

PRIVATE PLACEMENT

CONFIDENTIAL

Consolidated Report February 1961

ACCOLADE MINES, INC.

Anchorage, Alaska

\$350,000 Convertible Note

CONTENTS

PROJECT TERMS	1
USE OF FUNDS	3
Source of Funds	3
Uses of Funds	3
Plant Investment	4
Investment and Working Capital	5
BUSINESS AND HISTORY	6
Name and Location	6
Background	6
Description of Property	8
Existing Facilities	9
Development	10
Reserves	10
MINING	12
Mining Conditions	12
Transportation	12
Project	13
Coal Beneficiation Process	15
Labor and Housing	17
Schedule of Operations	18
MARKET AND COMPETITION	19
Estimated Receipts Per Ton on Dunkle Fuel	20
Projected Earnings	21
Pro Forma Interest and Amortization Coverage	23
Quarterly Cash Flow Forecast	24
Balance Sheet	25
Tax Features	26
MANAGEMENT	28

ACCOLADE MINES, INC.

Convertible Note

Proposed Terms

AMOUNT: \$350,000

INTEREST RATE: 6%

MATURITY: Fifteen years from date of closing.

TAKE DOWN: As soon as possible.

CONVERSION: Convertible into 200,000 shares of common stock of the company. (\$1.75 per share).

CALL FEATURES: Non-callable for two years. Readable thereafter, otherwise than for sinking fund purposes, at 106, declining 1/2 of 1% each year to par at maturity.

AMORTIZATION: Beginning with the sixth year, the company will retire \$17,500 of this issue semi-annually provided the net working capital is more than \$300,000. If the net working capital is \$150,000 to \$300,000 the company may accrue the semi-annual sinking fund payments and this will not constitute a default. If the net working capital is less than \$150,000 after three years from the date of consummation of this note, it will constitute a default on this loan.

ANTI-DILUTION: The noteholder will be protected against dilution of his conversion privilege under the "Average Price Basis." Protection will be provided against stock dividends; splits; distribution; and the issuance of stock for cash, property or services

at a price below the then effective conversion price of this issue; except that restricted stock options under Section 421 (g) of the Internal Revenue Code will be exempted from the anti-dilution provisions up to a maximum of 10% of the shares outstanding upon consummation of this loan.

SUBORDINATION:

This issue shall be subordinated to future bank loans, debt to McNally Pittsburg Manufacturing Company, equipment rental obligations and future Senior Debt. The company may not repurchase or retire any securities subordinated to this loan except securities sold for cash after consummation of this loan, to the extent of the cash received for such securities, provided such repurchases or retirements would not result in a default under any of the other terms of this loan.

ADDITIONAL DEBT:

The company may not incur additional long term debt without consent of the noteholder, unless, after giving effect thereto, the tangible net worth thereafter would be equal to the total debt, and the total pro forma fixed charges (i.e., interest, rent, royalties, and sinking fund payments) would have been covered at least twice by the earnings before these charges in the preceding fiscal year.

USE OF FUNDS

(Six Months From the Date of Consummation of the Loan)

The proceeds of the note will be used for the initial payments in the purchase of the equipment and the plant at Broad Pass, Alaska and to provide the initial working capital for the operations. Specifically, \$109,000 will be used as an initial outlay on the plant, rail siding, and maintenance shop. The balance of \$241,000 will be used for working capital requirements for the first six months of operation and will include two payments of \$15,000 each for the plant. During the first six months of operation the project is expected to produce a loss of \$96,000. After this period the next 12 months should show a sales volume of about \$2,500,000, a net profit of \$680,000, and a cash flow of nearly \$800,000. The capacity operations of the plant would produce over \$3,000,000 in sales, nearly \$850,000 in net profit after taxes, and about \$1,100,000 in cash flow.

Sources of Funds (First six months of operation)

Convertible Note	\$350,000
Depreciation and Depletion	<u>24,000</u>
Total	\$374,000

Use of Funds

Increase in working capital	\$139,000
Deficit from operations	96,000
Payments of fixed assets	<u>139,000</u>
Total	\$374,000

Plant Investment

The estimated cost of the plant to be established at Broad Pass is as follows:

Plant	\$275,000
Freight and erection	65,000
Housing for Plant	<u>20,000</u>
Total Costs	\$360,000
Rail Siding	\$ 4,200
Maintenance Shop, Tools	<u>15,000</u>
Total Capital Investment	\$379,200

The estimated plant cost of \$360,000 will be financed by the payment of 25 % of the costs upon placement of the order and \$15,000 per month beginning 30 days after completion of construction. Thus, the initial outlay is as follows:

Plant down payment	\$ 90,000
Rail Siding	4,200
Maintenance Shop & Tools	<u>15,000</u>
Total Initial Outlay	\$109,200

Investment and Working Capital

	<u>First 3 Months</u>	<u>Second 3 Months</u>
Executive Salaries	\$ 10,000	\$ 10,000
Plant Workers	1,080	7,650
Insurance	12,500	12,500
Incidentals (contingency tools)	5,000	5,000
Travel	3,000	3,000
Supplies and Miscellaneous Exp.	5,000	5,000
Mining Costs (Including Fuel, Equipment rental and 3 laborers)	36,000	75,600
Royalties Government	3,600	7,560
Royalties Dunkle		1,800
Total	\$ 76,180	\$ 128,110
Additional Plant Payment	-	30,000
	\$ 76,180	\$ 158,000
		<u>76,180</u>
Total Working Capital Requirements		\$ 234,180
Initial Outlay		<u>109,200</u>
Total Initial Outlay and Working Capital		\$ 343,380
(Note cost will be covered by additional funds received from sale of coal, per cash flow statements attached).		

