



# Media Release

## Silver Spruce Reports Final Assays from Phase 1 Drilling at El Mezquite Au-Ag Project, Sonora, Mexico

**September 21, 2021 - Bedford, NS - (TSXV:SSE)** - Silver Spruce Resources Inc. ("Silver Spruce" or the "Company") announces the receipt of all assays from the twenty holes of its Phase 1 exploration drilling at the El Mezquite Au-Ag property ("El Mezquite" or the "Property").

"We are pleased to report encouraging precious metal assays in nineteen of the first twenty holes drilled at El Mezquite. The second group of results returned gold values to 1.435 g/t Au. As noted previously, the drilling data are consistent with our exploration expectations for a low-grade, heap-leachable target with mineralization in the range of 0.1 g/t Au to 1.0 g/t Au," stated Greg Davison, Silver Spruce Vice-President Exploration and Director. "The latest drilling identified more and thicker intervals, the best assays to date and significant low-grade multi-metal haloes which point to the importance of the structural targets generated from the geological data compilation. Many of these targets remain to be drilled in a proposed Phase 2 program."



*Figure 1. El Mezquite property showing RC rig from Layne de Mexico.*

The Phase 1 RC program (see Figures 1 and 2) comprised 20 holes with a combined depth of 2,485 metres and utilized eight drill pad locations focused around a 400m x 600m area with elevated surface precious metal values to 3.41 g/t Au and 387 g/t Ag. Collars were defined by several northeast-trending veins, structural lineaments and oxide/sulphide transitions interpreted from geological mapping, precious metal assays, multi-element geochemistry, alteration assemblages and coincident 3D IP chargeability anomalies.

A total of 77 sampling intervals, ranging from surface to 146.4 metres depth downhole, are shown in Tables 1a and 1b. Individual sections of >0.1 g/t Au include sample composites of up to five

intervals (3.1 metres to 7.7 metres) with weighted grades from 0.121 g/t Au to 0.955 g/t Au. Silver values were generally low (98<sup>th</sup> percentile – 17 g/t Ag) and ranged from <1 g/t Ag to 241 g/t Ag. Elevated Ag occurred commonly with higher Au and base metals.

“The mineralized intervals noted above reflected the observed scale estimated from current surface sampling on outcropping vein and structurally-controlled showings. Of importance to the geochemical interpretation, the pathfinder elements (Hg, Cu, Pb, Zn, Sb and As) with low grade Au often displayed well-defined metal haloes adjacent to notable Au values. These zones, which occurred in fourteen (14) drill holes, ranged from ten (10) to forty-three (43) metres, with seven intervals over 20 metres in apparent thickness downhole, within and peripheral to the multiple gold and silver-bearing intervals and potentially are indicative of a significant structurally-influenced, precious metal mineralizing system with vein, stockwork and disseminated sulphides and/or secondary oxides,” said Greg Davison, Silver Spruce Vice-President Exploration and Director.

“Targets for Phase 2 drilling are being prepared from our ongoing geological, hyperspectral, LANDSAT and LiDAR compilation for inclusion in a revised environmental report submittal to the Mexican Secretariat of Environment and Natural Resources (SEMARNAT) for permitting,” said Mr. Davison.

