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# **Properties Highlights**

#### 184 km2 Licences in Kosovo

- ☐ 6 exploration licences
- ☐ 1 mining licence

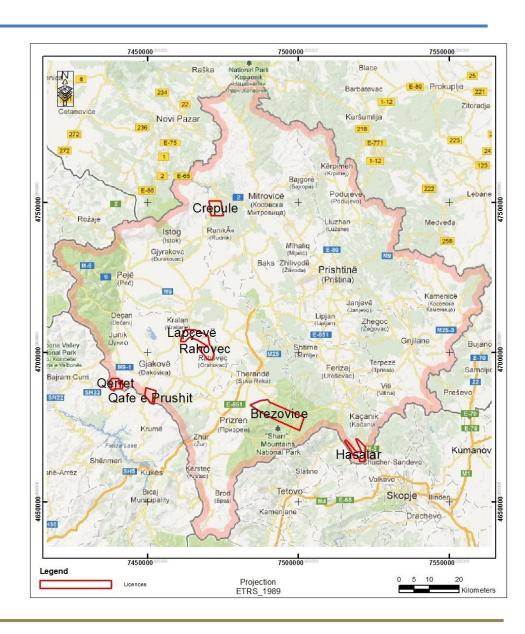
Commodity	Property	Licence	Development stage	Surface (km²)
Chromium	Llapçevë	Mining	Early excavation	0.046
Chromium Co-Cu-Ni-Au sulfides	Rahovec	Exploration	Drill ready	44
Chromium	Hasalar	Exploration	Drill ready	19
Chromium	Qerret	Exploration	Drill ready	13
Chromium	Qafë e Prushit	Exploration	Exploration Drilling completed	
Chromium	Brezovicë	Exploration	Reconnaissance	75
Pb-Zn	Crepule	Exploration	Reconnaissance	20





### A Track Record of Growth and Execution

- Rahovec Property
  - Since 2009
  - Cr and Ni-Co-Cu-Au sulfide exploration
- Llapçevë Property
  - In the Rahovec Property area
  - Mining licence since 2011
  - Cr mining since 2012
- Qerret
  - Since 2009
  - Cr exploration
- Qafë e Prushit
  - Since 2009
  - Cr, PGE exploration
- Hasalar
  - Since 2012
  - Cr exploration
- Brezovicë
  - Since 2011
  - Cr exploration
- Crepule
  - Since 2012
  - Pb-Zn exploration

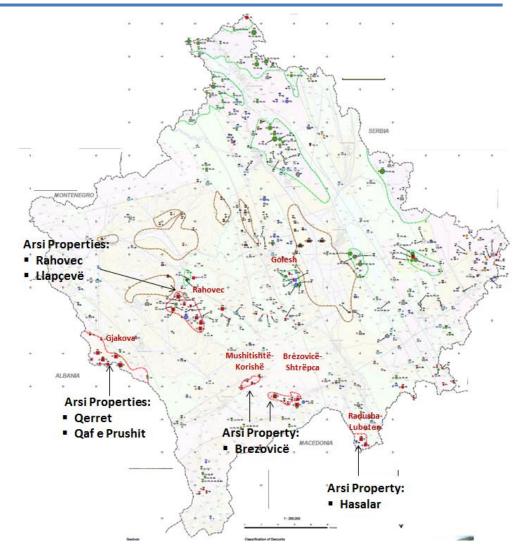






## Owner of 80% of the known chromium districts in Kosovo

- Kosovo was the largest chromite producer during the Yugoslavian time
- ☐ High quality chromite ore (>40% Cr2O3, Cr:Fe >2,5)
- Arsi currently owns 80% of the known chromium districts in Kosovo
- Currently the only active company for chromite exploration in Kosovo.
- Main districts
  - Gjakove district,
  - The Brezovicë-Shtërpca and Mushitishtë-Korishë district
  - Radusha Luboten district
  - Rahovec district



Metallogenic Map of Kosovo (1:200 000, ICMM, 2006)





## Kosovo, a now stable, safe and strong environment

- Modern EU-oriented legislation, institutional set-up and regulatory framework ensuring transparency and fair trade practices,
- Very low level of government debt and future liabilities,
- Very low taxes and wages,
- ☐ Youngest population in Europe constituting a readily available and motivated workforce,
- Availability of a large labour pool for any new mining
- Accelerated institution building and sound economic policies,
- ☐ Laws and tools for a transparent businessfriendly environment are for the most part in place.
- Existing transport infrastructure and access to major Mediterranean ports

