## Indian Bureau of Mines Minerals Development and Regulation Division MCDR Inspection Report Hyderabad Regional Office.

Mine File No: AP/VZNR/Mn-127/Hyd Mine Code: 40APR20077

1) Name of Inspecting officer:	Shri. M.K. Kalmata
2) Designation	Regional Mining Geologist
3) Accompanying mine official with designation	Mr.D.K.Sahu, Mines Manager.
4) Date of Inspection	20.10.2023.

## Part-I: General

S.No.	Particulars	Details
1	Name of the Mine	Raja Rajeshwari Manganese Mine
2	Total Lease Area (Ha) with breakup of Non- forest and forest land	4.477Ha (Non-forest)
3	Mine code	40APR20077
4	IBM Registration Number under rule 45 of	IBM/4748/2011
5	fax number	M/s Barbil Mining & Industries Pvt.Ltd. Gurudwara Road, Barbil, Kendujhar Dist, Odisha-758035 Ph:-06767277339, Fax: 06767276858, E-mail:-works@barbilmining.com
6	Village	Itlamamidipalle
7	Taluka/Mandal	Ramabhadrapuram
8	District	VIZIANAGARAM
9	Pin code	NA
10	State	Andhra Pradesh
11	Post office	Itlamamidipalle
12	Nearest police station	Ramabhadrapuram
13	Nearest Railway station	Bobili
14	Date of Grant of Mining Lease	20.08.2008
15	Date of Execution	07/01/2009
16	Period	20 years, Valid up to 06-01-2029.

17	Name of the Nominated Owner with Address, phone, email, fax number and date of appointment	Name: Sri Anshul Kumar Agarwal, Door No 1615 1 <sup>st</sup> Floor, Salur bypass road, Ramabhadrapuram, VIZIANAGARAM Dist, A.P- 535579 Phone: 9494168114 Email: connect@barbilmining.com
18	Name of the Mine Agent with Address, phone, email, fax number and date of appointment	Shri N.K.Sahu, VIZIANAGARAM VIZIANAGARAM ANDHRA PRADESH Phone: 08964-204111, 94 94330870. E-mail:- works@barbilmining .com
19	Name of the Mines Manager with Address, phone, email, fax number and date of appointment in mines, qualification	Shri B.K.Sahu, Raja Rajeshawari Manganese Mine, Itlamamidipalli-village, Ramabhadrapuram-Mandal, Vizianagaram District, Andhra Pradesh. D.O.A:-18-11-2009. Ph: 9494168114 Email: works@barbilmining.com
20	Name of the Mining Engineer & Geologist, Qualification and date of appointment in mine,	Mining Engineer: .B.K.Sahu Qualification: B.E.Mining D.O.A.: 18.11.2009  Geologist: Mr. Durga Prasad Tedda. Qualification:- Msc, Geology. DOA: NA
21	Date of Approval of Mining Plan/Modified Mining Plan with five-year period and specific condition in approval letter, if any.	Review of Mining plan AP/VZNR/MP/Mn-89, dated 17-01-2019 YD
22	Name of the Mineral	Manganese
23	Method of Mining(Opencast, Underground)	Opencast
24	Category (Fully Mechanized, Others or Manual)	Category – A (Fully Mechanized)
25	Captive/Non Captive	Non-Captive

	PART-II				
	oration :				
Sl. No.	Item	Proposals	Actual Work	Remarks	
la	Backlog of previous year	None in the year 2022-23 & 2023- 24.	Drilled 06 exploratory boreholes in the year 2023-24.	Lessee has drilled 19 DTH exploratory borehole in the year 2020-21	
1b	Exploration over lease area for geological axis 1 or 2	None in the year 2022-23 & 2023- 24.	Drilled 06 exploratory boreholes in the year 2023-24.	Exploration is carried out to convert G-2 level to G-1.	
1c	Exploration Agencies and Expenditure in lakh rupees during the year	None in the year 2022-23 & 2023- 24.	Expenditure incurred on exploration carried out in the year 2023-24 is 7lakhs	And expenditure made so far is 11 lakhs	
1d	Balance area to be explored to bring Geological axis in 1 or 2	None in the year 2022-23 & 2023-24.	Converted 0.6383Ha into G-1 level from G-2 level.	Total lease area is 4.477Ha, out of which, 0.6383Ha is explored under G-1 level, 0.2917Ha, under G-2 & remaining 3.5470 ha is proved as non- mineralized area. Lessee has drilled 25 exploratory boreholes in the lease area. However, drilling was not carried out in the grid pattern suitable to the nature of the deposit. So in the	

