

PRE FEASIBILITY REPORT

Of

**Quartz and Feldspar
Sy No – 119 & 126/3, Kambampadu Village
A. Konduru Mandal,
Krishna District, Andhra Pradesh**

Area of Mining Lease –2.720 Ha

For

**1, 09,055.08 MT/Annum OF Quartz and
Feldspar Production**

By

M/s Aparna Enterprises Limited

Prefeasibility Report of Quartz & Feldspar of M/s Aparna Enterprises
Limited, Sy. No's. 119 & 126/3 of
Kambampadu (V), A.konduru (M), Krishna District, AP

EXECUTIVE SUMMARY

S. No	Parameter	Details																																													
1	Name & Address of the Applicant	M/s Aparna Enterprises Limited, #8-2-293/82/A,1214, Road No.60, Jubilee Hills, Hyderabad -500033. Mobile No +91 7995082023 Email: - krcreddy@viterotiles.com																																													
2	Total Extent of the project	2.720 Ha																																													
3	Location of the project	119 & 126/3																																													
4	Geo Co-ordinates	<table border="1"> <thead> <tr> <th>B.P No</th> <th>LATITUDE</th> <th>LONGITUDE</th> </tr> </thead> <tbody> <tr> <td>a</td> <td>N16°59'37.650"</td> <td>E080°38'14.020"</td> </tr> <tr> <td>b</td> <td>N16°59'36.350"</td> <td>E080°38'16.970"</td> </tr> <tr> <td>c</td> <td>N16°59'34.400"</td> <td>E080°38'16.300"</td> </tr> <tr> <td>d</td> <td>N16°59'34.040"</td> <td>E080°38'16.500"</td> </tr> <tr> <td>e</td> <td>N16°59'34.370"</td> <td>E080°38'17.010"</td> </tr> <tr> <td>f</td> <td>N16°59'34.270"</td> <td>E080°38'17.480"</td> </tr> <tr> <td>g</td> <td>N16°59'33.910"</td> <td>E080°38'17.480"</td> </tr> <tr> <td>h</td> <td>N16°59'33.590"</td> <td>E080°38'18.060"</td> </tr> <tr> <td>i</td> <td>N16°59'32.620"</td> <td>E080°38'20.760"</td> </tr> <tr> <td>j</td> <td>N16°59'30.340"</td> <td>E080°38'20.360"</td> </tr> <tr> <td>k</td> <td>N16°59'31.480"</td> <td>E080°38'18.500"</td> </tr> <tr> <td>l</td> <td>N16°59'28.900"</td> <td>E080°38'18.030"</td> </tr> <tr> <td>m</td> <td>N16°59'31.400"</td> <td>E080°38'14.210"</td> </tr> <tr> <td>n</td> <td>N16°59'35.310"</td> <td>E080°38'15.350"</td> </tr> </tbody> </table>	B.P No	LATITUDE	LONGITUDE	a	N16°59'37.650"	E080°38'14.020"	b	N16°59'36.350"	E080°38'16.970"	c	N16°59'34.400"	E080°38'16.300"	d	N16°59'34.040"	E080°38'16.500"	e	N16°59'34.370"	E080°38'17.010"	f	N16°59'34.270"	E080°38'17.480"	g	N16°59'33.910"	E080°38'17.480"	h	N16°59'33.590"	E080°38'18.060"	i	N16°59'32.620"	E080°38'20.760"	j	N16°59'30.340"	E080°38'20.360"	k	N16°59'31.480"	E080°38'18.500"	l	N16°59'28.900"	E080°38'18.030"	m	N16°59'31.400"	E080°38'14.210"	n	N16°59'35.310"	E080°38'15.350"
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		o	N16°59'35.280"	E080°38'15.150"
		p	N16°59'34.950"	E080°38'14.810"
		q	N16°59'35.700"	E080°38'13.320"
5	Total Mineable Reserves	6,92,545.46 MT		
6	Proposed Production	1,09,055.08 MT -Average annual production		
7	Life of the Mine	20 years		
8	Method of Mining	Open Cast Semi Mechanized Method		
9	Employment	52 persons		
10	Water Requirement	10 KLD		

1. INTRODUCTION OF THE PROJECT/BACKGROUND INFORMATION

(i) Identification of project and project proponent. In case of mining project, a copy of mining lease/ letter of intent should be given

M/s Aparna Enterprises Limited has been granted a quarry lease for Quartz & Feldspar over an extent of 2.720 Ha in Sy. No's 119 & 126/3 of Kambampadu (V), A. Konduru (M), Krishna District Andhra Pradesh State by Ass Director of Mines & Geology, Vijayawada, Notice No. 1648 / Q / 2018 dated 22 -11-2018. The copy of the lease letter is enclosed as annexure.