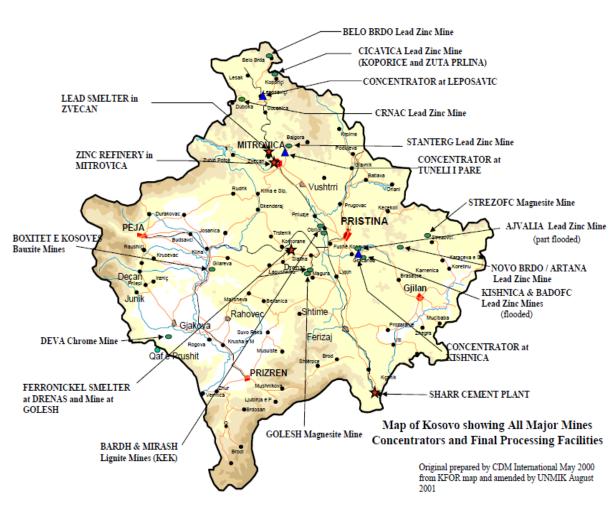






# Kosovo, long history of mining activity

- One of the largest reserve bases of lignite in the world
- □ Pb-Zn-Ag mines and deposits of the Trepça Complex – one of the world's largest accumulations of lead, zinc and silver
- ☐ Significant nickel mine and plant complex located at Drenas formerly operated by the State-owned metal producer Ferronikeli
- In 2005 the Kosovo Government and the United Nations Mission in Kosovo (UNMIK) created of the Independent Commission for Mines and Minerals (ICMM) in Kosovo to regulate the mining sector and implements and enforces the Mining Law

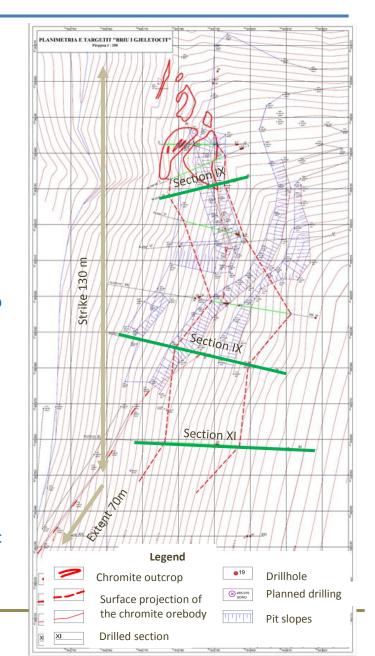






## Llapçevë Property: Briu i Gjeletocit deposit

- Most advanced of Arsi's Projects
- □ 38 drillings totalling 1680 m (average depth of drilling: 45m)
- Delineated over a 130 m strike.
- Presence of chromite outcrops over 70m further to the SSW,
- Expected extend over a ~200m strike.
- Outcropping orebody in the Northern parts and plunging down to 60m depth Southward.
- Thickness s of up to 20 m
- ☐ Homogeneous grade, averaging 31.16% Cr<sub>2</sub>O<sub>3</sub>.
- Over 90% of the intervals in the range [25-38]%  $Cr_2O_3$ .
- Alpine-type podiform chromite deposit in Middle-Upper Jurassic peridotite-dunite ophiolite

