Report on Bottle Roll Tests, Mineragraphy and Electron Microscope Studies on Drill Core Reject Samples, Carneritos Area of the Tenoriba Project, Chihuahua, Mexico

October 2023

Summary:

The Carneritos area within Mammoth Resources' Tenoriba project is a large area of known gold-silver mineralization in soil, chip, tens of metres of channel and multiple tens of metre intervals of drill core samples with the area of mineralization measuring approximately 1.4 by 0.4 kilometres. Given the wide distribution of gold and silver throughout this large area it is important in planning future exploration activities to understand the extent to which gold-silver mineralization can be recovered via low-cost cyanide heap leach methods.

With the objective of understanding the extent to which gold and silver can be recovered by cyanide leaching, preliminary bottle roll metallurgical tests were performed on three composite samples of oxidized and combined oxidized and partially sulfide containing core reject samples with grades approximating a 0.65 gram per tonne gold equivalent grade (combined gold and silver with silver grade converted to gold at a 75 : 1 silver to gold ratio), that is the average assayed grade among all mineralized drill core intervals grading higher than 0.18 grams per tonne gold from 11 diamond drill core samples within the Carneritos area. In addition, mineragraphy and electron microscope with dispersive energy studies were performed on individual drill core samples from six holes drilled during the 2021-22 drill campaign within the Carneritos area of the Tenoriba project with the objective of possibly viewing gold and/or silver grains within the samples to determine the nature of gold and silver's occurrence among these samples providing insights into gold and silver mineralization throughout the Carneritos area. This report describes the rationale, method of sample collection quality control and quality assurance measures and the results obtained from these tests and studies and recommendations for further work.

The cyanide bottle roll tests were performed at SGS Laboratory in Durango Mexico, supervised by German Alarcon, SGS de Mexico S.A de C.V metallurgist and a Qualified Person. The mineragraphy and electron microscope with dispersive energy studies were performed at la Universidad de Sonora in Hermosillo, Mexico by Dr. Efren Perez, a consulting geologist and a Qualified Person. The sample selection was performed by Mammoth Resources personnel under the supervision and/or performed by Richard Simpson, Vice President Exploration for Mammoth Resources, a professional geologist and Mammoth Resources Qualified Person. Bottle roll sample preparation and testing was performed at the Laboratorio Tecnologico de Metalurgia LTM in Hermosillo, Mexico and supervised by Dr. Efren Perez, a Qualified Person. Mineragraphy and electron microscope work was performed at la Universidad de Sonora in Hermosillo, Mexico and performed by Dr. Efren Perez, a Qualified Person.

Gold dissolution (amount of gold dissolved-recoverable relative to the assayed grade) in bottle roll tests performed on two composite samples from 11 drill holes of oxidized material is greater than 90% (samples B and C), while for a single mixed oxidized-sulfide/transition zone composite sample from 5 holes (sample A) gold dissolution was 75%. Silver recoveries are 59% for the oxidized samples and 64% for the mixed oxidized-sulfide/transition zone sample. Most of the gold and silver was dissolved-was recoverable within the first 12 hours. With respect of the cyanide consumption, considering the fine granulometry of the material tested, the cyanide consumption for the three samples range from 0.7 to 1.0 kilogram per tonne are moderate. Calcium Carbonate (lime) consumption for the mixed oxidized-sulfide sample, at the rate of 1.0 kilogram per tonne is moderate while for the oxidized samples, at the rate of 2.3 and 2.5 kilogram per tonne for samples B and C, respectively and is considered somewhat high.

Gold, was not observed in the mineragraphy work performed by Dr. Perez, in association with any other mineral or occurring as free gold. Silver was identified only in sample 1, where it is associated with a copper and silver rich Sulphoantinonite. Seeing silver in this single sample and the form in which it was observed does not suggest this is the only form in which silver exists, but rather was the form in which it was observed in the samples provided.

Similar, preliminary metallurgical testing was performed on drill core samples from the Masuparia Gold Corp. drill core that was available when Mammoth initially optioned the Tenoriba project in 2012 (refer to the press release issued September 26, 2013, on the Mammoth Resources website for these results). Testing of various quarter-split drill core from seven drill holes plus numerous assay rejects from surface chip samples at various locations within the Masuparia area illustrated elevated dissolution/recovery of gold of greater than 90 % over a period of 72 hours, testing every 6 hours, illustrating that oxidized and mixed oxidized-sulfide/transition zone material within the Masuparia area too had the potential to be recoverable using cyanide heap leach methods.

Recommendations for future work include additional metallurgical testing of material of more coarse granulometry. Initially sampling from the screening of a coarser fraction from these same samples should be analyzed by bottle roll testing. Following encouraging results from this work, analysis should proceed to samples from portions of core, crushed and screened for the desired size of material of approximately 3/8-inch in diameter. Sulfide bearing gold and silver core intervals should also be tested, initially by fine granulometry bottle roll tests and if warranted by their recoveries, followed by coarser granulometry column testing. These tests would further validate and enhance the confidence of the metallurgical recoveries of gold and silver by cyanide heap leach methods plus the consumption of reagents to achieve the best gold and silver recoveries.

