

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, DELHI
ORIGINAL APPLICATION NO. 755/2024**

IN THE MATTER OF:

TRIBUNAL ON ITS OWN MOTION

...APPLICANT

VERSUS

STATE OF RAJASTHAN

...RESPONDENTS

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Date: 20.03.2025

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RESPONSE ON BEHALF OF RESPONDENT NO. 6 – ASHU SINGH BHATI

1. That the present response is being preferred on behalf of Respondent No. 6 – Ashu Singh Bhati (**'Answering Respondent'**) in pursuance of the orders dated 05.12.2024 and 17.02.2025 passed by this Hon'ble Tribunal whereby the Answering Respondent was directed to file a reply with respect to the observations made by the Joint Committee in its report dated 29.11.2024.
2. The present Original Application (hereinafter referred to as "**OA**") under Sections 14 and 15 of National Green Tribunal Act, 2010 (hereinafter referred to as '**NGT Act, 2010**') has been registered in exercise of *suo-motu* jurisdiction of this Hon'ble Tribunal on the basis of a letter petition dated 28.10.2023 received via email from a villager of Village Kheda Hetam complaining that lease holders are carrying on mining activities at a depth of more than 3 mtrs on the site of River Khari passing through River Kheda, Hetam, Tehsil Foolia Kalan, District Shahpura, Rajasthan. It was further alleged that several trees have been cut illegally; heavy machines are being used and no action has been taken by concerned authorities despite above illegal activities.
3. That this Hon'ble Tribunal considered the complaint on 05.08.2024 and found it appropriate to obtain a factual report by constituting a Joint Committee comprising District Magistrate Shahpura, representative of Indian School of Mines, Dhanbad to be nominated by Director of the said institute, representative of Institute of Seismology, Gandhinagar to be nominated by Director/Director General of Institute, a senior Scientist of MoEF&CC not

below the rank of Director and Member Secretary and Central Pollution Control Board.

4. That the Joint Committee was required to submit report within two months, which time was extended by this Hon'ble Tribunal vide orders dated 14.10.2024 and 26.11.2024. That the Joint Committee finally submitted its report on 29.11.2024 before this Hon'ble Tribunal.
5. That based on the observations made in the site visit and the recommendations given by the Joint Committee, this Hon'ble Tribunal by way of order dated 05.12.2024 found it appropriate to implead the following parties, including the Answering Respondent. The relevant para is extracted as under,

“In the light of observations made by Joint Committee and its findings, we find it appropriate to implead following as respondents:-

- i. Ministry of Environment, Forest and Climate Change, Government of India through its secretary, Jor Bagh Rd, Lodi Colony, New Delhi, Delhi 110003*
- ii. Ministry of Environment, Forest and Climate Change, State of Rajasthan through Principal Secretary/Additional Chief Secretary, A-209 & 218, 'Aranya Bhawan', Mahatma Gandhi Road, Jhalana Institutional Area, Jaipur, Rajasthan – 302004*
- iii. Rajasthan State Pollution Control Board through Member Secretary, 4, Institutional Area, Jhalana Dungari, Jaipur, Rajasthan – 302004*
- iv. District Magistrate, Shahapura, State of Rajasthan, Near Ramniwas Dham, Shahpura, Bhilwara, Rajasthan – 311404*
- v. Ashu Singh Bhati, son of Magan Singh Bhati, resident of 45, Pachim Vihar, Vaishali Nagar, Jaipur.”*

6. That at the outset, it is submitted by the Answering Respondent that the contents of the letter petition dated 28.10.2023 are extremely vague and omnibus in nature, therefore the present reply is being confined to the orders passed by this Hon'ble Tribunal as well as the observations made in the Joint Committee Report dated 29.11.2024
7. That before dwelling into the response to the findings of the Joint Committee the Answering Respondent humbly raises the following legal grounds as Preliminary Objections.

A. PRELIMINARY OBJECTIONS

That the present Original Application is barred by the principles of Res Judicata, Issue Estoppel and Cause of Action Estoppel

8. At the outset it is submitted that identical grievances have been raised in an earlier Original Application bearing No. OA 148/2023(CZ) titled as ‘*Bhanwar Lal Gurjar v State of Rajasthan & Ors*’ filed before the Ld. Central Zone Bench. It is pertinent to mention that the said OA 148/2023(CZ) has already been disposed of vide order dated 19.09.2024. Further, it is also pertinent to mention that Respondent No. 6 was specifically made a Respondent in the above-captioned OA 148/2023(CZ).

A true copy of the order dated 19.09.2024 passed by the Ld. Central Zone Bench in OA 148/2023(CZ) is annexed herewith and marked as **Annexure R6/1**

9. That the grievances raised in OA 148/2023(CZ) have been appropriately captured by the Ld. Central Zone Bench by way of order dated 17.10.2023. The relevant extract is as under,

“1. The present application is filed for the preservation and conservation of Rivers Khari and Mansi, which originated in District Pali and is lifeline of Bhilwada, Shahpura and Kekdi Districts of Rajasthan. The place Daneshwar is Sangam Sthal, falls in Fuliakalan Tehsil, where more than 40 temples and many festivals, numerous Marriage Ceremonies takes place every year. The applicant approached this Hon’ble Tribunal because of illegal excavation of Bazri sand in violation of norms, conditions of Environmental Rules by the Respondent No. 6/PP who has not only demolished Farmers Open wells, irrigation pipelines, standing crops, full grown trees causing huge financial losses to the villagers and residents of Shahpura but made huge adverse impact on river Khari & Mansi no n perennial river of Rajasthan. The respondents is in violation of installing and excavating by using Heavy JCB & Poclain Machines which is not permissible for bajri mining. Upon Complaint the a Spot Mauka Parcha was prepared in presence of concerned Tehsildar on 27.09.2023 regarding destruction of pipe lines and full grown trees due to rampant and illegal mining activities of the PP.”

Further, by way of the order dated 17.10.2023, the Ld. Central Zone Bench was pleased to constitute a joint committee to ascertain the truth in the allegations raised in Original Application.

A true copy of the order dated 17.10.2023 passed by the Ld. Central Zone Bench in OA 148/2023(CZ) is annexed herewith and marked as **Annexure R6/2**

10. That the joint committee comprising the officials from District Administration and Rajasthan State Pollution Control Board visited the site on 23.11.2023 and filed its report before the Ld. Central Zone Bench on 06.01.2024. The summary of observations of the joint committee is as follows:

- That no illegal mining activities were found during visit.
- That lease was operating after obtaining Environmental Clearance (EC) granted by MoEF &CC dated 14.10.2020, amended EC dated 27.10.2023 and having valid consent to operate dated 17.03.2023.
- Depth of mining pits were not more than permitted depth.
- No damage to natural plants was found at this site.
- No damage to open well and pipeline was observed in village Kheda Hetam stretch and mining activities were also not going on. No crop damage was observed.
- No mining activity found within 45 meters of embankment and crematorium. No damage to place of crematorium found during site visit.
- No illegitimate recovery of royalty by the lease holder from the villagers has been observed.

Therefore, the Joint Committee Report (already on record at Pages 124 – 220 of the Paper book in the present Original Application) essentially recorded that no illegal mining activity or any other activity alleged in the OA 148/2023 were being carried on by the Answering Respondent.

11. The since certain objections were raised to the Joint Committee Report dated 06.01.2024, the Ld. Central Zone Bench *vide* its order dated 10.04.2024, issued directions to Regional Officer, Integrated Office, MoEF&CC, Bhopal to verify the report and submit a factual report. It is submitted that the verification report by the Regional Officer, Integrated Office, MoEF&CC, Bhopal (already on record at Pages 225 to 247 of the Paper book in the Present OA) was submitted before the Ld. Central Zone Bench on 23.08.2024. It is submitted that even the verification report confirmed that no illegal activities had been carried on as alleged in the OA 148/2023.

A true copy of the order dated 10.04.2024 passed by the Ld. Central Zone Bench in OA 148/2023(CZ) is annexed herewith and marked as **Annexure R6/3**

12. That based on the above-captioned reports, the Ld. Central Zone Bench was pleased to dispose of OA 148/2023(CZ) by order dated 19.09.2024 noting that no violations have been reported in either of the reports, and accordingly, no further action was required to be taken. The relevant extract is as under,

“6. We have gone through the report submitted by the MoEF&CC, Regional Office and found that no such violation has been reported, accordingly no further action is required to be taken. However, we direct the State Authorities concerned and State PCB to strictly enforce the guidelines issues by the MoEF&CC named Sustainable Sand Mining Management Guidelines 2016 and Sustainable Sand Mining Management Guidelines 2020 and in case of any violation strict action in addition to realisation of environment compensation must be assessed according to rules.”

13. A perusal of the above-mentioned facts would show that the Ld. Central zone bench, after two rounds of independent inspections, categorically found that no violations have been found and only then disposed of the OA 148/2023(CZ) *vide* its order dated 19.09.2024.
14. That it is submitted that when the Hon'ble Central Zone has finally disposed of the OA 148/2023 (CZ) on the basis of a particular cause of action, the same cause of action cannot be resurrected by filing of a letter petition before this Hon'ble Tribunal on the same cause of action. Thus, it is submitted that the present Original Application is barred by the principles of *cause of action*

estoppel, *issue estoppel* and the doctrine of *res judicata* which are applicable to this Hon'ble Tribunal as has been laid down by a 4 judge bench of this Hon'ble Tribunal in *University of Delhi v. Ministry of Environment Forest & Climate Change*, 2022 SCC OnLine NGT 2073 and also in *Renny Jacob George v. Kerala State Pollution Control Board*, 2023 SCC OnLine NGT 521. The relevant extract of *University of Delhi (supra)* is as under,

“165. Further application of the principle of res-judicata has also to be seen in the backdrop of the fact that this Tribunal has been constituted under NGT Act, 2010 and it is not a ‘Court’ as defined under Civil Procedure Code, 1908 (hereinafter referred to as ‘CPC’). Section 19 clearly says that Tribunal is not bound by the procedure laid down by CPC but shall be guided by the “principles of natural justice” and subject to NGT Act, 2010, Tribunal shall have power to regulate its own procedure. Subsection 4 of Section 19 of NGT Act, 2010, says that Tribunal shall have, for the purpose of discharging its functions under NGT Act, 2010, same powers as are vested in civil court under CPC while trying a suit, in respect of the matters enumerated in clauses (a) to (k). The provision of ‘res-judicata’ prescribed under Section 11 CPC, as such is not applicable to NGT but it is also true that it is a principle of well accepted doctrine that no one shall be vexed twice for the same cause or that it is for the public good that there be an end of litigation, hence, if on an issue between the parties, there is already an adjudication, the principle of constructive res-judicata, even in the matter before Tribunal shall apply. This is a well-recognized principle applied since ancient time so as to quite to a dispute and not to allow the same party to litigate over the same matter again and again”

(emphasis supplied)

A true copy of the decision in *Renny Jacob George v. Kerala State Pollution Control Board*, 2023 SCC OnLine NGT 521 is annexed herewith and marked as **Annexure R6/4**

15. Additionally, it is emphasized that the absence of any ongoing mining activity since June 2024, as has been explicitly recorded in Annexure 13 of the Joint Committee Report, reinforces that no fresh cause of action exists to justify the present proceedings. The principle of finality in litigation mandates that once a competent forum has adjudicated upon a matter and recorded the cessation of the alleged activity, the same issue cannot be reopened before

another bench on identical grounds. Any residual or related grievance ought to have been pursued within the framework of OA No. 148/2023 (CZ), rather than attempting to circumvent the findings of the Ld. Central Zone Bench through a fresh Original Application.

16. That Section 4(3) of the National Green Tribunal Act, 2010, read with the Circular dated 19.03.2020 issued by this Hon'ble Tribunal, delineates the territorial jurisdiction of the various benches of the Hon'ble National Green Tribunal. A plain reading of the Circular dated 19.03.2020 unequivocally establishes that all environmental grievances pertaining to the State of Rajasthan fall exclusively within the jurisdiction of the Ld. Central Zone Bench. Consequently, it is respectfully submitted that this Hon'ble Tribunal lacks jurisdiction to entertain the present Original Application, and the same is liable to be dismissed *in limine* on this ground alone.

A true copy of the Circular dated 19.03.2020 issued by this Hon'ble Tribunal is annexed herewith and marked as **Annexure R6/5**

B. PRELIMINARY SUBMISSIONS

17. That on 14.10.2020, Environmental Clearance was issued by MoEF&CC in favour of the Answering Respondent for mining of mineral Bajri from river stretches in two rivers Khari River and Mashi River in revenue villages of Shahpura Tehsil for proposed annual production of for proposed annual production of 0.84 MTPA from 24.31 ha area each year. The said EC dated 14.10.2020 is already a part of record at Pages 34 – 63 of the Paper book in the present Original Application.
18. As per Clause 23 of the EC dated 14.10.2020, it was observed that permissible mining of riverbed material (Sand/Bajri) shall be limited to 0.84 MTPA from an effective mineable area of 24.31 ha, with the maximum mineable depth of 1 m from the original ground-level as reported in the replenishment study.
19. That on 09.03.2023, mining lease for mining of mineral from 624.39 ha of rivers in Shahpura Tehsil was registered and handed over to the answering respondent for a period of 4 years and 4 months from the date of execution of the mining lease. A true copy of the mining lease dated 09.03.2023 is already on record before this Hon'ble Tribunal.

20. That by way of letter dated 17.03.2023, the Rajasthan State Pollution Control Board (RSPCB) issued Consent to Establish and Consent to Operate with conditions of maximum permissible mining depth of 1 m, in line with the EC dated 14.10.2020.
21. That by virtue of Notification S.O. 1886(E) dated 20.04.2022, the MoEF&CC delegated the power to grant environmental clearance to all Minor Mineral Mining projects, irrespective of mining lease area to the State Level Environment Impact Assessment Authority (SEIAA).
- A true copy of the Notification S.O. 1886(E) dated 20.04.2022 is annexed herewith and marked as **Annexure R6/6**
22. That by way of letter dated 27.10.2023, the SEIAA amended the previous EC dated 14.10.2020, increasing the permitted depth of mining from 1m to 3m duly taken into account the replenishment study submitted by the Answering Respondent. A true copy of the Replenishment Study submitted by the Answering Respondent is annexed herewith and marked as **Annexure R6/7**. A true copy of the amended EC dated 27.10.2023 issued by SEIAA is annexed herewith and marked as **Annexure R6/8**.
23. That on 13.02.2024, the Rajasthan State Pollution Control Board (RSPCB) issued Consent to Establish and Consent to Operate in line of the amended EC dated 27.10.2023. It is pertinent to mention that the amended CTE and CRO dated 13.02.2024 have already been annexed at Page No. 112 – 121 of the Paper Book of the present Original Application.

C. RESPONSE TO THE JOINT COMMITTEE REPORT DATED 29.11.2024

24. That the Joint Committee Report dated 29.11.2024 addresses several allegations regarding the mining activities of the Answering Respondent. Each allegation, along with the findings of the Joint Committee by way of its report dated 29.11.2024, the findings of the Ld. Central Zone Bench in OA/148/2023 (CZ) and the Respondent's detailed response, is elaborated below. The Answering Respondent remains steadfast in its commitment to environmental responsibility and adherence to statutory regulations.

25. The following is the Response of the Answering Respondent to the allegations raised in the E-Mail dated 28.11.2023

25.1. Mining Depth Exceeding Permissible Limits

25.1.1. **Allegation:** It was alleged that the Project Proponent is carrying out mining activities at a depth exceeding the permissible limit of 3 meters.

25.1.2. **Findings of the JC in report dated 29.11.2024:**

"Committee Members measured depth of mined pits at some places in the river during the site visit on 16.11.2024 (i.e., post-monsoon in 2024) with the help of measuring tape and found that mined depth from the adjacent nearby river bed was 1.4 m at few places, while at some places the depth was even 2.5 m. An excavation of 2 to 2.5 m below the nearby riverbed was observed at one location in riverbed near to the terrace where the crematorium exists."

25.1.3. Findings of the Joint Committee report dated 06.01.2024 in OA 148/2023

"11. As per report of Mining Department dated 23/11/2023, no mining pit was found deep more than 03 meter and mining activities were well above the ground water level. Water level in open wells near the lease area was approx. 6 meters deep only, which reveals that water scarcity does not prevail in the area"

25.1.4. **Response:** That the above-mentioned allegations made in the email dated 28.10.2023 are false, incorrect, misleading and hence, denied. It is humbly submitted that the Answering Respondent operates strictly within the parameters of the Environmental Clearance (EC). It is submitted that Answer Respondent had stopped mining in June 2024 in compliance with the order of local authorities. It is additionally submitted that even the Committees constituted in proceedings under the OA 148/2023 did not find any instance of mining to be more than permitted depth of 3 meters. The also clearly shows that no mining activities exceeding the permissible limit has taken place within the leased area of the Answering Respondent. The finding establishes that no mining activities even

in the vicinity of leased mining area have exceeded the permissible limit of 3 meters. It is submitted that EC dated 14.10.2020 has been amended by SEIAA by letter dated 27.10.2023, increasing the depth of mining to 3 meters and also increased the validity of EC to terminus with lease period. This refutes the baseless allegations and underscores the Answering Respondent's bona fide adherence to regulatory conditions.

25.2. Damage to Villagers' Pipelines

25.2.1. **Allegation:** It was alleged that mining activities caused damage to irrigation pipelines used by local villagers.

25.2.2. **Findings of the JC in report dated 29.11.2024:**

"It was observed that local villagers at Khera Hetam village used PVC pipes for irrigation in their agricultural fields. During the site visit on 16.11.2024, damage to pipelines was not observed. However, there may be chances of damage to pipelines when trucks/vehicles ply during mining operation if care is not taken."

25.2.3. **Findings of Ld. Central Zone Bench in OA 148/2023**

"2. The open wells situated in the course of river were inspected and it was observed that no borewell has been damaged. It is pertinent to mention that number of borewells have been constructed in the riverbed on revenue land through which water is being taken out by nearby situated agriculture fields. Relevant site photographs have been attached with this report"

25.2.4. **Response:** That the above-mentioned allegations made in the email dated 28.10.2023 are false, incorrect, misleading and hence, denied. The Answering Respondent operates with utmost care to ensure no harm is caused to public infrastructure. The Joint Committee's findings unequivocally confirm that no damage was observed. The speculative mention of potential risks cannot be a basis for actionable claims against the Answering Respondent. It is submitted that Joint Committee report in OA 148/2023 categorical reported that no damage pipelines and open wells were observed at the site and all mining activities had been stopped since June 2024,

therefore the allegation of damage to pipelines is totally unfounded and baseless.

25.3. Damage to Trees

25.3.1. **Allegation:** It was alleged that mining activities have damaged trees at the crematorium grounds.

25.3.2. **Findings of the JC in report dated 29.11.2024:**

“No evidence of damage to the trees near the crematorium was observed by the committee members at the crematorium site. Satellite (Google Earth) image of April 2022 (pre-monsoon) and November 2023 (post-monsoon) was compared. It is observed that tree cover was found to be increased in November 2023 compared to April 2022 period. However, it is observed that mining has been carried out up to near tress planted on one side of the crematorium on the terrace of the left bank of the river. One naturally grown-up tree of keekar variety was found uprooted on the bank between river and the crematorium but it did not seem be due to mining or related transport activity as it was on the raised terrace on the left bank and mining is not carried out at this place and vehicle movement at this location is also not likely.”

25.3.3. **Findings of the Joint Committee report dated 06.01.2024 in OA 148/2023**

“Naturally protected trees were found at the embankment of River Khari in village Kheda Hetam. No damage to plants was observed at this site”

25.3.4. **Response:** That the above mentioned allegations made in the email dated 28.10.2023 are false, incorrect, misleading and hence, denied. It is submitted that the findings of the Joint Committee decisively debunk this allegation. Infact the satellite imagery substantiates that tree cover has increased over time, evidencing that the Answering Respondent has maintained and even improved the ecological balance in the area. Such baseless claims unjustly malign the Answering Respondent’s adherence to environmental safeguards. These findings prove that the allegations made in email dated 28.10.2023 are nothing but part of a smear campaign against the

reputation of the Answering Respondent. It is submitted that Joint Committee report in OA 148/2023 categorical reported that no damaged trees were observed at the site and all mining activities had been stopped since June 2024, therefore the allegation of damage to trees is totally unfounded and baseless.

25.4. Illegal Mining Activities

25.4.1. **Allegation:** Illegal mining activities, including unregulated sand excavation and unauthorized stockpiling, have been observed.

25.4.2. **Findings of the JC in report dated 29.11.2024:**

"It was observed that people are engaged in carrying out illegal mining in Khari River in Phuliya Kalan tehsil. A JCB and a tractor were observed near the river while the committee members were on the way to the complaint site and crossing the river bridge about two kilometers downstream of Khera Hetam."

25.4.3. **Response:** The Answering Respondent categorically denies involvement in any illegal mining activities. It is pertinent to mention that it is on record that no mining is being done by the Answering Respondent since June 2024. The findings make no direct attribution to the Answering Respondent, clearly identifying third-party actors as responsible. The Answering Respondent urges the authorities to take stringent actions against unauthorized operators and to strengthen monitoring mechanisms in the area.

26. That the following is the response of the Answering Respondent to the General Observations of the Joint Committee with respect to mining at Khera Hetam village and Phuliya Kalan tehsil

26.1. The Joint Committee at point 6A (1) noted water-filled pockets and haphazard excavations in the riverbed, potentially affecting the river's natural flow. It highlighted the absence of proper supervision and inspection. It is submitted that the Answering Respondent ceased mining operations following the notice issued in June 2024 and the same has been recorded in the report of Joint Committee at point no 6A (2). It is submitted that the Answering Respondent stopped mining in June 2024 which is before the onset of Monsoon in India. It is

submitted that the pits which were mined by the Answering Respondent would have been replenished with fresh sediment load brought down and deposited by the river. It is crucial to note that the Joint Committee did not attribute the haphazard excavations to the Answering Respondent's leased area of operation whatsoever. The Answering Respondent has always adhered to the conditions of its Environmental Clearance (EC), conducting mining activities under strict compliance frameworks.

- 26.2. The Joint Committee at point 6A(4) noted that it observed illegal mining activities, including the presence of unauthorized machinery near the river. The Answering Respondent categorically denies any involvement in illegal mining or the use of unauthorized machinery. The Joint Committee's findings clearly point to third-party actors responsible for these violations and no finding in this regard was recorded against the Answering Respondent. The Answering Respondent has consistently adhered to the stipulated boundaries and regulations, and any illegal activities outside the Answering Respondent's lease area should be dealt with by the authorities. The Answering Respondent strongly advocates for enhanced vigilance and enforcement to prevent such unauthorized activities.
- 26.3. The Joint Committee at point 6A(3) noted the absence of boundary demarcation was noted by the Committee as a non-compliance with the Rajasthan Minor Mineral Concession Rules, 2017. It is humbly submitted that the Answering Respondent has in compliance deposited the demarcation fee, photo of pillars and fulfilled other compliances as mandated. For the sake of reiteration, it is submitted that no mining activity has been done since June 2024.
- 26.4. The Joint Committee at point 6A(8) observed two large sand stockpiles licensed to the Answering Respondent. Recommendations were made for siltation ponds and catch drains. It is submitted the Answering Respondent appreciates the Committee's recommendations and undertake to fully comply with the recommendation of establishing siltation ponds and catch drains to prevent the flow of sand into adjacent agricultural or other lands

before restoring mining operations. These proactive steps reinforce the Respondent's commitment to minimizing environmental impact and ensuring that its operations adhere to the highest environmental standards.

- 26.5. The Joint Committee at point 6A(9) noted that weighbridges installed by the Respondent were not operational, and sand was measured at private weighbridges. The Answering Respondent clarifies that all weighbridges installed by it were operational during the time of sand mining. The temporary non-operation observed by the Committee was after the cessation of mining activities in June 2024. The Answering Respondent emphasizes its compliance during the operational period and its commitment to ensuring all requisite infrastructure remains fully functional during active operations.
- 26.6. The Joint Committee found no checkpoints, CCTV cameras, or RFID-tagged transportation equipment in use, which are recommended under Sustainable Mining Guidelines. The Answering Respondent respectfully submits that necessary equipment were duly installed were not operational due to halting of mining operations. The Answering Respondent has consistently operated within the regulatory framework and cannot be held accountable for compliance measures that fall under the purview of the authorities. The Respondent supports these initiatives and remains willing to collaborate to enhance overall monitoring and enforcement.
27. The Answering Respondent unequivocally asserts that no statutory non-compliance, illegal mining activities, unauthorized felling of trees, or destruction of pipelines can be attributed to its operations. The findings of the Joint Committee corroborate this position, as no direct violations by the Answering Respondent have been substantiated. Furthermore, these allegations are exactly the same when compared to those allegations previously raised in OA 148/2023 (CZ), which were comprehensively considered and dismissed by the Hon'ble Central Zone Bench in light of two rounds of independent inspections reports of which were submitted by the Joint Committee and Joint Director (S)/ Scientist- D, MoEF&CC, on 06.01.2024 and 23.08.2024 respectively. The said proceedings confirmed the

Answering Respondent's compliance with all regulatory and statutory requirements, rendering the present allegations repetitive and baseless.

28. The Answering Respondent submits that this repeated invocation of same alleged violations reflects a personal agenda against its lawful operations. The Respondent has consistently adhered to environmental and operational protocols, as evidenced by authoritative findings in prior and current inspections. This ongoing pattern of baseless accusations undermines judicial economy and distracts from genuine issues requiring attention. The Answering Respondent respectfully urges that the Hon'ble Tribunal consider the history of compliance and dismiss these unfounded allegations with the seriousness they deserve.
29. The Answering Respondent reaffirms its bona fide credentials and compliance with all statutory and regulatory requirements. The Joint Committee's findings corroborate that the allegations are either baseless or attributable to third parties and not the Answering Respondent. The Answering Respondent remains committed to addressing minor deficiencies and strengthening compliance measures. It is respectfully prayed that the Hon'ble Tribunal dismisses the unfounded allegations and directs authorities to improve enforcement against unauthorized operators.

That in light of the above mentioned facts and circumstances, it is humbly prayed that this Hon'ble Court may be pleased to dismiss the Original Application No. 755/2024

FILED BY



(MADHAV BHATIA, ADV.
VIVEK SURA, ADV.)

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DATE: 20.03.2025

PLACE: NEW DELHI



BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI
IN O.A. 755/2024

IN THE MATTER OF:

Tribunal on its own Motion

...APPLICANT

VERSUS

State of Rajasthan & Ors

...RESPONDENTS

AFFIDAVIT

I, Ashu Singh Bhati, S/o Magan singh Bhati, aged about ____ years, R/o 45, Pachim Vihar, Vaishali Nagar, Jaipur hereby solemnly affirm and state on oath as under:

1. That I am the Respondent No. 6 in the captioned matter and as such am fully conversant with the facts and circumstances of the case and duly authorized and competent to swear this Affidavit.
2. That the accompanying Reply has been drafted by my Counsel under my instructions, the contents of the Accompanying Reply are true and correct to the best of my personal knowledge and the record maintained by the respondent.
3. The contents of the accompanying Reply may be read as part and parcel of this affidavit as the same are repeated herein for the sake of brevity.
4. I say that annexures filed along with the petition are true copies of their respective originals.

ATTESTED
Anil Kumar Jain
Notary (Govt. of India)
JAIPUR (Raj.)

DEPONENT

VERIFICATION

20 MAR 2025

Verified at New Delhi on this day ____ of _____, 2025 that the contents of the present Affidavit are true and correct to the best of my knowledge and belief as derived from the record maintained by the Applicant and no part of it is false and nothing material has been concealed therefrom.

DEPONENT

ATTESTED
Anil Kumar Jain
Notary (Govt. of India)
JAIPUR (Raj.)

20 MAR 2025

Annexure R6/1

Item No. 3

**BEFORE THE NATIONAL GREEN TRIBUNAL
CENTRAL ZONE BENCH, BHOPAL
(Through Video Conferencing)****Original Application No.148/2023(CZ)**

Bhanwar Lal Gurjar

Applicant (s)

Vs.

State of Rajasthan & Ors..

Respondent(s)

Date of Hearing: **19 .09.2024****CORAM: HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER**

For Applicant (s): Mr. Dharamivir Sharma, Adv.

For Respondent(s): Mr. Rohit Sharma, Adv.
Mr. Om Shankar Shrivastav, Adv.**ORDER**

- 1 The present application is filed for the preservation and conservation of Rivers Khari and Mansi, which originated in District Pali and is lifeline of Bhilwada, Shahpura and Kekdi Districts of Rajasthan. The place Daneshwar is Sangam Sthal, falls in Fuliakalan Tehsil, where more than 40 temples and many festivals, numerous Marriage Ceremonies takes place every year. The applicant approached this Hon'ble Tribunal because of illegal excavation of Bazri sand in violation of norms, conditions of Environmental Rules by the Respondent No. 6/PP who has not only demolished Farmers Open wells, irrigation pipelines, standing crops, full grown trees causing huge financial losses to the villagers and residents of Shahpura but made huge adverse impact on river Khari & Mansi no n perennial river of Rajasthan. The respondents is in violation of

1

installing and excavating by using Heavy JCB & Poclain Machines which is not permissible for bajri mining. Upon Complaint the a Spot Mauka Parcha was prepared in presence of concerned Tehsildar on 27.09.2023 regarding destruction of pipe lines and full grown trees due to rampant and illegal mining activities of the PP.

- 2 The matter was taken up by this tribunal and a committee was constituted with direction to submit the report. In addition to that the respondents were directed to submit the reply. In compliance of the order members of the committee visited the site and submitted the report with the following facts :

“

During the visit, lease area of M/s Ashu Singh Bhati s/o Sh. Magan Singh Bhati, M.L. No. 111/2012, (River Sand/Bajri Mining), of Town Phooliya Kalan, village Kheda Hetam, Kajodiya and nearby area of Dhaneshwar Dham stretches were inspected, as prominent mining activities were carried out in these stretches. No illegal mining activities were found during visit in theses stretches. During, field visit, no mining activities were going on in the area.

2. Lease is operating after obtaining Environmental Clearance (EC) granted by MoEF &CC vide dated 14/10/2020, amended EC dated 27/10/2023 and having valid consent to operate dated 17/03/2023 with validity up to 19/01/2024. (Annexure-2a, Annexure-2b & Annexure-2c).

3. Sign marks of mining activities were observed in Village- Phooliya Kalan, Village Kheda Hetam District- Shahpura, however depth of mining pits was not more than permitted depth.

4. A permitted stock point found near Ratadeh Chaurahaya (25°47'5.04"N, 75° 2'11.08"E) Village- Kajodiya (Phooliya Kalan), District- Shahpura was also visited. Mineral loading and transportation machineries/ vehicles were deployed at permitted stock site. 20 trees were planted at this site. Water spray arrangement for dust suppression was provided in form of flexible pipe mounted on water tanker.

5. Natural protected trees were found at the embankment of River Khari in Kajodiya (Phooliya Kalan) stretch near the stock point. No damage to the natural plants was found at this site. No signs of mining activity were observed in this stretch. No damage to open well and pipeline was found at this location.

6. Signs of mining activities were observed in river Khari at village- Kheda Hetam, Tehsil- Phooliya Kalan, District- Shahpura. Rain water was accumulated in the river bed at various places. A number of open wells were also observed in the river bed. It was informed by the concerned Patwari that the wells inside the river bed constructed by nearby farmers for irrigation purposes.

During the visit, no damage to open well and pipeline was observed in the Kheda Hetam stretch and mining activities were also not going on. No crop damage observed.

Naturally protected trees were found at the embankment of River Khari in village Kheda Hetam. No damage to plants was observed at this site.

No mining activity found within 45 meters of embankment and crematorium. No damage to place of cremation found during site visit.

7. During the visit of nearby area of Dhaneshwar Dham, no bajri mining activity was observed in the river bed area. Rain water was found accumulated in the area and dense naturally protected trees were observed at the embankment of the River Khari in this stretch.

No damage to the wells was found at this location, neither sign of bajri mining activity was observed.

8. As per Environment Clearance (EC) dated 14/10/2020 issued in favour of lease holder, there are no restrictions to use excavators for excavation of Bajri from river bed. Consent to operate for production of River Sand at capacity 8,40,000 Ton per Annum has been granted in favor of lease holder, the same is not violated as per production report received from Mines Department, Bhilwara, lease holder has excavated nearly 1.32 lac Tons of Bajri in the year 2023-2024 till November, 2023 .

9. Rs. 56/- per ton of river sand in the form of Royalty, DMFT and RSMET are being paid by the mining lease holder. Other than that, expenditures related to establishment, transportation, premium, loading charges are controlled by lease holders. As per the report dated 01/11/2023 from Mining Department, no illegitimate recovery of royalty by the lease holder from the villagers has been observed.

10. As per Mines Department, Bhilwara, joint demarcation has been done khasra wise in the presence of concerned Revenue Department according to Rajasthan Minor Mineral Concession Rules, 2017. There is no provision in the rule and agreement to wire fence the demarcated area.

As reported by Station Police Officer, Phooliya Kalan no accident due to overloaded bajri transport vehicles has been reported since 01/03/2023.

11. As per report of Mining Department dated 23/11/2023, no mining pit was found deep more than 03 meter and mining activities were well above the ground water level. Water level in open wells near the lease area was approx. 6 meters deep only, which reveals that water scarcity does not prevail in the area .

As reported by Incharge, Ground Water Scientist, Ground Water Department, Bhilwara, during ground water survey conducted in the year 2023, ground water level has been risen up to 2.40-meter nearby villages Phooliya Kalan .

It has also been reported by PHED, Block-Shahpura, that no departmental open wells/tube wells are present in river bed area of Khari & Mansi River, in theses villages Phooliya Kalan, Dhaneshwar, Kheda Hetam and water supply in this area is catered through Chambal Project by house hold tap connections.

As per SDM, Phooliya Kalan open wells established with the river bed area have not been recorded in the revenue records under the jurisdiction of the office.

12. As per approved mining plan, lease shall have to plant 6000 plants in the first year after of operation of mining lease, but no such dense plantation found during the visit by the joint committee. However, the lease holder has been bounded to submit the compliance.

13. Regional Office, RSPCB, Bhilwara has conducted ambient air quality at the mineral stock point near village Kajodiya and PM 10 was found 129 $\mu\text{g}/\text{m}^3$ and prominent activities found during monitoring are mineral handling & vehicular movement.

14. A show cause notice was issued against the lease holder for non-compliance by Regional Office, RSPCB, Bhilwara.

3 Submission of the Learned Counsel for the respondent
no. 1, 2 and 3 are that complaint were made by the villagers

before the District Collector and after receiving the complaint a report was called from Mining Department. Mining Department visited the site and submitted that no trees were found to have been cut in the river and/or on the banks of the river as well as there were no fresh mining within the radius of 45 meters from the crematorium and culvert etc. located in the area. Agriculture land is situated on both banks of the Khari river, no damage was found to the agriculture land or crops located on the banks.

4 The submission of the learned Counsel for the State PCB are that no illegal mining activities were found during the visit and the lease holders are operating the mining after obtaining environmental clearance from the MoEF&CC. No mining activity relating to Bajri was observed in the river bed area and there is no violation based on the production report received from the Mining Department. The report submitted by the In-charge Ground Water Scientist from the Ground Water Department, Bhilwara discloses that the ground water survey conducted in 2023 in the case discloses rise in the ground water level. On the point of Ambient Air Quality the State PCB had issued notices to the Project Proponents.

5 On the request of the Learned Counsel for the applicant the Chief Secretary was directed to examine the matter and submit the report and respondent no. 1 has filed the reply on behalf of the State of Rajasthan to the fact that no mining activities were going on in the area in question and the respondent no 6 is operating after obtaining the Environmental Clearance from the

MoEF&CC. There are no damage to open wells and pipelines and there is no excavation beyond the sanctioned capacity, a dense plantation has been done in the area and plantation proposal to the tune of 43,333/ have been reported by the authorities. On the objection raised by the Learned Counsel for the applicant the Regional Office, MoEF&CC, Jaipur was directed to submit the report on point and the report has been filed with the following facts.

Factual Observations

1. With respect to the illegal excavation of Bath sand, the area was inspected in presence of representative of Department of Mines and Geology, GoR and mining activity was found within the lease limiis. Further, the Department of Mines and Geology, GoR vide their letter dated 18/08/2023 has informed that there are no financial dues from the lessee.
2. The open wells situated in the course of river were inspected and it was observed that no borewell has been damaged. It is pertinent to mention that number of borewells have been constructed in the riverbed on revenue land through which water is being taken out by nearby situated agriculture fields. Relevant site photographs have been • attached with this report.
3. Cremation ground has not been damaged and No damage to the natural plants was found at this site. Relevant site photographs have been attached.

4. Machinery is being used for excavation of bajri and as per visual observation of active working and old workings it appears that mining has not been done beyond the permissible depth.
 5. It was observed that the transfer of mineral Bajri is through dumpers from the stockyard, overloading of vehicle was not observed during the inspection.
 6. Demarcation of lease was not adequate and pillars were not observed in place and there is a need to increase plantation in a scientific manner with adequate planning.
6. We have gone through the report submitted by the MoEF&CC, Regional Office and found that no such violation has been reported, accordingly no further action is required to be taken. However, we direct the State Authorities concerned and State PCB to strictly enforce the guidelines issues by the MoEF&CC named Sustainable Sand Mining Management Guidelines 2016 and Sustainable Sand Mining Management Guidelines 2020 and in case of any violation strict action in addition to realisation of environment compensation must be assessed according to rules.

With these observations the O.A. No. 148/2023 stands **disposed** of.

Sheo Kumar Singh, JM

Dr. Afroz Ahmad, EM

19th September 2024
O.A. No. 148/2023(CZ)
K

Annexure R6/2

Item No. 3

**BEFORE THE NATIONAL GREEN TRIBUNAL
CENTRAL ZONE BENCH, BHOPAL
(Through Video Conferencing)****Original Application No.148/2023(CZ)**

Bhanwar Lal Gurjar

Applicant(s)

Vs.

State of Rajasthan & Ors.

Respondent(s)

Date of Hearing: **17.10.2023****CORAM: HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. AFROZ AHMAD, EXPERT MEMBER**

For Applicant(s):

Mr. Dharamvir Sharma, Adv.

For Respondent(s):

None

ORDER

1. The present application is filed for the preservation and conservation of Rivers Khari and Mansi, which originated in District Pali and is lifeline of Bhilwada, Shahpura and Kekdi Districts of Rajasthan. The place Daneshwar is Sangam Sthal, falls in Fuliakalan Tehsil, where more than 40 temples and many festivals, numerous Marriage Ceremonies takes place every year. The applicant approached this Hon'ble Tribunal because of illegal excavation of Bazri sand in violation of norms, conditions of Environmental Rules by the Respondent No. 6/PP who has not only demolished Farmers Open wells, irrigation pipelines, standing crops, full grown trees causing huge financial losses to the villagers and residents of Shahpura but made huge adverse impact on river Khari & Mansi no n perennial river of Rajasthan. The respondents is in violation of installing and excavating by using Heavy JCB & Poclain Machines which is not permissible for bajri mining. Upon Complaint the a Spot Mauka Parcha was prepared in presence of concerned Tehsildar on 27.09.2023

regarding destruction of pipe lines and full grown trees due to rampant and illegal mining activities of the PP.

2. A substantial issue of environment has been raised. Issue notice to the respondents. Returnable within four weeks.
3. Applicant is directed to take necessary steps for service to the respondents by both ways and also on available email.
4. Respondents are directed to submit their reply within six weeks through e-filing portal, preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.
5. We further constitute a committee consisting of :
 - i. One representative from Collector, District Shahpura (Rajasthan)
 - ii. One representative from State Pollution Control Board, Rajasthan
6. The Committee is directed to visit the place, examine the facts, take remedial measures and submit the factual and action taken report within four weeks. The State PCB will be the nodal agency for coordination and logistic support.
7. The report in the matter be filed by the Committee through email at ngtczbbho-mp@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.

List it on **4th January, 2024.**

Sheo Kumar Singh, JM

Dr. Afroz Ahmad, EM

17th October, 2023
O.A. No. 148/2023 (CZ)
K

Annexure R6/3

Item No. 06

**BEFORE THE NATIONAL GREEN TRIBUNAL
CENTRAL ZONE BENCH, BHOPAL
(Through Video Conferencing)****Original Application No. 148/2023(CZ)**

Bhanwar Lal Gurjar

Applicant(s)

Vs.

State of Rajasthan & Ors.

Respondent(s)

Date of Hearing: 10.04.2024**CORAM: HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. SATYAGOPAL KORLAPATI, EXPERT MEMBER**

For Applicant(s):

Mr. Dharamvir Sharma, Adv.

For Respondent(s):

Mr. Nishant Kesharwani, Adv.
(for Mr. Shoeb Hasan Khan, Adv.)

Ms. Diksha Chaturvedi, Adv.

ORDER

1. Learned counsel for the applicant has submitted that though the version as narrated by the applicant with regard to violation has not been depicted in the joint committee report but the photographs which has been attached shows the serious violation which has not been taken into account while submitting the report.
2. In this circumstance we direct the Regional Officer, Integrated Office, MoEF&CC, Bhopal to examine the matter and violation of rules and to submit the report within four weeks.

List it on **23rd July, 2024.****Sheo Kumar Singh, JM****Dr. Satyagopal Korlapati, EM**10th April, 2024
O.A No. 148/2023(CZ)
PN

2023 SCC OnLine NGT 521

In the National Green Tribunal[±]

(BEFORE PUSHPA SATHYANARAYANA, MEMBER (JUDICIAL) AND SATYAGOPAL
KORLAPATI, EXPERT MEMBER)

In the Matter of

Renny Jacob George ... Applicant(s);

Versus

Kerala State Pollution Control Board and Others ...
Respondent(s).

Original Application No. 142 of 2020 (SZ) I.A. Nos. 37, 148 and
149 of 2022 (SZ) & I.A. Nos. 21, 22 and 71 of 2023 (SZ)

Decided on December 6, 2023, [Reserved on : 23rd November,
2023]

Advocates who appeared in this case:

Mr. K.K. Ashkar. for Applicant(s);

Mrs. V.K. Rema Smrithi for R 1 and R 2. for Respondent(s).

Mr. G. Vignesh for Mr. E.K. Kumaresan for R 3, R 4, R 6 and R 7.

Ms. Kiran Rani for Mr. Kaushik N. Sharma for R 5.

Mr. Satish Parasaran, Sr. Adv along with Mr. Madan Babu, Ms. A.L.
Gandhimathi and Mr. P. Haridas for R 8/I.A.

The Judgment of the Court was delivered by

PUSHPA SATHYANARAYANA, MEMBER (JUDICIAL):— The 8th respondent, who is the project proponent had obtained quarry lease dated 18.11.2005 for extracting granite building stone from an area of 1.0183 ha., in Sy Nos. 326/2, 326/4 and 326/5 of Anicadu Village for 12 years. He also had secured another quarry lease dated 22.02.2008 for extracting granite building stone from an extent of land measuring about 5.1962 ha., comprised in Sy. Nos. 328/6, 329/9, 329/10, 327/1, 325/2, 305/10 and 305/11 of the same village for a period of 12 years. Consent to operate was also obtained by the 8th respondent.

2. The applicant, who is a resident of Anicadu Village, has filed the above application alleging that the 8th respondent was carrying on the quarrying operation till 2016 when there were orders to stop the operations by the Judgment of the Hon'ble High Court of Kerala in W.P. No. 39189 of 2015. He has claimed that a quarry should have a quarry closure plan and owner of the quarry shall have the responsibility to ensure the protective measures contained in the quarry closure plan

and that the respondent had not complied with the same. Therefore, he has asked for:

- (i) Reclamation of the mining pits,
- (ii) Not to do mining without obtaining proper Environmental Clearance,
- (iii) Not to discharge the wash out effluents into the nearby creek and land,
- (iv) To take penal action under the Environmental (Protection) Act, 1986 and
- (v) Also to recover the Environmental Compensation from the 8th respondent for illegal mining of granite stone from the above referred survey numbers in Anicadu Village in Mallappally Taluk of Pathanamthitta District, Kerala without obtaining Environmental Clearance.

3. The Learned Counsel appearing for the 8th respondent objected to the maintainability of the application itself as the same is barred by limitation and also the writ Petition filed by the very same applicant before the Hon'ble High Court of Kerala on similar prayers and the orders were already passed. As the issues arising in the present application were already adjudicated upon by the Hon'ble High Court of Kerala, there is a merger of cause of action into the judgments rendered by the Hon'ble High Court.

4. Without getting into the merits of the case, it would be appropriate to advert to the order passed by the Hon'ble High Court of Kerala in **W.P No. 39189 of 2015** wherein the present applicant is the 2nd writ petitioner. The prayer in the Writ Petition was for writ of mandamus directing the official respondents to take immediate and effective steps to prohibit the illegal quarrying operations conducted by the project proponent in the properties comprised in Sy. Nos. 325/3, 326/2, 4, 5, 327/1, 325/1 and 2, 305/6 and 11, 328/6, 329/9 and 10 of Anicadu Village in Mallappally Taluk.

5. The allegations in the writ petition was that there is a serious ecological destruction and environmental pollution caused due to massive quarrying and removal of large quantity of granites daily without Environmental Clearance. The 2nd allegation was that the lease deeds were granted without an Environmental Clearance and in view of the Deepak Kumar Case-(2012) 4 SCC 629, the project proponent cannot be permitted to continue the operations based on the lease deeds without Environmental Clearance.

6. The next objection raised was for not following the Rules 9, 12 and 13 of the Kerala Minor Mineral Concession Rules. It was alleged that no person shall be eligible for permit on a particular area of

contiguous land owned and possessed by him if he has availed permits for quarrying up to a maximum period of three years in different spells on the same land. The applicant also has raised the grounds of Sustainable Development, Precautionary Principle, Polluter Pays Principle etc., and thus prayed for a direction to the project proponent to take remediation measures to restore the degraded environment by filling the huge pits formed as a result of quarrying operations in his property.

7. In this application also the applicant has sought for reclamation of the mining pits and the assessment of the environmental compensation etc. The Hon'ble High Court of Kerala had passed the common order on 16.03.2016 in W.P (C) No. 39189 of 2015 and W.P (C) No. 2783 of 2016. The W.P No. 2783 of 2016 was filed by the project proponent, herein, challenging the order of the Department of Mining and Geology dated 29.06.2015 and permitted the project proponent to continue with their mining operations. In the above writ petitions common order was passed issuing the directions which are as follows:

- "1. The Geologist, after obtaining a report from the Tahsildar as to the extent of the area covered in Ext. P2 which remain unexcavated, shall permit the petitioner in W.P. (C) No. 2783/16 to excavate such area remain as unexcavated in Ext. P2. This shall be done within a period of three weeks from the date of receipt of the copy of the Judgment.*
- 2. However, the petitioner shall not be permitted to excavate from the area covered by Ext. P3 unless the petitioner obtains Environmental Clearance.*
- 3. It is made clear that the directions will not stand in the way of any authority for considering the application for environmental clearance. Needless to say that once the petitioner obtains environmental clearance, the petitioner is free to conduct quarrying operation in respect to the area covered both under Exts.P2 and P3."*

8. As the above order has included the same cause of action raised by the applicant, herein, it was argued by the Learned Counsel for the 8th respondent that when the Hon'ble High Court has already passed the Judgment based on the same cause of action, the same is extinguished and cannot be resurrected by filling a subsequent litigation. The applicant also placed his reliance on *Som Dev v. Rati Ram*-(2006) 10 SCC 788 para-19 which reads as follows:

"19. When a cause of action is put in suit and it fructifies into a decree, the cause of action gets merged in the decree. Thereafter, the cause of action cannot be resurrected to examine whether the cause of action was enforceable or the right claimed therein could be

enforced. To borrow the words of Spencer-Bower and Turner on Res Judicata, every judicial decision: "is of such exalted nature that it extinguishes the original cause of action, and consequently bars the successful party from afterwards attempting to resuscitate what has been so extinguished and stir the dust which has received such honourable sepulture." (See Introduction to the 2nd Edn.)

9. Learned Counsel also compared the prayers sought for in the writ petition and the prayers sought for in the present application and demonstrated that all issues raised and relief sought for in the present proceedings have either already been adjudicated upon or pending before the Division Bench of the Hon'ble High Court.

10. It was pointed out by the Learned Counsel for the applicant that the relief of reclamation, restitution and compensation were not considered by the Hon'ble High Court of Kerala and the same have to be looked into by this Tribunal. The same was opposed by the respondent stating that though the above referred prayers were specifically sought for by the applicant before the Hon'ble High Court of Kerala, the same deemed to have been impliedly refused by the Hon'ble High Court. The same is admitted by the Learned Counsel for the applicant.

11. The Judgment of the Kerala High Court was passed on 16.03.2016 giving quietus to all the issues which arose out of the quarry operations. Admittedly, the 8th respondent had stopped quarrying from March, 2016 immediately after the orders were passed in the writ petitions. Therefore, there cannot be any fresh cause of action for the applicant and the respondent cannot be vexed twice for the same cause of action. If the applicant was so aggrieved, he could have preferred a review or an appeal.

12. The Learned Counsel appearing for the applicant also could not establish that after the orders of the Hon'ble High Court passed in March, 2016 there were further quarry activity by the respondent and admitted that the quarry operations were stopped by the 8th respondent in March, 2016. In the absence of any such fresh cause of action, the application filed by the applicant in the year 2020 cannot be maintained and the same is rejected on the preliminary issue. Consequently, the Original Application is dismissed.

13. In view of the disposal of the Original Application, the Interlocutory Applications also stands dismissed.

[†] Chennai Bench

rendered or accepted on the basis of this casenote/ headnote/ judgment/ act/ rule/ regulation/ circular/ notification. All disputes will be subject exclusively to jurisdiction of courts, tribunals and forums at Lucknow only. The authenticity of this text must be verified from the original source.

Annexure R6/5

NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH
NEW DELHI

File No. NGT/PB/RG/2020/6/170/210
Dated: 19.03.2020

CIRCULAR

WHEREAS, in exercise of powers conferred by sub-section (3) of Section 4 of the National Green Tribunal Act, 2010 (19 of 2010), the Central Government, vide notifications no. S.O. 10003(E) dated 05.05.2011 and S.O. 1908(E) dated 17.08.2011, had specified certain places of sitting to exercise jurisdiction in the areas indicated. The said notifications were superseded vide subsequent notification bearing no. S.O. 2582(E) dated 10.08.2017, by which places of sitting were notified to exercise jurisdiction in the areas indicated against each.

WHEREAS, Pune Bench is getting functional w.e.f. 14th April, 2020 and in order to provide access to justice, in view of the observations of the Hon'ble High Court of Bombay in the Writ Petition No.22/2017, which equally applies to the UTs of Daman and Diu and Dadra and Nagar Haveli. The competent authority has approved that the jurisdiction of Daman and Diu and Dadra and Nagar Haveli will be at Pune Bench.

The modified list specifying the jurisdiction now stands as under:-

Serial number	Zone	Place of Sitting	Territorial Jurisdiction
1	Northern	Delhi (Principal Place)	Uttar Pradesh, Uttarakhand, Punjab, Haryana, Himachal Pradesh, Jammu and Kashmir, National Capital Territory of Delhi and Union Territory of Chandigarh
2	Western	Pune	Maharashtra, Gujarat, Goa ¹ with Union Territories of Daman and Diu and Dadra and Nagar Haveli ² .
3	Central	Bhopal	Madhya Pradesh, Rajasthan and Chhattisgarh.
4	Southern	Chennai	Kerala, Tamil Nadu, Andhra Pradesh, Telangana, Karnataka,

[Signature]
19/3/2020

Union Territories of
Pondicherry and
Lakshadweep.

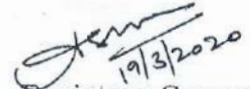
5

Eastern

Kolkata

West Bengal, Orissa,
Bihar, Jharkhand,
seven sister States of
North-Eastern region,
Sikkim, Andaman and
Nicobar Islands.

- *Daman & Diu and Dadar & Nagar Haveli modified.*
- 1. *In accordance with the order dated 11.10.2017 passed by the High Court of Bombay Bench at Goa. In Writ Petition No.22/2017*
- 2. *On direction of Competent Authority in view of judgment in Writ Petition No.22/2017 passed by the High Court of Bombay Bench at Goa.*


19/3/2020

Registrar General
National Green Tribunal

Copy to:

1. Secretary, Ministry of Environment Forest & Climate Change New Delhi for information and necessary action at their end if required
2. PPS to Hon'ble Chairperson
3. PA to Hon'ble Members
4. PS to Registrar General
5. Ld. Registrar of WZB, Pune
6. PA to Dy. Registrar (Judicial)
7. Consultant (Judicial / Admin./Pro)
8. Court Masters
9. President NGT Bar Association
10. NGT Bar Notice Board
11. NGT Notice Board
12. Guard File NGT
13. NGT Website



भारत का राजपत्र
The Gazette of India

सी.जी.-डी.एल.-अ.-20042022-235241
CG-DL-E-20042022-235241

असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 1795]
No. 1795]

नई दिल्ली, बुधवार, अप्रैल 20, 2022/चैत्र 30, 1944
NEW DELHI, WEDNESDAY, APRIL 20, 2022/CHAITRA 30, 1944

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 20 अप्रैल, 2022

का.आ. 1886(अ).—केंद्रीय सरकार पर्यावरण और वन विभाग के पूर्ववर्ती मंत्रालय में पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा (3) की उप-धारा (1) और उप-धारा (2) के खंड (v) के अधीन प्रदत्त शक्तियों का प्रयोग करते हुए, पर्यावरण समाघात निर्धारण अधिसूचना, 2006 (जिसे इसमें इसके पश्चात ईआईए अधिसूचना, 2006 कहा गया है), परियोजनाओं की कतिपय प्रवर्ग के लिए पूर्व पर्यावरणीय मंजूरी आज्ञापक बनाने के लिए, संख्या का.आ.1533(अ), तारीख 14 सितंबर, 2006 द्वारा प्रकाशित की है।

और राज्य पर्यावरण समाघात निर्धारण प्राधिकरण (एसईआईए) का गठन प्रवर्ग ख के अधीन सभी प्रस्तावों के लिए पर्यावरण मंजूरी (ईसी) पर विचार और अनुदान के लिए प्रत्यायोजित शक्तियों का प्रयोग करने हेतु राज्य स्तर पर ईआईए अधिसूचना, 2006 के कार्यान्वयन के लिए पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उप-धारा (3) के अधीन किया गया है;

और राज्य पर्यावरण समाघात निर्धारण प्राधिकरण ने पर्यावरण मंजूरी मूल्यांकन प्रक्रिया में पिछले पंद्रह वर्षों में पर्याप्त अनुभव प्राप्त किया है और राज्य स्तर पर पर्यावरण मंजूरी प्रस्तावों के कुशल और पारदर्शी निपटान के लिए परिवेश पोर्टल के माध्यम से पूरी तरह से ऑनलाइन कर दिया गया है;

और केंद्रीय सरकार राज्य स्तर पर मंजूरी की प्रसुविधा के लिए पर्यावरण मंजूरी प्रक्रिया को और विकेंद्रीकृत करना आवश्यक समझती है;

और आज की तारीख में, सुरक्षा भागीदारी के महत्वपूर्ण तत्वों के साथ राष्ट्रीय रक्षा और सामरिक महत्व से संबंधित प्रवर्ग ख की परियोजनाओं का राज्य स्तर पर भी मूल्यांकन किया जा रहा है, जिसे केंद्रीय सरकार राष्ट्रीय सुरक्षा चिंताओं को ध्यान में रखते हुए केंद्रीय रूप से मूल्यांकन करना आवश्यक समझती है;

अतः अब, केंद्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उप-नियम (4) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उप-धारा (1) और उप-धारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए उक्त नियमों के नियम 5 के उप-नियम (3) के खंड (क) के अधीन नोटिस की अपेक्षा को समाप्त करने के पश्चात्, लोकहित में भारत सरकार की तत्कालीन पर्यावरण एवं वन मंत्रालय की अधिसूचना संख्यांक का.आ. 1533(अ), तारीख 14 सितम्बर, 2006, की अधिसूचना में निम्नलिखित और संशोधन करती है अर्थात्:-

उक्त अधिसूचना में-

(1) पैरा 4 में, उप-पैरा (iii) क) के स्थान पर, निम्नलिखित रखा जाएगा, अर्थात्: -

(iii) क) राष्ट्रीय रक्षा या सामरिक या सुरक्षा महत्व से संबंधित हैं या जिन्हें केंद्रीय सरकार द्वारा संकटकाल जैसे महामारी, प्राकृतिक आपदाओं जैसी अत्यावश्यकताओं के कारण ऐसी प्रवर्ग 'ख' परियोजनाओं को अधिसूचित किया गया है या राष्ट्रीय कार्यक्रमों या स्कीमों या मिशन या ऐसी परियोजनाओं के अधीन पर्यावरण के अनुकूल क्रियाकलापों का संवर्धन करने के लिए जो इस अधिसूचना में यथा अधिकथित समय-सीमा से अधिक विलंबित हैं और समय-समय पर इस संबंध में यथा-अधिकथित मानदंडों को पूरा करती हैं, उन्हें केंद्रीय स्तर पर प्रवर्ग 'ख' परियोजनाओं के रूप में विचार किया जाएगा;

(2) अनुसूची में, -

(i) मद 1(क) के सामने, -

(क) स्तंभ (3) में, -

(क) गैर-कोयला खनन पट्टे के संबंध में "> 100 हेक्टेयर खनन पट्टा क्षेत्र" के स्थान पर, निम्नलिखित रखा जाएगा, अर्थात्: -

"कोयले के अलावा अन्य प्रमुख खनिज खनन पट्टे के संबंध में >250 हेक्टेयर खनन पट्टा क्षेत्र";

(ख) ">150 हेक्टेयर" प्रतीक, अंक और अक्षर के स्थान पर, "> 500 हेक्टेयर" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(ख) स्तंभ (4) में, -

(क) गैर-कोयला खनन के संबंध में <100 हेक्टेयर खनन पट्टा क्षेत्र के स्थान पर,

पट्टा", निम्नलिखित रखा जाएगा, अर्थात्: -

"लघु खनिज खनन पट्टों के संबंध में सभी खनन पट्टा क्षेत्र और कोयले के अलावा अन्य प्रमुख खनिज खनन पट्टे के संबंध में <250 हेक्टेयर खनन पट्टा क्षेत्र";

(ख) "<150 हेक्टेयर" के प्रतीकों, अंकों और अक्षरों के स्थान पर "<500 हेक्टेयर" के प्रतीक, अंक और अक्षर रखे जाएंगे;

(ii) मद 1(ग) के सामने, -

(क) स्तंभ (3) में, -

(क) क्रम संख्या (i) में, "> 50 मेगावाट, प्रतीकों, अंकों और अक्षरों के स्थान पर "> 100 मेगावाट" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(ख) क्रम संख्या (ii) और उससे संबंधित प्रविष्टियों का लोप किया जाएगा;

(ख) स्तंभ (4) में, -

(क) क्रम संख्या (i) में, "<50 मेगावाट" प्रतीक, अंक और अक्षर के स्थान पर, "<100 मेगावाट" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(ख) क्रम संख्या (ii) में, -

(i) "और <50,000 हेक्टेयर" शब्द, प्रतीक और अंक का लोप किया जाएगा;

(ii) बिंदु (ग) में सारणी में, "से <50,000" शब्द, प्रतीक और अंक का लोप किया जाएगा; ।

(ग) स्तंभ (5) में, क्रम संख्या (ii) के पश्चात, निम्नलिखित क्रम संख्या अंतःस्थापित किया जाएगा, अर्थात् :-

"(iii) अंतर-राज्यीय मुद्दों से संबंधित सिंचाई परियोजनाओं का मूल्यांकन केंद्रीय स्तर पर श्रेणी में परिवर्तन के बिना किया जाएगा";

(iii) मद 1(घ) के सामने,-

(क) स्तंभ (3) में, "> 50 मेगावाट" प्रतीकों, अंकों और अक्षरों के स्थान पर, "> 100 मेगावाट" प्रतीकों, अंकों और अक्षरों को रखा जाएगा;

(ख) स्तंभ (4) में, "<50 मेगावाट" प्रतीक, अंक और अक्षर के स्थान पर, "<100 मेगावाट" प्रतीक, आंकड़े और अक्षर रखे जाएंगे;

(iv) मद 2(क) के सामने, -

(क) स्तंभ (3) में, ">1" प्रतीकों और अंक के स्थान पर, ">2.5" प्रतीकों और अंक को रखा जाएगा;

(ख) स्तंभ (4) में, "<1" प्रतीकों और अंक के स्थान पर, "< 2.5" प्रतीक और अंक रखे जाएंगे;

(ग) स्तंभ (5) में, विद्यमान पैरा के पश्चात, निम्नलिखित पैरा अंतःस्थापित किया जाएगा, अर्थात् :-

"खनन पट्टा क्षेत्र के भीतर स्थित धुलाई मशीनों के साथ एकीकृत कोयला खनन परियोजनाओं को कोयला खनन परियोजनाओं के लिए विद्यमान सीमा के अनुसार केंद्रीय स्तर या राज्य स्तर पर, यथास्थिति, विचार किया जाना जारी रहेगा";

(v) मद 2 (ख) के सामने, -

(क) स्तंभ (3) में, विद्यमान प्रविष्टियों का लोप किया जाएगा;

(ख) स्तंभ (4) में, "<0.5 मिलियन टीपीए का उत्पादन" प्रतीक, अंक, शब्द और अक्षर के स्थान पर, "सभी खनिज परिष्करण परियोजना, परिष्करण की प्रक्रिया पर ध्यान दिए बिना" शब्द रखे जाएंगे;

(ग) स्तंभ (5) में, विद्यमान पैरा के पश्चात, निम्नलिखित पैरा रखा जाएगा,

अर्थात् :-

"भीतर स्थित लाभकारी संयंत्रों के साथ एकीकृत खनन परियोजनाएं खनन पट्टा क्षेत्र पर केन्द्रीय स्तर पर विचार किया जाता रहेगा या यथास्थिति, राज्य स्तर, खनन परियोजनाओं के लिए विद्यमान सीमा के अनुसार";

(vi) मद 7 (क) के सामने,-

(क) स्तंभ (3) में, "सभी परियोजनाओं" शब्दों के स्थान पर "सभी नई परियोजनाएं" शब्द रखे जाएंगे;

(ख) स्तंभ (4) में, निम्नलिखित अंतःस्थापित किया जाएगा, अर्थात् :-

"सभी विस्तार परियोजनाएं, जिनमें हवाई पट्टियां भी सम्मिलित हैं, जो वाणिज्यिक उपयोग के लिए हैं।"

[फा. सं. आईए 3-22/10/2022-आईए. III]

डॉ. सुजीत कुमार बाजपेयी, संयुक्त सचिव

टिप्पण : मूल अधिसूचना भारत के राजपत्र, असाधारण, भाग II, खंड III, उप-खंड (ii), संख्या का.आ. 1533(अ), तारीख 14 सितंबर, 2006 द्वारा प्रकाशित की गई थी और अधिसूचना संख्या का.आ. 1807(अ), तारीख 12 अप्रैल, 2022 द्वारा अंतिम संशोधन किया गया था।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 20th April, 2022

S.O. 1886(E).—WHEREAS, the Central Government in the erstwhile Ministry of Environment and Forests, in exercise of its powers under sub-section (1) and clause (v) of sub-section (2) of section (3) of the Environment (Protection) Act, 1986 has published the Environment Impact Assessment Notification, 2006 (hereinafter referred to as the EIA Notification, 2006), vide number S.O.1533 (E), dated the 14th September, 2006 for mandating prior environmental clearance for certain category of projects;

And whereas, the State Environment Impact Assessment Authorities (SEIAAs) have been constituted under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 for implementation of the EIA Notification, 2006 at State level for exercising delegated powers to consider and grant Environmental Clearance (EC) for all proposals under Category B;

And whereas, the SEIAAs have gained substantial experience over the past fifteen years in the EC appraisal process and the process at the State level has also been made completely online through the PARIVESH portal for efficient and transparent disposal of EC proposals;

And whereas, the Central Government deems it necessary to further decentralise the EC process for facilitating clearances at State level;

And whereas, as on date, category 'B' projects, relating to national defence and strategic importance with significant element of security involvement are also being appraised at the State level which, the Central Government deems it necessary to be appraised centrally taking into account national security concerns;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986), read with sub-rule(4) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government, after having dispensed with the requirement of notice under clause (a) of sub-rule (3) of rule 5 of the said rules, in public interest, hereby makes the following further amendments in the notification of the Government of India, in the erstwhile Ministry of Environment and Forests, number S.O. 1533 (E), dated the 14th September, 2006, namely:-

In the said notification,-

(1) in paragraph 4, for sub-paragraph (iii a), the following shall be substituted, namely:-

(iii a) Such Category 'B' projects, relating to the National defence or strategic or security importance or those as notified by the Central Government on account of exigencies such as pandemics, natural disasters or to promote environmentally friendly activities under National Programmes or Schemes or Missions or such projects which are inordinately delayed beyond the stipulated timeline as laid down in this notification and also meet the criteria as laid down in this regard from time to time, shall be considered at the Central level as Category 'B' projects;

(2) in the Schedule,-

(i) against item 1(a),-

(a) in column (3),-

(A) for ">100 ha. of mining lease area in respect of non-coal mining lease", the following shall be substituted, namely:-

">250 ha mining lease area in respect of major mineral mining lease other than coal";

(B) for the symbol, figures and letters "> 150 ha", the symbol, figures and letters "> 500 ha" shall be substituted;

(b) in column (4),-

(A) for "≤ 100 ha of mining lease area in respect of non-coal mine lease", the following shall be substituted, namely:-

"All mining lease area in respect of minor mineral mining leases and ≤ 250 ha mining lease area in respect of major mineral mining lease other than coal";

- (B) for the symbols, figures and letters " ≤ 150 ha", the symbols, figures and letters " ≤ 500 ha" shall be substituted;
- (ii) against item 1(c),—
- (a) in column (3),—
- (A) in serial number (i), for the symbols, figures and letters " ≥ 50 MW", the symbols, figures and letters " ≥ 100 MW" shall be substituted;
- (B) serial number (ii) and the entries relating thereto shall be omitted;
- (b) in column (4),—
- (A) in serial number (i), for the symbol, figures and letters "< 50 MW", the symbol, figures and letters "< 100 MW" shall be substituted;
- (B) in serial number (ii),—
- (I) the word, symbol and figures "and < 50,000 ha." shall be omitted;
- (II) in point (c) in the table, the word, symbol and figures "to < 50,000" shall be omitted;
- (c) in column (5), after serial number (ii), the following serial number shall be inserted, namely:—
- "(iii) Irrigation projects involving Inter-State issues shall be appraised at Central level without change in category.";
- (iii) against item 1(d),—
- (a) in column (3), for the symbols, figures and letters " ≥ 50 MW", the symbols, figures and letters " ≥ 100 MW" shall be substituted;
- (b) in column (4), for the symbol, figures and letters "< 50 MW", the symbol, figures and letters "< 100 MW" shall be substituted;
- (iv) against item 2(a),—
- (a) in column (3), for the symbols and figure " ≥ 1 ", the symbols and figures " ≥ 2.5 " shall be substituted;
- (b) in column (4), for the symbols and figure "< 1", the symbols and figures "< 2.5" shall be substituted;
- (c) in column (5), after the existing paragraph, the following paragraph shall be inserted, namely:—
- "Integrated coal mining projects with washeries located within mining lease area shall continue to be considered at Central level or State level, as the case may be, as per the extant threshold for coal mining projects.";
- (v) against item 2 (b),—
- (a) in column (3), the existing entries shall be omitted;
- (b) in column (4), for the symbol, figures, words and letters "< 0.5 million TPA throughput", the words "All mineral beneficiation projects irrespective of the procedure for beneficiation" shall be substituted;
- (c) in column (5), after the existing paragraph, the following paragraph shall be inserted, namely:—
- "Integrated mining projects with beneficiation plants located within mining lease area shall continue to be considered at Central level or State level, as the case may be, as per the extant threshold for mining projects.";
- (vi) against item 7 (a),—
- (a) in column (3), for the words "All projects", the words "All new projects" shall be substituted;

(b) in column (4), the following shall be inserted, namely:—

“All expansions projects, including airstrips, which are for commercial use.”

