Baghmara Prospecting Scheme

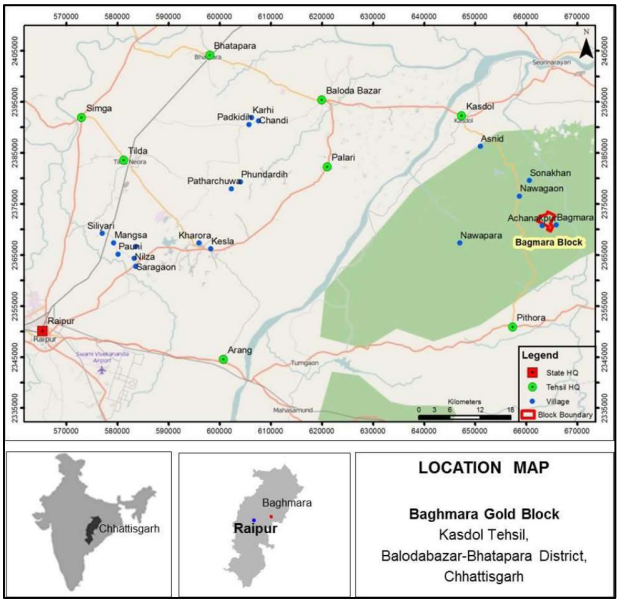
1. Introduction

During non-coal mineral auctioning held by the Chhattisgarh State Government, Vedanta Limited won the Baghmara Gold block Composite License (Prospecting-cum-Mining Lease) in the auction and the State has issued LOI (S.No 3-11/16/12 dated 28 April 2016 for 608 ha area & revision order dated 17th March 2017 for a reduced area to 474.3 ha). The new area of the block is now stands as 474.3 Ha. As per LOI terms & conditions, Vedanta is now submitting a detailed systematic high technology prospecting scheme which will utilize international Achaean /Lower Proterozoic gold exploration models targeting sizable economic gold mineralization. DGM approval and Forest Department clearances are sought for commencing prospecting work.

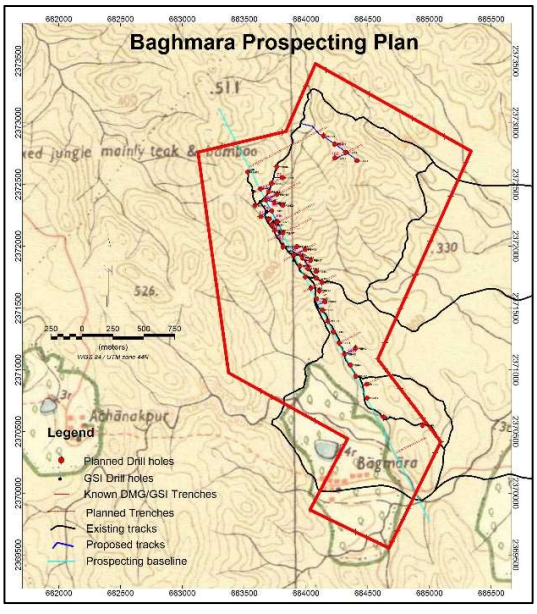
Vedanta Limited is a major multi-commodity mining group with excellent exploration experience for minerals. It has well experienced geoscientists who are targeting minerals with latest state-of-the art technologies both in grass-root exploration and detailed prospecting maintaining high HSE standards and is committed to preservation of ecological balance using best in class technologies. Vedanta Exploration operates under International Exploration protocols and uses JORC standards.

2. Location Map

Baghmara block is located in and around Baghmara and Achanakpur villages, Kasdol Tehsil, Balodabazar-Bhatapara District, Chhattisgarh and falls within the Survey of India Topo sheet No. 64 K/11 about 140 km ENE of Raipur the state capital.



Location Map of Baghmara Gold Block



Lease boundary on Topo sheet

3. Previous Exploration:

Baghmara block was previously explored for gold by the Directorate of Geology and Mining in two phases between 1981 and 1990 and subsequently from 2004 to 2007 part of the Project was investigated by the Geological Survey of India ("GSI") up to Preliminary Exploration (G3) stage of UNFC.

