**NATURAL RESOURCES IN LAO CAI PROVINCE, VIETNAM**

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Located in the North of Vietnam, Lao Cai has an abundance of natural resources including rare earth elements, apatite, copper, zinc, lead, iron, molipden, gold, serpentine, graphite, quartzite and vermiculite. In late July 2023, the Government approved a master plan to explore, exploitate and use natural resources during 2023 – 2030, with a vision to 2050. This Article discusses Vietnam’s plan to develop the mining industry in Lao Cai Province.

 **Plan to explore**. Lao Cai is ranked no. 1 in terms of several natural resource reserves [eg, apatite (126,000 tons); copper (367,000 tons); serpentine (16,000,000 tons); graphite (6,700,000 tons); gold (44,000 tons); molipden (7,000 tons)]; and Lao Cai is ranked no. 2 in terms of iron reserves and rare earth reserves.

Under Decision 866[[1]](#footnote-1), the Government plans to explore: (i) two mining areas (*Rare earth*); (ii) three mining areas (*Zinc and lead*); (iii) four mining areas (*Iron*); (iv) eight mining areas (*Copper*); (v) one mining area (*Molipden*); (vi) one mining area (*Gold*); (vii) nine mining areas (*Apatite*); (viii)

one mining area (*Serpentine*); and (ix) one mining area (*Graphite*) all in Lao Cai Province. Particular mining areas can be found in Table 1.

**Plan to exploit.** A large volume of apatite, copper and iron ores have been mined in Lao Cai. Under Decision 316[[2]](#footnote-2), Lao Cai will continue to focus on the exploitation of these natural resources (including rare earth elements). Serious investors have begun to explore these opportunities. It is estimated that a significant volume of natural resources will continue to be exploited in Lao Cai during the period 2021-2030. See also Table 2.

**Auction to acquire a concession.** Under the Law on Natural Resources,anyconcession to exploit natural resources is subject to public auction. Local authorities will issue a list of mining projects that are subject to public auction, over time they will augment the list. Lists can be found at the following address: [*https://taisancong.vn/niem-yet-gia-dau-gia-dau-thau/thong-tin-ban-dau-gia*](https://taisancong.vn/niem-yet-gia-dau-gia-dau-thau/thong-tin-ban-dau-gia)*.* For security and defense purposes, certain projects which are situated within boundary belts (Restricted Projects) are not subject to public auction. In this connection, the People’s Committee of Lao Cai Province has issued a decision (Decision 2039[[3]](#footnote-3)). The “Restricted Projects” can be found in Decision 2039.

**Plan to process natural resources.** Mining companies must be capable to use advanced technology and modern equipment and their operations must protect the environment. Lao Cai has also a plan to develop four new industrial zones (namely Võ Lao, Bản Qua, Cam Cọn, and Cốc Mỳ-Trịnh Tường) in Bat Xat, Van Ban, and Bao Yen Districts where mining sites are located and mining companies will operate. Industrial zones which are well-equipped with environmentally safe treatment facilities and systems will be considered as a measure to mitigate negative environmental impact and risks that arise from mining.

Under Decision 866, Lao Cai has a plan to develop: (i) one copper manufacturing plant in Tằng Loỏng, Tằng Loỏng Town, Bảo Thắng District (with capacity of 10,000 tons per year); (ii) one copper manufacturing plant in Bản Qua, Bản Vược Ward, Bát Xát District (with capacity of 20,000 tons per year); (iii) one copper manufacturing plant in Tằng Loỏng Industrial Park, Bảo Thắng District (with capacity of 10,000 - 15,000 tons per year); (iv) one milipden processing plant (with capacity of 200 - 400 tons of metal per year); (v) two gold collection plants[[4]](#footnote-4) (with capacity of 1,350 - 1,800 kg per year): (vi) one serpentine processing plant in Thượng Hà, Thượng Hà Ward, Bảo Yên District (with capacity of 100 tons per year); (vii) Bao Ha 1 graphite manufacturing plant in Bảo Hà Ward, Bảo Yên District (with capacity of 10,000 tons per year); (viii) one graphite manufacturing plant in Nam Thi, Lao Cai Province (with capacity of 15,000 - 20,000 tons per year); (ix) Bao Ha 2 graphite manufacturing plant in Bảo Hà Ward, Bảo Yên District (with capacity of 20,000 - 30,000 tons per year); and (x) three quartzite processing plants (with capacity of 260 - 420 tons per year).

