing a valuable mine. The Department rejected the claimant's contention that more weight should have been given to the evidence of values recovered in the past, saying that it was not sufficient that a valuable discovery may have been made in the past, citing the Logomarcini case.

The Adams decision was challenged in court but sustained in Alonzo A. Adams v. United States, 318 F. 2d 861 (9th Cir. 1963). The court expressly affirmed the ruling in the Logomarcini case.

More recently the same court has rendered another decision which appears to be decisive of the central issue presented in the appeals under consideration. In Mulkern v. Hammitt, 326 F. 2d 896 (1964), the court sustained a decision of the Department holding two mining claims null and void for lack of a valid discovery of gypsum or silica. United States v. G. C. (Tom) Mulkern, A-27746 (January 19, 1962). The claims, which were located on December 23, 1922, were contested in 1944 and a hearing was held in 1957. The issue was whether during the period from December 23, 1922, to May 15, 1926, or between August 31, 1928, and May 3, 1929, there had been a valid discovery on the claims. The two periods of time were the only times in which the land in the claims was open to mining location. The evidence at the hearing was largely to the effect that at the time of the hearing there was no market for the minerals in the claims. There was only slight evidence as to marketability prior to May 3, 1929. The Department held the claims to be null and void for lack of a showing of marketability during the two periods of time when the land was open to location.

In the ensuing litigation, the claimant contended that conditions in the 1957 period, when the hearing was held, had no

bearing on the issue of discovery; that the testimony as to such conditions was irrelevant; and that the only question was whether, in 1922 and the years immediately thereafter, the situation satisfied the Castle v. Womble test. The court rejected the contention, saying--

"The appellant's contention is erroneous. This court, in the recent case of Adams v. United States, 318 F. 2d 861, dealt with this very question, and held that even though the mining claim there in litigation would, at one time, have satisfied the test, nevertheless the Government rightfully denied a patent to the claimant since, because of changed economic conditions, the claim did not presently satisfy the test. The fact that in Adams the attack was upon the Government's refusal to issue a patent, while in the instant case the Government was seeking to nullify the appellant's claim as to which he had never requested or received a patent, does not distinguish the Adams case from the instant one. The problem in both cases is whether the public lands of the United States should be perpetually incumbered and occupied by a private occupant just because, at one time, he had there a valuable mine which has now been completely worked out; or because he had on his location a mineral which, in the then practice of the building industry, had a market, but which, on account of a change in building practice, no longer has a market or a reasonable prospect of a future market; or because, at the time of his discovery, transportation facilities were available which made exploitation feasible, which facilities are no longer available." (P. 898; emphasis added.)

The Mulkern case, then, is clear authority for the proposition that although a mining claim may once have been valid because it contained a valuable deposit of mineral the claim will become invalid if the mineral deposit loses its value because of

changes in economic conditions, such as the loss of a market or transportation facilities. That the ruling is not confined to instances involving minerals of common occurrence, such as pumice, is plain from the court's statement that the Adams case decided the same question. That case, of course, dealt with gold.

In the Adams case, also, the court ruled that in applying the prudent man rule "evidence as to the cost of extracting the mineral is relevant" and that the Department properly considered evidence on that point with respect to the Adams claims. 318 F. 2d at 870. And, years earlier, the Supreme Court had indicated that "the cost of mining, transportation and reduction" was relevant to determining whether a valid discovery had been made. Cole v. Ralph, 252 U.S. 286, 299 (1920). That case, too, concerned claims located for gold.

Thus, the economic conditions which may be considered in determining whether a valuable mineral deposit has been discovered include such factors as the cost of mining, transporting, and processing the mineral and the existence of a market for the mineral, whether it be deemed one of intrinsic value, such as gold, or one of common occurrence, such as pumice.

In this connection, note should be taken of references by the parties to the Solicitor's opinion of September 20, 1962, supra, on the "Marketability Rule" as applied to the law of discovery. The claimants purport to find comfort in the statement in

the opinion that

"An intrinsically valuable mineral by its very nature is deemed marketable, and therefore merely showing the nature of the mineral usually meets the test of marketability." 69 I.D. at 146.

Claimants state that manganese is an intrinsically valuable mineral and therefore is marketable. This overlooks the fact, however, that the opinion carefully states that showing the mineral discovered to be an intrinsically valuable one only "usually meets the test of marketability" (emphasis added). The opinion otherwise makes it amply clear that the marketability test

"is in reality applied to all minerals, although it is often mistakenly said to be applied solely to non-metallic minerals of wide occurrence." Id.

Thus, it is entirely proper to require the holder of a claim containing a low grade of an intrinsically valuable mineral to show that there is a market or demand for the mineral in the claim.

What does the application of these rules to the four cases under consideration show?

First, the evidence developed at the respective hearings seems to show that deposits of manganese exist on the claims in question and that some of the manganese is of a grade that was mined and sold in the past from patented manganese claims in the same area and from some of the contested claims themselves. The quantity of such manganese in each claim is not clearly established and it is questionable to what extent minable deposits exist on the claims.

Second, the evidence establishes that, except possibly in the case of the Beecroft claim, all sales of manganese were made during World War II and the post-war period to August 5, 1959, when a Government carlot buying program was in effect. Upon termination of the Government program on August 5, 1959, sales of manganese in the area of the claims, and, indeed, of practically all domestically produced manganese, ceased. This apparently was caused by a break in the price of manganese from around \$90 per ton to \$40-50 per ton.

Third, up to the time of the respective hearings (the last one being held on March 1, 1963, in the Beecroft case), no further sales of domestic manganese had been made, except possibly in the case of some captive mines owned by steel companies, because no profit could be realized from sales. The market for manganese has been supplied by imported manganese of the same or higher grade.

Fourth, the claims are being held in reserve with the hope and expectation that some day the market will return. However, little basis has been given for this hope or expectation.<sup>4/</sup>

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<sup>4/</sup> The evidence referred to up to this point may be found in the transcripts of the various hearings as follows: Denison Tr. 294, 355, 357, 360, 362, 386, 388, 391, 439-441, 455, 456; Shoup Tr. I (first hearing) 137, 139, 177, 210, 212, 213; Shoup Tr. II (second hearing) 79, 113-116, 128, 130, 131, 170, 211; Smith Tr. 105, 111, 112, 124, 187, 232-233, 237, 243, 257, 263; Beecroft Tr. 33-37, 51, 57, 60, 61, 75-78, 89-91, 97.

In the hearing on the Beecroft claim, it was asserted by the claimant that manganese was sold from the claim up to August 5, 1960, but there is at least a question whether the proper date was not August 5, 1959 (Beecroft Tr. 60).

Considering the evidence as a whole, it seems inescapable that what sales of manganese have been made from some of the claims and from other patented claims in the area were made during a period of national emergency and of a Government price support program which ended on August 5, 1959, and that the manganese on the claims has had no market since that date because of a 50 percent reduction in the market price which makes it unprofitable to mine and sell domestic manganese today. Outside of some speculation about development of new processes for utilizing low grade manganese economically, there is no evidentiary basis for any reasonable expectation that in the reasonably near future high price levels will return which will make it economic to mine the claims. The fact is that manganese has not been sold from the area in recent years and there is no evidence that sales may reasonably be expected in the future.

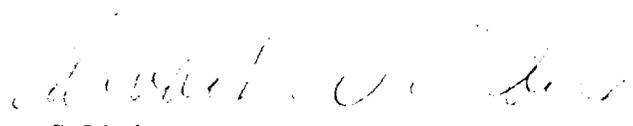
In the circumstances, the ruling in the Mulkern case is clearly applicable and it must be concluded that the contested claims are null and void for lack of a present discovery of valuable mineral deposits due to changed economic conditions.<sup>5/</sup>

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<sup>5/</sup> The burden is on a mining claimant to show by a preponderance of the evidence that he has a valid mining claim. Foster v. Seaton, supra. Thus, the claimants had the burden of

This makes it unnecessary to consider other issues raised in the appeals, such as whether the claims were properly located as lode claims instead of as placer claims and whether the Shoup claims are invalid because of bad faith on the part of the claimant.

Therefore, pursuant to the authority delegated to the Solicitor by the Secretary of the Interior (210 DM 2.2A(4)(a); 24 F.R. 1348), the decisions of the Assistant Director are affirmed to the extent that they held that some of the contested claims are null and void and reversed to the extent that they held the remaining claims to be valid.

  
DEPUTY Solicitor

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Footnote 5 - continued:

showing that their manganese deposits were still valuable under current economic conditions. They clearly did not sustain the burden.