BUSINESS AND HISTORY

Name and Location

This company, Accolade Mines, Inc., is organized under the laws of Alaska to strip, mine and beneficiate coal from the W. E. Dunkle Coal Property which is located near Mile 305 on the Alaska Railroad. A second prospect is near Mile 297 on the Alaska Railroad, both in Broad Pass, a part of the Alaska Range. The location is approximately 63°10' north; 149°00' west. Distances by rail to the principal Alaskan cities are:

Fairbanks	165 miles
Anchorage (Deep sea port)	191 "
Seward (Deep sea port)	305 "

Background

Although the coal deposits at Broad Pass have been known for some time, possibly since the railroad was constructed, it is likely that they were thought to have no value since the lignite is a brown, fibrous material which is easily confused with a worthless type of coal that appears on the surface in many places in this general area of Alaska. About ten or more years ago W. E. Dunkle, a mining engineer, recognized the true nature and value of the Broad Pass coal deposits and began work on them which was continued until his death in September, 1957. Prior to his death, Mr. Dunkle had made geological surveys, applied for extensive mining permits and leases from the Department of Interior since the deposits are located on government land, constructed an airstrip, access roads, and camp, stripped the overburden from some areas, did extensive core drilling and some mining.

The lignite coal had a high water content and thus, a relatively low B.T.U. rating and a high ash residue. Mr. Dunkle developed a means to remove the water and upgrade the coal. His research developed a patentable process.

After Mr. Dunkle's death, Mrs. Dunkle who was joint owner of the property and an experienced businesswoman, acquired additional leases and arranged for sufficient coal to be mined and processed by batches using Mr. Dunkle's method providing adequate tests to establish its market value. The United States Smelting, Refining and Mining Company of Fairbanks, Alaska, tested the product on January 6, 1958, and compared it with previous tests on undried coal from the same area, as follows:

	<u>Un-Dried Coal</u> <u>Tested 9/22/56</u>	<u>Dried Coal</u> <u>Tested 1/6/58</u>	<u>Change</u>
Tons	157.65	21.35	-
Moisture (As received)	31.8%	13.8%	-18%
Ash (As received)	10.9%	10.5%	- .4%
B.T.U./lb. (As received)	6,970	9,346	+2,376 B.T.U.
B.T.U./lb. (Oven dry, 105°C.)	10,220	10,842	+ 622 B.T.U.
Adjusted Mine Price per Ton	\$4.56	\$7.39	+ \$2.83 per ton

Thus, the drying process up-graded the coal 2,376 B.T.U. per lb., as received, and the adjusted mine price by \$2.83 per ton. Also the recently tested coal was better coal before testing, since it showed less ash and higher B.T.U. per lb., oven dry basis.

This conversion and beneficiation process will be used by Accolade Mines, Inc., without payment of royalty. The equipment and the plant will be constructed by McNally Pittsburg Manufacturing Company at a cost of \$360,000, which is being financed by a 25% payment 30 days after construction is completed and the plant is in operation, with the balance amortized over a three-year period. The plant can be delivered and erected within 90 days after order, weather permitting, since standard conveying equipment, boiler and housing is used.

An Engineering Report on development of the property was obtained from Charles F. Herbert, mining engineer of Seattle, Washington and Fairbanks, Alaska, dated February 7, 1958. This report, in general, confirmed the findings of Mr. Dunkle, and the recommendations therein have been followed, except where later engineering developments in the dehydration process dictated change. Certain questions were raised concerning the hazards of spontaneous combustion from dehydrated coal, but these problems were solved by the design of the plant in which the coal, after dehydration, is sprayed with an oil film to prevent absorption of moisture as well as increase the quality of the product. It is also exposed to an inert gas obtained from the boilers which fills the air cells in the coal, and, thus, further contributes to the reduction of moisture absorption.

Mrs. Dunkle states that over \$200,000 has been expended by her husband, herself and the Dunkle Estate in acquiring the leases and permits to the property, developing it for commercial exploitation, and in perfecting the techniques of processing the coal.

Description of Property

The various filings and acreages included are as follows (from the records of the U. S. Department of Interior, Anchorage):

<u>TYPE</u>	<u>ANCHORAGE SERIAL NO.</u>	<u>FORMER FAIR- BANKS SERIAL NO.</u>	<u>TOTAL ACREAGE</u>
Lease Authorized	027608		640
Lease Authorized	010280		120
Lease Issued	050746	011636	1,320
Permit Applica- tion Rejected	050745	014544	480
Permit Applica- tion Pending	050747	024478	2,320
			240 (Additional lands included in map accompanying application)
			<u>5,120</u>
Less	050745 (may be obtained under a new application, otherwise must be bid publicly)		480
Total Acreage			<u>4,640</u>

Royalty to the U. S. Government will be \$0.15 per ton of coal, subject to periodical adjustment. They are good for 50 years.

The above rights were owned by Mr. and Mrs. W. E. Dunkle. In September, 1957, Mr. Dunkle died and the rights are held jointly by Mrs. Gladys E. Dunkle as sole Trustee of the W. E. Dunkle Estate, and Mrs. Gladys E. Dunkle, Box 565, Anchorage, Alaska, and are being conveyed and assigned to Accolade Mines, Inc.

Existing Facilities

The property has been improved by access roads, an airfield, camp water supply, camp buildings, etc. There are trucks, jeep, small tools and hand drill on the property.

The surface is rolling with gradients from flat to as much as 20% for short distances. The essentially flat lignite beds have gentle rolls of a few degrees, although an easterly dip of 20 degrees is indicated at drill hole No. 1.

The ground is not frozen.

Development

The Middle Fork deposit has been developed only by surface stripping and surface examination for a distance of one-third of a mile or more.