Abbreviations:

- AA: atomic absorption
- ALS: Australia Laboratory Services
- cm: centimetre
- g/t: gram per ton
- HQ: 63.5 mm size diameter drill core
- ICP: Induced Coupled Plasma mass spectrometry
- kg: kilogram
- km: kilometre
- mix or mixed: oxide-sulfide material
- mm: millimetre
- m: metre
- pH: refer to *acidity* or *basicity* levels
- ppm: parts per million
- QP/CP: Qualified Person/Competent Person
- RQD: rock quality designation
- SEM-EDS: Electron Microscope with Dispersive Energy or Scanning Electron Microscope - Energy Dispersive X-Ray Spectrometry
- Au: Gold
- Ag: Silver
- As: Arsenic
- Ca: Calcium
- CaO: Calcium Oxide
- CN: Cyanide

- NaCN: Sodium Cyanide
- Cu: Copper
- Na: Sodium
- O: Oxygen
- S: Sulfur
- Se: Selenium
- Te: Tellurium
- Zn: Zinc

CYANIDE BOTTLE ROLL TESTS, MINERAGRAPHY AND ELECTRON MICROSCOPE WITH DISPERSIVE ENERGY (SEM-EDS) STUDIES

Sample Selection:

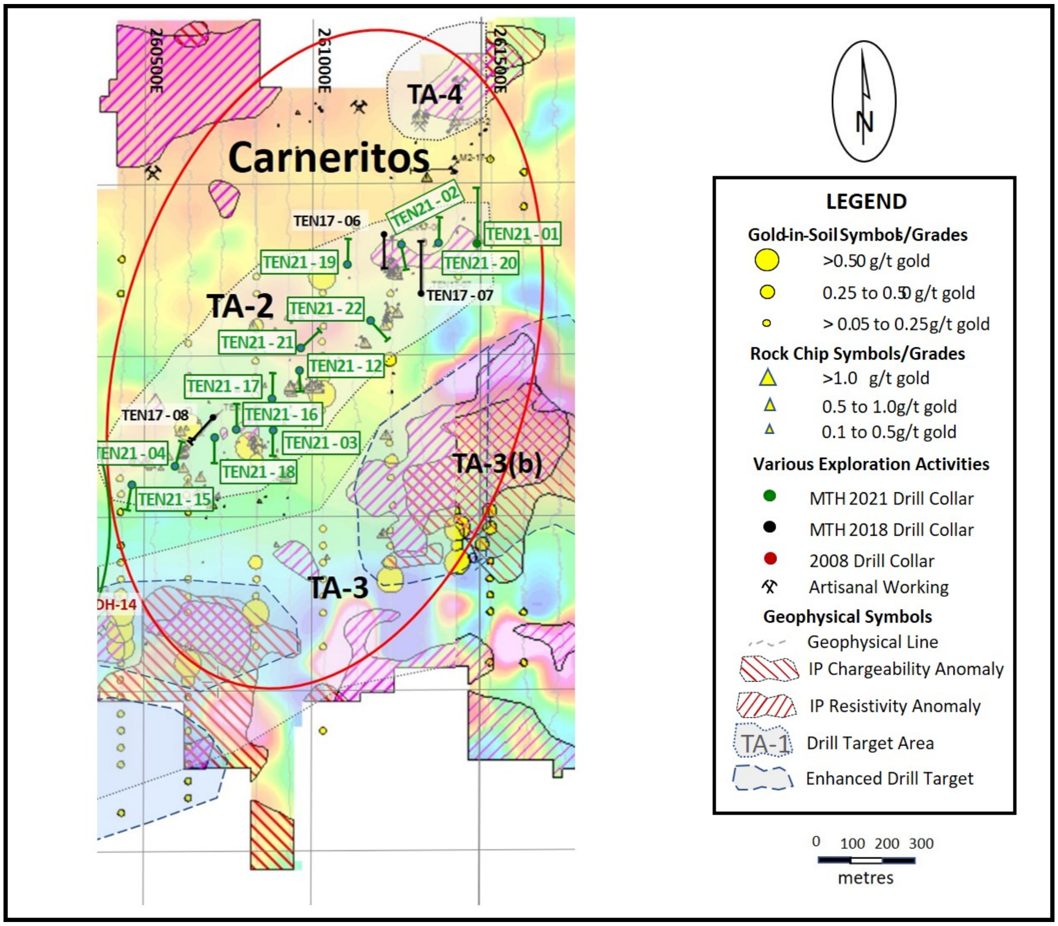
Samples were selected from sample rejects of drill core recovered by Mammoth Resources personnel from Australian Laboratory Services (ALS) preparation laboratory, Chihuahua where they had originally been prepared for drill core assay analysis of holes drilled within the Carneritos area of the Tenoriba property during the 2021-2022 diamond drilling program. Drill core assay results, plus Quality Assurance/Quality Control (QA/QC) measure were previously reported in various press releases (refer to Mammoth Resources website press releases spanning the period November 18, 2021 to December 15, 2022).

The selection of the samples to be analyzed were prioritized based upon the extent to which they would: (1) provide a good distribution over the extent of the Carneritos area as it had been defined by geological mapping, sampling, geophysics and drilling, (2) comprise, what was observed through drill core logging to be both oxidized (samples B and C) and mixed oxidized-sulfide/transition zone mineralized intervals (sample A), and (3) the composite of such samples would comprise an average grade, as best could be achieved by sample collection means, to approximate the current weighted average grade of all mineralized drill hole intervals from all 57 historical drill holes at Tenoriba, which approximates 0.65 g/t gold equivalent (gold with silver wherein silver is converted to a gold equivalent at a 75 : 1 silver to gold ratio) utilizing a 0.18 g/t gold cut-off grade for assembling potentially economical intervals of open pit mineable and heap leach recoverable precious metals at Carneritos (refer to Figure 1 - Map of Drill Hole Locations, Carneritos Area, Tenoriba Project, Chihuahua, Mexico).

Coarse reject samples from the 2021-2022 drill program, which assayed greater than 0.1 g/t gold, have been stored in 54 nylon rice bags sealed with plastic tie wraps and kept under lock and key in a storage room located at the ranch of Rodolfo Chavez outside of Chihuahua City, Mexico (Rodolfo Chavez is one of the original owners of the Tenoriba property from which Mammoth Resources optioned the property in 2012).

