BEFORE THE INDIAN CLAIMS COMMISSION

THE MINNESOTA CHIPPEWA TRIBE,
et al.,

Plaintiffs,

v.

Docket No. 18-S

THE UNITED STATES OF AMERICA,

Defendant.

Decided: January 14, 1976

Appearances:

Rodney J. Edwards, Attorney for Plaintiffs. Marvin J. Sonosky was on the Brief.

Richard L. Beal, with whom was Assistant Attorney General Shiro Kashiwa, Attorneys for Defendant.

OPINION OF THE COMMISSION

Vance, Commissioner, delivered the opinion of the Commission.

In this case the Minnesota Chippewa Tribe, et al., claims that the consideration for the cession of certain lands in Wisconsin and Michigan was unconscionable within the meaning of Clause 3, Section 2, of the Indian Claims Commission Act (60 Stat. 1049, 1050). The lands involved have been designated as Area 261 by Charles C. Royce on his Michigan Map I and Wisconsin Map I in the 18th Annual Report of the Bureau of American Ethnology, Part II, Indian Land Cessions, and they will be referred to hereafter as Royce Area 261. In previous findings made on

August 13, 1968 (19 Ind. Cl. Comm. 319), the Commission determined that these lands were ceded by the plaintiff to the United States by the Treaty of October 4, 1842. Article VII of the Treaty provided that it should become obligatory upon the parties when ratified by the President and Senate of the United States. In the absence of the recorded ratification date, the proclamation date of March 28, 1843, will be considered the date of taking of this area.

The case is now before the Commission for determination of the acreage and fair market value of Royce Area 261, as of March 28, 1843. We must also decide whether or not the consideration for the cession was unconscionable. The parties agree, and we find, that Royce Area 261 contains 10,538,000 acres of which 5,435,733 acres are in Michigan and 5,102,267 acres are in Wisconsin. The Michigan portion is in the western half of the Upper Peninsula, and extends eastward to the Escanaba and Chocolate Rivers. The northern boundary is formed by 367 miles of Lake Superior shoreline, including Isle Royale in Lake Superior about 50 miles northwest of the Upper Peninsula. The Wisconsin portion is at the north end of the state extending approximately 200 miles from east to west. For most of the width of the Wisconsin area, the land is a narrow strip varying from 20 to 50 miles, north to south.

The area has hills ranging from 600 feet to 900 feet above lake level near the coast of Lake Superior, running generally east and west with valleys of

flat or gently rolling land, and increasing to heights of 1200 feet to 1300 feet some 15 to 20 miles inland. The Porcupine Mountains are almost on the coast of Lake Superior about 37 miles northeast of the mouth of the Montreal River. They are an exception to the east—west direction of the hill range and extend inland south and west in Gogebic and Ontonagon counties. They are about 900 feet high near Lake Superior and rise to 1100 and 1300 feet above lake level at several inland knobs. The valleys separating the ranges in the hilly district are heavily timbered and the soil in the valleys is a dark, rich and deep loam. Densely wooded streams wind through the bottom lands. The country levels out south of the hills and becomes flat.

Part of the area drains to the south into the Mississippi River via the Wisconsin, St. Croix and Chippewa Rivers. The eastern aréa drains into Lake Michigan via the Menominee River and its tributaries, while the northwest area drains into Lake Superior. The largest rivers in the area have their sources in the Lake Superior-Lake Michigan divide and flow into Lake Michigan. The Menominee River, a part of the Wisconsin-Michigan boundary, is the largest. Its sources are within 15 miles of Lake Superior and it runs 200 miles, with numerous tributaries feeding from within the ceded area. Other important rivers are the Chocolate, Death, Yellow Dog, Huron, Portage, Fire Steel, Ontonagon, Iron, Presque Isle, Black and Montreal. The Ontonagon is the largest of all the rivers that flow into Lake Superior. It has three principal branches and

drains about 1300 square miles. The Sturgeon River is the next largest and runs for about 65 miles on the northern slope. The Black and Presque Isle Rivers are large and flow northwesterly into Lake Superior.