The Broad Pass deposit has been partially developed by stripping, diamond drilling and hand drilling for a distance from east to west of more than one mile and a north to south distance of 1,000 feet. A considerably larger area to the north and to the south is scheduled for future drilling and testing.

Work done in the late summer of 1957 disclosed 32 feet of clean lignite in the Dunkle-Brandal seam, within one half mile of the railroad.

Reserves (From Herbert's Engineering Report)

"Development is hardly sufficient to prove the reserves but reasonably acceptable estimates can be made of the amount of lignite probably available for strip mining. These are:

Middle Fork Deposit: Dunkle (Nov. 11, 1956) claimed 200,000 tons proven with total probable of 400,000 tons. Mrs. Dunkle (Jan. 1958) reported 800,000 tons.

Broad Pass Deposits:

Texas Seam: The available information is not clear. From Map B it would appear that the Texas and Stevens may be identical and, from information by Mrs. Dunkle, the Stevens seam is not suitable because of high ash content.

Dunkle-Brandal Seam: This seam probably contains at least 3,000,000 tons.

Sroufa Seam: Probable reserve is over 4,000,000 tons.

Copper (Bruce) Seam: Probable reserve is over 1,000,000 tons.

"The total lignite probably available for strip mining (excluding the Hinchey and Texas-Stevens seams) is 8,000,000 tons (as a minimum from the acreage tested). Dunkle had estimated 8,000,000 in the Dunkle, Brandal alone but the information on which this estimate was based is not available."

The total amount of coal recoverable from all of the coal bearing acreage, using an average seam of 15' has been computed by Mr. C. W. Waterman, Jr. of McNally-Pittsburg in an estimate as exceeding 100 million tons. The coal seams in many areas exceed 30' in depth.

MINING

Mining Conditions

Overburden consists of soil and gravel up to at least 20 feet in the creek bed. On the hillside there is a shallow mantle of soil over clayey sandstone, which also separates the lignite beds. There is no perma frost.

It would appear that the relatively minor gravel beds could readily be stripped mechanically. The soft sandstone could be removed by high pressure water, if necessary, but it is planned at present to use only mechanical methods.

It is estimated that during the summer months from May to September there is available 1000 cubic feet per minute of water under a gravity head of 150 feet.

There is ample disposal room for hydraulic debris and, at present, little likelihood of protest from downstream users of water.

The surface topography, attitude of the lignite beds and drainage pattern appear to offer few problems for hydraulic mining.

It is planned to break the coal beds with heavy rippers on the bulldozer and load dump trucks with a front-end loader. This method indicates a very moderate mining cost and low capital investment in equipment.

Transportation

The extension of known lignite to within one-half mile of the railroad greatly simplifies the mine to plant haul.

Some access roads have been built.

There is gravel available for additional road construction.

A railroad spur can be built by the railroad on an existing road bed for a fixed price of \$4,200.

As previously noted, there is an airfield on the property.

Project

It is proposed to start mining the 32 foot seam which contains sufficient reserve for several years operation.

Due to the thin overburden, the mining equipment required is an International TD-25 Bulldozer with ripper, an International TD-20 front-end loader with Drott 4 yard bucket and 3 International 8-184 trucks equipped with hydraulic end dump bodies, costing approximately \$110,000. However, this mining equipment is being rented with a recapture clause on a 4-year pay-out plan equivalent to a rental payment of 10¢ per ton for the coal shipped. Mining capacity of 300 tons per hour is scheduled, with sufficient coal being stockpiled at the plant on the day shift to permit the plant to operate for three shifts on a 8-hour basis at the production rate of 50 tons per hour, with allowance for a 40% shrinkage in weight during the processing and for fines. Since there is no perma frost and the roads are gravel surfaced, snow can be cleared away by bulldozer in the cold months and operations can continue on a twelve-month basis.

Mr. C. W. Waterman, Jr., Sales Manager of the McNally Pittsburg Manufacturing Company, who has visited the Broad Pass Coal deposit sites and in addition is familiar with other coal mining operations in Alaska and elsewhere through sales and servicing of equipment, wrote on April 7, 1960, as follows:

"After walking over the leases of the W. E. Dunkle Estate at Broad Pass, Alaska and personally inspecting the crop-line explorations of the Dunkle, Dunkle-Brandel, Sroufe, Stevens and Texas lignite beds, it is my opinion that these seams combine to form one of the greatest coal reserves in Alaska today. This reserve is readily adaptable to low cost strip mining methods.

"It is readily apparent that the Dunkle seam, ranging from 12 feet to 32 feet in thickness, can be mined by removing cover from a minimum cover of one foot to fifteen feet by bulldozer excavation alone. This seam should be the first seam mined as it would produce maximum tonnages with minimum capital investments in labor and capital equipment.

"The entire leasehold permits natural gravity drainage thereby eliminating pumping costs occurring in most stripping operations. Another natural advantage of this leasehold is that the preparation plant site is such that the haulage grades are in favor of the loads, thus keeping haulage costs at a minimum.

"The foregoing, combined with the prospecting which has been done to date, prove the cover overlying the Dunkle seam to be loose, unconsolidated glacial deposit free of perma frost, a rarity in Alaska operations.

"The scheduled need for other than heavy bulldozer equipment for stripping cannot be established until further drilling of the entire leasehold can be completed. It is recommended that this exploratory drilling progress after initial mining is started. However, sufficient drilling and exploratory work has been done to date to warrant activation of operations.

"The contiguous holdings of 5120 acres of reserves coupled with the proven beneficiation of the Dunkle Converter gives you, in my opinion, one of the greatest potentials for the production of high-grade low-cost coals in Alaska today.