Of the 559 coarse rejects which existed from the 2021-22 drill core sampling within the Carneritos area, 125 samples were selected to form six composite samples of which three of these samples (refer Table 1 - Selected Individual Core Reject Samples) were sent to SGS laboratory in Durango for a 96 hours cyanide bottle roll test. The other 3 samples (refer to Table 4 - First Phase, Heavy Metal Concentrate Composite Samples) were sent to Dr. Efren Perez in Hermosillo, Sonora for heavy mineral concentration and microscopic study of mineralogy, especially to attempt to observe the nature of gold's occurrence within these sample composites. In a second phase sampling, five additional individual samples from half split diamond core were sent to Dr, Perez (refer to Table 5 - Second Phase, Heavy Metal Concentrate Composite Samples).

Figure 1 - Map of Drill Hole Locations, Carneritos Area, Tenoriba Project, Chihuahua, Mexico



Cyanide Bottle Roll Tests:

Sample Preparation:

Sample selection and preparation for cyanide bottle roll testing was performed by Mammoths personnel at the Chavez ranch outside of Chihuahua City, Mexico under the supervision of Richard Simpson, Mammoth's QP/CP. After mixing/blending material from each individual sample reject on a clean, plastic tarp, approximately 275 grams of material was selected and composited into three samples (refer to Table 1 - Selected Individual Core Reject Samples) and sent from Chihuahua City by bus to SGS laboratory in Durango City, Mexico in three plastic rice bags sealed by tie wraps. At the SGS laboratory the samples were dried, homogenized using a riffle splitter and to establish the head grade for the tests, the samples were fire assayed for gold and silver (Au-AA finish and Ag-gravimetric finish) plus assayed by ICP for 32 multi-elements. Following confirmation of suitable grade approximating the weighted average from all historical drilling at Tenoriba, 2 kg were crushed so greater then 60% of the material pass through minus 200 size mesh of which a 1 kg sample was selected for the 96-hour bottle roll test. SGS lab QA/QC procedures were performed which includes check assays for gold and silver. At the SGS lab the initial parameters for the bottle roll tests were a sample weight of 1.0 Kg, 33% of material as solids, 1500 ppm NaCN concentration, 10.5 to 11.5 pH and 96 hours test. NaCN and CaO were added during the test to optimize gold dissolution.

Table 1 - Selected Individual Core Reject Samples

Sample A

Hole No.	From	To	Unit	Sample	Zone	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm
TEN21-21	4.50	6.00	Dacite	**337218**	Mixed	1.64	4.6	164	225	15
TEN21-21	6.00	7.50	Dacite	**337219**	Mixed	1.52	2.0	108	561	38
TEN21-21	12.00	13.50	Dacite	**337224**	Mixed	1.33	6.0	41	288	11
TEN21-21	13.50	15.00	Dacite	**337225**	Mixed	1.25	2.4	73	174	5
TEN21-21	15.00	16.50	Dacite	**337226**	Mixed	0.95	1.6	31	250	5
TEN21-21	16.50	18.00	Dacite	**337227**	Mixed	1.10	1.7	65	394	9
TEN21-21	18.00	19.50	Dacite	**337228**	Mixed	0.70	1.4	64	534	4
TEN21-16	43.50	45.00	Dacite	**337013**	Mixed	0.71	5.1	29	118	8
TEN21-16	45.00	46.50	Dacite	**337014**	Mixed	0.72	4.1	206	94	11
TEN21-16	46.50	48.00	Dacite	**337016**	Mixed	0.48	3.6	130	239	20
TEN21-15	46.50	48.00	Breccia	**335959**	Mixed	0.53	13.3	548	304	161
TEN21-15	48.00	49.50	Breccia	**335960**	Mixed	0.57	12.0	924	278	3,810
TEN21-15	49.50	51.00	Breccia	**335961**	Mixed	1.45	9.5	393	436	2,230
TEN21-15	51.00	52.50	Breccia	**335962**	Mixed	0.86	15.3	346	243	406
TEN21-03	19.50	22.50	Dacite	**335218**	Mixed	0.65	1.4	28	313	2
TEN21-03	22.50	25.50	Dacite	**335219**	Mixed	0.49	0.9	24	180	2
TEN21-03	25.50	27.00	Dacite	**335220**	Mixed	0.39	1.5	29	427	2
TEN21-03	27.00	28.50	Dacite	**335221**	Mixed	0.44	1.2	18	525	2
TEN21-03	28.50	30.00	Dacite	**335222**	Mixed	0.65	4.0	73	265	9
TEN21-03	30.00	33.00	Dacite	**335223**	Mixed	0.70	5.7	69	294	7
TEN21-01	19.50	21.00	Dacite	**335014**	Mixed	0.64	5.4	49	154	5
TEN21-01	21.00	22.50	Dacite	**335016**	Mixed	0.53	8.0	103	195	8
TEN21-01	22.50	24.00	Dacite	**335017**	Mixed	0.47	9.4	152	299	12
TEN21-01	24.00	25.50	Dacite	**335018**	Mixed	0.33	11.5	106	166	9
TEN21-01	25.50	27.00	Dacite	**335019**	Mixed	0.11	10.5	117	88	9
				Average Grade:		**0.75**	**5.4**			