(ii) Brief description of the nature of the project

The proposed project is a Quartz & Feldspar over an extent of 2.720 Ha in Sy. No's 119 & 126/3 of Kambampadu (V), A. Konduru (M), Krishna District Andhra Pradesh State, The applicant proposed to produce 1,39,124.3 MT per annum from the subject quarry.

(iii) Need for the project & its importance to the country and or region

Quartz & Feldspar are used widely in the glass and ceramics industries. Albite, or soda spar as it is known commercially, is used in ceramics. The feldspar-rich rocks larvikite and a few anorthosites are employed as both interior and exterior facing slabs. Quartz & Feldspar has been used for hard stone carvings, sandpapers, sandblasting, and abrasives things.

Demand- Supply Gap

The Quartz & Feldspar which is produced from the subject Quarry will be used in ceramic and glass industry and used for abrasive mineral.

(iv) imports vs. Indigenous production

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The Quartz & Feldspar will be consumed in the domestic as well as international market

(v) Export possibility

The Quartz & Feldspar of this area will be sold to the Ferro Alloy Industries, Foundries, Ceramics and to Glass Industries, Located in and around Telangana and Andhra Pradesh. Quartz & Feldspar and Feldspar will be consumed in the domestic as well as international market hence it is export products.

(vi) Domestic/Export Markets

There is a possibility of Export. The Quartz & Feldspar will be consumed in the domestic and International market also

(vii) Employment generation (direct and indirect) due to the project

About 52 persons will be employed directly and indirect employment will also be provided in the form of helpers, drivers etc., It will provide employment to the people residing in vicinity.

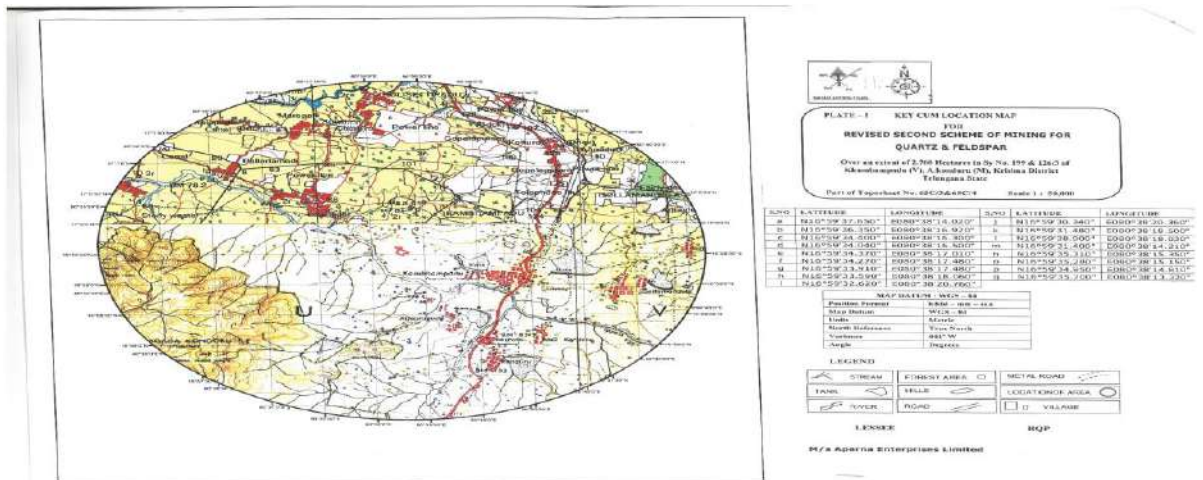
2. PROJECT DESCRIPTION

(i) Type of Project Including Interlinked And Independent Projects, If Any

The Subject project is a Quartz & Feldspar Quarry project located over an extent of extent of 2.720 Ha in Sy. No's 119 & 126/3 of Kambampadu Village, A.konduru Mandal, Krishna District Andhra Pradesh State, The applicant proposed to produce **1,09,055.08 MT** per annum of the subject quarry. Open Cast Semi Mechanized Method of Mining will be adopted.

(ii) Location (map showing general location, specific location, and project boundary & project site layout) with coordinates

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(iii) Details of Alternate Sites Considered and the basis of selecting the proposed site, particularly the environmental considerations gone into should be highlighted.

No Alternative sites were considered as it is site specific project.

