# OROGEN

# Jake Creek

Nevada

TECHNICAL PRESENTATION
SEPTEMBER 2020

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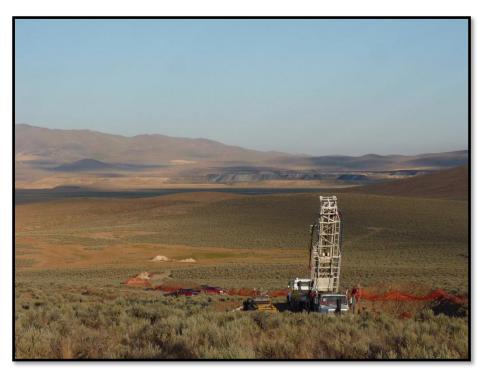
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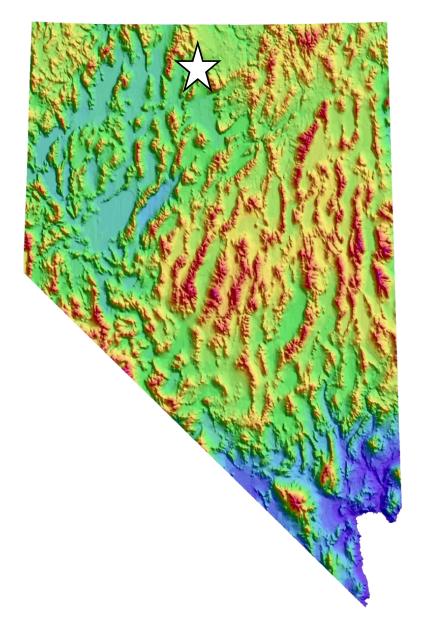


# **Location and Land**

# Low-sulfidation epithermal gold in the Northern Nevada rift

- 100% owned by Orogen Royalties
- 98 unpatented lode mining claims

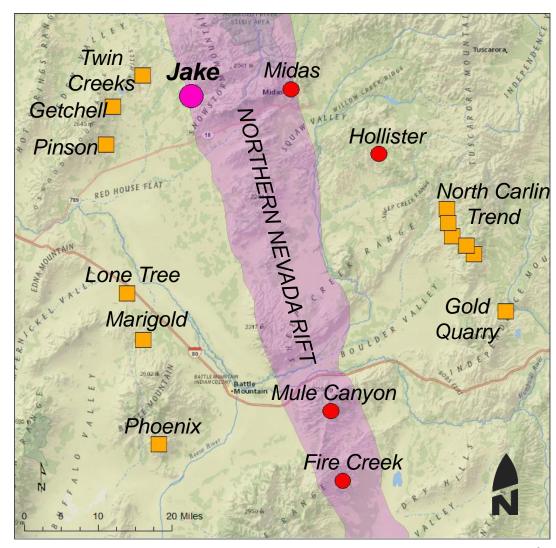






# **Nearby Gold Mines**

- Located on western margin of Northern Nevada Rift
- Similar geologic setting to other gold mines