[F. No. IA3-22/10/2022-IA.III]

Dr. SUJIT KUMAR BAIJAYEE, Jt. Secy.

Note : The principal notification was published in the Gazette of India, Extraordinary, Part II, Section III, sub-section (ii), vide, number S.O. 1533(E), dated the 14th September, 2006 and was last amended, vide, the notification number S.O. 1807(E), dated the 12th April, 2022.

2023

REPLENISHMENT STUDY

BASED ON TOPOGRAPHICAL SURVEY
STUDY PERIOD PREMONSOON & POST MONSOON -2023

SAND/BAJRI MINING PROJECT OF MINOR MINERAL
TEHSIL –SHAH PURA, DISTRICT – BHILWARA, RAJASTHAN
NAME OF RIVERS-KHARI NADI
LEASE AREA: 624.39 HECT.
SURVEYED AREA: 624.39 HECT.

LESSEE
M/S ASHU SINGH BHATI, 45 PASHCHIM VIHAR ,VAISHALI
NAGAR,JAIPUR, Rajasthan-



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INTRODUCTION

Bhilwara district is located in the southern part of Rajasthan. It is bounded in the north by Ajmer and Tonk districts, in the east by Bundi district, south by Chittaurgarh district and the state of Madhya Pradesh and by Rajsamand district in the west. It stretches between $25^{\circ} 00' 38.87''$ to $25^{\circ} 57' 53.70''$ north latitude and $74^{\circ} 00' 31.67''$ to $75^{\circ} 27' 46.25''$ east longitude covering area of 10,445.1 sq km. Major part of the district has a systematic drainage system contributing to 'Banas River Basin' (central and western parts of the district) for its most part and the eastern part drains into the 'Chambal River Basin'.

RAINFALL & CLIMATE

The rainfall received in the district is fairly good. The general distribution of rainfall across can be visualized from isohyets presented in the Plate – III where district is having uneven type of rainfall pattern. The rainfall isohyets follow north to south in the center part, generally receiving 800 to 900 mm while in the east while the west received 600 to 700 mm. Rainfall gradually decreases from southeast towards northwest. The annual average rainfall was 743.1 mm based on the data of available blocks. Mandalgarh block received highest annual rainfall (1281.8 mm) whereas minimum was in Asind block (347.0 mm). Highest average annual rainfall was recorded in Mandalgarh block which was about 901.6 mm.

January is the coldest month with mean and maximum temperatures being lowest at 22.2°C and 7.3°C . Temperature during peak summer month of June reaches up to 46°C . Monsoon months from July to September bring in rains to the district which help in not only contain the rising temperatures but also to replenish the water resources both surface and sub-surface. Atmosphere is generally dry except during the monsoon period. Annual mean rainfall in the district is 583.7mm.

PROCESS OF DEPOSITION OF SEDIMENTS IN THE RIVER OF THE DISTRICT:

Introduction: Rivers are an integral part of the hydrologic cycle and are the major geologic agents which erode the continents and transport water and sediments to the oceans. Thus rivers constitute an important link between continents and oceans. The important river which flows across the district are as follows:

Banas River: The Banas River originates in the Khamnor hills of the Aravali range (near to

Machind in Nathdwara tahsil) at an elevation 372.5m above mean sea level. The total length of the river from origin to its outfall into the little Rann of Kachchh it drains an area of 8,674 sq km out of which nearly 38 % lies in Rajasthan State and the remaining 62 % falls in Gujarat state. The basin lies between the geographical coordinates of 71°15' to 73°15' east longitudes and 23°30' to 24°55' north latitudes. The entry point of the river in the Bhilwara district is village Dudiya tehsil, Hamirgarh and where as exit point is village Dhuvala Tehsil Jahazpur and it travels 145 km in the district out of 512 km in the state. The river flows in a south –westerly direction and empties into little Rann of Kachchh. It is bounded by Luni basin in the north, Sarasvatibasin in the south, Aravalli Hill ranges in the east and finally, Arabian Sea in the west. Banas is a major tributary of the Chambal River, the two rivers meeting near village Rameshwar in Khandar Block in Sawai Madhopur District. The total catchment area of Banas River is about 45,833 km².

Tributaries: Berach and Menali on the right, and Kothari, Khari, Dai, Dheel, Sohadara, Morel and Kalisil on the left.

River Berach: River Berach originates in the hills northeast of Udaipur city. It flows northeast for about 157km in Udaipur, Chittorgarh and Bhilwara Districts before joining the Banas near Bigod village in Mandalgarh Tehsil of Bhilwara District. The entry point of the river in the Bhilwara district is village Badliya, Tehsil Kotri and where as exit point is village Bigod near Trivani and it travels 85 km in the district. It flows in a hilly region up to Badgaon reservoir and then through plains. The total catchment area of the river around 7,502 km²

Tributaries: Ayar, Wagli Wagon, Gambhiri and Orai, joining from the right.

River Kothari: River Kothari originates in the eastern slopes of the Aravali range near Horera village in Bhilwara District. The river flows through Rajsamand and Bhilwara Districts for about 51 km in a hilly region, and 100 km through plains, before joining the Banas near Nandrai village in Bhilwara District. The entry point of the river in district is village Ladki, tehsil Raipur and exist point is Nandrani, tehsil Kotri, length of the river in district is about 126 km. The catchment area of the river is around 2,341 km².

Tributaries: Bahamani

River Khari: River Khari originates in the hills near Deogarh in Rajsamand District. It flows northeast for about 192 km through Rajsamand, Bhilwara and Ajmer Districts before joining the

Banas River near Chosalavillage in Ajmer District. The entry point of the river in the district is village Dhuwala, tehsil Karera and existpoint village Gulabpura, tehsil Hurda with the travel length of 62 km. The catchement area of the river around 6,268 km²

Tributaries: Nekhadi and Bara rivers on the left and Mansi River on the right.

River Manshi: River Manshi originates near village Karera in Bhilwara District. It flows from south west to north east and then merge in Khari river. The entry point of the river in the district is village Kaserpura, Tehsil Karera and exist point is village Sangriya, tehsil Phuliakala with the travel length of 68 km in the district. The total catchment area of the river is around 1500 km².

River Chandrabhaga: River Chandrabhaga originates in the hills of the Amet area district Rajasamnd and flows south-easterly. The entry point of the river in the district is village Phukia, Tehsil Sahada and exit point is village Majawas, Tehsil Sahada with travel of 26 km in the district.

River Menali: River Menali originates from uparmal area of Bundi district and flows through North-west through Menal water fall and enters in Menal, Bhilwara district and ultimately merge in Banas River near Bigod by flowing 15 km in length.

The river Banas, Khari, Mansi, Kothari, and Chandrabhaga are originated from the hills of Delhi Super group and enter in the plains of Banded Gneissic Complex in the district Bhilwara. The sand is generated in all the rivers are due to process of erosion of Delhi Super group of rocks and BGC rocks. Among these rivers, Banas River having good quality of sand due to long course of travelling of the sediments and thickness of deposition of sand is about 3-4 m in all the above rivers. Details of Royalty, production and important places of sand mining tehsil wise is given in table below:

Reserves of sand deposit in the district

There is no systematic prospecting work for sand is carried out in the district thus it is not possible to mention the reserves of sand deposit. However with the help of Toposheet, Google maps and through local information tentative geological reserves of sand in important rivers are estimated with shown in table below.

Name of River	Approximately length (m)	Average width(m)	Geological Resource in Million Ton
Banas	145000	300	339.3
Chandrabhaga	26000	100	20.280
Khari	62000	200	96.72
Kothari	126000	175	171.99
Berach	85000	150	99.45
		Total	728.26

*Av. Depth of sand bad assumed 3 meter and specific gravity 2.6

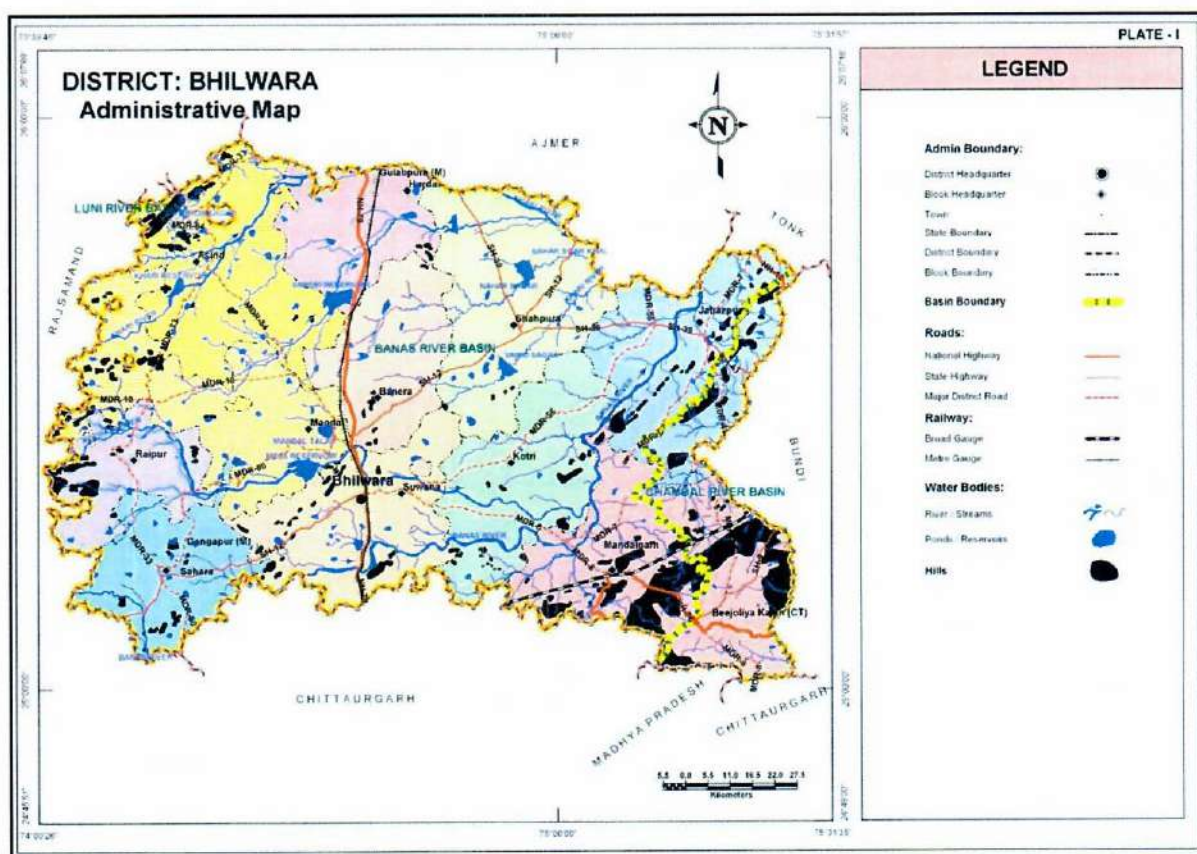


Fig-1. Administrative Map of the Bhilwara District

PHYSIOGRAPHIC:

Bhilwara is situated between 25o00' to 27o50' north latitude and 74o03' to

75°25' east longitude. It is 414.25 meters above the sea level. It is 260 km away from Jaipur. Northern border of the district touches district Ajmer, north-west border touches district Rajsamand, south & south-east border touches district Chittorgarh and east & east-north touches district Bundi & Tonk. Bhilwara district consists of fairly open plains in the north and southeast with a few hillocks and undulating plains & hills in the south and northeastern part. Occasional inselberg, low-lying hillocks and chains of ridges break the monotony of peneplained tract. The area of the district generally slopes gently except in western & northwestern part where slope is high.

Geomorphological divisions of the district are given in Table:

Origin	Landform Unit	Occurrence
Fluvial	Alluvial Plain	Along rivers-Khari, Masi, Banas, Kothari
	Valley Fill	Small scattered patches in east & west
	Ravine	Along Berach River in south
Denudational	Pediment	Scattered in entire district, mainly in east & west
	Buried Pediment	Almost entire district except in east, southeast & north
	Intermontane Valley	Scattered in east & southeast
Aeolian	Sandy Plain	North
Structural	Plateau	Southeast
Hills	Linear Ridges	Near Jahazpur town
	Structural Hill	In northwest & eastern part of the district and Bhilwara town

GEOLOGY AND MINERAL WEALTH:

Bhilwara district is located almost in the centre of Rajasthan state covering an area of 10,455 km². It is bounded by latitudes 25°01' to 25°58' and longitudes 74°01' to 75°28', falling in Survey of India degree sheets 45K and O. The district has 16 tehsils namely Asind, Hurara, Kotari, Mandal, Kareda, Raipur, Sahara, Shahpura, Jahazpur, Banera, Mandalgarh, Bhilwara, Badnor, Hamirgarh, Bijoliya & Pholiya. There is well spread network of roads in district. Broad gauge railway line (Jaipur-Udaipur) measuring 84 km and connecting Ajmer with Khandwa in Madhya Pradesh. The nearest airport is at Udaipur (171 km). The average annual rainfall is 699mm. The Banas River along with its tributaries drains the area in the south and east while Khaririver drains the north-western area.

Geology:

The Precambrian rocks of the district have been classified into the Bhilwara Supergroup (more

than 2500 m.y.), the Aravalli Supergroup (2500 to 2000 m.y.), the Delhi Supergroup (2000-850 m.y.) and the Vindhyan Supergroup (900-570 m.y.). The Bhilwara Supergroup includes Banded Gneiss Complex represented by Sndmata complex comprising migmatite, gneiss, sillimanite-biotite schist, calc silicate rock etc are exposed in the central part. The Hindoli Group consisting of metagreywacke, tuf, phyllite, quartzite, marble/dolomite are exposed in juxtaposition with the Mangalwar complex in eastern part. Rocks of the Bhilwara Supergroup are intruded by the Gyangarh-Asind acidic rocks, amphibolites, norite, dolerite, Berach and the Jahazpur Granites. The Lower Proterozoic calcareous rocks chiefly consisting calc-schist, calc-gneiss, dolomite and also mica schist, chert etc are grouped within the Pur-Banera, Jahazpur and Rajpura-Dariba Groups which occur as isolated cover sequences overlying the Mangalwars. These are exposed west of Bhilwara, between Kachola and Jahazpur and east of Gangapur respectively. A small patch of Aravalli rocks represented by Dovda Group occur in southwestern part. Rocks of Delhi Supergroup, in the extreme northwestern part of the district are represented by the Gogunda and Kumbhalgarh Groups. The Gogunda Group consists of mainly calc-gneiss, marble with minor schist and quartzite. The southeastern part of the district is occupied by a sequence of shale, sandstone, limestone belonging to the Khorip, the Kaimur, the Rewa and the Bhandar Group of the Vindhyan Supergroup. These rocks are juxtaposed with the Hindoli metasediments along the Great Boundary fault.

PURPOSE OF REPLENISHMENT STUDY: -

The need for replenishment study for river bed sand is required in order to nullify the adverse impacts arising due to excising sand extraction. Mining within or near riverbed has a direct impact on the stream's physical characteristics. Alteration or modification of attributes may cause an impact on the ecological equilibrium of the river regime, disturbance in channel configuration and flow-paths. This may also cause an adverse impact on in-stream biota and riparian habitats. It is assumed that the riparian habitat disturbance is minimum if the replenishment is equal to excavation for a given stretch. Therefore, to minimize the adverse impact arising out of sand mining in a given river stretch, it is imperative to have a study of replenishment of material during the defined period.

Report aims to quantify the amount of replenishment of sand/Bajri on the basis of survey done with Differential global positioning system (DGPS) during Pre-Monsoon & Post Monsoon of

River bed. After completion of the field survey mining depth should be restricted to 3 meters and distance from the bank should be 1/4th of river width and should not be less than 7.5 meters thus area falling under 3/4th part of River bed is considered as Mineable & 1/4th part under Statuary barrier determined on both side of river and sections drawn at an interval of 200m. And modified as recommend by CEC Guidelines. Post Monsoon data superimposed over pre monsoon data and volume generated. Sampling is done between two consecutive sections to determine the Bulk density as per the guideline of Sustainable Sand Mining Management Guidelines. 2016, and Enforcement & Monitoring Guidelines for Sand Mining 2020.

Brief process of replenishment study to estimate & establish the replenished amount of sand/Bajri in respective block/stretch:-

- Data Collection of Pre monsoon – Post monsoon status of Lease Area.
- Establishing the levels difference of Pre monsoon – Post monsoon period to establish the Occurrence for sand/Bajri in relative block.
- Quantifying the replenishment amount of sand/Bajri establishing the reserve viability in Relative block.
- Sampling is done between two consecutive sections to determine the Bulk density & verified by competent authority.
- Geological & Mineable reserve estimated and proposal for bajri excavation made for Permissible quantity. (Mineable material per hectare area available for actual mining shall not exceed the maximum quantity of 60,000 MT per annum as per Enforcement & Monitoring Guidelines for Sand Mining 2020).

Location and Description of lease area:-Most of the data for this study has been collected at field.

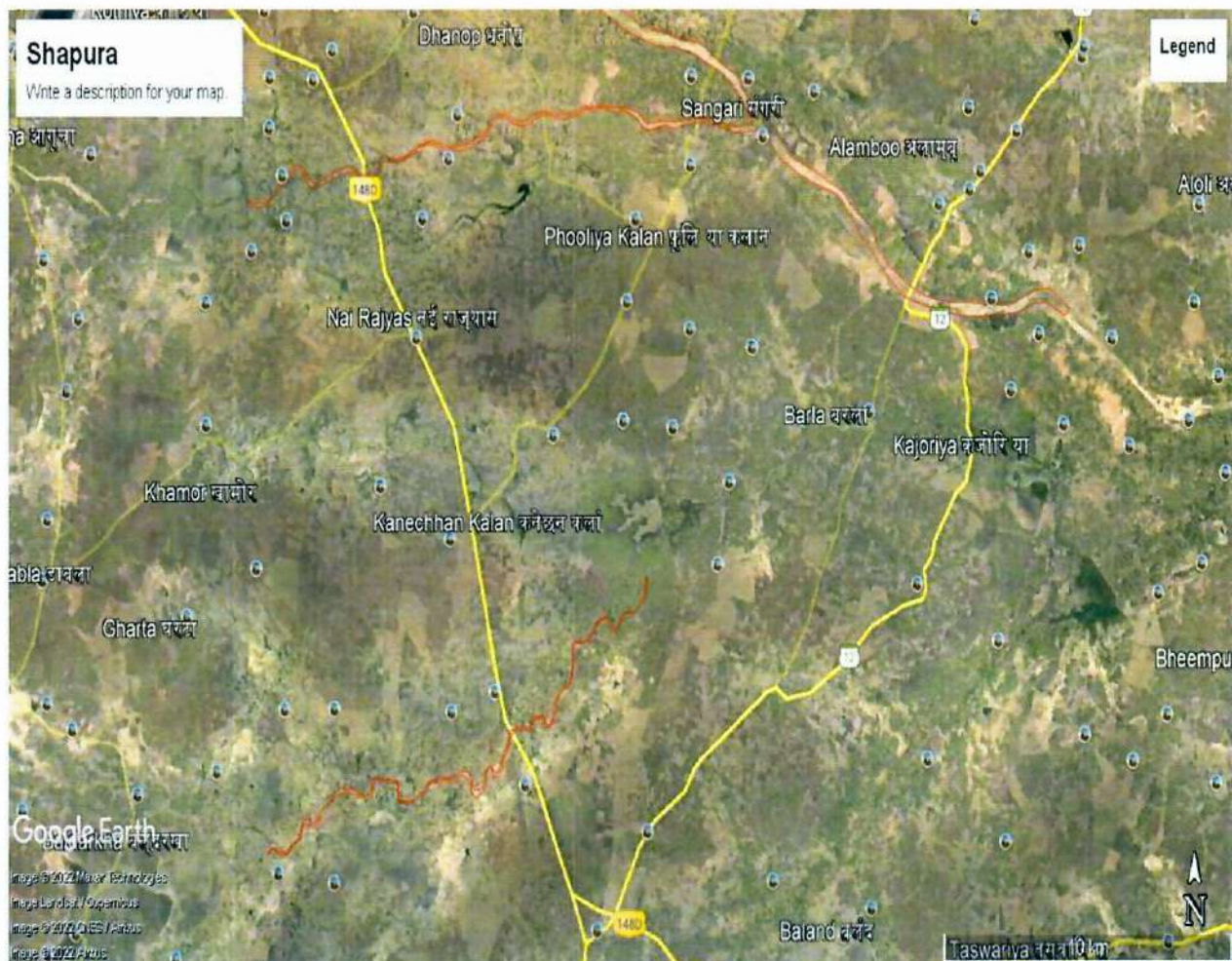


Fig-2. Google Image of the Total lease Area

Sr.No.	PointNo.	Latitude(N)	Longitude(E)
1.	A	25°46'56.8638"N	75°5'33.9802"E
2.	B	25°46'50.3834"N	75°5'29.1285"E
3.	C	25°52'33.0109"N	74°52'27.2324"E
4.	D	25°52'39.4787"N	74°52'30.524"E
5.	E	25°48'20.0713"N	74°48'31.4335"E
6.	F	25°48'24.2691"N	74°48'30.5151"E

Sr.No.	PointNo.	Latitude(N)	Longitude(E)
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1.	A	25°43'20.2229"N	74°56'47.4309"E
2.	B	25°43'20.1046"N	74°56'46.1705"E
3.	C	25°39'38.2199"N	74°48'56.0545"E
4.	D	25°39'37.4839"N	74°48'56.4114"E

Replenishment study Method:-

Replenishment Study has been done with Physical survey of the field by the conventional method wherein river stretch has been demarcated with latitude and longitude provided by Department of Mines & Geology (Rajasthan).

Field Survey conducted & completed in the presence of competent Authority with DGPS instrument FOIFA90, year of manufacturing 2023 on dated 17/05/2023 by Mr. Hariom, Mr. Subhash for pre- monsoon season & post monsoon survey conducted with DGPS instrument FOIFA90 Year Of manufacturing 2023 on 19/09/2023 by Mr. Hariom, Mr. Subhash under the supervision of Prerna Chauhan (Geologist & QP, EIA Co-ordinator).

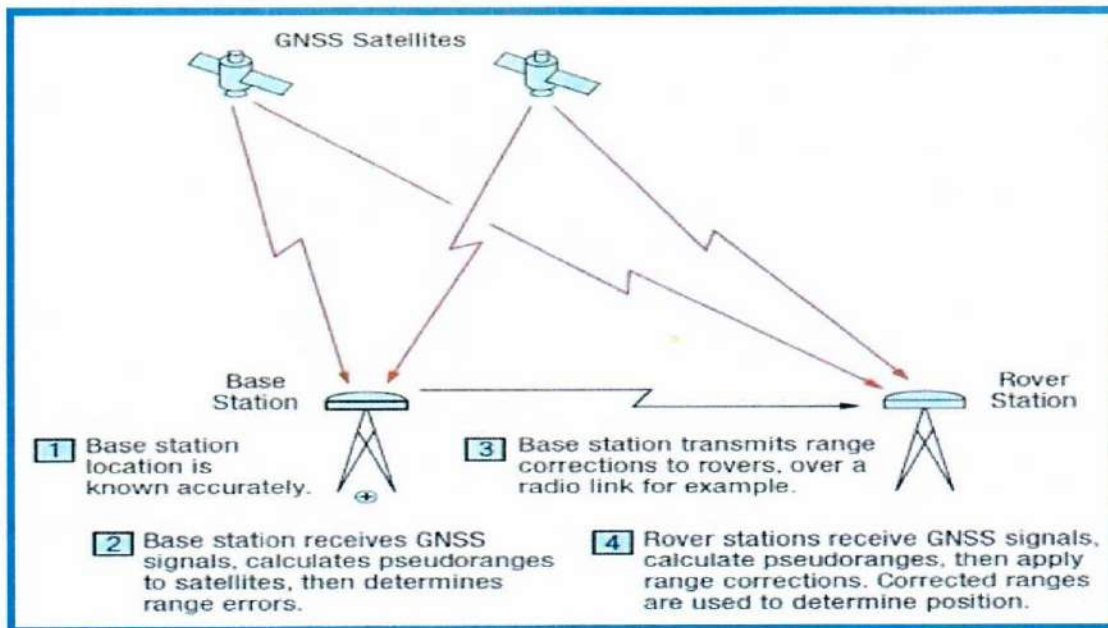
Field Survey with Differential Global Positioning System (DGPS):-

Methodology:-

A Differential Global Positioning System (DGPS) is an enhancement to the Global Positioning System (GPS) which provides improved location accuracy, in the range of operations of each system. DGPS (Differential GPS) is essentially a system to provide positional corrections to GPS signals. DGPS uses a fixed, known position to adjust real time GPS signals to eliminate pseudo range errors. DGPS has no effect on results that are based on speed data, such as brake stop results.

Differential GPS (DGPS) requires that a GPS receiver, known as the base station to be set up, thus for pre monsoon Survey/data collection a base station has been set up on a precisely known location. Physical benchmarks has been fixed at appropriate intervals and marked as common/Fixed reference points to control the topographic survey and mining activity in pre & post monsoon period and the Reduced Level (RL) are validated from a nearby standard RL. The base station receiver calculates its position based on satellite signals and compares this location to the known location. The difference is applied to the GPS data recorded by the roving GPS

receiver.



3. Fig- DGPSworkingprocesses

Establishing the Original Ground level the Databases thus generated, structured in tabulated form clearly mentioning the latitude & longitude and respective levels of all the points taken in pre-monsoon period.

The same process repeated for post monsoon while surveying with DGPS, the Databases thus generated, structured in tabulated form clearly mentioning, latitude & longitude and respective levels of all the points taken in post-monsoon period.

Thus the CSV files of pre& post monsoon data is generated to be processed further to estimate the replenished mineral resource.

Data Processing:-

The above generated file is exported to E-Survey CADD software for further processing. With the help of software the data (CSV) is processed & 3D plotlines created selecting elevation (mRL).

Interpolate of Survey Data

Interpolation is an easy way to interpolate points at any intervals using the actual surveyed data for generating Cross Sections along the longitudinal section. "Interpolate" allows obtaining values at regular intervals. It interpolates elevations at each cross-section along the longitudinal section, which may further be exported to excel for section generation. It also uses the three most commonly used and proven methods of Interpolation techniques for data processing - Straight line, TIN or 3D interpolation.

Practically, surveying at regular/accurate intervals (as directed in Sustainable Sand Mining Management Guideline 2016, and Rajasthan Miner Mineral concession Rule 2017, and Enforcement & Monitoring Guidelines for Sand Mining 2020) is not possible for various reasons. Thus, to obtain values at regular intervals (as per the guideline & as directed by authority), points are interpolated. This interpolation is often done manually with a lot of calculations.

Section Generation & Volume Calculation:-

Exports interpolated cross-section and longitudinal section values to excel or section generation software i.e E-Survey CADD. Further generate the section drawings from point data available in CAD drawing or levels available in Excel or CSV file. The database thus structured in a tabulated form clearly depicting the nomenclature of the section lines, latitude and longitude of the starting point, chain-age and respective levels of all the points taken on that section line.

A plan clearly mentioning the width of the river, lease boundaries, levels (MSL & RL), left under safety barriers (non mining) demarcated as restricted in consensus with Rajasthan Miner Mineral concession Rule 2017, and the provision mentioned in this Sustainable Sand Mining Management Guidelines. 2016, and Enforcement & Monitoring Guidelines for Sand Mining 2020.

Also the software generates the area & volume calculations which are based on trapezoidal method of calculation between two consecutive sections. Thus establishing the volume of reserve

replenished in btw pre & post monsoon period. Reserve estimation is based on the data collection and quantification of sand transported during the monsoon season. Based on the quantification of material deposited in the river bed, working plan has been prepared/ proposed for farther excavation.

The tonnage of the volume established using the Bulk density verified by the Department of Mines & Geology, Rajasthan, between every two consecutive section.

1. Sampling Procedure:-

(a) Sand Sampling:

Objective: To prepare dry sand samples from the field for various laboratory tests.

Apparatus:

- Wooden Mallet.
- Non-corrodible trays.
- Pulverizing apparatus such as mortar and a rubber covered pestle or a mechanical device
Consisting of mortar and a power driven rubber covered pestle.
- A suitable riffle sampler or sample splitter for quartering the samples.
- Thermostatically controlled oven of capacity 250°C.
- Balance of capacity 500 grams and sensitivity 0.01 gram.
- Balance of capacity 10kgs and sensitivity 0.5 gram.
- Balance of capacity 15Kgs and sensitivity 1 gram.

Procedure:

- One sample per 900 Square meters (30m x30m) has been taken.
- Dry the sand sample as received from the field in the air or under the sun.
- Remove the organic matter like tree roots and pieces of bark from the sample.
- Separate matter other than sand, like shells from the sand mass.
- Break the clods with a wooden mallet to hasten drying.
- In wet weather a drying apparatus may be used but the temperature of the sample during heating shall not exceed 60°C.

- When an oven is used for drying, the temperature in the oven shall not exceed 1100C.
- The amount of drying depends upon the proposed test to be conducted on the particular sample.
- The type, temperature and duration of drying of sand samples for different tests are given in
- After the specified period of drying, cool the material to the room temperature.
- Break the big clods with the help of wooden mallet.
- Pulverize the sand sample to pass through the specified sieves of the particular test to be conducted.
- Mix the entire sand thoroughly and spread on a flat surface.
- Divide the sample into four quadrants and mix the diagonally opposite quadrants.

Method for Quartering

The quartering method shall be used when splitters are not available. Quartering simply requires a quartering cloth and a stick or rod and is done as follows



Pour contents from sample bucket the quartering cloth



Level sample on quartering cloth on tousing a rod



Insert rod under the middle of the quartering cloth and lift both ends of rod to divide the sample into two equal parts

Repeat step ii, dividing the sample into four parts for testing. If necessary, repeat the quartering process.

Repeat step iii, dividing the sample into four quarters

the tw

PRECAUTIONS

- Care shall be taken not to break individual grains during pulverization of sand. Sand containing organic or calcareous matter should not be dried at a temperature above 600C.
- In the case of coarse gravels or gravelly sand quartering by forming a cone shall not be done.

(b) Specific Gravity:

DEFINITION

- Specific gravity is defined as the ratio of the mass of a given volume of the substance to the mass of an equal volume of water.
- Or more precisely it is the ratio of the density of a substance to the density of a given reference material. Specific gravity for ligaments is nearly always measured with respect to water of the offset, for gases,

Reference is air at room temp.

APPARATUS

- Density bottle
- Vacuum desiccators of size 200mm to 250mm in diameter containing anhydrous silica gel or any suitable desiccating material.
- Thermostatically controlled oven of capable of.
- Analytical balance of sensitivity 0.001 grams.
- 2 mm IS sieve.
- A wash bottle preferably made of plastic.

CALCULATIONS

- If distilled water is used as an air free liquid, calculate the specific gravity of the soil particles 'S' from the equation

$$S = \frac{m_2 - m_1}{(m_4 - m_1) - (m_3 - m_2)}$$

- If kerosene or white spirit is used as an air free liquid, calculate the specific Gravity of the soil particles 'S' from the equation

$$S = \frac{SL(m_2 - m_1)}{(m_4 - m_1) - (m_3 - m_2)}$$

SL = Specific gravity of the liquid used at the constant temperature.

m₁ = mass of the density bottle with stopper.

m₂ = mass of density bottle + dry soil.

m₃ = mass of density bottle, soil and water.

m₄ = mass of density bottle and water.

PRECAUTIONS

- Packing of the samples should be done properly in order to avoid any loss in transfer.
- Before sample to the laboratory, it should be ensured, that proper identification marks are present on the sample bags as well as on the labels placed on the bags .it should be written by permanent markers.
- Monitoring locations & details of samples collection will be prepared separately and send to the laboratory.
- Care should be taken that the sample is collected from deposition zone preferring and not from corrosion zone for purpose of bulk density.
- Soil should not be dried more than 80°C if there is any doubt in change of specific gravity by

loss of water of hydration during oven drying.

- The largest source of error in the test is due to the difficulty in ensuring the complete removal of air from the sample. To ensure this the density bottle with soil submerged in water should be kept in vacuum desiccators.
- This test requires temperature between 22°C to 32°C and therefore shall be conducted in concrete laboratory where temperature is maintained at $27 \pm 2^\circ\text{C}$.

1. List of Instruments: -DGPS, inch tap, Brinton Compass, etc.

2. List of Software: -E-Survey CADD, Google Earth Pro

3. Pre & Post Monsoon Survey Data(CSV) & their comparison :-

4. Area & Volume Generated:-

5. Reserve Estimation:-

6. Surveyor:-

(a) Prerna Chauhan (Qualified Person)

(a) Mr. Hariom, Mr. Subhash


Prerna Chauhan (Geologists)
(Qualified Persons)
M/s N.S. Envirotech Laboratories & Consultant
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E-mail - nsenvirotech@gmail.com
Mob. 09829930877, 7878360147

QP CERTIFICATE

00440



हेमवती नन्दन बहुगुणा गढ़वाल विश्वविद्यालय
(केन्द्रीय विश्वविद्यालय)
विज्ञान निष्णात

Enrolment No.: G07340169
(नामांकन संख्या)

Roll No.: 82582426
(अनुक्रमक)

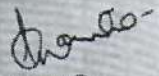
श्री/कु०/श्रीमती प्रेरणा चौहान को इस विश्वविद्यालय
की भूविज्ञान में विज्ञान निष्णात की उपाधि एतद्वारा सन् २०१२ की
परीक्षा में प्रथम श्रेणी में प्रदान की जाती है।

HEMVATI NANDAN BAHUGUNA GARHWAL UNIVERSITY
(A Central University)
Master of Science

Mr./Ms./Mrs. Prerna Chauhan is hereby conferred
the degree of Master of Science in Geology of this University
in the Examination of 2012 in First division.

Place: Srinagar (Garhwal), Uttarakhand - 246 174
स्थान: श्रीनगर (गढ़वाल), उत्तराखण्ड-२४६, १७४

दिनांक
Date: 30 JUN 2020


कुलपति
Vice Chancellor

**7. Estimation of River Bed Material (RBM) in the mining Lease area :-
Pre – Monsoon & Post - Monsoon:- Survey Data**

Pre monsoon				Post Monsoon				
Sr.No	Northing	Easting	mRL	Sr.No	Northing	Easting	mRL	Difference
1	509166.5	2851397	332.7333	1	509166.5	2851397	335.4556	2.7223
2	509301.5	2851597	332.6658	2	509301.5	2851597	335.3334	2.6676
3	509284.6	2851572	332.6877	3	509284.6	2851572	335.285	2.5973
4	509183.4	2851422	333.0884	4	509183.4	2851422	335.7325	2.6441
5	509166.5	2851397	332.7327	5	509166.5	2851397	335.4556	2.7229
6	509301.5	2851597	332.4264	6	509301.5	2851597	335.3334	2.907
7	509166.9	2851398	332.6166	7	509166.9	2851398	335.4224	2.8058
8	509178.2	2851414	333.2493	8	509178.2	2851414	335.9197	2.6704
9	509189.4	2851431	332.8714	9	509189.4	2851431	335.5701	2.6987
10	509200.6	2851447	332.8626	10	509200.6	2851447	335.267	2.4044
11	509211.8	2851464	332.2002	11	509211.8	2851464	334.9639	2.7637
12	509223	2851481	332.3134	12	509223	2851481	334.8808	2.5674
13	509234.2	2851497	332.4876	13	509234.2	2851497	335.1321	2.6445
14	509245.4	2851514	332.3722	14	509245.4	2851514	335.1445	2.7723
15	509256.6	2851530	332.5049	15	509256.6	2851530	335.2021	2.6972
16	509267.8	2851547	332.3219	16	509267.8	2851547	335.2347	2.9128
17	509279	2851563	332.7022	17	509279	2851563	335.2684	2.5662
18	509290.3	2851580	332.5308	18	509290.3	2851580	335.3016	2.7708
19	508977.1	2851499	335.4878	19	508977.1	2851499	338.3836	2.8958
20	509155.3	2851716	333.017	20	509155.3	2851716	335.5557	2.5387
21	509136.3	2851693	332.8833	21	509136.3	2851693	335.5353	2.652
22	509005.5	2851534	335.3393	22	509005.5	2851534	337.7638	2.4245
23	508977.8	2851500	335.7638	23	508977.8	2851500	338.3964	2.6326
24	508990.5	2851515	335.8146	24	508990.5	2851515	338.604	2.7894
25	509003.2	2851531	335.1269	25	509003.2	2851531	337.9319	2.805
26	509015.8	2851546	334.2391	26	509015.8	2851546	337.0214	2.7823
27	509028.5	2851562	333.8422	27	509028.5	2851562	336.3879	2.5457
28	509041.2	2851577	333.3676	28	509041.2	2851577	335.9492	2.5816
29	509053.9	2851593	333.1016	29	509053.9	2851593	335.7142	2.6126
30	509066.6	2851608	332.7995	30	509066.6	2851608	335.504	2.7045
31	509079.2	2851624	332.8058	31	509079.2	2851624	335.5015	2.6957
32	509091.9	2851639	332.972	32	509091.9	2851639	335.5033	2.5313
33	509104.6	2851654	333.1052	33	509104.6	2851654	335.5089	2.4037
34	509117.3	2851670	332.925	34	509117.3	2851670	335.5177	2.5927
35	509129.9	2851685	332.6124	35	509129.9	2851685	335.529	2.9166
36	509142.6	2851701	332.9442	36	509142.6	2851701	335.5419	2.5977
37	508829.7	2851578	337.2069	37	508829.7	2851578	339.8329	2.626

38	508980.9	2851859	333.9329	38	508980.9	2851859	336.5046	2.5717
39	508966.4	2851832	334.1218	39	508966.4	2851832	336.5087	2.3869
40	508850.5	2851617	335.7949	40	508850.5	2851617	338.4777	2.6828
41	508838.8	2851595	336.7103	41	508838.8	2851595	339.4151	2.7048
42	508848.3	2851613	335.8913	42	508848.3	2851613	338.6666	2.7753
43	508857.7	2851630	335.2963	43	508857.7	2851630	337.9238	2.6275
44	508867.2	2851648	334.8102	44	508867.2	2851648	337.3058	2.4956
45	508876.7	2851666	333.8512	45	508876.7	2851666	336.7794	2.9282
46	508886.2	2851683	333.9011	46	508886.2	2851683	336.3879	2.4868
47	508895.6	2851701	333.8786	47	508895.6	2851701	336.4657	2.5871
48	508905.1	2851718	333.4763	48	508905.1	2851718	336.0675	2.5912
49	508914.6	2851736	333.4233	49	508914.6	2851736	336.0699	2.6466
50	508924	2851754	333.4867	50	508924	2851754	336.0692	2.5825
51	508933.5	2851771	333.5018	51	508933.5	2851771	336.0657	2.5639
52	508943	2851789	333.433	52	508943	2851789	336.0597	2.6267
53	508952.5	2851806	333.3724	53	508952.5	2851806	336.0519	2.6795
54	508961.9	2851824	333.9842	54	508961.9	2851824	336.5099	2.5257
55	508971.4	2851842	333.7699	55	508971.4	2851842	336.5074	2.7375
56	508653.6	2851673	337.7079	56	508653.6	2851673	340.3834	2.6755
57	508818.6	2851980	333.8413	57	508818.6	2851980	336.4971	2.6558
58	508798.7	2851943	333.7857	58	508798.7	2851943	336.5103	2.7246
59	508674.4	2851712	336.2766	59	508674.4	2851712	339.0721	2.7955
60	508657.6	2851680	337.6528	60	508657.6	2851680	340.2361	2.5833
61	508667.1	2851698	337.0884	61	508667.1	2851698	339.763	2.6746
62	508676.5	2851716	336.2698	62	508676.5	2851716	338.9039	2.6341
63	508686	2851733	335.4514	63	508686	2851733	338.1599	2.7085
64	508695.5	2851751	334.8101	64	508695.5	2851751	337.4158	2.6057
65	508705	2851768	334.1273	65	508705	2851768	336.6925	2.5652
66	508714.4	2851786	333.7028	66	508714.4	2851786	336.5583	2.8555
67	508723.9	2851804	333.7707	67	508723.9	2851804	336.454	2.6833
68	508733.4	2851821	333.7712	68	508733.4	2851821	336.577	2.8058
69	508742.8	2851839	333.8009	69	508742.8	2851839	336.5696	2.7687
70	508752.3	2851857	333.7852	70	508752.3	2851857	336.5577	2.7725
71	508761.8	2851874	333.7817	71	508761.8	2851874	336.546	2.7643
72	508771.3	2851892	333.6749	72	508771.3	2851892	336.5352	2.8603
73	508780.7	2851909	333.6382	73	508780.7	2851909	336.5256	2.8874
74	508790.2	2851927	333.9346	74	508790.2	2851927	336.5171	2.5825
75	508799.7	2851945	333.8093	75	508799.7	2851945	336.5096	2.7003
76	508809.1	2851962	333.8843	76	508809.1	2851962	336.5029	2.6186
77	508533.4	2851736	336.8792	77	508533.4	2851736	339.6516	2.7724
78	508574.1	2852077	333.7967	78	508574.1	2852077	336.56	2.7633

79	508569	2852034	333.668	79	508569	2852034	336.5226	2.8546
80	508538.6	2851779	336.1059	80	508538.6	2851779	339.0001	2.8942
81	508533.8	2851739	336.8561	81	508533.8	2851739	339.5914	2.7353
82	508536.2	2851759	336.4782	82	508536.2	2851759	339.2371	2.7589
83	508538.6	2851779	336.2357	83	508538.6	2851779	339.0012	2.7655
84	508540.9	2851799	336.3157	84	508540.9	2851799	338.8673	2.5516
85	508543.3	2851818	335.8435	85	508543.3	2851818	338.4448	2.6013
86	508545.7	2851838	335.652	86	508545.7	2851838	338.0995	2.4475
87	508548	2851858	334.747	87	508548	2851858	337.4004	2.6534
88	508550.4	2851878	333.8411	88	508550.4	2851878	336.6936	2.8525
89	508552.8	2851898	333.5386	89	508552.8	2851898	336.4006	2.862
90	508555.1	2851918	333.3483	90	508555.1	2851918	336.2424	2.8941
91	508557.5	2851938	333.8472	91	508557.5	2851938	336.4048	2.5576
92	508559.9	2851957	333.7651	92	508559.9	2851957	336.3999	2.6348
93	508562.2	2851977	333.6117	93	508562.2	2851977	336.3964	2.7847
94	508564.6	2851997	333.8185	94	508564.6	2851997	336.5033	2.6848
95	508567	2852017	333.8778	95	508567	2852017	336.5117	2.6339
96	508569.3	2852037	333.9731	96	508569.3	2852037	336.5244	2.5513
97	508571.7	2852057	333.9762	97	508571.7	2852057	336.5407	2.5645
98	508357.2	2851738	336.7785	98	508357.2	2851738	339.521	2.7425
99	508352	2852084	333.7786	99	508352	2852084	336.5108	2.7322
100	508352.6	2852045	333.6957	100	508352.6	2852045	336.4683	2.7726
101	508356.5	2851782	336.0459	101	508356.5	2851782	338.6324	2.5865
102	508357.1	2851744	336.664	102	508357.1	2851744	339.4002	2.7362
103	508356.8	2851764	336.2198	103	508356.8	2851764	339.0046	2.7848
104	508356.5	2851784	335.8913	104	508356.5	2851784	338.5729	2.6816
105	508356.2	2851804	335.1946	105	508356.2	2851804	337.8284	2.6338
106	508355.9	2851824	334.548	106	508355.9	2851824	337.084	2.536
107	508355.6	2851844	333.8492	107	508355.6	2851844	336.4504	2.6012
108	508355.3	2851864	333.6448	108	508355.3	2851864	336.2944	2.6496
109	508355	2851884	333.5394	109	508355	2851884	336.1384	2.599
110	508354.7	2851904	333.277	110	508354.7	2851904	335.9824	2.7054
111	508354.4	2851924	333.1853	111	508354.4	2851924	335.8264	2.6411
112	508354.1	2851944	333.168	112	508354.1	2851944	335.7984	2.6304
113	508353.8	2851964	333.1216	113	508353.8	2851964	335.7717	2.6501
114	508353.5	2851984	333.1256	114	508353.5	2851984	335.745	2.6194
115	508353.2	2852004	333.2002	115	508353.2	2852004	335.7009	2.5007
116	508352.9	2852024	333.6762	116	508352.9	2852024	336.2422	2.566
117	508352.6	2852044	333.8966	117	508352.6	2852044	336.4673	2.5707
118	508352.3	2852064	333.8096	118	508352.3	2852064	336.4875	2.6779
119	508181.7	2851735	336.5751	119	508181.7	2851735	339.066	2.4909

120	508131.7	2852049	333.859	120	508131.7	2852049	336.4206	2.5616
121	508137.8	2852011	334.1618	121	508137.8	2852011	336.8844	2.7226
122	508174.6	2851780	335.7868	122	508174.6	2851780	338.1691	2.3823
123	508178.9	2851752	336.2125	123	508178.9	2851752	338.7156	2.5031
124	508175.8	2851772	335.6598	124	508175.8	2851772	338.3167	2.6569
125	508172.6	2851792	335.3068	125	508172.6	2851792	337.9178	2.611
126	508169.5	2851812	334.8642	126	508169.5	2851812	337.5189	2.6547
127	508166.3	2851831	334.4676	127	508166.3	2851831	337.12	2.6524
128	508163.2	2851851	334.0174	128	508163.2	2851851	336.7211	2.7037
129	508160	2851871	333.8408	129	508160	2851871	336.4973	2.6565
130	508156.9	2851891	333.7496	130	508156.9	2851891	336.3356	2.586
131	508153.8	2851910	333.4108	131	508153.8	2851910	336.1738	2.763
132	508150.6	2851930	333.6261	132	508150.6	2851930	336.0121	2.386
133	508147.5	2851950	333.4146	133	508147.5	2851950	335.8504	2.4358
134	508144.3	2851970	334.8218	134	508144.3	2851970	337.3849	2.5631
135	508141.2	2851989	334.38	135	508141.2	2851989	337.1438	2.7638
136	508138	2852009	334.1617	136	508138	2852009	336.9028	2.7411
137	508134.9	2852029	333.9761	137	508134.9	2852029	336.6617	2.6856
138	508023.7	2851697	336.6511	138	508023.7	2851697	339.3594	2.7083
139	507913.1	2851965	336.0157	139	507913.1	2851965	338.8199	2.8042
140	507927	2851931	336.4889	140	507927	2851931	339.1798	2.6909
141	508009.9	2851730	335.9914	141	508009.9	2851730	338.6618	2.6704
142	508020.1	2851706	336.6711	142	508020.1	2851706	339.1768	2.5057
143	508012.4	2851724	336.3559	143	508012.4	2851724	338.7899	2.434
144	508004.8	2851743	335.7738	144	508004.8	2851743	338.403	2.6292
145	507997.1	2851761	335.3596	145	507997.1	2851761	338.0162	2.6566
146	507989.5	2851780	334.5915	146	507989.5	2851780	337.2125	2.621
147	507981.8	2851798	334.7831	147	507981.8	2851798	337.4723	2.6892
148	507974.2	2851817	334.924	148	507974.2	2851817	337.7321	2.8081
149	507966.6	2851835	335.3106	149	507966.6	2851835	337.9919	2.6813
150	507958.9	2851854	335.5085	150	507958.9	2851854	338.2517	2.7432
151	507951.3	2851872	335.7396	151	507951.3	2851872	338.5114	2.7718
152	507943.6	2851891	336.0183	152	507943.6	2851891	338.7712	2.7529
153	507936	2851909	336.0438	153	507936	2851909	338.5813	2.5375
154	507928.3	2851928	335.7936	154	507928.3	2851928	338.5493	2.7557
155	507920.7	2851946	336.4774	155	507920.7	2851946	339.0177	2.5403
156	507838.9	2851621	337.7677	156	507838.9	2851621	340.3336	2.5659
157	507727.4	2851890	337.3503	157	507727.4	2851890	339.8881	2.5378
158	507741.7	2851856	336.7719	158	507741.7	2851856	339.5732	2.8013
159	507825.1	2851654	336.9507	159	507825.1	2851654	339.636	2.6853
160	507834.4	2851632	337.3244	160	507834.4	2851632	340.1063	2.7819

161	507826.7	2851650	336.9377	161	507826.7	2851650	339.7194	2.7817
162	507819.1	2851669	336.3195	162	507819.1	2851669	339.1971	2.8776
163	507811.4	2851687	335.6491	163	507811.4	2851687	338.3562	2.7071
164	507803.8	2851705	335.1093	164	507803.8	2851705	337.9176	2.8083
165	507796.1	2851724	335.6399	165	507796.1	2851724	338.1774	2.5375
166	507788.5	2851742	335.7193	166	507788.5	2851742	338.4371	2.7178
167	507780.9	2851761	336.1411	167	507780.9	2851761	338.6969	2.5558
168	507773.2	2851779	336.2563	168	507773.2	2851779	338.9567	2.7004
169	507765.6	2851798	336.6767	169	507765.6	2851798	339.2165	2.5398
170	507757.9	2851816	336.7728	170	507757.9	2851816	339.4762	2.7034
171	507750.3	2851835	336.7506	171	507750.3	2851835	339.4535	2.7029
172	507742.6	2851853	336.6753	172	507742.6	2851853	339.4857	2.8104
173	507735	2851872	337.4868	173	507735	2851872	340.1901	2.7033
174	507651.1	2851543	338.6151	174	507651.1	2851543	341.3234	2.7083
175	507544	2851819	337.9275	175	507544	2851819	340.4621	2.5346
176	507557.5	2851784	337.3234	176	507557.5	2851784	340.0412	2.7178
177	507638	2851577	337.5688	177	507638	2851577	340.2839	2.7151
178	507645.2	2851558	338.3055	178	507645.2	2851558	341.0089	2.7034
179	507638	2851577	337.7218	179	507638	2851577	340.2796	2.5578
180	507630.7	2851595	336.8815	180	507630.7	2851595	339.438	2.5565
181	507623.5	2851614	335.9089	181	507623.5	2851614	338.5964	2.6875
182	507616.3	2851633	335.9358	182	507616.3	2851633	338.6535	2.7177
183	507609.1	2851651	336.2261	183	507609.1	2851651	338.9117	2.6856
184	507601.8	2851670	336.4607	184	507601.8	2851670	339.118	2.6573
185	507594.6	2851689	336.21	185	507594.6	2851689	338.9243	2.7143
186	507587.4	2851707	335.9952	186	507587.4	2851707	338.7307	2.7355
187	507580.1	2851726	335.819	187	507580.1	2851726	338.537	2.718
188	507572.9	2851745	336.0447	188	507572.9	2851745	338.7601	2.7154
189	507565.7	2851763	336.726	189	507565.7	2851763	339.4632	2.7372
190	507558.4	2851782	337.4406	190	507558.4	2851782	339.9803	2.5397
191	507551.2	2851801	337.7812	191	507551.2	2851801	340.4688	2.6876
192	507463.4	2851474	339.2349	192	507463.4	2851474	341.9199	2.685
193	507357.5	2851747	337.311	193	507357.5	2851747	339.9885	2.6775
194	507371.1	2851712	336.4669	194	507371.1	2851712	339.0725	2.6056
195	507451.6	2851504	337.8782	195	507451.6	2851504	340.6014	2.7232
196	507458.7	2851486	338.6919	196	507458.7	2851486	341.399	2.7071
197	507451.5	2851504	337.8391	197	507451.5	2851504	340.5947	2.7556
198	507444.3	2851523	337.0151	198	507444.3	2851523	339.7905	2.7754
199	507437.1	2851542	336.1927	199	507437.1	2851542	338.9863	2.7936
200	507429.8	2851560	335.5072	200	507429.8	2851560	338.2721	2.7649
201	507422.6	2851579	335.3605	201	507422.6	2851579	338.0911	2.7306

202	507415.4	2851598	335.1228	202	507415.4	2851598	337.9101	2.7873
203	507408.1	2851616	334.998	203	507408.1	2851616	337.7291	2.7311
204	507400.9	2851635	335.0331	204	507400.9	2851635	337.5481	2.515
205	507393.7	2851654	335.0702	205	507393.7	2851654	337.6969	2.6267
206	507386.4	2851672	335.3835	206	507386.4	2851672	337.9424	2.5589
207	507379.2	2851691	335.8834	207	507379.2	2851691	338.4761	2.5927
208	507372	2851710	336.1905	208	507372	2851710	339.0116	2.8211
209	507364.7	2851728	336.6919	209	507364.7	2851728	339.5	2.8081
210	507227.1	2851451	339.4429	210	507227.1	2851451	342.0417	2.5988
211	507203.3	2851704	336.8662	211	507203.3	2851704	339.5942	2.728
212	507206.4	2851671	335.832	212	507206.4	2851671	338.6356	2.8036
213	507224.1	2851483	337.6327	213	507224.1	2851483	340.4873	2.8546
214	507225.8	2851465	339.1229	214	507225.8	2851465	341.8638	2.7409
215	507224	2851485	337.6851	215	507224	2851485	340.3568	2.6717
216	507222.1	2851505	336.1926	216	507222.1	2851505	338.8497	2.6571
217	507220.2	2851524	334.9003	217	507220.2	2851524	337.3427	2.4424
218	507218.3	2851544	333.747	218	507218.3	2851544	336.5873	2.8403
219	507216.5	2851564	334.0937	219	507216.5	2851564	336.7535	2.6598
220	507214.6	2851584	334.4188	220	507214.6	2851584	337.0092	2.5904
221	507212.7	2851604	334.4941	221	507212.7	2851604	337.2649	2.7708
222	507210.8	2851624	334.7245	222	507210.8	2851624	337.5205	2.796
223	507209	2851644	334.9229	223	507209	2851644	337.7762	2.8533
224	507207.1	2851664	335.7129	224	507207.1	2851664	338.3806	2.6677
225	507205.2	2851684	336.3008	225	507205.2	2851684	339.0555	2.7547
226	507025.9	2851433	338.8029	226	507025.9	2851433	341.6794	2.8765
227	507006.1	2851688	337.3855	227	507006.1	2851688	340.0718	2.6863
228	507008.6	2851656	336.3639	228	507008.6	2851656	339.051	2.6871
229	507023.4	2851464	339.0831	229	507023.4	2851464	341.6089	2.5258
230	507024.6	2851449	339.2358	230	507024.6	2851449	341.8268	2.591
231	507023	2851469	338.5931	231	507023	2851469	341.2261	2.633
232	507021.5	2851489	336.8358	232	507021.5	2851489	339.7174	2.8816
233	507020	2851509	335.6311	233	507020	2851509	338.2087	2.5776
234	507018.4	2851529	335.0953	234	507018.4	2851529	337.5869	2.4916
235	507016.9	2851549	334.7081	235	507016.9	2851549	337.2882	2.5801
236	507015.3	2851569	334.6358	236	507015.3	2851569	337.2498	2.614
237	507013.8	2851589	334.7391	237	507013.8	2851589	337.3841	2.645
238	507012.3	2851609	334.8462	238	507012.3	2851609	337.5433	2.6971
239	507010.7	2851629	335.5119	239	507010.7	2851629	338.1271	2.6152
240	507009.2	2851649	336.417	240	507009.2	2851649	338.8014	2.3844
241	507007.6	2851668	336.9353	241	507007.6	2851668	339.4756	2.5403
242	506826.7	2851414	338.4691	242	506826.7	2851414	341.3208	2.8517

243	506806.7	2851673	337.4833	243	506806.7	2851673	339.9822	2.4989
244	506809.2	2851640	336.8013	244	506809.2	2851640	339.3857	2.5844
245	506824.3	2851446	339.1875	245	506824.3	2851446	341.6028	2.4153
246	506825.2	2851434	339.1344	246	506825.2	2851434	341.4979	2.3635
247	506823.6	2851454	339.2956	247	506823.6	2851454	341.6752	2.3796
248	506822.1	2851474	337.8273	248	506822.1	2851474	340.5779	2.7506
249	506820.5	2851494	336.5587	249	506820.5	2851494	339.3325	2.7738
250	506819	2851513	336.4075	250	506819	2851513	339.0338	2.6263
251	506817.5	2851533	336.199	251	506817.5	2851533	338.7351	2.5361
252	506815.9	2851553	335.6068	252	506815.9	2851553	338.4365	2.8297
253	506814.4	2851573	335.5671	253	506814.4	2851573	338.1378	2.5707
254	506812.8	2851593	335.5412	254	506812.8	2851593	338.209	2.6678
255	506811.3	2851613	336.2621	255	506811.3	2851613	338.8009	2.5388
256	506809.8	2851633	336.646	256	506809.8	2851633	339.2277	2.5817
257	506808.2	2851653	337.2707	257	506808.2	2851653	339.6545	2.3838
258	506620.2	2851405	336.627	258	506620.2	2851405	339.1493	2.5223
259	506613.1	2851686	337.333	259	506613.1	2851686	340.0032	2.6702
260	506614.2	2851641	336.6818	260	506614.2	2851641	339.3379	2.6561
261	506619.4	2851438	338.751	261	506619.4	2851438	341.169	2.418
262	506620.2	2851406	336.307	262	506620.2	2851406	339.1905	2.8835
263	506619.7	2851426	337.7493	263	506619.7	2851426	340.4233	2.674
264	506619.2	2851446	338.8566	264	506619.2	2851446	341.4111	2.5545
265	506618.6	2851466	338.2167	265	506618.6	2851466	340.9818	2.7651
266	506618.1	2851486	337.979	266	506618.1	2851486	340.676	2.697
267	506617.6	2851506	337.4074	267	506617.6	2851506	339.9746	2.5672
268	506617.1	2851526	336.63	268	506617.1	2851526	339.1853	2.5553
269	506616.6	2851546	335.7143	269	506616.6	2851546	338.3959	2.6816
270	506616.1	2851566	335.5412	270	506616.1	2851566	338.1848	2.6436
271	506615.6	2851586	335.7772	271	506615.6	2851586	338.1841	2.4069
272	506615.1	2851606	335.6884	272	506615.1	2851606	338.6121	2.9237
273	506614.6	2851626	336.1411	273	506614.6	2851626	339.0402	2.8991
274	506614.1	2851646	336.9388	274	506614.1	2851646	339.3985	2.4597
275	506613.6	2851666	337.0402	275	506613.6	2851666	339.6413	2.6011
276	506420.2	2851400	335.7133	276	506420.2	2851400	338.4279	2.7146
277	506412.6	2851702	337.4426	277	506412.6	2851702	340.2136	2.771
278	506413.8	2851657	336.5009	278	506413.8	2851657	339.264	2.7631
279	506419.4	2851433	335.4976	279	506419.4	2851433	338.3984	2.9008
280	506420.2	2851402	335.6378	280	506420.2	2851402	338.4266	2.7888
281	506419.7	2851422	335.9422	281	506419.7	2851422	338.4086	2.4664
282	506419.2	2851442	335.5857	282	506419.2	2851442	338.3906	2.8049
283	506418.7	2851462	336.7906	283	506418.7	2851462	339.4625	2.6719

284	506418.2	2851482	336.6052	284	506418.2	2851482	339.2473	2.6421
285	506417.7	2851502	335.872	285	506417.7	2851502	338.4579	2.5859
286	506417.2	2851522	335.4954	286	506417.2	2851522	338.2961	2.8007
287	506416.7	2851542	335.5031	287	506416.7	2851542	338.1747	2.6716
288	506416.2	2851562	335.3128	288	506416.2	2851562	338.0534	2.7406
289	506415.7	2851582	335.2291	289	506415.7	2851582	338.0565	2.8274
290	506415.2	2851602	335.879	290	506415.2	2851602	338.4846	2.6056
291	506414.7	2851622	336.2236	291	506414.7	2851622	338.839	2.6154
292	506414.1	2851642	336.4792	292	506414.1	2851642	339.0818	2.6026
293	506413.6	2851662	336.9187	293	506413.6	2851662	339.3246	2.4059
294	506413.1	2851682	336.8706	294	506413.1	2851682	339.5675	2.6969
295	506206.2	2851395	335.8243	295	506206.2	2851395	338.6533	2.829
296	506231.2	2851716	337.5497	296	506231.2	2851716	340.404	2.8543
297	506227.8	2851671	336.5143	297	506227.8	2851671	339.1955	2.6812
298	506208.7	2851428	335.9659	298	506208.7	2851428	338.622	2.6561
299	506206.3	2851397	336.0179	299	506206.3	2851397	338.6515	2.6336
300	506207.9	2851417	336.0062	300	506207.9	2851417	338.6314	2.6252
301	506209.4	2851437	335.8351	301	506209.4	2851437	338.6214	2.7863
302	506211	2851457	335.9021	302	506211	2851457	338.6199	2.7178
303	506212.5	2851477	336.0864	303	506212.5	2851477	338.6184	2.532
304	506214.1	2851496	335.8287	304	506214.1	2851496	338.3407	2.512
305	506215.7	2851516	335.3917	305	506215.7	2851516	338.1692	2.7775
306	506217.2	2851536	335.2163	306	506217.2	2851536	338.0498	2.8335
307	506218.8	2851556	335.3297	307	506218.8	2851556	337.9303	2.6006
308	506220.3	2851576	335.3834	308	506220.3	2851576	337.9061	2.5227
309	506221.9	2851596	335.5327	309	506221.9	2851596	338.2742	2.7415
310	506223.4	2851616	335.7658	310	506223.4	2851616	338.5191	2.7533
311	506225	2851636	335.9421	311	506225	2851636	338.7639	2.8218
312	506226.6	2851656	336.3112	312	506226.6	2851656	339.0088	2.6976
313	506228.1	2851676	336.6403	313	506228.1	2851676	339.2537	2.6134
314	506229.7	2851696	337.1382	314	506229.7	2851696	339.6921	2.5539
315	506005.1	2851390	336.3794	315	506005.1	2851390	338.9379	2.5585
316	506031.8	2851731	338.0591	316	506031.8	2851731	340.6133	2.5542
317	506028.4	2851687	336.5449	317	506028.4	2851687	339.1221	2.5772
318	506007.7	2851423	336.5484	318	506007.7	2851423	338.9355	2.3871
319	506005.4	2851392	336.2088	319	506005.4	2851392	338.9377	2.7289
320	506006.9	2851412	336.3874	320	506006.9	2851412	338.9363	2.5489
321	506008.5	2851432	336.1749	321	506008.5	2851432	338.9348	2.7599
322	506010	2851452	336.3312	322	506010	2851452	338.9333	2.6021
323	506011.6	2851472	336.2885	323	506011.6	2851472	338.9319	2.6434
324	506013.1	2851492	336.307	324	506013.1	2851492	338.9116	2.6046

325	506014.7	2851512	336.006	325	506014.7	2851512	338.5642	2.5582
326	506016.3	2851532	335.8236	326	506016.3	2851532	338.2167	2.3931
327	506017.8	2851552	335.1265	327	506017.8	2851552	337.8693	2.7428
328	506019.4	2851572	335.167	328	506019.4	2851572	337.8316	2.6646
329	506020.9	2851592	335.5037	329	506020.9	2851592	337.9558	2.4521
330	506022.5	2851612	335.7717	330	506022.5	2851612	338.2007	2.429
331	506024.1	2851632	335.6644	331	506024.1	2851632	338.4456	2.7812
332	506025.6	2851652	336.0534	332	506025.6	2851652	338.6905	2.6371
333	506027.2	2851672	336.4002	333	506027.2	2851672	338.9354	2.5352
334	506028.7	2851691	336.7115	334	506028.7	2851691	339.1894	2.4779
335	506030.3	2851711	337.1856	335	506030.3	2851711	339.9014	2.7158
336	505816.4	2851391	336.6957	336	505816.4	2851391	339.2325	2.5368
337	505820.5	2851748	338.1346	337	505820.5	2851748	340.831	2.6964
338	505820	2851703	336.5293	338	505820	2851703	339.2523	2.723
339	505816.9	2851432	336.6422	339	505816.9	2851432	339.2338	2.5916
340	505816.6	2851408	336.5458	340	505816.6	2851408	339.233	2.6872
341	505816.8	2851428	336.6123	341	505816.8	2851428	339.2337	2.6214
342	505817.1	2851448	336.7785	342	505817.1	2851448	339.2343	2.4558
343	505817.3	2851468	336.8723	343	505817.3	2851468	339.2349	2.3626
344	505817.5	2851488	336.8263	344	505817.5	2851488	339.2355	2.4092
345	505817.8	2851508	336.3234	345	505817.8	2851508	339.1234	2.8
346	505818	2851528	336.032	346	505818	2851528	338.7782	2.7462
347	505818.2	2851548	335.8789	347	505818.2	2851548	338.433	2.5541
348	505818.5	2851568	335.9553	348	505818.5	2851568	338.4038	2.4485
349	505818.7	2851588	335.7456	349	505818.7	2851588	338.5136	2.768
350	505818.9	2851608	335.8312	350	505818.9	2851608	338.6234	2.7922
351	505819.1	2851628	336.1043	351	505819.1	2851628	338.7332	2.6289
352	505819.4	2851648	336.4675	352	505819.4	2851648	338.843	2.3755
353	505819.6	2851668	336.4962	353	505819.6	2851668	338.9528	2.4566
354	505819.8	2851688	336.3594	354	505819.8	2851688	339.0347	2.6753
355	505820.1	2851708	336.7147	355	505820.1	2851708	339.4075	2.6928
356	505820.3	2851728	337.4931	356	505820.3	2851728	340.1193	2.6262
357	505616.7	2851414	336.9877	357	505616.7	2851414	339.5454	2.5577
358	505620.5	2851750	338.0826	358	505620.5	2851750	340.7309	2.6483
359	505620	2851705	336.9606	359	505620	2851705	339.5057	2.5451
360	505617.1	2851452	336.8021	360	505617.1	2851452	339.5466	2.7445
361	505616.9	2851430	336.7156	361	505616.9	2851430	339.5459	2.8303
362	505617.1	2851450	336.95	362	505617.1	2851450	339.5465	2.5965
363	505617.3	2851470	337.033	363	505617.3	2851470	339.5471	2.5141
364	505617.5	2851490	336.8998	364	505617.5	2851490	339.5478	2.648
365	505617.8	2851510	337.0621	365	505617.8	2851510	339.5484	2.4863