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Lao Cai Province, which borders with China, was a remote area in the past. Thanks to the development of the tourism and hospitality industries, the province has rapidly developed. Last year, Lao Cai was ranked no 6 (among 63 provinces and cities) on the provincial competitiveness index (PCI). The Government has set a target for Lao Cai to reach a gross regional domestic product (GRDP) rate of 10% or more, 2021-2030. The development of the mining industry is expected to promote the province’s economy in order to achieve this target.

**TABLE 1**

**LIST OF MINING PROJECTS TO BE EXPLORED UNDER DECISION 866**

|  **No.** | **Mining and location** | **Land area****(*ha*)** | **Objective to explore**  |
| --- | --- | --- | --- |
| **2023-2030** | **2031-2050** |
| **1** | **Rare earth** |  | **(tons of metal)** |  |
| 1.1 | Muong Hum, Bat Xat District, Lao Cai Province | 2,985 | 129,207 |  |
| 1.2 | Khu Tan An, Van Ban District, Lao Cai Province | 773 | 101,640 |  |
| **2** | **Zinc and Lead**  |  | **(tons of metal)** |  |
| 2.1 | Gia Khâu A Area, Nậm Chảy Ward, Mường Khương District, Lao Cai Provine | 154 | 12,500 |   |
| 2.2 | Bản Mế Area; Bản Mế Ward, Si Ma Cai District, Lao Cai Provine | 12 | 8,000 |  |
| 2.3 | Khu vực Suối Thầu; Bản Sen Ward and Lùng Vai Ward, Mường Khương District, Lao Cai Provine | 70 | 15,000 |  |
| **3** | **Iron** |  | **(tons of metal)** |  |
| 3.1 | Hợp Thành Ward, Lào Cai City | 20 | 1,000,000 |  |
| 3.2 | Sơn Thủy Ward, Văn Bàn Disitrct, Lao Cai Provine | 39 | 3,384,720 |  |
| 3.3 | Ba Hòn - Làng Lếch, Văn Bàn Disitrict, Lao Cai Provine | 68 | 8,300,000 |  |
| 3.4 | Tác Ái, Sơn Thủy Ward, Văn Bàn District, Lao Cai Provine | 35 | 2,000,000 |  |
| **4** | **Copper**  |  | **(tons of metal)** |  |
| 4.1 | Mỏ Trịnh Tường, Nậm Chạc Ward and Trịnh Tường Ward, Bát Xát Ward, Lao Cai Provine (*being explored*) | 522 | 28,000 |  |
| 4.2 | Khu mỏ đồng Lùng Thàng, Bản Qua Ward, Bát Xát District, Lao Cai Provine | 1,655 | 35,000 | 20,000 |
| 4.3 | Nậm San, Bát Xát District, Lao Cai Provine  | 1,399 | 20,000 |  |
| 4.4 | Bản Vược Ward and Cốc Mỳ Ward, Bát Xát Disitrct, Lao Cai Provine  | 585 | 110,000 | 50,000 |