Sample B

Hole No.	From	To	Unit	Sample	Zone	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm
TEN21-01	7.50	9.00	Dacite	**335006**	Oxidized	0.41	6.3	56	964	72
TEN21-01	16.50	18.00	Dacite	**335012**	Oxidized	0.39	7.4	23	222	16
TEN21-01	18.00	19.50	Dacite	**335013**	Oxidized	0.43	2.8	45	250	9
TEN21-03	0.00	4.50	Dacite	**335205**	Oxidized	0.47	1.3	95	521	22
TEN21-03	12.00	13.50	Breccia	**335212**	Oxidized	0.63	8.9	43	432	3
TEN21-03	13.50	15.00	Breccia	**335213**	Oxidized	0.68	2.1	80	168	2
TEN21-03	15.00	16.50	Breccia	**335214**	Oxidized	0.53	2.4	104	473	2
TEN21-03	18.00	19.50	Dacite	**335217**	Oxidized	0.74	4.0	57	294	3
TEN21-04	1.50	3.00	Dacite	**336002**	Oxidized	0.71	10.4	19	362	205
TEN21-04	3.00	4.50	Dacite	**336003**	Oxidized	0.64	11.2	22	274	201
TEN21-12	4.50	6.00	Breccia	**336489**	Oxidized	0.59	9.3	216	133	10
TEN21-12	6.00	7.50	Breccia	**336490**	Oxidized	0.65	9.1	153	196	4
TEN21-12	7.50	9.00	Breccia	**336491**	Oxidized	0.67	8.3	41	213	4
TEN21-12	10.50	12.00	Breccia	**336493**	Oxidized	0.44	0.6	34	209	6
TEN21-12	16.50	18.00	Breccia	**336498**	Oxidized	0.48	3.9	49	269	3
TEN21-12	19.50	21.00	Breccia	**336500**	Oxidized	0.46	1.4	49	218	4
TEN21-15	25.50	27.00	Breccia	**335944**	Oxidized	0.82	6.6	77	467	90
TEN21-15	27.00	28.50	Breccia	**335945**	Oxidized	0.78	7.6	171	253	66
TEN21-16	7.50	10.50	Dacite	**335990**	Oxidized	0.65	0.5	42	687	19
TEN21-16	30.00	31.50	Dacite	**337004**	Oxidized	0.62	1.2	67	508	23
TEN21-16	31.50	33.00	Dacite	**337005**	Oxidized	0.41	2.1	121	538	14
TEN21-16	33.00	34.50	Dacite	**337006**	Oxidized	0.44	1.5	21	550	10
TEN21-16	34.50	36.00	Dacite	**337007**	Oxidized	0.46	2.2	135	600	15
TEN21-17	0.00	3.00	Breccia	**336527**	Oxidized	0.79	1.2	61	189	54
TEN21-17	3.00	4.50	Breccia	**336528**	Oxidized	2.14	0.8	49	160	47
TEN21-17	4.50	6.00	Breccia	**336529**	Oxidized	0.92	1.2	43	153	46
TEN21-18	13.50	15.00	Dacite	**336568**	Oxidized	0.93	0.6	12	181	115
TEN21-18	15.00	16.50	Dacite	**336569**	Oxidized	0.69	0.5	16	85	253
TEN21-18	22.50	24.00	Dacite	**336575**	Oxidized	1.12	5.0	24	500	192
TEN21-18	24.00	25.50	Dacite	**336576**	Oxidized	0.54	4.0	23	479	170
TEN21-19	3.05	6.10	Breccia	**337055**	Oxidized	1.43	8.9	139	286	13
TEN21-19	9.15	10.60	Breccia	**337057**	Oxidized	0.46	2.4	171	601	24
TEN21-20	16.50	18.00	Dacite	**337150**	Oxidized	0.35	5.7	72	317	15
TEN21-21	0.00	1.50	Dacite	**337215**	Oxidized	1.03	1.4	9	242	15
TEN21-21	1.50	3.00	Dacite	**337216**	Oxidized	0.61	1.6	15	219	13
TEN21-21	3.00	4.50	Dacite	**337217**	Oxidized	1.44	2.3	34	271	22
				Average Grade:		**0.72**	**3.9**			

