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Compositional analysis of obsidian artifacts from the Templo Mayor of Tenochtitlan, capital of the Mexica (Aztec) Empire

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This study presents the results of geochemical compositional analysis through portable X-ray fluorescence of 788 artifacts from the Templo Mayor in Mexico City. The results reveal that the Mexica (Aztecs) preferred green obsidian from Sierra de Pachuca. However, a diachronic analysis (c. 1375-1520 CE) demonstrated that they continuously consumed obsidian from seven additional sources with some temporal variations related to the sociopolitical transformations of the empire. In the early phases, obsidian from Tulancingo, El Paraíso, and Zacualtipán is more common. After the consolidation of the Mexica Empire c.1430 CE, the patterns shifted to obsidian from Otumba, Paredón, and Ucareo. The study of artifacts from ritual and nonritual contexts demonstrates that most inhabitants used obsidian from multiple regions in the form of blades and flakes, probably acquired in local markets. Conversely, the elites and ritual specialists clearly preferred green obsidian from Pachuca to elaborate ritual objects due to its unique color and symbolic value. Ritual objects may arrive directly at the sacred precinct from the workshops outside the city, such as those found in Otumba and Pachuca. This study highlights the importance of analyzing large samples that combine ritual and nonritual artifacts, as well as objects from different phases, to explore temporal and social patterns of obsidian consumption among Pre-Hispanic societies.

obsidian provenance | Mexica (Aztecs) | Tenochtitlan | Templo Mayor | portable X-ray fluorescence

Significance

This study explores the use of obsidian at Tenochtitlan (c. 1375-1520 CE), identifying changes in the economic networks before and after the consolidation of the Mexica (Aztec) Empire (c. 1430 CE). The sample comprises 788 artifacts, one of the largest analyzed for Postclassic Mesoamerica, including multiple types of artifacts and contexts. Our results reveal the frequencies and variations of specific types of obsidian over time and the preference for a particular color and quality to produce ritual objects. Included in the obsidian assemblage are artifacts from outside of the boundaries of the Mexica Empire, such as Ucareo, the principal obsidian used by the Purépecha (Tarascan), implying that this raw material moved within different trade systems among rival polities.

Obsidian was a fundamental resource for Mesoamerican societies to elaborate utilitarian and ritual objects. Its nature as volcanic glass allowed experienced craftsmen to obtain extremely sharp instruments, perfect for cutting and scraping. In addition, its natural luster made it ideal for producing highly polished ornaments and religious insignia. Its physical attributes, complemented by its ubiquitous presence throughout Mesoamerica, allowed ancient communities to integrate obsidian into their daily practices since at least the Late Archaic (c. 6000-2000 BCE) (1) and to remain as a key resource for crafting tools until the colonial period. Archaeological evidence demonstrates that obsidian was present in long-distance exchange networks since at least the Early Preclassic (c. 2000-1200 BCE) (2–6). During the Late Postclassic period (c. 1200-1520 CE), obsidian from different sources was consumed by urban and rural communities as part of the complex market system and used for ritual and nonritual activities (7). Obsidian was integral to the Mexica (also known as the Aztec) political and ritual economy. This is evident at Tenochtitlan, where the Mexica deposited numerous obsidian objects in buried offerings in the sacred precinct of their city, which was a restricted space in which the Templo Mayor or *Huey Teocalli* was located, a religious building dedicated to the cult of their principal deities, Tlaloc and Huitzilopochtli.

The principal obsidian deposits in Mexico belong to the geological formation known as the Trans-Mexican Volcanic Belt that extends approximately 1,000 km from the west to the east coasts in the central portion of Mexico, an area of 160,000 km^2 (8). Multiple Mesoamerican obsidian sources have been identified and studied in this region since the 1960s (4, 9–13), although new studies still provide and/or refine data on provenance and exploitation of natural obsidian deposits (9, 14–17). In addition, compositional analyses of artifacts found in archaeological contexts enable archaeologists to study obsidian provenance and exploitation (1, 18, 19), procurement patterns in relation to political and economic changes at the regional and macroregional scales (3, 5, 20–23), local and long-distance trade and exchange systems (24–27), and technology and artifact production patterns (28, 29).

In the case of Tenochtitlan, no compositional analysis had been carried out of a representative sample. Previous studies were limited to a few objects (30), to objects from specific buildings (31), or to objects from ritual contexts (32, 33), making it impossible to identify diachronic patterns of consumption (Table 1). In addition, limiting the analysis

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Table 1. Previous compositional studies of obsidian artifacts from the Templo Mayor Archaeological Zone

Researcher	Affiliation	Artifacts analyzed	Method	Sources identified
Athié Islas (33)	PTM-INAH*	6	INAA	Pachuca, Otumba, Zaragoza
López Luján (31)	PTM-INAH	13	INAA	Pachuca, Otumba, Zaragoza
Matadamas-Gomora (30)	PTM-INAH	8	XRF	Pachuca, Otumba, Pico de Orizaba, Paredón
Melgar Tísoc et al. (32)	MTM-INAH/ IIA-UNAM	21	XRF	Pachuca, Otumba, Pico de Orizaba, Ucareo

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to objects found in buried offerings excludes all the nonritual artifacts found in the construction fill, such as fragments of prismatic blades, cores, and flakes. As a consequence, current perspectives of obsidian consumption in Tenochtitlan are limited to its ritual use. To this end, our objectives are the following:

1. To analyze a representative sample of obsidian artifacts, which encompasses multiple types of objects found in both offerings and construction fill. This enables us to explore temporal changes in the use of obsidian according to the artifact's type and function.
2. Determine the variations in the amount and types of obsidian throughout the multiple construction phases of the sacred precinct of Tenochtitlan.
3. Investigate how those variations are related to the sociopolitical transformations of Tenochtitlan during the Late Postclassic period.

Starting in 1978, the Proyecto Templo Mayor (PTM-INAH) excavated the *Huey Teocalli* and 16 surrounding religious buildings in the core of Tenochtitlan. Archaeologists have identified seven construction phases and six partial renovations of the main temple (34). Currently, 210 offerings have been explored in an area of approximately 1.51 ha (35). The power and influence of the Mexica Empire (or Triple Alliance) is reflected in the large number and diversity of materials that comprise the offerings, including minerals, plants, animals, human beings, and cultural objects. Some offerings contain tens of thousands of objects made of different raw materials from throughout Mesoamerica and beyond (36). Obsidian artifacts are also ubiquitous and include artifacts that require specialized production.

Templo Mayor's typology comprises 20 different types of obsidian objects, ranging from miniature representations of weapons, such as projectile points and clubs, to life-size clubs, urns, earspools, pendants, scepters, and inlays in sculptures and decorated human skulls (30) (Figs. 1 and 2). However, as mentioned, obsidian was not limited to producing luxury or ritual artifacts. Fragments of prismatic blades and flakes comprise most of the collection, suggesting that it was used mainly for nonritual activities. From our observations, there are three important features to highlight about the sample:

1. Currently, there is no information about the total number of obsidian artifacts recovered in Templo Mayor since 1978. Melgar Tísoc et al. (32) mention the existence of more than 1,000 objects, of which 210 were classified as "jewelry." Unfortunately, there is little detail about their characteristics, chronological placement, or context. However, a better recording system implemented since 2007 has identified 760 obsidian artifacts. This study includes 738 of those artifacts. The 22 not analyzed were too small to be detected by the portable X-ray fluorescence (pXRF) collimator. We also include 47 artifacts from offerings and three obsidian inlays representing the eyes of stone sculptures from excavations prior to 2007, during the first field season of the PTM-INAH between 1978 and 1982 (37, 38).
2. All obsidian in the PTM-INAH's collection is high quality. Regardless of the type of object, its size, or context, the raw material shows little or no cortex, inclusions, deformations, or cracks.
3. Almost all artifacts found in offerings are small, such as miniature representations of weapons mainly used as attire for small basalt braziers and flint knives dressed as divine characters (39). The fragments of flakes and blades are also small and have use-wear marks, suggesting that they are discarded artifacts used during construction labor. Within the sacred precinct of Tenochtitlan, there are no concentrations of artifacts related to the production process of obsidian tools, ritual insignia, and ornaments, such as large flakes with cortex, microdebitage, preforms, or hammer stones. This suggests that the obsidian artifacts arrived at the sacred precinct as finished products. However, there is information that lithic workshops existed within the city. Gianfranco Cassiano (40) explored a blade obsidian workshop located 0.7 km southwest of the *Huey Teocalli*, outside the limits of the sacred precinct. He identified evidence of all stages of prismatic blade production, including exhausted cores, large flakes, and microdebitage (40), although there is no information on the geological sources of this raw material.

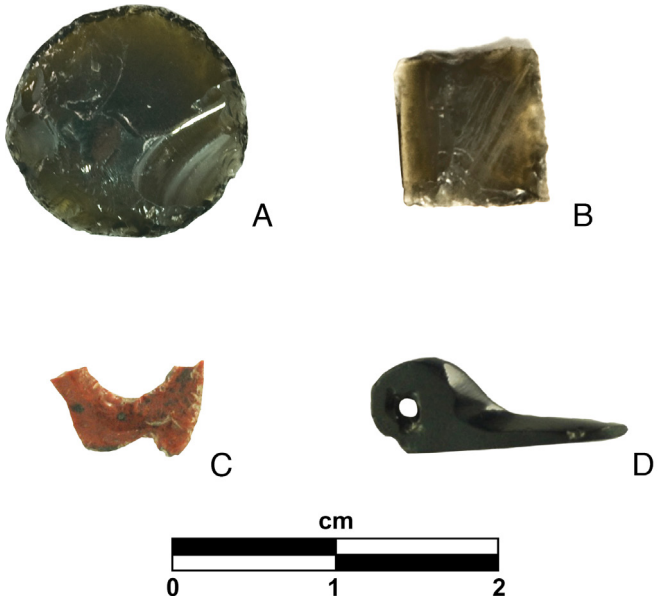

Fig. 1. Examples of the miniature artifacts in PTM-INAH's collection that were analyzed in this study. (*A*) Op. 4/A426 (TM-216); (*B*) Of. 167/A326 (TM-488); (*C*) Of. 166/A20 (TM-615); (*D*) Op. 1/A63 (TM-7). For more details, see *SI Appendix*. Photos by Mirsa Islas. Courtesy of PTM-INAH.

Fig. 2. Examples of the ritual and nonritual artifacts in PTM-INAH's collection that were analyzed in this study. (*A*) Of. 139/A12 (TM-592); (*B*) Of. 125/A78 (TM-584); (*C*) Of. 94/10-262998 4/5 (TM-787); (*D*) Of. 39/10-265454 (TM-748); (*E*) Of. 39/10-251281 (TM-757); (*F*) Op. 6/A272 (TM-345); (*G*) Of. 120/A669 (TM-469); (*H*) Op. 4/A600 (TM-241); (*I*) Op. 16/A73 (TM-97). For more details, see *SI Appendix*. Photos by Mirsa Islas. Courtesy of PTM-INAH.

This study involves the analysis of 788 obsidian artifacts combining ritual and nonritual contexts (Figs. 3 and 4, Table 2, and *SI Appendix*, Table S1). The sample also contains artifacts from each construction phase except the first one, which has not been explored yet (Table 3). Artifacts in the sample are dated through stratigraphic correlation. At Templo Mayor, archaeologists have identified that the Mexica used lacustrine clays from the lake beds for the construction fill, which are characterized by their plasticity and dark colors, indicating high levels of organic material (41). Paleobotanical analyses of these clays revealed the presence of lacustrine and palustrine seeds and a large number of fish scales, diatoms, and freshwater snails (42, 43). In addition, the low presence of ceramic fragments, lithics, or bones within the construction fill reveals that the Mexica did not use soil extracted from inland areas to renovate their sacred precinct. The cultural materials found in these layers were likely deposited during construction and are contemporaneous with each other. Ceramic fragments almost always belong to the Late Postclassic period. Among the 26648 ceramic sherds excavated by the PTM-INAH until 2013, only five belong to the Epiclassic period and seven to the Early Postclassic (44). Furthermore, Aztec II ceramics have been found in the sacred precinct at depths of 8 m or more below the surface level. García Chávez et al. (45) explained that there is no mixture of Aztec II and Aztec III ceramics, indicating that the Mexica had the same construction system since the city's foundation. In this respect, the artifacts in the construction fill can be temporally correlated to the specific construction phases where they are found.

We investigate the use of obsidian by the Mexica from c. 1375 CE until 1520 CE. The sample also includes artifacts from colonial contexts (c. 1521-1810 CE). However, dating them is complex because the Europeans disturbed the pre-Hispanic levels to get materials for their own constructions. As a result, several artifacts found in these strata likely originally belonged to Pre-Hispanic deposits that were unintentionally redeposited into the colonial construction fill, making it problematic to determine whether they were manufactured during Pre-Hispanic or colonial times. It is for this reason that we do not include artifacts from colonial contexts in our discussion about obsidian consumption in Tenochtitlan.

Results

The largest group of obsidian artifacts corresponds to the deposit of Sierra de Pachuca, with 702 artifacts representing 89.08% of the entire sample. While Pachuca was dominant, the remaining 10.92% of our sample is associated with seven additional deposits. The second-largest group comprises 27 artifacts (3.42%) made with obsidian from Otumba; the third group corresponds to Paredón with 15 artifacts, followed by Ucareo (n = 13), Tulancingo (n = 12), El Paraíso (n = 9), Zacualtipán (n = 8), and Pico de Orizaba (n = 2) (Table 2). We corroborated our initial expectations that most of the artifacts were manufactured with obsidian from Sierra de Pachuca since it is well known that the Mexica had high esteem for the green and golden colors found in this outcrop (10, 46).

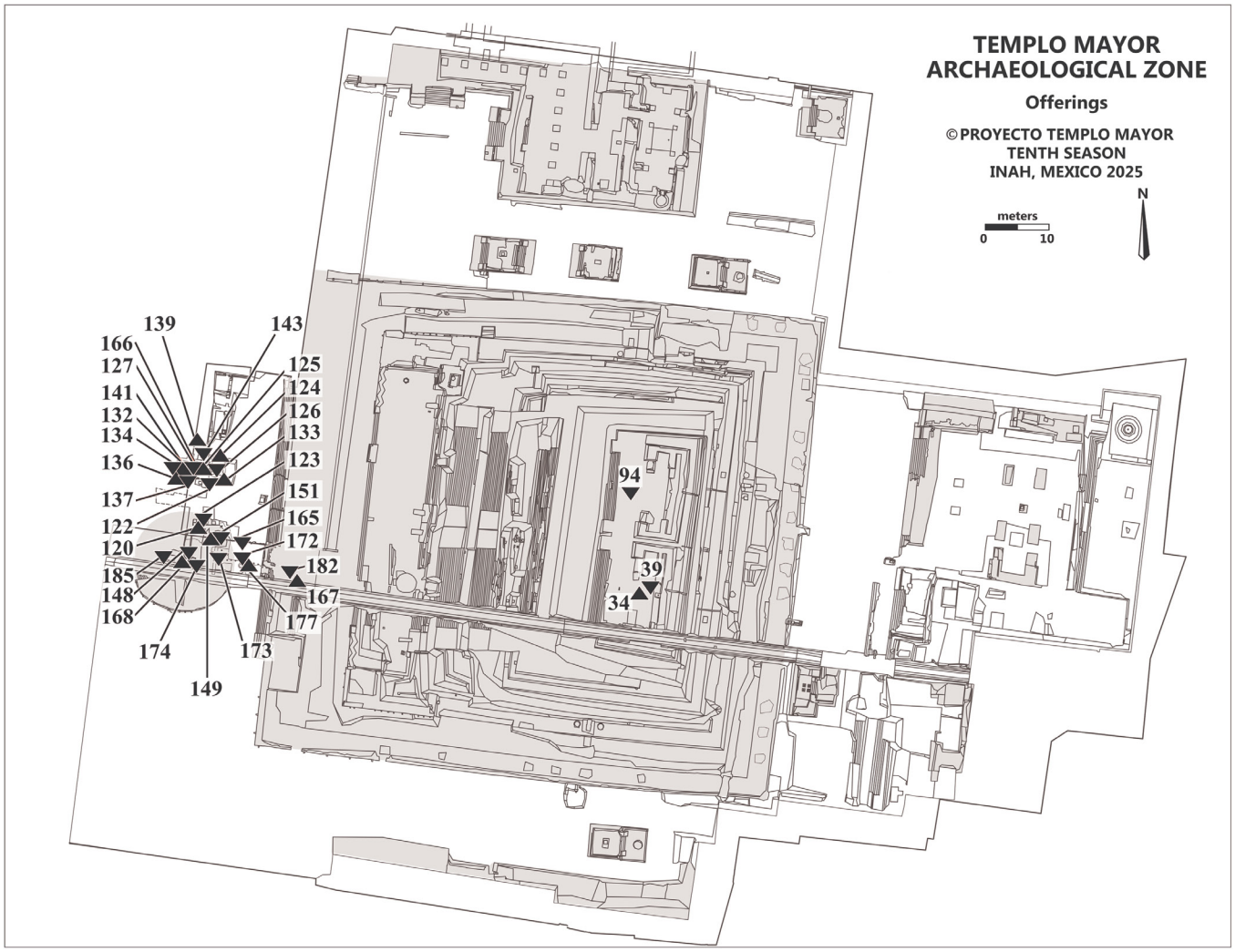

Fig. 3. Location of the ritual contexts (offerings) with obsidian artifacts analyzed in this study. Map by Michelle De Anda. Courtesy of PTM-INAH.

Sierra de Pachuca (n = 702). Obsidian from this source is present in all the offerings and construction fills explored by the PTM-INAH, and there was no variation in its proportion over time. Sierra de Pachuca is located approximately 94 km northeast of Tenochtitlan (Fig. 5), and it was the principal obsidian source in Central Mexico since the Classic period (c. 200-650 CE) (47). Remarkably, almost all the artifacts found in offerings are made with this obsidian, revealing the preferences of the Mexica. Sierra de Pachuca obsidian is characterized by its particular green and golden colors (9), which make it highly valuable in Mesoamerica. In historical documents, it is called *tolteca itztli* or *toltecaliztli* (Toltec obsidian or obsidian of the masters) (48, 49), and it was symbolically associated with the mythical city of Tollan, the place where the god Quetzalcoatl lived. The Mexica Empire's privileged access to green obsidian from Sierra de Pachuca has been widely discussed (49–51).