A P P E N D I X

Claimant and Appeal Number	Arizona Contest Numbers and Patent Application Numbers	Names of Lode Claims and General Description of Area of Claims	Date of Hearing Examiner Decision and Action Taken	Date of Assistant Director's Decision and Action Taken
Alvis F. Denison A-29884	Contest No. 10406 Mineral Patent Application 023529, filed October 1, 1959	B.V.D. Nos. 1 & 2, Hillcrest No. 22 Within sec. 19, T. 11 N., R. 15 E., G.&S.R.M., Arizona	August 23, 1961  Found claims invalid as no valuable mineralization in lodes, rejected patent applications.	October 30, 1962  Vacated decision as to 4 claims (Miss Lottie Nos. 5 & 6, B.V.D. No. 3, Little Pine No. 9), found them valid as lodes, affirmed as to other claims on ground no discovery.
	Contest No. 10407 Mineral Patent Application 021383, filed June 4, 1959	Miss Lottie Nos. 4, 5, & 6, D & W Nos. 3, 4, & 5 Within sec. 14, T. 11 N., R. 14 E., G.&S.R.M., Arizona		
	Contest No. 10408 Mineral Patent Application 021390, filed June 4, 1959	Little Pine Nos. 7, 8, & 9, B.V.D. Nos. 3, 4, & 5, Hillcrest No. 23 Within secs. 18 & 19, T. 11 N., R. 15 E., G.&S.R.M., Arizona  All within Coconino County and the Sitgreaves National Forest		
Leo E. Shoup A-29983	Contest No. 10426 Mineral Patent Application 024012, filed December 4, 1959	Manganese Nos. 3, 4, & 5, Black Diamond Nos. 1* & 2 (*No. 1 was relin- quished by the claimant	February 28, 1962  Found claims invalid for lack of discovery	February 15, 1963  Affirmed.

A P P E N D I X (Continued)

on May 15, 1962, and is of valuable mineral  
not involved in the in lodes, rejected  
appeal) patent applications.  
Within secs. 19, 20, 29,  
& 30, T. 14 N., R. 10  
E., G.&S.R.M., Arizona

Contest No. 10427  
Mineral Patent Application  
024013, filed  
December 4, 1959

Manganese Nos. 9 & 10  
Within sec. 20, T. 14 N.,  
R. 10 E., G.&S.R.M.,  
Arizona

All within Coconino  
County and the Coconino  
National Forest

Reid Smith  
A-30190

Contest No. 10507  
Mineral Patent Application  
30459, filed March 6,  
1961

Sunset Nos. 1-16, inc.  
Within secs. 13 & 24,  
T. 14 N., R. 9 E., and  
secs. 18 & 19, T. 14 N.,  
R. 10 E., G.&S.R.M.,  
Arizona

February 20, 1963  
Found claims valid,  
dismissed contest.

October 23, 1963  
Affirmed.

All within Coconino  
County and Coconino  
National Forest

Estate of Robert  
F. Beecroft  
A-30210

Contest No. 10560  
Mineral Patent Application  
030188, filed  
January 26, 1961

Rough Hill #1 Lode  
Within sec. 30, T. 14 N.,  
R. 10 E., G.&S.R.M.,  
Arizona

June 7, 1963  
Found claims valid,  
dismissed contest.

November 6, 1963  
Affirmed.

Coconino County, Coconino  
National Forest

83D CONGRESS  
1ST SESSION

# S. 1830

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IN THE SENATE OF THE UNITED STATES

MAY 4 (legislative day, APRIL 6), 1953

Mr. DWORSHAK introduced the following bill; which was read twice and referred to the Committee on Interior and Insular Affairs.

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## A BILL

To define the surface rights vested in the locator of a mining claim hereafter made under the mining laws of the United States, prior to issuance of patent therefor, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*  
3 That mining claims hereafter located under the mining laws  
4 of the United States shall not, prior to issuance of patent  
5 therefor, be used for any purposes other than prospecting,  
6 mining, or processing operations and uses reasonably inci-  
7 dental thereto.

8 SEC. 2. (a) Any mining claim hereafter located, prior  
9 to the issuance of patent therefor, shall be subject to the

1 right of the United States, its permittees and licensees,  
2 under the limitations of subsection (c) hereof, to use so  
3 much of the surface thereof as may be necessary or appro-  
4 priate for forage control or usage, or reforestation, fire pre-  
5 vention, or other forest protection, upon such claim or for  
6 access to adjacent land for said purposes or to cut and remove  
7 timber on the adjacent land, and to the right of the United  
8 States, its permittees and licensees, under the limitations  
9 of subsection (c) hereof, to cut and remove dead, fallen,  
10 diseased, insect-infested, or over-mature timber.

11 (b) Except to the extent required to provide timber  
12 for the mining claimant's prospecting, mining, or processing  
13 operations and uses reasonably incidental thereto, or to pro-  
14 vide clearance for such operations or uses, or for buildings  
15 or structures in connection therewith, no claimant of an un-  
16 patented mining claim hereafter located shall cut and remove  
17 any timber growing thereon without authorization from the  
18 United States. Any cutting and removal of timber for such  
19 prospecting, mining, or processing operations and uses rea-  
20 sonably incidental thereto (but not cutting required to pro-  
21 vide clearance as aforesaid) shall be conducted in accordance  
22 with sound principles of forest management.

23 (c) Any use of the surface of an unpatented mining  
24 claim authorized to be made under this section by the United  
25 States, or its permittees or licensees, shall be such as to not

1 interfere materially with the prospecting, mining, or proc-  
2 essing operations or reasonably incidental uses of the mining  
3 claimant.

4 SEC. 3. Nothing in this Act shall be construed in any  
5 manner to limit or restrict or to authorize the limitation or  
6 restriction of any existing rights of any claimant under any  
7 valid mining claim heretofore located or to authorize in-  
8 clusion in any patent hereafter issued under the mining laws  
9 of the United States for any mining claim heretofore or  
10 hereafter located, of any limitation or restriction not other-  
11 wise authorized by law.

83d CONGRESS  
1st Session

**S. 1830**

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**A BILL**

To define the surface rights vested in the locator of a mining claim hereafter made under the mining laws of the United States, prior to issuance of patent therefor, and for other purposes.

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By Mr. DWORSHAK

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MAY 4 (legislative day, APRIL 6), 1953

Read twice and referred to the Committee on Interior  
and Insular Affairs

Manning

NATIONAL FOREST MINING CLAIMS

AUGUST 3, 1953.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. HOPE, from the Committee on Agriculture, submitted the following

REPORT

[To accompany H. R. 5358]

The Committee on Agriculture, to whom was referred the bill (H. R. 5358) to protect the surface values of lands within the national forests, and for other purposes, having considered the same, report favorably thereon with amendments and recommend that the bill do pass.

The amendments are as follows:

Page 2, lines 3 and 4, strike out the words "as is or may be provided by law" and insert in lieu thereof the following:

in accordance with timber cutting budgets prepared as a part of sustained yield management plans.

Page 3, line 10, after the words "timber shall be", insert the words "the fair market price as".

Page 3, line 10, strike out the comma and insert in lieu thereof a period, and strike out the remainder of the sentence ending with the word "therewith" in line 15.

Page 4, line 1, after the words "forest timber" insert the following: "which is ready and available for harvesting under the rules and regulations of the Secretary of Agriculture".

MINING LAWS AND NATIONAL FORESTS

Less than 100 years ago the Government, to encourage development in the West, was giving away millions of acres of land rich in mineral, soil, and water resources. The general policy was ownership as a reward for discovery. Later, Congress enacted laws providing for continued public ownership of forest, grazing land, and water resources, and for their private development and use under management conditions established by public authority. This general policy was

extended to the mineral fuels and a few other nonmetallic minerals. The mining laws, applying primarily to metalliferous deposits, are a survivor of the frontier days of land gifts.

Under the mining laws the discoverer of a mineral deposit on public land can establish a legal claim to it simply by marking out the boundaries of his claim (approximately 20 acres) and, if State law requires it, recording the location. He does not have to advise the Federal Government when he stakes a claim, nor when he begins to exploit the mineral or other resources on it. Having staked his claim, he may continue indefinitely to enjoy what amounts to almost complete domination over the property, mining it or not as he wishes. He is required by the mining laws to spend \$100 a year on labor or improvements, or risk being dispossessed by another claimant. (He cannot, however, be dispossessed by the United States for this reason.)

The only basis on which the Government can recover the claim is a showing that the prospector has not in fact made a discovery offering reasonable expectation of finding ore in paying quantities. There have been few invalidations on this ground and appropriations never have been made to establish administrative machinery able to exercise the power systematically.

If a person wants an unqualified title to his 20-acre claim, he must apply to the Department of the Interior for a "patent." He must show that he has actually made a discovery of a mineral deposit and has spent \$500 in improving the property; he must comply with certain survey and notice provisions, pay a nominal acreage fee, and fulfill other formalities. He then obtains a patent to 20 acres or less of public domain giving him complete rights to all surface and subsurface features.

In frontier times this simple procedure was a strong incentive to minerals discovery and therefore in the national interest, whatever its shortcomings from the standpoint of efficient use of all national resources. Today the mining laws in their present form not only directly impair the public interest, but often obstruct private mineral exploration and development.

The privilege of staking a mining claim on public land has often been abused. Much public property has been taken over by people seeking timber and water rights, fishing and hunting facilities, and sites for hotels, tourist cabins, and filling stations.

Since the end of World War II this problem has been greatly intensified. Automobiles are more numerous. Good roads have been or are being extended into almost every corner of the Nation. For the first time in their lives many families have at the same time the money, the leisure, the transportation, and the inclination to spend sometime enjoying the almost unlimited recreational opportunities of our national forests.