366	505618	2851530	336.7677	366	505618	2851530	339.2321	2.4644
367	505618.2	2851550	336.362	367	505618.2	2851550	338.8986	2.5366
368	505618.5	2851570	336.3667	368	505618.5	2851570	339.0084	2.6417
369	505618.7	2851590	336.7314	369	505618.7	2851590	339.1182	2.3868
370	505618.9	2851610	336.4622	370	505618.9	2851610	339.228	2.7658
371	505619.2	2851630	336.5754	371	505619.2	2851630	339.3378	2.7624
372	505619.4	2851650	336.522	372	505619.4	2851650	339.3472	2.8252
373	505619.6	2851670	336.6425	373	505619.6	2851670	339.0847	2.4422
374	505619.8	2851690	336.6577	374	505619.8	2851690	339.2673	2.6096
375	505620.1	2851710	337.1348	375	505620.1	2851710	339.598	2.4632
376	505620.3	2851730	337.7105	376	505620.3	2851730	340.1645	2.454
377	505402.2	2851439	337.5203	377	505402.2	2851439	339.8814	2.3611
378	505438.6	2851752	338.2649	378	505438.6	2851752	340.8337	2.5688
379	505433.4	2851707	337.4319	379	505433.4	2851707	339.8119	2.38
380	505406.5	2851476	337.3092	380	505406.5	2851476	339.8765	2.5673
381	505404	2851454	337.2991	381	505404	2851454	339.8794	2.5803
382	505406.3	2851474	337.2137	382	505406.3	2851474	339.8768	2.6631
383	505408.6	2851494	337.4619	383	505408.6	2851494	339.8741	2.4122
384	505410.9	2851514	337.1081	384	505410.9	2851514	339.8715	2.7634
385	505413.2	2851534	337.2672	385	505413.2	2851534	339.6764	2.4092
386	505415.5	2851553	337.0537	386	505415.5	2851553	339.5175	2.4638
387	505417.8	2851573	337.0068	387	505417.8	2851573	339.6204	2.6136
388	505420.1	2851593	337.1211	388	505420.1	2851593	339.7233	2.6022
389	505422.4	2851613	337.2553	389	505422.4	2851613	339.6535	2.3982
390	505424.7	2851633	336.9365	390	505424.7	2851633	339.3946	2.4581
391	505427.1	2851653	336.5643	391	505427.1	2851653	339.1357	2.5714
392	505429.4	2851673	336.6666	392	505429.4	2851673	339.265	2.5984
393	505431.7	2851693	337.02	393	505431.7	2851693	339.5812	2.5612
394	505434	2851712	337.1385	394	505434	2851712	339.8975	2.759
395	505436.3	2851732	337.9889	395	505436.3	2851732	340.3511	2.3622
396	505203.5	2851462	337.5553	396	505203.5	2851462	340.1926	2.6373
397	505237.8	2851757	338.0718	397	505237.8	2851757	340.6846	2.6128
398	505233.7	2851721	337.7332	398	505233.7	2851721	340.1474	2.4142
399	505207.8	2851499	337.7821	399	505207.8	2851499	340.1877	2.4056
400	505205.5	2851479	337.5824	400	505205.5	2851479	340.1903	2.6079
401	505207.8	2851499	337.4696	401	505207.8	2851499	340.1877	2.7181
402	505210.1	2851519	337.4761	402	505210.1	2851519	340.1851	2.709
403	505212.4	2851539	337.382	403	505212.4	2851539	340.0835	2.7015
404	505214.8	2851559	337.5104	404	505214.8	2851559	340.14	2.6296
405	505217.1	2851578	337.3736	405	505217.1	2851578	339.9208	2.5472
406	505219.4	2851598	336.9308	406	505219.4	2851598	339.6619	2.7311

407	505221.7	2851618	336.8234	407	505221.7	2851618	339.403	2.5796
408	505224	2851638	336.5807	408	505224	2851638	339.1441	2.5634
409	505226.3	2851658	336.8473	409	505226.3	2851658	339.2849	2.4376
410	505228.6	2851678	336.8693	410	505228.6	2851678	339.5556	2.6863
411	505230.9	2851698	337.2144	411	505230.9	2851698	339.8262	2.6118
412	505233.2	2851718	337.3349	412	505233.2	2851718	340.0968	2.7619
413	505235.5	2851737	337.5567	413	505235.5	2851737	340.3726	2.8159
414	504990.4	2851495	337.9546	414	504990.4	2851495	340.6002	2.6456
415	505054.6	2851771	338.3552	415	505054.6	2851771	340.9221	2.5669
416	505046.8	2851738	337.7253	416	505046.8	2851738	340.4168	2.6915
417	504998.5	2851530	337.9197	417	504998.5	2851530	340.6644	2.7447
418	504991.2	2851499	337.7831	418	504991.2	2851499	340.6067	2.8236
419	504995.7	2851518	338.1156	419	504995.7	2851518	340.6427	2.5271
420	505000.3	2851538	337.9828	420	505000.3	2851538	340.6787	2.6959
421	505004.8	2851557	338.1179	421	505004.8	2851557	340.6781	2.5602
422	505009.3	2851577	337.7809	422	505009.3	2851577	340.5231	2.7422
423	505013.8	2851596	337.5088	423	505013.8	2851596	340.3682	2.8594
424	505018.4	2851616	337.1242	424	505018.4	2851616	339.8931	2.7689
425	505022.9	2851635	336.6307	425	505022.9	2851635	339.2998	2.6691
426	505027.4	2851655	336.5631	426	505027.4	2851655	339.3034	2.7403
427	505031.9	2851674	336.898	427	505031.9	2851674	339.5532	2.6552
428	505036.5	2851694	336.926	428	505036.5	2851694	339.8132	2.8872
429	505041	2851713	337.6031	429	505041	2851713	340.0781	2.475
430	505045.5	2851733	337.5443	430	505045.5	2851733	340.3429	2.7986
431	505050	2851752	337.8425	431	505050	2851752	340.6163	2.7738
432	504803.7	2851539	338.4776	432	504803.7	2851539	341.2761	2.7985
433	504849.1	2851806	338.7129	433	504849.1	2851806	341.4853	2.7724
434	504843.3	2851772	338.2887	434	504843.3	2851772	340.9534	2.6647
435	504809.3	2851572	338.486	435	504809.3	2851572	341.2729	2.7869
436	504805.6	2851550	338.4599	436	504805.6	2851550	341.275	2.8151
437	504809	2851570	338.6819	437	504809	2851570	341.273	2.5911
438	504812.3	2851589	338.5063	438	504812.3	2851589	341.1281	2.6218
439	504815.7	2851609	337.543	439	504815.7	2851609	340.0662	2.5232
440	504819	2851629	336.6913	440	504819	2851629	339.4654	2.7741
441	504822.4	2851649	336.5544	441	504822.4	2851649	339.3002	2.7458
442	504825.7	2851668	336.6249	442	504825.7	2851668	339.5535	2.9286
443	504829	2851688	337.1167	443	504829	2851688	339.8067	2.69
444	504832.4	2851708	337.2602	444	504832.4	2851708	340.06	2.7998
445	504835.7	2851727	337.6371	445	504835.7	2851727	340.3202	2.6831
446	504839.1	2851747	337.8748	446	504839.1	2851747	340.5886	2.7138
447	504842.4	2851767	338.3021	447	504842.4	2851767	340.8661	2.564

448	504845.7	2851787	338.6816	448	504845.7	2851787	341.1757	2.4941
449	504601	2851586	338.9592	449	504601	2851586	341.6066	2.6474
450	504660.1	2851839	339.4963	450	504660.1	2851839	342.0193	2.523
451	504653	2851809	338.9974	451	504653	2851809	341.5425	2.5451
452	504608.5	2851618	338.7185	452	504608.5	2851618	341.6001	2.8816
453	504601	2851586	339.1102	453	504601	2851586	341.6066	2.4964
454	504605.5	2851606	338.9351	454	504605.5	2851606	341.6027	2.6676
455	504610.1	2851625	338.8706	455	504610.1	2851625	341.5987	2.7281
456	504614.6	2851645	338.5802	456	504614.6	2851645	341.1905	2.6103
457	504619.2	2851664	336.8775	457	504619.2	2851664	339.4679	2.5904
458	504623.7	2851684	337.2392	458	504623.7	2851684	339.7981	2.5589
459	504628.3	2851703	337.2972	459	504628.3	2851703	340.074	2.7768
460	504632.8	2851723	337.6949	460	504632.8	2851723	340.3236	2.6287
461	504637.4	2851742	338.1182	461	504637.4	2851742	340.5733	2.4551
462	504641.9	2851761	338.0011	462	504641.9	2851761	340.8278	2.8267
463	504646.5	2851781	338.6994	463	504646.5	2851781	341.1023	2.4029
464	504651	2851800	338.9015	464	504651	2851800	341.4079	2.5064
465	504655.6	2851820	339.165	465	504655.6	2851820	341.7136	2.5486
466	504402.9	2851633	339.318	466	504402.9	2851633	341.9294	2.6114
467	504467.6	2851878	340.148	467	504467.6	2851878	342.6346	2.4866
468	504459.5	2851847	339.5484	468	504459.5	2851847	342.1539	2.6055
469	504411	2851663	339.1387	469	504411	2851663	341.9218	2.7831
470	504406.3	2851646	339.1233	470	504406.3	2851646	341.9262	2.8029
471	504411.4	2851665	339.4881	471	504411.4	2851665	341.9214	2.4333
472	504416.5	2851684	339.2249	472	504416.5	2851684	341.9165	2.6916
473	504421.6	2851704	338.1694	473	504421.6	2851704	340.7464	2.577
474	504426.8	2851723	337.3735	474	504426.8	2851723	340.0833	2.7098
475	504431.9	2851742	337.9126	475	504431.9	2851742	340.4122	2.4996
476	504437	2851762	338.1063	476	504437	2851762	340.7411	2.6348
477	504442.1	2851781	338.5368	477	504442.1	2851781	341.0701	2.5333
478	504447.2	2851800	338.638	478	504447.2	2851800	341.4205	2.7825
479	504452.3	2851820	339.1187	479	504452.3	2851820	341.7243	2.6056
480	504457.4	2851839	339.3609	480	504457.4	2851839	342.0277	2.6668
481	504462.5	2851858	339.6558	481	504462.5	2851858	342.3312	2.6754
482	504194.1	2851697	339.6829	482	504194.1	2851697	342.2724	2.5895
483	504294	2851932	340.7086	483	504294	2851932	343.5073	2.7987
484	504282.6	2851906	340.2258	484	504282.6	2851906	343.0843	2.8585
485	504208.2	2851731	339.4965	485	504208.2	2851731	342.2556	2.7591
486	504200.1	2851711	339.4729	486	504200.1	2851711	342.2653	2.7924
487	504207.9	2851730	339.4313	487	504207.9	2851730	342.256	2.8247
488	504215.7	2851748	339.4519	488	504215.7	2851748	342.0926	2.6407

489	504223.5	2851767	337.9683	489	504223.5	2851767	340.7171	2.7488
490	504231.4	2851785	338.1197	490	504231.4	2851785	340.7494	2.6297
491	504239.2	2851803	338.1701	491	504239.2	2851803	341.068	2.8979
492	504247	2851822	338.6655	492	504247	2851822	341.4062	2.7407
493	504254.8	2851840	338.8797	493	504254.8	2851840	341.788	2.9083
494	504262.7	2851859	339.3117	494	504262.7	2851859	342.1698	2.8581
495	504270.5	2851877	339.8214	495	504270.5	2851877	342.5515	2.7301
496	504278.3	2851896	340.1353	496	504278.3	2851896	342.9257	2.7904
497	504286.1	2851914	340.2835	497	504286.1	2851914	343.2165	2.933
498	504016.7	2851752	340.014	498	504016.7	2851752	342.5638	2.5498
499	504098.3	2852015	341.3928	499	504098.3	2852015	344.2364	2.8436
500	504089.7	2851988	341.2026	500	504089.7	2851988	343.7797	2.5771
501	504027.4	2851787	339.6609	501	504027.4	2851787	342.5527	2.8918
502	504021.3	2851767	339.7288	502	504021.3	2851767	342.559	2.8302
503	504027.2	2851786	339.6376	503	504027.2	2851786	342.5529	2.9153
504	504033.2	2851805	338.9874	504	504033.2	2851805	341.7093	2.7219
505	504039.1	2851824	338.4397	505	504039.1	2851824	341.0445	2.6048
506	504045	2851844	338.6658	506	504045	2851844	341.38	2.7142
507	504050.9	2851863	338.9879	507	504050.9	2851863	341.7712	2.7833
508	504056.9	2851882	339.4125	508	504056.9	2851882	342.1625	2.75
509	504062.8	2851901	339.8832	509	504062.8	2851901	342.5538	2.6706
510	504068.7	2851920	340.3196	510	504068.7	2851920	342.945	2.6254
511	504074.6	2851939	339.8837	511	504074.6	2851939	342.6308	2.7471
512	504080.6	2851958	340.2	512	504080.6	2851958	342.8806	2.6806
513	504086.5	2851977	340.6018	513	504086.5	2851977	343.4653	2.8635
514	504092.4	2851996	341.4056	514	504092.4	2851996	344.05	2.6444
515	503825.7	2851812	340.1435	515	503825.7	2851812	342.8776	2.7341
516	503914.7	2852099	341.7489	516	503914.7	2852099	344.4828	2.7339
517	503902.2	2852058	340.6662	517	503902.2	2852058	343.2431	2.5769
518	503836.4	2851846	340.2532	518	503836.4	2851846	342.8665	2.6133
519	503825.8	2851812	340.1035	519	503825.8	2851812	342.8775	2.774
520	503831.8	2851831	340.2968	520	503831.8	2851831	342.8713	2.5745
521	503837.7	2851850	339.9313	521	503837.7	2851850	342.5651	2.6338
522	503843.6	2851869	339.447	522	503843.6	2851869	341.9422	2.4952
523	503849.5	2851889	339.145	523	503849.5	2851889	341.8769	2.7319
524	503855.5	2851908	339.1387	524	503855.5	2851908	341.79	2.6513
525	503861.4	2851927	338.8022	525	503861.4	2851927	341.5812	2.779
526	503867.3	2851946	338.6731	526	503867.3	2851946	341.3723	2.6992
527	503873.3	2851965	338.5901	527	503873.3	2851965	341.1635	2.5734
528	503879.2	2851984	338.7119	528	503879.2	2851984	341.2322	2.5203
529	503885.1	2852003	338.8094	529	503885.1	2852003	341.6461	2.8367

530	503891	2852022	339.67	530	503891	2852022	342.1441	2.4741
531	503897	2852041	339.9265	531	503897	2852041	342.7288	2.8023
532	503902.9	2852060	340.7412	532	503902.9	2852060	343.3135	2.5723
533	503908.8	2852080	341.2291	533	503908.8	2852080	343.8981	2.669
534	503611.5	2851878	340.5972	534	503611.5	2851878	343.2219	2.6247
535	503758.4	2852176	341.9056	535	503758.4	2852176	344.5233	2.6177
536	503739.8	2852138	340.6	536	503739.8	2852138	343.2851	2.6851
537	503628.6	2851913	340.5701	537	503628.6	2851913	343.1975	2.6274
538	503616.7	2851889	340.5768	538	503616.7	2851889	343.2144	2.6376
539	503625.6	2851907	340.551	539	503625.6	2851907	343.2018	2.6508
540	503634.4	2851925	340.5659	540	503634.4	2851925	343.1264	2.5605
541	503643.3	2851943	340.1329	541	503643.3	2851943	342.9365	2.8036
542	503652.1	2851961	340.0835	542	503652.1	2851961	342.7257	2.6422
543	503661	2851979	339.7291	543	503661	2851979	342.507	2.7779
544	503669.8	2851996	339.5625	544	503669.8	2851996	342.2882	2.7257
545	503678.7	2852014	339.3361	545	503678.7	2852014	342.0695	2.7334
546	503687.5	2852032	339.2143	546	503687.5	2852032	341.8508	2.6365
547	503696.4	2852050	339.1139	547	503696.4	2852050	341.632	2.5181
548	503705.3	2852068	338.9285	548	503705.3	2852068	341.5649	2.6364
549	503714.1	2852086	339.3117	549	503714.1	2852086	341.981	2.6693
550	503723	2852104	339.6771	550	503723	2852104	342.4129	2.7358
551	503731.8	2852122	340.2278	551	503731.8	2852122	342.8449	2.6171
552	503740.7	2852140	340.7726	552	503740.7	2852140	343.3407	2.5681
553	503749.5	2852158	341.1916	553	503749.5	2852158	343.932	2.7404
554	503425.4	2852032	340.3828	554	503425.4	2852032	343.0725	2.6897
555	503622.4	2852254	341.9481	555	503622.4	2852254	344.8601	2.912
556	503602.6	2852232	341.5416	556	503602.6	2852232	344.0511	2.5095
557	503450.7	2852061	340.2819	557	503450.7	2852061	342.9416	2.6597
558	503436.5	2852045	340.3772	558	503436.5	2852045	343.0453	2.6681
559	503449.7	2852060	340.2959	559	503449.7	2852060	342.9512	2.6553
560	503463	2852075	340.0392	560	503463	2852075	342.8131	2.7739
561	503476.3	2852090	340.0074	561	503476.3	2852090	342.675	2.6676
562	503489.6	2852105	339.95	562	503489.6	2852105	342.5337	2.5837
563	503502.9	2852120	339.6452	563	503502.9	2852120	342.3422	2.697
564	503516.1	2852135	339.493	564	503516.1	2852135	342.1328	2.6398
565	503529.4	2852150	339.0922	565	503529.4	2852150	341.9097	2.8175
566	503542.7	2852165	339.7044	566	503542.7	2852165	342.2194	2.515
567	503556	2852179	339.8783	567	503556	2852179	342.6258	2.7475
568	503569.3	2852194	340.3863	568	503569.3	2852194	343.0323	2.646
569	503582.6	2852209	340.8831	569	503582.6	2852209	343.4388	2.5557
570	503595.8	2852224	341.2242	570	503595.8	2852224	343.8453	2.6211

571	503609.1	2852239	341.5884	571	503609.1	2852239	344.2911	2.7027
572	503275.8	2852165	339.937	572	503275.8	2852165	342.5607	2.6237
573	503456.9	2852369	342.8969	573	503456.9	2852369	345.6251	2.7282
574	503439.7	2852350	342.463	574	503439.7	2852350	345.1529	2.6899
575	503301.1	2852194	339.6571	575	503301.1	2852194	342.4321	2.775
576	503284.2	2852175	339.8743	576	503284.2	2852175	342.5401	2.6658
577	503297.5	2852190	339.8882	577	503297.5	2852190	342.4699	2.5817
578	503310.8	2852205	339.6813	578	503310.8	2852205	342.3318	2.6505
579	503324.1	2852220	339.5618	579	503324.1	2852220	342.1937	2.6319
580	503337.3	2852234	339.456	580	503337.3	2852234	342.0556	2.5996
581	503350.6	2852249	339.2779	581	503350.6	2852249	341.9175	2.6396
582	503363.9	2852264	339.5798	582	503363.9	2852264	342.2053	2.6255
583	503377.2	2852279	340.143	583	503377.2	2852279	342.8007	2.6577
584	503390.5	2852294	340.7913	584	503390.5	2852294	343.3858	2.5945
585	503403.7	2852309	341.1486	585	503403.7	2852309	343.8917	2.7431
586	503417	2852324	341.7348	586	503417	2852324	344.3976	2.6628
587	503430.3	2852339	342.2933	587	503430.3	2852339	344.8653	2.572
588	503443.6	2852354	342.4551	588	503443.6	2852354	345.2717	2.8166
589	503139.7	2852286	339.4379	589	503139.7	2852286	342.0947	2.6568
590	503281.5	2852491	342.9421	590	503281.5	2852491	345.5919	2.6498
591	503266.9	2852470	342.7454	591	503266.9	2852470	345.3683	2.6229
592	503161.6	2852318	339.3267	592	503161.6	2852318	341.9565	2.6298
593	503144.8	2852293	339.4404	593	503144.8	2852293	342.0776	2.6372
594	503156.2	2852310	339.3465	594	503156.2	2852310	342.0244	2.6779
595	503167.6	2852326	339.1757	595	503167.6	2852326	341.8812	2.7055
596	503179	2852343	339.0817	596	503179	2852343	341.738	2.6563
597	503190.4	2852359	338.958	597	503190.4	2852359	341.5948	2.6368
598	503201.8	2852376	339.2343	598	503201.8	2852376	342.0694	2.8351
599	503213.1	2852392	339.9991	599	503213.1	2852392	342.6678	2.6687
600	503224.5	2852408	340.5946	600	503224.5	2852408	343.2662	2.6716
601	503235.9	2852425	341.2075	601	503235.9	2852425	343.8646	2.6571
602	503247.3	2852441	341.802	602	503247.3	2852441	344.463	2.661
603	503258.7	2852458	342.4079	603	503258.7	2852458	345.0614	2.6535
604	503270.1	2852474	342.836	604	503270.1	2852474	345.4176	2.5816
605	502989.1	2852420	338.8799	605	502989.1	2852420	341.5791	2.6992
606	503117.2	2852605	341.3646	606	503117.2	2852605	344.0477	2.6831
607	503102.6	2852584	339.9226	607	503102.6	2852584	342.6542	2.7316
608	503010.9	2852451	338.6679	608	503010.9	2852451	341.4433	2.7754
609	502991.8	2852424	338.8043	609	502991.8	2852424	341.5699	2.7656
610	503003.2	2852440	338.7333	610	503003.2	2852440	341.5315	2.7982
611	503014.6	2852457	338.8133	611	503014.6	2852457	341.3973	2.584

612	503026	2852473	338.6193	612	503026	2852473	341.3633	2.744
613	503037.4	2852490	339.179	613	503037.4	2852490	341.9617	2.7827
614	503048.8	2852506	340.1673	614	503048.8	2852506	342.5601	2.3928
615	503060.2	2852522	340.6079	615	503060.2	2852522	343.1585	2.5506
616	503071.6	2852539	340.065	616	503071.6	2852539	342.7017	2.6367
617	503083	2852555	339.4733	617	503083	2852555	342.134	2.6607
618	503094.4	2852572	339.2003	618	503094.4	2852572	341.8755	2.6752
619	503105.8	2852588	340.113	619	503105.8	2852588	342.9616	2.8486
620	502820.1	2852580	338.2717	620	502820.1	2852580	340.972	2.7003
621	502999.7	2852723	340.998	621	502999.7	2852723	343.4099	2.4119
622	502977.7	2852705	339.4444	622	502977.7	2852705	342.2287	2.7843
623	502845.7	2852600	338.0385	623	502845.7	2852600	340.9407	2.9022
624	502827.7	2852586	338.2848	624	502827.7	2852586	340.9608	2.676
625	502843.3	2852598	338.2607	625	502843.3	2852598	340.9337	2.673
626	502858.9	2852611	338.2644	626	502858.9	2852611	340.98	2.7156
627	502874.6	2852623	338.5404	627	502874.6	2852623	341.0264	2.486
628	502890.2	2852636	338.5005	628	502890.2	2852636	341.0727	2.5722
629	502905.9	2852648	338.2424	629	502905.9	2852648	340.9946	2.7522
630	502921.5	2852661	338.6382	630	502921.5	2852661	341.1745	2.5363
631	502937.1	2852673	338.8851	631	502937.1	2852673	341.3544	2.4693
632	502952.8	2852686	337.7395	632	502952.8	2852686	341.5343	3.7948
633	502968.4	2852698	339.0758	633	502968.4	2852698	341.9696	2.8938
634	502984.1	2852710	339.7373	634	502984.1	2852710	342.4065	2.6692
635	502685.2	2852728	339.3693	635	502685.2	2852728	342.0079	2.6386
636	502875.1	2852879	341.0099	636	502875.1	2852879	343.8671	2.8572
637	502853.1	2852862	340.4529	637	502853.1	2852862	343.0868	2.6339
638	502711.8	2852749	339.3778	638	502711.8	2852749	342	2.6222
639	502687.4	2852730	339.4757	639	502687.4	2852730	342.0028	2.5271
640	502703	2852742	339.4246	640	502703	2852742	341.974	2.5494
641	502718.7	2852755	339.5438	641	502718.7	2852755	342.0203	2.4765
642	502734.3	2852767	338.138	642	502734.3	2852767	341.7946	3.6566
643	502749.9	2852780	338.871	643	502749.9	2852780	341.538	2.667
644	502765.6	2852792	338.8438	644	502765.6	2852792	341.2814	2.4376
645	502781.2	2852805	338.8724	645	502781.2	2852805	341.351	2.4786
646	502796.9	2852817	338.8208	646	502796.9	2852817	341.5309	2.7101
647	502812.5	2852829	339.2683	647	502812.5	2852829	341.9538	2.6855
648	502828.2	2852842	339.8854	648	502828.2	2852842	342.3908	2.5054
649	502843.8	2852854	340.428	649	502843.8	2852854	342.8277	2.3997
650	502859.4	2852867	340.7995	650	502859.4	2852867	343.2646	2.4651
651	502556.5	2852870	340.3927	651	502556.5	2852870	342.9805	2.5878
652	502745.7	2853042	341.9071	652	502745.7	2853042	344.5923	2.6852

653	502724.8	2853023	341.3694	653	502724.8	2853023	343.9696	2.6002
654	502581.6	2852892	340.1039	654	502581.6	2852892	342.7468	2.6429
655	502568.2	2852880	340.3984	655	502568.2	2852880	342.9573	2.5589
656	502583	2852894	340.1731	656	502583	2852894	342.713	2.5399
657	502597.8	2852907	339.8835	657	502597.8	2852907	342.3511	2.4676
658	502612.6	2852921	339.3858	658	502612.6	2852921	341.9892	2.6034
659	502627.3	2852934	339.2157	659	502627.3	2852934	341.688	2.4723
660	502642.1	2852948	339.0023	660	502642.1	2852948	341.5274	2.5251
661	502656.9	2852961	339.266	661	502656.9	2852961	341.9426	2.6766
662	502671.7	2852974	339.6531	662	502671.7	2852974	342.3843	2.7312
663	502686.5	2852988	340.1713	663	502686.5	2852988	342.8259	2.6546
664	502701.3	2853001	340.519	664	502701.3	2853001	343.2675	2.7485
665	502716.1	2853015	341.0227	665	502716.1	2853015	343.7091	2.6864
666	502730.9	2853028	341.434	666	502730.9	2853028	344.1507	2.7167
667	502421.9	2853018	341.47	667	502421.9	2853018	343.9551	2.4851
668	502620.8	2853198	342.7714	668	502620.8	2853198	345.4522	2.6808
669	502597.5	2853177	342.2444	669	502597.5	2853177	344.7582	2.5138
670	502447	2853040	341.1134	670	502447	2853040	343.7461	2.6327
671	502428.5	2853024	341.4316	671	502428.5	2853024	343.942	2.5104
672	502443.3	2853037	341.1235	672	502443.3	2853037	343.8115	2.688
673	502458.1	2853050	340.8207	673	502458.1	2853050	343.4932	2.6725
674	502472.9	2853064	340.578	674	502472.9	2853064	343.1313	2.5533
675	502487.7	2853077	340.0638	675	502487.7	2853077	342.7694	2.7056
676	502502.4	2853091	339.6745	676	502502.4	2853091	342.473	2.7985
677	502517.2	2853104	339.9778	677	502517.2	2853104	342.4295	2.4517
678	502532	2853118	339.75	678	502532	2853118	342.386	2.636
679	502546.8	2853131	339.7134	679	502546.8	2853131	342.3426	2.6292
680	502561.6	2853145	339.9214	680	502561.6	2853145	342.7002	2.7788
681	502576.4	2853158	341.3479	681	502576.4	2853158	343.8561	2.5082
682	502591.2	2853172	341.8283	682	502591.2	2853172	344.569	2.7407
683	502606	2853185	342.168	683	502606	2853185	345.0106	2.8426
684	502287.3	2853165	342.4933	684	502287.3	2853165	344.9296	2.4363
685	502535.1	2853391	341.913	685	502535.1	2853391	344.4035	2.4905
686	502489.4	2853349	341.2509	686	502489.4	2853349	343.8479	2.597
687	502312.4	2853188	342.2393	687	502312.4	2853188	344.7088	2.4695
688	502298.4	2853176	342.3491	688	502298.4	2853176	344.9077	2.5586
689	502313.2	2853189	341.8545	689	502313.2	2853189	344.6958	2.8413
690	502327.9	2853202	341.5106	690	502327.9	2853202	344.401	2.8904
691	502342.7	2853216	341.4888	691	502342.7	2853216	344.0391	2.5503
692	502357.5	2853229	340.9677	692	502357.5	2853229	343.6772	2.7095
693	502372.3	2853243	340.9048	693	502372.3	2853243	343.6299	2.7251

694	502387.1	2853256	341.0746	694	502387.1	2853256	343.5865	2.5119
695	502401.9	2853270	341.0344	695	502401.9	2853270	343.543	2.5086
696	502416.7	2853283	340.1548	696	502416.7	2853283	342.8382	2.6834
697	502431.5	2853297	340.0897	697	502431.5	2853297	342.5735	2.4838
698	502446.3	2853310	340.3566	698	502446.3	2853310	342.8992	2.5426
699	502461.1	2853324	340.429	699	502461.1	2853324	343.2249	2.7959
700	502475.9	2853337	340.9047	700	502475.9	2853337	343.5505	2.6458
701	502490.7	2853350	341.197	701	502490.7	2853350	343.8762	2.6792
702	502505.5	2853364	341.8575	702	502505.5	2853364	344.4614	2.6039
703	502520.3	2853377	342.2076	703	502520.3	2853377	344.7719	2.5643
704	502144.8	2853322	343.321	704	502144.8	2853322	345.9615	2.6405
705	502470.1	2853561	341.8513	705	502470.1	2853561	344.4569	2.6056
706	502422	2853526	341.6524	706	502422	2853526	344.499	2.8466
707	502172.3	2853342	343.2079	707	502172.3	2853342	345.711	2.5031
708	502147.8	2853324	343.3996	708	502147.8	2853324	345.9542	2.5546
709	502163.9	2853336	343.118	709	502163.9	2853336	345.8503	2.7323
710	502180	2853348	342.9165	710	502180	2853348	345.5821	2.6656
711	502196.2	2853360	342.559	711	502196.2	2853360	345.2911	2.7321
712	502212.3	2853372	342.3189	712	502212.3	2853372	344.9206	2.6017
713	502228.4	2853384	342.2186	713	502228.4	2853384	344.8313	2.6127
714	502244.5	2853395	342.1509	714	502244.5	2853395	344.7105	2.5596
715	502260.6	2853407	341.4005	715	502260.6	2853407	343.9131	2.5126
716	502276.7	2853419	340.4809	716	502276.7	2853419	343.1156	2.6347
717	502292.8	2853431	339.9542	717	502292.8	2853431	342.478	2.5238
718	502309	2853443	340.3418	718	502309	2853443	342.8007	2.4589
719	502325.1	2853455	340.3768	719	502325.1	2853455	343.1235	2.7467
720	502341.2	2853466	340.6651	720	502341.2	2853466	343.4868	2.8217
721	502357.3	2853478	341.0701	721	502357.3	2853478	343.8764	2.8063
722	502373.4	2853490	341.7046	722	502373.4	2853490	344.266	2.5614
723	502389.5	2853502	341.919	723	502389.5	2853502	344.6098	2.6908
724	502405.6	2853514	341.9067	724	502405.6	2853514	344.5133	2.6066
725	502421.7	2853526	342.0318	725	502421.7	2853526	344.4992	2.4674
726	502437.9	2853538	342.0729	726	502437.9	2853538	344.4851	2.4122
727	502454	2853549	341.822	727	502454	2853549	344.471	2.649
728	502057.4	2853418	344.1615	728	502057.4	2853418	346.5945	2.433
729	502274.6	2853727	341.9957	729	502274.6	2853727	344.6231	2.6274
730	502248.5	2853690	342.0987	730	502248.5	2853690	344.6463	2.5476
731	502081.2	2853452	343.6132	731	502081.2	2853452	346.3136	2.7004
732	502067.6	2853433	344.1843	732	502067.6	2853433	346.5879	2.4036
733	502079.1	2853449	343.7744	733	502079.1	2853449	346.3563	2.5819
734	502090.6	2853465	343.3616	734	502090.6	2853465	346.124	2.7624

735	502102.1	2853482	343.2215	735	502102.1	2853482	345.8472	2.6257
736	502113.6	2853498	343.2713	736	502113.6	2853498	345.6508	2.3795
737	502125.1	2853514	342.1554	737	502125.1	2853514	344.8615	2.7061
738	502136.6	2853531	341.7405	738	502136.6	2853531	344.1165	2.376
739	502148.1	2853547	340.9241	739	502148.1	2853547	343.5122	2.5881
740	502159.6	2853564	340.625	740	502159.6	2853564	343.0794	2.4544
741	502171.1	2853580	340.4778	741	502171.1	2853580	342.9725	2.4947
742	502182.6	2853596	340.7471	742	502182.6	2853596	343.3699	2.6228
743	502194.1	2853613	341.2876	743	502194.1	2853613	343.7673	2.4797
744	502205.6	2853629	341.5307	744	502205.6	2853629	344.1647	2.634
745	502217.1	2853645	341.9437	745	502217.1	2853645	344.5621	2.6184
746	502228.6	2853662	342.5298	746	502228.6	2853662	344.9471	2.4173
747	502240.1	2853678	342.033	747	502240.1	2853678	344.6537	2.6207
748	502251.6	2853694	342.0815	748	502251.6	2853694	344.6435	2.562
749	502263.1	2853711	342.0628	749	502263.1	2853711	344.6333	2.5705
750	501927.9	2853582	344.8846	750	501927.9	2853582	347.5877	2.7031
751	502111	2853842	342.0742	751	502111	2853842	344.7627	2.6885
752	502084.9	2853805	342.6449	752	502084.9	2853805	345.2279	2.583
753	501944.9	2853606	344.7388	753	501944.9	2853606	347.2644	2.5256
754	501938.5	2853597	344.916	754	501938.5	2853597	347.3971	2.4811
755	501950	2853613	344.5846	755	501950	2853613	347.1401	2.5555
756	501961.5	2853629	344.3203	756	501961.5	2853629	346.8565	2.5362
757	501973	2853646	343.6209	757	501973	2853646	346.2724	2.6515
758	501984.5	2853662	343.0456	758	501984.5	2853662	345.6682	2.6226
759	501996	2853679	342.6956	759	501996	2853679	345.1843	2.4887
760	502007.5	2853695	342.215	760	502007.5	2853695	344.8258	2.6108
761	502019	2853711	341.6739	761	502019	2853711	344.4674	2.7935
762	502030.5	2853728	341.47	762	502030.5	2853728	344.1089	2.6389
763	502042	2853744	341.2149	763	502042	2853744	343.7602	2.5453
764	502053.5	2853760	341.5783	764	502053.5	2853760	344.1576	2.5793
765	502065	2853777	341.8334	765	502065	2853777	344.555	2.7216
766	502076.5	2853793	342.4234	766	502076.5	2853793	344.9524	2.529
767	502088	2853809	342.4575	767	502088	2853809	344.989	2.5315
768	502099.5	2853826	342.1467	768	502099.5	2853826	344.7729	2.6262
769	501784.6	2853774	345.1499	769	501784.6	2853774	347.7384	2.5885
770	501990.2	2853927	342.4569	770	501990.2	2853927	344.8658	2.4089
771	501951.7	2853899	342.0661	771	501951.7	2853899	344.9119	2.8458
772	501807.2	2853791	344.991	772	501807.2	2853791	347.8313	2.8403
773	501797.6	2853784	345.0896	773	501797.6	2853784	347.8297	2.7401
774	501813.7	2853796	345.0788	774	501813.7	2853796	347.6695	2.5907
775	501829.7	2853808	344.5776	775	501829.7	2853808	347.218	2.6404

776	501845.8	2853820	344.3795	776	501845.8	2853820	346.8117	2.4322
777	501861.8	2853832	343.9425	777	501861.8	2853832	346.4054	2.4629
778	501877.8	2853844	343.3638	778	501877.8	2853844	345.9991	2.6353
779	501893.9	2853856	343.0106	779	501893.9	2853856	345.5928	2.5822
780	501909.9	2853867	342.6982	780	501909.9	2853867	345.1865	2.4883
781	501926	2853879	342.1299	781	501926	2853879	344.7802	2.6503
782	501942	2853891	341.9323	782	501942	2853891	344.6754	2.7431
783	501958.1	2853903	342.1927	783	501958.1	2853903	345.0655	2.8728
784	501974.1	2853915	342.9719	784	501974.1	2853915	345.4492	2.4773
785	501665.2	2853935	344.8407	785	501665.2	2853935	347.3516	2.5109
786	501837.5	2854063	342.8777	786	501837.5	2854063	345.3665	2.4888
787	501821.1	2854051	343.0076	787	501821.1	2854051	345.4978	2.4902
788	501687.8	2853951	344.5476	788	501687.8	2853951	347.0139	2.4663
789	501677	2853943	344.9974	789	501677	2853943	347.4347	2.4373
790	501693.1	2853955	344.2785	790	501693.1	2853955	346.7987	2.5202
791	501709.1	2853967	343.7169	791	501709.1	2853967	346.148	2.4311
792	501725.2	2853979	342.9396	792	501725.2	2853979	345.4973	2.5577
793	501741.2	2853991	342.2308	793	501741.2	2853991	344.8466	2.6158
794	501757.3	2854003	343.2326	794	501757.3	2854003	345.7537	2.5211
795	501773.3	2854015	343.9819	795	501773.3	2854015	346.5005	2.5186
796	501789.4	2854027	343.6161	796	501789.4	2854027	346.0942	2.4781
797	501805.4	2854039	343.1782	797	501805.4	2854039	345.6879	2.5097
798	501821.4	2854051	343.0813	798	501821.4	2854051	345.5057	2.4244
799	501545.8	2854095	344.4281	799	501545.8	2854095	346.829	2.4009
800	501702.5	2854212	342.6564	800	501702.5	2854212	345.1951	2.5387
801	501686.1	2854200	342.9052	801	501686.1	2854200	345.3648	2.4596
802	501568.4	2854112	343.3589	802	501568.4	2854112	345.9142	2.5553
803	501558.1	2854104	343.7524	803	501558.1	2854104	346.3315	2.5791
804	501574.1	2854116	343.044	804	501574.1	2854116	345.6808	2.6368
805	501590.2	2854128	342.3693	805	501590.2	2854128	345.0301	2.6608
806	501606.2	2854140	342.2093	806	501606.2	2854140	344.6193	2.41
807	501622.3	2854152	342.1961	807	501622.3	2854152	344.6351	2.439
808	501638.3	2854164	342.2365	808	501638.3	2854164	344.6508	2.4143
809	501654.3	2854176	342.2537	809	501654.3	2854176	344.6666	2.4129
810	501670.4	2854188	342.3792	810	501670.4	2854188	344.8533	2.4741
811	501686.4	2854200	342.7993	811	501686.4	2854200	345.3754	2.5761
812	501432.4	2854247	343.2359	812	501432.4	2854247	345.7845	2.5486
813	501562.7	2854366	342.5274	813	501562.7	2854366	345.2604	2.733
814	501547.7	2854352	342.5051	814	501547.7	2854352	345.2306	2.7255
815	501453.3	2854266	342.5832	815	501453.3	2854266	345.2368	2.6536
816	501444.2	2854258	342.6924	816	501444.2	2854258	345.258	2.5656

817	501459.1	2854272	342.6843	817	501459.1	2854272	345.2454	2.5611
818	501473.9	2854285	342.7096	818	501473.9	2854285	345.2677	2.5581
819	501488.7	2854299	342.6772	819	501488.7	2854299	345.2899	2.6127
820	501503.5	2854312	342.7249	820	501503.5	2854312	345.3122	2.5873
821	501518.3	2854325	342.6304	821	501518.3	2854325	345.3344	2.704
822	501533.1	2854339	342.737	822	501533.1	2854339	345.2983	2.5613
823	501547.9	2854352	342.5673	823	501547.9	2854352	345.2342	2.6669
824	501324.3	2854372	343.0184	824	501324.3	2854372	345.7533	2.7349
825	501406.1	2854538	342.8649	825	501406.1	2854538	345.5167	2.6518
826	501396.5	2854519	342.7239	826	501396.5	2854519	345.5233	2.7994
827	501334.6	2854393	343.0508	827	501334.6	2854393	345.6656	2.6148
828	501326.8	2854377	343.1729	828	501326.8	2854377	345.7661	2.5932
829	501335.6	2854395	342.9965	829	501335.6	2854395	345.6332	2.6367
830	501344.4	2854413	342.6685	830	501344.4	2854413	345.3908	2.7223
831	501353.2	2854431	342.5616	831	501353.2	2854431	345.2292	2.6676
832	501362	2854449	342.5956	832	501362	2854449	345.1948	2.5992
833	501370.9	2854467	342.7491	833	501370.9	2854467	345.395	2.6459
834	501379.7	2854485	342.7464	834	501379.7	2854485	345.5349	2.7885
835	501388.5	2854502	342.7327	835	501388.5	2854502	345.5288	2.7961
836	501397.3	2854520	342.8132	836	501397.3	2854520	345.5228	2.7096
837	501144	2854460	343.552	837	501144	2854460	346.0907	2.5387
838	501228.8	2854629	343.2547	838	501228.8	2854629	345.7752	2.5205
839	501218.1	2854608	343.2258	839	501218.1	2854608	345.7828	2.557
840	501154.5	2854481	343.2768	840	501154.5	2854481	345.9451	2.6683
841	501148	2854468	343.3775	841	501148	2854468	346.035	2.6575
842	501157	2854486	343.3849	842	501157	2854486	345.9106	2.5257
843	501166	2854504	343.1329	843	501166	2854504	345.7862	2.6533
844	501174.9	2854522	343.0462	844	501174.9	2854522	345.6458	2.5996
845	501183.9	2854540	343.0808	845	501183.9	2854540	345.6328	2.552
846	501192.9	2854558	342.9727	846	501192.9	2854558	345.6198	2.6471
847	501201.8	2854575	342.94	847	501201.8	2854575	345.6068	2.6668
848	501210.8	2854593	343.1329	848	501210.8	2854593	345.7879	2.655
849	501219.8	2854611	343.1034	849	501219.8	2854611	345.7816	2.6782
850	500963.3	2854546	343.6421	850	500963.3	2854546	346.3414	2.6993
851	501050	2854719	343.5242	851	501050	2854719	346.0472	2.523
852	501039.3	2854697	343.3613	852	501039.3	2854697	346.0194	2.6581
853	500975.2	2854570	343.5426	853	500975.2	2854570	346.1762	2.6336
854	500969.3	2854558	343.7117	854	500969.3	2854558	346.2584	2.5467
855	500978.2	2854576	343.5668	855	500978.2	2854576	346.1266	2.5598
856	500987.2	2854594	343.2531	856	500987.2	2854594	345.8137	2.5606
857	500996.2	2854612	342.8403	857	500996.2	2854612	345.5521	2.7118

858	501005.1	2854629	342.5821	858	501005.1	2854629	345.2905	2.7084
859	501014.1	2854647	342.8852	859	501014.1	2854647	345.4253	2.5401
860	501023.1	2854665	342.9273	860	501023.1	2854665	345.6368	2.7095
861	501032.1	2854683	343.4438	861	501032.1	2854683	345.8483	2.4045
862	501041	2854701	343.4683	862	501041	2854701	346.0197	2.5514
863	500769.9	2854606	344.2409	863	500769.9	2854606	346.7678	2.5269
864	500871.3	2854808	343.9976	864	500871.3	2854808	346.7069	2.7093
865	500860.6	2854787	343.8639	865	500860.6	2854787	346.4383	2.5744
866	500787.4	2854641	343.8778	866	500787.4	2854641	346.2795	2.4017
867	500772.6	2854612	344.0345	867	500772.6	2854612	346.7306	2.6961
868	500781.5	2854630	343.8324	868	500781.5	2854630	346.5408	2.7084
869	500790.5	2854648	343.7608	869	500790.5	2854648	346.143	2.3822
870	500799.5	2854665	343.2265	870	500799.5	2854665	345.9307	2.7042
871	500808.5	2854683	343.2351	871	500808.5	2854683	345.6691	2.434
872	500817.4	2854701	343.0086	872	500817.4	2854701	345.4075	2.3989
873	500826.4	2854719	342.7617	873	500826.4	2854719	345.1459	2.3842
874	500835.4	2854737	342.1788	874	500835.4	2854737	344.8843	2.7055
875	500844.3	2854755	342.205	875	500844.3	2854755	344.7704	2.5654
876	500853.3	2854773	343.2422	876	500853.3	2854773	345.6582	2.416
877	500862.3	2854791	344.0724	877	500862.3	2854791	346.6228	2.5504
878	500601.1	2854659	344.6005	878	500601.1	2854659	347.1401	2.5396
879	500678.1	2854905	345.3827	879	500678.1	2854905	347.8	2.4173
880	500670.9	2854882	345.4069	880	500670.9	2854882	347.9436	2.5367
881	500612.6	2854696	343.9405	881	500612.6	2854696	346.5217	2.5812
882	500606.4	2854676	344.5028	882	500606.4	2854676	346.9357	2.4329
883	500612.4	2854695	343.9998	883	500612.4	2854695	346.5369	2.5371
884	500618.4	2854715	343.5731	884	500618.4	2854715	346.2868	2.7137
885	500624.3	2854734	343.3061	885	500624.3	2854734	346.0263	2.7202
886	500630.3	2854753	343.4272	886	500630.3	2854753	345.8117	2.3845
887	500636.3	2854772	343.2021	887	500636.3	2854772	345.6256	2.4235
888	500642.3	2854791	343.0971	888	500642.3	2854791	345.6284	2.5313
889	500648.2	2854810	343.488	889	500648.2	2854810	345.8971	2.4091
890	500654.2	2854829	343.688	890	500654.2	2854829	346.0914	2.4034
891	500660.2	2854848	343.7311	891	500660.2	2854848	346.2858	2.5547
892	500666.2	2854867	344.7411	892	500666.2	2854867	347.1706	2.4295
893	500672.1	2854886	345.4288	893	500672.1	2854886	348.1455	2.7167
894	500411.1	2854722	345.2829	894	500411.1	2854722	347.8438	2.5609
895	500497	2854996	346.2305	895	500497	2854996	348.825	2.5945
896	500489.8	2854973	346.9692	896	500489.8	2854973	349.3811	2.4119
897	500422	2854757	344.9522	897	500422	2854757	347.5346	2.5824
898	500413.4	2854729	345.0032	898	500413.4	2854729	347.7137	2.7105

899	500419.3	2854748	345.224	899	500419.3	2854748	347.5823	2.3583
900	500425.3	2854767	344.8044	900	500425.3	2854767	347.2314	2.427
901	500431.3	2854786	344.1321	901	500431.3	2854786	346.69	2.5579
902	500437.3	2854805	343.967	902	500437.3	2854805	346.3691	2.4021
903	500443.2	2854825	343.6132	903	500443.2	2854825	346.1711	2.5579
904	500449.2	2854844	343.4171	904	500449.2	2854844	345.9829	2.5658
905	500455.2	2854863	343.8762	905	500455.2	2854863	346.3589	2.4827
906	500461.2	2854882	344.3556	906	500461.2	2854882	346.8153	2.4597
907	500467.1	2854901	344.8851	907	500467.1	2854901	347.4496	2.5645
908	500473.1	2854920	345.2434	908	500473.1	2854920	347.8079	2.5645
909	500479.1	2854939	345.5938	909	500479.1	2854939	348.0023	2.4085
910	500485.1	2854958	346.0324	910	500485.1	2854958	348.6081	2.5757
911	500491	2854977	346.7996	911	500491	2854977	349.5311	2.7315
912	500212.2	2854813	346.2223	912	500212.2	2854813	348.6425	2.4202
913	500332.4	2855075	347.4984	913	500332.4	2855075	349.8809	2.3825
914	500317.7	2855043	347.2321	914	500317.7	2855043	349.9729	2.7408
915	500227.3	2854846	345.4093	915	500227.3	2854846	347.9072	2.4979
916	500215.5	2854820	346.2151	916	500215.5	2854820	348.6251	2.41
917	500223.9	2854839	345.7233	917	500223.9	2854839	348.1161	2.3928
918	500232.2	2854857	345.135	918	500232.2	2854857	347.6056	2.4706
919	500240.6	2854875	344.5754	919	500240.6	2854875	347.0564	2.481
920	500248.9	2854893	343.9667	920	500248.9	2854893	346.5846	2.6179
921	500257.2	2854911	344.0777	921	500257.2	2854911	346.639	2.5613
922	500265.6	2854929	344.5982	922	500265.6	2854929	347.0055	2.4073
923	500273.9	2854948	344.938	923	500273.9	2854948	347.372	2.434
924	500282.3	2854966	345.1664	924	500282.3	2854966	347.8118	2.6454
925	500290.6	2854984	345.9333	925	500290.6	2854984	348.4391	2.5058
926	500299	2855002	346.7023	926	500299	2855002	349.0664	2.3641
927	500307.3	2855020	347.1402	927	500307.3	2855020	349.574	2.4338
928	500315.7	2855039	347.2482	928	500315.7	2855039	349.749	2.5008
929	500324	2855057	348.0976	929	500324	2855057	350.609	2.5114
930	500033	2854895	346.1286	930	500033	2854895	348.5768	2.4482
931	500146.5	2855156	348.9359	931	500146.5	2855156	351.3053	2.3694
932	500132.5	2855124	348.8543	932	500132.5	2855124	351.3154	2.4611
933	500047.4	2854929	345.6162	933	500047.4	2854929	348.0979	2.4817
934	500034.6	2854899	346.0993	934	500034.6	2854899	348.574	2.4747
935	500042.6	2854918	345.8908	935	500042.6	2854918	348.4037	2.5129
936	500050.6	2854936	345.5334	936	500050.6	2854936	347.8958	2.3624
937	500058.6	2854954	344.9554	937	500058.6	2854954	347.3858	2.4304
938	500066.6	2854973	344.4561	938	500066.6	2854973	346.8757	2.4196
939	500074.6	2854991	344.7161	939	500074.6	2854991	347.2257	2.5096

940	500082.6	2855009	345.3346	940	500082.6	2855009	347.7193	2.3847
941	500090.6	2855028	345.7779	941	500090.6	2855028	348.2129	2.435
942	500098.6	2855046	346.1828	942	500098.6	2855046	348.6533	2.4705
943	500106.6	2855064	346.8459	943	500106.6	2855064	349.2752	2.4293
944	500114.6	2855083	347.5123	944	500114.6	2855083	349.9042	2.3919
945	500122.6	2855101	348.0642	945	500122.6	2855101	350.5333	2.4691
946	500130.5	2855119	348.7767	946	500130.5	2855119	351.1623	2.3856
947	500138.5	2855138	349.2507	947	500138.5	2855138	351.6131	2.3624
948	499852.8	2854983	346.1054	948	499852.8	2854983	348.5074	2.402
949	499963.2	2855236	349.6609	949	499963.2	2855236	352.1703	2.5094
950	499949.2	2855204	349.3192	950	499949.2	2855204	351.7079	2.3887
951	499864.9	2855010	345.9042	951	499864.9	2855010	348.3333	2.4291
952	499859.3	2854998	346.078	952	499859.3	2854998	348.4966	2.4186
953	499867.3	2855016	345.8067	953	499867.3	2855016	348.1847	2.378
954	499875.3	2855034	345.2804	954	499875.3	2855034	347.6776	2.3972
955	499883.3	2855053	344.7038	955	499883.3	2855053	347.1676	2.4638
956	499891.3	2855071	344.9293	956	499891.3	2855071	347.3525	2.4232
957	499899.3	2855089	345.4364	957	499899.3	2855089	347.8461	2.4097
958	499907.2	2855108	345.8395	958	499907.2	2855108	348.3397	2.5002
959	499915.2	2855126	345.8074	959	499915.2	2855126	348.2821	2.4747
960	499923.2	2855144	346.2209	960	499923.2	2855144	348.6875	2.4666
961	499931.2	2855163	346.5742	961	499931.2	2855163	349.019	2.4448
962	499939.2	2855181	348.0485	962	499939.2	2855181	350.5575	2.509
963	499947.2	2855199	349.0627	963	499947.2	2855199	351.5366	2.4739
964	499955.2	2855218	349.5007	964	499955.2	2855218	352.0348	2.5341
965	499667.3	2855089	345.8537	965	499667.3	2855089	348.4239	2.5702
966	499793.7	2855310	348.7398	966	499793.7	2855310	351.2372	2.4974
967	499776.2	2855279	346.7043	967	499776.2	2855279	349.2077	2.5034
968	499681.8	2855114	345.4716	968	499681.8	2855114	348.0761	2.6045
969	499674.5	2855101	345.8691	969	499674.5	2855101	348.4148	2.5457
970	499684.4	2855119	345.331	970	499684.4	2855119	347.9456	2.6146
971	499694.4	2855136	344.7698	971	499694.4	2855136	347.439	2.6692
972	499704.3	2855154	344.8287	972	499704.3	2855154	347.5082	2.6795
973	499714.2	2855171	345.1819	973	499714.2	2855171	347.9039	2.722
974	499724.2	2855188	345.0038	974	499724.2	2855188	347.6842	2.6804
975	499734.1	2855206	345.1343	975	499734.1	2855206	347.8277	2.6934
976	499744.1	2855223	345.5076	976	499744.1	2855223	348.2431	2.7355
977	499754	2855240	345.9326	977	499754	2855240	348.6412	2.7086
978	499763.9	2855258	346.1647	978	499763.9	2855258	348.9245	2.7598
979	499773.9	2855275	346.398	979	499773.9	2855275	349.1542	2.7562
980	499783.8	2855292	347.2835	980	499783.8	2855292	350.0647	2.7812

981	499493.7	2855188	345.5406	981	499493.7	2855188	348.3457	2.8051
982	499613.1	2855397	346.1888	982	499613.1	2855397	348.9864	2.7976
983	499595.8	2855367	345.7312	983	499595.8	2855367	348.5543	2.8231
984	499508.3	2855214	345.0311	984	499508.3	2855214	347.8128	2.7817
985	499493.9	2855189	345.5113	985	499493.9	2855189	348.3455	2.8342
986	499503.8	2855206	345.119	986	499503.8	2855206	348.0375	2.9185
987	499513.8	2855223	344.6906	987	499513.8	2855223	347.5364	2.8458
988	499523.7	2855241	344.5305	988	499523.7	2855241	347.3668	2.8363
989	499533.6	2855258	344.5186	989	499533.6	2855258	347.3978	2.8792
990	499543.6	2855275	344.5616	990	499543.6	2855275	347.4439	2.8823
991	499553.5	2855293	344.3909	991	499553.5	2855293	347.2417	2.8508
992	499563.4	2855310	344.7008	992	499563.4	2855310	347.5635	2.8627
993	499573.4	2855327	345.0151	993	499573.4	2855327	347.868	2.8529
994	499583.3	2855345	345.3247	994	499583.3	2855345	348.1725	2.8478
995	499593.2	2855362	345.5429	995	499593.2	2855362	348.4771	2.9342
996	499603.2	2855379	345.8211	996	499603.2	2855379	348.7567	2.9356
997	499301.6	2855316	345.8337	997	499301.6	2855316	348.6236	2.7899
998	499497.3	2855517	346.4591	998	499497.3	2855517	349.2689	2.8098
999	499470.9	2855490	345.7914	999	499470.9	2855490	348.6774	2.886
1000	499325.5	2855341	346.0262	1000	499325.5	2855341	348.902	2.8758
1001	499302.1	2855317	345.767	1001	499302.1	2855317	348.6309	2.8639
1002	499316	2855331	345.979	1002	499316	2855331	348.8312	2.8522
1003	499330	2855345	346.0648	1003	499330	2855345	348.9407	2.8759
1004	499343.9	2855360	346.0885	1004	499343.9	2855360	348.9317	2.8432
1005	499357.8	2855374	346.0374	1005	499357.8	2855374	348.9227	2.8853
1006	499371.8	2855388	346.0271	1006	499371.8	2855388	348.9137	2.8866
1007	499385.7	2855403	345.697	1007	499385.7	2855403	348.4957	2.7987
1008	499399.7	2855417	344.8679	1008	499399.7	2855417	347.6873	2.8194
1009	499413.6	2855431	344.2932	1009	499413.6	2855431	347.1147	2.8215
1010	499427.6	2855446	344.6885	1010	499427.6	2855446	347.5758	2.8873
1011	499441.5	2855460	345.1896	1011	499441.5	2855460	348.0211	2.8315
1012	499455.4	2855474	345.5154	1012	499455.4	2855474	348.3326	2.8172
1013	499469.4	2855489	345.7993	1013	499469.4	2855489	348.6442	2.8449
1014	499483.3	2855503	346.0555	1014	499483.3	2855503	348.9195	2.864
1015	499158.2	2855455	346.5636	1015	499158.2	2855455	349.3832	2.8196
1016	499358.6	2855661	346.9218	1016	499358.6	2855661	349.7803	2.8585
1017	499332.2	2855634	346.0442	1017	499332.2	2855634	348.8942	2.85
1018	499182.1	2855480	346.5938	1018	499182.1	2855480	349.425	2.8312
1019	499163.4	2855461	346.5951	1019	499163.4	2855461	349.3922	2.7971
1020	499177.3	2855475	346.4779	1020	499177.3	2855475	349.4166	2.9387
1021	499191.2	2855489	346.7616	1021	499191.2	2855489	349.4956	2.734

1022	499205.2	2855504	346.9369	1022	499205.2	2855504	349.7511	2.8142
1023	499219.1	2855518	346.9998	1023	499219.1	2855518	349.7708	2.771
1024	499233.1	2855532	346.2152	1024	499233.1	2855532	349.0171	2.8019
1025	499247	2855547	345.5218	1025	499247	2855547	348.2633	2.7415
1026	499261	2855561	344.7248	1026	499261	2855561	347.5071	2.7823
1027	499274.9	2855575	344.2576	1027	499274.9	2855575	347.0975	2.8399
1028	499288.8	2855590	344.7246	1028	499288.8	2855590	347.5585	2.8339
1029	499302.8	2855604	345.2235	1029	499302.8	2855604	348.0196	2.7961
1030	499316.7	2855618	345.5881	1030	499316.7	2855618	348.4806	2.8925
1031	499330.7	2855633	346.1144	1031	499330.7	2855633	348.861	2.7466
1032	499344.6	2855647	346.603	1032	499344.6	2855647	349.3581	2.7551
1033	499011.4	2855598	347.1611	1033	499011.4	2855598	349.9035	2.7424
1034	499223.4	2855802	347.4058	1034	499223.4	2855802	350.1286	2.7228
1035	499196.1	2855776	346.6969	1035	499196.1	2855776	349.462	2.7651
1036	499036.2	2855622	347.1654	1036	499036.2	2855622	349.9424	2.777
1037	499021.6	2855608	347.0587	1037	499021.6	2855608	349.9195	2.8608
1038	499036	2855622	347.1193	1038	499036	2855622	349.9422	2.8229
1039	499050.4	2855636	347.1629	1039	499050.4	2855636	350.0128	2.8499
1040	499064.9	2855650	347.0464	1040	499064.9	2855650	349.8889	2.8425
1041	499079.3	2855663	346.2794	1041	499079.3	2855663	349.1369	2.8575
1042	499093.7	2855677	346.0359	1042	499093.7	2855677	348.6395	2.6036
1043	499108.1	2855691	345.7216	1043	499108.1	2855691	348.3104	2.5888
1044	499122.5	2855705	345.2829	1044	499122.5	2855705	347.9919	2.709
1045	499136.9	2855719	345.5533	1045	499136.9	2855719	348.3254	2.7721
1046	499151.3	2855733	345.9718	1046	499151.3	2855733	348.6588	2.687
1047	499165.8	2855747	346.1706	1047	499165.8	2855747	348.9651	2.7945
1048	499180.2	2855760	346.4471	1048	499180.2	2855760	349.2009	2.7538
1049	499194.6	2855774	346.7833	1049	499194.6	2855774	349.4366	2.6533
1050	499209	2855788	346.9412	1050	499209	2855788	349.6723	2.7311
1051	498868	2855738	347.771	1051	498868	2855738	350.4123	2.6413
1052	499084.8	2855946	349.1427	1052	499084.8	2855946	351.6988	2.5561
1053	499057.5	2855920	348.0152	1053	499057.5	2855920	350.5192	2.504
1054	498893.8	2855763	348.0994	1054	498893.8	2855763	350.6328	2.5334
1055	498868.6	2855738	347.7876	1055	498868.6	2855738	350.4132	2.6256
1056	498883	2855752	347.9249	1056	498883	2855752	350.4359	2.511
1057	498897.4	2855766	348.1077	1057	498897.4	2855766	350.7515	2.6438
1058	498911.8	2855780	347.7482	1058	498911.8	2855780	350.3593	2.6111
1059	498926.2	2855794	347.2611	1059	498926.2	2855794	349.7576	2.4965
1060	498940.6	2855808	346.5317	1060	498940.6	2855808	349.1559	2.6242
1061	498955	2855821	346.0527	1061	498955	2855821	348.7327	2.68
1062	498969.5	2855835	345.7314	1062	498969.5	2855835	348.3674	2.636

1063	498983.9	2855849	345.2219	1063	498983.9	2855849	348.002	2.7801
1064	498998.3	2855863	345.6195	1064	498998.3	2855863	348.0898	2.4703
1065	499012.7	2855877	345.6251	1065	499012.7	2855877	348.3872	2.7621
1066	499027.1	2855891	346.2104	1066	499027.1	2855891	348.8047	2.5943
1067	499041.5	2855905	347.0738	1067	499041.5	2855905	349.848	2.7742
1068	499055.9	2855918	347.7536	1068	499055.9	2855918	350.4919	2.7383
1069	499070.4	2855932	348.1103	1069	499070.4	2855932	350.7454	2.6351
1070	498730.1	2855883	349.1315	1070	498730.1	2855883	351.7659	2.6344
1071	498946.1	2856090	351.4191	1071	498946.1	2856090	354.1835	2.7644
1072	498918.9	2856064	349.0601	1072	498918.9	2856064	351.7033	2.6432
1073	498756.5	2855908	348.5607	1073	498756.5	2855908	351.307	2.7463
1074	498744.3	2855896	348.9322	1074	498744.3	2855896	351.5188	2.5866
1075	498758.7	2855910	348.4633	1075	498758.7	2855910	351.269	2.8057
1076	498773.2	2855924	348.3681	1076	498773.2	2855924	351.0191	2.651
1077	498787.6	2855938	348.0061	1077	498787.6	2855938	350.7568	2.7507
1078	498802	2855952	347.4102	1078	498802	2855952	350.1673	2.7571
1079	498816.4	2855966	346.9433	1079	498816.4	2855966	349.5777	2.6344
1080	498830.8	2855979	346.4653	1080	498830.8	2855979	349.0932	2.6279
1081	498845.2	2855993	346.3819	1081	498845.2	2855993	349.0069	2.625
1082	498859.6	2856007	346.2752	1082	498859.6	2856007	348.9206	2.6454
1083	498874.1	2856021	346.2812	1083	498874.1	2856021	348.8816	2.6004
1084	498888.5	2856035	347.0533	1084	498888.5	2856035	349.6816	2.6283
1085	498902.9	2856049	347.8462	1085	498902.9	2856049	350.4816	2.6354
1086	498917.3	2856063	348.8854	1086	498917.3	2856063	351.5383	2.6529
1087	498931.7	2856076	350.2257	1087	498931.7	2856076	352.8079	2.5822
1088	498591.9	2856000	348.7695	1088	498591.9	2856000	351.4129	2.6434
1089	498794.9	2856248	352.2135	1089	498794.9	2856248	354.8073	2.5938
1090	498770.7	2856218	351.5997	1090	498770.7	2856218	354.1935	2.5938
1091	498617.9	2856031	348.3479	1091	498617.9	2856031	351.0101	2.6622
1092	498592.2	2856000	348.7961	1092	498592.2	2856000	351.4076	2.6115
1093	498604.9	2856015	348.5856	1093	498604.9	2856015	351.1635	2.5779
1094	498617.5	2856031	348.4365	1094	498617.5	2856031	351.0145	2.578
1095	498630.2	2856046	348.2269	1095	498630.2	2856046	350.8654	2.6385
1096	498642.9	2856062	348.0538	1096	498642.9	2856062	350.7163	2.6625
1097	498655.5	2856077	347.969	1097	498655.5	2856077	350.5838	2.6148
1098	498668.2	2856093	347.9363	1098	498668.2	2856093	350.583	2.6467
1099	498680.9	2856108	347.9612	1099	498680.9	2856108	350.5821	2.6209
1100	498693.5	2856124	347.9831	1100	498693.5	2856124	350.5599	2.5768
1101	498706.2	2856139	347.9158	1101	498706.2	2856139	350.5368	2.621
1102	498718.9	2856155	348.6052	1102	498718.9	2856155	351.2346	2.6294
1103	498731.5	2856170	349.799	1103	498731.5	2856170	352.4226	2.6236