Most artifacts in this group are fragments of prismatic blades, cores, and flakes found in the construction fill (n = 477). The rest are high-quality ornaments and religious insignia deposited into offerings, such as beads, earspools, miniature projectile points, knives, clubs, and small round and quadrangular bifaces used to represent the eyes of life-size sculptures and flint knives (n = 225) (Fig. 1 *A* and *B*).

Otumba (n = 27). The objects linked to this source were found in contexts from Phase III to Phase VII and the colonial period. Otumba is located c. 48 km northeast of Tenochtitlan. It was one of the principal obsidians for blade production during the Late Postclassic period. Workshops and houses in the Otumba city-state area had materials related to the intensive production of blade cores, prismatic blades, bifaces, earspools, and labrets, although most of them may be consumed locally or within the nearby area (52). This could explain why the obsidian from this source is not abundant in Templo Mayor, even though Otumba is the closest obsidian deposit to Tenochtitlan.

Our sample has 13 fragments of prismatic blades, 11 flakes, and one fragment of an exhausted prismatic core. The other two are ritual objects that were deposited into offerings. One is a tiny biface of red-and-black obsidian (Fig. 1*C*) from Offering 166 (Phase VII). This particular color, known as *meca*, is rare because it only appears in small quantities in obsidian deposits with other characteristics (53). For this reason, it was highly valuable among Pre-Hispanic societies and referred to as *itzcuinnitztli*. It was symbolically associated with the old god of fire, Xiuhtecuhtli (48).

The biface in our sample is similar to the ones recorded in workshops at Otumba, some of which were made of *meca* obsidian (47). Unfortunately, the artifact from Templo Mayor is broken, so we cannot identify its original form, although its size and provenance data suggest it was manufactured in Otumba. Melgar Tísoc et al. (32) and Athié (33) identified other artifacts of *meca* obsidian from this outcrop in Templo Mayor. We refer to three gourd-shaped

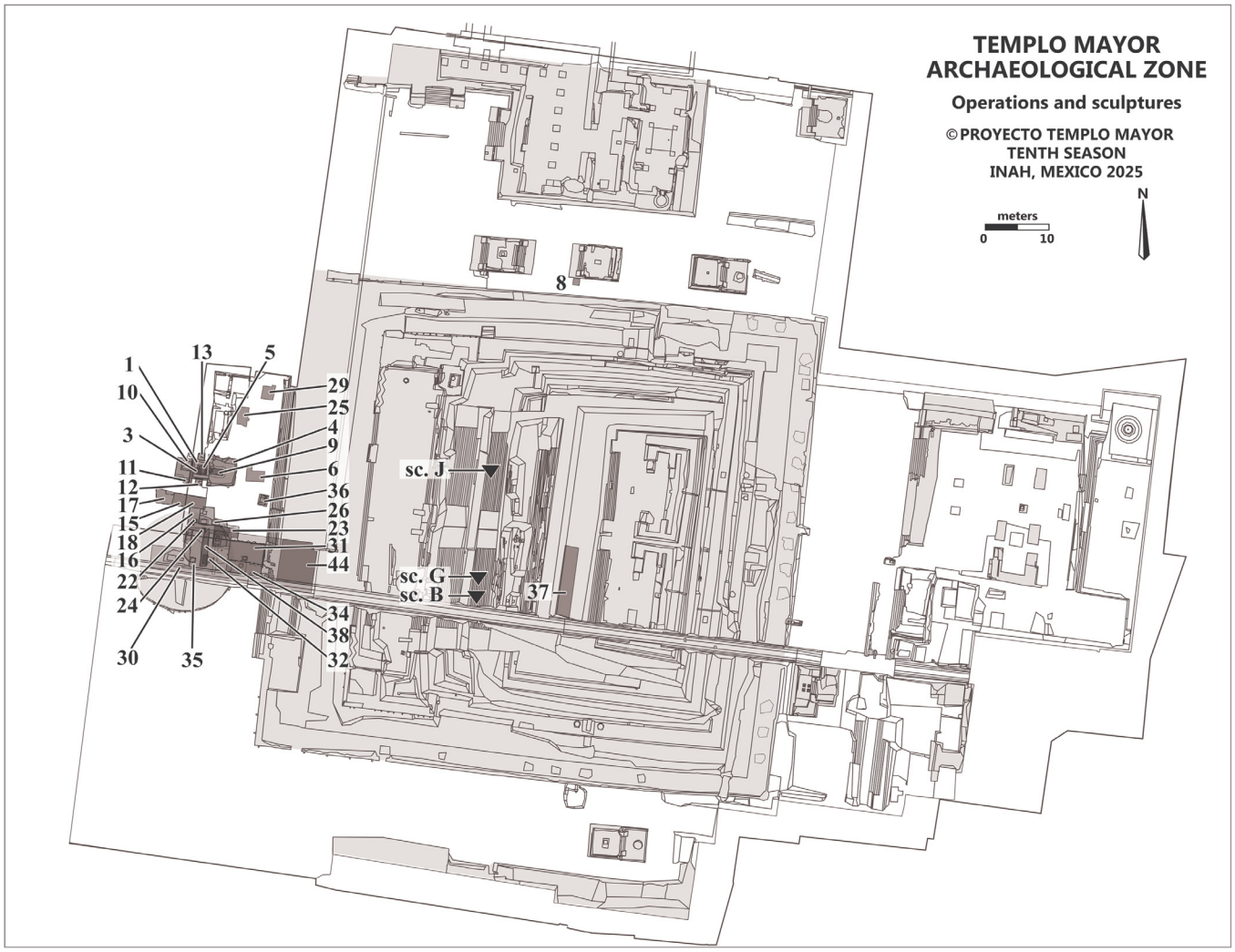

Fig. 4. Location of the nonritual contexts (operations) and the three life-size sculptures (B, G, and J) with obsidian artifacts analyzed in this study. Map by Michelle De Anda. Courtesy of PTM-INAH.

and one globular bead from offerings 39 and 34 (Phase II) and one flake recovered in the construction fill.

The other standout artifact made with obsidian from Otumba, a miniature club (Fig. 2*A*), was found in Offering 139 (Phase VII). The collection contains 17 other examples of this type of artifact, all made with obsidian from Sierra de Pachuca. Their standardized shapes and dimensions indicate specialized production. Technological analysis indicates that this type of object was produced with exhausted prismatic cores (30). These data show that the Mexica deposited artifacts of Otumba obsidian in ritual contexts from the earlier to the later phases of the sacred precinct, indicating a continuous consumption throughout most of Tenochtitlan's history.

Paredón (n = 15). Fifteen artifacts come from the Paredón outcrop that is located c. 108 km northeast of Tenochtitlan. The evidence of human exploitation at this source dates from the Terminal Preclassic to the Late Postclassic periods (4, 9). Recently, Vicencio et al. (17) demonstrated the existence of a subsource at the Paredón quarry known as Tres Cabezas. In our sample, the hierarchical cluster analysis (HCA) and principal component analysis (PCA) showed two clusters among the Paredón group, with Zn and Nb as the principal components. Some artifacts could correspond to Tres Cabezas. However, we do not have sufficient data to determine which subsource the Templo Mayor obsidian pertains to.

Our sample contains six fragments of prismatic blades, seven flakes, one projectile point, and one fragment of a miniature knife (for example, Fig. 2*C*), all found in the construction fill. This obsidian is present in contexts between phases III and VII. The projectile point and the knife came from the same layer and excavation unit (R13/Operation 6), corresponding to Phase III. Both artifacts have similar sizes and negatives of flakes removed unidirectionally by pressure.

Ucareo (n = 13). Ucareo is located c. 173 km northwest of Tenochtitlan. Nine fragments of prismatic blades, three flakes, and one helical bead are made with this obsidian (Fig. 2*D*). All the blades and two flakes were deposited in the construction fill between phases II and VII. The third flake was found inside the stone box that contained Offering 166, although it was over the sediment that covered the materials, indicating that it probably filtered into the box from the upper strata. The helical bead was found in Offering 39 (Phase II), located on top of the *Huey Teocalli*, below the stucco floor on the south side of the pyramid, dedicated to the cult of Huitzilopochtli. This offering contained several other lithic objects, including a travertine funerary vessel with the representation of an anthropomorphic character (38) and four other helical beads, all fabricated with obsidian from Pachuca (32).

Table 2. Obsidian artifacts recovered in each construction phase of the Templo Mayor Archaeological Zone

Obsidian source	Phase II		Phase III		Phase IV-IVa		Phase IVb-V		Phase VI	
	Ritual	Nonritual	Ritual	Nonritual	Ritual	Nonritual	Ritual	Nonritual	Ritual	Nonritual
Sierra de Pachuca	44	5	5	114	3	65		27	147	80
Otumba				1		1		2	5	6
Paredón				3	1	4				3
Ucareo	1					3			1	5
Tulancingo	2			5	1				1	1
El Paraíso				4		4				1
Zacualtipán				6						1
Pico de Orizaba				1						
TOTAL	47	5	5	134	5	77	0	29	154	97

Obsidian source	Phase VII		Colonial		Undetermined		
	Ritual	Nonritual	Ritual	Nonritual	Ritual	Nonritual	TOTAL
Sierra de Pachuca	45	90		61		16	702
Otumba	2	4		5		1	27
Paredón		4					15
Ucareo	1	2					13
Tulancingo	1	1					12
El Paraíso							9
Zacualtipán				1			8
Pico de Orizaba		1					2
TOTAL	49	102	0	67	0	17	788

Ucareo obsidian was ubiquitous in Central Mexico before the Late Postclassic period (32, 54), when it became the primary obsidian source of the Purépecha (Tarascan) polity. Some scholars have proposed that the rise of the Purépecha as the main polity in West Mexico affected the flow of this raw material into Central Mexico through trade (55). Alternatively, other scholars have considered the presence of Ucareo artifacts in offerings at Tenochtitlan as looted relics from ancient sites, gifts, or war prizes (32). However, our results, along with data from other Middle and Late Postclassic sites in Central Mexico (Table 4), confirm that obsidian from Ucareo circulated continuously during this period, crossing political borders and reaching the capital of the Mexica Empire. Indeed, Ucareo obsidian comprises the fourth-largest group in our sample. Nonetheless, its presence, mainly as prismatic blades and flakes, suggests that it was primarily used for everyday activities rather than to manufacture ritual items.

Table 3. Construction phases of the Templo Mayor and sovereigns (*tlatoque*) of Tenochtitlan. Based on López Austin and López Luján (34)

Phase	Tlatoani	Period
II-IIc	Acamapichtli Huitzilíhuitl Chimalpopoca	c. 1375-1427 CE
III	Itzcóatl	c. 1427-1440 CE
IV-IVa	Motecuhzoma I	c. 1440-1469 CE
IVb-V	Axayácatl Tízoc	c. 1469-1486 CE
VI	Ahuítzotl	c. 1486-1502 CE
VII	Motecuhzoma II	c. 1502-1520 CE
Colonial		c. 1521-1821 CE

Tulancingo (n = 12). This outcrop is located c. 115 km northwest of Tenochtitlan. The group has five fragments and one complete prismatic blade, one flake, one earspool, one circular ornament (Fig. 2*E*), one pendant with the form of a duck head (Fig. 1*D*), and two small quadrangular bifaces (Fig. 1*B*) found in contexts between phases II and VII and the colonial period. This group has the largest number of ritual objects after Sierra de Pachuca. The bifaces were used to represent the eyes of flint knives from offerings 167 (Phase VII) and 173 (Phase IV). The complete blade was also found in this latter offering. This artifact is small (6.2 cm long) and does not have wear marks, which suggests its use for bloodletting. The earspool and disc were found in Offering 39 (Phase II) in the same context as the helical bead of Ucareo obsidian and the gourd-shaped beads of Otumba obsidian. This offering had objects made with obsidian from four different sources, making it the ritual context with the greatest obsidian diversity in our entire sample. As mentioned, it was placed below the stucco floor inside the shrine of Huitzilopochtli, the principal god of the Mexica. López Luján (38) and Chávez Balderas (61) proposed that this deposit could have contained the remains of a *tlatoani* (Tenochtitlan ruler). The diversity of obsidian types supports this hypothesis, suggesting that the Mexica gathered artifacts from multiple places to honor the character deposited into this offering.

Finally, the duck-head pendant (Fig. 1*D*) was found in the construction fill of the colonial period; for this reason, there is no information on its original context. However, this type of artifact has been found only in two offerings within the sacred precinct of Tenochtitlan. They are Offering 14 (Phase IV), which had 14

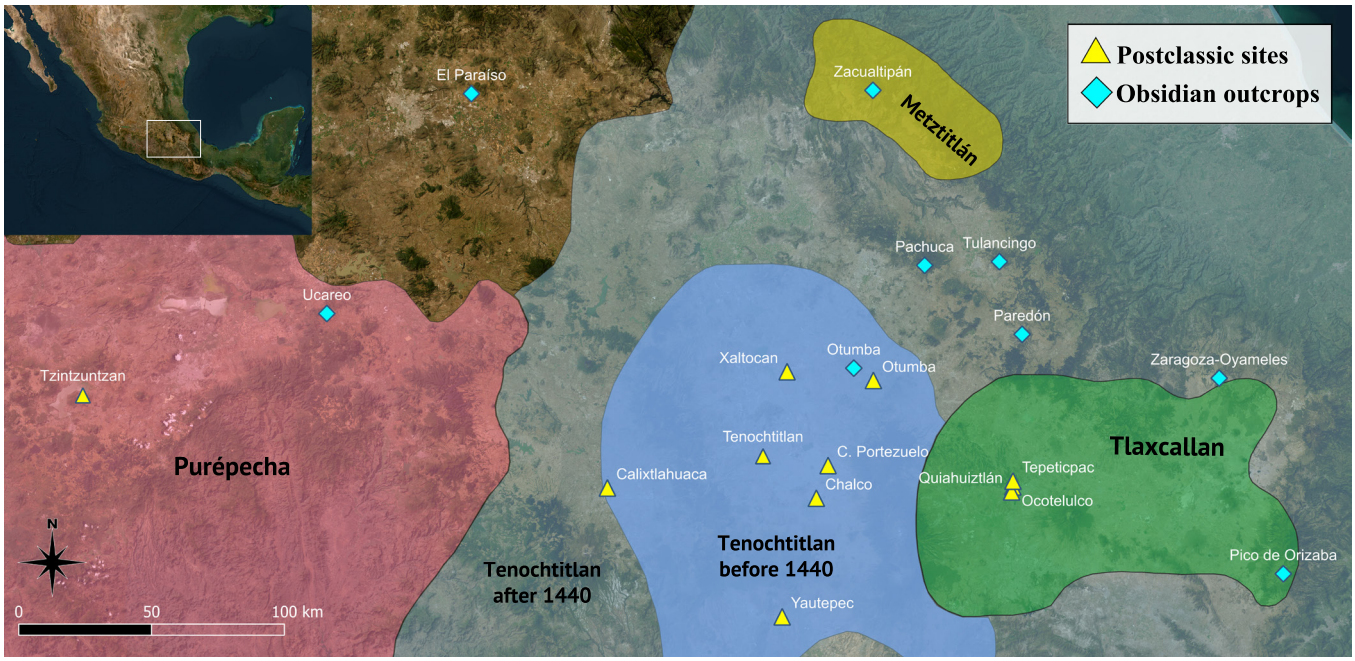

Fig. 5. Sites and obsidian outcrops mentioned in this article.

pendants, and Offering V, which had eight complete pendants and some fragments. Melgar Tísoc et al. (32) analyzed six pendants from Offering 14 (Pachuca) and three from Offering V (Pico de Orizaba). Although it is still necessary to analyze the rest, the current data indicate that the object in our sample is the only one made with obsidian from Tulancingo.

Duck-head pendants are common in funerary contexts in Central Mexico (31, 33, 61–63). During her excavations of the Postclassic lithic workshops in Otumba, Otis Charlton (64) found several of these objects made with obsidian of multiple colors, including green, suggesting their specialized production at this site. Their meaning is still unclear, although they may be symbols of one of the souls in Nahua cosmovision, the *teyolía* (31). Consequently, they may have been manufactured exclusively for funerary contexts (65).

El Paraíso (n = 9). This outcrop is located c. 175 km north of Tenochtitlan. It has not been widely studied, although Cobean (9) describes it as the most extensive obsidian flow in southern Querétaro. The presence of this obsidian is not common in Postclassic sites. Pastrana (66) and Juárez-Cossío et al. (67) identified blades made of El Paraíso obsidian in sites within the Querétaro region, suggesting that it was consumed locally, although not intensively, because of its low quality (66). Our sample includes six fragments of prismatic blades, two flakes, and one fragment of a miniature knife, all found in the construction fill between phases III and VI.

Zacualtipán (n = 8). The next group has eight fragments of prismatic blades from Zacualtipán, which is located c. 144 km northeast of Tenochtitlan in the territory of the Metztitlán polity. This is the only group with a single type of artifact, which may reveal the preference of this obsidian for blade production. Six fragments belong to Phase III, while the remaining two are from Phase VI and the colonial construction fill, indicating that the Mexica consumed obsidian from this source for approximately a century.

Pico de Orizaba (n = 2). The last group comprises the artifacts made with obsidian from Pico de Orizaba, which is located c. 200 km southeast of Tenochtitlan. One is a flake found in the construction fill of Phase VII. The other is a miniature projectile point (Fig. 2*F*), which was found in the same context (R13, Operation 6) as other bifaces made with obsidian from Paredón and El Paraíso (Phase III). Combining all the information available on provenance studies at Tenochtitlan, we identify only five artifacts of this type of obsidian in Templo Mayor between phases III and VII, making it the scarcest type in Tenochtitlan. Data from other Postclassic sites show that Pico de Orizaba obsidian was also uncommon in the Basin of Mexico. The site that consumed the most from this quarry was Tepeticpac in Tlaxcallan, although in limited quantities compared to other outcrops (Table 4).