At the same time, the timber growing in those forests has become more valuable. Its intrinsic value has increased each year as the supply of merchantable timber in private hands has decreased. The dollar value of the trees themselves has increased due to the rise in prices generally and to the demand for lumber. Because of these facts it has become economically and commercially feasible to go further and further into the forests to bring out merchantable timber. Forest areas which were once considered of little value commercially because of the difficulty and expense involved in bringing out the

timber are now of significant value because it is commercially feasible to invest the money necessary to reach and develop that part of the forests.

Water for cities, for agriculture, and for industry has become increasingly important to the Nation. Mountain ranges, forest lands, and streams that 50 or 100 years ago had little or no value except for the minerals that might be discovered in them are now of tremendous importance as sources of water for people, animals, crops, and factories.

The result of this development and these changing conditions is that land which only a few decades ago was valued only for the minerals which might be discovered on it has become valuable for many other useful purposes. The mining laws of the United States have not kept pace with these changing conditions nor given any recognition to the additional and equally valid values which have become attached to our national forests and other public lands. The purpose of this bill is to give recognition to these other values insofar as the national forests are concerned and to implement the concept that while mining and mineral discovery is a valid use of national forest lands it is no longer, as it once was, the only valid or useful purpose for which those lands are being held in trust for the people of the United States by their Government.

#### BACKGROUND OF THE BILL

There can be no doubt that the existence of many thousands of mining claims on the national forests constitutes a handicap to the proper administration of those forests and interferes with the right of the people of the United States to use and enjoy those forests for other useful and valid purposes. The committee's attention was first drawn to this situation about 4 years ago. After a thorough preliminary examination produced convincing evidence of the existence of the problem and the need for remedial legislation, the Department of Agriculture was asked to suggest the wording of a bill which would protect the other values of forest lands against unnecessary damage from the use of those lands for mining purposes and mineral discovery, while at the same time not place any unnecessary restriction on the continued use of those lands for mineral discovery and removal.

After some modification, this suggested legislation (H. R. 7023, 82d Cong.) was introduced by the then chairman of the committee, Representative Harold D. Cooley, on March 12, 1952. He stated at the time that it was not the committee's intention to rush this bill to hearing but that it was being introduced with the hope and expectation that it would be studied by all interested parties during the remainder of that year and that it might be reintroduced and brought to hearing before the committee in the first session of the 83d Congress.

That program announced by Chairman Cooley was carried out by the committee. During the period of the recess between the 82d and 83d Congresses, and in the early weeks of the 83d Congress, members of the committee and of the committee staff met numerous times with representatives of the mining industry and with representatives of groups or agencies interested primarily in the other values of our national forests. The objections raised by the mining industry to H. R. 7023 were given sympathetic and serious consideration. Every effort was made in the redrafting of the bill to meet the valid objections of

the mining industry to the provisions of H. R. 7023 and to draft a bill which would give recognition and protection to the other uses and values of the national forests without in any way impairing their use for mineral discovery and production. The bill which resulted from this long and conscientious effort to produce a sound and constructive piece of legislation was introduced on May 22, 1953, and hearings were scheduled beginning July 8, 1953.

#### SUBCOMMITTEE OBSERVATIONS

Following the adjournment of the 82d Congress, a subcommittee made an intensive inspection trip through western national forests starting in northern Washington and ending in central California. From the subcommittee's observations on this trip, the danger to other forest values from the almost unrestricted privileges given locators of mining claims was quite clearly a major problem and the necessity for remedial action urgent. Following are some examples of conditions which the subcommittee witnessed:

In one area of heavy timber stand a "prospector" had driven a small bulldozer along an access road constructed by the Government for the removal of timber. About every quarter of a mile he had driven the bulldozer off the road on each side and scooped out a shallow depression in the soil. This process he repeated continuously for some distance along the road. On the basis of this "discovery" he had filed mining claims on the timberlands on both sides of this access road. The valuable mineral he claimed to have discovered was pumice. In that part of the country pumice is present generally in the soil. It is one of the most common of minerals and it would be difficult to find a place where it is not present. In the particular area where these claims had been staked out, however, it is well established that the pumice does not occur in sufficient quantity or quality to have commercial value. This mining claimant had indeed discovered something of value, but the thing of value was growing trees—not a mineral in the soil.

The highway leading into Crater Lake National Park from the northeast passes through the Rogue River National Forest. It is an area of exceptionally fine timber and the land on either side of the highway leading to the park is valuable not only for its timber but for its scenic and recreational possibilities and even for potential commercial development. Although the mineral values in that area are known to be negligible the forest on both sides of that highway and extending for great distances in either direction have been covered by mining claims filed by a single individual. In another scenic location, the subcommittee saw an area where an individual had staked out several contiguous mining claims, subdivided them into building lots, and brazenly offered them for sale as summer homesites.

In another similar area seen by the committee, the Forest Service had set aside a sizable location along a stream for the construction of summer cabins and vacation homes under special-use permits. One individual who did not like the size of the lot available to him or the terms on which it was offered, staked out a mining claim covering the entrance to the whole area, appropriated it to his own use, and refused to permit anyone else access to the area. At still another spot the committee saw an improved forest service campground, including

some Forest Service administrative buildings, which had been taken over by a mining claim. In this particular case, the locator of the claim had applied to the Forest Service for a special-use permit for a commercial development in the area. The permit was refused and he thereupon filed a mining claim covering most of the area of the Forest Service public campground, posted a sign prohibiting trespassing, and gave the Forest Service 30 days in which to remove its buildings and other improvements.

#### TYPES OF CLAIMS

These flagrant examples of abuse of the mining laws for personal gain help to pinpoint the difficult problem involved. There are, in general, three types of active mining claims on the national forests. There is, first, the bona fide mining claim staked out by a prospector in search of valuable minerals. His hope of commercial mineral deposits may prove to be vain and he may never recover minerals from the claim equal to his investment in it. But the claim is an honest one, made for the purpose of procuring the minerals, if any, which may lie beneath the surface. The second type of claim is one which is obviously invalid. Such claims are filed through ignorance of the law or in utter disregard of the requirements that there must be some valid mineral discovery to substantiate the claim. The third general type is composed of claims where there is some slight showing of minerals but where it is quite clear from the locator's subsequent actions or from the nature of the circumstances that the person filing the claim is not interested in the minerals he may recover from beneath the ground but with the use of the surface of the ground for his own purpose.

The third type of claim is the one which is causing most of the trouble. The locators of these claims are not ignorant of the mining laws. In many cases they are well versed in these laws and are able to take advantage of every privilege and loophole the laws afford. Where they are able to make a showing of the presence of minerals, it is at best a long, costly, and difficult procedure to demonstrate that their claims are invalid. Indeed, if the locator of such a claim can demonstrate some trace of minerals, takes advantage of all the privileges and delays afforded him by the mining laws, and then has the tenacity to refile a new claim if his old one is invalidated, it may actually be impossible ever to dislodge him from his grab of public lands even though it may be completely obvious to everyone that he has no interest whatever in the mineral deposits but is concerned only with utilizing the surface of the claim for his own benefit.

In addition to the "live" claims on the national forests, it should be remembered that there are also uncounted thousands of claims which have been actually or apparently abandoned but which may be revived any time the original owner or his heirs or assigns cares to do so. Under the mining laws a claim continues forever unless it is legally invalidated or is superseded by a later claim. There are numerous examples of claims which have been abandoned for decades—on which no assessment work has been done—but which have suddenly come to life and assumed great value in the eyes of the then owner of the claim when a dam, a road, an industrial development, a city,

or a recreational area gave value to the land. The only record of such a claim may be in the musty archives of an obscure county courthouse and yet the legal holder of that property right may return to assert it against the people of the United States at any time.

It is against the last two classes of claims that this bill is primarily directed: Those claims which have a shadow of validity but which are filed for some purpose other than bona fide mining; and those claims which have been abandoned, or have never been worked, but which remain on the record books as a perpetual barrier to sound administration of the national forests and to the use of those forests for other proper purposes. In connection with the latter type of claims, it is one of the absurdities of the present mining laws that any individual can take advantage of a locator's failure to keep his claim alive by doing the required annual assessment work but the owner of the property—the people of the United States collectively—cannot do so and as against them the claim remains good forever.

#### HEARINGS

The committee was not able to devote as much time as it would have liked to the hearings on this bill because of the press of other urgent legislative matters. The limitations in time which became necessary were, however, imposed entirely upon those who appeared in favor of the bill. Every opposition witness was heard fully and completely and given as much time as he cared to consume. Although there were only a few opposition witnesses, all representing one point of view, these witnesses were given more of the time devoted to the hearing than were the more than a score of witnesses in favor of the bill, representing many different points of views and many different organizations.

The witnesses who appeared in opposition to the bill were the American Mining Congress, several Members of Congress, and a representative of the Department of the Interior. The committee also received an unfavorable report on the bill from the Department of the Interior. This report was not cleared with nor approved by the Bureau of the Budget. The favorable report on the bill received from the Department of Agriculture did have Budget Bureau approval and clearance.

In general, the position taken by the opposition witnesses was: that minerals are of great importance to the economy of the United States; that in order to encourage the discovery and production of minerals the mining laws of the United States have given many inducements and advantages to those engaged in this business; and that the United States cannot or should not now withdraw or diminish any of the privileges or advantages which have been extended to the prospecting and mining industry in the past.

