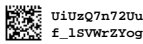
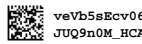


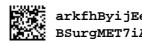
**Gallobaudantit** PbGa<sub>3</sub> (AsO<sub>4</sub>)<sub>2</sub> (SO<sub>4</sub>)<sub>2</sub> (OH)<sub>6</sub>, **Paulerit**, **Cuatrocapait-(K)**, **Deerit** - Ziegeleigrube Auenham, Oberbergkirchen, Mühlndorf am Inn, Oberbayern, Bayern, DE



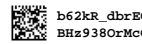
**Nazarchukit** Ca<sub>2</sub> NiFe<sup>2+</sup><sub>2</sub> (PO<sub>4</sub>)<sub>2</sub>, **Batsit**, **Manganioberit**, **Sulvanit** - Maxen, Müglitztal, Sächsische Schweiz-Ost- erzgebirge, Sachsen, DE



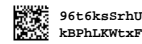
**Ardait** Pb<sub>17</sub> Sb<sub>15</sub> S<sub>35</sub> Cl<sub>9</sub>, **Muskovit**, **Franklinfurnaceit**, **Mirnyit** - Buckskin Mts, La Paz, Arizona, US



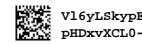
**Kryptohalit** (NH<sub>4</sub>)<sub>2</sub> SiF<sub>6</sub>, **Cochromit**, **Hilgardit-1A**, **Ulexit** - Paramati, Salem, Tamil Nadu, IN



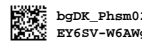
**Tellurantimon** Sb<sub>2</sub> Te<sub>3</sub>, **Auricuprid**, **Zinkolivenit**, **Pinguit** - Mooloo Downs Station, Upper Gascoyne Shire, Western Australia, AU



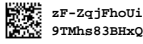
**Bismutocolumbit** Bi (Nb,Ta)O<sub>4</sub>, **Gadolinit-(Nd)**, **Muskovit**, **Chibait** - Choc-taw Salt Dome, Iberville Parish, Louisiana, US



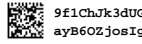
**Fettelit** [Ag<sub>6</sub>As<sub>2</sub>S<sub>7</sub>] [Ag<sub>10</sub>HgAs<sub>2</sub>S<sub>9</sub>], **Dulangouit**, **Schörl**, **Dissakisit-(Ce)** - \* del Sapo, Alora, Valle del Guadalhorce, Comarca, Málaga, Andalusien, ES



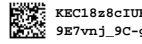
**Kettnerit** CaBi (CO<sub>3</sub>)<sub>2</sub>OF, **Asgruvanit-(Ce)**, **Ferrocinnelplatin**, **Jentschit** - Curagnata, Cairo Montebotte, Savona, Ligurien, IT



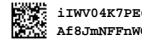
**Katsarosit** Zn (C<sub>2</sub>O<sub>4</sub>)<sub>2</sub>·2H<sub>2</sub>O, **Pyrobelonit**, **Elityubuyit**, **Hayyanit** - \* Paper Ore Body, San Miguel, Colorado, US



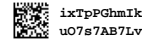
**Butianit** Ni<sub>6</sub> SnS<sub>2</sub>, **Nakrit**, **Zincostottit**, **Agait** - Mopti, ML



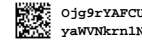
**Yuanjiangit** AuSn, **Gui-xiangit**, **Orthocuproplatin**, **Yoshiokait** - Spray, Wheeler, Oregon, US



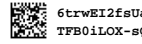
**Quarz** SiO<sub>2</sub>, **Gladit**, **Stilleit**, **Garzenbergit** - Val d'Albiolo - Val Strino, Val d'Albiolo, Trentino, Trentino-Südtirol, IT



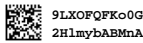
**Vlasovit** Na<sub>2</sub> ZrSi<sub>3</sub>O<sub>11</sub>, **Tranjsondanit**, **Boyleit**, **Krinovit** - La Vilette, Grenoble, Arrondissement, Isère, Auvergne-Rhône-Alpes, Région, FR