1104	498744.2	2856186	350.5832	1104	498744.2	2856186	353.1363	2.5531
1105	498756.9	2856201	350.9912	1105	498756.9	2856201	353.6411	2.6499
1106	498769.5	2856217	351.496	1106	498769.5	2856217	354.1459	2.6499
1107	498782.2	2856232	351.816	1107	498782.2	2856232	354.4219	2.6059
1108	498419.2	2856109	347.1008	1108	498419.2	2856109	349.7402	2.6394
1109	498652.9	2856377	351.5662	1109	498652.9	2856377	354.2497	2.6835
1110	498623.8	2856344	351.1236	1110	498623.8	2856344	353.7185	2.5949
1111	498448.5	2856143	346.7171	1111	498448.5	2856143	349.3497	2.6326
1112	498429.5	2856121	346.6516	1112	498429.5	2856121	349.3444	2.6928
1113	498442.6	2856136	346.6048	1113	498442.6	2856136	349.2552	2.6504
1114	498455.8	2856151	346.8099	1114	498455.8	2856151	349.4688	2.6589
1115	498468.9	2856166	347.0042	1115	498468.9	2856166	349.6824	2.6782
1116	498482.1	2856181	347.2955	1116	498482.1	2856181	349.896	2.6005
1117	498495.2	2856197	347.5193	1117	498495.2	2856197	350.1095	2.5902
1118	498508.4	2856212	347.5018	1118	498508.4	2856212	350.1583	2.6565
1119	498521.5	2856227	347.4946	1119	498521.5	2856227	350.2079	2.7133
1120	498534.6	2856242	347.5959	1120	498534.6	2856242	350.2662	2.6703
1121	498547.8	2856257	347.6546	1121	498547.8	2856257	350.3245	2.6699
1122	498560.9	2856272	347.7339	1122	498560.9	2856272	350.3953	2.6614
1123	498574.1	2856287	348.4751	1123	498574.1	2856287	351.0821	2.607
1124	498587.2	2856302	349.1024	1124	498587.2	2856302	351.7689	2.6665
1125	498600.4	2856317	349.7583	1125	498600.4	2856317	352.4557	2.6974
1126	498613.5	2856332	350.5118	1126	498613.5	2856332	353.1425	2.6307
1127	498626.6	2856347	351.0978	1127	498626.6	2856347	353.7184	2.6206
1128	498639.8	2856362	351.2309	1128	498639.8	2856362	353.7177	2.4868
1129	498276.5	2856248	346.8468	1129	498276.5	2856248	349.5126	2.6658
1130	498500.4	2856509	350.6754	1130	498500.4	2856509	353.3525	2.6771
1131	498471.4	2856475	349.1018	1131	498471.4	2856475	351.7847	2.6829
1132	498298	2856273	346.5687	1132	498298	2856273	349.0594	2.4907
1133	498278.7	2856251	346.8111	1133	498278.7	2856251	349.466	2.6549
1134	498291.7	2856266	346.5828	1134	498291.7	2856266	349.192	2.6092
1135	498304.8	2856281	346.2736	1135	498304.8	2856281	348.918	2.6444
1136	498317.8	2856296	345.9885	1136	498317.8	2856296	348.644	2.6555
1137	498330.8	2856312	345.6738	1137	498330.8	2856312	348.3403	2.6665
1138	498343.9	2856327	345.8121	1138	498343.9	2856327	348.3048	2.4927
1139	498356.9	2856342	345.8984	1139	498356.9	2856342	348.5414	2.643
1140	498370	2856357	346.2116	1140	498370	2856357	348.8426	2.631
1141	498383	2856372	346.4657	1141	498383	2856372	349.1438	2.6781
1142	498396	2856387	346.9145	1142	498396	2856387	349.445	2.5305
1143	498409.1	2856403	347.0918	1143	498409.1	2856403	349.7542	2.6624
1144	498422.1	2856418	347.4502	1144	498422.1	2856418	350.0962	2.646

1145	498435.2	2856433	347.7619	1145	498435.2	2856433	350.4383	2.6764
1146	498448.2	2856448	348.1312	1146	498448.2	2856448	350.7803	2.6491
1147	498461.2	2856463	348.7202	1147	498461.2	2856463	351.2803	2.5601
1148	498474.3	2856478	349.2409	1148	498474.3	2856478	351.9242	2.6833
1149	498487.3	2856493	350.0782	1149	498487.3	2856493	352.6231	2.5449
1150	498141.4	2856441	348.1217	1150	498141.4	2856441	350.8008	2.6791
1151	498382.5	2856610	349.9158	1151	498382.5	2856610	352.4425	2.5267
1152	498345	2856584	349.1058	1152	498345	2856584	351.6348	2.529
1153	498165.3	2856458	347.8137	1153	498165.3	2856458	350.5184	2.7047
1154	498153.1	2856449	348.1565	1154	498153.1	2856449	350.7068	2.5503
1155	498169.5	2856461	347.7281	1155	498169.5	2856461	350.3537	2.6256
1156	498185.9	2856472	347.4496	1156	498185.9	2856472	349.9969	2.5473
1157	498202.3	2856484	347.294	1157	498202.3	2856484	349.6947	2.4007
1158	498218.7	2856495	346.8349	1158	498218.7	2856495	349.3924	2.5575
1159	498235.1	2856507	346.8782	1159	498235.1	2856507	349.2639	2.3857
1160	498251.4	2856518	346.9446	1160	498251.4	2856518	349.5664	2.6218
1161	498267.8	2856530	347.3852	1161	498267.8	2856530	349.8565	2.4713
1162	498284.2	2856541	347.7182	1162	498284.2	2856541	350.142	2.4238
1163	498300.6	2856553	347.8049	1163	498300.6	2856553	350.4275	2.6226
1164	498317	2856564	348.3003	1164	498317	2856564	350.713	2.4127
1165	498333.3	2856576	348.6825	1165	498333.3	2856576	351.1772	2.4947
1166	498349.7	2856587	349.4192	1166	498349.7	2856587	351.8194	2.4002
1167	498366.1	2856599	349.8191	1167	498366.1	2856599	352.1904	2.3713
1168	498026.7	2856605	350.5178	1168	498026.7	2856605	352.8927	2.3749
1169	498226	2856745	348.9637	1169	498226	2856745	351.4048	2.4411
1170	498193.8	2856722	348.2261	1170	498193.8	2856722	350.7654	2.5393
1171	498050.5	2856622	349.9302	1171	498050.5	2856622	352.4534	2.5232
1172	498029.4	2856607	350.292	1172	498029.4	2856607	352.8689	2.5769
1173	498045.8	2856618	349.9667	1173	498045.8	2856618	352.5681	2.6014
1174	498062.2	2856630	349.677	1174	498062.2	2856630	352.1727	2.4957
1175	498078.5	2856641	349.1963	1175	498078.5	2856641	351.7773	2.581
1176	498094.9	2856653	348.7769	1176	498094.9	2856653	351.3819	2.605
1177	498111.3	2856664	348.4459	1177	498111.3	2856664	350.9852	2.5393
1178	498127.7	2856676	347.952	1178	498127.7	2856676	350.4972	2.5452
1179	498144.1	2856687	347.3686	1179	498144.1	2856687	350.0092	2.6406
1180	498160.5	2856699	347.3582	1180	498160.5	2856699	350.012	2.6538
1181	498176.8	2856710	347.7404	1181	498176.8	2856710	350.3826	2.6422
1182	498193.2	2856722	348.0635	1182	498193.2	2856722	350.7532	2.6897
1183	498209.6	2856733	348.0664	1183	498209.6	2856733	350.8396	2.7732
1184	497911.9	2856769	350.312	1184	497911.9	2856769	353.0255	2.7135
1185	498098.6	2856900	349.3586	1185	498098.6	2856900	352.0764	2.7178

1186	498075.9	2856884	347.9449	1186	498075.9	2856884	350.7442	2.7993
1187	497935.8	2856785	348.7187	1187	497935.8	2856785	351.4584	2.7397
1188	497918.4	2856773	349.9089	1188	497918.4	2856773	352.6552	2.7463
1189	497934.8	2856785	348.7391	1189	497934.8	2856785	351.5254	2.7863
1190	497951.2	2856796	347.7614	1190	497951.2	2856796	350.5559	2.7945
1191	497967.6	2856808	347.4519	1191	497967.6	2856808	350.2611	2.8092
1192	497984	2856819	347.3868	1192	497984	2856819	350.1426	2.7558
1193	498000.4	2856831	347.1954	1193	498000.4	2856831	350.0655	2.8701
1194	498016.7	2856842	347.1027	1194	498016.7	2856842	349.9883	2.8856
1195	498033.1	2856854	347.1042	1195	498033.1	2856854	349.9438	2.8396
1196	498049.5	2856865	347.0854	1196	498049.5	2856865	349.9086	2.8232
1197	498065.9	2856877	347.5638	1197	498065.9	2856877	350.3658	2.802
1198	498082.3	2856888	348.2882	1198	498082.3	2856888	351.1165	2.8283
1199	497796.2	2856927	350.0144	1199	497796.2	2856927	352.8673	2.8529
1200	497976.5	2857062	350.6935	1200	497976.5	2857062	353.5775	2.884
1201	497954.3	2857046	350.164	1201	497954.3	2857046	353.0296	2.8656
1202	497821.1	2856946	349.2189	1202	497821.1	2856946	352.0586	2.8397
1203	497800.5	2856930	349.9703	1203	497800.5	2856930	352.8685	2.8982
1204	497816.5	2856942	349.2292	1204	497816.5	2856942	352.1428	2.9136
1205	497832.5	2856954	349.0322	1205	497832.5	2856954	351.9385	2.9063
1206	497848.5	2856966	348.94	1206	497848.5	2856966	351.8258	2.8858
1207	497864.5	2856978	349.1136	1207	497864.5	2856978	351.9981	2.8845
1208	497880.5	2856990	349.3459	1208	497880.5	2856990	352.1819	2.836
1209	497896.5	2857002	349.4677	1209	497896.5	2857002	352.3656	2.8979
1210	497912.5	2857014	349.6366	1210	497912.5	2857014	352.5494	2.9128
1211	497928.5	2857026	349.8949	1211	497928.5	2857026	352.7332	2.8383
1212	497944.5	2857038	350.0924	1212	497944.5	2857038	352.9169	2.8245
1213	497960.5	2857050	350.2317	1213	497960.5	2857050	353.1007	2.869
1214	497666.7	2857035	350.0494	1214	497666.7	2857035	352.8799	2.8305
1215	497840.6	2857244	352.3116	1215	497840.6	2857244	355.1513	2.8397
1216	497822.4	2857222	351.3289	1216	497822.4	2857222	354.1877	2.8588
1217	497691.5	2857065	349.8599	1217	497691.5	2857065	352.7534	2.8935
1218	497674	2857044	350.0145	1218	497674	2857044	352.8685	2.854
1219	497686.8	2857059	350.0696	1219	497686.8	2857059	352.8196	2.75
1220	497699.6	2857075	349.7661	1220	497699.6	2857075	352.6387	2.8726
1221	497712.4	2857090	349.5857	1221	497712.4	2857090	352.4578	2.8721
1222	497725.2	2857105	349.4258	1222	497725.2	2857105	352.277	2.8512
1223	497738.1	2857121	349.3822	1223	497738.1	2857121	352.0961	2.7139
1224	497750.9	2857136	349.2263	1224	497750.9	2857136	351.9166	2.6903
1225	497763.7	2857152	348.921	1225	497763.7	2857152	351.7566	2.8356
1226	497776.5	2857167	348.7546	1226	497776.5	2857167	351.5966	2.842

1227	497789.4	2857182	349.4539	1227	497789.4	2857182	352.3471	2.8932
1228	497802.2	2857198	350.4605	1228	497802.2	2857198	353.3606	2.9001
1229	497815	2857213	351.1783	1229	497815	2857213	353.9273	2.749
1230	497827.8	2857228	351.6172	1230	497827.8	2857228	354.3803	2.7631
1231	497513.2	2857164	350.5127	1231	497513.2	2857164	353.2927	2.78
1232	497707.9	2857397	352.4471	1232	497707.9	2857397	355.2552	2.8081
1233	497686.7	2857371	352.1502	1233	497686.7	2857371	354.9183	2.7681
1234	497538	2857193	350.4205	1234	497538	2857193	353.1939	2.7734
1235	497515.5	2857166	350.5741	1235	497515.5	2857166	353.2879	2.7138
1236	497528.4	2857182	350.4899	1236	497528.4	2857182	353.2616	2.7717
1237	497541.2	2857197	350.3465	1237	497541.2	2857197	353.1047	2.7582
1238	497554	2857212	349.9756	1238	497554	2857212	352.7479	2.7723
1239	497566.8	2857228	349.6195	1239	497566.8	2857228	352.391	2.7715
1240	497579.7	2857243	349.2883	1240	497579.7	2857243	352.0341	2.7458
1241	497592.5	2857259	349.2517	1241	497592.5	2857259	351.9644	2.7127
1242	497605.3	2857274	350.5495	1242	497605.3	2857274	352.0438	1.4943
1243	497618.1	2857289	350.4808	1243	497618.1	2857289	352.1071	1.6263
1244	497630.9	2857305	350.5539	1244	497630.9	2857305	352.1705	1.6166
1245	497643.8	2857320	351.0295	1245	497643.8	2857320	352.4602	1.4307
1246	497656.6	2857335	351.4216	1246	497656.6	2857335	352.9131	1.4915
1247	497669.4	2857351	352.2157	1247	497669.4	2857351	353.6534	1.4377
1248	497682.2	2857366	353.0992	1248	497682.2	2857366	354.5815	1.4823
1249	497695.1	2857381	353.7831	1249	497695.1	2857381	355.2549	1.4718
1250	497359.7	2857292	352.3631	1250	497359.7	2857292	353.9242	1.5611
1251	497535.8	2857503	353.3539	1251	497535.8	2857503	354.9152	1.5613
1252	497517	2857480	351.3439	1252	497517	2857480	354.0662	2.7223
1253	497384.5	2857322	351.2058	1253	497384.5	2857322	353.8734	2.6676
1254	497369.1	2857303	351.3076	1254	497369.1	2857303	353.9049	2.5973
1255	497382	2857318	351.2345	1255	497382	2857318	353.8786	2.6441
1256	497394.8	2857334	351.017	1256	497394.8	2857334	353.7399	2.7229
1257	497407.6	2857349	350.476	1257	497407.6	2857349	353.383	2.907
1258	497420.4	2857365	350.1759	1258	497420.4	2857365	352.9817	2.8058
1259	497433.2	2857380	349.8907	1259	497433.2	2857380	352.5611	2.6704
1260	497446.1	2857395	349.4417	1260	497446.1	2857395	352.1404	2.6987
1261	497458.9	2857411	349.903	1261	497458.9	2857411	352.3074	2.4044
1262	497471.7	2857426	349.9318	1262	497471.7	2857426	352.6955	2.7637
1263	497484.5	2857441	350.5162	1263	497484.5	2857441	353.0836	2.5674
1264	497497.4	2857457	350.8272	1264	497497.4	2857457	353.4717	2.6445
1265	497510.2	2857472	351.0875	1265	497510.2	2857472	353.8598	2.7723
1266	497523	2857487	351.5507	1266	497523	2857487	354.2479	2.6972
1267	497221.9	2857407	351.0591	1267	497221.9	2857407	353.9719	2.9128

1268	497351	2857616	352.3522	1268	497351	2857616	354.9184	2.5662
1269	497335.8	2857592	352.9921	1269	497335.8	2857592	355.7629	2.7708
1270	497242.4	2857440	351.1543	1270	497242.4	2857440	354.0501	2.8958
1271	497225.2	2857412	351.4455	1271	497225.2	2857412	353.9842	2.5387
1272	497235.7	2857429	351.3722	1272	497235.7	2857429	354.0242	2.652
1273	497246.1	2857446	351.6398	1273	497246.1	2857446	354.0643	2.4245
1274	497256.6	2857463	351.6557	1274	497256.6	2857463	354.2883	2.6326
1275	497267.1	2857480	351.8114	1275	497267.1	2857480	354.6008	2.7894
1276	497277.6	2857497	352.0947	1276	497277.6	2857497	354.8997	2.805
1277	497288.1	2857514	352.273	1277	497288.1	2857514	355.0553	2.7823
1278	497298.6	2857531	352.6652	1278	497298.6	2857531	355.2109	2.5457
1279	497309.1	2857548	352.7849	1279	497309.1	2857548	355.3665	2.5816
1280	497319.6	2857565	352.9095	1280	497319.6	2857565	355.5221	2.6126
1281	497330.1	2857582	352.9732	1281	497330.1	2857582	355.6777	2.7045
1282	497340.6	2857599	352.8369	1282	497340.6	2857599	355.5326	2.6957
1283	497054	2857516	349.51	1283	497054	2857516	352.0413	2.5313
1284	497180.8	2857721	352.212	1284	497180.8	2857721	354.6157	2.4037
1285	497165.5	2857697	352.4155	1285	497165.5	2857697	355.0082	2.5927
1286	497071.2	2857544	349.2519	1286	497071.2	2857544	352.1685	2.9166
1287	497054.9	2857517	349.4398	1287	497054.9	2857517	352.0375	2.5977
1288	497065.4	2857534	349.3669	1288	497065.4	2857534	351.9929	2.626
1289	497075.9	2857551	349.7701	1289	497075.9	2857551	352.3418	2.5717
1290	497086.4	2857568	350.3474	1290	497086.4	2857568	352.7343	2.3869
1291	497096.8	2857585	350.444	1291	497096.8	2857585	353.1268	2.6828
1292	497107.3	2857602	350.8144	1292	497107.3	2857602	353.5192	2.7048
1293	497117.8	2857619	351.1364	1293	497117.8	2857619	353.9117	2.7753
1294	497128.3	2857636	351.6425	1294	497128.3	2857636	354.27	2.6275
1295	497138.8	2857653	352.1353	1295	497138.8	2857653	354.6309	2.4956
1296	497149.3	2857670	352.1766	1296	497149.3	2857670	355.1048	2.9282
1297	497159.8	2857687	352.8999	1297	497159.8	2857687	355.3867	2.4868
1298	497170.3	2857704	352.2781	1298	497170.3	2857704	354.8652	2.5871
1299	496885.2	2857600	349.9192	1299	496885.2	2857600	352.5104	2.5912
1300	497001.4	2857832	351.7245	1300	497001.4	2857832	354.3711	2.6466
1301	496988	2857805	352.0526	1301	496988	2857805	354.6351	2.5825
1302	496899.9	2857629	349.8466	1302	496899.9	2857629	352.4105	2.5639
1303	496893.8	2857617	349.8658	1303	496893.8	2857617	352.4925	2.6267
1304	496902.8	2857635	349.6414	1304	496902.8	2857635	352.3209	2.6795
1305	496911.8	2857653	349.7738	1305	496911.8	2857653	352.2995	2.5257
1306	496920.7	2857671	349.7806	1306	496920.7	2857671	352.5181	2.7375
1307	496929.7	2857689	350.0612	1307	496929.7	2857689	352.7367	2.6755
1308	496938.6	2857707	350.2995	1308	496938.6	2857707	352.9553	2.6558

1309	496947.6	2857725	350.4493	1309	496947.6	2857725	353.1739	2.7246
1310	496956.6	2857742	350.6588	1310	496956.6	2857742	353.4543	2.7955
1311	496965.5	2857760	351.35	1311	496965.5	2857760	353.9333	2.5833
1312	496974.5	2857778	351.7377	1312	496974.5	2857778	354.4123	2.6746
1313	496983.4	2857796	352.1622	1313	496983.4	2857796	354.7963	2.6341
1314	496992.4	2857814	351.77	1314	496992.4	2857814	354.4785	2.7085
1315	496706.4	2857690	351.3188	1315	496706.4	2857690	353.9245	2.6057
1316	496836.8	2857950	351.7195	1316	496836.8	2857950	354.2847	2.5652
1317	496814.6	2857906	350.8903	1317	496814.6	2857906	353.7458	2.8555
1318	496721.1	2857719	351.2107	1318	496721.1	2857719	353.894	2.6833
1319	496711.3	2857700	351.1085	1319	496711.3	2857700	353.9143	2.8058
1320	496720.3	2857717	351.127	1320	496720.3	2857717	353.8957	2.7687
1321	496729.3	2857735	350.6752	1321	496729.3	2857735	353.4477	2.7725
1322	496738.2	2857753	350.143	1322	496738.2	2857753	352.9073	2.7643
1323	496747.2	2857771	349.7356	1323	496747.2	2857771	352.5959	2.8603
1324	496756.1	2857789	349.486	1324	496756.1	2857789	352.3734	2.8874
1325	496765.1	2857807	349.59	1325	496765.1	2857807	352.1725	2.5825
1326	496774	2857825	349.2714	1326	496774	2857825	351.9717	2.7003
1327	496783	2857843	349.2126	1327	496783	2857843	351.8312	2.6186
1328	496792	2857860	349.519	1328	496792	2857860	352.2914	2.7724
1329	496800.9	2857878	350.1027	1329	496800.9	2857878	352.866	2.7633
1330	496809.9	2857896	350.586	1330	496809.9	2857896	353.4406	2.8546
1331	496818.8	2857914	351.121	1331	496818.8	2857914	354.0152	2.8942
1332	496827.8	2857932	351.5036	1332	496827.8	2857932	354.2389	2.7353
1333	496527.6	2857779	352.5798	1333	496527.6	2857779	355.3387	2.7589
1334	496673.4	2858070	350.965	1334	496673.4	2858070	353.7305	2.7655
1335	496651.3	2858026	351.8264	1335	496651.3	2858026	354.378	2.5516
1336	496542.3	2857809	352.7069	1336	496542.3	2857809	355.3082	2.6013
1337	496530.1	2857784	352.886	1337	496530.1	2857784	355.3335	2.4475
1338	496539	2857802	352.6615	1338	496539	2857802	355.3149	2.6534
1339	496548	2857820	352.272	1339	496548	2857820	355.1245	2.8525
1340	496557	2857838	351.7221	1340	496557	2857838	354.5841	2.862
1341	496565.9	2857856	351.1778	1341	496565.9	2857856	354.0719	2.8941
1342	496574.9	2857874	351.2819	1342	496574.9	2857874	353.8395	2.5576
1343	496583.8	2857892	350.9723	1343	496583.8	2857892	353.6071	2.6348
1344	496592.8	2857909	350.59	1344	496592.8	2857909	353.3747	2.7847
1345	496601.7	2857927	350.5405	1345	496601.7	2857927	353.2253	2.6848
1346	496610.7	2857945	350.838	1346	496610.7	2857945	353.4719	2.6339
1347	496619.7	2857963	351.1672	1347	496619.7	2857963	353.7185	2.5513
1348	496628.6	2857981	351.4006	1348	496628.6	2857981	353.9651	2.5645
1349	496637.6	2857999	351.4692	1349	496637.6	2857999	354.2117	2.7425

1350	496646.5	2858017	351.6528	1350	496646.5	2858017	354.385	2.7322
1351	496655.5	2858035	351.5919	1351	496655.5	2858035	354.3645	2.7726
1352	496664.5	2858052	351.7378	1352	496664.5	2858052	354.3243	2.5865
1353	496326.1	2857880	352.745	1353	496326.1	2857880	355.4812	2.7362
1354	496539.3	2858169	350.9658	1354	496539.3	2858169	353.7506	2.7848
1355	496510.4	2858130	351.0013	1355	496510.4	2858130	353.6829	2.6816
1356	496345.9	2857907	353.0345	1356	496345.9	2857907	355.6683	2.6338
1357	496337.5	2857896	353.0529	1357	496337.5	2857896	355.5889	2.536
1358	496349.4	2857912	353.1002	1358	496349.4	2857912	355.7014	2.6012
1359	496361.2	2857928	352.4081	1359	496361.2	2857928	355.0577	2.6496
1360	496373.1	2857944	351.9076	1360	496373.1	2857944	354.5066	2.599
1361	496385	2857960	351.5265	1361	496385	2857960	354.2319	2.7054
1362	496396.8	2857976	351.3161	1362	496396.8	2857976	353.9572	2.6411
1363	496408.7	2857992	351.052	1363	496408.7	2857992	353.6824	2.6304
1364	496420.6	2858008	350.7576	1364	496420.6	2858008	353.4077	2.6501
1365	496432.5	2858024	350.5136	1365	496432.5	2858024	353.133	2.6194
1366	496444.3	2858040	350.3575	1366	496444.3	2858040	352.8582	2.5007
1367	496456.2	2858057	350.0175	1367	496456.2	2858057	352.5835	2.566
1368	496468.1	2858073	350.6098	1368	496468.1	2858073	353.1805	2.5707
1369	496479.9	2858089	350.9847	1369	496479.9	2858089	353.6626	2.6779
1370	496491.8	2858105	351.1691	1370	496491.8	2858105	353.66	2.4909
1371	496503.7	2858121	351.1099	1371	496503.7	2858121	353.6715	2.5616
1372	496515.6	2858137	350.9707	1372	496515.6	2858137	353.6933	2.7226
1373	496527.4	2858153	351.3385	1373	496527.4	2858153	353.7208	2.3823
1374	496224.6	2857931	351.9216	1374	496224.6	2857931	354.4247	2.5031
1375	496266.4	2858233	352.8009	1375	496266.4	2858233	355.4578	2.6569
1376	496261.6	2858198	351.7825	1376	496261.6	2858198	354.3935	2.611
1377	496230.5	2857974	351.4908	1377	496230.5	2857974	354.1455	2.6547
1378	496225.3	2857936	351.7768	1378	496225.3	2857936	354.4292	2.6524
1379	496228	2857956	351.7435	1379	496228	2857956	354.4472	2.7037
1380	496230.8	2857976	351.4171	1380	496230.8	2857976	354.0736	2.6565
1381	496233.5	2857996	350.7423	1381	496233.5	2857996	353.3283	2.586
1382	496236.3	2858015	349.8201	1382	496236.3	2858015	352.5831	2.763
1383	496239	2858035	349.4519	1383	496239	2858035	351.8379	2.386
1384	496241.7	2858055	348.6569	1384	496241.7	2858055	351.0927	2.4358
1385	496244.5	2858075	347.7843	1385	496244.5	2858075	350.3474	2.5631
1386	496247.2	2858095	347.4155	1386	496247.2	2858095	350.1793	2.7638
1387	496250	2858114	348.9872	1387	496250	2858114	351.7283	2.7411
1388	496252.7	2858134	350.7199	1388	496252.7	2858134	353.4055	2.6856
1389	496255.5	2858154	351.6653	1389	496255.5	2858154	354.3736	2.7083
1390	496258.2	2858174	351.5789	1390	496258.2	2858174	354.3831	2.8042

1391	496260.9	2858194	351.7008	1391	496260.9	2858194	354.3917	2.6909
1392	496263.7	2858213	351.729	1392	496263.7	2858213	354.3994	2.6704
1393	496030.9	2857991	351.6184	1393	496030.9	2857991	354.1241	2.5057
1394	496068.3	2858261	352.853	1394	496068.3	2858261	355.287	2.434
1395	496063.4	2858225	352.3618	1395	496063.4	2858225	354.991	2.6292
1396	496035.3	2858022	351.588	1396	496035.3	2858022	354.2446	2.6566
1397	496032.7	2858003	351.5177	1397	496032.7	2858003	354.1387	2.621
1398	496035.4	2858023	351.5641	1398	496035.4	2858023	354.2533	2.6892
1399	496038.2	2858043	351.6276	1399	496038.2	2858043	354.4357	2.8081
1400	496040.9	2858063	351.7019	1400	496040.9	2858063	354.3832	2.6813
1401	496043.6	2858082	351.5875	1401	496043.6	2858082	354.3307	2.7432
1402	496046.4	2858102	351.5917	1402	496046.4	2858102	354.3635	2.7718
1403	496049.1	2858122	351.6905	1403	496049.1	2858122	354.4434	2.7529
1404	496051.9	2858142	351.9057	1404	496051.9	2858142	354.4432	2.5375
1405	496054.6	2858162	351.5832	1405	496054.6	2858162	354.3389	2.7557
1406	496057.4	2858181	351.6944	1406	496057.4	2858181	354.2347	2.5403
1407	496060.1	2858201	352.079	1407	496060.1	2858201	354.6449	2.5659
1408	496062.8	2858221	352.454	1408	496062.8	2858221	354.9918	2.5378
1409	496065.6	2858241	352.4766	1409	496065.6	2858241	355.2779	2.8013
1410	495825.1	2858037	351.8586	1410	495825.1	2858037	354.5439	2.6853
1411	495881.8	2858287	352.5552	1411	495881.8	2858287	355.3371	2.7819
1412	495874.6	2858255	352.8408	1412	495874.6	2858255	355.6225	2.7817
1413	495832.2	2858069	351.8942	1413	495832.2	2858069	354.7718	2.8776
1414	495828.5	2858053	351.852	1414	495828.5	2858053	354.5591	2.7071
1415	495832.9	2858072	352.0116	1415	495832.9	2858072	354.8199	2.8083
1416	495837.4	2858092	352.5249	1416	495837.4	2858092	355.0624	2.5375
1417	495841.8	2858111	352.4816	1417	495841.8	2858111	355.1994	2.7178
1418	495846.2	2858131	352.7806	1418	495846.2	2858131	355.3364	2.5558
1419	495850.7	2858150	352.7248	1419	495850.7	2858150	355.4252	2.7004
1420	495855.1	2858170	352.9395	1420	495855.1	2858170	355.4793	2.5398
1421	495859.6	2858189	352.83	1421	495859.6	2858189	355.5334	2.7034
1422	495864	2858209	352.8846	1422	495864	2858209	355.5875	2.7029
1423	495868.4	2858228	352.8312	1423	495868.4	2858228	355.6416	2.8104
1424	495872.9	2858248	352.7709	1424	495872.9	2858248	355.4742	2.7033
1425	495877.3	2858267	352.7282	1425	495877.3	2858267	355.4365	2.7083
1426	495626.3	2858076	352.6381	1426	495626.3	2858076	355.1727	2.5346
1427	495689.7	2858334	353.0917	1427	495689.7	2858334	355.8095	2.7178
1428	495682	2858302	353.5769	1428	495682	2858302	356.292	2.7151
1429	495635.7	2858114	352.1668	1429	495635.7	2858114	354.8702	2.7034
1430	495627.5	2858081	352.6195	1430	495627.5	2858081	355.1773	2.5578
1431	495632.3	2858101	352.4934	1431	495632.3	2858101	355.0499	2.5565

1432	495637.1	2858120	352.1099	1432	495637.1	2858120	354.7974	2.6875
1433	495641.9	2858139	351.8271	1433	495641.9	2858139	354.5448	2.7177
1434	495646.7	2858159	351.7776	1434	495646.7	2858159	354.4632	2.6856
1435	495651.4	2858178	351.8791	1435	495651.4	2858178	354.5364	2.6573
1436	495656.2	2858198	351.8954	1436	495656.2	2858198	354.6097	2.7143
1437	495661	2858217	352.1754	1437	495661	2858217	354.9109	2.7355
1438	495665.8	2858236	352.7016	1438	495665.8	2858236	355.4196	2.718
1439	495670.6	2858256	353.213	1439	495670.6	2858256	355.9284	2.7154
1440	495675.4	2858275	353.2617	1440	495675.4	2858275	355.9989	2.7372
1441	495680.2	2858295	353.556	1441	495680.2	2858295	356.0957	2.5397
1442	495685	2858314	353.4313	1442	495685	2858314	356.1189	2.6876
1443	495423.2	2858088	353.6651	1443	495423.2	2858088	356.3501	2.685
1444	495495.5	2858381	353.8168	1444	495495.5	2858381	356.4943	2.6775
1445	495487.8	2858350	354.3721	1445	495487.8	2858350	356.9777	2.6056
1446	495434.8	2858135	353.4863	1446	495434.8	2858135	356.2095	2.7232
1447	495423.8	2858090	353.645	1447	495423.8	2858090	356.3521	2.7071
1448	495428.5	2858110	353.6151	1448	495428.5	2858110	356.3707	2.7556
1449	495433.3	2858129	353.5568	1449	495433.3	2858129	356.3322	2.7754
1450	495438.1	2858148	353.1406	1450	495438.1	2858148	355.9342	2.7936
1451	495442.9	2858168	352.7712	1451	495442.9	2858168	355.5361	2.7649
1452	495447.7	2858187	352.4075	1452	495447.7	2858187	355.1381	2.7306
1453	495452.5	2858207	351.9528	1453	495452.5	2858207	354.7401	2.7873
1454	495457.3	2858226	351.6395	1454	495457.3	2858226	354.3706	2.7311
1455	495462	2858246	352.2566	1455	495462	2858246	354.7716	2.515
1456	495466.8	2858265	352.5459	1456	495466.8	2858265	355.1726	2.6267
1457	495471.6	2858284	353.0518	1457	495471.6	2858284	355.6107	2.5589
1458	495476.4	2858304	353.5267	1458	495476.4	2858304	356.1194	2.5927
1459	495481.2	2858323	353.4728	1459	495481.2	2858323	356.2939	2.8211
1460	495486	2858343	353.9733	1460	495486	2858343	356.7814	2.8081
1461	495490.8	2858362	354.2049	1461	495490.8	2858362	356.8037	2.5988
1462	495256.8	2858098	353.1577	1462	495256.8	2858098	355.8857	2.728
1463	495276.7	2858435	354.4625	1463	495276.7	2858435	357.2661	2.8036
1464	495274.8	2858403	354.8755	1464	495274.8	2858403	357.7301	2.8546
1465	495259.6	2858145	353.1652	1465	495259.6	2858145	355.9061	2.7409
1466	495257.9	2858116	353.2218	1466	495257.9	2858116	355.8935	2.6717
1467	495259.1	2858136	353.245	1467	495259.1	2858136	355.9021	2.6571
1468	495260.2	2858156	353.4683	1468	495260.2	2858156	355.9107	2.4424
1469	495261.4	2858176	352.7233	1469	495261.4	2858176	355.5636	2.8403
1470	495262.6	2858196	352.4715	1470	495262.6	2858196	355.1313	2.6598
1471	495263.8	2858216	352.1086	1471	495263.8	2858216	354.699	2.5904
1472	495264.9	2858236	352.1324	1472	495264.9	2858236	354.9032	2.7708

1473	495266.1	2858256	352.4167	1473	495266.1	2858256	355.2127	2.796
1474	495267.3	2858276	352.6688	1474	495267.3	2858276	355.5221	2.8533
1475	495268.5	2858296	353.1639	1475	495268.5	2858296	355.8316	2.6677
1476	495269.6	2858316	353.3863	1476	495269.6	2858316	356.141	2.7547
1477	495270.8	2858336	353.574	1477	495270.8	2858336	356.4505	2.8765
1478	495272	2858356	354.0737	1478	495272	2858356	356.76	2.6863
1479	495273.2	2858375	354.3823	1479	495273.2	2858375	357.0694	2.6871
1480	495274.3	2858395	355.0204	1480	495274.3	2858395	357.5462	2.5258
1481	495275.5	2858415	354.9669	1481	495275.5	2858415	357.5579	2.591
1482	495037.9	2858126	352.6457	1482	495037.9	2858126	355.2787	2.633
1483	495099.7	2858479	355.0087	1483	495099.7	2858479	357.8903	2.8816
1484	495093	2858441	355.5347	1484	495093	2858441	358.1123	2.5776
1485	495044.6	2858164	352.8159	1485	495044.6	2858164	355.3075	2.4916
1486	495041.2	2858144	352.7126	1486	495041.2	2858144	355.2927	2.5801
1487	495044.6	2858164	352.6936	1487	495044.6	2858164	355.3076	2.614
1488	495048	2858184	352.6775	1488	495048	2858184	355.3225	2.645
1489	495051.5	2858203	352.5707	1489	495051.5	2858203	355.2678	2.6971
1490	495054.9	2858223	352.2228	1490	495054.9	2858223	354.838	2.6152
1491	495058.4	2858243	352.6797	1491	495058.4	2858243	355.0641	2.3844
1492	495061.8	2858262	352.7315	1492	495061.8	2858262	355.2718	2.5403
1493	495065.3	2858282	352.0481	1493	495065.3	2858282	354.8998	2.8517
1494	495068.7	2858302	352.0289	1494	495068.7	2858302	354.5278	2.4989
1495	495072.1	2858321	351.5713	1495	495072.1	2858321	354.1557	2.5844
1496	495075.6	2858341	352.236	1496	495075.6	2858341	354.6513	2.4153
1497	495079	2858361	352.8875	1497	495079	2858361	355.251	2.3635
1498	495082.5	2858381	353.5627	1498	495082.5	2858381	355.9423	2.3796
1499	495085.9	2858400	353.8831	1499	495085.9	2858400	356.6337	2.7506
1500	495089.4	2858420	354.5512	1500	495089.4	2858420	357.325	2.7738
1501	495092.8	2858440	355.4523	1501	495092.8	2858440	358.0786	2.6263
1502	495096.2	2858459	355.6581	1502	495096.2	2858459	358.1942	2.5361
1503	494844.9	2858183	351.9226	1503	494844.9	2858183	354.7523	2.8297
1504	494903.2	2858517	355.7938	1504	494903.2	2858517	358.3645	2.5707
1505	494895.3	2858471	355.4913	1505	494895.3	2858471	358.1591	2.6678
1506	494851.3	2858220	352.2412	1506	494851.3	2858220	354.78	2.5388
1507	494848.2	2858201	352.1845	1507	494848.2	2858201	354.7662	2.5817
1508	494851.6	2858221	352.3973	1508	494851.6	2858221	354.7811	2.3838
1509	494855	2858241	352.2092	1509	494855	2858241	354.7315	2.5223
1510	494858.5	2858261	352.591	1510	494858.5	2858261	355.2612	2.6702
1511	494861.9	2858280	352.8025	1511	494861.9	2858280	355.4586	2.6561
1512	494865.4	2858300	353.1409	1512	494865.4	2858300	355.5589	2.418
1513	494868.8	2858320	352.5818	1513	494868.8	2858320	355.4653	2.8835

1514	494872.2	2858339	352.6976	1514	494872.2	2858339	355.3716	2.674
1515	494875.7	2858359	352.739	1515	494875.7	2858359	355.2935	2.5545
1516	494879.1	2858379	352.8566	1516	494879.1	2858379	355.6217	2.7651
1517	494882.6	2858398	353.279	1517	494882.6	2858398	355.976	2.697
1518	494886	2858418	353.8443	1518	494886	2858418	356.4115	2.5672
1519	494889.5	2858438	354.3267	1519	494889.5	2858438	356.882	2.5553
1520	494892.9	2858458	354.956	1520	494892.9	2858458	357.6376	2.6816
1521	494896.3	2858477	355.7497	1521	494896.3	2858477	358.3933	2.6436
1522	494899.8	2858497	356.0446	1522	494899.8	2858497	358.4515	2.4069
1523	494636.4	2858245	353.6027	1523	494636.4	2858245	356.5264	2.9237
1524	494726.4	2858548	355.6801	1524	494726.4	2858548	358.5792	2.8991
1525	494713.2	2858503	355.8765	1525	494713.2	2858503	358.3362	2.4597
1526	494646.9	2858280	353.8368	1526	494646.9	2858280	356.4379	2.6011
1527	494640.9	2858260	353.8206	1527	494640.9	2858260	356.5352	2.7146
1528	494646.6	2858279	353.6733	1528	494646.6	2858279	356.4443	2.771
1529	494652.3	2858298	353.5825	1529	494652.3	2858298	356.3456	2.7631
1530	494658	2858318	353.346	1530	494658	2858318	356.2468	2.9008
1531	494663.7	2858337	353.3592	1531	494663.7	2858337	356.148	2.7888
1532	494669.4	2858356	353.5829	1532	494669.4	2858356	356.0493	2.4664
1533	494675.1	2858375	353.1456	1533	494675.1	2858375	355.9505	2.8049
1534	494680.8	2858394	353.1797	1534	494680.8	2858394	355.8516	2.6719
1535	494686.5	2858413	353.5981	1535	494686.5	2858413	356.2402	2.6421
1536	494692.2	2858433	354.0788	1536	494692.2	2858433	356.6647	2.5859
1537	494697.9	2858452	354.2885	1537	494697.9	2858452	357.0892	2.8007
1538	494703.6	2858471	354.8421	1538	494703.6	2858471	357.5137	2.6716
1539	494709.3	2858490	355.1976	1539	494709.3	2858490	357.9382	2.7406
1540	494715	2858509	355.7525	1540	494715	2858509	358.5799	2.8274
1541	494720.7	2858528	356.0628	1541	494720.7	2858528	358.6684	2.6056
1542	494444.7	2858302	355.4264	1542	494444.7	2858302	358.0418	2.6154
1543	494530.9	2858592	356.1739	1543	494530.9	2858592	358.7765	2.6026
1544	494519.2	2858553	355.6215	1544	494519.2	2858553	358.0274	2.4059
1545	494455.2	2858337	354.8536	1545	494455.2	2858337	357.5505	2.6969
1546	494445.3	2858304	355.1566	1546	494445.3	2858304	357.9856	2.829
1547	494451	2858323	354.8117	1547	494451	2858323	357.666	2.8543
1548	494456.7	2858342	354.8296	1548	494456.7	2858342	357.5108	2.6812
1549	494462.4	2858362	354.6996	1549	494462.4	2858362	357.3557	2.6561
1550	494468.1	2858381	354.4074	1550	494468.1	2858381	357.041	2.6336
1551	494473.8	2858400	354.1006	1551	494473.8	2858400	356.7258	2.6252
1552	494479.5	2858419	353.6243	1552	494479.5	2858419	356.4106	2.7863
1553	494485.2	2858438	353.3775	1553	494485.2	2858438	356.0953	2.7178
1554	494490.9	2858457	353.2481	1554	494490.9	2858457	355.7801	2.532

1555	494496.6	2858477	353.3377	1555	494496.6	2858477	355.8497	2.512
1556	494502.3	2858496	353.7794	1556	494502.3	2858496	356.5569	2.7775
1557	494508	2858515	354.2425	1557	494508	2858515	357.076	2.8335
1558	494513.7	2858534	354.9101	1558	494513.7	2858534	357.5107	2.6006
1559	494519.5	2858553	355.5268	1559	494519.5	2858553	358.0495	2.5227
1560	494525.2	2858572	355.9106	1560	494525.2	2858572	358.6521	2.7415
1561	494221.6	2858386	353.8863	1561	494221.6	2858386	356.6396	2.7533
1562	494391.6	2858674	355.8876	1562	494391.6	2858674	358.7094	2.8218
1563	494371.5	2858640	355.2045	1563	494371.5	2858640	357.9021	2.6976
1564	494246.9	2858429	353.136	1564	494246.9	2858429	355.7494	2.6134
1565	494229	2858398	354.1151	1565	494229	2858398	356.669	2.5539
1566	494239.1	2858415	353.5903	1566	494239.1	2858415	356.1488	2.5585
1567	494249.3	2858433	353.07	1567	494249.3	2858433	355.6242	2.5542
1568	494259.5	2858450	352.5225	1568	494259.5	2858450	355.0997	2.5772
1569	494269.6	2858467	352.1881	1569	494269.6	2858467	354.5752	2.3871
1570	494279.8	2858484	351.725	1570	494279.8	2858484	354.4539	2.7289
1571	494290	2858502	351.9739	1571	494290	2858502	354.5228	2.5489
1572	494300.1	2858519	352.1964	1572	494300.1	2858519	354.9563	2.7599
1573	494310.3	2858536	352.9912	1573	494310.3	2858536	355.5933	2.6021
1574	494320.5	2858553	353.5452	1574	494320.5	2858553	356.1886	2.6434
1575	494330.6	2858570	354.0692	1575	494330.6	2858570	356.6738	2.6046
1576	494340.8	2858588	354.361	1576	494340.8	2858588	356.9192	2.5582
1577	494351	2858605	354.7714	1577	494351	2858605	357.1645	2.3931
1578	494361.1	2858622	354.6671	1578	494361.1	2858622	357.4099	2.7428
1579	494371.3	2858639	355.2227	1579	494371.3	2858639	357.8873	2.6646
1580	494381.5	2858657	356.3472	1580	494381.5	2858657	358.7993	2.4521
1581	494059.8	2858455	353.6881	1581	494059.8	2858455	356.1171	2.429
1582	494201.6	2858786	355.8461	1582	494201.6	2858786	358.6273	2.7812
1583	494185.9	2858749	355.1075	1583	494185.9	2858749	357.7446	2.6371
1584	494079.3	2858500	353.6041	1584	494079.3	2858500	356.1393	2.5352
1585	494059.9	2858455	353.6391	1585	494059.9	2858455	356.117	2.4779
1586	494067.7	2858473	353.3823	1586	494067.7	2858473	356.0981	2.7158
1587	494075.6	2858492	353.5676	1587	494075.6	2858492	356.1044	2.5368
1588	494083.5	2858510	353.4831	1588	494083.5	2858510	356.1795	2.6964
1589	494091.4	2858529	353.5317	1589	494091.4	2858529	356.2547	2.723
1590	494099.3	2858547	353.7383	1590	494099.3	2858547	356.3299	2.5916
1591	494107.1	2858565	353.7178	1591	494107.1	2858565	356.405	2.6872
1592	494115	2858584	353.8588	1592	494115	2858584	356.4802	2.6214
1593	494122.9	2858602	353.9818	1593	494122.9	2858602	356.4376	2.4558
1594	494130.8	2858620	353.9748	1594	494130.8	2858620	356.3374	2.3626
1595	494138.6	2858639	353.8281	1595	494138.6	2858639	356.2373	2.4092

1596	494146.5	2858657	353.4094	1596	494146.5	2858657	356.2094	2.8
1597	494154.4	2858676	353.8442	1597	494154.4	2858676	356.5904	2.7462
1598	494162.3	2858694	354.2784	1598	494162.3	2858694	356.8325	2.5541
1599	494170.1	2858712	354.6262	1599	494170.1	2858712	357.0747	2.4485
1600	494178	2858731	354.5488	1600	494178	2858731	357.3168	2.768
1601	494185.9	2858749	354.948	1601	494185.9	2858749	357.7402	2.7922
1602	494193.8	2858768	356.0791	1602	494193.8	2858768	358.708	2.6289
1603	493876	2858534	355.0951	1603	493876	2858534	357.4706	2.3755
1604	494028	2858888	356.2275	1604	494028	2858888	358.6841	2.4566
1605	494012.1	2858851	355.9019	1605	494012.1	2858851	358.5772	2.6753
1606	493895.4	2858579	354.7752	1606	493895.4	2858579	357.468	2.6928
1607	493878.3	2858539	354.8441	1607	493878.3	2858539	357.4703	2.6262
1608	493886.2	2858558	354.9115	1608	493886.2	2858558	357.4692	2.5577
1609	493894.1	2858576	354.8199	1609	493894.1	2858576	357.4682	2.6483
1610	493902	2858594	354.9221	1610	493902	2858594	357.4672	2.5451
1611	493909.8	2858613	354.7216	1611	493909.8	2858613	357.4661	2.7445
1612	493917.7	2858631	354.781	1612	493917.7	2858631	357.6113	2.8303
1613	493925.6	2858649	355.0427	1613	493925.6	2858649	357.6392	2.5965
1614	493933.5	2858668	355.0674	1614	493933.5	2858668	357.5815	2.5141
1615	493941.3	2858686	354.8759	1615	493941.3	2858686	357.5239	2.648
1616	493949.2	2858705	354.98	1616	493949.2	2858705	357.4663	2.4863
1617	493957.1	2858723	354.9443	1617	493957.1	2858723	357.4087	2.4644
1618	493965	2858741	354.8144	1618	493965	2858741	357.351	2.5366
1619	493972.8	2858760	354.6517	1619	493972.8	2858760	357.2934	2.6417
1620	493980.7	2858778	354.849	1620	493980.7	2858778	357.2358	2.3868
1621	493988.6	2858797	354.4124	1621	493988.6	2858797	357.1782	2.7658
1622	493996.5	2858815	354.4944	1622	493996.5	2858815	357.2568	2.7624
1623	494004.4	2858833	354.677	1623	494004.4	2858833	357.5022	2.8252
1624	494012.2	2858852	356.1406	1624	494012.2	2858852	358.5828	2.4422
1625	494020.1	2858870	356.0861	1625	494020.1	2858870	358.6957	2.6096
1626	493673.9	2858625	351.7483	1626	493673.9	2858625	354.2115	2.4632
1627	493868.1	2858968	356.2881	1627	493868.1	2858968	358.7421	2.454
1628	493847.1	2858931	356.0128	1628	493847.1	2858931	358.3739	2.3611
1629	493698.9	2858669	351.7218	1629	493698.9	2858669	354.2906	2.5688
1630	493681	2858638	351.854	1630	493681	2858638	354.234	2.38
1631	493690.9	2858655	351.698	1631	493690.9	2858655	354.2653	2.5673
1632	493700.7	2858673	351.7162	1632	493700.7	2858673	354.2965	2.5803
1633	493710.6	2858690	351.6647	1633	493710.6	2858690	354.3278	2.6631
1634	493720.4	2858707	351.9468	1634	493720.4	2858707	354.359	2.4122
1635	493730.3	2858725	351.6269	1635	493730.3	2858725	354.3903	2.7634
1636	493740.1	2858742	352.3282	1636	493740.1	2858742	354.7374	2.4092

1637	493750	2858760	352.818	1637	493750	2858760	355.2818	2.4638
1638	493759.8	2858777	353.2127	1638	493759.8	2858777	355.8263	2.6136
1639	493769.6	2858794	353.6682	1639	493769.6	2858794	356.2704	2.6022
1640	493779.5	2858812	353.9514	1640	493779.5	2858812	356.3496	2.3982
1641	493789.3	2858829	353.9706	1641	493789.3	2858829	356.4287	2.4581
1642	493799.2	2858847	353.9365	1642	493799.2	2858847	356.5079	2.5714
1643	493809	2858864	353.9993	1643	493809	2858864	356.5977	2.5984
1644	493818.9	2858881	354.2342	1644	493818.9	2858881	356.7954	2.5612
1645	493828.7	2858899	354.2698	1645	493828.7	2858899	357.0288	2.759
1646	493838.6	2858916	355.3086	1646	493838.6	2858916	357.6708	2.3622
1647	493848.4	2858934	355.8058	1647	493848.4	2858934	358.4431	2.6373
1648	493858.3	2858951	356.1416	1648	493858.3	2858951	358.7544	2.6128
1649	493499.9	2858724	352.0399	1649	493499.9	2858724	354.4541	2.4142
1650	493684.6	2859050	356.4069	1650	493684.6	2859050	358.8125	2.4056
1651	493663.6	2859013	355.3636	1651	493663.6	2859013	357.9715	2.6079
1652	493524.8	2858768	351.3834	1652	493524.8	2858768	354.1015	2.7181
1653	493507.4	2858737	351.6386	1653	493507.4	2858737	354.3476	2.709
1654	493517.2	2858754	351.5067	1654	493517.2	2858754	354.2082	2.7015
1655	493527.1	2858772	351.4393	1655	493527.1	2858772	354.0689	2.6296
1656	493536.9	2858789	351.3823	1656	493536.9	2858789	353.9295	2.5472
1657	493546.8	2858807	351.059	1657	493546.8	2858807	353.7901	2.7311
1658	493556.6	2858824	351.2041	1658	493556.6	2858824	353.7837	2.5796
1659	493566.5	2858841	351.706	1659	493566.5	2858841	354.2694	2.5634
1660	493576.3	2858859	351.9972	1660	493576.3	2858859	354.4348	2.4376
1661	493586.2	2858876	351.9139	1661	493586.2	2858876	354.6002	2.6863
1662	493596	2858894	352.1538	1662	493596	2858894	354.7656	2.6118
1663	493605.9	2858911	352.1691	1663	493605.9	2858911	354.931	2.7619
1664	493615.7	2858928	352.2805	1664	493615.7	2858928	355.0964	2.8159
1665	493625.6	2858946	352.6161	1665	493625.6	2858946	355.2617	2.6456
1666	493635.4	2858963	353.0161	1666	493635.4	2858963	355.583	2.5669
1667	493645.3	2858981	353.6827	1667	493645.3	2858981	356.3742	2.6915
1668	493655.1	2858998	354.5787	1668	493655.1	2858998	357.3234	2.7447
1669	493665	2859016	355.2171	1669	493665	2859016	358.0407	2.8236
1670	493674.8	2859033	356.0128	1670	493674.8	2859033	358.5399	2.5271
1671	493341.9	2858813	354.0668	1671	493341.9	2858813	356.7627	2.6959
1672	493487.1	2859138	356.0457	1672	493487.1	2859138	358.6059	2.5602
1673	493469.7	2859100	354.8042	1673	493469.7	2859100	357.5464	2.7422
1674	493362.6	2858859	353.6122	1674	493362.6	2858859	356.4716	2.8594
1675	493348.5	2858828	353.9003	1675	493348.5	2858828	356.6692	2.7689
1676	493356.7	2858846	353.8855	1676	493356.7	2858846	356.5546	2.6691
1677	493364.8	2858865	353.6997	1677	493364.8	2858865	356.44	2.7403

1678	493373	2858883	354.1949	1678	493373	2858883	356.8501	2.6552
1679	493381.1	2858901	354.5507	1679	493381.1	2858901	357.4379	2.8872
1680	493389.3	2858919	355.5506	1680	493389.3	2858919	358.0256	2.475
1681	493397.4	2858938	355.6887	1681	493397.4	2858938	358.4873	2.7986
1682	493405.6	2858956	355.6432	1682	493405.6	2858956	358.417	2.7738
1683	493413.7	2858974	355.5482	1683	493413.7	2858974	358.3467	2.7985
1684	493421.9	2858992	355.504	1684	493421.9	2858992	358.2764	2.7724
1685	493430	2859011	355.5414	1685	493430	2859011	358.2061	2.6647
1686	493438.2	2859029	355.349	1686	493438.2	2859029	358.1359	2.7869
1687	493446.3	2859047	355.2505	1687	493446.3	2859047	358.0656	2.8151
1688	493454.5	2859065	355.4042	1688	493454.5	2859065	357.9953	2.5911
1689	493462.6	2859084	355.3032	1689	493462.6	2859084	357.925	2.6218
1690	493470.8	2859102	355.0873	1690	493470.8	2859102	357.6105	2.5232
1691	493478.9	2859120	355.3341	1691	493478.9	2859120	358.1082	2.7741
1692	493167.7	2858914	356.5624	1692	493167.7	2858914	359.3082	2.7458
1693	493304.4	2859220	355.2768	1693	493304.4	2859220	358.2054	2.9286
1694	493287.1	2859181	356.5846	1694	493287.1	2859181	359.2746	2.69
1695	493183.6	2858949	357.0652	1695	493183.6	2858949	359.865	2.7998
1696	493174	2858928	356.8413	1696	493174	2858928	359.5244	2.6831
1697	493182.2	2858946	357.1509	1697	493182.2	2858946	359.8647	2.7138
1698	493190.3	2858964	357.3023	1698	493190.3	2858964	359.8663	2.564
1699	493198.5	2858983	357.3737	1699	493198.5	2858983	359.8678	2.4941
1700	493206.6	2859001	357.222	1700	493206.6	2859001	359.8694	2.6474
1701	493214.8	2859019	357.348	1701	493214.8	2859019	359.871	2.523
1702	493222.9	2859037	357.3274	1702	493222.9	2859037	359.8725	2.5451
1703	493231.1	2859056	356.9925	1703	493231.1	2859056	359.8741	2.8816
1704	493239.2	2859074	357.3792	1704	493239.2	2859074	359.8756	2.4964
1705	493247.4	2859092	357.2096	1705	493247.4	2859092	359.8772	2.6676
1706	493255.5	2859110	357.1507	1706	493255.5	2859110	359.8788	2.7281
1707	493263.7	2859129	357.27	1707	493263.7	2859129	359.8803	2.6103
1708	493271.8	2859147	357.2915	1708	493271.8	2859147	359.8819	2.5904
1709	493280	2859165	357.2717	1709	493280	2859165	359.8306	2.5589
1710	493288.1	2859183	356.3958	1710	493288.1	2859183	359.1726	2.7768
1711	493296.3	2859202	355.7519	1711	493296.3	2859202	358.3806	2.6287
1712	492979.2	2859033	357.2253	1712	492979.2	2859033	359.6804	2.4551
1713	493144.4	2859294	356.23	1713	493144.4	2859294	359.0567	2.8267
1714	493123.2	2859261	356.6984	1714	493123.2	2859261	359.1013	2.4029
1715	492999.8	2859065	356.6548	1715	492999.8	2859065	359.1612	2.5064
1716	492984.2	2859041	357.0047	1716	492984.2	2859041	359.5533	2.5486
1717	492994.9	2859058	356.6725	1717	492994.9	2859058	359.2839	2.6114
1718	493005.6	2859074	356.5279	1718	493005.6	2859074	359.0145	2.4866

1719	493016.3	2859091	356.1396	1719	493016.3	2859091	358.7451	2.6055
1720	493026.9	2859108	355.6926	1720	493026.9	2859108	358.4757	2.7831
1721	493037.6	2859125	355.4034	1721	493037.6	2859125	358.2063	2.8029
1722	493048.3	2859142	355.5036	1722	493048.3	2859142	357.9369	2.4333
1723	493059	2859159	354.9759	1723	493059	2859159	357.6675	2.6916
1724	493069.7	2859176	354.821	1724	493069.7	2859176	357.398	2.577
1725	493080.3	2859193	354.5662	1725	493080.3	2859193	357.276	2.7098
1726	493091	2859210	355.0985	1726	493091	2859210	357.5981	2.4996
1727	493101.7	2859227	355.4613	1727	493101.7	2859227	358.0961	2.6348
1728	493112.4	2859244	356.0609	1728	493112.4	2859244	358.5942	2.5333
1729	493123	2859260	356.3097	1729	493123	2859260	359.0922	2.7825
1730	493133.7	2859277	356.9854	1730	493133.7	2859277	359.591	2.6056
1731	492810.1	2859139	356.5334	1731	492810.1	2859139	359.2002	2.6668
1732	492986	2859418	356.2022	1732	492986	2859418	358.8776	2.6754
1733	492961.9	2859380	355.752	1733	492961.9	2859380	358.3415	2.5895
1734	492830.7	2859172	356.1486	1734	492830.7	2859172	358.9473	2.7987
1735	492815.1	2859147	356.3353	1735	492815.1	2859147	359.1938	2.8585
1736	492825.8	2859164	356.2568	1736	492825.8	2859164	359.0159	2.7591
1737	492836.5	2859181	356.0723	1737	492836.5	2859181	358.8647	2.7924
1738	492847.2	2859198	355.6879	1738	492847.2	2859198	358.5126	2.8247
1739	492857.9	2859215	355.4741	1739	492857.9	2859215	358.1148	2.6407
1740	492868.5	2859232	354.9681	1740	492868.5	2859232	357.7169	2.7488
1741	492879.2	2859249	354.6893	1741	492879.2	2859249	357.319	2.6297
1742	492889.9	2859266	354.0233	1742	492889.9	2859266	356.9212	2.8979
1743	492900.6	2859283	353.7826	1743	492900.6	2859283	356.5233	2.7407
1744	492911.2	2859300	353.2808	1744	492911.2	2859300	356.1891	2.9083
1745	492921.9	2859317	353.369	1745	492921.9	2859317	356.2271	2.8581
1746	492932.6	2859333	354.0771	1746	492932.6	2859333	356.8072	2.7301
1747	492943.3	2859350	354.5968	1747	492943.3	2859350	357.3872	2.7904
1748	492953.9	2859367	355.0342	1748	492953.9	2859367	357.9672	2.933
1749	492964.6	2859384	355.9197	1749	492964.6	2859384	358.4695	2.5498
1750	492975.3	2859401	356.124	1750	492975.3	2859401	358.9676	2.8436
1751	492627.3	2859255	356.9756	1751	492627.3	2859255	359.5527	2.5771
1752	492842.3	2859530	356.1812	1752	492842.3	2859530	359.073	2.8918
1753	492814.7	2859495	355.9807	1753	492814.7	2859495	358.8109	2.8302
1754	492651.1	2859285	356.3144	1754	492651.1	2859285	359.2297	2.9153
1755	492633.1	2859262	356.8265	1755	492633.1	2859262	359.5484	2.7219
1756	492645.4	2859278	356.7397	1756	492645.4	2859278	359.3445	2.6048
1757	492657.7	2859294	356.4264	1757	492657.7	2859294	359.1406	2.7142
1758	492670	2859309	356.2043	1758	492670	2859309	358.9876	2.7833
1759	492682.3	2859325	356.0846	1759	492682.3	2859325	358.8346	2.75

1760	492694.6	2859341	355.9854	1760	492694.6	2859341	358.656	2.6706
1761	492706.9	2859357	355.7776	1761	492706.9	2859357	358.403	2.6254
1762	492719.2	2859373	355.4198	1762	492719.2	2859373	358.1669	2.7471
1763	492731.5	2859388	355.518	1763	492731.5	2859388	358.1986	2.6806
1764	492743.9	2859404	355.3667	1764	492743.9	2859404	358.2302	2.8635
1765	492756.2	2859420	355.6175	1765	492756.2	2859420	358.2619	2.6444
1766	492768.5	2859436	355.5595	1766	492768.5	2859436	358.2936	2.7341
1767	492780.8	2859451	355.5914	1767	492780.8	2859451	358.3253	2.7339
1768	492793.1	2859467	355.78	1768	492793.1	2859467	358.3569	2.5769
1769	492805.4	2859483	355.8648	1769	492805.4	2859483	358.4781	2.6133
1770	492817.7	2859499	356.1454	1770	492817.7	2859499	358.9194	2.774
1771	492830	2859514	356.8431	1771	492830	2859514	359.4176	2.5745
1772	492461.9	2859368	357.2431	1772	492461.9	2859368	359.8769	2.6338
1773	492684.7	2859653	356.623	1773	492684.7	2859653	359.1182	2.4952
1774	492657.1	2859618	357.0643	1774	492657.1	2859618	359.7962	2.7319
1775	492490.5	2859405	356.7606	1775	492490.5	2859405	359.4119	2.6513
1776	492463.1	2859370	357.097	1776	492463.1	2859370	359.876	2.779
1777	492475.4	2859385	357.0134	1777	492475.4	2859385	359.7126	2.6992
1778	492487.7	2859401	356.8936	1778	492487.7	2859401	359.467	2.5734
1779	492500.1	2859417	356.7272	1779	492500.1	2859417	359.2475	2.5203
1780	492512.4	2859433	356.2578	1780	492512.4	2859433	359.0945	2.8367
1781	492524.7	2859448	356.4282	1781	492524.7	2859448	358.9023	2.4741
1782	492537	2859464	355.847	1782	492537	2859464	358.6493	2.8023
1783	492549.3	2859480	355.824	1783	492549.3	2859480	358.3963	2.5723
1784	492561.6	2859496	355.4743	1784	492561.6	2859496	358.1433	2.669
1785	492573.9	2859511	355.6022	1785	492573.9	2859511	358.2269	2.6247
1786	492586.2	2859527	355.7112	1786	492586.2	2859527	358.3289	2.6177
1787	492598.5	2859543	355.7458	1787	492598.5	2859543	358.4309	2.6851
1788	492610.8	2859559	355.9056	1788	492610.8	2859559	358.533	2.6274
1789	492623.2	2859574	355.9974	1789	492623.2	2859574	358.635	2.6376
1790	492635.5	2859590	356.4015	1790	492635.5	2859590	359.0523	2.6508
1791	492647.8	2859606	357.0084	1791	492647.8	2859606	359.5689	2.5605
1792	492660.1	2859622	356.7779	1792	492660.1	2859622	359.5815	2.8036
1793	492672.4	2859637	356.5446	1793	492672.4	2859637	359.1868	2.6422
1794	492305	2859484	357.3856	1794	492305	2859484	360.1635	2.7779
1795	492523.4	2859779	356.4835	1795	492523.4	2859779	359.2092	2.7257
1796	492496.7	2859743	356.5848	1796	492496.7	2859743	359.3182	2.7334
1797	492332.6	2859521	356.958	1797	492332.6	2859521	359.5945	2.6365
1798	492309.2	2859490	357.5582	1798	492309.2	2859490	360.0763	2.5181
1799	492321.1	2859506	357.1947	1799	492321.1	2859506	359.8311	2.6364
1800	492333	2859522	356.9166	1800	492333	2859522	359.5859	2.6693