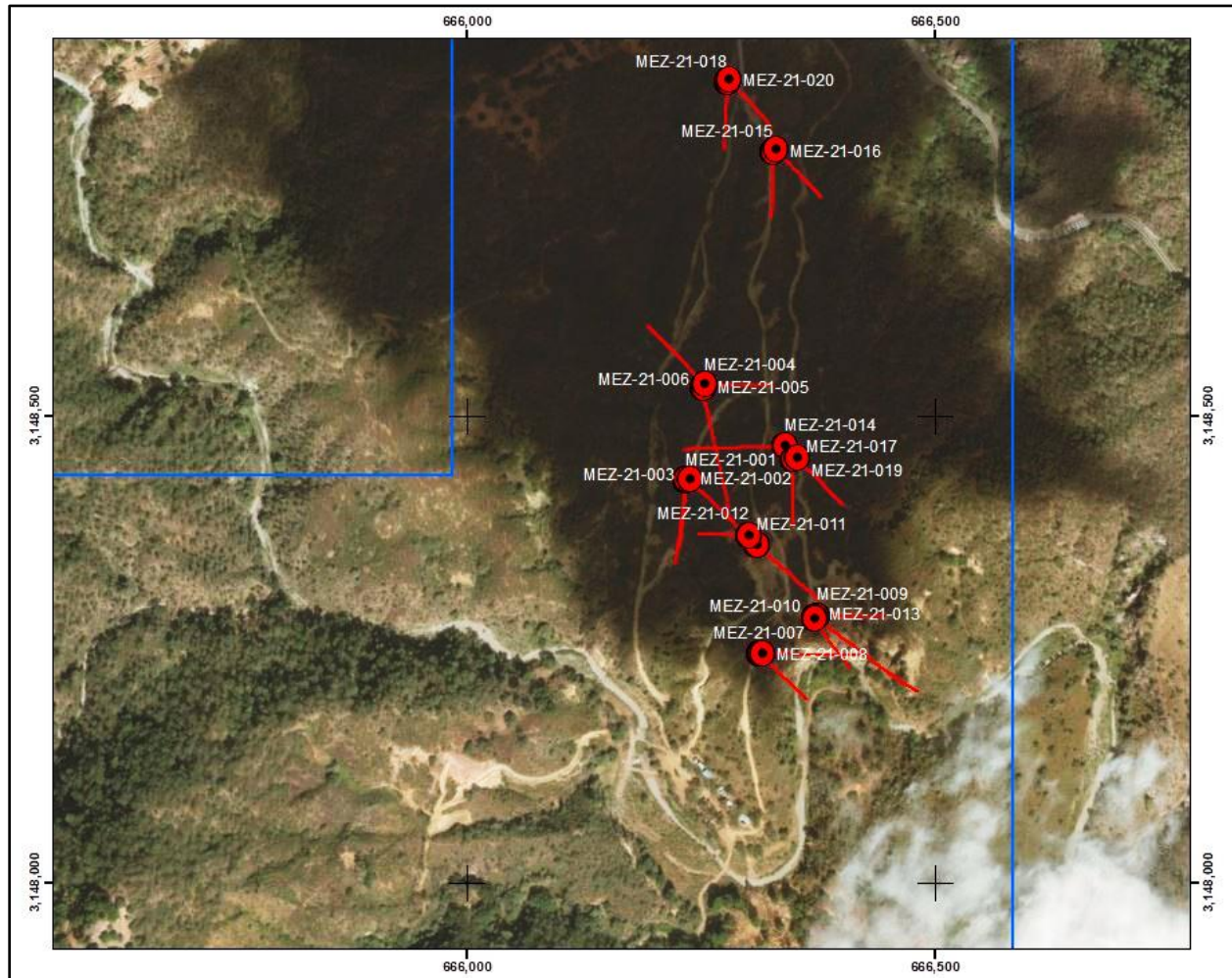


Figure 2. Drill collar location map for the El Mezquite property.

The Company's first-ever drilling program at El Mezquite (see Press Releases of August 5 and September 7, 2021) was completed in July with samples being submitted to ALS Global in Hermosillo in daily batches of 3-4 holes. The first seven (7) drill holes were completed on June 14<sup>th</sup>. The remaining thirteen (13) holes were drilled with two RC rigs from Layne de Mexico and completed as scheduled on July 28<sup>th</sup>.

Local drill management and oversight, packaging and shipping, logging, splitting and packaging of geochemical samples, quality control protocols and delivery to ALS Global were conducted under Servicios Geológicos IMEx ("IMEx") supervision at the El Mezquite property and at our option partner Colibri Resource's ("Colibri") office facilities in Hermosillo.

Sample splits (50%) were collected for geochemical analysis from 1.53 metre intervals throughout the length of each hole. Chip samples were split for logging from each interval, packaged in vials and organized in trays by drill hole. The remaining splits (50%) were stored at the project site and at Colibri's storage facility in Suaqui Grande.