Discussion

The results of this study demonstrated that the Mexica from Tenochtitlan consumed mainly green obsidian from Sierra de Pachuca. Almost 90% of the sample analyzed is linked to this outcrop. However, it is interesting that nearly 10% reflected so much variability, indicating that obsidian from several other sources reached Tenochtitlan throughout its history. The Mexica acquired obsidian from at least seven sources besides Pachuca. This number is higher than the average calculated by Feinman et al. (5) in their sample of 129 Late Postclassic sites, with an average of 3.6 different sources for sites in Eastern Mesoamerica (the Maya region) and an average of 4 for sites in Western Mesoamerica (areas west of the Maya region, including Central Mexico and West Mexico). In this respect, Tenochtitlan had access to obsidian from more sources than several other urban and rural sites in Mesoamerica during the Late Postclassic period. In addition, our results accord with those of Feinman et al. (5), who stated that during the Late Postclassic period, 99.99% of obsidian consumed by sites in Western Mesoamerica came from Western sources, with Sierra de Pachuca as the most common.

It is well known that the Mexica had quarries and workshops in Sierra de Pachuca to get direct access to this type of obsidian (47). Pastrana (46) identified prismatic cores and preforms of artifacts associated with Aztec III ceramics (c. 1350-1520 CE). However, even if the Mexica exploited and transported obsidian in large quantities from Pachuca to Tenochtitlan, this situation did not limit their access to obsidian from several other deposits, some of

them beyond their political borders. Indeed, there is no evidence throughout Mesoamerican history that any urban center monopolized access to obsidian from any source (5, 68). The Mexica from Tenochtitlan preferred green obsidian and likely acquired it directly in the outcrop, but they also participated in trade systems like other urban and rural sites in Central Mexico, with local markets (*tianquiztli*) as the principal places to acquire obsidian tools.

Most artifacts in our sample are fragments of prismatic blades and small flakes found in the construction fill, suggesting that they were utilitarian artifacts deposited during the construction labor. Obsidian from several other sources than Pachuca was available to the population of Tenochtitlan; it was not necessarily a prestige good for them, and it seems that the state did not control its distribution. They likely obtained their artifacts, mostly prismatic blades, in the city market or Tlatelolco's great market, where historical documents indicate that merchants from different regions gathered to trade their products. Diversity of obsidian sources has also been identified at other Middle and Late Postclassic sites in Central Mexico, such as Yautepec (25), Calixtlahuaca (58), Xaltocan (18), Ocotelulco, Quiahuiztlán, Tepeticpac (Tlaxcallan) (14, 20), Otumba (24), Cerro Portezuelo, and Chalco (60) (Table 4).

The offerings show a different pattern. Variability in these deposits is more limited. Our analysis reveals that the Mexica preferred obsidian from Sierra de Pachuca for their ritual artifacts. Green obsidian was present in offerings from all the phases and areas of the sacred precinct. We propose that the Mexica from Tenochtitlan did not distinguish between obsidian sources when acquiring their tools at local markets. On the other hand, the artisans who produced ritual objects and the priests who deposited them into the offerings did have a clear predilection for obsidian from Sierra de Pachuca. This tendency stayed constant from the earliest phases until the first half of the sixteenth century when the supply system changed with the disintegration of the Mexica Empire. We can be sure that the so-called *tolteca itztli* was the primary type of obsidian for creating sumptuary objects in Tenochtitlan because of its symbolic value.

A temporal analysis demonstrates that green obsidian was always the most consumed type throughout Tenochtitlan's history. There is a considerable disproportion in the number of artifacts toward Phase VI (Table 2), which does not necessarily indicate that the Mexica consumed more obsidian in this period. The disproportion can be linked to the number of contexts explored for each phase. Calculating the percentage of obsidian types in each phase reveals that green obsidian always comprises between 82 and 94 percent of all types.

In terms of variability through time, phases III, IVa-IVb, and VI show a greater number of sources, with six, five, and six, respectively. Phases IVb-V are the ones with the most limited number of sources and artifacts (Table 2). In our sample, there is obsidian only from Sierra de Pachuca and Otumba in this period, which suggests that the Mexica had limited access to this raw material, so they relied on the primary outcrops associated with the Empire. As mentioned, Melgar et al. (32) identified three duck-head pendants from this period associated with Pico de Orizaba. These authors highlight the limited access to other resources, such as turquoise and greenstone, during Tízoc's government. Our results accord with this hypothesis; it is during this phase that we see fewer obsidian artifacts and types. This situation changed abruptly during the next phase when obsidian from at least seven different sources was consumed at Tenochtitlan. This intensification corresponds to the shift in government from Tízoc to Ahuítzotl, one of the most prominent *tlatoque*, who focused on expanding the Empire as far as the Tehuantepec and Xoconochco regions along the Pacific coast (69) (Fig. 5).

In addition, we distinguish a shift in the nongreen obsidian types acquired by the Mexica in the early phases and after the consolidation of the Triple Alliance c. 1430 CE. In the early phases (II-III), there was a preference for obsidian from Tulancingo, El Paraíso, and Zacualtipán, especially during Phase III, when it was used primarily to produce ritual artifacts. These outcrops were located beyond the Mexica's political boundaries (Fig. 5). However, during Phase II, the Mexica consumed almost exclusively obsidian from Pachuca, with the three exceptions from Offering 39. This deposit contained the remains of an elite personage, which justifies the presence of objects from distant places, which were probably considered of high economic and symbolic value during the period prior to the consolidation of the empire. As we explained, the helical bead of Ucareo obsidian found in this offering has been interpreted as a potential looted relic from an ancient site (70). However, the presence of two other high-quality objects made with obsidian from Tulancingo (one earspool and one perforated disc), along with the other four helical beads of Pachuca obsidian, which are identical in their shape, suggests that all these artifacts are contemporaneous. Obsidian variability in Offering 39 seems to be related to the type of context.

Phase III represents the first intensification in obsidian networks, likely motivated by the rise in power of Itzcóatl, the first *tlatoani* who conquered regions beyond the Basin of Mexico and who defeated the Tepanecs from Azcapotzalco, creating the context for the development of the Mexica Empire (69). The presence of at least seven sources of obsidian indicates that the Mexica expanded their commercial interactions during this period, probably because of their newly gained independence from Tepanec control. However, variability is reflected only in nonritual artifacts. The five obsidian objects found in ritual contexts for this phase are made with obsidian from Pachuca.

During Phase IV, the tendencies changed toward obsidian from Otumba, Paredón, and Ucareo, although Tulancingo is still present. This variation corresponds with the period of Tenochtitlan's imperialistic expansion. The consolidation of the Mexica Empire incorporated Tulancingo, El Paredón, Zaragoza-Oyameles, and Pico de Orizaba into the empire's political influence. Otumba became the second principal source for the Mexica. The other two were Paredón and Ucareo; however, our sample contains only blades and flakes from these two sources from phases IV to VII, which suggests that the Mexica no longer used these types to produce ritual artifacts. Obsidian tools from these outcrops arrived at the Tenochtitlan markets, where they were exchanged along with blades and flakes from other sources. Conversely, only obsidian from Sierra de Pachuca, Otumba, and Tulancingo was used for ritual objects.

Phase V is characterized by a reduction in the amount and variability of obsidian, related to the political and economic destabilization of Tízoc's short reign. This phase is also defined by the absence of obsidian ritual artifacts. During Phase VI, the amount and variability of obsidian increases considerably. The main change is reflected in the lack of obsidian from El Paraíso. This tendency persisted during the next phase. The colonial contexts are problematic because of the large amount of fill disturbance. However, we identified that all the 67 artifacts dated to this period are nonritual, and 66 of them are made with green obsidian from Pachuca. The other one is a fragment of a prismatic blade from Zacualtipán. Unfortunately, the high degree of disturbance of the Pre-Hispanic strata makes it impossible to determine whether these artifacts are contemporaneous.

Finally, the sample analyzed in this study does not include any artifact manufactured with obsidian from Zaragoza-Oyameles, which was an important source for the Tlaxcallan polity (14), an independent confederation located in the Puebla-Tlaxcala Valley. Tlaxcallan has been consistently identified as the main enemy of the Mexica Empire. The absence of obsidian from these sources suggests an important commercial restriction between these deposits and the Basin of Mexico. Only a few objects (1 to 3%) of this

Table 4. Percentage of obsidian from different deposits in distinct Middle and Late Postclassic sites in Central Mexico*

	Hidalgo			Hidalgo (Tulancingo region)		State of Mexico	Puebla		Querétaro	
	Pachuca	Malpaís	Zacualtipán	Tulancingo	Tepalcingo	Otumba	Paredón	Zaragoza-Oyameles	El Paraíso	Fuentezuelas
Tenochtitlan	89.08%		1.02%	1.52%		3.42%	1.90%		1.14%	
Calixtlahuaca	20.13%†					28.78%				
	N/A		0.66%			30.46%	0.66%		0.66%	
Xaltocan	58.25%		0.98%	0.98%		32.03%		0.98%		
Tepeticpac	9.67%					12.9%	54.19%	16.77%		
Ocotelulco, Quiahuiztlán, and Tepeticpac	17%					2%	70%	9%		
Otumba	24.21%			10.52%	1.05%	48.42%				
Cerro Portezuelo	65.3%	1%	1%			17.8%		1%		
Chalco	72%					16%	3%	2%		

	Michoacán			Veracruz	Jalisco				
	Ucareo	Zinapécuaro	Cruz Negra	Pico de Orizaba	San Juan de los Arcos	Santa Teresa	Sample size	Method	Source
Tenochtitlan	1.65%			0.26%			788	pXRF	This study
Calixtlahuaca	45.80%						388	XRF	Novic (56)
	62.25%	0.66%	0.66%			0.66%	151‡	XRF	Huster (57); Andrews et al. (58)
Xaltocan	3.88%				0.98%		103§	pXRF, IXRF, and INAA	Millhauser et al. (18)
Tepeticpac				6.45%			155	pXRF	López Corral et al. (14)
Ocotelulco, Quiahuiztlán, and Tepeticpac				2%			45	pXRF	Millhauser et al. (20)
Otumba				1.05%			95	INAA	Neff et al. (24)
Cerro Portezuelo	13.9%						102	ED-XRF	Parry and Glascock (59)
Chalco	7%						120	INAA	Elam et al. (60)

*Another Postclassic site that shows a large diversity of obsidian sources is Yautepec in Morelos. We do not include it in this table because there is no precise information on the number of green obsidian artifacts recovered. Smith et al. (25) intentionally removed them from their sample, which, according to them, comprised almost 90% of the total lithic artifacts recovered. Besides Pachuca, Yautepec consumed obsidian from Otumba (60.58%), Paredón (13.82%), Ucareo (13.53%), Zaragoza-Oyameles (5%), El Paraíso (3.23%), Fuentezuelas (2.06%), Zinapécuaro (0.88%), and Zacualtipán (0.29%). These percentages, however, correspond to nongreen obsidian artifacts (n = 340) analyzed through XRF and INAA.
†Percentages in this row are calculated from the percentages provided by Novic (56) for surface and excavation assemblages.
‡This number corresponds to gray obsidian artifacts analyzed chemically. All the green obsidian artifacts in their sample were assigned directly to the Pachuca source (58). In addition, their sample includes one artifact assigned to an unknown geological group, "Enchisi," which is present only in sites in the Toluca Valley (71).
§According to Millhauser et al. (20), only 50 of the samples in their study date from Postclassic contexts; the remaining 53 are from the colonial period.

obsidian have been found at Cerro Portezuelo and Chalco (60, 71). However, several artifacts of Pachuca obsidian have been found in Tlaxcallan, suggesting that the blockade existed only in one way (72). Nonetheless, Tenochtitlan consumed obsidian from Paredón, another deposit located close to Tlaxcallan territory (Fig. 5). Archaeological and historical data indicate that Tlaxcallan did not control obsidian exploitation and distribution of these deposits (20). Indeed, Zaragoza-Oyameles was located close to a territory controlled by the Mexica Empire, Tlatlauhquitepec (20). The reasons why the obsidian flow from this source was always limited in the Basin of Mexico require further research.

This study demonstrates the importance of nondestructive techniques, such as pXRF, for analyzing archaeological materials, which allow archaeologists to study considerably larger samples. We encourage researchers to include artifacts from nonritual contexts in their studies. Ritual and nonritual artifacts are equally important when exploring obsidian consumption patterns in Pre-Hispanic societies. In our study, incorporating nonritual artifacts allowed us to identify the great variety of types of obsidian that arrived in Tenochtitlan, which remained constant even after the expansion of the empire. Market systems were key to moving obsidian from distant localities such as Ucareo, Zacualtipán, and Pico de Orizaba into the imperial capital, although sociopolitical tensions affected the influx of other types of obsidian in the Basin of Mexico. Comparisons of larger samples from multiple sites in Central Mexico are necessary to understand better the systems of

exploitation, trade, and distribution of this important material at the macroregional scale.

Materials and Methods

Our sample was analyzed in the field laboratory of the PTM in Mexico City, using an equipment, Bruker model Tracer 5i, property of the Department of Anthropology at Tulane University. The pXRF measurements were taken using the calibration and checked against the standard sample provided by Bruker. The calibration was corroborated every fifty measurements. We used an 8 mm collimator, exposing each object to radiation for 60 s (30 s for light elements and 30 s for heavy elements), measuring concentrations of 10 elements: Mn, Fe, Zn, Ga, Rb, Sr, Y, Zr, Nb, and Th. In addition, we analyzed 42 geological samples from different Mesoamerican obsidian outcrops, which were used as standards for identifying the provenance of Templo Mayor artifacts (*SI Appendix*, Fig. S1).

Elements with an average percent error above 20 were removed from the analysis, leaving the following seven elements: Mn, Fe, Zn, Rb, Y, Zr, and Nb (*SI Appendix*, Tables S2 and S3). To standardize the distribution of the data, we transformed the ppm values into log10 (*SI* pXRF data). Then, we performed the following statistical analysis: HCA, PCA, and discriminant function analysis (DFA), using the software IBM SPSS Statistics 29.

PCA, HCA, and DFA of Geological Samples. PCA was used to reduce variables into factors that explain the variance of the sample. In the case of geochemical analysis, elements that explain the degree of variation between obsidian artifacts will be represented through components. PCA uses the Kaiser–Meyer–Olkin Measure of Sampling Adequacy (KMO) to represent the squared correlation between variables and the squared partial correlation between variables (72). The closer this value is to 1, the more compact the correlations are, and a more reliable factor analysis can be generated.

HCA classifies the dataset based on shared attributes between individual cases. Within SPSS, commonly used methods include average linkage clustering, single linkage, and Ward's method. Average linkage clustering is often the most reliable because single linkage can display a chaining effect, and Ward's method tends to obscure outlier cases. The distance between cases can be measured using Euclidean distance and squared Euclidean distance. While Euclidean distance represents the straight line between two given points, squared Euclidean distance places progressively greater weight on cases that are further apart.

DFA, like PCA, compresses the variables into a smaller concentration, which are called functions. Function is a linear combination of variables that maximizes group differences. The combination of PCA, HCA, and DFA is ideal for analyzing the degree of variation in the sample and determining group membership. PCA compresses the data into several regression factors and examines the closeness of individual cases. The HCA indicates clusters of artifacts closely related based on similar geochemical signatures. DFA then checks the group membership based on the combination of independent variables. Tables and figures for these statistical analyses are included in *SI Appendix*.

PCA, HCA, and DFA of Geological and Archaeological Samples. We first analyzed geological samples to examine whether we could differentiate different source materials. The KMO value was 0.761, which shows the dataset is suitable for PCA (72). Mn was the only element from the geological samples to yield a KMO below 0.5. However, we decided to keep it because the Mn's KMO value was useful when combined with the archaeological sample data, which had a KMO value over 0.5.

Overall, the total variance explained was 90%, with two components extracted (*SI Appendix*, Fig. S2). Mn was the only element to load onto Component 2, while the remaining elements all correlated to Component 1. HCA, using average linkage and squared Euclidean distance of the geological samples, indicated roughly eight different groups: 1) Pachuca, 2) Tulancingo, 3) Pico de Orizaba, 4) Otumba, 5) El Paraíso, 6) Ucareo, 7) Paredón–Pénjamo–Zaragoza, and 8) Zacualtipán.

Once the differentiation of geological sources had been established, we combined the data with that of the Templo Mayor to determine which artifacts may be grouped into specific sources. To begin with, PCA was applied to the entire dataset. The addition of Templo Mayor artifacts greatly obscured the original, robust groups formulated through geological sources. This might be mainly attributed to the large number of artifacts associated with Sierra de Pachuca. Even if all the Sierra de Pachuca artifacts were located within the same cluster and obsidian is a chemically homogeneous material, some minor variation within the same source exists, which impacts the creation of well-defined clusters for other sources. This is especially true when there are so many artifacts from Pachuca and just a few from other sources. After analyzing the entire sample altogether, we separated the Pachuca samples (*SI Appendix*, Fig. S6 and Table S7) and reanalyzed the following groups: Otumba, Ucareo, Tulancingo, Paredón, and Zacualtipán (*SI Appendix*, Fig. S3 and Table S4).

We also removed geological samples that were not associated with any archaeological artifact (Pénjamo, Zaragoza, and Derrumbadas). This allowed us to classify each artifact into a specific group. After the PCs plotted the geological sources, it was clear they all grouped separately (*SI Appendix*, Fig. S4).

DFA indicated that geological and archaeological samples are well grouped (*SI Appendix*, Tables S5, S9, and S10). Wilk's Lambda measures how well-separated the groups are (a score closer to 0 means well-separated groups, and a score closer to 1 indicates poor sorting). In this case, the values among both analyses proved that the groups are well sorted (*SI Appendix*, Tables S6 and S8). Due to the large sample size of Pachuca, the function has a high eigenvalue, which explains 100% of the variance. This is confirmed through the standardized canonical coefficients and structure matrix, both of which attribute all the variance to function 1, similar to the PCA. The canonical correlation yielded a regression score of 1, revealing that the sample has a positive linear relationship between function and the variance of the sample.