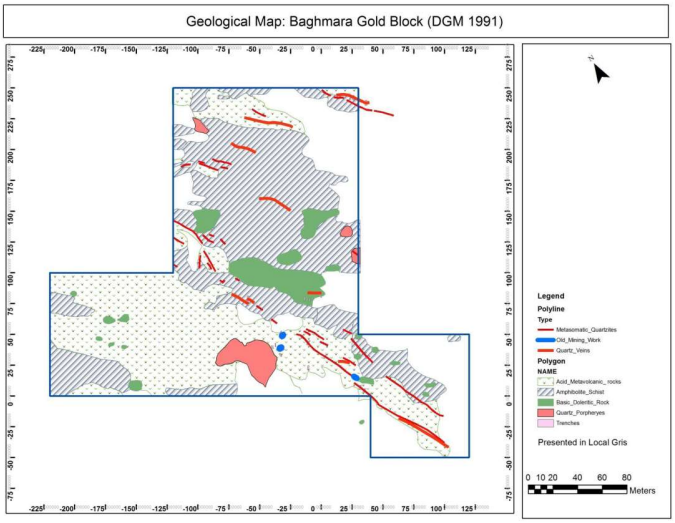
Details of historical investigations	DGM	GSI	Total
Number of Trenches Dug	25	7	32
Number of Trench Samples Collected	NA	62	62
Number of Boreholes Drilled	10	10	20
Drilled Meterage	1138.11 m	1696.35 m	2834.46 m
Number of Drilled Samples Collected	NA	359	359

Table 1: Quantum of previous exploration

Based on this G3 level of exploration, a gold ore resource of 0.9 Mt (average grade 3g/t Au) and 1.8Mt (average grade 0.7 g/t Au) has been estimated by the DGM Chhattisgarh and GSI respectively. A higher level exploration both along strike and dip directions is needed converting these resources into an economical minable resources.

4. Geology:

The block area exposes basic volcanics, acid volcanics and chert belonging to Baghmara formation of Early Proterozoic Sonakhan Group. Carbonaceous rock, of which surface exposures are concealed, was intersected in the boreholes in the north western part. Basic dykes and a number of quartz veins are exposed in the block area. The rocks have a general trend of N30°W with steep to moderate dips on either side and are affected by more than one generations of deformation. Most of the quartz veins also have trends of N30°W. The gold mineralization lies in a zone of intense shearing and brecciation with associated quartz – chlorite – carbonate alteration. Gold is associated with hydrothermal quartz (chert) –sulphide mineralization. The dominant sulphide is pyrrohtite followed by pyrite, arsenopyrite and chalcopyrite with occasional sphalerite. This auriferous sulphide suite is identical to that seen in global Greenstone Belts.