Laboratory assay results were submitted between June 17<sup>th</sup> and August 5<sup>th</sup>. Data were received between July 15<sup>th</sup> and August 24<sup>th</sup>. Despite laboratory workloads which have impacted turnaround timelines, our samples were analysed in Vancouver and Lima, Peru to expedite completion.

*Table 1a. Select assay intervals (>0.1 g/t Au) for the Phase 1 drilling program (MEZ001-MEZ-010).*

Collar	Sample ID	Geol_From	Geol_To	Au_ppm	Ag_ppm	Cu_ppm	Pb_ppm	Zn_ppm
MEZ-21-001	853032	42.7	44.225	0.196	13.7	263	3970	9980
MEZ-21-001	853061-062	82.35	85.4	0.114	2.0	60	689	965
MEZ-21-001	853090	123.525	125.05	0.146	4.3	95	591	1665
MEZ-21-002	853159	86.925	88.45	0.239	14.5	29	228	396
MEZ-21-002	853170	102.175	103.7	0.165	17	3200	1040	8590
MEZ-21-003	853271	30.5	32.025	0.129	3.7	61	1710	1065
MEZ-21-003	853305	77.775	79.3	0.189	0.7	71	289	756
MEZ-21-005	853408	6.1	7.625	0.706	11.5	133	2300	845
MEZ-21-005	853409	7.625	9.15	0.955	11.4	148	5560	1770
MEZ-21-005	853432-433	39.65	42.7	0.487	1.2	34	22	114
MEZ-21-005	854465, 467	85.4	88.45	0.191	8.8	242	768	1356
MEZ-21-005	853494-495	125.05	128.1	0.494	166.2	4158	4643	4195
MEZ-21-005	853509	144.875	146.4	0.162	12.3	354	364	1080
MEZ-21-006	853616-617, 619	83.875	88.45	0.398	15.1	155	1352	2319
MEZ-21-007	853665	18.3	19.825	0.667	101	2610	>10000	>10000
MEZ-21-007	853716	88.45	89.975	0.23	1.3	39	669	1235
MEZ-21-008	853743-745	19.825	24.4	0.179	17.9	413	3468	5753
MEZ-21-009	855003	1.525	3.05	0.103	1.8	49	45	114
MEZ-21-009	855013	15.25	16.775	0.112	1	17	19	81
MEZ-21-010	855087	10.675	12.2	0.1	2.6	34	14	50
MEZ-21-010	855147-148	93.025	96.075	0.128	23.8	277	6267	8348
MEZ-21-010	855158	108.275	109.8	0.122	65.5	3110	4000	>10000

Table 1b. Select assay intervals (>0.1 g/t Au) for the Phase 1 drilling program (MEZ011-MEZ-020).

Collar	Sample ID	Geol_From	Geol_To	Au_ppm	Ag_ppm	Cu_ppm	Pb_ppm	Zn_ppm
MEZ-21-011	853860	22.875	24.4	0.141	41.1	4660	2110	5170
MEZ-21-011	853934	123.525	125.05	0.126	0.25	87	134	685
MEZ-21-012	853944-946	6.1	10.675	0.502	24.7	97	1506	98
MEZ-21-013	855295	86.925	88.45	0.141	4.1	62	2290	3680
MEZ-21-013	855300	94.55	96.075	0.298	99.4	987	>10000	>10000
MEZ-21-014	855381	105.225	106.75	0.182	26.1	624	1065	2160
MEZ-21-015	854033-034, 036-038	24.4	32.025	0.229	17.2	385	3214	8183
MEZ-21-015	854067	70.15	71.675	0.157	4.9	156	868	1240
MEZ-21-016	854108, 111-112	24.4	30.5	0.152	4.1	110	1403	1536
MEZ-21-016	854136-139	62.525	68.625	0.537	2.5	27	717	1110
MEZ-21-016	854152	83.875	85.4	0.107	7.5	136	1050	1035
MEZ-21-016	854155	88.45	89.975	0.104	12.2	134	910	1215
MEZ-21-016	854158	93.025	94.55	0.188	1.1	52	370	563
MEZ-21-017	855464-465, 467-469	65.575	73.2	0.177	12.4	353	2203	3510
MEZ-21-017	855473-474	77.775	80.825	0.121	7.9	151	1489	1537
MEZ-21-018	854199	45.75	47.275	0.278	8.4	231	666	923
MEZ-21-018	854200	47.275	48.8	0.127	3.8	86	1035	1625
MEZ-21-018	854232	91.5	93.025	0.111	2.2	34	139	278
MEZ-21-019	855518-519	36.6	39.65	0.470	31.7	1277	2771	6353
MEZ-21-019	855525-526	45.75	48.8	0.176	52.9	501	4549	6752
MEZ-21-019	855546	74.725	76.25	0.162	20.7	500	6820	>10000
MEZ-21-020	854259, 854261	25.925	28.975	0.127	1.6	82	675	632
MEZ-21-020	854272-275	42.7	48.8	0.187	4.5	204	1873	3820
MEZ-21-020	854306	89.975	91.5	0.101	0.25	9	53	304