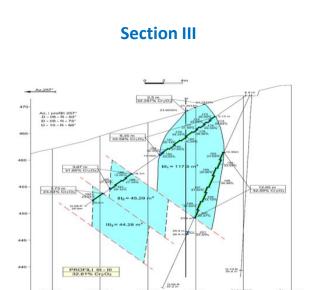


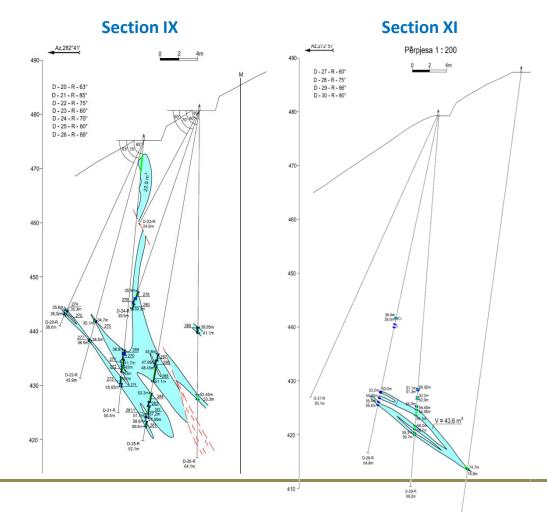




## Llapçevë Property: Briu i Gjeletocit deposit

- Two types of morphologies:
  - Sub-vertical pods, discordant to the foliation, (Northern part I
  - Layer-shaped pods, sub-concordant pods to the foliation, dipping 35-45° to the East, (Southern part)
- Both types of morphologies in the central part of the orebody.



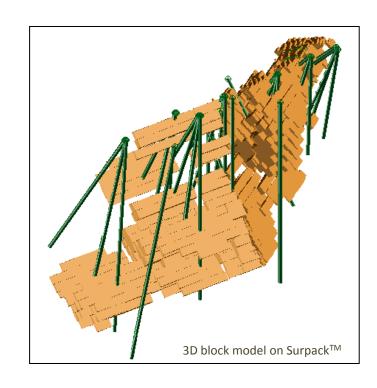






### Llapçevë Property: Briu i Gjeletocit deposit, resources

- ☐ In-house resource estimate using a basic 2D modelling approach
  - $\Box$  57 672 t at a 30.27% aCr<sub>2</sub>O<sub>3</sub> grade over a 130 m strike,
  - including 50 620 t at 30.11 %  $Cr_2O_3$  between section II and XIII (105 m strike)
- ☐ ULC Geoimpact review estimate s using a 3D statistical approach:
  - 47 855 t at 29.42% Cr₂O₃ between section II and XIII (105 m strike)
  - □ Classified in the Inferred category, in accordance with the CIM rules for NI 43-101 compliance.
  - Density of 3.37
- ☐ Target extension:
  - □ ~100 000 t at ~30% Cr<sub>2</sub>O<sub>3</sub>
- Arsi's drilling program :
  - doubling the number of drillings (>1500 m at least) to the SSW direction







## Llapçevë Property: open pit mining just started

- Open pit test mining initiated by Arsi in 2012
- Excavation as three benches on a slope between 485m and 465 m ASL
- ☐ Current pit dimensions are approximately 50x40 m²
- $\square$  1700 t of chromite ore at [26-30]%  $Cr_2O_3$  was mined in Q1-Q3 2012.



Briu i Gjeletocit open pit in March 2012 (view to the SE).



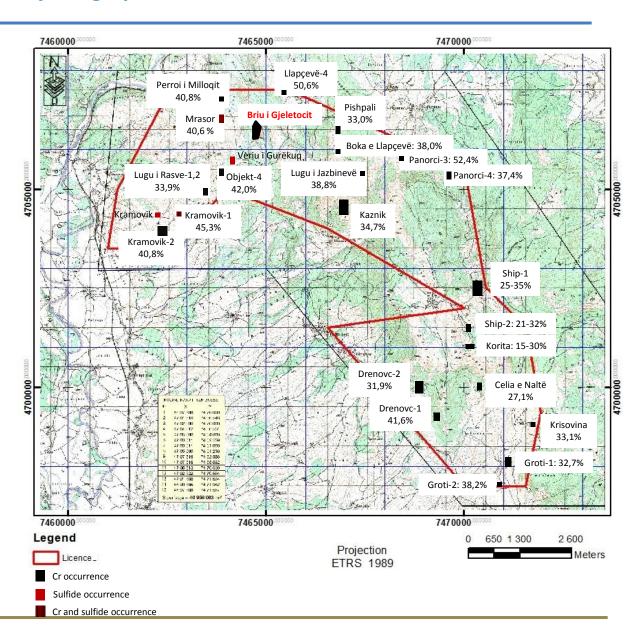
Briu i Gjeletocit open pit in December 2012 (view to the SE).