| 4.5 | Vi Kẽm, Cốc Mỳ Ward, Bát Xát District, Lao Cai Provine  | 315 | 30,000 | 30,000 |
| 4.6 | Tả Phời, Lào Cai City  | 407 | 50,000 |  |
| 4.7 | Sin Quyền, Bản Vược Ward, Bát Xát District, Lao Cai Provine | 385 | 25,000 | 20,000 |
| 4.8 | Nậm Mít - Nậm Chạc, A Mú Sung Ward and Nậm Chạc Ward, Bát Xát District, Lao Cai Provine | 1,486 | 30,000 | 30,000 |
| **5** | **Molipden**  |  | **(tons of metal)** |  |
| 5.1 | Kin Tchang Hồ Mining, Pa Cheo Ward, Bát Xát District, Lao Cai Provine | 46 | 15,000 |  |
| **6** | **Gold**  |  | **Kg** |  |
| 6.1 | Minh Lương, Minh Lương Ward, Văn Bàn District, Lao Cai Provine | 112 | 2,500 |  |
| **7** | **Apatite**  |  | **(103 tons of ore)** | **(103 tons of ore)** |
| 7.1 | Vùng Lũng Pô - Bát Xát District, Lao Cai Provine | 4,300 | 35,000 | 65,000 |
| 7.2 | Mining sites 20-22-23, Đồng Tuyển Ward, Lào Cai City  | 98 | 30,000 |  |
| 7.3 | Mining sites 14,15,11,12,30,31 (Ngòi Đum - Làng Tác) |  | 163,000 |  |
| 7.4 | Tam Đỉnh - Làng Phúng | 271 | 20,000 |  |
| 7.5 | A Mú Sung Ward, Bát Xát District, Lao Cai Provine | 20 | 191 |  |
| 7.6 | Khu vực Nậm Cáng, Nậm Chạc Ward, Bát Xát District, Lao Cai Provine | 30 | 507 |  |
| 7.7 | Khu vực Khoang Thuyền, Nậm Chạc Ward, Bát Xát District, Lao Cai Provine | 50 | 1,396 |  |
| 7.8 | Khu vực Quang Kim, Quang Kim Ward (Mining sites 24, 25) | 97 | 3,000 |  |
| 7.9 | Ngòi Bo - Ngòi Chát | 270 | 2,150 |  |
| **8** | **Serpentine** |  | **(103 tons)** |  |
| 8.1 | Mỏ Thượng Hà, Thượng Hà Ward, Bảo Yên District, Lao Cai Provine | 45 |  |  |
| **9** | **Graphite**  |  |  |  |
| 9.1 | Làng Khoai, Làng Mạ, Bông 2, Bảo Hà, Yên Sơn, Minh Tân and Kim Sơn Wards, Bảo Yên District, Lao Cai Provine | 868 | 1,200 |  |
| **10** | **Quartzite** |  | **(103 tons)** |  |
| 10.1 | Cốc Lầu Ward, Bắc Hà District, Lao Cai Province (being licensed) | 15 | 14,790 |  |
| 10.2 | Na Lang Commune, Lùng Vài Ward, Mường Khương District, Lao Cai Province (to be licensed)  | 22 | 2,800 |  |
| 10.3 | Bảo Nhai Ward, Bắc Hà District, Lao Cai Province (to be licensed)  | 13 | 4,200 |  |
| **11** | **Vermiculite**  |  | **(103 tons)** |  |
| 11.1 | Son Thuy Ward, Van Ban Disitrct, Lao Cai Province  | 686 | 100 |  |