### **RC Drill – Geological Logging**

The drill hole geology was recurrent and logged primarily as light to dark green to grey-green, fine-grained phaneritic to porphyritic-textured andesite and dark grey mafic dykes exhibiting surface oxidation and transitional zones, weak to moderate propylitic alteration and at depth, abundant disseminated sulphides, chiefly pyrite, and/or magnetite. The andesite dykes contained elevated magnetite. Minor rhyolitic units may be feldspar-quartz intrusive dykes.

Oxidation reached depths of 3 metres to 24.4 metres above transitional intervals also measuring from 3 metres to 24.3 metres; hematite and manganese oxides identified as pyrolusite were noted in red to orange to orange-grey altered andesite with silicification and incipient argillic alteration noted in several drill holes (e.g., MEZ-21-17 and MEZ-21-19). The sulphide zone andesites were intersected at overall downhole depths of 12.2 metres to 36.6 metres and continued throughout to the base of the holes.

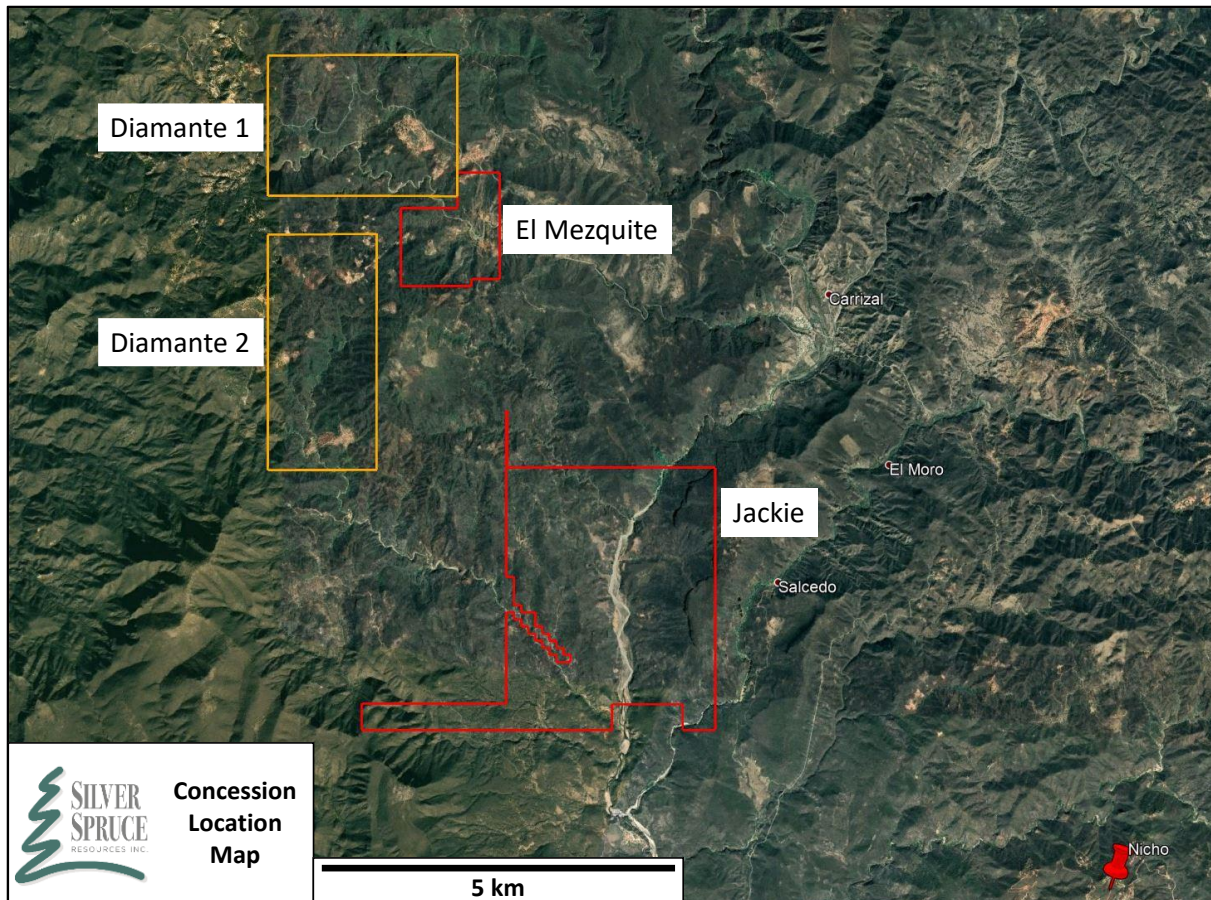
Pyrite (estimated 1-2 wt.%, max. 5 wt.%) was the dominant sulphide species with minor chalcopyrite, sphalerite and possible galena. Sulphides also occurred in quartz and quartz-carbonate veinlets with a stockwork-style distribution. Minor calcite-chlorite and quartz-gypsum vein sets were noted.