				draft RMP lessee has given proposal to explore entire mineralized area under G-1 level.
1e	Balance reserves as on 01/04/2017	As per the approved document dated 17-01-2019 (In tonnes) Probable Mineral Resources (122) - 75432 Prefeasibility Resources (222) - 9556.4 tonnes, Total:- 84988.4 tonnes	Reserves/resources as on 01.04.2023 is as follows:- Probable Mineral Reserves (122) :- 1802 T, Prefeasibility M Resources (222) - 9556.4T Total:- 11358T. The figures are updated by depleting production carried out from 01-01.2019 to 31.03.2023.	However, lessee has drilled 25 exploratory boreholes in the block period of 2019 -20 to 2023-24 (19 in 2020-21 & 06 in 2023-24). Based on exploration carried out lessee has updated reserves/resources in the Draft RMP and figures of reserves/resources are increased. However, since the document is under scrutiny stage on the day of inspection figures of the same are not mentioned in this report.

1f General The Region forms a Total lease area is remarks of part of the plains that 4.477Ha, out of inspecting border the Eastern which, 0.6383Ha is officers on Ghat hill ranges and is explored under G-1 geology, exploration etc. occupied by the level, 0.2917Ha, under G-2 & Khondalite group of remaining 3.5470 ha rocks, namely, garnetsillimanite-graphite is proved as nonschists/gneisses, mineralized area. garnetiferous Lessee has drilled 25 quartzites, calc exploratory gneisses/granulites, boreholes in the migmatites and lease area. However, pegmatites/quartz drilling was not carried out in the veins. Manganese ore occurs as grid pattern suitable discontinuous bands to the nature of the or lenses in platy deposit. So in the draft RMP lessee has manganiferous felspathic qurtzites. given proposal to The latter shows explore entire effects of folding in mineralized area the form of en under G-1 level. echelon drag folds. The ore zone strikes in a general E-W to to N70W to S70E direction with dips of 68 - 70 towards south.Soil and murrum of 0.5m to 1.5m in thickness, average being 1m, occurs as overburden

lopment :		average being 70 and is towards south	
	1		
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			as it is a old mine on negligible quantity of soil available. The ore zone extends over a strike length of about 170m with width varying from 20m to 40m, thus exhibiting pinching and swelling characteristics along the strike direction. The dip is generally steep, the

Devel	Development:					
Sl.N	Item	Proposals	Actual Work	Remarks		
0.						
2a	Location of development w.r.t. lease area	in the approved document there was a proposal to work between the co-ordinates N 110 to N 170 and E95 to E160	Actual working is carried out between the co-ordinates N 75 to N 120 and E 100 to 180.	The working has been not carried out within the proposed limits. However, lessee has submitted draft review of mining plan with updated pit survey with new proposals so no violation is pointed out for deviation in workings. Further, advised lessee to submit proposals in		

2b	Separate benches in	Yes proposed	Benches are existing in	National grids.
	topsoil, overburden and minerals (Rule-15)	separate benches in OB and Ore	ore and OB.	
2c	Stripping ratio of ore to OB ratio	1:2.0	1:1.25	
2d	Quantity of topsoil generation in m3	None.	None.	
2e	Quantity of overburden generation in m3	3860 CUM	7700 CUM	Out of which about 2500 CUM is generated from recovery of the saleable ore from ROM and remaining is OB and intercalated waste.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc.		The formation is soft in nature and bench parameters are not maintained as per the proposal. Since violation is already pointed out for the same by ACOM no	

			fresh violation is pointed out. Further, lessee has submitted draft RMP for approval with revised proposal. Advised lessee to carry out slope stability study and modify the bench parameters as per the recommendations of the study report.	
	oitation :			
Sl.N	Item	Proposals	Actual Work	Remarks
3a	Number of pit proposed for production	One.	One	Dimension of the pit is 176.1m (L) x 134.6m(W) x 25m(h)
3b	Quantity of ROM mineral production proposed	16212 tonnes	12610 tonnes	
3c	Recovery of saleable / usable mineral from ROM production	100%	60% (Total ROM production is 12610 out of which only 7620 tonnes is shown under grade wise production and reaming quantity is shown as waste.	In the approved document recovery is not mentioned correctly. In the draft review of Mining plan lessee as corrected the recovery factor.
3d	Quantity of mineral reject generation	None in the year 2022-23 & 2023-24.	None	Saleable mineral is shown only 60% of the ROM and