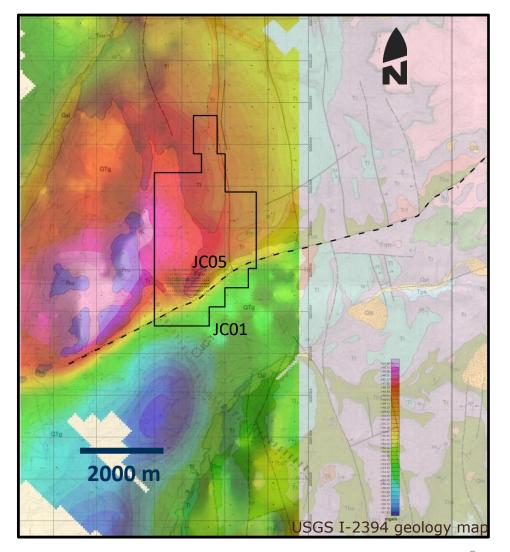




# **Geophysics**

### **Gravity (cbg 255) – 2011 Survey**

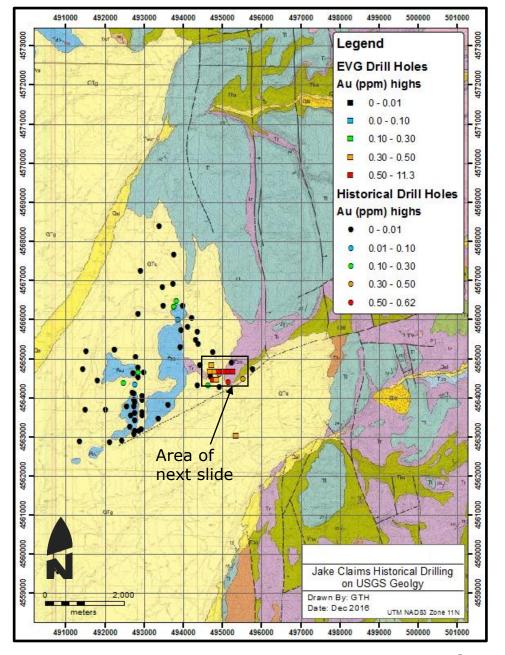
- Jake claim block on geology and gravity
- Drilled area adjacent to "Midas trough" NE structure





# **Historic Drilling**

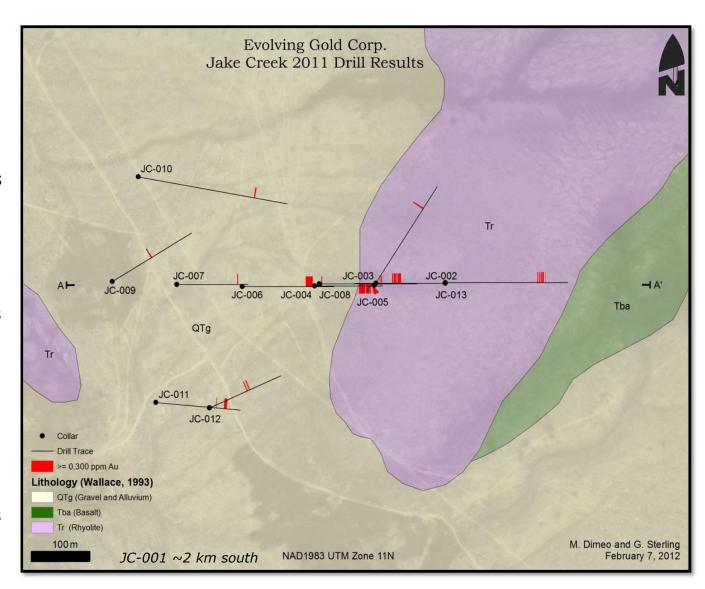
- Approximately 94 historic & modern drill holes in and adjacent to project area
- Most recent project operator (Evolving Gold) drill holes shown in colored squares





# **Drill Results**

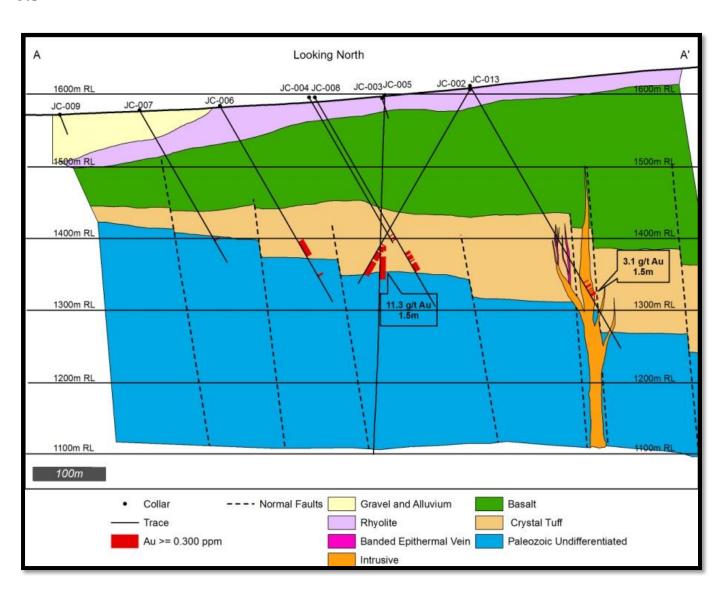
- Thirteen RC holes
- Multiple mineralized zones, epithermal veins
- Banded quartz and sooty pyrite
- Gold system over 550 meters diameter
- System still open
- Similar to nearby Ken Snyder and Sleeper deposits





