



Western Michigan University  
ScholarWorks at WMU

---

Honors Theses

Lee Honors College

---

4-18-2014

## Lead Seals from Colonial Fort St. Joseph (20BE23)

Cathrine Davis

Western Michigan University, [cathrine.m.davis14@gmail.com](mailto:cathrine.m.davis14@gmail.com)

Follow this and additional works at: [https://scholarworks.wmich.edu/honors\\_theses](https://scholarworks.wmich.edu/honors_theses)



Part of the Anthropology Commons

---

### Recommended Citation

Davis, Cathrine, "Lead Seals from Colonial Fort St. Joseph (20BE23)" (2014). *Honors Theses*. 2408.  
[https://scholarworks.wmich.edu/honors\\_theses/2408](https://scholarworks.wmich.edu/honors_theses/2408)

This Honors Thesis-Open Access is brought to you for free and open access by the Lee Honors College at ScholarWorks at WMU. It has been accepted for inclusion in Honors Theses by an authorized administrator of ScholarWorks at WMU. For more information, please contact [wmu-scholarworks@wmich.edu](mailto:wmu-scholarworks@wmich.edu).



Lead Seals from Colonial Fort St. Joseph (20BE23)

By Cathrine M. Davis

Senior Honors Thesis

Western Michigan University

Spring Semester 2014

April 18, 2014

## **Acknowledgements**

I would like to acknowledge several people and institutions for the aid I have received in creating this thesis. Firstly, I would like to thank Dr. Michael Nassaney for directing this project and for the training I have received throughout my time at Western Michigan University, Dr. José Brandão for helping me with many historical questions and concerns, Dr. David MacDonald for his sage advice, and Joseph Gagné for all of his aid and encouragement. I would also like to thank my family and friends for their constant support throughout this process.

I would like to acknowledge the wonderful staff at the Center for History in South Bend, IN, and at the Fort St. Joseph Museum in Niles, MI, and thank them for access to their collections, as well as for their time and understanding. I would like to acknowledge the Fort St. Joseph Archaeological Project and all those past and present individuals involved in it for instilling in me a passion for colonial studies. I would like to thank the Carl and Winifred Lee Honors College for the financial assistance that made my study abroad in Québec City possible, and those at Western Michigan University and at Université Laval who gave me the help and knowledge needed to complete this research.

Finally, I would also like to acknowledge those who have contributed their time and effort to the study of colonial lead seals, especially Antoine Sabatier, Dr. Geoffrey Egan, Diane Adams, and M. Michel Gaumond. Without their work, this study would not have been possible.

## **Introduction**

In the 17<sup>th</sup> and 18<sup>th</sup> centuries, as European powers took root in the New World, they came into contact with Native Americans that had lived on the land for millennia, and developed close ties with them through what became known as the trade (Juen and Nassaney 2012; Innis 2001; Vidal and Havard 2008: 309; White 2011;) The fur trade created not only economic ties, but close social ties that spawned a unique cultural identity in areas where the trade was a way of life (Vidal and Havard 2008: 324-333; White 2012). Among the goods traded to Native Americans in exchange for furs (usually beaver pelts) were large amounts of European cloth (Anderson 1994; Dechêne 1988: 151, 505; White 2011: 138). Cloth decays quickly and leaves few traces in the archaeological record (Loren 2010: 45). Archaeological material related to cloth is usually limited to buttons, sewing needles, thimbles, scissors, and other items linked to clothing production or adornment, such as lead seals (Good 1972; Hulse 1977; Loren 2010; Stone 1974). Lead seals were attached to goods and expressed information such as place of manufacture, size, and quality. They are most commonly associated with textiles, and stand as one of the sole archaeological means of understanding cloth and its role in daily life over 300 years ago. In their function as documentary artifacts, lead seals can help determine information about this lost cloth, and rediscover lost connections between frontier settlements in colonial North America and textile manufacturing areas in Europe. In this study, printed motifs and lettering on lead seals from a frontier post of New France will be traced back to their cities and regions of origin in Europe, and historical research will be examined in order to determine some likely candidates for the type of cloth that these seals may have marked.

Lead seals can be thought of as the colonial equivalent of modern day merchandise tags. They often convey information concerning the circulation and taxation of goods. In colonial times (16<sup>th</sup> -18<sup>th</sup> centuries), lead seals could have marked everything from packaged tobacco and salt (Sabatier 1908: 19; 1912: 147) to strands of beads, bales, bags, and bundles of trade goods (Maxwell and Binford 1961: 89; Wheeler 1975: 23-24), but are most closely associated with cloth inspection and textiles (Adams 1989; Egan 1995). Lead, a soft metal that is easily molded through applied pressure, was an ideal substance for these objects which were fixed to bolts of cloth in order to testify to the quality of the material and to signify that it was ready for market (Minard 1998; Sabatier 1912). Lead seals were attached to cloth at its point of origin in Europe, remained on the cloth until it reached its final destination, or until they may have been taken off for repackaging purposes, and, hence they appear at sites associated with the fur trade, such as Fort Michilimackinac (Adams 1989), Pointe-à-Callière (Montreal, QC) (Kent 2001: 943-944), Fort Ouiatenon (Noble 1983), and Fort St. Joseph (Hulse 1977; Juen and Nassaney 2012: Figure 58). The fur trade was the mainstay of the French colonial economy, with considerable trade occurring in the western Great Lakes region, then called the *Pays d'en Haut* (Nassaney et al. 2007: 4-5).

This study will examine and analyze the lettering and motifs present on 66 lead seals from Fort St. Joseph (20BE23) in order to determine their origin, and therefore possibly the type of cloth they once marked. Twenty-four lead seals and fragments housed in the collections of the South Bend Center for History (South Bend, IN) will be examined, as well as the 41 seals and fragments found in the collections of the Fort St. Joseph Museum (Niles, MI). These objects, though located in separate repositories, are all from the site of Fort St. Joseph in Niles, MI. During the 19<sup>th</sup>-20<sup>st</sup> centuries, artifacts were unearthed from this site by artifact collectors (Hulse

1977: 16), and later through archaeological excavation (Nassaney and Juen 2012: 2). Through the creation of a typology based on attachment style and on motifs and lettering present on these seals, comparative research using site reports and studies of other seal collections, and through documentary research, this study will attempt to establish the European origins of these artifacts. This will allow possible linkage to types of cloths coming from these regions and further archaeological understanding of cloth at and around the site of Fort St. Joseph, a mission, fort, and trading post that was occupied from the 1680's-1781 (Nassaney et al. 2007: 4-5). The results of this analysis will help shed light on cloth circulation and consumption at colonial Fort St. Joseph in comparison to other posts in the *Pays d'en Haut* where similar studies have been completed (e.g., Fort Michilimackinac; Adams 1989).

Cloth was a very important trade item from early in the fur trade into the 19<sup>th</sup> century, especially in the Great Lakes region. Once introduced to Native Americans, cloth quickly took hold as the most popular trade good category due to its efficiency and convenience as opposed to the difficult to work and slow drying buckskin attire that composed traditional Native American dress (Anderson 1994: 109-111; Dechêne 1988: 151, 152-153, 505; White 2011: 138). The popularity of cloth may also have been a result of the labor intensive process of preparing pelts for sale to the French. Native American women could purchase European cloth to make clothing, rather than preparing hides to fulfill the same purpose. In doing so, they would speed up the clothing production process considerably, leaving more time to process pelts for trade (White 2011: 132). It should be noted that the reverse might hold true as well, and that the purchase of cloth in turn allowed more time to prepare beaver pelts in order to procure other items (Anderson 1994: 111). Cloth was so prized by Native Americans that they were experts in assessing the quality of cloth, especially woolens such as *écarlatine*, and their preferences were often difficult

for French merchants and traders to meet using French versions and imitations of more preferred British cloths (Dechêne 1988: 153; Innis 2001: 78-80; Kent 2001: 660-661).

European settlers also used imported cloth for their everyday needs and for clothing, either in their habitual European style or in styles that incorporated traditional Native American elements (White 2012; Gallup and Shaffer 1992: 74). Because the only known Canadian made cloth came about as a result of an economic experiment imposed by the Intendant in the St. Lawrence Valley towards the end of the 17<sup>th</sup> century (Kent 2001: 663), and counted for a minute percentage (5%) of cloth sold in Montreal (Dechêne 1988: 151-152), imported cloth was likely consumed by European settlers in the region as well as Native Americans. Many prefabricated clothing articles, such as shirts and leggings, were imported to the *Pays d'en Haut* as well (Dechêne 1988: 153; Peyser 1978: 89, 104), though the majority of imported cloth was simply in raw bolt form (*drap*) (Dechêne 1988: 152).

Due to the demand for cloth, the economics of Native American populations, and European countries and their possessions in the colonies were affected in related ways by certain economic practices and situations. These included but were not limited to smuggling, introduction of new cloth types into production areas, and competition between colonial powers (White 2011: 120-121, 125, 132; Innis 2001: 78-83; Dechêne 1988: 151-153). Thus, understanding cloth and its role in the fur trade could potentially shed light on economic trends in supply, demand and the impact of colonial trade on production in the metropole, both in terms of early North American colonialism, and on the phenomenon of colonialism in a broader context.

Lead seals were used as far back as the Roman period to record movement of various goods throughout the empire, and as document seals (Sabatier 1912: 2-3; Oikonomidès 1985: 8-9). Lead seals are perhaps best understood as a Byzantine tradition, and most of the work done on them has been in relation to this ancient era of human history (Oikonomidès 1985; Dunn 1983; Cotsonis 2008). Post medieval seals (13<sup>th</sup>-18<sup>th</sup> century), upon which this study focuses, were used as tracking devices to record tax fulfillments on goods (such as tobacco) and the quality of cloth (Sabatier 1912). However, seals dating from the 17<sup>th</sup>-18<sup>th</sup> century in particular have taken on an increasingly important role due to their connection with colonial North America. Seals from this period have undergone a fair amount of archaeological study in the past 35 years (Adams 1989; Egan 1995; Loren 2010), yet the work done on them is still minute in comparison to other topics, such as gunflints, trade beads, or ceramics.

This is probably due to the fact that seals require in depth documentary research, knowledge of heraldic conventions (Egan 1995), offices and professions that used seals, and cloth inspection in Europe (Adams 1989: 16). Often, only about half of seals and seal fragments in any given collection are legible enough to interpret. Further, because only a fraction of seals have been identified by experts since the start of the 20<sup>th</sup> century (see Sabatier (1908, 1912), many seals cannot be identified without training in sigillography (the study of seals, a branch of numismatics), heraldry, and in depth knowledge of crests and motifs common throughout Europe. Nevertheless, in a North American environment, the information that seals provide is an invaluable link to the origins of trade goods and cloth.

This work will continue with a basic orientation concerning the historical context of the fur trade in North America, a brief history and archaeology of the Fort St. Joseph site, progressing into a basic historiography of lead seals and discussion of methodology. This will be



followed by a typology of seals examined in this study, an analysis of results, and concluding remarks.

## **Contextual Information**

### **The Fur Trade in North America**

The fur trade in North America began as early as the 16<sup>th</sup> century, when Basque fishermen came to the Grand Banks, still one of the richest fishing grounds in the world. In order to preserve and prepare the fish harvested for the voyage across the Atlantic back to Europe, they put ashore on present day Newfoundland and Nova Scotia. There, they dried their fish and came into contact with Native peoples (Innis 2001: 9). This interaction eventually led the Native Americans to trade beaver robes and other pelts to these fishermen in exchange for European goods (Trigger 1994: 128-129). This trade had made its mark by the time Jacques Cartier arrived in Canada in 1534, when he wrote that Native Americans beckoned to his ship, waving furs on sticks as a sign that they wished to trade (Innis 2001: 10).

With the onset of French colonization of the New World, the fur trade grew as an industry but also as a means of maintaining good relations with native peoples. In a vast western territory where only a string of forts denoted a French presence, French power depended on having close relationships with the Native Americans that occupied the land (Cecile and Havard 2008: 313-315, 435-439). Militarily, Native Americans contributed heavily to the French forces in North America and participated in a number of wars as crucial allies (White 2011: 142-143).

In the western Great Lakes region, Native Americans lived near the trading posts and missions established by the French, and closely interacted not only through trade, but often on a

close personal level, with intermarriage being a common practice (White 2012: 26-32; Nassaney et al. 2007: 4). As a result of this *metissage*, largely engrained in the culture of the *Pays d'en Haut* and the *Pays des Illinois*, Native Americans and Frenchmen often adopted the material culture of the other, especially in regards to appearance (White 2012). However, the extended presence of European goods in Native American hands is not without a reciprocal effect. There is evidence that Frenchmen on the frontier also adopted elements of Native American material culture in order to adapt to the rough interior environment or to present themselves in a way more accepted and familiar to the cultures they lived among (Vidal and Havard 2008: 147-149, 329-333). Ultimately, the fur trade was not only a system of economic exchanges, but cultural ones as well (Juen and Nassaney 2012). By the end of the French Regime, the fur trade was a commerce worth 140 000 *livres* per year (Frégault 1955: 402-403).

With the fall of New France at the end of the Seven Years' War, the forts in the western Great Lakes region were occupied and garrisoned by the British, eager to reap the benefits of the fur trade (Adams 1989: 11). During the British period, most forts saw an increase in the regulation of the fur trade, mostly as part of a wave of reform exercised by General Jeffrey Amherst (Anderson 2001: 469-471). Amherst's policies angered the Native Americans, who were still adjusting to the absence of their French allies and the change in regime, causing what is now known as Pontiac's Rebellion (Anderson 2001: 535, 546). This uprising was rather successful but did not completely end British control of the region, instead leading to treaties and agreements between the British and the tribes that had fought them, and resulting in some of the policies that triggered the American Revolution (Anderson 2001: 560-566). Ultimately British trading companies, mainly the Hudson's Bay Company and the Northwest Company, operated in

the region for some time before American companies, in particular the American Fur Company of John Jacob Astor, gained dominance (Innis 2001: 187, 263, 280).

### **A Brief Overview of the History and Archaeology of the Fur Trade at Fort St. Joseph**

As a prime example of a typical fur trade community located at the convergence of the *Pays d'en Haut* and the *Pays des Illinois* (the area to the south of the *Pays d'en Haut*, roughly between the Illinois River and the Ohio River), Fort St. Joseph provides a great opportunity to analyze the cloth consumption patterns of the people that occupied the site. The occupants living at and around site appear to have been a combination of Native Americans, French traders, soldiers, missionaries, and settlers, and *métis* (mixed French and Native decent) families.

The earliest mention of Fort St. Joseph is in the 1680s, when Jesuit missionaries were granted land near present day Niles, MI in order to establish a mission to the Miami in that area (Nassaney et al. 2007: 4). The mission was eventually joined by a trading post and garrisoned fort at the site in 1691 (Nassaney et al., 2007: 4). The location of Fort St. Joseph was central to the importance of the fort, situated on the banks of the St. Joseph River and its intersection with the Great Sauk Trail (modern day US-12, stretching from Chicago to Detroit) and a portage to the Kankakee River system that emptied into the Mississippi (Nassaney et al. 2007: 3; Skinner 2008: 39, 143).

The first description of goods bound for the fort is in 1694, listing three breeches, three lace trimmed jackets, and two sails, along with kettles, guns, and alimentary provisions (Idle 2001: 16). Another canoe sent at about the same time was loaded with nine shirts, a *capot*, and six pairs of stockings (Idle 2001: 16). These lists illustrate that clothing was already an important commodity at the fort early in its existence. In 1718, six men held trading licenses to operate

trade to and from Fort St. Joseph (Idle 2001: 17). A detailed list of those companies that held *congés* or other permissions related to trade at the fort is available in Dunning Idle's work on the post (2001: 83-85, 117-120). When the fur trade experienced a decline due to a surplus of furs at the turn of the 18<sup>th</sup> century, Fort St. Joseph was one of three posts recommended for continued operation, most likely due to its strategic placement, which was important for maintaining alliances with Native Americans and defense of the area from hostile tribes and the English (Nassaney et al. 2007: 4-5).

Peyser (1978) lists several accounts of the import of cloth and clothing to Fort St. Joseph. In 1739, there are documents listing the import of 2 ½ ells of cloth from Lyon (1978: 86), 5 and 2 ½ ells of unspecified cloth (1978: 86), and 2 cloth blankets (likely woolens) to be used for the burial of an Ottawa chief killed not far from the fort (1978: 88). Other trade lists from 1740 include women's shirts (1978: 89, 101), chemises (1978: 89, 104), leggings (1978: 89, 104), a breechcloth (1978: 89), and blankets, one described as blue (1978: 101), and the other as being a four point blanket (suggesting that the use of the term point dates back to at least this time in order to describe the size of cloth) (1978: 123). In 1750, the fort produced 400 bales of fur per year, and boasted a population of about 55 families (Skinner 2008: 143), demonstrating its place as the fourth most productive fort in the region (Nassaney et al. 2007: 4).

After the conclusion of the Seven Years' War, the fort and those that surrounded it were under the control of the British crown. Although some French inhabitants continued to live and engage in economic activities at the fort, the trade was regulated according to British policy (Nassaney et al. 2008: 5). During Pontiac's Rebellion, the fort was attacked and the British garrison removed. After this event, the fort was never re-garrisoned, but continued to live on as a trading post (Nassaney et al. 2007: 5). After playing a minor role in the American Revolution,

the French inhabitants of the fort were removed and replaced with British traders (Nassaney et al. 2007: 5). In 1781, a small raiding party composed of Native Americans and Frenchmen from St. Louis, under a Spanish flag, took control of the fort for a day (Nassaney et al. 2007: 5). After this event, the fort was abandoned and left in a state of decay until its rediscovery in 1998 (Nassaney et al. 2007: 5-6).

### **An Initiation to Colonial Lead Seals**

What we know about colonial lead seals is limited due to their scarcity in both archaeological and documentary sources, with only a select few books and articles devoted to them, and few going in depth to explain their use or to identify individual seals (Egan 1995; Sabatier 1912). As objects with a highly specialized purpose, these seals were disposable and served little function after their initial purpose of tracking merchandise was fulfilled. Therefore, for the purposes of this project, I will consider any other use of seals (adornment, recreational objects, and other reuse and repurposing) as a secondary purpose, which I will discuss later. The purpose of lead seals is still a subject of debate among specialists, possibly due to the many different seals and varied functions that they fulfilled. There are several possible uses for any given seal, though many can be identified based on morphological characteristics specific to fulfilling a particular task.

Until recently, many archaeologists thought that lead seals found in North America were in fact bale seals used to mark bales of fur or trade goods, but studies by Diane Adams (1987; 1989) and others (Egan 1995; Kent 2001; Loren 2010) have shown that while there are some lead seals that may have functioned as bale markers, the majority of those found at fur trade sites marked cloth, being fixed directly on each individual piece. Occasionally, lead seals really were

used as bale seals, but this use is more relegated to transport in France, or possibly under the auspices of trading companies such as the *Compagnie des Indes* (Sabatier 1912: 404). Series C Type I seals, those of “double tunnel/double wire” type attachment (Stone 1974: 295) have been suggested by Diane Adams and by Sabatier to be bale or tax seals (1989: 26; 1908: 19, 24), that would have attached to canvas trade bale covers through a metal wire or cloth cord passed through the cloth and the two tunnels of the seal.

While seals used as cloth markers were attached by merchants, inspection offices, or customs agencies, bale seals (if used at all) would probably have been attached after the purchase of cloth or goods by a merchant company and after these articles were packaged for shipment. Often, goods were deposited and sold to suppliers in Québec City, and then sent to merchant connections in Montreal for distribution to trading parties and voyageurs under contract for that merchant (Miquelon 1978: 73). When goods arrived in the trade hubs of Montreal and Québec City, the bales of merchandise and cloth sent from France were most likely repackaged in order to facilitate their transport by canoe (Kent 2001: 942). Dale Miquelon’s research on transatlantic trade suggests that bales coming from France may have been marked with information indicating to whom the bale was bound in Québec or Montreal (1978: 74). However, bales may have not needed seals at all to mark them, because many sources, pictorial (Figures 7 and 8 in appendix, p.77) and written, suggest that they were instead labeled with painted on marks and numbers (Adams 1989: 24). In this case, the sealing of packages would be redundant and probably more costly, though it could be possible that seals were attached to the contents within painted bales.

Lead seals are found in North America and Europe, though it may be presumed that lead seals are found elsewhere in colonially occupied regions, because many global trade companies, such as the British East India Company and the Africa Royal Adventurers’ Company are known

to have used seals (Egan 1995: 189). However, a literature survey did not show any examples of lead seals in areas of the world other than the Americas and Europe. In a colonial 17<sup>th</sup>-18<sup>th</sup> century context, they appear to originate from European countries such as England/Great Britain, France, the Netherlands, Germany, Spain, and Russia, and several other countries (Egan 1995: 18; Sabatier 1912: 444-486). In a North American context, lead seals occur in trade contexts and are often found at sites related to the fur trade, colonial habitation sites or posts where clothing was being made, and on shipwrecks with trade related cargoes. French, Dutch, English, Spanish, and Russian seals are found in North America, though theoretically seals from any European countries that traded with colonial powers belonging to the list above could be found in America. French lead seals (and often British ones as well), are present in North America in nearly any place the French settled or traded with the largest collections present at large sites such as Fort Michilimackinac (Mackinaw City, MI), and other major trading hubs and entrepôts, though Michilimackinac's collection size may be a result of the extensive work that has taken place there since the mid-20<sup>th</sup> century. Lead seals are found at many sites, but usually in limited quantities if at all, most likely due to the secondary use of seals as a source of lead for the production of ammunition and other objects (discussed later in the discussion portion of the work. As Kent points out, some sites with reported lead seals are; Old Mobile (Waselkov 1999: 25), Champlain's Habitation (Québec City), Pointe-à-Callière (Montreal), the *Machault* wreck, Fort Niagara (Youngstown, NY), Fort St. Louis, Fort Rouillé (Toronto), Fort Tombigbee (Alabama), Fort Pentagoet (Nova Scotia), The Indian Hill Onondaga site, the Norge site, the Rock Island site, the Bloodhound site, the Bayou Goula site (Louisiana), the Floating Bridge site (2001: 943-944). For a list of more sites where seals are found, see Diane Adams (1989: 38). Lead seals span the corridors of French America, from Michigan and Minnesota down through

Illinois and Louisiana, and in the St. Lawrence Valley and Acadia (Fort Pentagoet; Kent 2001: 944). French seals, as well as those of other nationalities, are found in New England (Calver and Bolton 1950: 264-277), and seals are also found in former Russian possessions on the Northwest Coast (<http://dnr.alaska.gov/parks/oha/castlehill/chpteleven.htm>).

### **Historiography of Lead Seal Studies**

The study of historic lead seals is a young one, with roots in the works of Antoine Sabatier at the beginning of the 20<sup>th</sup> century (1908, 1912). Using period documents in his possession, and following edicts still extant from the *Ancien Régime*, he classified and described the function and form of lead seals in his personal collection of some 400 seals, most of French origin. His 1912 work is still considered among historic sigillographers as the most informative and exhaustive work on French seals, and is referenced by almost every serious study on the subject since its publication (Adams 1989; Egan 1995). Reports on lead seals of English origin are slightly more numerous (Egan 1995; Endrei and Egan 1982). One of these important sources is Geoffrey Egan's 1995 report on lead seals in the British Museum collection. Arguably the modern master of lead seal research, Egan was versed in British, French, Dutch, and various other European seals, but often focused on the English evidence in his work (Egan 1995; Endrei and Egan 1982).

