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October 9, 1957

Mr. G. Gregory Bryan  
Mining Department  
National Lead Company  
111 Broadway  
New York 6, N. Y.

Dear Greg:

Re: McCracken Project  
Mohave Co., Arizona

The following is a brief listing of personnel, equipment,  
and other items proposed for the McCracken project:

Personnel

1 geologist - - - - -	for 9 months
1 geologist's helper - - - - -	" 6 "
1 engineer (surveyor and sample boss) - - - - -	" 9 "
1 engineer's helper - - - - -	" 6 "
2 samplers - - - - -	" 3 "

Equipment

2 jeeps ) (transportation to Arizona)  
1 house trailer )  
Transit, alidade, plane table, etc.  
Engineering supplies  
Sampling equipment and sacks  
Core boxes

Other Expenses

Legal fees  
Industrial Insurance (Arizona) \* *Payroll Taxes*  
Living expenses of staff  
Auto expense and upkeep  
Transport & assaying of samples (\$5,000)

Preliminary Diamond Drilling

2,500 feet @ \$7.00 (?) (Expensive water haul)

Property Payments

To Griffith for 9 months - - - - - \$ 4,500  
To McPherson (actually a reimburse-  
ment for road construction, etc.  
already performed)  
At end of first 6 months - - - - - \$ 5,000

Because of your recent activities on the Plateau and else-  
where in the U. S., I believe that you are in a better  
position to assess the cost of the above program than I am.  
Consequently I have put down an estimated cost for only a  
few items.

I am assuming that all of the required equipment is available  
and that there will only be a transportation charge against  
it. There are some living quarters probably available at  
Signal, about 10 miles to the east, but we had better plan  
on making one house trailer available.

I have included 2,500 feet of diamond drilling. This could  
be deleted and put into a subsequent C. & R.

Including the drilling, I would guess that the program would  
cost around \$60,000, without providing for contingencies.

With best regards,

Yours sincerely

E. N. Pennebaker

ENP:mc  
cc - Mr. G. M. Wiles

## NOTES ON McCracken Mountain Lead-Silver Deposits

The Griffith holdings on McCracken Mountain, Mohave County, Owens Mining District, Arizona, consists of 4 patented and 15 unpatented quartz mining claims.

This property is 43 miles southeast of Yucca, on good dirt road. Yucca is 25 miles southwest of Kingman, on pavement.

These mining claims have a total of over 9000 feet of tunnels and drifts; one 600 foot shaft and several smaller ones; and over 1500 feet of open cut vein exposures. Two separate vein systems with attendant feeder veins strike for  $1\frac{1}{2}$  miles through the property in a northwesterly-southeasterly direction. The width of said main veins vary from 6 to 30 feet. The present known depth of said veins is over 750 feet, and show no diminution in quality or quantity. Vein material, besides gold, silver, zinc and lead, consist of: (taken from raw ore smelter settlement sheets) Insol. 33. to 52.%; Silica 26. to 52%; Iron 2.0 to 4.0%; Lime 10.0 to 22.0%; Zn 0.3 to 5.5%; Sulphur 0.4 to 1.7%; Alumina 0.7 to 1.8%; As 0.2%; Sb 0.17 to 0.35%.

On the GALENA claim a shaft has just been sunk 25 feet on a 6 to 18 inch wide 50% galena streak carrying 5 to 12 oz silver in a 3 foot vein. As it is improving in quantity and quality with depth, it should be sunk 25 to 50 feet deeper, and the vein then drifted upon and stoped where practical. 150 feet east of the shaft the same vein is exposed by open cut, and shows a commercial grade of mill ore. 250 feet west of said shaft the same vein is exposed by several open cuts showing good mill grade of lead and silver.

On the west end of the SOUTH OTSEGO claim the Galena vein and the Otsego patented vein unite, and continue united through the 1500 feet length of said SOUTH OTSEGO. Mill grade lead and silver ores are exposed thereon in open cuts and short shafts.

The Otsego patented claim is surrounded on all sides by the Griffith holdings, and is the only mining property on McCracken Mountain that is not included in the Griffith group. If desired, this claim can be leased or purchased.

The extreme north end of the SENATOR patented claim exposes the "Palace Chamber", 50 feet wide, 100 feet long, and nearly 50 feet deep, from which was taken silver ore (all lead ore was discarded due to pan-amalgamation recovery) of the net return value of \$4,000,000.00, as so reported by accredited mining engineers. Twenty feet inside the south portal of the upper tunnel (next under the Palace Chamber) was recently sampled and assayed: HW 6 feet wide, Silver 9.96 oz.; Lead 4.91%; FW 3 feet wide; Silver 17.76 oz; Lead 19.98%.