## **Drill Results**

- Completed 4,793 meters in 13 RC holes
- Gold system over 550m wide, open to the north/south/east
- Bonanza-style veins with grades to 11.3 g/t Au
- 45.7 meters of 0.96 g/t Au in JC-005
- Eastward thickening of favorable tuff host unit, increasing alteration intensity and veining





# **Gold intercepts**

### **JC-002**

130'@0.87 g/t, including **10'@2.13 g/t** 

### JC-005

150'@0.96 g/t, including **5'@11.3 g/t** 

### **JC-006**

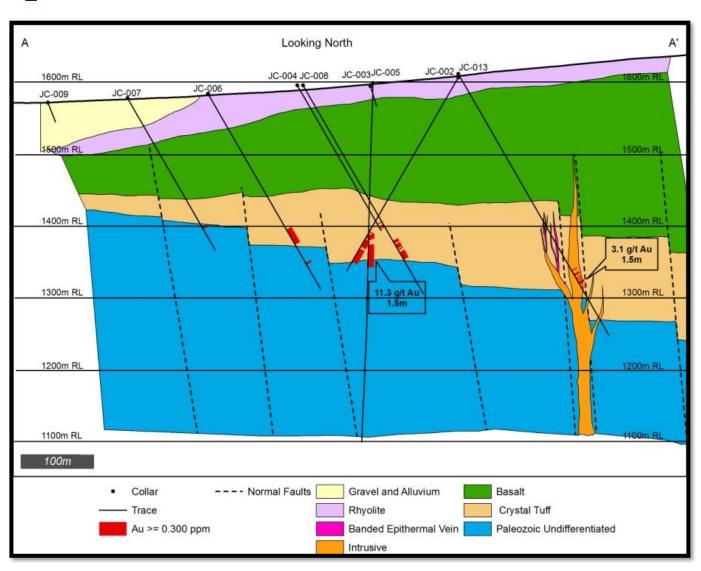
65'@0.68 g/t, including 15'@1.36 g/t

### **JC-008**

40'@0.41 g/t, including **5'@1.87 g/t** and 40'@0.93 g/t, including **5'@1.22 g/t** 

### **JC-013**

55'@0.61 g/t, including **5'@3.10 g/t** 



# **Style of Mineralization**



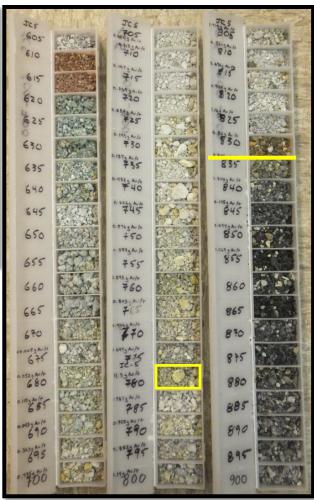
Silicified tuff breccia chips from 284.9-286.5 meters in JC-002, assayed 1.28 g/t Au.



Silicified chips and banded silica veins from 243.84 - 245.36 meters in JC-013.



Mineralized basaltic dike with calcite amygdules in JC-013.



JC-005 mineralized zone, including 11.3 g/t Au at 236.22 -237.74 Paleozoic contact at 254.50 meters

# **Assay Tabulation**

Hole ID	Azimuth	Inclination	Depth (ft)	Assay Highlights (Au ppm)	Included intervals over 1.0 ppm Au
JC-001	0	-90	2340	5′ @ 0.36 ppm, 1935 - 1940′	
JC-002	270	-60	1020	130' @ 0.87 ppm, 840 - 970'	5' @ 1.09 ppm <b>10' @ 2.13 ppm</b>
JC-003	033	-60	1300	5′ @ 0.39 ppm, 1015 – 1020′	
JC-004	090	-60	765	15' @ 0.32 ppm, 745 - 760'	
JC-005	0	-90	1640	150' @ 0.96 ppm, 690 - 840'	<b>5' @ 11.3 ppm</b> 5' @ 1.14 ppm 5' @ 1.16 ppm
JC-006	090	-60	1030	65' @ 0.68 ppm, 725 - 790' and 10' @ 0.62 ppm, 890 - 900'	15' @ 1.36 ppm
JC-007	090	-60	800	10' @ 0.35 ppm, 680 - 690'	
JC-008	090	-60	1100	40' @ 0.41 ppm, 820 - 860' and 40' @ 0.93 ppm, 880 - 920'	5' @ 1.87 ppm 5' @ 1.22 ppm
JC-009	059	-65	1230	5' @ 0.37 ppm, 610 - 615'	
JC-010	100	-45	1200	10' @ 0.41 ppm, 930 - 940'	
JC-011	095	-50	880	5' @ 0.62 ppm, 525 - 530' and 25' @ 0.55 ppm, 595 - 620'	
JC-012	066	-65	1040	20' @ 0.34 ppm, 530 - 550' and 20' @ 0.37 ppm, 565 - 585'	
JC-013	090	-60	1380	55' @ 0.61 ppm, 1055 - 1110'	5' @ 3.10 ppm