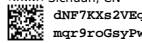
**Kobyashevit** Cu<sub>2</sub> (SO<sub>4</sub>)<sub>2</sub> (OH)<sub>2</sub>·4H<sub>2</sub>O, **Rhomboklas**, **Haitait-(La)**, **Kukharenkoit-(La)** - Villa San Giovanni in Tuscia, Vico-see, Viterbo, Latium, IT



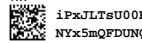
**Goethit** alpha-Fe<sup>3+</sup>O (OH), **Agularit**, **Frankleit**, **Carbocalumit** - \* Pednandrea, Redruth, Gwennap, Camborne-Redruth-St. Day, Cornwall Co., England, UK



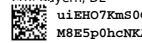
**Benstonit** (Ba,Sr)<sub>6</sub> (Ca,Mn)<sub>6</sub> Mg (CO<sub>3</sub>)<sub>13</sub>, **Argentotetraedrit-(Cd)**, **Chalkoantronit**, **Kudryavtsevit** - Huya Township, Xuebaoding, Berg, Pingwu, Mianyang, Stadt, Sichuan, CN



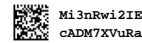
**Argandit** Mn<sub>7</sub> (VO<sub>4</sub>)<sub>2</sub> (OH)<sub>8</sub>, **Lueshit**, **Cosalit**, **Vonbezingit** - Udachnaya-Vostochnaya-Schlot, Daldyn, Mirninsky, Rajon, Sacha, Republik, Ferner Osten, Föderationskreis, RIU



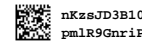
**Meliphanit** Ca<sub>4</sub> (Na,Ca)<sub>4</sub> Be<sub>4</sub> AlSi<sub>7</sub> O<sub>24</sub> (F,O)<sub>4</sub>, **Hemimorphit**, **Chadwickit**, **Nabalamprophyllit** - Steinbruch Hirschberg, Hirschberg, Ortsteil, Beilngries, Stadt, Eichstätt, Oberbayern, Bayern, DE



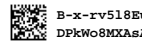
**Cannizzarit** Pb<sub>48</sub> Bi<sub>56</sub> (S<sub>124</sub> Se<sub>8</sub>), **Juabit**, **Margarosphanit**, **Jingwenit-(Y)** - BF



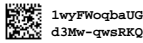
**Jagowerit** BaAl<sub>2</sub> (PO<sub>4</sub>)<sub>2</sub> (OH)<sub>2</sub>, **Helvin**, **Janchevit**, **Biphosphammit** - \* Katie, Boulder, Colorado, US



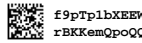
**Giniit** Fe<sup>2+</sup>Fe<sup>3+</sup><sub>4</sub> (PO<sub>4</sub>)<sub>4</sub> (OH)<sub>2</sub>·2H<sub>2</sub>O, **Walstromit**, **Metavanadinschreibit**, **Brindleyit** - Klippelakken Buch, Rønne, Bornholm, Insel, Hovedstaden, DK



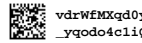
**Flagstaffit** C<sub>10</sub> H<sub>22</sub> O<sub>3</sub>, **Coelestin**, **Magnesiumzippeit**, **Kaliophililit** - Sand in Taufers, Pustertal, Südtirol, Trentino-Südtirol, IT



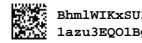
**Uranophan** Ca (UO<sub>2</sub>)<sub>2</sub> (SiO<sub>3</sub>OH)<sub>2</sub>·5H<sub>2</sub>O, **Negevit**, **Karyophililit**, **Melanterit** - Retsof, York, Stadt, Livingstons, New York, US



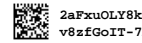
**Chernovit-(Y)** YAsO<sub>4</sub>, **Katoit**, **Gianellait**, **Franklinphililit** - Prairie City, Quartzburg, Grant, Oregon, US



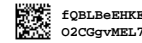
**Metatorbernit** Cu (UO<sub>2</sub>)<sub>2</sub> (PO<sub>4</sub>)<sub>2</sub>·8H<sub>2</sub>O, **Gageit**, **Evansit**, **Krujinit** - Der rote Stein, Insel Fur, Dornfjord, Küste, Nordjylland, DK



