



# KLONDEX MINES LTD. *NEWS*

For Immediate Release

## **High-Grade Gold Veins Discovered East of Main Zone in Klondex's 2009 Exploration Program**

### **- Drilling Continues to Expand Scope of Fire Creek Mineralization With Further Exploration Planned for 2010 -**

**Vancouver, British Columbia** – January 20, 2010 - Klondex Mines Ltd. (TSX: KDX) (“Klondex” or “KDX”) today announced final results from its 2009 drilling campaign. The 2009 program included RC drilling of two IP anomalies, one of which yielded the discovery of two new veins. The IP anomaly targets were developed in a geophysical survey also conducted in 2009. KDX completed 15 holes totaling 20,221 feet (6,163 meters) within the Fire Creek project in 2009. The results are reported in the table below, and the drill plan showing all 2009 drill holes is posted at [www.klondexmines.com](http://www.klondexmines.com). The bulk of the results for holes FC0901 through FC0905 were previously released.

#### **2009 Geophysical Survey Identifies 15 Drilling Targets**

In the summer of 2009 a new detailed, multi-method geophysical survey was run at Fire Creek (FC). The survey identified 15 untested anomalies that are drilling targets. Using a reverse circulation (RC) drill rig Klondex tested two of the anomalies. Drill holes FC0912RC through FC0915RC tested two anomalies located east of the Main vein zone. Holes FC0912RC and FC0913RC intersected two high-angle dikes with weakly anomalous gold values near the margins of the dikes below the first anomaly drilled.

#### **RC Program Identifies Two New Veins**

Hole FC0914RC intersected a broad zone of +0.03 oz/ton gold occurring between 925 and 1360 feet. **Within this anomaly are two veins consisting of 3.5 feet (1.1 meter) true width of 0.26 oz/ton (9.1 g/t) gold and 0.76 oz/ton (25.9 g/t) silver and 3.5 feet (1.1 meter) true width of 0.26 oz/ton (9.1 g/t) gold and 0.18 oz/ton (6.3 g/t) silver.** This new discovery is approximately 300 feet (91 meters) east of the nearest vein. FC0915RC was lost before reaching the mineralized horizon. Core drilling of the new discovery is planned in the spring of 2010.

Robert Sibthorpe, KDX's Technical Director, commented, “Our 2009 drilling program continued to expand the scope of mineralization at Fire Creek, an effort we will recommence in the spring. Drilling in 2009 extended Main zone mineralization further south and extended New North zone mineralization to the north, while also establishing a new vein system in the Eastern side of the Main zone. We also initiated an RC drilling program to more cost effectively test 15 anomalies identified in our 2009 geophysical program. Given our substantial property position and the success we have achieved, we are very optimistic about the potential to further extend the scope of the Fire Creek resource in 2010 and in the future.”

#### **Main Zone Definition Drilling Yields 1.45 oz/ton Intercept**

Holes FC0901 through FC0905 were targeted within the Main vein zone and were used to further define areas suitable for bulk sampling once underground work is initiated. These results included several +0.25 oz/ton gold values **including 8.8 feet (2.7 meters) true width of 1.45 oz/ton (49.9 g/t) gold and 0.88 oz/ton (30.1 g/t) silver in hole FC0903.**