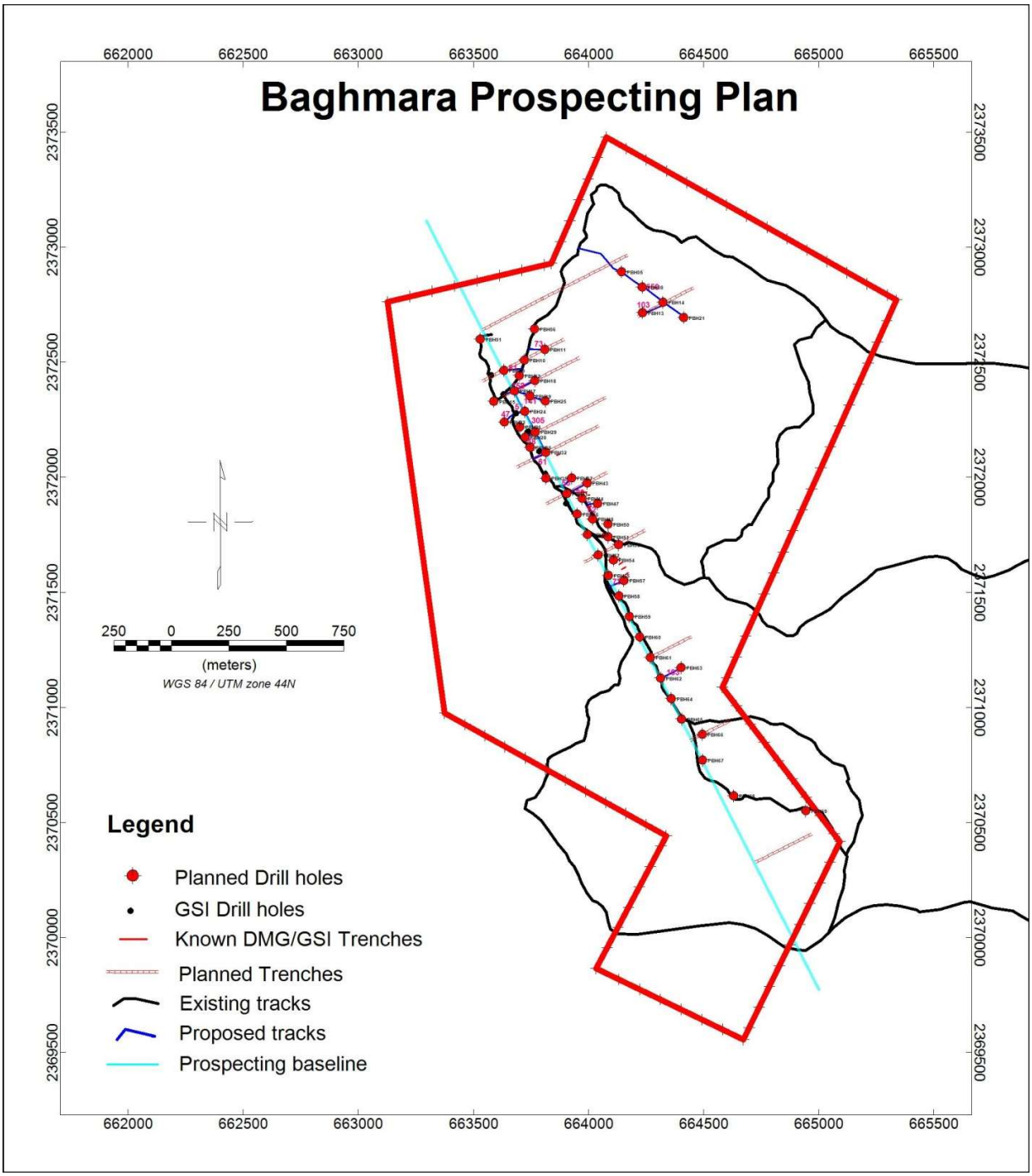
Geological map of the Area

5. Vedanta Prospecting Scheme:

In Baghmara gold block, Vedanta intends to conduct a systematic prospecting activity as per below scheme:

1) Prospect scale geological mapping (1: 2,000 scale) along with detailed topographic survey.
2) Satellite Data Remote Sensing Studies (Landsat, Aster & Cartosat data) for identification of spectral anomalies.
3) High resolution ground magnetic survey of entire block for supporting litho-structural mapping & shear zone identification (150 lkm)
4) High power Induced Polarisation – Resistivity survey for identification of chargeable zone which may host gold mineralization (20 lkm)
5) Drilling: Drilling will be driven by success in a staged manner over a period of three year for establishing strike and dip continuity of GSI intersections of the main target zone at specified intervals including testing of parallel or newer target zones. Infilling boreholes including deeper continuity testing also will be undertaken for attaining enhanced confidence level for R&R estimations. In case of necessity a motorized deviation drilling / drilling with different angles from same drill location will be undertaken for covering target at deeper levels from the same Collar. A total of 51 Drill Collar locations were selected for drill testing. All drill core litho-structural logging will be undertaken and interpreted sections will be generated with chemical assay and R&R estimations will be undertaken using Geo-statistics. Co-ordinates of the planned boreholes Collar positions are listed in the table enclosed to this report.
6) Geochemical Sampling: All samples are to be analysed for Gold by fire assay and 27 elements by ICPMS in a reputed lab.
    a. Rock chip / Drainage /Soil etc (760 nos samples)
    b. Trench channel sampling (about 11 trenches which include cleaning / reopening of old DGM & GSI trenches and sampling - 650 nos samples). Trench sampling was planned across quartz viens, cherty units, carbonaceous, BIF bands and other auriferous litho units.
    c. Drill core Sampling (7,000 nos)
7) Petro-mineralogical studies: Thin sections, polish sections, ore microscopy and whole rock analysis. 100 nos
8) Multi-disciplinary data integration and GIS analysis – Target generation, 3D Modeling and R&R estimations using Geostatistical tools.
9) Deeper holes, at least in alternate profiles may be drilled by Reverse Circulation (RC) methods or other non-coring methods for increasing the speed of drilling and reducing drilling cost.
10) Beneficiation studies: One or two bulk samples of drilled core or surface trench
11) Scoping and Pre-feasibility / Feasibility study
12) Mining Lease application