"You are aware that for the past year and a half we have been working diligently on the Dunkle Converter. We have not only expanded the designs and principals of lignite drying established by Mr. W. E. Dunkle prior to his death, but we have also combined the Dunkle theories with gas-fired infra-red as a heat source. The first of these pilot models has completed an initial eight weeks trial run and is now undergoing minor alterations. We recommend, however, that due to the high cost and unstable supply of propane gas at Broad Pass, the Dunkle Converter to be installed at Broad Pass utilize indirect steam as a heat source, as was the original intention of Mr. Dunkle. The infra-red unit should be employed only in those areas where low-cost, natural and propane gases are available.

"The development of the Dunkle Converter, protected by United States and foreign patent applications, coupled with the vast reserves of convertible coals assures your operations an outstanding advantage over other operations in Alaska. The premiums established at U. S. Smelting and Refining Company's plant at Fairbanks should eliminate any doubt but that the Accolade Mines will enjoy a profitable and ever expanding market in high-grade steam and export coals."

Subsequently, Mrs. Dunkle interested Mr. Waterman in managing this project.

Coal Beneficiation Process

The mining and coal handling equipment to be used ahead of the plant proper is based on a raw coal input of 300 tons per hour, while the converter plant is based on a discharge capacity of 50 tons per hour. It is on this latter figure that the mining costs and computations shown in the attachments hereafter are based. As the market requirements for this fuel increases, the capacity of the operations can be enlarged by adding another converter plant without an increase in the equipment used to handle the raw coal and converted coal.

Run of mine coal from the pits will be hauled from the mine and dumped by end dump trucks into a receiving hopper of approximately 150 tons or larger capacity and stockpiled ahead of the hopper. This capacity is required to eliminate surges of raw coal feed to the conversion unit. The raw coal is fed by gravity from the receiving hopper to a 36 x 60 double roll gearmatic breaker where it is reduced to less than 6" coal pieces. After this primary breaking operation, the resultant from the primary breaker stage is delivered by conveyor to rescreen equipment where the 2 1/2" x 1/2" or 2 1/2" x 1/4" size material is removed by vibrating screen equipment and diverted directly to the Dunkle converter unit. Plus 2 1/2" material is then routed via conveyor and elevator to a secondary stage of crushing where it is reduced to 2 1/2" minus and returned to the vibrating screen for final classification into 2 1/2" x 1/2" and 1/2" x 0.

Part of the 1/2" x 0 is diverted for fuel to the steam generating plant. The balance will be stockpiled for new uses, such as a cement plant now in

the planning stage, as may develop in the area.

The 2 1/2" x 1/2" raw coal conveyed from the reocrushing and rescreening plant is then discharged by a feed conveyor into the top of the Dunkle converter. The converter is sealed, as is the feed conveyor, to a point just below the final discharge of the feed conveyors, thereby creating an inverted retort which is one of the basic principles of the Dunkle process. This principle maintains a steam seal to the lowermost portion of the converter, thereby reducing the fire hazard of the dried coal to a minimum during the conversion cycle, which will last for a period of three hours. In the remote possibility of ignition during the conversion process, the ignited material in process is discharged through trap doors and emergency chutes provided for this purpose without damage to the plant or equipment. The converter works on a continuous cycle with a three hour process time during which the raw coal descends by gravity over sealed steam pipes from the inlet to the discharge point. Converted coal is blanketed by inert gas and oil treated to prevent reabsorption of moisture and fragmentation prior to cooling.

After final cooling and screening, the converted fuel (2 1/2" x 1/4") is conveyed to a load-out chute on the railroad track paralleling the coal preparation and conversion system.

Thus the Dunkle Converter is, in effect, a large heat exchanger, operating at 400° F. The 25 million B.T.U. coal fired steam plant is calculated to deliver steam at 200 psig. When lignite coal is beneficiated using this process, it shrinks in size and weight, becomes black in color,

and leaves a black mark instead of the brown mark normally associated with lignite coal. Since it is sub-bituminous but is no longer lignite, it may be advisable to market the product under the name "Dunkle Fuel".

Labor and Housing

The following employees will be required at the plant and mine:

General Manager (Supervision and Sales)		\$25,000 per year
Engineer		\$15,000 per year
Mine employees		
Bulldozer operator	1	
Truck drivers	2	
Plant employees (2 per shift)	6	
Maintenance	<u>1</u>	
Total common labor	10	

All of the employees except the general manager and engineer can be employed in the area where there is an ample supply of labor skilled in the operation of bulldozers, trucks, front end loaders and the ore handling equipment used in a plant of this type. The prevailing wages are \$12 per day with employees paying for their own food and lodging. Employees in the bush in Alaska expect to and prefer to work a 7-day week without overtime with replacements being supplied for their time-off on a rotating basis. The railroad will furnish modern camp cars for living facilities which are equipped with heating, lights and cooking facilities. They will be set off near the plant site where water is available. These cars can be rented from the railroad for \$5 per month per car, or they can be acquired at nominal cost. Some housing of other types is available in the area. The company will provide a cook and food at a camp mess for employees who do not bring their families into the bush. Food will be supplied at or near cost and paid for by the employees. The cook is not included in the above list since his wages are

offset by food charges. Also the employment of an additional truck driver may prove necessary under full operating conditions.

Schedule of Operations

As soon as the financing has been completed, the mining equipment and the plant will be ordered. The mining equipment should be delivered on the site in thirty days (used equipment in Alaska will be furnished until new equipment ordered is received from the States) and during the following sixty days the railroad siding will be constructed, the housing cars set in place, additional work done on access roads, concrete work for the plant finished, overburden stripped from sufficient coal to permit mining throughout the winter months, and coal mining started. A stockpile of raw coal ready to process will be built up near the plant site.