About 100 feet below the "Palace Chamber" a 700 foot drift was excavated for the sole purpose of stoping up to the above mentioned upper tunnel. This operation yielded 7,000 tons of con-

sentrates from which a net return of over \$460,000.00 was received in a little over one year of operations. No exploratory, winze, cross-cutting or other development work on said claim has since been done. There is no question but what this ore enrichment or ore chimney goes on down below the above mentioned lower drift level. Many thousands of tons of valuable ore remains above said two levels in pillars, hanging and foot walls, and also in marginal ground. It is impossible to estimate the value or tonnage of the ore under said lower tunnel without some exploratory work, other than to admit that a tunnel never stopped an ore chimney from going down. The south 750 feet of this claim and vein is entirely virgin ground. At the extreme south end of same an easement can be obtained through a raise on the north end of the Otsego which can be used as a shaft near this vein system giving 206 feet of backs to start north (750 feet) on. An examination will show good reason to expect high grade vein matter along the entire south half of the Senator, due to vein junctures, exposures, etc.

The ALTA claim seems to be divided into three parts; the south 400 feet extends under the "Palace Chamber" and contains a part of the lower tunnel above mentioned; the middle 600 feet or more is virgin ground with strong silver and lead showings; the north 500 feet or less is partly stoped from grass roots to the Blacksmith tunnel level, by or from said Blacksmith tunnel and the Bateman tunnel, with several thousand tons of mill grade and better ore left in the many pillars, and side walls - hanging and foot. Under the Blacksmith tunnel level the Alta is almost entirely virgin ground.

The PEABODY patented claim has a reputation of yielding several net millions of dollars from its Blacksmith tunnel and its 100 foot and 250 foot levels. The Bateman tunnel and the Atlanta patented claim to the east, contributed much to the mill (100 ton) on said Peabody claim. A shaft to depth of 600 feet was sunk on the north end of this claim, having a 100 foot level 1350 feet long, and a 250 foot level 600 feet long, on the vein. The balance of the depth was carried at the same uniform 22 degrees easterly dip from vertical. At the 300 foot depth the vein completely left the shaft by dipping further to the east. It never returned and was never attempted to be reached by cross-cut, core drill or otherwise. At the 500 foot level copper and gold were encountered in an entirely different vein structure. Starting at \$2. to \$4. gold (\$20. oz value) and 2 % copper, and so continued, except getting better as went down to the 600 foot level, where am informed the gold was \$6. to \$10. (\$20. oz) and copper up to 5%. Am advised by miner s recently examining the shaft that it is still in good shape all the way down for exploratory work, but would need some repair work before putting it on heavy production. Am likewise advised there is much excellent mill grade ore on both the 100 foot and 250 foot levels; also stored in several of the chutes which were not pulled. There is over 5,000 tons of 10% to 15% lead and 5 to 10 oz. silver ore above ground on this claim that can be salvaged. Although the Blacksmith tunnel cannot be used as a haulage tunnel any more, the south end of same has good mill grade ore, and also much false foot

wall material quite high in lead content (Purposesely left because it fouled silver amalgamation) may be drawn by way of the raise from the 100 foot level to the Bateman tunnel which now passes 65 to 75 feet south of the south end of the Blacksmith tunnel.

The ATLANTA patented claim has the reputation of being a good producer. All work was done between the entrance level and grass roots. The ore was mostly delivered to the Peabody mill via 1/4 mile aerial two-way tram. The 1,000 foot drift starting on the Swastika No. 3 now cuts this vein about 250 feet under the present workings. Also there is a parallel silver vein 3 1/2 feet wide averaging \$50.00 per ton in silver and some lead, in the center of which is a narrow 300 to 500 oz. silver vein. The northerly 600 feet of this Atlanta claim exposes a strong lead and silver vein, unexplored except by several open cuts. Have two assays therefrom as follows: No.1. Silver 1.2 oz; Lead 15.5%. No.2 . Silver 14.0 oz; Lead 21.3%.

The SWASTIKA No. 3 claim has the stone house (camp) and the entrance to the tunnel under the Swastika No.1, the Atlanta Extension, and into the Atlanta patented claim.

In the SWASTIKA No.1 and about 300 feet northerly from the portal of tunnel above mentioned, a sample of a stope 12 feet along the vein, 2 feet wide, with 150 feet of backs was recently taken. Assay result: 3.86 oz. Silver; 24.5% Lead. (at 90¢ & 15¢) value \$76.97. In the same drift but further north and near the No.3 ore chute therein, this vein was recently sampled up a man-way as far as the ladder would reach. The assay was: .04 oz Gold; 2.5 oz Silver; 22 .1% Lead. Total value \$65.53. Continuing northerly in said tunnel about 150 feet and in a cross-cut about 15 feet east of the tunnel's hanging wall, is a vein exposed about 3 feet wide with lead and silver showings. No attempt has been made to sample or assay this new parallel vein until further exploratory work is undertaken.