Above prospecting scheme and borehole locations are tentative and actual drilling and positioning may vary on the basis of outcome of each stage drilling.


Baghmara Prospecting Plan
662000
662500
663000
663500
664000
664500
665000
665500
2373500
2373000
2372500
2372000
2371500
2371000
2370500
2370000
2369500
250 0 250 500 750
(meters)
WGS 84 / UTM zone 44N
Legend
Planned Drill holes
GSI Drill holes
Known DMG/GSI Trenches
Planned Trenches
Existing tracks
Proposed tracks
Prospecting baseline

6. Prospecting Scheme:

The following quantum of work is proposed over a period of three years under gold prospecting scheme for testing economic viability and mine plan development if viable.

Prospecting Details	Quantum of Work proposed
Detailed Geological Mapping (1:2,000)	4.74 Sq km
Topographic survey	4.74 Sq km
High resolution Ground Magnetic Survey to support geological interpretation	150 lkm
High Power Induced Polarisation Survey to identify the disseminated sulphide zones at depth	20 lkm
Data integration and GIS analysis for Target generation	✓
Number of Borehole Collar positions: *(Motorised deviation drilling may be carried out from the same collar position if deeper testing of gold mineralisation is required)*	51 nos
Total drilling coverage (Core & non-core drilling) Staged	26,000 m
Number of Trenches	11 nos
Drilled core litho-structural logging, trench mapping, preparation of cross sections and interpretation.	✓
Geochemical Sampling & Analysis a) Rock Chip / Bed rock/ Soil/ Drainage..…….. b) Trench Sampling……... c) Drill core Sampling …… **TOTAL**	 760 nos 650 nos 7,000 nos ---------- **8,410 nos**
Petro-mineralogical studies	100 nos
3D Geological model preparation	✓
JoRC complaint Reserves & Resources estimations using Geostatistical tools	✓
Beneficiation studies	5 nos
Pre-feasibility studies	✓
Feasibility study	✓
Mining lease application	✓

Note: Quantum of work may vary based on outcome of the work completed.

7. Baghmara Planned Borehole Collar Positions

S.No	BHID	UTM_X	UTM_Y	Latitude	Longitude
1	PBH01-04	663529	2372601	21°26'54.33''	82°34'41.11''
2	PBH05	664143	2372894	21°27'03.66''	82°35'02.54''
3	PBH06-07	663765	2372645	21°26'55.68''	82°34'49.32''
4	PBH08	664233	2372827	21°27'01.45''	82°35'05.64''
5	PBH09	663632	2372465	21°26'49.87''	82°34'44.64''
6	PBH10	663721	2372510	21°26'51.31''	82°34'47.75''
7	PBH11	663810	2372556	21°26'52.77''	82°34'50.85''
8	PBH12	663699	2372443	21°26'49.14''	82°34'46.96''
9	PBH13	664234	2372716	21°26'57.84''	82°35'05.64''
10	PBH14	664323	2372761	21°26'59.27''	82°35'08.74''
11	PBH15-16	663588	2372331	21°26'45.53''	82°34'43.06''
12	PBH17	663678	2372376	21°26'46.97''	82°34'46.21''
13	PBH18	663767	2372421	21°26'48.40''	82°34'49.31''
14	PBH19-20	663745	2372354	21°26'46.23''	82°34'48.52''
15	PBH21	664413	2372695	21°26'57.10''	82°35'11.84''
16	PBH22-23	663634	2372241	21°26'42.59''	82°34'44.63''
17	PBH24	663723	2372287	21°26'44.06''	82°34'47.74''
18	PBH25	663812	2372332	21°26'45.49''	82°34'50.84''
19	PBH26-27	663701	2372220	21°26'41.87''	82°34'46.95''
20	PBH28	663724	2372175	21°26'40.42''	82°34'47.73''
21	PBH29	663768	2372198	21°26'41.15''	82°34'49.27''
22	PBH30-31	663747	2372130	21°26'38.96''	82°34'48.50''
23	PBH32-34	663814	2372109	21°26'38.24''	82°34'50.84''
24	PBH35-36	663815	2371997	21°26'34.59''	82°34'50.82''
25	PBH37-40	663926	2371998	21°26'34.58''	82°34'54.70''