Sample C

Hole No.	From	To	Unit	Sample	Zone	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm
TEN21-01	15.00	16.50	Dacite	**335011**	Oxidized	0.48	1.9	3	172	13
TEN21-03	6.00	7.50	Dacite	**335207**	Oxidized	0.40	1.8	70	367	5
TEN21-03	7.50	9.00	Breccia	**335208**	Oxidized	0.46	12.1	21	257	6
TEN21-03	9.00	10.50	Breccia	**335209**	Oxidized	0.68	9.9	42	507	6
TEN21-04	4.50	6.00	Dacite	**336004**	Oxidized	0.70	5.4	24	440	112
TEN21-04	6.00	7.50	Dacite	**336005**	Oxidized	0.64	19.5	35	352	244
TEN21-04	7.50	10.50	Dacite	**336006**	Oxidized	0.49	11.7	19	171	114
TEN21-12	24.00	25.50	Breccia	**336503**	Oxidized	0.48	0.8	41	154	2
TEN21-12	25.50	27.00	Breccia	**336504**	Oxidized	0.65	1.7	79	178	5
TEN21-12	27.00	28.50	Breccia	**336505**	Oxidized	0.57	4.7	75	194	3
TEN21-12	28.50	30.00	Breccia	**336506**	Oxidized	0.54	1.0	76	259	2
TEN21-12	30.00	31.50	Breccia	**336507**	Oxidized	0.58	4.9	59	248	3
TEN21-15	28.50	30.00	Breccia	**335946**	Oxidized	0.41	5.4	125	571	138
TEN21-15	30.00	31.50	Breccia	**335947**	Oxidized	0.44	2.5	199	906	211
TEN21-15	36.00	37.50	Breccia	**335951**	Oxidized	0.45	5.9	191	376	433
TEN21-16	24.00	25.50	Dacite	**335999**	Oxidized	0.76	3.8	2	148	23
TEN21-16	25.50	27.00	Dacite	**337001**	Oxidized	0.88	0.6	22	560	16
TEN21-16	27.00	28.50	Dacite	**337002**	Oxidized	1.27	1.9	82	416	11
TEN21-16	42.00	43.50	Dacite	**337012**	Oxidized	0.58	2.1	36	192	17
TEN21-17	6.00	7.50	Breccia	**336530**	Oxidized	0.84	1.6	44	169	50
TEN21-17	7.50	9.00	Breccia	**336531**	Oxidized	0.87	1.5	49	173	50
TEN21-17	9.00	10.50	Breccia	**336532**	Oxidized	0.66	1.7	47	143	35
TEN21-17	10.50	12.00	Breccia	**336533**	Oxidized	0.66	1.7	58	277	31
TEN21-17	12.00	13.50	Breccia	**336534**	Oxidized	0.81	2.1	63	223	26
TEN21-18	0.00	3.00	Dacite	**336561**	Oxidized	0.46	1.1	35	280	174
TEN21-18	3.00	4.50	Dacite	**336562**	Oxidized	0.55	0.7	28	664	160
TEN21-18	25.50	27.00	Dacite	**336577**	Oxidized	0.76	4.1	35	307	91
TEN21-18	27.00	28.50	Dacite	**336578**	Oxidized	0.74	3.1	25	464	40
TEN21-18	34.50	36.00	Dacite	**336583**	Oxidized	0.62	18.1	98	445	250
TEN21-18	37.50	39.00	Dacite	**336586**	Oxidized	0.83	4.5	38	157	65
TEN21-18	39.00	40.50	Dacite	**336587**	Oxidized	0.86	1.8	98	239	193
TEN21-18	40.50	42.00	Dacite	**336588**	Oxidized	0.56	2.2	82	236	174
TEN21-18	42.00	43.50	Dacite	**336589**	Oxidized	0.82	2.2	78	275	201
TEN21-18	43.50	45.00	Dacite	**336590**	Oxidized	0.72	3.2	94	237	117
TEN21-18	45.00	46.50	Dacite	**336591**	Oxidized	1.62	1.9	161	269	161
TEN21-18	46.50	48.00	Dacite	**336592**	Oxidized	1.90	4.1	112	284	154
TEN21-18	48.00	51.00	Dacite	**336593**	Oxidized	0.57	6.7	41	327	184
TEN21-18	51.00	54.00	Dacite	**336594**	Oxidized	0.51	2.4	28	660	144
TEN21-19	6.10	9.15	Breccia	**337056**	Oxidized	1.70	46.3	320	348	16
TEN21-19	10.60	12.20	Breccia	**337058**	Oxidized	0.88	7.0	166	527	30
TEN21-19	12.20	13.70	Breccia	**337059**	Oxidized	0.35	5.1	148	783	39
TEN21-20	10.50	12.00	Dacite	**337146**	Oxidized	0.42	-	30	371	<2
TEN21-20	12.00	13.50	Dacite	**337147**	Oxidized	0.51	0.7	47	414	<2
TEN21-21	19.50	21.00	Dacite	**337229**	Oxidized	0.71	1.3	26	571	2
TEN21-21	21.00	22.50	Dacite	**337230**	Oxidized	0.80	1.6	15	558	2
TEN21-21	22.50	24.00	Dacite	**337231**	Oxidized	0.97	2.9	20	517	<2
TEN21-21	24.00	25.50	Dacite	**337232**	Oxidized	0.93	3.8	28	466	2
TEN21-21	25.50	27.00	Dacite	**337233**	Oxidized	1.39	4.0	90	521	2
TEN21-21	27.00	28.50	Dacite	**337234**	Oxidized	0.73	1.3	41	439	<2
					Average Grade:	**0.81**	**7.6**			

Results of Cyanide Bottle Roll Tests:

Results of the cyanide bottle roll tests are illustrated in Table 2 - Dissolution Kinetics and Results. Gold dissolution (amount of gold dissolved/potentially recoverable relative to the assayed grade) from the oxidized material (samples B and C) is very rapid at 92% and 88% dissolution in the first 12 hours, respectively and reached 94% and 91%, respectively after 96 hours. The silver dissolution is also very rapid and reaches approximately 55% for both samples in the first 12 hours and 59% for both samples after 96 hours.

Gold dissolution in the same cyanide bottle roll of mixed oxidized-sulfide/transition material (sample A) is also very rapid with 72.3% of the total gold dissolved in the first 12 hours while 74.7% of gold dissolution occurs in 96 hours. The total silver dissolution for this mixed sample is also very rapid at 60.7% of the total gold dissolved in the first 12 hours while 64.1 % dissolution after 96 hours.

German Alarcon, SGS metallurgist who was responsible for the bottle roll tests, commented on these results stating that the results from the bottle roll test bode well for recovery of gold and silver from Carneritos oxidized and mixed oxidized-sulfide/transition zone material by cyanide heap leach methods. Cyanide (NaCN) consumption for the three samples, ranging from 0.7 to 1.0 kg/t are deemed moderate considering the fine granulometry of the material tested. Calcium Carbonate (lime) consumption of 1.0 kg/t for the mixed oxidized-sulfide sample is moderate while consumption of 2.3 and 2.5 kg/t for the oxidized material samples are considered somewhat high. The higher rate of lime consumption in the oxidized samples is not understood, however this is not concerning at this stage but rather something to investigate in future, more advanced studies to understand if this was a feature of these samples or a more pervasive phenomenon among the oxidized material and what minerals present in these oxidized zones lead to the need to regulate acidity via the addition of Calcium Carbonate.