The following miscellaneous mine assays grouped under the proper mine headings are mostly known to be correct. A few of those taken from certain mining engineer's reports have not been rechecked, but are believed to be correct.

SOUTH OTSEGO: Recently an old report dated 7-15-1920, written by Walter W. Wishon, E. M., was produced which reads as follows:

"At a point not far from the showing in the south end of the Otsego claim, on a 10 foot wide vein at the surface, there is an old 50 or 60 foot vertical shaft. Has no ladder. Work shows as done long ago." - -

Two assays from the dump ran:

"No.1. Silver 17.56 oz; Lead 64.69%

No. 2, Silver 72.20 oz; Lead 38.22%  
Have had no opportunity to verify or reject.

SENATOR; A, or Lower Tunnel has over 600 feet in good values, 400 feet of which are south and 200 feet north of Alta south end line; has total of 1300 feet in length. About 600 feet north and 700 feet south of Alta south line, is about 800 feet from Lower tunnel to south end line of Senator. North adit to cave-in about 680 feet, then S. 20° E. 575 feet to south portal. A small shaft is 400 feet north of south line of Senator. An open cut is 100 feet north of said shaft. About 100 feet north of above open cut the vein stands over 10 feet above the surface, part is black in color and part is a dull red, both very light in weight. The black assays 7.6 oz silver; the red 6.02 oz silver. Near the south end of Senator and on the surface, a leaser shipped 25 tons; Assay - 5.95 oz Silver, 14.9% Lead. Assay value \$61.97 per ton. Spent about 5 days getting the 25 tons.

ALTA; The Green Monster, a tributary vein south of dump in canyon 1000 feet above the Bateman tunnel, and south of the north portal of the "lower tunnel" has a surface sample assay of 13.4 oz Silver; 8.1% Lead.

The Bateman tunnel is 850 to 900 feet long. Strike N. 25 or 30° W. Is in Northeast corner of the Alta and 100 feet below the "Lower tunnel" level. Entrance about 200 feet north of entrance to "Lower tunnel". This tunnel is pretty well stoped to grass roots until chute No. 10 is passed, which is about 325 feet from the end.

PEABODY; Blacksmith tunnel, level with 600 foot shaft collar, starts 125 feet south of shaft. Runs S. 20° E 904 feet south of entrance. Near south end a HW. sample was taken. Assay 2.24 oz Silver; 24.95% Lead. The 600 foot shaft is on an incline of 22° east of vertical. Has a

100 foot level running south	1192 feet,	north	165 feet
250 "	" "	" "	490 "
400 "	" "	" "	180 "
550 "	" "	" "	50 "
			with 60 ft.

cross-cut.

100 foot level runs 150 feet past the Blacksmith tunnel and 375 feet past the portal of the Bateman tunnel. 500 feet south of shaft is a small cave-in (an ore chute smashed); 650 feet south of shaft is a raise not stoped; 1000 feet south of shaft is another raise not stoped, should be good to the surface, and is about 75 feet south of the end of Blacksmith tunnel (which is good). 400 feet south of shaft shows 1 foot of solid galena and 6 feet additional of medium grade. A few assays show:

- (B) 96. Pillar 5.5 ft. wide. Silver 14.25 oz; Lead 7.3%
- (S) See. vein
  - in XC B.1648. 9.5 ft wide. Zinc 20%
  - No. 1647. 7.5 ft wide. Zinc 23.5%
  - No. 1648. 10 feet " " 23.8%

250 foot level - Assays as follows:

No. 11027.. 5.0 ft. wide. Gold .07 oz; Ag 1.0 oz;  
1.4% Pb; 13.6% Zn is 450 ft. So. of  
shaft.

No. 11028. HW 4.5' wide. Gold .02 oz; Ag 6.0 oz;  
Lead 19.22%; Zn 8.4%. Is 2 80' S. shaft.

ATLANTA: Vein runs N. 40° W. Opened and worked for 320  
feet. Stopped to grass roots. No samples taken.