Commentary. Through PCA and HCA, it appears that all geological samples can be distinctly grouped. The DFA further confirmed this claim. However, the groups could not all be analyzed directly due to disproportionate amounts of obsidian from Pachuca and other deposits, which obscures group membership. A consequence is that some sources became conflated with one another, which required separating the overall sample. It may be worth noting, for future reference, that Pachuca was conflated with El Paraíso; Otumba, Zaragoza, and Ucareo were all clustered together, as were Tulancingo and Pénjamo; and Zacualtipán and Paredón. The element that seemed to most heavily impact the extracted components and functions during PCA and DFA appeared to be Rubidium (Rb), especially in the cases of Tulancingo, Otumba, Ucareo, and Paredón. All these problems were solved after removing Sierra de Pachuca and the geological samples with no archaeological associations from further analyses.

Data, Materials, and Software Availability. All study data are included in the article and/or *SI Appendix*.

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Supplementary Materials

Table S1. Templo Mayor artifacts analyzed in this study.

Sample Number	Outcrop	PTM-INAH code	Context	Context type	Stage	Temporality	Artifact type
TM-1	Sierra de Pachuca	A7	Op. 1/R6	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-2	Sierra de Pachuca	A21	Op. 1/P6	Non-ritual	Colonial	1521-1821 CE	Point
TM-3	Sierra de Pachuca	A37	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-4	Sierra de Pachuca	A51	Op. 1/R10	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-5	Sierra de Pachuca	A54	Op. 1/R11	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-6	Sierra de Pachuca	A55	Op. 1/R16	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-7	Tulancingo	A63	Op. 1/R12	Non-ritual	VII-1	1502-1520 CE	Duck head pendant
TM-8	Sierra de Pachuca	A68	Op. 1/R12	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-9	Sierra de Pachuca	A73	Op. 1/R13	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-10	Sierra de Pachuca	A123	Op. 1/R11	Non-ritual	Colonial	1521-1821 CE	Flake
TM-11	Sierra de Pachuca	A127	Op. 1/R6	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-12	Sierra de Pachuca	A128	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-13	Sierra de Pachuca	A129	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-14	Sierra de Pachuca	A130	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-15	Sierra de Pachuca	A131	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-16	Sierra de Pachuca	A132	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Flake
TM-17	Sierra de Pachuca	A133	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-18	Sierra de Pachuca	A134	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-19	Sierra de Pachuca	A135	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-20	Sierra de Pachuca	A136	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-21	Sierra de Pachuca	A137	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-22	Sierra de Pachuca	A138	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-23	Sierra de Pachuca	A139	Op. 1/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-24	Sierra de Pachuca	A140	Op. 1/R11	Non-ritual	Colonial	1521-1821 CE	Flake
TM-25	Sierra de Pachuca	A141	Op. 1/R16	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-26	Sierra de Pachuca	A142	Op. 1/R16	Non-ritual	VII-1	1502-1520 CE	Flake
TM-27	Sierra de Pachuca	A143	Op. 1/R16	Non-ritual	VII-1	1502-1520 CE	Flake
TM-28	Paredón	A8	Op. 3/R3	Non-ritual	VII-1	1502-1520 CE	Flake

TM-30	Sierra de Pachuca	A10	Op. 3/R1	Non-ritual	VII-1	1502-1520 CE	Lip plug
TM-31	Otumba	A11	Op. 5/R6	Non-ritual	IVb-V	1469-1486 CE	Flake
TM-32	Sierra de Pachuca	A65	Op. 5/R9	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-33	Sierra de Pachuca	A66	Op. 5/R9	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-34	Sierra de Pachuca	A104	Op. 5/R11	Non-ritual	III	1375-1427 CE	Prismatic blade
TM-35	Sierra de Pachuca	A124	Op. 5/R13	Non-ritual	III	1375-1427 CE	Prismatic blade
TM-36	Sierra de Pachuca	A137	Op. 5/R10-R18	Non-ritual	III	1375-1427 CE	Prismatic blade
TM-37	Sierra de Pachuca	A159	Op. 5/R11	Non-ritual	III	1375-1427 CE	Prismatic blade
TM-38	Sierra de Pachuca	A169	Op. 5/R11	Non-ritual	III	1375-1427 CE	Prismatic blade
TM-39	Sierra de Pachuca	A173	Op. 5/R12-R18	Non-ritual	III	1375-1427 CE	Prismatic blade
TM-40	Sierra de Pachuca	A176	Op. 5/R12	Non-ritual	III	1375-1427 CE	Prismatic blade
TM-41	Sierra de Pachuca	A177	Op. 5/R11	Non-ritual	III	1375-1427 CE	Prismatic blade
TM-42	Sierra de Pachuca	A178	Op. 5/R12-R18	Non-ritual	III	1375-1427 CE	Prismatic blade
TM-43	Sierra de Pachuca	A179	Op. 5/R12-R18	Non-ritual	III	1375-1427 CE	Prismatic blade
TM-44	Sierra de Pachuca	A180	Op. 5/R12-R18	Non-ritual	III	1375-1427 CE	Flake
TM-45	Sierra de Pachuca	A2	Op. 8/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-46	Sierra de Pachuca	A4	Op. 8/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-47	Sierra de Pachuca	A20	Op. 9/R8	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-48	Sierra de Pachuca	A64	Op. 9/R12	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-49	Sierra de Pachuca	A72	Op. 9/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-50	Tulancingo	A73	Op. 9/R14	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-51	Otumba	A7	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-52	Sierra de Pachuca	A8	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Point preform
TM-53	Sierra de Pachuca	A16	Op. 10/P6	Non-ritual	VII-2	1502-1520 CE	Prismatic blade
TM-54	Sierra de Pachuca	A26	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-55	Sierra de Pachuca	A38	Op. 10/P6 firme	Non-ritual	VII-2	1502-1520 CE	Prismatic blade
TM-56	Sierra de Pachuca	A40	Op. 10/R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-57	Sierra de Pachuca	A47	Op. 10/R4-P4	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-58	Sierra de Pachuca	A51	Op. 10/P6 firme	Non-ritual	VII-2	1502-1520 CE	Prismatic blade
TM-59	Sierra de Pachuca	A54	Op. 10/R16	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-60	Otumba	A65	Op. 10/R16	Non-ritual	VII-1	1502-1520 CE	Prismatic blade

TM-61	Sierra de Pachuca	A71	Op. 10/R4-P4	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-62	Sierra de Pachuca	A85	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-63	Otumba	A86	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-64	Sierra de Pachuca	A87	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-65	Sierra de Pachuca	A88	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-66	Sierra de Pachuca	A89	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-67	Sierra de Pachuca	A90	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-68	Zacualtipán	A91	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-69	Sierra de Pachuca	A92	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-70	Sierra de Pachuca	A93	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-71	Paredón	A94	Op. 10/P6 firme	Non-ritual	VII-2	1502-1520 CE	Prismatic blade
TM-72	Sierra de Pachuca	A95	Op. 10/R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-73	Otumba	A96	Op. 10/R4-P4	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-74	Sierra de Pachuca	A97	Op. 10/R4-P4	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-75	Sierra de Pachuca	A98	Op. 10/R4-P4	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-76	Sierra de Pachuca	A99	Op. 10/P6 firme	Non-ritual	VII-2	1502-1520 CE	Prismatic blade
TM-77	Sierra de Pachuca	A100	Op. 10/R16	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-78	Otumba	A101	Op. 10/R16	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-79	Sierra de Pachuca	A102	Op. 10/R4-R8	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-80	Sierra de Pachuca	A6	Op. 11/Bajo piso 6	Non-ritual	VII-2	1502-1520 CE	Prismatic blade
TM-81	Sierra de Pachuca	A11	Op. 11/Bajo piso 6	Non-ritual	VII-2	1502-1520 CE	Prismatic blade
TM-82	Sierra de Pachuca	A15	Op. 12/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-83	Sierra de Pachuca	A9	Op. 13/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-84	Sierra de Pachuca	A10	Op. 13/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-85	Otumba	A11	Op. 13/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-86	Sierra de Pachuca	A12	Op. 13/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-87	Zacualtipán	A19	Op. 13/R17	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-88	Sierra de Pachuca	A30	Op. 13/R4-R9	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-89	Otumba	A31	Op. 13/R17	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-90	Sierra de Pachuca	A34	Op. 15/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-91	Ucareo	A44	Op. 15/R1	Non-ritual	VI-1	1486-1502 CE	Prismatic blade
TM-92	Sierra de Pachuca	A54	Op. 15/P8	Non-ritual	VI-5	1486-1502 CE	Flake

TM-93	Sierra de Pachuca	A65	Op. 15/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-94	Sierra de Pachuca	A66	Op. 15/P8	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-95	Otumba	A67	Op. 15/P8	Non-ritual	VI-5	1486-1502 CE	Flake
TM-96	Sierra de Pachuca	A68	Op. 15/Fosa R3	Non-ritual	Colonial	1521-1821 CE	Flake
TM-97	Sierra de Pachuca	A73	Op. 16/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic core
TM-98	Sierra de Pachuca	A74	Op. 16/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-99	Sierra de Pachuca	A75	Op. 16/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-100	Sierra de Pachuca	A85	Op. 16/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-101	Sierra de Pachuca	A86	Op. 16/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-102	Otumba	A87	Op. 16/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-103	Sierra de Pachuca	A88	Op. 16/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-104	Sierra de Pachuca	A7	Op. 16/R3	Non-ritual	VI-5	1486-1502 CE	Flake
TM-105	Sierra de Pachuca	A23	Op. 16/P7	Non-ritual	VII-2	1502-1520 CE	Prismatic blade
TM-106	Sierra de Pachuca	A27	Op. 16/R1	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-107	Sierra de Pachuca	A35	Op. 16/R1	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-108	Sierra de Pachuca	A40	Op. 16/R1	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-109	Sierra de Pachuca	A43	Op. 16/R1	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-110	Sierra de Pachuca	A44	Op. 16/Bajo P11	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-111	Sierra de Pachuca	A60	Op. 16/R1	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-112	Sierra de Pachuca	A56	Op. 16/R1	Non-ritual	VI-5	1486-1502 CE	Flake
TM-113	Sierra de Pachuca	A62	Op. 16/R1	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-114	Sierra de Pachuca	A65	Op. 16/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-115	Sierra de Pachuca	A66	Op. 16/P11	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-116	Sierra de Pachuca	A67	Op. 16/P7	Non-ritual	VII-2	1502-1520 CE	Prismatic blade
TM-117	Sierra de Pachuca	A68	Op. 16/P7	Non-ritual	VII-2	1502-1520 CE	Prismatic blade
TM-118	Sierra de Pachuca	A69	Op. 16/R1	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-119	Ucareo	A70	Op. 16/R1	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-120	Sierra de Pachuca	A71	Op. 16/R1	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-121	Otumba	A72	Op. 16/R1	Non-ritual	VI-5	1486-1502 CE	Flake
TM-122	Sierra de Pachuca	A89	Op. 16/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-123	Sierra de Pachuca	A2	Op. 17/R1	Non-ritual	VI-1	1486-1502 CE	Flake

TM-124	Sierra de Pachuca	A12	Op. 17/R4	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-125	Sierra de Pachuca	A2	Op. 18/R2	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-126	Sierra de Pachuca	A4	Op. 18/R2	Non-ritual	IVa	1440-1469 CE	Flake
TM-127	Sierra de Pachuca	A5	Op. 18/R2	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-128	Sierra de Pachuca	A8	Op. 18/R2	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-129	Sierra de Pachuca	A15	Op. 18/R3	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-130	Ucareo	A17	Op. 18/R4	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-131	Sierra de Pachuca	A22	Op. 18/R2	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-132	Sierra de Pachuca	A23	Op. 18/R2	Non-ritual	IVa	1440-1469 CE	Flake
TM-133	Sierra de Pachuca	A24	Op. 18/R2	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-134	Sierra de Pachuca	A3	Op. 22/R4	Non-ritual	VI-3	1486-1502 CE	Prismatic blade
TM-135	Sierra de Pachuca	A5	Op. 22/R4	Non-ritual	VI-3	1486-1502 CE	Prismatic blade
TM-136	Sierra de Pachuca	A6	Op. 22/R4	Non-ritual	VI-3	1486-1502 CE	Prismatic blade
TM-137	Sierra de Pachuca	A7	Op. 23/R2	Non-ritual	VI-1	1486-1502 CE	Prismatic blade
TM-138	Sierra de Pachuca	A11	Op. 23/R2	Non-ritual	VI-1	1486-1502 CE	Prismatic blade
TM-139	Sierra de Pachuca	A17	Op. 23/R3	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-140	Sierra de Pachuca	A23	Op. 23/R4	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-141	Sierra de Pachuca	A27	Op. 23/R4	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-142	Sierra de Pachuca	A32	Op. 23/R5	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-143	Sierra de Pachuca	A37	Op. 23/R3	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-144	Tulancingo	A39	Op. 23/R5	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-145	Sierra de Pachuca	A42	Op. 23/R6	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-146	Sierra de Pachuca	A43	Op. 23/R6	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-147	Sierra de Pachuca	A47	Op. 23/R6	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-148	Sierra de Pachuca	A49	Op. 23/R6	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-149	Sierra de Pachuca	A53	Op. 23/R5	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-150	Sierra de Pachuca	A59	Op. 23/R7	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-151	Sierra de Pachuca	A67	Op. 23/R4	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-152	Sierra de Pachuca	A74	Op. 23/R9	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-153	Sierra de Pachuca	A78	Op. 23/R9	Non-ritual	IV	1440-1469 CE	Prismatic blade

TM-154	Sierra de Pachuca	A82	Op. 23/Material de remoción	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-155	Sierra de Pachuca	A86	Op. 23/R15	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-156	Sierra de Pachuca	A97	Op. 23/Relleno entre muros	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-157	Sierra de Pachuca	A111	Op. 23/Relleno entre muros	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-158	Sierra de Pachuca	A112	Op. 23/R4	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-159	Sierra de Pachuca	A113	Op. 23/R5	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-160	Sierra de Pachuca	A114	Op. 23/R5	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-161	Sierra de Pachuca	A115	Op. 23/R6	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-162	Sierra de Pachuca	A116	Op. 23/R5	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-163	Sierra de Pachuca	A117	Op. 23/Material de remoción	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-164	Sierra de Pachuca	A118	Op. 23/Relleno entre muros	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-165	Otumba	A119	Op. 23/Relleno entre muros	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-166	Sierra de Pachuca	A120	Op. 23/Relleno entre muros	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-167	Sierra de Pachuca	A121	Op. 23/Relleno entre muros	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-168	Sierra de Pachuca	A122	Op. 23/Relleno entre muros	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-169	Sierra de Pachuca	A123	Op. 23/Relleno entre muros	Non-ritual	IV	1440-1469 CE	Flake
TM-170	Sierra de Pachuca	A124	Op. 23/Relleno entre muros	Non-ritual	IV	1440-1469 CE	Flake
TM-171	Sierra de Pachuca	A1	Op. 24/Perfil sur	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-172	Sierra de Pachuca	A2	Op. 25/R1	Non-ritual	VI-2	1486-1502 CE	Flake
TM-173	Sierra de Pachuca	A4	Op. 25/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-174	Sierra de Pachuca	A6	Op. 25/R2	Non-ritual	VI-1	1486-1502 CE	Prismatic blade
TM-175	Sierra de Pachuca	A22	Op. 25/F2	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-176	Sierra de Pachuca	A27	Op. 25/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-177	Sierra de Pachuca	A29	Op. 25/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-178	Sierra de Pachuca	A30	Op. 25/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-179	Sierra de Pachuca	A1	Op. 26/R1	Non-ritual	VI-2	1486-1502 CE	Point
TM-180	Sierra de Pachuca	A4	Op. 26/R2	Non-ritual	VI-1	1486-1502 CE	Prismatic blade
TM-181	Otumba	A17	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Flake
TM-182	Ucareo	A25	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-183	Sierra de Pachuca	A30	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade

TM-184	Sierra de Pachuca	A34	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Flake
TM-185	Sierra de Pachuca	A36	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Point
TM-186	Sierra de Pachuca	A46	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Flake
TM-187	Sierra de Pachuca	A47	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-188	Sierra de Pachuca	A57	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Flake
TM-189	Sierra de Pachuca	A75	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-190	Paredón	A79	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-191	Sierra de Pachuca	A116	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Flake
TM-192	Sierra de Pachuca	A123	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-193	Sierra de Pachuca	A133	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-194	Sierra de Pachuca	A151	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-195	Sierra de Pachuca	A160	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Circular biface
TM-196	Sierra de Pachuca	A161	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Point
TM-197	Sierra de Pachuca	A219	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Biface (eccentric)
TM-198	Sierra de Pachuca	A232	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-199	Sierra de Pachuca	A239	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-201	Sierra de Pachuca	A254	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-202	Sierra de Pachuca	A281	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Circular biface
TM-203	Sierra de Pachuca	A285	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Point
TM-204	Sierra de Pachuca	A313	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Point preform
TM-205	Sierra de Pachuca	A326	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Point
TM-206	Sierra de Pachuca	A340	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Circular biface
TM-207	Sierra de Pachuca	A370	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Flake
TM-208	Sierra de Pachuca	A382	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-209	Sierra de Pachuca	A387	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Flake
TM-210	Sierra de Pachuca	A393	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-211	Sierra de Pachuca	A394	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-212	Sierra de Pachuca	A399	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Flake
TM-213	Sierra de Pachuca	A404	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Circular biface
TM-214	Sierra de Pachuca	A405	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Point

