

**INDIAN BUREAU OF MINES  
MINERALS DEVELOPEMMENT AND REGULATION DIVISION**

**MCDR INSPECTION REPORT**

**Bhubaneshwar regional office**

**Mine file No :** ORI/CR/JJP/MCDR-3/BBS

**Mine code :** 11ORI19004

- (i) Name of the Inspecting : **DEY** ) **NARENDRA MOHAN DEY**  
Officer and ID No.
- (ii) Designation : Assistant Mining Engineer
- (iii) Accompanying mine : **SHRI B K GIRI, MANAGER, SHRI A MISHRA, MINING ENGINE**  
Official with  
Designation
- (iv) Date of Inspection : 02/11/2015
- (v) Prev.inspection date : 10/12/2014

**PART-I : GENERAL INFORMATION**

1. (a) **Mine Name** : **KAMARDA**
- (b) **Registration NO.** :
- (c) Category : A Other than Fully Mech.
- (d) Type of Working : Opencast
- (e) Postal address
- State : ORISSA
- District : JAJPUR
- Village : KAMARDA
- Taluka : SUKINDA
- Post office : KANSA
- Pin Code : 755028
- FAX No. : 0671-2620347
- E-mail :
- Phone : 0671-2349546
- (f) Police Station :
- (g) First opening date : 22/02/1963
- (h) Weekly day of rest : SUN
2. Address for : VILLAGE: KALIAPANI, PO: KALIAPANI  
correspondance DIST: JAJPUR,ORISSA.  
PHONE:06726- 68722
3. (a) Lease Number : ORI0232
- (b) Lease area : 107.24
- (c) Period of lease : 20
- (d) Date of Expiry : 21/02/1988
4. Mineral worked : CHROMITE Main

## 5. Name and Address of the

Lessee : B.C.MOHANTY  
 AT/PO : RAJABAGICHA  
 CUTTACK ORISSA  
 Phone:620347, 621030  
 FAX :620347

Owner : B.C.MOHANTY  
 AT/PO:RAJABHAGICHA  
 CUTTACK ORISSA  
 Phone: 620347, 621030  
 FAX : 620347

## Mining Engineer

Name : SHRI B K GIRI,Full Time  
 Qualification : AMIE (MINING ENGNIEERING)  
 Appointment/ : 01/01/2008  
 Termination date

## Geologist

Name : SHRI S K PATNAIK,Full Time  
 Qualification : M SC (GEOLOGY)  
 Appointment/ : 01/02/2009  
 Termination date

## Manager

Name : VIJAY KANTIGIRI  
 Qualification :  
 Appointment/ : 02/05/2006  
 Termination date

## Manager

Name : N.PANIGRAHI  
 Qualification : DIPLOMA IN M.E. 1ST CLASS MINES MANAGER  
 Appointment/ : 02/05/2006  
 Termination date

## Manager

Name : K.K.SAHU  
 Qualification : PERMIT MANAGER.  
 Appointment/ : 02/05/2006  
 Termination date

6. Date of approval of Mining Plan/Scheme of Mining	:	Mining Scheme rule 12 MCDR1988	03/01/2005
		Mining Scheme rule 12 MCDR1988	06/05/2007
		Renewal under rule 24 MCR1960	27/02/2008
		Modif.approved Mining Scheme	03/02/2011
		Modif.of approved Mining Plan	03/02/2011
		Modif.of approved Mining Plan	08/03/2013
		Mining Scheme rule 12 MCDR1988	26/03/2013