## **Project Background**

El Mezquite, a drill-ready precious metal project located 10 km northwest of the town of Tepoca, and 170 km southeast of the capital city of Hermosillo, eastern Sonora, Mexico, is very well situated in terms of logistics for exploration and is located only twelve kilometres northwest of the Nicho deposit currently under mine development by Minera Alamos (see Figure 3).

The 180-hectare Property is easily accessible from Mexican Highway #16 via a southerly-trending unpaved road which traverses through the centre of the known gold mineralization. High voltage power lines are positioned along Highway #16.

The El Mezquite Project is located within the west-central portion of the Sierra Madre Occidental Volcanic Complex within the prominent northwest-trending “Sonora Gold Belt” of northern Mexico and parallel to the precious metals-rich Mojave-Sonora Megashear.



*Figure 3. Location Map for El Mezquite, Jackie and Diamante Concessions. Nicho mine development by Minera Alamos located 10 km SE of El Mezquite, 5km SE of Jackie.*

The Company undertook an exploration program including environmental permitting for drilling, geological mapping of geologic structures and lineaments, ortho-mosaic photography, rock geochemical and hyperspectral analysis, data compilation and GIS modeling, and a LiDAR survey. Ground truthing of the Au-Ag system with geological mapping and rock sampling was completed in three campaigns between July 2020 and March 2021. All aspects of the exploration program are conducted with strict adherence to COVID-19 protocols for personal safety.

All current samples from the 2020-2021 field programs were submitted to ALS Global for gold, multi-element and hyperspectral analysis. Historical samples (>400) from the 2010-2019 programs also were submitted to provide complementary multi-element and hyperspectral data over the Property database. The LiDAR survey data and satellite hyperspectral interpretation results are being updated into the project ArcGIS database.

The environmental permit, required to drill the Property, was received from SEMARNAT (see Press Release April 20, 2021) and granted to the concession holder, Yaque Minerals S.A. de C.V. (“Yaque”) by SEMARNAT. The permit allows for fourteen (14) drill pads over the targets in the northern area of the concession. Individual holes achieved depths of 100-200 metres to intersect the target intervals.

Land surface agreements were signed with three ranchers to facilitate full access to the Phase 1 collar locations.