Those who appeared in favor of the bill included such diverse groups and agencies as the Department of Agriculture, the National Grange, the National Farmers Union, the Congress of Industrial Organizations, the American Federation of Labor, the Izaak Walton League, the Wildlife Management Institute, the National Wildlife Federation, the National Council of State Garden Clubs, the American Forestry Association, the Cooperative League of the United States of America, the Pennsylvania Federation of Sportsmen's Clubs, etc.

At the conclusion of the hearings the chairman restated the objective of the committee: To take action which would prevent the unnecessary interference of mining claims with the proper administration of the national forests and with the use of those forests for other purposes, while at the same time not interfering with the use of national forest areas for the discovery and production of minerals. The bill was unanimously reported by the committee and in furtherance of the objective stated above, the chairman appointed a subcommittee to meet with a similar subcommittee of the Committee on Interior and Insular Affairs to consider the matter further in the light of the committee's stated objective.

#### DEPARTMENT REPORT

Following is the report of the Department of Agriculture recommending approval of this legislation. The report also explains the nature of the amendments adopted by the committee.

JULY 8, 1953.

HON. CLIFFORD R. HOPE,  
*Chairman, Committee on Agriculture,  
House of Representatives.*

DEAR MR. HOPE: Reference is made to your request of June 5 for a report on H. R. 5358, a bill to protect the surface values of lands within the national forests, and for other purposes.

H. R. 5358 relates to a problem which would also be affected by two other bills pending in the House; i. e., H. R. 334, by Mr. Regan, and H. R. 4983, by Mr. D'Ewart, both of which were referred to the Committee on Interior and Insular Affairs. This is the problem of mining claims on the national forests. It was the subject of a study made by a subcommittee of your committee in the summer of 1952.

H. R. 334 would remove sand, stone, gravel, pumice, pumicite, and cinders from the operation of the mining laws and put these materials under a permit system. The Department favored this bill as originally introduced. It was reported favorably by the committee with amendments and is now before the House. However, one amendment removed pumice and pumicite from the bill. H. R. 4983 would define the surface rights vested in the locator of the mining claim. However, the bill would accomplish little because most of its provisions are merely a restatement of the present mining laws. It was reported favorably by the committee without amendment and is now before the House.

H. R. 5358 would (1) correct undesirable lax provisions of the mining laws without impeding or obstructing prospecting for or development of minerals; (2) enable the United States to more readily contest invalid claims; (3) discourage fraudulent claims; (4) provide an equitable method of settling the 84,000 existing claims on the national forests; (5) not interfere with such use of surface resources by the claimant or patentee as is necessary to develop minerals; and (6) upon patent, fee title to surface resources would go to the patentee except timber, a 3-year purchase option for which would be offered the patentee.

This Department endorses H. R. 5358 and if amended as herein suggested, recommends its early enactment. Enactment of H. R. 5358 would not result in any increase in expenditures of Federal funds or increased personnel.

This Department desires to encourage legitimate prospecting and effective utilization and development of mineral resources of the national forests. H. R. 5358 would not, in our opinion, interfere with such development of minerals nor would it work a hardship on the bona fide prospector or miner.

H. R. 5358 would apply to the same national forest lands as do the mining laws; that is, to those national forests created from the public domain but not to those acquired by purchase. It would not affect the territorial application of the mining laws.

#### BASIC PROVISIONS OF H. R. 5358

##### A. Provisions applicable to unpatented mining locations made under this bill

1. The locator of a valid mining claim shall have the right to prospect for, mine, and develop the mineral resources on the claim and to use so much of the surface as is reasonably necessary for prospecting, mining, and development.

2. The locator shall have the right to use so much of the timber on the claim as is reasonably necessary for prospecting, mining, and development until such time as the timber may be disposed of by the United States. Timber cut by the locator must be cut under sound rules of forest management, except when clearing is necessary for mining purposes.

3. The locator may not obstruct or prevent other uses of the surface of the claim by the United States or under national forest rules and regulations, if not in conflict with mineral development.

4. The United States has the right to manage and dispose of timber on the claim, but if the United States disposes of the timber the locator has the right to obtain equivalent timber for mining purposes from the nearest national forest land.

5. Placer mining operations must be conducted under Department of Agriculture rules and regulations to minimize erosion, water pollution, and watershed damage, and for restoration of the surface.

6. Mining claims shall not be valid until filed for record in the local United States district land office.

7. Mining claims may be determined to be invalid for noncompliance with this or other applicable laws, including insufficient discovery to justify further development and failure to meet the annual assessment work requirements.

8. Mining claims will be considered to be abandoned if notice of performance of assessment work is not filed in the local United States district land office for 2 consecutive years.

9. Mining claims will become invalid if application for patent is not made within 10 years of date of location.

#### *B. Provisions applicable to mining claims patented under this bill*

1. When a mining claim is patented, the patentee acquires full title except that he shall not acquire title to the timber then or thereafter standing on the land unless he shall purchase it at the time of application for patent, or within 3 years thereafter, the purchase price to be determined by the Secretary of Agriculture taking into consideration the patentee's rights to use timber for mining purposes. If the patentee does not exercise his option, the timber then and thereafter standing on the land may be disposed of by the Department of Agriculture.

2. If the United States disposes of the timber, the patentee has the right to obtain equivalent timber for mining purposes from the nearest national forest lands.

#### *C. Provisions applicable to valid mining claims existing prior to the enactment of this bill*

1. Existing valid mining claims may be perfected under laws applicable prior to the passage of this bill, provided that—

(a) The claims are recorded in the local United States district land office within 3 years of the date this bill is enacted; failure to so record shall constitute abandonment.

(b) Application for patent is made within 5 years of the date this bill is enacted; upon failure to apply within 5 years the location becomes void unless the claim is relocated under the provisions of this bill, in which event prior development work done on the claim shall be applicable to patents issued under the bill.

#### SITUATION ON THE NATIONAL FORESTS

On the national forests the mining laws are sometimes used to obtain claim or title to valuable timber, summer homesites, or lands blocking access to water needed in the grazing use of the national forests. Such a situation interferes seriously with the orderly management and development of the values and resources of the national forests without creating offsetting compensations.

As of January 1, 1952, there were 36,600 mining patents on the national forests, covering 918,500 acres. Only about 15 percent of these mining patents have been or are commercially successful mines. As of the same date, there were approximately 84,000 claims, covering 2.1 million acres. Only 2 percent of these claims were producing minerals in commercial quantities and probably not more than 40 percent could be considered valid under the requirements of the mining laws. Yet, on these claims, there was over 8 billion feet of commercial saw-timber, valued at over \$100 million. The attached two tables supply these basic statistics by States. The significant facts in these figures are—

1. Only 15 percent of the patented claims have produced or are producing ore in commercial quantities.

2. About 2 percent of the unpatented claims are producing commercial quantities of ore.

3. Only 40 percent of unpatented claims might be valid under the mining laws.

4. National forest timber exceeding in quantity and value that cut from all national forests in any 1 year is tied up on mining claims and cannot be harvested by the Government.

The effect of this situation is increased costs of administration, obstruction of orderly management, and obtaining high-value surface resources at nominal cost.

*A. Cost of administration.*—The existence of some 84,000 unpatented claims means the Forest Service must locate the boundaries of each claim and exclude the area within the claim from plans for all other resource management, from timber sales, from recreation development, from grazing use. This is a tremendous job but made much more difficult by the fact that there are no requirements for recordation in the local United States district land offices. Many claims cannot be located on the ground from the descriptions.

*B. Obstruction of management.*—Claimants may refuse or delay permission to cross their claims with public roads, or ask unreasonable prices for the privilege, thus compelling the United States to resort to condemnation. Claimants may obstruct the orderly movement of permitted livestock across the claim, or block access to available water for livestock. Timber sales have been held up by rights-of-way difficulties. Timber on mining claims may be part of an orderly management unit, but the claimant may refuse to give his consent even though the timber could not be needed for the development of the claim.

*C. Obtaining high-value surface resources.*—A single 20-acre claim in the Douglas fir forests of Oregon and Washington may easily carry a stand of timber worth \$25,000. If there is sufficient pumice or other low-value minerals to justify the claim, the locator could get patent to this claim, including the timber, at a cost of about \$1,100, of which only \$100 would accrue to the United States. In this manner a locator could obtain a strategic location for a summer home on a lake shore, or along the banks of a fishing stream, or where a public campground should be built. Numerous patented claims are used for summer homes, filling stations, and other commercial ventures not related to mining.

The general mining laws are not consistent in their application to Federal timberlands, formerly part of the public domain. The Oregon and California timberlands, administered by the Bureau of Land Management, of the Department of the Interior, is a case in point. On these lands the mining claimant receives the right to use only such timber on those lands as is necessary to develop his claim, and the patentee receives title to only a similar amount of timber. This was provided in act of April 8, 1948 (62 Stat. 162.) There is no justification for having the timber on the national forests subjected to greater exploitation under the mining laws than is timber on the Oregon and California reverted lands. The provisions regarding timber on patented claims in H. R. 5358 are similar to the act of April 8, 1948, but in addition permit the patentee to purchase the interest of the United States in the timber at a price determined by the Secretary of Agriculture.

