CENTRAL SUN MINING INC. Form 6-K April 15, 2008

#### FORM 6-K

### UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

Report of Foreign Issuer

Pursuant to Rule 13a-16 or 15d-16 of the Securities Exchange Act of 1934

For the month of April 2008

Commission File Number 001-32412

#### CENTRAL SUN MINING INC.

(Translation of registrant's name into English)

500 – 6 Adelaide St. East Toronto, Ontario, Canada M5C 1H6 (Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F

Form 20-F — Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): \_\_\_\_\_\_

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Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): \_\_\_\_\_

**Note:** Regulation S-T Rule 101(b)(7) only permits the submission in paper of a Form 6-K if submitted to furnish a report or other document that the registrant foreign private issuer must furnish and make public under the laws of the jurisdiction in which the registrant is incorporated, domiciled or legally organized (the registrant's "home country"), or under the rules of the home country exchange on which the registrant's securities are traded, as long as the report or other document is not a press release, is not required to be and has not been distributed to the registrant's security holders, and, if discussing a material event, has already been the subject of a Form 6-K submission or other Commission filing on EDGAR.

	mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to bursuant to rule 12g3-2(b) under the Securities Exchange Act of 1934.					
If "Yes" is marked	Yes No _X d, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b) 82					
EXHIBIT NO.	DESCRIPTION					
99.1 2008	Technical Report on Mineral Resources and Mineral Reserves, Limon Mine and Mestiza Areas, Nicaragua dated March 31,					
99.2 Consent of William N. Pearson dated April 2, 2008 99.3 Consent of Graham Speirs dated April 2, 2008						
	SIGNATURE					
	quirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the cunto duly authorized.					
	CENTRAL SUN MINING INC.					
Date: April 15, 2	By: <u>/s/ Denis C. Arsenault</u> Denis C. Arsenault, Chief Financial Officer					

EXHIBIT 99.1

# TECHNICAL REPORT ON MINERAL RESOURCES AND MINERAL

# RESERVES, LIMÓN MINE AND MESTIZA AREAS, NICARAGUA

# NI 43-101 Report

# **Authors:**

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March 31, 2008

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## 1 SUMMARY

#### **EXECUTIVE SUMMARY**

Central Sun has prepared a Technical Report on the Limón gold mine and the Mestiza property in northern Nicaragua. This report presents an updated estimate of the Mineral Resources and Mineral Reserves of the Talavera and Santa Pancha deposits at Limon and reviews the Company's Mine Plan. An inferred mineral resource has also been estimated for the Mestiza property. The Technical Report has been prepared to conform to NI 43101 Standards of Disclosure for Mineral Projects. The authors of this report have visited the property on a number of occasions and have been directly involved with the exploration and mining programs carried out there.

Central Sun is a reporting issuer listed at the Toronto Stock Exchange (TSX: CSM). The company, through its 95% interest in Triton Minera S.A. (TMSA), owns and operates the Mina El Limón mineral concession and holds 9 exploration-stage mineral concessions, including the past producing La India mine; all of which are located in northwestern Nicaragua. The Mestiza project comprises the 100% owned Espinito-Mendoza concession and the 40% owned Espinito-San Pablo mineral concessions that are enclosed by the La India concession.

This report discusses the 12,000 ha Mina El Limón mineral concession, including the Santa Pancha and Talavera underground mines, and the Mestiza project located 70 km east by road of Limon. Table 1-1 below summarizes Central Sun's estimate of the Mineral Reserves and Mineral Resources at the Mina El Limón concession and Mestiza Project, as of December 31, 2007:

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TABLE 1-1 MINERAL RESERVES AND MINERAL RESOURCES

Central Sun - Limón Mine and Mestiza Project

As at December 31, 2007

**Mineral Reserves** 

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Deposit	Category Tonnes	Grade (g Au/t)	Contained Ounces Au
Talavera	Proven 85,900	5.34	14,800
	Probable 75,500	4.46	10,800
Santa Pancha	Proven 63,400	7.01	14,300
	Probable 811,600	4.96	129,400
Veta Nueva	Probable 182,500	5.71	33,500
Open Pits	Proven 7,000	5.91	1,300
	Probable 155,100	2.63	13,100
Subtotal	Proven 156,400	6.04	30,400
Subtotal	Probable 1,224,600	4.75	186,900
Total Underground	Proven & Probable 1,381,000	4.89	217,200
	Additional Mineral Resources		
Talavera	Measured 9,500	6.92	2,100
	Indicated 30,500	5.20	5,100
Santa Pancha	Indicated 281,500	4.60	41,600
Veta Nueva	Indicated 42,100	7.71	10,400
Open Pits	Measured 20,500	3.60	2,400
Subtotal	Measured 30,000	4.65	4,500
Subtotal	Indicated 354,100	5.02	57,200
Total	Measured & Indicated 384,000	4.99	61,600
Talavera	Inferred 305,000	6.52	63,900
Santa Pancha	Inferred 912,000	5.72	167,800
Veta Nueva	Inferred 42,000	7.12	9,600
Open Pits	Inferred 32,000	4.10	4,300
Mestiza	Inferred 558,000	8.80	158,600
Total	Inferred 1,849,000	6.81	404,600

1-2

#### Notes:

- 1 CIM definitions were followed for estimation of reserves & resources.
- 2 Mineral Reserves are estimated at a cutoff grade of 3.8 g Au/t. Additional Mineral Resources which exclude reserves are estimated at a cutoff grade of 2
- 3 Mineral Reserves are estimated using an average long-term gold price of US\$550 per ounce.
- 4 A minimum vein width of 2.4 m was used, and a minimum mining width of 3.0 m.
- 5 Dilution added was 0.3m each side (total 0.6m) at 0 grade.
- 6 Specific Gravity is 2.60.

