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ASX Code: PDI

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## ASX Announcement

# Further Drill Success on Bonsiega Project

### HIGHLIGHTS

- At Prospect 71, a **new, higher grade gold structure** identified, including:
  - **4m at 7.1g/t Au from 20m**
  - Along strike from historical intercepts of:
    - **4m at 15g/t Au from 22m**
    - **2m at 7.5g/t Au from 32m**
  - At least 250m of strike now recognised and open in all directions
- At Dave East, **over 500m of strike continuity** identified in one of a series of mineralised locations within the 7km long, Dave-Dave East system:
  - Includes the following new intercepts:
    - **28m at 1.6g/t Au from 30m**
    - **24m at 1.1g/t Au from 0m**
    - **12m at 1.5g/t Au from 56m**and the following previously reported intercepts:
    - **26m at 2.7g/t Au from 22m**
    - **12m at 1.5g/t Au from 28m**
  - Open to the north-east and at depth
- **Seven gold mineralised structures with over 5km of strike**, open in most directions have now been identified in RC drilling on Laterite Hill grid.

Predictive Discovery Limited (**ASX: PDI**) announces that more assays have been received from RC drilling completed in March 2012 on the Laterite Hill Grid, Bonsiega Project in eastern Burkina Faso.

### Managing Director's Assessment of Drill Results

Mr Paul Roberts, PDI's Managing Director commented: *"Our drilling programs in Burkina Faso this year have two objectives – first to identify the scale of potential gold mineralised systems on our properties and second, to infill drill the best prospects in order to advance them towards a JORC resource calculation. The drill results announced today represent progress on both fronts.*

*"Drilling on the Dave and Dave East Prospects within the Laterite Hill Grid has already identified a large mineralised system over a strike length of at least 4 km including multiple lodes containing moderate gold grades and some higher grades at depth. Infill and extension drilling on just one of these lodes at Dave East shows that it extends for at least 500m with significant widths of gold mineralisation on each line.*

*"New assays from the Prospect 71 drilling have also confirmed the presence of another higher grade lode to add to the recent Tamboana and Koundi discoveries. The higher gold grades in these zones balance the*

lower grades in “Dave East-type” lodes and strengthen the probability of obtaining average grades over the whole Laterite Hill gold field above 2g/t Au.

*“Also, as new drill results are announced, the scale of the gold field is becoming increasingly apparent. Our power auger drilling has now discovered more than 18km of strong gold bedrock gold anomalies on the Laterite Hill Grid. PDI’s RC drilling has intersected ore grade and width mineralised zones in every Prospect, most of which are open in all directions. Three previously unknown gold mineralised zones have now been discovered. These results continue to strengthen the potential to make one or more large gold discoveries on the Bonsiega Project.”*

## **Bonsiega Project – Laterite Hill Grid**

The Bonsiega Project covers approximately 100 km of strike length in the Samira Hill greenstone belt in eastern Burkina Faso (Figure 1). This belt hosts the 2 million ounce Samira Hill gold mine across the border in Niger and contains numerous active artisanal gold mine sites along its length. The Laterite Hill Grid section covers an area of 70 km<sup>2</sup> within two of the four permits in the Birrimian Joint Venture with Eldore Mining Corporation Limited. PDI’s equity in the Joint Venture currently stands at 72%.

During 2011, auger drilling identified an 18km long zone of strong bedrock gold anomalies in the Laterite Hill Grid area. In mid-2011 RC drill holes at the Dave and Dave East Prospects located a series of gold-bearing mineralised zones containing numerous ore grade and width intercepts over a strike length of 2km. Infill RC drilling and analysis completed in December 2011 identified higher grade sections that are interpreted to lie within a series of north-east striking zones.

Assays reported in this release are from an RC, diamond and air core drill program carried out in the Laterite Hill Grid area between December 2011 and March this year. The holes were drilled on six prospects comprising the Dave, Dave East, Laterite Hill, Tamboana, Prospect 71 and Prospect 71 West Prospects, and totalled 17,600m.

This program had two main objectives:

- Increase the potential at Dave and Dave East prospects by infilling between previous intersections and to test for extensions over an additional 3km of strike.
- Follow up some of the extensive bedrock gold anomalies on the Laterite Hill Grid with wide spaced drill sections.