Between 100 and 150 feet northwest and above the floor  
of the Atlanta workings is the surface outcrop of said Atlanta  
vein. Samples taken therefrom assayed as follows:

(B) 11015.	4' wide.	Silver 57.36 oz;	Lead 0.97.
7-25-50	Mine run O.T.T.	Silver 29.06;	Lead 1.3%
8- 18-50	200' So. of O.T.T.	" 36.60;	" 7.1%
9-9-50	N. end Hurley stope		
"	near surface. 10' W.	Silver 110.06;	Lead 24.0%
"	" S. end "	" - - - "	" 29.1%
"	same "	" 45.60;	" 28.5%
6-19-50	No.1 carbon pile 8' S. of tree.	Silver 144.2 oz;	Lead 45.1%
No.2	small cut 10' S. No.1	Silver 27.44 oz;	L. 3.8%
No. 3	2nd grade pile	" 64.02	" " 6.3%
No.4	High grade grabs	" 314.80	" " 19.7%
No.5	calcite apex 10' N. of trail		
	west of white post- - - "	18.46	" " 0.1%
No.6	3rd grade pile 125' S.		
	& up from O.T.T. - - - "	50.20	" " 1.5%
No.7	Where we shot in O.T.T.		
	100' So. adit - - - "	36.04	" " 11.4%
5-2-50	No.3 Gray Green		
	NW corner - - - "	13.44	" " 8.1%
No.6 (23)	Bet. Bat. T. & where B.		
	worked on N. side Atlanta "	1.2	" " 15.5%
No. 8 (26)	D. cut e. top Atl. So.		
	100'-125' of OTT - - - "	86.0	" " 3.5%
" 9 (27)	Off foot D. cut - - - "	156.0	" " 8.75%
" 10 (24)	Where B. working 8-23-52		
	e. of Bate. T. $\frac{1}{2}$ way up		
	W. side Atl. - - - "	14.0	" " 21.25%

The report by George A. Camphus, E.M., in 1930 supplies  
the following:

Bateman tunnel floor is 80 feet above Blacksmith tunnel  
floor. Assays No. 348 9' .5 W. Silver 10.6 oz; No. 362 4' .5 W.  
Silver 15.8,

Sub A level (in north end of Alta claim above Bateman

tunnel. 9 samples covering 95 feet. 5 to 20 feet apart. Lead not reported.

No. 137	6'	.0 W.	Silver	19.0 oz;	No. 142	3'	.5 W.	Silver	21.3 oz
No. 138	4'	.0 W.	"	20.9 "	No. 143	3'	.5 W	"	31.6 "
No. 139	6'	.0 W.	"	14.6 "	No. 144	4'	.0 W	"	26.4 "
No. 140	4'	.5 W.	"	14.4 "	No. 145	3'	.5 W	"	15.3 "
No. 141	4'	.5 W.	"	17.4 "					

- A. level (north end Alta above Bateman tunnel) No's 104 to 136. Average 15 oz. Silver. Lead not reported.
- B. level (100 feet above Blacksmith tunnel) Assays No's 85 to 103. 10 to 20 feet apart for 165 feet. average width 6 to 7 feet. Average silver 20 to 41 oz.
- C. level (50 feet above Blacksmith tunnel) Assays No's 60 to 76. Average width 5 feet. Silver average 6 to 31 oz.

Blacksmith tunnel (between C. & D.) level.  
 Assays No's 39 to 59. Average 5 feet wide. Average 15 oz. Silver.  
 Low 6.5 oz, high 30.6 oz.  
 No. 57. 14 feet wide. 30.6 oz. Silver.

- D. level (50 feet below the Blacksmith tunnel) 38 samples taken over 308 feet. Numbered 1 to 38.  
 No. 10. 5 ft W. 33.4 oz. Silver (105' N of 308' ??)  
 No. 36. 4 1/2 " " 47.6 " " (288' N of 308' )  
 No. 37. 3 " " 21.4 " " (298' N of 308' )

Above level mostly stoped, excepting side walls & pillar material.

- E. level (100' level in the 600' shaft.) Assays Nos 231 to 261, beginning 517 feet south of shaft and running north. Average over 5% lead and 14 oz Silver.

No.	Pt W.	description	% Lead	Oz. Silver
233	5.	493' so. of shaft	5.6 "	31.2 "
242	4.5	330' " " "	8.6 "	21.3 "
247	4.	275' " " "	6.0 "	22.2 "
256	3.	139' " " "	5.0 "	20.6 "
253	6.	210' " " "	6.3 "	14.8 "
260	25.	34' " " "	7.0 "	27.6 "
261	4.5	At so. side	3.0 "	24.7 "
265	4.5	S. side shaft 15' below 100'	1.10.6 "	40.2 "
269	3.5	across a short drift 18' so. of air shaft - - -	8.6 "	27.5 "
270	3.	across FW galena streak 26' so. of whim shaft-	8.4 "	8.1 "

No.	Ft. w.	description	% Lead	Oz. Silver	%Zinc
271	4.	ac. face of short drift in FW galena streak back of #253 on 100' level - - -	16.7	2.2	S
F. level (250' level in the 600' shaft)					
273	3.5	ac. back 10' no. of 272 which is ac. back on N. side so. winze coming down from 100' level - - - - -	4.0	21.8	"
274	13.0	ac. back 10' No. #273	11.6	13.5	"
276	3.5	" " 19' No. #274	6.1	15.5	"
1280	4.6	No description - - - - -			19.6
1281	7.0	" "			19.7
1284	7.0	" "	6.1	10.5	" 21.9
12 85	8.0	" "	8.9	21.3	" 4.9

Between the 300' and 350' depth in the 600' shaft the vein leaves the shaft by dipping to the east and does not return, neither has it been contacted by cross-cut or otherwise.

