

Nature's Brilliant Colours

Newsletter No. 16 09/2013

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Exciting Times!

Dear Customers, Readers and Friends,

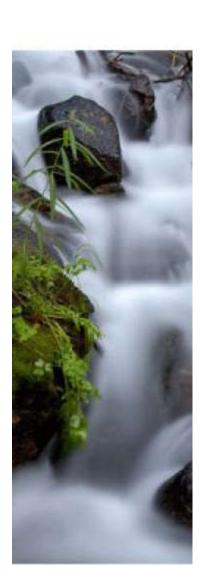
A beautiful summer is slowly coming to an end. We are all stocked up and ready, once again, to continue supplying you with exceptional quality Natural Fancy Coloured Diamonds for your new collections.

We are very excited to welcome our new intern, Severin Keller, who will be bringing his support to the KULSEN & HENNIG team in Berlin. So, we are ready for the autumn / winter season to begin!

To help make your sales presentations even clearer for your customers, we have developed a new service providing images and texts on the theme of Natural Fancy Coloured Diamonds. Here you will find everything you should know on the subject.

The growing popularity of Natural Fancy Coloured Diamonds is reflected not only in increased customer interest, but also in the prices attained at auction. As red and pink diamonds are among the rarest of all diamonds, it is all the more impressive when several of these diamonds are auctioned at the same time.

Therefore, we would like to devote a new series about this particular type of trading – its history, development, fascination and, of course, its impact on world prices.



As it is well known that Natural Fancy Coloured Diamonds are rare, we thought it would be interesting to learn how new resources are developed and what enormous feats of engineering are behind them.

We hope you enjoy reading!

Juliane Hennig
Ihr KULSEN & HENNIG Team

Dominik Kulsen Ihr DOMINIK KULSEN Team

KULSEN & HENNIG's New Offices

It is done! The KULSEN & HENNIG Team has moved into its new offices located in downtown Berlin-Mitte!

From now on, you can reach us at the following postal address:

POB 2 10 63 10122 Berlin Germany

Telephone: +49 (0)30 400 55 93 0 Fax: +49 (0)30 400 55 93 29

E-mail: info@kulsen-hennig.com Website: <u>www.kulsen-hennig.com</u>

If you would like to stop by, just let us know in advance. We look forward to seeing you!



Natural Coloured Diamonds - Our Knowledge at Your Service

Interest in Natural Fancy Coloured Diamonds has been growing steadily, yet surprisingly little is generally known about them. As specialists in this field, it is important for us to share our knowledge with our customers.

This is the motivation behind the creation of our ever so popular colour cards and the information we provide about Natural Fancy Coloured Diamonds in our newsletters and on our website.

Although the content of our website is not yet completely available in English, you can still obtain detailed overviews of diamond colours, the theories behind the colours and diamond mining, in English, by consulting our newsletter archives.

Sales presentations designed for laptop or tablet computers have become the standard, demonstrating increased customer interest in digital image and text materials about Natural Fancy Coloured Diamonds. Upon request, we will gladly send you files in print or e-mail versions and advise you in your choice of themes.



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Our offerings at a glance...

From Our Collection: Fancy Light Yellow – A 1.07 ct. Princess Cut Diamond

On a recent hot summer day in Berlin, I tasted a new ice cream flavour called "GUZIMI". Now what in the world is that, you might ask? The answer is an original combination that takes its name from the German words for cucumber (GUrke), lemon (ZItrone) and mint (MInze).

The diamond we are presenting today reminds me of that hot summer day and that refreshing ice-cream flavour, with its fresh, light and cool colour.

This stone's dimensions are: $5,35 \times 5,32 \times 4,15$ mm and it has a clarity grading of VS.

We also have other princess stones in Fancy Light Yellow weighing between 0.10 and 1.07 ct.

If you are interested in our "refreshing" princess, please feel free to contact us:

Our office in Berlin/Germany

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Our office in Winterthur/Switzerland E-mail: info@dominikkulsen.com Telephone: +41 (0)52 212 24 40

All about Natural Coloured Diamonds

Fancy Vivid Blue - Sale Exceeds Expectations

The 25.5 ct Fancy Blue diamond from the Cullinan diamond mine in South African (see our Newsletter no. 15) has been sold. The value of the rough stone had been estimated at USD 10.000.000, but in June of this year, Petra Diamonds, the Cullinan mine operators, were able to sell it for USD 16.900.000, which is USD 600.000 per carat.