### **Geochemical Analysis, Quality Assurance and Quality Control**

Drill chip sample splits were delivered from the drill site to an in-house storage facility in Hermosillo for logging and QA/QC by IMEx, and then to the ALS sample preparation facility in Hermosillo, Sonora, Mexico. ALS Global in North Vancouver, British Columbia, Canada, is a facility certified as ISO 9001:2008 and accredited to ISO/IEC 17025:2005 from the Standards Council of Canada. Local chain of custody was monitored and maintained by a professional senior geologist with IMEx.

The samples were crushed to 70% passing 2mm (PREP-31) and a split of up to 250 grams pulverized to 85% passing 75 micrometres (-200 mesh). The sample pulps and crushed splits were transferred internally to ALS Global's North Vancouver, Canada or Lima, Peru analytical facility for gold and multi-element analysis. Pulps (50gram split) are submitted for Au analysis by Fire Assay with Atomic Absorption finish (Au-AA24).

The retained pulps also were analysed by Four Acid Digestion followed by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) multi-element analyses (ME-ICP61m) with Hg by Aqua Regia and ICP-MS (Hg-MS42).

Over-limit Au and Ag samples are analyzed by Fire Assay with Gravimetric Finish Ore Grade (Au-GRA21 or Au-GRA22, Ag-GRA21). Overlimit base metals are analyzed by Four Acid Digestion followed by Ore Grade Inductively Coupled Plasma Atomic Emission Spectrometry (ICP-AES) for Cu, Pb and Zn (Cu-OG62, Pb-OG62, Zn-OG62).

In-house quality control samples (blanks, standards, duplicates, preparation duplicates) were inserted into the sample set by IMEx. ALS Global conducts its own internal QA/QC program of blanks, standards and duplicates, and the results were provided with the Company sample certificates. The results of the ALS control samples were reviewed by IMEx and the Company's QP and evaluated for acceptable tolerances.

All sample and pulp rejects will be stored at ALS Global pending full review of the analytical data, and future selection of pulps for independent third-party check analyses, as requisite.

Sample grades reported by element in the technical documentation and analytical certificates range from detection limit (based on the specific instrumentation and by element) to anomalous values which represent and include select samples and are reported as ‘up to’ the maximum values and/or

ranges presented. Average or weighted values may be reported for select suites of samples in which the sample frequency is indicated, and which only represent metal grades from those samples.

### **Qualified Person**

Greg Davison, PGeo, Silver Spruce VP Exploration and Director, is the Company's internal Qualified Person for the El Mezquite Project and is responsible for approval of the technical content of this press release within the meaning of National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101"), under TSX guidelines.

### **About Silver Spruce Resources Inc.**

Silver Spruce Resources Inc. is a Canadian junior exploration company which has signed Definitive Agreements to acquire 100% of the Melchett Lake Zn-Au-Ag project in northern Ontario, and with Colibri Resource Corp. in Sonora, Mexico, to acquire 50% interest in Yaque Minerales S.A de C.V. holding the El Mezquite Au project, a drill-ready precious metal project, and up to 50% interest in each of Colibri's early stage Jackie Au and Diamante Au-Ag projects, with the three properties located from 5 kilometres to 15 kilometres northwest from Minera Alamos's Nicho deposit, respectively. The Company is acquiring 100% interest in the drill-ready and fully permitted Pino de Plata Ag project, located 15 kilometres west of Coeur Mining's Palmarejo Mine, in western Chihuahua, Mexico. Silver Spruce recently signed a Definitive Agreement to acquire 100% interest in three exploration properties in the Exploits Subzone Gold Belt, located 15-40 kilometres from recent discoveries by Sokoman Minerals Corp. and New Found Gold Corp., central Newfoundland. Silver Spruce Resources Inc. continues to investigate opportunities that Management has identified or that have been presented to the Company for consideration.

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*Actual results could differ from those projected in any forward-looking statements due to numerous factors. Such factors include, among others, the inherent uncertainties associated with mineral exploration and difficulties associated with obtaining financing on acceptable terms. We are not in control of metals prices and these could vary to make development uneconomic. These forward-*

*looking statements are made as of the date of this news release, and we assume no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements. Although we believe that the beliefs, plans, expectations and intentions contained in this press release are reasonable, there can be no assurance that such beliefs, plans, expectations or intentions will prove to be accurate.*