#### THE MILL

The mill is located on the NW/4 of NE/4, Sec. 16, T 13 N, R 13 W. a school section. Lies along and some of it in the Big Sandy River. Is held by successive 5 year leases from the State. All property placed thereon has been properly registered and approved by the State as to kind and value. Plenty of water for a 1,500 ton mill is available.

The mill is test rated at 60 tons capacity. Will be comparatively easy and inexpensive to increase it to 100 tons. Recovery rating is 85 to 90 per cent of lead and 90 per cent of silver. Mill includes the following:

1. Adequate concrete reservoir, filled by pump and 250' of 2" pipe line from the river. Sufficiently high to service the entire mill by gravity.
2. 20-ton ore bin. Frame but iron lined. Steel grizzly on top with 6" separations.
3. 200' of 2" pipe to all parts of mill.
4. F.&C. jaw crusher 10x7. Gas engine.
5. 32' belt conveyor. 65' of 20" troughing belt, rolls and steel frame.
6. Wheeling jaw crusher 9x24. Allys Chalmers gas engine.
7. 25' belting and belt conveyor to Nos 8 & 9.
8. Vibrating screen - 10 mesh.
9. Steel ore bin.
10. 40' conveyor belting with steel buckets attached. 20' steel bucket conveyor. Gas engine.

11. Steel ore bin, automatic ore feeder and conveyor to ball mill.
  12. Hardinge conical ball mill No. 1054. New liners. Drive shaft, gears, pulleys and heavy power belting to 150 HP Waukesha gas engine.
  13. Dorr type 14' rake classifier.
  14. Sizing screens - 4 deck separations, and gas engine.
  15. 5 tons new forged steel grinding balls. Miscellaneous pulleys, shafts and belts.
  16. 4 new Dunham concentrating tables, shafts, pulleys and belts.
  17. 5 small gas engines for misc. duty.
  18. 12'x16' frame, iron & Aluminum assay office and assay equipment.
- Misc.: Installation costs, lumber, steel, cement, etc.  
Labor costs.  
Experimental work and equipment.

Test runs were made on 10% lead heads, believing it as low grade as in any way necessary to keep the mill fully supplied. From careful sampling and assays it was found that 83% lead concentrates could be produced, but the disadvantages were: a large middling recovery which had to be again run (separately or with the raw ore), and a high lead loss (1, to 1.5%) in the tailings. A 74 to 75% lead concentrate was found to materially overcome the disadvantages encountered in getting into the higher concentrates. By reducing the concentrates to about 54% lead much smaller volume of middlings of much less value were obtained, and the tailings could be held down to 0.5 to 0.7% of 1.0%. To find the most profitable standard to use, three arbitrary runs were made, one yielding a 54.5% lead concentrate, one a 62% lead concentrate, and one a 72% lead concentrate. One set was personally taken to the U.S. Smelting, Refining and Milling Co. of Salt Lake City, and the other sent to the A.S. & R. Co., El Paso. Both buyers of McCracken Mt. lease produced raw ore. With the benefit of the respective staffs, and most appreciated cooperation, also using certain assumptions, such as: a 10% lead head; an 85% lead recovery (lower than actual); a \$2.50 per ton milling cost (on 100 ton basis); hauling from mines to mill (9.5 miles) \$1.00 per ton; mining cost \$10.00 per ton (which included necessary development as work progressed); price of lead was then 13.5 cents; also the figures of- Gold 0.10 oz, silver 11.3 oz as actually shown in the 54.5% concentrate, were used for all three. Accurate answers were soon arrived at.

With above figures in mind it was, due to escalator freight rates, quickly discovered that the 62% concentrates were the least profitable. Then it was found that due to the same freight rates the net profits on the 72% concentrates were so little more that it was more than eaten up by the increased middling load necessary to carry, as well as the increase in tailings value loss. As both smelters agreed substantially with these conclusions, there is no question now but that approximately 54% lead concentrates are the

most profitable, unless a cheaper haul can be contracted for via truck freight lines dealing in weights and not values, or the property can grow into smelter proportions.