TM-215	Sierra de Pachuca	A422	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-216	Sierra de Pachuca	A426	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Circular biface
TM-217	Sierra de Pachuca	A427	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Flake
TM-218	Sierra de Pachuca	A439	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Circular biface
TM-219	Sierra de Pachuca	A444	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Circular biface
TM-220	Sierra de Pachuca	A451	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Circular biface
TM-221	Sierra de Pachuca	A458	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Point
TM-222	Sierra de Pachuca	A467	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Circular biface
TM-223	Sierra de Pachuca	A477	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-224	Sierra de Pachuca	A481	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Flake
TM-225	Paredón	A485	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Flake
TM-226	Sierra de Pachuca	A487	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Flake
TM-227	Sierra de Pachuca	A492	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-228	Sierra de Pachuca	A501	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-229	Sierra de Pachuca	A515	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-230	Sierra de Pachuca	A516	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Point
TM-231	Sierra de Pachuca	A517	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-232	Otumba	A524	Op. 4/R3	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-233	Sierra de Pachuca	A534	Op. 4/R3	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-234	Paredón	A550	Op. 4/R4	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-235	Otumba	A558	Op. 4/R6	Non-ritual	VI-5	1486-1502 CE	Flake
TM-236	Sierra de Pachuca	A568	Op. 4/R4	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-237	Sierra de Pachuca	A577	Op. 4/R6	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-238	Sierra de Pachuca	A585	Op. 4/R5	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-239	Sierra de Pachuca	A593	Op. 4/Sobre Tlaltecuhtli	Non-ritual	VII-2	1502-1520 CE	Prismatic blade
TM-240	Sierra de Pachuca	A599	Op. 4/R7	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-241	Sierra de Pachuca	A600	Op. 4/R7	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-242	Sierra de Pachuca	A602	Op. 4/R7	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-243	Sierra de Pachuca	A611	Op. 4/R7	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-244	Sierra de Pachuca	A617	Op. 4/R9	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-245	Sierra de Pachuca	A619	Op. 4/R7	Non-ritual	VI-5	1486-1502 CE	Prismatic blade

TM-246	Sierra de Pachuca	A621	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-247	Sierra de Pachuca	A622	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-248	Sierra de Pachuca	A623	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-249	Sierra de Pachuca	A624	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-250	Sierra de Pachuca	A625	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-251	Sierra de Pachuca	A626	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-252	Sierra de Pachuca	A627	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-253	Sierra de Pachuca	A628	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Flake
TM-254	Sierra de Pachuca	A629	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-255	Sierra de Pachuca	A630	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Flake
TM-256	Sierra de Pachuca	A631	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-257	Sierra de Pachuca	A632	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-258	Sierra de Pachuca	A633	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-259	Sierra de Pachuca	A635	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-260	Sierra de Pachuca	A636	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Flake
TM-261	Sierra de Pachuca	A637	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-262	Sierra de Pachuca	A638	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-263	Sierra de Pachuca	A639	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-265	Sierra de Pachuca	A641	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Flake
TM-266	Sierra de Pachuca	A642	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Flake
TM-267	Sierra de Pachuca	A643	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-268	Sierra de Pachuca	A644	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-269	Sierra de Pachuca	A645	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-270	Otumba	A646	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-271	Sierra de Pachuca	A647	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-272	Paredón	A648	Op. 4/R3	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-273	Sierra de Pachuca	A649	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Circular biface
TM-274	Sierra de Pachuca	A3	Op. 6/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-275	Ucareo	A5	Op. 6/R1	Non-ritual	VII-1	1502-1520 CE	Prismatic blade
TM-276	Sierra de Pachuca	A19	Op. 6/R2	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-277	Sierra de Pachuca	A38	Op. 6/R4	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade

TM-278	Sierra de Pachuca	A40	Op. 6/R4	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-279	Sierra de Pachuca	A43	Op. 6/R4	Non-ritual	IVb-V	1469-1486 CE	Flake
TM-280	Sierra de Pachuca	A45	Op. 6/R4	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-281	Sierra de Pachuca	A47	Op. 6/R5	Non-ritual	IVb-V	1469-1486 CE	Flake
TM-282	Sierra de Pachuca	A55	Op. 6/R6	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-283	Sierra de Pachuca	A57	Op. 6/R6	Non-ritual	IVa	1440-1469 CE	Flake
TM-284	Sierra de Pachuca	A59	Op. 6/R6	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-285	Sierra de Pachuca	A61	Op. 6/R5	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-286	Sierra de Pachuca	A66	Op. 6/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-287	Sierra de Pachuca	A68	Op. 6/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-288	Sierra de Pachuca	A76	Op. 6/R6	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-289	Sierra de Pachuca	A80	Op. 6/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-290	Sierra de Pachuca	A83	Op. 6/F2	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-292	Sierra de Pachuca	A85	Op. 6/F2	Non-ritual	IV	1440-1469 CE	Flake
TM-293	Sierra de Pachuca	A86	Op. 6/F2	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-294	Sierra de Pachuca	A87	Op. 6/F2	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-295	Sierra de Pachuca	A102	Op. 6/R4	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-296	Sierra de Pachuca	A103	Op. 6/N1-R8	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-297	Sierra de Pachuca	A111	Op. 6/R8	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-298	Sierra de Pachuca	A119	Op. 6/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-299	Sierra de Pachuca	A123	Op. 6/Perfil	Non-ritual	Undetermined	Undetermined	Flake
TM-300	Sierra de Pachuca	A135	Op. 6/R8	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-301	Sierra de Pachuca	A158	Op. 6/F3	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-302	Sierra de Pachuca	A162	Op. 6/R9	Non-ritual	III	1427-1440 CE	Flake
TM-303	Sierra de Pachuca	A169	Op. 6/R9	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-304	Sierra de Pachuca	A170	Op. 6/R9-Plantilla de arena	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-305	Sierra de Pachuca	A180	Op. 6/R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-306	Sierra de Pachuca	A183	Op. 6/R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-307	Zacualtipán	A187	Op. 6/R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-308	Sierra de Pachuca	A191	Op. 6/F4	Non-ritual	III	1427-1440 CE	Prismatic blade

TM-309	Sierra de Pachuca	A193	Op. 6/F4	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-310	Sierra de Pachuca	A196	Op. 6/F4	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-311	Sierra de Pachuca	A199	Op. 6/F4	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-312	Sierra de Pachuca	A203	Op. 6/R12	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-313	Sierra de Pachuca	A204	Op. 6/R12	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-314	Sierra de Pachuca	A233	Op. 6/R13	Non-ritual	III	1427-1440 CE	Flake
TM-315	Sierra de Pachuca	A234	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-316	Sierra de Pachuca	A235	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-317	Tulancingo	A236	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-318	Sierra de Pachuca	A237	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-319	Sierra de Pachuca	A238	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-320	Sierra de Pachuca	A239	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-321	Sierra de Pachuca	A240	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-322	Paredón	A242	Op. 6/R13	Non-ritual	III	1427-1440 CE	Miniature knife
TM-323	Sierra de Pachuca	A246	Op. 6/R13	Non-ritual	III	1427-1440 CE	Flake
TM-324	Sierra de Pachuca	A248	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-325	Sierra de Pachuca	A249	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-326	Tulancingo	A250	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-327	Paredón	A251	Op. 6/R13	Non-ritual	III	1427-1440 CE	Point
TM-328	Sierra de Pachuca	A252	Op. 6/R13	Non-ritual	III	1427-1440 CE	Point
TM-329	Sierra de Pachuca	A253	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-330	Sierra de Pachuca	A254	Op. 6/R13	Non-ritual	III	1427-1440 CE	Flake
TM-331	Sierra de Pachuca	A257	Op. 6/R13	Non-ritual	III	1427-1440 CE	Flake
TM-332	Sierra de Pachuca	A258	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-333	Tulancingo	A259	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-334	Sierra de Pachuca	A260	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-335	Sierra de Pachuca	A261	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-336	Sierra de Pachuca	A262	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-337	Sierra de Pachuca	A263	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-338	Sierra de Pachuca	A264	Op. 6/R13	Non-ritual	III	1427-1440 CE	Flake
TM-339	Sierra de Pachuca	A265	Op. 6/R13	Non-ritual	III	1427-1440 CE	Flake

TM-340	Sierra de Pachuca	A266	Op. 6/R13	Non-ritual	III	1427-1440 CE	Flake
TM-341	El Paraíso	A267	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-342	Sierra de Pachuca	A269	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-343	Sierra de Pachuca	A270	Op. 6/R13	Non-ritual	III	1427-1440 CE	Point
TM-344	El Paraíso	A271	Op. 6/R13	Non-ritual	III	1427-1440 CE	Miniature knife
TM-345	Pico de Orizaba	A272	Op. 6/R13	Non-ritual	III	1427-1440 CE	Point
TM-346	Sierra de Pachuca	A278	Op. 6/R13-R14	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-347	Sierra de Pachuca	A279	Op. 6/R13-R14	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-349	Sierra de Pachuca	A283	Op. 6/R13-R14	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-350	Sierra de Pachuca	A301	Op. 6/R14	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-351	Tulancingo	A302	Op. 6/R14	Non-ritual	III	1427-1440 CE	Flake
TM-352	Sierra de Pachuca	A303	Op. 6/R14	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-353	Sierra de Pachuca	A310	Op. 6/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-354	Sierra de Pachuca	A311	Op. 6/R8-R9	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-355	Sierra de Pachuca	A315	Op. 6/R15	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-356	Sierra de Pachuca	A319	Op. 6/R15	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-357	Sierra de Pachuca	A328	Op. 6/R15	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-358	Sierra de Pachuca	A346	Op. 6/R11-R15	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-359	Sierra de Pachuca	A347	Op. 6/R11-R15	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-360	Paredón	A351	Op. 6/R11-R15	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-361	Sierra de Pachuca	A358	Op. 6/R14	Non-ritual	III	1427-1440 CE	Point
TM-362	Sierra de Pachuca	A360	Op. 6/R13 N5	Non-ritual	III	1427-1440 CE	Point preform
TM-363	Ucareo	A395	Op. 6/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-364	Sierra de Pachuca	A396	Op. 6/R4	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-365	Sierra de Pachuca	A397	Op. 6/R4	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-366	Sierra de Pachuca	A398	Op. 6/R6	Non-ritual	IVa	1440-1469 CE	Flake
TM-367	Sierra de Pachuca	A399	Op. 6/F2	Non-ritual	IV	1440-1469 CE	Flake
TM-368	Sierra de Pachuca	A400	Op. 6/F2	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-369	Sierra de Pachuca	A401	Op. 6/F2	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-370	Sierra de Pachuca	A402	Op. 6/R9-Plantilla de arena	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-371	Zacualtipán	A403	Op. 6/R11	Non-ritual	III	1427-1440 CE	Prismatic blade

TM-372	Sierra de Pachuca	A404	Op. 6/R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-373	Sierra de Pachuca	A405	Op. 6/F4	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-374	Sierra de Pachuca	A406	Op. 6/F4	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-375	Sierra de Pachuca	A407	Op. 6/R12	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-376	Sierra de Pachuca	A408	Op. 6/R12	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-377	Sierra de Pachuca	A409	Op. 6/R15	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-378	Sierra de Pachuca	A410	Op. 6/R15	Non-ritual	III	1427-1440 CE	Flake
TM-379	Sierra de Pachuca	A411	Op. 6/R11-R15	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-380	Sierra de Pachuca	A412	Op. 6/R11-R15	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-381	Sierra de Pachuca	A8	Op. 29/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-382	Sierra de Pachuca	A9	Op. 29/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-383	Sierra de Pachuca	A18	Op. 29/R3	Non-ritual	IVb-V	1469-1486 CE	Flake
TM-384	Sierra de Pachuca	A22	Op. 29/R3	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-385	Otumba	A23	Op. 29/R3	Non-ritual	IVb-V	1469-1486 CE	Prismatic core
TM-386	Sierra de Pachuca	A10	Op. 29/R1	Non-ritual	VI-2	1486-1502 CE	Flake
TM-387	El Paraíso	A11	Op. 29/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-388	Sierra de Pachuca	A24	Op. 29/R3	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-389	Sierra de Pachuca	A25	Op. 29/R3	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-390	Sierra de Pachuca	A26	Op. 29/R3-P3	Non-ritual	IVb-V	1469-1486 CE	Flake
TM-391	Sierra de Pachuca	A30	Op. 29/R5	Non-ritual	IVa	1440-1469 CE	Flake
TM-392	Sierra de Pachuca	A34	Op. 29/R6	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-393	Sierra de Pachuca	A33	Op. 29/R5	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-394	Sierra de Pachuca	A39	Op. 29/R7	Non-ritual	IVa	1440-1469 CE	Flake
TM-395	Sierra de Pachuca	A41	Op. 29/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-396	Paredón	A42	Op. 29/R7	Non-ritual	IVa	1440-1469 CE	Flake
TM-397	El Paraíso	A43	Op. 29/R7	Non-ritual	IVa	1440-1469 CE	Flake
TM-398	Sierra de Pachuca	A44	Op. 29/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-399	Sierra de Pachuca	A46	Op. 29/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-400	Sierra de Pachuca	A47	Op. 29/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-401	Sierra de Pachuca	A127	Op. 29/Perfiles	Non-ritual	Undetermined	Undetermined	Prismatic blade
TM-402	El Paraíso	A48	Op. 29/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade

TM-403	Sierra de Pachuca	A54	Op. 29/F4	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-404	Paredón	A49	Op. 29/R7	Non-ritual	IVa	1440-1469 CE	Flake
TM-405	Paredón	A50	Op. 29/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-406	Sierra de Pachuca	A57	Op. 29/R8	Non-ritual	IV	1440-1469 CE	Flake
TM-407	El Paraíso	A51	Op. 29/R7	Non-ritual	IVa	1440-1469 CE	Prismatic blade
TM-408	El Paraíso	A62	Op. 29/R8	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-409	Sierra de Pachuca	A63	Op. 29/R8	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-410	Paredón	A64	Op. 29/R8	Non-ritual	IV	1440-1469 CE	Flake
TM-411	Sierra de Pachuca	A66	Op. 29/R8	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-412	Ucareo	A55	Op. 29/F4	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-413	Sierra de Pachuca	A65	Op. 29/R8	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-414	Sierra de Pachuca	A19	Op. 29/R3	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-415	Sierra de Pachuca	A67	Op. 29/R8	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-416	Sierra de Pachuca	A68	Op. 29/R8	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-417	Sierra de Pachuca	A71	Op. 29/R9	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-418	Sierra de Pachuca	A72	Op. 29/R9-F6	Non-ritual	III	1427-1440 CE	Flake
TM-419	Sierra de Pachuca	A73	Op. 29/R9-F6	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-420	Sierra de Pachuca	A78	Op. 29/R10	Non-ritual	III	1427-1440 CE	Undetermined fragment
TM-421	Sierra de Pachuca	A79	Op. 29/R10	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-422	Sierra de Pachuca	A80	Op. 29/R10	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-423	Sierra de Pachuca	A81	Op. 29/R10	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-424	Sierra de Pachuca	A82	Op. 29/R10-F7	Non-ritual	III	1427-1440 CE	Flake
TM-425	Sierra de Pachuca	A85	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-426	Sierra de Pachuca	A86	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-427	Sierra de Pachuca	A87	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-428	Sierra de Pachuca	A88	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-429	Sierra de Pachuca	A89	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-430	Sierra de Pachuca	A90	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-431	Sierra de Pachuca	A91	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Flake
TM-432	Sierra de Pachuca	A92	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-433	Sierra de Pachuca	A93	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-434	Sierra de Pachuca	A94	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade

TM-435	Sierra de Pachuca	A95	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-436	Sierra de Pachuca	A96	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-437	Sierra de Pachuca	A97	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-438	Sierra de Pachuca	A98	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-439	Sierra de Pachuca	A99	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-440	Sierra de Pachuca	A100	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-441	Sierra de Pachuca	A101	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-442	Sierra de Pachuca	A102	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-443	Sierra de Pachuca	A103	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-444	Sierra de Pachuca	A104	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-445	Sierra de Pachuca	A105	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-446	Sierra de Pachuca	A106	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-447	Zacualtipán	A107	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-448	El Paraíso	A108	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-449	Zacualtipán	A109	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-450	Sierra de Pachuca	A110	Op. 29/F7-R11	Non-ritual	III	1427-1440 CE	Point preform
TM-451	Sierra de Pachuca	A113	Op. 29/R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-452	Zacualtipán	A114	Op. 29/R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-453	Sierra de Pachuca	A115	Op. 29/R11	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-454	Sierra de Pachuca	A118	Op. 29/R12	Non-ritual	III	1427-1440 CE	Flake
TM-455	Zacualtipán	A119	Op. 29/R12	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-456	Sierra de Pachuca	A120	Op. 29/R12	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-457	El Paraíso	A121	Op. 29/R12	Non-ritual	III	1427-1440 CE	Flake
TM-458	Sierra de Pachuca	A124	Op. 29/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-459	Sierra de Pachuca	A125	Op. 29/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-460	Sierra de Pachuca	A126	Op. 29/R13	Non-ritual	III	1427-1440 CE	Prismatic blade
TM-461	Sierra de Pachuca	A128	Op. 29/Perfiles	Non-ritual	Undetermined	Undetermined	Flake
TM-462	Sierra de Pachuca	A9	Of. 173/N1	Ritual	IV	1440-1469 CE	Prismatic blade
TM-463	Paredón	A15	Of. 173/N1	Ritual	IV	1440-1469 CE	Flake
TM-464	Tulancingo	A23	Of. 173/N2	Ritual	IV	1440-1469 CE	Prismatic blade
TM-465	Sierra de Pachuca	A24	Of. 173/N2	Ritual	IV	1440-1469 CE	Prismatic blade
TM-466	Sierra de Pachuca	A26	Of. 173/N2	Ritual	IV	1440-1469 CE	Flake