Table 2 - Dissolution Kinetics and Results:

(hours under agitation and resultant percent dissolved (recoverable) gold (Au) and silver (Ag)

Time	**Sample A**		**Sample B**		**Sample C**	
(hours)	Au %	Ag %	Au %	Ag%	Au %	Ag%
0	0.0	0.0	0.0	0.0	0.0	0.0
2	70.3	54.7	86.0	49.7	86.1	48.0
6	72.0	60.2	91.9	53.4	89.5	53.8
12	72.3	60.7	92.3	54.7	87.7	54.6
24	73.3	63.2	92.0	56.9	88.8	56.8
48	74.3	63.1	93.1	57.0	90.3	58.3
72	73.8	64.1	94.7	58.3	89.4	58.4
96	74.7	64.1	94.0	58.8	91.1	58.9

Table 3 - Sample Grade, Dissolution and Reagent Consumption:

Description	Sample A		Sample B		Sample C	
	Au	**Ag**	**Au**	**Ag**	**Au**	**Ag**
	g/t	g/t	g/t	g/t	g/t	g/t
Calculated Head Grade	0.87	5.6	0.83	4.86	0.79	4.87
Assayed Head Grade	0.74	5.0	0.62	4.00	0.61	6.00
Tailings	0.22	2.0	0.05	2.00	0.07	2.00
	Au	**Ag**	**Au**	**Ag**	**Au**	**Ag**
% Dissolved	%	%	%	%	%	%
	74.7	**64.1**	**94.0**	**58.8**	**91.5**	**58.9**
	NaCN	**CaO**	**NaCN**	**CaO**	**NaCN**	**CaO**
Reagent Consumption	kg/t	kg/t	kg/t	kg/t	kg/t	kg/t
	1.0	1.0	0.7	2.3	0.8	2.5

Mineragraphy and Electron Microscope with Dispersive Energy (SEM-EDS) Studies on Heavy Mineral Concentrate :

Sample Preparation:

Sample selection was performed by Mammoth personnel in Chihuahua, Mexico under the supervision of Richard Simpson. A first phase of mineragraphy and electron microscope study was conducted, whereby 15 individual coarse reject samples from Carneritos drill core were composited into three samples (refer to Table 4 - First Phase, Heavy Metal Concentrate Composite Samples). A second phase of sampling was conducted, whereby five additional individual samples from select Carneritos split drill core were selected for further study (Refer to Table 5 - Second Phase, Heavy Metal Concentrate Individual Samples). In both phases the samples were sent in plastic rice bags, sealed by tie wraps, by bus from Chihuahua City to Laboratorio Tecnologico de Metalurgia (LTM) in Hermosillo city, Sonora, Mexico where the samples were prepared for Dr. Perez's mineragraphy and electron microscope study under the supervision of Dr. Rodrigo Martinez, QP/CP. The sample preparation of the first phase consisted of quartering and homogenizing the coarse sample reject material for each sample and selecting a 2.0-kilogram sample of this material which was crushed to material passing 1.0 mm granularity of which a heavy mineral concentrate was created using a prospector pan to separate a heavy metal fraction of 1.0 kg of sample material. Using epoxy, two polished sections of approximately 2 cm by 4 cm in size were produced for each sample, such that a total of six polished thin sections for study by mineragraphy and electron microscope with dispersive energy (SEM-EDS) by Dr. Perez, QP/CP at the Universidad de Sonora, Mexico to identify the presence and nature of gold and silver minerals.

For the second phase of mineragraphy study, five half split core samples which assayed from 1.47 to 3.34 g/t gold and up to 46.3 g/t silver were selected from Tenoriba's core storage facility located on the Tenoriba property. Each sample was individually bagged and tagged/marked in plastic bags sealed with tie wraps. Mammoth's personnel, under the supervision of Richard Simpson selected these samples and delivered the samples in a sealed rice bag to Chihuahua city bus station for delivery to LTM in Hermosillo, Sonora, Mexico. At LTM, Dr. Martinez supervised the preparation of samples for Dr. Perez in a process equal to the first phase, producing a heavy metal fraction of 1.0 kg of sample material. Using epoxy, two polished sections of approximately 2 cm by 4 cm in size were produced for each of the five samples for a total of 10 polished thin section for study by mineragraphy and SEM-EDS by Dr. Perez at the Universidad de Sonora, Mexico to identify the presence and nature of gold and silver minerals.

Table 4 - First Phase, Heavy Metal Concentrate Composite Samples

SAMPLE # 1

Hole No.	Sample No.	Zone	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm
TEN21-01	335026	SULFIDES	0.73	18.0	21	189	1075
TEN21-01	335027	SULFIDES	0 .25	36.8	49	227	1595
TEN21-01	335028	SULFIDES	0.42	171.0	227	322	770
TEN21-19	337084	SULFIDES	0.41	22.2	74	610	1090
TEN21-19	337086	SULFIDES	0.61	23.1	292	841	3120
TEN21-21	337221	MIX	2.65	4.8	167	308	27
TEN21-21	337022	MIX	3.34	1.8	72	215	70
TEN21-21	337023	MIX	2.66	4.8	126	255	9
	Average Grade:		**1.38**	**35.3**			

SAMPLE # 2

Hole no.	Sample No.	Zone	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm
TEN21-04	336007	OXIDIZED	1.21	15.2	71	292	138
TEN21-04	336008	OXIDIZED	1.31	9.1	111	228	351
TEN21-15	335952	OXIDIZED	1.21	30.8	191	532	148
TEN21-15	335953	OXIDIZED	0.51	21.9	175	455	100
	Average Grade:		**1.06**	**19.3**			

SAMPLE # 3

Hole no.	Sample No.	Zone	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm
TEN21-12	336494	OXIDIZED	1.08	1.0	67	327	7
TEN21-12	336496	OXIDIZED	0.62	1.3	37	548	5
TEN21-12	336501	OXIDIZED	1.07	2.0	77	141	5
	Average Grade:		**0.92**	**1.4**			

Table 5 - Second Phase, Heavy Metal Concentrate - Individual Samples

Hole no.	Sample No.	Zone	Au ppm	Ag ppm	Cu ppm	Pb ppm	Zn ppm
TEN21-21	337221	MIX	2.65	4.8	167	308	27
TEN21-21	337222	MIX	3.34	1.8	72	215	70
TEN21-21	337223	MIX	2.61	4.8	126	255	9
TEN21-19	337055	OXIDIZED	1.43	8.9	139	286	13
TEN21-19	337056	OXIDIZED	1.70	46.3	320	348	16