The mineral resources and reserves have been estimated in accordance with the CIM Standards for Mineral Resources and Mineral Reserves adopted by the CIM Council on December 11, 2005 as required by NI-43-101.

#### **ECONOMIC ANALYSIS**

Central Sun has prepared a Life of Mine Plan (LOMP) that schedules production of the Mineral Reserves as of January 1, 2008. The mine life is forecast to be approximately 4 years, ending in the fourth quarter of 2011. Central Sun's projection of the pre-tax cash flow is shown in Table 1-2, expressed in US dollars (US\$). The key input parameters are:

- Production of 1,055 tonnes per day (based on 327 days per annum).
- Reserve and Resource Base: Mineral Reserves of 1.38 million tonnes at an average grade of 4.89 g Au/t, and Measured and Indicated Mineral Resources of 394,000 tonnes at an average grade of 4.99 g Au/t. The Mineral Resources are additional to the Mineral Reserves.
- Total production: 1.38 million tonnes at 4.89 g Au/t.
- Annual gold production: 44,534 ounces, average.
- Metallurgical recovery of 82%.
- Gold price of \$837 per ounce, average.
- Silver revenue assumed to be not material.
- Revenue is recognized at the time of production.
- Operating costs: \$541 per tonne milled.

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Capital costs: \$9.02 million.

#### GLOBAL MARKETS

The principal commodities at the Limón mine are freely traded, at prices that are widely known, so that prospects for sale of any production are virtually assured. A gold price of US\$550 per ounce was used for the Base Case.

The Nicaraguan currency (Cordoba) has shown a steady decline against the US dollar over the past five years, as follows:

- December 31, 2007 1 US dollar = 19.22 Cordobas
- December 31, 2006 1 US dollar = 18.57 Cordobas
- December 31, 2005 1 US dollar = 17.21 Cordobas
- December 31, 2004 1 US dollar = 16.24 Cordobas
- December 31, 2003 1 US dollar = 15.43 Cordobas

For costs originally estimated in Cordobas (for example, labour), Central Sun applies an inflation factor of 6% per annum before converting to US dollars.

#### **CASH FLOW ANALYSIS**

The undiscounted pre-tax cash flow totals \$33.9 million. The unit operating cost is \$541 per ounce of gold. Capital expenditures are estimated to total \$55 per ounce, and royalties are forecast to total \$50 per ounce, over the remaining mine life. The total cost of production, including operating, capital and royalties, is estimated to be \$646 per ounce. All costs and revenue are expressed in US dollars (US\$) unless otherwise noted.

Central Sun's physical and cost data in the cash flow model are consistent with operations during the past several years. In view of recent gold prices ranging from \$900 to \$1,000 per ounce, the Limón Mine is expected to generate a positive cash flow for the period detailed in the Life of Mine Plan.

TABLE 1-2 CASH FLOW MODEL

PRODUCTION	UNITS	2007	2008	2009	2010	2011	PLAN TOTAL			
UNDERGROUND										
ORE MINED (FULL OPERATING COST	T) TM		331,000	350,000	350,000	349,000	1,380,000			
GOLD GRADE	gpt		4.93	4.87	4.82	4.97	4.90			
TOTAL ORE MINED	TM		331,000	350,000	350,000	349,000	1,380,000			
AVG. GRADE	gpt		4.93	4.87	4.82	4.97	4.90			
MILLING										
FEED TONNES	TM		331,000	350,000	350,000	349,000	1,380,000			
GOLD GRADE	gpt		4.97	3.97	4.09	4.85	4.46			
RECOVERY	%		82.0%	82.0%	82.0%	82.0%	82.0%			
GOLD BULLION	OUNCE	S	43,028	44,921	44,499	45,689	178,136			
GOLD IN CARBON	OUNCE	S								
RECOVERED OUNCES	OUNCE	S	43,028	44,921	44,499	45,689	178,136			
SILVER BULLION	OUNCE	S								
GROSS INCOME NET REALIZED GOLD PRICE PER										
OUNCE	US\$		900	850	800	800	837			
GOLD REVENUE	US\$		38,725,217	38,182,650	35,598,864	36,551,244	149,057,976			
COST OF PRODUCTION										
MINING	US\$		10,409,619	11,007,150	11,007,150	10,975,701	43,399,620			
MILLING	US\$		6,007,650	6,352,500	6,352,500	6,334,350	25,047,000			
ADMINISTRATION	US\$		6,436,948	7,197,143	7,197,143	7,156,075	27,987,309			
TOTAL COST	US\$		22,854,217	24,556,793	24,556,793	24,466,126	96,433,929			
UNIT COST PER TONNE										
MINING	US\$/TM		31.45	31.45	31.45	31.45	31.45			
MILLING	US\$/TM		18.15	18.15	18.15	18.15	18.15			
ADMINISTRATION	US\$/TM		19.45	20.56	20.56	20.50	20.28			
COST PER TONNE	US\$		69.05	70.16	70.16	70.10	69.88			
COST PER OUNCE GROSS PROFIT/LOSS OF	US\$		531.15	546.67	551.86	535.49	541.35			
PRODUCTION	US\$		15,871,000	13,625,857	11,042,072	12,085,118	52,624,046			
Repadre Royalty Expenses (3%)	US\$		1,161,757	1,145,479	1,067,966	1,096,537	4,471,739			
Income Tax Advances (Advalorem 3%)	US\$		1,161,757	1,145,479	1,067,966	1,096,537	4,471,739			
PROFIT/LOSS of OPERATION	US\$		13,547,487	11,334,898	8,906,140	9,892,043	43,680,568			
CAPITAL EXPENDITURE MINE MILL	US \$ US \$ US \$	340,500 394,297	2,935,906 1,450,000	761,078 600,000	761,078 600,000	661,078 0	5,459,639 3,044,297			
INFRASTRUCTURE	US\$	•	215,000	•	•		215,000			
CLOSURE PLAN TOTAL CAPITAL	US \$ US \$	734,797	4,600,906	1,361,078	300,000 <b>1,661,078</b>	736,000 <b>1,397,078</b>	1,036,000 <b>9,754,936</b>			