Transportation in this area at the time of the cession was by foot on trails, or by canoe on the many streams and lakes, with portages around rapids and from one stream to the next. Dog sleds were used during the winter months when these water surfaces were frozen over. Access to the area was by water over the Great Lakes, which was restricted in the winter time by ice conditions at Sault Ste. Marie and in the lakes. Between Lake Superior and Lake Huron there was the 21 foot fall at Sault Ste. Marie which constituted an impediment to the connection of navigation between the lakes. In 1839 the State of Michigan contracted to pay \$112,000 for the construction of a canal around the falls. However, that effort was abandoned when the contractor was forcibly removed from the area by armed United States troops in May of 1839. In 1853 canal construction was begun, and the canal was opened for public use in June 1855. Railroads were many years away. A privately financed railroad was begun in 1852 and completed in 1857 for the movement of iron ore from the mines at Neguanee and Ishpeming to Marquette Bay. This was the first section of a railroad system of 462 miles that was to link Keweenaw Bay to Chicago in 1872.

The average growing season was 115 days in the Michigan portion of the area and 123 days in the Wisconsin portion. On 65% of the land the soil was of first or second rate agricultural quality. Most of the precipitation occurred in the warmer half of the year and amounted to an average of 29 inches in Michigan and 30 inches in Wisconsin. The growing season was adequate for wheat, rye, potatoes, barley and hay. Since there was limited access to markets outside the area, the agricultural land was primarily useful for subsistence farming.

There was no substantial non-Indian population in Royce Area 261 prior to the valuation date. The decade between 1830 and 1840 was a period of westward migration of population, and in this period of time the population of Michigan increased from 32,000 to 398,000. Wisconsin's population grew from 42,000 persons in 1842 to 155,000 in 1846 and 305,000 in 1850. In this period the population of Illinois grew from 157,000 to 851,000 and that of Indiana grew from 343,000 to 988,000. Chicago, which did not exist as a city in 1830, had a population of 43,000 by 1850, and by that year Milwaukee had expanded to 31,000 people.

The subject area lay within the forest region known as the northern pine belt. The forested areas were generally a mixture of pine and hardwoods, but the predominant tree was the white pice. In 1843 it was the most desirable tree and was cut commercially almost to the exclusion of Norway pine. White pine was light, soft, easily worked, slow to decay, and seasoned well. It was suitable for almost any building purpose and was capable of being floated down the logging streams. Norway pine

had some use for structural purposes. The hardwoods and jack pine had no commercial value in 1843.

In 1843 Royce Area 261 contained 4,264,131 acres of white and Norway pine. This figure was calculated by plaintiff's forestry expert, John William Trygg, who based his estimate on data obtained from the United States Land Surveyors' field notes. As we have previously held, the surveyors' notes are among the best evidence of the quality and adaptability of a specific area to be valued. Bois Forte Band v. United States, Docket 18-D, 34 Ind. Cl. Comm. 157, 163 (1974); Sac and Fox Tribe v. United States, Docket 195, 13 Ind. Cl. Comm. 295, 315 (1964). In addition to this acreage Mr. Trygg estimated that there were an additional 4,490,588 acres of forest which contained primarily hardwoods but with some white and Norway pine.

It is true, as defendant has noted, that Mr. Trygg's pineland acreage computation included the less valuable Norway pine. But Norway pine represented a relatively insignificant part of the total pine stand. In his report on the forestry conditions of northern Wisconsin Filibert Roth, Special Agent United States Department of Agriculture, noted that originally Norway pine formed but a very small part of the entire stand of pine and that even in 1897 it represented only 13% of the remaining supply of pine. Since white pine had been cut almost to the exclusion of Norway pine, it is obvious that the Norway pine constituted a far lesser percentage of the pine forests in 1843.