				remaining 40% is pure waste rock which is having Mno2 % below threshold value.
3e	Grade of mineral rejects generation and threshold value declared.	Not applicable.	Not applicable.	
3f	Quantity of subgrade mineral generation.	None in the year 2022-23 & 2023-24.	None	
3g	Grade of subgrade mineral generation.	Not applicable.	Not applicable.	
3h	Manual / Mechanized method adopted for segregating from ROM	Mechanised.	Mechanized.	
3i	Any analysis or beneficiation study proposed and carried out for subgrade mineral and rejects	None.	None.	Lessee is doing only size separation by screening plant.
3ј	Provision of drilling and blasting in mineral benches	yes proposed drilling and blasting.	Lessee is doing drilling and blasting as per the proposal.	using

3k	Provision of mining machineries in mineral benches	Yes, proposed combination of excavator and tippers.	Lessee is using excavator of 0.8CUM and tippers of 16 ton capacity for production and development.	Additionally, using drilling machine of 115 mm for drill blast holes.
31	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	Proposed 3 mtrs bench height.	Bench height was maintained 5.00 to 6.00mtr in the Southern side and benches were irregular in Northern side.	The violation was pointed out for the same by ACOM during his previous inspection so no fresh violation was issued. Further, lessee has submitted draft Review of Mining Plan for approval and in propsals is given to rectify the benches by carrying out slope stability test.
3m	Total area covered under excavation / pits	2.0915Ha up to 2023-24	2.37Ha	To advance the pit top bench was moved in the northern side of the lease area and roads also taken in pit area only. So, the broken up area is more than the proposal. Lessee as submitted Draft RMP for the next

				five year block period and updated pit details, so no violation is pointed out for the same.
3n	Ore to OB ratio for the pit/mine during the year.	1:2.0 in the year 2022-23.	1:1.25 in the year 2022-23.	The production achieved is lessee than the proposal so the there is a deviation in Ore to OB ratio.
30	Total area put in use under different heads at the end of year	Area under Mining- 2.0915Ha, waste dump-0.7154Ha, Mineral storage- 0.0128Ha, Infrastructure;- 0.5659Ha	Area under mining:- 2.37Ha, Area under dumps:-0.58Ha, Mineral storage:- 0.02Ha, Infrastructure:- 0.56.	The area shown under roads is also covered under pits area also. If we delete roads from pits actual area covered under pits is 2.05Ha only.
3p	Production of ROM mineral during the last five year period as applicable	2023-24 - 16584T 2022-23 - 16212T 2021-22 - 15212T 2020-21 - 14212T 2019-20 -13212T	2023-24 -3450T ( up to Sep 23) 2022-23 - 12610T 2021-22 - 10300T 2020-21 - 22740T 2019-20 -20110T	
3q	General remarks of inspecting officers on method of mining etc.		The method mining adopted is fully mechanized. Using combination of excavator and tippers for production and development. Doing	

deep hole drilling and
blasting for loosening
of strata. During field
visit it is observed that
benches are not made
as per the proposal.
Since the violation was
issued for the same by
ACOM during previous
inspection no fresh
violation is pointed
out. However, advised
lessee to carryout
slope stability study
and modify the bench
parameters as per the
recommendations of
study report.