Most of the work that has been done in North America involving seals has been done by archaeologists associated with Fort Michilimackinac. This important fort served as a distribution center for trade goods in the northern Great Lakes region (Adams 1989: 10). A presentation of artifacts from Fort Michilimackinac (Stone 1974) included a large section on seals, but one that consisted of a typology accompanied by illustrations, and little else. A 1989 publication by Diane



Adams on lead seals from Michilimackinac, written as a condensed version of her Master's thesis, examines the function of lead seals and focuses largely on whether lead seals were used to mark textiles, bales of trade goods, or both. Ultimately, she finds that lead seals were overwhelmingly used to mark cloth, based on spatial analysis of lead seals at the site, comparative analysis, documentary research, and a close examination of cloth imprints on the seals themselves. Aside from these few major works, cloth seals have appeared as merely a small section or mention in reports and books, largely misunderstood and generally written off as highly enigmatic and undecipherable. While this is true at times due to poor preservation, lead seals are simply a subject in need of careful and in depth research in order to be better understood.

### **Documentary Research and Contextualization**

In order to understand the role of many of the French seals that occur at this site, it is important to understand how they fit into the economic system of France at the time of their creation. It can be said that seals are a purely European, bureaucratic instrument in a North American environment. Historic French lead seals were an integral part of the economic system of inspection in place during the *Ancien Régime* (Minard 1998: 21). They marked goods with information important to their transportation and sale both in France (from where they are manufactured to other provinces and cities) and around the world in the colonies of the French Empire. They can be divided to three major groups based on their function, as defined by Sabatier (1912: 33): fiscal seals (*sceaux fiscaux*), commercial seals (*sceaux commerciaux*), and special seals (*sceaux spéciaux*). This last category, special seals, is comprised of seals that are not generally found in North America, as their functions were fulfilled within France. Examples

include those used in hospitals, orphanages, or money printing workshops in the metropole (Sabatier 1912: 409).

Fiscal and commercial seals do find their way to North America, because they often marked goods bound for the colonies. The formal difference between them is not immediately clear, and can only be determined by a skilled seal expert versed in heraldry and familiar with symbols and motifs common in Old Regime France, if the seal is not already mentioned or identified in a work on lead seals or period document. Commercial seals are less difficult to identify, because they are often marked with the name of an inspection office in a town, and often bear markings such as “*BUREAU DE CONTROLLE DE*”, “*FORAINE DE*”, “*DRAP DE*” or “*FABRIQUE DE*.” Fiscal seals more often bear terms related to taxation rather than to production or merchant activity. Possibly the most readily identifiable fiscal seals are those associated with customs taxes, often bearing the words “*DOUANE DE*.”

Fiscal seals were often used to mark the taxes paid on goods leaving and entering France (customs seals), as well as those circulating between provinces in France, the *gabelle* (tax on salt) (Sabatier 1912: 138), and the *ferme de tabac* (tobacco tax) (Sabatier 1912: 147). Many fiscal seals, especially those of the *ferme de tabac*, are small, triangular, tunnel style seals. There are several different types of customs seals discussed in the first section (Section A) of Sabatier’s work (1912: 33-171), elaborated in detail and followed essentially throughout their existence. Sabatier notes that fiscal seals always have royal arms printed on them (1912: 162). This seems to be the best work concerning French fiscal seals, while Egan (1995) discusses English fiscal seals. In this study, no seals were identified as fiscal seals. This also seems to be the case at Fort Ouiatenon (Noble 1983). Fiscal seals seem to be rare at Michilimackinac as well, as only one

fiscal seal, an English example identified through personal communication with seal expert Geoffrey Egan, is identified by Adams (1989: 41).

Commercial seals are possibly the most common type of lead seal found at sites in North America. Of these, cloth inspection seals are the most common (MacDonald 2012: 20). Cloth seals are largely those used by inspection offices (discussed in the next section), although many other varieties and uses for cloth seals exist (Sabatier 1912: 222-225). These offices were charged with the inspection of cloth and were part of the grand scheme of Colbertism from 1669 to the French Revolution (see the following section for more details on Colbertism). Evidence suggests that many seals could have been attached and remained attached to the same piece of cloth (Egan 1995: 4; <http://collectie.lakenhal.nl>) and that these seals were not removed until the cloth reached its final destination, either in a different province in France, elsewhere in Europe, or along the trade routes of North America. The seals were kept on the cloth most likely because the seals would remain in use until the seal was either repackaged and they were removed post inspection, or until the seal reached its destination. The seals appear to have been difficult and time consuming to remove from cloth, as evidenced by complaints voiced by members of the textile community in Lyons when government reforms in the late 18<sup>th</sup> century tried to add more inspections and regulations to the already rigorous inspection process (Parker 1993: 37). More importantly, when the seals were removed, the cloth could no longer be legally sold without the proof of inspection or tax payment.

### **The Role of Seals in French Mercantilist Policy**

From 1664 onward to the Revolution, France operated under a unique mercantilist system of internal economics known today as Colbertism (Minard 1998: 15). This system, imposed by

the financial minister under Louis XIV, Jean-Baptiste Colbert, implemented the general ideas of mercantilism through rigorous internal inspection of manufactured merchandise, namely cloth (Minard 1998: 15). The main goal of mercantilism was to attract and maintain the most specie possible through domination of the market. This would insure the wealth of the nation, since they would possess more specie (gold and silver) than neighboring nations. In order to gain this specie, considered at the time a limited resource that could not increase in quantity, it was important to produce the highest quality of goods and to export more to other countries than was imported (Minard 1998: 15).

In order to obtain consistency in quality throughout France, Colbert and his ministry imposed strict nationwide quality control standards on cloth, the primary export of France at the time (Minard, 1998: 17). Commercial seals are those that were attached to cloth by individual fabricants, or those that were attached after the cloth had been inspected and approved by inspection office in a community. These inspection offices were: the *bureau de draperie / de fabrique* (Sabatier [1908 :10] refers to these also as “*sceaux communautaires*”), the *bureau de contrôle*, and the *bureau foraine / bureau de visite de foraine* (Sabatier 1912 : 205-206). These three inspection offices present at the local level would each attach one seal (*marque*) to the cloth after inspection was complete (Minard 1998: 20).

There seems to be disagreement concerning the use of seals by individual fabricants. According to Minard, the name of the maker would often be marked elsewhere or sewn into the top of the piece of cloth (1998: 21). However, in English seals, merchant’s marks, dyer’s marks, and bleacher’s marks are occasionally present on seals (Egan 1995: 2, 4). These are described by Sabatier as seals “*à quatre de chiffre*”, those that include marks incorporating letters, hearts, and 4-like designs (for examples, see Calver and Bolton 1950: 269-269, 274; Egan 1995: 186-188;

Sabatier 1912: plates XIII and XIV, numbers 213-232; Stone 1975: 288 figure F). Since these seals with numeral markings are found in Europe (Sabatier 1912: plates XIII and XIV), it is likely that the numbers present on seals in North America were added in Europe. According to Sabatier, seals “*à quatre de chiffre*” are both individual marks (because these symbols functioned as a sort of signature; Calver and Bolton 1950: 274) and baling marks (1912: 188), and were possibly used by many different professions (other than cloth). Sabatier mentions that it is generally believed that makers marked their own pieces by embroidering their names to the cloth, but notes that because many cloth makers were illiterate, that they possibly embroidered individually designed marks to represent themselves (1912: 212), possibly marks similar to those on “*quatre de chiffre*” seals. Though these seals are found at other sites (Mackinac [Stone 1974: 288] and Horsetail Rapids, where they may have marked packaged knives [Wheeler 1975: 23-24]), none appear to be present in the collections for Fort St. Joseph.

The *bureau de draperie / de fabrique* was the first seal that was put on a cloth (Sabatier 1912: 205). Cloth making guild members would elect *gardes jures*, officials who would complete this inspection, with heavy emphasis on ensuring only the exportation of quality goods (Sabatier 1908: 10; Sabatier 1912: 205-223; Minard 2011: 20-22). Cloth was often bought from the artisans who wove the cloth (these weavers would often sew a mark or name into the top edge of the cloth, but are not known to have used seals), and was finished and dyed by another artisan or merchant, after which it would be inspected (Adams 1989: 18). After inspection of a piece of cloth was passed by these inspectors, a tax of one *sol* would be paid by the fabricant (or finisher or dyer), and a seal would be attached to mark that the cloth had passed inspection (Minard 1998: 21). These seals often bear the words “FABRIQUE DE” or “MANUFACTURE DE” (Sabatier 1912: 231-252). If a fabricant’s cloth did not pass inspection, and if one attempted

to sell this cloth without the appropriate seals, the offending maker could be fined by the local royal judge of manufactures, or his cloth could be confiscated or destroyed (Parker 1993: 26).

The *bureau de contrôle* was a similar inspection office run by merchants that performed inspection on the cloth already approved by fabricants and the *guards jures*, and attached its own seals of approval (Minard 2011: 21). Often these seals bear the phrase “BUREAU DE CONTRÔLE” followed by the name of a given town (Sabatier 1908: 131). These offices were often located in a merchant’s hall, cloth market, or on fairgrounds (*champ de foire*) (Minard 1998: 21). This seal, the second of two attached in the town of manufacture, allowed the cloth to circulate freely until the next point of inspection, usually in another town (Minard 1998: 21).

The *bureau foraine* / *bureau de visite foraine* in a town marked cloth that was being admitted to the market in that town, and are usually associated with *foraines*, or fairs, in this sense meaning a non-sedentary and changing marketplace where goods coming from outside a town would be sold (Allaire 1999: 162). They often approved foreign seals from other provinces or countries to be sold in their cities. The presence of a *bureau foraine* was usually consigned to towns or cities without a large cloth guild system or another inspection office, and supplemented the work done by the *bureaux de contrôle* (Sabatier 1912: 326). These commercial seals from these three local inspection offices often bear the words “*DE CONTRÔLE DE....*”, “*DE VISITE DE*” or “*DE FORAINE DE...*” followed by the name of a town where the office was located (Sabatier, 1912: 131, 253-255). In combination, these offices, along with the royal commissioners that inspected them and reported to the Intendant (Minard 2011: 21), and attempted to hold Colbert’s national standards, although regional variation was never completely eliminated (Parker 1993: 27-34).

## **Methodology**

The ultimate goal of this study is to tie as many of the lead seals from Fort St. Joseph as possible to a town or region of origin. In doing so, I will also attempt to link cloth from that region to the fort, providing further information on the role of cloth at the site. In order to achieve this, several steps are needed. First, the seals in each collection should be grouped according to attachment style, and then by lettering, and motifs that appear on either face of the seal. Then, seals will be identified and linked to a region, office, or company through comparative analysis, using publications that focus on seals from museum collections, private collections (Sabatier 1912), and archaeological collections. Many seals are not identifiable, either due to their state of preservation or because they do not appear in any comparative sources available to the researcher. If, seals are identified, they will be tied through documentary research to a location, maker, office, or company in Europe. Cloth types that these seals may have marked will be presented based on historical research. Results will be compared where possible with those seals and cloth types from Michilimackinac identified by Diane Adams (1989).

## **Sample Size and Information**

This study includes 66 seals and seal fragments that can be associated with the site of Fort St. Joseph, and that are present in the collections of the Center for History and the Fort St. Joseph Museum. These collections both include lead seals that come from the site of Fort St. Joseph (Hulse 1977: 16). Some seals (n=31) and other artifacts from the fort site present at the Fort St. Joseph Museum were donated by several local collectors during the early 20<sup>th</sup> century, and were reportedly collected following the plowing of the site (Hulse 1977: 15-16). The Fort St.

Joseph Museum also houses seals (n=17) that have been recovered from 1998 to the present as the result of excavations conducted by the Fort St. Joseph Archaeological Project (FSJAP), under the auspices of Western Michigan University, and directed by Dr. Michael Nassaney (Nassaney et al. 2007: 3).

The seals and other artifacts from the site of Fort St. Joseph in the Fort St. Joseph Museum collection that were acquired before the advent of archaeology at the site were documented in 1977 (Hulse 1977). Although lead seals were included in this report, they are only touched on, and the descriptions and illustrations are done with only a basic knowledge of lead seals. The use of this thesis presents a problem in that the collection seems to have changed since his investigation. Of the 31 seals noted by Hulse (1977: 55), I was only able to see 26, a phenomenon explained by museum functions such as loans of artifacts to other institutions for exhibitions. Seals included in Hulse's work but not present in this study are the seals in his Series A Type 1 Variety J and K (1977: 59), those in his Series A Type 2 Variety C (1977: 60), and 2 other seals which belong to groups that are mentioned but not described in his typology. Lead seals that are not present in the museum collections, archaeological or donated, will not be covered in the typology of this thesis because of accessibility issues, but may be referenced where possible based on their appearances in publications, as part of documentary and comparative research.

The South Bend Center for History collection of artifacts from Fort St. Joseph was purchased in the early 1990s by the museum from a collector (n=23). To my knowledge, this collection has not been studied or analyzed, nor has it appeared in any publications. Though the seals in the South Bend Center for History collection are presented by their catalogue numbers, the donated seals in the Fort St. Joseph Museum collection do not have specific catalogue



numbers attached to them due to the difficulty in attributing certain seals to any one donor, and therefore were assigned letters to facilitate reference to them. Specimens collected through archaeological means by the FSJAP will be presented with both their individual accession numbers and specific provenience (unit coordinates). Seals from the South Bend Center for History have been illustrated and photographed for this study. Seals from the Fort St. Joseph Museum have also been photographed. Additionally, many of the seals from the Fort St. Joseph collection were photographed and included in Charles Hulse's thesis (1977: 57).

### **General Classification and Typology of Lead Seals**

Lead seals are often categorized based on the attribute of their attachment style, that is to say, the way in which they are affixed to cloth, boxes, bags, or bales (Egan 1995; Sabatier 1912; Stone 1977). This study will rely upon the typology present in Lyle Stone's study on Michilimackinac, down to the level of type (1974: 281-297). This includes his classifications based on the formal characteristics related to attachment method. Lead seals will be listed by series, by type, by variety, and then by catalogue number. Equivalencies to Lyle Stone's varieties assigned to seals in the Michilimackinac collection will be noted in the discussion section of this work. The seals will be presented separately according to collection, with the collection from the Fort St. Joseph Museum split into archaeologically retrieved specimens and collector donated specimens in order to facilitate the use of data collected in this study by museum professionals and to avoid confusion related to conflicting catalogue and accession number styles. The archaeological specimens presented are only those which can be confidently classified as lead seal fragments, as large quantities of lead scrap are present in the collection, and are not all recognizable enough to be considered lead seal fragments, so much as lead strips or scrap.

Each collection (South Bend Center for History, Fort St. Joseph Museum donated collections, and Fort St. Joseph Museum archaeological collections) will be given its own section order to make the locations of the seals more evident and to facilitate use by museum staff and by researchers, but will share the same typology. For example, Series A Type I Variety A seals (those from Mazamet) are found in two collections, both of which refer to them as Series A Type I Variety A seals.

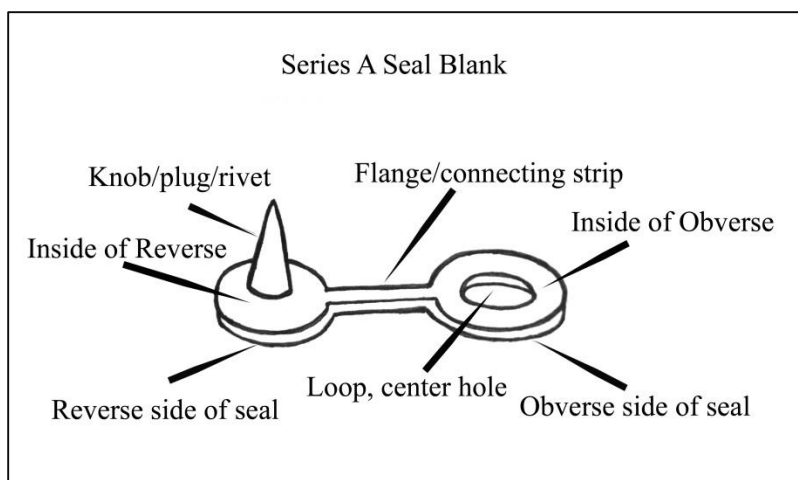
### **Formal Terminology and Mechanics**

The terminology of lead seals is simple and complicated at the same time. Nearly every study on lead seals uses a different name for a given part of a seal's anatomy. The following illustrations will attempt to combine many of the more common terms for seal parts and clarify through illustration to which each term pertains. It should be noted that each of the series presented have multiple forms, and that there are many seal types mentioned by Sabatier that are not illustrated (1912: 7-13). Only the most common forms of each seal type have been presented.

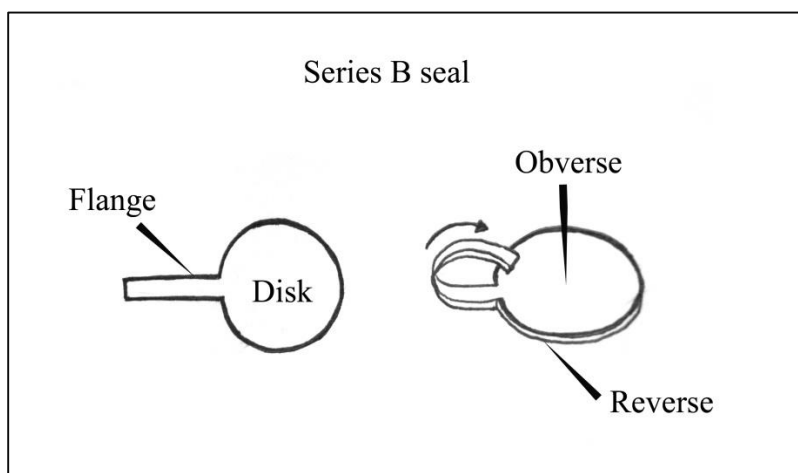
Series A seals may also have two knobs with two holes that correspond (Type II), but function in the same way as the seal presented in Figure 1 (Type I), with the connecting strip being bent in a way that allows the reverse disk knob to match with the hole on the obverse disk (Stone 1974: 289). A good example of how the single knob attachment style appears when not pressed together can be seen in plate XXI (p.96). Series B might also consist of two disks pressed against each other without additional joining agents such as in a plug and loop closure (MacDonald 2012: 21), or simply a flange pressed into a singular disk (Figure 2). Series C seals may have a single tunnel, triple tunnels, or a Y shaped tunnel system (Sabatier 1912: 7). These

tunnels were compressed when the seal was stamped, locking down on the wire or string passed through these holes, and through the cloth (see Figure 3).

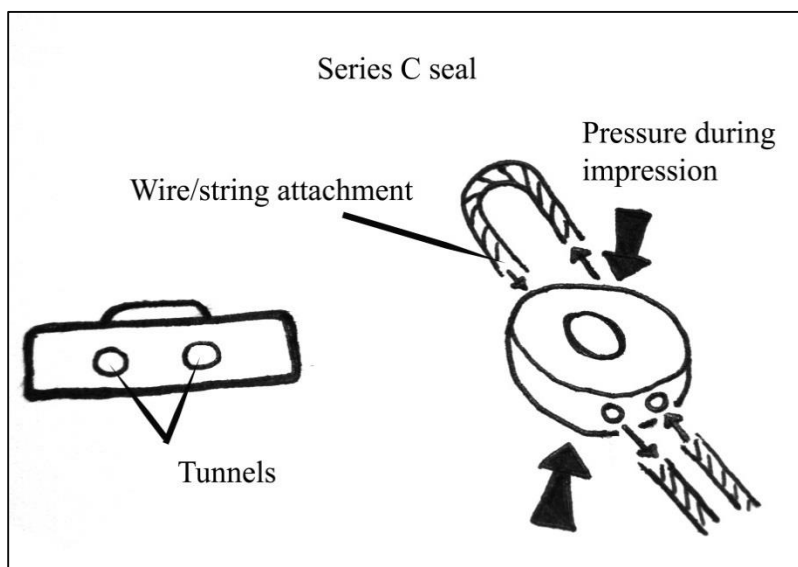
Lead seals were impressed with their markings usually through the use of a stamp and anvil, with the stamp hit sharply with a hammer in order to leave a mark on both faces of the seal (Sabatier 1912: 7-8). Sabatier notes that the two parts of this method of impression may have allowed for a dyer to have his name and information on one side of the seal, while the merchant selling the cloth would have his own information imprinted on the opposite face (Sabatier 1912: 7). However, many seals only have one stamped face, with a blank reverse or with etched numbers on the reverse, especially seals “*à quatre de chiffre*” (see page 23).



**Figure 1**- Series A seal. *Illustration by C. Davis*



**Figure 2**- Series B seal. *Illustration by C. Davis*



**Figure 3**- Series C seal. *Illustration by C. Davis*

## **Typology / Description of Seals in Collection**

The following descriptions serve to classify the seals included in this study and to supply additional details that could be of use in further studies of lead seals. They will also serve to facilitate the analytical discussion that follows. A written description of seals is included in several studies, notably those of Diane Adams (1989), Lyle Stone (1974), and Geoffrey Egan (1995). The key supplied and implemented is consistent with the conventions used by Geoffrey Egan in his description of the British Museum collection (Egan 1995: viii). The French word *grènetis* has been adopted from Sabatier's work in order to describe the beaded or corded anti-counterfeiting devices present on seals around the edge of a given seal face because no English language parallel has been found to have the same connotation (Sabatier 1912: 17-19). Diameter values have been given according to the maximum measurements for each seal, in an attempt to best express the original measurements of the seal before exposure to taphonomic processes. This is to offset the influences of time on the seals, by which they are often warped or distorted by shovel marks, intentional reshaping in the past, corrosion of the metal (this varies depending on the chemical makeup of the lead itself), or other influences of nature. Sabatier gives explanations concerning the discolorations of the lead due to corrosion processes and how they are linked to the chemical content of the lead (Sabatier 1912: 15).

For the purposes of this study, recall that obverse and reverse are determined for seals classified as Series A seals based on the available information that remains concerning the seal blank before impression. The side of the seal with the hole through which the plug of the seal is passed, and by extension the flattened plug, is the obverse side of the seal (see Figure 1). The side that includes the flattened backside of the plug will be considered as the reverse. In series B

seals, the reverse side will entail the face where the flange originates, and the obverse side will include the side upon which the end of the flange is affixed (see Figure 2). Though series B seals that consist of two disks pressed together do exist, there are none present in descriptions of seals from Michilimackinac done by Lyle Stone or Diane Adams, nor do there appear to be any present in any of these collections (See MacDonald 2012: 21-22). In regards to Series C seals (Figure 3), the obverse side will be noted as that with either royal or company arms that contain lettering and the back side of the obverse will be considered the reverse. Series C seals that do not have arms on either face will have obverse and reverse sides assigned randomly. For additional clarification, see the glossary and the methodology section of this work. Completions of words or phrases are those which can be made with confidence based on other examples, known markings, or known expressions.

Key: ( ) = Completion of missing or partial letter

..= Missing letter

... = Two or more missing letters

/ = Line break on seal

Maximum diameter measurements = Obverse face // Reverse face

## **Seals in the South Bend Center for History Collections**

**Series A:** Knob style attachment

**Type I:** Single Knob attachment

**Variety A:** 2 specimens, 94.3.317 A, K. Defined by obverse or reverse lettering horizontally across seal and including fully or partially the words “Mazamet”, or presence of Gallic cock

**1. 94.3.317 A:**

*Illustration: Figure 4 (AO, AR) / Photo: Plate I*

Maximum diameter: 1.8 cm // 2.5 cm

Obverse: "(CONT)RO(L).. / DE / (MA)ZAM(ET) / (1)74(8)"

Reverse : "PVLCH / au / (M)AZAMAT". "29" Stamped separately over existing impression

**2. 94.3.317 K:**

*Illustration: Figure 4 (KO, KR) / Photo: Plate III*

Maximum diameter: 1.7 cm // 2 cm

Obverse: In circle, Gallic cock with 3 fleur de lys in triangle above. (Seal of town of Mazamet)

Reverse: "• DE • / (C)ONTROLL.. / • DE • / (M)AZAMET / 174(8)".