The gold assay results released today represent 2,184m of RC drilling from the above program.

### **Drilling Results**

Drill hole locations for the various Prospects are shown in Figures 2 to 5. Significant results are highlighted. Holes where assays are outstanding are also indicated on the Figures. A complete list of drill hole coordinates and assays is provided in Table 1 at the end of this release

#### **Dave and Dave East Prospects (Figure 3)**

Assays for 13 holes, totalling 1,068m, have been received bringing the assays now received for 26 out of a total of 137 holes. The best new results are as follows:

- **28m at 1.6g/t Au from 30m**

- **24m at 1.1g/t Au from 0m**
- **12m at 1.5g/t Au from 56m**

These three intercepts were obtained from 100m step-out or infill lines on one lode in the Dave East Prospect. RC drilling was focused on this lode to help develop a clearer understanding of gold mineralisation continuity throughout the Dave-Dave East mineralised system prior to more focused JORC resource drilling. The presence of comparable intercepts on five lines 100m apart is very encouraging and shows that this lode is approximately 500m long and open to the north-east. It is one of a series of gold mineralised positions that have now been identified by drilling within the 7km long Dave-Dave East bedrock gold anomaly.

#### **Prospect 71 (Figure 4)**

Results from an additional 14 drill holes were received totalling 1,116m. A high grade zone was identified in an area with no artisanal workings with an intercept of **4m averaging 7.1g/t Au from 20m** down-hole depth. RC drilling by a Canadian company, Emerging African Gold in 1996-97, is reported to have intersected 4m at 15g/t Au approximately 130m north-east of this intercept and 2m at 7.5g/t Au about 100m south-west of it. This suggests a strike orientation consistent with other higher grade lodges intersected elsewhere on the Laterite Hill Grid.

Elsewhere, narrow low to moderate grade gold intercepts were encountered in most holes (Table 1).

#### **Future work program**

RC drilling is continuing on the Laterite Hill Grid with the aim of developing a greater understanding of geological continuity as the basis for resource calculation on part of the Laterite Hill Grid gold field. The Company also plans to undertake preliminary metallurgical studies on representative samples of the gold mineralisation.

A power auger program is progressing, testing the 15km of greenstone strike south-west of the Laterite Hill Grid.