Solid Waste Management - Dumping:

Sl.N	Item	Proposals	Actual Work	Remarks
0.				
4a	Separate	Yes proposed	Dumping of waste rock	However, during
	dumping of	separating dumping	is made separately in	inspection it was
	topsoil, OB and mineral	of waste rock.	the year 2022-23 and	observed that
	rejects (Rule		2023-24.	lessee has made
	32, 33)			waste dumping
				outside the lease
				area. Since the
				violation was
				already issued by
				the ACOM during
				his previous
				inspection, no
				fresh violation is
				issued for the

				same. However, advised lessee to remove the proposals given in the draft RMP submitted for the next plan period for dumping waste outside the lease area.
4b	Location of topsoil, OB and mineral reject dumps	In the present block period (2019-20 to 2023-24) Proposal was given to dump waste outside the lease area.	Dumping of waste was made outside the lease area. Further, two old dumps are existing within the lease area one big dump in the northern side the lease boundary and one small dump in the southern side of the lease boundary.	In the last approved document, the dumping of waste outside the lease area was given; however, lessee has not taken clearances from pollution control board, for dumping waste outside the lease area. Only State Government of AP recommended to DMG,AP for further necessary action w.r.t application made by the lessee for dumping outside the lease.

4c	Number of dumps within lease area and outside of lease area	For the block period 2019-20 to 2023-24, waste dumping was proposed outside the lease area.	One waste dump is existing outside the lease area.	Two old dumps are existing inside the lease area.
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	Outside the UPL.	Outside the UPL	
4e	Number of active and alive dumps.	One outside the lease area.	One outside the lease area.	In the last approved document, Proposal was given to dump waste rock generated outside the lease area. However, lessee has not taken clearances from pollution control board, for dumping waste outside the lease area. Only State Government of AP recommended to DMG,AP for further necessary action w.r.t application made by the lessee for dumping outside the lease.

4f	Number of dead dumps.	None in the year 2022-23 & 2023-24.	Two inactive dumps are exiting within the lease area.	Plantation is made on the dump existing in the Northern side of the lease area.
4g	Number of dumps established.	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	However, plantation is made on the dump existing in the Northern side of the lease area.
4h	Whether retaining wall or garland drains all along dumps are there.	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	
4i	Length of retaining wall or garland drain all along dumps.	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	
4j	Number of settling ponds	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	
4k	Specific comments of inspecting officers on waste dump management .		In the last approved document, Proposal was given to dump waste rock generated outside the lease area. However, lessee has not taken clearances from pollution control board, for dumping	Since the violation was already pointed out by ACOM for dumping outside the lease area no fresh violation is pointed out. However, advised lessee to

			waste outside the lease area. Only State Government of AP recommended to DMG,AP for further necessary action w.r.t application made by the lessee for dumping outside the lease.	give dumping proposals within the lease only in the draft RMP submitted for approval.
			ement - Backfilling:	
Sl.N	Item	Proposals	Actual Work	Remarks
5a	Status of part or full extraction of mineral from mined out area before starting backfilling	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	Mineral is not exhausted up to the proved level so no backfilling is proposed in the block period 2019-20 to 2023-24. However, earlier back filling is made in the top waste benches for rectification of the benches in the North western side.
5b	Area under backfilling of mined out area	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	Earlier back filling is made in the top waste benches for rectification of the benches in the North western side.

5c	Concurrent use of topsoil for restoration or rehabilitatio n of mined out area (Rule 32)	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	
5d	Total area fully reclaimed and rehabilitated	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	Earlier back filling is made in the top waste benches for rectification of the benches in the North western side. Area covered is approximately 0.035Ha and plantation is made partially.
5e	General remarks of inspecting officers on backfilling and reclamation etc.		No back filling proposed and made in the present block period. However, earlier back filling is made in the top waste benches for rectification of the benches in the North western side. Area covered is approximately 0.035Ha and plantation is made partially.	
	1	Progressive Mi	ne Closure Plan :	

Sl.N o.	Item	Proposals	Actual Work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 26(2)	Before 1st July of every year.	Submitted yearly report on PMCP within the prescribed time limit.	PMCP report submitted on 28.06.2023 along with the Annual returns submitted for the year 2022- 23.
6b	Area available for rehabilitatio n (ha)	None.	None	
6c	Afforestatio n done (ha)	0.088Ha in the year 2022-23.	Plantation already existed in the 7.5 mtr safety zone. So no plantation was made within the lease area.	However, lessee has planted 100 sapling outside the lease area(adjacent to lease area)
6d	No. of saplings planted during the year	100 in the year 2022- 23.	None within the lease area.	100 outside the lease area.
6e	Cumulative no. of plants	500 saplings in the block period 2019-20 to 2023-24.	335 saplings in the present block period up to 2022-23.	Total plantation made so far is 1835 saplings. Since the vegetation is already existing in the 7.5 mtr safety zone. Lessee has made plantation outside the lease area just adjacent to lease.