The value of the pinelands in Royce Area 261 was directly related to the watershed area in which they were located. The most valuable forested areas were those in the Lake Michigan watershed. There were 2,085,895 acres of white and Norway pine in that portion of Royce Area 261, and Mr. Trygg estimated that the stand contained 10.863 billion board feet of lumber, which was an average of 5,208 board feet per acre. The timber and lumber from that area could be delivered to the routes of vessels trading between Chicago, Milwaukee, and other markets. In the 1830's and early 1840's lumbering operations had begun and sawmills were located on rivers which reached into Royce Area 261. In the 1850's when General Land Office surveyors traversed the Lake Michigan watershed area of the subject tract, they found evidence that some timber had already been cut.

The Royce Area 261 pinelands within the Wisconsin River drainage had a value comparable to those in the Lake Michigan watershed. The Wisconsin River, feeding into the Mississippi River, provided an outlet to developing markets in the Mississippi River valley and from there to the prairie areas of Illinois, Iowa, Missouri and other states. There were 646,968 acres of white and Norway pine in this Wisconsin River drainage area. The average stand of white and Norway pine, as computed by Mr. Trygg, was 6,076 board feet per acre. The Wisconsin River and its principal tributaries were large enough to float logs and lumber. To the south of Royce Area 261 commercial lumbering had commenced immediately after that area's cession by the Menominee Indians in 1836, and by the early 1840's there were 24 mills in operation on that part of the Wisconsin River.

The remaining pineland acreage, 1,531,268 acres, was within the Lake Superior drainage system. It was the least desirable of the Royce Area 261 pineland because of its remoteness and difficulties in transporting the lumber. There was no real market for timber in that area until the St. Mary's canal was completed in 1855, and it became possible to reach the same markets as those served by the Lake Michigan drainage lands. While there was some local demand for the timber, large-scale lumbering did not begin until the 1860's.

Plaintiff's expert appraiser, Mr. Robert Nathan, valued the timber and agricultural uses of the subject tract. His timberland appraisal was primarily based on a computation of the 1843 value of the future income to be derived from the sale of pine timber. His study considered each of the three drainage divisions. The most valuable timber was in the Lake Michigan watershed for which he projected the sale of Royce Area 261 white pine over a 40-year period and discounted the expected net cash income to an 1843 value using both 8% and 10% discount factors. His calculations involved many assumed factors which are questionable. For example he used a Chicago-Milwaukee lumber price of \$20 per thousand board feet for the entire 40-year period. He based this on some eleven sources of lumber prices between 1834 and 1842. However, several of the cited sources do not support his figure but, to the contrary, indicate that the overall selling price for lumber in Chicago was considerably less than \$20 per thousand board feet. For example his listed prices for 1840 were from \$16.00 to \$20.00 and from \$18.00 to \$20.00. And for

1842 the indicated range was \$18.00 to \$20.00. However, the cited sources quoted such prices for clear lumber only, and other grades of lumber were quoted at lower prices, including merchantable lumber at \$10.00 to \$13.00; second quality at \$12.00 to \$13.00; and flooring at \$12.00 to \$14.00. A prospective purchaser of Royce Area 261 would not have envisioned a sale of all the pine timber in the Lake Michigan watershed at a clear lumber price of \$20.00 a thousand board feet. The evidence also indicates that lumber prices in the later years of Mr. Nathan's 1843 to 1883 projection often were below the \$20.00 figure. For the Lake Michigan timber Mr. Nathan used an estimated cost factor of \$9.50 per thousand board feet for the entire 40-year period. This figure is likewise subject to serious dispute. Using these estimates and applying them to a projected Chicago market for Royce Area 261 lumber, Mr. Nathan computed the 1843 stumpage value of pine accessible to Lake Michigan at \$7,451,077.00 (at the 8% discount factor) and \$4,741,338.00 (at the 10% discount factor). Since there were 2,085,895 acres of pineland in the portion of the area drained by streams flowing

^{1/} The Tribune Chicago, April 11, 1840 (Pl. Ex. N-50) Lumber: Clear \$16.00-\$20.00; Merchantable \$10.00 to \$13.00; Flooring \$12.00 to \$14.00; Siding \$12.00 to \$14.00. Refuse \$7.00 to \$10.00; Shingles \$2.50 to \$3.50.