## PART - II : OBSERVATION/COMMENTS OF INSPECTING OFFICERS

## Exploration :

Sl.No.	Item	Proposals	Actual work	Remarks
1a	Backlog of previous year	2013-14 : 10 BH 2014-15: 7	2013-14 : 25 BH 2014-15: 10 BH	
1b	Exploration over lease area for geological axis 1 or 2	2014-15: 7 BH	2014-15 : 10 BH LEASE AREA ALREADY EXPLORED OUT OF TOTAL LEASE AREA 107.24 HA AS PER UNFC NORMS AS ON 31.09.2015 IS AS FOLLOWS: UNDER G1 LEVEL : 18. 761 HA, BH DRILLED 51 NOS, METERAGE DRILLED 1775.85 M UNDER G2 LEVEL : 11.548 HA, BH DRILLED 01 NO. UNDER G3 LEVEL : 7.929 HA, BH DRILLED 03 NOS, METERAGE DRILLED 182 M EXPLORED AND FOUND NON- MINERALISED : 8.324 HA, BH DRILLED 05 NOS, METERAGE DRILLED 594.10 M UN-EXPLORED LEASE AREA 60.678 HA	
1c	Exploration Agencies and Expenditure in lakh rupees during the year		Rs.3495070 /-	
1d	Balance area to be explored to bring Geological axis in 1 or 2	2013-14: 10 BH, 2014-15 : 7 BH, 2015- 16: 7 BH, 2016-17: 5 BH, 2017-18: 7 BH UNEXPLORED LEASE AREA : 60.678 HA.	2013-14: 25 BH, 2014-45: 10, 2015-16: NIL	MINING OPERATION WAS DISCONTINUED FROM 16.09.2014 TO 16.10.2015.

1e	Balance reserve as on 01/04/20	AS PER SCHEME OF MINING APPROVED ON 26.03.2013 RESERVES AS PER UNFC CLASSIFICATIO N AS ON 01.04.2013 IS AS FOLLOWS: 111: 460050 MT + 122: 788100 MT + 222: 4200 MT + 333: 223350 MT = 1475700 MT	PRODUCTION DURING 2013- 14: 87891.720 MT + 2014- 15: 41300 MT= 129191 MT BALANCE RESERVES AFTER DEPLETION AS ON 01.04.2015 : 1346509 MT ( 1475700 MT - 129191 MT)	MINING OPERATION WAS DISCONTINUED FROM 16.09.2014 TO 16.10.2015.
1f	General remarks of inspecting officers on geology, exploration etc		DURING 2013-14 TO 2014- 15 BORE HOLE DRILLED 35 NOS AGAINST THE PROPOSED 17 NOS. TOTAL METERAGE DRILLED 1744.100 M. RESERVE AS ON 01.04.2015 IS 1346509 MT.	THE EXPECTED LIFE OF THE MINE ABOUT 9 YEARS AFTER SCHEME PERIOD i.e AFTER 01.04.2018 ON THE BASIS OF AVERAGE ANNUAL RATE OF PRODUCTION 88000 TONNE. BESIDES ON COMPLETION OF PROPOSED DRILLING THE RESERVE MAY BE ENHANCED AS THE RESOURCES 333 CONVERTED TO PROVED 111 AND ADDITIONAL RESERVES IN DEPTH IS LIKELY TO BE ADDED.

---

Development :

Sl.No.	Item	Proposals	Actual work	Remarks
2a	Location of development w.r.t.lease area	88S -281 S / 84 E V-237 E 88 N -573 N / 360 W -18 E	88 S - 281 S / 84 E -237 E 88 N -573 N / 360 W -18 E	

2b	Separate benches in topsoil, overburden and minerals (Rule 15)	SEPARATE BENCHES IN OB AND MINERALS	QUARRY : 1 NO OF OB BENCHES 11, NO OF BENCH IN ORE NIL QUARRY : 2 NO OF OB BENCHES 12, NO OF BENCH IN ORE NIL QUARRY 3 & 4 : NO OF OB BENCHES 13, NO OF BENCH IN ORE 1	
2c	Stripping ratio or ore to OB ratio	1 : 4.80	1 : 4.80	
2d	Quantity of topsoil generation in m3	NIL	NIL	
2e	Quantity of overburden generation in m3	405700 CUM	124645 CUM	MINING OPERATION WAS DISCONTINUED FROM 16.09.2014 TO 16.10.2015.
2f	General remarks of inspecting officers on development of pit w.r.t. type of deposit etc			MINING OPERATION WAS DISCONTINUED FOR NEARLY 6 MONTHS DURING 2014-15 FROM 16.09.2014 TO 16.10.2015 , THERE WAS LESS DEVELOPMENT

---

### Exploitation:

Sl.No.	Item	Propasals	Actual work	Remarks
3a	Number of pit proposed for production	TWO	QUARRY 1 & 2 MERGED INTO ONE QUARRY 3 & 4 MERGED INTO ONE	
3b	Quantity of ROM mineral production proposed	87750 MT	41300 MT	MINING OPERATION WAS DISCONTINUED FOR NEARLY 6 MONTHS DURING 2014-15.
3d	Quantity of mineral reject generation	NIL	NIL	