6f	Any other method of rehabilitatio	None.	None.	
6g	Cost incurred on watch and care during the year	None.	No information is available.	
6h	Compliance on reclamation and rehabilitatio n by backfilling (i) Voids available for backfilling (LxBxD)	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	Earlier, about 0.08 ha in the North- western part of te top benches backfilled for rectification of benches. No mineral exhausted voids are backfilled so far.
6i	Compliance on reclamation and rehabilitatio n by backfilling (ii) Voids filled by waste / tailings	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	
6j	Compliance on reclamation and rehabilitatio n by backfilling (iii) Afforestatio n on	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	

	backfilled			
	area			
6k	Compliance	None in the year	None in the year 2022-	
	on	2022-23 & 2023-24.	23 & 2023-24.	
	reclamation	2022 23 & 2023 24.	25 & 2025 24.	
	and			
	rehabilitatio			
	n by			
	backfilling			
	(iv)Rehabilit			
	ation by			
	making			
	water			
	reservoir			
61	Compliance	None in the year	None in the year 2022-	
	on	2022-23 & 2023-24.	23 & 2023-24.	
	reclamation			
	and			
	rehabilitatio			
	n by			
	backfilling			
	(v) any other			
	specific			
	means.			
6m	Compliance	None in the year	None in the year 2022-	
	of	2022-23 & 2023-24.	23 & 2023-24.	
	rehabilitatio	2022-23 & 2023-24.	23 & 2023-24.	
	n of waste			
	land within			
	lease (i)			
	afforestation			
6n	Compliance	None in the year	None in the year 2022-	
	of	2022-23 & 2023-24.	23 & 2023-24.	
	rehabilitatio		25 & 2025 24.	
	n of waste			
	land within			
	lease (ii)			
	Area			
	rehabilitatio			
	n (ha)			
60	Compliance	None in the year	None in the year 2022-	
	of			

	rehabilitatio n of waste land within lease (ii) Method of rehabilitatio n	2022-23 & 2023-24.	23 & 2023-24.	
6р	Compliance of environment al monitoring (core zone and buffer zone)	Yes, Air, Water and Noise monitoring was proposed in Core and Buffer zone.	Environmental monitoring in the core and buffer zone is carried out as per the proposal and results are within permissible limits.	Environmental monitoring is carried out by Spectra Envirotech Pvt.Ltd.,Vizag.
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		Only plantation was proposed under PMCP. Since vegetation was already existing in the 7,5 mtrs safety zone. Plantation was made outside the lease area. Carried out environmental monitoring in the core and buffer zone and results are within permissible limits.	
Mine	ral Conservati	on:-		
Sl.N o.	Item	Proposals	Actual Work	Remarks
7a	ROM mineral dispatch or gradewise sorting within lease area	Grade wise sorting within the lease area.	Grade wise sorting within the lease area.	Lessee is doing screening and zigging for separation of waste, + 10 mm to -30mm and over

				size(+30mm).
7b	Method of gradewise mineral sorting i.e. manual or mechanical	Mechanical	Mechanical.	Lessee is doing screening and zigging for separation of waste, + 10 mm to -30mm and over size(+30mm).
7c	Different grade of mineral sorted out at mines	Below 25% Mn ore and 25 to below 35% Mn ore.	Below 25% Mn ore and 25 to below 35% Mn ore.	
7d	Any beneficiatio n process at mines	None.	None,	Lessee is doing screening and zigging for separation of waste, + 10 mm to -30mm and over size(+30mm).
7e	General remarks of inspecting officers on mineral conservation and beneficiatio n issues.		Lessee is doing screening and zigging for separation of waste, + 10 mm to - 30mm and over size(+30mm).	
	onment:-		A	T
Sl.No	Item	Proposals	Actual Work	Remarks
8a	Separate removal and utilization of topsoil	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	In the block period 2019-20 to 2023-24 working was proposed in