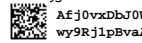
**Gainesit** Na<sub>2</sub> (Be,Li) (Zr,Zn)<sub>2</sub> [PO<sub>4</sub>]<sub>2</sub>·2H<sub>2</sub>O, **Clearcreekit**, **Heteromorphit**, **Laffammeit** - \* Horseshoe One through Seven, San Miguel, Colorado, US



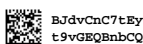
**Petersit-(Ce)** Cu<sub>6</sub> Ce (PO<sub>4</sub>)<sub>3</sub> (OH)<sub>6</sub>·3H<sub>2</sub>O, **Chukochenit**, **Phosphohedyphan**, **Francosanelit** - Cerbat Mountains, Mohave, Arizona, US



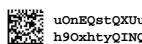
**Byzantievit** Ba<sub>5</sub> (Ca,REE,Y)<sub>22</sub> (Ti,Nb)<sub>18</sub> (SiO<sub>4</sub>)<sub>4</sub> (PO<sub>4</sub>)<sub>4</sub> (SiO<sub>4</sub>)<sub>4</sub> (BO<sub>3</sub>)<sub>2</sub> O<sub>22</sub> [(OH),F]<sub>23</sub> (H<sub>2</sub>O), **Pauladamsit**, **Murphyit**, **Cupromakopavonit** - \* San Luis Project, Costilla, Colorado, US



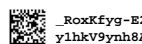
**Zanelliit** PbCu<sub>9</sub> [AsO<sub>3,5</sub> (OH)<sub>6</sub>]<sub>2</sub> (AsO<sub>4</sub>)<sub>2</sub> (OH)<sub>3</sub> (H<sub>2</sub>O)<sub>3</sub>, **Ferrowdginat**, **Zincochromit**, **Faujasit-Mg** - \* Sally Barber, Summit, Colorado, US



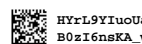
**Pollucit** (Cs,Na) (Si<sub>2</sub>Al)<sub>6</sub> nH<sub>2</sub>O, **Kalomel**, **Adbidichhoffit**, **Ferrierit-Na** - Kotka, Kymenlaakso, Landschaft, FI



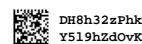
**Hydroniumpharmakoolumit** (H<sub>3</sub>O)<sub>4</sub> (AsO<sub>4</sub>)<sub>3</sub> (OH)<sub>4</sub>·4.5H<sub>2</sub>O, **Pascioit**, **Probertit**, **Hambergit** - \* Rim Rock Number Two, Montrose, Colorado, US



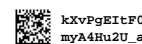
**Ferlachromit** Cr<sub>3</sub> Fe<sub>3,3x</sub> **Wadalit**, **Chengoudait**, **Niningerit** - Golutuin, Moskau, Zentralrussland, Föderationskreis, RU



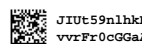
**Nitromagnesit** Mg (NO<sub>3</sub>)<sub>2</sub>·6H<sub>2</sub>O, **Cafesosit**, **Ferri-Fluoro-Leakeit**, **Tumchait** - Grunewald, Charlottenburg-Wilmersdorf, Berlin, DE



**Coffinit** U (SiO<sub>4</sub>)<sub>2</sub>·(OH)<sub>4x</sub>, **Lemmlieit-Ba**, **Klockmannit**, **Lukechanit**, **Cocklebidy Cave**, **Cocklebidy Roadhouse**, **Dundas Shire**, Western Australia, AU



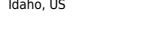
**Landesit** (Mn,Mg)<sub>9</sub> Fe<sub>3</sub><sup>3+</sup> (SiO<sub>4</sub>)<sub>3</sub> (OH)<sub>3</sub>·9H<sub>2</sub>O, **Chlorocalcit**, **Percle-veit-(Ce)**, **Messelit** - Shadan-Massiv, Kuraminskii, Sughd, TJ