**Variety B:** 2 specimens, 94.3.317 B,T. Defined by “1734” on obverse face

**1. 94.3.317 B:**

*Illustration: Figure 4 (BO, BR) / Photo: Plate I*

Maximum diameter: 1.8 cm // 2 cm

Obverse: “1734 / AVNEVR” in crest/circle with fleur de lys above. Fleur de lys flanked on the right and the left by dots. “...L • H...” on outside edge. Possible textile markings visible on the inside of reverse face.


32  
27

Reverse:

**2. 94.3.317 T:**

*Illustration: Figure 5 (TO) / Photo: Plate IV*

Maximum diameter: 1.1 cm // 2 cm

Obverse: “•  • / 173(4)” with fragment of circle rim.

Reverse: “...MO... / ...NA...” 2-3 lines of distorted and unreadable text, faintly discernable in photograph.


**Variety C:** 3 specimens, 94.3.317 C, G, V. Defined by obverse marking “AN,” complete or fragmentary, and by presence of scratched numbers or lines on reverse.

**1. 94.3.317 C:**

*Illustration: Figure 4 (CO, CR) / Photo: Plate I*

Maximum diameter: 2.7 cm // 1.7 cm

Obverse: “..A..”

Reverse: 


Inside of reverse, textile markings

**2. 94.3.317 G:**

*Illustration: Figure 4 (GO, GR) / Photo: Plate II*

Maximum Diameter: 2.1 cm // 1.1 cm

Obverse: “..AN”, with a small 5 petaled flower design with leaves above, at top center of seal

Reverse: 


**3. 94.3.317 V:**

*Illustration: Figure 5 (VO, VR) / Photo: Plate V*

Maximum diameter: 1.7 cm // 2.7 cm

Obverse: “..A..”, large stamped line or linear distortion to the right of the letter A.



Reverse: 

**Variety D:** 2 specimens, 94.3.317 E, O. Defined by presence of Lizard in a crest with the letters P and V on the obverse side.

**1. 94.3.317 E:**

*Illustration: Figure 4 (EO, ER) / Photo: Plate II*

Maximum diameter: 2.2 cm // 2.5 cm

Obverse: In circle, Lizard flanked by “P” on the left and “V” on the left. Above in upper third of circle, three crescents, tips up, with possible remnants of vertically striped background on this upper portion. Above that, the bottom tip of a possible badge shape or heart. Scrollwork remnants around the left side of the circle, possible error in impression to the left of P.


Reverse: 

**2. 94.3.317 O:**

*Illustration: Figure 5 (OO, OR) / Photo: Plate III*

Maximum diameter: 1.8 cm // 3 cm

Obverse: Circular crest with lizard-like quadruped flanked by “V” on right, with top third occupied by three crescents, tips up. Crosshatching in background of top third. Leaf motif at bottom of circle/crest. Textile markings on back of reverse.

Reverse:  (flange pressed into reverse shown in grey).

**Variety E:** 1 specimen, 94.3.317 D. Defined by fragments of lettering for “De / Control(le) / De” on obverse.

**1. 94.3.317 D:**

*Illustration: Figure 4 (DO) / Photo: Plate I*

Maximum diameter: 2.1 cm // 1.3 cm

Obverse: “DE / ...NTRO... / ...DE...”

Reverse: -

**Variety F:** 1 specimen, 94.3.317 F. Defined by unreadable obverse and reverse, and remnants of a *grènetis* on obverse

**1. 94.3.317 F:**

*Illustration: - / Photo: Plate II*

Maximum diameter: 1 cm // 2.1 cm

Obverse: - ,Warped, corroded

Reverse: Circular, beaded *grènetis* remnants. Warped design, unreadable.


**Variety G:** 1 specimen, 94.3.317 G. Defined by smooth oval crest at center, with lettering remnants circling it.

**1. 94.3.317 P:**

*Illustration: Figure 5 (PO, PR) / Photo: Plate IV*

Maximum diameter: 2 cm // 2.7 cm

Obverse: “...N...”, circle crest, blank/abraded. Possibly surrounded by lettering around edges at one time.

Reverse: 

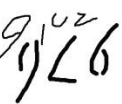
**Variety H:** 1 specimen, 94.3.317 Q. Defined by 3 lines of lettering on obverse that do not fall into other varieties.

**1. 94.3.317 Q:**

*Illustration: Figure 5 (QO, QR) / Photo: Plate IV*

Maximum diameter: 2.2 cm // 2.2 cm

Obverse: “M..R...TT / NE.../ MO...” corded *grènetis* on face of seal.

Reverse: 

**Category I:** 4 specimens, 94.3.317 H, I, N, U. Partial Series A Type I seals, obverse half.  
Described separately.

**1. 94.3.317 H:**

*Illustration: - / Photo: Plates VI, VII*

Maximum diameter: 3.1 cm

Abraded seal fragment. Circular, no flange. Hole in center, obverse portion.

Not Illustrated.

**2. 94.3.317 I:**

*Illustration: Figure 4 (IO) / Photo: Plate II*

Maximum diameter: 2.5 cm (without flange). Maximum diameter of center hole: 1.6 cm.

Minimum diameter of hole: 1.2 cm. Flange: 1 cm x .6 cm.

Textile Marks

Obverse half of seal with flange portion.

Obverse: Scrollwork. See Illustration, photo

**3. 94.3.317 N:**

*Illustration: - / Photo: Plate III*

Maximum diameter: 2.6 cm Flange: .7 cm

Obverse: Stamped circle fragment

Inside of Obverse : -

**4. 94.3.317 U:**

*Illustration: Figure 5 (UO) / Photo: Plate V*

Maximum diameter: 2.2 cm, center hole: 1.2cm.

Obverse: “(M)... / ..BAN”

Inside of obverse shows possible textile marks

U shaped fragment.

## **Series C:** Tunnel style attachment

### **Type I:** Double Tunnel attachment

**Variety A:** 1 specimen, 94.3.317 M. Defined by the presence of “CDI” in a wreath with distinctive beaded *grènetis* on obverse, and crest on obverse.

#### **1. 94.3.317 M:**

*Illustration: Figure 4 (MO, MR) / Photo: Plate III*

Maximum diameter: 1.7 cm//1.7 cm

Obverse: “CDI” with  $\supset\subset$  design beneath. In wreath, with beaded *grènetis* around outside edge of seal face.


Reverse: Crest with clouds or mountains on diagonally striped background. Above is half circle with four diamonds surrounding it. Entire crest is surrounded by scrollwork. Beaded *grènetis* around outside edge of seal face.

**Variety B:** 1 specimen, 94.3.317 W. Defined by 3 fleur de lys in a crowned oval crest surrounded by scrollwork and lettering.

#### **1. 94.3.317 W:**

*Illustration: Figure 5 (WO, WR) / Photo: Plate V*

Maximum diameter: 1.7 cm // 1.7 cm

Obverse: Shaped scrollwork crest with three fleur de lys, two on top, one on bottom horizontally striped background. Crown over crest. Surrounding crest along edge of seal face: “...(F)ERAR ”. Beaded *grènetis* remnants around edge of face.<sup>†</sup>

Reverse: Crest flanked by two figures, crowned. Crest contains small human figure at bottom, the rest is undistinguishable. Beaded *grènetis* around edge of seal face.

## **Non-Classifiable lead fragments**

#### **1. 94.3.317 J:**

*Illustration: - / Photo: Plates VI, VII*

Series A or Series B Type I

---

<sup>†</sup> There is an inconsistency in this illustration, which shows a star rather than a fleur de lys. Before photographs were taken, it was unsure whether the symbols on this seal were stars or fleur de lys due to abrasion, though Sabatier's examples show that this seal, that of the *Compagnie des Indes*, included fleur de lys in this placement, and closer examination of the photograph taken of this seal seems to rule out the idea of a star.

Measurements: 1 cm x .7 cm

Seal fragment. Flange piece, rectangular.

Not Illustrated.

## 2. 94.3.317 L:

*Illustration: - / Photo: Plates VI, VII*

Classification Unknown

Maximum diameter: 2.5 cm. Length of folded portions: 1.5 cm, 1.3 cm.

Bent, abraded seal.

Not Illustrated.

## 3. 94.3.317 R:

*Illustration: Figure 5 (R) / Photo: Plate IV*

Classification Unknown

Maximum diameter: 1.5 cm // 1.9 cm

Bent and abraded seal or lead scrap

Obverse: 1) 79 scratched very faintly

Reverse: - Corrosion

## 4. 94.3.317 S:

*Illustration: - / Photo: Plates VI, VII*

Diameter: 1.9 cm

Abraded, corroded lead piece. No Illustration.

## **Related Artifacts**

### 94.3.445:

*Illustration: Figure 5 (94.3.445 O and R) / Photo: Plate V*

### **Pierced Lead Disk**

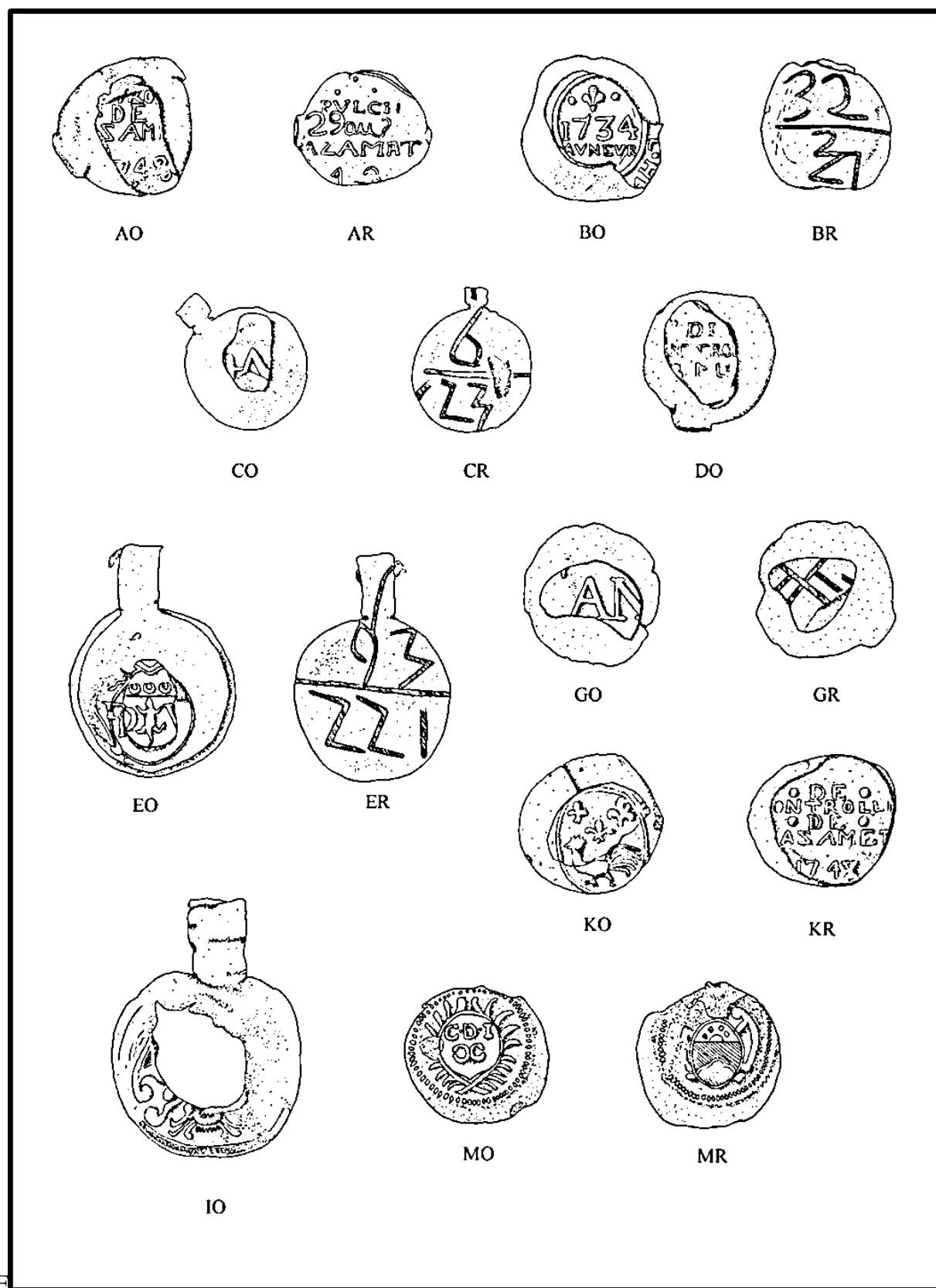
Possible reused Series A Type I seal, visible flattened plug, obverse and reverse sides.

Three holes in the center of disk suggest use as whizzer or button. Evidence of pressed plug characteristic to lead seals. No discernable intentional markings.

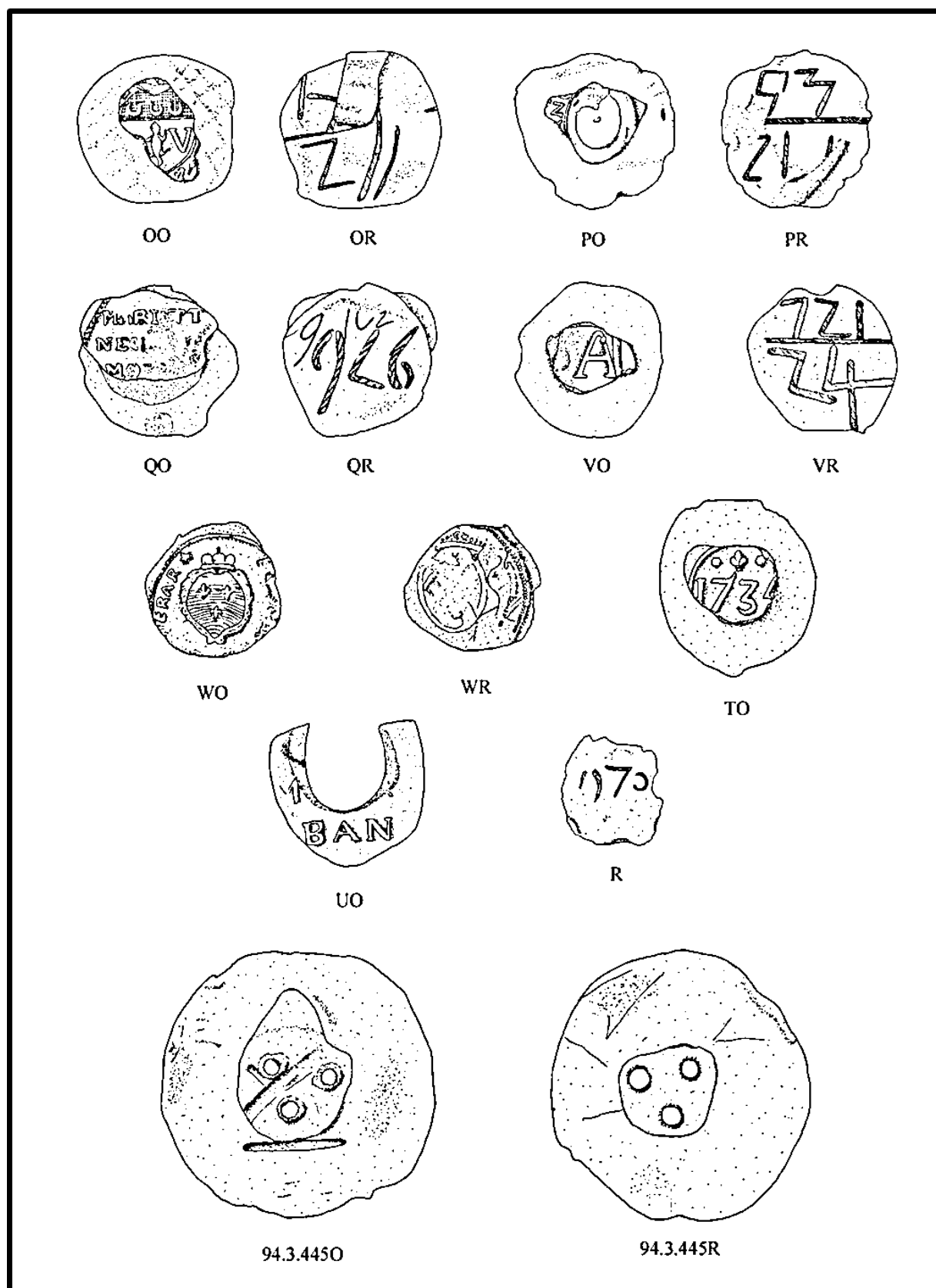
---

**A Note on Illustrations that follow:**

The illustrations that follow are labeled by their assigned letter within their catalogue number. Therefore 94.3.317A is labeled A in figure 4. The O or R that follows denotes Obverse of Reverse sides of the same seal. Therefore, AO is the label for the obverse side of 94.3.317 A, and AR is the reverse side of 94.3.317A. The only artifact illustrated that does not follow this pattern is the 94.3.445 (see above) that is instead labeled with its catalogue number. Illustrations and photographs are credit Cathrine Davis and courtesy of the Center for History, South Bend, Indiana.



**Figure 4:** Illustration by C.Davis, Courtesy of the Center for History, South Bend, IN



**Figure 5:** Illustration by C.Davis, Courtesy of the Center for History, South Bend, IN



## **Seals in the Fort St. Joseph Museum Collection**

### **Donated Specimens**

#### **Series A:** Knob style attachment

##### **Type I:** Single knob attachment

**Variety A:** 2 specimens. Defined by obverse or reverse lettering in horizontal lines across seal and including fully or partially the word “Mazamet”, or presence of Gallic cock.

#### **1. Seal F:**

*Photo: Plate IX*

Maximum Diameter: 1.1 // 2.1 cm. Flange length: .2 cm

Fragment, reverse portion of seal.

Obverse: N/A

Reverse: “(F)O(RA)IN(E) / •DE• / MAZAMET” with three fleurs de lys below, two above the third in V pattern.

#### **2. Seal G:**

*Photo: Plate IX*

Maximum Diameter: 1.4 // 2.5 cm.

Obverse: “MA(ZAMET)” around outside rim of seal, with impressed circular border interior to lettering, three fleurs de lys in a V pattern over Gallic cock at seal center.

Reverse: “(VI)ZIT(E) / ...OU(I)... / ..DE• / MAZAM(ET) / 17(4).. ” with three dots in V pattern between first and second lines.

**Variety I:** 3 specimens. Defined by obverse consisting of horizontally positioned lettering or fragments of lettering “DRAP” interior of lettering around edges.

#### **1. Seal H**

*Photo: Plate IX*

Maximum Diameter: 2.5 // 2.5 cm

Obverse: "...RIO...RCA..." around edges of seal, with interior markings horizontally across seal center "(D)RAP / D ♣ E / ..." The fleur de lys is larger than the lettering and placed between the D and E in "DE."

Reverse: paper remnants stuck to seal as if it had been adhered to a paper and then pulled off, appears to be blank.

## 2. Seal I

*Photo: Plate X*

Maximum Diameter: 3.1. Maximum diameter center hole: 1.4 cm.

Fragment, obverse portion of seal

Obverse: "...PRIOVE •DE• CARCA..." around outside edges, with horizontally placed lettering "...AP" interior to that. Beaded *grènetis* and raised circular line present interior to the lettering at the edges, and exterior to the horizontal lettering.

Reverse: N/A

## 3. Seal J

*Photo: Plate X*

Maximum Diameter: 3 cm. Maximum diameter center hole: 1.3 cm

Fragment, obverse portion of seal

Obverse: "...INE...TOV..." around edges. Interior to that and horizontally placed, "D". Raised circular line exterior of edge lettering.

Inside of obverse shows faint fabric marks.

Reverse: N/A

**Variety J:** 1 specimen. Defined by presence of "Vo" in center and "BUCK...ER SHAW • HALIFAX" around edges of reverse side

## 1. Seal P:

*Photo: Plate XI*

Maximum Diameter: 1.5 // 3.2 cm

Obverse: Stamped numerals:



Reverse: “BUCK...ER SHAW • HALIFAX” stamped around outside edge, interior to large beaded *grènetis* and exterior to that, a circular impression, interior to another large beaded *grènetis*. “Vo” stamped in center of seal, possibly with “O” stamped above the “V”.

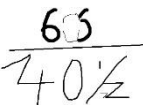
**Variety K:** 1 specimen. Defined by presence of obverse marked with “Leed” in cursive at center of seal, with lettering around edges.

**1. Seal U:**

*Photo: Plate XIII*

Maximum Diameter: 2.9 // 3.3 cm

Obverse: “...S EYRE & C...” around edges of seal, interior to raised circular line around seal. “Leed” appears in cursive at center of seal.

Reverse: Stamped letters over scratched letters: 

**Variety L:** 1 specimen. Defined by stag with letters to each side and below with crescent flanked by two stars above on obverse face.

**1. Seal X:**

*Photo: Plate XIII*

Maximum Diameter: 1.6 // 2 cm

Obverse: Stag *passant guardant* surrounded by letters. L to the left, and F or P to the right, and an E to the bottom. Above stag in chief, a crescent with tips up flanked on each side by a star.

Reverse: 28-1/4 scratched above 2294 thickly engraved.


**Variety M:** 2 specimens. Defined by fragmentary scratched numbers on reverse, with unreadable, obliterated, or blank obverse.

**1. Seal M:**

*Photo: Plate XI*

Maximum Diameter: 2.2 // 2.4 cm. Flange length: .1 cm

Obverse: Corrosion, remnants of circular pressed line near edges.

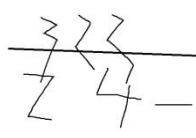
Reverse: 

## 2. Seal W:

Photo: Plate XIII

Maximum Diameter: 1.5 // 2.3 cm. Flange length: 1.2 cm

Obverse: Fragmentary beaded *grènetis*

Reverse: 

**Variety N:** 1 specimen. Defined by presence of scene with five men in a canoe on obverse, and scratched numbers on reverse

## 1. Seal Z:

Photo: Plate XIV

Maximum Diameter: 2.7 // 2.3 cm. Flange length : 1.5 cm

Obverse: Five figures in a canoe, one (second in from right side) is higher than the rest and appears to be holding an arm out to the left. The right side of the canoe has a curved prow, and below the canoe appear calm and realistic waves. Above men in canoe, a five pointed star to the left, and a crown or heart in the center. On the body of the canoe there are 3 vertical lines, possibly paddles. “NBANMA...ETTE●” around edges of face, interior to a beaded *grènetis*.

Reverse: 3903 deeply engraved into lead.

**Variety O:** 1 specimen. Defined by lettering around obverse edge and presence of horse/unicorn head.

## 1. Seal T:

Photo: Plate XII

Maximum Diameter: 2.3 cm. Maximum diameter center hole: 1.1 cm. Flange length: 1.4 cm.

Fragment, obverse portion of seal. Flange bent at tip.

Obverse: "...LL..." and other unclear lettering around edges. At center, a head from a horse or a unicorn appears, but the rest of the animal is missing with the reverse portion of this seal.

Inside of obverse shows possible textile marks.

**Variety P:** 1 specimen. Defined by obverse with lettering "...AME...EA..." around edges.

**1. Seal Q:**

*Photo: Plate XII*

Maximum Diameter: 2.1 cm. Maximum diameter center hole: 1.1 cm.

Fragment, obverse portion of seal.

Obverse: "...AME...EA..." stamped around outside edges of face.

Inside of obverse: paper scraps stuck on seal.

**Variety Q:** 3 specimens. Defined by obverse of unclear or nonexistent motifs and/or lettering, either accompanied by a *grènetis* or scrollwork fragments.

**1. Seal L:**

*Photo: Plate X*

Maximum Diameter: 1.6 // 2.5 cm. Flange length : .4 cm.

Fragment, reverse portion.

Obverse: paper scraps stuck over obverse stamped face / plug portion of reverse side.