S.No	BHID	UTM_X	UTM_Y	21°26'32.39''	82°34'53.93''
26	PBH41-42	663905	2371930	21°26'33.86''	82°34'57.04''
27	PBH43	663994	2371976	21°26'31.67''	82°34'56.25''
28	PBH44-45	663972	2371909	21°26'29.48''	82°34'55.46''
29	PBH46	663950	2371841	21°26'30.95''	82°34'58.57''
30	PBH47	664039	2371887	21°26'28.76''	82°34'57.79''
31	PBH48	664017	2371819	21°26'26.57''	82°34'57.00''
32	PBH49	663995	2371752	21°26'28.03''	82°35'00.12''
33	PBH50	664084	2371798	21°26'26.22''	82°35'00.12''
34	PBH51	664085	2371742	21°26'23.66''	82°34'58.56''
35	PBH52	664041	2371663	21°26'25.10''	82°35'01.67''
36	PBH53	664130	2371708	21°26'22.93''	82°35'00.88''
37	PBH54	664108	2371641	21°26'20.76''	82°35'00.09''
38	PBH55-56	664086	2371574	21°26'20.02''	82°35'02.43''
39	PBH57	664153	2371552	21°26'17.85''	82°35'01.66''
40	PBH58	664132	2371485	21°26'14.94''	82°35'03.19''
41	PBH59	664177	2371396	21°26'12.03''	82°35'04.72''
42	PBH60	664222	2371307	21°26'09.12''	82°35'06.29''
43	PBH61	664268	2371218	21°26'06.18''	82°35'07.82''
44	PBH62	664313	2371128	21°26'07.65''	82°35'10.93''
45	PBH63	664402	2371174	21°26'03.27''	82°35'09.39''
46	PBH64	664359	2371039	21°26'00.36''	82°35'10.92''
47	PBH65	664404	2370950	21°25'58.18''	82°35'14.02''
48	PBH66	664494	2370884	21°25'54.54''	82°35'14.02''
49	PBH67	664495	2370772	21°25'49.45''	82°35'18.65''
50	PBH68	664630	2370617	21°25'47.24''	82°35'29.52''
51	PBH69	664944	2370552	21°26'54.33''	82°34'41.11''

Baghmara Prospecting Project Cost

Total Area for Prospecting: 474.3 hectare

Activity	Approximate Cost INR lacs
1. Detailed Geological Mapping & Topographic Survey	20.00
2. Surface Geophysical Surveys (Magnetic, IP etc)	30.00
3. Core Drilling at 51 sites (About 26,000 m)	800.00
4. Geochemical analysis of about 8000 samples	100.00
5. Local Manpower hiring cost	20.00
6. Trench and other geochemical sampling	30.00
7. Logistics	20.00
8. CSR Activity	40.00
9. Team site office maintenance, security etc	40.00
10. Technical Consultants / expert hiring	50.00
11. Travel & accommodation cost of the team	50.00
TOTAL	**1200.00**

***

For Vedanta Limited

Shuvrendu Roy Choudhury
Head Mines