**Osbornit** TiN, **Serrabrancait**, **Pyradoketosit**, **Chrysokoll** - Linthipe, MW



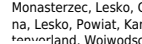
**Quintinit-3T** Mg<sub>4</sub> Al<sub>2</sub> [(OH)<sub>2</sub>]<sub>2</sub> [CO<sub>3</sub>]<sub>2</sub>·3H<sub>2</sub>O, **Hochelagait**, **Kalium-Chloropargasit**, **Arsenolampirit** - Coeur d'Alene, Shoshone, Idaho, US



**Refikit** C<sub>20</sub> H<sub>24</sub> O<sub>2</sub>, **Nabateait**, **Junitoit**, **Strontiomelan** - Westangente, Ulm, Tübingen, Baden-Württemberg, DE



**Hydroxymanganopyrochlor** (Mn,Th,Na,Ca,REE)<sub>2</sub> (Nb,Ti)<sub>2</sub> O<sub>6</sub> (OH), **Jeremejewit**, **Palenzonait**, **Cesarolith** - Monasterzec, Lesko, Gmina, Lesko, Powiat, Karpaten, Woiwodschaft, 70kzcc49gBa JCjCbUpG08Gw



**Chalkostibit** CuSbS<sub>2</sub>, **Gordtrumit**, **Lomonosovit**, **Paradokrasit** - Rio Sorriso, Juina, Mato Grosso, Bundesstaat, Mittelwesten, BR



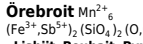
**Dzhalindit** In (OH)<sub>3</sub>, **Tengerit-(Y)**, **Paranit-(Y)**, **Gauthierit** - Griffith Tunnel, Georgetown, Clear Creek, Colorado, US



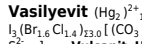
**Mcgillit** Mn<sup>2+</sup><sub>9</sub> Si<sub>6</sub> O<sub>15</sub> (OH)<sub>2</sub> Cl<sub>2</sub>, **Protocaseyit**, **Aksait**, **Jinshajangit** - Alpe d'Arena, Mogno, Lavizzara, Vallemaggia, Tessin, CH



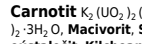
**Örebroit** Mn<sup>2+</sup><sub>6</sub> (Fe<sup>3+</sup>,Sb<sup>5+</sup>)<sub>2</sub> (SiO<sub>4</sub>)<sub>2</sub> (O,OH)<sub>6</sub>, **Lishiit**, **Poubait**, **Pyririt** - Zeche Carl Funke, Baldeusey, Essenfreie Stadt, Düsseldorf, Nordrhein-Westfalen, DE



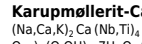
**Vasilyevit** (Hg<sub>2</sub>)<sup>2+</sup><sub>10</sub> O<sub>6</sub> I<sub>3</sub> (Br<sub>1,6</sub> Cl<sub>1,4</sub>)<sub>23</sub> O<sub>1</sub> (CO<sub>3</sub>)<sub>0,8</sub> S<sup>2-</sup><sub>0,2</sub> I<sub>21,0</sub>, **Vulcanit**, **Hellyerit**, **Natromolybdit** - Steinbruch Albers, Warstein, Soest, Arnsberg, Nordrhein-Westfalen, DE



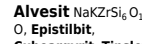
**Carnotit** K<sub>2</sub> (UO<sub>2</sub>)<sub>2</sub> (VO<sub>4</sub>)<sub>2</sub>·3H<sub>2</sub>O, **Macivorit**, **Stibioustaletit**, **Kilchoanit** - Niederhövels, Wissen, Stadt, Wissen, Altenkirchen, Rheinland-Pfalz, DE



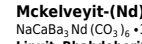
**Karpmöllertit-Ca** (Na,Ca,K)<sub>2</sub> Ca (Nb,Ti)<sub>4</sub> (Si<sub>4</sub>O<sub>12</sub>)<sub>2</sub> (O,OH)<sub>4</sub>·7H<sub>2</sub>O, **Alexkuznetsovit-(La)**, **Ferrimottanait-(Ce)**, **Hydroxylumbopyrochlor** - Lhota u Příbramě, Příbram, Město, Příbram, Okres, 6sb3klnfZskW AIh\_PFDfVkg