Reverse: Mostly obliterated motif, excepting fragmentary scrollwork and beaded *grènetis*.

**2. Seal O:**

*Photo: Plate XI*

Maximum Diameter: 2.4 cm. Maximum diameter center hole: 1 cm. Flange length: 1.2 cm.

Fragment, obverse portion of seal.

Obverse: Large beaded *grènetis*, elaborate and thick "I..." or square/building edge.

Inside of obverse: paper scraps stuck to seal.

### 3. Seal S:

*Photo: Plate XII*

Maximum Diameter: 2.3 cm. Maximum diameter center hole: 1.4 cm. Flange length: 1 cm.

Obverse: "...N," with faint corded *grènetis*.

Inside of obverse: paper scraps stuck to seal.

**Variety R:** 1 specimen. Defined by obverse with unclear lettering and reverse with lettering and three fleur de lys in V pattern.

#### 1. Seal K:

*Photo: Plate X*

Maximum Diameter: 1 // 2.2 cm. Flange length: .2.

Obverse: "...V..."

Reverse: "...A...T...V.../ D•E/ ALL...OV..." with three fleur de lys in V pattern under final line. "...A..." appearing halfway between the lines containing "D•E" and "ALL...OV..." as if double struck. Two fleur de lys off to the left side over main lettering, possible result of the die double striking the seal.

**Variety S:** 1 specimen. Defined by presence on obverse side of regular rectangular shape with lines printed within a heavy border, partial lettering around outside, and another horizontally printed line of partial lettering interior to that.

#### 1. Seal R:

*Photo: Plate XII*

Maximum Diameter: 2.6 cm. Maximum diameter center hole: 1.4 cm. Flange length: 1 cm.

Fragment, obverse portion.

Obverse: "...M..." printed around edge of seal, "...L" printed interior to that as part of a horizontal line of text. To the right of "...L" is a large printed rectangular shape with thick borders and interior vertical lines/stripes.

**Type II:** Double knob attachment

**Variety A:** 1 specimen. Defined by lettering on reverse: "✠ B ✠ / FORAINE / DE / LILLE" horizontally across seal in multiple lines.

**1. Seal A:***Photo: Plate VIII*

Maximum Diameter: 1.8 cm.

Fragment, reverse portion.

Reverse portion: “ B  / FORAINE / DE / LILLE” in horizontal lines across seal.

Inside reverse: two knobs

**Variety B:** 1 specimen. Determined by lettering around edges of seal, with *grènetis* exterior to that, and fleur de lys on the obverse side.

**1. Seal C:***Photo: Plate VIII*

Maximum Diameter: 2.2 cm. Maximum diameter of holes: .5 cm, .6 cm. Flange length: 1.1 cm.

Fragment, obverse portion.

Obverse: “...T...RO... / ...” with two fleurs de lys visible below last line, one set higher than the other, as if part of 3 fleurs de lys V formation present on other seals. Exterior to the lettering and the fleurs de lys is a faint beaded *grènetis*.



**Variety C:** 1 specimen. Defined by circular crest with three fleurs de lys on obverse.

**1. Seal E:***Photo: Plate IX*

Maximum Diameter: 2.2 cm. Maximum diameter holes: .4 cm, .3 cm. Flange length: .7 cm.

Fragment, obverse portion.

Obverse: Very corroded. Circular crest with three fleurs de lys inside.

**Variety D:** 1 specimen. Defined by several lines of lettering horizontally across obverse face of seal, **excluding** those seals which appear with lettering “ B  FORAINE DE LILLE”.

**1. Seal V:***Photo: Plate XIII*

Maximum Diameter: 2.3 cm. Maximum diameter of holes : .5 cm, .5 cm. Flange length: .6 cm.

Fragment, obverse portion of seal

Obverse : “• /...P...EMERI... / ...VSIVR...DE... / ...AN • B • (unclear lettering) ... / ...  
/...RARET • / (cut off numbers [1738 ?])”.

**Variety E:** 2 specimens. Defined by unreadable or indistinct markings or lettering on obverse.

**1. Seal B:**

*Photo: Plate VIII*

Maximum Diameter: 2.2 cm. Maximum diameter holes: .4 cm, .4 cm. Flange length: 1.1cm.

Fragment, obverse portion of seal.

Obverse: “IO (hole) ...”

Inside of obverse: paper scraps stuck to seal.

**2. Seal D:**

*Photo: Plate VIII*

Maximum Diameter: 2.4 cm. Maximum diameter holes: .4 cm, .4 cm. Flange length: .2 cm.

Fragment, obverse portion of seal.

Obverse: No distinct markings except for printed



**Series C:** Tunnel style attachment

**Type I:** Double Tunnel attachment

**Variety A:** 1 specimen. Defined by the presence of “CDI” in a wreath with distinctive beaded *grènetis* on obverse, and crest on obverse.

**1. Seal Y:**

*Photo: Plate XIV*

Maximum diameter: 1.9 cm//1.9 cm

Obverse: “CDI” with (...)C design beneath. In wreath, with pearled *grènetis* around outside edge of seal face.

Reverse: Crest with clouds or mountains on diagonally striped background. Above is half circle with four diamonds surrounding it. Entire crest is surrounded by scrollwork. Beaded *grènetis* around outside edge of seal face.



## **Unclassified Seals**

### **1. Seal N:**

*Photo: Plate XI*

Maximum Diameter: 2.7cm. Flange length: .4 cm

Thick, singular disk with flange fragment. Partially punctured in the center of disk. No discernable markings. May have been in the process of being repurposed for use as fishing weight or adornment item, appears to have both obverse and reverse disks melded together, or possibly only had one disk and functioned as a Series B seal (see Figure 2). Glue on one side of disk.

## **Archaeological Specimens**

### **Series A:** Knob style attachment

#### **Type I:** Single knob attachment

**Variety T:** 1 specimen. Defined by presence of three fleurs de lys in oval crest with crown, surrounded by scrollwork.

### **1. 98-3-0:**

*Photo: Plate XVII*

Provenience: shovel test pits / survey

Maximum Diameter: .7 // 2.4 cm. Flange length : .2 cm

Obverse : partial letter, possibly “A” on obverse pressed knob portion.

Reverse: Three fleurs de lys in oval crest. Crest topped by a crown and surrounded by beaded *grènetis* interrupted periodically by flower-like marks. This *grènetis* is surrounded by scrollwork. “H” in sunburst near top of crest.

Inside of reverse: Very fine cloth imprints

**Variety U:** 3 specimens. Defined by presence of scratched numbers on seal reverse.

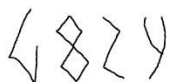
### **1. 06-2-6w:**

*Photo: Plate XV*

Provenience: N19 W6, 16-22 cmbd

Maximum Diameter: 2.3 // 2.2 cm. Flange length : .9 cm.

Obverse : Corroded, knob pressed sideways onto seal, not squarely flattened.

Reverse: 

## 2. 11-2-65w:

*Photo: Plate XVII*

Provenience: N28 E15, 45-50 cmbd.

Maximum Diameter: 2.6 // 2.5 cm. Flange length : .7 cm.

Obverse : Corded *grènetis* and possible remnants of scrollwork.

Reverse: Numbers partially hidden by folded portion of reverse plate 

## 3. 11-2-86w:

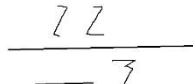
*Photo: Plate XVII*

Provenience: N21 W7, 45-50 cmbd.

Reverse portion and separate fragment. Same coloration, likely same seal, bagged together.

Maximum Diameter (Main portion): 1.7 // 2.2 cm. Fragment length : 1.6 cm.

Obverse : unreadable printed marks

Reverse: 

**Variety V:** 2 specimens. Fragments or seals with lettering or printed marks present on obverse face, and with blank reverse faces.

## 1. 09-2-132

*Photo: Plate XVI*

Provenience: N24 W7, 40-45 cmbd.

Twisted strip, likely edge fragment of obverse face of seal

Length : 3 cm. Maximum width: .8 cm.


Obverse: "...R ...OIS..." with circular impression near rim.

**2. 11-2-15w:***Photo: Plate XVI*

Provenience: N28 E15, 24-30 cmbd.

Fragment of obverse

Maximum length: 2 cm.

Obverse: Impressed with marking “” near rim, interior to remnants of a corded *grènetis*.

**3. 11-2-23w.01:***Photo: Plate XVI*

Provenience: N34 E16, 30-35 cmbd.

Obverse plate and start of flange fragment.

Obverse: Corroded, with unclear *grènetis* remnants.

**Variety W:** 5 specimens. Fragments of obverse portion with blank or obliterated surfaces.

**1. 07-3-54:***Photo: Plates XIX, XX*

Provenience: N28 E2, 35-40 cmbd.

Folded fragment of obverse with flange.

Width of folded strip: 1 cm. Length of folded fragment: 1 cm. Flange length: 1.3 cm.

**2. 08-2-105w:***Photo: Plates XIX, XX*

Provenience: N25 E10, 45-50 cmbd.

Fragment of obverse face of seal, charred and corroded.

Estimated Maximum Diameter of entire seal: 2.5 cm.

**3. 12-2-49w:***Photo: Plates XIX, XX*

Provenience: N23 W2, North ½, 55-60 cmbd.

Maximum diameter: 2.2 cm. Maximum diameter hole: 1.3 cm.

Obverse portion fragment, corroded.

**4. 09-2-110:**

*Photo: Plates XIX, XX*

Provenience: N27 E16, 45-50 cmbd.

Length: 2.3 cm.

Slightly charred and twisted fragment of seal rim.

**Variety X:** 2 specimens. Fragments of reverse portion of seal with blank sides or obliterated markings.

**1. 07-3-11w:**

*Photo: Plate XVI*

Provenience: N27 E7, 19-25 cmbd.

Maximum Diameter: .6 // 1.6 cm.

Highly corroded reverse portion of seal.

**2. 06-2-1:**

*Photo: Plate XV*

Provenience: N27 E8, 35-45 cmbd.

Maximum diameter: 2 cm.

Reverse portion of seal, pressed plug highly abraded and corroded, only slight rise remains on inside of reverse. Lead is thin and brittle.

**Variety Y:** 1 specimen. Flange fragments with evidence of attachment to either side of seal, but without significant fragments of either plate.

**1. 11-2-10w:**

*Photo: Plate XVI*

Provenience: N21 W7, 22-30 cmbd.

Flange length: 1.2 cm.

**Variety Z:** 1 specimen. Open seals in two fragments.

**1. 04-1-74:**

*Photo: Plate XXI*

Provenience: unlabeled.

Seal in two fragments. No visible markings, knob pressed down, suggesting use and then separation of disks due to taphonomic processes.

Fragment 1 (Obverse):

Maximum Diameter: 1.9 cm. Maximum diameter of hole : 1 cm. Flange length: 1 cm.

Fragment 2 (Reverse):

Maximum Diameter: 1.3 // 1.9 cm. Flange length : 1.2 cm.

**Non-Classifiable Seals or Fragments :**

**1. 04-1-20 :**

*Photo : Plate XV*

Provenience : N26 E8, 35-45 cmbd.

Maximum Diameter: 3.2 cm.

No markings, thick lead disk with large impression in one side. Possibly the result of exposure to heat, appears melted or warped. Impression / crater may have been the result of flange melting away, leaving ring portion of obverse. May have been very large and thick seal.

**2. 06-2-44w:**

*Photo : Plate XV*

Provenience: N19 W6, 27-32 cmbd.

Maximum Diameter: 2.2 cm.

Thick lead disk. May be remnant of seal after exposure to heat and fusion of plates. No discernable markings.

## **Analysis**

### **Results of Comparative Analysis and Documentary Research**

In this discussion, several abbreviations will be used in order to clarify the collection to which each seal belongs.

Collections of the Center for History, South Bend, IN ---- **CFH**

Fort St. Joseph Museum Collection, Donated Artifacts --- **FSJ**

Fort St. Joseph Museum Collection, Archaeological Specimen recovered by the Fort St. Joseph Archaeological Project -----**FSJAP**

### **Series A Type I Seals**

Series A Type I seals (n=50) comprise the majority of these collections. This type of seal is closely associated with cloth, as are most Series A Type II seals, and may have been specially designed to mark cloth, especially woolens (Egan 1995: 4; Sabatier 1912: 8). Several of these type I seals bear textile imprints (n=5), which would make this collection a good candidate for a study of these markings and what varieties of cloth might have made them. As cloth markers, seals were attached to the selvedge (the finished edge, sometimes called a list [Kent: 2001: 661]) of cloth bolts. A hole was cut slightly higher than the edge of the cloth, one disk of the seal was passed through this hole, the other disk was bent over the edge of the fabric onto the other disk, and the seal was then hammered shut (Egan 1995: 4; Sabatier 1912: 9). The security in lead seals as a technology lay in the fact that in order to separate seals from cloth, it was necessary to cut them out, or to cut the selvedge off the cloth (Sabatier 1912: 9). The Museum de Lakenhal in Leiden, The Netherlands, once the cloth inspection and sealing guild of the city, has in its

collection several examples of seals still attached to woolen material (<http://collectie.lakenhal.nl>). Egan (1995: 163, 168) also includes an image of seals still present on cloth. In theory, those seals found at North American sites that still have full obverse and reverse portions still joined and fragmented would have been deposited with cloth remnants in between the disks, though the same might apply to fragmentary seals that may have been damaged post deposition. However, Sabatier notes that many Series A seals are incomplete due to damage sustained upon removal from the cloth after reaching the intended consumer, suggesting that at times, removal of seals before deposition was practiced (1908: 11).

### **Seals from Mazamet, Montauban, and Carcassonne**

Of the seals in this study, those belonging to Series A Type I Variety A, those which bear markings in connection with the town of Mazamet (Mazamat), France, appear to be the most common, with 4 present throughout the collections examined. The lettering on the reverse and the Gallic cock crest on the obverse of seal 94.3.317 K (CFH, see p. 36, figure 4; p. 81, plate III) and seal G (FSJ, p. 86, plate IX) are the same marks found on a handful of seals from Fort Michilimackinac (Stone 1974: 284, figures G-N). The Gallic cock is prominent on the coat of arms of the city of Mazamet (<http://fr.wikipedia.org/wiki/Mazamet>). Mazamet is a town in southern France (Languedoc region)<sup>‡</sup> at the center of a major wool production area (see p.77, figure 9 for map of France). It has a rich history of woolen cloth and yarn production, and the cloth it produced took on the name of the town. Mazamet is a variety of twill woven molleton woolen. A twill weave is one where the weft and warp are passed over each other, skipping under and over two rows rather than one, and creating a distinctive diagonal pattern. Molleton

---

<sup>‡</sup> It must be noted that in this report, the regions from the period are used. Many were roughly defined at the time and are now grouped into different, more concise regions than in the 17<sup>th</sup>-18<sup>th</sup> centuries.

woolens as a category are thick, warm, and have a short nap (Kent, 2001: 663). A nap is the fine layer of fiber that remains on the surface of a fabric after weaving. It is often trimmed to varying degrees to create a smoother surface, or brushed up to create more friction and a warmer woolen. (Tichenor 2002: 31). Molleton cloth was imported to Fort St. Joseph in 1742, in a shipment of 889 yards in total (Kent 2001: 663). This may have been composed of several varieties of molleton cloth, such as *revesche*, *dourgne*, *mazamet*, or a host of other woolens that fall under the category of molletons. The large size of this shipment suggests that woolens were a popular good in high demand at the post, and might account for the large amount of seals that can be traced to regions that produced mostly woolen cloth.

Mazamet came in a range of colors, including blue, red, brown, grey, white, olive, and bright yellow, and was imported to Fort Ponchartrain at Detroit, the Louisiana colony in addition to its use among the colonists in the Saint Lawrence Valley (Kent 2001: 664). The blue variety of mazamet was likely used in French marine uniforms in 1730 for the *veste* (waistcoat) portion of the ensemble (Gallup and Shaffer 1992: 61). It is possible that the mazamet marked by these two seals was present at the fort to serve both as a trade woolen and as material for uniforms, since marine uniforms were present and more often than not created throughout the Illinois country at major posts during the French period (Gallup and Shaffer 1992: 74). Mazamet was used at other posts in the *Pays d'en Haut* as fabric for *capotes*, hooded wool coats (Kent, 2001: 569-570).

An *arrêt* (government ruling) in 1750 specifically targeted the Languedoc region, including Mazamet, and may have brought about the advent of cloth inspection and seals in the region, since before it appears that cloth was largely unregulated in this part of France, despite the rigid application of Colbertism elsewhere (Cazals 1992: 164-165). This may be due to the



fact that Mazamet was so renowned in France for its woolens that the name nearly guaranteed quality in itself (Cazals 1992: 165). This might suggest that seals from Mazamet postdate 1750.

It should be noted that the reverse sides of the two seals that exhibit the Gallic cock on their obverse are different. Seal 94.3.317 K (CFH, p.36, figure 4; p.81, plate III) is labeled “DE / (C)ONTROLL / DE / (M)AZAMET / 174(8)” while seal G (FSJ, p.86, plate IX) reads “(VI)ZIT(E) / ...OU(I)... / ...DE / MAZAM(ET) / 17(4)...” Those seals which bear the phrase or portions of the phrase “DE CONTRÔLE DE” (seals 94.3.317 A, D, and K (CFH) see p.36, figure 4; p.79, plate I, and p.81, plate III), probably refers to one of the local *bureaux de contrôle* present in a large number of cities after Colbert’s economic system was put into place. Similar seals of the *bureau de contrôle* of Mazamet are described and listed as seals 1 and 3 in Noble’s Variety K (1983: 271), and all of his seals in Variety K appear to be from various *bureaux de contrôle*, even though for the other two seals, a specific town name is not given. The other seal noted by Noble that appears to be seal of a *bureau de contrôle* is listed under his Variety GG (1983: 271).

Seal A (CFH. see p. 36, figure 4; p.79, plate I) includes an interesting reverse impression. The word “PVLCH” at the beginning of the phrase “PVLUCH au Mazamet” appears to contain a stylized U, and so reads “PULCH.” One possible meaning of this word is as a Latin, not a French one. “*Pulch*” may be an abbreviation of the Latin adjective *pulcher*, meaning excellent, fine, or beautiful (*Collins Latin Dictionary Plus Grammar*, 1997), and could signify that the cloth is of a higher quality or of the quality and appearance required under law. The impressed numerals “29” seem to have been added after the other markings on this seal, perhaps after the marked cloth was bought and prepared for shipping by a merchant or trading company.

Seal G (FSJ, p.86, plate IX) is possibly a fabricant's seal of Mazamet, put on by the *gardes jures* for the textile community there. The date on this seal and on seal 94.3.317 K (CFH) appears to have a date from the 1740s (possibly 1748) impressed on its reverse, making the dating of these seals difficult, as this would predate the 1750 *arrêt* (Cazals 1992: 164). The last seal with identifiable ties to Mazamet, seal F (FSJ p.87, plate X), is marked "FORAINE DE MAZAMET," indicating that it would have marked cloth imported into the town for sale. The appearance of this seal might mean that one of the traders in France that supplied connections in New France may have bought cloth from another town at Mazamet and shipped it to the colony, where it was sent to Fort St. Joseph.

These seals from Mazamet may have close ties to other seals found at the site. Seal 94.3.317 U (CFH, p.37, figure 5; p.83, plate V) appears to bear a portion of the common inscription "CONTRÔLE DE MONTAUBAN" and therefore it might also be the mark of an inspection bureau in Montauban (Sabatier 1912: 194; Stone 1974: 287; Adams 1989: 23-24). Another, seal Z (FSJ, p.91, plate XIV) seems to match seals at Michilimackinac and Pointe-à-Callière (Montreal), which have a possible provenience of Montauban as well. (Stone, 1974: 286; <http://www.jeuxpac.net/jeu3-objets-f.html>). Adams (1989: 31) identifies a seal at Michilimackinac with a similar design as a possible bale seal. Louise Dechêne identifies Montauban as a town that produced woolens for trade with Native Americans (1988: 152), and Sabatier lists it among wool producing departments (1912: 194). Montauban also functioned in close relation with other towns around it in the Languedoc region, especially Mazamet and Castres (see p.77, figure 9). The wool produced in Mazamet and Castres was often sent to merchants in Montauban for dyeing and finishing (Cazals 1992: 167). The appearance of so many seals from Mazamet economically links the town and region to Fort St. Joseph.

Montauban probably also received cloth from Dourgne, which was near Mazamet, and also produced a woolen named after the town, *dourgne* (Cazals 1992: 166; Kent 2001: 664). Historical records inform us that a shipment of 282 yards of this woolen of lesser quality than Mazamet was sent to Fort St. Joseph in 1742 (Kent 2001: 664). Another woolen imported from the Languedoc region to Fort St. Joseph in 1742 includes *cadis*, a lightweight, inexpensive woolen (quantity unknown) (Kent 2001: 665). Clearly, the Languedoc region was well represented in the cloth sent to Canada. Further research attests to the impact of the transfer of Canada to the English had on the textile industry in the region of Mazamet and Montauban, with accounts from 1774 stating that “...*Manufactures du diocèse (Castres) ruinées par la perte du Canada, plusieurs milliers d’ouvriers réduits à la mendicité*”<sup>§</sup> (Cazals 1992: 167). Though this seems like an expected result due to the loss of the fur trade, it is likely untrue. This statement is noted by Rémy Cazals in his history of the region, where he explains to the reader that the context of this phrase is one in which it is being used to sway the government in order to garner tax credits for the region. He considers the following statement much more factual, as it appears at around the same time, among many other reports testifying that the economy of the region was anything but ruined by the loss of Canada. “*Mazamet, Castres, Brassac n’ont pas assez de bras, la première surtout fait des envois considérables en cordelats*”<sup>\*\*</sup> *que les Anglais viennent enlever pour le Canada*”<sup>††</sup> (Cazals 1992: 167). It seems the English were purchasing large amounts of cloth from this region to keep the colony supplied with Languedoc produced woolens. These statements remind us of the enormous consumption and trade of woolens that the fur trade brought about even after the French crown lost ownership of the pelts it produced. This statement

---

<sup>§</sup> “...The Manufacturing Industries of the diocese ruined by the loss of Canada, many thousands of workers reduced to begging.”

<sup>\*\*</sup> *Cordelats* are a type of woolen similar to *molleton*

<sup>††</sup> “Mazamet, Castres, Brassac do not have enough arms [hands], the former over all makes considerable shipments of *cordelats* that the English come to remove [purchase, take for shipment] for Canada.”

has even more meaning in regards to the cloth coming from Mazamet, suggesting that of the towns in the region, the cloth from Mazamet was in the highest demand and that its woolen production was booming. If Mazamet cloth was this popular in Canada during both the French and British control, this may explain why at Fort St. Joseph, Ouatennon, and Michilimackinac, seals from Mazamet are present in significant quantities (6% (4 seals), 5% (2 seals), 4% (12 seals), of total lead seals, respectively).

Another seal that could be linked either to Montauban or Montreal is 94.3.317 Q (CFH, see p.37, figure 5; p.83, plate V), which appears to have a name, possibly that of Mariett (Noble 1983: 271), followed by the word “NÉGOTIANT,” suggesting that this mark is that of a dealer or merchant. The final line starts “MONT...,” and may be a location, since many merchants seals state their location on the seal, usually in the final line (See figures K and L of Stone 1974: 286). One example from Montauban with the name of a certain *negotiant* that may match this seal is included in Noble’s work on Fort Ouatennon as Series A Type I Variety CC (1983: 271), and an example on display in the Center d’Interpretation de Place Royale in Québec City also seems to have the name of the same merchant, along with “Montauban” (<http://www.mcq.org/place-royale/en/themes.php?id=6&ver=1>). Another seal with a similar design and a different name is noted in Lyle Stone’s description section as belonging to his variety CC (1974: 287), and in Calver and Bolton’s work (1950: 273) another is presented.