**TABLE 2**

**LIST OF MINING PROJECTS TO BE EXPLOITED UNDER DECISION 866**

| **No** | **Mining and location** | **Land area (ha)** | **Reserves to be exploited** | **Capacity**  |
| --- | --- | --- | --- | --- |
| **2021 - 2030** | **2031 - 2050** |
| **Ore**  | **Metal**  | **Ore**  | **Metal**  | **Ore**  | **Metal**  |
| **1** | **Rare earth** |  | **(103 tons)** | **TR2O3 (103 tons)** | **(103 tons)** | **TR2O3 (103 tons)** | **(103 tons)** | **TR2O3 (103 tons)** |
| **1.1** | Mỏ Bến Đền, Bảo Thắng District and Thống Nhất Ward, Lào Cai City (to be licensed) | 2,160 |  | 42.7 |  | 1÷1.5 |  | 1÷1.5 |
| **1.2** | Mỏ Mường Hum, Bát Xát District, Lao Cai Province (to be licensed) | 2,985 |  | 129.2 |  | 11÷15 |  | 11÷15 |
| **1.3** | Khu Tân An, Văn Bàn District, Lao Cai Province (to be licensed) | 773 |  | 102 |  | 4÷5 |  | 4÷5 |
| **2** | **Zinc and lead** |  | **(103 tons)** | **(103 tons)** | **(103 tons)** | **(103 tons)** | **(103 tons)** | **(103 tons)** |
| 2.1 | Khu vực Gia Khâu A, xã Nậm Chảy, huyện Mường Khương | 154 | 156 | 13 | 12.5÷18.8 | 1÷1.5 | 12.5÷18.8 | 1÷1.5 |
| 2.2 | Khu vực Bản Mế; xã Bản Mế, huyện Si Ma Cai | 12 | 100 | 8 | 6.3÷12.5 | 0.5÷1 | 6.3÷12.5 | 0.5÷1 |
| 2.3 | Khu vực Suối Thầu; xã Bản Sen và xã Lùng Vai, huyện Mường Khương | 70 | 188 | 15 | 12.5÷18.8 | 1÷1.5 | 12.5÷18.8 | 1÷1.5 |
| **3** | **Iron**  |  | **(103 tons)** | **(103 tons)** | **(103 tons)** | **(103 tons)** | **(103 tons)** | **(103 tons)** |
| 3.1 | Mỏ Kíp Tước, Hợp ThànhWard, Lao Cai City (being licensed) | 8 | 1,000 |  | 121 |  |  |  |
| 3.2 | Mỏ Làng Vinh-Làng Cọ, Võ Lao and Văn Sơn Wards, Văn Bàn District (being licensed) | 128 | 14,711 |  | 480 |  | 480 |  |
| 3.3 | Mỏ Ba Hòn-Làng Lếch Sơn Thủy Ward, Văn Bàn District (being licensed) | 68,1 | 8,313 |  | 745 |  |  |  |
| 3.4 | Mỏ Đông Nam Làng Lếch, Sơn Thủy and Chiềng Ken Wards, Văn Bàn District (being licensed) | 64 | 4,146 |  | 248 |  | 248 |  |
| 3.5 | Mỏ Quý Xa, Sơn Thủy Ward, Văn Bàn District (to be licensed) | 81 | 94,873 |  | 100÷125 |  | 3,000÷5,000 | 3,000÷5,000 |
| 3.6 | Khai thác mở rộng mỏ sắt Kíp Tước Hợp ThànhWard, Lao Cai City (to be licensed) | 20 | 1,000 |  | 150÷200 |  | 100÷125 | 100÷125 |
| 3.7 | Khu Đông và khu Bắc mỏ Quý Xa, Sơn Thủy Ward, Văn Bàn District (to be licensed) | 39 | 3,385 |  | 75÷100 |  | 150÷200 | 150÷200 |
| 3.8 | Sơn Thủy Ward, Văn Bàn District (to be licensed) | 35 | 2,000 |  | 700÷750 |  | 75÷100 | 75÷100 |
| 3.9 | Ba Hòn - Làng Lếch Sơn Thủy Ward, Văn Bàn District (to be licensed) | 68 | 8,300 |  | 100÷125 |  | 700÷750 | 700÷750 |
| **4** | **Copper**  |  |  |  |  |  |  |  |
| 4.1 | Mỏ Tả Phời, Tả Phời Ward, Lào Cai City(being licensed) | 200 | 11,003 | 96 | 967,434 | 8,473 |  |  |