The long-range natural resource outlook for the United States has recently been explored by the Materials Policy Commission. In its report, Resources for Freedom, of June 1952, the Commission recommended certain basic revisions of the mining laws. The provisions of H. R. 5358 would incorporate most of the recommendations of that Commission relating to unpatented claims, but would give a patentee a much greater right to the surface and timber.

The National Forest Advisory Council has recently completed an exhaustive study of the mining problem on the national forests. The report of the Council on Problem of Mining Claims on the National Forests is attached to and made a part of this report. It is a clear statement and record of the problems resulting on the national forests from mining claims. The committee's attention is also called to the Council's conclusions and recommendations to the Secretary, pages 51-53. H. R. 5358 would implement some of the recommendations of the National Forest Advisory Council relating to unpatented claims.

It is recommended that the following amendments be made:

1. It is not the intention of this Department to cut timber on mining claims except in connection with normal timber harvesting operations on adjacent national forest land. It is therefore suggested that section 1 be amended by inserting the words "in accordance with timber cutting budgets prepared as a part of sustained yield management plans" after the word "States," in line 2, page 2. The words "as is or may be provided by law" in lines 2 and 3, page 2, should be deleted. This provision will be a protection to the locator of a mining claim.

2. The provision in section 2 that the right of the patentee to use timber for mining purposes must be taken into account by the Secretary of Agriculture in

determining the value of the timber if the patentee elects to purchase it seems unworkable. It would be practically impossible to calculate or estimate how much timber the patentee might need in the future. His needs would naturally depend upon the ultimate size of his mining operations. It seems obvious that under the provision as written in the bill, the United States would seldom, if ever, obtain any returns for the sale of the timber because of the difficulty of appraising future needs at the time of patent. It is therefore suggested that section 2 be amended by inserting the words "the fair market price as" after the word "be", line 10, page 3; and by changing the comma to a period at the end of that line and striking the rest of the sentence.

3. In Section 3 it seems desirable to restrict the rights of the patentee to timber which is ready and available for harvesting. It would not be desirable to allow a locator or patentee to demand timber from stands which are already under sale contract or timber which was not silviculturally ready for harvesting, or timber which was reserved from cutting for such purposes as protection of administrative sites, recreation areas, roadside zones or wilderness areas. Hence it is recommended that section 3 be amended by inserting the words "which is ready and available for harvesting under the rules and regulations of the Secretary of Agriculture" after the word "timber" in line 1, page 4.

With these amendments, H. R. 5358 would be very desirable legislation, would correct many of the present defects of the mining laws, and this Department urges its enactment.

The Bureau of the Budget advises that, from the standpoint of the program of the President, there is no objection to the submission of this report.

Sincerely yours,

E. T. BENSON, Secretary.

*Estimated number of unpatented mining claims on the national forests  
(as of Jan. 1, 1952)*

State	Number of claims	Acres	Estimated percent which are producing minerals in commercial quantities	Estimated percent considered valid under the mining laws	Timber on claims	
					Volume (thousand feet, board measure)	1951 value
Arizona.....	5,000	95,400	9.0	22	70,000	\$700,000
California.....	19,610	582,700	8	30	3,460,000	50,177,000
Colorado.....	9,450	256,000	1.0	37	80,000	368,000
Idaho.....	15,840	353,100	4.3	42	1,170,000	8,425,000
Montana.....	6,890	132,600	1.7	46	85,000	440,000
Nevada.....	2,940	50,700	2.0	60		
New Mexico.....	2,350	81,700	3.0	24	225,000	2,000,000
Oregon.....	7,780	267,300	1.8	55	2,301,000	36,307,000
South Dakota.....	2,000	52,500	4.5	30	81,000	542,000
Utah.....	7,810	185,300	2.0	50	7,000	40,000
Washington.....	2,920	71,700	2.2	52	751,000	4,111,000
Wyoming.....	860	32,900	6	55	36,000	417,000
Total.....	84,050	2,163,900	2.0	40	8,266,000	103,527,000

*Patented mining claims on the national forests (as of Jan. 1, 1952)*

State	Number of claims	Acreage	Estimated percent which are or have ever been commercial mining operations	State	Number of claims	Acreage	Estimated percent which are or have ever been commercial mining operations
Arizona.....	1,110	53,370	5	Oregon.....	1,370	26,634	22
California.....	3,068	134,807	14½	South Dakota.....	1,000	74,000	7
Colorado.....	17,000	300,000	12	Utah.....	1,359	57,210	10
Idaho.....	3,203	80,802	28	Washington.....	1,184	20,738	8
Montana.....	5,124	116,575	17½	Wyoming.....	781	17,687	1½
Nevada.....	675	12,205	50				
New Mexico.....	706	24,498	16	Total.....	36,560	918,526	14¾

SUMMARY OF H. R. 5358

*Section 1. Rights and duties of locators under United States mining laws on lands within national forests*

Locator may occupy and use without charge or permit surface necessary for mining purposes. He may use timber for mining operations until timber is disposed of by the United States in accordance with sustained-yield principles, any timber cutting by locator to be under sound rules of forest management as defined by national forest rules and regulations, except clearing necessary for mining purposes. He may not prevent or obstruct other use of surface by the United States or under national forest rules and regulations if such other use is not in conflict with mineral development. He must conduct placer mining operations under Department of Agriculture rules and regulations for prevention of erosion.

Under this section timber resources on mining claims in the national forests can be managed and harvested in accordance with timber-management plans. Locators cannot disrupt timber management by holding up the sale of timber, or the use of the land (subject to mining needs) by the United States. Much of the incentive for locating claims for other than mining purposes will be removed.

Soil erosion and stream pollution resulting from placer operations will be greatly reduced by reasonable regulations requiring the minimizing of erosion, pollution of water and damage to watershed, and restoration of the surface.

*Section 2. Rights of patentee*

Patentee will acquire all mineral and surface rights except timber and may purchase timber at time of patent or within 3 years at the fair market price calculated by the Department of Agriculture. If he does not purchase the timber, it will be reserved to the United States in the patent, which shall provide that such timber may be disposed of by the Department of Agriculture at any time.

Much of the incentive to patent mining claims for nonmining purposes will be removed by requiring the patentee to purchase the timber. The timber resource, often worth thousands of dollars per claim, is one of the major temptations to patent claims which the locator has no intention of operating as a mining property.

*Section 3. Right of locator and patentee to use timber*

If timber is disposed of by the United States, a locator or patentee will have right to obtain timber necessary for mining purposes from the nearest national forest timber which is ready for harvesting equivalent to what he could have obtained from the lands prior to such disposition.

The right of the locator and patentee to timber for mining purposes is protected in case the United States harvests the timber on the lands.

*Section 4. Existing mining claims*

Existing claims may be perfected under present law if (a) notice thereof is filed in the district land office within 3 years, failure to do so to constitute abandonment as to the United States; and (b) application for patent is made within 5 years, if not made, location to become null and void unless relocated under this act. If relocated, prior development work will be applicable to patents issued under this act.

There are now some 84,000 claims on the national forests covering some 2 million acres with over 8 billion board feet of timber worth \$100 million. These existing claims will be cleared up in an equitable and orderly fashion and the United States will know which claims are active and which are abandoned. After 5 years existing valid claims will have either been patented or relocated under this act, while existing invalid claims will have been abandoned or declared null and void. The management of the resources of the national forests will be greatly facilitated.

*Section 5. Notice of claim and assessment work on locations under this act*

Locations will not be valid as to the United States unless notice is filed in the United States district land office. Notice of performance of assessment work must also be filed in that office, and failure to do so for 2 consecutive years will constitute abandonment as to the United States.

The United States will have a record of mining claims on the national forests and claims will have to be kept active by assessment work or abandoned. There will be less incentive to locate claims for nonmineral purposes.

*Section 6. Type of notice to be filed*

Requirements for the notice to be made pursuant to sections 4 and 5 includes the name and address of locator, name of claim, county, approximate area, de-

scription of location, etc., but the description of the location of the claim is to be in no greater detail than required by law for description of claims in the county where filed. Land office will acknowledge receipt of notice.

This section protects the locator from being required to describe his claim by an expensive survey.

*Section 7. Claims to be determined to be invalid*

Claims under the act may be determined to be invalid for (1) noncompliance with this or other applicable laws; (2) insufficient discovery to justify further development; (3) assessment requirements not met.

It will provide a more logical basis on which to contest invalid claims or abandoned claims and therefore will reduce the incentive to locate claims for non-mineral purposes, or to hold claims for speculative purposes without developing the mineral resources.

*Section 8. Application for patent*

Claims under the act will become invalid if application for patent is not made within 10 years.

This will reduce the incentive to locate claims for nonmineral or speculative purposes since patent based on mineral discovery and development work must be obtained in 10 years.

AL-3-5387

December 2, 1958

MEMO

Notes from comments made by Alvis Denison on October 31, 1958.