The three seals belonging to Variety C are similar to each other and to seals found at Michilimackinac (Stone 1974: 282, figures H, I, J, and K), but the origin and meaning of this design is unknown. Seals 94.3.317 B and T (CFH) bear the exact same impression on the obverse face, made apparent by the presence of a continued spike above the junction of the stem and the horizontal portions of the numeral “7,” in “1734”. This is almost without a doubt the

result of a flaw, whether intentional or accidental, in the matrix or die used to impress the seal (see Sabatier 1912: 7-10, 20-24; Egan 1995: 4). Due to this flaw, it is probably safe to say that the word “AVNEVR” on the obverse face of seal 94.3.317 B (see p.36, figure 4; p.79, plate I) is the completion for the missing portion of 94.3.317 T (see p.37, figure 5; p. 82, plate IV). This word is probably “*auneur*” with stylized U’s. The *auneur* of a town was a cloth inspector who would measure out the *aunes*<sup>††</sup> of a piece of cloth to see if it met the dimensional requirements for inspection (Sabatier 1912: 213-214).

Another major cloth producing town in the Languedoc region was Carcassonne (see p.77, figure 9). At least two seals appear to have fragments of the word Carcassonne: Seals H and I (FSJ, p.86, plate IX; p.87, plate X) in Variety I. Both have parts of what is probably the word “DRAP” (sheet cloth/woolen cloth) inside a circle of lettering around the edges of the seal. This and the similar fragments of lettering around outside that could read “FABRIQUE DE CARCASSONNE” would lead me to classify these seals as seals belonging to the *bureau de draperie* or *de fabrique* at Carcassonne. Carcassonne is distinguished from Mazamet and Castres because it was a center of manufacturing for fine cloth traded with the Mediterranean world (Cazals 1992: 165), but nevertheless still produced woolens that were popular in New France (Dechêne 1988: 152). Kent mentions that in 1714, Carcassonne and several other towns were charged with the production of imitation *écarlatine* in order to challenge British dominance of the market (Kent 2001: 660-661). *Écarlatine* (stroud) was the most valued and highest quality woolen in circulation in New France, although it was illegal to sell or own the cloth at several points in the history of the colony, and was consistently illegal in the metropole (Kent 2001: 660). *Écarlatine* was usually produced in blue and red (Kent 2001: 661). The last seal in Variety

---

<sup>††</sup> An *aune* (ell) is approximately 3.86 feet in standard English measure (Kent, 2001: 941).

I, seal J (FSJ, see p.87, plate X) appears to have the same layout as the other two, but the lettering around the edges is too fragmentary to determine an origin.

### **Seals of Unknown Origin**

Variety L contains a single specimen, seal X (FSJ, see p.90 plate XIII), which is identified by the presence of a stag on the obverse face of the seal. Though Hulse (1977: 58) and Noble (1983: 273) both identify this figure as a lion, but the charge looks much more like a stag, with evident antlers. I have not been able to find any further information on this seal, nor on the equally enigmatic seals in Variety D (Seals 94.3.317 E and O (CFH) see p.80, plate II, and p.81 plate III), which exhibit a lizard or salamander in a crest on the obverse face, with a hatched chief<sup>§§</sup>. Egan does present a seal with lizards and hatching in the background (ordinary<sup>\*\*\*</sup>) of the crest but it seems unlikely that this seal is related to those of Variety D (Egan 1995: 89-90, 185). The seal in Variety T, #98-3-0 (FSJAP, see p.94, Plate XVII), has royal arms on the reverse portion, and might possibly be a fiscal seal. The same might be said for the seal found in excavations in 2013 (Bauer 2013: 22, Figure 2).

### **English Seals**

Two identifiably English seals exist in the collections, seals P and U (FSJ, p.88, Plate XI, and p. 90, Plate XIII). Both seals appear to be from major cloth producing towns in Yorkshire. Seal P, almost certainly from Halifax, might be a merchant's seal. Seal U is identified by Calver and Bolton (1950: 165-166) as belonging to a particular merchant in Leeds, a town larger than Halifax and the center of the Yorkshire woolen trade (Atkinson 1956: x, xi). The merchant to whom this seal pertains, James Eyre, made a fortune in the woolen business (Calver and Bolton

---

<sup>§§</sup> Chief in heraldic terms, the upper third of a crest.

<sup>\*\*\*</sup> Ordinary here is meant in the heraldic sense

1950: 166). In regards to the importance of Leeds and Halifax, the main cloth type produced and marketed in both towns and in the region was kersey, a lightweight and coarse worsted with a long nap that was often woven in small pieces of about one yard in length (Kent 2001: 665). Kersey kept out dampness more readily than other cloths, and was often used as a multipurpose cloth and in military garments (Atkinson 1956: 70). This cloth was used for clothing by those who lived in the Saint Lawrence Valley, but also functioned as a trade cloth (Kent 2001: 665). A shipment of an unknown quantity of kersey was sent to Fort St. Joseph in 1742 (Kent 2001: 665). Leeds was renowned for its broadcloth (also a woolen, heavier and of better quality than kersey) and was home to many merchants who frequented other local cloth producing towns, such as Halifax, in order to sell abroad (Atkinson 1956: 69). Bays were also a common cloth produced in the region, and were a hybrid woven out of worsted and woolen yarn, one a warp and one as weft threads, respectively (Atkinson 1956: 69). The front page in Atkinson's book is a color copy of a page in a merchant's book adorned with swatches of various cloth colors he provided, some of which are broadcloths, and the others bays (1956: frontispiece illustration), and gives a good idea of the colors of cloth available in the area.

### **Series A Type II Seals**

Series A Type II (n=6) seals appear only in the collections from the Fort St. Joseph Museum, and of these seals, many do not have enough information present on them to hint at any use or provenience. As a category, seals with double knob attachment have been attributed to cloth producing towns and regions in the north of France, or foreign seals (Sabatier 1908: 11, 1912: 9). True to the idea, Type II seal most common to the site of Fort St. Joseph is that of the *bureau foraine* of Lille (n=2), a city in the northern part of France (see p.77, figure 9). This seal, identified by Sabatier in both his works (1908: 10; 1912: 254, plates 11 and 12, no. 183), has

been found archaeologically at Fort St. Joseph (MacDonald, 2012: 8) and the Ghost Horse site in Illinois (Mazrim 2011: 210-211), though with slight variations in the reverse (MacDonald 2012: 8). It also appears in the Fort St. Joseph Museum collections as seal A (FSJ, see p.85, plate VIII) (Hulse 1977: 58). This seal, as a seal of the *bureau foraine*, would have marked cloth coming into Lille from the outside. MacDonald notes that Lille imported textiles from the immediate region as well as Flanders, and the city itself was known for its lace, linen, and cotton (2012: 8). Kent notes that Lille also produced camlet, *polimiez* (polimy), and *persianes*, the first being a light cotton cloth, the other two light woolens (Kent 2001: 667). Striped *polimiez* was present at Fort St. Joseph in 1742 (Kent 2001: 667). With towns such as Valenciennes (Egan 1995: 18, 105, 191; Calver and Bolton 1950: 271), Douai (Egan 1995: 18, 101, 190), and various other cloth creating towns in the Netherlands (Egan 1995: 18) in range of the city, Lille could have easily been an exporter of cloth types produced in these towns (see p.77, figure 9).

### **Seals of the *Compagnie des Indes***

Finally, the last identifiable seals in the collections examined are those of the *Compagnie des Indes* (Company of the Indies), seals 94.3.317 M (Variety A) and W (CFH, see p.36-37 figures 4-5; p.81, plate III and p.83, plate V), and seal Y (FSJ, see p.91, plate XIV) (Variety B). The *Compagnie des Indes* was a trading company that began as several other companies that were all condensed into one in 1719. In 1717, John Law, the famous economist, founded the *Compagnie des Indes Occidentales* (West Indies Company; *Compagnie du Mississippi*, *Compagnie de la Louisiane*) as part of his scheme to save the floundering financial situation in France after the death of Louis XIV (Cécile and Havard, 2008: 130; Sabatier 1912: 387). In 1719, the *Compagnie des Indes Occidentales*, under the control of Law, absorbed a number of companies including the *Compagnie de L'Assiente* (based in Guinea), the *Compagnie du*



*Castor/du Canada*, the *Compagnie des Indes Orientales*, and the *Compagnie de la Chine* (1912: 376-387). With the absorption of these companies and their rights, the *Compagnie des Indes* became an enormous worldwide trading company, with ties directly to the royal bank of France established by Law (1912: 388). This bank, that subsisted nearly entirely on an excess of printed money and on credit, combined with stock in the *Compagnie des Indes*, would eventually crash along with the *Compagnie* in 1720, victim and cause of an important episode of economic history known today as the Mississippi Bubble (Cécile and Havard 2008: 130-131; Ekberg 1996: 144-145; Sabatier 1912 :388-389).

Closer to the realms of daily life, the *Compagnie des Indes* played an important role in Louisiana, the *Pays d'illinois*, and the *Pays d'en Haut*. It held a complete monopoly on fur exports from the colony, and also imported trade goods from Europe (Adams 1989: 26; Kent 2001: 941; Sabatier 1912: 390). The company attempted to discover precious metals and instead found lead mines near where the settlement of Kaskaskia would spring up, where some individuals in the community found work in mining for the *Compagnie* (Skinner 2008: 117). Some trade goods imported by the company include spices, metals, coffee (Sabatier 1912: 390), and possibly gunpowder (Adams 1989: 26). The company carried various cloth for trade, including striped and plaid cotton cloths and muslins, but the sale of printed or painted cloth such as *indiennes* was outlawed in France and in Canada until after 1759 (Sabatier 1912: 390). The company was also the only institution authorized to bring British *écarlatine* (until the French succeeded in producing a good imitation, in Montpellier) through La Rochelle to Montreal, when the cloth was allowed into the colony for the purposes of the fur trade (Dechêne 1988: 153). These *écarlatines* were entrusted to the company to cut down on problems of contraband English cloths, and would have been unavailable to French consumers in the St. Lawrence Valley and

reserved only for exchange in the fur trade (Dechêne 1988: 153). Therefore, during the French régime, the company would likely have imported only plain white cotton cloths (Sabatier 1912: 390) and occasionally *écarlatine*, at the same time forbidding the manufacture of cloths in the colony in order to maintain a monopoly on cloth imports (Skinner 2008: 119). These cloths would have been marked with Series C lead seals (Sabatier 1912: 401), which would include all of the seals of the *Compagnie* present in collections from Fort St. Joseph. Stamps on slips of parchment (some of which exist in his personal collection) were likely attached to a piece of cloth alongside of the seal, as instructed by company documents (Sabatier 1912: 390-396).

The variety A seal, described in depth by Sabatier (1912: 404-406), includes on one face (the obverse) a royal crest (that of Louis XV), with the phrase “FLOREBO QUO FERAR” around the edge of the seal. “FLOREBO QUO FERAR,” was the Latin motto of the *Compagnie*, which roughly translates to “I flower wherever planted.” The reverse features the crest of the *Compagnie des Indes*, which was adopted as the company logo from the crest’s original use for the *Compagnie des Indes Occidentales* (Sabatier 1912: 405). Whereas this crest was originally designed to have a personification of the Mississippi and a mound of gold, flanked by two Native Americans, but as the logo of the *Compagnie des Indes*, Sabatier suggests that the crest was adopted and the Mississippi and the mound of gold instead represented the Ganges and the Himalayas (:405). At times, small letters or symbols can be seen at the bottom right of the reverse design, usually on an urn at the foot of the right Native American figure, and may have been related to the type of cloth the seal marked, or perhaps simply acted as anti-counterfeiting devices (: 406). On the example in the South Bend Center for History (#94.3.317 M, see p.81, plate III), no letter is discernable on the seal. Sabatier hypothesizes that this seal from the *Compagnie* may postdate 1749 (:404-405). He bases his dating off of a document (an *arrêt*)

imposing a change of device in 1748-9 (: 403-404), as well as the styling of the letters on the seal (: 406). The seal most certainly postdates 1719, and must have been issued before the end of the company's charter in 1769 (: 391).

The two Variety B seals in the collection, #94.3.317 W (CFH, see p.37, figure 5; p.83, plate V) and seal Y (FSJ, see p.91, plate XIV) bear a design that is a different version of the *Compagnie des Indes* seal (Kent 2001: 941). They feature on the obverse the letters "CDI" in a wreath, and a crest on the reverse that is not the same as that in Variety A seals. This dating of this variety is not known, but it must have existed during the years of operation for the *Compagnie* (1719-69). This same seal variety has appeared at Michilimackinac (Stone 1977: 293-294) and at Ouiatenon (Noble 1983: 273), suggesting a definite presence of trade goods through the company in the region, possibly by way of the Mississippi River system from Louisiana, or from the east (Montreal).

### **Comparisons with Michilimackinac**

The identification and determination of origins and cloth related to lead seals from one related site, Michilimackinac, was carried out partially by Diane Adams (1989). Though her research focused mainly on determining if lead seals were used to mark cloth rather than trade bales, she was able to pinpoint the origins of many lead seals from the site (28%). Though the cloth that lead seals marked cannot be known with complete certainty (excepting the rare cases where seals are marked), the above discussion of identified lead seals presents some possibilities. The origins and cloth types associated with seals from Fort St. Joseph and Michilimackinac (based off of Adam's data) are presented in the following tables (Table 1 and Table 2). This information will be further discussed in the section concerning the results of the study (p.69).

**Table 1: Origins of Lead Seals from Fort St. Joseph and Michilimackinac**

| <b>Origin of Identified Seals</b>                          | <b>Present in Collections from Fort St. Joseph</b> | <b>Present at Michilimackinac (Adams 1989)</b> |
|--|--|--|
| <b>France</b>  | <b>22 (33%)</b>                                    | <b>113 (41%)</b>                               |
| <b>Languedoc Region</b>                                    | <b>9 (64%*)</b>                                    | <b>39 (50%*)</b>                               |
| Carcassonne  | 2  | 1  |
| Nîmes  | -  | 20   |
| Mazamet  | 4  | 12   |
| Montauban  | 3  | 6  |
| <b>Nord-Pas-de-Calais Region</b>                           | <b>2 (14%*)</b>                                    | <b>1 (1%*)</b>                                 |
| Lille  | 2  | -  |
| Roubaix  | -  | 1  |
| <b>Rhône-Alpes Region</b>                                  | <b>-(0%*)</b>                                      | <b>2 (3%*)</b>                                 |
| Lyon   | -  | 2  |
| <b>Compagnie des Indes</b>                                 | <b>3 (21%*)</b>                                    | <b>26 (34%*)</b>                               |
| <b>Unknown French</b>                                      | <b>11 (17%)</b>                                    | <b>45 (16%)</b>                                |
| <b>Great Britain</b>                                       | <b>2 (3%)</b>                                      | <b>20 (7%)</b>                                 |
| <b>Yorkshire Region</b>                                    | <b>2 (14%*)</b>                                    | <b>3 (4%*)</b>                                 |
| Halifax  | 1  | -  |
| Leeds  | 1  | -  |
| Wakefield  | -  | 3  |
| <b>London</b>  | <b>- (0%*)</b>                                     | <b>6 (8%*)</b>                                 |
| <b>Unknown British</b>                                     | <b>- (0%)</b>                                      | <b>11 (4%)</b>                                 |
| Total Identified (Nationality Known)                       | 24 (36%)   | 133 (48%)                                      |
| Total Identified (Specific Region or Town of Origin Known) | 14 (21%)   | 77 (28%)                                       |
| Total Unknown Nationality or Origin                        | 40 (60%)   | 145 (52%)                                      |
| Total Included in Study                                    | 66   | 278  |

\*calculated out of total seals identified and linked to a region or town of origin. All others are out of total in study.

**Table 2: Cloth Types Associated with Identified Seal Origins and Their Appearance at Fort St. Joseph and Michilimackinac**

| Location                   | Associated with what cloths   | Seal Present at Fort St. Joseph                          | Seal Present at Michilimackinac (Adams 1989) |
|----------------------------|---|--|--|
| Carcassonne                | <i>Écarlatines</i> (heavy woolen)   | Yes  | Yes  |
| Lille                      | <b>Camlet</b> (cotton), <i>polimiez</i> , <i>persianes</i> (light woolens), <b>lace</b> , <b>linens</b>   | Yes  | No   |
| Lyon                       | <b>Bombazine</b> (cotton [Kent 2001: 672]), <b>fustian</b> (cotton [Kent 2001:672]), <i>coutil</i> (denim, cotton [Kent 2001: 673]), <b>taffeta</b> (silk/satin [Kent 2001: 647])   | No, but “Lyon Cloth” recorded in documents (Peyser 1978) | Yes  |
| Mazamet                    | <i>Mazamet</i> (woolen), other woolens  | Yes  | Yes  |
| Montauban                  | <b>Woolens</b> , cloths from nearby towns   | Yes  | Yes  |
| Nîmes                      | <b>Silks</b> (Sabatier 1912: 332), <b>serge</b> (Woolen [Kent 2001: 663]), <b>perpetuana</b> (woolen [Kent 2001: 667])  | No   | Yes  |
| Roubaix                    | <b>Woolens</b> (Roubaix. (2013). In <i>The Hutchinson unabridged encyclopedia with atlas and weather guide</i> . Retrieved from <a href="http://search.credoreference.com/content/entry/heliconhe/roubaix/0">http://search.credoreference.com/content/entry/heliconhe/roubaix/0</a> ) | No   | Yes  |
| <i>Compagnie des Indes</i> | <i>Écarlatines</i> , <b>muslins</b> (cotton), <b>bleached cotton cloths</b> , <b>striped and plaid cotton cloths</b> (late 18 <sup>th</sup> century)  | Yes  | Yes  |
| Halifax                    | <b>Kersey</b> (light worsted woolen), <b>bays</b> (worsted/woolen combination cloth), <b>broadcloths</b> (woolen)   | Yes  | No   |
| Leeds                      | <b>Kersey</b> (light worsted woolen), <b>broadcloths</b> (woolen)   | Yes  | No   |
| Wakefield                  | <b>Woolens</b> (Adams 1989:41)  | No   | Yes  |
| London                     | Unknown, Packer’s seals   | No   | Yes  |

### **Secondary Uses for Lead Seals in the Region**

As previously mentioned, lead seals fulfilled a very temporary purpose. Once lead reached its final destination, the seals became a relatively meaningless mass of lead, a resource valued by many denizens of the western part of New France. With only some lead mines present in the entire colony, many that were exploited only beginning in the 1720-30s by the French (Ekberg 1996: 144-146), lead was for the most part an imported item, commonly in the form of musket balls or ingots (Morand 1994: 40, 43; Dechêne 1988: 156). Although the initial purpose of seals is the focus of this study, their secondary purposes and reuse should also be discussed. As important as it is to discuss what is present in these collections, it is also important to consider what might be missing.

Due to the malleability of lead and the constant need for more utilitarian objects such as musket balls or lead shot at frontier posts in the western Great Lakes region, it is to be expected that at least some lead seals might have been melted down as scrap and remolded into various objects. It has been suggested that the scarcity of lead seals at some posts might be explained by the melting of lead into musket balls (Wheeler 1975: 62). This was probably the case at Fort St. Joseph, where sprue and lead waste are present in conjunction with musket ball and lead shot, providing solid evidence of the on-site production of musket balls and other ammunition (Nassaney et al. 2007: 12). Perhaps some of the best evidence of the molten fate of lead seals is discussed by Diane Adams. She notes the presence of the singular lead seal at Fort St. Pierre that was found in an area related to the production of Rupert shot (1989: 35). Rupert shot is lead shot that was produced by pouring molten lead through a colander and into a barrel of cold water below (Morand 1994: 40). This may have been overwhelmingly the case at Fort St. Joseph,

where subsistence research indicates that the residents of the site were likely consuming large amounts of wild game (Nassaney et al. 2007: 315).

However, ammunition for firearms may have only been one purpose of seals. At least one seal at Michilimackinac seems to have had a projectile point cut out of it (Adams 1989: 36-37; Stone 1974: 290). Metal arrow points of several different materials (Brass, copper, and iron) are also present at other sites in the *Pays d'en Haut*, including the Guebert site (Good 1972: 69), Fort Michilimackinac (Morand 1994: 28-29), and at Fort St. Joseph (Nassaney et al. 2007: 12), suggesting that the reuse of lead in this manner could possibly have occurred at these sites. Seals may also have easily been fashioned into lead fishing weights or coat weights, whether through remolding or trimming with a knife. Seals also appear to have been shaped into whizzers at several sites (Noble 1983: 272; Adams 1989: 35). This may have also been the case at Fort St. Joseph, as suggested by the presence of artifact #94.3.445 (CFH, see p.37, figure 5 and p.83, plate V), which has the same pressed plug characteristic to Series A Type I seals. It appears to have been trimmed around the edges and has three pierced holes in the center. While this object could have functioned as a button or adornment item, its size, weight, and crude fashioning seem to be inadequate for ornamental use. If it was meant for use as a fishing weight, one hole appears to have been sufficient in other fishing weight examples (Morand 1994: 43). It appears that it could have easily functioned as a whizzer, even without the serrated edges present on many whizzers (Morand 1994:42). It is also possible that a large portion of the lead scrap in these collections could be the remnants of reused or recycled lead seals. One suggestion of non-destructive reuse might have been the repurposing of seals as ornaments (Adams 1989: 36). With so many ways to reuse the lead from seals, it is to be expected that they would be used often enough that those sites with large seal collection can be assumed to have had at one time a much

larger quantity of seals coming in than are found archaeologically. If the seals presented in this study and those yet to be found are merely the survivors, the huge quantity of cloth coming into the fort can only be imagined, once again highlighting the importance of cloth in trade and daily life at this site, and others.

### **Results of Study**

This study has reinforced the fact that there are limits to how many seals in a collection are identifiable. Although 37 percent of vast majority of the collection was identifiable at least on the basis of nationality, and a smaller 21 percent are able to be tracked to their origins in Europe, most of the collections (60%) remains either too fragmentary and corroded to identify, or exhibits unidentifiable or unknown markings. Dating also remains a problem, and even dates printed on seals are probably untrustworthy and not entirely exact due to the long transit time involved in shipping from Europe to the Western Great Lakes region, and possible gluts or long term storage in warehouses. This missing temporal information could show patterns over time in the cloth types present sites for which documentary sources are scarce, or could reinforce existing records. However, in identifying even one seal, a great deal more information on textiles at a site can be uncovered. My research has found that at Fort St. Joseph, the majority of cloth imported was shown by the seals already found at the site and identified in this study, was probably from cities and areas that produced woolens. In particular, *mazamet* woolens from the Languedoc region may have been the leading import to the fort, and possibly the region, with 64 percent of identified seals coming from that region, and 29 percent of identified seals marking cloth bought or fabricated in Mazamet. At Michilimackinac, though the Languedoc region represents a similar 50 percent of identified seals, Mazamet seals are not the most plentiful. Nîmes, renowned for silk but for woolens as well, is the place of origin for 26 percent of



identified seals, and account for the largest amount of identified seals if not for the domination of the *Compagnie des Indes* (34% of identified seals). The popularity of these seals is probably due to the monopoly held by the company, and perhaps represents a large amount of British *écarlatines* that would have come to Michilimackinac through the company. Other seal evidence at the site shows that *écarlatines* were present at the site (Adams 1989: 24), though further historical research is needed to more firmly secure a picture of how important this cloth really was there. Though seals of the *Compagnie des Indes* are also numerous at Fort St. Joseph, they are narrowly surpassed by those from Mazamet. This may be due to the small sample size used in this study, but even in the Michilimackinac data (Table 1), seals from Mazamet and the *Compagnie des Indes* are in the top three categories (though Mazamet is still less represented than Nîmes at Michilimackinac). Though the *Compagnie des Indes* may have been responsible for the import of cotton cloth, it seems more likely that they marked woolens due to the large amount of seals from Mazamet (which almost certainly marked woolens) that the seals of the company seals found at Michilimackinac would have marked woolens for the trade, especially when Dechêne reminds us that 80-90 percent of imported cloth was of the woolen variety (1988:151). One should note that some of these woolens may have been used by Europeans at Michilimackinac as well as Native American consumers, especially given the similarity of clothing styles between the two in many cases (White 2012).