Modified from Evolving Gold NI 43-101 Technical Report



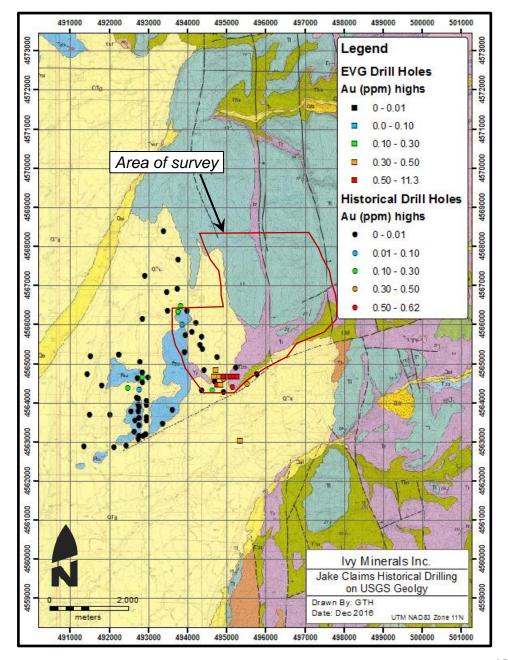
# **Continuing Target Generation**

- 2018 Ionic Leach soil survey
  - Provides support for NE trending vein targets
  - Interpretation projects into historic high-grade intercepts
  - Interpretation coincides with gravity edge
- 2020 Alteration studies (ongoing)
  - Suggests alteration zoning
  - Provide vector to guide next drilling?