Translating the above figures submitted by the smelters, except using the present 15¢ lead price, with all deductions made by the smelters, instead of the 13½¢ price then prevailing-

On a 60 tons per day raw ore basis we have:

9.36 tons of concentrates per day with a net smelter return of \$118.71 per ton (9.36 x \$118.71) - - - - -	\$1111.125
60 tons raw ore per day mined and hauled and milled at \$14.00 per ton (50¢ per ton added) - - - - -	840.00
A net profit per day of - - - - -	<u>\$ 270.00</u>

On a 100 tons per day raw ore basis we have:

15.6 tons of concentrates per day, net smelter returns \$118.71 per ton (15.6x\$118.71) - - -	\$1851.876
100 tons raw ore per day mined, milled and hauled at \$13.50 per ton (100x\$13.50) - - - -	1350.00
A net profit per day of - - - - -	<u>\$ 500.00</u>

It is an established fact that every dollar invested in efficient machinery, equipment, development and exploratory work will daily and materially reduce the above stated excessive mining and milling costs per ton. As the mill capacity is increased the cost of milling in proper ratio decreases.

The calculations here made are based upon mill heads of an assay value of \$30.00 to \$35.00 per ton. Many thousands of tons of ore can now be placed in that class without exploration and very little development work. The \$10.00 mining charge above used will carry such development. If the mines are mechanized and the mill capacity increased to take care of the output, \$15.00 ore can soon be handled with equal profit per ton on an almost unlimited daily tonnage basis.

Long and abundant stopes are a natural on this mountain, with great quantities of ore to be pulled therefrom at a cost of 50¢ to 75¢ per ton - rather than the \$10.00 per ton used above.

W. H. Munds, M.E. in July 1929 stated that he operated the 100-ton mill then on the Peabody in the early 1920s, and he then supervised the following recoveries from McCracken Mt. ores:

4,255.7 tons of concentrates shipped, averaging per ton 18.0 oz. of silver and 49.8% of lead. Total shipped 572,750 oz. silver & 5,310,000 lbs of lead.  
 Extraction: Silver 74.8%; lead 76.3%.  
 Value of concentrates shipped \$781,383.60  
 Production cost \$547,800.00  
 Tons of ore milled 91,300  
 Average heads 9.8 oz. silver; 2.9% lead

Total heads 900,175 oz. silver  
5,510,000 lbs lead.  
Property cost \$408,000.00, Profit \$233,583.60.  
18.2% paid per year on investment.

John L. Whitney, M.E. An operator on McCracken Mt. in 1913, when making a report on the advantages of extending the 100 foot level under the Peabody claim south through the mountain under the Alta and Senator wrote that there would be over 5,000,000 tons of commercial vein matter above said proposed tunnel and that 60% of the outcrops show payable values, also that 1,500,000 tons of ore above this level could be worked by glory hole methods and delivered to the mill for 60¢ per ton. That the mill could concentrate 80% of the lead and 75% of the silver at \$2.00 per ton, and with proper equipment this could later be reduced to a grand total of \$3.00 per ton of ore mined.

George Alexander Camphuis, M.E., in 1930 reported that he found ore blocked out much in excess of 100,000 tons ready to mine and mill at an immediate source of profit of \$500,000.00 to \$1,500,000.00. Further on in mentioning his examination of the 600 foot shaft on the Peabody he stated "from the 250 ft level up, there is over 100,000 tons of valuable ore ready to break down (stope) and mill or ship raw." Also that "the 600 foot level has interesting 10% copper lenses on the foot wall side of said shaft, and that he is confident that at further depth the shaft will show much larger deposits of high grade."

It has been suggested that the best and most economical way to develop the mountain would be to drive a two-way trackless drift or cross-cut in a northeasterly direction, beginning about 300 feet below and 200 to 300 feet south of the south portal of the lower tunnel on the Senator, and ending (breaking out) in the deep gulch east of the Atlanta claim workings. A total 1000 to 1200 feet. This done with "Gismos" and underground conditioned trucks would be very fast and would cross-cut all mineralization on the mountain at 600 feet depth. Stations could be cut at proper vein crossings for drifting and stoping both north and south. When completed a central shaft could be selected for sinking and working the mineralization below for many years.

It has been further suggested that the property justifies a 500-ton mill on the southwest side or corner of the mountain, to be increased to a 1,000 ton and more when justified by development work, as water geology seems to assure that an ample water supply can be developed on this western side. Both natural gas from Texas and electricity from Parker Dam pass within approximately 3½ miles of a mill site. Proper industrial prices would prevail for this gas and electricity.

Respectfully submitted,

Ben F. Griffith  
P. O. Box 74  
Yucca, Arizona



Exhibit No. 1.  
SETTLEMENTS BY SELLERS  
OF  
RAW ORE SHIPMENTS FROM McCracken Mt. BY LEASERS UNDER MR. GRIFFITH.