Hotchkiss, G. W., Lumber and Forest Industry of the Northwest, Chicago, 1896 (Pl. Ex. N-31) p. 671 "The prevailing prices for lumber in 1840 were for clear per thousand, \$18 @ \$20; merchantable, \$12 @ 14; flooring \$14 and \$16; refuse \$8 @ \$10; shingles \$2.50 @ \$4."

Chicago Democrat, June 1, 1842 (Pl. Ex. N-51) Boards, 1st quality \$18.00 to \$20.00; Boards, 2nd quality \$12.00 to \$13.00; Scantling and joist \$9.00 to \$10.00; Flooring and siding \$12.00 to \$15.00; Lath \$2.50 to \$3.00; Lath board \$7.00 to \$8.00; Shingles \$2.00 to \$3.00; and square timber per foot \$5.00 to \$12.00.

into Lake Michigan, Mr. Nathan computed that ". . . . the stumpage value per acre of pineland would be \$2.27 if an annual discount rate of 10 percent is used, and \$3.57 if a discount rate of 8 percent is used."

(Nathan Appraisal Report, Pl. Ex. N-1, p. 43). Obviously any change in Mr. Nathan's assumed price or cost factors would have a significant effect on the computations. But even assuming that the stumpage value computations were based cr valid assumptions, such a valuation procedure is really an elaboration of a process whereby units are multiplied by a price per unit—a method which has been rejected by the courts and this Commission.

See e.g., Nooksack Tribe of Indians v. United States, 6 Ind. Cl. Comm. 578, 600-601 (1958), aff'd., 162 Ct. Cl. 712 (1963), cert. denied, 375 U.S.

993 (1964). There is no evidence to indicate that any pineland close to the subject area was selling in 1843 for a price of \$2.27 to \$3.57 an acre.

Using the same method Mr. Nathan computed a per acre stumpage value of \$2.50 to \$3.50 an acre for that part of the pineland in the Wisconsin River basin. The pinelands in the Lake Superior watershed were less accessible to any market. Mr. Nathan considered that even when that timber was logged there would be higher transportation costs, and he valued the Lake Superior pinelands at \$1.00 an acre.

Mr. Nathan attempted to corroborate his stumpage value per acre by a presentation of actual sales of pineland in the north central states. He listed some 25 "sales" from 1855 to 1875, discounting the

per acre prices to 1843 using the wholesale price index. We find no basis for accepting the indicated value of \$2.94 per acre as representing the fair market value of Royce Area 261. Of the 25 listed transactions, seven were not sales at all but only offers. There is no evidence to indicate that the lands involved in the study were comparable to those in the subject tract. All of the sales occurred long after the valuation date, and, while Mr. Nathan adjusted the prices to 1843 values by means of the wholesale price index, it does not appear from the record that pinelands appreciated at the same rate as the general wholesale price index.

In addition to the computations relating to pineland values Mr.

Nathan considered various factors which related to the value of the remaining lands in Royce Area 261. Those factors, as detailed in our findings, concerned agricultural uses as well as some value for hardwoods and other scattered areas of pine. Mr. Nathan's overall surface valuation for the subject tract was \$14,500,000.00.