Results of Heavy Mineral Concentrate Mineragraphy and Electron Microscope with Dispersive Energy (SEM-EDS):

Dr. Perez failed to identify any free gold or silver nor any mineral associated with gold from the thin polished sections from the first phase sample. Silver was identified in sample 1, associated with a coper and silver rich Sulphoantinonite composed of S - 26.2%, Cu - 25.1%, Sb - 24.7%, Ag - 14.5%, Zn - 7.8% and As - 1.7% which has a similar composition as Tetrahedrite ($(Cu,Fe)_{12}Sb_4S_{13}$) – Freibergite ($(Ag,Cu,Fe)_{12}(Sb,As)_4S_{13}$) solid solution. Given the failure to observe free gold or silver in the first phase sampling the seconds phase was initiated with a focus on higher grade intervals of drill core vs core reject samples. These additional core samples again failed to result in the observation of free gold or silver nor any mineral associated with gold from the thin polished sections from the second phase sample thin, polished sections.

Identified Minerals in Sample 1:
Pyrite is the major sulfide identified with minor Galena (Pb) and Sphalerite (Zn) in the oxidized portion. Minor supergene Covellite (Cu) was also identified. Silver bearing Sulphoantinonite and Barite was also identified. This mineral has similar composition as the Tetrahedrite-Freibergite solid solution.

Identified Minerals in sample 2:
Goethite and Limonite with minor Pyrite are the only mineral identified.

Identified Minerals in sample 3:
Sample 3 is very similar to the previous sample, only Goethite and minor Barite was identified.

Identified Minerals in Sample 337221:
Limonite and minor Barite were observed.

Identified Minerals in Sample 337222:
Limonite and minor colloform Goethite, in addition of less than 1% Pyrite with minor microscopic Galena inclusions were observed.

Identified Minerals in Sample 337223:
In the sample coexist oxidized rock and primary sulfides. Pyrite averages 15% of the sample, minor colloform Goethite is also observed.

Identified Minerals in Sample 337055:
Oxidized minerals of a yellow-ocre colour, most likely Jarosite with less then 1% very fined grained Pyrite also present.

Identified Minerals in Sample 337056:
Oxidized minerals of a yellow-ocre colour, most likely Jarosite.

Conclusion and Recommendations:

Bottle Roll Test:

Conclusions:

From the bottle roll tests performed, German Alarcon metallurgist, SGS de Mexico S.A de C.V concluded that gold dissolution was exceptionally rapid and achieved high levels of dissolution over the 96-hour test period at greater than 91% for the oxidized samples (B and C) and 74% for the mixed (oxidized-sulfide) sample A.

The silver dissolution was also exceptionally rapid and achieved high levels of dissolution over the 96-hour test period at 59% for the oxidized samples and 64% for the mixed (oxidized-sulfide) sample. Mr. Alarcon believes that the results from the bottle roll test bode well for recovery of gold and silver from Carneritos oxidized and mixed oxidized-sulfide material by cyanide heap leach methods.

Cyanide (NaCN) consumption for the three samples varied from 0.7 to 1.0 kg/t and this level of consumption is deemed moderate considering the fine granulometry of the material tested. Calcium Carbonate (lime) consumption of 1.0 kg/t for the mixed oxidized-sulfide sample is moderate while consumption of 2.3 and 2.5 kg/t for the oxidized material samples are considered somewhat high. The higher rate of lime consumption in the oxidized samples is not understood, however at this stage of study this is not concerning but rather is something to investigate in future, more advanced studies to understand if this was a feature of these samples or a more pervasive phenomenon among the oxidized material and what minerals present in these oxidized zones may lead to the need to regulate acidity via the addition of Calcium Carbonate during cyanide leach.

Recommendation:

To enhance the confidence of oxidized and mixed oxidized-sulfide material at Carneritos being amenable to high gold and silver dissolution and potential recovery by cyanide heap leach methods, additional metallurgical test work is recommended and should include: (1) additional bottle roll tests utilizing coarser granulometry material. With success in coarser granulometry material (moving towards 3/8-inch diameter material), further testing of similar granulometry material should be studied by cyanide column leach tests. Sulfide bearing gold and silver core intervals should also be tested by various granulometry bottle roll tests and if warranted followed by column testing. These tests would validate and further enhance the confidence of the metallurgical recoveries of gold and silver by cyanide heap leaching methods.

Heavy Mineral Concentrate Test:

Conclusions:

Dr. Perez failed to identify any free gold or silver nor any mineral associated with gold from the thin polished sections from either the first phase nor second phase sampling. This initial investigation does not mean there is no gold in the samples received. Searching for gold and silver minerals can be very difficult and in theory although the probability of finding such gold and/or silver, or gold bearing minerals should be greater in a heavy mineral concentrate, the volume of material selected for this mineragraphy and electronic microscope study was quite small.

Silver was identified only in sample 1, it is associated with a Copper and Silver rich Sulphoantinonite composed of S - 26.2%, Cu - 25.1%, Sb - 24.7%, Ag - 14.5%, Zn - 7.8% and As - 1.7% which has a similar composition as Tetrahedrite - Freibergite solid solution. An additional problem in identifying gold and silver or gold bearing minerals could be the overall low grade (<3.34 g/t Au) of the samples and possibly the that gold occurs at Tenoriba, within the oxidized material, as free gold in nuggets of varying size. In this sampling it is possible that no nuggets were present in the samples under analysis and as such why no gold or no minerals associated to gold were identified by Dr. Perez. The high gold solubility in the cyanide bottle roll tests also suggest that gold most likely occurs in the form of free gold.