US \$	-734,797	8,946,581	9,973,820	7,245,062	8,494,965	33,925,632
US \$						
US \$	(734,797)	8,946,581	9,973,820	7,245,062	8,494,965	33,925,632
	(734.797)	8 946 581	9 973 820	7.245.062	8 494 965	33,925,632
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#### SENSITIVITY ANALYSIS

Variations to the LOMP base case NPV calculated at a 5% interest rate are detailed in Table 1-3, and graphed in Figure 1-1. The cash flow is most sensitive to gold price, followed by operating cost.

TABLE 1-3 SENSITIVITY DATA Central Sun Gold – Limón Mine

Parameter	TT:4	-20%	-10%	Dana	+10%	+20%
Variables	Units	-20%	-10%	Base	+10%	+20%
Gold Price	\$/oz	670	753	837	921	1004
Operating Cost	\$/tonne	56	63	70	77	84
Capital Cost	\$millions	7.22	8.12	9.02	9.92	10.82
NPV	Units	-20%	-10%	Base	+10%	+20%
Gold Price	\$millions	11.5	22.6	33.8	44.9	56.1
Operating Cost	\$millions	35.3	34.6	33.8	33.1	32.3
Capital Cost	\$millions	47.7	40.7	33.8	26.9	19.9
Mine Life	\$millions	11.5	22.7	33.8	44.9	56.1

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#### FIGURE 1-1 CASH FLOW SENSITIVITY GRAPH

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#### **TECHNICAL SUMMARY**

#### **PROPERTY STATUS**

Central Sun holds interests in 10 mineral concessions in northwestern Nicaragua including the Limon Mine concession. The Mineral Concessions are located approximately 100 km northwest of Managua, the capital of Nicaragua. Production from the Limón Mine and concessions with a 10km radius of the mine are subject to the following royalties:

• A 3% net smelter royalty (NSR) to Royal Gold, Inc. ("Royal Gold), on the mineral production from the Limón Mine and any other production revenue in the future, obtained from the Limón Mine Concession and the other mineral concessions, including La India, that were formerly part of the original El Limón-La India exploration concession. The Royal Gold royalty does not apply to the

1-7

Espinito-San Pablo and Espinito-Mendoza concessions comprising the Mestiza project nor does it apply to concessions outside the 10km radius of the Limon Mill.

• A royalty equal to 5% of the net profit of Triton Mining (USA) LLC (Triton USA) is due to Internacional de Comercial S.A. (IDC). Triton USA is a subsidiary of Central Sun which holds a 47.5% interest in the Limón Mine.

- The Espinito-Mendoza mineral concession is subject to a 1.5% NSR payable to the vendor.
- All concessions are subject to a 3% NSR on gold production, payable to the Government of Nicaragua.

The Santa Pancha and Talavera gold deposits are located within the 12,000 ha Mina El Limón mineral concession that has a term of 25 years, expiring in 2027. The property straddles the boundary of the municipalities of Larreynaga and Telica of the Department of León and the municipalities of Chinandega and Villa Nueva of the Department of Chinandega.

TMSA is the direct owner of the surface rights that underlie all of its current mining, milling, tailings and related facilities and infrastructure at the Limón Mine. When necessary, access agreements are negotiated and signed with the individual surface owners for other areas within the concession not owned by the Company. The Permits required for current mining and milling operations, and for exploration activities are in place.

The original purchase of the mineral concessions, except for Espinito-Mendoza in the Mestiza project, was made by Minera de Occidente S.A., (subsequently renamed TMSA). TMSA is owned 47.5% by Triton Mining Corporation (Triton), 47.5% by Triton USA, and 5% by Inversiones Mineras S.A. (IMISA), a holding company representing the unionized mine workers of Nicaragua. Central Sun's 95% interest in the concessions is from its 100% ownership of Triton and Triton USA acquired as a result of a merger with Black Hawk Mining Inc. in October 2003. The Espinito-Mendozao mineral concession was acquired by Central Sun in September 2006.