Johan Dippenaar, the Managing Director of Petra Diamonds, emphasizes how this extraordinary sales result demonstrates the importance of the Cullinan mine as the world's largest source of blue diamonds.





In Brief: The *Argyle Pink Jubilee* Diamond in the Melbourne Museum

In our Newsletter no. 11, we reported the sensational discovery of the largest rough pink diamond ever found in Australia, the 12.76 ct. light pink *Argyle Pink Jubilee*. Originally, the diamond was to have been sold at the annual *Argyle Pink Diamonds Tender* for USD 10-20.000.000.

Due to its internal structure, however, this stone could only be partially cut and polished. Its current weight is 8.01 ct.

In 2012, Rio Tinto, the operator of the *Argyle Diamond Mine*, subsequently donated the *Argyle Pink Jubilee* diamond to the Melbourne museum. The diamond can be admired there as one of more than 3000 rare minerals and precious stones included in the extensive *Dynamic Earth* exhibition



Argyle Pink Diamonds Tender 2013 - Fancy Reds

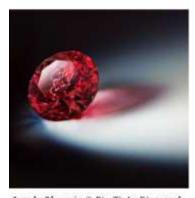
On May 17, Rio Tinto announced an impressive record: for the first time, three diamonds with the absolutely exceptional Fancy Red colour grading will be sold at auction during this year's <u>Argyle Pink Diamonds Tender</u>.

Of the three round diamonds, the two smaller ones weigh 0.20 ct and 0.58 ct., respectively. The largest among the three weighs 1.56 ct and is called the *Argyle Phoenix*, in honour of the recently opened Argyle Underground Mine. Read our article about the new mine in this newsletter. The *Argyle Phoenix* is the largest Fancy Red diamond ever offered at auction.

The rarity of the colour red among Natural Fancy Coloured Diamonds is demonstrated by the fact that in the 30 year history of the *Argyle Diamond Mine*, only six diamonds have been certified as Fancy Red by the Gemological Institute of America (GIA).

The Argyle Pink Diamonds Tender 2013 collection is made up of 58 pink diamonds, three blue diamonds and three red diamonds. All the stones were cut and polished by the Rio Tinto Master diamond cutters, acknowledged internationally for their expertise, precision and artistic flair.

After showings in Sydney, New York and Tokyo, the diamonds will be presented in Perth and Hong Kong. Bids will be accepted until 8 October and premium prices are expected to be offered for these diamonds. We are very excited about this event and will of course keep you updated on any new developments.



Argyle Phoenix © Rio Tinto Diamonds

The hero diamonds of the auction...

Auctions – Episode 1: From Antiquity to Modern Times

The sensational sales results obtained during auctions of rare Natural Fancy Coloured Diamonds have repeatedly caused a stir these last few years. The same was true this year: on 24 April, the *Bonhams* Auction House in London sold an exceptional Fancy Deep Blue 5.30 ct diamond for USD 7.300.000 – that is to say USD 1.800.000 per carat. The stone was bought by Graff Diamonds.

Auction sales of diamonds are a source of real fascination. Since the 1970s, when the two largest Auction houses, *Sotheby's* and *Christie's*, started to hold these sales, public interest in them has not abated. The first auctions brought Natural Fancy Coloured Diamonds into the public's view and triggered growing enthusiasm for them. In the meantime, these auctions have come to hold decisive influence over the prices of diamonds.

We would like to take this evolution as an opportunity to develop the subject in more detail. In this first episode of our series, we will take a look at the history of auctions and the origins of the first auction houses.



Read more...

Gemmology Corner

Rio Tinto - Official Opening of the Argyle Underground Mine

In our Newsletters no. 5 and no. 10, we reported on the activities and exceptional finds of the <u>Argyle Diamond Mine</u> in Western Australia. This mine is world famous for its production of champagne and pink diamonds, colours offered in our product range.

The operation of the mine was originally scheduled for 2017. But on 30 April, Rio Tinto, the Australian operator of the mine, announced the official opening of the *Argyle Underground Mine*.

The transition from open pit mining to underground mining will probably extend the mine's activities until 2020. The Argyle Diamond Mine is the first mine in Western Australia to use a high-tech system known as "block caving" for underground mining.