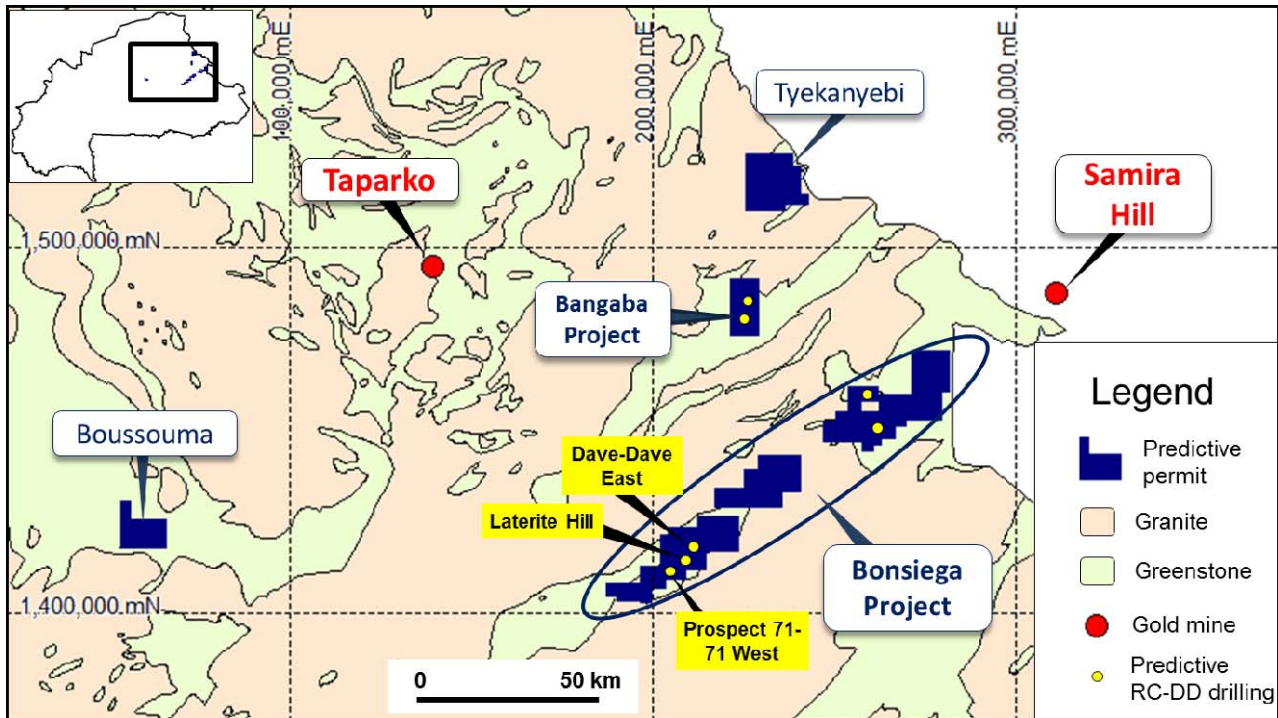


Figure 1: Geological map of eastern Burkina Faso showing PDI's tenements with the location of the Bonsiega Project and drilled Prospects (yellow) on the Laterite Hill Grid highlighted.

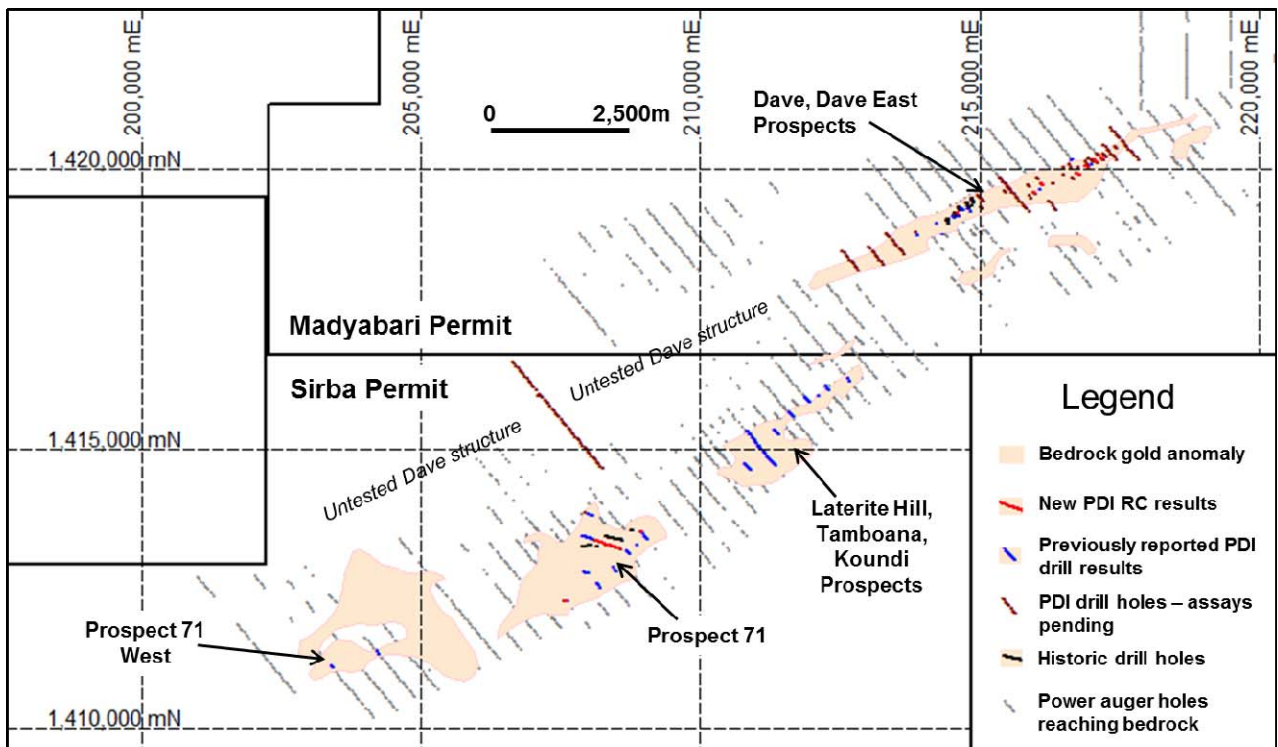


Figure 2: Laterite Hill Grid showing Prospects along with the location of RC, air core and diamond drill holes. The underlying map shows the outlines of bedrock gold geochemical anomalies greater than 25ppb Au (pink shading) from the power auger drilling as well as the power auger grid (grey lines).