1-8

TMSA is not responsible for any type of environmental damage caused prior to the time at which it took possession of the Limón Mine in 1994, but is required to implement the necessary changes to reduce any existing environmental problems. According to the existing Central Bank regulations, TMSA may freely export and sell the gold produced and the proceeds may be repatriated without restriction.

#### LOCATION AND ACCESS

The Mina El Limón mineral concession is situated along the eastern margin of the Nicaragua Depression. The property lies within the relatively flat lowlands of the depression itself, but contains hills with moderate relief. The Mestiza project and La India district are in the Nicaraguan highlands lying just east of the Nicaraguan depression and in a hilly area of moderate to steep relief.

Access to the Limón mine area is by paved road approximately 125 km from Managua and approximately 15 km by all-season gravel road to the Village of El Limón. The total road distance from Managua is 140 km. The Talavera underground mine is situated approximately 4 km west of the Village of El Limón, and the Santa Pancha deposit is situated approximately 5 km east of that village. Both areas are accessible by gravel roads from the Limón mine site.

The Mestiza Project and La India district are approximately 140 kilometres northwest of Managua and 45 kilometres in a direct line east of the Limon mill. The village of La Cruz de La India, located at the south end of the India concession, is on a paved highway that traverses the southern limits of the district. The road distance to the Limon mill is approximately 70 kilometres.

The climate in northwestern Nicaragua is tropical with a hot, wet season from May through November and hotter, dry season from December through to April. The mean annual temperature is 27° C with an average annual precipitation of two metres. The

1-9

Limón Mine operates year round and is not normally affected by the typical seasonal climatic variations.

Electrical power for the Limón Mine operations is obtained from the Nicaraguan national grid system with backup generators at the mine site. Water, both industrial and potable, is drawn from local sources.

The three villages of Limón, Santa Pancha and Minvah, all located within the mine concession, have a population of approximately 10,000 people including many of the mine employees. Transportation to the Limón Mine is by private vehicles and public and company buses. At Mestiza, the local population is estimated at 7,000 inhabitants with 3,000 of these living in La Cruz de La India. A power line follows the highway and supplies electricity to the village and homes located along the way. Water for La Cruz de La India is supplied from a well, located one kilometre northeast of the village.

The Mina El Limón mineral concession is in an area of low to moderate relief that offers flat areas for mine infrastructure. Elevations of the mine property range from 40 m to 300 m above mean sea level. The area is covered with sparse vegetation consisting predominantly of grasslands and scrub brush with widely spaced trees. At Mestiza, elevations range from 350 metres to 800 metres above sea level with vegetation consisting of grass, brush and sparse tree cover.

#### **HISTORY**

Historic mining and prospecting activities in the Limón district of northwestern Nicaragua, which hosts the Limón and other gold deposits, date back to the late 1850s. Modern mining and exploration started in 1918. Mine production was intermittent from the 1850s to 1941, and the exact amount of gold production is unknown for this period. Since 1941, continuous production over 63 years has amounted to more than 3.0 million ounces of gold and an unrecorded quantity of silver (as a by-product) has been produced. Much of this production was when the mine was under the control of Noranda Mines. Production rates in this period started at 200 tons per day and increased to 345 tons per day. Within the Limón Mine concession gold production has come from three sources:

1-10

#### These are:

- Limón vein system,
- Santa Pancha vein system, and
- Talavera vein system.

Minor production has also come from three other sources, namely; Atravesada: (within Limón concession, with production of approximately 11,000 oz Au); Rincon de Garcia (approximately 23,800 oz Au) and Mina de Agua (approximately 46,600 oz Au). Mina de Agua and Rincon de Garcia are located in the Villanueva 2 concession about 20km north of the Limon mine. Ore from these mines was trucked for processing in the Limon mill intermittently between 1972 and 1988. There was also small scale production in the 1920s at the La Grecia mine located in the San Juan de Limay-La Grecia concession.

The La India gold vein was discovered in the 1930s. Modern gold production started in 1938 and lasted 17 years until 1955 recovering approximately 576,000 ounces of gold from 1.7 million tons at an average grade of 0.39 ounces of gold per ton (13.4 g Au/t) primarily from La India and America-Constancia veins that were mined to a depth of 200 metres. There has been no prior production in the area of the Mestiza

Project.

#### GEOLOGICAL SETTING AND MINERALIZATION

The geomorphology of Nicaragua consists of three major terranes. A northwest striking graben, 30 km to 40 km wide, parallels the Pacific coastline along the western margin of the country. This graben hosts up to 16 active or recently active volcanoes and is the site of thick Quaternary to Recent volcanic deposits. To the southwest, between the graben and the Pacific coast, a 10 km to 20 km wide belt of Tertiary, Mesozoic and Palaeozoic rocks are preserved. To the northeast of the graben; the Tertiary, Mesozoic and Palaeozoic "basement" is overlain by a major unit of Tertiary volcanic rocks, the Coyol (Miocene-Pliocene) and Matagalpa (Oligocene-Miocene) Groups. The Coyol

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Group hosts the known vein gold deposits in Nicaragua, including those at El Limón and La India.