Date	Lot	Dry wt. lb.	Price	Lead %	Silver Oz.	Net amount paid before deducting freight.
6-24-48	172947	81,073	17.50	14.40	0.90	\$ 1,140.70
8-23-48	173061	80,775	19.50	22.30	0.90	2,283.35
8-26-48	24388	90,965	19.50	19.80	0.90	2,200.44
9-22-48	174657	73,478	19.50	17.90	- --	1,540.10
10-27-48	84070	102,606	19.50	16.80	3.90	2,055.75
11-23-48	81923	109,480	21.50	14.20	1.35	1,854.59
12-16-48	56590	58,822	21.50	14.55	1.90	1,048.21
10-21-49	Truck	18,374	14.93	40.40	15.00	872.03
1-12-49	172900	74,267	21.50	23.98	1.60	2,584.12
3-4-49	9928A	90,566	21.50	19.00	2.90	2,568.45
3-31-49	82524	88,628	18.00	10.60	3.00	724.53
4-11-49	172082	106,142	16.67	13.50	4.60	1,247.70
3-31-49	S. truck	11,000	?	17.00	2.60	147.73
11-22-48	"	12,040	?	12.00	4.00	133.95
12-10-48	"	13,484	?	16.50	4.00	255.50
12-13-48	"	9,880	?	17.30	3.40	197.75
12-20-48	"	10,780	?	21.20	3.00	285.67
1- 2-49	"	8,036	?	33.00	1.50	371.26
7- 1-50	Fisher "	6,277	?	45.60	9.90	204.19
9- 5-50	Bauer "	3,375	?	23.50	181.70	332.47
10-30-50	" "	4,030	?	25.60	46.90	165.65
9- 8-50	" "	3,574	?	24.60	190.10	349.71
1-25-51	"	28,492	17.00	30.50	1.80	1,018.73
7-19-51	" 2013	90,198	17.00	28.70	11.30	3,455.49
2-21-52	MSB 317	50,020	19.00	14.90	6.00	953.88
4-28-52	B. 1278	113,626	19.00	31.2	1.10	4,843.88

Total \$ 32,835.83

Exhibit No. 2

CONCENTRATE SHIPMENTS

McCRACKEN PROPERTIES.

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Date					Net Payment.
July	19, '22	25,788	tons @	289.32	\$6,865.59
Aug.	12, '22	28,259	" "	171.90	4,335.97
Dec.	28, '22	33,173	" "	137.90	3,994.68
Jan.	1, '23	28,173	" "	160.36	3,975.93
Jan.	6, '23	27,000	" "	87.82	2,731.14
Jan.	10, '23	27,000	" "	107.98	2,915.46
Feb.	6, '23	33,000	" "	164.65	5,466.38
Feb.	26, '23	26,400	" "	168.89	4,458.69
Mar.	13, '23	35,099	" "	192.03	6,740.06
Mar.	20, '23	28,000	" "	200.00	5,600.00
Mar.	28, '23	27,400	" "	222.82	6,105.76
Apr.	6, '23	24,000	" "	297.98	7,151.52
Apr.	16, '23	24,000	" "	220.32	5,463.94
Apr.	19, '23	31,500	" "	194.56	6,128.64
Apr.	23, '23	21,800	" "	183.04	3,990.27
May	5, '23	26,400	" "	194.43	5,132.95
May	10, '23	27,500	" "	205.66	5,655.65
May	15, '23	24,000	" "	207.61	4,982.64
May	22, '23	23,400	" "	238.11	5,571.77
May	24, '23	31,508	" "	194.18	5,552.75
May	25, '23	32,264	" "	206.63	6,074.01
May	28, '23	24,780	" "	230.65	5,715.50
June	2, '23	29,750	" "	166.60	4,956.35
June	4, '23	24,406	" "	238.58	5,370.98
June	5, '23	26,057	" "	200.33	4,744.79
June	9, '23	25,500	" "	158.05	4,030.27
June	10, '23	34,024	" "	96.83	2,780.71
June	15, '23	25,500	" "	159.07	4,056.28
June	20, '23	25,500	" "	142.23	3,526.86
June	20, '23	27,285	" "	165.29	4,027.61
June	20, '23	31,241	" "	171.62	4,814.08
June	26, '23	27,216	" "	152.82	3,682.99
June	26, '23	26,340	" "	151.98	4,003.15
June	29, '23	25,098	" "	161.68	3,589.23
July	2, '23	26,220	" "	149.24	3,913.07
July	9, '23	26,100	" "	148.65	3,879.76
July	10, '23	25,866	" "	146.10	3,309.64
July	13, '23	28,771	" "	152.10	3,872.58
July	14, '23	31,680	" "	146.17	4,630.66
July	17, '23	26,665	" "	148.49	3,490.07
July	23, '23	29,920	" "	164.19	4,912.66
July	28, '23	29,971	" "	142.47	3,734.67
July	30, '23	31,080	" "	140.57	4,368.91
Aug.	7, '23	34,114	" "	157.13	4,762.13
Aug.	11, '23	29,574	" "	166.00	4,392.19
Aug.	13, '23	37,100	" "	169.59	6,291.78
Aug.	16, '23	25,558	" "	148.56	3,472.06
Aug.	20, '23	32,400	" "	144.80	4,691.52
Aug.	21, '23	25,457	" "	168.54	3,821.72
Aug.	25, '23	27,600	" "	132.68	3,661.96
Aug.	31, '23	28,000	" "	173.54	4,859.12
Sept.	1, '23	39,575	" "	175.11	6,227.18
Sept.	6, '23	28,000	" "	150.34	4,209.52
Sept.	10, '23	32,695	" "	157.11	4,545.91
Sept.	11, '23	27,345	" "	142.99	3,420.80
Sept.	17, '23	25,107	" "	178.76	4,019.61
Sept.	17, '23	37,000	" "	157.76	5,837.12
Sept.	21, '23	25,947	" "	144.97	3,281.69
Sept.	22, '23	25,000	" "	160.71	4,017.75
Sept.	29, '23	25,000	" "	161.73	4,043.25