® Rio Tinto Diamonds

Read more...

You will receive our next newsletter in December 2013.

Earlier editions of our newsletter may be found in our <u>newsletter-archive</u>.

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Our News

Natural Coloured Diamonds – Our Knowledge at Your Service

Images and Texts for Screen Presentations

Upon request, we will send you our colour cards in PDF format for champagne, yellow, pink and orange diamonds. We can also provide professional photographic images in print or email quality, as well as PDF or Word versions of our articles for easy processing.

Our Website



Diamantfarben Section (Diamond Colours)

On these pages, you will find everything you need to know about Natural Fancy Coloured Diamonds. The articles provide useful data and information that you can include in your sales presentations.

At this time, the content of our website is not yet totally available in English. You can, however, find detailed overviews of diamond colours, the theories behind the colours and diamond mining, in English, by consulting our newsletter archives.



Wissen Section (Knowledge)

In the Diamanten (Diamonds), Diamantförderung (Diamond Mining) and Farblehre (Colour Theory) sections, you will learn more about the formation and mining of Natural Fancy Coloured Diamonds as well as about the origins of their colour.

You can also find our downloadable Colour Cards and our newsletter archives available in German, English and French. Each newsletter's detailed table of contents provides a brief overview of all the topics that we have published so far.



Medien Section (Media)

Additional information on Natural Fancy Colored Diamonds can be found in the articles that we have published in the trade press.



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Our Newsletter



Our newsletter is published four times a year in German, English and French.

Extensively researched articles inform you about current news and exciting aspects of the world of Natural Fancy Coloured Diamonds as well as interesting facts about gemmology.

We look forward to your contacting us by telephone or email and to an opportunity to advise you in your choice of themes.

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All about Natural Coloured Diamonds

Argyle Pink Diamonds Tender 2013 - Fancy Reds

The hero diamonds of the auction are:

Argyle Aurelia	1.18 ct	Oval	Fancy Intense Purplish Pink	SI2
Argyle Phoenix	1.56 ct	Brilliant	Fancy Red	I2
Argyle Seraphina	2.02 ct	Princess	Fancy Intense Purple Pink	SI2
Argyle Celestial	0.71 ct	Heart	Fancy Dark Gray Blue	VS1
Argyle Imperial	3.02 ct	Radiant	Fancy Intense Orangy Pink	SI1
Argyle Dauphine	2.51 ct	Radiant	Fancy Deep Pink	SI2



From left to right: *Argyle Aurelia*, *Argyle Phoenix*, *Argyle Seraphina*, *Argyle Celestial*. © Rio Tinto Diamonds



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Weighing 1.56 ct, the *Argyle Phoenix* is the largest Fancy Red diamond ever offered for sale at the *Argyle Pink Diamonds Tender*. It is flanked by two Fancy Red diamonds, one on the left weighing 0.58 ct (P2), and another on the right weighing 0.20 ct (SI2); both diamonds come from the *Argyle Pink Diamonds Tender Collection 2013*.



© Rio Tinto Diamonds



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All about Natural Coloured Diamonds

Auctions – Episode 1: From Antiquity to Modern Times

What is an Auction?

The term "auction" comes from the Latin "auctio" which roughly means something like "multiplication". An auction is a particular form of price determination and one of the oldest forms of trade, after the exchange of goods. Auctions follow clear rules that determine which bids can be made, the conditions under which the auction is won, the price that can be attained for an auction item, the conditions under which the exchange takes place and how payments, for example between buyer and seller, will take place. An auction must be held by an auctioneer.

Auctions already enjoyed great popularity in 500 BC and, then as now, had one clear goal: obtain the highest possible price for the auction item.



The Babylonian Marriage Market Edwin Long 1875

Ancient Times (1200/800 BC – approximately 600 AD)

The Greek historian Herodotus (490 – 424 BC) provides the first mention of auctions. He explains how young women were auctioned off in the annual marriage markets in Babylon. Of course, the most attractive girls obtained the highest bids. The less attractive women were offered for sale with a dowry, financed from the sale proceeds of the previously auctioned women. The bidder who accepted the lowest dowry won the auction. The purchase was cancelled when a girl refused "her" bidder as a husband.