3e	Grade of mineral rejects generation and threshold value declared.	LESS THAN 10% Cr2O3	NIL
3f	Quantity of sub grade mineral generation.	57000 MT	31941 MT
3g	Grade of sub grade mineral generation	<p>THE GENERATION AVERAGE FEED OF OF THE OF SUB-GRADE COBP AROUND 23% Cr2O3. ORE (10 TO 40% Cr2O3) AROUND 65 % OF THE TOTAL PRODUCTION. BALANCE 35% BEING MORE THAN 40% Cr2O3 ORE. THUS A QUANTITY AROUND 57000 MT OF SUB*GRADE GENERATED EVERY YEAR WHICH FED TO COBP AFTER THE SAME WITH THE DUMP MATERIALS ANALYSING 18.7% Cr2O3 IN AVERAGE.</p>	
3h	Manual / Mechanised method adopted for segregating from ROM	MECHANISED	<p>SUB-GRADE ORE GENERATED EVERY YEAR FED TO COBP AFTER BLENDING THE SAME WITH DUMP MATERIALS ANALYSING 18.7 % Cr2O3 IN AVERAGE. AVERAGE FEED OF THE COBP AROUND 23 % Cr2O3.</p>

3i	Any analysis or beneficiation study proposed and carried out for sub grade mineral and rejects.	NO STUDY PROPOSED	DURING THIS SCHEME PERIOD AROUND 57000 MT OF LOW GRADE ORE IS GENERATED. THIS MATERIAL IS FED TO COB PLANT WHERE THE AVERAGE GRADE IS 25% Cr <sub>2</sub> O <sub>3</sub> . IT HAS BEEN PLANNED TO FEED PART OR FULL OF THESE MATERIAL IN THE COB PLANT WHERE THE FEED GRADE ORE WOULD HAVE AN AVERAGE Cr <sub>2</sub> O <sub>3</sub> OF AROUND 35% AND THE CONCENTRATE ABOUT 48% TO 52% Cr <sub>2</sub> O <sub>3</sub> . THE LESSEE HAS DEVELOPED A MECHANISED PROCESS FOR BENEFICIATING THE SUB GRADE AND LOW GRADE ORE AVAILABLE IN THE MINE , AFTER PROPERLY SURVEY AND SAMPLING OF THE	EXISTING DUMPS IN THE LEASE HOLD AREA. SAMPLING OF THE EXISTING DUMPS IN THE LEASE HOLD AREA REVEAL THAT THE AVERAGE CHROME CONTENT IN THESE WASTE DUMPS IS AROUND 18.74% . AVERAGE GRADE OF FEED MATERIAL : 23% Cr <sub>2</sub> O <sub>3</sub> PRODUCT : 46 TO 47% Cr <sub>2</sub> O <sub>3</sub> AND TAILING : 8.4% Cr <sub>2</sub> O <sub>3</sub> .
3j	Provision of drilling and blasting in mineral benches	YES	MASSIVE HARD ROCK STRATA ARE BEING LOOSENED THROUGH DRILLING AND BLASTING. DRILLING OF THE BLAST HOLES ARE DONE BY PNEUMATIC DRIFTER WAGON DRILL OF 85 MM DIA HOLES IN THE INSITU ZONE. HEIGHT OF THE BENCH KEPT AT 6 M. BURDEN 3.5 M , SPACING 3.0 M , LENGTH OF THE HOLE 6.6 M	
3k	Provision of mining machineries in mineral benches	YES	EXCAVATOR 5 NOS OF CAPACITY EACH 0.9 CUM, WAGON DRILL (85 MM DIA) ONE NO, JACK HAMMER 32 MM DIA TWO NOS, DUMPER 19 NOS OF CAPACITY 10 TONNE EACH, DOZER 1 NO OF CAPCITY 250 HP	

3l	Whether height of benches in overburden and mineral suitable for method of mining proposed in MP/SOM	HEIGHT OF BENCHES IN OB 2.5 M AND WIDTH 3 M ( MANUAL) HEIGHT OF BENCHES IN ORE 6 M AND WIDTH 10 M (MACHINERY)	MAINTAINED AS PROPOSED IN THE SOM , SUITABLE FOR METHOD OF MINING.	
3m	Total area covered under excavation/pits	23.252 HA	23.252 HA	
3n	Ore to OB ratio for the pit/mine during the year.	1 : 5.211	1 : 3.698	
3o	Total area put in use under different heads at the end of year		69.196 HA	
3p	Production of ROM mineral during the last five year period as applicable	2013-14: 87900 MT, 2014-15: 87750 MT, 2015-16 : 87915 MT,	2013-14: 87891 MT, 2014-15: 41300 MT, 2015-16: 87912 MT	MODIFICATION TO THE APPROVED SOM WAS APPROVED ON 04.02.2016 FOR THE PERIOD 2015-16 (PART) TO 2017-18.