The Limón Mine is located along the eastern edge of the Nicaragua graben within an area of low hills that contrast with the level plain of the graben floor. Approximately 50% of the area in the general vicinity of the mine is covered by a thin layer of Quaternary to Recent deposits of volcanic ash and alluvium. The Mina El Limón mineral concession is underlain predominantly by volcanic strata that are correlated with the Miocene-Pliocene Coyol Group that is present over extensive areas of western Nicaragua.

Coyol Group rocks, exposed on the Mina El Limón mineral concession, range from intermediate to felsic volcanic and volcaniclastic rocks that are cut by minor intermediate to felsic hypabyssal intrusive bodies. From lowest to highest in stratigraphic section, these rocks are as follows:

- Interstratified, massive porphyry flows and coarse volcaniclastic rocks of intermediate composition.
- Intermediate to felsic flows, domes and minor tuffs and epiclastic rocks.
- Weakly stratified, intermediate to felsic tuffs and epiclastic rocks.
- Massive to flow-banded, intermediate porphyritic flows.

The above units appear to be conformable and generally strike east to northeast and dip gently south with local variability common.

Deformation is dominated by normal faulting with little evidence for significant internal deformation of intervening fault blocks. The faults commonly trend northeast with moderate to steep dips to the northwest as well as southeast. A second group of faults strikes north to west-northwest, dipping steeply to the east and/or to northeast. Apparent displacements on these faults are tens to several hundreds of metres.

Gold mineralization in the Limón district is typical of low-sulphidation, quartz-adularia, epithermal systems. These deposits were formed at relatively shallow depth,

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typically from just below the surface to a little over one kilometre deep, from reduced, neutral-pH hydrothermal fluids with temperatures of <150° C to 300° C. The volcano-plutonic arc of western Nicaragua is a common tectonic setting for these deposits. From bottom to top, the hydrothermal alteration and the associated gold and/or sulphide mineralization along the mineralized structures is described, as follows:

- Barren to low-grade (<1 g Au/t) structurally (fault) controlled and constrained quartz vein, and/or hydrothermal breccias and quartz stockworks, often with late-stage coarse-grained calcite veining. No base metal zone is evident at Limón. Wall rock alteration is normally minimal.
- Ore grade gold mineralization hosted in quartz veins and multi-phased quartz breccia veins (+/- adularia, +/- pyrite less than 1%). Wall rock alteration is absent to restricted at depth, but increasing in width and extent near the tops of veins, in part dependent on wall rock permeability.
- Clay alteration of variable extent and intensity, depending on wall rock permeability and fracturing, occurs in a broader zone at the tops and above the mineralized veins. The clay zone is zoned outward and upward from higher temperature mixed layer clay minerals (smectites/illite or smectites/chlorite) to lower temperature smectites that is often accompanied by dickite or kaolinite, and disseminated to microvein pyrite up to several percent. Occasional silicified horizons controlled by permeable lithologies have been observed in this zone at Limón.
- A discontinuous to continuous, laterally extensive "blanket" of low temperature quartz (opal and/or chalcedony) conforms to and occurs at the interface as well as below the paleo-water table (below the vadose zone). The quartz often includes fine-grained disseminated pyrite. Clay alteration, principally kaolinite, is more common above the veins and decreases in content, or is absent, laterally away from the veins.
- A near-surface zone of clay mineral alteration (kaolinite with or without alunite and devoid of pyrite and other sulphide minerals) is developed from acid-leaching (steam-heated alteration) in the vadose zone above the paleo-water table. To date, no evidence of sinter deposits has been observed at Limón.

Erosion over most of the Limón Property has removed tens to hundreds of metres of the upper parts of the epithermal system. In the southern portion of the property the epithermal system at Limón has been preserved from erosion to the level of, and in places

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just above, the paleo-water table. Weathering has imprinted supergene alteration on top of the system.

The veins at Limón are quartz dominant with lesser and variable quantities of calcite, and minor adularia. Pyrite is the predominant sulphide, but with an average content of less than one percent. Trace amounts of chalcopyrite, sphalerite, arsenopyrite, altaite, gold tellurides and native gold are also reported to occur. Gold is present in both the banded quartz and silicified breccias that form the veins. Gold is very fine grained and relatively uniformly distributed throughout the higher grade parts of the veins; only once has visible gold ever been reported on the Mina El Limón mineral concession.

The productive vein systems are approximately one to two kilometres long, with vein widths from less than one metre up to 25 m. Individual ore-shoots within the veins range from 60 m to 450 m long horizontally, and from 40 m to 290 m vertically. Strike orientations vary from north-northwest through northeast to east-west, and dips are from 40° to near vertical. All economic gold mineralization discovered and mined to date lies within 400 m of surface, however zones such as Santa Pancha are open at depth and will be tested in the 2008 exploration program. The productive and prospective elevations within the vein systems vary across the district. Post-mineral faults locally disrupt and offset the veins.