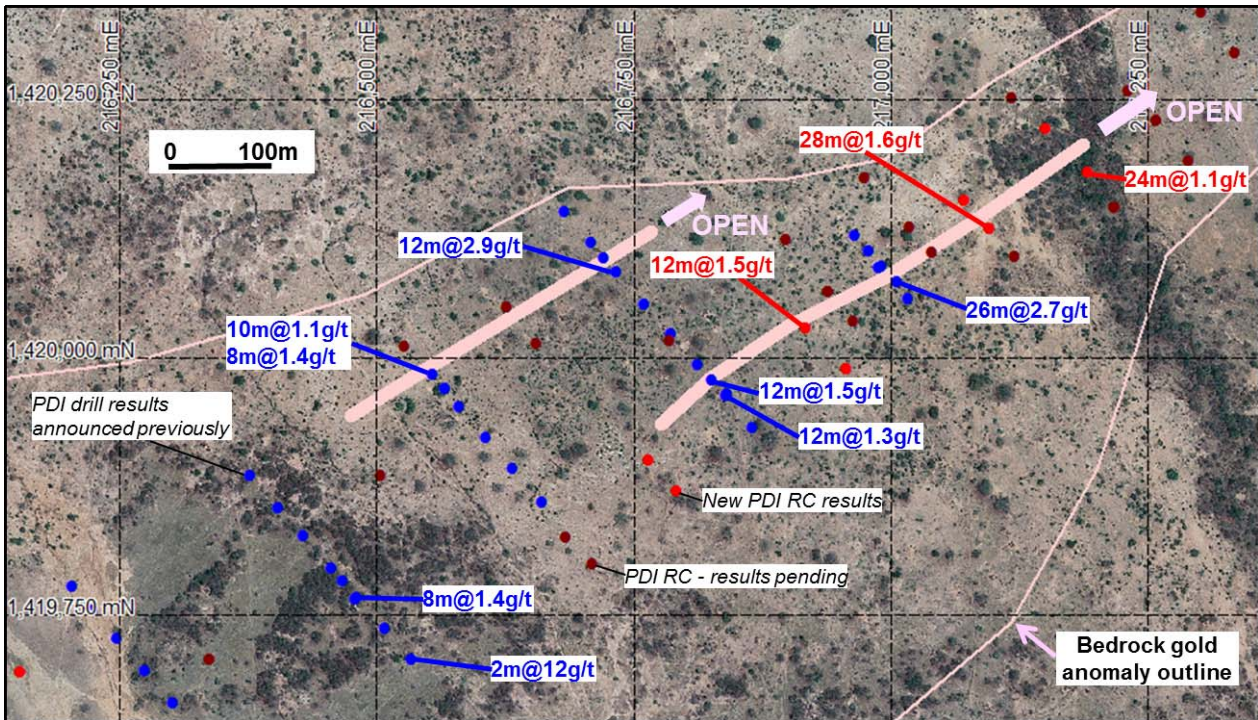


Figure 3: Dave East Prospect – drill hole locations and assay highlights superimposed on aerial photography.