3q General remarks  
of inspecting  
officers on  
method of mining  
etc.

OPENCAST MINING  
METHOD (A-OTFM)  
WITH DEPLOYMENT OF  
MACHINES LIKE  
EXCAVATOR( BACK-  
HOE), WAGON DRILL  
& JACK HAMMER,  
DUMPERS , AIR  
COMPRESSOR ETC ON  
SINGLE SHIFT BASIS  
. MASSIVE HARD  
ROCK STRATA ARE  
BEING LOOSENED  
THROUGH DRILLING  
AND BLASTING.  
BLASTED ROCKS ARE  
CARRIED MANUALLY  
AND LOADED IN THE  
DUMPER/ TIPPER.  
THE RUN OFF MINE  
ORE OF > 40% Cr2O3  
TRANSPORTED TO ORE  
STOCK YARD AND  
10TO 40% Cr2O3 ORE  
( SUB GRADE /  
MINERAL REJECT)  
ARE TRANSPORTED TO  
THE COBP FOR  
UPGRADATION.

---

Solid Waste Management - Dumping:

Sl.No.	Item	Propasals	Actual work	Remarks
4a	Separate dumping of topsoil, OB and mineral rejects (Rule 32,33)	SEPARATELY DUMPING	THREE OB DUMPS AB , C & D	
4b	Location of topsoil, OB and mineral reject dumps	DUMP AB : 100 N -400 S / 319 E -622 E DUMP C : 320 N -438 E / 535 N - 655 W DUMP D : 218 W -512 W / 164 N - 338 N	SAME LOCATION OF OB DUMP AS PROPOSED.	

4c	Number of dumps within lease area and outside of lease area	OUT SIDE LEASE AREA : NIL INSIDE LEASE AREA : 3 ( AB, C & D)	SAME AS PROPOSED	
4d	Location of dumps w.r.t. ultimate pit limit (Rule 16)	BEYOND ULTIMATE PIT LIMIT	BEYOND ULTIMATE PIT LIMIT	
4e	Number of active and alive dumps.	THREE	THREE	
4f	Number of dead dumps.	NIL	NIL	
4g	Number of dumps established.	NIL	NIL	
4h	Whether Retaining wall or garland drain all along dumps are there.	YES RETAINING WALL 220 M X 1.5 M X 0.5 M AND GARLAND DRAIN 220 M X 1.0 M X 0.5 M ALONG DUMP D	CONSTRUCTED ALONG DUMP D AS PROPOSED	
4i	Length of Retaining wall or garland drain all along dumps	RETAINING WALL : 220 M X 1.5 M X 0.5 M GARLAND DRAIN : 220 M X 1.0 M X 0.5 M ALONG DUMP D	CONSTRUCTED AS PROPOSED.	
4j	Number of settling ponds	ONE PROPOSED FOR MAINTENANCE	MAINTAINED.	
4k	Specific comments of inspecting officer on waste dump management	THREE DUMPS AB, C AND D	ALL THREE DUMPS ARE ON THE NON-MINERALISED LAND. AB DUMP 18 M HEIGHT, C DUMP 30 M HEIGHT AND DUMP D IS 18 M HEIGHT. TERRACES AT EVERY 10M.	CUMULATIVE RETAINING WALL OF LENGTH 2337 M AND GARLAND DRAIN 4850 M HAVE ALREADY BEEN CONSTRUCTED. ONE SETTLING POND OF SIZE 2 M X 2 M X 1.0 M AT THE END OF THE DRAIN HAS BEEN CONSTRUCTED AND MAINTAINED.