Ancient Rome also had auctions and they already followed the same rules we know today, with written publications (forerunners of today's catalogues), the allocation of premiums (similar to today's commissions for buyers or sellers), imposed taxes and invoices. The auctions were held in a room called the "atrium auctionorum"

Auctions were regularly held directly after military campaigns. The spoils of war were sold "sub hasta", Latin for "under the spear", as a spear planted in the ground was the symbol of authority. Perhaps the most astonishing auction from a historical perspective was the sale of the Romain Empire to the highest bidder by the Praetorian Guard, the Emperor's body guards. Senator Marcus Didius Julianus (133 – 193) won the auction with his bid, equivalent to approximately EUR 14.000.000 today – a bargain for an empire!



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Middle Ages (6th - 15th centuries)

Little has survived from the Middle Ages, but many of the Hanseatic League auctions are documented. These were spread throughout Europe, at trading centres from London to Novgorod. According to a report from the 7th century China, the belongings of deceased monks were auctioned. A monk acted as auctioneer, and it was his job to stop any "frenzied" overbidding. And in France, in 1328, the personal effects of the French queen Clementia of Hungary (1293-1328) were sold at auction.

Modern Times (15th – **16**th centuries to present)

With the beginning of the modern era, auctions found new popularity. In 16^{th} century France, the estates of the deceased, especially, were sold at auction. This is why the profession of "hussiers-priseurs" (court-executors - auctioneers) was legally established by the French government in 1556. They were allowed to estimate the value of an estate and sell it.

There were no catalogues or previews and the auction was held in the home of the deceased. Two auctioneers led the auction: one described the goods and the other acted as crier, identifying the bidders and repeating their offers. As government officials, the "hussiers-priseurs" were not allowed to sell new goods or to hold another profession. In compensation, they were under state protection, guaranteeing independent experts with no self-interest. This guaranteed impartiality benefitted buyers as much as sellers.

Sparked by colonial trade, a real passion for auctions developed in the Netherlands in the mid-16th century. Everything that the ships brought back from distant lands was auctioned off: porcelain, spices, tobacco and art. This was when the first art auctions developed.

The world's oldest auction house still in existence is the Swedish Stockholms Auktionsverk. It was founded in 1674 on the initiative of the Swedish Baron Claes Rålamb and was specialized from the start in valuable art from past eras. The finest and most famous people of the time were among his clients.



Claes Rålamb



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An auction at burning candle. C. C. Junghans © Verlag Waldemar Kramer Frankfurt

At the same time in England, candle auctions were particularly popular. They were held in cafés or pubs around Covent Garden and were announced in advance in the London Gazette.

An inch long (2.54 cm) candle was lit and the last bidder to make an offer just before the flame went out won the auction item. Certain clever bidders tried to get around such a random method – they noticed that the smoke clearly changed immediately before the flame went out and therefore they knew when to make their bid.

Ships were even sold this way. But as this type of auction often caused conflicts, the candle was replaced by the hammer.

In 18th century England, book and art auctions were especially popular. *Sotheby's* (1744) and *Christie's* (1766), two of the largest auction houses in the world today, have their origins in the London of this period. Their success is closely linked to the Industrial Revolution from the middle of the century and the growing prosperity of an emerging middle class

These auction houses also benefitted from the French Revolution (1789-1799), as countless works of art and precious jewels arrived in England. London quickly replaced Paris as the centre of the European art trade.

Due to increasing demand, other auction houses, like *Bonhams* (1793) and *Phillips de Pury* (1796), were founded.



The Auction, George Bernard O'Neill (1857) © AKG Images



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"An Auction" by Pyne William Henry (1808) Auction room, Christie's

James Christie (1730-1803) quickly realized that the origin and the history of an auction item were just as important to a successful sale as the identity of the owner. This was because the buyer wanted to demonstrate his position in society by owning objects that were steeped in history.

Customers were motivated by their emotions when buying and paid prices that were far above the objective value of the objects. This is how the company's philosophy of buying only objects that possess a certificate of origin, still applied today, came about.

During that time, James Christie enjoyed the privilege of auctioning off the precious jewels belonging to Madame du Barry, Louis XV's mistress. The auction was a huge success, not least because of the famous previous owner. The proceeds of the sale were the equivalent of EUR 1.000.000 in today's money. This auction established Christie's reputation as an expert in jewels and diamonds.