Defendant's expert appraiser, Mr. Richard B. Hall, finding no comparable sales upon which he could base a valuation of the subject tract, listed a variety of factors which would have affected the 1843 value of Royce Area 261. While he considered all of those factors, in the final analysis he based his appraisal on the \$1.25 per acre price for public land, discounted by one dollar to arrive at a valuation of 25 cents per acre. His discounting factors were:

\$0.50 - costs of financing, holding, taxes and management

0.25 - development and sales

0.25 - profit

\$1.00 Total

He arrived at a cost of financing figure by using a 10% rate of return on investment (or cost of borrowed capital) for a 10-year period, which was his estimate of the waiting period which would have been required before resales of the area would bring in any income. In Mr. Hall's analysis, this would mean "more than a doubling of the price that would have been paid for the land." This would account for 25 cents of the discounting factors. However, there is little to support the remaining deductions of 75 cents. All of the listed amounts are Mr. Hall's subjective determinations of factors which he believes an 1843 investor would have considered in purchasing Royce Area 261 as a speculation. We do not agree with the \$1.00 discount which Mr. Hall has applied to the \$1.25 selling price for the public domain. While such a figure would appear justified for the relatively undesirable areas of the tract, it cannot be applied "across the board" to include the millions of acres of choice pineland which was accessible and would have been in demand shortly after the land was available to the public.

^{2/} If this amount represents the 10% return expected by a buyer on his invested capital, then the 25 cents profit factor listed by Mr. Hall would have permitted another 10% return on the investment, or a total of 20% for 10 years.

In valuing the pineland acreage of Royce Area 261 we have considered separately the various acreages within the three watershed acres. The evidence indicates that choice public lands were selling at prices close to \$1.25 an acre about the valuation date. Defendant's appraiser used a \$1.25 per acre price as the starting point for his appraisal. And plaintiff's appraiser presented a table of public land sales which reflected that between 1835 and 1842 some 2.4 million acres of public land were sold at land offices in Michigan and Wisconsin at an average price of \$1.28 per acre. Of course the sales in Michigan were in the lower peninsula and the Wisconsin sales were in the Milwaukee and Green Bay districts. Such lands could not be considered comparable to the subject area. On the other hand the sales were prior to the 1843 valuation date in this case.

Defendant's appraiser reduced his overall \$1.25 figure by \$1.00 to account for costs of financing, holding, taxes, management, expenses of development and sales, and resale profit. As we have previously indicated defendant's expert has not provided a basis for these figures, and we do not believe such discounts should be applied in this case, especially to the choice pinelands, which would have been in demand shortly after the cession of the area by the Indians in 1843. We consider the pineland in both the Wisconsin River and Lake Michigan drainage areas to have been the most valuable and that the 1843 fair market value of such lands would have been slightly less than the \$1.25 an acre which was the then

prevailing price paid for lands of similar quality located closer to the populated acres of Michigan and Wisconsin. We value the choice pinelands in Royce Area 261 at an average per acre price of \$1.00, resulting in the following totals:

Lake Michigan pinelands 2,085,895 acres
Wisconsin River pinelands 646,968 acres
2,732,863 acres

2,732,863 acres x \$1.00 = \$2,732,863.00

The remaining pinelands in the subject area, those in the Lake
Superior drainage, were not as valuable. Plaintiff's expert appraiser
recognized the remoteness of the area, and, because of the greater
transportation costs that would have been involved in a commercial
lumbering operation in that area, he valued the Lake Superior pinelands
at less than half the per acre value of the Lake Michigan and Wisconsin
River pinelands. We agree that the Lake Superior pinelands were much less
valuable than those in the Wisconsin River and Lake Michigan drainages,
and we find that the 1,531,268 acres of pineland in the Lake Superior
watershed had an 1843 fair market value of \$0.50 an acre or a total of
\$765,634.00.

There were in Royce Area 261 some 6,273,869 acres of land, other than the white and Norway pineland which we have just considered. This additional 6 million plus acres included a small amount of scattered agricultural land which would have had a value even higher than the

choice white and Norway pine in the most accessible areas. The 120-day growing season was adequate for wheat, rye, potatoes, barley, and hay. The climate and soil were favorable, and local markets for agricultural products would have become available with the expanding lumbering operations and mining. A great portion of the remaining lands was forested with hardwoods and some pine. The large areas of swamp land also had some white and Norway pine. Such forested areas, while not as valuable as the Lake Michigan and Wisconsin River pinelands, had a value for local use. There were, of course, some areas, particularly marsh and water areas which in themselves had virtually no market value. Overall we conclude that the 6,273,869 acres were worth slightly more than the remote pinelands of the Lake Superior watershed. But they were not nearly as valuable as the choice Lake Michigan-Wisconsin River pinelands. We find that the 1843 fair market value of the remaining 6,273,869 acres averaged \$.60 per acre or a total of \$3,764,321.00.