Summary 2009 Drill Results - Fire Creek											
Hole No.	From (feet)	To (feet)	Interval (feet)	True Width (feet)	Gold (oz/ton)	Silver (oz/ton)	True Width (meters)	Gold (grams/tonne)	Silver (grams/tonne)	Target Area	
FC0901 including	885	945	60	42.0	0.124	0.312	12.8	4.25	10.7	Main	
	885	893	8	5.6	0.237	0.663	1.7	8.12	22.7	Main	
	935	945	10	7.0	<b>0.505</b>	<b>0.461</b>	2.1	17.30	15.8	Main	
FC0902	1035	1055	20	14.0	0.055	0.091	4.3	1.90	3.1	Main	
FC0903 including	220	270	50	40.0	0.104	0.057	12.2	3.56	1.9	Main	
	250	260	10	8.0	<b>0.331</b>	<b>0.044</b>	2.4	11.34	1.5	Main	
	915	943.2	28.2	20.8	<b>0.730</b>	<b>0.470</b>	6.3	25.00	16.1	Main	
including	915	927.5	12.5	8.8	<b>1.457</b>	<b>0.879</b>	2.7	49.90	30.1	Main	
FC0904	727.8	745	17.2	12.0	<b>0.312</b>	<b>0.572</b>	3.7	10.70	19.6	Main	
	810	815	5	3.5	<b>0.295</b>	<b>0.149</b>	1.1	10.10	5.1	Main	
FC0905	575	590	15	10.7	0.043	0.006	3.3	1.47	0.2	Main	
	612.5	625	12.5	8.8	0.067	0.047	2.7	2.30	1.6	Main	
	785	795	10	7.1	<b>0.526</b>	<b>0.435</b>	2.2	18.00	14.9	Main	
	915	1001	86	60.2	0.050	0.199	18.3	1.70	6.8	Main	
FC0906	500	510	10	7.0	0.093	0.219	2.1	3.17	7.5	S. Main Ext.	
	615	625	10	7.0	0.063	0.234	2.1	2.17	8.0	S. Main Ext.	
FC0907	905	920	15	10.6	0.062	0.059	3.2	2.14	2.0	N. Main Ext.	
FC0908	850	885	35	29.8	0.077	0.053	9.1	2.63	1.8	N. Main Ext.	
	1195	1220	25	20.0	0.046	0.172	6.1	1.56	5.9	N. Main Ext.	
FC0909	No Values >10 feet @ > 0.03 oz/ton Gold									N. Main Ext.	
FC0910	790	805	15	12.0	0.053	0.053	3.7	1.80	1.8	New North	
FC0911	815	840	25	20.0	0.044	0.155	6.1	1.51	5.3	New North	
	895	910	15	12.0	0.063	<0.015	3.7	2.16	<0.5	New North	
FC0912RC	No Values >10 feet @ > 0.03 oz/ton Gold									IP Anom. #2	
FC0913RC	No Values >10 feet @ > 0.03 oz/ton Gold									IP Anom. #2	
FC0914RC including	925	940	15	12.0	0.053	0.020	3.7	1.83	0.7	IP Anom. #1	
	1010	1025	15	12.0	0.032	0.140	3.7	1.10	4.8	IP Anom. #1	
	1115	1125	10	7.1	0.054	0.126	2.2	1.84	4.3	IP Anom. #1	
	1225	1235	10	7.1	0.196	0.581	2.2	6.70	19.9	IP Anom. #1	
	including	1225	1230	5	3.5	<b>0.265</b>	<b>0.756</b>	1.1	9.08	25.9	IP Anom. #1
	including	1345	1360	15	10.5	0.127	0.143	3.2	4.35	4.9	IP Anom. #1
	including	1350	1355	5	3.5	<b>0.265</b>	<b>0.184</b>	1.1	9.07	6.3	IP Anom. #1
FC0915RC	No Values >10 feet @ > 0.03 oz/ton Gold – Hole Lost									IP Anom. #1	
Note: Table only includes values equivalent to ≥ 10 feet @ ≥ 0.03 oz/ton gold											

### Main and New North Zone Extension Drilling

Six of the remaining holes were targeted on possible extensions of the Main zone to the north and south and the north extension of the New North vein zone. FC0906 is the first hole to test the southernmost extension of Main, and it found two sub-grade veins worthy of further testing. FC0907 through FC0909 tested the northern extension of the Main zone. FC0907 and FC0908 both hit sub-grade veins **with FC0908 intersecting 29.8 feet (9.1 meters) true width of 0.08 oz/ton (2.6 g/t) gold**. Located on the northernmost discovery at Main, this major fault zone will be tested further. FC0909 did not intersect any significant veining.

Drill holes FC0910 and FC0911 tested the northern extension of the New North zone. FC0910 was a 100-meter step-out and the first hole to explore this far north. The sub-grade vein intersected indicates the mineralized structure is still present, and a fence of holes are planned to further test this area. FC0911 was drilled to test directly west of a previous vein intercept and intercepted two sub-grade veins.

Klondex will continue testing additional geophysical anomalies in 2010 using an RC rig to identify vein zones and then following up with core drilling.

As of September 30, 2009, KDX had 30,964,089 shares issued and outstanding, 34,879,089 shares on a fully diluted basis and cash of approximately CDN \$4.4 million and working capital of CDN \$3.8 million.

**About Klondex Mines:**

Klondex Mines Ltd. is a gold exploration company with four projects in North Central Nevada. The Company is focused on the development of its high-grade Fire Creek gold deposit where it has identified the following NI 43-101 compliant resource:

**Fire Creek Project – Indicated and Inferred Resource \***  
**NI 43-101 Dated March 30, 2009**

<b>Classification</b>	<b>Metric Tonnes</b>	<b>Grams Gold Equivalent Per Metric Tonne</b>	<b>Total Ounces Gold Equivalent</b>
<b>Indicated</b>	<b>5,043,033</b>	<b>10.11</b>	<b>1,639,822</b>
<b>Inferred</b>	<b>1,833,423</b>	<b>8.63</b>	<b>508,799</b>

\* Fire Creek has a gold-to-silver ratio of approximately 1:1, indicating **the resource is approximately 98.3% gold and 1.7% silver**. Reflects a cutoff grade of 5 grams per tonne and 60 units of silver equivalent to one unit of gold.

For more information, please visit [www.klondexmines.com](http://www.klondexmines.com).

Richard Kern (P.Geol), of Reno, Nevada, a qualified person as defined under National Instrument 43-101 and has reviewed and approved the technical information contained in this press release.

**ON BEHALF OF KLONDEX MINES LTD.**

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**New  
North  
Veins**

**Northeast  
Zone**

**Far  
North  
Veins**

**Vein Zone  
Discovered  
In 2009**

**Main  
Veins**

**KLONDEX MINES LTD.  
FIRE CREEK PROJECT**

**2009 Drill Hole Locations  
and Projected Veins**



RRK 01/10

0910

0911

0908

0909

0907

0905

0901

0914

0915

0913

0912

0904

0902

0903

0906