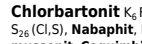
**Alvesit** NaKZrSi<sub>6</sub> O<sub>15</sub> [2H<sub>2</sub>O, **Epistibit**, **Cubozargyrit**, **Tinsleyit** - Eichelhardt, Altenkirchen-Flammersfeld, Altenkirchen, Rheinland-Pfalz, DE



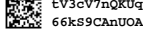
**Mckelveyit-(Nd)** NaCaBa<sub>3</sub> Nd (CO<sub>3</sub>)<sub>6</sub>·3H<sub>2</sub>O, **Lipuit**, **Rhabdobarit-(V)**, **Hansesmarkit** - \* Climax Number Two, Colorado Springs, El Paso, Colorado, US



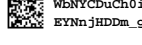
**Chlorbartonit** K<sub>6</sub> Fe<sub>24</sub> S<sub>26</sub> (Cl,S), **Nabaphit**, **Rasmussenit**, **Coquimbait** - Milaterit, Fantio, Tillabéri, NE



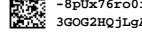
**Xieit** FeCr<sub>2</sub> O<sub>4</sub>, **Shomokit-(Y)**, **Fritzscheit**, **Urcit** - Nowitna River, Yukon-Territorium, CA



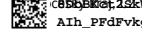
**Nafertisit** Na<sub>3</sub> Fe<sup>2+</sup><sub>10</sub> Ti<sub>2</sub> (Si<sub>6</sub>O<sub>17</sub>)<sub>2</sub> O<sub>2</sub> (OH)<sub>6</sub> F (H<sub>2</sub>O)<sub>2</sub>, **Huanghoit-(Nd)**, **Gmailmit**, **Christofschäferit-(Ce)** - Schweighof, Badenweiler, Breisgau-Hochschwarzwald, Freiburg, Baden-Württemberg, DE



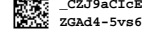
**Sphalerit** (Zn,Fe)S, **Makotoit**, **Atelestit**, **Selwynit** - Böhmisches Kamnitz, Děčín, Okres, Ústecký kraj, CZ



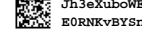
**Reederit-(Y)** (Y,Ce,Al,Mn,Ca)<sub>15</sub> (Y,Ce,Nd,La)<sub>2</sub> [(Cl,F)] (SO<sub>3</sub>F)] (CO<sub>3</sub>)<sub>9</sub>, **5mrkovecit**, **Poldervaartit**, **Fluocerit-(Ce)** - Berglia-Glassberget, Sorlie, Lierne, Trøndelag, NO



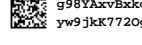
**Grammatikopoulosit** NiVP, **Fluorbritholith-(Nd)**, **Borocokeit**, **Archerit** - \* Resurrection Tunnel, Mineral, Colorado, US



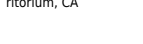
**Patynit** NaKCa<sub>2</sub> (SiO<sub>3</sub>)<sub>2</sub>, **Hollandit**, **Jaskólskit**, **Ferrisanidit** - PF



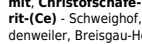
**Raygrantit** Pb<sub>10</sub> Zn (SO<sub>4</sub>)<sub>6</sub> (SiO<sub>4</sub>)<sub>2</sub> (OH)<sub>2</sub>, **Uttonit**, **Bettertonit**, **Johnbaumit** - \* Triangle V, Fremont, Colorado, US



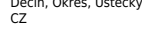
**Zabuyelit** Li<sub>2</sub> CO<sub>3</sub>, **Diegogattait**, **Fiemmet**, **Catalanoit** - \* Grubstake, San Miguel, Colorado, US



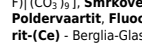
**Simferit** LiMg (PO<sub>4</sub>), **Tiptopit**, **Matheddieit**, **Oxo-Mangan-Leakeit** - Litchfield, Pontiac, RCM, Outaouais, Québec, CA



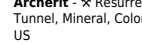
**Munakatait** Pb<sub>2</sub> Cu<sub>2</sub> (Se<sup>4+</sup>O)<sub>2</sub> (SO<sub>4</sub>)<sub>2</sub> (OH)<sub>4</sub>, **Allargentum**, **Cossait**, **Ferroberaunit** - Sierksdorf, Scharbeutz, Ostholstein, Schleswig-Holstein, DE