Since the plant uses standard conveying equipment, boilers and housing, it can be constructed, shipped, erected and housed within ninety days after receiving the order, according to the manufacturer. During the first three months of operation of the plant, it can be expected to reach only about half of its capacity as adjustments in the cycle and speeds of the equipment are made. Some allowance has been made in the computations for interrupted production during the first year and a half as unexpected delays are encountered. The plant at capacity is scheduled to produce 50 tons per hour of finished product or 432,000 tons per year based on a 360 day year and three-shift operations of the plant.

MARKET AND COMPETITION

This venture contemplates producing and shipping coal in the following amounts:

Aug. 31, 1961 (6 mos.)	-	21,000 tons
Aug. 31, 1962 (full year)	-	363,000 tons
Aug. 31, 1963 (full year)	-	432,000 tons
Aug. 31, 1964 (full year)	-	432,000 tons

Deep water loading facilities may become available in Anchorage in 1962 or 1963, opening up the Japanese market, if the international situation is promising, sufficient to justify doubling the plant capacity at a cost of about \$300,000. However, all present plans for the project are based on the current Alaskan domestic and military market.

The National Coal Association figures for the Alaskan Coal Industry compiled by its Economic Division are as follows:

	<u>Tons</u>
1959 Production	660,000
1959 Consumption	
Electric Utilities	- 444,000
Retail Dealers	- 68,000
Others	- <u>173,000</u>
TOTAL	685,000

To the normal increase of the above consumption figures for 1960 and the future can be added the awards of the Navy Fuel Supply Bureau of 458,000 tons (not shown for 1959 in the above figures) and two new government installations (still classified) each using over 225,000 tons. The most recent information obtained from the U. S. General Services Administration in Alaska is that the coal consumption of the Federal Government agencies in 1960 exceeded 750,000 tons. Thus, the total coal demand in Alaska is apparently in excess of 1,200,000 tons, with Alaskan domestic production far behind.

A comparison of the cost, expressed in mine price per ton and B.T.U. per lb of sale price of the various Alaskan coals, using the actual payment made by U. S. Smelting Company for 21 tons of dried lignite from Broad Pass, is as follows:

	<u>Mine Price Per Ton</u>	<u>B.T.U./lb (as rec'd)</u>
<u>Fairbanks Market:</u>		
Cripple Creek Coal Co. (Healy River)	\$6.96	16,170
Usibelli Coal Co. " "	6.82	16,547
Suntrana " "	7.34	15,514
Broad Pass Lignite (dried)	7.39	16,970
<u>Anchorage Market:</u>		
Mrak Coal Co. (Matanuska)	12.90	14,782
Evan Jones Coal Co. (Matanuska)	12.65	14,788
Artic Coal Co. (Healy River)	6.13	15,168
Broad Pass Lignite (dried)	7.39	16,970

From the foregoing it would appear that dried Broad Pass lignite would have a competitive advantage in both markets, if the profit were only \$1.14 per ton.

Due to the high B.T.U. tests on its product, the company is likely to capture the market to the extent of its production until such time as competitors install beneficiation plants, but by that time, it would seem that military and international markets would be available for the continued full production of the Company.

Estimated Receipts Per Ton on the Dunkle Fuel

The price paid by U. S. Smelting and Refining Company, Fairbanks, Alaska for Dunkle Fuel is adjusted at \$7.39 per ton f.o.b. the mine. Prices at government installations and to other customers will follow closely this price which is fixed by the tested B.T.U. content of the product. Freight from Broad Pass to Fairbanks is \$3.69, and therefore the selling price of Dunkle Fuel in Fairbanks will be \$11.08 per ton, which yields 18,525 B.T.U.'s per

penny in price. This is, as far as is known, the highest yield of any Alaska produced coal.

A selling price of \$7 per ton f.o.b. the mine (instead of \$7.39) has been assumed in the computations shown in the profit and loss forecast. Based on this forecast, it would appear that an after-tax profit of approximately \$1.96 per ton can be realized at the present price structure and a cash flow of \$2.75 per ton may be gained after the plant has been fully paid for and under capacity operations. Thus, there is a substantial margin available for protection in the event of competitive price reductions.

Projected Earnings

Because of the startup expenses, the company will probably show a loss during the first six months of operation, but will create a substantial profit in the second and third six month periods even if capacity has not been reached. The projections allow for only a gradual buildup in production, reaching capacity about a year after the plant itself is "on stream". Actually this buildup to capacity may be much faster and thus may generate earnings more rapidly than is indicated in the attached exhibits.

To summarize the profit and loss forecasts of the attached exhibit, the first six months of operation are expected to yield only a total sales volume of \$147,000 and a net loss before taxes of \$96,000. Net cash flow (after taking into account depreciation, depletion and plant payments) is expected to be minus \$192,000 for the first six months period. The following 12 months (assuming a gradual buildup in quarterly production from 50,000 tons to 108,000 tons) will provide a sales volume of an estimated \$2,500,000 and a pre-tax net income of approximately \$1,320,000. After giving effect to the tax loss carry forward of the previous period, net income after taxes would

be \$684,000. Adding back depreciation and a large depletion allowance (10% of sales) the gross cash flow would be \$970,000. Net cash flow after plant payments of \$180,000 would be \$790,000.

On a per share basis, after giving effect to full conversion of the note and to exercise of options, net income on the 568,500 shares to be outstanding would be \$1.20 per share in that 12 month period. Net cash flow per share would be \$1.39. Based on these estimates, after 18 months of operation the stock owner who paid the equivalent of \$1.75 per share by conversion of the note would have an 80% increase in his investment. However, most of these funds may be retained in the business for further expansion of plant to serve the Japanese market as described elsewhere in this report.