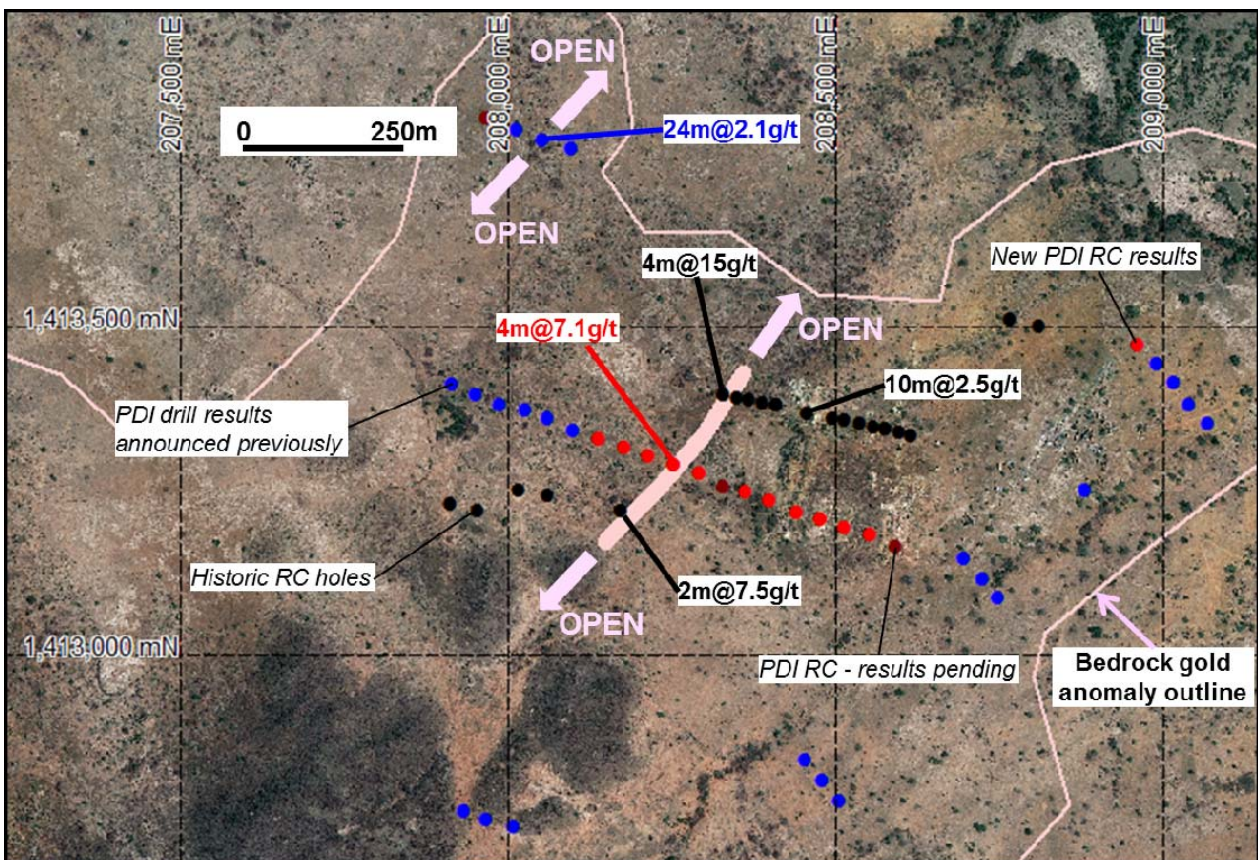


Figure 4: Prospect 71 – drill locations and assay highlights superimposed on aerial photography. Positions of historic (Emerging African Gold) drill holes are approximate only.