	(Rule 32)			the already broken up area only. So no topsoil was produced.
8b	Concurrent use or storage of topsoil	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	In the block period 2019-20 to 2023-24 working was proposed in the already broken up area only. So no topsoil was produced. However, the topsoil removed in the past was utilized for plantation work.
8c	Separate dumps for overburden , waste rock, rejects and fines (Rule 33)	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	
8d	Use of overburden , waste rock, rejects and fines dumps for restoring the land to its original	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	

	use			
8e	Phased restoration, reclamatio n and rehabilitati on of land affected by mining operations (pits, dumps etc.)	None in the year 2022-23 & 2023-24.	None in the year 2022- 23 & 2023-24.	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)	Baseline information was furnished in the mining plan. Additional plantation proposals are being given in the Mining Plan documents.	Additionally lessee has planted about 335 saplings within the lease area. Thick vegetation already exists in the 7.5 mtr safety zone. So lessee has made plantation in outside the lease also	
8g	Survival rate	None.	65 to 70%	
8h	Water sprinkling on roads to control airborne dust	yes proposed.	Regularly spraying water on the working benches, Haul road etc.	Lessee is using hired water tanker for spraying water on haul roads.
8i	General remarks of inspecting officers on aesthetic beauty in and around mine areas.		Most of the area is degraded by mining activity. Benches are not maintained systematically in the northern part. Since violation is already pointed out by ACOM	

no fresh violation is
issued for the same.
Advised lessee to carry
out slope stability study
and revise the bench
proposals as per the
recommendation based
on the study. Plantation
is existing in the 7.5 mtr
safety zone and on
inactive dump existing
in the northern portion
of the lease.

**Compliance of Rule 45:** 

Sl.N	Item	Proposals	Actual Work	Remarks
0.				
9a	Status of submission of monthly and annual returns	A monthly return shall be submitted before the tenth day of every month in respect of the preceding month and an annual return shall be submitted before the 1st day of July each year for the preceding financial year.	Submitting Monthly and Annual returns within the time limit.	Submitted Annual returns for the year 2022-23 on 28-06-2023.
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and	Details of the Mining Engineer, Geologist and Mines Manager are as follows. Mining Engineer & Mines Manager:- Mr.	The details furnished in the Annual returns submitted for the year 2022-23 are found correct.	

	Manager	D.K.Sahu. Geologist:- Mr. Durga Prasad Tedda.		
9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	Area under current workings:-2.091Ha, waste disposal:- 0.658Ha, Reclamation and Rehabilitated area:-0.034Ha, Infrastructure:- 0.546Ha	The information furnished in the annual returns submitted for the year 2022-23(as on 31.03.2023) is found correct.	However, as on September 2023, the land use details are as follows. Area under mining:- 2.37Ha, Area under dumps:-0.58Ha, Mineral storage:- 0.02Ha, Infrastructure:- 0.56.
9d	Scrutiny of Annual return on afforestation	100 saplings outside the lease area.	The information furnished is found correct.	
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	None.	None.	Recovery is shown only 60% and remaining 40% is pure waste and no mineral reject was generated in the year 2022-23.
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM: Opening stock- 170 tonnes, Production:- 12610tonnes and closing stock:- 160 tonnes. Grade wise details:- Below 25%Mn:- opening	The information furnished is found correct.	Out of 12610 tonnes of ROM production, grade wise production is shown only 7620 tonnes and remaining quantity is pure waste rock

		stock-330.070 tonnes, production- 4820T, dispatch- 4900T and closing stock-250.070T 25 to below 35%Mn ore:- opening stock and closing stock:-100 and production and dispatch:-2800T		and same is mentioned under OB and waste disposal.
9g	Scrutiny of Annual return on Sale value, Ex Mine price and production cost	Sale value & ex-mine price of below 25Mn grade ore is Average-Rs 2994/ton and for 25 to below 35%Mn ore Ex-mine price and sale value is mentioned as Rs 8498/ton and cost of production given is Rs 4762/ton	The details furnished in the Annual returns submitted for the year 2022-23 are found correct.	
9h	Scrutiny of Annual return on fixed assets	Value of fixed asset was shown as Rs- 47128504.	The details furnished in the Annual returns submitted for the year 2022-23 are found correct.	
9k	Scrutiny of Annual return on mining machineries	Shovel-0.8CUM-02, Tippers of 16 ton capacity-04, one loader of 2.0CUM.	The details furnished in the Annual returns submitted for the year 2022-23 are found correct.	

Date:-	(KALMATA.M.K)
	Indian Bureau of Mines