The L.E. Shoup (of Prescott) group of 14 unpatented manganese claims adjoin the J. Reed Denison group of patented claims in the Long Valley district. The property is located approximately 50 miles south of Winslow on the Winslow-Pine Road in the Long Valley Mining District of Coconino Co. The Shoup claims were leased, along with the Reed Denison claims, to the Last Chance Mining Co. at the time the company was active in the region several years ago.



these openings were cleared of water and in most of them at least two walls were sufficiently clean to readily view the formation and the mode of ore occurrence. I also inspected a number of openings on patented claims adjoining the claims in question. Following is a description of the more important work places visited:

On the C & D claim No. 11 (patented) past mining operations have opened a pit some 100,000 square feet in areal extent and about 8 feet deep with however much of the floor made up of back fill. The mining method here as elsewhere on the property has been to strip off the thin mantle of overburden and then to mine the generally narrow vertical manganese stringers or groupings of stringers (veins) by means of a tractor-mounted back-hoe. A considerable number of veins was mined in this pit. The veins had a more or less parallel strike and were mined to a maximum depth of 16 feet. In order to mine to this depth the upper wall material of the hoe trenches was removed by dozer and backfilled in the pit as mining progressed.

The Miss Lottie No. 5 claim adjoins the northwest end line of the above C & D No. 11 claim and judging from the exposures in openings in the Miss Lottie No. 5 claim near the common end line the manganese mineralization extends into this as yet undeveloped claim. The shallow openings on Miss Lottie No. 5 as well as in several cuts and trenches on Miss Lottie No. 6 (west of No. 5) and Miss Lottie No. 4 (east of No. 5) show compacted clay and weathered sandstone in place with some of the cuts showing a good sprinkling of manganese in the ends and also in the dumps.

D & W No. 3 claim: A narrow trench 20' long by 8' deep has been made on a stringer of manganese and a short distance beyond one end of the trench a shaft has been put down 55'. The shaft is sunk on a stringer of manganese and at 48' a drift had followed it for 16' and two men were continuing with the work at the time of visit. The stringer could be seen cutting 2 firm layers of sandstone just above the start of the drift and there were pieces of chert on the dump along with soft sandstone and clay.

D & W No. 4: A trench 12' long and about 5' deep has been opened on the southwest half of the claim. There was water in the bottom and the banks were sloughed. The trench was apparently dug longitudinal with a vein and the dump showed a considerable amount of manganese with broken sandstone rock and some chert and clay. Some 75' north of this trench a cut 10' long by 5' wide by 4' deep showed a 6' vertical band of manganese mineralization in a formation in place composed of bedded hard and soft sandstone, clay and some chert. A similar showing is visible in a nearby trench in a clay and sandstone formation.

D & W No. 5: A cut 12' long, 10' deep and about 10' wide exposed a narrow vertical vein of manganese cutting alternate beds of clay, hard and soft sandstone and thin layer of chert. The soil overburden here was about 4' deep.

BVD No. 3 Claim: Near the east end of the claim a cut and fill area along new highway construction shows much manganese in the fill material. The fill has covered exposures stated to show good manganese interbedded with sandstone. Mr. Denison has a photograph (taken before filling) supporting this statement.

BVD No. 4: Shallow holes No. 1, 2 & 3 in the northwest portion of the claim showed hard and some fractured sandstone with manganese, all in place. Holes 6, 7 and several others showed manganese on the dump along with both hard and fractured sandstone chunks.

A crosscut trench 45' long near the southeast corner of the claim intersects an 18" vein of manganese in its eastern end. This is at the top of inclined strata of hard sandstone which is exposed for the full length of the trench. In the same trench and some 10' west from the above showing a 24" wide vertical band of manganese mineralization is intersected in the hard sandstone. The west end of the cut was discontinued in sandstone which was too hard to dig mechanically.

BVD No. 5: No. 6 trench in the northeast portion of the claim is 12' long, about 6' wide, and about 10' deep and shows the formation in place composed of hard and soft weathered sandstone with a vertical 10 to 12" vein of manganese clearly visible in each end of the trench. Two nearby holes expose a similar vein (possibly the same vein) in the same sort of formation. Also, near here, hole No. 1 is 9' deep and very clearly shows in the north wall a vertical vein of manganese mineralization 18" to 24" wide in fractured sandstone.

Little Pine No. 7 Claim: Trench No. 9 and several nearby trenches show manganese stringers, hard and soft sandstone, and clay in place.

Little Pine No. 8 : Cut No. 4 is 15' by 7' wide by 8' deep and shows a vertical vein of manganese about 3' wide in the west wall in a formation of hard and soft sandstone with some clay. No. 7 trench with about the same dimensions shows several thin vertical stringers of manganese in hard sandstone. A cut 8' x 4' x 3' deep shows a 4" to 6" stringer in sandstone.

Little Pine No. 9: Manganese in sandstone in place is visible in a number of cuts and trenches and holes in the northeasterly portion of this claim.

Hillcrest No. 23 claim: The west bank of the new highway cut exposes beds of hard sandstone with considerable interbedded manganese for a length of 60'. The manganese occurrence here is said to be similar to that which is covered by fill on the east end of the adjoining BVD claim No. 3 (noted above).

BVD No. 1 Claim: An 80' dozer cut has been made along a hillside on this claim. The material in the cut is hard and soft sandstone with a surface cover of hard sandstone containing some lime. A vein of manganese is exposed in the bank of the cut extending from the floor to just beneath the hard sandstone cover. At the top the manganese is about 6' wide and it narrows to 8" in the bottom of the cut. On the hill above and about 100' north of the dozer cut a series of shallow trenches expose a manganese vein varying from 8" to 20" wide for a discernable length of 100'. A hole near the top of the hill shows a 15" vertical vein of manganese in a soft sandstone formation. Delineation between the vein and the enclosing rocks in this hole and in the trenches is quite sharp.

BVD No. 2: A number of shallow cuts on a hillside show narrow vertical stringers up to 20" in width in firm and soft weathered sandstone in place. A 12' shaft near the north side line of the claim some 500' from the northwest corner shows a grouping of stringers of manganese with overall width of 18 to 20". Continuity of the vein is indicated in other openings/a distance of 125' from the shaft where cut No. 4 shows 30" of manganese mineralization.

Hillcrest No. 22: A large manganese bearing area in the southeasterly portion of this claim is indicated in a cut 50' long by 6' wide and averaging 3 to 4' deep, and in several nearby cuts. The manganese occurs in stringers and as chunks and boulders in hard sandstone in place. The dump contains such manganese and many scattered large pieces have been strewn about the rims of the openings. The manganese here contains much more silica than in other parts of the property.

### CONCLUSIONS:

The country rock in which the Denison manganese deposits occur is primarily sandstone with some interbedding of chert and compacted clay. Layers of fractured sandstone are common and much of the sandstone near the surface is disintegrated to a soft rock and even to sand by weathering. The manganese mineralization is wide-spread over the area occurring largely as vertical stringers and narrow veins and also occasionally as interbeds between layers of country rock.

In no place did I see evidence that the manganese or its enclosing material had been transported for any distance from its source by water, wind, slide or other natural action. Movements of this sort are the general characteristic of placer deposits. By contrast the manganese mineralization here occurs either in vein form with continuity along strike, with steep or vertical attitude and with distinct separation of the vein material from the enclosing rock; or, less frequently, the occurrence is in beds embraced within the mass of the bedded country rock. In places the vertical veins are seen to pass through alternate differing layers of material, i.e. hard, soft or broken sandstone, compacted clay beds, and thin layers of chert.

An exception to the common type of placer with the characteristics noted above would be a "residual" placer which is one derived from weathering of rock in situ. In this instance however while weathering is present (as in the cappings of most vein deposits) the vein-form of the deposits with valuable mineralization confined within certain well limits and bordered by barren material, effectively rules out the designation residual placer.

*Page 31*  
The distinction between lode and placer has been a subject of continuing controversy since Congress passed the Mining Act of 1872, which is the basis of our present day mining law. Innumerable interpretations of the definition of "lodes" or "veins" have been made in court decisions. One which seems apt in this situation is noted at page 645 of the Pacific Reporter to wit: (excerpts, with underlining by the writer) "And, when this act speaks of veins or lodes in place, it means such as lie in a fixed position in the general mass of the country rock or in the general mass of the mountain ..." -- "and then I want to say that by 'rock in place' I do not mean merely hard rock, merely hard quartz, but any combination of rock, broken up, mixed with minerals and other things" ... -- "Excluding the waste slide or debris on the surface of the mountain all things in the mass of the mountain are in place."

If validity of the Denison claims can be attacked on the ground that they should have been located as placer claims instead of lode claims then one could with infinitely greater propriety challenge the vast majority of the lode claims which support our multi-billion dollar uranium industry. The uranium producing formations are with few rare exceptions sandstone, limestone, mudstone, siltstone, claystone and plain sand and clay with mineralization in most cases clearly occurring in and along ancient stream channels and in pot holes, washes, buried gullies, and in lake beds.

# DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA

## FIELD ENGINEERS REPORT

Mine Alvis F. Denison Mine & Mill

Date December 2, 1958

District Heber, Coconino Co.

Engineer Travis P. Lane

Subject: Visit -10-31-58

Property: 52 patented claims, 2 patented mill sites, and 19 claims for which patents have been applied for. The principal manganese showings on the claims cover parts of Sections 17, 18, 19 and 20, T. 11 N., R. 15 E. The most important workings and the mill are approximately 17 miles west of Heber. The Young-Heber road passes through a portion of the property.

Heber, Arizona,

Owner: Alvis S. Denison, is sole proprietor. His manganese operations in the area began in 1950.