| 4.2 | Mỏ Sin Quyền, Bản Vược Ward and Cốc Mỳ Ward, Bát Xát District (being licensed) | 200 | 17,292 | 198 | 2,000,000 | 22,163 |  |  |
| 4.3 | Mỏ Vi Kẽm xã Cốc Mỳ, Bát Xát District (being licensed) | 155 | 5,154 | 39 | 350,000 | 2,826 |  |  |
| 4.4 | Sin Quyền (to be licensed) | 585 | 25,402 | 282 | 1950÷2500 | 19÷25 | 1950÷2500 | 19÷25 |
| 4.5 | Bản Vược Ward, Bát Xát District (to be licensed) | 971 | 13,500 | 135 | 1350÷1800 | 15÷20 | 1350÷1800 | 15÷20 |
| 4.6 | Tả Phời Ward, Lào Cai City (to be licensed) | 407 | 5,710 | 50 | 900÷1200 | 8÷10 | 900÷1200 | 8÷10 |
| 4.7 | Cốc Mỳ Ward, Bát Xát District (to be licensed) | 315 | 8,000 | 70 | 450÷600 | 4÷5 | 450÷600 | 4÷5 |
| 4.8 | Nậm Chạc Ward and Trịnh Tường Ward, Bát Xát District (to be licensed) | 522 | 3,150 | 28 |  |  | 225÷300 | 2÷3 |
| 4.9 | Lùng Thàng, Bản Qua Ward, Bát Xát District (to be licensed) | 1,655 | 5,000 | 35 |  |  | 375÷500 | 2÷3 |
| 4.10 | Nậm San Quang Kim Ward, Bát Xát District | 1,399 | 2,850 | 25 | 375÷500 | 2÷3 | 375÷500 | 2÷3 |
| 4.11 | Suối Thầu and Phìn Ngàn Chải, Bát Xát District (to be licensed) | 96,0 | 2,340 | 13 | 113÷150 | 0,6÷1 | 113÷150 | 0,6÷1 |
| 4.12 | Nậm Mít - Nậm Chạc, A Mú Sung Ward and Nậm Chạc Ward, Bát Xát District (to be licensed) | 1,486 | 7,000 | 50 |  |  | 300÷400 | 2÷3 |
| 5 | **Molipden** |  | **(103 tons)** | **(tons)** | **(103 tons)** | **(tons)** | **(103 tons)** | **(tons)** |
| 5.1 | Mỏ Kin Tchang Hồ, Pa Cheo, Bát Xát District | 46,3 | 2.941 | 5.000 | 150÷200 | 263÷350 | 150÷200 | 263÷350 |
| 6 | **Gold** |  | **(103 tons)** | **(kgs)** | **(103 tons/years)** | **(Kgs/****year)** | **(103 tons/year)** | **(Kgs/year)** |
| 6.1 | Sa Phìn, Nậm Xây Ward, Văn Bàn District (being licensed) | 84 | 224 | 1,289 |  | 150 |  | 150 |
| 6.2 | Tả Phời, Sin Quyền, Vi Kẽm, ... (being licensed) |  |  |  |  | 1,600 |  | 2,000 |
| 6.3 | Minh Lương, Minh Lương Ward, Văn Bàn District (to be increased) | 112 | 215 | 2,500 | 14÷18 | 150÷200 | 14÷18 | 150÷200 |
| 6.4 | Tả Phời, xã Tả Phời, Lào Cai City (to be licensed) | 104 | 10 | 100 | 1.5÷2 | 15÷20 |  |  |
| **7** | **Apatite**  |  | **(103 tons)** |  | **(103 tons/year)** |  | **(103 tons/year)** |  |
| 7.1 | Mining site 25, Quang Kim Ward and Bản Qua Ward, Bát Xát District (being licensed) | 28 | 505 |  | 90 |  | 90 |  |
| 3,271 |  | 580 |  | 580 |  |
| 7.2 | Khu vực Quang Kim, Quang Kim Ward, Bát Xát District (being licensed) | 33 | 4,423 |  | 600 |  | 600 |  |
| 7.3 | Mining site 19a, Cốc San Ward, Bát Xát District and Đồng Tuyển Ward, Lào Cai City (being licensed) | 50 | 700 |  | 45 |  | 45 |  |
| 23,219 |  | 1,421 |  | 1,421 |  |