The India district, including the Mestiza Project area, is characterized by eroded stratovolcano vent areas consisting of volcanic rocks of calc-alkaline affinity vary in composition from andesite to rhyolite. Andesitic flows and tuff breccias are predominant and can be divided into a lower, regionally propylitized andesite package and an upper, unaltered andesite package. The whole suite is considered to be part of the Lower Coyol Group of Miocene-Pliocene age.

There are no detailed geological maps for the other concessions; the level of geological information is limited to the published government regional maps at 1:50,000

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scale. The other concessions are all underlain by the Tertiary volcanic suites of the Matagalpa and Lower Coyol groups. The older Matagalpa Group is dominated by intermediate to acid pyroclastic rocks. The Lower Coyol Group is characterized by basic lavas near its base overlain by dacite, rhyodacite and rhyolite flows, tuffs and ignimbrites. Small acid and basic subvolcanic intrusives of approximately the same age as the volcanics occur throughout the area.

The Villa Nueva, Bonete-Limon and San Antonio concessions lie within or along the western limit of the Nicaragua graben. The Tertiary volcanic suites are in places overlain by Recent and Quaternary volcanic and sedimentary units that fill the graben.

#### **EXPLORATION**

Prior to 1995, prospecting was the prominent exploration tool in the Limón area. Consequently, all but one exploration discovery of economic gold mineralization was made by trenching and drilling of outcropping quartz veins. Since there is no significant amount of sulphides or intense clay alteration directly associated with the gold mineralization, it was previously thought there is no geophysical response to the mineralized zones. A number of conventional geophysical techniques (IP, EM, and magnetometer) have been applied in the past, with little success, however recent work by Central Sun indicates that spectral IP can be used to detect areas of strong silicification with sulphides.

Since 1996, exploration work at Limón has been directed at the discovery of hidden, subparallel veins close to existing gold mineralization. In particular:

- Subparallel veins and extensions of known veins in the Talavera area.
- Extensions of previously mined veins at the Limón and Santa Pancha open pits.

In 2004, Central Sun carried out an exploration program which consisted primarily of diamond drilling. The focus was on exploration and resource definition around Talavera, at the south end of the Limón vein, and on finding the source for auriferous quartz boulders at Santa Rosa-Uval. Additional exploration drilling had been ongoing to test a number of the exploration targets within the Limón concession. In total, some 38,300 m

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of diamond drilling was completed in 2004. Only limited exploration was carried out in 2005 and 2006.

In 2007, Central Sun completed an underground in-fill diamond drilling program at Talavera that totaled 4,830 metres in 41 holes. Holes were collared at 25 m spacing and intersected targets at intervals of less than 60 m apart vertically to a depth of 30 m. A diamond drilling program of 6 holes totaling 783 m also tested the north-south extension of the El Limon zone located about 2.0 km northeast of Talavera.

In 2008, Central Sun has commenced a major exploration to test targets in the Santa Pancha and Talavera areas as well as carry out more exploration on targets outside these areas. Approximately 10,000 metres of diamond drilling is planned, in addition to IP and geological surveys. An extensive compilation of all existing data is in progress as much of this data has not been used for many years.

The principal exploration conducted in the Mestiza area consisted of trenching and drilling from 1983 to 1991 by the INMINE with the assistance of Soviet technical advisors. In 2004, the Company completed a 1900 m drill program at Soledad de la Cruz and on projected extensions of the La India vein; however no significant gold mineralization was encountered in either area. No significant work was carried out

in 2005 and 2006. In 2007 Central carried out a program of diamond drilling of 3 holes totalling 619m on the Tatiana vein however this program was terminated due to financial constraints.

In January 2008, Central Sun initiated a comprehensive exploration program at Mestiza including data compilation, line cutting, geological mapping and induced polarization surveys. Diamond drilling of 2,500m is planned to test targets outlined in this program.

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#### MINERAL RESERVES AND MINERAL RESOURCES

In 2005 Scott Wilson Roscoe Postle & Associates ("Scott Wilson RPA") carried out an audit of the Mineral Reserves and Mineral Resources at Limón, performed a number of checks to verify the various procedures and numerical calculations used in earlier estimates and completed some independent sampling as detailed in their report dated February 24, 2005 that is filed on Sedar. Scott Wilson RPA was of the opinion that the Central Sun resource and reserve estimates were in accordance with the Mineral Resource/Reserve Classification as recommended by the CIM Committee on Mineral Resources/Reserves.

The present update of the reserves and resources was completed by Central Sun mine geology and engineering personnel under the supervision of Dr. William N. Pearson, P.Geo. and Mr. Graham Speirs, P.Eng. Both individuals are Qualified Persons as defined under National Instrument 43-101. The updated mineral reserve and mineral resource estimate as at December 31, 2007 incorporated results from the in-fill underground diamond drilling completed in 2007. Methodology employed was the same as used by Scott Wilson RPA except that the gold price was adjusted to \$US550 per ounce for mineral reserves and cutoff grades adjusted for both mineral reserves and remaining resources.

#### SAMPLING FOR 2007 PROGRAM BY CENTRAL SUN

Core samples from the 2007 program by Central Sun were analyzed at the Limon Mine laboratory using a standard fire assay technique. Internal quality control includes the use of blanks, duplicates and standards in every batch of samples. The Company also conducts internal check assaying. Regular external check assays on production samples were performed at Acme Laboratories from 2000 to 2007 and are being done at ALS Chemex in 2008, both of which are certified Canadian commercial laboratories.