Mr. Denison prevailed in 1957 in his dispute with the Forest Service which had contested his application (made in 1953) for patent of 52 mining claims and 2 mill sites. Mr. Dennison has applied for patent on 19 additional claims. He anticipates opposition by the Forest Service but feels confident these patents also will eventually be granted.

The writer visited the property on October 31, 1958 and discussed the operations with Mr. Alvis Denison. A 200 TPD mill was constructed last year and at the time of the visit was operating at capacity. Concentrate shipments are averaging 2½ cars per month 45% Mn concentrate. The concentrates are shipped to the Government Carlot buying station at Fort Worth, Texas.

The manganese oxide of the district occurs as sporadic fragments and masses in a thin mantle of clayey soil overlying gently dipping Coconino sandstone. Until construction of the mill Mr. Denison's crude shipments were derived from sorting of material mined from scores of widely scattered shallow pits and cuts. The mill made possible the handling of low grade material. While no definite pattern of the occurrences has been proved, some irregular continuity has been recognized in trends of narrow bands of fractures. For most of the past year mining has been done by a tractor-mounted back hoe following fracture bands and offshoots from them. Mining depth is quite shallow with maximum about 16 feet.

The mill equipment consists of an 18" Ken-Ken crusher from which a ½" product is jigged in a Pan American jig, a Denver Equipment jig, and a 4 - compartment Hartz jig.

Ten men are employed.

DEPARTMENT OF MINERAL RESOURCES

STATE OF ARIZONA  
FIELD ENGINEERS REPORT

Mine Denison Manganese Date Sept. 7, 1960  
District Heber, Coconino Co. Engineer Travis P. Lane  
Subject: Examination - Sept. 1-2, 1960

The captioned property was first visited by the writer on Oct. 31, 1958 and the findings covered in a Department of Mineral Resources report dated Dec. 2, 1958. At the time, Mr. Alvis Denison, proprietor, had recently been granted patents on a large number of manganese lode claims in an area centered about his camp and mill; and he had applied for patents on other adjoining claims.

At the time of this visit (Sept. 1-2, 1960) the number of Denison patented claims totaled 57 and application for patent for 16 additional claims was in process. The Forest Service however is vigorously contesting the validity of these claims principally on the grounds that the deposit is placer rather than lode. These 16 claims border on or are interspersed among the existing patented claims the whole making a more or less solid block of claims with similar rock formation and manganese mineralization. While many of the patents granted to date were contested by the Forest Service it is interesting to note that there was no questioning of the validity of any of the claims because of their being located as lodes instead of placers.

The recent visit was made at the behest of J. H. Morgan, Attorney for Alvis Denison for the purpose of determining the proper classification of the manganese deposits - i.e. whether lode or placer. I drove to Denison's camp on Sept. 1, arriving about noon. Mr. Morgan was a passenger in my auto. We spent the afternoon and the major part of the next day at the property returning to Phoenix in the late afternoon of Sept. 2. We were guests of Mr. Denison at his camp during our stay.

The claims under consideration for patent are covered by Mineral Surveys Nos. 4462, 4463, and 4483. The respective claims are as follows:

M.S. No. 4462:	Miss Lottis No. 4
	" " No. 5
	" " No. 6
	D & W No. 4
	" No. 5
	" No. 6
M. S. No. 4463:	BVD No. 3
	" No. 4
	" No. 5
	Little Pine No. 7
	" " No. 8
	" " No. 9
	Hillcrest No.23
M.S. No. 4483:	BVD No. 1
	" No. 2
	Hillcrest No.22

I visited each of the above claims in the company of Alvis Denison and his son William, and Mr. Morgan; and inspected exposures of formation and manganese mineralization in a large number of pits, trenches and holes, and several shafts on the claims. Most of

these openings were cleared of water and in most of them at least two walls were sufficiently clean to readily view the formation and the mode of ore occurrence. I also inspected a number of openings on patented claims adjoining the claims in question. Following is a description of the more important work places visited:

On the C & D claim No. 11 (patented) past mining operations have opened a pit some 100,000 square feet in areal extent and about 8 feet deep with however much of the floor made up of back fill. The mining method here as elsewhere on the property has been to strip off the thin mantle of overburden and then to mine the generally narrow vertical manganese stringers or groupings of stringers (veins) by means of a tractor-mounted back-hoe. A considerable number of veins was mined in this pit. The veins had a more or less parallel strike and were mined to a maximum depth of 16 feet. In order to mine to this depth the upper wall material of the hoe trenches was removed by dozer and backfilled in the pit as mining progressed.

The Miss Lottie No. 5 claim adjoins the northwest end line of the above C & D No. 11 claim and judging from the exposures in openings in the Miss Lottie No. 5 claim near the common end line the manganese mineralization extends into this as yet undeveloped claim. The shallow openings on Miss Lottie No. 5 as well as in several cuts and trenches on Miss Lottie No. 6 (west of No. 5) and Miss Lottie No. 4 (east of No. 5) show compacted clay and weathered sandstone in place with some of the cuts showing a good sprinkling of manganese in the ends and also in the dumps.

D & W No. 3 claim: A narrow trench 20' long by 8' deep has been made on a stringer of manganese and a short distance beyond one end of the trench a shaft has been put down 55'. The shaft is sunk on a stringer of manganese and at 48' a drift had followed it for 16' and two men were continuing with the work at the time of visit. The stringer could be seen cutting 2 firm layers of sandstone just above the start of the drift and there were pieces of chert on the dump along with soft sandstone and clay.

D & W No. 4: A trench 12' long and about 5' deep has been opened on the southwest half of the claim. There was water in the bottom and the banks were sloughed. The trench was apparently dug longitudinal with a vein and the dump showed a considerable amount of manganese with broken sandstone rock and some chert and clay. Some 75' north of this trench a cut 10' long by 5' wide by 4' deep showed a 6' vertical band of manganese mineralization in a formation in place composed of bedded hard and soft sandstone, clay and some chert. A similar showing is visible in a nearby trench in a clay and sandstone formation.

D & W No. 5: A cut 12' long, 10' deep and about 10' wide exposed a narrow vertical vein of manganese cutting alternate beds of clay, hard and soft sandstone and thin layer of chert. The soil overburden here was about 4' deep.

EVD No. 3 Claim: Near the east end of the claim a cut and fill area along new highway construction shows much manganese in the fill material. The fill has covered exposures stated to show good manganese interbedded with sandstone. Mr. Denison has a photograph (taken before filling) supporting this statement.

EVD No. 4: Shallow holes No. 1, 2 & 3 in the northwest portion of the claim showed hard and some fractured sandstone with manganese, all in place. Holes 6, 7 and several others showed manganese on the dump along with both hard and fractured sandstone chunks.

A crosscut trench 45' long near the southeast corner of the claim intersects an 18" vein of manganese in its eastern end. This is at the top of inclined strata of hard sandstone which is exposed for the full length of the trench. In the same trench and some 10' west from the above showing a 24" wide vertical band of manganese mineralization is intersected in the hard sandstone. The west end of the cut was discontinued in sandstone which was too hard to dig mechanically.

BVD No. 5: No. 6 trench in the northeast portion of the claim is 12' long, about 6' wide, and about 10' deep and shows the formation in place composed of hard and soft weathered sandstone with a vertical 10 to 12" vein of manganese clearly visible in each end of the trench. Two nearby holes expose a similar vein (possibly the same vein) in the same sort of formation. Also, near here, hole No. 1 is 9' deep and very clearly shows in the north wall a vertical vein of manganese mineralization 18" to 24" wide in fractured sandstone.

Little Pine No. 7 Claim: Trench No. 9 and several nearby trenches show manganese stringers, hard and soft sandstone, and clay in place.

Little Pine No. 8 : Cut No. 4 is 15' by 7' wide by 8' deep and shows a vertical vein of manganese about 3' wide in the west wall in a formation of hard and soft sandstone with some clay. No. 7 trench with about the same dimensions shows several thin vertical stringers of manganese in hard sandstone. A cut 8' x 4' x 3' deep shows a 4" to 6" stringer in sandstone.

Little Pine No. 9: Manganese in sandstone in place is visible in a number of cuts and trenches and holes in the northeasterly portion of this claim.

Hillcrest No. 23 claim: The west bank of the new highway cut exposes beds of hard sandstone with considerable interbedded manganese for a length of 60'. The manganese occurrence here is said to be similar to that which is covered by fill on the east end of the adjoining BVD claim No. 3 (noted above).

BVD No. 1 Claim: An 80' dozer cut has been made along a hillside on this claim. The material in the cut is hard and soft sandstone with a surface cover of hard sandstone containing some lime. A vein of manganese is exposed in the bank of the cut extending from the floor to just beneath the hard sandstone cover. At the top the manganese is about 6' wide and it narrows to 8" in the bottom of the cut. On the hill above and about 100' north of the dozer cut a series of shallow trenches expose a manganese vein varying from 8" to 20" wide for a discernable length of 100'. A hole near the top of the hill shows a 15" vertical vein of manganese in a soft sandstone formation. Delineation between the vein and the enclosing rocks in this hole and in the trenches is quite sharp.