More woolens are represented by the English seals found at the Fort St. Joseph site, all of which are from the woolen producing hotbed of the Yorkshire region (Leeds, Halifax). Seals from this region are also found at Michilimackinac (Wakefield), along with packers' seals from London. It is highly likely that these seals marked bays, kerseys, or broadcloths, all varieties of English woolens. Though one may be tempted to date these examples to the British period at

either fort, it must be mentioned that according to historical sources, English strouds (woolens) were in high demand during the French period, imported through the Compagnie des Indes, and may have also come to these sites through illegal trade with New England (Innis 2001: 78-80).

Following this data, woolens appear to be the most consumed cloth at both sites, with almost all 12 of the locations identified strongly identified with the manufacture of some sort of woolen (Table 2). Even the seal from Lille, which itself was known for the manufacture of cotton and delicate laces and linens than for woolens, could have easily marked woolens produced in the surrounding area (since the seal does come from the *bureau foraine* and would probably not have marked cloth produced in Lille), possibly from Roubaix (as present at Michilimackinac) or other towns. One set of seals that are highly likely to have been attached to a non-woolen cloth are those from Nîmes present at Michilimackinac. The small size (just over 1 cm) and the motifs present on these seals are appropriate for use on silk (Adams 1989: 42; Sabatier 1912: Plate XV no.275- 276). The absence of these seals at Fort St. Joseph may be attributed to the small amount of work done at the site in contrast to the excavations at Michilimackinac, which have been in progress since the mid-20<sup>th</sup> century, or may truly be part of a trend suggesting that silk and luxury cloths were not as popular at Fort St. Joseph, either among Native Americans or the European settlers there. Further excavation and a larger sample size will certainly prove or disprove this idea.

Another seal missing from the Fort St. Joseph collections is that of Lyon. It is interesting that the only cloth mentioned by name in the Peyser manuscripts (1978) is not represented by at least one seal. While Michilimackinac has a few examples of seals from Lyon, they compose only 3 percent of total identified seals there, even after years of excavation. This could be explained by the fact that Lyon produced cotton textiles rather than woolens (Kent 2001: 672-

673, 647) and the scarcity of these seals may be a function of the popularity of woolens over all other cloth categories. While the cloth from Lyon may have been traded to Native Americans, it may be that it was imported primarily for use in the production of European style clothing such as kerchiefs (Kent 2001: 585-586), ladies skirts and petticoats (2001: 581-82), chemisettes (2001: 553) or chemises (2001: 547). The latter article was used often by both French and Native Americans (Kent 2001: 547-553, 581).

Overall, it appears that with aside from a higher silk and cotton consumption at Michilimackinac, the two posts have very similar patterns in the type of cloth present at the site, according to evidence provided by the lead seals. The overwhelming presence of woolen related seals at these sites agrees with the historical attestations to the popularity of woolens in the fur trade in the *Pays d'en Haut*. It is clear that in order to add to this data, further excavation is needed, with more seals almost certainly present at the site. Further excavation would also provide more contextualization within the site, possibly allowing for an intrasite analysis and the assignment of cloth types to certain areas of the site. However, for the present moment, this study allows us a wonderful illustration of the importance and use of cloth at Fort St. Joseph, as alluded to by historical sources as well.

## **Conclusions**

This study has shown that it is possible to use lead seals and documentary research in combination in order to determine the textiles once present at a site. This study, which drew from sources in several different disciplines, demonstrates the close connection between archaeology and history, and how one benefits from the other. Lead seals may be treated archaeologically, but they also are documentary artifacts that require not only historical research for identification, but

even more historical research to understand the meaning of the seal's provenience and relation to cloth consumption at a site.

It has also tested the relevance of the results that may be expected from other studies on lead seals conducted in this manner. It has given a place in the record to cloth long since disappeared, and has explored the impact of mercantilist economics on European cloth makers and merchants, and Native American and French communities present at the far reaches of a North American empire. This study only takes one approach to pulling information from lead seals. There are still many remaining questions to be answered, such as the role of the scratched numbers on the reverse of many seals, or if lead mined in the Illinois country was used to create seals here or back in Europe, to name a few.

In order to facilitate further research concerning lead seals, I would recommend that archaeologists and historians take into account several considerations. First, in order to facilitate research into lead seals and to allow more comparative opportunities for researchers interested in them, I strongly recommend that archaeological projects and museums have clear and detailed photographs of their lead seal collections available for the perusal of researchers. In the descriptive sense, "clear and detailed" is meant to qualify that photographs should be taken up close (most efficiently with a macro lens and an SLR camera) and with oblique lighting, as employed by this study and Diane Adams in her study of Michilimackinac seals (1989: 7) in order to emphasize surface detail, such as textile markings, lettering, and other impressions, on seals. If photographs are provided, photos of both the obverse and reverse sides of every seal or seal fragment should be given. Also, if publications are being done including photographs of seals discussed in a text or a collection, I believe that it is highly beneficial to include illustrations of the seals, at least the more diagnostic faces and details, as well. I have decided to

provide illustrations and photographs in this work, because too many times in my research, I found that the copies of certain theses and publications provided to me through my university library included important illustrations that were rendered unintelligible or entirely impossible to make out. Many photographs end up, through sub-par photocopying or digitizing efforts, as just a plate of black seal-shaped blobs in silhouette. Also, older publications that include photos are often so pixelated that discerning details and lettering is nearly impossible.

Another roadblock I encountered in my research is surely one that haunts researchers almost as a whole in history and archaeology. The availability of key sources needs to be worked on. Whether this means finding a way to re-release older publications that have become major and widely used references, such as Egan's 1995 work, or digitization of rare books or manuscripts (Sabatier's 1912 work especially, as to my knowledge only one or two copies in the world are available to scholars), it should be done. These difficulties may or may not be tied to my status as a young, undergraduate researcher, but if it were not for the aid granted to me by close academic colleagues in finding certain documents, it is possible that only a fraction of this research would have come to fruition.

Over the course of my research I have spoken with many historians and archaeologists alike that believe that further in depth research on lead seals needs to be undertaken. While examining and researching all of the lead seals present even only at French sites in North America is an overwhelming task for one person to fulfill, several well informed and skilled researchers with a basic background in lead seals could more easily make sense of the web of specimens that spans the continent. Further research on seals could also benefit from archival research. While this study was not focused on these numbers and rather the more identifiable marks on seals, it is not to say that an excellent study could not be done in order to determine if it

is possible to match seals to documents of the time. Cross examination with the Montreal Merchants' records could yield more precise historical context concerning these seals and those in other collections.

With many new routes for seal research to take, and if a growing interest in lead seals can be obtained, I believe that a great deal can still be learned from these often overlooked artifacts. Future research and expanded studies of other sites in North America could contribute greatly to our understanding of both cloth consumption and possibly even trade routes and shipping practices. I encourage others to pursue the information hidden in these seals, and to take the time and effort, as tedious as it may become, to look more closely at these fascinating artifacts.

## Appendix

Figure 8 : Joseph Vernet, « L'intérieur du port de Marseille vu du pavillon de l'Horloge du Parc » (1754), detail. Taken from <http://rives.revues.org/docannexe/image/1393/img-5.jpg> (Buti 2008)

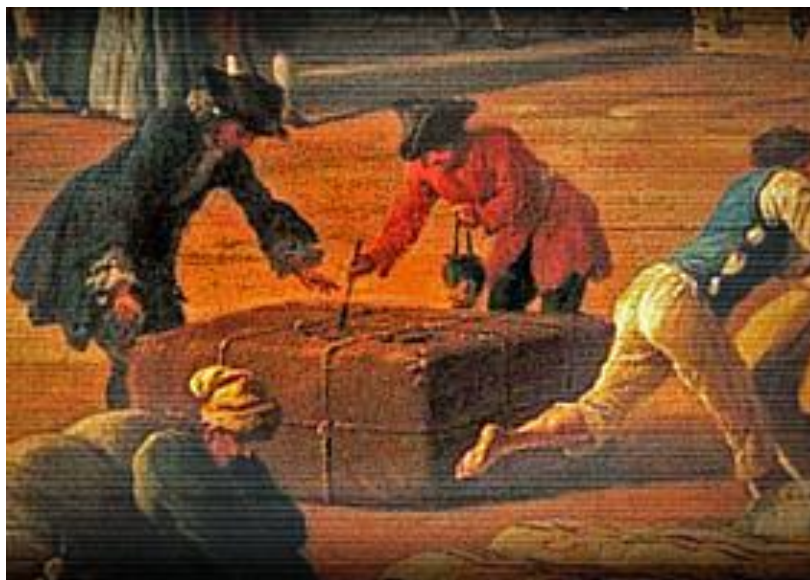


Figure 7 : Joseph Vernet, « L'intérieur du port de Marseille vu du pavillon de l'Horloge du Parc » (1754), detail. Taken from <http://rives.revues.org/docannexe/image/1393/img-1.jpg> (Buti 2008)



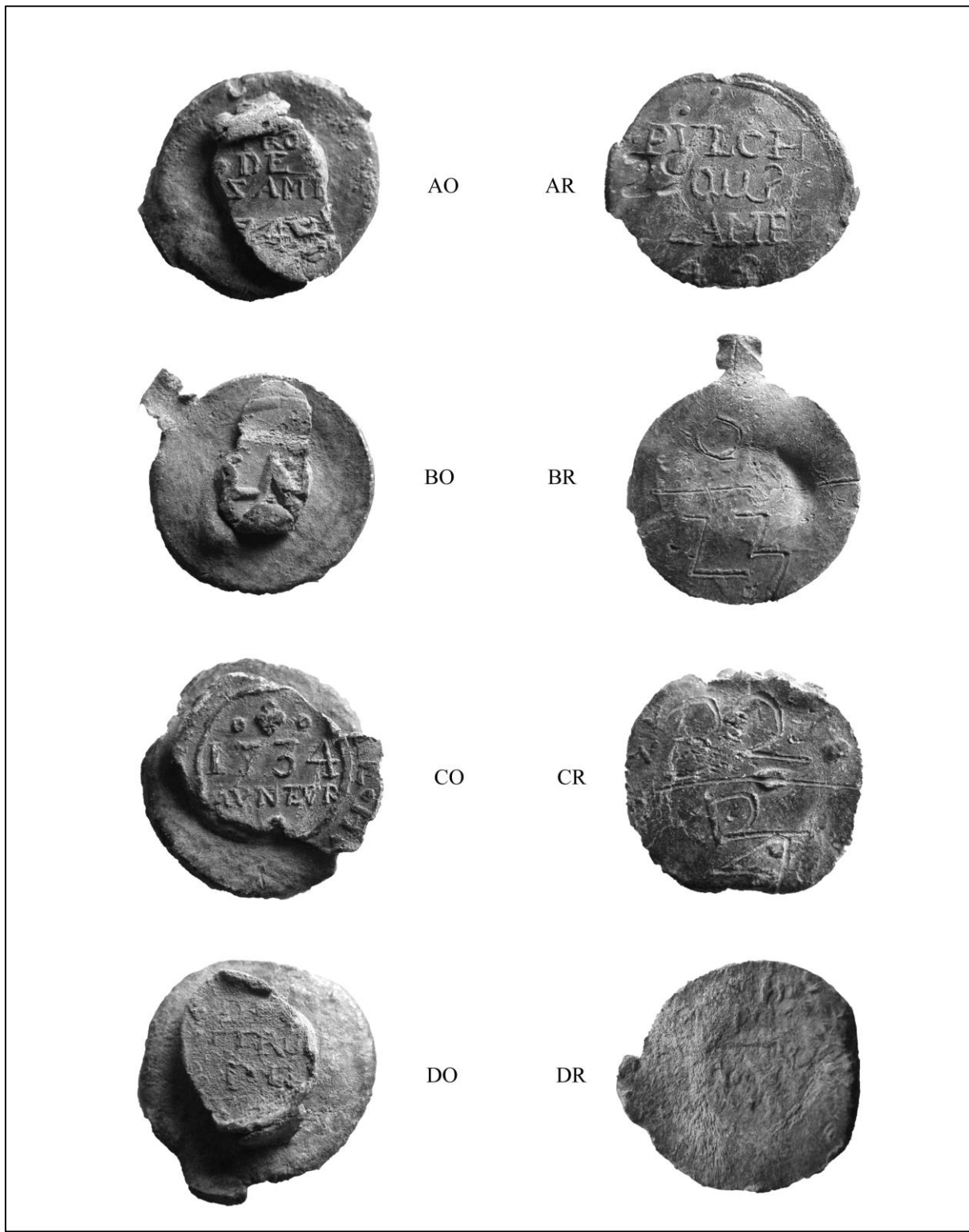
**Figure 9: Modern Map of France with Locations Discussed in the Text and Major Cities and Ports**



Image edited by Cathrine Davis from blank map available at: <http://www.france-pub.com/maps/region-blank-1000.jpg>

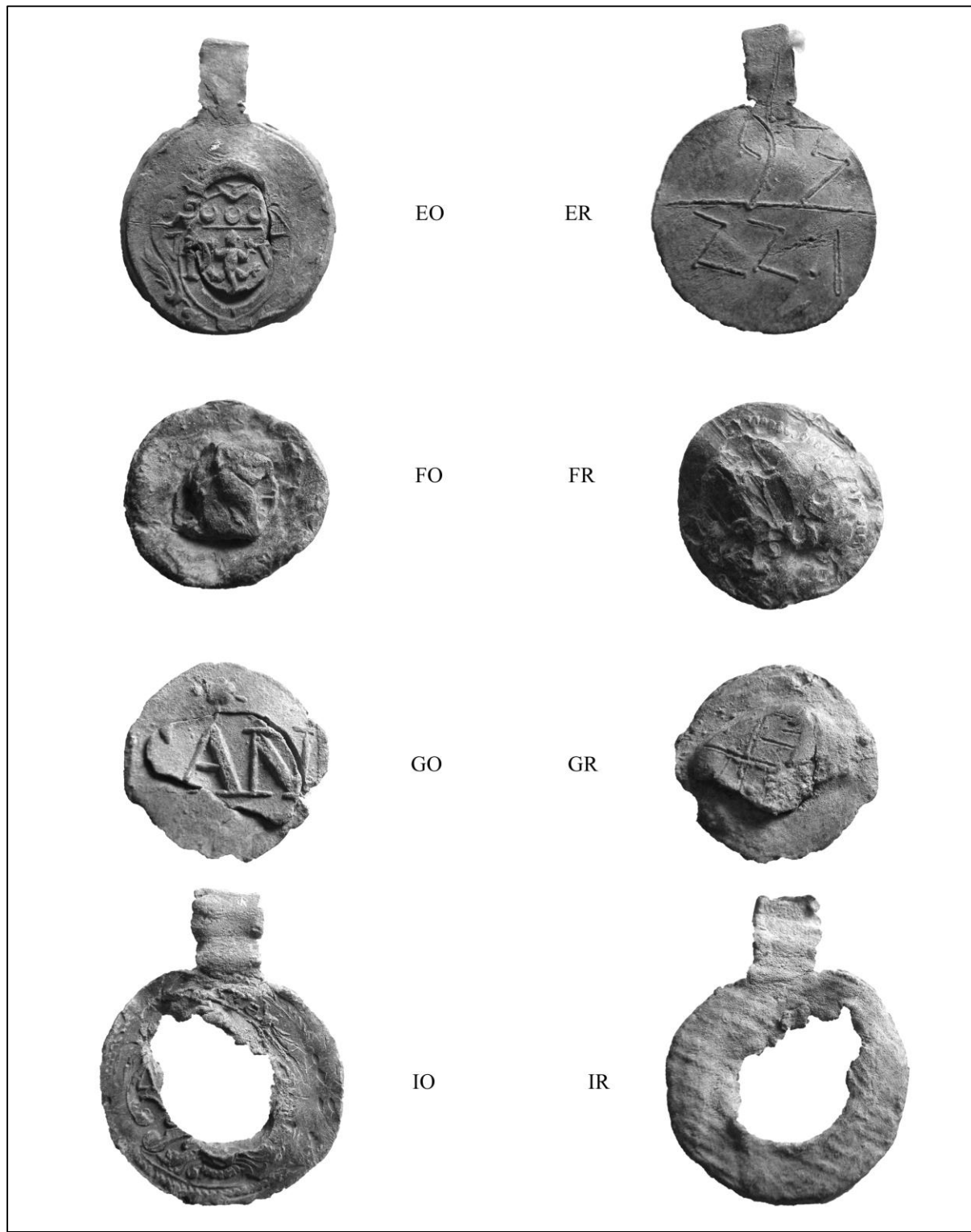


**Plate I: Center for History Collection #94.3.317 A, B, C, and D**



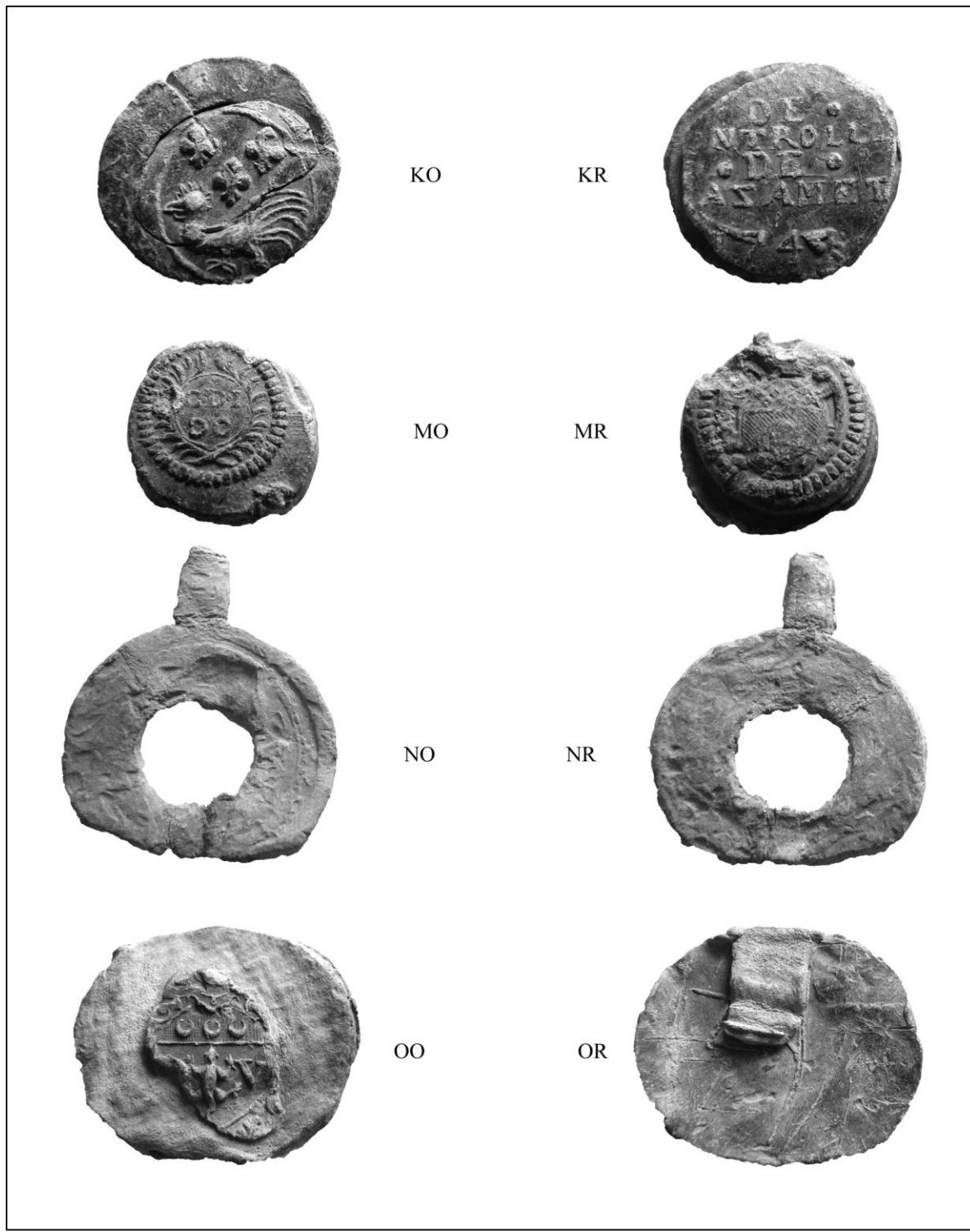
*Photo Credit C. Davis, Courtesy Center for History, South Bend, IN*

**Plate II: Center for History Collection #94.3.317 E, F, G, and I**



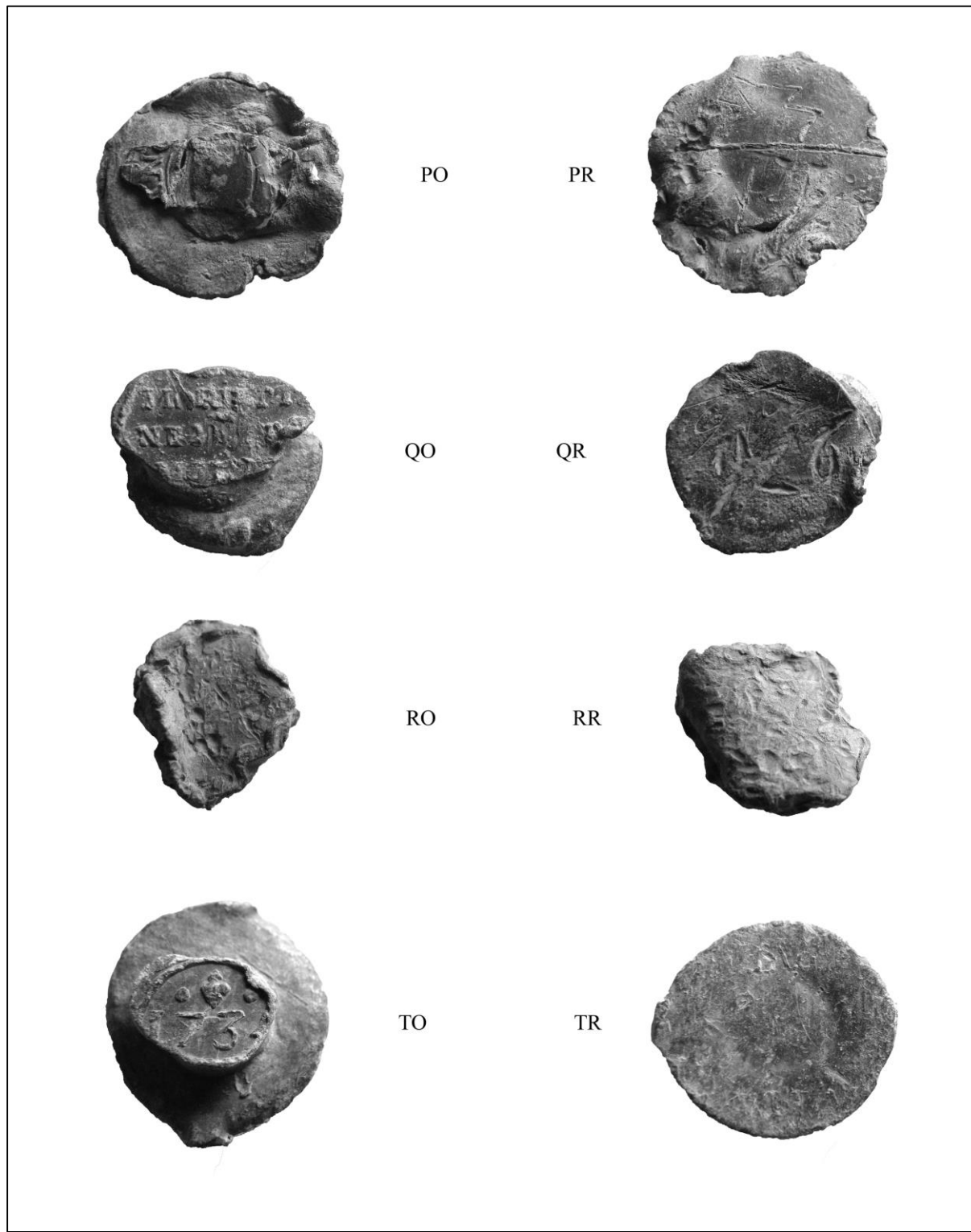
*Photo Credit C. Davis. Courtesy Center for History, South Bend, IN*