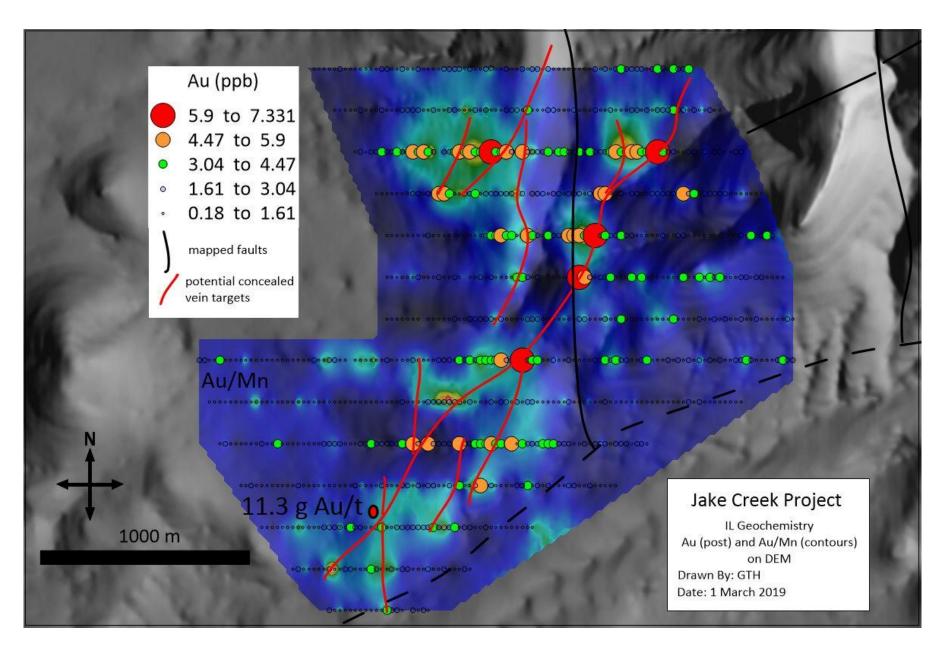


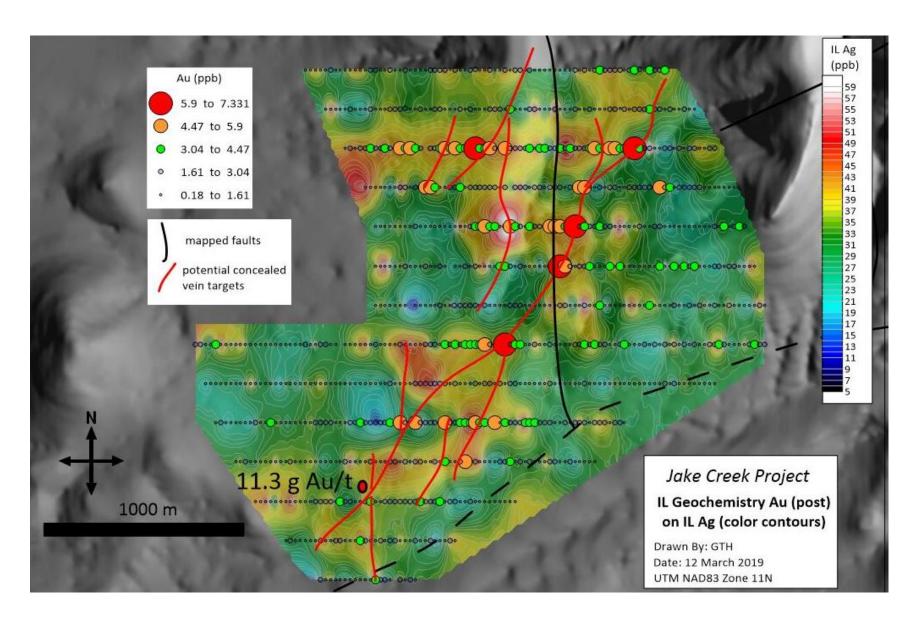
# Ionic Leach Soil Geochemistry Program - 2018

- 1006 samples
- 200m x 25m sampling
- Previous partner utilized IL survey to help guide followup drilling
- Partner unsuccessful in raising money to fund drilling, deal terminated