CONCENTRATE SHIPMENTS - McCRACKEN PROPERTIES (Continued).

1	Oct.	5,	'23	25.000	tons @	142.26	\$3,556.50
	Oct.	5,	'23	35.089	"	167.93	5,471.28
2	Oct.	10,	'23	26.118	"	167.93	3,906.79
	Oct.	12,	'23	25.000	"	179.17	4,021.75
3	Oct.	19,	'23	25.000	"	164.00	4,100.00
	Oct.	22,	'23	27.942	"	158.78	3,927.98
4	Oct.	24,	'23	25.000	"	150.24	3,756.00
	Oct.	26,	'23	26.778	"	158.19	3,741.41
5	Oct.	29,	'23	25.953	"	172.62	3,998.92
	Oct.	31,	'23	26.000	"	136.25	3,542.50
6	Nov.	6,	'23	26.000	"	122.49	3,184.74
	Nov.	6,	'23	27.482	"	171.30	4,197.99
7	Nov.	14,	'23	28.608	"	168.25	4,283.84
	Nov.	14,	'23	27.000	"	144.88	3,911.76
8	Nov.	19,	'23	27.000	"	125.27	3,382.09
	Nov.	19,	'23	30.200	"	138.39	3,618.70
9	Nov.	22,	'23	29.546	"	137.89	3,531.05
	Nov.	26,	'23	27.000	"	172.07	4,645.89
10	Nov.	30,	'23	28.182	"	153.64	3,804.92
	Dec.	3,	'23	27.000	"	149.75	4,043.25
11	Dec.	6,	'23	26.496	"	150.10	3,476.64
	Dec.	10,	'23	27.000	"	132.58	3,579.66
12	Dec.	11,	'23	26.421	"	182.83	4,347.67
	Dec.	15,	'23	27.000	"	129.75	3,503.25
13	Dec.	21,	'23	25.265	"	171.44	3,849.10
	Dec.	22,	'23	27.000	"	133.86	3,614.22
14	Dec.	26,	'23	22.107	"	150.51	2,859.75
	Dec.	27,	'23	27.000	"	120.62	3,256.74
15	Jan.	1,	'24	27.000	"	112.10	3,026.70
	Jan.	7,	'24	32.298	"	149.56	4,227.94
16	Jan.	8,	'24	26.123	"	147.87	3,358.81
	Jan.	17,	'24	24.303	"	131.25	2,715.31
17	Jan.	19,	'24	37.000	"	117.81	4,358.97
	Jan.	22,	'24	28.902	"	108.17	2,663.75
18	Jan.	24,	'24	32.168	"	95.90	2,586.75
	Jan.	28,	'24	30.776	"	130.22	3,434.27
19	Feb.	6,	'24	32.351	"	125.91	3,473.91
20	Apr.	14,	'24	26.350	"	85.63	2,256.08
	May	12,	'24	27.500	"	93.91	2,577.02
21	May	26,	'24	31,600	"	82.14	2,594.62
	May	31,	'24	28.100	"	113.74	3,196.09
22	June	3,	'24	26.950	"	111.61	2,559.28
	June	6,	'24	29.700	"	108.70	3,228.39
	June	23,	'24	33,300	"	140.75	4,687.30
23	July	5,	'24	26.450	"	139.16	5,072.38
	July	11,	'24	32.560	"	158.24	5,152.29
24	July	18,	'24	33.300	"	148.36	4,940.50
	July	25,	'24	32.400	"	151.58	4,911.19
25	Mar.	9,	'25.	27.000	"	87.92	2,373.84

NOTE: The above totals 3,078 tons of concentrates shipped for which net smelter returns were received of \$460,518.78.