| 7.4 | Mining site 18 thuộc Đồng Tuyển Ward and Cốc San Ward, Lào Cai City (being licensed) | 2.8 | 23 |  | 2 |  |  |  |
| 354 |  | 97 |  |  |  |
| 7.5 | Mỏ Ngòi Đum - Đông Hồ, Bắc Cường Ward and Nam Cường Ward, Lào Cai City (mining sites 14, 15a, 15b) (being licensed) | 80 | 8,217 |  | 480 |  | 480 |  |
| 7.6 | Mining site 10 - Cam Đường 1 mỏ Apatit Lào Cai, Cam Đường Ward, Lào Cai City (being licensed) | 49 | 365 |  | 89 |  |  |  |
| 7 |  | 4 |  |  |  |
| 31 |  | 7 |  |  |  |
| 7.7 | Khu Mỏ Cóc 1, Tả Phời, Lào Cai City (being licensed) | 78 | 49 |  |  |  |  |  |
| 3,419 |  | 200 |  | 200 |  |
| 69 |  |  |  |  |  |
| 7.8 | Cam đường 2 - Mỏ apatit Lào Cai, Cam Đường Ward, Lào Cai City (being licensed) | 24 | 52 |  | 4 |  | 4 |  |
| 470 |  | 40 |  | 40 |  |
| 159 |  | 6 |  | 6 |  |
| 7.9 | Mining sites 32 and Làng Cáng 2, Tả Phời and Hợp ThànhWard, Lào Cai City (being licensed) | 49 | 736 |  |  |  | 126 |  |
| 2,741 |  | 437 |  | 9 |  |
| 3,106 |  | 63 |  | 366 |  |
| 7.10 | Khu Làng Mô, xã Gia Phú, Bảo Thắng District gồm 2 khu (xã Thống Nhất, Lào Cai City) (being licensed) | 31 | 1,136 |  | 60 |  |  |  |
| 332 |  | 61 |  |  |  |
| 2,929 |  | 330 |  |  |  |
| 7.11 | Khu Phú Nhuận, Phú Nhuận Ward, Bảo Thắng District, Văn Sơn Ward, Võ Lao, Văn Bàn District (mining sites 38- 39-40) (being licensed) | 45 | 508 |  |  |  |  |  |
| 7,213 |  | 250 |  | 250 |  |
| 7.12 | Mining site 19b (Làng Mòn), Đồng Tuyển Ward, Lào Cai City (being licensed) | 24 | 384 |  | 75÷100 |  | 75÷100 |  |
| 4,772 |  | 1000÷1400 |  | 1000÷1400 |  |
| 7.13 | Mỏ Tam Đỉnh - Làng Phúng, Sơn Thủy Ward and Chiềng Ken Ward, Văn Bàn District (being licensed) | 136 | 3,443 |  | 200 |  | 200 |  |
| 168 |  | 12 |  | 12 |  |
| 8,080 |  | 466 |  | 466 |  |
| 7.14 | Mining site 27, 28, 29, Bản Vược Ward and Bản Qua Ward, Bát Xát District (to be licensed) | 91 | 2.257 |  | 150÷200 |  | 150÷200 |  |
| 11,269 |  | 1200÷1600 |  | 1200÷1600 |  |
| 7.15 | Mining site 23, Đồng Tuyển Ward, Lào Cai City (to be licensed) | 22 | 283 |  | 38÷50 |  |  |  |
| 1,067 |  | 150÷200 |  |  |  |
| 7.16 | Mining site 30, Cam Đường Ward, Lào Cai City (to be licensed) | 27 | 252 |  | 19÷25 |  | 19÷25 |  |
| 3,783 |  | 284÷378 |  | 284÷378 |  |
| 7.17 | Mining site Làng Cóc, Nam Cường Ward, Tả Phời and Hợp Thành Wards, Lào Cai City (to be licensed) | 79 | 338 |  | 23÷30 |  | 23÷30 |  |
| 3,136 |  | 188÷250 |  | 180÷240 |  |
| 3,867 |  | 188÷250 |  | 188÷250 |  |
| 7.18 | Mỏ Làng Cáng 1, Nam Cường, Tả Phời and Hợp Thành Wards, Lào Cai City (to be licensed) | 54 | 129 |  | 23÷30 |  | 23÷30 |  |
| 2,017 |  | 300÷400 |  | 300÷400 |  |
| 332 |  | 53÷70 |  | 53÷70 |  |
| 7.19 | Mining site 13, Nam Cường, Tả Phời and Hợp Thành Wards, Lào Cai City (to be licensed) | 62 | 221 |  | 17÷22 |  | 17÷22 |  |