For the reasons set forth we have concluded that the surface value for the subject tract was \$7,262,818.00.

The first discovery of iron ore in the subject area was made in September 1844, some 18 months after the valuation date in this case. Therefore the iron deposits in Royce Area 261 did not contribute to the tract's 1843 fair market value. Plaintiffs have argued that the iron ore would have added a substantial value (\$3,072,000) because iron

^{3/} We have thus valued the entire surface area of the subject tract without any deductions for the areas from which copper ore could be extracted. However, since we are valuing the mineral enhancement on a discounted royalty basis covering a production period of over 45 years, we can assume that the prospective purchaser of Royce Area 261 would have been able to utilize virtually all the surface area resources (the primary one being the cutting of pine timber) before any of the copper ore was removed.

deposits were apparent on the surface and were readily identifiable. For this reason, plaintiffs contend, any well informed prospective purchaser of the tract would have observed the deposits, either through personal inspection or as a result of hiring experts to explore the lands. We cannot accept plaintiffs' contention as a basis for valuing Royce Area 261. Plaintiffs would include post valuation date discoveries and knowledge to support a value of over 3 million dollars for iron deposits. The Commission can only consider the knowledge that was available on March 28, 1843. As we stated in Northern Painte Nation v. United States, 16 Ind. Cl. Comm. 215, 308-309 (1965), aff'd, 183 Ct. Cl. 321, 393 F.2d 786 (1968):

. . . While we do take into consideration all the information which was available on the date in question, we cannot go beyond that which was "known" to impute to the well informed buyer and seller additional knowledge based on future discoveries or that which might have been discovered if additional explorations had been conducted. In this case the Commission will base its fair market value determinations upon all of the factors which we believe the prospective well informed buyer and seller would have considered in connection with the sale of the California portion of the Mono tract on March 3, 1853, and of the Nevada portion of the Mono tract on July 11, 1863. We cannot in making our determinations enter the vast area of conjecture and speculation of that which "might have been" if a qualified mineral evaluator had made a thorough exploration of the area and if he had observed the mineralized outcroppings and if he had correctly analyzed his findings and if he had been able to define or limit the extent of the underlying minerals.

On the valuation date it was known that there were substantial copper deposits in Royce Area 261. In fact the Indians had mined copper from Isle Royal and Keweenaw Point long before any white men were at Lake Superior. The French knew of the deposits, and an Englishman, Alexander Henry, undertook mining operations on Keweenaw Point in 1763.

As a result of earlier French explorations, Benjamin Franklin was aware

of the copper to the south of Lake Superior, and he insisted upon its inclusion as part of the United States territory when he participated in negotiating the Treaty of Paris ending the Revolutionary War.

In 1840 the Michigan State Geologist, Dr. Douglass Houghton, commenced an investigation of the copper belt on the northern slope of the Upper Peninsula. He reported on the great mineral potential for the area, cautioning, however, that any exploitation of the copper deposits would require the most judicious and economical expenditure of capital.

In 1840 very little of the copper used in this country was mined in the states. The deposits in Michigan were to become the first large source of copper in the country. Starting with the production of 13 tons in 1845, production consistently increased. The Cliff Mine, on Keweenaw Point, was the first big copper producer in the area. Copper prices were subject to wide fluctuations ranging from 18 cents a pound in 1780 to 43 1/3 cents in 1807. In the 1840's the price ranged between 17 1/3 and 21 2/3 cents per pound.