TM-467	Sierra de Pachuca	A214	Of. 120/N4	Ritual	VI-2	1486-1502 CE	Prismatic blade
TM-468	Sierra de Pachuca	A475	Of. 120/N5	Ritual	VI-2	1486-1502 CE	Circular biface
TM-469	Sierra de Pachuca	A669	Of. 120/N5-N6	Ritual	VI-2	1486-1502 CE	Point
TM-470	Sierra de Pachuca	A722	Of. 120/N5-N6	Ritual	VI-2	1486-1502 CE	Circular biface
TM-471	Sierra de Pachuca	A949	Of. 120/N6-N7	Ritual	VI-2	1486-1502 CE	Point
TM-472	Sierra de Pachuca	A950	Of. 120/N6-N7	Ritual	VI-2	1486-1502 CE	Point
TM-473	Sierra de Pachuca	A979	Of. 120/N7	Ritual	VI-2	1486-1502 CE	Circular biface
TM-474	Sierra de Pachuca	A1755	Of. 120/N6	Ritual	VI-2	1486-1502 CE	Point
TM-475	Sierra de Pachuca	A17	Of. 122/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-476	Sierra de Pachuca	A21	Of. 122/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-477	Sierra de Pachuca	A27	Of. 122/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-478	Sierra de Pachuca	A32	Of. 122/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-479	Sierra de Pachuca	A54	Of. 122/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-480	Sierra de Pachuca	A76	Of. 122/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-481	Sierra de Pachuca	A91	Of. 122/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-482	Sierra de Pachuca	A900	Of. 120/N6-N7	Ritual	VI-2	1486-1502 CE	Circular biface
TM-483	Sierra de Pachuca	A158	Of. 141/N4	Ritual	VI-4	1486-1502 CE	Circular biface
TM-484	Tulancingo	A162	Of. 141	Ritual	VI-4	1486-1502 CE	Circular biface
TM-485	Sierra de Pachuca	A300	Of. 141/N5	Ritual	VI-4	1486-1502 CE	Circular biface
TM-486	Sierra de Pachuca	A1236	Of. 141/N11	Ritual	VI-4	1486-1502 CE	Circular biface
TM-487	Sierra de Pachuca	A118	Of. 167/N9	Ritual	VII-1	1502-1520 CE	Quadrangular biface
TM-488	Tulancingo	A326	Of. 167/N15	Ritual	VII-1	1502-1520 CE	Quadrangular biface
TM-489	Sierra de Pachuca	A163	Of. 167/N12	Ritual	VII-1	1502-1520 CE	Circular biface
TM-490	Sierra de Pachuca	A316	Of. 167/N15	Ritual	VII-1	1502-1520 CE	Circular biface
TM-491	Sierra de Pachuca	A321	Of. 167/N15	Ritual	VII-1	1502-1520 CE	Circular biface
TM-492	Sierra de Pachuca	A99	Of. 167/N8	Ritual	VII-1	1502-1520 CE	Quadrangular biface
TM-493	Otumba	A68	Of. 124/N1	Ritual	VI-5	1486-1502 CE	Prismatic blade
TM-494	Sierra de Pachuca	A25	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-495	Otumba	A46	Of. 123	Ritual	VI-5	1486-1502 CE	Prismatic blade
TM-496	Sierra de Pachuca	A62	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Miniature club
TM-497	Sierra de Pachuca	A87	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface

TM-498	Sierra de Pachuca	A93	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-499	Sierra de Pachuca	A96	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-500	Sierra de Pachuca	A98	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-501	Sierra de Pachuca	A103	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-502	Sierra de Pachuca	A112	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-503	Sierra de Pachuca	A115	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-504	Sierra de Pachuca	A123	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-505	Sierra de Pachuca	A124	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Miniature club
TM-506	Sierra de Pachuca	A128	Of. 123/N1-N2	Ritual	VI-5	1486-1502 CE	Circular biface
TM-507	Sierra de Pachuca	A139	Of. 123/N1-N2	Ritual	VI-5	1486-1502 CE	Circular biface
TM-508	Sierra de Pachuca	A140	Of. 123/N1-N2	Ritual	VI-5	1486-1502 CE	Circular biface
TM-509	Sierra de Pachuca	A142	Of. 123/N1-N2	Ritual	VI-5	1486-1502 CE	Circular biface
TM-510	Sierra de Pachuca	A164	Of. 123/N2	Ritual	VI-5	1486-1502 CE	Circular biface
TM-511	Sierra de Pachuca	A182	Of. 123/N2	Ritual	VI-5	1486-1502 CE	Circular biface
TM-512	Sierra de Pachuca	A204	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-514	Sierra de Pachuca	A218	Of. 123/N2	Ritual	VI-5	1486-1502 CE	Circular biface
TM-515	Sierra de Pachuca	A219	Of. 123/N2	Ritual	VI-5	1486-1502 CE	Circular biface
TM-516	Sierra de Pachuca	A221	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-517	Sierra de Pachuca	A223	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-518	Sierra de Pachuca	A229	Of. 123/N1	Ritual	VI-5	1486-1502 CE	Circular biface
TM-519	Sierra de Pachuca	A5	Of. 132/N1	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-520	Sierra de Pachuca	A17	Of. 132/N2	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-521	Sierra de Pachuca	A21	Of. 132/N2	Ritual	VII-2	1502-1520 CE	Point preform
TM-522	Sierra de Pachuca	A22	Of. 132/N2	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-523	Sierra de Pachuca	A32	Of. 132/N3	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-524	Sierra de Pachuca	A34	Of. 132/N3	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-525	Sierra de Pachuca	A39	Of. 132/N4	Ritual	VII-2	1502-1520 CE	Flake
TM-526	Sierra de Pachuca	A42	Of. 132/N4	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-527	Sierra de Pachuca	A56	Of. 132/N4	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-528	Sierra de Pachuca	A70	Of. 132/N4	Ritual	VII-2	1502-1520 CE	Prismatic blade

TM-529	Sierra de Pachuca	A79	Of. 132/N4	Ritual	VII-2	1502-1520 CE	Flake
TM-530	Sierra de Pachuca	A106	Of. 132/N5	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-531	Sierra de Pachuca	A117	Of. 132/N6	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-532	Sierra de Pachuca	A172	Of. 132/N7	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-533	Sierra de Pachuca	A216	Of. 132/N7	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-534	Sierra de Pachuca	A226	Of. 132/N3	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-535	Sierra de Pachuca	A228	Of. 132/N4	Ritual	VII-2	1502-1520 CE	Point preform
TM-536	Sierra de Pachuca	A237	Of. 132/N6	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-537	Sierra de Pachuca	A287	Of. 132/Derrumbe N3	Ritual	VII-2	1502-1520 CE	Flake
TM-538	Sierra de Pachuca	A315	Of. 132/N3	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-539	Sierra de Pachuca	A316	Of. 132/N3	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-540	Sierra de Pachuca	A317	Of. 132/N3	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-541	Sierra de Pachuca	A318	Of. 132/N4	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-542	Sierra de Pachuca	A319	Of. 132/N4	Ritual	VII-2	1502-1520 CE	Point preform
TM-543	Sierra de Pachuca	A320	Of. 132/Derrumbe N3	Ritual	VII-2	1502-1520 CE	Flake
TM-544	Sierra de Pachuca	A321	Of. 132/N4	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-545	Sierra de Pachuca	A487	Of. 125/N5A	Ritual	VI-5	1486-1502 CE	Miniature club
TM-546	Sierra de Pachuca	A509	Of. 125/N5A	Ritual	VI-5	1486-1502 CE	Miniature club
TM-547	Sierra de Pachuca	A669	Of. 125/N5B	Ritual	VI-5	1486-1502 CE	Miniature club
TM-548	Sierra de Pachuca	A777	Of. 125/N5D	Ritual	VI-5	1486-1502 CE	Miniature club
TM-549	Sierra de Pachuca	A812	Of. 125/N5D	Ritual	VI-5	1486-1502 CE	Miniature club
TM-550	Sierra de Pachuca	A814	Of. 125/N5D	Ritual	VI-5	1486-1502 CE	Miniature club
TM-551	Sierra de Pachuca	A11	Of. 134/N1-Fosa oeste	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-552	Sierra de Pachuca	A14	Of. 134/N1-Fosa oeste	Ritual	VII-2	1502-1520 CE	Prismatic blade
TM-553	Sierra de Pachuca	A1	Of. 136/R1	Ritual	VI-5	1486-1502 CE	Flake
TM-554	Sierra de Pachuca	A13	Of. 137/N3	Ritual	VI-5	1486-1502 CE	Point
TM-555	Sierra de Pachuca	A19	Of. 137/N3A	Ritual	VI-5	1486-1502 CE	Point
TM-556	Sierra de Pachuca	A24	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-557	Sierra de Pachuca	A42	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Miniature club

TM-558	Sierra de Pachuca	A53	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-559	Sierra de Pachuca	A54	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-560	Sierra de Pachuca	A55	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-561	Sierra de Pachuca	A56	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-562	Sierra de Pachuca	A67	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-563	Sierra de Pachuca	A69	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-564	Sierra de Pachuca	A70	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-565	Sierra de Pachuca	A71	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-566	Sierra de Pachuca	A74	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-567	Sierra de Pachuca	A84	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Miniature club
TM-568	Sierra de Pachuca	A88	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-569	Sierra de Pachuca	A104	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-570	Sierra de Pachuca	A105	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-571	Sierra de Pachuca	A106	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-572	Sierra de Pachuca	A107	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-573	Sierra de Pachuca	A108	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Point
TM-574	Sierra de Pachuca	A109	Of. 137/N4	Ritual	VI-5	1486-1502 CE	Miniature club
TM-575	Sierra de Pachuca	A149	Of. 137/N4A	Ritual	VI-5	1486-1502 CE	Miniature club
TM-576	Sierra de Pachuca	A198	Of. 137/N4A	Ritual	VI-5	1486-1502 CE	Point
TM-577	Sierra de Pachuca	A199	Of. 137/N4A	Ritual	VI-5	1486-1502 CE	Point
TM-578	Sierra de Pachuca	A223	Of. 137/N4A	Ritual	VI-5	1486-1502 CE	Point
TM-579	Sierra de Pachuca	A231	Of. 137/N4A	Ritual	VI-5	1486-1502 CE	Miniature club
TM-580	Sierra de Pachuca	A232	Of. 137/N4A	Ritual	VI-5	1486-1502 CE	Miniature club
TM-581	Sierra de Pachuca	A249	Of. 137/N4A	Ritual	VI-5	1486-1502 CE	Point
TM-582	Sierra de Pachuca	A252	Of. 137/N4A	Ritual	VI-5	1486-1502 CE	Point
TM-583	Sierra de Pachuca	A274	Of. 137/N4B	Ritual	VI-5	1486-1502 CE	Point
TM-584	Sierra de Pachuca	A78	Of. 125/N3A	Ritual	VI-5	1486-1502 CE	Curved biface
TM-585	Sierra de Pachuca	A79	Of. 125/N3A	Ritual	VI-5	1486-1502 CE	Earspool
TM-586	Sierra de Pachuca	A190	Of. 125/N3B	Ritual	VI-5	1486-1502 CE	Earspool
TM-587	Sierra de Pachuca	A480	Of. 125/N5A	Ritual	VI-5	1486-1502 CE	Miniature club

TM-588	Sierra de Pachuca	A2	Of. 139/N1	Ritual	VII-1	1502-1520 CE	Miniature club
TM-589	Sierra de Pachuca	A3	Of. 139/N1	Ritual	VII-1	1502-1520 CE	Point
TM-590	Sierra de Pachuca	A5	Of. 139/N1	Ritual	VII-1	1502-1520 CE	Point
TM-591	Sierra de Pachuca	A6	Of. 139/N1	Ritual	VII-1	1502-1520 CE	Miniature club
TM-592	Otumba	A12	Of. 139	Ritual	VII-1	1502-1520 CE	Miniature club
TM-593	Sierra de Pachuca	A16	Of. 139/N1	Ritual	VII-1	1502-1520 CE	Miniature club
TM-594	Sierra de Pachuca	A24	Of. 139/N1	Ritual	VII-1	1502-1520 CE	Miniature club
TM-595	Sierra de Pachuca	A25	Of. 139/N1	Ritual	VII-1	1502-1520 CE	Point
TM-596	Sierra de Pachuca	A462	Of. 126/N1C	Ritual	VI-5	1486-1502 CE	Curved biface
TM-597	Sierra de Pachuca	A463	Of. 126/N1C	Ritual	VI-5	1486-1502 CE	Prismatic blade
TM-598	Sierra de Pachuca	A592	Of. 126N3B	Ritual	VI-5	1486-1502 CE	Earspool
TM-599	Sierra de Pachuca	A34	Of. 127/N1	Ritual	VI-4	1486-1502 CE	Prismatic blade
TM-600	Sierra de Pachuca	A50	Of. 127/N1	Ritual	VI-4	1486-1502 CE	Prismatic blade
TM-601	Sierra de Pachuca	A13	Of. 143/N2	Ritual	VI-5	1486-1502 CE	Point
TM-602	Sierra de Pachuca	A14	Of. 143/N2	Ritual	VI-5	1486-1502 CE	Point
TM-603	Sierra de Pachuca	A15	Of. 143/N2	Ritual	VI-5	1486-1502 CE	Point
TM-604	Sierra de Pachuca	A16	Of. 143/N2	Ritual	VI-5	1486-1502 CE	Point
TM-605	Sierra de Pachuca	A1	Of. 149/N1	Ritual	VI-2	1486-1502 CE	Sickle-shaped instrument
TM-608	Sierra de Pachuca	A116	Of. 149/N9	Ritual	VI-2	1486-1502 CE	Prismatic blade
TM-609	Sierra de Pachuca	A4	Of. 151/R1	Ritual	VI-2	1486-1502 CE	Prismatic blade
TM-610	Sierra de Pachuca	A5	Of. 151/R1	Ritual	VI-2	1486-1502 CE	Prismatic blade
TM-611	Sierra de Pachuca	A7	Of. 166/N1	Ritual	VII-1	1502-1520 CE	Prismatic blade
TM-612	Sierra de Pachuca	A8	Of. 166/N1	Ritual	VII-1	1502-1520 CE	Prismatic blade
TM-613	Sierra de Pachuca	A11	Of. 166/N1	Ritual	VII-1	1502-1520 CE	Prismatic blade
TM-614	Ucareo	A18	Of. 166/N1	Ritual	VII-1	1502-1520 CE	Flake
TM-615	Otumba	A20	Of. 166/N1	Ritual	VII-1	1502-1520 CE	Biface (eccentric)
TM-616	Sierra de Pachuca	A3	Of. 168/N1	Ritual	VII-1	1502-1520 CE	Prismatic blade
TM-617	Sierra de Pachuca	A4	Of. 168/N1	Ritual	VII-1	1502-1520 CE	Prismatic blade
TM-619	Sierra de Pachuca	A1053	Of. 172/N15	Ritual	VI-2	1502-1520 CE	Prismatic blade
TM-622	Otumba	A1229	Of. 126/N4F	Ritual	VI-5	1486-1502 CE	Flake
TM-623	Otumba	A1230	Of. 126/N4F	Ritual	VI-5	1486-1502 CE	Flake

TM-624	Sierra de Pachuca	A1102	Of. 126/N4D	Ritual	VI-5	1486-1502 CE	Prismatic blade
TM-626	Ucareo	A1221	Of. 126/N4F	Ritual	VI-5	1486-1502 CE	Prismatic blade
TM-627	Sierra de Pachuca	A1	Of. 148/N1	Ritual	VI-2	1486-1502 CE	Prismatic blade
TM-628	Sierra de Pachuca	A4	Of. 148/R3	Ritual	VI-2	1486-1502 CE	Prismatic blade
TM-629	Sierra de Pachuca	A5	Of. 148/R3	Ritual	VI-2	1486-1502 CE	Prismatic blade
TM-630	Otumba	A24	Of. 133/N2	Ritual	VI-5	1486-1502 CE	Flake
TM-631	Sierra de Pachuca	A4	Of. 165/R1 externo	Ritual	VI-3	1486-1502 CE	Prismatic blade
TM-632	Sierra de Pachuca	A1	Of. 174/R1	Ritual	VI-1	1486-1502 CE	Prismatic blade
TM-633	Sierra de Pachuca	A1041	Of. 141/N10	Ritual	VI-4	1486-1502 CE	Point
TM-634	Sierra de Pachuca	A1042	Of. 141/N10	Ritual	VI-4	1486-1502 CE	Point
TM-635	Sierra de Pachuca	A1043	Of. 141/N10	Ritual	VI-4	1486-1502 CE	Point
TM-636	Sierra de Pachuca	A1044	Of. 141/N10	Ritual	VI-4	1486-1502 CE	Point
TM-637	Sierra de Pachuca	A1323	Of. 141/N11-A	Ritual	VI-4	1486-1502 CE	Point
TM-638	Sierra de Pachuca	A1368	Of. 141/N12	Ritual	VI-4	1486-1502 CE	Point
TM-639	Sierra de Pachuca	A1549	Of. 141/N12-C	Ritual	VI-4	1486-1502 CE	Point
TM-640	Sierra de Pachuca	A16	Of. 177/N2	Ritual	VI-1	1486-1502 CE	Point
TM-641	Sierra de Pachuca	A17	Of. 177/N2	Ritual	VI-1	1486-1502 CE	Point
TM-642	Sierra de Pachuca	A18	Of. 177/N2	Ritual	VI-1	1486-1502 CE	Point
TM-643	Sierra de Pachuca	A20	Of. 177/N2	Ritual	VI-1	1486-1502 CE	Point
TM-644	Sierra de Pachuca	A21	Of. 177/N2	Ritual	VI-1	1486-1502 CE	Point
TM-645	Sierra de Pachuca	A22	Of. 177/N2	Ritual	VI-1	1486-1502 CE	Point
TM-646	Sierra de Pachuca	A23	Of. 177/N2	Ritual	VI-1	1486-1502 CE	Point
TM-647	Sierra de Pachuca	A24	Of. 177/N2	Ritual	VI-1	1486-1502 CE	Point
TM-648	Sierra de Pachuca	A101	Of. 177/N3A	Ritual	VI-1	1486-1502 CE	Point
TM-649	Sierra de Pachuca	A102	Of. 177/N3A	Ritual	VI-1	1486-1502 CE	Point
TM-650	Sierra de Pachuca	A103	Of. 177/N3A	Ritual	VI-1	1486-1502 CE	Point
TM-651	Sierra de Pachuca	Sculpture G, left eye	Templo Mayor stairs	Ritual	III	1427-1440 CE	Circular biface
TM-652	Sierra de Pachuca	Sculpture J, right eye	Templo Mayor stairs	Ritual	III	1427-1440 CE	Circular biface
TM-653	Sierra de Pachuca	Sculpture B, left eye	Templo Mayor stairs	Ritual	III	1427-1440 CE	Circular biface
TM-654	Sierra de Pachuca	A104	Of. 177/N3A	Ritual	VI-1	1486-1502 CE	Point
TM-655	Sierra de Pachuca	A105	Of. 177/N3A	Ritual	VI-1	1486-1502 CE	Point