#### Rahovec Property: large potential for additional resources

- Widespread chromite mineralization, within a 44 km² area.
- Large potential for the discovery and delineation of additional chromite resources:
  - Former small scale mining only focused on surficial ore offering a potential for extensions
  - New undiscovered chromite orebodies outlined by Arsi
  - Potential additional chromite occurrences beneath soil, scree or barren rock, inbetween chromite zones







## **Rahovec Property: large potential for additional resources**

- 22 occurrences ranked as priority zones by Arsi
- 50% of the occurrences
  - >38% Cr<sub>2</sub>O<sub>3</sub>
- □ 30% of the occurrences
  - [30-38]% Cr<sub>2</sub>O<sub>3</sub>
- 20% of the occurrences
  - [20-30]% Cr<sub>2</sub>O<sub>3</sub>

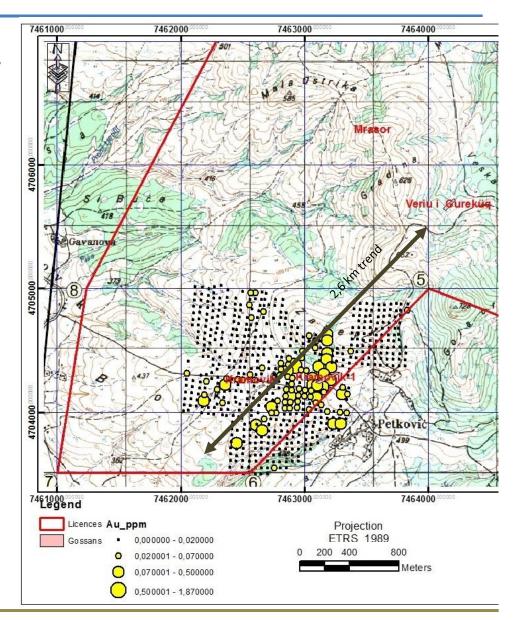
Prospect	average % Cr2O3	min % Cr2O3	max % Cr2O3	number of samples	Origin of samples	Thickness/area of chromite occurrence	Planned drilling area
Boka e Llapçevës	38			1	former pit	0,2 m thick chro	omite outcrop
Celia e Naltë	27,1	18	36,3	7	former pit	120x90 pit area	100x50
Drenovc-1	41,6	31,9	50,6	3	former pit	100 x 60 pit area	125x70
Drenovc-2	31,9			1	former pit	260x60 pit area	240x50
Groti-1	32,7	22,4	40,6	3	outcrop		190x60
Groti-2	38,2	35	41,3	2	outcrop		50x40
Lugu i Jazbinëve	38,8	25,4	47,9	3	outcrop	7 m thick chromite outcrop	80x60
Kaznik	34,7	9,2	50,4	6	former pit	3 m thick chr	omite lens
Kisovina	33,1	26,8	50,9	3	former pit		
Korita							
Kramovik-1	45,3	37,3	49,2	6	float	0,2 m	100x65
Kramovik-2	40,8	42,6	39	2	float	0,3 m	300x100
Llapçevë-4	50,6			1	former pit		100x40
Lugu i rasve-1-2	33,9	10,9	47,4	6	former pit	90x20 pit area	65x55 and 50x50
Mrasor	45,6	27	58	13	former pit	1 m	
Objekt-4	42	32,6	50,5	11	former pit and adjacent trenches	1,5-4 m thick chromite lenses	375x140
Panorci-3	52,4			1	former pit		80x40
Panorci-4	37,4	28,9	48,9	3	former pit	110 x 130 pit area	100x40
Përroi i Milloqit	40,8	39,4	42,1	2	former pit	3 m chromite lens	80x40
Pishpali (Panorci -	33	30	36	2	former pit	45 x 30 pit area. 10 m thick chromite lense	120x50
Ship-1	estimate 25-35% Cr2O3 in former pit						320x90
Ship-2	estimate 21	-32% Cr2O	3 in former pit				160x60





## Rahovec Property: Gurëkuq Sulfide Prospect

- ☐ Three gossan zones and gold-copper soil anomalies, distributed along a 2.6 km, NE striking trend
- Gossan (Kramovik zone)
  - Former shaft by the Yugoslavians in the 50's,
  - Reported grades of 0.1 -3.37 % Cu, up to 1.77 % Co, 0.1-0.44 % Ni
- Gossan (Karmovik1 zone)
  - Trenching and drilling by Lydian International Ltd. (2006-2008)
  - Trench sample grades of up to 8 ppm Au and 4.1% Cu
- Gossan in the Veriu i Gurëkuq zone
  - Newly discovered by Arsi
- Gold-copper soil anomaly trend
  - ☐ Evidenced by Lydian (2007)
  - ☐ 1.1 km long x 300m wide
  - ☐ Spot highs of 1.9ppm Au and 0.35% Cu
- ☐ Sulfide mineralization in historical drillings in the Mrasori zone, 27 km NNE