In the spring of 1843, following ratification of the treaty of cession, the lands were opened to mineral exploration. There was an ineffective, dual system of issuing mining permits and leases, which resulted in overlapping claims and much confusion. The leasing procedure was halted in 1846 and in 1847 Congress enacted laws directing that mineral districts be organized, geological surveys be conducted, and mineral lands be sold. Persons possessing land under a lease or permit

were to pay \$2.50 per acre. All other lands were to be offered for sale at not less than \$5.00 per acre. Pursuant to the 1847 Act, 163,360 acres were classified as copper-bearing land. In 1848 there were 2,016.07 acres sold at the minimum of \$5.00 an acre, and 6,464.81 acres under lease were sold at the stipulated \$2.50 an acre price.

Plaintiffs' expert mineral appraiser, Roy P. Full, valued the minerals in Royce Area 261 at \$12,784,000.00. He prepared a detailed report which contained voluminous excerpts from geological surveys and government reports pertaining to the geology of the copper and iron ranges and the earliest mines within those regions. He classified the copper and iron bearing lands and fixed the acreages for each. He reported the development of the mineral areas and set forth the facts respecting the early mining companies and their operations. Mr. Full stated that he considered all the information available by March 28, 1843, or that which could have been reasonably obtained by an informed buyer and seller at that time. It was his opinion that the fair market value of the copper lands was:

Area	Acreage	Value/acre	Fair Market Value
Keweenaw Point	122,880	\$50.00	\$6,144,000
Portage Lake to Porcupine Mountains	101,760	25.00	2,544,000
Isle Royal	102,400	10.00	1,024,000
	327,040		\$9,712,000

He valued the iron deposits on the same per acre basis using values of \$50.00 and \$20.00 per acre to arrive at a total value of \$3,072,000.00. While he has asserted that he considered all the pertinent factors in reaching his value determination, Mr. Full has not revealed how any of the factors detailed in his report led him to his opinion. It appears from Mr. Full's testimony that he reached his per acre values primarily on the basis of an 1845 report by General Walter Cunningham, a United States mineral agent, that mineral land claims in Illinois, Iowa, and Wisconsin frequently sold for \$100 to \$150 per acre. The lands involved were in the Galena District and the mineral in question was lead. While it is not apparent precisely how many or when these sales occurred, there is no basis for comparing them to the 1843 fair market value of Royce Area 261 copper deposits. Mr. Full testified that mining in the Galena District had begun about 1816 or 1817, some 26 years before the valuation date in this case. All of the factors which would have related to the 1843 or 1844 fair market value of lead lands in the Galena District were vastly different from the pertinent factors affecting the value of the copper bearing lands in this case. Mr. Full himself recognized the difficulty in using comparable sales to value the mineral lands in Royce Area 261. In his report (Pl. Ex. F-1) he wrote at page 9:

Comparable Sales Method

The comparable sales method is based on the evidence of the price received in the open market from the sales of other mineral land comparable to the subject land in size, potential, type of mineral deposit, accessibility to markets, and general mining conditions which took place within a reasonable period of time before or after the date of valuation.

The difficulty is that, in general, mineral properties are

unique and each deposit or area must be considered independently. Also, there are no comparable sales of mineral properties of the size of the Lake Superior mineral area. The absence of such sales precludes resting an opinion of fair market value on the sales of other lands alone.

We find nothing in the record to support the per acre valuations which Mr. Full has placed on the mineral lands in this case. In fact the evidence indicates that there was very little demand, even in 1848, for the copper bearing lands at the government prices of \$5.00 and \$2.50 per acre.

Defendant's mineral appraiser was Mr. Ernest Oberbillig, who valued the mineral deposits at \$550,000.00. As set forth in his appraisal report and testimony Mr. Oberbillig based his valuation on a royalty calculation of the projected copper production from 1843 to 1890, discounted to the 1843 valuation date. He confirmed his valuation by two "hindsight" methods—a capitalized royalty of the actual production and a capitalized computation of half of the dividends paid by copper mining companies.

