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## **CORNELIUS & PATTON EXPLORATION COMPANY**

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THOMAS C. PATTON CONSULTING GEOLOGIST

September 23, 1986

Dr. Henry A. Perlmutter Montedeoro Corporation 460 Valle Del Oro Road Tucson, Arizona 85704

Dear Dr. Perlmutter:

I performed the 1986-1987 Annual Assessment work on the Montedeoro Corporation claims in Nye County, Nevada on September 1-3, 1986 in accordance with your instructions. A notarized Assessment Affidavit is attached for filing with the Nye County Recorder. The Affidavit, along with a check for \$13.75 (11 claims @ \$1.25 per claim) should be mailed to:

Naoma Lydon Nye County Recorder P.O. Box 1111 Tonopah, Nevada 89049 Telephone (702) 482-3516

A copy of the recorded affidavit of annual assessment work should be filed with the Nevada office of the Bureau of Land Management after January 1, 1987. Filing after January 1, 1987 will save you the trouble of filing a Notice of Intent to Hold. Two copies of the recorded Affidavit should be sent to:

Nevada Bureau of Land Management Attn: Mining Claims P.O. Box 12000 Reno, Nevada 89520

After a careful examination of your claim group, I definitely believe that the property has potential for small to moderate tonnages of extremely high grade gold ore. At least 5 separate veins traverse your claim group from northeast to southwest (Fig. 1) and appear to project directly into the White Caps mine area less than 1 mile beyond your claim boundary. The Manhattan mine produced gold from the most northerly of these vein systems. Extensive underground workings on three other veins strongly suggest at least some gold production by early miners. However, no significant exploration has taken place on these veins for at least 50 years.

I think that both the geological characteristics and geochemistry of the veins can be useful in identifying potential ore shoots. All of the veins are typically narrow with good open space textures. However, the veins adjacent

to old mine workings usually contain minor pyrite or pseudomorphs of limonite after pyrite and brown to black opaline silica. Pale green tremolite and calcite or casts of calcite in quartz are also commonly present. In contrast, "barren" veins are characteristically milky white and contain no pyrite, calcite, or opaline silica.

Veins close to ore shoots also contain anomalous amounts of arsenic, antimony, and mercury which appear to be more widely dispersed than the gold mineralization. Thus during future exploration for blind ore shoots, both the physical characteristics and the geochemistry of the vein material may be useful in identifying prospective zones along each vein.

The following targets within your claim block are worthy of further exploration:

- 1. The most obvious and easily tested target, and one described in previous reports by Resource Exploration (1980) and Buchanan Mines (1967), is the projected intersection of three splays of the Main vein exposed in the Manhattan mine workings. All three splays of this vein were mined in the past, and could form a bonanza ore shoot at their projected point of intersection about 150 feet below the lower adit level. The zone of intersection could be tested by drilling from the lower adit level, or by a decline starting from the Otero workings to the north.
- 2. The northeasterly projection of the Main vein is also a potential target. Two adits and a shaft explored what I believe is the northeasterly extension of the Main vein just beyond your claim boundary. In addition, Freeport Hole WC-79, drilled in 1985, intersected low grade gold mineralization  $(\pm .04 \text{ oz/ton})$  from 0-65 feet, with one 5 foot interval near the top of the hole running  $\pm 0.3$  oz.ton. The workings and drill hole show that gold is present in the vein 800 feet northeast of the mine workings. Additional ore shoots may be present in this unexplored vein segment.
- 3. The "East" vein (samples M-15, 16, 31,32) is exposed almost continuously over a strike length of at least 600 feet. What should be the most prospective part of the vein, where it intersects black limestone, is hidden by alluvium along a steep slope. Sample M-31, taken from a dump along this vein, ran 0.18 oz/ton gold, which indicates that the old timers were mining much higher grade ore. It is interesting to note that the average silver, arsenic, and antimony values of 4 samples taken from the east vein are higher than the average values of 5 surface samples taken from the Main vein in the vicinity of the Manhattan mine. Mercury values are about the same for both veins.

The southwesterly projection of the East vein cannot be traced on the ground beyond the workings at an elevation of 7800 feet. However, a zone of stockwork quartz veinlets sampled at site M-21 shows strongly anomalous

arsenic, antimony, mercury, and thallium values and may be the southwest extension of this vein.