| 2,268 |  | 173÷230 |  | 173÷230 |  |
| 2,992 |  | 225÷300 |  | 225÷300 |  |
| 7.20 | Mỏ Thôn Vĩ Lầu, and Bản Tàng, Trịnh Tường Ward, Bát Xát District (to be licensed) | 26 | 104 |  | 19÷25 |  | 19÷25 |  |
| 302 |  | 56÷75 |  | 56÷75 |  |
| 7.21 | Mining site 11, Nam Cường and Cam Đường Wards, Lào Cai City (to be licensed) | 11,9 | 300 |  |  |  |  |  |
| 7.22 | Tây Bắc Mining site 10, Cam Đường Ward, TP. Lào Cai (to be licensed) | 31,7 | 200 |  | 23÷30 |  | 23÷30 |  |
| 7.23 | KT 20-22, Đồng Tuyển Ward, Lào Cai City (to be licensed) | 76,3 | 30,000 |  |  |  | 750÷1000 |  |
| 7.24 | Tam Đình - Làng Phúng (to be expanded) | 271,6 | 20,000 |  | 300÷500 |  | 300÷500 |  |
| 7.25 | A Mú Sung, Bát Xát District | 20,0 | 191 |  | 38÷50 |  |  |  |
| 7.26 | Nậm Cáng, Nậm Chạc, Bát Xát District (to be licensed) | 30,0 | 506 |  | 75÷100 |  |  |  |
| 7.27 | Khoang Thuyền, Nậm Chạc, Bát Xát District (to be licensed) | 50,0 | 1,395 |  | 113÷150 |  |  |  |
| 7.28 | Quang Kim, Quang Kim Ward (Mining site 24, 25) (to be licensed) | 97,1 | 3,000 |  | 300÷500 |  | 300÷500 |  |
| 7.29 | Khu vực Ngòi Bo - Ngòi Chát (to be licensed) | 270 | 1,100 |  | 120÷150 |  | 120÷150 |  |
| 130 |  |  |  |  |  |
| 920 |  | 75÷100 |  | 75÷100 |  |
| 7.30 | Ngòi Đum - Làng Tác (Mining site 11, 12, 14, 15, 30, 31) (to be licensed) |  | 130,400 |  | 1500÷2000 |  | 3000÷4000 |  |
| 7.31 | Vùng Lũng Pô - Bát Xát (to be licensed) | 4,300 | 100,000 |  |  |  | 1500÷2000 |  |
| 8 | **Serpentine** |  | **(103 tons)** |  | **(103 tons/year)** |  | **(103 tons/year)** |  |
| 8.1 | Thuong Ha, Bao Yen District | 4 | 1,554 |  | 60 |  | 60 |  |
| 9 | **Quartzite** |  |  |  |  |  |  |  |
| 9.1 | Cốc Lầu Ward, Bắc Hà District, Lao Cai Province (to be licenses) | 15 | 21,790 |  | 160÷250 |  | 160÷250 |  |
| 9.2 | Na Lang Commune, Lùng Vài Ward, Mường Khương District, Lao Cai Province (to be licensed)  | 22 | 14,790 |  | 40÷50 |  | 40÷50 |  |
| 9.3 | Bảo Nhai Ward, Bắc Hà District, Lao Cai Province (to be licensed)  | 13 | 4,200 |  | 60÷120 |  | 60÷120 |  |
| 10 | **Vermiculite**  |  |  |  | **(103 tons/year)** |  | **(103 tons/year)** |  |
|  | Son Thuy Ward, Van Ban District, Lao Cai Province  | 686 | 100 |  | 3.75÷5 |  | 3.75÷5 |  |

1. *Decision 866/2023/QD-TTg of the Prime Minister dated July 18, 2023 (“****Decision 866****”)* [↑](#footnote-ref-1)
2. *Decision 316/QD-TTG of the Prime Minister dated March 29, 2023 (“****Decision 316****”).* [↑](#footnote-ref-2)
3. *Decision 2039 of the People’s Committee of Lao Cai Province dated August 18, 2023 (“****Decision 2029****”).* [↑](#footnote-ref-3)
4. *Gold is collected from copper mining sites in Lao Cai.*  [↑](#footnote-ref-4)