BVD No. 2: A number of shallow cuts on a hillside show narrow vertical stringers up to 20" in width in firm and soft weathered sandstone in place. A 12' shaft near the north side line of the claim some 500' from the northwest corner shows a grouping of stringers of manganese with overall width of 18 to 20". Continuity of the vein is indicated in other openings/a distance of 125' from the shaft where cut No. 4 shows 30" of manganese mineralization.

Hillcrest No. 22: A large manganese bearing area in the southeasterly portion of this claim is indicated in a cut 50' long by 8' wide and averaging 3 to 4' deep, and in several nearby cuts. The manganese occurs in stringers and as chunks and boulders in hard sandstone in place. The dump contains much manganese and many scattered large pieces have been strewn about the rims of the openings. The manganese here contains much more silica than in other parts of the property.

#### CONCLUSIONS:

The country rock in which the Denison manganese deposits occur is primarily sandstone with some interbedding of chert and compacted clay. Layers of fractured sandstone are common and much of the sandstone near the surface is disintegrated to a soft rock and even to sand by weathering. The manganese mineralization is wide-spread over the area occurring largely as vertical stringers and narrow veins and also occasionally as interbeds between layers of country rock.

In no place did I see evidence that the manganese or its enclosing material had been transported for any distance from its source by water, wind, slide or other natural action. Movements of this sort are the general characteristic of placer deposits. By contrast the manganese mineralization here occurs either in vein form with continuity along strike, with steep or vertical attitude and with distinct separation of the vein material from the enclosing rock; or, less frequently, the occurrence is in beds embraced within the mass of the bedded country rock. In places the vertical veins are seen to pass through alternate differing layers of material, i.e. hard, soft or broken sandstone, compacted clay beds, and thin layers of chert.

An exception to the common type of placer with the characteristics noted above would be a "residual" placer which is one derived from weathering of rock in situ. In this instance however while weathering is present (as in the cappings of most vein deposits) the vein-form of the deposits with valuable mineralization confined within certain well limits and bordered by barren material, effectively rules out the designation residual placer.

The distinction between lode and placer has been a subject of continuing controversy since Congress passed the Mining Act of 1872, which is the basis of our present day mining law. Innumerable interpretations of the definition of "lodes" or "veins" have been made in court decisions. One which seems apt in this situation is noted at page 645 of the Pacific Reporter to wit: (excerpts, with underlining by the writer) "And, when this act speaks of veins or lodes in place, it means such as lie in a fixed position in the general mass of the country rock or in the general mass of the mountain ..." -- "and then I want to say that by 'rock in place' I do not mean merely hard rock, merely hard quartz, but any combination of rock, broken up, mixed with minerals and other things" ... --- "Excluding the waste slide or debris on the surface of the mountain all things in the mass of the mountain are in place."

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HEARING ON THE APPLICATION OF ALVIS F. DENNISON AND LOTTIE MAE DENNISON TO PATENT MINING CLAIMS IN THE SITGREAVES NATIONAL FOREST.

On Monday, October 19, 1953 at 9:30 A. M. the Dennison hearing was called in the office of the Bureau of Land Management, Room 241, U. S. Post Office Building, Mr. Thomas F. Britt, Manager, presiding.

An application for patent on 20 mining claims had previously been made by Lottie Mae Dennison, of which 6 had been adversed by the U. S. Forest Service and Alvis F. Dennison had made application to patent 21 mining claims, of which 7 had been adversed by the U. S. Forest Service. On 13 of Lottie Mae Dennison's claims and on 14 of Alvis F. Dennison's claims, the Forest Service filed no protest.

The Forest Service was represented by: W. G. Koogler and E. S. French from the Albuquerque office and Ralph V. Mingus, Mineral Examiner from Denver.

The Dennisons were represented by the firm Joseph H. Morgan & Son, Attorneys, Phoenix.

Due to a plea by the Forest Service of insufficient time to gather pertinent evidence, Mr. Britt granted a continuance of the hearing until November 18, 1953; but agreed to hear certain witnesses for the Dennisons on the plea that it was impossible for them to appear at a later date. These witnesses were: S. P. Vickers and O. A. Bolinghouse, both employees of the Dennisons, and Caswell Silver, a registered mining geologist from Albuquerque, New Mexico.

Lottie Mae Dennison took the stand first and testified to the fact that she and her husband had patented certain mining claims in 1948, said claims being located in the Sitgreaves National Forest in the vicinity of Long Valley. She further stated that in 1943 and 1944, prior to patenting, she had shipped \$12,723.05 worth of ore, of which \$5,000 was profit. She also stated that she was presently shipping from these claims through a lessee to the Manganese Depot at Wenden, Arizona. The patent to these claims was granted with the stipulation that they would not market the timber from the claims. Upon the death of her husband, Lottie Mae Dennison subsequently sold the timber from these claims.

Mr. Vickers then took the stand, followed by Mr. Bolinghouse and both of these gentlemen testified to the fact that they had done the location work on all of the claims presently in question; as well as the necessary development work for patent for the Dennisons. They further stated that they had uncovered manganese in commercial quantities in place on all of the claims.

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Throughout the testimony they referred to ore in various percentages with a manganese content of percentages varying from 20% to 40%.

Mr. Caswell Silver, geologist, after qualifying himself, stated that he had spent one day on these claims in June of 1953 and one day again on the 28th day of September, 1953, during which time he examined all of the claims in question; wrote a report on them for the claimants; and took numerous samples. He stated during his testimony that he had in his opinion made sufficient geological examination to warrant his statement that commercial ore in considerable quantities was present on all of the claims. He also stated that there was present on a great many of the claims, manganese ore in excess of \$150,000 per claim. Mr. Silver thinks that all of the claims in question contain good deposits of manganese.

He also stated that in some localities, the manganese had replaced 90% of the sandstone and that the resulting ore ran as high as 50% manganese.

Mr. French, representing the Forest Service, cross examined Mr. Silver regarding his statements on one claim, namely: No. 7, and it was admitted that his deductions in which he stated that fully one fourth of the claim contained manganese ore in paying quantities, were based on evidence consisting of one 4 x 4 x 7 feet deep pit located in one corner of the claim.

The hearing was then adjourned at approximately 3 P. M. until November 18, 1953.

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OBSERVATIONS

It appeared to me that the ore spoken of by the witnesses for the Dennisons was specimens - in other words, pieces of manganese removed from the host material which in this instance was clay and sand and gravel rather than ore as usually recognized by engineer which would consist of all of the material that would have to be mined.

It is my opinion that an assay of the mined material would not even closely approximate the percentages testified to. However, I do feel that manganese mineral is present on all claims on which a patent was requested. Some question arose as to whether this mineral was in place or not, and I don't consider such a question as being pertinent to such an application for should it be proven that the mineral was not in place, the claims could be located as placer claims and patent re-applied for.

There is some question in my mind, however, as to whether or not sufficient work has been performed on the claims to warrant patent and also there is some question as to whether mineralization is sufficiently great as to warrant a prudent man to spend his time and money in an attempt to develop a mine.

Apparently the Forest Service's main point of contention is that the timber on the claims estimated to be approximately \$5,000 per claim is worth more than the mineral.

Testimony was recorded both by court reporter and dictaphone - copies of which no doubt will be available. There was no cross-examination of the witnesses other than Mr. Silver and that only on one claim. The Attorney General's office was represented by Mr. Bartlett.

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*S/ R. C. Manning* T  
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Director,  
Department of Mineral Resources.

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August 12, 1953

Mr. Alvis F. Denison  
P. O. Box 103  
Fort Wingate, New Mexico

Dear Mr. Denison:

We have your letter of August 10 addressed to Mr. Manning, concerning a probable date for conference. Mr. Manning is out of the city this week and we will call your letter to his attention immediately upon his return.

Very truly yours,

Secretary.

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July 31, 1953

COMMENTS ON MINING LOCATIONS IN THE SITGREAVES  
NATIONAL FOREST.

To date approximately 82 claims have been located by Alvis F. Dennison and 22 claims by Johnny Patrick. Mr. Dennison has had surveyed for patent 42 claims, the majority of which the Forest Service has put of record "no protest", and the Regional Forester of Albuquerque has requested adverse proceedings on the remaining claims.

Mr. Patrick has filed a timber waiver on his claims. The claims of both Patrick and Dennison are located on perhaps the best stand of virgin timber in the State of Arizona. It has been estimated by authorities in the lumber industry that a conservative value of the timber on these claims, figured at the rate of \$15.00 per 1,000 feet of stumpage, is \$5,000 per claim, which means that there is in excess of \$500,000 in timber involved.

While there is definitely a trace of manganese, nothing has been developed to date to justify any large scale or commercial operations. The forest service stated that Mr. Patrick had voluntarily signed timber waiver on all his claims, but that Mr. Dennison had no such intentions.

Since the value of the timber very far exceeds the value of any manganese showings, the question immediately arises as to why Mr. Patrick would voluntarily waive approximately \$100,000, and why the Forest Service would willingly file "no protest" on claims of Mr. Dennison containing almost \$200,000 worth of timber.

R.I.C. Manning, Director.

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STATE OF ARIZONA  
DEPARTMENT OF MINERAL RESOURCES  
MINERAL BUILDING, FAIRGROUNDS  
PHOENIX, ARIZONA



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