- 4. The vein at Sample Site M-14 looks productive and has permissive geochemistry with anomalous mercury and arsenic. The vein has not been traced in either direction beyond the old workings, but deserves additional work.
- 5. The vein exposed in a shaft southeast of hole WC-79, should extend southwesterly into your claim group. Geochemical sampling and trenching would be useful in tracking this vein.
- 6. A long-shot target could be present on the Wild Fox No. 2 claim and is shown on Figure 1. A covered area adjacent to the Manhattan caldera margin is at the projected intersection of a northeast and northwest trending vein system. Trenching and geochemical sampling might identify drill targets.

A number of photos are included with the report to give you an idea of the current property status. I have tried to describe several potential targets which exist on your property. If the price of gold continues to increase, I think one or more of these targets will generate a lot of interest from small to medium-sized mining companies.

Please let me know if you have questions or would like more information on any of these targets.

Sincerely,

T.C. Patton

T.C. Patton

## Sample Descriptions Manhattan Gold Mine Nye County, Nevada

- M-13. Dump sample of white, open-space quartz taken from caved pit. Vein appears to trend N70E, cutting white limestone which has attitude N15W/40SW.
- M-14. Dump sample from caved shaft. White open-space quartz and brown opaline quartz with small unreduced clots of pyrite. Host rock is white lime-stone.
- M-15. Dump sample of white, open-space quartz downhill from shaft in which previous sampling showed anomalous gold. Vein trends N70E.
- M-16. Rock chip sample of 4 ft. section of vein and white limestone exposed on side of caved shaft. Lensy, white, open-space quartz, orange limonite.
- M-17. Rock chip sample of vein material exposed in short adit. Narrow openspace quartz veinlets cut black argillite, trend N50W, with vertical to 70SW dips. Bedding is faulted and contorted.
- M-18. Rock chip sample 50 ft., S30E from Salisbury Peak. Narrow, drusy quartz veins similar to M-17, cut massive quartzite.
- M-19. Rock chip sample from 6 inch quartz vein which cuts white to gray tremolitic limestone. Vein has attitude of N60E/65SE, limestone N40W/70NE.
- M-20. Rock chip sample from narrow (<6") vein with vuggy, white open-space quartz, pseudomorphs of calcite, minor gray opaline silica. Also minor pseudomorphs of limonite after pyrite. Vein attitude N65E/steep SE.
- M-21. Rock chip sample of ½"-½" quartz veinlets with good open-space textures cutting quartzite. Veinlets attitude N70E/±90°; bedding N40W/45SW.
- M-22. Rock chip sample of 5" quartz vein cutting gray limestone. Vein is vuggy, white, probably barren.
- M-23. Rock chip sample from 6" quartz vein exposed in pit above upper Manhattan adit. Vein material is vuggy, white, with trace pyrite.
- M-24. Rock chip sample from southern edge of surface stope. Stope is 30 inches wide, with open-space white quartz, abundant brown opaline silica, and pseudomorphs of limonite after pyrite. Limestone host has pale green tremolite.
- M-25. Rock chip sample across 3 ft. thickness of vein material exposed in back of Upper adit. Same as M-24, including brown to black opaline silica.
- M-26. Underground, lower adit. Sampled 3 ft. zone of black argillite cut by quartz stringers. Similar to veins cutting quartzite on ridge.

- M-27. Underground, lower adit. Sampled vein (8") and 2 ft. wide stringer zone. Vein composed of dense white quartz with pyrite, siderite (?), yellow-green clay, which pinches and swells along edge of stope.
- M-28. Underground, lower adit. Vein 1 ft. thick with core of brown opaline silica and selvages of white drusy quartz. Abundant pyrite and yellow clay gouge.
- M-29. Underground, lower adit. Vein 1 ft. wide, with brownish-black opaline silica and drusy white quartz, yellow clay, and pyrite. Vein attitude N55-60E/70°SE.
- M-30. Underground, lower adit. Vein 15" wide, same description as M-29.
- M-31. Dump sample from area shown by previous sampling to be anomalous in gold. Quartz is dense gray color, with light green tremolite, white calcite and minor iron oxide.
- M-32. Dump sample 150 slope feet downhill from M-31. Drusy white quartz, minor iron oxides.

Note: All samples taken by T.C. Patton during period September 1-3, 1986. Sample locations shown on attached map.