In the second 12 months of full operations, the plant should be at capacity. This capacity is estimated at 432,000 tons per year (360 days) which at an average selling price of \$7.00 per ton would yield \$3,024,000 in sales. Net income after taxes would be \$848,000, and gross cash flow would be \$1,187,000 during this period. The last payment on the plant would be made during this period, reducing this gross cash flow by \$60,000. Thus, with the plant at capacity, earnings per share would be \$1.49 after conversion of the note and net cash flow would be \$1.98 per share.

During the first 30 months, the company will have earned in cash flow more per share than the investment made by the noteholder. This noteholder after conversion would have paid \$1.75 per share, whereas the accumulated net cash flow at the end of this period would be \$3.03 per share.

In other words, the investment of \$350,000, if converted into 200,000 shares of common stock, would during the first 30 months be represented by net cash flow of \$606,000, out of the \$1,725,000 available to all stockholders, assuming that these projections prove correct. This should permit the company after paying Federal

taxes to pay off all debts during the period, double the capacity of the plant, pay for the capital construction, maintain sufficient working capital, and return more than the amount invested in the form of dividends.

Net cash flow after taxes following 1963 should be at the rate of \$2.09 per share, without giving effect to further expansion. This computation is possible due to the high potential earnings and the substantial depletion allowances.

Pro Forma Interest and Amortization Coverage

After the initial start-up costs, interest and amortization coverages are expected to be substantial, as indicated on the attached schedule. In the first 6 months, these pro forma charges cannot be met except out of the principal of the note itself. While the chart shows the pro forma effect of amortization of the note beginning in 1961, actually the amortization will not begin until 1966.

In 1962, even after giving effect to amortization requirements, the company's earnings will cover all its charges (royalties, rent, interest, and amortization) about eight times. This margin should be increased to over nine times by the increased earnings in 1963.

Quarterly Cash Flow Forecast

Accolade Mines, Inc., is expected to generate over \$2,253,000 in net cash flow by November of 1963, which is sufficient to provide for a three-fold increase in capacity if needed plus a payment of dividends greater than the conversion price per common share of the convertible note (\$1.75).

The cash flow forecast, attached, allows for a gradual buildup to capacity operations starting at 22% of capacity in July, 1961, and reaching 100% of capacity in March, 1962. This assumes the plant will be in place by July, 1961. Actual capacity operations may be reached very shortly after start-up.

The cash flow forecast also allows for a delay in payments by purchasers of coal and for receipt of proceeds from the sale of the note of only \$320,000, rather than gross proceeds of \$350,000. Even on this conservative basis, the low point for cash drain occurs in the second three months which ends with a \$50,000 cash cushion. In the third three month period, the cash drain is more than offset by receipts from the sale of coal, and a rapid buildup of cash begins in the fourth quarter of operations. This buildup starts with a net cash increase of \$20,690 in the September quarter, 1961, \$270,000 in the December quarter, and \$444,000 in the March, 1962, quarter. During capacity operations, the peak cash flow that is generated is \$526,000 per quarter, disregarding the annual Federal tax bill.

By January, 1963, final payments on the plant will be made, and by November, 1963, the company will have generated a net cash flow of \$2,253,000 after plant payments, Federal taxes, etc. This will permit the company over the period to triple its plant capacity by that time at a cost of over \$800,000 and still pay dividends over the period of over \$2 per share. Thus, the total investment

could be returned in less than three years after funds are set aside to triple the production of the company, if such action is deemed desirable.

Balance Sheet

As indicated on the attachment, the company will have an initial capitalization of \$350,000 in a convertible note and 343,500 shares of \$1 par common stock. After conversion, there will be 543,500 shares outstanding. An additional 25,000 shares are reserved for stock options for the General Manager, making a total of 568,500 shares. Thus, the note is convertible into 35.2% of the common stock.

Mrs. W. E. Dunkle and the Dunkle Estate will receive 310,000 shares for the assignment of their mining rights, for over \$200,000 in research and development expenses, and for organizational expenses. These rights have far greater value than this amount of stock or the balance sheet would indicate. The minimum lignite deposits on the acreage are estimated to be 8,000,000 tons (actually much larger). On a dehydrated basis this minimum would make at least 4,800,000 tons of coal which, on the basis of the attached projections, could yield \$2 in net income per ton or \$2.80 of gross cash flow per ton. Such mining rights, therefore, could be worth \$13,440,000 without giving effect to a discount for present value. The rights are carried on the balance sheet at the nominal value of \$1.00.

All cash received from the sale of the note will be used to pay for plant equipment and working capital. The balance sheet gives effect to the down payment on the plant and for the cost of a maintenance shop and rail siding. The difference between that cost and the gross amount received by the company through the sale of the note is indicated by the cash account. The commission for the sale of the note has not been deducted from cash.

Thus, further equity dilution should not be necessary. The current ratio of 2:1 is liquid, and should provide ample funds to support the initial stages of the operation. Since the convertible note is essentially in a subordinated, unsecured position, it may be possible to secure a current bank line should the need arise.

Tax Features

The proposed sale of such a note offers various tax advantages to the individual investor, as well as to the company. The company itself, being in the mining business, is able to take advantage of the depletion allowance, which provides that depletion on coal mined may be taken at 10% of the sales of the product at the mine, but not over 50% of the income before taxes and depletion. Interest on the note is also tax deductible to the company, of course.

There are other important tax benefits which will be applicable to Accolade Mines. The cost of renting mining equipment is a deductible item. Accelerated depreciation may be taken on plant and equipment thereby increasing the cash flow.

The company may accumulate earnings of \$100,000 without being subject to the special surtax thereon.

A closely held corporation with no more than 10 stockholders, which derives its income principally from trade or industry, may elect to be taxed as a partnership.