After the sensational performance of the Christie's auction house, Sotheby's also expanded its business and became a competitor in the area of jewellery and almost all luxury goods.

The common denominator between these two auction houses has remained their principle of only excepting for auction objects with a history, a certificate of origin and high emotional and social value.

In the next episode, learn more about the different types of auctions, the development of the auction houses and the reasons for their increasing influence on pricing in the diamond trade.



James Christie by Thomas Gainsborough



Samuel Baker Founder of Sotheby's



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Gemmology Corner

Rio Tinto – Official Opening of the Argyle Underground Mine

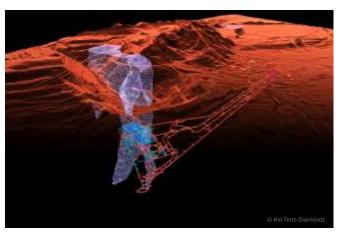
The Argyle Diamond Mine

Since its opening in 1983, the Australian *Argyle Diamond Mine* has produced more than 791 million carats of rough diamonds using open pit mining. Although that only corresponds to 0,1 % of the world's production of diamonds, the mine provides 90 % of the world's supply of pink diamonds.

The Argyle Diamond Mine experienced its most productive period in the late 1990s with an annual production of approximately 30 million carats of diamonds. As early as 2009, however, the annual production dropped to 3,5 million carats and it was foreseeable that the resources would be, to a large extent, depleted by 2017.

The Argyle Underground Mine

Rio Tinto, the operator of the *Argyle Diamond Mine*, therefore invested in extensive feasibility studies to determine the most economical and safest way to reach deep into the Argyle's ore body. To do so, a 2,5 kilometre ramp was built in 2005, leading down and cutting through the rock 85 metres below the floor of the existing open pit mine.



Computer based image of the underground mine



The Open Pit of the Argyle Diamond Mine (AK1 pipe)



The ramp built in 2005

Because of the positive results of the studies, the continuation of the project was planned, but only actually realised in 2010. The cost of the *Argyle Diamond Mine's* expansion into underground mining amounts to USD 2,2 billion.



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Between 2011 and the middle of 2012, the underground workshops were completed. After the construction of the transport routes and the installation of crushers and draining pumps, production could begin. In 2012, the underground mine produced 13,10 million carats of rough diamonds.







The underground mine was extended through a network of tunnels, 40 kilometres in length. The main entrances to the underground network of roads consist of four tunnels: two to carry vehicles, one for ventilation and the last to transport the ore. There are a total of 273 draw points where loaders access the ore via 16 production tunnels.

To crush the rock, two large underground crushers were installed in a cathedral-like chamber deep in the mine. A 2,2 kilometre underground conveyor belt connects with a 1,2 kilometre conveyor belt above ground in order to transport the ore.

Block caving

By using the block caving technique to mine diamond ore, the *Argyle Underground Mine* in Western Australia is one of the most technologically advanced mines in the world and at the forefront of technology and mining engineering services.

Block caving involves undercutting the ore body and allowing it to break up or "cave" under its own weight. By using this method, dangerous blasting is avoided.



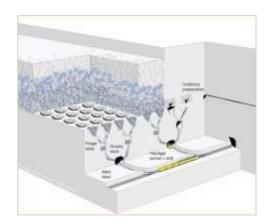




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Block-Caving



Under the blocks of rock, a honeycomb construction of cone-shaped funnels was developed through which the diamond-bearing ore falls, after being broken up by explosives.

The material will drop using only the force of gravity to spaces below the cones, the collection points, where driverless 14 tonne loaders, operated from the surface, will transport it to the crushers. From there, conveyor belts will take the ore to the surface.









Block caving has made underground mining much safer. Ultra-modern technology has made it possible to operate the mine with a high degree of mechanisation. This in turn means that fewer people are underground during operations than is possible with traditional methods of underground mining.

The *Argyle Underground Mine* was officially opened on 30 April 2013. The opening of the underground mine will extend the life of the mine until at least 2020. On average, the mine will generate approximately 20 million carats per year; maximum production is expected to be reached in 2015.





The *Manthe* ritual, during the inauguration of the Argyle Underground Mine. In this traditional ceremony, visitors walk through the smoke of smouldering leaves or are brushed with wet gum leaves.

This is how the Aborigines, traditional owners of the land, let their ancestors know that the newcomers are welcome and should be protected during their stay.