TM-656	Sierra de Pachuca	A109	Of. 177/N3A	Ritual	VI-1	1486-1502 CE	Point
TM-657	Sierra de Pachuca	A110	Of. 177/N3A	Ritual	VI-1	1486-1502 CE	Point
TM-658	Sierra de Pachuca	A111	Of. 177/N3A	Ritual	VI-1	1486-1502 CE	Point
TM-659	Sierra de Pachuca	A112	Of. 177/N3A	Ritual	VI-1	1486-1502 CE	Point
TM-660	Sierra de Pachuca	A146	Of. 177/N4A	Ritual	VI-1	1486-1502 CE	Point
TM-661	Sierra de Pachuca	A147	Of. 177/N4A	Ritual	VI-1	1486-1502 CE	Point
TM-662	Sierra de Pachuca	A148	Of. 177/N4A	Ritual	VI-1	1486-1502 CE	Point
TM-663	Sierra de Pachuca	A149	Of. 177/N4A	Ritual	VI-1	1486-1502 CE	Point
TM-664	Sierra de Pachuca	A166	Of. 177/N5	Ritual	VI-1	1486-1502 CE	Point
TM-665	Sierra de Pachuca	A167	Of. 177/N5	Ritual	VI-1	1486-1502 CE	Point
TM-666	Sierra de Pachuca	A168	Of. 177/N5	Ritual	VI-1	1486-1502 CE	Point
TM-667	Sierra de Pachuca	A169	Of. 177/N5	Ritual	VI-1	1486-1502 CE	Point
TM-668	Sierra de Pachuca	A190	Of. 177/N5	Ritual	VI-1	1486-1502 CE	Point
TM-669	Sierra de Pachuca	A191	Of. 177/N5	Ritual	VI-1	1486-1502 CE	Point
TM-670	Sierra de Pachuca	A192	Of. 177/N5	Ritual	VI-1	1486-1502 CE	Point
TM-671	Sierra de Pachuca	A193	Of. 177/N5	Ritual	VI-1	1486-1502 CE	Point
TM-672	Sierra de Pachuca	A194	Of. 177/N5	Ritual	VI-1	1486-1502 CE	Point
TM-673	Sierra de Pachuca	A39	Op. 4/R1	Non-ritual	VII-1	1502-1520 CE	Flake
TM-674	Ucareo	A580	Op. 4/R6	Non-ritual	VI-5	1486-1502 CE	Flake
TM-675	Pico de Orizaba	A634	Op. 4/R2	Non-ritual	VII-1	1502-1520 CE	Flake
TM-676	Otumba	A413	Op. 6/R13	Non-ritual	III	1427-1440 CE	Flake
TM-677	Sierra de Pachuca	A90	Op. 16/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-678	Sierra de Pachuca	A24	Op. 25/R7	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-679	Paredón	A28	Op. 25/R1	Non-ritual	VI-2	1486-1502 CE	Flake
TM-680	Sierra de Pachuca	A4	Op. 30/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-681	Sierra de Pachuca	A6	Op. 30/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-682	Sierra de Pachuca	A18	Op. 30/Relleno colonial	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-683	Sierra de Pachuca	A37	Op. 31/P1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-684	Sierra de Pachuca	A72	Op. 31/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-685	Sierra de Pachuca	A75	Op. 31/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-686	Sierra de Pachuca	A85	Op. 31/R1	Non-ritual	VI-2	1486-1502 CE	Flake

TM-687	Sierra de Pachuca	A87	Op. 31/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-688	Sierra de Pachuca	A88	Op. 31/R1	Non-ritual	VI-2	1486-1502 CE	Prismatic blade
TM-689	Sierra de Pachuca	A89	Op. 31/R1	Non-ritual	VI-2	1486-1502 CE	Flake
TM-690	Sierra de Pachuca	A90	Op. 31/R1	Non-ritual	VI-2	1486-1502 CE	Flake
TM-691	Sierra de Pachuca	A5	Op. 32/Tapial	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-692	Sierra de Pachuca	A11	Op. 32/R1	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-693	Sierra de Pachuca	A18	Op. 32/R1	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-694	Sierra de Pachuca	A8	Op. 34/R21	Non-ritual	VI-3	1486-1502 CE	Prismatic blade
TM-695	Sierra de Pachuca	A13	Op. 34/R21	Non-ritual	VI-3	1486-1502 CE	Prismatic blade
TM-696	Sierra de Pachuca	A1	Op. 35/Fosa 2/R1	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-697	Sierra de Pachuca	A3	Op. 35/Fosa 2/R2	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-698	Sierra de Pachuca	A13	Op. 35/Fosa 2/R2	Non-ritual	Colonial	1521-1821 CE	Prismatic blade
TM-699	Sierra de Pachuca	A1	Op. 36/R18	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-700	Otumba	A2	Op. 36/R19	Non-ritual	VI-5	1486-1502 CE	Flake
TM-701	Ucareo	A4	Op. 36/R19	Non-ritual	VI-5	1486-1502 CE	Prismatic blade
TM-702	Sierra de Pachuca	A3	Op. 37/R1	Non-ritual	Undetermined	Undetermined	Prismatic blade
TM-703	Sierra de Pachuca	A7	Op. 37/R2	Non-ritual	IIa	1375-1427 CE	Prismatic blade
TM-704	Sierra de Pachuca	A8	Op. 37/R2	Non-ritual	IIa	1375-1427 CE	Prismatic blade
TM-705	Sierra de Pachuca	A9	Op. 37/R2	Non-ritual	IIa	1375-1427 CE	Flake
TM-706	Sierra de Pachuca	A11	Op. 37/R2	Non-ritual	IIa	1375-1427 CE	Prismatic blade
TM-707	Sierra de Pachuca	A14	Op. 37/R2	Non-ritual	IIa	1375-1427 CE	Prismatic blade
TM-708	Sierra de Pachuca	A19	Op. 37/R1	Non-ritual	Undetermined	Undetermined	Point
TM-709	Sierra de Pachuca	A20	Op. 37/R1	Non-ritual	Undetermined	Undetermined	Prismatic blade
TM-710	Sierra de Pachuca	A21	Op. 37/R1	Non-ritual	Undetermined	Undetermined	Prismatic blade
TM-711	Sierra de Pachuca	A22	Op. 37/R1	Non-ritual	Undetermined	Undetermined	Prismatic blade
TM-712	Sierra de Pachuca	A23	Op. 37/R1	Non-ritual	Undetermined	Undetermined	Flake
TM-713	Sierra de Pachuca	A24	Op. 37/R1	Non-ritual	Undetermined	Undetermined	Prismatic blade
TM-714	Sierra de Pachuca	A1	Op. 38/R3-N1	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-715	Sierra de Pachuca	A10	Op. 38/R3-N2	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-716	Sierra de Pachuca	A15	Op. 38/R3-N2	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-717	Sierra de Pachuca	A17	Op. 38/R3-N4	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade

TM-718	Sierra de Pachuca	A30	Op. 38/R3-N4	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-719	Sierra de Pachuca	A31	Op. 38/R3-N4	Non-ritual	IVb-V	1469-1486 CE	Flake
TM-720	Sierra de Pachuca	A32	Op. 38/R3-N4	Non-ritual	IVb-V	1469-1486 CE	Undetermined fragment
TM-721	Sierra de Pachuca	A33	Op. 38/R3-N4	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-722	Sierra de Pachuca	A34	Op. 38/R3-N4	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-723	Sierra de Pachuca	A36	Op. 38/R4-N1	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-724	Sierra de Pachuca	A37	Op. 38/R3-N5	Non-ritual	IVb-V	1469-1486 CE	Prismatic blade
TM-725	Sierra de Pachuca	A40	Op. 38/R3-N5	Non-ritual	IVb-V	1469-1486 CE	Flake
TM-726	Sierra de Pachuca	A42	Op. 38/R4-N1	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-727	Sierra de Pachuca	A43	Op. 38/R4-N1	Non-ritual	IV	1440-1469 CE	Prismatic blade
TM-728	Sierra de Pachuca	A3	Op. 44/R1	Non-ritual	Undetermined	Undetermined	Flake
TM-729	Sierra de Pachuca	A8	Op. 44/R1	Non-ritual	Undetermined	Undetermined	Flake
TM-730	Sierra de Pachuca	A11	Op. 44/R1-Relleno moderno	Non-ritual	Undetermined	Undetermined	Flake
TM-731	Sierra de Pachuca	A21	Op. 44/Fosa 1-Relleno 1	Non-ritual	Undetermined	Undetermined	Flake
TM-732	Sierra de Pachuca	A32	Op. 44/Fosa 1	Non-ritual	Undetermined	Undetermined	Prismatic blade
TM-733	Sierra de Pachuca	A37	Op. 44/Caja Telmex/R3C	Non-ritual	VI-1	1486-1502 CE	Prismatic blade
TM-734	Sierra de Pachuca	A44	Op. 44/Caja Telmex/R3	Non-ritual	VI-1	1486-1502 CE	Flake
TM-735	Sierra de Pachuca	A47	Op. 44/Caja Telmex/R3A	Non-ritual	VI-1	1486-1502 CE	Prismatic blade
TM-736	Ucareo	A48	Op. 44/Caja Telmex R3b	Non-ritual	VI-1	1486-1502 CE	Flake
TM-737	Sierra de Pachuca	A50	Op. 44/Caja Telmex/R3B	Non-ritual	VI-1	1486-1502 CE	Flake
TM-738	Sierra de Pachuca	A51	Op. 44/Caja Telmex/R2	Non-ritual	VI-1	1486-1502 CE	Prismatic blade
TM-739	Sierra de Pachuca	A55	Op. 44/R3	Non-ritual	VI-1	1486-1502 CE	Prismatic blade
TM-740	Sierra de Pachuca	A56	Op. 44/R3	Non-ritual	VI-1	1486-1502 CE	Prismatic blade
TM-741	Sierra de Pachuca	A62	Op. 44/R3A	Non-ritual	VI-1	1486-1502 CE	Prismatic blade
TM-742	Sierra de Pachuca	A115	Op. 44/R7	Non-ritual	IV	1440-1469 CE	Point
TM-743	Sierra de Pachuca	A2	Of. 182/N2	Ritual	III	1427-1440 CE	Prismatic blade
TM-744	Sierra de Pachuca	A8	Of. 185/N3	Ritual	VI-1	1486-1502 CE	Flake
TM-745	Sierra de Pachuca	A9	Of. 185/N3	Ritual	VI-1	1486-1502 CE	Point
TM-746	Sierra de Pachuca	A10	Of. 185/N3	Ritual	VI-1	1486-1502 CE	Point

TM-747	Sierra de Pachuca	TM1 OF 34-14 3062	Of. 34	Ritual	II	1375-1427 CE	Flake
TM-748	Ucareo	TM1 OF 39-10 3251 10-265454	Of. 39	Ritual	II	1375-1427 CE	Helical bead
TM-750	Sierra de Pachuca	TM1 OF 39-57 3303 10-262925 1/2	Of. 39	Ritual	II	1375-1427 CE	Earspool
TM-751	Sierra de Pachuca	TM1 OF 39-51 3303 10-262925 2/2	Of. 39	Ritual	II	1375-1427 CE	Earspool
TM-752	Tulancingo	TM1 OF 39-51 3348 10-265885	Of. 39	Ritual	II	1375-1427 CE	Earspool
TM-753	Sierra de Pachuca	TM1 OF 39-68 3311 10-265884	Of. 39	Ritual	II	1375-1427 CE	Earspool
TM-754	Sierra de Pachuca	TM1 OF 39-D 3378	Of. 39	Ritual	II	1375-1427 CE	Earspool
TM-755	Sierra de Pachuca	TM1 OF 39-11 3252	Of. 39	Ritual	II	1375-1427 CE	Earspool
TM-756	Sierra de Pachuca	TM1 OF 39-52 3297	Of. 39	Ritual	II	1375-1427 CE	Earspool
TM-757	Tulancingo	TM1 OF 39-7 3248 10-251281	Of. 39	Ritual	II	1375-1427 CE	Disc
TM-758	Sierra de Pachuca	TM1 OF 39-50 3295 10-252328 2/2	Of. 39	Ritual	II	1375-1427 CE	Earspool
TM-759	Sierra de Pachuca	TM1 OF 39-53 3298 10-252228 1/2	Of. 39	Ritual	II	1375-1427 CE	Earspool
TM-760	Sierra de Pachuca	TM1 OF 39-47 3292 10-251964 2/2	Of. 39	Ritual	II	1375-1427 CE	Earspool
TM-761	Sierra de Pachuca	TM1 OF 39-52 3297 10-252253	Of. 39	Ritual	II	1375-1427 CE	Earspool
TM-762	Sierra de Pachuca	TM1 OF 39-13 3254 10-252240	Of. 39	Ritual	II	1375-1427 CE	Earspool

TM-763	Sierra de Pachuca	TM1 OF 39-5 324 10-252734	Of. 39	Ritual	II	1375-1427 CE	Disc
TM-764	Sierra de Pachuca	TM1 OF 34-8 3031	Of. 39	Ritual	II	1375-1427 CE	Disc
TM-765	Sierra de Pachuca	TM1 OF 39-4 3245 10-265170	Of. 39	Ritual	II	1375-1427 CE	Disc
TM-766	Sierra de Pachuca	TM1 OF 39-20 3263 10-265745	Of. 39	Ritual	II	1375-1427 CE	Helical bead
TM-767	Sierra de Pachuca	TM1 OF 39-21 10-265746	Of. 39	Ritual	II	1375-1427 CE	Helical bead
TM-768	Sierra de Pachuca	TM1 OF 39-56 10-265744	Of. 39	Ritual	II	1375-1427 CE	Helical bead
TM-769	Sierra de Pachuca	TM1 OF 39-38 3281 10-265455	Of. 39	Ritual	II	1375-1427 CE	Helical bead
TM-770	Sierra de Pachuca	10-263001 1/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-771	Sierra de Pachuca	10-263000 1/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-772	Sierra de Pachuca	10-262998 1/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-773	Sierra de Pachuca	10-262999 1/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-774	Sierra de Pachuca	10-263002 1/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-775	Sierra de Pachuca	10-263001 2/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-776	Sierra de Pachuca	10-263000 2/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-777	Sierra de Pachuca	10-262998 2/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-778	Sierra de Pachuca	10-262999 2/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-779	Sierra de Pachuca	10-263002 2/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-780	Sierra de Pachuca	10-263001 3/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-781	Sierra de Pachuca	10-262998 3/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-782	Sierra de Pachuca	10-263002 3/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-783	Sierra de Pachuca	10-262999 3/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-784	Sierra de Pachuca	10-263001 4/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-785	Sierra de Pachuca	10-263000 4/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-786	Sierra de Pachuca	10-263005 4/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-787	Sierra de Pachuca	10-262998 4/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-788	Sierra de Pachuca	10-263002 4/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife

TM-789	Sierra de Pachuca	10-262999 4/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-790	Sierra de Pachuca	10-263001 5/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-791	Sierra de Pachuca	10-263000 5/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-792	Sierra de Pachuca	10-262998 5/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-793	Sierra de Pachuca	10-263002 5/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-794	Sierra de Pachuca	10-262999 5/5	Of. 94	Ritual	II	1375-1427 CE	Miniature knife
TM-795	Sierra de Pachuca	A30	Op. 6	Non-ritual	Undetermined	Undetermined	Undetermined fragment
TM-796	Otumba	A38	Op. 44	Non-ritual	Undetermined	Undetermined	Flake
TM-797	Sierra de Pachuca	A2	Of. 182	Ritual	III	1427-1440 CE	Prismatic blade
TM-798	Sierra de Pachuca	A490	Of. 125/N5A	Ritual	VI-5	1486-1502 CE	Earspool
TM-799	Sierra de Pachuca	A771	Of. 125/N5C	Ritual	VI-5	1486-1502 CE	Earspool
TM-800	Sierra de Pachuca	A781	Of. 125/N5D	Ritual	VI-5	1486-1502 CE	Earspool
TM-801	Sierra de Pachuca	A891	Of. 125/N5A	Ritual	VI-5	1486-1502 CE	Earspool

Table S2. Summary of results from pXRF, artifacts from the Templo mayor assemblage (SD: standard deviation; CV: coefficient of variation).

	Mean (ppm)	Mean Error (ppm)	Mean Error (%)	SD (ppm)	CV (%)
Fe	15938.85	271.02	1.73	2425.49	15.22
Mn	970.17	83.33	9.50	290.41	29.93
Nb	80.09	4.79	7.55	20.71	25.86
Rb	189.89	8.07	4.30	23.52	12.39
Y	111.07	5.79	5.74	25.58	23.03
Zn	200.75	15.59	8.52	47.64	23.73
Zr	826.37	10.66	1.45	207.33	25.09

Table S3. Summary of results from pXRF, geological samples (SD: standard deviation; CV: coefficient of variation).