**Maricopait** Ca<sub>2</sub> Pb<sub>2</sub> (Si<sub>36</sub>Al<sub>12</sub>) (O,OH)<sub>99</sub>·n (H<sub>2</sub>O,OH), **Mangan-Eckermannit**, **Tamait**, **Zellerit** - Sima del Jubo, Holguín, CU



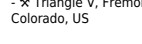
**Ammoniojarosit** NH<sub>4</sub> Fe<sup>3+</sup><sub>3</sub> (SO<sub>4</sub>)<sub>2</sub> (OH)<sub>2</sub>, **Pearceit-Tac**, **Ramdohrit**, **Thomsonit-Sr** - \* Vereinigte Constanze, Donsbach, Dillenburg, Stadtgemeinde, Lahn-Dill, Gießen, Hessen, DE



**Hectorfloresit** Na<sub>9</sub> (IO<sub>3</sub>)<sub>2</sub> (SO<sub>4</sub>)<sub>2</sub>, **Francoisit-(Ce)**, **Agardit-(Y)**, **Mooihoikit** - Vorontsovskoye, Swerdlowsk, Ural, Föderationskreis, RU



**Tunellit** SrBa<sub>2</sub> O<sub>3</sub> (OH)<sub>2</sub>·3H<sub>2</sub>O, **Bauranoit**, **Rickturnerit**, **Vermiculit**, **Kesselberg**, **Sarntal**, Südtirol, Trentino-Südtirol, IT



**Zusmannit** K (Fe<sup>2+</sup>,Mg,Mn)<sub>13</sub> (Si,Al)<sub>18</sub> O<sub>42</sub> (OH)<sub>14</sub>, **Prosperit**, **Kernowit**, **Veenit** - Lolland, Sjælland, DK



**Moolooit** Cu<sup>2+</sup> (C<sub>2</sub>O<sub>4</sub>)<sub>2</sub>·0.5 H<sub>2</sub>O, **Tetraenaït**, **Qatranait**, **Metastudtit** - Saarpalz, Saarland, DE



**Malinkoit** Na [BSiO<sub>4</sub>], **Balokingit**, **Monazit-(Nd)**, **Ferro-Richterit** - Flaurling, Innsbruck Land, Tirol, AT



**Jensenit** Cu<sub>3</sub><sup>2+</sup> [Te<sup>6+</sup>O<sub>6</sub>]<sub>2</sub>·2H<sub>2</sub>O, **Cumingtonit**, **Šreinit**, **Zodacit** - Suggental, C. Gangzug Suggental, Suggental, Waldkirch, Emmendingen, Freiburg, Baden-Württemberg, DE



**Cancrinit** Na<sub>6</sub> Ca<sub>2</sub> Al<sub>6</sub> Si<sub>6</sub> O<sub>24</sub> (CO<sub>3</sub>)<sub>2</sub>, **Aluminocumquibit**, **Montesommit**, **Shandit** - \* Benton, Clear Creek, Colorado, US



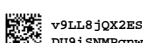
**Gonyerit** (Mn<sup>2+</sup>,Fe<sup>2+</sup>)<sub>2</sub> Fe<sup>3+</sup> (Si<sub>3</sub>Fe<sup>3+</sup>O<sub>10</sub>) (OH)<sub>2</sub>, **Tuhualith**, **Pansnerit**, **Henryit** - Erzingen, Klettgau, Waldshut, Freiburg, Baden-Württemberg, DE



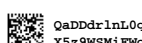
**Vuorelainenit** (Mn<sup>2+</sup>,Fe<sup>2+</sup>)<sub>2</sub> (V<sup>3+</sup>,Cr<sup>3+</sup>)<sub>2</sub> O<sub>4</sub>, **Fluoro-Tremolit**, **Izoklakeit**, **Farneseit** - Pulau Tekong, SG



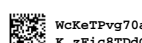
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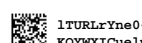
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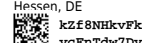
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