#### MINING AND MILLING OPERATIONS

The mining methods used at Talavera are longitudinal open stoping for the primary stopes and sub-level retreat for pillar recovery. Stopes are backfilled with unconsolidated

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development waste. Development of most mining areas is from the top down; sill pillars are left at regular intervals between longhole blocks.

The Santa Pancha deposit is being mined using cut and fill methods, with unconsolidated waste fill coming from mine development and nearby open pit operations. Development of the Santa Pancha ramp began in January 2005 with underground production commencing in March 2007. The open pit was mined from August 2005 through 2007. Underground mining operations are fully mechanized. The mine equipment is

adequate to support the current 1,050 tonnes per day operation.

The Limón mill is a nominal 1,000 tonnes per day CIP gold recovery plant. It has demonstrated a capacity of 1,200 tonnes per day. The production records for the past six years, as well as the forecast for the next four years are summarized in Tables 1-4 and 1-5:

#### **TABLE 1-4 PRODUCTION HISTORY**

#### Central Sun Gold – Limón Mine

Units		2007	2006	2005	2004	2003	2002
Mill feed	('000 t)	287.7	295.6	311.4	341.2	284.1	315.0
Head Grade	(g Au/t)	5.1	4.4	4.7	5.1	5.7	6.2
Recovery	(%)	78.5	83.3	83.8	84.6	88.1	86.8
Gold Recovered	(oz)	36,702	34,341	39,091	46,135	45,851	55,388

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#### TABLE 1-5 LIMÓN MINE, LIFE OF MINE PLAN

#### Central Sun Gold – Limón Mine

	<b>Units</b> ('000 t)	<b>2008</b> 100	<b>2009</b> 61	2010	2011	<b>Total</b> 161
Talavera						
Grade		5.2	4.5			4.9
V A N				90	92	182
Veta Nueva Grade				5.7	5.7	5.7
Santa Pancha Grade	('000 t)	165	219	234	257	875
		5.7	5.6	4.7	4.7	5.1
<b>Open Pit</b> Grade	('000 t)	66	70	26		162
	(g Au/t)	2.6	2.9	2.9		2.8
Mill Grade Recovery Gol	('000 t)	331	350	350	349	1,380
	d (g Au/t)	4.9	4.9	4.8	5.0	4.9

Gold	(oz)	43,028	44,921	44,499	45,689	178,136
	(%)	82	82	82	82	82

The Limón operations are in compliance with all applicable environmental requirements and have not received any non-compliance orders from regulators.

#### **EXPLORATION POTENTIAL**

The Limón Mine is a gold producer and on-going exploration by Central Sun continues to extend known zones of gold mineralization along strike of the Santa Pancha and Talavera Structures. The mine has an excellent record of replacing production as well as increasing resources and reserves over most of its history.

A number of exploration targets have been outlined, from west to east, as follows:

• Talavera Oeste: The primary target here is the extension of the Talavera Sur structure. A significant intersection of 18.8 g Au/t over 7.3 m (true width) in quartz vein was reported from Drill Hole 3301. This is along the projected southwest extension of the Talavera Sur structure. Underground holes previously drilled to test the extension of the Talavera Sur target resulted in encountering the new Talavera III (TIII) Vein. Recent drilling included Hole 3300, which

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intersected two adjacent zones of 4.3 g Au/t over 2.3 m (true width) and 7.6 g Au/t over 2.7 m (true width). These intersections are interpreted to represent the HW and FW segments of the TIII vein, adjacent to the Victoria Vein.

- Talevera Victoria: Previous drilling has intersected high-grade sections of 15.8 g Au/t over 36.0 m, at a depth of approximately 300 m below the surface, in Drill Hole 3235, and 7.7 g Au/t over 15.8 m in Drill Hole 3211. Both drill holes are situated along the flank of hydrothermal alteration along a ridge, some 5 km west of the Limón mill.
- Este de Talavera Sur: This target area is the potential extension to the east of the Talavera Sur structure.
- East of SEO: Drilling in this area near the main Talavera Vein suggests that the structure remains open to the northeast.
- Morales Extension: DDH 1763 intersected 6.85 g Au/t over 2.4m and DDH 1761, 8.0 g Au/t over 1.60m. This zone has similar characteristics as Veta Nueva.
- **Pozo Bono Extension**: Two holes have tested this area with one hole intersecting 10.15 g Au/t over 1.0 m. Follow-up drilling is planned.
- **Babilonia Sur**: Diamond drilling in the past had intersected a wide zone of low-grade gold, of 0.56 g Au/t over 15.6 m, with intervening higher grades. Follow-up drilling did not replicate earlier results however compilation of historical drill data indicates that the initial follow-up drilling was poorly placed to test this target; hence, it remains a valid exploration target for the future. It appears that this wide intersection is likely in a hole drilled down dip of the vein.
- Santa Pancha Sur: This target is the potential southern extension of the Santa Pancha orebody that is currently been mined.

In addition to the above targets, sampling of mineralized boulders in 2004 detected a gold- and clay-mineral anomalous zone in an area known as Santa Rosa-Uval 1.5 km to 3 km southwest of the Limón mill. Drilling beneath these areas, however, did not locate significant mineralization. This target is being re-evaluated geologically to determine if an alternative source is possible.