**TABLE 1 – DRILL ASSAY RESULTS**

Hole No.	Prospect	Easting (UTM)	Northing (UTM)	Azimuth (UTM)	Dip	0.25g/t cut-off			0.5g/t cutoff			Comments
						From	Down-hole width	Au g/t	From	Down-hole width	Au g/t	
DAVRC090	Dave East	217150	1420222	320	-50	6	14	0.79	6	8	1.1	
DAVRC090	Dave East	217150	1420222	320	-50	50	4	0.48				
DAVRC091	Dave East	217191	1420179	320	-50	0	30	1.0	0	24	1.1	
DAVRC091	Dave East	217191	1420179	320	-50	50	24	0.61	52	6	1.6	
DAVRC092	Dave East	217071	1420152	320	-50	18	6	0.42				
DAVRC092	Dave East	217071	1420152	320	-50	34	4	0.79	36	2	1.3	
DAVRC093	Dave East	217096	1420125	320	-50	12	66	0.87	12	2	0.87	
DAVRC093	Dave East	217096	1420125	320	-50				30	28	1.6	
DAVRC094	Dave East	216917	1420028	320	-50	10	4	0.68	10	2	0.99	
DAVRC094	Dave East	216917	1420028	320	-50	26	2	0.98	26	2	0.98	
DAVRC094	Dave East	216917	1420028	320	-50	56	12	1.46	56	12	1.46	
DAVRC095	Dave East	216956	1419988	320	-50	66	4	0.55				
DAVRC096	Dave East	216764	1419900	320	-50	68	10	0.47				
DAVRC097	Dave East	216792	1419870	320	-50							No significant results
DAVRC098	Dave West	216153	1419694	320	-50							No significant results
DAVRC099	Dave West	216124	1419728	320	-50	44	12	0.42				
DAVRC100	Dave West	215995	1419563	320	-50							No significant results
DAVRC101	Dave West	216022	1414536	320	-50	74	6	0.54	74	2	1.1	
DAVRC102	Dave West	214604	1419191	140	-50	4	6	0.35				
DAVRC102	Dave West	214604	1419191	140	-50	40	12	0.56	40	2	1.7	
DAVRC102	Dave West	214604	1419191	140	-50	68	18	0.68	70	16	0.73	
PSORC014	Prospect 71	208962	1413471	320	-50							No significant results
PSORC015	Prospect 71	207575	1412251	110	-50							No significant results
PSORC016	Prospect 71	207614	1412240	110	-50	42	6	0.36				
PSORC027	Prospect 71	208138	1413329	110	-50							No significant results
PSORC028	Prospect 71	208178	1413317	110	-50							No significant results
PSORC029	Prospect 71	208213	1413302	110	-50	50	2	0.89	50	2	0.89	
PSORC030	Prospect 71	208252	1413289	110	-50	8	4	0.59	8	2	0.9	
PSORC030	Prospect 71	208252	1413289	110	-50	20	6	4.8	20	4	7.1	
PSORC030	Prospect 71	208252	1413289	110	-50	68	12	0.77	72	2	2.6	
PSORC031	Prospect 71	208291	1413278	110	-50	18	6	0.71	18	6	0.71	
PSORC031	Prospect 71	208291	1413278	110	-50	74	6	0.3				
PSORC032	Prospect 71	208361	1413248	110	-50	18	2	1.0	18	2	1.0	
PSORC033	Prospect 71	208398	1413236	110	-50	56	18	0.43	56	4	0.78	
PSORC033	Prospect 71	208398	1413236	110	-50				68	4	0.60	
PSORC034	Prospect 71	208440	1413217	110	-50	0	6	0.73	0	4	0.94	
PSORC035	Prospect 71	208476	1413206	110	-50	34	4	0.82	34	2	1.3	
PSORC036	Prospect 71	208512	1413193	110	-50	50	8	0.33				
PSORC036	Prospect 71	208512	1413193	110	-50	70	2	1.72	70	2	1.72	
PSORC037	Prospect 71	208553	1413183	110	-50	0	4	0.67	0	2	0.96	
PSORC037	Prospect 71	208553	1413183	110	-50	20	4	0.63				
PSORC037	Prospect 71	208553	1413183	110	-50	54	2	1.1	54	2	1.1	

**Notes regarding the drilling and the assay table:**

1. Down-hole surveys were performed on all holes.
2. Analytical standards, blanks and duplicates were added to all sample batches for quality control.
3. Analyses were performed by fire assay at the SGS laboratory in Ouagadougou.
4. Average assay values are calculated with a maximum of 4m of internal waste.

**About Predictive Discovery:**

*Predictive Discovery Limited (PDI) was established in late 2007 to explore for gold and uranium. The Company is focused principally on exploration for gold in West Africa with one additional gold project in Australia. PDI has a distinctive technological capability, known as Predictore™, which is designed to increase drill targeting efficiency thereby reducing ore discovery cost. The Company's major focus is in Burkina Faso, West Africa where it has assembled a substantial regional ground position totalling 1,544km<sup>2</sup> and is exploring for large open-pittable gold ore deposits.*

Competent Persons Statement

*The exploration results reported herein, insofar as they relate to mineralisation, are based on information compiled by Mr Paul Roberts (Fellow of the Australian Institute of Geoscientists). Mr Roberts is a full time employee of the company and has sufficient experience relevant to the style of mineralisation and type of deposits being considered to qualify as a Competent Person as defined by the 2004 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2004 Edition). Mr Roberts consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

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