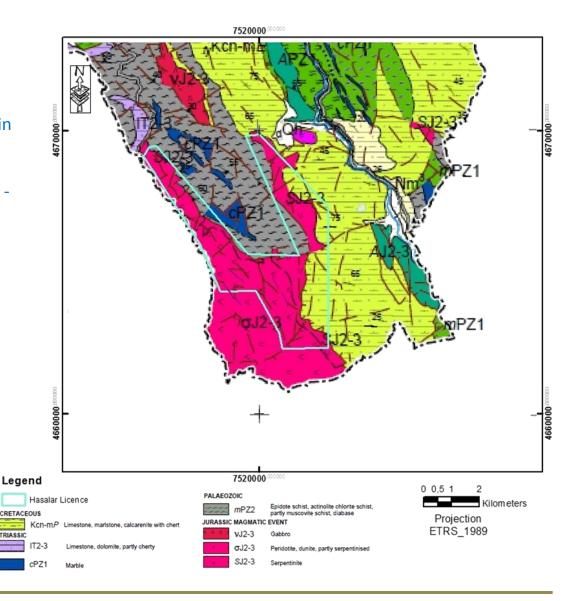






## **Hasalar Property: a major chromite district**

- Radusha -Luboten district
- ☐ Formerly the largest chromium producer in Yugoslavia. (72% in 1957)
- high  $Cr_2O_3$  grades (>42%) Cr / Fe ratio (2.8 3.7) and low  $SiO_2$  contents (5-9%)
- Former large mining operations
  - Nada (800 000 t extracted at 48%  $Cr_2O_3$ ),
  - Oraje (500 000 t extracted at 48% Cr<sub>2</sub>O<sub>3</sub>),
  - Gornaye Radusha (200 000 t extracted)
- All mining activities ceased in 1981

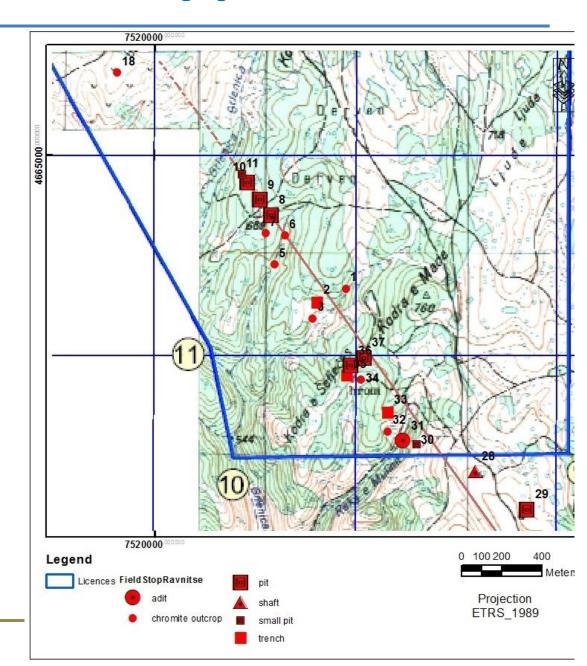






### **Hasalar Property: 3 km trend of high-grade chromite occurrences**

- Reconnaissance works initiated in 2012
- Ravnishte trend
  - ~3km long, NNW striking
  - Over 25 chromite occurrences as outcrops, former pits, adit, shaft and trenches
  - Expected grades > 38% Cr<sub>2</sub>O<sub>3</sub>
- Large potential for additional chromite resources:
  - Former small scale mining only focused on surficial ore offering a potential for extensions
  - Newly discovered chromite occurrences
  - Potential additional chromite occurrences beneath soil, scree or barren rock, in-between chromite zones