Recommendations:

For the time being no additional heavy mineral concentrate tests are being contemplated for the oxidized and mixed oxidized-sulfide/transition zone mineralized material from the drill core rejects. If the sulfide bearing preliminary bottle roll test results are promising, samples from the best sulfide mineralized material could be tested by this method to attempt to identify gold and silver minerals. Should any further testing be performed, it is advised that 100% of individual higher-grade samples should be crushed and panned to produce a heavy metal concentrate from which polished thin sections would be made for observation.

Quality Assurance and Quality Control: (QA/QC):

Richard Simpson Mammoth's Vice President Exploration was the geologist in charge of the drill program and the QA/QC program for the 2021-22 diamond drill program that resulted in the samples used in these studies. He was assisted and supervised by two Mexican geologists and local helpers. At the end of each drill shift, Mammoth's personnel (helper or geologist) would recover at the drill site the shift´s HQ diameter drill core stored in plastic core boxes and these boxes would be transported to the core preparation-storage site. Mammoth geologists would measure and mark the core boxes, note the core recovery and rock quality designation (RQD), the core in boxes would then individually be photographed with this recorded in Excel spreadsheets and stored on the geologist laptop, then using pen and paper the core would be logged, core samples marked by the geologist and the paper logs, once completed for each hole, would be entered into the geologist's laptop core log. After each drill hole log was completed, the digitized data would be copied onto a portable hard drive and stored in a different location.

Once the core was photographed and logged, successive sample intervals of core would be sawn in half, along its long axis, by a technician using a table mounted rock saw. Core sample lengths were generally 1.5 metres. One half of the sampled core would be individually bagged, tagged and bags placed along ordered sample rows which would later be consolidated into numbered rice bags to be shipped to ALS preparation laboratory in Chihuahua city, Chihuahua, Mexico for preparation with sample portions for analysis shipped to ALS's facility in Canada where a 30-gram fire assay with an atomic absorption finish was performed. Silver, copper, lead and zinc were analyzed as part of a multi-element ICP package using a 4-acid digestion. Any over limit samples with greater than one percent copper, lead and zinc are re-analyzed using ore grade detection limits. Blank and duplicate samples are inserted randomly at approximately every 15 samples. The blank sample used was derived from material collected from outcropping, unmineralized granodiorite of which the average grade was assayed at less than 0.005 g/t Au. This blank material was blended and stored in plastic rice bags at the core shack. Two ROCKLABS gold standards were used, OXE150 = 0.600 g/t and OXG140 = 1.015 g/t. The duplicate samples consisted of quarter split core from the half core left in the core boxes. The remaining half of the sawn core was replaced in the core boxes in the original sequence. The core boxes were stored in sequence in the core shack.

When feasible, Mammoth personnel would transport the sealed rice bags by pickup truck to PPM Entregas Puntuales SA de CV in Hidalgo de Parral, Chihuahua, Mexico, a courier company recommended by ALS. Alternatively, samples were transported directly by Mammoth personnel to the ALS sample preparation laboratory in Chihuahua city.

The bottle roll metallurgical testing of the three composite drill core reject samples and mineragraphy plus electron microscope with dispersive energy (SEM-EDS) studies performed over three composite drill core reject samples and five individual drill core samples from holes recently drilled within the large, Carneritos area of the Tenoriba project are described above in the sample selection and preparation sections.

Qualified Person(s)/Competent Person(s) (QP/QC):

German Alarcon, Metallurgist for SGS de Mexico S.A de C.V. Mr. Alarcon is an experience metallurgist. He graduated in 2007 from the Faculty of Chemistry at the Universidad del Estado de Durango, Mexico as an Ingeniero en Ciencias de los Materiales. Since graduating in 2007, Mr. Alarcon has worked as a metallurgist for numerous reputable organizations, including Minerales y Minas de Mexico and First Majestic Silver Corp.

Since 2018 Mr. Alaron has been the Metallurgical Lab Manager for SGS in Durango, Mexico. Mr. Alarcon is a QP/CP under NI 43-101 by virtue of his university degree and 16 years of experience as a metallurgist.

Dr. Rodrigo Martinez, PhD Engineering (metallurgy) is a geochemist-metallurgist. Dr. Martinez graduated Chemical Engineer from the Universidad de Sonora. Mexico in 2011; attained his Master in Administration from the Instituto Sistema Empresa Inteligente (ISEI) de Hermosillo, Sonora in 2015, a Fire Assay Certificate from British Columbia Institute of Technology in 2016 and his PhD from el Tecnologico de Mexico, Saltillo Campus in 2023. Dr Martinez has worked at Laboratorio Tecnologico de Metalurgia in Hermosillo, Sonora, Mexico for the last 17 years as a chemist-metallurgist including the last 12 years as the Laboratory Manager. Dr. Martinez is a QP/CP by virtue of his university degrees and years of experience chemist-metallurgist.

Dr. Efren Perez, PhD Geology, is a consulting geologist. From 1977 to 2022 Dr. Perez was a professor of Economic Geology at the Universidad de Sonora, Mexico. Dr. Perez received his PhD in 2006 from the Universidad de Mexico (UNAM). His post graduate studies are from the Ecole Nacionale Superieure des Mines de Paris (1975-1976) and Ecole Nationale Supérieure de Géologie Appliquée et de Prospection Minière, Nancy, France (1977-1979). Dr. Perez is a QP/CP under NI 43-101 by virtue of his university degrees, academic studies and 45 years of experience as a professor of Economic Geology at the Universidad de Sonora.

Richard Simpson, P.Geo., Vice-President Exploration for Mammoth Resources Corp. is Mammoth's QP/CP under National Instrument 43-101 (refer to Mammoth’s website “Legal” for Mr. Simpson’s QP/CP qualifications) by virtue of his professional designation, university degree and years of work experience as a geologist and is responsible for and has reviewed all technical data in this report.

Richard Simpson P. Geo.
Vice President Exploration, Mammoth Resources Corp.

Thomas Atkins
President and CEO, Mammoth Resources Corp.