1801	492344.9	2859538	356.6161	1801	492344.9	2859538	359.3519	2.7358
1802	492356.8	2859554	356.5304	1802	492356.8	2859554	359.1475	2.6171
1803	492368.7	2859570	356.4783	1803	492368.7	2859570	359.0464	2.5681
1804	492380.6	2859586	356.4112	1804	492380.6	2859586	359.1516	2.7404
1805	492392.5	2859602	356.3778	1805	492392.5	2859602	359.0675	2.6897
1806	492404.4	2859618	356.02	1806	492404.4	2859618	358.932	2.912
1807	492416.3	2859635	356.287	1807	492416.3	2859635	358.7965	2.5095
1808	492428.2	2859651	356.0013	1808	492428.2	2859651	358.661	2.6597
1809	492440.1	2859667	355.8575	1809	492440.1	2859667	358.5256	2.6681
1810	492452	2859683	355.8036	1810	492452	2859683	358.4589	2.6553
1811	492463.9	2859699	355.7726	1811	492463.9	2859699	358.5465	2.7739
1812	492475.8	2859715	356.3363	1812	492475.8	2859715	359.0039	2.6676
1813	492487.7	2859731	357.1236	1813	492487.7	2859731	359.7073	2.5837
1814	492499.6	2859747	356.6043	1814	492499.6	2859747	359.3013	2.697
1815	492511.5	2859763	356.593	1815	492511.5	2859763	359.2328	2.6398
1816	492144.2	2859603	357.5319	1816	492144.2	2859603	360.3494	2.8175
1817	492361	2859896	357.2161	1817	492361	2859896	359.7311	2.515
1818	492337.5	2859864	356.6748	1818	492337.5	2859864	359.4223	2.7475
1819	492171.9	2859640	357.138	1819	492171.9	2859640	359.784	2.646
1820	492146.8	2859607	357.74	1820	492146.8	2859607	360.2957	2.5557
1821	492158.7	2859623	357.4294	1821	492158.7	2859623	360.0505	2.6211
1822	492170.6	2859639	357.1059	1822	492170.6	2859639	359.8086	2.7027
1823	492182.5	2859655	356.9438	1823	492182.5	2859655	359.5675	2.6237
1824	492194.4	2859671	356.5983	1824	492194.4	2859671	359.3265	2.7282
1825	492206.3	2859687	356.3956	1825	492206.3	2859687	359.0855	2.6899
1826	492218.2	2859703	356.5814	1826	492218.2	2859703	359.3564	2.775
1827	492230.1	2859719	356.9851	1827	492230.1	2859719	359.6509	2.6658
1828	492242	2859735	357.3638	1828	492242	2859735	359.9455	2.5817
1829	492253.9	2859751	357.216	1829	492253.9	2859751	359.8665	2.6505
1830	492265.8	2859767	357.0136	1830	492265.8	2859767	359.6455	2.6319
1831	492277.7	2859783	356.825	1831	492277.7	2859783	359.4246	2.5996
1832	492289.6	2859800	356.564	1832	492289.6	2859800	359.2036	2.6396
1833	492301.5	2859816	356.0796	1833	492301.5	2859816	358.7051	2.6255
1834	492313.4	2859832	356.2998	1834	492313.4	2859832	358.9575	2.6577
1835	492325.3	2859848	356.8475	1835	492325.3	2859848	359.442	2.5945
1836	492337.2	2859864	356.6795	1836	492337.2	2859864	359.4226	2.7431
1837	492349.1	2859880	357.0261	1837	492349.1	2859880	359.6889	2.6628
1838	492011.1	2859702	357.8773	1838	492011.1	2859702	360.4493	2.572
1839	492154.7	2859997	357.377	1839	492154.7	2859997	360.1936	2.8166
1840	492139.2	2859965	357.5177	1840	492139.2	2859965	360.1745	2.6568
1841	492031.8	2859744	357.1423	1841	492031.8	2859744	359.7921	2.6498

1842	492014.5	2859709	357.6888	1842	492014.5	2859709	360.3117	2.6229
1843	492023.3	2859727	357.4055	1843	492023.3	2859727	360.0353	2.6298
1844	492032.1	2859745	357.146	1844	492032.1	2859745	359.7832	2.6372
1845	492040.8	2859763	356.8533	1845	492040.8	2859763	359.5312	2.6779
1846	492049.6	2859781	356.5736	1846	492049.6	2859781	359.2791	2.7055
1847	492058.3	2859799	356.3708	1847	492058.3	2859799	359.0271	2.6563
1848	492067.1	2859817	356.1382	1848	492067.1	2859817	358.775	2.6368
1849	492075.8	2859835	355.6878	1849	492075.8	2859835	358.5229	2.8351
1850	492084.6	2859853	356.0071	1850	492084.6	2859853	358.6758	2.6687
1851	492093.4	2859871	356.3232	1851	492093.4	2859871	358.9948	2.6716
1852	492102.1	2859889	356.1854	1852	492102.1	2859889	358.8425	2.6571
1853	492110.9	2859907	356.2534	1853	492110.9	2859907	358.9144	2.661
1854	492119.6	2859925	356.6504	1854	492119.6	2859925	359.3039	2.6535
1855	492128.4	2859943	357.2219	1855	492128.4	2859943	359.8035	2.5816
1856	492137.1	2859961	357.4737	1856	492137.1	2859961	360.1729	2.6992
1857	492145.9	2859979	357.4983	1857	492145.9	2859979	360.1814	2.6831
1858	491847.6	2859823	357.7774	1858	491847.6	2859823	360.509	2.7316
1859	491974.8	2860084	358.1972	1859	491974.8	2860084	360.9726	2.7754
1860	491959.4	2860052	358.1282	1860	491959.4	2860052	360.8938	2.7656
1861	491866.4	2859862	357.3245	1861	491866.4	2859862	360.1227	2.7982
1862	491852.2	2859832	357.9079	1862	491852.2	2859832	360.4919	2.584
1863	491861	2859850	357.5293	1863	491861	2859850	360.2733	2.744
1864	491869.8	2859868	357.2482	1864	491869.8	2859868	360.0309	2.7827
1865	491878.5	2859886	357.3957	1865	491878.5	2859886	359.7885	2.3928
1866	491887.3	2859904	357.1319	1866	491887.3	2859904	359.6825	2.5506
1867	491896	2859922	356.8943	1867	491896	2859922	359.531	2.6367
1868	491904.8	2859940	356.7188	1868	491904.8	2859940	359.3795	2.6607
1869	491913.5	2859958	356.458	1869	491913.5	2859958	359.1332	2.6752
1870	491922.3	2859976	356.0236	1870	491922.3	2859976	358.8722	2.8486
1871	491931.1	2859994	356.4173	1871	491931.1	2859994	359.1176	2.7003
1872	491939.8	2860012	357.1818	1872	491939.8	2860012	359.5937	2.4119
1873	491948.6	2860030	357.392	1873	491948.6	2860030	360.1763	2.7843
1874	491957.3	2860048	357.8566	1874	491957.3	2860048	360.7588	2.9022
1875	491966.1	2860066	358.3004	1875	491966.1	2860066	360.9764	2.676
1876	491671.7	2859918	357.7099	1876	491671.7	2859918	360.3829	2.673
1877	491795	2860172	358.7183	1877	491795	2860172	361.4339	2.7156
1878	491779.5	2860140	358.3878	1878	491779.5	2860140	360.8738	2.486
1879	491687	2859950	357.755	1879	491687	2859950	360.3272	2.5722
1880	491672.4	2859920	357.6281	1880	491672.4	2859920	360.3803	2.7522
1881	491681.2	2859938	357.812	1881	491681.2	2859938	360.3483	2.5363
1882	491689.9	2859956	357.847	1882	491689.9	2859956	360.3163	2.4693

1883	491698.7	2859974	356.4895	1883	491698.7	2859974	360.2843	3.7948
1884	491707.5	2859992	357.2553	1884	491707.5	2859992	360.1491	2.8938
1885	491716.2	2860010	357.6103	1885	491716.2	2860010	360.2795	2.6692
1886	491725	2860028	357.8248	1886	491725	2860028	360.4634	2.6386
1887	491733.7	2860046	358.0426	1887	491733.7	2860046	360.8998	2.8572
1888	491742.5	2860064	358.7022	1888	491742.5	2860064	361.3361	2.6339
1889	491751.2	2860082	358.6746	1889	491751.2	2860082	361.2968	2.6222
1890	491760	2860100	358.7212	1890	491760	2860100	361.2483	2.5271
1891	491768.8	2860118	358.2329	1891	491768.8	2860118	360.7823	2.5494
1892	491777.5	2860136	358.1914	1892	491777.5	2860136	360.6679	2.4765
1893	491786.3	2860154	357.7789	1893	491786.3	2860154	361.4355	3.6566
1894	491491.6	2860008	357.601	1894	491491.6	2860008	360.268	2.667
1895	491616.3	2860259	358.8907	1895	491616.3	2860259	361.3283	2.4376
1896	491600.5	2860227	357.9592	1896	491600.5	2860227	360.4378	2.4786
1897	491507.1	2860039	357.5024	1897	491507.1	2860039	360.2125	2.7101
1898	491500.5	2860026	357.5506	1898	491500.5	2860026	360.2361	2.6855
1899	491509.4	2860044	357.6988	1899	491509.4	2860044	360.2042	2.5054
1900	491518.3	2860062	357.3469	1900	491518.3	2860062	359.7466	2.3997
1901	491527.2	2860080	356.7611	1901	491527.2	2860080	359.2262	2.4651
1902	491536.1	2860098	356.118	1902	491536.1	2860098	358.7058	2.5878
1903	491545	2860115	355.5003	1903	491545	2860115	358.1855	2.6852
1904	491553.9	2860133	355.0649	1904	491553.9	2860133	357.6651	2.6002
1905	491562.8	2860151	354.6703	1905	491562.8	2860151	357.3132	2.6429
1906	491571.7	2860169	355.0136	1906	491571.7	2860169	357.5725	2.5589
1907	491580.6	2860187	355.9215	1907	491580.6	2860187	358.4614	2.5399
1908	491589.6	2860205	356.8827	1908	491589.6	2860205	359.3503	2.4676
1909	491598.5	2860223	357.6303	1909	491598.5	2860223	360.2337	2.6034
1910	491607.4	2860241	358.643	1910	491607.4	2860241	361.1153	2.4723
1911	491312.5	2860097	358.284	1911	491312.5	2860097	360.8091	2.5251
1912	491435.8	2860345	358.5447	1912	491435.8	2860345	361.2213	2.6766
1913	491420.6	2860314	357.4079	1913	491420.6	2860314	360.1391	2.7312
1914	491328	2860128	357.3791	1914	491328	2860128	360.0337	2.6546
1915	491320	2860112	357.6497	1915	491320	2860112	360.3982	2.7485
1916	491328.9	2860130	357.3168	1916	491328.9	2860130	360.0032	2.6864
1917	491337.8	2860148	356.9906	1917	491337.8	2860148	359.7073	2.7167
1918	491346.8	2860166	357.0303	1918	491346.8	2860166	359.5154	2.4851
1919	491355.7	2860184	356.6794	1919	491355.7	2860184	359.3602	2.6808
1920	491364.6	2860202	356.6912	1920	491364.6	2860202	359.205	2.5138
1921	491373.5	2860220	356.417	1921	491373.5	2860220	359.0497	2.6327
1922	491382.4	2860238	356.3841	1922	491382.4	2860238	358.8945	2.5104
1923	491391.3	2860255	356.0513	1923	491391.3	2860255	358.7393	2.688

1924	491400.2	2860273	355.9115	1924	491400.2	2860273	358.584	2.6725
1925	491409.1	2860291	356.6657	1925	491409.1	2860291	359.219	2.5533
1926	491418	2860309	357.2228	1926	491418	2860309	359.9284	2.7056
1927	491426.9	2860327	357.8394	1927	491426.9	2860327	360.6379	2.7985
1928	491137.9	2860161	360.3053	1928	491137.9	2860161	362.757	2.4517
1929	491235.1	2860418	358.5183	1929	491235.1	2860418	361.1543	2.636
1930	491222.9	2860386	357.408	1930	491222.9	2860386	360.0372	2.6292
1931	491150	2860193	359.1968	1931	491150	2860193	361.9756	2.7788
1932	491143	2860175	359.9284	1932	491143	2860175	362.4366	2.5082
1933	491150.1	2860193	359.227	1933	491150.1	2860193	361.9677	2.7407
1934	491157.2	2860212	358.6563	1934	491157.2	2860212	361.4989	2.8426
1935	491164.2	2860231	358.5937	1935	491164.2	2860231	361.03	2.4363
1936	491171.3	2860250	358.067	1936	491171.3	2860250	360.5575	2.4905
1937	491178.4	2860268	357.4772	1937	491178.4	2860268	360.0742	2.597
1938	491185.5	2860287	357.3269	1938	491185.5	2860287	359.7964	2.4695
1939	491192.6	2860306	356.9601	1939	491192.6	2860306	359.5187	2.5586
1940	491199.7	2860324	356.2207	1940	491199.7	2860324	359.062	2.8413
1941	491206.7	2860343	355.8551	1941	491206.7	2860343	358.7455	2.8904
1942	491213.8	2860362	356.6508	1942	491213.8	2860362	359.2011	2.5503
1943	491220.9	2860380	357.1444	1943	491220.9	2860380	359.8539	2.7095
1944	491228	2860399	357.7815	1944	491228	2860399	360.5066	2.7251
1945	490955.1	2860220	360.5511	1945	490955.1	2860220	363.063	2.5119
1946	491039.3	2860488	358.5556	1946	491039.3	2860488	361.0642	2.5086
1947	491028.8	2860455	357.1154	1947	491028.8	2860455	359.7988	2.6834
1948	490965.7	2860253	360.4762	1948	490965.7	2860253	362.96	2.4838
1949	490955.6	2860221	360.521	1949	490955.6	2860221	363.0636	2.5426
1950	490961.6	2860240	360.286	1950	490961.6	2860240	363.0819	2.7959
1951	490967.5	2860259	359.9156	1951	490967.5	2860259	362.5614	2.6458
1952	490973.5	2860278	358.6058	1952	490973.5	2860278	361.285	2.6792
1953	490979.5	2860297	358.1417	1953	490979.5	2860297	360.7456	2.6039
1954	490985.5	2860317	357.6418	1954	490985.5	2860317	360.2061	2.5643
1955	490991.5	2860336	357.4729	1955	490991.5	2860336	360.1134	2.6405
1956	490997.4	2860355	357.5582	1956	490997.4	2860355	360.1638	2.6056
1957	491003.4	2860374	356.8706	1957	491003.4	2860374	359.7172	2.8466
1958	491009.4	2860393	357.0605	1958	491009.4	2860393	359.5636	2.5031
1959	491015.4	2860412	356.8553	1959	491015.4	2860412	359.4099	2.5546
1960	491021.4	2860431	356.5239	1960	491021.4	2860431	359.2562	2.7323
1961	491027.3	2860450	356.9748	1961	491027.3	2860450	359.6404	2.6656
1962	491033.3	2860469	357.6103	1962	491033.3	2860469	360.3424	2.7321
1963	490765.1	2860277	359.5331	1963	490765.1	2860277	362.1348	2.6017
1964	490848.4	2860553	358.2198	1964	490848.4	2860553	360.8325	2.6127

1965	490837.7	2860518	357.3646	1965	490837.7	2860518	359.9242	2.5596
1966	490775.3	2860311	359.6341	1966	490775.3	2860311	362.1467	2.5126
1967	490767.5	2860285	359.5029	1967	490767.5	2860285	362.1376	2.6347
1968	490773.2	2860304	359.6205	1968	490773.2	2860304	362.1443	2.5238
1969	490779	2860323	359.6922	1969	490779	2860323	362.1511	2.4589
1970	490784.8	2860342	359.6156	1970	490784.8	2860342	362.3623	2.7467
1971	490790.6	2860362	359.1537	1971	490790.6	2860362	361.9754	2.8217
1972	490796.4	2860381	357.8859	1972	490796.4	2860381	360.6922	2.8063
1973	490802.1	2860400	357.7664	1973	490802.1	2860400	360.3278	2.5614
1974	490807.9	2860419	357.5834	1974	490807.9	2860419	360.2742	2.6908
1975	490813.7	2860438	357.5888	1975	490813.7	2860438	360.1954	2.6066
1976	490819.5	2860457	357.6493	1976	490819.5	2860457	360.1167	2.4674
1977	490825.3	2860476	357.6257	1977	490825.3	2860476	360.0379	2.4122
1978	490831	2860496	357.3101	1978	490831	2860496	359.9591	2.649
1979	490836.8	2860515	357.4817	1979	490836.8	2860515	359.9147	2.433
1980	490842.6	2860534	357.4315	1980	490842.6	2860534	360.0589	2.6274
1981	490562.4	2860357	358.5784	1981	490562.4	2860357	361.126	2.5476
1982	490680.7	2860623	358.2305	1982	490680.7	2860623	360.9309	2.7004
1983	490665.8	2860589	358.7444	1983	490665.8	2860589	361.148	2.4036
1984	490577.2	2860390	358.5774	1984	490577.2	2860390	361.1593	2.5819
1985	490566.9	2860367	358.3736	1985	490566.9	2860367	361.136	2.7624
1986	490575	2860385	358.5287	1986	490575	2860385	361.1544	2.6257
1987	490583.1	2860403	358.7933	1987	490583.1	2860403	361.1728	2.3795
1988	490591.3	2860422	358.5938	1988	490591.3	2860422	361.2999	2.7061
1989	490599.4	2860440	359.1501	1989	490599.4	2860440	361.5261	2.376
1990	490607.5	2860458	359.1643	1990	490607.5	2860458	361.7524	2.5881
1991	490615.7	2860476	358.795	1991	490615.7	2860476	361.2494	2.4544
1992	490623.8	2860495	358.7626	1992	490623.8	2860495	361.2573	2.4947
1993	490631.9	2860513	358.6373	1993	490631.9	2860513	361.2601	2.6228
1994	490640.1	2860531	358.6877	1994	490640.1	2860531	361.1674	2.4797
1995	490648.2	2860550	358.5701	1995	490648.2	2860550	361.2041	2.634
1996	490656.3	2860568	358.6197	1996	490656.3	2860568	361.2381	2.6184
1997	490664.5	2860586	358.7689	1997	490664.5	2860586	361.1862	2.4173
1998	490672.6	2860604	358.4818	1998	490672.6	2860604	361.1025	2.6207
1999	490374.7	2860447	357.6128	1999	490374.7	2860447	360.1748	2.562
2000	490512	2860713	358.4227	2000	490512	2860713	360.9932	2.5705
2001	490496.2	2860682	358.4367	2001	490496.2	2860682	361.1398	2.7031
2002	490392.1	2860481	357.5311	2002	490392.1	2860481	360.2196	2.6885
2003	490383.4	2860464	357.6144	2003	490383.4	2860464	360.1974	2.583
2004	490392.6	2860482	357.6955	2004	490392.6	2860482	360.2211	2.5256
2005	490401.8	2860499	357.78	2005	490401.8	2860499	360.2611	2.4811

2006	490411	2860517	357.937	2006	490411	2860517	360.4925	2.5555
2007	490420.2	2860535	357.3943	2007	490420.2	2860535	359.9305	2.5362
2008	490429.3	2860553	357.0754	2008	490429.3	2860553	359.7269	2.6515
2009	490438.5	2860570	356.9784	2009	490438.5	2860570	359.601	2.6226
2010	490447.7	2860588	357.0929	2010	490447.7	2860588	359.5816	2.4887
2011	490456.9	2860606	357.0071	2011	490456.9	2860606	359.6179	2.6108
2012	490466.1	2860624	356.8952	2012	490466.1	2860624	359.6887	2.7935
2013	490475.3	2860642	357.4918	2013	490475.3	2860642	360.1307	2.6389
2014	490484.4	2860659	358.0274	2014	490484.4	2860659	360.5727	2.5453
2015	490493.6	2860677	358.4354	2015	490493.6	2860677	361.0147	2.5793
2016	490502.8	2860695	358.2569	2016	490502.8	2860695	360.9785	2.7216
2017	490217	2860528	357.4796	2017	490217	2860528	360.0086	2.529
2018	490302.1	2860784	358.6441	2018	490302.1	2860784	361.1756	2.5315
2019	490291.5	2860752	358.8819	2019	490291.5	2860752	361.5081	2.6262
2020	490229.1	2860565	357.3978	2020	490229.1	2860565	359.9863	2.5885
2021	490219.9	2860537	357.5943	2021	490219.9	2860537	360.0032	2.4089
2022	490226.3	2860556	357.1457	2022	490226.3	2860556	359.9915	2.8458
2023	490232.6	2860575	357.1395	2023	490232.6	2860575	359.9798	2.8403
2024	490238.9	2860594	357.2174	2024	490238.9	2860594	359.9575	2.7401
2025	490245.2	2860613	357.4884	2025	490245.2	2860613	360.0791	2.5907
2026	490251.5	2860632	357.7944	2026	490251.5	2860632	360.4348	2.6404
2027	490257.9	2860651	358.3583	2027	490257.9	2860651	360.7905	2.4322
2028	490264.2	2860670	358.4736	2028	490264.2	2860670	360.9365	2.4629
2029	490270.5	2860689	358.4332	2029	490270.5	2860689	361.0685	2.6353
2030	490276.8	2860708	358.6183	2030	490276.8	2860708	361.2005	2.5822
2031	490283.1	2860727	358.8442	2031	490283.1	2860727	361.3325	2.4883
2032	490289.5	2860746	358.8142	2032	490289.5	2860746	361.4645	2.6503
2033	490295.8	2860765	358.743	2033	490295.8	2860765	361.4861	2.7431
2034	490020.5	2860631	357.8955	2034	490020.5	2860631	360.7683	2.8728
2035	490139.5	2860858	358.9781	2035	490139.5	2860858	361.4554	2.4773
2036	490124.1	2860829	358.5485	2036	490124.1	2860829	361.0594	2.5109
2037	490035.2	2860659	358.2885	2037	490035.2	2860659	360.7773	2.4888
2038	490028.1	2860646	358.283	2038	490028.1	2860646	360.7732	2.4902
2039	490037.4	2860663	358.3055	2039	490037.4	2860663	360.7718	2.4663
2040	490046.7	2860681	358.3108	2040	490046.7	2860681	360.7481	2.4373
2041	490056	2860699	358.2042	2041	490056	2860699	360.7244	2.5202
2042	490065.2	2860716	358.263	2042	490065.2	2860716	360.6941	2.4311
2043	490074.5	2860734	358.0727	2043	490074.5	2860734	360.6304	2.5577
2044	490083.8	2860752	357.8813	2044	490083.8	2860752	360.4971	2.6158
2045	490093.1	2860770	357.9553	2045	490093.1	2860770	360.4764	2.5211
2046	490102.4	2860787	358.1049	2046	490102.4	2860787	360.6235	2.5186

2047	490111.7	2860805	358.2925	2047	490111.7	2860805	360.7706	2.4781
2048	490121	2860823	358.4694	2048	490121	2860823	360.9791	2.5097
2049	490130.2	2860840	358.7929	2049	490130.2	2860840	361.2173	2.4244
2050	489837.6	2860734	358.2477	2050	489837.6	2860734	360.6486	2.4009
2051	489971.3	2860946	358.8112	2051	489971.3	2860946	361.3499	2.5387
2052	489954.3	2860919	358.5112	2052	489954.3	2860919	360.9708	2.4596
2053	489854.1	2860760	358.1039	2053	489854.1	2860760	360.6592	2.5553
2054	489843.1	2860743	358.0731	2054	489843.1	2860743	360.6522	2.5791
2055	489853.8	2860760	358.0223	2055	489853.8	2860760	360.6591	2.6368
2056	489864.5	2860777	358.0052	2056	489864.5	2860777	360.666	2.6608
2057	489875.2	2860794	358.2629	2057	489875.2	2860794	360.6729	2.41
2058	489885.8	2860811	357.8842	2058	489885.8	2860811	360.3232	2.439
2059	489896.5	2860827	356.5794	2059	489896.5	2860827	358.9937	2.4143
2060	489907.2	2860844	356.8548	2060	489907.2	2860844	359.2677	2.4129
2061	489917.9	2860861	357.25	2061	489917.9	2860861	359.7241	2.4741
2062	489928.6	2860878	357.7647	2062	489928.6	2860878	360.3408	2.5761
2063	489939.2	2860895	358.0865	2063	489939.2	2860895	360.6351	2.5486
2064	489949.9	2860912	358.1404	2064	489949.9	2860912	360.8734	2.733
2065	489960.6	2860929	358.3861	2065	489960.6	2860929	361.1116	2.7255
2066	489670.6	2860840	357.8856	2066	489670.6	2860840	360.5392	2.6536
2067	489796.6	2861048	359.0895	2067	489796.6	2861048	361.6551	2.5656
2068	489780.9	2861022	357.988	2068	489780.9	2861022	360.5491	2.5611
2069	489686.4	2860866	357.9913	2069	489686.4	2860866	360.5494	2.5581
2070	489672.5	2860843	357.9277	2070	489672.5	2860843	360.5404	2.6127
2071	489682.9	2860860	357.9598	2071	489682.9	2860860	360.5471	2.5873
2072	489693.2	2860877	357.8498	2072	489693.2	2860877	360.5538	2.704
2073	489703.5	2860894	357.9993	2073	489703.5	2860894	360.5606	2.5613
2074	489713.9	2860911	356.4208	2074	489713.9	2860911	359.0877	2.6669
2075	489724.2	2860928	354.7882	2075	489724.2	2860928	357.5231	2.7349
2076	489734.6	2860946	354.6473	2076	489734.6	2860946	357.2991	2.6518
2077	489744.9	2860963	355.2228	2077	489744.9	2860963	358.0222	2.7994
2078	489755.2	2860980	356.134	2078	489755.2	2860980	358.7488	2.6148
2079	489765.6	2860997	356.8822	2079	489765.6	2860997	359.4754	2.5932
2080	489775.9	2861014	357.5653	2080	489775.9	2861014	360.202	2.6367
2081	489786.3	2861031	358.2062	2081	489786.3	2861031	360.9285	2.7223
2082	489502.5	2860975	357.7614	2082	489502.5	2860975	360.429	2.6676
2083	489641.4	2861145	360.7024	2083	489641.4	2861145	363.3016	2.5992
2084	489622.2	2861122	360.1125	2084	489622.2	2861122	362.7584	2.6459
2085	489518.7	2860995	357.0711	2085	489518.7	2860995	359.8596	2.7885
2086	489515	2860991	357.5091	2086	489515	2860991	360.3052	2.7961
2087	489527.6	2861006	356.9382	2087	489527.6	2861006	359.6478	2.7096

2088	489540.3	2861021	357.2356	2088	489540.3	2861021	359.7743	2.5387
2089	489552.9	2861037	357.3802	2089	489552.9	2861037	359.9007	2.5205
2090	489565.6	2861052	357.5423	2090	489565.6	2861052	360.0993	2.557
2091	489578.2	2861068	358.2634	2091	489578.2	2861068	360.9317	2.6683
2092	489590.8	2861083	358.9375	2092	489590.8	2861083	361.595	2.6575
2093	489603.5	2861099	359.4285	2093	489603.5	2861099	361.9542	2.5257
2094	489616.1	2861114	359.8312	2094	489616.1	2861114	362.4845	2.6533
2095	489628.8	2861130	360.4583	2095	489628.8	2861130	363.0579	2.5996
2096	489347.6	2861102	359.5507	2096	489347.6	2861102	362.1027	2.552
2097	489481.6	2861266	358.845	2097	489481.6	2861266	361.4921	2.6471
2098	489463.1	2861243	358.9599	2098	489463.1	2861243	361.6267	2.6668
2099	489363.7	2861121	358.8643	2099	489363.7	2861121	361.5193	2.655
2100	489355.1	2861111	359.1514	2100	489355.1	2861111	361.8296	2.6782
2101	489367.8	2861126	358.6729	2101	489367.8	2861126	361.3722	2.6993
2102	489380.4	2861142	358.3917	2102	489380.4	2861142	360.9147	2.523
2103	489393.1	2861157	358.2084	2103	489393.1	2861157	360.8665	2.6581
2104	489405.7	2861173	358.4945	2104	489405.7	2861173	361.1281	2.6336
2105	489418.4	2861188	358.5471	2105	489418.4	2861188	361.0938	2.5467
2106	489431	2861204	358.4998	2106	489431	2861204	361.0596	2.5598
2107	489443.6	2861219	358.4648	2107	489443.6	2861219	361.0254	2.5606
2108	489456.3	2861235	358.8269	2108	489456.3	2861235	361.5387	2.7118
2109	489468.9	2861250	358.8758	2109	489468.9	2861250	361.5842	2.7084
2110	489185.9	2861240	360.3544	2110	489185.9	2861240	362.8945	2.5401
2111	489352.4	2861400	357.4155	2111	489352.4	2861400	360.125	2.7095
2112	489331.5	2861380	357.378	2112	489331.5	2861380	359.7825	2.4045
2113	489205.9	2861259	360.1847	2113	489205.9	2861259	362.7361	2.5514
2114	489193.8	2861248	360.3049	2114	489193.8	2861248	362.8318	2.5269
2115	489208.2	2861262	360.0084	2115	489208.2	2861262	362.7177	2.7093
2116	489222.7	2861275	359.9654	2116	489222.7	2861275	362.5398	2.5744
2117	489237.1	2861289	359.7818	2117	489237.1	2861289	362.1835	2.4017
2118	489251.5	2861303	359.0363	2118	489251.5	2861303	361.7324	2.6961
2119	489265.9	2861317	358.5032	2119	489265.9	2861317	361.2116	2.7084
2120	489280.3	2861331	358.3655	2120	489280.3	2861331	360.7477	2.3822
2121	489294.7	2861345	357.6578	2121	489294.7	2861345	360.362	2.7042
2122	489309.1	2861359	357.4945	2122	489309.1	2861359	359.9285	2.434
2123	489323.6	2861373	357.4216	2123	489323.6	2861373	359.8205	2.3989
2124	489338	2861386	357.367	2124	489338	2861386	359.7512	2.3842
2125	489050.2	2861393	359.9533	2125	489050.2	2861393	362.6588	2.7055
2126	489217	2861541	358.8679	2126	489217	2861541	361.4333	2.5654
2127	489195.3	2861522	358.5709	2127	489195.3	2861522	360.9869	2.416
2128	489070.5	2861411	359.641	2128	489070.5	2861411	362.1914	2.5504

2129	489052.4	2861395	360.1027	2129	489052.4	2861395	362.6423	2.5396
2130	489067.3	2861408	359.8824	2130	489067.3	2861408	362.2997	2.4173
2131	489082.3	2861422	359.2488	2131	489082.3	2861422	361.7855	2.5367
2132	489097.3	2861435	358.6901	2132	489097.3	2861435	361.2713	2.5812
2133	489112.2	2861448	358.9751	2133	489112.2	2861448	361.408	2.4329
2134	489127.2	2861461	358.5549	2134	489127.2	2861461	361.092	2.5371
2135	489142.2	2861475	357.6718	2135	489142.2	2861475	360.3855	2.7137
2136	489157.1	2861488	356.9312	2136	489157.1	2861488	359.6514	2.7202
2137	489172.1	2861501	357.8952	2137	489172.1	2861501	360.2797	2.3845
2138	489187.1	2861514	358.7802	2138	489187.1	2861514	361.2037	2.4235
2139	489202	2861528	358.2762	2139	489202	2861528	360.8075	2.5313
2140	488917.5	2861543	358.7623	2140	488917.5	2861543	361.1714	2.4091
2141	489074.2	2861682	360.0616	2141	489074.2	2861682	362.465	2.4034
2142	489056.8	2861666	359.1561	2142	489056.8	2861666	361.7108	2.5547
2143	488937.8	2861561	358.0448	2143	488937.8	2861561	360.4743	2.4295
2144	488924.6	2861549	358.2119	2144	488924.6	2861549	360.9286	2.7167
2145	488939.6	2861562	357.8536	2145	488939.6	2861562	360.4145	2.5609
2146	488954.5	2861576	357.6287	2146	488954.5	2861576	360.2232	2.5945
2147	488969.5	2861589	357.8007	2147	488969.5	2861589	360.2126	2.4119
2148	488984.4	2861602	358.1142	2148	488984.4	2861602	360.6966	2.5824
2149	488999.4	2861615	357.9642	2149	488999.4	2861615	360.6747	2.7105
2150	489014.4	2861629	358.2945	2150	489014.4	2861629	360.6528	2.3583
2151	489029.3	2861642	358.2039	2151	489029.3	2861642	360.6309	2.427
2152	489044.3	2861655	358.3683	2152	489044.3	2861655	360.9262	2.5579
2153	489059.3	2861668	359.4674	2153	489059.3	2861668	361.8695	2.4021
2154	488787.5	2861674	358.8662	2154	488787.5	2861674	361.4241	2.5579
2155	488911.3	2861820	361.2345	2155	488911.3	2861820	363.8003	2.5658
2156	488896.3	2861802	360.9704	2156	488896.3	2861802	363.4531	2.4827
2157	488806.5	2861697	359.1567	2157	488806.5	2861697	361.6164	2.4597
2158	488794.8	2861683	358.9336	2158	488794.8	2861683	361.4981	2.5645
2159	488807.7	2861698	359.0643	2159	488807.7	2861698	361.6288	2.5645
2160	488820.7	2861713	359.2083	2160	488820.7	2861713	361.6168	2.4085
2161	488833.6	2861729	358.9494	2161	488833.6	2861729	361.5251	2.5757
2162	488846.6	2861744	358.702	2162	488846.6	2861744	361.4335	2.7315
2163	488859.5	2861759	359.5842	2163	488859.5	2861759	362.0044	2.4202
2164	488872.4	2861774	360.3023	2164	488872.4	2861774	362.6848	2.3825
2165	488885.4	2861790	360.7621	2165	488885.4	2861790	363.5029	2.7408
2166	488898.3	2861805	360.9421	2166	488898.3	2861805	363.44	2.4979
2167	488637.6	2861735	359.8241	2167	488637.6	2861735	362.2341	2.41
2168	488733.3	2861971	363.0169	2168	488733.3	2861971	365.4097	2.3928
2169	488724.1	2861948	362.2439	2169	488724.1	2861948	364.7145	2.4706

2170	488650.7	2861768	360.0514	2170	488650.7	2861768	362.5324	2.481
2171	488643	2861749	359.7399	2171	488643	2861749	362.3578	2.6179
2172	488650.6	2861767	359.967	2172	488650.6	2861767	362.5283	2.5613
2173	488658.1	2861786	359.822	2173	488658.1	2861786	362.2293	2.4073
2174	488665.6	2861804	359.5579	2174	488665.6	2861804	361.9919	2.434
2175	488673.1	2861823	359.6511	2175	488673.1	2861823	362.2965	2.6454
2176	488680.6	2861841	360.0953	2176	488680.6	2861841	362.6011	2.5058
2177	488688.2	2861860	360.5416	2177	488688.2	2861860	362.9057	2.3641
2178	488695.7	2861878	360.7765	2178	488695.7	2861878	363.2103	2.4338
2179	488703.2	2861897	361.0141	2179	488703.2	2861897	363.5149	2.5008
2180	488710.7	2861915	361.3081	2180	488710.7	2861915	363.8195	2.5114
2181	488718.3	2861934	361.8632	2181	488718.3	2861934	364.3114	2.4482
2182	488725.8	2861952	362.4578	2182	488725.8	2861952	364.8272	2.3694
2183	488497.6	2861792	360.3206	2183	488497.6	2861792	362.7817	2.4611
2184	488501.4	2862026	362.5689	2184	488501.4	2862026	365.0506	2.4817
2185	488501	2861998	361.8012	2185	488501	2861998	364.2759	2.4747
2186	488498.2	2861830	358.5735	2186	488498.2	2861830	361.0864	2.5129
2187	488497.8	2861806	359.7707	2187	488497.8	2861806	362.1331	2.3624
2188	488498.1	2861826	358.7989	2188	488498.1	2861826	361.2293	2.4304
2189	488498.5	2861846	357.9058	2189	488498.5	2861846	360.3254	2.4196
2190	488498.8	2861866	358.0273	2190	488498.8	2861866	360.5369	2.5096
2191	488499.1	2861886	358.6842	2191	488499.1	2861886	361.0689	2.3847
2192	488499.5	2861906	359.2071	2192	488499.5	2861906	361.6421	2.435
2193	488499.8	2861926	359.7447	2193	488499.8	2861926	362.2152	2.4705
2194	488500.1	2861946	360.359	2194	488500.1	2861946	362.7883	2.4293
2195	488500.4	2861966	360.9696	2195	488500.4	2861966	363.3615	2.3919
2196	488500.8	2861986	361.4655	2196	488500.8	2861986	363.9346	2.4691
2197	488501.1	2862006	362.1221	2197	488501.1	2862006	364.5077	2.3856
2198	488299.7	2861802	361.0224	2198	488299.7	2861802	363.3848	2.3624
2199	488299.5	2862029	362.0915	2199	488299.5	2862029	364.4935	2.402
2200	488299.5	2862001	361.6031	2200	488299.5	2862001	364.1125	2.5094
2201	488299.7	2861830	360.4023	2201	488299.7	2861830	362.791	2.3887
2202	488299.7	2861809	360.8707	2202	488299.7	2861809	363.2998	2.4291
2203	488299.7	2861829	360.407	2203	488299.7	2861829	362.8256	2.4186
2204	488299.7	2861849	359.9734	2204	488299.7	2861849	362.3514	2.378
2205	488299.7	2861869	359.48	2205	488299.7	2861869	361.8772	2.3972
2206	488299.6	2861889	359.1474	2206	488299.6	2861889	361.6112	2.4638
2207	488299.6	2861909	359.0326	2207	488299.6	2861909	361.4558	2.4232
2208	488299.6	2861929	358.8907	2208	488299.6	2861929	361.3004	2.4097
2209	488299.6	2861949	359.7536	2209	488299.6	2861949	362.2538	2.5002
2210	488299.5	2861969	361.5471	2210	488299.5	2861969	364.0218	2.4747

2211	488299.5	2861989	361.5096	2211	488299.5	2861989	363.9762	2.4666
2212	488299.5	2862009	361.7875	2212	488299.5	2862009	364.2323	2.4448
2213	488111.6	2861801	361.7746	2213	488111.6	2861801	364.2836	2.509
2214	488088.7	2862005	361.4788	2214	488088.7	2862005	363.9527	2.4739
2215	488091.7	2861979	361.0201	2215	488091.7	2861979	363.5542	2.5341
2216	488109	2861824	361.5832	2216	488109	2861824	364.1534	2.5702
2217	488111	2861806	361.7604	2217	488111	2861806	364.2578	2.4974
2218	488108.8	2861826	361.6363	2218	488108.8	2861826	364.1397	2.5034
2219	488106.6	2861846	361.417	2219	488106.6	2861846	364.0215	2.6045
2220	488104.3	2861866	361.3577	2220	488104.3	2861866	363.9034	2.5457
2221	488102.1	2861886	361.1706	2221	488102.1	2861886	363.7852	2.6146
2222	488099.9	2861906	360.9979	2222	488099.9	2861906	363.6671	2.6692
2223	488097.6	2861926	360.8695	2223	488097.6	2861926	363.549	2.6795
2224	488095.4	2861946	360.7088	2224	488095.4	2861946	363.4308	2.722
2225	488093.2	2861966	360.7125	2225	488093.2	2861966	363.3929	2.6804
2226	488091	2861985	360.9553	2226	488091	2861985	363.6487	2.6934
2227	487902.3	2861798	361.6368	2227	487902.3	2861798	364.3723	2.7355
2228	487899.6	2861984	360.9025	2228	487899.6	2861984	363.6111	2.7086
2229	487899.9	2861959	360.6668	2229	487899.9	2861959	363.4266	2.7598
2230	487902	2861821	361.6407	2230	487902	2861821	364.3969	2.7562
2231	487902.2	2861804	361.5976	2231	487902.2	2861804	364.3788	2.7812
2232	487901.9	2861824	361.5951	2232	487901.9	2861824	364.4002	2.8051
2233	487901.6	2861844	361.3404	2233	487901.6	2861844	364.138	2.7976
2234	487901.3	2861864	360.9045	2234	487901.3	2861864	363.7276	2.8231
2235	487901	2861884	360.5355	2235	487901	2861884	363.3172	2.7817
2236	487900.7	2861904	359.8776	2236	487900.7	2861904	362.7118	2.8342
2237	487900.4	2861924	359.8704	2237	487900.4	2861924	362.7889	2.9185
2238	487900.1	2861944	360.3473	2238	487900.1	2861944	363.1931	2.8458
2239	487899.8	2861964	360.626	2239	487899.8	2861964	363.4623	2.8363
2240	487677.7	2861822	361.6319	2240	487677.7	2861822	364.5111	2.8792
2241	487731.2	2862011	361.071	2241	487731.2	2862011	363.9533	2.8823
2242	487723.6	2861984	361.6086	2242	487723.6	2861984	364.4594	2.8508
2243	487685.7	2861850	361.6586	2243	487685.7	2861850	364.5213	2.8627
2244	487682.1	2861838	361.6565	2244	487682.1	2861838	364.5094	2.8529
2245	487687.6	2861857	361.6797	2245	487687.6	2861857	364.5275	2.8478
2246	487693	2861876	361.2643	2246	487693	2861876	364.1985	2.9342
2247	487698.5	2861895	360.8482	2247	487698.5	2861895	363.7838	2.9356
2248	487703.9	2861915	360.4573	2248	487703.9	2861915	363.2472	2.7899
2249	487709.4	2861934	360.1862	2249	487709.4	2861934	362.996	2.8098
2250	487714.8	2861953	360.2742	2250	487714.8	2861953	363.1602	2.886
2251	487720.3	2861972	360.7466	2251	487720.3	2861972	363.6224	2.8758

2252	487725.8	2861992	361.4164	2252	487725.8	2861992	364.2803	2.8639
2253	487479.7	2861906	359.9693	2253	487479.7	2861906	362.8215	2.8522
2254	487565.8	2862092	361.8404	2254	487565.8	2862092	364.7163	2.8759
2255	487553.2	2862065	361.6301	2255	487553.2	2862065	364.4733	2.8432
2256	487492.3	2861933	359.9572	2256	487492.3	2861933	362.8425	2.8853
2257	487481.9	2861911	359.9301	2257	487481.9	2861911	362.8167	2.8866
2258	487490.3	2861929	359.9878	2258	487490.3	2861929	362.7865	2.7987
2259	487498.7	2861947	360.2023	2259	487498.7	2861947	363.0217	2.8194
2260	487507.1	2861965	360.4334	2260	487507.1	2861965	363.2549	2.8215
2261	487515.5	2861983	360.5891	2261	487515.5	2861983	363.4764	2.8873
2262	487523.9	2862001	360.8665	2262	487523.9	2862001	363.698	2.8315
2263	487532.2	2862020	361.1023	2263	487532.2	2862020	363.9195	2.8172
2264	487540.6	2862038	361.2961	2264	487540.6	2862038	364.141	2.8449
2265	487549	2862056	361.4985	2265	487549	2862056	364.3625	2.864
2266	487557.4	2862074	361.7645	2266	487557.4	2862074	364.5841	2.8196
2267	487400.1	2861940	360.1603	2267	487400.1	2861940	363.0188	2.8585
2268	487491.9	2862139	361.9832	2268	487491.9	2862139	364.8332	2.85
2269	487479.4	2862111	360.8669	2269	487479.4	2862111	363.6981	2.8312
2270	487412.7	2861967	360.1352	2270	487412.7	2861967	362.9323	2.7971
2271	487491.9	2862139	361.8945	2271	487491.9	2862139	364.8332	2.9387
2272	487400.1	2861940	360.2848	2272	487400.1	2861940	363.0188	2.734
2273	487408.1	2861957	360.2589	2273	487408.1	2861957	363.0731	2.8142
2274	487416.5	2861975	360.0057	2274	487416.5	2861975	362.7767	2.771
2275	487424.9	2861993	359.6302	2275	487424.9	2861993	362.4321	2.8019
2276	487433.3	2862011	359.4361	2276	487433.3	2862011	362.1776	2.7415
2277	487441.6	2862030	359.6569	2277	487441.6	2862030	362.4392	2.7823
2278	487450	2862048	359.817	2278	487450	2862048	362.6569	2.8399
2279	487458.4	2862066	360.0804	2279	487458.4	2862066	362.9143	2.8339
2280	487466.8	2862084	360.3864	2280	487466.8	2862084	363.1825	2.7961
2281	487475.2	2862102	360.5582	2281	487475.2	2862102	363.4507	2.8925
2282	487483.6	2862120	361.3814	2282	487483.6	2862120	364.128	2.7466
2283	480826.9	2854167	369.7742	2283	480826.9	2854167	372.5293	2.7551
2284	480801.5	2854296	372.2015	2284	480801.5	2854296	374.9439	2.7424
2285	480804.7	2854280	372.6959	2285	480804.7	2854280	375.4187	2.7228
2286	480801.5	2854296	372.1788	2286	480801.5	2854296	374.9439	2.7651
2287	480826.9	2854167	369.7523	2287	480826.9	2854167	372.5293	2.777
2288	480805.3	2854276	372.6703	2288	480805.3	2854276	375.5311	2.8608
2289	480809.2	2854257	372.7578	2289	480809.2	2854257	375.5807	2.8229
2290	480813.1	2854237	372.3661	2290	480813.1	2854237	375.216	2.8499
2291	480816.9	2854217	371.7323	2291	480816.9	2854217	374.5748	2.8425
2292	480820.8	2854198	370.5675	2292	480820.8	2854198	373.425	2.8575

2293	480824.6	2854178	370.0795	2293	480824.6	2854178	372.6831	2.6036
2294	480993.4	2854127	369.7584	2294	480993.4	2854127	372.3472	2.5888
2295	481021.4	2854232	370.5952	2295	481021.4	2854232	373.3042	2.709
2296	481017.7	2854219	369.6467	2296	481017.7	2854219	372.4188	2.7721
2297	480998	2854144	369.5253	2297	480998	2854144	372.2123	2.687
2298	481016.3	2854213	369.299	2298	481016.3	2854213	372.0935	2.7945
2299	481011.2	2854194	368.7934	2299	481011.2	2854194	371.5472	2.7538
2300	481006	2854175	369.0715	2300	481006	2854175	371.7248	2.6533
2301	481000.9	2854155	369.2137	2301	481000.9	2854155	371.9448	2.7311
2302	480995.7	2854136	369.6979	2302	480995.7	2854136	372.3392	2.6413
2303	481205.7	2854116	369.8904	2303	481205.7	2854116	372.4465	2.5561
2304	481208.2	2854229	369.7448	2304	481208.2	2854229	372.2488	2.504
2305	481207.9	2854214	369.0452	2305	481207.9	2854214	371.5786	2.5334
2306	481206	2854130	369.8192	2306	481206	2854130	372.4448	2.6256
2307	481207.8	2854209	368.8976	2307	481207.8	2854209	371.4086	2.511
2308	481207.3	2854189	368.3888	2308	481207.3	2854189	371.0326	2.6438
2309	481206.9	2854169	368.7605	2309	481206.9	2854169	371.3716	2.6111
2310	481206.4	2854149	369.4341	2310	481206.4	2854149	371.9306	2.4965
2311	481206	2854129	369.8207	2311	481206	2854129	372.4449	2.6242
2312	481415.4	2854172	369.5306	2312	481415.4	2854172	372.2106	2.68
2313	481383.4	2854251	370.3175	2313	481383.4	2854251	372.9535	2.636
2314	481389.1	2854237	370.3917	2314	481389.1	2854237	373.1718	2.7801
2315	481412.3	2854180	369.743	2315	481412.3	2854180	372.2133	2.4703
2316	481390.9	2854233	370.2758	2316	481390.9	2854233	373.0379	2.7621
2317	481398.4	2854214	369.9151	2317	481398.4	2854214	372.5094	2.5943
2318	481405.9	2854196	369.3939	2318	481405.9	2854196	372.1681	2.7742
2319	481413.4	2854177	369.474	2319	481413.4	2854177	372.2123	2.7383
2320	481591.9	2854279	370.4901	2320	481591.9	2854279	373.1252	2.6351
2321	481554.5	2854331	370.5033	2321	481554.5	2854331	373.1377	2.6344
2322	481559.1	2854325	370.5627	2322	481559.1	2854325	373.3271	2.7644
2323	481587.2	2854286	370.8534	2323	481587.2	2854286	373.4966	2.6432
2324	481566.2	2854315	370.8702	2324	481566.2	2854315	373.6165	2.7463
2325	481577.8	2854299	371.5086	2325	481577.8	2854299	374.0952	2.5866
2326	481589.5	2854283	370.4177	2326	481589.5	2854283	373.2234	2.8057
2327	481750.1	2854408	369.5194	2327	481750.1	2854408	372.1704	2.651
2328	481705.8	2854455	369.0704	2328	481705.8	2854455	371.8211	2.7507
2329	481712	2854448	368.8488	2329	481712	2854448	371.6059	2.7571
2330	481744.8	2854413	369.4902	2330	481744.8	2854413	372.1246	2.6344
2331	481719.5	2854440	369.25	2331	481719.5	2854440	371.8779	2.6279
2332	481733.2	2854426	369.724	2332	481733.2	2854426	372.349	2.625
2333	481746.9	2854411	369.4972	2333	481746.9	2854411	372.1426	2.6454

2334	481896.8	2854546	368.5317	2334	481896.8	2854546	371.1321	2.6004
2335	481845.3	2854596	369.521	2335	481845.3	2854596	372.1493	2.6283
2336	481851.8	2854590	369.4849	2336	481851.8	2854590	372.1203	2.6354
2337	481890.6	2854552	368.7898	2337	481890.6	2854552	371.4427	2.6529
2338	481859.6	2854582	369.3967	2338	481859.6	2854582	371.9789	2.5822
2339	481873.8	2854568	369.0757	2339	481873.8	2854568	371.7191	2.6434
2340	481888	2854554	368.9365	2340	481888	2854554	371.5303	2.5938
2341	482046.4	2854665	369.0913	2341	482046.4	2854665	371.6851	2.5938
2342	482013.2	2854718	370.3612	2342	482013.2	2854718	373.0234	2.6622
2343	482017	2854712	370.2856	2343	482017	2854712	372.8971	2.6115
2344	482041.2	2854673	369.1784	2344	482041.2	2854673	371.7563	2.5779
2345	482023.8	2854701	369.8125	2345	482023.8	2854701	372.3905	2.578
2346	482034.5	2854684	369.3003	2346	482034.5	2854684	371.9388	2.6385
2347	482045.1	2854667	369.0405	2347	482045.1	2854667	371.703	2.6625
2348	482192.8	2854811	370.0021	2348	482192.8	2854811	372.6169	2.6148
2349	482158.1	2854843	370.3577	2349	482158.1	2854843	373.0044	2.6467
2350	482163.3	2854839	370.5763	2350	482163.3	2854839	373.1972	2.6209
2351	482188.6	2854815	370.0309	2351	482188.6	2854815	372.6077	2.5768
2352	482172.8	2854830	370.4185	2352	482172.8	2854830	373.0395	2.621
2353	482187.4	2854816	369.9757	2353	482187.4	2854816	372.6051	2.6294
2354	482330.7	2854948	369.2946	2354	482330.7	2854948	371.9182	2.6236
2355	482285.4	2855004	368.8789	2355	482285.4	2855004	371.432	2.5531
2356	482290	2854998	368.8626	2356	482290	2854998	371.5125	2.6499
2357	482324.7	2854955	369.3914	2357	482324.7	2854955	372.0413	2.6499
2358	482298	2854988	369.1667	2358	482298	2854988	371.7726	2.6059
2359	482310.6	2854973	369.6901	2359	482310.6	2854973	372.3295	2.6394
2360	482323.1	2854957	369.389	2360	482323.1	2854957	372.0725	2.6835
2361	482478.9	2855041	368.9304	2361	482478.9	2855041	371.5253	2.5949
2362	482459.1	2855138	367.2784	2362	482459.1	2855138	369.911	2.6326
2363	482461.5	2855126	367.2116	2363	482461.5	2855126	369.9044	2.6928
2364	482476.4	2855053	368.6476	2364	482476.4	2855053	371.298	2.6504
2365	482463.1	2855118	367.378	2365	482463.1	2855118	370.0369	2.6589
2366	482467.1	2855098	367.6298	2366	482467.1	2855098	370.308	2.6782
2367	482471.2	2855079	368.018	2367	482471.2	2855079	370.6185	2.6005
2368	482475.2	2855059	368.5674	2368	482475.2	2855059	371.1576	2.5902
2369	482650.6	2855036	368.1785	2369	482650.6	2855036	370.835	2.6565
2370	482675.6	2855120	369.0811	2370	482675.6	2855120	371.7944	2.7133
2371	482672.4	2855109	369.1411	2371	482672.4	2855109	371.8114	2.6703
2372	482653.6	2855046	368.0348	2372	482653.6	2855046	370.7047	2.6699
2373	482669.9	2855101	369.1205	2373	482669.9	2855101	371.7819	2.6614
2374	482664.2	2855081	368.5864	2374	482664.2	2855081	371.1934	2.607

2375	482658.5	2855062	368.0257	2375	482658.5	2855062	370.6922	2.6665
2376	482652.8	2855043	368.0437	2376	482652.8	2855043	370.7411	2.6974
2377	482769.6	2854929	368.1911	2377	482769.6	2854929	370.8218	2.6307
2378	482815.8	2854955	369.1345	2378	482815.8	2854955	371.7551	2.6206
2379	482810	2854952	369.1311	2379	482810	2854952	371.6179	2.4868
2380	482775.4	2854932	368.1662	2380	482775.4	2854932	370.832	2.6658
2381	482798.4	2854945	368.4116	2381	482798.4	2854945	371.0887	2.6771
2382	482781.1	2854935	368.1873	2382	482781.1	2854935	370.8702	2.6829
2383	482868.8	2854755	367.3343	2383	482868.8	2854755	369.825	2.4907
2384	482947.7	2854801	368.3548	2384	482947.7	2854801	371.0097	2.6549
2385	482933.3	2854792	368.0502	2385	482933.3	2854792	370.6594	2.6092
2386	482874.7	2854758	367.1859	2386	482874.7	2854758	369.8303	2.6444
2387	482930.4	2854791	367.9605	2387	482930.4	2854791	370.616	2.6555
2388	482913.1	2854781	367.6349	2388	482913.1	2854781	370.3014	2.6665
2389	482895.8	2854771	367.367	2389	482895.8	2854771	369.8597	2.4927
2390	482878.5	2854760	367.1908	2390	482878.5	2854760	369.8338	2.643
2391	483080.5	2854633	368.0844	2391	483080.5	2854633	370.7154	2.631
2392	483055.6	2854744	367.8153	2392	483055.6	2854744	370.4934	2.6781
2393	483058.1	2854733	367.7172	2393	483058.1	2854733	370.2477	2.5305
2394	483077.4	2854647	367.6675	2394	483077.4	2854647	370.3299	2.6624
2395	483060	2854725	367.4677	2395	483060	2854725	370.1137	2.646
2396	483064.3	2854705	367.2866	2396	483064.3	2854705	369.963	2.6764
2397	483068.7	2854686	367.2154	2397	483068.7	2854686	369.8645	2.6491
2398	483073.1	2854666	367.1453	2398	483073.1	2854666	369.7054	2.5601
2399	483077.4	2854647	367.6579	2399	483077.4	2854647	370.3412	2.6833
2400	483269.5	2854657	367.7803	2400	483269.5	2854657	370.3252	2.5449
2401	483263.6	2854735	368.9716	2401	483263.6	2854735	371.6507	2.6791
2402	483264.4	2854725	368.7518	2402	483264.4	2854725	371.2785	2.5267
2403	483268.8	2854667	367.7687	2403	483268.8	2854667	370.2977	2.529
2404	483265.2	2854715	368.2031	2404	483265.2	2854715	370.9078	2.7047
2405	483266.7	2854695	367.7952	2405	483266.7	2854695	370.3455	2.5503
2406	483268.2	2854675	367.4493	2406	483268.2	2854675	370.0749	2.6256
2407	483468.5	2854727	367.5324	2407	483468.5	2854727	370.0797	2.5473
2408	483434.6	2854813	369.3069	2408	483434.6	2854813	371.7076	2.4007
2409	483438.4	2854803	368.9261	2409	483438.4	2854803	371.4836	2.5575
2410	483464.1	2854738	367.688	2410	483464.1	2854738	370.0737	2.3857
2411	483441.9	2854794	368.6523	2411	483441.9	2854794	371.2741	2.6218
2412	483449.3	2854775	368.4003	2412	483449.3	2854775	370.8716	2.4713
2413	483456.6	2854757	368.0045	2413	483456.6	2854757	370.4283	2.4238
2414	483464	2854738	367.451	2414	483464	2854738	370.0736	2.6226
2415	483659	2854800	367.5336	2415	483659	2854800	369.9463	2.4127

2416	483611.6	2854897	369.086	2416	483611.6	2854897	371.5807	2.4947
2417	483617.3	2854885	369.2056	2417	483617.3	2854885	371.6058	2.4002
2418	483652	2854815	368.1326	2418	483652	2854815	370.5039	2.3713
2419	483620.4	2854879	369.2442	2419	483620.4	2854879	371.6191	2.3749
2420	483629.2	2854861	368.8949	2420	483629.2	2854861	371.336	2.4411
2421	483638	2854843	368.6399	2421	483638	2854843	371.1792	2.5393
2422	483646.9	2854825	368.3868	2422	483646.9	2854825	370.91	2.5232
2423	483655.7	2854807	367.6174	2423	483655.7	2854807	370.1943	2.5769
2424	483840.8	2854859	366.6311	2424	483840.8	2854859	369.2325	2.6014
2425	483799	2854989	368.4641	2425	483799	2854989	370.9598	2.4957
2426	483804	2854973	368.4169	2426	483804	2854973	370.9979	2.581
2427	483835.5	2854875	366.8498	2427	483835.5	2854875	369.4548	2.605
2428	483805.1	2854970	368.4672	2428	483805.1	2854970	371.0065	2.5393
2429	483811.2	2854951	368.3144	2429	483811.2	2854951	370.8596	2.5452
2430	483817.3	2854932	367.6727	2430	483817.3	2854932	370.3133	2.6406
2431	483823.4	2854913	367.2262	2431	483823.4	2854913	369.88	2.6538
2432	483829.5	2854894	366.8121	2432	483829.5	2854894	369.4543	2.6422
2433	483835.6	2854875	366.7595	2433	483835.6	2854875	369.4492	2.6897
2434	484027.5	2854916	366.8148	2434	484027.5	2854916	369.588	2.7732
2435	483986.3	2855067	368.5439	2435	483986.3	2855067	371.2574	2.7135
2436	483991.3	2855049	368.311	2436	483991.3	2855049	371.0288	2.7178
2437	484022.1	2854936	366.2893	2437	484022.1	2854936	369.0886	2.7993
2438	483991.6	2855048	368.2749	2438	483991.6	2855048	371.0146	2.7397
2439	483996.8	2855029	367.6568	2439	483996.8	2855029	370.4031	2.7463
2440	484002.1	2855009	367.0652	2440	484002.1	2855009	369.8515	2.7863
2441	484007.4	2854990	366.6153	2441	484007.4	2854990	369.4098	2.7945
2442	484012.6	2854971	366.159	2442	484012.6	2854971	368.9682	2.8092
2443	484017.9	2854951	365.7816	2443	484017.9	2854951	368.5374	2.7558
2444	484023.1	2854932	366.3581	2444	484023.1	2854932	369.2282	2.8701
2445	484215.5	2854968	366.8275	2445	484215.5	2854968	369.7131	2.8856
2446	484184.7	2855117	368.5919	2446	484184.7	2855117	371.4315	2.8396
2447	484188.4	2855099	367.8908	2447	484188.4	2855099	370.714	2.8232
2448	484211.3	2854988	366.2031	2448	484211.3	2854988	369.0051	2.802
2449	484188.8	2855097	367.7975	2449	484188.8	2855097	370.6258	2.8283
2450	484192.8	2855078	366.8906	2450	484192.8	2855078	369.7435	2.8529
2451	484196.8	2855058	365.9915	2451	484196.8	2855058	368.8755	2.884
2452	484200.8	2855039	365.3798	2452	484200.8	2855039	368.2454	2.8656
2453	484204.9	2855019	365.0593	2453	484204.9	2855019	367.899	2.8397
2454	484208.9	2854999	365.6907	2454	484208.9	2854999	368.5889	2.8982
2455	484212.9	2854980	366.3653	2455	484212.9	2854980	369.2789	2.9136
2456	484394.3	2855001	367.0877	2456	484394.3	2855001	369.994	2.9063

2457	484398.2	2855105	367.0967	2457	484398.2	2855105	369.9825	2.8858
2458	484397.9	2855096	366.992	2458	484397.9	2855096	369.8765	2.8845
2459	484394.9	2855018	366.7522	2459	484394.9	2855018	369.5882	2.836
2460	484397.5	2855085	366.8503	2460	484397.5	2855085	369.7482	2.8979
2461	484396.7	2855065	366.6011	2461	484396.7	2855065	369.5139	2.9128
2462	484395.9	2855045	365.2542	2462	484395.9	2855045	368.0925	2.8383
2463	484395.2	2855025	366.2743	2463	484395.2	2855025	369.0988	2.8245
2464	484394.4	2855005	367.1456	2464	484394.4	2855005	370.0146	2.869
2465	484561.3	2854972	364.9638	2465	484561.3	2854972	367.7943	2.8305
2466	484609.9	2855040	365.0445	2466	484609.9	2855040	367.8842	2.8397
2467	484603.3	2855031	364.9557	2467	484603.3	2855031	367.8145	2.8588
2468	484567.3	2854981	364.3894	2468	484567.3	2854981	367.2829	2.8935
2469	484598.3	2855024	364.9085	2469	484598.3	2855024	367.7625	2.854
2470	484586.7	2855008	364.8907	2470	484586.7	2855008	367.6407	2.75
2471	484575	2854992	364.4194	2471	484575	2854992	367.1417	2.7223
2472	484563.4	2854975	364.9452	2472	484563.4	2854975	367.6128	2.6676
2473	484743.9	2854869	365.1819	2473	484743.9	2854869	367.7792	2.5973
2474	484769.1	2854943	364.0474	2474	484769.1	2854943	366.6915	2.6441
2475	484765.8	2854933	363.8067	2475	484765.8	2854933	366.5296	2.7229
2476	484747	2854878	364.4657	2476	484747	2854878	367.3727	2.907
2477	484762.7	2854924	363.5771	2477	484762.7	2854924	366.3829	2.8058
2478	484756.3	2854905	363.655	2478	484756.3	2854905	366.3254	2.6704
2479	484749.8	2854886	364.3248	2479	484749.8	2854886	367.0235	2.6987
2480	484953.3	2854842	365.8849	2480	484953.3	2854842	368.2893	2.4044
2481	484955.5	2854942	363.5538	2481	484955.5	2854942	366.3175	2.7637
2482	484955.2	2854928	364.161	2482	484955.2	2854928	366.7284	2.5674
2483	484953.5	2854854	365.5192	2483	484953.5	2854854	368.1637	2.6445
2484	484955.1	2854922	364.0591	2484	484955.1	2854922	366.8314	2.7723
2485	484954.6	2854902	364.346	2485	484954.6	2854902	367.0432	2.6972
2486	484954.2	2854882	364.4721	2486	484954.2	2854882	367.3849	2.9128
2487	484953.7	2854862	365.2006	2487	484953.7	2854862	367.7668	2.5662
2488	485162.1	2854865	365.9683	2488	485162.1	2854865	368.7391	2.7708
2489	485141.3	2854973	363.9997	2489	485141.3	2854973	366.8955	2.8958
2490	485143.9	2854960	364.29	2490	485143.9	2854960	366.8287	2.5387
2491	485159.5	2854879	366.1148	2491	485159.5	2854879	368.7668	2.652
2492	485145.1	2854954	364.3748	2492	485145.1	2854954	366.7993	2.4245
2493	485148.8	2854934	364.0844	2493	485148.8	2854934	366.717	2.6326
2494	485152.6	2854914	364.7474	2494	485152.6	2854914	367.5368	2.7894
2495	485156.4	2854895	365.7109	2495	485156.4	2854895	368.5159	2.805
2496	485160.2	2854875	365.9768	2496	485160.2	2854875	368.7591	2.7823
2497	485361	2854980	365.807	2497	485361	2854980	368.3527	2.5457

2498	485260.2	2855083	364.7534	2498	485260.2	2855083	367.335	2.5816
2499	485273.2	2855070	364.6987	2499	485273.2	2855070	367.3113	2.6126
2500	485350.6	2854990	365.3082	2500	485350.6	2854990	368.0127	2.7045
2501	485274.2	2855069	364.6209	2501	485274.2	2855069	367.3166	2.6957
2502	485288.1	2855055	364.8898	2502	485288.1	2855055	367.4211	2.5313
2503	485302	2855040	365.6424	2503	485302	2855040	368.0461	2.4037
2504	485316	2855026	365.527	2504	485316	2855026	368.1197	2.5927
2505	485329.9	2855012	365.0517	2505	485329.9	2855012	367.9683	2.9166
2506	485343.9	2854997	365.2193	2506	485343.9	2854997	367.817	2.5977
2507	485357.8	2854983	365.6229	2507	485357.8	2854983	368.2489	2.626
2508	485465	2855183	368.0917	2508	485465	2855183	370.6634	2.5717
2509	485351.7	2855222	365.7095	2509	485351.7	2855222	368.0964	2.3869
2510	485366.6	2855216	365.358	2510	485366.6	2855216	368.0408	2.6828
2511	485451.9	2855187	367.7385	2511	485451.9	2855187	370.4433	2.7048
2512	485370.6	2855215	365.2503	2512	485370.6	2855215	368.0256	2.7753
2513	485389.5	2855209	365.399	2513	485389.5	2855209	368.0265	2.6275
2514	485408.4	2855202	365.6426	2514	485408.4	2855202	368.1382	2.4956
2515	485427.4	2855196	365.9583	2515	485427.4	2855196	368.8865	2.9282
2516	485446.3	2855189	367.6919	2516	485446.3	2855189	370.1787	2.4868
2517	485529.9	2855267	366.069	2517	485529.9	2855267	368.6561	2.5871
2518	485532.8	2855407	363.9532	2518	485532.8	2855407	366.5444	2.5912
2519	485532.4	2855390	363.8573	2519	485532.4	2855390	366.5039	2.6466
2520	485530.3	2855287	365.6319	2520	485530.3	2855287	368.2144	2.5825
2521	485532.4	2855387	364.0112	2521	485532.4	2855387	366.5751	2.5639
2522	485532	2855367	364.4382	2522	485532	2855367	367.0649	2.6267
2523	485531.5	2855347	364.8593	2523	485531.5	2855347	367.5388	2.6795
2524	485531.1	2855327	365.1042	2524	485531.1	2855327	367.6299	2.5257
2525	485530.7	2855307	365.0479	2525	485530.7	2855307	367.7854	2.7375
2526	485530.3	2855287	365.5467	2526	485530.3	2855287	368.2222	2.6755
2527	485722.7	2855256	363.7861	2527	485722.7	2855256	366.4419	2.6558
2528	485730.9	2855364	363.4623	2528	485730.9	2855364	366.1869	2.7246
2529	485729.3	2855343	363.1994	2529	485729.3	2855343	365.9949	2.7955
2530	485723.6	2855268	363.563	2530	485723.6	2855268	366.1463	2.5833
2531	485729.4	2855344	363.3216	2531	485729.4	2855344	365.9962	2.6746
2532	485727.8	2855324	363.1715	2532	485727.8	2855324	365.8056	2.6341
2533	485726.3	2855304	362.8145	2533	485726.3	2855304	365.523	2.7085
2534	485724.8	2855284	363.106	2534	485724.8	2855284	365.7117	2.6057
2535	485723.3	2855264	363.7072	2535	485723.3	2855264	366.2724	2.5652
2536	485921.7	2855237	364.1229	2536	485921.7	2855237	366.9784	2.8555
2537	485928.5	2855333	362.9786	2537	485928.5	2855333	365.6619	2.6833
2538	485927.6	2855321	362.7413	2538	485927.6	2855321	365.5471	2.8058