Mr. Oberbillig examined the trend of copper imports by the United States prior to 1843 and projected what a prospective purchaser of Royce Area 261 might have considered the nation's future requirements for copper. Considering it reasonable to have planned that by 1850 copper mining in the subject area could have been sufficiently developed to meet the needs of the United States, Mr. Oberbillig projected the 1850 copper output at 5,200 tons. He projected this production to 1890

following the anticipated copper needs. Valuing the copper at \$500.00 per ton he computed a 10% royalty of the yearly production, which he discounted at 25% to reach an 1843 value for the yearly royalty payments. The resulting value was \$476,000.00.

We find Mr. Oberbillig's projected production figures and gross value computations to be reasonable and supported by the evidence.

However, we cannot agree with his 25% discount factor. Mr. Oberbillig has justified the use of a high discount rate because of the mining hazards and uncertainties involved. However, he has used a modest 10% royalty figure to compute the owner's profit from the mining, and, as plaintiffs have noted, such a royalty agreement is premised on the concept that the landowner agrees in advance to accept a relatively small percentage of the gross, free and clear of all costs. We have also observed that Mr. Oberbillig himself used only a 15% discount factor in his two hindsight calculations. We believe that a 15% discount would have been more appropriate in the royalty calculations and we have recalculated Mr. Oberbillig's royalty on the anticipated future yields of copper using the 15% discount factors. This has resulted in a total calculation of \$1,591,332.00 (see Finding 32).

In relying on Mr. Oberbillig's valuation in this case we are not unmindful of our rejection of his appraisal method in <u>Fort Sill Apache</u>

<u>Tribe v. United States</u>, Dockets 30, 30-A, 48 and 48-A, 25 Ind. Cl. Comm.

352 (1971), <u>aff'd.</u>, 202 Ct. Cl. 134 (1973). In that case we found

Mr. Full's capitalized anticipated net profit approach to have provided

a sounder basis for valuing the mineral lands involved. The Court of Claims affirmed our position noting that, while Mr. Full's method was not the only possible way to value mineral interests, it certainly was a permissible one. But in the instant case Mr. Full has not provided a reliable method to value the mineral interest in Royce Area 261. He did not present a capitalized anticipated net profit valuation. Under these circumstances we find Mr. Oberbillig's computation of a capitalization of 10% of the anticipated gross income from the mining of copper in the area to be the better method available to us from the state of the record. It is, we believe, in essence a variation of the capitalized net profit method. The 10% computation of the yearly gross production represents the yearly net profit which a prospective purchaser of the tract could have envisioned from the mining of the copper deposits if he did not operate it himself.

The Commission finds that the mineral deposits in Royce Area 261 contributed \$1,600,000.00 to the March 28, 1843, fair market value of the tract.

We conclude therefore that the March 28, 1843, fair market value of Royce Area 261, including its mineral enhancement, was \$8,862,818.00.

The consideration promised to the plaintiffs in the Treaty of October 4, 1842 (7 Stat. 591), totalled \$875,000.00. This consideration for lands having a fair market value of \$8,862,818.00 was so grossly inadequate as to render the consideration unconscionable within the meaning of Clause 3, Section 2 of the Indian Claims Commission Act.

^{4/} We continue in our belief that use of royalty computations rather than the anticipated net profit as a basis for a mineral appraisal may not result in a full valuation of the mineral enhancement. However, from the evidence in this case, no basis is found from which any other figure could be selected.

The plaintiffs allege that no proof of payment of the amounts due under the treaty has been made by the defendant, and that portions of a General Accounting Office report submitted in evidence are inadequate to prove that consideration was paid pursuant to the treaty. The case will now proceed to a determination of the payments actually made under the treaty and the gratuitous offsets, if any, which may be allowed under the Indian Claims Commission Act.

John 1. Vance, Commissioner

We concur:

pergine K. Kuykendall, Chayrman

Richard W. Yarborough, Commissioner

Margaret A. Pierce, Commissioner

Brantley Blue, Commissioner