## **GEOCHEMICAL ANALYSIS REPORT**

LOT ID: COH-60904E

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SAMPLE ID	#	Ag	As	Au	Cu	Hg	Мо	Pb	Sb	TL	Zn	Bi	Cd	Ga	Pd	Pt	Se	Sn .	Te	
		bbm	ppm	ppm	ppm	ppm	· ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
		••••												••••			••••	••••		
M-13	1	3.9	25.3	<.05	8.29	<.5	13.1	3.1	1.88	<.5	40.2	<.5	<.5	1.74	<.25	<.5	<1.0	.608	<.5	
М-14	2	.707	233.0	.112	17.0	.519 -	13.9	3.13	10.1	<.5	32.1	<.5	<.5	2.24	<.25	<.5	2.24	<.5	<.5	
M-15	3	5.37	98.7	.104	32.1	<.5	3.83	2.75	21.0	<.5	19.9	<.5	<.5	.895	<.25	<.5	<1.0	<.5	<.5	
H-16	4	1.65	410.0	.054	42.4	1.49	9.57	4.75	33.5	<.5	26.4	<.5	<.5	2.09	<.25	<.5	<1.0	<.5		
H-17	5	3.21	49.0	.067	23.7	<.5	12.5	25.9	6.32	<.5	111.0		2.09	<.5	<.25	<.5			<.5	
M-18	6	.105	12.4	<.05	4.85	<.5	3.46	2.06	1.6	<.5	34.1	<.5	<.5	2.54	<.25	<.5	<1.0	<.5	<.5	
M-19	7	1.38	28.1	<.05	22.7	<.5	13.3	12.6	4.32	<.5	20.0	<.5	<.5	<.5			<1.0	<.5	<.5	
M-20	8	2.18	20.9	.125	15.8	<.5	3.08	2.69	4.25	<.5	8.81	<.5	<.5		<.25	<.5	<1.0	.699	<.5	
M-21	9	2.61	395.0	.121	6.02	5.75	33.2	5.05	75.1	3.03	67.4	<.5	<.5	<.5	<.25	- < <b>.</b> 5	<1.0	<.5	<.5	
N-22	- 10	.768	14.5	<.05	5.47	<.5	4.26	4.45	2.09	<.5	50.5	<.5		<.5	<.25	<.5	1.2	<.5	<.5	
M-23	11	3.38	32.9	<.05	21.0	<.5	22.5	13.6	11.9				<.5	<.5	<.25	<.5	<1.0	.575	<.5	
M-24	12	4.11	293.0	.506	45.5	1.46	21.0	2.08		<.5	69.1	<.5	<.5	<.5	<.25	<.5	<1.0	<.5	<.5	
M-25	13	1.49	160.0	<.05	86.2				44.3	<.5	36.8	<.5	<.5	.54	<.25	<.5	1.07	<.5	<.5	:
M-26	14	.951	324.0	<.05	_	.879	30.4	5.83	20.8	<.5	73.7	<.5	2.67	2.25	<.25	<.5	<1.0	<.5	<.5	
M-27	. 15	3.59			33.6	2.8	38.6	9.4	38.2	<.5	879.0	.963	3.83	15.5	<.25	<.5	1.38	<.5	.839	
M-28	16	5.25	101.0	.124	27.9	.527	13.1	4.04	13.8	<.5	38.4	<.5	<.5	1.14	<.25	<.5	<1.0	.599	<.5	
M-29			89.1	.322	29.5	.531	12.6	3.8	14.6	<.5	33.2	<.5	<.5	.907	<.25	<.5	<1.0	<.5	<.5	
N-30	17	.867	131.0	.083	11.6	<.5	5.56	2.87	11.7	<.5	26. <del>9</del>	<.5	<.5	1.57	<.25	<.5	<1.0	<.5	<.5	
and the second s	18	1.36	109.0	.62	31.6	.609	22.3	3.53	16.3	<.5	59.7	<.5	.734	1.26	<.25	<.5	<1.0	<.5	<.5	
N-31	19	7.45	83.7	6.28	63.3	<.5	23.0	5.84	11.6	<.5	13.7	<.5	<.5	1.49	<.25	<.5	<1.0	<.5	<.5	
N-32	20	1.12	300.0	.103	14.8	.56	9.8	4.31	26.4	<.5	20.1	<.5	<.5	.795	<.25	<-5	<1.0	< 5	- 5	

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