**Plate III: Center for History Collection #94.3.317 K, M, N, and O**



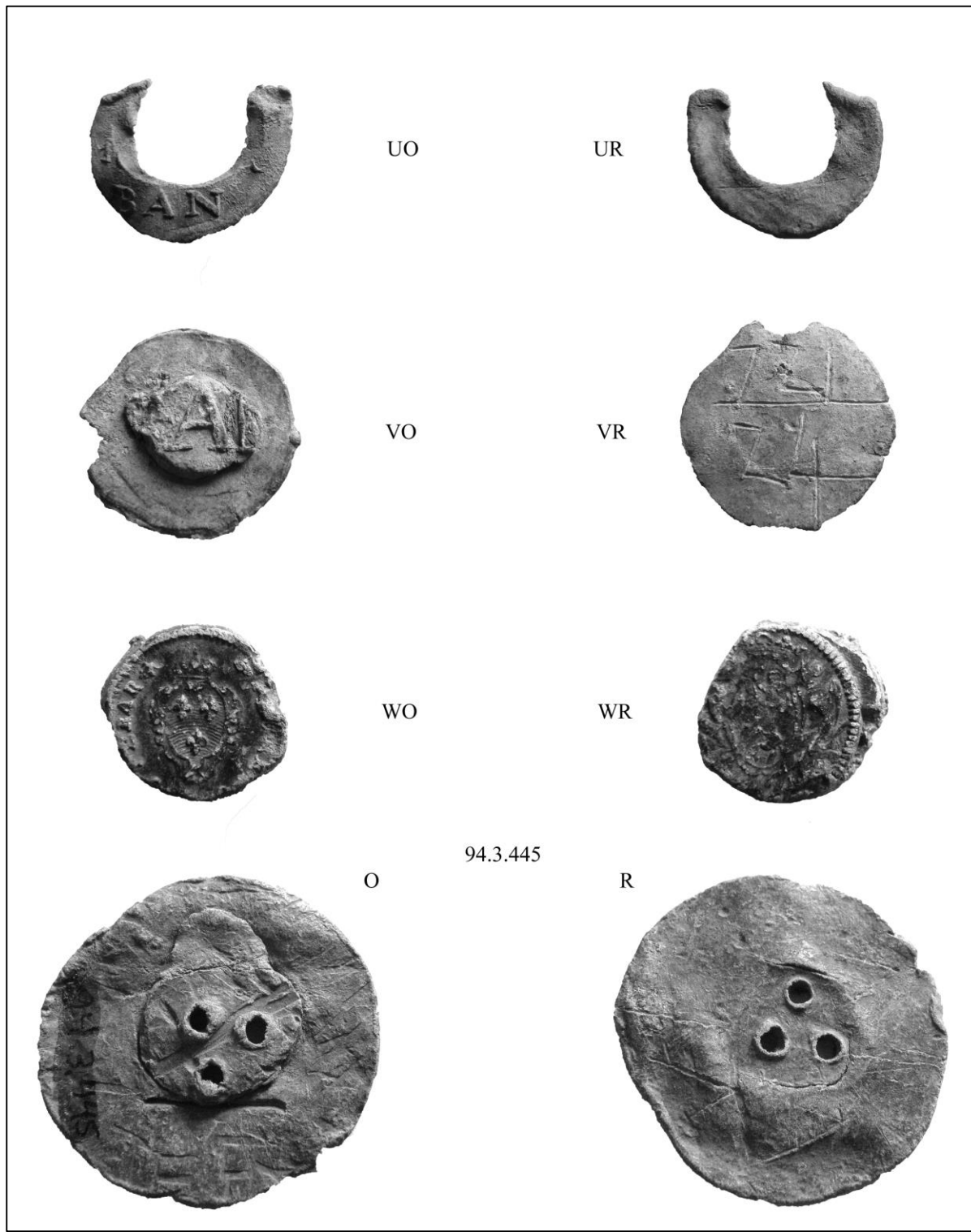
*Photo Credit C. Davis, Courtesy Center for History, South Bend, IN*

**Plate IV: Center for History Collection #94.3.317 P, Q, R, and T**



*Photo Credit C. Davis, Courtesy Center for History, South Bend, IN*

**Plate V: Center for History Collection #94.3.317 U, V, W; 94.3.445**



*Photo Credit C. Davis, Courtesy Center for History, South Bend, IN*

**Plate VI:** Center for History Collection: 94.3.317 S, H, L, and J  
(Obverse)



*Photo Credit C. Davis, Courtesy Center for History, South Bend, IN*

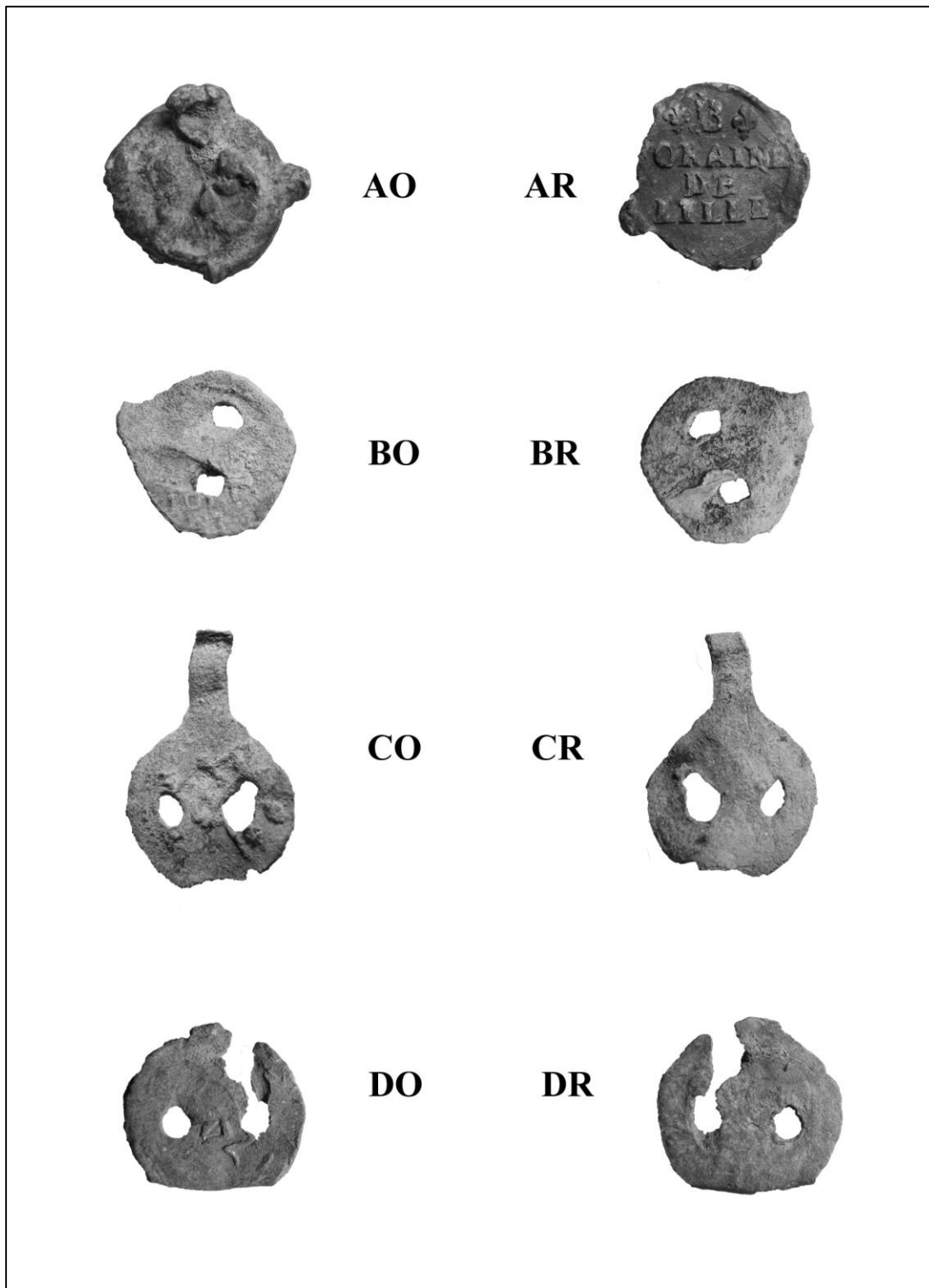
---

**Plate VII:**  
Center for History Collection: 94.3.317 S, H, L, and J (Reverse)



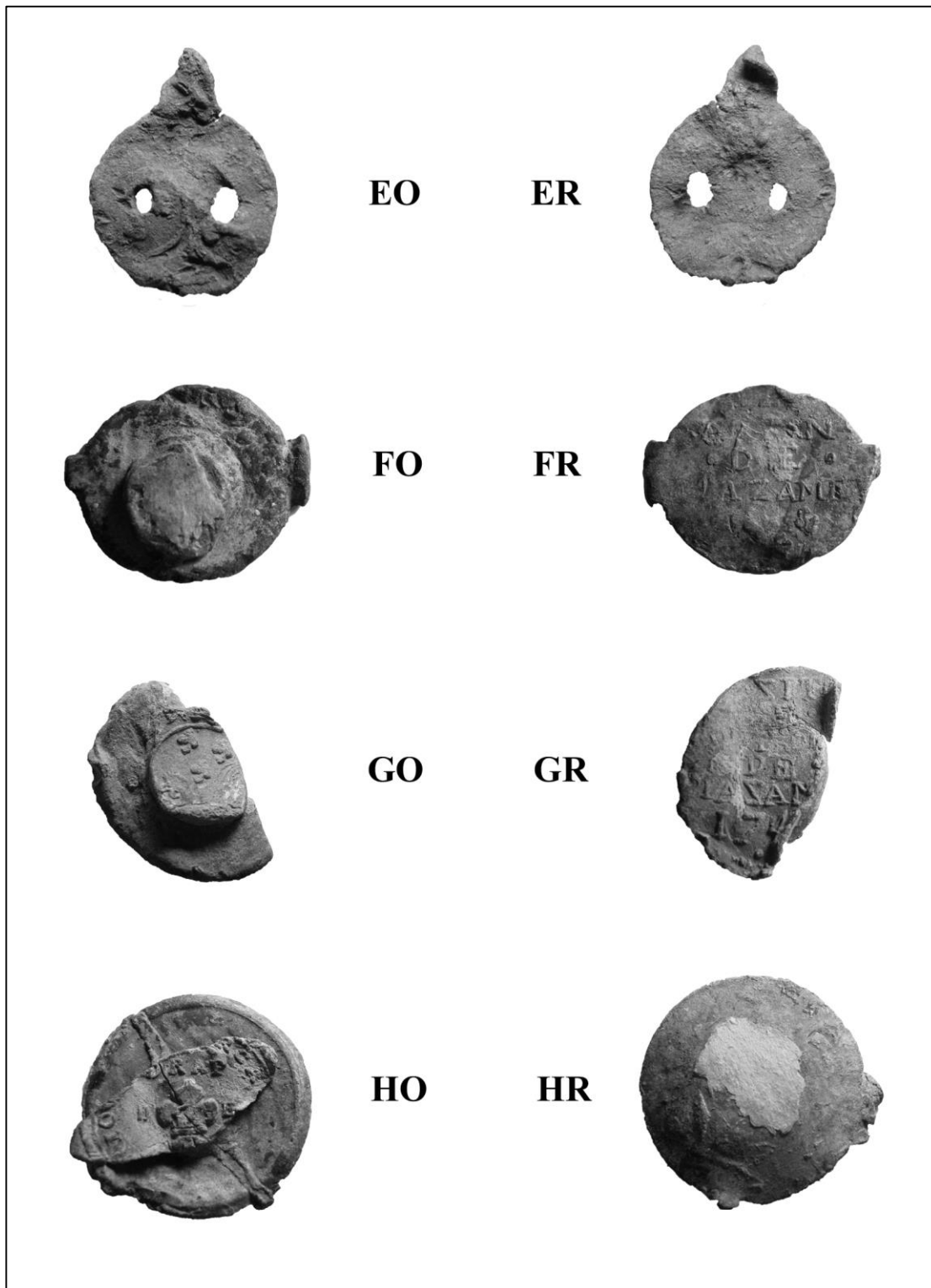
*Photo Credit C. Davis, Courtesy Center for History, South Bend, IN*

**Plate VIII: Fort St. Joseph Museum Collection Seals A-D**



*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*

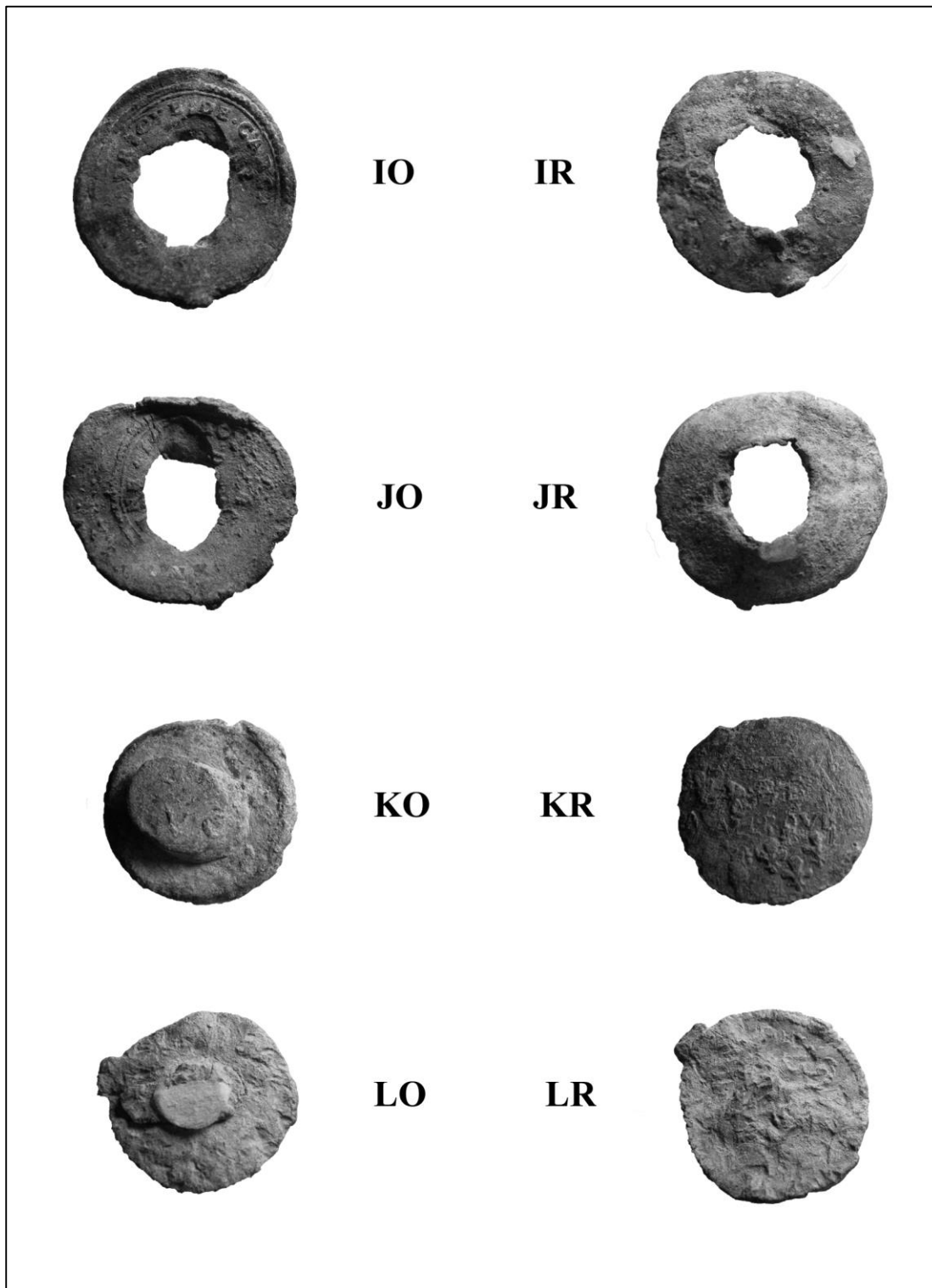
**Plate IX: Fort St. Joseph Museum Collection Seals E-H**



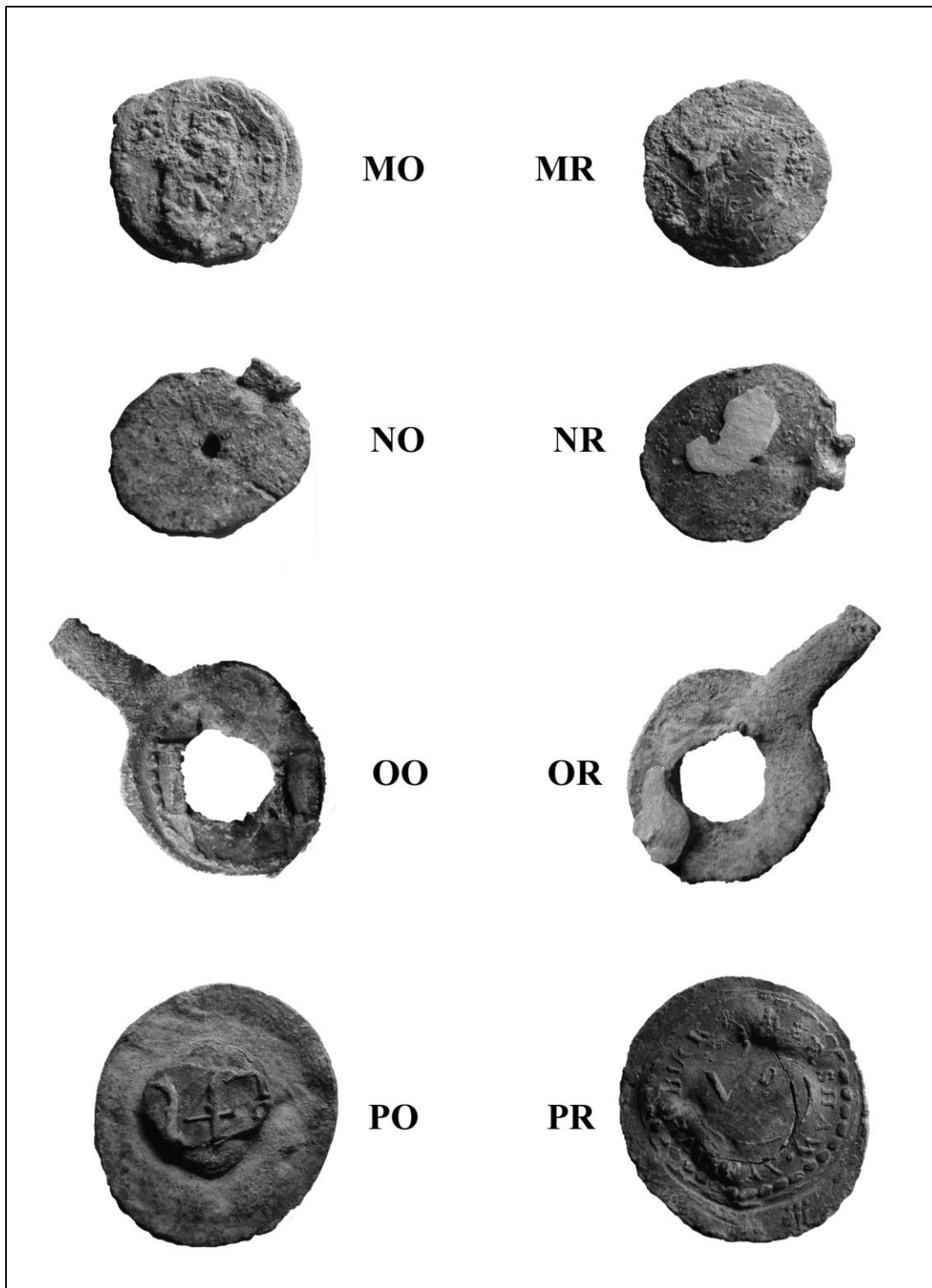
*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*