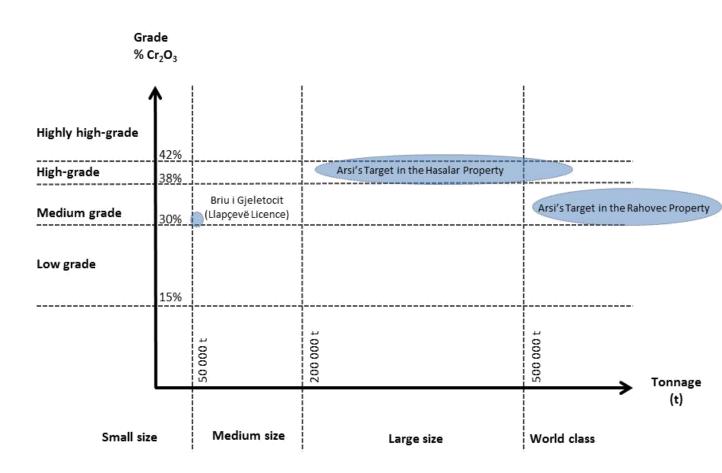




## **Arsi Resource targets**

#### Resource targets:

- a world-class mediumgrade deposit in the Rahovec Property
- □ large-size (at least), high-grade deposit in the Hasalar Property

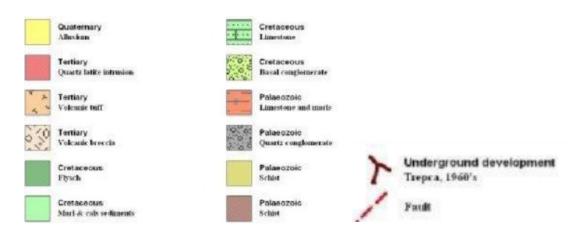






### **Crepule Pb-Zn Project: Arsi new acquisition**

- Originally investigated by the Yugoslav Trepča Combinat in the 50's
- Explored by Lydian International (2006-2009)
- Still an early-stage exploration project
- Palaeozoic limestones unconformably overlain, or in structural contact with, Cretaceous sediments
- Zinc-rich mineralized zones occur as veins, mineralized fractures and breccias patches in coarse, altered limestone
- Poorly understood deposit type, morphology and controls on mineralization.



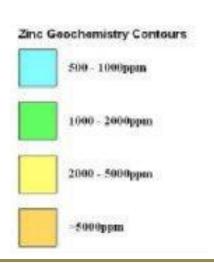


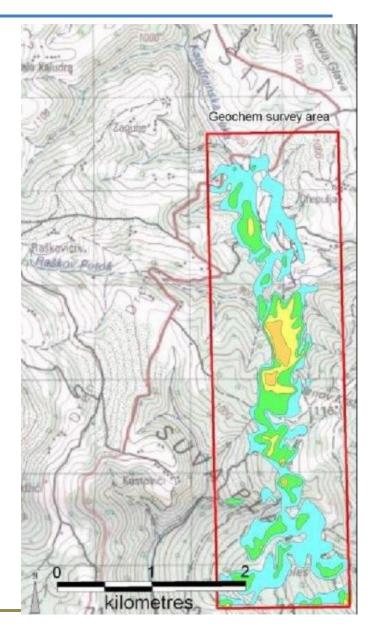




## **Crepule: historical high grade Pb-Zn mineralisation**

- ☐ Historical works by Yugoslav Trepča Combinat
- Soil sampling :
  - North-South 5km long by 200-500m wide trend
  - Continuous zinc and patchy lead anomalism
  - Values reaching over 5,000ppm for Pb and Zn
- ☐ Four adits and six trenches in 1974 (undocumented)









### **Crepule: confirmed high grade Pb-Zn mineralisation**

- ☐ Lydian International Ltd. exploration works (2006-2009)
  - Soil sampling
     Confirmed historical soil anomalies
     Exceptional anomalous values, up to a maximum of 13.7% zinc and 3.34% lead
  - Trenching
     Assayed 32m at 25.89% zinc, and 3.86% lead
  - Drilling

     7 diamond drill holes totalling 375.2m
     Several shallow mineralized intercepts, all of which were associated with gossanous iron oxide fracture zones within the host limestone

- Target a possible zinc-lead rich sulfide source(s) at depth
- Structural studies
- IP/resistivity geophysical surveying followed by drill testing

Drill hole	From (m)	To (m)	Interval (m)	Zn%	Pb%
DDC-002	6.6	10.0	3.4	15.34	3.77
DDC-003	3.6	12.0	8.4	5.10	0.36
DDC-006	0.0	3.2	3.2	32.51	9.34
DDC-007	0.0	5.0	5.0	7.21	0.56

Significant Drill Assay Intervals by Lydian