2539	485922.5	2855249	363.9426	2539	485922.5	2855249	366.7113	2.7687
2540	485927.1	2855313	362.6986	2540	485927.1	2855313	365.4711	2.7725
2541	485925.7	2855293	362.6785	2541	485925.7	2855293	365.4428	2.7643
2542	485924.3	2855273	363.3046	2542	485924.3	2855273	366.1649	2.8603
2543	485922.9	2855253	363.7216	2543	485922.9	2855253	366.609	2.8874
2544	486129.1	2855262	364.1699	2544	486129.1	2855262	366.7524	2.5825
2545	486113.9	2855349	362.3001	2545	486113.9	2855349	365.0004	2.7003
2546	486116.2	2855336	362.7	2546	486116.2	2855336	365.3186	2.6186
2547	486128	2855268	363.9703	2547	486128	2855268	366.7427	2.7724
2548	486117.4	2855329	362.695	2548	486117.4	2855329	365.4583	2.7633
2549	486120.8	2855310	362.9882	2549	486120.8	2855310	365.8428	2.8546
2550	486124.2	2855290	363.9248	2550	486124.2	2855290	366.819	2.8942
2551	486127.7	2855270	364.0047	2551	486127.7	2855270	366.74	2.7353
2552	486322.8	2855342	364.2002	2552	486322.8	2855342	366.9591	2.7589
2553	486296.9	2855389	360.4711	2553	486296.9	2855389	363.2366	2.7655
2554	486300.1	2855383	360.8575	2554	486300.1	2855383	363.4091	2.5516
2555	486319.4	2855348	364.505	2555	486319.4	2855348	367.1063	2.6013
2556	486306.5	2855371	361.804	2556	486306.5	2855371	364.2515	2.4475
2557	486316.2	2855354	364.5936	2557	486316.2	2855354	367.247	2.6534
2558	486502.3	2855425	363.9708	2558	486502.3	2855425	366.8233	2.8525
2559	486474	2855486	360.2906	2559	486474	2855486	363.1526	2.862
2560	486476.9	2855480	360.0102	2560	486476.9	2855480	362.9043	2.8941
2561	486498.6	2855433	363.9402	2561	486498.6	2855433	366.4978	2.5576
2562	486482.5	2855468	360.4497	2562	486482.5	2855468	363.0845	2.6348
2563	486490.9	2855450	362.2629	2563	486490.9	2855450	365.0476	2.7847
2564	486499.3	2855432	363.6593	2564	486499.3	2855432	366.3441	2.6848
2565	486677.5	2855532	359.4991	2565	486677.5	2855532	362.133	2.6339
2566	486634.4	2855593	361.2159	2566	486634.4	2855593	363.7672	2.5513
2567	486639.8	2855585	360.8805	2567	486639.8	2855585	363.445	2.5645
2568	486671.7	2855541	359.7494	2568	486671.7	2855541	362.4919	2.7425
2569	486646.1	2855576	360.3132	2569	486646.1	2855576	363.0454	2.7322
2570	486657.7	2855560	359.9319	2570	486657.7	2855560	362.7045	2.7726
2571	486669.3	2855544	359.9419	2571	486669.3	2855544	362.5284	2.5865
2572	486833.4	2855635	361.1564	2572	486833.4	2855635	363.8926	2.7362
2573	486816.1	2855684	361.331	2573	486816.1	2855684	364.1158	2.7848
2574	486818	2855679	361.4424	2574	486818	2855679	364.124	2.6816
2575	486830.8	2855643	361.6341	2575	486830.8	2855643	364.2679	2.6338
2576	486822.8	2855665	361.1895	2576	486822.8	2855665	363.7255	2.536
2577	486829.6	2855646	361.5799	2577	486829.6	2855646	364.1811	2.6012
2578	487021.5	2855688	360.5235	2578	487021.5	2855688	363.1731	2.6496
2579	487011.7	2855739	362.0591	2579	487011.7	2855739	364.6581	2.599

2580	487012.8	2855734	361.9588	2580	487012.8	2855734	364.6642	2.7054
2581	487020.1	2855696	360.5631	2581	487020.1	2855696	363.2042	2.6411
2582	487015.5	2855720	361.5143	2582	487015.5	2855720	364.1447	2.6304
2583	487019.2	2855700	360.795	2583	487019.2	2855700	363.4451	2.6501
2584	487205.6	2855686	361.1059	2584	487205.6	2855686	363.7253	2.6194
2585	487219.7	2855771	362.3075	2585	487219.7	2855771	364.8082	2.5007
2586	487218.2	2855762	362.1992	2586	487218.2	2855762	364.7652	2.566
2587	487207.4	2855697	361.7734	2587	487207.4	2855697	364.3441	2.5707
2588	487216.4	2855752	362.0379	2588	487216.4	2855752	364.7158	2.6779
2589	487213.2	2855732	363.0793	2589	487213.2	2855732	365.5702	2.4909
2590	487209.9	2855712	362.6568	2590	487209.9	2855712	365.2184	2.5616
2591	487206.7	2855692	361.3757	2591	487206.7	2855692	364.0983	2.7226
2592	487397.3	2855646	359.9009	2592	487397.3	2855646	362.2832	2.3823
2593	487416.7	2855720	361.502	2593	487416.7	2855720	364.0051	2.5031
2594	487414.4	2855711	361.3089	2594	487414.4	2855711	363.9658	2.6569
2595	487399.9	2855655	359.9965	2595	487399.9	2855655	362.6075	2.611
2596	487411.6	2855700	361.265	2596	487411.6	2855700	363.9197	2.6547
2597	487406.6	2855681	361.4926	2597	487406.6	2855681	364.145	2.6524
2598	487401.5	2855662	360.3527	2598	487401.5	2855662	363.0564	2.7037
2599	487587	2855588	360.548	2599	487587	2855588	363.2045	2.6565
2600	487610.3	2855663	360.5063	2600	487610.3	2855663	363.0923	2.586
2601	487607.3	2855653	360.3175	2601	487607.3	2855653	363.0805	2.763
2602	487589.6	2855597	360.7625	2602	487589.6	2855597	363.1485	2.386
2603	487604.3	2855644	360.7197	2603	487604.3	2855644	363.1555	2.4358
2604	487598.4	2855625	360.4412	2604	487598.4	2855625	363.0043	2.5631
2605	487592.5	2855606	360.2899	2605	487592.5	2855606	363.0537	2.7638
2606	487792.7	2855559	361.5727	2606	487792.7	2855559	364.3138	2.7411
2607	487796.1	2855628	360.1813	2607	487796.1	2855628	362.8669	2.6856
2608	487795.5	2855617	360.4139	2608	487795.5	2855617	363.1222	2.7083
2609	487793.1	2855567	361.5912	2609	487793.1	2855567	364.3954	2.8042
2610	487795.1	2855608	360.7005	2610	487795.1	2855608	363.3914	2.6909
2611	487794.1	2855588	361.3419	2611	487794.1	2855588	364.0123	2.6704
2612	487793.1	2855568	361.8948	2612	487793.1	2855568	364.4005	2.5057
2613	487994.9	2855549	361.1177	2613	487994.9	2855549	363.5517	2.434
2614	487993.2	2855632	360.2907	2614	487993.2	2855632	362.9199	2.6292
2615	487993.4	2855621	359.6293	2615	487993.4	2855621	362.2859	2.6566
2616	487994.8	2855557	360.9288	2616	487994.8	2855557	363.5498	2.621
2617	487993.6	2855612	359.7981	2617	487993.6	2855612	362.4873	2.6892
2618	487994	2855592	360.1326	2618	487994	2855592	362.9407	2.8081
2619	487994.5	2855572	360.7128	2619	487994.5	2855572	363.3941	2.6813
2620	487994.9	2855552	360.8079	2620	487994.9	2855552	363.5511	2.7432

2621	488197.3	2855550	360.3022	2621	488197.3	2855550	363.074	2.7718
2622	488190.4	2855643	361.6164	2622	488190.4	2855643	364.3693	2.7529
2623	488191.3	2855631	361.072	2623	488191.3	2855631	363.6095	2.5375
2624	488196.5	2855562	360.3131	2624	488196.5	2855562	363.0688	2.7557
2625	488191.9	2855623	360.5378	2625	488191.9	2855623	363.0781	2.5403
2626	488193.4	2855603	359.6611	2626	488193.4	2855603	362.227	2.5659
2627	488194.9	2855583	360.5213	2627	488194.9	2855583	363.0591	2.5378
2628	488196.4	2855563	360.2669	2628	488196.4	2855563	363.0682	2.8013
2629	488398.7	2855571	359.8806	2629	488398.7	2855571	362.5659	2.6853
2630	488386.1	2855667	361.7765	2630	488386.1	2855667	364.5584	2.7819
2631	488387.9	2855653	361.2186	2631	488387.9	2855653	364.0003	2.7817
2632	488397.2	2855582	359.6847	2632	488397.2	2855582	362.5623	2.8776
2633	488388.7	2855647	360.7993	2633	488388.7	2855647	363.5064	2.7071
2634	488391.3	2855627	359.4197	2634	488391.3	2855627	362.228	2.8083
2635	488393.9	2855607	360.0168	2635	488393.9	2855607	362.5543	2.5375
2636	488396.5	2855588	359.8428	2636	488396.5	2855588	362.5606	2.7178
2637	488599.7	2855641	360.7827	2637	488599.7	2855641	363.3385	2.5558
2638	488561.6	2855722	360.9878	2638	488561.6	2855722	363.6882	2.7004
2639	488567.4	2855709	360.9987	2639	488567.4	2855709	363.5385	2.5398
2640	488595.4	2855650	360.6521	2640	488595.4	2855650	363.3555	2.7034
2641	488570.1	2855704	360.6072	2641	488570.1	2855704	363.3101	2.7029
2642	488578.6	2855686	360.5426	2642	488578.6	2855686	363.353	2.8104
2643	488587.1	2855668	361.237	2643	488587.1	2855668	363.9403	2.7033
2644	488595.6	2855649	360.6461	2644	488595.6	2855649	363.3544	2.7083
2645	488767.2	2855730	360.5734	2645	488767.2	2855730	363.108	2.5346
2646	488738.4	2855826	360.3905	2646	488738.4	2855826	363.1083	2.7178
2647	488741.3	2855817	360.2896	2647	488741.3	2855817	363.0047	2.7151
2648	488763.2	2855744	359.6736	2648	488763.2	2855744	362.377	2.7034
2649	488744.2	2855807	360.346	2649	488744.2	2855807	362.9038	2.5578
2650	488749.9	2855788	360.1428	2650	488749.9	2855788	362.6993	2.5565
2651	488755.7	2855769	359.8074	2651	488755.7	2855769	362.4949	2.6875
2652	488761.4	2855750	359.5727	2652	488761.4	2855750	362.2904	2.7177
2653	488767.2	2855731	360.4075	2653	488767.2	2855731	363.0931	2.6856
2654	488959.1	2855798	359.8084	2654	488959.1	2855798	362.4657	2.6573
2655	488926.6	2855872	359.2321	2655	488926.6	2855872	361.9464	2.7143
2656	488931.8	2855860	359.0678	2656	488931.8	2855860	361.8033	2.7355
2657	488955.4	2855807	359.5976	2657	488955.4	2855807	362.3156	2.718
2658	488934.6	2855854	359.0093	2658	488934.6	2855854	361.7247	2.7154
2659	488942.7	2855836	358.9577	2659	488942.7	2855836	361.6949	2.7372
2660	488950.7	2855817	359.5481	2660	488950.7	2855817	362.0878	2.5397
2661	488958.8	2855799	359.7735	2661	488958.8	2855799	362.4611	2.6876

2662	489137.6	2855901	358.9378	2662	489137.6	2855901	361.6228	2.685
2663	489091.8	2855969	359.7171	2663	489091.8	2855969	362.3946	2.6775
2664	489097.5	2855961	359.7507	2664	489097.5	2855961	362.3563	2.6056
2665	489131.9	2855909	359.0945	2665	489131.9	2855909	361.8177	2.7232
2666	489102.9	2855953	359.5388	2666	489102.9	2855953	362.2459	2.7071
2667	489114.1	2855936	359.6656	2667	489114.1	2855936	362.4212	2.7556
2668	489125.2	2855920	359.2698	2668	489125.2	2855920	362.0452	2.7754
2669	489136.3	2855903	358.8756	2669	489136.3	2855903	361.6692	2.7936
2670	489236.7	2856095	359.426	2670	489236.7	2856095	362.1909	2.7649
2671	489176.7	2856116	359.4969	2671	489176.7	2856116	362.2275	2.7306
2672	489183.6	2856114	359.5458	2672	489183.6	2856114	362.3331	2.7873
2673	489228.7	2856098	359.4624	2673	489228.7	2856098	362.1935	2.7311
2674	489195.5	2856109	359.5704	2674	489195.5	2856109	362.0854	2.515
2675	489214.3	2856103	359.4959	2675	489214.3	2856103	362.1226	2.6267
2676	489233.1	2856096	359.6331	2676	489233.1	2856096	362.192	2.5589
2677	489329.5	2856252	359.4239	2677	489329.5	2856252	362.0166	2.5927
2678	489285.9	2856297	358.9551	2678	489285.9	2856297	361.7762	2.8211
2679	489290.5	2856292	359.0195	2679	489290.5	2856292	361.8276	2.8081
2680	489323.3	2856259	359.3955	2680	489323.3	2856259	361.9943	2.5988
2681	489299.9	2856283	359.1975	2681	489299.9	2856283	361.9255	2.728
2682	489313.8	2856268	359.1566	2682	489313.8	2856268	361.9602	2.8036
2683	489327.8	2856254	359.1557	2683	489327.8	2856254	362.0103	2.8546
2684	489491.3	2856324	358.7553	2684	489491.3	2856324	361.4962	2.7409
2685	489475	2856383	357.776	2685	489475	2856383	360.4477	2.6717
2686	489477	2856376	358.1042	2686	489477	2856376	360.7613	2.6571
2687	489489.4	2856331	359.0174	2687	489489.4	2856331	361.4598	2.4424
2688	489480.3	2856364	358.1763	2688	489480.3	2856364	361.0166	2.8403
2689	489485.6	2856345	358.7406	2689	489485.6	2856345	361.4004	2.6598
2690	489490.9	2856326	358.8933	2690	489490.9	2856326	361.4837	2.5904
2691	489680.4	2856338	358.83	2691	489680.4	2856338	361.6008	2.7708
2692	489680.6	2856412	357.6381	2692	489680.6	2856412	360.4341	2.796
2693	489680.6	2856403	357.5825	2693	489680.6	2856403	360.4358	2.8533
2694	489680.4	2856351	358.6985	2694	489680.4	2856351	361.3662	2.6677
2695	489680.6	2856392	357.8282	2695	489680.6	2856392	360.5829	2.7547
2696	489680.5	2856372	358.1457	2696	489680.5	2856372	361.0222	2.8765
2697	489680.4	2856352	358.6713	2697	489680.4	2856352	361.3576	2.6863
2698	489853.4	2856296	359.2425	2698	489853.4	2856296	361.9296	2.6871
2699	489893.1	2856377	359.5154	2699	489893.1	2856377	362.0412	2.5258
2700	489888.5	2856368	359.3831	2700	489888.5	2856368	361.9741	2.591
2701	489859.3	2856308	359.1702	2701	489859.3	2856308	361.8032	2.633
2702	489884.3	2856359	358.8844	2702	489884.3	2856359	361.766	2.8816

2703	489875.5	2856341	358.6914	2703	489875.5	2856341	361.269	2.5776
2704	489866.7	2856323	359.0711	2704	489866.7	2856323	361.5627	2.4916
2705	489857.9	2856305	359.2525	2705	489857.9	2856305	361.8326	2.5801
2706	490034.6	2856199	359.7378	2706	490034.6	2856199	362.3518	2.614
2707	490068.6	2856298	358.8589	2707	490068.6	2856298	361.5039	2.645
2708	490064.2	2856286	359.0844	2708	490064.2	2856286	361.7815	2.6971
2709	490038.8	2856211	359.8406	2709	490038.8	2856211	362.4558	2.6152
2710	490062.1	2856280	359.5289	2710	490062.1	2856280	361.9133	2.3844
2711	490055.7	2856261	359.6528	2711	490055.7	2856261	362.1931	2.5403
2712	490049.2	2856242	359.4806	2712	490049.2	2856242	362.3323	2.8517
2713	490042.7	2856223	359.9725	2713	490042.7	2856223	362.4714	2.4989
2714	490036.2	2856204	359.8022	2714	490036.2	2856204	362.3866	2.5844
2715	490243	2856154	359.6001	2715	490243	2856154	362.0154	2.4153
2716	490248.4	2856256	357.9589	2716	490248.4	2856256	360.3224	2.3635
2717	490247.7	2856243	358.0856	2717	490247.7	2856243	360.4652	2.3796
2718	490243.6	2856167	359.2582	2718	490243.6	2856167	362.0088	2.7506
2719	490247.3	2856237	357.8162	2719	490247.3	2856237	360.59	2.7738
2720	490246.3	2856217	358.3307	2720	490246.3	2856217	360.957	2.6263
2721	490245.2	2856197	358.7879	2721	490245.2	2856197	361.324	2.5361
2722	490244.2	2856177	358.8153	2722	490244.2	2856177	361.645	2.8297
2723	490243.1	2856157	359.4434	2723	490243.1	2856157	362.0141	2.5707
2724	490446.6	2856152	358.8947	2724	490446.6	2856152	361.5625	2.6678
2725	490444.1	2856257	357.2542	2725	490444.1	2856257	359.793	2.5388
2726	490444.4	2856242	357.093	2726	490444.4	2856242	359.6747	2.5817
2727	490446.3	2856164	359.1744	2727	490446.3	2856164	361.5582	2.3838
2728	490444.5	2856237	357.1118	2728	490444.5	2856237	359.6341	2.5223
2729	490445	2856217	357.5192	2729	490445	2856217	360.1894	2.6702
2730	490445.5	2856197	358.7112	2730	490445.5	2856197	361.3673	2.6561
2731	490446	2856177	359.1357	2731	490446	2856177	361.5537	2.418
2732	490446.5	2856157	358.6774	2732	490446.5	2856157	361.5609	2.8835
2733	490654	2856248	356.7733	2733	490654	2856248	359.4473	2.674
2734	490594.5	2856316	356.6438	2734	490594.5	2856316	359.1983	2.5545
2735	490604.2	2856305	356.4816	2735	490604.2	2856305	359.2467	2.7651
2736	490647.7	2856255	356.8305	2736	490647.7	2856255	359.5275	2.697
2737	490607.7	2856301	356.766	2737	490607.7	2856301	359.3332	2.5672
2738	490620.9	2856286	357.2888	2738	490620.9	2856286	359.8441	2.5553
2739	490634.1	2856271	357.0205	2739	490634.1	2856271	359.7021	2.6816
2740	490647.3	2856256	356.89	2740	490647.3	2856256	359.5336	2.6436
2741	490820.9	2856330	357.5986	2741	490820.9	2856330	360.0055	2.4069
2742	490788.5	2856408	356.2227	2742	490788.5	2856408	359.1464	2.9237
2743	490792.3	2856399	356.1405	2743	490792.3	2856399	359.0396	2.8991

2744	490816.8	2856340	356.8168	2744	490816.8	2856340	359.2765	2.4597
2745	490796.2	2856390	356.3281	2745	490796.2	2856390	358.9292	2.6011
2746	490803.8	2856371	355.9974	2746	490803.8	2856371	358.712	2.7146
2747	490811.5	2856353	355.5298	2747	490811.5	2856353	358.3008	2.771
2748	490819.1	2856334	356.946	2748	490819.1	2856334	359.7091	2.7631
2749	491009	2856363	355.9716	2749	491009	2856363	358.8724	2.9008
2750	490992.5	2856450	356.0181	2750	490992.5	2856450	358.8069	2.7888
2751	490994.5	2856440	356.3202	2751	490994.5	2856440	358.7866	2.4664
2752	491006.9	2856374	355.5277	2752	491006.9	2856374	358.3326	2.8049
2753	490996.2	2856431	356.0734	2753	490996.2	2856431	358.7453	2.6719
2754	490999.9	2856411	355.6389	2754	490999.9	2856411	358.281	2.6421
2755	491003.6	2856392	355.2383	2755	491003.6	2856392	357.8242	2.5859
2756	491007.4	2856372	355.6402	2756	491007.4	2856372	358.4409	2.8007
2757	491193.1	2856393	355.5397	2757	491193.1	2856393	358.2113	2.6716
2758	491202.3	2856462	357.1017	2758	491202.3	2856462	359.8423	2.7406
2759	491201.2	2856453	356.9959	2759	491201.2	2856453	359.8233	2.8274
2760	491194.2	2856402	355.4703	2760	491194.2	2856402	358.0759	2.6056
2761	491199.7	2856442	356.1651	2761	491199.7	2856442	358.7805	2.6154
2762	491197	2856422	355.1512	2762	491197	2856422	357.7538	2.6026
2763	491194.3	2856403	355.6598	2763	491194.3	2856403	358.0657	2.4059
2764	491391.2	2856366	356.2128	2764	491391.2	2856366	358.9097	2.6969
2765	491400.6	2856435	356.0154	2765	491400.6	2856435	358.8444	2.829
2766	491399.4	2856427	355.9711	2766	491399.4	2856427	358.8254	2.8543
2767	491392.4	2856375	356.135	2767	491392.4	2856375	358.8162	2.6812
2768	491397.9	2856415	356.1445	2768	491397.9	2856415	358.8006	2.6561
2769	491395.2	2856396	356.1232	2769	491395.2	2856396	358.7568	2.6336
2770	491392.5	2856376	356.1747	2770	491392.5	2856376	358.7999	2.6252
2771	491586.3	2856328	356.1088	2771	491586.3	2856328	358.8951	2.7863
2772	491601.5	2856418	355.1416	2772	491601.5	2856418	357.8594	2.7178
2773	491599.2	2856404	355.3007	2773	491599.2	2856404	357.8327	2.532
2774	491587.9	2856337	356.3436	2774	491587.9	2856337	358.8556	2.512
2775	491598.2	2856398	355.0419	2775	491598.2	2856398	357.8194	2.7775
2776	491594.8	2856378	355.1909	2776	491594.8	2856378	358.0244	2.8335
2777	491591.5	2856359	355.8224	2777	491591.5	2856359	358.423	2.6006
2778	491588.2	2856339	356.2988	2778	491588.2	2856339	358.8215	2.5227
2779	491788.5	2856295	355.8184	2779	491788.5	2856295	358.5599	2.7415
2780	491795.6	2856405	354.4901	2780	491795.6	2856405	357.2434	2.7533
2781	491794.8	2856392	354.7889	2781	491794.8	2856392	357.6107	2.8218
2782	491789.5	2856311	355.8553	2782	491789.5	2856311	358.5529	2.6976
2783	491794.4	2856385	354.8979	2783	491794.4	2856385	357.5113	2.6134
2784	491793.1	2856365	355.2363	2784	491793.1	2856365	357.7902	2.5539

2785	491791.8	2856345	355.7043	2785	491791.8	2856345	358.2628	2.5585
2786	491790.5	2856325	355.9923	2786	491790.5	2856325	358.5465	2.5542
2787	491789.2	2856305	355.978	2787	491789.2	2856305	358.5552	2.5772
2788	491996.7	2856334	355.9768	2788	491996.7	2856334	358.3639	2.3871
2789	491978.3	2856393	355.9863	2789	491978.3	2856393	358.7152	2.7289
2790	491982.7	2856379	356.3155	2790	491982.7	2856379	358.8644	2.5489
2791	491994.5	2856341	355.7254	2791	491994.5	2856341	358.4853	2.7599
2792	491984.3	2856374	356.2377	2792	491984.3	2856374	358.8398	2.6021
2793	491990.2	2856355	356.0881	2793	491990.2	2856355	358.7315	2.6434
2794	491996.2	2856336	355.7878	2794	491996.2	2856336	358.3924	2.6046
2795	492192.6	2856384	356.4158	2795	492192.6	2856384	358.974	2.5582
2796	492163.5	2856448	356.1754	2796	492163.5	2856448	358.5685	2.3931
2797	492167.5	2856439	355.9456	2797	492167.5	2856439	358.6884	2.7428
2798	492189.3	2856391	356.2736	2798	492189.3	2856391	358.9382	2.6646
2799	492171.9	2856429	355.9961	2799	492171.9	2856429	358.4482	2.4521
2800	492180.2	2856411	355.774	2800	492180.2	2856411	358.203	2.429
2801	492188.6	2856393	356.1491	2801	492188.6	2856393	358.9303	2.7812
2802	492376	2856465	354.1169	2802	492376	2856465	356.754	2.6371
2803	492346.9	2856526	355.6646	2803	492346.9	2856526	358.1998	2.5352
2804	492350.6	2856518	355.6891	2804	492350.6	2856518	358.167	2.4779
2805	492372.6	2856472	353.9385	2805	492372.6	2856472	356.6543	2.7158
2806	492355.5	2856508	355.5867	2806	492355.5	2856508	358.1235	2.5368
2807	492364.1	2856490	354.918	2807	492364.1	2856490	357.6144	2.6964
2808	492372.7	2856472	353.9229	2808	492372.7	2856472	356.6459	2.723
2809	492541	2856541	354.5331	2809	492541	2856541	357.1247	2.5916
2810	492545.6	2856594	354.4808	2810	492545.6	2856594	357.168	2.6872
2811	492545.2	2856589	354.5294	2811	492545.2	2856589	357.1508	2.6214
2812	492541.8	2856551	354.6955	2812	492541.8	2856551	357.1513	2.4558
2813	492543.9	2856574	354.738	2813	492543.9	2856574	357.1006	2.3626
2814	492542.1	2856554	354.75	2814	492542.1	2856554	357.1592	2.4092
2815	492737	2856521	354.5429	2815	492737	2856521	357.3429	2.8
2816	492746.9	2856576	354.0021	2816	492746.9	2856576	356.7483	2.7462
2817	492746	2856571	354.2845	2817	492746	2856571	356.8386	2.5541
2818	492738.3	2856528	354.8594	2818	492738.3	2856528	357.3079	2.4485
2819	492743.4	2856557	354.3357	2819	492743.4	2856557	357.1037	2.768
2820	492739.9	2856537	354.4726	2820	492739.9	2856537	357.2648	2.7922
2821	492944.5	2856537	355.7009	2821	492944.5	2856537	358.3298	2.6289
2822	492931.5	2856604	354.6699	2822	492931.5	2856604	357.0454	2.3755
2823	492932.9	2856597	354.688	2823	492932.9	2856597	357.1446	2.4566
2824	492942.5	2856547	355.873	2824	492942.5	2856547	358.5483	2.6753
2825	492935.3	2856584	354.6976	2825	492935.3	2856584	357.3904	2.6928

2826	492939.1	2856565	355.3174	2826	492939.1	2856565	357.9436	2.6262
2827	492942.9	2856545	355.9785	2827	492942.9	2856545	358.5362	2.5577
2828	493130.1	2856559	355.3627	2828	493130.1	2856559	358.011	2.6483
2829	493137.6	2856628	356.0953	2829	493137.6	2856628	358.6404	2.5451
2830	493136.8	2856621	355.8247	2830	493136.8	2856621	358.5692	2.7445
2831	493131.1	2856568	355.0382	2831	493131.1	2856568	357.8685	2.8303
2832	493135.4	2856608	355.6423	2832	493135.4	2856608	358.2388	2.5965
2833	493133.2	2856588	355.2416	2833	493133.2	2856588	357.7557	2.5141
2834	493131	2856568	355.2251	2834	493131	2856568	357.8731	2.648
2835	493316	2856523	355.6207	2835	493316	2856523	358.107	2.4863
2836	493340.7	2856581	356.2616	2836	493340.7	2856581	358.726	2.4644
2837	493338.1	2856575	356.1996	2837	493338.1	2856575	358.7362	2.5366
2838	493319.2	2856530	355.3402	2838	493319.2	2856530	357.9819	2.6417
2839	493332.9	2856563	356.2344	2839	493332.9	2856563	358.6212	2.3868
2840	493325.1	2856544	355.4094	2840	493325.1	2856544	358.1752	2.7658
2841	493317.3	2856526	355.2944	2841	493317.3	2856526	358.0568	2.7624
2842	493511.9	2856465	354.6191	2842	493511.9	2856465	357.4443	2.8252
2843	493534.5	2856570	355.596	2843	493534.5	2856570	358.0382	2.4422
2844	493532.2	2856559	355.4435	2844	493532.2	2856559	358.0531	2.6096
2845	493515	2856479	354.9627	2845	493515	2856479	357.4259	2.4632
2846	493530.3	2856550	355.6227	2846	493530.3	2856550	358.0767	2.454
2847	493526.1	2856531	355.7666	2847	493526.1	2856531	358.1277	2.3611
2848	493521.9	2856511	355.2375	2848	493521.9	2856511	357.8063	2.5688
2849	493517.7	2856492	354.9933	2849	493517.7	2856492	357.3733	2.38
2850	493513.5	2856472	354.8675	2850	493513.5	2856472	357.4348	2.5673
2851	493721.7	2856480	354.8102	2851	493721.7	2856480	357.3905	2.5803
2852	493724.5	2856563	354.6997	2852	493724.5	2856563	357.3628	2.6631
2853	493724.2	2856552	354.9546	2853	493724.2	2856552	357.3668	2.4122
2854	493721.9	2856487	354.4082	2854	493721.9	2856487	357.1716	2.7634
2855	493723.8	2856543	354.9749	2855	493723.8	2856543	357.3841	2.4092
2856	493723.2	2856523	354.9593	2856	493723.2	2856523	357.4231	2.4638
2857	493722.5	2856503	354.0249	2857	493722.5	2856503	356.6385	2.6136
2858	493721.8	2856483	354.6929	2858	493721.8	2856483	357.2951	2.6022
2859	493911.6	2856484	353.4076	2859	493911.6	2856484	355.8058	2.3982
2860	493930.7	2856553	354.8445	2860	493930.7	2856553	357.3026	2.4581
2861	493928.2	2856544	354.6451	2861	493928.2	2856544	357.2165	2.5714
2862	493914	2856492	353.3353	2862	493914	2856492	355.9337	2.5984
2863	493925.4	2856534	354.4224	2863	493925.4	2856534	356.9836	2.5612
2864	493920.1	2856514	353.7371	2864	493920.1	2856514	356.4961	2.759
2865	493914.8	2856495	353.6463	2865	493914.8	2856495	356.0085	2.3622
2866	494102.9	2856414	352.9605	2866	494102.9	2856414	355.5978	2.6373

2867	494124.1	2856510	352.7425	2867	494124.1	2856510	355.3553	2.6128
2868	494122.1	2856501	352.9399	2868	494122.1	2856501	355.3541	2.4142
2869	494106.6	2856431	353.0929	2869	494106.6	2856431	355.4985	2.4056
2870	494119.8	2856491	352.7449	2870	494119.8	2856491	355.3528	2.6079
2871	494115.5	2856471	352.6322	2871	494115.5	2856471	355.3503	2.7181
2872	494111.2	2856452	352.6655	2872	494111.2	2856452	355.3745	2.709
2873	494106.9	2856432	352.79	2873	494106.9	2856432	355.4915	2.7015
2874	494250.2	2856345	353.192	2874	494250.2	2856345	355.8216	2.6296
2875	494340.5	2856435	352.022	2875	494340.5	2856435	354.5692	2.5472
2876	494327.9	2856423	351.8691	2876	494327.9	2856423	354.6002	2.7311
2877	494262.6	2856357	352.8407	2877	494262.6	2856357	355.4203	2.5796
2878	494326.4	2856421	352.0406	2878	494326.4	2856421	354.604	2.5634
2879	494312.3	2856407	352.2011	2879	494312.3	2856407	354.6387	2.4376
2880	494298.2	2856393	351.9872	2880	494298.2	2856393	354.6735	2.6863
2881	494284.1	2856379	352.1852	2881	494284.1	2856379	354.797	2.6118
2882	494270	2856365	352.3715	2882	494270	2856365	355.1334	2.7619
2883	494255.9	2856350	352.8661	2883	494255.9	2856350	355.682	2.8159
2884	494408.1	2856207	354.2726	2884	494408.1	2856207	356.9182	2.6456
2885	494493.5	2856322	351.5645	2885	494493.5	2856322	354.1314	2.5669
2886	494483	2856308	351.6727	2886	494483	2856308	354.3642	2.6915
2887	494420	2856223	353.6911	2887	494420	2856223	356.4358	2.7447
2888	494481.6	2856306	351.5999	2888	494481.6	2856306	354.4235	2.8236
2889	494469.7	2856290	352.4311	2889	494469.7	2856290	354.9582	2.5271
2890	494457.8	2856274	352.8007	2890	494457.8	2856274	355.4966	2.6959
2891	494445.9	2856258	353.3525	2891	494445.9	2856258	355.9127	2.5602
2892	494434	2856242	353.1673	2892	494434	2856242	355.9095	2.7422
2893	494422.1	2856226	353.4506	2893	494422.1	2856226	356.31	2.8594
2894	494410.2	2856210	354.0753	2894	494410.2	2856210	356.8442	2.7689
2895	494580.1	2856064	355.7078	2895	494580.1	2856064	358.3769	2.6691
2896	494625.3	2856224	352.6221	2896	494625.3	2856224	355.3624	2.7403
2897	494620.2	2856206	352.747	2897	494620.2	2856206	355.4022	2.6552
2898	494585	2856081	355.1425	2898	494585	2856081	358.0297	2.8872
2899	494619.9	2856205	352.9295	2899	494619.9	2856205	355.4045	2.475
2900	494614.5	2856186	352.648	2900	494614.5	2856186	355.4466	2.7986
2901	494609.1	2856167	353.0747	2901	494609.1	2856167	355.8485	2.7738
2902	494603.7	2856147	353.6205	2902	494603.7	2856147	356.419	2.7985
2903	494598.3	2856128	354.3133	2903	494598.3	2856128	357.0857	2.7724
2904	494592.9	2856109	355.0209	2904	494592.9	2856109	357.6856	2.6647
2905	494587.5	2856090	355.0709	2905	494587.5	2856090	357.8578	2.7869
2906	494582.1	2856070	355.4251	2906	494582.1	2856070	358.2402	2.8151
2907	494805.3	2856035	355.7414	2907	494805.3	2856035	358.3325	2.5911

2908	494783.6	2856202	351.9756	2908	494783.6	2856202	354.5974	2.6218
2909	494786.2	2856182	352.0773	2909	494786.2	2856182	354.6005	2.5232
2910	494802.5	2856056	354.9286	2910	494802.5	2856056	357.7027	2.7741
2911	494786.2	2856182	351.8547	2911	494786.2	2856182	354.6005	2.7458
2912	494788.7	2856162	352.0778	2912	494788.7	2856162	355.0064	2.9286
2913	494791.3	2856142	352.7255	2913	494791.3	2856142	355.4155	2.69
2914	494793.9	2856123	353.0335	2914	494793.9	2856123	355.8333	2.7998
2915	494796.5	2856103	353.6833	2915	494796.5	2856103	356.3664	2.6831
2916	494799.1	2856083	354.2039	2916	494799.1	2856083	356.9177	2.7138
2917	494801.6	2856063	354.9361	2917	494801.6	2856063	357.5001	2.564
2918	494804.2	2856043	355.5884	2918	494804.2	2856043	358.0825	2.4941
2919	494999.5	2856092	353.0831	2919	494999.5	2856092	355.7305	2.6474
2920	494981.9	2856228	352.1989	2920	494981.9	2856228	354.7219	2.523
2921	494984.5	2856208	351.6586	2921	494984.5	2856208	354.2037	2.5451
2922	494997.9	2856105	352.8388	2922	494997.9	2856105	355.7204	2.8816
2923	494984.5	2856208	351.7091	2923	494984.5	2856208	354.2055	2.4964
2924	494987.1	2856188	351.0215	2924	494987.1	2856188	353.6891	2.6676
2925	494989.6	2856168	351.1572	2925	494989.6	2856168	353.8853	2.7281
2926	494992.2	2856148	351.7777	2926	494992.2	2856148	354.388	2.6103
2927	494994.8	2856129	352.3205	2927	494994.8	2856129	354.9109	2.5904
2928	494997.4	2856109	352.9967	2928	494997.4	2856109	355.5556	2.5589
2929	495189.7	2856128	352.7518	2929	495189.7	2856128	355.5286	2.7768
2930	495182.4	2856245	351.3818	2930	495182.4	2856245	354.0105	2.6287
2931	495183.2	2856232	351.5007	2931	495183.2	2856232	353.9558	2.4551
2932	495188.7	2856143	352.7082	2932	495188.7	2856143	355.5349	2.8267
2933	495183.7	2856225	351.5238	2933	495183.7	2856225	353.9267	2.4029
2934	495184.9	2856205	350.7261	2934	495184.9	2856205	353.2325	2.5064
2935	495186.1	2856185	351.1342	2935	495186.1	2856185	353.6828	2.5486
2936	495187.4	2856165	351.9518	2936	495187.4	2856165	354.5632	2.6114
2937	495188.6	2856145	352.957	2937	495188.6	2856145	355.4436	2.4866
2938	495384.3	2856126	351.683	2938	495384.3	2856126	354.2885	2.6055
2939	495387	2856240	350.5231	2939	495387	2856240	353.3062	2.7831
2940	495386.7	2856227	350.4956	2940	495386.7	2856227	353.2985	2.8029
2941	495384.9	2856149	352.4196	2941	495384.9	2856149	354.8529	2.4333
2942	495386.5	2856220	350.6028	2942	495386.5	2856220	353.2944	2.6916
2943	495386	2856200	351.0286	2943	495386	2856200	353.6056	2.577
2944	495385.6	2856180	352.1147	2944	495385.6	2856180	354.8245	2.7098
2945	495385.1	2856160	352.8519	2945	495385.1	2856160	355.3515	2.4996
2946	495384.7	2856140	351.7805	2946	495384.7	2856140	354.4153	2.6348
2947	495561.7	2856083	351.396	2947	495561.7	2856083	353.9293	2.5333
2948	495599.9	2856236	350.8877	2948	495599.9	2856236	353.6702	2.7825

2949	495596.7	2856223	351.0518	2949	495596.7	2856223	353.6574	2.6056
2950	495567.2	2856105	351.1661	2950	495567.2	2856105	353.8329	2.6668
2951	495595.1	2856216	350.9757	2951	495595.1	2856216	353.6511	2.6754
2952	495590.2	2856197	351.2628	2952	495590.2	2856197	353.8523	2.5895
2953	495585.4	2856177	350.7787	2953	495585.4	2856177	353.5774	2.7987
2954	495580.5	2856158	350.6023	2954	495580.5	2856158	353.4608	2.8585
2955	495575.7	2856139	350.5851	2955	495575.7	2856139	353.3442	2.7591
2956	495570.8	2856119	350.8036	2956	495570.8	2856119	353.596	2.7924
2957	495565.9	2856100	351.0788	2957	495565.9	2856100	353.9035	2.8247
2958	495783.9	2856096	350.2825	2958	495783.9	2856096	352.9232	2.6407
2959	495775.7	2856239	349.6664	2959	495775.7	2856239	352.4152	2.7488
2960	495776.5	2856226	349.7871	2960	495776.5	2856226	352.4168	2.6297
2961	495782.9	2856114	350.0366	2961	495782.9	2856114	352.9345	2.8979
2962	495776.9	2856219	349.6613	2962	495776.9	2856219	352.402	2.7407
2963	495778	2856199	349.7352	2963	495778	2856199	352.6435	2.9083
2964	495779.2	2856179	349.668	2964	495779.2	2856179	352.5261	2.8581
2965	495780.3	2856159	350.063	2965	495780.3	2856159	352.7931	2.7301
2966	495781.5	2856139	350.2697	2966	495781.5	2856139	353.0601	2.7904
2967	495782.6	2856119	350.0863	2967	495782.6	2856119	353.0193	2.933
2968	495783.8	2856099	350.3729	2968	495783.8	2856099	352.9227	2.5498
2969	495977.1	2856164	350.9571	2969	495977.1	2856164	353.8007	2.8436
2970	495963.3	2856264	350.4687	2970	495963.3	2856264	353.0458	2.5771
2971	495965	2856251	350.159	2971	495965	2856251	353.0508	2.8918
2972	495975.4	2856176	350.9328	2972	495975.4	2856176	353.763	2.8302
2973	495966	2856245	350.1382	2973	495966	2856245	353.0535	2.9153
2974	495968.7	2856225	350.2775	2974	495968.7	2856225	352.9994	2.7219
2975	495971.4	2856205	350.8782	2975	495971.4	2856205	353.483	2.6048
2976	495974.1	2856185	351.0677	2976	495974.1	2856185	353.7819	2.7142
2977	495976.8	2856165	351.0397	2977	495976.8	2856165	353.823	2.7833
2978	496176	2856185	351.3234	2978	496176	2856185	354.0734	2.75
2979	496161.4	2856292	351.3468	2979	496161.4	2856292	354.0174	2.6706
2980	496163.2	2856279	351.3937	2980	496163.2	2856279	354.0191	2.6254
2981	496174.1	2856199	351.4108	2981	496174.1	2856199	354.1579	2.7471
2982	496164.1	2856272	351.3395	2982	496164.1	2856272	354.0201	2.6806
2983	496166.8	2856252	351.21	2983	496166.8	2856252	354.0735	2.8635
2984	496169.6	2856232	351.3898	2984	496169.6	2856232	354.0342	2.6444
2985	496172.3	2856212	351.2609	2985	496172.3	2856212	353.995	2.7341
2986	496175	2856193	351.4614	2986	496175	2856193	354.1953	2.7339
2987	496373	2856205	351.7436	2987	496373	2856205	354.3205	2.5769
2988	496361.7	2856318	351.4909	2988	496361.7	2856318	354.1042	2.6133
2989	496363	2856305	351.3494	2989	496363	2856305	354.1234	2.774

2990	496371.5	2856219	351.9776	2990	496371.5	2856219	354.5521	2.5745
2991	496363.7	2856298	351.4992	2991	496363.7	2856298	354.133	2.6338
2992	496365.7	2856278	351.7031	2992	496365.7	2856278	354.1983	2.4952
2993	496367.6	2856258	351.5334	2993	496367.6	2856258	354.2653	2.7319
2994	496369.6	2856238	351.7687	2994	496369.6	2856238	354.42	2.6513
2995	496371.6	2856218	351.7639	2995	496371.6	2856218	354.5429	2.779
2996	496562.4	2856212	351.6719	2996	496562.4	2856212	354.3711	2.6992
2997	496570.4	2856299	352.1682	2997	496570.4	2856299	354.7416	2.5734
2998	496569.5	2856289	352.2285	2998	496569.5	2856289	354.7488	2.5203
2999	496563.6	2856225	351.7396	2999	496563.6	2856225	354.5763	2.8367
3000	496568.5	2856279	352.283	3000	496568.5	2856279	354.7571	2.4741
3001	496566.7	2856259	351.9704	3001	496566.7	2856259	354.7727	2.8023
3002	496564.9	2856239	352.235	3002	496564.9	2856239	354.8073	2.5723
3003	496563	2856219	351.8166	3003	496563	2856219	354.4856	2.669
3004	496762.4	2856203	351.5343	3004	496762.4	2856203	354.159	2.6247
3005	496769.5	2856280	352.047	3005	496769.5	2856280	354.6647	2.6177
3006	496768.7	2856271	351.863	3006	496768.7	2856271	354.5481	2.6851
3007	496763.5	2856215	351.0288	3007	496763.5	2856215	353.6562	2.6274
3008	496767.7	2856260	351.3797	3008	496767.7	2856260	354.0173	2.6376
3009	496765.9	2856241	350.5344	3009	496765.9	2856241	353.1852	2.6508
3010	496764	2856221	350.8336	3010	496764	2856221	353.3941	2.5605
3011	496951.3	2856159	350.5733	3011	496951.3	2856159	353.3769	2.8036
3012	496972.9	2856251	349.4223	3012	496972.9	2856251	352.0645	2.6422
3013	496970.2	2856240	349.3009	3013	496970.2	2856240	352.0788	2.7779
3014	496954	2856170	350.6181	3014	496954	2856170	353.3438	2.7257
3015	496968.3	2856232	349.3553	3015	496968.3	2856232	352.0887	2.7334
3016	496963.8	2856212	349.4764	3016	496963.8	2856212	352.1129	2.6365
3017	496959.2	2856193	349.8854	3017	496959.2	2856193	352.4035	2.5181
3018	496954.7	2856173	350.5642	3018	496954.7	2856173	353.2006	2.6364
3019	497146	2856111	350.0245	3019	497146	2856111	352.6938	2.6693
3020	497167.6	2856208	350.2429	3020	497167.6	2856208	352.9787	2.7358
3021	497165	2856197	350.3766	3021	497165	2856197	352.9937	2.6171
3022	497149.2	2856125	349.9978	3022	497149.2	2856125	352.5659	2.5681
3023	497163.2	2856189	350.2637	3023	497163.2	2856189	353.0041	2.7404
3024	497158.9	2856169	350.5169	3024	497158.9	2856169	353.2066	2.6897
3025	497154.6	2856150	350.2185	3025	497154.6	2856150	353.1305	2.912
3026	497150.3	2856130	349.9851	3026	497150.3	2856130	352.4946	2.5095
3027	497146	2856111	350.0341	3027	497146	2856111	352.6938	2.6597
3028	497336.2	2856059	349.7064	3028	497336.2	2856059	352.3745	2.6681
3029	497365.4	2856165	350.8007	3029	497365.4	2856165	353.456	2.6553
3030	497362.2	2856153	350.6817	3030	497362.2	2856153	353.4556	2.7739

3031	497340	2856073	349.8031	3031	497340	2856073	352.4707	2.6676
3032	497360.1	2856146	350.8717	3032	497360.1	2856146	353.4554	2.5837
3033	497354.8	2856126	349.9659	3033	497354.8	2856126	352.6629	2.697
3034	497349.4	2856107	349.6783	3034	497349.4	2856107	352.3181	2.6398
3035	497344.1	2856088	349.4939	3035	497344.1	2856088	352.3114	2.8175
3036	497338.8	2856068	349.9031	3036	497338.8	2856068	352.4181	2.515
3037	497534.5	2856006	349.3535	3037	497534.5	2856006	352.101	2.7475
3038	497557.4	2856132	350.1592	3038	497557.4	2856132	352.8052	2.646
3039	497554.2	2856115	350.1413	3039	497554.2	2856115	352.697	2.5557
3040	497537.2	2856021	349.5399	3040	497537.2	2856021	352.161	2.6211
3041	497553.9	2856113	349.971	3041	497553.9	2856113	352.6737	2.7027
3042	497550.3	2856093	350.0114	3042	497550.3	2856093	352.6351	2.6237
3043	497546.7	2856073	349.8923	3043	497546.7	2856073	352.6205	2.7282
3044	497543.2	2856054	349.8137	3044	497543.2	2856054	352.5036	2.6899
3045	497539.6	2856034	349.5199	3045	497539.6	2856034	352.2949	2.775
3046	497536.1	2856014	349.4667	3046	497536.1	2856014	352.1325	2.6658
3047	497738.8	2855974	349.2484	3047	497738.8	2855974	351.8301	2.5817
3048	497749.6	2856118	349.5538	3048	497749.6	2856118	352.2043	2.6505
3049	497748.3	2856100	349.3594	3049	497748.3	2856100	351.9913	2.6319
3050	497740.2	2855992	349.0744	3050	497740.2	2855992	351.674	2.5996
3051	497748.1	2856098	349.3263	3051	497748.1	2856098	351.9659	2.6396
3052	497746.6	2856078	349.2093	3052	497746.6	2856078	351.8348	2.6255
3053	497745.1	2856058	349.1539	3053	497745.1	2856058	351.8116	2.6577
3054	497743.6	2856038	349.194	3054	497743.6	2856038	351.7885	2.5945
3055	497742.1	2856018	349.0069	3055	497742.1	2856018	351.75	2.7431
3056	497740.6	2855998	349.029	3056	497740.6	2855998	351.6918	2.6628
3057	497739.1	2855978	349.2187	3057	497739.1	2855978	351.7907	2.572
3058	497969.8	2855960	348.3285	3058	497969.8	2855960	351.1451	2.8166
3059	497915.1	2856126	349.1358	3059	497915.1	2856126	351.7926	2.6568
3060	497921.8	2856106	348.8466	3060	497921.8	2856106	351.4964	2.6498
3061	497962.6	2855982	348.5878	3061	497962.6	2855982	351.2107	2.6229
3062	497921.4	2856107	348.868	3062	497921.4	2856107	351.4978	2.6298
3063	497927.6	2856088	348.8303	3063	497927.6	2856088	351.4675	2.6372
3064	497933.9	2856069	348.7475	3064	497933.9	2856069	351.4254	2.6779
3065	497940.1	2856050	348.6778	3065	497940.1	2856050	351.3833	2.7055
3066	497946.3	2856031	348.6708	3066	497946.3	2856031	351.3271	2.6563
3067	497952.6	2856012	348.4481	3067	497952.6	2856012	351.0849	2.6368
3068	497958.8	2855993	348.1826	3068	497958.8	2855993	351.0177	2.8351
3069	497965.1	2855974	348.5679	3069	497965.1	2855974	351.2366	2.6687
3070	498156.4	2856001	348.4404	3070	498156.4	2856001	351.112	2.6716
3071	498119.3	2856171	349.1034	3071	498119.3	2856171	351.7605	2.6571

3072	498123.8	2856150	348.5973	3072	498123.8	2856150	351.2583	2.661
3073	498151.4	2856024	348.0772	3073	498151.4	2856024	350.7307	2.6535
3074	498123.5	2856151	348.7075	3074	498123.5	2856151	351.2891	2.5816
3075	498127.8	2856132	348.7356	3075	498127.8	2856132	351.4348	2.6992
3076	498132.1	2856112	348.7727	3076	498132.1	2856112	351.4558	2.6831
3077	498136.3	2856093	348.5126	3077	498136.3	2856093	351.2442	2.7316
3078	498140.6	2856073	348.2502	3078	498140.6	2856073	351.0256	2.7754
3079	498144.9	2856054	348.0196	3079	498144.9	2856054	350.7852	2.7656
3080	498149.1	2856034	347.7565	3080	498149.1	2856034	350.5547	2.7982
3081	498153.4	2856015	348.3	3081	498153.4	2856015	350.884	2.584
3082	498401.7	2856035	349.4434	3082	498401.7	2856035	352.1874	2.744
3083	498271.9	2856204	347.6498	3083	498271.9	2856204	350.4325	2.7827
3084	498287.6	2856184	348.5339	3084	498287.6	2856184	350.9267	2.3928
3085	498382.2	2856060	348.3264	3085	498382.2	2856060	350.877	2.5506
3086	498284.1	2856188	348.1792	3086	498284.1	2856188	350.8159	2.6367
3087	498296.2	2856172	348.5125	3087	498296.2	2856172	351.1732	2.6607
3088	498308.4	2856157	348.2803	3088	498308.4	2856157	350.9555	2.6752
3089	498320.5	2856141	347.7886	3089	498320.5	2856141	350.6372	2.8486
3090	498332.7	2856125	347.458	3090	498332.7	2856125	350.1583	2.7003
3091	498344.8	2856109	347.2675	3091	498344.8	2856109	349.6794	2.4119
3092	498357	2856093	346.8788	3092	498357	2856093	349.6631	2.7843
3093	498369.2	2856077	347.1056	3093	498369.2	2856077	350.0078	2.9022
3094	498381.3	2856061	348.1454	3094	498381.3	2856061	350.8214	2.676
3095	498393.5	2856045	348.962	3095	498393.5	2856045	351.635	2.673
3096	494634.2	2844930	354.453	3096	494634.2	2844930	357.1686	2.7156
3097	494599.1	2844927	354.445	3097	494599.1	2844927	356.931	2.486
3098	494603.4	2844927	354.4672	3098	494603.4	2844927	357.0394	2.5722
3099	494629.8	2844930	354.1005	3099	494629.8	2844930	356.8527	2.7522
3100	494634.2	2844930	354.6323	3100	494634.2	2844930	357.1686	2.5363
3101	494599.1	2844927	354.4617	3101	494599.1	2844927	356.931	2.4693
3102	494619	2844929	353.103	3102	494619	2844929	356.8978	3.7948
3103	494623.2	2844728	354.3819	3103	494623.2	2844728	357.2757	2.8938
3104	494584	2844730	354.1141	3104	494584	2844730	356.7833	2.6692
3105	494588.6	2844730	354.2326	3105	494588.6	2844730	356.8712	2.6386
3106	494618.2	2844728	354.4432	3106	494618.2	2844728	357.3004	2.8572
3107	494603.9	2844729	354.4344	3107	494603.9	2844729	357.0683	2.6339
3108	494602.3	2844529	354.8983	3108	494602.3	2844529	357.5205	2.6222
3109	494574.6	2844530	354.7728	3109	494574.6	2844530	357.2999	2.5271
3110	494578.1	2844530	354.7971	3110	494578.1	2844530	357.3465	2.5494
3111	494598.7	2844529	355.0753	3111	494598.7	2844529	357.5518	2.4765
3112	494594.6	2844529	353.9296	3112	494594.6	2844529	357.5862	3.6566

3113	494511.5	2844343	354.7608	3113	494511.5	2844343	357.4278	2.667
3114	494482.2	2844367	355.4829	3114	494482.2	2844367	357.9205	2.4376
3115	494486.1	2844364	355.3832	3115	494486.1	2844364	357.8618	2.4786
3116	494508.7	2844345	354.8541	3116	494508.7	2844345	357.5642	2.7101
3117	494497.7	2844355	354.9997	3117	494497.7	2844355	357.6852	2.6855
3118	494383	2844190	354.6803	3118	494383	2844190	357.1857	2.5054
3119	494355.4	2844213	355.1747	3119	494355.4	2844213	357.5744	2.3997
3120	494358.7	2844210	354.9265	3120	494358.7	2844210	357.3916	2.4651
3121	494379.2	2844193	354.3807	3121	494379.2	2844193	356.9685	2.5878
3122	494370.9	2844200	354.3716	3122	494370.9	2844200	357.0568	2.6852
3123	494245.5	2844036	354.6205	3123	494245.5	2844036	357.2207	2.6002
3124	494225	2844073	354.0751	3124	494225	2844073	356.718	2.6429
3125	494227.6	2844068	353.9476	3125	494227.6	2844068	356.5065	2.5589
3126	494243.1	2844040	354.6789	3126	494243.1	2844040	357.2188	2.5399
3127	494244.2	2844038	354.7521	3127	494244.2	2844038	357.2197	2.4676
3128	494234.6	2844056	353.551	3128	494234.6	2844056	356.1544	2.6034
3129	494040.4	2844024	353.461	3129	494040.4	2844024	355.9333	2.4723
3130	494042.3	2844059	353.8388	3130	494042.3	2844059	356.3639	2.5251
3131	494042.1	2844055	353.5965	3131	494042.1	2844055	356.2731	2.6766
3132	494040.7	2844029	353.1154	3132	494040.7	2844029	355.8466	2.7312
3133	494041.2	2844039	353.335	3133	494041.2	2844039	355.9896	2.6546
3134	493854.7	2844014	353.9908	3134	493854.7	2844014	356.7393	2.7485
3135	493842.8	2844029	353.4504	3135	493842.8	2844029	356.1368	2.6864
3136	493844.2	2844027	353.5056	3136	493844.2	2844027	356.2223	2.7167
3137	493852.9	2844016	354.2104	3137	493852.9	2844016	356.6955	2.4851
3138	493743.8	2843854	355.4581	3138	493743.8	2843854	358.1389	2.6808
3139	493719.4	2843870	355.3347	3139	493719.4	2843870	357.8485	2.5138
3140	493722.3	2843868	355.209	3140	493722.3	2843868	357.8417	2.6327
3141	493739.8	2843857	355.5162	3141	493739.8	2843857	358.0266	2.5104
3142	493736.2	2843859	355.2406	3142	493736.2	2843859	357.9286	2.688
3143	493654.5	2843675	355.677	3143	493654.5	2843675	358.3495	2.6725
3144	493635.9	2843692	355.6336	3144	493635.9	2843692	358.1869	2.5533
3145	493638.5	2843690	355.4569	3145	493638.5	2843690	358.1625	2.7056
3146	493652.2	2843677	355.4906	3146	493652.2	2843677	358.2891	2.7985
3147	493650.6	2843679	355.7941	3147	493650.6	2843679	358.2458	2.4517
3148	493467.3	2843586	356.4987	3148	493467.3	2843586	359.1347	2.636
3149	493484.3	2843627	355.5181	3149	493484.3	2843627	358.1473	2.6292
3150	493482.4	2843622	355.4753	3150	493482.4	2843622	358.2541	2.7788
3151	493469.6	2843591	356.5519	3151	493469.6	2843591	359.0601	2.5082
3152	493468.9	2843590	356.3412	3152	493468.9	2843590	359.0819	2.7407
3153	493476.6	2843608	355.7468	3153	493476.6	2843608	358.5894	2.8426

3154	493343.7	2843746	356.5054	3154	493343.7	2843746	358.9417	2.4363
3155	493370.8	2843754	356.416	3155	493370.8	2843754	358.9065	2.4905
3156	493367.4	2843753	356.3161	3156	493367.4	2843753	358.9131	2.597
3157	493347.3	2843748	356.4721	3157	493347.3	2843748	358.9416	2.4695
3158	493351.6	2843749	356.3829	3158	493351.6	2843749	358.9415	2.5586
3159	493264.7	2843899	356.8741	3159	493264.7	2843899	359.7154	2.8413
3160	493274.5	2843934	356.899	3160	493274.5	2843934	359.7894	2.8904
3161	493273.3	2843929	357.2195	3161	493273.3	2843929	359.7698	2.5503
3162	493266	2843903	357.0239	3162	493266	2843903	359.7334	2.7095
3163	493269.1	2843914	357.0443	3163	493269.1	2843914	359.7694	2.7251
3164	493082.3	2843871	357.8162	3164	493082.3	2843871	360.3281	2.5119
3165	493074.9	2843901	356.2841	3165	493074.9	2843901	358.7927	2.5086
3166	493075.7	2843898	356.1328	3166	493075.7	2843898	358.8162	2.6834
3167	493080.8	2843877	357.7398	3167	493080.8	2843877	360.2236	2.4838
3168	493079.6	2843882	357.6065	3168	493079.6	2843882	360.1491	2.5426
3169	492921.9	2843767	356.9842	3169	492921.9	2843767	359.7801	2.7959
3170	492904.8	2843788	356.4467	3170	492904.8	2843788	359.0925	2.6458
3171	492907.2	2843785	356.5228	3171	492907.2	2843785	359.202	2.6792
3172	492919.8	2843770	357.1403	3172	492919.8	2843770	359.7442	2.6039
3173	492917.2	2843773	357.1879	3173	492917.2	2843773	359.7522	2.5643
3174	492811.6	2843614	355.3727	3174	492811.6	2843614	358.0132	2.6405
3175	492790.5	2843623	356.0001	3175	492790.5	2843623	358.6057	2.6056
3176	492792.9	2843622	355.6319	3176	492792.9	2843622	358.4785	2.8466
3177	492808.2	2843615	355.4931	3177	492808.2	2843615	357.9962	2.5031
3178	492809	2843615	355.4455	3178	492809	2843615	358.0001	2.5546
3179	492722.9	2843437	355.9843	3179	492722.9	2843437	358.7166	2.7323
3180	492691.9	2843448	356.6266	3180	492691.9	2843448	359.2922	2.6656
3181	492695.5	2843447	356.5428	3181	492695.5	2843447	359.2749	2.7321
3182	492718.9	2843439	356.2376	3182	492718.9	2843439	358.8393	2.6017
3183	492710.8	2843442	356.4709	3183	492710.8	2843442	359.0836	2.6127
3184	492568.8	2843308	356.3487	3184	492568.8	2843308	358.9083	2.5596
3185	492564.3	2843332	357.1182	3185	492564.3	2843332	359.6308	2.5126
3186	492564.9	2843329	356.9057	3186	492564.9	2843329	359.5404	2.6347
3187	492568.2	2843311	356.478	3187	492568.2	2843311	359.0018	2.5238
3188	492567.9	2843313	356.5775	3188	492567.9	2843313	359.0364	2.4589
3189	492369	2843281	359.2608	3189	492369	2843281	362.0075	2.7467
3190	492369.2	2843307	357.707	3190	492369.2	2843307	360.5287	2.8217
3191	492369.2	2843304	357.723	3191	492369.2	2843304	360.5293	2.8063
3192	492369.1	2843284	359.1595	3192	492369.1	2843284	361.7209	2.5614
3193	492369.1	2843287	358.7364	3193	492369.1	2843287	361.4272	2.6908
3194	492178.1	2843280	356.6542	3194	492178.1	2843280	359.2608	2.6066

3195	492160.9	2843304	356.4196	3195	492160.9	2843304	358.887	2.4674
3196	492163.5	2843301	356.5017	3196	492163.5	2843301	358.9139	2.4122
3197	492175.9	2843283	356.5619	3197	492175.9	2843283	359.2109	2.649
3198	492172.4	2843288	356.7018	3198	492172.4	2843288	359.1348	2.433
3199	492110.7	2843128	357.2989	3199	492110.7	2843128	359.9263	2.6274
3200	492072.3	2843127	356.9569	3200	492072.3	2843127	359.5045	2.5476
3201	492077.3	2843127	356.7939	3201	492077.3	2843127	359.4943	2.7004
3202	492105.9	2843128	357.4762	3202	492105.9	2843128	359.8798	2.4036
3203	492092.3	2843127	357.0425	3203	492092.3	2843127	359.6244	2.5819
3204	492110.5	2842927	357.9463	3204	492110.5	2842927	360.7087	2.7624
3205	492074.6	2842928	357.3621	3205	492074.6	2842928	359.9878	2.6257
3206	492079.6	2842928	357.7828	3206	492079.6	2842928	360.1623	2.3795
3207	492106.5	2842927	357.9736	3207	492106.5	2842927	360.6797	2.7061
3208	492094.5	2842927	358.182	3208	492094.5	2842927	360.558	2.376
3209	492102.8	2842726	357.4124	3209	492102.8	2842726	360.0005	2.5881
3210	492067.2	2842729	357.663	3210	492067.2	2842729	360.1174	2.4544
3211	492072	2842728	357.6962	3211	492072	2842728	360.1909	2.4947
3212	492098.9	2842727	357.4034	3212	492098.9	2842727	360.0262	2.6228
3213	492087.2	2842727	357.483	3213	492087.2	2842727	359.9627	2.4797
3214	492079.6	2842525	358.2321	3214	492079.6	2842525	360.8661	2.634
3215	492043.6	2842534	359.9079	3215	492043.6	2842534	362.5263	2.6184
3216	492048.3	2842533	360.048	3216	492048.3	2842533	362.4653	2.4173
3217	492075.7	2842526	358.2187	3217	492075.7	2842526	360.8394	2.6207
3218	492063	2842529	358.9186	3218	492063	2842529	361.4806	2.562
3219	492015.5	2842332	357.6354	3219	492015.5	2842332	360.2059	2.5705
3220	491980.5	2842350	358.7841	3220	491980.5	2842350	361.4872	2.7031
3221	491985.2	2842348	358.7188	3221	491985.2	2842348	361.4073	2.6885
3222	492012.2	2842333	357.6948	3222	492012.2	2842333	360.2778	2.583
3223	491998.2	2842341	358.4119	3223	491998.2	2842341	360.9375	2.5256
3224	491857.4	2842199	357.8948	3224	491857.4	2842199	360.3759	2.4811
3225	491839.3	2842242	358.1856	3225	491839.3	2842242	360.7411	2.5555
3226	491841.3	2842238	358.1564	3226	491841.3	2842238	360.6926	2.5362
3227	491854.8	2842205	357.9262	3227	491854.8	2842205	360.5777	2.6515
3228	491854.8	2842206	357.9594	3228	491854.8	2842206	360.582	2.6226
3229	491847	2842224	358.0917	3229	491847	2842224	360.5804	2.4887
3230	491706.1	2842087	358.3013	3230	491706.1	2842087	360.9121	2.6108
3231	491670.4	2842123	357.4066	3231	491670.4	2842123	360.2001	2.7935
3232	491674.6	2842119	357.6	3232	491674.6	2842119	360.2389	2.6389
3233	491701.4	2842092	358.3864	3233	491701.4	2842092	360.9317	2.5453
3234	491698.5	2842095	358.3112	3234	491698.5	2842095	360.8905	2.5793
3235	491684.4	2842109	357.9042	3235	491684.4	2842109	360.6258	2.7216

3236	491593.6	2841933	358.8783	3236	491593.6	2841933	361.4073	2.529
3237	491552.4	2841956	357.6128	3237	491552.4	2841956	360.1443	2.5315
3238	491557.6	2841954	357.6351	3238	491557.6	2841954	360.2613	2.6262
3239	491588.7	2841936	358.7556	3239	491588.7	2841936	361.3441	2.5885
3240	491587.3	2841937	358.9173	3240	491587.3	2841937	361.3262	2.4089
3241	491569.8	2841947	357.6105	3241	491569.8	2841947	360.4563	2.8458
3242	491523.6	2841752	358.0651	3242	491523.6	2841752	360.9054	2.8403
3243	491452.2	2841778	359.037	3243	491452.2	2841778	361.7771	2.7401
3244	491459.3	2841775	359.1033	3244	491459.3	2841775	361.694	2.5907
3245	491514.4	2841755	358.4517	3245	491514.4	2841755	361.0921	2.6404
3246	491508.5	2841757	358.7248	3246	491508.5	2841757	361.157	2.4322
3247	491489.7	2841764	358.8735	3247	491489.7	2841764	361.3364	2.4629
3248	491471	2841771	358.9214	3248	491471	2841771	361.5567	2.6353
3249	491481.6	2841563	358.2406	3249	491481.6	2841563	360.8228	2.5822
3250	491409.3	2841577	358.8193	3250	491409.3	2841577	361.3076	2.4883
3251	491418.4	2841575	358.6039	3251	491418.4	2841575	361.2542	2.6503
3252	491472.6	2841565	357.9549	3252	491472.6	2841565	360.698	2.7431
3253	491468.2	2841566	357.7951	3253	491468.2	2841566	360.6679	2.8728
3254	491448.6	2841569	358.4947	3254	491448.6	2841569	360.972	2.4773
3255	491428.9	2841573	358.7422	3255	491428.9	2841573	361.2531	2.5109
3256	491427.5	2841367	359.6317	3256	491427.5	2841367	362.1205	2.4888
3257	491369.6	2841385	358.3898	3257	491369.6	2841385	360.88	2.4902
3258	491377.6	2841383	358.6771	3258	491377.6	2841383	361.1434	2.4663
3259	491420.3	2841369	359.5758	3259	491420.3	2841369	362.0131	2.4373
3260	491426.8	2841367	359.5899	3260	491426.8	2841367	362.1101	2.5202
3261	491407.7	2841373	359.5645	3261	491407.7	2841373	361.9956	2.4311
3262	491388.7	2841379	358.9497	3262	491388.7	2841379	361.5074	2.5577
3263	491269.6	2841232	358.175	3263	491269.6	2841232	360.7908	2.6158
3264	491255.3	2841275	357.9978	3264	491255.3	2841275	360.5189	2.5211
3265	491257.1	2841270	357.956	3265	491257.1	2841270	360.4746	2.5186
3266	491267.8	2841237	358.3754	3266	491267.8	2841237	360.8535	2.4781
3267	491267.8	2841237	358.3461	3267	491267.8	2841237	360.8558	2.5097
3268	491261.5	2841256	358.087	3268	491261.5	2841256	360.5114	2.4244
3269	491053.2	2841271	359.6913	3269	491053.2	2841271	362.0922	2.4009
3270	491149.1	2841308	358.8727	3270	491149.1	2841308	361.4114	2.5387
3271	491141.8	2841305	358.9476	3271	491141.8	2841305	361.4072	2.4596
3272	491066	2841276	359.3492	3272	491066	2841276	361.9045	2.5553
3273	491056	2841272	359.4721	3273	491056	2841272	362.0512	2.5791
3274	491074.6	2841279	359.1399	3274	491074.6	2841279	361.7767	2.6368
3275	491093.2	2841286	358.8769	3275	491093.2	2841286	361.5377	2.6608
3276	491111.9	2841294	359.0726	3276	491111.9	2841294	361.4826	2.41