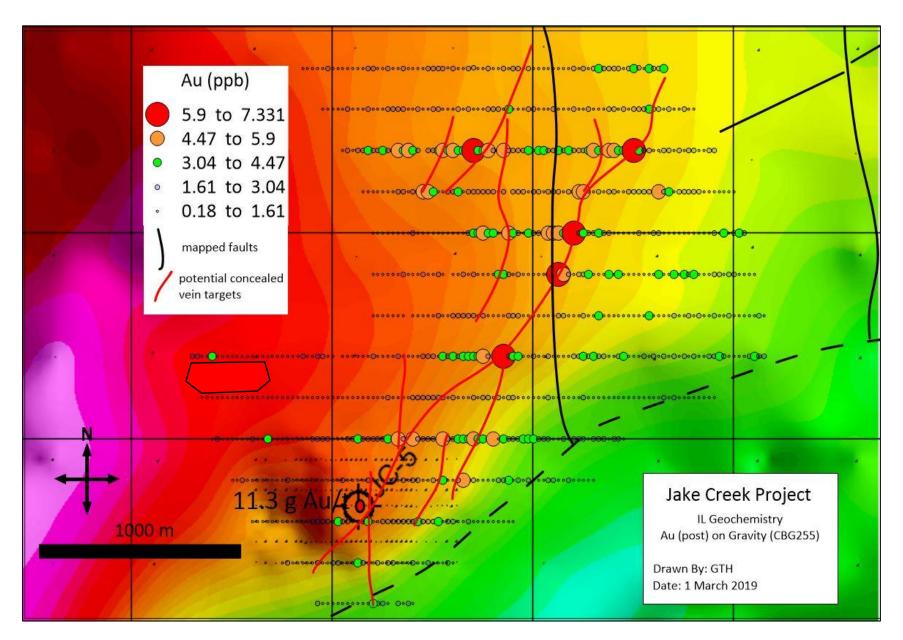






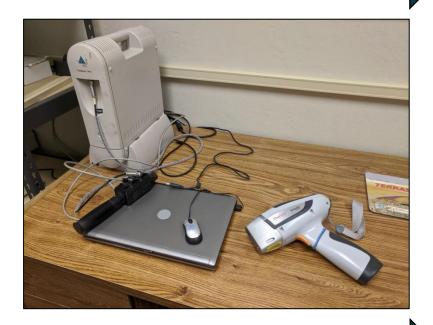




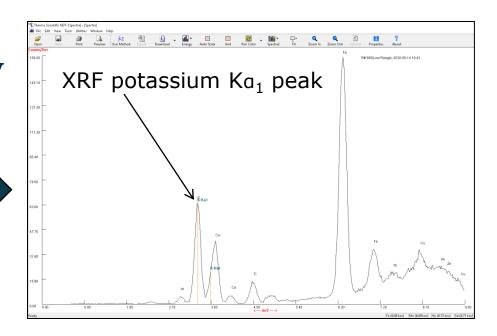


# Alteration Mineralogy Studies - 2020

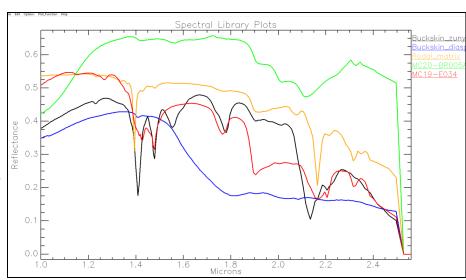
**Niton XRF** 



**ASD** spect



### **Green** = buddingtonite infrared signature



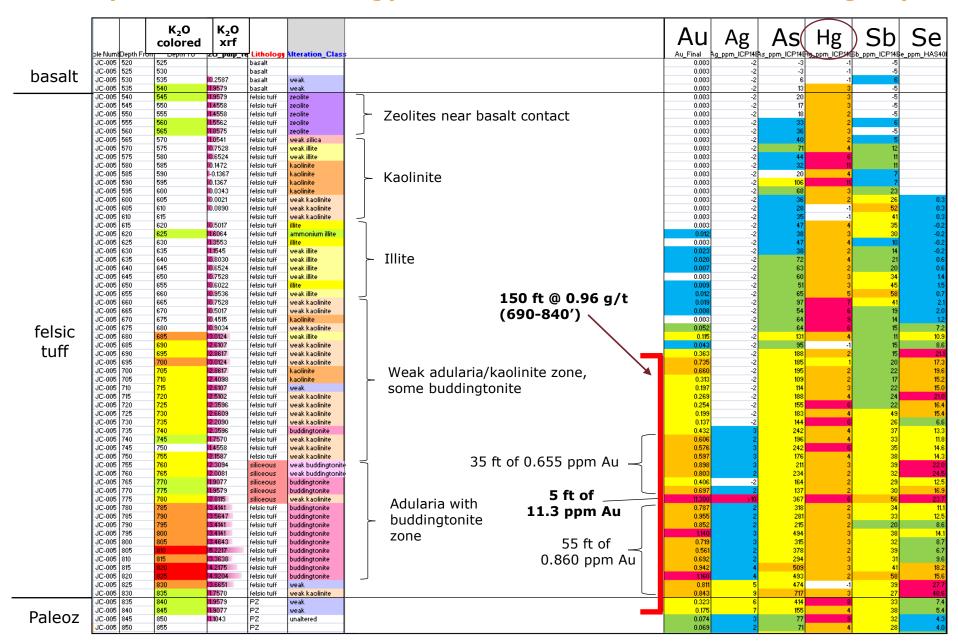


# **Alteration Mineralogy Studies - 2020**

- K-rich zone (adularia) corresponds with gold zone and presence of buddingtonite (NH<sub>4</sub>-feldspar) mapped with short-wave infrared spectrometer (ASD)
- Feldspar zone overlain by illite, kaolinite, and zeolite zones
- Mercury anomalies extend above precious metal zone
- Alteration mineralogy and trace elements can be used to optimize drill targeting of potential bonanza-grade veins
- Alteration mineralogy revealed by infrared spectrometer and XRF analyses of hole JC-005 (next slide)



# Jake Creek Drill Hole JC-005: felsic tuff portion of intercept (alteration mineralogy & trace elements vector towards gold)



# Summary

- Jake Creek project lies on the margin of the Northern Nevada Rift, host to other world-class epithermal Au-Ag deposits
- Historic drilling encountered significant gold mineralization, which has never been followed up
- Drilling encountered both thick intervals of gold mineralization as well as high grades
- Subsequent surface geochemical survey and alteration studies provide additional data to guide follow-up drilling
- Project available for JV



# O R O G E N

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