	Mean (ppm)	Mean Error (ppm)	Mean Error (%)	SD (ppm)	CV (%)
Fe	10012.21	243.33	4.06	5752.48	57.45
Mn	377.02	56.33	17.55	209.30	55.51
Nb	30.24	3.81	20.45	23.88	78.98
Rb	134.48	7.14	5.47	39.99	29.74
Y	64.52	4.71	11.88	51.25	79.43
Zn	110.31	12.52	15.95	78.87	71.50
Zr	384.55	7.31	3.11	339.23	88.21

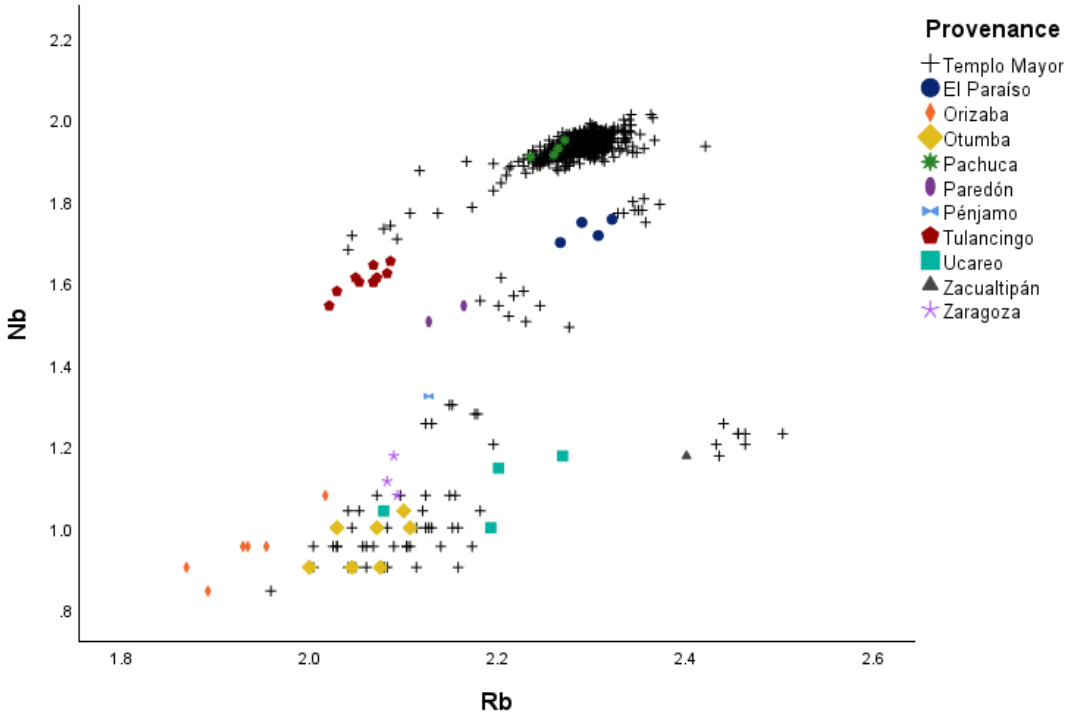

Figure S1. Scatterplot with Rubidium and Niobium for combined geological and archaeological samples.

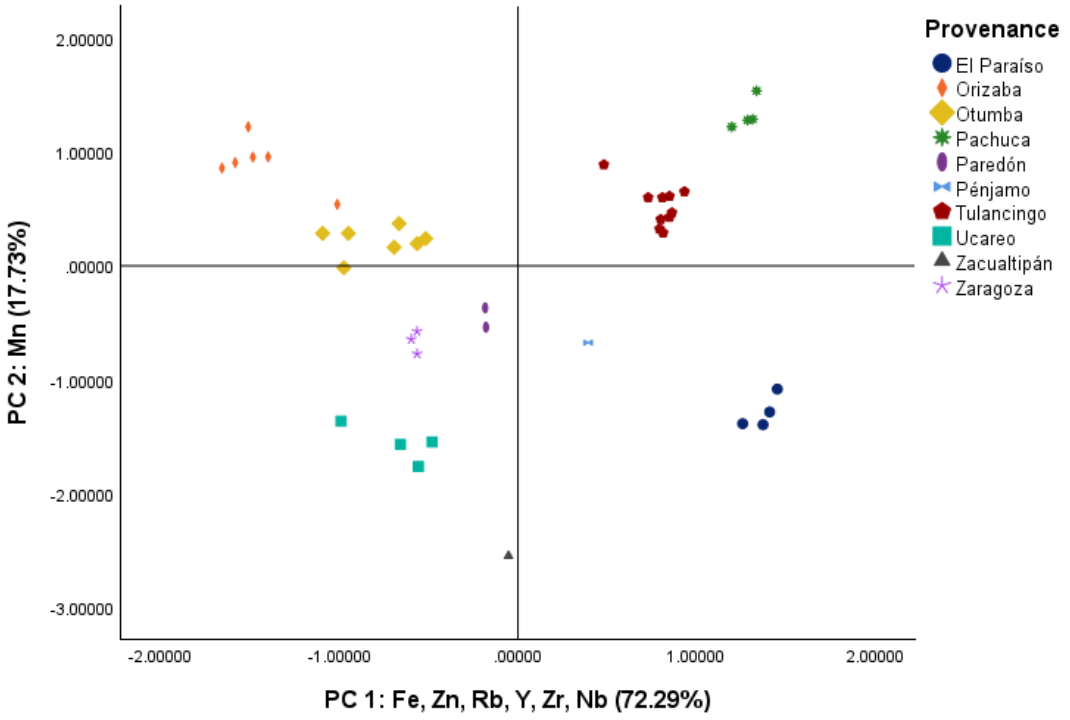

Figure S2. Biplot of Principal Components (PCs) of geological samples.

Table S4. Component matrix and Eigenvalues of the Templo Mayor artifacts and samples from Otumba, Ucareo, Tulancingo, Paredón, and Zacualtipán.

	PC 1	PC 2
Mn	**0.53**	-0.678
Fe	**0.904**	-0.008
Zn	**0.96**	-0.113
Rb	-0.004	**0.933**
Y	**0.926**	0.321
Zr	**0.983**	0.047
Nb	**0.91**	0.149
Eigenvalues	4.672	1.471
% of Variance	66.739	21.009

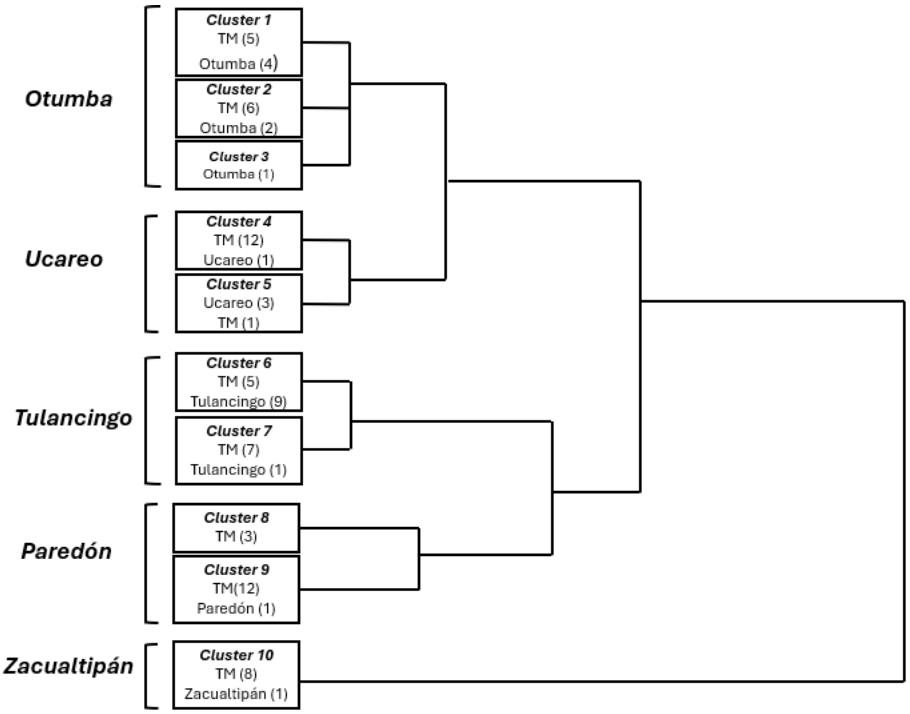

Figure S3. Dendrogram summary of the clusters among the analyzed sample with Otumba, Ucareo, Tulancingo, Paredón, and Zacualtipán (TM = Templo Mayor; the number in parenthesis represents the frequency).

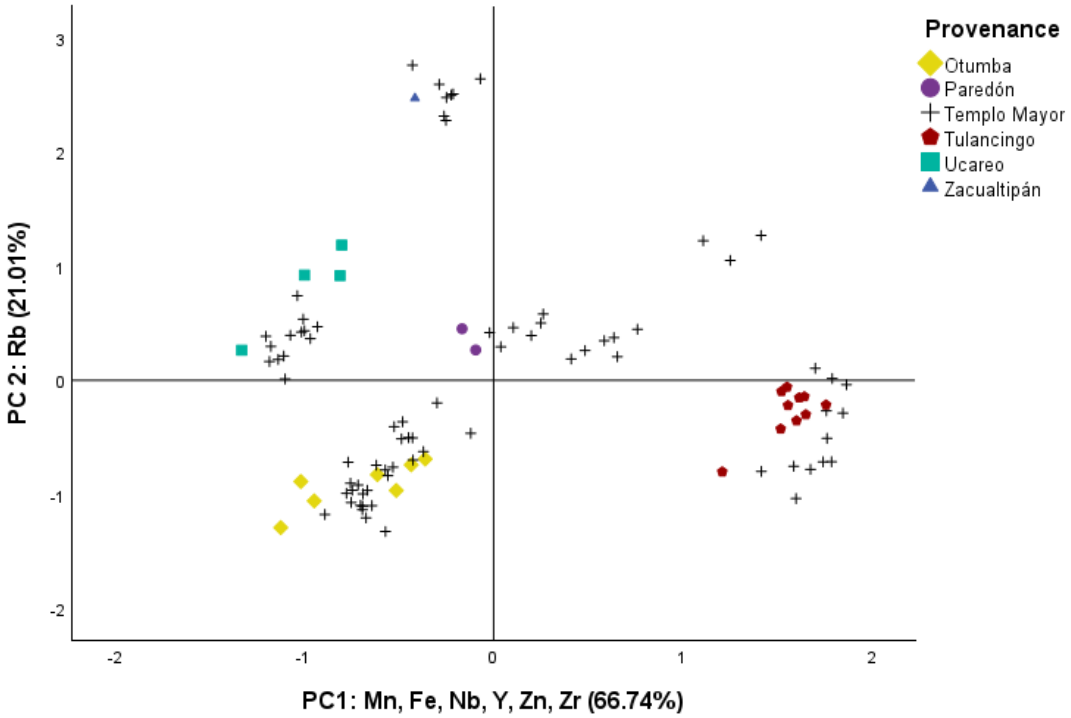

Figure S4. Biplot of PCs of the Otumba, Ucareo, Tulancingo, Paredón, and Zacualtipán groups, with associated artifacts.

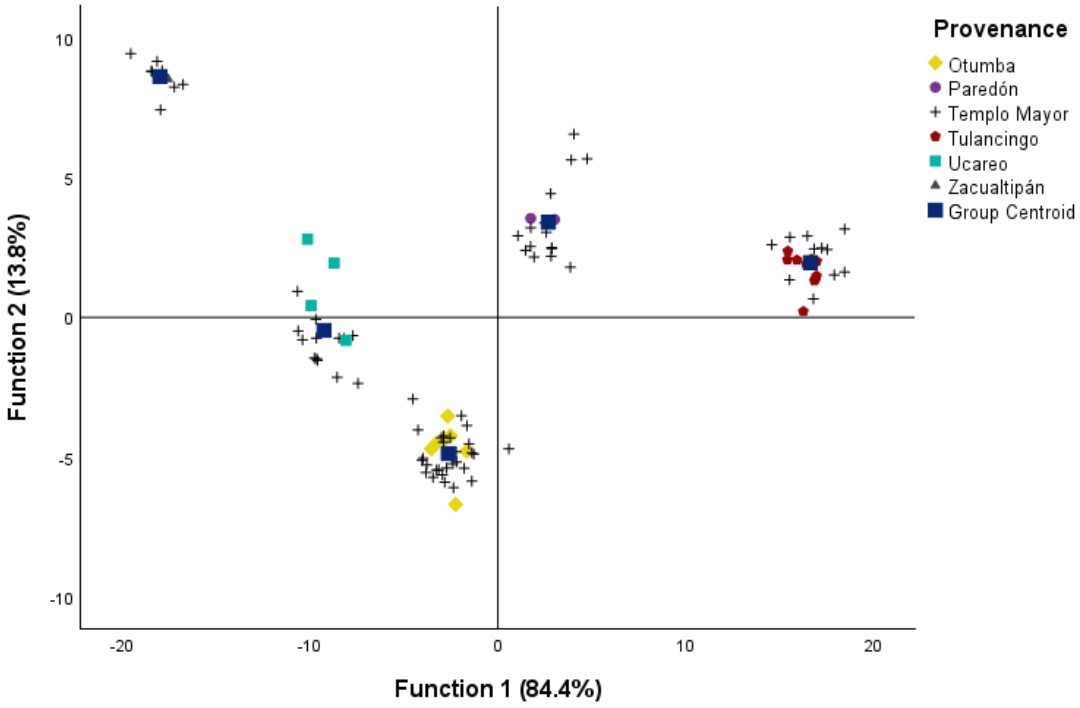

Figure S5. Biplot of discriminant function scores by provenance with group centroid for each source and associated artifacts (geological samples from Pachuca and artifacts assigned to Pachuca source are excluded).

Table S5. Structure matrix and Eigenvalues of discriminant functions (* represents the maximum absolute correlation between each element and functions).

	Function			
	1	2	3	4
Zn	**.232***	0.197	0.078	-0.215
Y	0.278	**.739***	0.144	0.051
Nb	0.247	**.482***	0.002	-0.014
Rb	-0.125	.464*	0.282	0.123
Fe	0.131	0.147	**.412***	-0.227
Zr	0.239	0.349	**.398***	-0.302
Mn	0.135	-0.129	0.429	**.539***
Eigenvalue	114.181	18.707	2.314	0.131
% of Variance	84.400	13.800	1.700	0.100
Canonical Correlation	0.996	0.974	0.836	0.341

Table S6. Results of discriminant function analysis.

Test of Function(s)	Wilks' Lambda	Chi-square	df	Sig.
1 through 4	0.000	841.545	28	<.001
2 through 4	0.014	400.120	18	<.001
3 through 4	0.267	122.890	10	<.001
4	0.884	11.463	4	0.0218

Table S7. Component matrix and Eigenvalues of the Templo Mayor artifacts (those assigned to Pachuca source) and geological samples from Pachuca and El Paraíso.

	1	2
Mn	-0.195	**0.939**
Fe	**0.885**	0.075
Zn	**0.855**	0.172
Rb	**0.896**	0.222
Y	**0.833**	-0.381
Zr	**0.862**	0.038
Nb	0.059	**0.938**
Eigenvalues	3.796	1.992
% of Variance	54.222	28.457

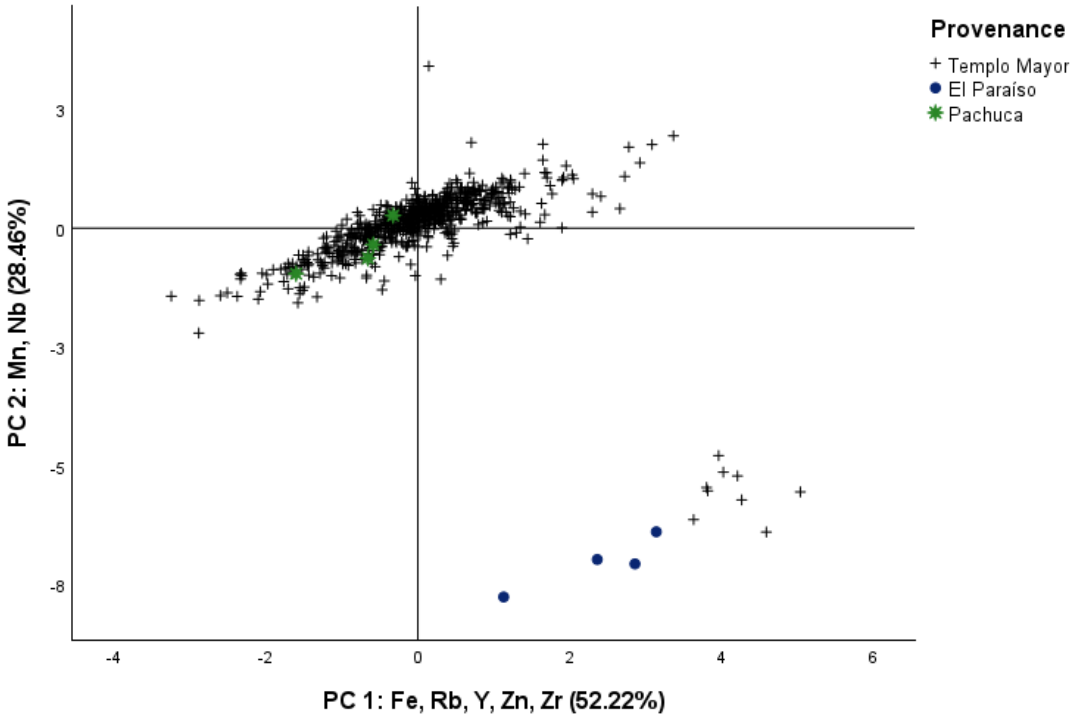

Figure S6. Biplot of the two extracted PCs among the El Paraíso and Pachuca samples and artifacts assigned to these sources.

Table S8. Structure matrix of function 1, Eigenvalues, and Wilks' Lambda of the DFA regarding Pachuca and El Paraíso.

	Function 1
Mn	0.356
Y	-0.295
Nb	0.236
Zr	-0.127
Fe	-0.073
Rb	-0.059
Zn	-0.048
Eigenvalue	19.76
% of Variance	100
Canonical Correlation	0.976
Wilks' Lambda	0.048

Table S9. Summary of classification results and predicted group membership from Otumba, Ucareo, Tulancingo, Paredón, and Zacualtipán calculated with Malahanobis distance.

Provenance		Predicted Group Membership					
		Otumba	Ucareo	Tulancingo	Paredón	Zacualtipán	Total
Count	Otumba	35	0	0	0	0	35
	Ucareo	0	17	0	0	0	17
	Tulancingo	0	0	22	0	0	22
	Paredón	0	0	0	17	0	17
	Zacualtipán	0	0	0	0	9	9
%	Otumba	100.0	0.0	0.0	0.0	0.0	100.0
	Ucareo	0.0	100.0	0.0	0.0	0.0	100.0
	Tulancingo	0.0	0.0	100.0	0.0	0.0	100.0
	Paredón	0.0	0.0	0.0	100.0	0.0	100.0
	Zacualtipán	0.0	0.0	0.0	0.0	100.0	100.0

Table S10. Summary of classification results and predicted group membership from Pachuca and El Paraíso calculated with Malahanobis distance.

	Provenance	Predicted Group Membership		
		Pachuca	El Paraíso	Total
Count	Pachuca	700	0	700
	El Paraíso	0	13	13
%	Pachuca	100.0	0.0	100.0
	El Paraíso	0.0	100.0	100.0