3277	491130.5	2841301	358.9725	3277	491130.5	2841301	361.4115	2.439
3278	491054.1	2841435	360.3201	3278	491054.1	2841435	362.7344	2.4143
3279	491055.1	2841482	360.4898	3279	491055.1	2841482	362.9027	2.4129
3280	491055	2841476	360.419	3280	491055	2841476	362.8931	2.4741
3281	491054.2	2841441	360.2151	3281	491054.2	2841441	362.7912	2.5761
3282	491054.2	2841442	360.2553	3282	491054.2	2841442	362.8039	2.5486
3283	491054.7	2841462	360.1371	3283	491054.7	2841462	362.8701	2.733
3284	490862.4	2841416	360.3018	3284	490862.4	2841416	363.0273	2.7255
3285	490849.9	2841466	359.9371	3285	490849.9	2841466	362.5907	2.6536
3286	490851.4	2841460	360.1795	3286	490851.4	2841460	362.7451	2.5656
3287	490860.8	2841423	360.5923	3287	490860.8	2841423	363.1534	2.5611
3288	490859.6	2841428	360.69	3288	490859.6	2841428	363.2481	2.5581
3289	490854.8	2841447	360.4528	3289	490854.8	2841447	363.0655	2.6127
3290	490702.3	2841345	360.6515	3290	490702.3	2841345	363.2388	2.5873
3291	490667.2	2841364	359.9877	3291	490667.2	2841364	362.6917	2.704
3292	490671.3	2841362	360.2164	3292	490671.3	2841362	362.7777	2.5613
3293	490696.1	2841349	360.6167	3293	490696.1	2841349	363.2836	2.6669
3294	490684.8	2841355	360.3249	3294	490684.8	2841355	363.0598	2.7349
3295	490629.6	2841150	359.5092	3295	490629.6	2841150	362.161	2.6518
3296	490593.9	2841194	359.2293	3296	490593.9	2841194	362.0287	2.7994
3297	490600	2841186	359.5835	3297	490600	2841186	362.1983	2.6148
3298	490625.4	2841155	359.4035	3298	490625.4	2841155	361.9967	2.5932
3299	490619.1	2841163	359.346	3299	490619.1	2841163	361.9827	2.6367
3300	490606.5	2841178	359.5962	3300	490606.5	2841178	362.3185	2.7223
3301	490414	2841160	357.1162	3301	490414	2841160	359.7838	2.6676
3302	490434.5	2841234	360.223	3302	490434.5	2841234	362.8222	2.5992
3303	490432.1	2841226	359.6887	3303	490432.1	2841226	362.3346	2.6459
3304	490416.6	2841170	356.5484	3304	490416.6	2841170	359.3369	2.7885
3305	490418.5	2841177	356.7971	3305	490418.5	2841177	359.5932	2.7961
3306	490423.8	2841196	357.8943	3306	490423.8	2841196	360.6039	2.7096
3307	490429.1	2841215	359.1474	3307	490429.1	2841215	361.6861	2.5387
3308	490240.8	2841163	357.892	3308	490240.8	2841163	360.4125	2.5205
3309	490221.2	2841219	358.6085	3309	490221.2	2841219	361.1655	2.557
3310	490223.6	2841213	358.4515	3310	490223.6	2841213	361.1198	2.6683
3311	490238	2841171	358.1922	3311	490238	2841171	360.8497	2.6575
3312	490234.3	2841182	358.1475	3312	490234.3	2841182	360.6732	2.5257
3313	490227.8	2841201	357.8558	3313	490227.8	2841201	360.5091	2.6533
3314	490061.8	2841082	359.7213	3314	490061.8	2841082	362.3209	2.5996
3315	490033.7	2841141	359.7681	3315	490033.7	2841141	362.3201	2.552
3316	490037.2	2841134	359.714	3316	490037.2	2841134	362.3611	2.6471
3317	490058.3	2841090	359.6404	3317	490058.3	2841090	362.3072	2.6668

3318	490059.5	2841087	359.6568	3318	490059.5	2841087	362.3118	2.655
3319	490050.9	2841105	359.6491	3319	490050.9	2841105	362.3273	2.6782
3320	490042.3	2841123	359.7034	3320	490042.3	2841123	362.4027	2.6993
3321	489948.1	2840965	360.0255	3321	489948.1	2840965	362.5485	2.523
3322	489877.4	2840986	358.3906	3322	489877.4	2840986	361.0487	2.6581
3323	489885	2840984	358.4542	3323	489885	2840984	361.0878	2.6336
3324	489937.4	2840968	359.8186	3324	489937.4	2840968	362.3653	2.5467
3325	489935.1	2840969	359.7569	3325	489935.1	2840969	362.3167	2.5598
3326	489915.9	2840975	359.3803	3326	489915.9	2840975	361.9409	2.5606
3327	489896.7	2840980	358.6982	3327	489896.7	2840980	361.41	2.7118
3328	489906.6	2840767	359.9621	3328	489906.6	2840767	362.6705	2.7084
3329	489854.6	2840801	360.2023	3329	489854.6	2840801	362.7424	2.5401
3330	489863.6	2840795	359.9368	3330	489863.6	2840795	362.6463	2.7095
3331	489901	2840770	360.282	3331	489901	2840770	362.6865	2.4045
3332	489904.9	2840768	360.1202	3332	489904.9	2840768	362.6716	2.5514
3333	489888.1	2840779	360.1969	3333	489888.1	2840779	362.7238	2.5269
3334	489871.3	2840790	359.8482	3334	489871.3	2840790	362.5575	2.7093
3335	489803.5	2840605	361.1588	3335	489803.5	2840605	363.7332	2.5744
3336	489739.8	2840631	360.538	3336	489739.8	2840631	362.9397	2.4017
3337	489748.1	2840628	360.662	3337	489748.1	2840628	363.3581	2.6961
3338	489796.7	2840608	361.2017	3338	489796.7	2840608	363.9101	2.7084
3339	489795.2	2840609	361.5586	3339	489795.2	2840609	363.9408	2.3822
3340	489776.7	2840616	361.5662	3340	489776.7	2840616	364.2704	2.7042
3341	489758.3	2840624	361.4029	3341	489758.3	2840624	363.8369	2.434
3342	489703.1	2840427	360.7871	3342	489703.1	2840427	363.186	2.3989
3343	489649.8	2840459	359.8815	3343	489649.8	2840459	362.2657	2.3842
3344	489656.5	2840455	359.5895	3344	489656.5	2840455	362.295	2.7055
3345	489696.6	2840431	360.4014	3345	489696.6	2840431	362.9668	2.5654
3346	489701.3	2840428	360.7105	3346	489701.3	2840428	363.1265	2.416
3347	489684.2	2840439	359.7628	3347	489684.2	2840439	362.3132	2.5504
3348	489667	2840449	359.7614	3348	489667	2840449	362.301	2.5396
3349	489639.7	2840257	361.4735	3349	489639.7	2840257	363.8908	2.4173
3350	489581.8	2840265	360.4	3350	489581.8	2840265	362.9367	2.5367
3351	489590.9	2840264	360.3825	3351	489590.9	2840264	362.9637	2.5812
3352	489634.3	2840258	361.3058	3352	489634.3	2840258	363.7387	2.4329
3353	489621.4	2840259	360.9443	3353	489621.4	2840259	363.4814	2.5371
3354	489601.6	2840262	360.6292	3354	489601.6	2840262	363.3429	2.7137
3355	489573.7	2840057	360.1799	3355	489573.7	2840057	362.9001	2.7202
3356	489520.8	2840100	361.2524	3356	489520.8	2840100	363.6369	2.3845
3357	489527.5	2840094	361.2382	3357	489527.5	2840094	363.6617	2.4235
3358	489567.4	2840062	361.0251	3358	489567.4	2840062	363.5564	2.5313

3359	489567.5	2840062	361.1468	3359	489567.5	2840062	363.5559	2.4091
3360	489552	2840075	361.191	3360	489552	2840075	363.5944	2.4034
3361	489536.4	2840087	361.0795	3361	489536.4	2840087	363.6342	2.5547
3362	489339.7	2840023	361.5489	3362	489339.7	2840023	363.9784	2.4295
3363	489411.4	2840081	360.4316	3363	489411.4	2840081	363.1483	2.7167
3364	489401.3	2840073	360.5062	3364	489401.3	2840073	363.0671	2.5609
3365	489348.5	2840030	361.3092	3365	489348.5	2840030	363.9037	2.5945
3366	489349.4	2840031	361.4764	3366	489349.4	2840031	363.8883	2.4119
3367	489364.9	2840043	361.029	3367	489364.9	2840043	363.6114	2.5824
3368	489380.4	2840056	360.68	3368	489380.4	2840056	363.3905	2.7105
3369	489395.9	2840069	360.7031	3369	489395.9	2840069	363.0614	2.3583
3370	489244.2	2840171	360.6452	3370	489244.2	2840171	363.0722	2.427
3371	489284.5	2840235	360.5542	3371	489284.5	2840235	363.1121	2.5579
3372	489279.6	2840228	360.6552	3372	489279.6	2840228	363.0573	2.4021
3373	489249.8	2840180	360.4378	3373	489249.8	2840180	362.9957	2.5579
3374	489252.5	2840185	360.4416	3374	489252.5	2840185	363.0074	2.5658
3375	489263.2	2840202	360.4707	3375	489263.2	2840202	362.9534	2.4827
3376	489273.8	2840219	360.5696	3376	489273.8	2840219	363.0293	2.4597
3377	489128.2	2840099	362.6183	3377	489128.2	2840099	365.1828	2.5645
3378	489099.4	2840117	362.8082	3378	489099.4	2840117	365.3727	2.5645
3379	489102.9	2840115	362.9995	3379	489102.9	2840115	365.408	2.4085
3380	489123.9	2840102	362.6128	3380	489123.9	2840102	365.1885	2.5757
3381	489116.4	2840107	362.3691	3381	489116.4	2840107	365.1006	2.7315
3382	489089.8	2839917	361.882	3382	489089.8	2839917	364.3022	2.4202
3383	489025.5	2839923	362.1885	3383	489025.5	2839923	364.571	2.3825
3384	489033.4	2839922	361.8183	3384	489033.4	2839922	364.5591	2.7408
3385	489081.8	2839917	361.86	3385	489081.8	2839917	364.3579	2.4979
3386	489085.2	2839917	361.9241	3386	489085.2	2839917	364.3341	2.41
3387	489065.3	2839919	362.073	3387	489065.3	2839919	364.4658	2.3928
3388	489045.4	2839921	362.0706	3388	489045.4	2839921	364.5412	2.4706
3389	489029.3	2839711	362.126	3389	489029.3	2839711	364.607	2.481
3390	488968.2	2839750	361.5368	3390	488968.2	2839750	364.1547	2.6179
3391	488976	2839745	361.5571	3391	488976	2839745	364.1184	2.5613
3392	489022.2	2839716	362.1769	3392	489022.2	2839716	364.5842	2.4073
3393	489018.7	2839718	362.1386	3393	489018.7	2839718	364.5726	2.434
3394	489001.8	2839729	361.3655	3394	489001.8	2839729	364.0109	2.6454
3395	488985	2839740	361.5687	3395	488985	2839740	364.0745	2.5058
3396	488882.9	2839557	362.3844	3396	488882.9	2839557	364.7485	2.3641
3397	488816.8	2839656	362.0295	3397	488816.8	2839656	364.4633	2.4338
3398	488828.8	2839638	361.8981	3398	488828.8	2839638	364.3989	2.5008
3399	488875.8	2839568	362.2399	3399	488875.8	2839568	364.7513	2.5114

3400	488872.6	2839573	362.3029	3400	488872.6	2839573	364.7511	2.4482
3401	488861.4	2839589	362.1783	3401	488861.4	2839589	364.5477	2.3694
3402	488850.3	2839606	361.6377	3402	488850.3	2839606	364.0988	2.4611
3403	488839.1	2839622	361.6548	3403	488839.1	2839622	364.1365	2.4817
3404	488827.9	2839639	361.9434	3404	488827.9	2839639	364.4181	2.4747
3405	488632.1	2839538	361.9694	3405	488632.1	2839538	364.4823	2.5129
3406	488707.2	2839647	362.5928	3406	488707.2	2839647	364.9552	2.3624
3407	488693.3	2839627	361.9373	3407	488693.3	2839627	364.3677	2.4304
3408	488640.6	2839551	361.8849	3408	488640.6	2839551	364.3045	2.4196
3409	488639.2	2839549	361.8338	3409	488639.2	2839549	364.3434	2.5096
3410	488650.5	2839565	361.7002	3410	488650.5	2839565	364.0849	2.3847
3411	488661.9	2839581	361.4248	3411	488661.9	2839581	363.8598	2.435
3412	488673.2	2839598	361.4522	3412	488673.2	2839598	363.9227	2.4705
3413	488684.5	2839614	361.5975	3413	488684.5	2839614	364.0268	2.4293
3414	488695.9	2839631	362.0736	3414	488695.9	2839631	364.4655	2.3919
3415	488545.1	2839750	363.7253	3415	488545.1	2839750	366.1944	2.4691
3416	488608.8	2839763	363.1745	3416	488608.8	2839763	365.5601	2.3856
3417	488600.2	2839761	363.3682	3417	488600.2	2839761	365.7306	2.3624
3418	488552.6	2839751	363.6378	3418	488552.6	2839751	366.0398	2.402
3419	488550	2839751	363.5855	3419	488550	2839751	366.0949	2.5094
3420	488569.6	2839755	363.8003	3420	488569.6	2839755	366.189	2.3887
3421	488589.2	2839759	363.5214	3421	488589.2	2839759	365.9505	2.4291
3422	488452.5	2839912	363.652	3422	488452.5	2839912	366.0706	2.4186
3423	488558	2839964	362.5422	3423	488558	2839964	364.9202	2.378
3424	488546.1	2839958	362.5219	3424	488546.1	2839958	364.9191	2.3972
3425	488471.6	2839921	363.0999	3425	488471.6	2839921	365.5637	2.4638
3426	488468.5	2839920	363.22	3426	488468.5	2839920	365.6432	2.4232
3427	488486.4	2839929	362.7747	3427	488486.4	2839929	365.1844	2.4097
3428	488504.3	2839937	362.5945	3428	488504.3	2839937	365.0947	2.5002
3429	488522.2	2839946	362.539	3429	488522.2	2839946	365.0137	2.4747
3430	488540.1	2839955	362.4533	3430	488540.1	2839955	364.9199	2.4666
3431	488352.3	2839982	364.802	3431	488352.3	2839982	367.2468	2.4448
3432	488363.6	2840127	363.62	3432	488363.6	2840127	366.129	2.509
3433	488362.3	2840111	364.0701	3433	488362.3	2840111	366.544	2.4739
3434	488354	2840004	363.6938	3434	488354	2840004	366.2279	2.5341
3435	488352.6	2839987	364.4493	3435	488352.6	2839987	367.0195	2.5702
3436	488354.2	2840007	363.6297	3436	488354.2	2840007	366.1271	2.4974
3437	488355.8	2840027	363.2636	3437	488355.8	2840027	365.767	2.5034
3438	488357.3	2840047	362.6047	3438	488357.3	2840047	365.2092	2.6045
3439	488358.9	2840067	363.6938	3439	488358.9	2840067	366.2395	2.5457
3440	488360.4	2840087	363.986	3440	488360.4	2840087	366.6006	2.6146

3441	488362	2840107	363.8867	3441	488362	2840107	366.5559	2.6692
3442	488187.8	2840008	364.2954	3442	488187.8	2840008	366.9749	2.6795
3443	488149.2	2840063	363.5267	3443	488149.2	2840063	366.2487	2.722
3444	488153.8	2840057	363.5739	3444	488153.8	2840057	366.2543	2.6804
3445	488182.6	2840016	364.1816	3445	488182.6	2840016	366.875	2.6934
3446	488183.8	2840014	364.1759	3446	488183.8	2840014	366.9114	2.7355
3447	488172.2	2840031	363.8289	3447	488172.2	2840031	366.5375	2.7086
3448	488160.7	2840047	363.5343	3448	488160.7	2840047	366.2941	2.7598
3449	488020.3	2839891	362.3314	3449	488020.3	2839891	365.0876	2.7562
3450	487984.3	2839965	363.8515	3450	487984.3	2839965	366.6327	2.7812
3451	487989.2	2839955	363.7124	3451	487989.2	2839955	366.5175	2.8051
3452	488016.3	2839899	362.4716	3452	488016.3	2839899	365.2692	2.7976
3453	488019	2839893	362.3333	3453	488019	2839893	365.1564	2.8231
3454	488010.3	2839911	362.7492	3454	488010.3	2839911	365.5309	2.7817
3455	488001.6	2839929	363.0729	3455	488001.6	2839929	365.9071	2.8342
3456	487993	2839947	363.4128	3456	487993	2839947	366.3313	2.9185
3457	487799.6	2839892	363.5476	3457	487799.6	2839892	366.3934	2.8458
3458	487812.3	2839955	364.0005	3458	487812.3	2839955	366.8368	2.8363
3459	487810.8	2839948	363.9632	3459	487810.8	2839948	366.8424	2.8792
3460	487801.2	2839900	363.5853	3460	487801.2	2839900	366.4676	2.8823
3461	487800.5	2839897	363.5832	3461	487800.5	2839897	366.434	2.8508
3462	487804.4	2839916	363.7514	3462	487804.4	2839916	366.6141	2.8627
3463	487808.3	2839936	363.9987	3463	487808.3	2839936	366.8516	2.8529
3464	487607.8	2839923	364.4774	3464	487607.8	2839923	367.3252	2.8478
3465	487607.8	2839972	364.3924	3465	487607.8	2839972	367.3266	2.9342
3466	487607.8	2839967	364.3907	3466	487607.8	2839967	367.3263	2.9356
3467	487607.8	2839930	364.3272	3467	487607.8	2839930	367.1171	2.7899
3468	487607.8	2839932	364.2384	3468	487607.8	2839932	367.0482	2.8098
3469	487607.8	2839952	364.295	3469	487607.8	2839952	367.181	2.886
3470	487442.8	2839853	364.6549	3470	487442.8	2839853	367.5307	2.8758
3471	487407.5	2839902	365.4636	3471	487407.5	2839902	368.3275	2.8639
3472	487411.6	2839896	365.4322	3472	487411.6	2839896	368.2844	2.8522
3473	487437.6	2839860	364.699	3473	487437.6	2839860	367.5749	2.8759
3474	487442.7	2839853	364.6876	3474	487442.7	2839853	367.5308	2.8432
3475	487431	2839869	364.7497	3475	487431	2839869	367.635	2.8853
3476	487419.3	2839885	365.1754	3476	487419.3	2839885	368.062	2.8866
3477	487233	2839836	364.4616	3477	487233	2839836	367.2603	2.7987
3478	487233.3	2839891	365.0932	3478	487233.3	2839891	367.9126	2.8194
3479	487233.2	2839884	365.1032	3479	487233.2	2839884	367.9247	2.8215
3480	487233.1	2839843	364.2977	3480	487233.1	2839843	367.185	2.8873
3481	487233.1	2839851	364.3966	3481	487233.1	2839851	367.2281	2.8315

3482	487233.2	2839871	364.7955	3482	487233.2	2839871	367.6127	2.8172
3483	487103.4	2839753	364.09	3483	487103.4	2839753	366.9349	2.8449
3484	487041.2	2839796	362.5413	3484	487041.2	2839796	365.4053	2.864
3485	487047.8	2839792	362.5964	3485	487047.8	2839792	365.416	2.8196
3486	487095.4	2839758	363.9401	3486	487095.4	2839758	366.7986	2.8585
3487	487090.4	2839762	363.737	3487	487090.4	2839762	366.587	2.85
3488	487074	2839773	363.2201	3488	487074	2839773	366.0513	2.8312
3489	487057.6	2839785	362.7084	3489	487057.6	2839785	365.5055	2.7971
3490	486960.7	2839611	364.1216	3490	486960.7	2839611	367.0603	2.9387
3491	486914	2839646	363.9802	3491	486914	2839646	366.7142	2.734
3492	486920.4	2839642	363.9524	3492	486920.4	2839642	366.7666	2.8142
3493	486956	2839615	364.2965	3493	486956	2839615	367.0675	2.771
3494	486945.9	2839622	364.3795	3494	486945.9	2839622	367.1814	2.8019
3495	486930	2839634	364.2294	3495	486930	2839634	366.9709	2.7415
3496	486791.5	2839490	365.2983	3496	486791.5	2839490	368.0806	2.7823
3497	486762.2	2839543	365.3664	3497	486762.2	2839543	368.2063	2.8399
3498	486766.5	2839535	365.4469	3498	486766.5	2839535	368.2808	2.8339
3499	486789.1	2839494	365.3029	3499	486789.1	2839494	368.099	2.7961
3500	486791.2	2839491	365.1904	3500	486791.2	2839491	368.0829	2.8925
3501	486781.6	2839508	365.3415	3501	486781.6	2839508	368.0881	2.7466
3502	486771.9	2839526	365.4903	3502	486771.9	2839526	368.2454	2.7551
3503	486607.3	2839416	365.746	3503	486607.3	2839416	368.4884	2.7424
3504	486588.9	2839443	366.871	3504	486588.9	2839443	369.5938	2.7228
3505	486591.2	2839439	366.8587	3505	486591.2	2839439	369.6238	2.7651
3506	486605	2839419	365.8723	3506	486605	2839419	368.6493	2.777
3507	486600.1	2839426	366.8375	3507	486600.1	2839426	369.6983	2.8608
3508	486422	2839333	366.834	3508	486422	2839333	369.6569	2.8229
3509	486415.7	2839375	366.4679	3509	486415.7	2839375	369.3178	2.8499
3510	486416.4	2839370	366.6085	3510	486416.4	2839370	369.451	2.8425
3511	486421.2	2839338	366.8449	3511	486421.2	2839338	369.7024	2.8575
3512	486421.7	2839335	367.071	3512	486421.7	2839335	369.6746	2.6036
3513	486418.7	2839355	366.7344	3513	486418.7	2839355	369.3232	2.5888
3514	486216.9	2839323	366.9177	3514	486216.9	2839323	369.6267	2.709
3515	486222.2	2839383	364.9636	3515	486222.2	2839383	367.7357	2.7721
3516	486221.5	2839376	365.0133	3516	486221.5	2839376	367.7003	2.687
3517	486217.5	2839331	366.7999	3517	486217.5	2839331	369.5944	2.7945
3518	486216.9	2839324	366.8716	3518	486216.9	2839324	369.6254	2.7538
3519	486218.7	2839344	366.2573	3519	486218.7	2839344	368.9106	2.6533
3520	486220.4	2839364	365.2884	3520	486220.4	2839364	368.0195	2.7311
3521	486036	2839439	365.716	3521	486036	2839439	368.3573	2.6413
3522	486084.1	2839509	364.8093	3522	486084.1	2839509	367.3654	2.5561

3523	486077.4	2839499	364.8209	3523	486077.4	2839499	367.3249	2.504
3524	486040.1	2839445	365.7182	3524	486040.1	2839445	368.2516	2.5334
3525	486038.9	2839443	365.657	3525	486038.9	2839443	368.2826	2.6256
3526	486050.2	2839459	365.4372	3526	486050.2	2839459	367.9482	2.511
3527	486061.5	2839476	364.6969	3527	486061.5	2839476	367.3407	2.6438
3528	486072.8	2839492	364.6862	3528	486072.8	2839492	367.2973	2.6111
3529	486002.7	2839658	365.8052	3529	486002.7	2839658	368.3017	2.4965
3530	486054.2	2839658	364.9237	3530	486054.2	2839658	367.5479	2.6242
3531	486048.2	2839658	364.8221	3531	486048.2	2839658	367.5021	2.68
3532	486009.7	2839658	365.3877	3532	486009.7	2839658	368.0237	2.636
3533	486014.2	2839658	365.0567	3533	486014.2	2839658	367.8368	2.7801
3534	486034.2	2839658	365.0723	3534	486034.2	2839658	367.5426	2.4703
3535	485962.9	2839818	365.652	3535	485962.9	2839818	368.4141	2.7621
3536	485997.5	2839858	365.7632	3536	485997.5	2839858	368.3575	2.5943
3537	485993.1	2839853	365.5311	3537	485993.1	2839853	368.3053	2.7742
3538	485967.2	2839823	365.8248	3538	485967.2	2839823	368.5631	2.7383
3539	485971.4	2839828	366.0768	3539	485971.4	2839828	368.7119	2.6351
3540	485984.4	2839843	365.8463	3540	485984.4	2839843	368.4807	2.6344
3541	485799	2839858	365.375	3541	485799	2839858	368.1394	2.7644
3542	485783.9	2839904	364.4534	3542	485783.9	2839904	367.0966	2.6432
3543	485786.8	2839895	364.4335	3543	485786.8	2839895	367.1798	2.7463
3544	485798	2839861	365.4706	3544	485798	2839861	368.0572	2.5866
3545	485796.5	2839866	365.1147	3545	485796.5	2839866	367.9204	2.8057
3546	485790.2	2839885	364.4271	3546	485790.2	2839885	367.0781	2.651
3547	485591.4	2839867	366.4556	3547	485591.4	2839867	369.2063	2.7507
3548	485604.7	2839923	365.6248	3548	485604.7	2839923	368.3819	2.7571
3549	485602.5	2839913	365.5863	3549	485602.5	2839913	368.2207	2.6344
3550	485592.9	2839873	366.7919	3550	485592.9	2839873	369.4198	2.6279
3551	485595.4	2839884	366.9129	3551	485595.4	2839884	369.5379	2.625
3552	485600.1	2839903	366.8518	3552	485600.1	2839903	369.4972	2.6454
3553	485398.3	2839893	366.8534	3553	485398.3	2839893	369.4538	2.6004
3554	485401.4	2839949	366.661	3554	485401.4	2839949	369.2893	2.6283
3555	485401.1	2839943	366.6546	3555	485401.1	2839943	369.29	2.6354
3556	485398.7	2839900	366.7639	3556	485398.7	2839900	369.4168	2.6529
3557	485399.2	2839909	366.9129	3557	485399.2	2839909	369.4951	2.5822
3558	485400.3	2839929	366.6484	3558	485400.3	2839929	369.2918	2.6434
3559	485228.5	2839889	367.3966	3559	485228.5	2839889	369.9904	2.5938
3560	485185.6	2839936	366.8605	3560	485185.6	2839936	369.4543	2.5938
3561	485188.9	2839933	366.7879	3561	485188.9	2839933	369.4501	2.6622
3562	485221.6	2839897	367.3907	3562	485221.6	2839897	370.0022	2.6115
3563	485226.1	2839892	367.4036	3563	485226.1	2839892	369.9815	2.5779

3564	485212.6	2839907	367.3583	3564	485212.6	2839907	369.9363	2.578
3565	485199.1	2839922	366.8817	3565	485199.1	2839922	369.5202	2.6385
3566	485157.7	2839730	366.4989	3566	485157.7	2839730	369.1614	2.6625
3567	485101.4	2839746	365.6801	3567	485101.4	2839746	368.2949	2.6148
3568	485108	2839744	365.6434	3568	485108	2839744	368.2901	2.6467
3569	485150.3	2839732	366.3121	3569	485150.3	2839732	368.933	2.6209
3570	485140	2839735	365.9257	3570	485140	2839735	368.5025	2.5768
3571	485120.7	2839740	365.2688	3571	485120.7	2839740	367.8898	2.621
3572	485126.6	2839526	367.3216	3572	485126.6	2839526	369.951	2.6294
3573	485054.3	2839569	367.0012	3573	485054.3	2839569	369.6248	2.6236
3574	485063.6	2839564	367.0809	3574	485063.6	2839564	369.634	2.5531
3575	485118.1	2839531	367.2725	3575	485118.1	2839531	369.9224	2.6499
3576	485123.1	2839528	367.3302	3576	485123.1	2839528	369.9801	2.6499
3577	485105.9	2839538	367.0885	3577	485105.9	2839538	369.6944	2.6059
3578	485088.7	2839549	367.0195	3578	485088.7	2839549	369.6589	2.6394
3579	485071.5	2839559	366.9584	3579	485071.5	2839559	369.6419	2.6835
3580	484917.4	2839433	365.4957	3580	484917.4	2839433	368.0906	2.5949
3581	484933.2	2839511	367.6556	3581	484933.2	2839511	370.2882	2.6326
3582	484931.2	2839501	367.663	3582	484931.2	2839501	370.3558	2.6928
3583	484919.4	2839443	365.3978	3583	484919.4	2839443	368.0482	2.6504
3584	484921.3	2839452	365.5654	3584	484921.3	2839452	368.2243	2.6589
3585	484925.3	2839472	366.0247	3585	484925.3	2839472	368.7029	2.6782
3586	484929.3	2839492	367.3043	3586	484929.3	2839492	369.9048	2.6005
3587	484719.6	2839482	366.0119	3587	484719.6	2839482	368.6021	2.5902
3588	484741.9	2839552	366.3102	3588	484741.9	2839552	368.9667	2.6565
3589	484738.8	2839542	366.2904	3589	484738.8	2839542	369.0037	2.7133
3590	484722.1	2839490	365.962	3590	484722.1	2839490	368.6323	2.6703
3591	484723.6	2839495	366.1441	3591	484723.6	2839495	368.814	2.6699
3592	484729.7	2839514	365.5358	3592	484729.7	2839514	368.1972	2.6614
3593	484735.8	2839533	366.1373	3593	484735.8	2839533	368.7443	2.607
3594	484535.4	2839538	366.4908	3594	484535.4	2839538	369.1573	2.6665
3595	484556	2839635	366.9902	3595	484556	2839635	369.6876	2.6974
3596	484553.7	2839624	367.0833	3596	484553.7	2839624	369.714	2.6307
3597	484538.2	2839551	366.7446	3597	484538.2	2839551	369.3652	2.6206
3598	484539.4	2839557	367.0878	3598	484539.4	2839557	369.5746	2.4868
3599	484543.5	2839576	367.3787	3599	484543.5	2839576	370.0445	2.6658
3600	484547.7	2839596	367.1091	3600	484547.7	2839596	369.7862	2.6771
3601	484551.8	2839615	367.0522	3601	484551.8	2839615	369.7351	2.6829
3602	484344.1	2839606	366.5037	3602	484344.1	2839606	368.9944	2.4907
3603	484366.7	2839686	366.5234	3603	484366.7	2839686	369.1783	2.6549
3604	484365	2839680	366.6373	3604	484365	2839680	369.2465	2.6092

3605	484347.7	2839618	366.2205	3605	484347.7	2839618	368.8649	2.6444
3606	484345.1	2839609	366.2667	3606	484345.1	2839609	368.9222	2.6555
3607	484350.5	2839628	366.4167	3607	484350.5	2839628	369.0832	2.6665
3608	484355.9	2839648	366.8491	3608	484355.9	2839648	369.3418	2.4927
3609	484361.3	2839667	366.6341	3609	484361.3	2839667	369.2771	2.643
3610	484156.6	2839614	367.313	3610	484156.6	2839614	369.944	2.631
3611	484164.5	2839683	367.848	3611	484164.5	2839683	370.5261	2.6781
3612	484163.4	2839673	367.5526	3612	484163.4	2839673	370.0831	2.5305
3613	484157.3	2839620	367.2584	3613	484157.3	2839620	369.9208	2.6624
3614	484157.6	2839623	367.2443	3614	484157.6	2839623	369.8903	2.646
3615	484159.9	2839643	367.0025	3615	484159.9	2839643	369.6789	2.6764
3616	484162.2	2839663	367.04	3616	484162.2	2839663	369.6891	2.6491
3617	483990.6	2839559	368.8694	3617	483990.6	2839559	371.4295	2.5601
3618	483950.8	2839641	368.4318	3618	483950.8	2839641	371.1151	2.6833
3619	483955.6	2839631	368.7625	3619	483955.6	2839631	371.3074	2.5449
3620	483985.1	2839571	368.6677	3620	483985.1	2839571	371.3468	2.6791
3621	483985.8	2839569	368.8431	3621	483985.8	2839569	371.3698	2.5267
3622	483977	2839587	368.7276	3622	483977	2839587	371.2566	2.529
3623	483968.3	2839605	368.6001	3623	483968.3	2839605	371.3048	2.7047
3624	483959.5	2839623	368.8027	3624	483959.5	2839623	371.353	2.5503
3625	483827	2839468	370.1701	3625	483827	2839468	372.7957	2.6256
3626	483790	2839510	369.1276	3626	483790	2839510	371.6749	2.5473
3627	483795	2839504	369.3968	3627	483795	2839504	371.7975	2.4007
3628	483822.5	2839473	370.144	3628	483822.5	2839473	372.7015	2.5575
3629	483816.5	2839480	370.0799	3629	483816.5	2839480	372.4656	2.3857
3630	483803.3	2839495	369.3336	3630	483803.3	2839495	371.9554	2.6218
3631	483679.1	2839331	368.5323	3631	483679.1	2839331	371.0036	2.4713
3632	483639.5	2839380	368.6118	3632	483639.5	2839380	371.0356	2.4238
3633	483643.9	2839375	368.4092	3633	483643.9	2839375	371.0318	2.6226
3634	483671.9	2839340	368.5177	3634	483671.9	2839340	370.9304	2.4127
3635	483677.1	2839334	368.4127	3635	483677.1	2839334	370.9074	2.4947
3636	483664.6	2839349	368.4702	3636	483664.6	2839349	370.8704	2.4002
3637	483652	2839365	368.3471	3637	483652	2839365	370.7184	2.3713
3638	483545.4	2839183	368.382	3638	483545.4	2839183	370.7569	2.3749
3639	483484.7	2839255	368.721	3639	483484.7	2839255	371.1621	2.4411
3640	483492.2	2839246	368.4781	3640	483492.2	2839246	371.0174	2.5393
3641	483537.6	2839192	368.3596	3641	483537.6	2839192	370.8828	2.5232
3642	483536.2	2839193	368.3138	3642	483536.2	2839193	370.8907	2.5769
3643	483523.3	2839209	368.0583	3643	483523.3	2839209	370.6597	2.6014
3644	483510.5	2839224	368.1483	3644	483510.5	2839224	370.644	2.4957
3645	483497.6	2839239	368.2904	3645	483497.6	2839239	370.8714	2.581

3646	483405.8	2839055	366.9662	3646	483405.8	2839055	369.5712	2.605
3647	483348.4	2839098	367.8398	3647	483348.4	2839098	370.3791	2.5393
3648	483353.7	2839094	367.6979	3648	483353.7	2839094	370.2431	2.5452
3649	483396	2839062	367.1278	3649	483396	2839062	369.7684	2.6406
3650	483396.3	2839062	367.1093	3650	483396.3	2839062	369.7631	2.6538
3651	483380.3	2839074	367.232	3651	483380.3	2839074	369.8742	2.6422
3652	483364.3	2839086	367.4678	3652	483364.3	2839086	370.1575	2.6897
3653	483278.1	2838899	366.97	3653	483278.1	2838899	369.7432	2.7732
3654	483226	2838941	367.0656	3654	483226	2838941	369.7791	2.7135
3655	483231.8	2838937	367.0418	3655	483231.8	2838937	369.7596	2.7178
3656	483270.9	2838905	367.0599	3656	483270.9	2838905	369.8592	2.7993
3657	483272.4	2838903	367.0915	3657	483272.4	2838903	369.8312	2.7397
3658	483257	2838916	367.1752	3658	483257	2838916	369.9215	2.7463
3659	483241.5	2838929	366.9471	3659	483241.5	2838929	369.7334	2.7863
3660	483121.6	2838742	367.0595	3660	483121.6	2838742	369.854	2.7945
3661	483107.1	2838825	368.1263	3661	483107.1	2838825	370.9355	2.8092
3662	483109	2838814	367.6441	3662	483109	2838814	370.3999	2.7558
3663	483120	2838751	367.1089	3663	483120	2838751	369.979	2.8701
3664	483120.9	2838746	367.0046	3664	483120.9	2838746	369.8902	2.8856
3665	483117.4	2838766	367.2638	3665	483117.4	2838766	370.1034	2.8396
3666	483114	2838786	366.841	3666	483114	2838786	369.6642	2.8232
3667	483110.6	2838805	367.1316	3667	483110.6	2838805	369.9336	2.802
3668	482899.8	2838804	369.3452	3668	482899.8	2838804	372.1735	2.8283
3669	482960	2838882	368.9209	3669	482960	2838882	371.7738	2.8529
3670	482951.3	2838871	368.9298	3670	482951.3	2838871	371.8138	2.884
3671	482905.8	2838812	369.2839	3671	482905.8	2838812	372.1495	2.8656
3672	482911.1	2838819	369.2712	3672	482911.1	2838819	372.1109	2.8397
3673	482923.3	2838835	369.1239	3673	482923.3	2838835	372.0221	2.8982
3674	482935.6	2838851	369.0196	3674	482935.6	2838851	371.9332	2.9136
3675	482947.8	2838866	368.9236	3675	482947.8	2838866	371.8299	2.9063
3676	482785.2	2838811	369.61	3676	482785.2	2838811	372.4958	2.8858
3677	482728.9	2838862	369.7447	3677	482728.9	2838862	372.6292	2.8845
3678	482733.7	2838857	369.7167	3678	482733.7	2838857	372.5527	2.836
3679	482773.3	2838821	369.5713	3679	482773.3	2838821	372.4692	2.8979
3680	482773.3	2838821	369.5558	3680	482773.3	2838821	372.4686	2.9128
3681	482758.5	2838835	369.3809	3681	482758.5	2838835	372.2192	2.8383
3682	482743.7	2838848	369.3095	3682	482743.7	2838848	372.134	2.8245
3683	482679	2838666	369.1969	3683	482679	2838666	372.0659	2.869
3684	482636.5	2838670	369.6671	3684	482636.5	2838670	372.4976	2.8305
3685	482643.3	2838670	369.5645	3685	482643.3	2838670	372.4042	2.8397
3686	482673.9	2838666	369.2181	3686	482673.9	2838666	372.0769	2.8588

3687	482676.3	2838666	369.1784	3687	482676.3	2838666	372.0719	2.8935
3688	482656.4	2838668	369.3986	3688	482656.4	2838668	372.2526	2.854
3689	482618.9	2838462	370.3401	3689	482618.9	2838462	373.0901	2.75
3690	482588.3	2838496	370.6655	3690	482588.3	2838496	373.3878	2.7223
3691	482592.2	2838492	370.6997	3691	482592.2	2838492	373.3673	2.6676
3692	482615.1	2838467	370.672	3692	482615.1	2838467	373.2693	2.5973
3693	482615.2	2838466	370.6193	3693	482615.2	2838466	373.2634	2.6441
3694	482601.7	2838481	370.6089	3694	482601.7	2838481	373.3318	2.7229
3695	482457.6	2838340	370.0498	3695	482457.6	2838340	372.9568	2.907
3696	482432.1	2838377	369.6845	3696	482432.1	2838377	372.4903	2.8058
3697	482435.6	2838371	369.6283	3697	482435.6	2838371	372.2987	2.6704
3698	482454.7	2838344	370.2249	3698	482454.7	2838344	372.9236	2.6987
3699	482454.9	2838344	370.5092	3699	482454.9	2838344	372.9136	2.4044
3700	482443.5	2838360	369.7858	3700	482443.5	2838360	372.5495	2.7637
3701	482312.6	2838215	370.2521	3701	482312.6	2838215	372.8195	2.5674
3702	482278.7	2838241	369.7166	3702	482278.7	2838241	372.3611	2.6445
3703	482282.4	2838238	369.5593	3703	482282.4	2838238	372.3316	2.7723
3704	482308	2838218	370.1865	3704	482308	2838218	372.8837	2.6972
3705	482310.6	2838216	369.928	3705	482310.6	2838216	372.8408	2.9128
3706	482294.6	2838229	370.0926	3706	482294.6	2838229	372.6588	2.5662
3707	482152	2838081	370.1098	3707	482152	2838081	372.8806	2.7708
3708	482141.1	2838132	369.8146	3708	482141.1	2838132	372.7104	2.8958
3709	482142.4	2838126	370.1573	3709	482142.4	2838126	372.696	2.5387
3710	482150.6	2838087	370.2149	3710	482150.6	2838087	372.8669	2.652
3711	482149.4	2838093	370.4499	3711	482149.4	2838093	372.8744	2.4245
3712	482145.3	2838112	370.1523	3712	482145.3	2838112	372.7849	2.6326
3713	481941.5	2838082	371.1599	3713	481941.5	2838082	373.9493	2.7894
3714	481954.3	2838140	370.4243	3714	481954.3	2838140	373.2293	2.805
3715	481952.5	2838132	370.4369	3715	481952.5	2838132	373.2192	2.7823
3716	481942.9	2838089	371.4044	3716	481942.9	2838089	373.9501	2.5457
3717	481945.7	2838101	371.1811	3717	481945.7	2838101	373.7627	2.5816
3718	481950	2838121	370.7606	3718	481950	2838121	373.3732	2.6126
3719	481756.5	2838161	371.2518	3719	481756.5	2838161	373.9563	2.7045
3720	481773.5	2838184	370.9739	3720	481773.5	2838184	373.6696	2.6957
3721	481771.4	2838181	370.9864	3721	481771.4	2838181	373.5177	2.5313
3722	481758.9	2838164	371.6795	3722	481758.9	2838164	374.0832	2.4037
3723	481761.6	2838168	371.6334	3723	481761.6	2838168	374.2261	2.5927
3724	481614.6	2838137	370.5356	3724	481614.6	2838137	373.4522	2.9166
3725	481593.3	2838157	371.053	3725	481593.3	2838157	373.6507	2.5977
3726	481596.1	2838154	370.8004	3726	481596.1	2838154	373.4264	2.626
3727	481612.2	2838139	370.8662	3727	481612.2	2838139	373.4379	2.5717

3728	481608	2838143	370.9968	3728	481608	2838143	373.3837	2.3869
3729	481499.9	2838090	372.4771	3729	481499.9	2838090	375.1599	2.6828
3730	481490	2838113	372.564	3730	481490	2838113	375.2688	2.7048
3731	481491.2	2838110	372.504	3731	481491.2	2838110	375.2793	2.7753
3732	481498.7	2838093	372.6087	3732	481498.7	2838093	375.2362	2.6275
3733	481490	2838113	372.7732	3733	481490	2838113	375.2688	2.4956
3734	481499.9	2838090	372.2317	3734	481499.9	2838090	375.1599	2.9282
3735	481498	2838095	372.778	3735	481498	2838095	375.2648	2.4868

8. Geological Reserve/Replenishment of River Bed Material(RBM) & Estimation of Mineable Reserve/Replenishment of River Bed Material (RBM)

Geological Reserves Estimation/Replenishment of sand/Bajri of Lease Area:-							
Sr.No	Two Consecutive Cross Section		Average Area of Cross Section	Mineral /Replenishment of Sand (Post Monsoon)(in Cubic Meters)	Bulk density	Tonnage Of Mineral (Replenished) in MT	Distance Between two consecutive Section Line
	From	To					
1	0	1-1'	419.23	0.00	1.5	0.00	0.000
2	1-1'	2-2'	817.65	148258.30	1.5	222387.45	181.323
3	2-2'	3-3'	793.43	158736.67	1.5	238105.01	200.065
4	3-3'	4-4'	799.62	160014.06	1.5	240021.09	200.112
5	4-4'	5-5'	808.11	165402.34	1.5	248103.51	204.678
6	5-5'	6-6'	803.42	160683.00	1.5	241024.50	200.000
7	6-6'	7-7'	744.01	172752.24	1.5	259128.36	232.192
8	7-7'	8-8'	684.65	136930.70	1.5	205396.05	200.000
9	8-8'	9-9'	679.28	145211.76	1.5	217817.64	213.774
10	9-9'	10-10'	684.30	137059.62	1.5	205589.42	200.292
11	10-10'	11-11'	704.03	138834.72	1.5	208252.07	197.200
12	11-11'	12-12'	721.15	157844.64	1.5	236766.95	218.878
13	12-12'	13-13'	687.00	137523.95	1.5	206285.92	200.181
14	13-13'	14-14'	611.41	108145.41	1.5	162218.12	176.879
15	14-14'	15-15'	538.52	109129.23	1.5	163693.84	202.646
16	15-15'	16-16'	498.64	99842.79	1.5	149764.18	200.230
17	16-16'	17-17'	497.03	99824.49	1.5	149736.73	200.844
18	17-17'	18-18'	480.00	80269.02	1.5	120403.53	167.228
19	18-18'	19-19'	474.22	90078.18	1.5	135117.28	189.950
20	19-19'	20-20'	512.82	102564.10	1.5	153846.15	200.000
21	20-20'	21-21'	602.93	120585.20	1.5	180877.80	200.000
22	21-21'	22-22'	748.32	179544.51	1.5	269316.76	239.929

23	22-22'	23-23'	895.91	187077.66	1.5	280616.48	208.813
24	23-23'	24-24'	1011.20	131361.08	1.5	197041.62	129.906
25	24-24'	25-25'	968.54	205101.69	1.5	307652.54	211.764
26	25-25'	26-26'	794.51	158902.60	1.5	238353.90	200.000
27	26-26'	27-27'	690.23	138045.30	1.5	207067.95	200.000
28	27-27'	28-28'	657.08	125706.36	1.5	188559.54	191.310
29	28-28'	29-29'	637.63	127799.21	1.5	191698.81	200.428
30	29-29'	30-30'	616.17	143521.13	1.5	215281.70	232.924
31	30-30'	31-31'	632.96	127505.62	1.5	191258.43	201.445
32	31-31'	32-32'	694.14	126385.58	1.5	189578.36	182.074
33	32-32'	33-33'	757.85	151569.10	1.5	227353.65	200.000
34	33-33'	34-34'	838.46	204033.37	1.5	306050.06	243.343
35	34-34'	35-35'	840.75	188615.14	1.5	282922.72	224.341
36	35-35'	36-36'	773.42	154683.20	1.5	232024.80	200.000
37	36-36'	37-37'	730.48	135647.03	1.5	203470.54	185.696
38	37-37'	38-38'	688.96	150620.51	1.5	225930.77	218.619
39	38-38'	39-39'	673.05	136941.45	1.5	205412.17	203.464
40	39-39'	40-40'	706.06	147028.60	1.5	220542.91	208.239
41	40-40'	41-41'	750.29	143788.00	1.5	215682.00	191.644
42	41-41'	42-42'	774.01	167208.37	1.5	250812.56	216.028
43	42-42'	43-43'	789.86	157972.30	1.5	236958.45	200.000
44	43-43'	44-44'	835.57	180446.25	1.5	270669.37	215.956
45	44-44'	45-45'	899.99	180981.59	1.5	271472.39	201.092
46	45-45'	46-46'	908.10	171669.14	1.5	257503.70	189.042
47	46-46'	47-47'	875.21	175979.42	1.5	263969.13	201.072
48	47-47'	48-48'	834.69	178754.73	1.5	268132.09	214.156
49	48-48'	49-49'	776.35	155270.10	1.5	232905.15	200.000
50	49-49'	50-50'	709.84	146783.24	1.5	220174.87	206.784
51	50-50'	51-51'	673.80	134779.57	1.5	202169.35	200.028
52	51-51'	52-52'	679.97	137430.30	1.5	206145.45	202.112
53	52-52'	53-53'	739.28	175503.98	1.5	263255.97	237.399
54	53-53'	54-54'	792.50	159314.29	1.5	238971.43	201.028
55	54-54'	55-55'	789.94	160526.79	1.5	240790.18	203.213
56	55-55'	56-56'	778.98	155796.10	1.5	233694.15	200.000
57	56-56'	57-57'	800.26	132350.59	1.5	198525.88	165.385
58	57-57'	58-58'	871.10	152903.22	1.5	229354.83	175.530
59	58-58'	59-59'	918.881	162663.990	1.5	243995.99	177.024
60	59-59'	60-60'	935.439	126903.458	1.5	190355.19	135.662
61	60-60'	61-61'	892.174	178434.800	1.5	267652.20	200.000
62	61-61'	62-62'	789.544	132129.399	1.5	198194.10	167.349

63	62-62'	63-63'	693.194	149042.148	1.5	223563.22	215.008
64	63-63'	64-64'	792.839	10186944.828	1.5	15280417.24	215.000
65	64-64'	65-65'	920.527	185232.024	1.5	277848.04	201.224
66	65-65'	66-66'	818.824	127276.365	1.5	190914.55	155.438
67	66-66'	67-67'	684.379	141255.826	1.5	211883.74	206.400
68	67-67'	68-68'	635.704	128007.900	1.5	192011.85	201.364
69	68-68'	69-69'	643.880	131095.900	1.5	196643.85	203.603
70	69-69'	70-70'	706.994	160112.111	1.5	240168.17	226.469
71	70-70'	71-71'	707.876	144986.352	1.5	217479.53	204.819
72	71-71'	72-72'	683.991	138225.689	1.5	207338.53	202.087
73	72-72'	73-73'	687.497	149199.115	1.5	223798.67	217.018
74	73-73'	74-74'	646.282	129256.400	1.5	193884.60	200.000
75	74-74'	75-75'	662.298	139560.759	1.5	209341.14	210.722
76	75-75'	76-76'	745.399	151016.245	1.5	226524.37	202.598
77	76-76'	77-77'	837.648	170010.612	1.5	255015.92	202.962
78	77-77'	78-78'	904.629	150750.912	1.5	226126.37	166.644
79	78-78'	79-79'	872.141	249148.880	1.5	373723.32	285.675
80	79-79'	80-80'	767.573	153514.600	1.5	230271.90	200.000'
81	80-80'	81-81'	707.219	133198.334	1.5	199797.50	188.341
82	81-81'	82-82'	699.172	138239.490	1.5	207359.24	197.719
83	82-82'	83-83'	762.774	152554.700	1.5	228832.05	200.000
84	83-83'	84-84'	865.742	195159.025	1.5	292738.54	225.424
85	84-84'	85-85'	922.018	168075.492	1.5	252113.24	182.291
86	85-85'	86-86'	906.416	181384.619	1.5	272076.93	200.112
87	86-86'	87-87'	870.589	156250.612	1.5	234375.92	179.477
88	87-87'	88-88'	831.862	168029.368	1.5	252044.05	201.992
89	88-88'	89-89'	838.361	135541.934	1.5	203312.90	161.675
90	89-89'	90-90'	905.053	199694.514	1.5	299541.77	220.644
91	90-90'	91-91'	974.941	196610.502	1.5	294915.75	201.664
92	91-91'	92-92'	1004.97 8	179941.221	1.5	269911.83	179.050
93	92-92'	93-93'	995.786	200063.365	1.5	300095.05	200.910
94	93-93'	94-94'	979.278	211863.857	1.5	317795.79	216.347
95	94-94'	95-95'	927.760	185551.900	1.5	278327.85	200.000
96	95-95'	96-96'	847.716	149816.760	1.5	224725.14	176.730
97	96-96'	97-97'	861.170	173096.892	1.5	259645.34	201.002
98	97-97'	98-98'	930.258	169546.871	1.5	254320.31	182.258
99	98-98'	99-99'	952.559	190511.700	1.5	285767.55	200.000
100	99-99'	100-100'	969.412	198406.543	1.5	297609.81	204.667
101	100-100'	101-101'	973.035	195283.259	1.5	292924.89	200.695

102	101-101'	102-102'	920.894	211381.894	1.5	317072.84	229.540
103	102-102'	103-103'	826.319	165263.800	1.5	247895.70	200.000
104	103-103'	104-104'	780.285	156056.900	1.5	234085.35	200.000
105	104-104'	105-105'	749.816	149088.815	1.5	223633.22	198.834
106	105-105'	106-106'	723.538	144777.060	1.5	217165.59	200.096
107	106-106'	107-107'	727.654	155395.605	1.5	233093.41	213.557
108	107-107'	108-108'	733.978	152767.245	1.5	229150.87	208.136
109	108-108'	109-109'	747.635	150815.923	1.5	226223.88	201.724
110	109-109'	110-110'	747.472	135690.835	1.5	203536.25	181.533
111	110-110'	111-111'	760.750	146048.785	1.5	219073.18	191.980
112	111-111'	112-112'	740.207	164152.005	1.5	246228.01	221.765
113	112-112'	113-113'	672.832	120218.258	1.5	180327.39	178.675
114	113-113'	114-114'	638.610	121270.667	1.5	181906.00	189.898
115	114-114'	115-115'	639.620	129544.696	1.5	194317.04	202.534
116	115-115'	116-116'	610.972	111870.806	1.5	167806.21	183.103
117	116-116'	117-117'	566.190	114018.675	1.5	171028.01	201.379
118	117-117'	118-118'	571.339	106478.071	1.5	159717.11	186.366
119	118-118'	119-119'	575.831	112479.373	1.5	168719.06	195.334
120	119-119'	120-120'	545.993	109555.033	1.5	164332.55	200.653
121	120-120'	121-121'	506.240	108205.763	1.5	162308.64	213.744
122	121-121'	122-122'	557.733	130157.592	1.5	195236.39	233.369
123	122-122'	123-123'	600.616	150860.324	1.5	226290.49	251.176
124	123-123'	124-124'	561.917	113525.676	1.5	170288.51	202.033
125	124-124'	125-125'	544.846	115532.854	1.5	173299.28	212.047
126	125-125'	126-126'	530.087	100912.037	1.5	151368.06	190.369
127	126-126'	127-127'	543.027	92961.878	1.5	139442.82	171.192
128	127-127'	128-128'	573.144	107152.616	1.5	160728.92	186.956
129	128-128'	129-129'	599.284	52204.784	1.5	78307.18	87.112
130	129-129'	130-130'	184.070	0.000	1.5	0.00	0.000
131	130-130'	131-131'	332.042	56846.919	1.5	85270.38	171.204
132	131-131'	132-132'	293.549	62572.505	1.5	93858.76	213.159
133	132-132'	133-133'	259.711	57605.867	1.5	86408.80	221.808
134	133-133'	134-134'	200.110	41598.363	1.5	62397.54	207.878
135	134-134'	135-135'	171.997	35111.710	1.5	52667.57	204.142
136	135-135'	136-136'	180.623	36353.088	1.5	54529.63	201.265
137	136-136'	137-137'	176.137	33710.860	1.5	50566.29	191.390
138	137-137'	138-138'	143.484	29792.444	1.5	44688.67	207.636
139	138-138'	139-139'	156.855	30516.043	1.5	45774.06	194.550
140	139-139'	140-140'	225.002	40481.370	1.5	60722.06	179.916

141	140-140'	141-141'	246.671	43615.133	1.5	65422.70	176.815
142	141-141'	142-142'	186.624	32115.751	1.5	48173.63	172.088
143	142-142'	143-143'	188.957	37837.317	1.5	56755.98	200.243
144	143-143'	144-144'	269.232	71962.752	1.5	107944.13	267.289
145	144-144'	145-145'	251.121	47984.859	1.5	71977.29	191.083
146	145-145'	146-146'	216.600	45889.093	1.5	68833.64	211.861
147	146-146'	147-147'	248.336	50734.446	1.5	76101.67	204.298
148	147-147'	148-148'	311.010	59353.986	1.5	89030.98	190.843
149	148-148'	149-149'	395.573	77323.348	1.5	115985.02	195.472
150	149-149'	150-150'	435.236	84806.943	1.5	127210.41	194.853
151	150-150'	151-151'	366.642	67324.912	1.5	100987.37	183.626
152	151-151'	152-152'	265.406	46394.208	1.5	69591.31	174.805
153	152-152'	153-153'	223.864	47736.759	1.5	71605.14	213.240
154	153-153'	154-154	241.373	51472.203	1.5	77208.30	213.248
155	154-154	155-155'	282.289	59604.758	1.5	89407.14	211.148
156	155-155'	156-156'	337.289	80053.520	1.5	120080.28	237.344
157	156-156'	157-157'	347.988	79593.207	1.5	119389.81	228.724
158	157-157'	158-158'	342.308	37249.272	1.5	55873.91	108.818
159	158-158'	159-159'	327.580	63697.834	1.5	95546.75	194.450
160	159-159'	160-160'	278.709	55860.251	1.5	83790.38	200.425
161	160-160'	161-161'	257.785	55243.218	1.5	82864.83	214.300
162	161-161'	162-162	192.336	40292.853	1.5	60439.28	209.492
163	162-162	163-163'	161.081	31881.858	1.5	47822.79	197.925
164	163-163'	164-164'	190.931	39546.392	1.5	59319.59	207.124
165	164-164'	165-165'	166.461	32491.259	1.5	48736.89	195.189
166	165-165'	166-166'	136.127	26612.556	1.5	39918.83	195.498
167	166-166'	167-167'	180.570	33999.345	1.5	50999.02	188.289
168	167-167'	168-168'	212.287	41668.329	1.5	62502.49	196.283
169	168-168'	169-169'	202.106	40064.685	1.5	60097.03	198.236
170	169-169'	170-170'	192.812	40242.949	1.5	60364.42	208.716
171	170-170'	171-171'	202.671	41031.656	1.5	61547.48	202.455
172	171-171'	172-172'	232.297	47066.624	1.5	70599.94	202.614
173	172-172'	173-173'	252.200	51093.702	1.5	76640.55	202.592
174	173-173'	174-174'	252.016	54281.726	1.5	81422.59	215.390
175	174-174'	175-175'	253.678	48701.767	1.5	73052.65	191.983
176	175-175'	176-176'	241.347	49191.002	1.5	73786.50	203.819
177	176-176'	177-177'	220.812	45663.597	1.5	68495.40	206.799
178	177-177'	178-178'	196.786	44018.555	1.5	66027.83	223.688
179	178-178'	179-179'	170.419	31673.301	1.5	47509.95	185.856

180	179-179'	180-180'	168.129	30935.812	1.5	46403.72	184.001
181	180-180'	181-181'	185.272	35460.690	1.5	53191.04	191.398
182	181-181'	182-182'	221.491	39416.006	1.5	59124.01	177.958
183	182-182'	183-183'	255.315	53120.328	1.5	79680.49	208.058
184	183-183'	184-184'	271.156	58083.406	1.5	87125.11	214.207
185	184-184'	185-185'	268.769	54825.920	1.5	82238.88	203.989
186	185-185'	186-186'	253.339	59347.330	1.5	89021.00	234.261
187	186-186'	187-187'	233.073	43697.132	1.5	65545.70	187.483
188	187-187'	188-188'	232.793	44545.543	1.5	66818.31	191.353
189	188-188'	189-189'	209.393	39188.225	1.5	58782.34	187.152
190	189-189'	190-190'	184.347	36863.501	1.5	55295.25	199.968
191	190-190'	191-191'	215.619	42891.694	1.5	64337.54	198.924
192	191-191'	192-192'	267.153	54724.587	1.5	82086.88	204.844
193	192-192'	193-193'	226.491	48768.161	1.5	73152.24	215.321
194	193-193'	194-194'	170.458	35069.926	1.5	52604.89	205.740
195	194-194'	195-195'	177.598	35597.820	1.5	53396.73	200.441
196	195-195'	196-196'	154.224	28010.317	1.5	42015.48	181.621
197	196-196'	197-197'	141.535	28465.843	1.5	42698.76	201.123
198	197-197'	198-198'	164.921	34951.213	1.5	52426.82	211.927
199	198-198'	199-199'	179.647	34255.174	1.5	51382.76	190.681
200	199-199'	200-200'	172.598	32979.681	1.5	49469.52	191.078
201	200-200'	201-201'	215.182	44171.485	1.5	66257.23	205.275
202	201-201'	202-202'	238.481	50307.090	1.5	75460.64	210.948
203	202-202'	203-203'	197.753	38131.524	1.5	57197.29	192.824
204	203-203'	204-204'	222.007	45355.484	1.5	68033.23	204.298
205	204-204'	205-205'	297.810	48468.280	1.5	72702.42	162.749
206	205-205'	206-206'	360.684	76333.358	1.5	114500.04	211.635
207	206-206'	207-207'	421.892	97746.470	1.5	146619.71	231.686
208	207-207'	208-208'	456.982	105704.848	1.5	158557.27	231.311
209	208-208'	209-209'	406.645	83074.320	1.5	124611.48	204.292
210	209-209'	210-210'	329.510	64460.625	1.5	96690.94	195.626
211	210-210'	211-211'	300.365	58963.954	1.5	88445.93	196.308
212	211-211'	212-212'	365.036	66696.093	1.5	100044.14	182.711
213	212-212'	213-213'	414.573	93018.046	1.5	139527.07	224.371
214	213-213'	214-214'	339.092	72291.256	1.5	108436.88	213.191
215	214-214'	215-215'	285.930	57212.491	1.5	85818.74	200.093
216	215-215'	216-216'	296.698	58720.985	1.5	88081.48	197.915
217	216-216'	217-217'	265.450	50414.529	1.5	75621.79	189.921
218	217-217'	218-218'	217.121	43561.420	1.5	65342.13	200.632

219	218-218'	219-219'	227.916	44211.602	1.5	66317.40	193.982
220	219-219'	220-220'	260.972	52408.036	1.5	78612.05	200.819
221	220-220'	221-221'	282.436	55677.456	1.5	83516.18	197.133
222	221-221'	222-222'	320.082	65721.477	1.5	98582.22	205.327
223	222-222'	223-233'	363.488	75201.202	1.5	112801.80	206.888
224	223-233'	224-224'	425.666	98693.100	1.5	148039.65	231.856
225	224-224'	225-225'	469.761	90139.620	1.5	135209.43	191.884
226	225-225'	226-226'	521.688	130080.170	1.5	195120.26	249.345
227	226-226'	227-227'	32.663	0.000	1.5	0.00	0.000
228	227-227'	228-228'	69.508	8711.375	1.5	13067.06	125.330
229	228-228'	229-229'	73.359	12907.648	1.5	19361.47	175.953
230	229-229'	230-230'	115.277	23944.416	1.5	35916.62	207.712
231	230-230'	231-231'	146.069	31009.904	1.5	46514.86	212.297
232	231-231'	232-232'	124.223	26944.341	1.5	40416.51	216.903
233	232-232'	233-233'	117.677	22697.443	1.5	34046.16	192.880
234	233-233'	234-234'	121.696	24687.737	1.5	37031.61	202.864
235	234-234'	235-235'	121.941	26623.635	1.5	39935.45	218.333
236	235-235'	236-236'	169.652	33141.688	1.5	49712.53	195.351
237	236-236'	237-237'	250.438	29174.216	1.5	43761.32	116.493
238	237-237'	238-238'	260.688	60770.283	1.5	91155.42	233.115
239	238-238'	239-239'	211.860	47818.808	1.5	71728.21	225.710
240	239-239'	240-240'	187.629	38381.576	1.5	57572.36	204.561
241	240-240'	241-241'	214.224	40566.005	1.5	60849.01	189.363
242	241-241'	242-242'	196.817	39372.16	1.5	59058.24	200.045
243	242-242'	243-243'	147.18	29715.97	1.5	44573.96	201.905
244	243-243'	244-244'	188.38	35569.34	1.5	53354.02	188.822
245	244-244'	245-245'	208.96	36740.21	1.5	55110.31	175.822
246	245-245'	246-246'	199.47	38033.77	1.5	57050.65	190.677
247	246-246'	247-247'	239.85	48892.87	1.5	73339.31	203.846
248	247-247'	248-248'	227.84	43882.50	1.5	65823.75	192.601
249	248-248'	249-249'	202.30	41275.27	1.5	61912.90	204.032
250	249-249'	250-250'	215.96	53332.43	1.5	79998.65	246.958
251	250-250'	251-251'	186.79	39919.88	1.5	59879.82	213.721
252	251-251'	252-252'	159.28	28064.80	1.5	42097.20	176.199
253	252-252'	253-253'	156.62	28722.96	1.5	43084.44	183.388
254	253-253'	254-254'	149.03	29141.59	1.5	43712.39	195.549
255	254-254'	255-255'	140.32	29846.79	1.5	44770.19	212.712
256	255-255'	256-256'	135.89	24958.04	1.5	37437.06	183.671
257	256-256'	257-257'	138.41	24254.48	1.5	36381.72	175.239
258	257-257'	258-258'	176.88	42001.69	1.5	63002.54	237.456