At Mestiza a number of major vein structures that have been identified. Most of the previous work has been directed towards the Tatiana vein however other structures in the area have good potential to host significant gold mineralization.

# 2 INTRODUCTION AND TERMS OF

# REFERENCE

Scott Wilson RPA completed an independent Technical Report on the Limón gold mine in northern Nicaragua in 2005. The purpose of this report was to provide an independent assessment of the Mineral Resources and Mineral Reserves of the Talavera and Santa Pancha deposits, and to review Central Sun's Life of Mine Plan. The Technical Report, dated February 24, 2005, was prepared in accordance with NI 43-101 Standards of Disclosure for Mineral Projects and is filed on Sedar. As part of Scott Wilson RPA's review, they visited the property in November 2004, and January 2005.

The present Technical Report, which is an update of the previous report prepared by Scott Wilson RPA, was prepared by Dr. William N. Pearson, P.Geo., Executive Vice President, Exploration for Central Sun and Mr. Graham Speirs, P.Eng., Chief Operating Officer for Central Sun. Dr. Pearson and Mr. Speirs are Qualified Persons as defined under National Instrument 43-101. The updated mineral resource and mineral reserve estimates were prepared by Limon mine geology and engineering staff under the direction of Dr. Pearson and Mr. Speirs. Dr. Pearson visited the site in October and November 2007 and February 2008. He has supervised all aspects of exploration on the Limon property for the Company since October 1, 2007 and regularly reviews results of the underground operations particularly as mining activity impacts on outlining additional resources and reserves. Graham Speirs has been based in Managua since October 2006 and has visited the mine site numerous times in the course of overseeing all aspects of mine production.

Central Sun is a reporting issuer listed at the Toronto Stock Exchange (TSX). The company, through its 95% interest in Triton Minera S.A. (TMSA), owns and operates the Mina El Limón – within the Limón mineral concession - and holds 10 exploration-stage mineral concessions covering 35,170 ha in northwestern Nicaragua. TMSA, through its

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40% interest in Inversiones La India, S.A., holds a 40% interest in the Espinito-San Pablo mineral concession enclosed by the La India concession. The Espinito-Mendoza property, which is contiguous and to the east of the Espinito=San Pablo concession was acquired by Central Sun in September 2006 for \$2.4 million payable over 42 months. The Espinito-Mendozo and Espinito-San Pablo properties collectively form the Mestiza project.

TMSA's 10 mineral concessions have 25-year terms, expiring in 2027. The concessions, which cover a total area of approximately 35,170 ha, comprise:

• A producing gold mine – Limón Mine, which includes the Talavera underground mine, the Santa Pancha project, some small open pits, an 1,100 tpd mill, a tailings impoundment area, and related infrastructure. The Limón mine property consists of the 12,000 ha Mina El Limón mineral concession.

- The formerly producing La India Mine and concessions. These consist of three concessions, located some 70 km east by road of the Mina El Limón mineral concession.
- The Mestiza property (Espinito-Mendozo and Espinito-San Pablo concessions) covering 550 ha which are included within the La India concession.
- A number of other exploration concessions at early stages of exploration. These consist of ten mineral concessions and are located to the north of the Limón Mine as well as between El Limón and La India districts.

This report discusses the Mina El Limón mineral concession and its contained Mineral Reserves and Mineral Resources and the Mestiza Project which contains inferred mineral resources located 70km by road east of Limon. The Limon concession hosts numerous low-sulphidation quartz-adularia veins with gold and silver mineralization. The veins vary in thickness from less than one metre to five metres, extend more than one kilometre along strike, and may extend up to 300 metres at depth. The Mestiza project was acquired by Central Sun in 2006.

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This present report is prepared in accordance with the requirements of National Instrument 43-101 (NI 43-101) of the Ontario Securities Commission (OSC) and the Canadian Securities Administrators (CSA).

In preparation of this report, the authors reviewed technical documents and reports on the Limón Mine as well as regularly reviewing on-going work on exploration and production at the mine in the normal course of their management responsibilities.

In preparing this updated technical report, Central Sun has relied on technical data contained in reports of past exploration, mining and development work and title documents in addition to current information generated by Central Sun. Central Sun maintains a property maintenance system in keeping with industry standards.

The key technical documents reviewed for this report are:

- The report entitled "Technical Report, Limón Mine, Nicaragua prepared for Glencairn Gold Corporation by Scott Wilson Roscoe Postle & Associates Inc. dated February 24, 2005.
- The report entitled "Technical Report on the Nicaragua Properties of Black Hawk Mining Inc." by Roscoe Postle & Associates Ltd., dated August 12, 2003.
- The report entitled "Technical Report of the Santa Pancha Resource Estimate for the Limón Mineral Concession of Nicaragua" by Michael B. Gareau of Glencairn Gold Inc., dated November 24, 2004.
- Glencairn Gold Inc.'s estimate of the Limón Mineral Reserves and Mineral Resources reported as of December 31, 2004, and the Life of Mine Plan.

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Units of measurement used in this report conform to the SI (metric) system. All currency in this report is US dollars (US\$) unless otherwise noted.