Investors in the stock of companies qualifying as small business companies may, for tax purposes, treat losses on such stock, if any, as an ordinary loss; but investors who enjoy a capital gain from such stock may treat it as a capital gain. However, this applies only to original investors. This

ordinary loss treatment is allowed for a loss not in excess of \$25,000 per year (\$50,000 on a joint return). The note holder would, of course, only be able to take advantage of this benefit if the note is converted.

MANAGEMENT

1. Mrs. W. E. Dunkle, Chairman of the Board and Vice President, (over 50), now living in Washington, D. C., is Administratrix of the Dunkle Estate. Educated in England with A.B., M.Sc. and Ph.D. degrees in Economics, Mrs. Dunkle accompanied her husband and lived in Africa and many parts of the world before moving to Alaska in about 1940. She is a very competent businesswoman. She plans to return to Anchorage as this project nears completion.

2. Charles Johnston, Seattle, Washington, President and Director, now Treasurer of Goodnews Bay Mining Company of Alaska, a highly successful gold and platinum mining company.

3. C. W. Waterman, Jr., General Manager, (54), has been employed by McNally Pittsburg Manufacturing Company since 1926, except for service during World War II for the War Production Board in charge of Allocation of Strategic Material for the Mining Industry. He is conversant with all phases of mining operations, is familiar with Alaskan coal mining conditions, has installed equipment in many of the mines in Alaska and in the States, has helped develop and test the Dunkle Converter, now supervises over 100 engineers and is in charge of Sales and Director of Advertising for McNally Pittsburg Manufacturing Company of Pittsburg, Kansas, one of the leading manufacturers of coal mining and processing equipment. He will proceed immediately with his duties of correlating all activities toward the development of the coal properties, strip mining and processing plant.

4. Grenold Collins, Anchorage, Alaska, Director, President of Collins Flying Service, Anchorage.

5. Mrs. Grenold Collins, Anchorage, Alaska, Director and Secretary, owner and manager of Alaska Treasure Shop, Anchorage.

6. Theodore L. Morris, Anchorage, Alaska, Director and Acting Treasurer.
7. David W. Thorness, Hughes and Thorness, Loussac Song Building, D. Street, P. O. Box 477, Anchorage, Alaska, counsel and agent for correspondence.
8. Wendell B. Barnes, New York, New York, Director, Shearson, Hammill & Co., 14 Wall Street.
9. A representative named by Investors.

Auditor: A. Van Seventer, C. P. A., Anchorage, Alaska.

ACCOLADE MINES, INC.

PROFIT AND LOSS FORECAST

	<u>6 Months</u> <u>Aug. 31, 1961</u>	<u>Year Ending</u> <u>Aug. 31, 1962</u>	<u>Year Ending</u> <u>Aug. 31, 1963</u>
Tons Shipped	21,000	363,600	432,000
Sales @ \$7 per ton	\$147,000	\$2,502,500	\$3,024,000
<u>Cost/Sales:</u>			
Salaries & Wages (Adminis- tration)	20,000	40,000	40,000
Insurance	25,000	50,000	50,000
Incidentals	16,000	20,000	20,000
Travel	6,000	12,000	12,000
Supplies	10,000	20,000	20,000
Plant wages (?)	8,730	30,600	30,600
Mining Costs (Incl. equipment rental)	111,600	631,800	648,000
Maint. & Tools	15,000	--	--
Total Cost/Sales	<u>\$206,330</u>	<u>\$ 804,400</u>	<u>\$ 820,600</u>
Gross Profit (Loss)	(59,330)	1,698,100	2,203,400
<u>Other Expenses</u>			
Royalties - Gov't.	11,160	63,180	64,800
Royalties - Dunkle	1,800	27,270	32,400
Total	<u>\$ 12,960</u>	<u>\$ 90,450</u>	<u>\$ 97,200</u>
Operating Profit (Loss)	(72,290)	1,607,650	2,106,200
Depreciation	9,125	36,500	36,500
Depletion 10%	14,700	250,250	302,400
Net Before Taxes	(96,115)	1,320,900	1,767,300
Fed. Taxes	--	636,888	918,996
Net Income (Loss)	<u>(96,115)</u>	<u>684,012</u>	<u>848,304</u>
Add: Depreciation	9,125	36,500	36,500
Depletion	14,700	250,250	302,400
Gross Cash Flow	(72,290)	970,762	1,187,204
Less: Amort. - Plant	120,000	180,000	60,000
Net Cash Flow	<u>(192,290)</u>	<u>790,762</u>	<u>1,127,204</u>
Cumulative Net Cash Flow	(192,290)	598,472	1,725,676
Net Inc./Ton	--	\$1.89	\$1.96
Gross cash flow/Ton	--	2.68	2.74
Net Cash Flow-Ton	--	2.18	2.61
Earns./Sh. 568,500 shs.	--	1.20	1.49
Net Cash Flow/Sh. after tax on 568,500 shs.	--	1.39	1.98
Cumulative Net Cash Flow/Sh. on 568,500 shs.	--	1.05	3.03

Note: Calculations do not include interest (maximum \$21,000) and amortization (\$35,000 beginning sixth year) on debentures, since it is assumed that the debentures have been converted. 568,500 shares also includes 25,000 shares on option.