---

Solid Waste Management - Backfilling:

---

Sl.No.	Item	Propasals	Actual work	Remarks
--------	------	-----------	-------------	---------

---

---

5a	Status of part or full extraction of mineral from mined out area before starting backfilling.	NO PROPOSAL	NIL
5b	Area under backfilling of mined out area	0.284 HA	0.284 HA ALONG ROAD SIDE
5c	Concurrent use of topsoil for restoration or rehabilitation of mineral out area (Rule 32)	NO PROPOSAL	CUMULATIVE 66172 CUM TOP SOIL GENERATED AND UTILISED FOR THE PURPOSE OF PLANTATION.
5d	Total area fully reclaimed and rehabilitated	0.284 ROAD SIDE	0.284 ROAD SIDE
5e	General remarks of inspecting officers on backfilling and reclamation etc.	NO PROPOSAL	ONLY 0.284 HA ALREADY BACKFILLED ON THE ROAD SIDE.

---

#### Progressive Mine Clousre Plan:

---

Sl.No.	Item	Propasals	Actual work	Remarks
6a	Whether Annual report on PMCP submitted on time and correctly. Rule 23 E(2).	YES	ANNUAL REPORT ON PMCP UNDER RULE 23E (2) HAS BEEN RECEIVED.	
6b	Area available for rehabilitation (ha) .	NIL	NIL	
6c	afforestation done (ha).	1.0 HA	1.0 HA	
6d	No. of saplings planted during the year	1600 NO OF SAPLINGS	2600 NO OF SAPLINGS	
6e	Cumulative no .of plants		86524 NO OF SAPLINGS PLANTED OVER AN AREA 8.687 HA	

---

6f	Any other method NO of rehabilitation		NIL
6g	Cost incurred on watch and care during the year		Rs.114.68 LAKH CUMULATIVE
6p	Compliance of environmental monitoring (core zone and buffer zone)	ENVIRONMENTAL MONITORING OF AMBIENT AIR QUALITY , WATER , NOISE LEVEL SURVEY ARE PROPOSED IN THE CORE ZONE AND BUFFER ZONE.	AMBIENT AIR QUALITY, AIR QUALITY AND NOISE LEVEL ARE BEING MONITORED AT REGULAR INTERVALS. AS PER PROPOSAL
6q	General remarks of inspecting officers on PMCP compliance and progressive closure operations etc.		TOTAL CUMULATIVE 2337 M RETAINING WALL, 4850 M GARLAND DRAIN, ONE SETTLING POND , ONE CHECK DAM HAVE BEEN CONSTRUCTED. TOTAL CUMULATIVE 90524 NO OF TREES HAVE BEEN PLANTED OVER 17.1 HA ON DUMP, BOUNDARY, OFFICE PREMISES, ROAD SIDE ETC.

---

Mineral Conservation:

Sl.No.	Item	Propasals	Actual work	Remarks
7a	ROM Mineral dispatch or grade-wise sorting within lease area	ROM : 87750 MT	ROM: 41300 MT GRADE-WISE DESPSTCH AS FOLLOWS: FINES BELOW 40% Cr2O3: 39003 MT 40% TO BELOW 52% Cr2O3 : 5990 MT CONCENTRATE : 11916 MT	

7b	Method of grade-wise mineral sorting i.e. manual or mechanical.	MANUAL AND MECHANICAL	THE RUN-OFF MINE ORE OF MORE THAN 40% Cr2O3 ARE TRANSPORTED TO ORE STACK YARD. +10% TO -40% Cr2O3 ORE ARE TRANSPORTED TO COBP FOR UPGRADATION.
7c	Different grade of mineral sorted out at mines.	LUMP AND FINES OF BELOW 40% Cr2O3, 40 TO LESS THAN 52 % Cr2O3, 52% Cr2O3 & ABOVE ETC.	SAME AS PROPOSED.
7d	Any beneficiation process at mines .	LOW GRADE / SUB GRADE ORE ARE PROPOSED TO FEED THE CHROME ORE BENEFICIATION PLANT FOR UP GRADATION.	
7e	General remarks of inspecting officer on Mineral conservation and beneficiation issues		

---

**Environment:**

Sl.No.	Item	Propasals	Actual work	Remarks
8a	Separate removal and utilization of topsoil (Rule 32)	NO PROPOSAL	CUMULATIVE 66172 CUM TOP SOIL GENERATED EARLIER HAVE BEEN UTILISED FOR PLANTATION PURPOSE.	
8b	Concurrent use or storage of topsoil	NO	ALREADY UTILISED FOR PLANTATION PURPOSE.	
8c	Separate dumps for overburden, waste rock, rejects and fines (Rule 33)	SEPARATE DUMPS FOR OB / WASTE	SAPARATE DUMP AB, C & D HAVE BEEN MAINTAINED.	