(iv) Size or Magnitude of Operation

The total extent of the quarry lease area is 2.720 Ha and it is proposed to produce **1,09,055.08 MT** per annum from this quarry.

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The year wise production proposed is shown in the following table.

YEAR WISE PRODUCTION FOR 4 YEARS (Quartz & Feldspar)

Year	Sectional Area	Influence	Volume	Quartz		Feldspar		Quartz	Feldspar	Total Volume In T.F.
				T.F. (2.7)	T.F. (2.6)	Tons	Tons			
	(M ²)	(M)	(M ³)	@ R.P	(M ³)	@ R.P	(M ³)	Tons	Tons	
2 nd Year 2018-19	385	25	9,625	@30%	2,887.5	@70%	6,737.5	7,796.25	17,517.5	25,313.75
3 rd Year 2019-20	253	25	6,325	@30%	1,897.5	@70%	4,427.5	5,123.25	11,511.5	16,634.75
	982	48	47,136	@10%	4,713.6	@90%	42,422.4	12,726.72	1,10,298.24	1,23,024.96
	Total		53,461	6,611.1		46,849.9		17,849.97	1,21,809.74	1,39,659.71
4 th Year 2020-21	1292	44	56,848	@10%	5,684.8	@90%	51,163.2	15,348.96	1,33,024.32	1,48,373.28
5 th Year 2021-22	640	73	46,720	@30%	14,016	@70%	32,704	37,843.2	85,030.4	1,22,873.6
SUB-TOTAL			1,66,654	29,199.4		1,37,454.6		78,838.38	3,57,381.96	4,36,220.34
AVERAGE			41,663.5	7,299.85		34,363.65		19,709.59	89,345.49	1,09,055.08

(v) Project Description with Process Detail (a schematic diagram/ flow chart showing the project layout, components of the project etc. should be given)

The Mineral in the quarry lease applied area is proposed to quarry the sheet by Open Cast Semi Mechanized Method by deploying an Excavator will be deployed to slice the mineral vein (from one end to another) and load into trucks.

(vi) Demands-Supply Gap

The demand for Quartz & Feldspar has been steadily increasing over the years to the requirement of Ferro-silicon, silica refractories, glass and for moulding and casting purposes. The requirements of these products except glass are linked directly with iron & steel industry including alloy steel production. Further, setting up foundries and enhancing their capacities are also linked with metallurgical industry. It is reported that glass industry is expected to grow by 10% every year due to rapid rise in infrastructural activities in the country. At present the domestic market for Quartz & Feldspar crystal components of the annual demand is about 13 ~ 1.6 billion, annual growth rate of nearly 20%.

(vii) Availability of Water Its Source, Energy /Power Requirement and Source

The total water requirement of the project is 10KLd which will be used for Dust Suppression, Green Belt Development and Domestic Purposes. This water will be sourced from water tankers.

(viii) Exploration already carried in the area:

Applied area for grant of mining lease was demarcated on the ground with reference to revenue pillars. Later the topographical survey of the area was carried out by ETS.

SITE ANALYSIS

(i) Connectivity

(ii) The location of quarry is well connected with good infrastructure as National Highway connecting to A. Konduru town is at 10 Km away from the quarry and adequate availability of skilled manpower is available for quarry operations.

(iii) Land Form, Land Use and Land Ownership

The mining lease is located in govt land. The QL applied area is a flat area in the form of **Topography along with Map**

The quarry lease applied area is located on a part of plain land over the clay silty outcrop with a maximum elevation of less than 7 M above ground level within the quarry lease applied area. The lowest contour is 92 M and highest contour is 99 M in topo plan

(iv) Soil Classification

The soil observed in the area is Clay Sand Soil

(v) Climatic Data from Secondary Sources

The area is falling under semi-arid tropical zone. The area is having dry climate. The temperature recorded in this area is 25°C in winter and about 48°C in summer seasons. The wind direction is in SW to NE. The average annual rainfall of the area is 1000 mm.

(vi) Environmental Requirements:

Proper planning of Approach Roads, Crushing Plant with green belt management and water sprinkling of haul roads will achieve hygienic quarry. Closure and Reclamation program shall be strictly implemented after exhaustion of ore in the quarry.

(vii) Legal Parameters and Others :

The quarry lease is valid up to 20 Years and granted over in Govt. Land. The quarry is under operation without any hindrances, which indicates the public acceptance for quarrying. The quarry is providing an employment for local labour of about 25 members. The quarry authorities / owner has to strictly adhere to future forthcoming any new rules and regulations. The area is not situated in tribal area and any national parks are not situated in the surrounding area.