259	258-258'	259-259'	191.45	41147.86	1.5	61721.79	214.928
260	259-259'	260-260'	139.47	28731.17	1.5	43096.75	206.001
261	260-260'	261-261'	103.40	21497.58	1.5	32246.37	207.915
262	261-261'	262-262'	130.19	25891.17	1.5	38836.75	198.876
263	262-262'	263-263'	165.89	35075.03	1.5	52612.54	211.431
264	263-263'	264-264'	188.97	38159.19	1.5	57238.79	201.932
265	264-264'	265-265'	183.96	31897.76	1.5	47846.63	173.396
266	265-265'	266-266'	162.77	34803.17	1.5	52204.75	213.822
267	266-266'	267-267'	157.36	28643.45	1.5	42965.18	182.025
268	267-267'	268-268'	163.47	31767.94	1.5	47651.91	194.335
269	268-268'	269-269'	209.59	47247.12	1.5	70870.67	225.428
270	269-269'	270-270'	208.18	43058.80	1.5	64588.20	206.832
271	270-270'	271-271'	276.10	47905.09	1.5	71857.64	173.506
272	271-271'	272-272'	329.32	40386.98	1.5	60580.47	122.636
273	272-272'	273-273'	222.31	42698.51	1.5	64047.77	192.067
274	273-273'	274-274'	239.12	56679.45	1.5	85019.17	237.033
275	274-274'	275-275'	305.98	86149.12	1.5	129223.67	281.551
276	275-275'	276-276'	237.10	51086.71	1.5	76630.06	215.463
277	276-276'	277-277'	172.37	37269.05	1.5	55903.57	216.211
278	277-277'	278-278'	123.91	23363.86	1.5	35045.79	188.549
279	278-278'	279-279'	137.75	20794.43	1.5	31191.64	150.955
280	279-279'	280-280'	212.30	38123.90	1.5	57185.85	179.579
281	280-280'	281-281'	202.29	56383.57	1.5	84575.35	278.734
282	281-281'	282-282'	159.18	34966.25	1.5	52449.38	219.669
283	282-282'	283-283'	154.32	29371.34	1.5	44057.00	190.325
284	283-283'	284-284'	167.72	34238.53	1.5	51357.79	204.141
285	284-284'	285-285'	168.78	32366.66	1.5	48549.99	191.774
286	285-285'	286-286'	176.11	37093.28	1.5	55639.91	210.628
287	286-286'	287-287'	183.01	30276.06	1.5	45414.10	165.438
288	287-287'	288-288'	164.72	32388.50	1.5	48582.75	196.627
289	288-288'	289-289'	180.88	32413.88	1.5	48620.82	179.201
290	289-289'	290-290'	179.03	41757.36	1.5	62636.04	233.239
291	290-290'	291-291'	128.56	27224.89	1.5	40837.33	211.763
292	291-291'	292-292'	119.56	21196.44	1.5	31794.66	177.290
293	292-292'	293-293'	127.47	24642.33	1.5	36963.49	193.327
294	293-293'	294-294'	191.10	35998.19	1.5	53997.29	188.379
295	294-294'	295-295'	187.44	48755.23	1.5	73132.85	260.116
296	295-295'	296-296'	132.45	29345.46	1.5	44018.19	221.568
297	296-296'	297-297'	171.24	34956.70	1.5	52435.05	204.144

298	297-297'	298-298'	193.64	37604.69	1.5	56407.04	194.200
299	298-298'	299-299'	160.06	31282.27	1.5	46923.40	195.436
300	299-299'	300-300'	129.74	25070.19	1.5	37605.28	193.240
301	300-300'	301-301'	127.03	24164.66	1.5	36246.99	190.222
302	301-301'	302-302'	111.06	23669.59	1.5	35504.39	213.133
303	302-302'	303-303'	98.59	20167.89	1.5	30251.84	204.556
304	303-303'	304-304'	92.12	18699.28	1.5	28048.92	202.996
305	304-304'	305-305'	89.67	17969.19	1.5	26953.79	200.388
306	305-305'	306-306'	94.06	18935.51	1.5	28403.27	201.311
307	306-306'	307-307'	86.47	15404.26	1.5	23106.39	178.155
308	307-307'	308-308'	72.77	13894.03	1.5	20841.04	190.932
309	308-308'	309-309'	67.48	13687.98	1.5	20531.97	202.842
310	309-309'	310-310'	75.57	16132.45	1.5	24198.68	213.484
311	310-310'	311-311'	74.13	14688.98	1.5	22033.47	198.157
312	311-311'	312-312'	66.63	12874.46	1.5	19311.69	193.229
313	312-312'	313-313'	76.28	14604.99	1.5	21907.48	191.468
314	313-313'	314-314'	88.76	16939.08	1.5	25408.62	190.836
315	314-314'	315-315'	84.71	15369.97	1.5	23054.96	181.454
316	315-315'	316-316'	96.28	20403.33	1.5	30605.00	211.910
317	316-316'	317-317'	93.34	20875.72	1.5	31313.57	223.656
318	317-317'	318-318'	71.27	14397.38	1.5	21596.07	202.016
319	318-318'	319-319'	63.61	12496.14	1.5	18744.21	196.437
320	319-319'	320-320'	71.81	13656.94	1.5	20485.41	190.171
321	320-320'	321-321'	101.20	21475.24	1.5	32212.86	212.207
322	321-321'	322-322'	100.64	20833.17	1.5	31249.76	207.012
323	322-322'	323-323'	95.36	19085.87	1.5	28628.81	200.157
324	323-323'	324-324'	90.48	18935.31	1.5	28402.97	209.282
325	324-324'	325-325'	94.16	18852.50	1.5	28278.75	200.223
326	325-325'	326-326'	107.45	21780.81	1.5	32671.21	202.714
Total				37137950.76		55706926.15	

Mineable Reserves Estimation/Replenishment of sand/Bajri of Lease Area:-

Sr.No	Two Consecutive Cross Section		Average Area of Cross Section	Mineral /Replenishment of Sand (Post Monsoon)(in Cubic Meters)	Bulk density	Tonnage Of Mineral (Replenished) in MT	Distance Between two consecutive Section Line
	From	To					
1	0	1-1'	419.23	0	1.5	0.00	0.000
2	1-1'	2-2'	613.24	111193.72	1.5	166790.59	181.323

3	2-2'	3-3'	595.07	119052.50	1.5	178578.76	200.065
4	3-3'	4-4'	599.72	120010.54	1.5	180015.82	200.112
5	4-4'	5-5'	606.08	124051.75	1.5	186077.63	204.678
6	5-5'	6-6'	602.56	120512.25	1.5	180768.38	200.000
7	6-6'	7-7'	558.00	129564.18	1.5	194346.27	232.192
8	7-7'	8-8'	513.49	102698.03	1.5	154047.04	200.000
9	8-8'	9-9'	509.46	108908.82	1.5	163363.23	213.774
10	9-9'	10-10'	513.22	102794.71	1.5	154192.07	200.292
11	10-10'	11-11'	528.02	104126.04	1.5	156189.06	197.200
12	11-11'	12-12'	540.87	118383.48	1.5	177575.22	218.878
13	12-12'	13-13'	515.25	103142.96	1.5	154714.44	200.181
14	13-13'	14-14'	458.56	81109.06	1.5	121663.59	176.879
15	14-14'	15-15'	403.89	81846.92	1.5	122770.38	202.646
16	15-15'	16-16'	373.98	74882.09	1.5	112323.14	200.230
17	16-16'	17-17'	372.77	74868.37	1.5	112302.55	200.844
18	17-17'	18-18'	360.00	60201.77	1.5	90302.65	167.228
19	18-18'	19-19'	355.67	67558.64	1.5	101337.96	189.950
20	19-19'	20-20'	384.62	76923.08	1.5	115384.61	200.000
21	20-20'	21-21'	452.19	90438.90	1.5	135658.35	200.000
22	21-21'	22-22'	561.24	134658.38	1.5	201987.57	239.929
23	22-22'	23-23'	671.93	140308.24	1.5	210462.36	208.813
24	23-23'	24-24'	758.40	98520.81	1.5	147781.21	129.906
25	24-24'	25-25'	726.40	153826.27	1.5	230739.40	211.764
26	25-25'	26-26'	595.88	119176.95	1.5	178765.43	200.000
27	26-26'	27-27'	517.67	103533.98	1.5	155300.96	200.000
28	27-27'	28-28'	492.81	94279.77	1.5	141419.65	191.310
29	28-28'	29-29'	478.22	95849.40	1.5	143774.11	200.428
30	29-29'	30-30'	462.13	107640.85	1.5	161461.27	232.924
31	30-30'	31-31'	474.72	95629.22	1.5	143443.82	201.445
32	31-31'	32-32'	520.61	94789.18	1.5	142183.77	182.074
33	32-32'	33-33'	568.38	113676.83	1.5	170515.24	200.000
34	33-33'	34-34'	628.85	153025.03	1.5	229537.54	243.343
35	34-34'	35-35'	630.56	141461.36	1.5	212192.04	224.341
36	35-35'	36-36'	580.06	116012.40	1.5	174018.60	200.000
37	36-36'	37-37'	547.86	101735.27	1.5	152602.91	185.696
38	37-37'	38-38'	516.72	112965.38	1.5	169448.07	218.619
39	38-38'	39-39'	504.79	102706.08	1.5	154059.13	203.464
40	39-39'	40-40'	529.54	110271.45	1.5	165407.18	208.239
41	40-40'	41-41'	562.72	107841.00	1.5	161761.50	191.644
42	41-41'	42-42'	580.51	125406.28	1.5	188109.42	216.028
43	42-42'	43-43'	592.40	118479.23	1.5	177718.84	200.000
44	43-43'	44-44'	626.68	135334.69	1.5	203002.03	215.956
45	44-44'	45-45'	675.00	135736.19	1.5	203604.29	201.092

46	45-45'	46-46'	681.08	128751.85	1.5	193127.78	189.042
47	46-46'	47-47'	656.40	131984.57	1.5	197976.85	201.072
48	47-47'	48-48'	626.02	134066.05	1.5	201099.07	214.156
49	48-48'	49-49'	582.26	116452.58	1.5	174678.86	200.000
50	49-49'	50-50'	532.38	110087.43	1.5	165131.15	206.784
51	50-50'	51-51'	505.35	101084.67	1.5	151627.01	200.028
52	51-51'	52-52'	509.98	103072.72	1.5	154609.09	202.112
53	52-52'	53-53'	554.46	131627.98	1.5	197441.97	237.399
54	53-53'	54-54'	594.37	119485.72	1.5	179228.57	201.028
55	54-54'	55-55'	592.46	120395.09	1.5	180592.64	203.213
56	55-55'	56-56'	584.24	116847.08	1.5	175270.61	200.000
57	56-56'	57-57'	600.19	99262.94	1.5	148894.41	165.385
58	57-57'	58-58'	653.32	114677.41	1.5	172016.12	175.530
59	58-58'	59-59'	689.16	121997.99	1.5	182996.99	177.024
60	59-59'	60-60'	701.58	95177.59	1.5	142766.39	135.662
61	60-60'	61-61'	669.13	133826.10	1.5	200739.15	200.000
62	61-61'	62-62'	592.16	99097.05	1.5	148645.57	167.349
63	62-62'	63-63'	519.90	111781.61	1.5	167672.42	215.008
64	63-63'	64-64'	35535.85	7640208.62	1.5	11460312.93	215.000
65	64-64'	65-65'	690.39	138924.02	1.5	208386.03	201.224
66	65-65'	66-66'	614.12	95457.27	1.5	143185.91	155.438
67	66-66'	67-67'	513.28	105941.87	1.5	158912.80	206.400
68	67-67'	68-68'	476.78	96005.93	1.5	144008.89	201.364
69	68-68'	69-69'	482.91	98321.93	1.5	147482.89	203.603
70	69-69'	70-70'	530.25	120084.08	1.5	180126.12	226.469
71	70-70'	71-71'	530.91	108739.76	1.5	163109.65	204.819
72	71-71'	72-72'	512.99	103669.27	1.5	155503.90	202.087
73	72-72'	73-73'	515.62	111899.34	1.5	167849.00	217.018
74	73-73'	74-74'	484.71	96942.30	1.5	145413.45	200.000
75	74-74'	75-75'	496.72	104670.57	1.5	157005.85	210.722
76	75-75'	76-76'	559.05	113262.18	1.5	169893.28	202.598
77	76-76'	77-77'	628.24	127507.96	1.5	191261.94	202.962
78	77-77'	78-78'	678.47	113063.18	1.5	169594.78	166.644
79	78-78'	79-79'	654.11	186861.66	1.5	280292.49	285.675
80	79-79'	80-80'	575.68	115135.95	1.5	172703.93	200.000
81	80-80'	81-81'	530.41	99898.75	1.5	149848.13	188.341
82	81-81'	82-82'	524.38	103679.62	1.5	155519.43	197.719
83	82-82'	83-83'	572.08	114416.03	1.5	171624.04	200.000
84	83-83'	84-84'	649.31	146369.27	1.5	219553.90	225.424
85	84-84'	85-85'	691.51	126056.62	1.5	189084.93	182.291
86	85-85'	86-86'	679.81	136038.46	1.5	204057.70	200.112
87	86-86'	87-87'	652.94	117187.96	1.5	175781.94	179.477
88	87-87'	88-88'	623.90	126022.03	1.5	189033.04	201.992

89	88-88'	89-89'	628.77	101656.45	1.5	152484.68	161.675
90	89-89'	90-90'	678.79	149770.89	1.5	224656.33	220.644
91	90-90'	91-91'	731.21	147457.88	1.5	221186.81	201.664
92	91-91'	92-92'	753.73	134955.92	1.5	202433.87	179.050
93	92-92'	93-93'	746.84	150047.52	1.5	225071.29	200.910
94	93-93'	94-94'	734.46	158897.89	1.5	238346.84	216.347
95	94-94'	95-95'	695.82	139163.93	1.5	208745.89	200.000
96	95-95'	96-96'	635.79	112362.57	1.5	168543.86	176.730
97	96-96'	97-97'	645.88	129822.67	1.5	194734.00	201.002
98	97-97'	98-98'	697.69	127160.15	1.5	190740.23	182.258
99	98-98'	99-99'	714.42	142883.78	1.5	214325.66	200.000
100	99-99'	100-100'	727.06	148804.91	1.5	223207.36	204.667
101	100-100'	101-101'	729.78	146462.44	1.5	219693.67	200.695
102	101-101'	102-102'	690.67	158536.42	1.5	237804.63	229.540
103	102-102'	103-103'	619.74	123947.85	1.5	185921.78	200.000
104	103-103'	104-104'	585.21	117042.68	1.5	175564.01	200.000
105	104-104'	105-105'	562.36	111816.61	1.5	167724.92	198.834
106	105-105'	106-106'	542.65	108582.80	1.5	162874.19	200.096
107	106-106'	107-107'	545.74	116546.70	1.5	174820.06	213.557
108	107-107'	108-108'	550.48	114575.43	1.5	171863.15	208.136
109	108-108'	109-109'	560.73	113111.94	1.5	169667.91	201.724
110	109-109'	110-110'	560.60	101768.13	1.5	152652.19	181.533
111	110-110'	111-111'	570.56	109536.59	1.5	164304.88	191.980
112	111-111'	112-112'	555.16	123114.00	1.5	184671.01	221.765
113	112-112'	113-113'	504.62	90163.69	1.5	135245.54	178.675
114	113-113'	114-114'	478.96	90953.00	1.5	136429.50	189.898
115	114-114'	115-115'	479.71	97158.52	1.5	145737.78	202.534
116	115-115'	116-116'	458.23	83903.10	1.5	125854.66	183.103
117	116-116'	117-117'	424.64	85514.01	1.5	128271.01	201.379
118	117-117'	118-118'	428.50	79858.55	1.5	119787.83	186.366
119	118-118'	119-119'	431.87	84359.53	1.5	126539.29	195.334
120	119-119'	120-120'	409.49	82166.27	1.5	123249.41	200.653
121	120-120'	121-121'	379.68	81154.32	1.5	121731.48	213.744
122	121-121'	122-122'	418.30	97618.19	1.5	146427.29	233.369
123	122-122'	123-123'	450.46	113145.24	1.5	169717.86	251.176
124	123-123'	124-124'	421.44	85144.26	1.5	127716.39	202.033
125	124-124'	125-125'	408.63	86649.64	1.5	129974.46	212.047
126	125-125'	126-126'	397.56	75684.03	1.5	113526.04	190.369
127	126-126'	127-127'	407.27	69721.41	1.5	104582.11	171.192
128	127-127'	128-128'	429.86	80364.46	1.5	120546.69	186.956
129	128-128'	129-129'	449.46	39153.59	1.5	58730.38	87.112

130	129-129'	130-130'	#DIV/0!	0.00	1.5	0.00	0.000
131	130-130'	131-131'	249.03	42635.19	1.5	63952.78	171.204
132	131-131'	132-132'	220.16	46929.38	1.5	70394.07	213.159
133	132-132'	133-133'	194.78	43204.40	1.5	64806.60	221.808
134	133-133'	134-134'	150.08	31198.77	1.5	46798.16	207.878
135	134-134'	135-135'	129.00	26333.78	1.5	39500.67	204.142
136	135-135'	136-136'	135.47	27264.82	1.5	40897.22	201.265
137	136-136'	137-137'	132.10	25283.15	1.5	37924.72	191.390
138	137-137'	138-138'	107.61	22344.33	1.5	33516.50	207.636
139	138-138'	139-139'	117.64	22887.03	1.5	34330.55	194.550
140	139-139'	140-140'	168.75	30361.03	1.5	45541.54	179.916
141	140-140'	141-141'	185.00	32711.35	1.5	49067.02	176.815
142	141-141'	142-142'	139.97	24086.81	1.5	36130.22	172.088
143	142-142'	143-143'	141.72	28377.99	1.5	42566.98	200.243
144	143-143'	144-144'	201.92	53972.06	1.5	80958.10	267.289
145	144-144'	145-145'	188.34	35988.64	1.5	53982.97	191.083
146	145-145'	146-146'	162.45	34416.82	1.5	51625.23	211.861
147	146-146'	147-147'	186.25	38050.83	1.5	57076.25	204.298
148	147-147'	148-148'	233.26	44515.49	1.5	66773.23	190.843
149	148-148'	149-149'	296.68	57992.51	1.5	86988.77	195.472
150	149-149'	150-150'	326.43	63605.21	1.5	95407.81	194.853
151	150-150'	151-151'	274.98	50493.68	1.5	75740.53	183.626
152	151-151'	152-152'	199.05	34795.66	1.5	52193.48	174.805
153	152-152'	153-153'	167.90	35802.57	1.5	53703.85	213.240
154	153-153'	154-154	181.03	38604.15	1.5	57906.23	213.248
155	154-154	155-155'	211.72	44703.57	1.5	67055.35	211.148
156	155-155'	156-156'	252.97	60040.14	1.5	90060.21	237.344
157	156-156'	157-157'	260.99	59694.91	1.5	89542.36	228.724
158	157-157'	158-158'	256.73	27936.95	1.5	41905.43	108.818
159	158-158'	159-159'	245.68	47773.38	1.5	71660.06	194.450
160	159-159'	160-160'	209.03	41895.19	1.5	62842.78	200.425
161	160-160'	161-161'	193.34	41432.41	1.5	62148.62	214.300
162	161-161'	162-162	144.25	30219.64	1.5	45329.46	209.492
163	162-162	163-163'	120.81	23911.39	1.5	35867.09	197.925
164	163-163'	164-164'	143.20	29659.79	1.5	44489.69	207.124
165	164-164'	165-165'	124.85	24368.44	1.5	36552.67	195.189
166	165-165'	166-166'	102.10	19959.42	1.5	29939.13	195.498
167	166-166'	167-167'	135.43	25499.51	1.5	38249.26	188.289
168	167-167'	168-168'	159.22	31251.25	1.5	46876.87	196.283
169	168-168'	169-169'	151.58	30048.51	1.5	45072.77	198.236
170	169-169'	170-170'	144.61	30182.21	1.5	45273.32	208.716
171	170-170'	171-171'	152.00	30773.74	1.5	46160.61	202.455
172	171-171'	172-172'	174.22	35299.97	1.5	52949.95	202.614

173	172-172'	173-173'	189.15	38320.28	1.5	57480.41	202.592
174	173-173'	174-174'	189.01	40711.29	1.5	61066.94	215.390
175	174-174'	175-175'	190.26	36526.33	1.5	54789.49	191.983
176	175-175'	176-176'	181.01	36893.25	1.5	55339.88	203.819
177	176-176'	177-177'	165.61	34247.70	1.5	51371.55	206.799
178	177-177'	178-178'	147.59	33013.92	1.5	49520.87	223.688
179	178-178'	179-179'	127.81	23754.98	1.5	35632.46	185.856
180	179-179'	180-180'	126.10	23201.86	1.5	34802.79	184.001
181	180-180'	181-181'	138.95	26595.52	1.5	39893.28	191.398
182	181-181'	182-182'	166.12	29562.00	1.5	44343.01	177.958
183	182-182'	183-183'	191.49	39840.25	1.5	59760.37	208.058
184	183-183'	184-184'	203.37	43562.55	1.5	65343.83	214.207
185	184-184'	185-185'	201.58	41119.44	1.5	61679.16	203.989
186	185-185'	186-186'	190.00	44510.50	1.5	66765.75	234.261
187	186-186'	187-187'	174.80	32772.85	1.5	49159.27	187.483
188	187-187'	188-188'	174.59	33409.16	1.5	50113.74	191.353
189	188-188'	189-189'	157.04	29391.17	1.5	44086.75	187.152
190	189-189'	190-190'	138.26	27647.63	1.5	41471.44	199.968
191	190-190'	191-191'	161.71	32168.77	1.5	48253.16	198.924
192	191-191'	192-192'	200.36	41043.44	1.5	61565.16	204.844
193	192-192'	193-193'	169.87	36576.12	1.5	54864.18	215.321
194	193-193'	194-194'	127.84	26302.44	1.5	39453.67	205.740
195	194-194'	195-195'	133.20	26698.37	1.5	40047.55	200.441
196	195-195'	196-196'	115.67	21007.74	1.5	31511.61	181.621
197	196-196'	197-197'	106.15	21349.38	1.5	32024.07	201.123
198	197-197'	198-198'	123.69	26213.41	1.5	39320.11	211.927
199	198-198'	199-199'	134.73	25691.38	1.5	38537.07	190.681
200	199-199'	200-200'	129.45	24734.76	1.5	37102.14	191.078
201	200-200'	201-201'	161.39	33128.61	1.5	49692.92	205.275
202	201-201'	202-202'	178.86	37730.32	1.5	56595.48	210.948
203	202-202'	203-203'	148.31	28598.64	1.5	42897.96	192.824
204	203-203'	204-204'	166.50	34016.61	1.5	51024.92	204.298
205	204-204'	205-205'	223.36	36351.21	1.5	54526.82	162.749
206	205-205'	206-206'	270.51	57250.02	1.5	85875.03	211.635
207	206-206'	207-207'	316.42	73309.85	1.5	109964.78	231.686
208	207-207'	208-208'	342.74	79278.64	1.5	118917.95	231.311
209	208-208'	209-209'	304.98	62305.74	1.5	93458.61	204.292
210	209-209'	210-210'	247.13	48345.47	1.5	72518.20	195.626
211	210-210'	211-211'	225.27	44222.97	1.5	66334.45	196.308
212	211-211'	212-212'	273.78	50022.07	1.5	75033.10	182.711
213	212-212'	213-213'	310.93	69763.53	1.5	104645.30	224.371
214	213-213'	214-214'	254.32	54218.44	1.5	81327.66	213.191
215	214-214'	215-215'	214.45	42909.37	1.5	64364.05	200.093

216	215-215'	216-216'	222.52	44040.74	1.5	66061.11	197.915
217	216-216'	217-217'	199.09	37810.90	1.5	56716.35	189.921
218	217-217'	218-218'	162.84	32671.07	1.5	49006.60	200.632
219	218-218'	219-219'	170.94	33158.70	1.5	49738.05	193.982
220	219-219'	220-220'	195.73	39306.03	1.5	58959.04	200.819
221	220-220'	221-221'	211.83	41758.09	1.5	62637.14	197.133
222	221-221'	222-222'	240.06	49291.11	1.5	73936.66	205.327
223	222-222'	223-233'	272.62	56400.90	1.5	84601.35	206.888
224	223-233'	224-224'	319.25	74019.83	1.5	111029.74	231.856
225	224-224'	225-225'	352.32	67604.72	1.5	101407.07	191.884
226	225-225'	226-226'	391.27	97560.13	1.5	146340.19	249.345
227	226-226'	227-227'	#DIV/0!	0.00	1.5	0.00	0.000
228	227-227'	228-228'	52.13	6533.53	1.5	9800.30	125.330
229	228-228'	229-229'	55.02	9680.74	1.5	14521.10	175.953
230	229-229'	230-230'	86.46	17958.31	1.5	26937.47	207.712
231	230-230'	231-231'	109.55	23257.43	1.5	34886.14	212.297
232	231-231'	232-232'	93.17	20208.26	1.5	30312.38	216.903
233	232-232'	233-233'	88.26	17023.08	1.5	25534.62	192.880
234	233-233'	234-234'	91.27	18515.80	1.5	27773.70	202.864
235	234-234'	235-235'	91.46	19967.73	1.5	29951.59	218.333
236	235-235'	236-236'	127.24	24856.27	1.5	37284.40	195.351
237	236-236'	237-237'	187.83	21880.66	1.5	32820.99	116.493
238	237-237'	238-238'	195.52	45577.71	1.5	68366.57	233.115
239	238-238'	239-239'	158.89	35864.11	1.5	53796.16	225.710
240	239-239'	240-240'	140.72	28786.18	1.5	43179.27	204.561
241	240-240'	241-241'	160.67	30424.50	1.5	45636.76	189.363
242	241-241'	242-242'	147.61	29529.12	1.5	44293.68	200.045
243	242-242'	243-243'	110.38	22286.98	1.5	33430.47	201.905
244	243-243'	244-244'	141.28	26677.01	1.5	40015.51	188.822
245	244-244'	245-245'	156.72	27555.15	1.5	41332.73	175.822
246	245-245'	246-246'	149.60	28525.33	1.5	42787.99	190.677
247	246-246'	247-247'	179.89	36669.65	1.5	55004.48	203.846
248	247-247'	248-248'	170.88	32911.88	1.5	49367.81	192.601
249	248-248'	249-249'	151.72	30956.45	1.5	46434.67	204.032
250	249-249'	250-250'	161.97	39999.32	1.5	59998.99	246.958
251	250-250'	251-251'	140.09	29939.91	1.5	44909.86	213.721
252	251-251'	252-252'	119.46	21048.60	1.5	31572.90	176.199
253	252-252'	253-253'	117.47	21542.22	1.5	32313.33	183.388
254	253-253'	254-254'	111.77	21856.19	1.5	32784.29	195.549
255	254-254'	255-255'	105.24	22385.09	1.5	33577.64	212.712
256	255-255'	256-256'	101.91	18718.53	1.5	28077.80	183.671
257	256-256'	257-257'	103.81	18190.86	1.5	27286.29	175.239
258	257-257'	258-258'	132.66	31501.27	1.5	47251.90	237.456

259	258-258'	259-259'	143.59	30860.89	1.5	46291.34	214.928
260	259-259'	260-260'	104.60	21548.37	1.5	32322.56	206.001
261	260-260'	261-261'	77.55	16123.18	1.5	24184.78	207.915
262	261-261'	262-262'	97.64	19418.38	1.5	29127.57	198.876
263	262-262'	263-263'	124.42	26306.27	1.5	39459.41	211.431
264	263-263'	264-264'	141.73	28619.39	1.5	42929.09	201.932
265	264-264'	265-265'	137.97	23923.32	1.5	35884.97	173.396
266	265-265'	266-266'	122.08	26102.37	1.5	39153.56	213.822
267	266-266'	267-267'	118.02	21482.59	1.5	32223.89	182.025
268	267-267'	268-268'	122.60	23825.96	1.5	35738.93	194.335
269	268-268'	269-269'	157.19	35435.34	1.5	53153.01	225.428
270	269-269'	270-270'	156.14	32294.10	1.5	48441.15	206.832
271	270-270'	271-271'	207.08	35928.82	1.5	53893.23	173.506
272	271-271'	272-272'	246.99	30290.23	1.5	45435.35	122.636
273	272-272'	273-273'	166.73	32023.88	1.5	48035.82	192.067
274	273-273'	274-274'	179.34	42509.59	1.5	63764.38	237.033
275	274-274'	275-275'	229.49	64611.84	1.5	96917.76	281.551
276	275-275'	276-276'	177.83	38315.03	1.5	57472.55	215.463
277	276-276'	277-277'	129.28	27951.79	1.5	41927.68	216.211
278	277-277'	278-278'	92.94	17522.90	1.5	26284.34	188.549
279	278-278'	279-279'	103.31	15595.82	1.5	23393.73	150.955
280	279-279'	280-280'	159.22	28592.93	1.5	42889.39	179.579
281	280-280'	281-281'	151.71	42287.68	1.5	63431.51	278.734
282	281-281'	282-282'	119.38	26224.69	1.5	39337.03	219.669
283	282-282'	283-283'	115.74	22028.50	1.5	33042.75	190.325
284	283-283'	284-284'	125.79	25678.90	1.5	38518.35	204.141
285	284-284'	285-285'	126.58	24274.99	1.5	36412.49	191.774
286	285-285'	286-286'	132.08	27819.96	1.5	41729.94	210.628
287	286-286'	287-287'	137.25	22707.05	1.5	34060.57	165.438
288	287-287'	288-288'	123.54	24291.37	1.5	36437.06	196.627
289	288-288'	289-289'	135.66	24310.41	1.5	36465.61	179.201
290	289-289'	290-290'	134.27	31318.02	1.5	46977.03	233.239
291	290-290'	291-291'	96.42	20418.67	1.5	30628.00	211.763
292	291-291'	292-292'	89.67	15897.33	1.5	23845.99	177.29
293	292-292'	293-293'	95.60	18481.75	1.5	27722.62	193.327
294	293-293'	294-294'	143.32	26998.64	1.5	40497.96	188.379
295	294-294'	295-295'	140.58	36566.42	1.5	54849.64	260.116
296	295-295'	296-296'	99.33	22009.10	1.5	33013.65	221.568
297	296-296'	297-297'	128.43	26217.53	1.5	39326.29	204.144
298	297-297'	298-298'	145.23	28203.52	1.5	42305.28	194.2
299	298-298'	299-299'	120.05	23461.70	1.5	35192.55	195.436
300	299-299'	300-300'	97.30	18802.64	1.5	28203.96	193.24
301	300-300'	301-301'	95.28	18123.50	1.5	27185.24	190.222

302	301-301'	302-302'	83.29	17752.19	1.5	26628.29	213.133
303	302-302'	303-303'	73.95	15125.92	1.5	22688.88	204.556
304	303-303'	304-304'	69.09	14024.46	1.5	21036.69	202.996
305	304-304'	305-305'	67.25	13476.89	1.5	20215.34	200.388
306	305-305'	306-306'	70.55	14201.64	1.5	21302.45	201.311
307	306-306'	307-307'	64.85	11553.20	1.5	17329.79	178.155
308	307-307'	308-308'	54.58	10420.52	1.5	15630.78	190.932
309	308-308'	309-309'	50.61	10265.99	1.5	15398.98	202.842
310	309-309'	310-310'	56.68	12099.34	1.5	18149.01	213.484
311	310-310'	311-311'	55.60	11016.74	1.5	16525.10	198.157
312	311-311'	312-312'	49.97	9655.85	1.5	14483.77	193.229
313	312-312'	313-313'	57.21	10953.74	1.5	16430.61	191.468
314	313-313'	314-314'	66.57	12704.31	1.5	19056.47	190.836
315	314-314'	315-315'	63.53	11527.48	1.5	17291.22	181.454
316	315-315'	316-316'	72.21	15302.50	1.5	22953.75	211.91
317	316-316'	317-317'	70.00	15656.79	1.5	23485.18	223.656
318	317-317'	318-318'	53.45	10798.03	1.5	16197.05	202.016
319	318-318'	319-319'	47.71	9372.11	1.5	14058.16	196.437
320	319-319'	320-320'	53.86	10242.71	1.5	15364.06	190.171
321	320-320'	321-321'	75.90	16106.43	1.5	24159.65	212.207
322	321-321'	322-322'	75.48	15624.88	1.5	23437.32	207.012
323	322-322'	323-323'	71.52	14314.40	1.5	21471.60	200.157
324	323-323'	324-324'	67.86	14201.48	1.5	21302.23	209.282
325	324-324'	325-325'	70.62	14139.37	1.5	21209.06	200.223
326	325-325'	326-326'	80.58	16335.61	1.5	24503.41	202.714
	Total			27853463.07		41780194.61	

Sr.No	Description	Area In ha.
1	Total Lease Area	624.39 ha.
2	Mineable Area(3/4thArea)	468.2925 ha.
3	1/4thArea (Area Blocked on both side of River)	156.0975 ha.

Sr.No	Description of Reserves	Quantity In MT
1	Total Geological reserves	55706926.15
2	Total Minable reserves	41780194.61
3	Total Blocked Reserves	13926731.54

*Reserve has been calculated as per the guideline & Recommendation of Central Empowered Committee.

Conclusion of replenishment study:-

In the present replenishment study for Lease Area 624.39 ha., Tehsil- Shahpura, District- Bhilwara, State- Rajasthan Pre- monsoon & Post Monsoon Survey has been conducted & Survey Data has been processed in conformity with the requirements & guidelines of Sustainable Sand Mining Management Guideline 2016, and Rajasthan Miner Mineral concession Rule 2017, and Enforcement & Monitoring Guidelines for Sand Mining 2020. Plans & sections are prepared according to the direction given in mentioned guidelines, thus establishing the replenished quantity of reserve.

The Geological Reserves /Replenishment of sand/Bajri estimated is about 55706926.15 MT wherein the Mineable reserve is 41780194.61 MT.


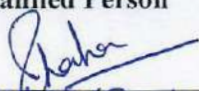
This replenishment study report will help to minimize the adverse impact arising out of sand mining in a given river stretch also could help to maintain the record of changes taking place due to mining operation in future years.

The Sand Mining in the Rivers shall be solely based on the Enforcement & Monitoring Guidelines for Sand Mining 2020 focusing on the effective monitoring of the sand mining since from the identification of sand mineral sources to its dispatch and end-use by consumers and the general public. Guidelines also support the fundamental concept, promote environmental protection, and limit negative physiological, hydro geological and social impacts underpinning sustainable economic growth. Sand mining shall be done considering the criteria of protecting the River Eco- System & Preservation of the river & its channel.

Points considered while Sand Replenishment Study:-

1. The Reduced level (RL) Measurement has been Done across following Locations:
 - 100 m Upstream of the Potential Lease Area
 - Within the Potential mine Site
 - 100m Downstream of the Potential Lease Area
 - The RL has been recorded using Differential GPS (DGPS) survey Instruments.
2. Physical benchmarks (GCP) are fixed at appropriate intervals and the Reduced Level (RL) shall be validated from a nearby standard RL.

3. The levels (MSL & RL) of the corner point are identified and safety barriers (Non-Mining) demarcated as restricted in consensus with Rajasthan Miner Mineral concession Rule 2017, and the provision mentioned in this Sustainable Sand Mining Management Guidelines.
4. Identification of Mining & non mining area clearly on plans.
5. A buffer distance /un-mined block of 50 meters is maintained after every block of 1000 meters over which mining is undertaken as directed/prescribed by the regulatory authority.
6. A barrier/blocked zone has been considered & maintained at a distance of 1 kilometer (1 km) from major bridges and highways on both sides, or five times (5x) of the span (x) of a bridge/public civil structure (including water intake points) on up-stream side and ten times (10x) the span of such bridge on down-stream side, subjected to a minimum of 250 meters on the upstream side and 500 meters on the downstream side.
7. Mining depth has been restricted to 3 meters and distance from the bank should be $\frac{1}{4}$ th or river width and should not be less than 7.5 meters.
8. Clear depiction of the nomenclature of the section lines, latitude and longitude of the starting point, chain-age and respective levels.
9. For Mine Lease having area more Than 10 ha. Such measurements should be at least at an interval of 200 m.
10. Volume has been estimated by multiplying the distance between two cross-sections with the average of net area of these two consecutive cross-sections. (With E-survey CADD software) using trapezoidal method of volume calculation.
11. Sampling has been done per 900 square meters (30 m x 30 m) for assessment of bulk density for estimation of deposition rate. Sample has been taken from zone of deposition not from erosion for assessment of bulk density.

Signature of Lessee	Signature of Qualified Person
<p style="text-align: center;">For ASHU SINGH BHATI</p>  <p style="text-align: center;">Proprietor/Auth. Signatory</p>	 <p style="text-align: center;">Prerna Chauhan (Geologists) (Qualified Persons) M/s N.S. Envirotech Laboratories & Consultant Office Add. P.No. 51, Geneta House, Shiv Vihar Colony, Near Patrakar Colony Road, Mansarovar Jaipur - 302020 (Raj) E-mail - nsenvirotech@gmail.com Mob. 09829930877, 7878360147</p>
<p style="text-align: center;">Ashu Singh Bhati</p>	<p style="text-align: center;">Prerna Chauhan</p>

Dr. Ashu Singh (Geologist)
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For ASHU SINGH BHATI

Proprietor/Author Signatory

State Level Environment Impact Assessment Authority (SEIAA), Rajasthan
Room No. 11, Aravali Bhawan, Jaipur - 302004.

F1 (4)/SEIAA/SEAC-Raj/Sectt/Project /Cat. 1(a)B1(23333)/2021-22

Jaipur, Dated:

27 OCT 2023

AMENDMENT IN EC

This has reference to your application dated 19.11.2022 seeking amendment in EC issued by MoEF&CC dated 14.10.2020 for the project under EIA Notification 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application.

The SEIAA Rajasthan considered the Project in 5.100th meeting held on 26.10.2023 and resolved to accept the recommendation of the SEAC and the following amendment is being made in the EC granted earlier vide MoEF&CC letter dated 14.10.2020 on the basis of Form-I, Form-4 and other requisite documents, subject to same terms & conditions:

S. No.	Amendments now being made
1.	River Bed Sand Mining Project for increase in depth of mining from 1.0m to 3.0m & increase in lease period without any change in Total production capacity (i.e. 0.84 Million TPA (ROM), Mineable area- 624.39 Hectare, Located at Revenue Villages of Tehsil- Shahpura & District- Bhilwara, (Rajasthan) (Proposal No- 293455) with a <i>validity of EC may be kept co-terminus with the lease period only.</i>

Additional Condition:

- i) MoEF&CC in the earlier granted EC vide dated 14.10.2020.
- ii) Ministry's O.M. No. 22-34/2018-IA.III dated 08.01.2019 & 16.01.2020.
- iii) Conditions as per Sustainable Sand Mining Management Guidelines 2016 and Enforcement & Monitoring Guidelines for Sand Mining, 2020, SOP issued by the Rajasthan State Government for prevention of illegal river sand mining in the state.
- iv) Further, the PP will have to ensure the compliances of all the directions issued by Hon'ble Courts with reference to River Sand Mining.
- v) The PP shall submit action taken report of Compliance Report to Integrated Regional Office and RSPCB, Jaipur, within 30 days.

A. Specific Condition:

1. The depth of mining is permitted up to the replenishment depth as per replenishment study submitted by the PP or up to depth of 1.0 m to 3.0 m, whichever is less.

I. Statutory compliance:

- I. This Environmental Clearance (EC) is subject to orders/directions of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, as is applicable.
- II. The Project proponent complies with all the statutory requirements and judgments of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- III. The Department of Mines & Geology, Government of Rajasthan (DMG, GoR) shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of

Common Cause versus Union of India & Ors.

- IV. **In case the project falls within a distance of 10 Km from the boundary of a National Park/ Wildlife Sanctuary, wherein final ESZ Notification has not been issued so far, the EC shall come into effect only after the PP obtains clearance from the Standing Committee of National Board for Wildlife (SCNBWL) as per OM dated 08.08.2019 of MoEF& CC.**
- V. This Environmental Clearance shall become operational only after receiving formal SCNBWL Clearance from Ministry of Environment, Forest & Climate Change, (MoEF& CC), Government of India (GoI) subsequent to the recommendations of the Standing Committee of National Board for Wildlife, if applicable to the Project.
- VI. This Environmental Clearance shall become operational only after receiving Forest Clearance (FC) under the provision of Forest Conservation Act, 1980, if applicable to the Project.
- VII. Project Proponent (PP) shall obtain Consent to Operate after grant of EC and effectively implement all the conditions stipulated therein. The mining activity shall not commence prior to obtaining Consent to Establish/ Consent to Operate from the State Pollution Control Board.
- VIII. The PP shall adhere to the provision of the Mines Act, 1952, Mines and Mineral (Development & Regulation), Act, 2015 and rules & regulations made there under. PP shall adhere to various circulars issued by Directorate General Mines Safety (DGMS) and Indian Bureau of Mines (IBM) from time to time.
- IX. The Project Proponent shall obtain consents from all the concerned land owners, before start of mining operations, as per the provisions of MMDR Act, 1957 and rules made thereunder in respect of lands which are not owned by it.
- X. The Project Proponent shall follow the mitigation measures provided in MoEF CC's Office Memorandum No. Z-11013/57/2014-LA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- XI. The Project Proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of surface water and from CGWA for withdrawal of ground water for the project.
- XII. A copy of EC letter will be marked to concerned Panchayat/ local NGO etc. if any, from whom suggestion/ representation has been received while processing the proposal.
- XIII. State Pollution Control Board shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- XIV. The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board and website of the Department of Environment, Govt. of Rajasthan, RSPCB for compliance and record.
- XV. The Project Proponent shall inform the MoEF& CC/ SEIAA for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred then mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.
- XVI. The Mining Department will ensure that while executing the mining lease, if the mining lease forms a cluster of total area of more than 5.0 ha, in accordance with EIA notification dated 15.01.2016 and 01.07.2016, then such mining lease will be

- executed/ registered only after public hearing has taken place for the entire cluster and there has been EIA/EMP study of the entire cluster. The Mining Department will further ensure that revised EC is also obtained by such mining lease holder (s) in the cluster.
- XVII. The Mining lease holder shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to the mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.
- XVIII. That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project proponent from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the project proponent.
- XIX. No further expansion or modifications in the project shall be carried out without prior approval of the SEIAA/MoEF& CC as the case may be. In case of deviations or alterations in the project proposal from those submitted to this Authority for clearance, a fresh reference shall be made to the Authority to assess the adequacy of conditions imposed and to include additional environmental protection measures required, if any.
- XX. The EC is liable to be rejected/ revoked, in case it is found that the PP has deliberately concealed and/or furnished false and misleading information or data which is material to screening or scoping or appraisal or decision on the application for EC.
- XXI. Officials from the Department of Environment, Government of Rajasthan, Jaipur/ Regional Office of MoEF& CC, Lucknow, RSPCB who would be monitoring the implementation of Environmental safeguards should be extended full cooperation, facilities and documents/data by the project proponents during their inspection. A complete set of all the documents submitted to SEIAA should be forwarded to the CCF, Regional Office of MoEF, Lucknow, Department of Environment, Government of Rajasthan, Jaipur / RSPCB.
- XXII. The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provision of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- XXIII. The above condition shall be enforced among others under the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006, along with their amendments and rules.
- XXIV. The PP shall obtain prior clearance from forestry and wildlife aspects including clearance from Standing Committee of National Board of Wild Life (if applicable). It is further categorically stated that grant of EC does not necessary imply that Forestry and Wildlife clearance shall be granted to the project by the concerned authorities. Proposals for forestry and wildlife clearance will be considered by the concerned authorities on its merits and decision taken accordingly. The investment made in the project, if any based on EC so granted, in anticipation of clearance from Forestry and Wildlife aspects shall be entirely at the cost and risk of the PP and MOEF & CC/SEIAA/ SEAC/ DOE shall not be responsible in this regard in any manner.
- XXV. The SEIAA, Rajasthan may revoke or suspend the Environmental Clearance, if implementation of any of the above conditions is not satisfactory.
- XXVI. The PP shall submit an environmental statement for the financial year ending 31st

March in Form-V as prescribed under the environment (Protection) Rules, 1986, as amended subsequently on or before the 30th day of September every year, to the Rajasthan State Pollution Control Board/SEIAA and shall also be put on the website of the company/ unit/ industry along with the status of compliance of environmental clearance conditions and shall also be sent to the Lucknow Regional offices of MoEF/SEIAA/ RSPCB by e-mail as well as hard copy duly signed by competent person of company.

- XXVII. This EC is granted for mining of the mineral with production mentioned in the above table subject to the stipulation that the PP shall abide by the annual/ permitted production schedule specified in the mining plan and that any deviation therein will render the PP liable for legal action in accordance with Environment and Mining Laws.
- XXVIII. The PP shall spend the various amounts in the respective heads as mentioned in Annexure G.
- XXIX. Drills shall either be operated with dust extractors or equipped with water injections system.
- XXX. Data on ambient air quality and stack emissions should be submitted to Rajasthan State Pollution Control Board once in six months. The monitoring/ sampling and analysis are to be carried out by MOEF/ NABL/ CPCB/ RSPCB/ Government approved lab.
- XXXI. Blasting operations, if permitted, should be carried out only during the daytime with safe blasting parameters.
- XXXII. The PP shall carry out mining activities with open cast method. The PP to undertake underground mining only if permitted specifically.
- XXXIII. In the project related to Bajri mining the PP shall follow the 'Sustainable Sand Mining Guidelines 2016' and 'Enforcement and Monitoring Guidelines for Sand Mining, 2020' laid down by the MoEF& CC, GOI. The Bajri sand mining activity is restricted to three meters from ground level or water level whichever is less and the PP shall carry out river sand (Bajri) mining activity only manually or semi mechanized method as provided under the 'Sustainable Sand Mining Management Guidelines, 2016' and 'Enforcement and Monitoring Guidelines for Sand Mining, 2020'.
- XXXIV. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.

2. Air quality monitoring and preservation:

- i. The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2; CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I. dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.
- ii. Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble

chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEF& CC/ Central Pollution Control Board.

3. Water quality monitoring and preservation:

- i. In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEF& CC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.
- ii. Regular monitoring of the flow rate of the springs and perennial nallahs flowing in and around the mine lease shall be carried out and records maintain. The natural water bodies and or streams which are flowing in an around the village, should not be disturbed. The Water Table should be nurtured so as not to go down below the pre-mining period. In case of any water scarcity in the area, the Project Proponent has to provide water to the villagers for their use. A provision for regular monitoring of water table in open dug well located in village should be incorporated to ascertain the impact of mining over ground water table. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- iii. Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.
- iv. The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease and maintain its records. The project proponent shall undertake regular monitoring of water quality upstream and downstream of water bodies passing within and nearby/ adjacent to the mine lease and maintain its records. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. PP shall carryout regular monitoring w.r.t. pH and included the same in monitoring plan. The parameters to be monitored shall include their water quality vis-a-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEF& CC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.
- v. Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Dissolved Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No.I-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.
- vi. Project Proponent shall plan, develop and implement rainwater harvesting measures on

long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEF& CC annually.

- vii. Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.
- viii. The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF& CC and State Pollution Control Board.

4. Noise and vibration monitoring and prevention:

- i. The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.
- ii. The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.
- iii. The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs/ muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.
- iv. The ambient noise level should conform to the standards prescribed under E (P) A Rules, 1986 viz 75 dB (A) during day time and 70 dB (A) during night time.

5. Mining plan:

- i. The Project Proponent shall adhere to the working parameters of mining plan which was submitted at the time of EC appraisal wherein year-wise plan was mentioned for total excavation i.e. quantum of mineral, waste, over burden, inter burden and top soil etc.. No change in basic mining proposal like mining technology, total excavation, mineral & waste production, lease area and scope of working (viz. method of mining, overburden & dump management, O.B & dump mining, mineral transportation mode, ultimate depth of mining etc.) shall not be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/ SEIAA, which entail adverse environmental impacts, even if it is a part of approved mining plan modified after grant of EC or granted by State Govt. in the form of Short Term Permit (STP), Query license or any other name.
- ii. The Project Proponent shall get the Final Mine Closure Plan along with Financial Assurance approved from Indian Bureau of Mines/Department of Mining & Geology as required under the Provision of the MMDR Act, 1957 and Rules/ Guidelines made there under. A copy of approved final mine closure plan shall be submitted within 2 months of the approval of the same from the competent authority to the concerned Regional Office, MoEF& CC/ SEIAA/ SPCB for record and verification.
- iii. The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-a-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEF& CC/ SEIAA/ SPCB and its concerned Regional Office.

6. Land reclamation:

- i. The Overburden (O.B.) generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by D.G.M.S w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of top soil/OB dumps. The topsoil shall be used for land reclamation and plantation.
- ii. The reject/waste generated during the mining operations shall be stacked at earmarked waste dump site(s) only. The physical parameters of the waste dumps like height, width and angle of slope shall be governed as per the approved Mining Plan as per the guidelines/circulars issued by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of waste dumps.
- iii. The reclamation of waste dump sites shall be done in scientific manner as per the Approved Mining Plan cum Progressive Mine Closure Plan.
- iv. The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.
- v. The Project Proponent shall carry out slope stability study in case the dump height is more than 30 meters. The slope stability report shall be submitted to concerned regional office of MoEF& CC/ RSPCB.
- vi. Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.
- vii. Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.
- viii. The top soil, if any, shall temporarily be stored at earmarked site(s) within the mine lease only and should not be kept unutilized for long. The physical parameters of the top soil dumps like height, width and angle of slope shall be governed as per the approved Mining Plan and as per the guidelines framed by DGMS w.r.t. safety in mining operations shall be strictly adhered to maintain the stability of dumps. The topsoil shall be used for land reclamation and plantation purpose.

7. Transportation:

- i. No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed

in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers.

- ii. The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

8. Green Belt:

- i. The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry/ SEIAA irrespective of the stipulation made in approved mine plan.
- ii. The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.
- iii. The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.
- iv. The Project Proponent shall undertake all precautionary measures for conservation and protection of endangered flora and fauna and Schedule-I species during mining operation. A Wildlife Conservation Plan shall be prepared for the same clearly delineating action to be taken for conservation of flora and fauna. The Plan shall be approved by Chief Wild Life Warden of the State Govt.
- v. And implemented in consultation with the State Forest and Wildlife Department. A copy of Wildlife Conservation Plan and its implementation status (annual) shall be submitted to the Regional Office of the Ministry/ SEIAA.

9. Public hearing and human health issues:

- i. The Project Proponent shall appoint an Occupational Health Specialist for Regular as well as Periodical medical examination of the workers engaged in the mining activities, as per the DGMS guidelines. The records shall be maintained properly. PP shall also carryout Occupational health check-ups in respect of workers which are having ailments like nr, diabetes, habitual smoking, etc. The check-ups shall be undertaken once in six months and necessary remedial/ preventive measures be taken. A status report on the

- same may be sent to MoEF& CC/ SEIAA/ Regional Office and DGMS on half-yearly basis.
- ii. The Project Proponent must demonstrate commitment to work towards 'Zero Harm' from their mining activities and carry out Health Risk Assessment (HRA) for identification workplace hazards and assess their potential risks to health and determine appropriate control measures to protect the health and wellbeing of workers and nearby community. The proponent shall maintain accurate and systematic records of the HRA. The HRA for neighborhood has to focus on Public Health Problems like Malaria, Tuberculosis, HIV, Anaemia, Diarrhoea in children under five, respiratory infections due to bio mass cooking. The proponent shall also create awareness and educate the nearby community and workers for Sanitation, Personal Hygiene, Hand washing, not to defecate in open, Women Health and Hygiene (Providing Sanitary Napkins), hazard of tobacco and alcohol use. The Proponent shall carryout base line HRA for all the category of workers and thereafter every five years.
 - iii. The Proponent shall carry out Occupational health surveillance which be a part of HRA and include Biological Monitoring where practical and feasible, and the tests and investigations relevant to the exposure (e.g. for Dust a X-Ray chest; For Noise Audiometric; for Lead Exposure Blood Lead, For Welders Full Ophthalmologic Assessment; for Manganese Miners a complete Neurological Assessment by a Certified Neurologist, and Manganese (Mn) Estimation in Blood; For Inorganic Chromium-Fortnightly skin inspection of hands and forearms by a responsible person. Except routine tests all tests would be carried out in a Lab accredited by NABH. Records of Health Surveillance must be kept for 30 years, including the results of and the records of Physical examination and tests. The record of exposure due to materials like Asbestos, Hard Rock Mining, Silica, Gold, Kaolin, Aluminum, Iron, Manganese, Chromium, Lead, Uranium need to be handed over to the Mining Department of the State in case the life of the mine is less than 30 years. It would be obligatory for the State Mines Departments to make arrangements for the safe and secure storage of the records including X-Ray. Only conventional X-Ray will be accepted for record purposes and not the digital one). X-Ray must meet ILO criteria (17 x14 inches and of good quality).
 - iv. The Proponent shall maintained a record of performance indicators for workers which includes (a) there should not be a significant decline in their Body Mass Index and it should stay between 18.5 -24.9, (b) the Final Chest X-Ray compared with the base line X-Ray should not show any capacities ,(c) At the end of their leaving job there should be no Diminution in their Lung Functions Forced Expiratory Volume in one second (FEV1), Forced Vital Capacity (FVC), and the ratio) unless they are smokers which has to be adjusted, and the effect of age, (d) their hearing should not be affected. As a proof an Audiogram (first and last need to be presented), (e) they should not have developed any Persistent Back Pain, Neck Pain, and the movement of their Hip, Knee and other joints should have normal range of movement, (f) they should not have suffered loss of any body part. The record of the same should be submitted to the Regional Office, MoEF& CC/ SEIAA annually along with details of the relief and compensation paid to workers having above indications.
 - v. The Project Proponent shall ensure that Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.
 - vi. Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.

vii. The activities proposed in Action plan prepared for addressing the issues raised during the Public Hearing shall be completed as per the budgetary provisions mentioned in the Action Plan and within the stipulated time frame. The Status Report on implementation of Action Plan shall be submitted to the concerned Regional Office of the Ministry along with District Administration.

10. Miscellaneous:

- i. The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF& CC/ SEIAA/SPCB.
- ii. The Project Authorities should inform to the SEIAA/Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.
- iii. The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.
- iv. A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF& CC/ SEIAA/ SPCB.
- v. The MoEF& CC/ SEIAA/ SPCB shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF& CC/ SEIAA/ SPCB officer(s) by furnishing the requisite data / information / monitoring reports.
- vi. Project Proponent shall keep the funds earmarked for environmental protection measures in a separate account and refrain from diverting the same for other purposes. The Year wise expenditure of such funds should be reported to the MoEF& CC/ SEIAA/ SPCB and its concerned Regional Office.

Additional conditions recommended in view of OM dated 08.08.2019 of the MoEF& CC (applicable where the project falls within a distance of 10 Km from the boundary of National Park/ Wildlife Sanctuary and outside notified ESZ):

1. The mining activity should be carried out in a manner so that the water regime/system of the sanctuary is not disturbed. The mining activity should not adversely affect any existing water course, water body, catchment etc. The PP shall while carrying out mining activity ensure compliance of the provisions of Air (Prevention and Control of Pollution) Act 1981, Water (Prevention and Control of Pollution) Act 1974 and the Environment (Protection) Act, 1986 so that the wildlife in the area is not adversely affected.
2. The processes like blasting, drilling, excavation, transport and haulage resulting into noise, should be carried out in such a manner so that such activities do not disturb wild animals and birds particularly during sunset to sunrise. The level of noise should be kept within the permissible limits.
3. The mining activity should not create any obstacle in the way of free movement of wildlife and adversely affect wildlife corridors.
4. The mineral waste/ slurry should be dumped only at the designated places only and such waste dumps should be reclaimed in accordance with the conditions of the mining plan/ consent issued by the RSPCB under the Water and Air act.
5. The PP shall cooperate with the concerned DCF, Wildlife in their efforts towards protection and conservation of wildlife in the Sanctuary/ Park.

6. The PP shall ensure that the transporter and labor employed by him should not damage flora and fauna in the ESZ and the Wildlife Sanctuary/ National Park.

Specific Conditions applicable, in the cases of violation in terms of the Notification dated 14.3.2017 and 8.3.2018 and OMs dated 30.5.2018, 4.7.2018 of the MoEF&CC :

1. The PP shall give an undertaking by way of affidavit to comply with all the statutory requirements and judgment of the Hon'ble Supreme Court dated 02.08.2017 in the matter of Writ Petition (Civil) No. 114 of 2014, Common Cause V/s Union of India & others before grant of ToR/EC. The undertaking inter-alia include commitment of the PP not to be repeat any such violation in future.
2. In case of violation of above undertaking/ affidavit, the ToR/EC shall be liable to be terminated forthwith.
3. The environmental clearance will not be operational, till such time the Project Proponent complies with all the statutory requirements and judgment of the Hon'ble Supreme Court dated 02.08.2017 in the matter of Writ Petition (Civil) No. 114 of 2014, Common Cause V/s Union of India & others.
4. The department of Mines & Geology shall ensure that the mining operations shall not commence till the entire compensation levied, if any, for illegal mining, is paid, by the Project Proponent through the Department of Mines and Geology, in strict compliance of the judgment of the Hon'ble Supreme Court dated 02.08.2017 in the matter of Writ Petition (Civil) No. 114 of 2014, Common Cause V/s Union of India & others.

GENERAL CONDITIONS

1. That the grant of this E.C. is issued from the environmental angle only, and does not absolve the project **Proponent** from the other statutory obligations prescribed under any other law or any other instrument in force. The sole and complete responsibility, to comply with the conditions laid down in all other laws for the time-being in force, rests with the industry / unit / project **Proponent**. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.
2. No further expansion or modifications in the project shall be carried out without prior approval of the SEIAA/Ministry of Environment and Forests as the case may be. In case of deviations or alterations in the project proposal from those submitted to this Authority for clearance, a fresh reference shall be made to the Authority to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
3. The implementation of the project vis-à-vis environmental action plans shall be monitored by MoEF Regional Office at Lucknow / RSPCB / CPCB / SEIAA, Department of Environment, Government of Rajasthan, Jaipur and this office. A six monthly compliance status report shall be submitted to monitoring agencies.
4. The EC is liable to be rejected, in case it is found that the PP has deliberately concealed and furnished false and misleading information or data which is material to screening or scoping or appraisal or decision on the application for EC.
5. The project authorities shall inform the MoEF Regional Office at Lucknow / RSPCB / CPCB / SEIAA, Department of Environment, Government of Rajasthan, Jaipur and the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
6. Officials from the Department of Environment, Government of Rajasthan, Jaipur/ Regional Office of MoEF, Lucknow, RSPCB who would be monitoring the implementation of Environmental safeguards should be given full cooperation, facilities and documents/data by the project **Proponents** during their inspection. A complete set of

all the documents submitted to SEIAA should be forwarded to the CCF, Regional Office of MoEF, Lucknow / SEIAA, Department of Environment, Government of Rajasthan, Jaipur / RSPCB.

7. The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provision of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
8. The project **Proponent** should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded environmental Clearance and copies of clearance letters are available with the Rajasthan State Pollution Control Board and may also be seen on the website of the RSPCB. The advertisement should be made within 7 days from the day of issue of the clearance letter and a copy of the same should be forwarded to the Regional Office of MoEF at Lucknow/Department of Ecology and Environment, Government of Rajasthan, Jaipur.
9. The above condition shall be enforced among others under the provisions of water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006, along with their amendments and rules.
10. The PP shall obtain prior clearance from forestry and wild Life angle including clearance from standing committee of National Board of Wild Life (if applicable). It is further categorically stated that grant of EC does not necessary imply that Forestry and Wild Life clearance shall be granted to the project and that proposals for forestry and wild Life clearance will be considered by the respective authorities on their merits and decision taken. The investment made in the project, if any based on EC so granted, in anticipation of clearance from Forestry and Wild Life angle shall be entirely at the cost risk of the PP and MOEF/SEIAA shall not be responsible in this regard in any manner.
11. The SEIAA, Rajasthan may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
12. Main haulage road should be provided with permanent water sprinklers and other roads should be regularly wetted with water tankers fitted with sprinklers. The material transfer points should invariably be provided with Bag filters and or dry fogging system. In case of Belt- conveyors facilities the system should be fully covered to avoid air borne dust; Use of effective sprinkler system to suppress fugitive dust on haul roads and other transport roads shall be ensured.
13. Periodic monitoring of ambient air quality shall be carried out for PM10, PM2.5, SPM, SO2 and NOx monitoring. Location of the stations (minimum 6) shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring shall be decided in consultation with the Rajasthan State pollution Control Board (RPCB). Six monthly reports of the data so collected shall be regularly submitted to the RPCB/CPCB including the MoEF, Regional office, Lucknow.
14. Personnel working in dusty areas shall wear protective respiratory devices they shall also be provided with adequate training and information on safety and health aspects.
15. The ambient noise level should conform to the standards prescribed under E (P) A Rules, 1986 viz 75 dB (A) during day time and 70 dB (A) during night time.
16. The PP shall submit an environmental statement for the financial year ending 31st March in Form-V as prescribed under the environment (Protection) Rules, 1986, as amended subsequently on or before the 30th day of September every year, to the Rajasthan State Pollution Control Board/SEIAA and shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also

be sent to the Lucknow Regional offices of MoEF/SEIAA by e-mail as well as hard copy duly signed by competent person of company.

17. The Mining Department will ensure that while executing the mining Lease/LoI, if the mining lease forms a cluster of total area of more than 5.0 ha, in accordance with EIA notification dated 15.01.2016 and 01.07.2016, then such mining lease will be executed / registered only after public hearing has taken place for the entire cluster and there has been EIA/EMP study of the whole cluster. The Mining Department will further ensure that revised EC is also obtained by such mining lease holder (s) in the cluster.
18. The Mining lease holder shall, after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to his mining activities and restored the land to a condition which is fit for growth of fodder, flora, fauna etc.
19. This EC is being issued on the condition that the applied area is at a distance of more than 50 metres from the boundary of the closest forest area as stated by project proponent in Form I.


(Khyati Mathur)
Member Secretary,
SEIAA, Rajasthan.

No. F1 (4)/SEIAA/SEAC-Raj/Scctt/Project/Cat.1(a)B1(23333)/2021-22 Jaipur, Dated:

Copy to following for information and necessary action:

1. Secretary, Ministry of Environment, Forest & Climate Change, Govt. of India, Indira Paryavaran Bhawan, Jor Bagh Road, Aliganj, New Delhi-110003.
2. ACS, Environment & Climate Change Department, Rajasthan, Jaipur.
3. Chairman, SEIAA, Aravali Bhawan, Jhalana Doongri, Jaipur, Rajasthan.
4. Member, SEIAA, Aravali Bhawan, Jhalana Doongri, Jaipur, Rajasthan.
5. Member Secretary, Rajasthan State Pollution Control Board, Jaipur for information & necessary action and to display this sanction on the website of the Rajasthan Pollution Control Board, Jaipur.
6. Member Secretary, SEAC Rajasthan.
7. The CCF, Regional Office, Ministry of Environment & Forests, RO(CZ), Kendriya Bhawan, 5th Floor, Sector 'H', Aliganj, Lucknow-226 020.
8. M/s-Ashu Singh Bhati, S/o- Magansingh Bhati, Address.- 45, PaschimVihar, Vaishali Nagar, Jaipur Rajasthan.
9. I.A., SEIAA, Jaipur with the direction to upload the copy of this Amendment in EC letter on the website.


Member Secretary,
SEIAA, Rajasthan.



BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI
IN O.A. 755/2024

IN THE MATTER OF:

Tribunal on its own Motion

VERSUS

...APPLICANT

State of Rajasthan & Ors

...RESPONDENTS

KNOWN ALL to whom these presents shall come that I, Ashu Singh Bhati, Respondent No. 6 in the above captioned matter do hereby appoint:

VERTARI LEGAL

Madhav Bhatia, Shreshth Arya, Shreyuss Shankar Joshi
A-446 (LGF), Defence Colony, New Delhi – 110024
(M) +91 9910572585; (E) madhavbhatia@vertarilegal.com

- Herein after called Advocates to be my/ our advocates in the above noted case and authorized them to act appear and plead in the above noted case in the Court or in any court in which the same may be tried or heard and also in the appellate courts including High Court and the Supreme Court
- To sign, verify and present pleadings application, appeals, cross objections or petitions for execution, review, restoration, withdrawal, compromise or other petitions, replies, objections or affidavits or documents as may be deemed necessary or proper for the prosecution of the said case in all its stages.
- To file and take back documents.
- To withdraw or compromise the said case or submit to arbitration any difference of disputes that may arise touching or in any manner relating to the said case. To take out execution proceedings.
- To deposit, draw and receive moneys, cheques and grant receipts there and to all other acts and things which may be necessary to be done for the progress and in the course of prosecution of that said case.
- To appoint and instruct other legal practitioners authorizing him to exercise the power and authorize hereby confer upon the advocate whenever he may think fit to do so and singe the power of attorney on our behalf.
- And I/ We undersigned do hereby agree ratify and confirm acts done by the advocates or his substitute in the matter is my/ our acts as if done by me/us to all intents and purposes.
- And I/ We undersigned do hereby agree that in the event of any part of the fees agreed by me/ us to be paid to the advocate remaining unpaid, he shall be entitled to withdraw from the prosecution and would be entitled to the same.

IN THE WITNESS WHEREOF I/ We do hereby upto put my/ our hand to these presents the contents to which have been understood by me/us on the 20 day of March 2025

Accepted *M Bhatia*
(Madhav Bhatia)

Advocate
D/7747/2021

Shreshth
(Shreshth Arya)

Advocate
D/2956/2018

Ashu Singh Bhati
Client

Shreyuss Shankar Joshi
(Shreyuss Shankar Joshi)
D/6/2019 Advocate

Vivek Sura
(Vivek Sura)
Advocate
PH/9170/2021



Thursday, March 20, 2025 at 17:29:35 India Standard Time

Subject: Service of Reply Affidavit in O.A. No. 755 of 2024 BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
Date: Thursday, 20 March 2025 at 5:29:23 PM India Standard Time
From: Madhav Bhatia
To: naveenkraor@gmail.com, rocz.lko-mef@nic.in, member-secretary@rpcb.nic.in, its.rspcb@gmail.com, dm.shahpura@rajasthan.gov.in, adm.shahpura@rajasthan.gov.in, mscb.cpcb@nic.in
CC: Litigation Team, Vivek Sura
BCC: Anand Varma Adv

Dear Sir/Madam,

Please find attached the Reply affidavit on behalf of Respondent No. 6 in in O.A. No.: 755 of 2024 " Tribunal on its own motion Vs. State of Rajasthan & Ors " before the National Green Tribunal, Principal Bench, New Delhi.

[Response Respondent 6.pdf](#)

Regards,
Madhav Bhatia
Partner

Vertari Legal

Address: A-446 (LGF), Defence Colony, New Delhi – 110024
(E): madhavbhatia@vertarilegal.com
(M): +91 9910572585

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