8d	Use of overburden, waste rock, rejects and fines dumps for restoring the land to its original use	NO	NO	
8f	Baseline information on existence of plantation and additional plantation done (Rule 41)			MINING LEASE AREA CONSIST OF 105.78 HA FOREST AND 1.46 HA NON FOREST. ADDITIONAL PLANTATION DONE 90524 NOS OVER AN AREA 17.1 HA.
8g	Survival rate			70%
8h	Water sprinkling on roads to control airborne dust	YES, PROPOSED		WATER IS SPRINKLED ON ROADS TO CONTROL AIR BONE DUST.
8i	General remarks of inspecting officer on aesthetic beauty in and around mines area			AESTHETIC BEAUTY IN AND AROUND THE MINES HAS BEEN ENHANCED BY ADDITIONAL PLANTION DONEALONG THE BOUNDARY , OFFICE PREMISES, ROAD SIDE AND DUMPS.

---

Compliance of Rule 45:

Sl.No.	Item	Propasals	Actual work	Remarks
9a	Status of submission of Monthly and Annual returns	SUBMITTED.	I HAVE INSPECTED THE MINE ON 02.11.2015. MONTHLY RETURN FOR THE MONTH OF SEPTEMBER , 2015 HAS BEEN RECEIVED. ANNUAL RETURN FOR THE YEAR 2014-15 HAS BEEN RECEIVED.	
9b	Scrutiny of Annual return for information on Mining Engineer, Geologist and Manager		ANNUAL RETURN WAS SCRUTINISED. SHRI B K GIRI, MINING ENGINEER, SHRI P L DAS, GEOLOGIST AND SHRI N PANIGRAGI , MANAGER HAVE BEEN APPOINTED.	

9c	Scrutiny of Annual return on land use pattern for area under pits, reclaimed area, dumps etc.	AREA UNDER PITS : 22.74 HA, RECLAIMED / REHABILITATED 0.28 HA, USED FOR WASTE DISPOSAL 19.04 HA, OCCUPIED BY ROAD, BUILDING ETC : 9.82 HA, ETP : 0.935 HA, TOP SOIL : 1.061 HA, SUB-GRADE STACK: 0.25 HA, MINERAL STORAGE : 0.706 HA, GREEN BELT: 6.0 HA
9d	Scrutiny of Annual return on afforestation	NO OF TREES PLANTED : 2000 WITH IN LEASE AND 600 OUT SIDE LEASE.
9e	Scrutiny of Annual return on mineral reject generation (Grade and quantity)	NIL
9f	Scrutiny of Annual return on ROM stock and/or graded ore	ROM PRODUCTION : 41300 MT, CLOSING STOCK : 3355.177 MT GRADED ORE STOCK AS FOLLOWS: LUMP : NIL FINES : BELOW 40% Cr2O3: 21021.132 MT, 40 TO 52% CR2O3: 826.842 MT, 52 % Cr2O3 & ABOVE: 265.0 MT, CONCENTRATE : 941.202 MT
9g	Scrutiny of Annual return on sale value, Ex. Mine price and production cost	PRODUCTION COST : Rs. 4948.62 /- PMV : BELOW 40% Cr2O3: Rs.2569.73 /-, 40 TO 52% Cr2O3: Rs.10060.01 /-, CONCENTRATE : Rs.12278.50 /-
9h	Scrutiny of Annual return on fixed assets	Rs.142741000 /-.

9k Scrutiny of  
Annual return on  
mining  
machineries

LT KOMASTU PC -300 TWO  
NOS OF CAPACITY 1.9 CUM,  
TATA JD 315 V ONE NO  
OF CAPACITY 0.35 CUM  
(BACK HOE ) 1.5 CUM (   
FRONT END),DOZER BEML D-  
80 TWO NOS OF CAPACITY  
21 Te, TATA DUMPER 1613  
FIVE NOS OF CAPACITY 6  
CUM, DTH DRILL AIR ROC  
D-35 ONE NO , TATA HYWA  
2516 TEN NO OF CAPACITY  
14 CUM.

---



**Details of violations observed during current inspection and compliance position of violation pointed out**

Violation observed		Show couse position	
Rule NO.	Issued on Compliance on	Rule NO.	Issued on Compliance on

**Date :**

**(NARENDRA MOHAN DEY)**

Indian Bureau of Mines