ACCOLADE MINES, INC.
Pro Forma Coverages of Interest and
Principal - \$350,000 Note

	<u>6 mos. end.</u> <u>Aug. 31, 1961</u>	<u>Year end.</u> <u>Aug. 31, 1962</u>	<u>Year end.</u> <u>Aug. 31, 1963</u>
Pre-tax Income	(\$96,115)	\$1,320,900	\$1,767,300
Depreciation and Depletion	23,825	286,750	338,900
Royalties	12,960	90,450	97,200
Equipment Rental	<u>2,100</u>	<u>36,360</u>	<u>42,400</u>
Total	(\$57,230)	\$1,734,460	\$2,245,800
Interest--6% Note	\$10,500	\$ 21,000	\$ 21,000
Times Interest Earned	deficit	82.5X	107.0X
Royalties	12,960	90,450	97,200
Equipment Rental	2,100	36,360	42,400
*Amortization (X2)	<u>35,000</u>	<u>70,000</u>	<u>70,000</u>
Total Charges	\$60,560	\$ 217,810	\$ 230,600
Times Charges Earned	deficit	8.0X	9.3X

* Note: Amortization is doubled to give pre-tax effect. Amortization is assumed to begin immediately in above calculation, but actually begins in 1965.

ACCOLADE MINES, INC.

Pro Forma Balance Sheet - Giving effect to Sale of \$350,000
of Convertible Note and Initial payments on plant, siding &
maintenance shop.

Cash	\$240,799	Plant Payments, Current	\$120,000
Fixed Assets	379,200	Deferred plant payments (beyond one year)	150,000
		6% Convertible Note	350,000
Other Assets		Common Stock no par	
Mining Rights		Authorized: 1,000,000 shs.	
Capitalized Testing Expenses	18,500	* Issued: 568,500 shs.	
Research development and Organizational Expenses	335,000	Outstanding: 353,500 shs.	353,500
<hr/>		<hr/>	
Total Assets	\$973,500	Total Liabilities and Net Worth	\$973,500

* Includes 25,000 shares reserved for stock options at \$1.75 per share, and 200,000 shares reserved for conversion of the Note.

Note: Rental obligation for equipment is \$110,000.

**REVISED CASH FLOW FORECAST
ACCOLADE MINES**

	March - May '61	June - Aug. '61	Sept. - Nov. '61	Dec. - Feb. '62	March - May '62	June - Aug. '62	Sept. - Nov. '62	Dec. - Feb. '63	March - May '63	June - Aug. '63	Sept. - Nov. '63
Tons Mined	24,000	50,400	97,200	108,000	108,000	108,000	108,000	108,000	108,000	108,000	108,000
Tons Produced	24,000	50,400	97,200	97,200	108,000	108,000	108,000	108,000	108,000	108,000	108,000
Tons Shipped (one week delay)	21,000	45,000	96,500	96,500	108,000	108,000	108,000	108,000	108,000	108,000	108,000
Rate of Production - Plant		25 tons/hr	35 tons/hr	45 tons/hr	50 tons/hr						
No. of Shifts - Plant		2 mos. - 2 Shifts	3 mos. - 2 Shifts	3 mos. - 3 Shifts	3 mos. - 3 Shifts	Capacity					
Proceeds - Stock Sale	300,000										
Sales @ \$7/ton		147,000	315,000	675,000	756,000	756,000	756,000	756,000	756,000	756,000	756,000
Cash Rec'd Sales (30 day dating)		73,500	283,500	555,000	729,000	756,000	756,000	756,000	756,000	756,000	756,000
Total Cash In	300,000	73,500	283,500	555,000	729,000	756,000	756,000	756,000	756,000	756,000	756,000
Salaries											
Waterman - \$25,000/yr											
Engineer - \$15,000/yr	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000
LPG \$0.48 per ton produced		11,500	24,200	46,600	51,800	51,800	51,800	51,800	51,800	51,800	51,800
Insurance	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500
Incidentals (Contingency, Tools)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Travel	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Supplies (Mostly Food)	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Maintenance Shop Tools	15,000	-	-	-	-	-	-	-	-	-	-
Mining Costs \$1.50/ton mined (includes laborers)	36,000	75,600	145,000	162,000	162,000	162,000	162,000	162,000	162,000	162,000	162,000
Rent - Equipment \$0.10/ton, \$120,000 limit	2,400	5,040	9,720	10,800	10,800	10,800	10,800	10,800	10,800	10,800	10,800
Plant Payments - Plant started March											
Finished June	90,000	30,000	45,000	45,000	45,000	45,000	45,000	15,000	-	-	-
Royalties - Gov't \$0.15/ton mined	3,600	7,560	14,580	16,200	16,200	16,200	16,200	16,200	16,200	16,200	16,200
Royalties - Dunkle \$0.075/tons produced		1,800	3,780	7,290	8,100	8,100	8,100	8,100	8,100	8,100	8,100
Rail Siding	4,200	-	-	-	-	-	-	-	-	-	-
Federal Taxes	-	-	-	-	-	-	524,301	-	-	-	804,700
Total Cash Out	186,700	167,000	278,580	323,390	329,400	329,400	864,301	299,400	284,400	284,400	1,089,100
Net Cash In (Out)	113,300	(93,500)	4,920	231,610	399,600	426,600	(108,301)	456,600	471,600	471,600	(333,100)
Cumulative Net Cash In (Out)	113,300	19,800	24,720	256,330	655,930	1,082,530	974,229	1,430,829	1,902,429	2,374,029	2,040,929

ASSUMPTIONS

1. Dunkle Converter plant will begin limited operations June, 1961. Mining starts about March, 1961.
2. Full Production and mining reached in March, 1962.
3. Shipment one week delay - to cover unexpected delays in shipments and delivery.
4. 30 day dating - will cover collection delays - improvement will increase working capital.
5. Food and supplies - payments by men not shown. These payments will increase working capital.
6. Incidentals - may be too high but a contingency fund is provided.
7. There is ample cash flow to provide funds to construct a second Dunkle Converter to double production capacity in 1962 if there is market justification. Figures not shown.
8. Cash flow shown here can be related to Profit and Loss Forecast - although different since payments and receivables here shown when received and in P & L Forecast when billed. No depreciation and depletion shown here since not cash items.
9. Equipment to be paid off around Jan., 1963.