**Plate X: Fort St. Joseph Museum Collection Seals I-L**

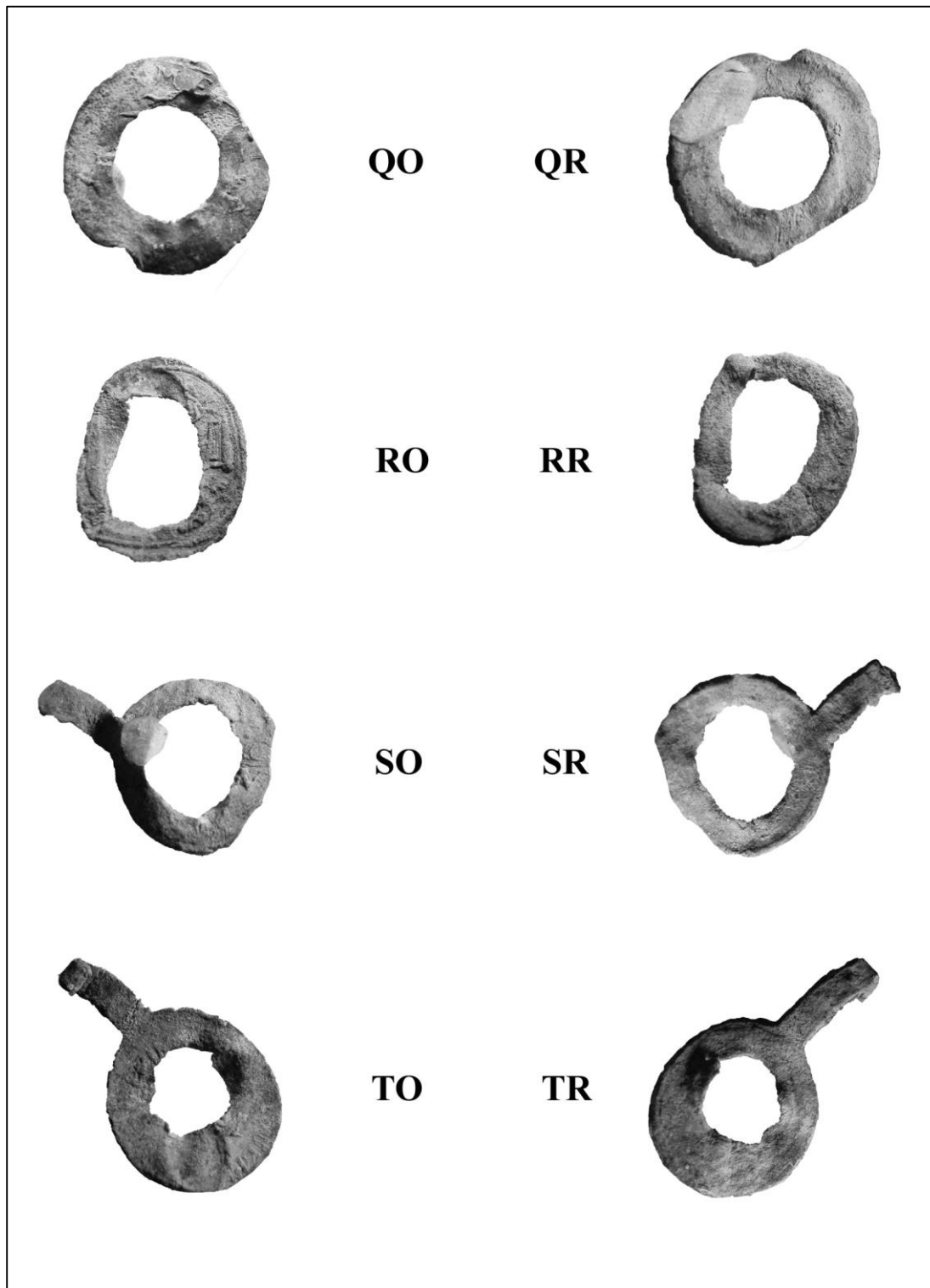


*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*

**Plate XI: Fort St. Joseph Museum Collection Seals M-P**

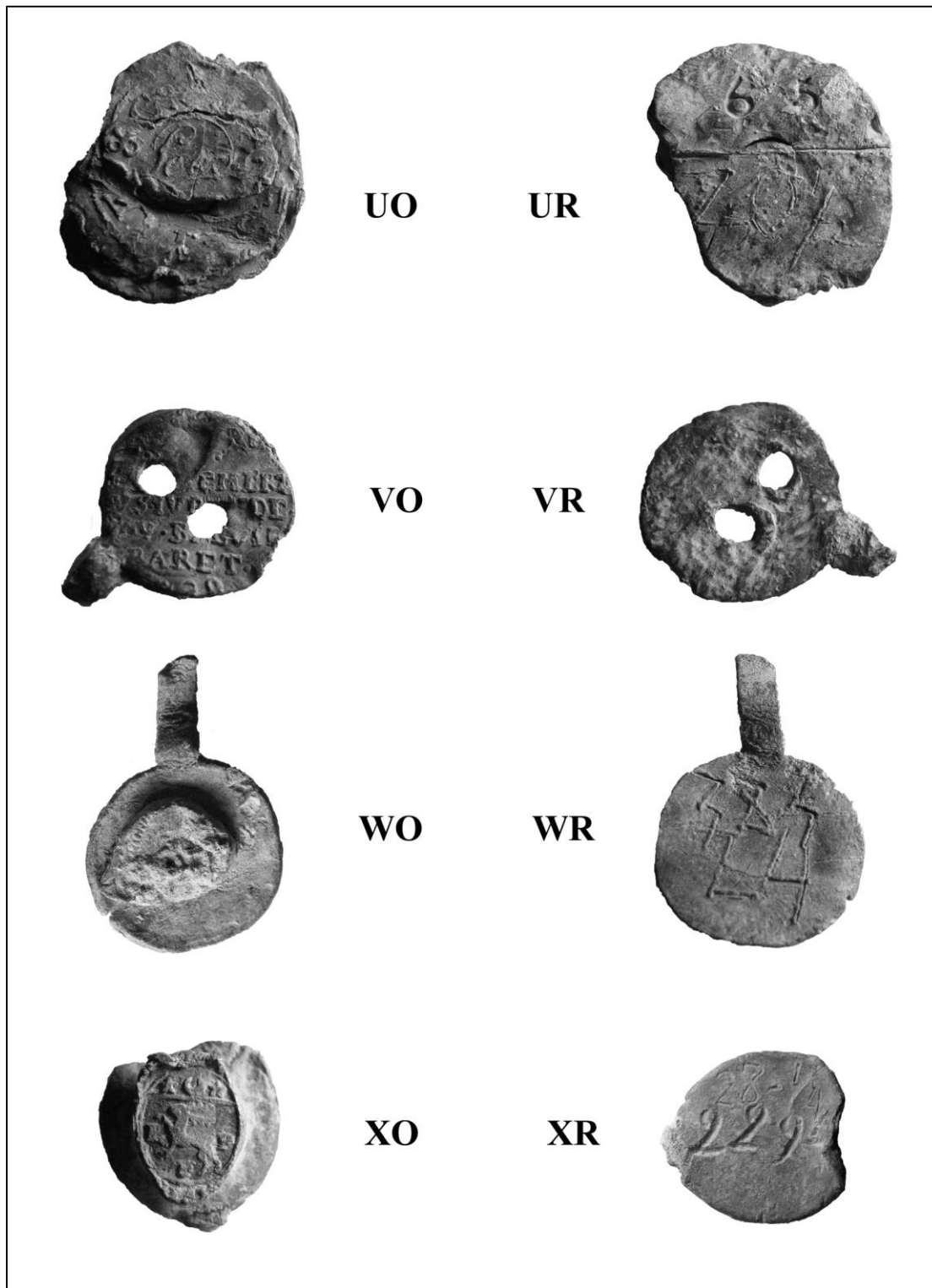
*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*

**Plate XII: Fort St. Joseph Museum Collection Seals Q-T**



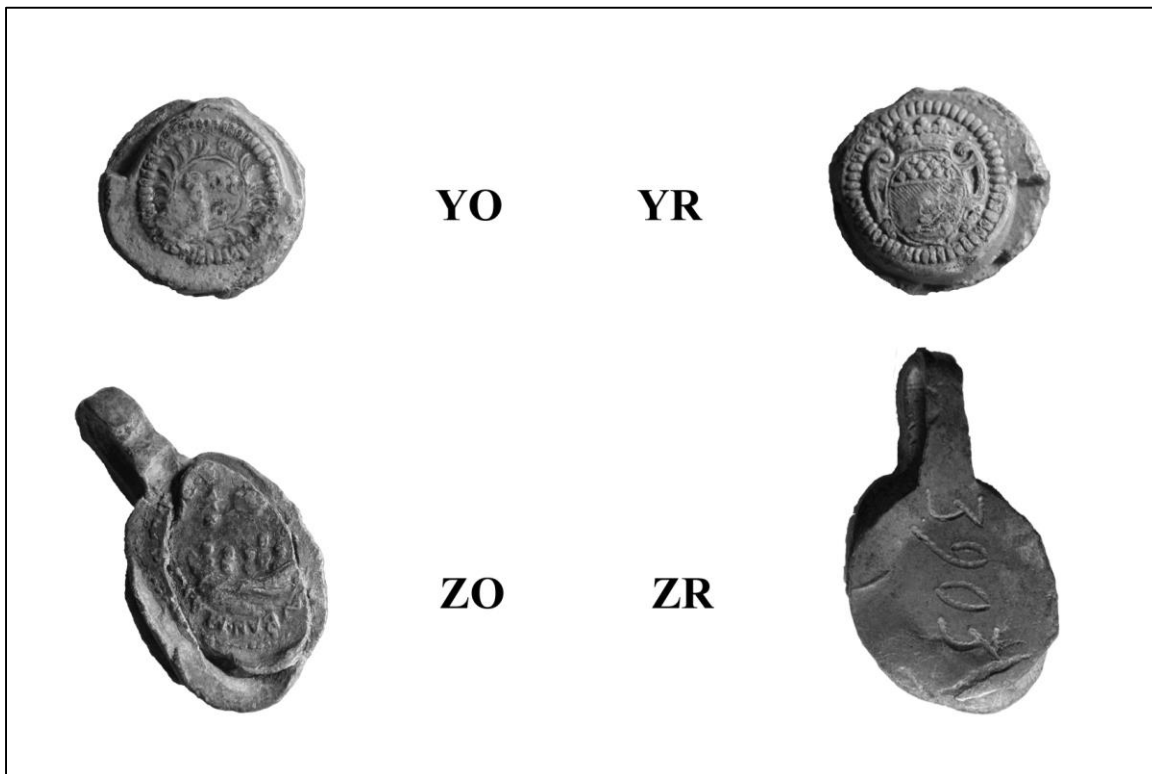
*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*

**Plate XIII: Fort St. Joseph Museum Collection Seals U-X**



*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*

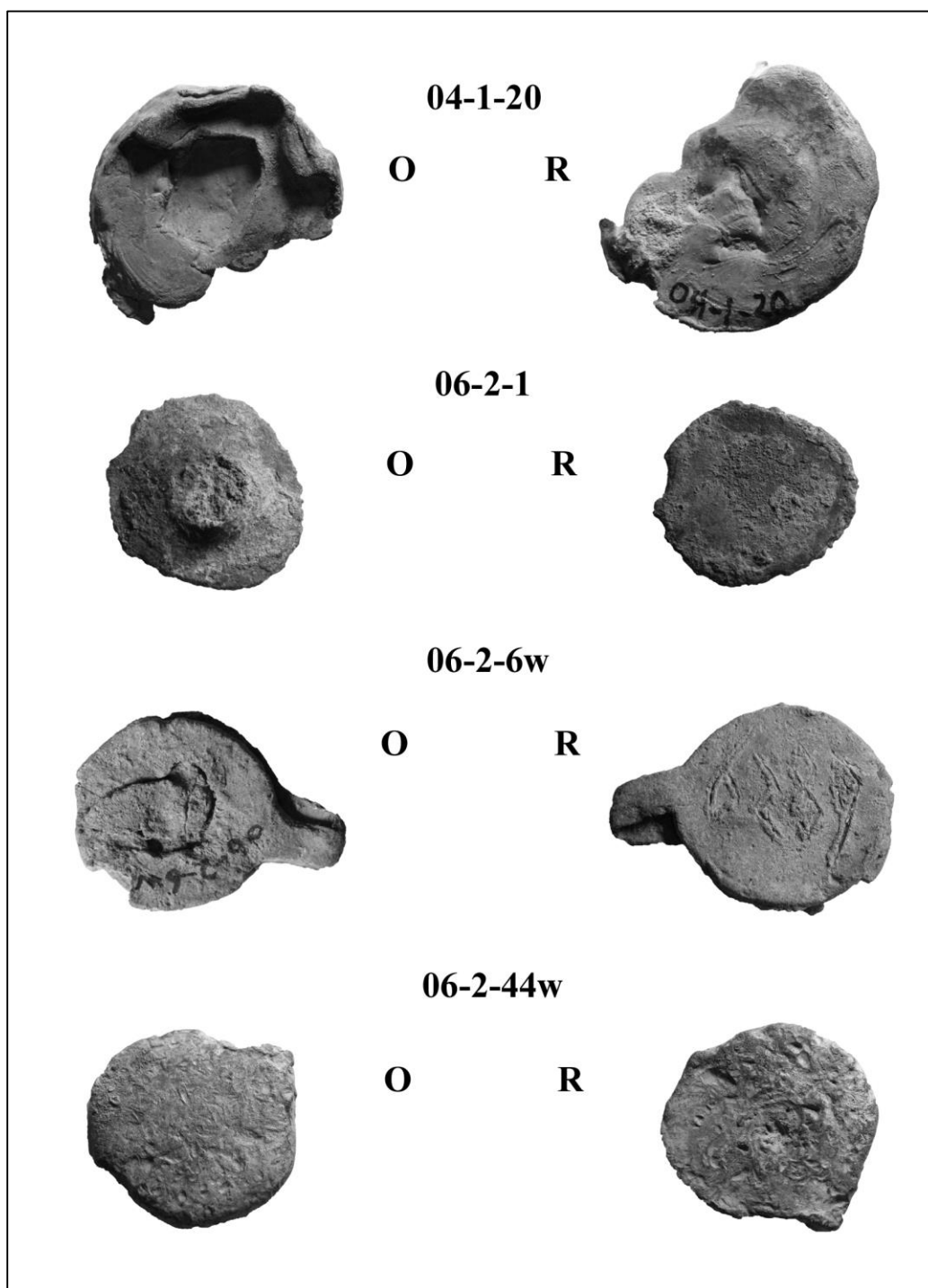
**Plate XIV: Fort St. Joseph Museum Collection Seals Y-Z**



*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*

**Plate XV: Fort St. Joseph Museum Collection**

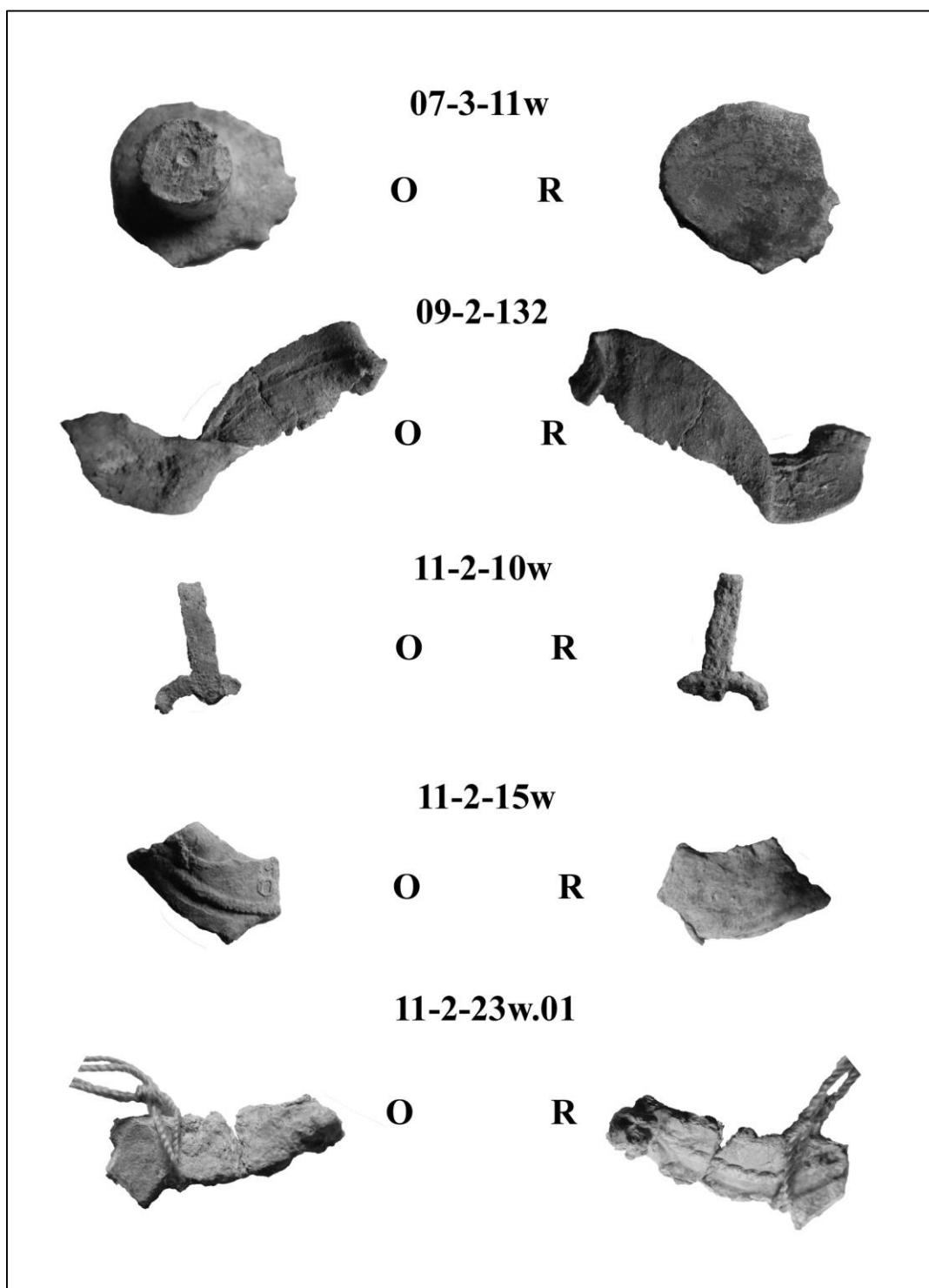
**FSJAP Seals 04-1-20 to 06-22-24w**



*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*

**Plate XVI: Fort St. Joseph Museum Collection**

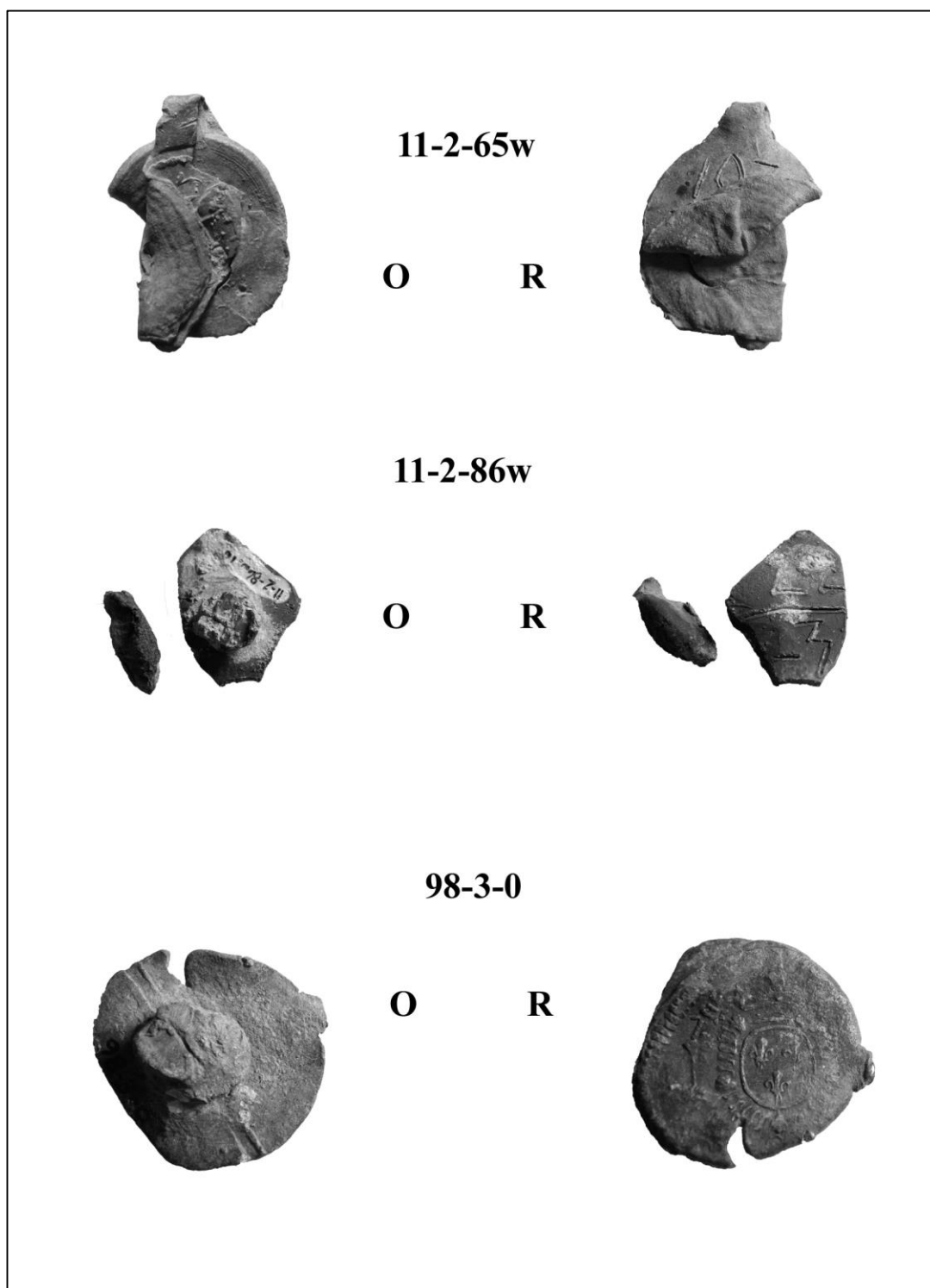
**FSJAP Seals 07-3-11w to 11-2-23w.01**



*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*

**Plate XVII: Fort St. Joseph Museum Collection**

**FSJAP Seals 11-2-65w to 98-3-0**



*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*



**Plate XIX: Fort St. Joseph Museum Collection**

**FSJAP Seals 07-3-54, 08-2-105w, 12-2-49w, 09-2-110 Obverse**



*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*

---

**Plate XX: Fort St. Joseph Museum Collection**

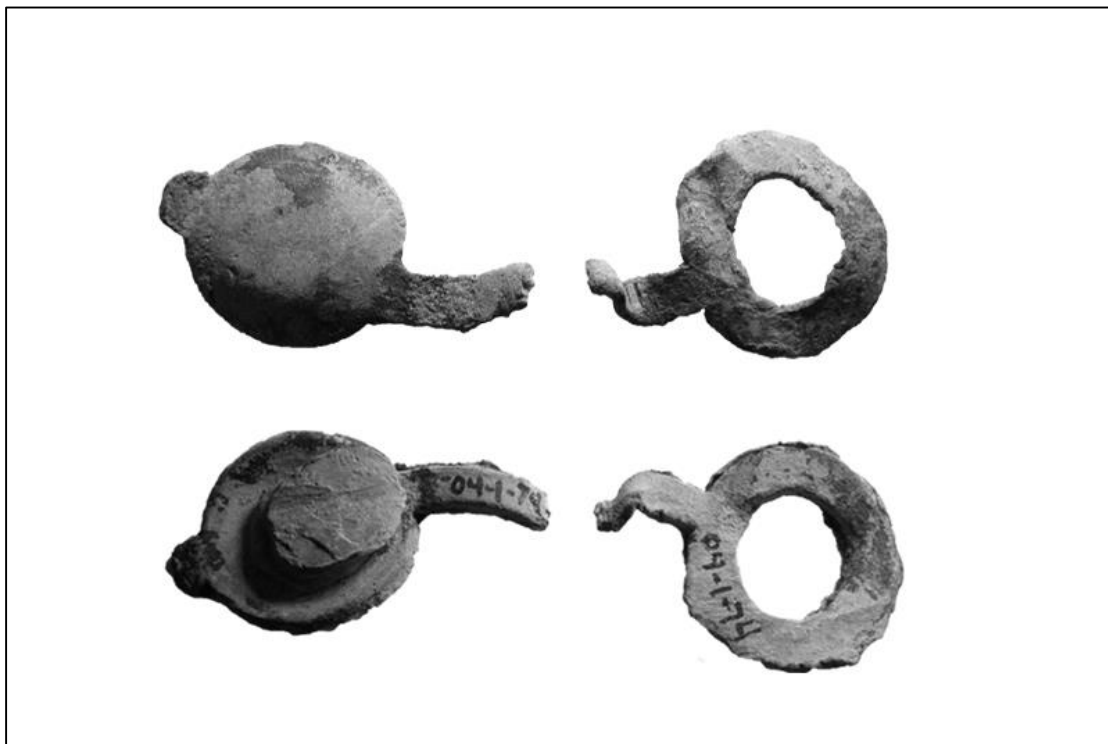
**FSJAP Seals 07-3-54, 08-2-105w, 12-2-49w, 09-2-110 Reverse**



*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*

**Plate XXI: Fort St. Joseph Museum Collection**

**FSJAP Seal 09-1-74**



*Photo Credit C. Davis, Courtesy Fort St. Joseph Museum*

## **Bibliography**

- Adams, Diane L, 1989. *Lead Seals from Fort Michilimackinac, 1715-1781*. Archaeological Completion Report Series. No. 14. Mackinac State Historic Parks, Mackinac Island, Mich.
- Allaire, Bernard, 1999. *Pelleteries, manchons et chapeaux de castor : les fourrures nord-américaines à Paris 1500-1632*. Les Éditions du Septentrion, Sillery, QC.
- Atkinson, Frank, 1956. *Some aspects of the Eighteenth Century Woolen and Worsted Trade in Halifax*. Halifax Museums, Halifax, UK.
- Anderson, Dean L., 1994. The Flow of European Trade Goods into the Western Great Lakes Region, 1715 – 1760. *The Fur Trade Revisited: Selected Papers of the Sixth North American Fur Trade Conference*. East Lansing, Michigan State University Press. p. 93-115.
- Anderson, Fred. 2001. *Crucible of War: The Seven Years' War and the Fate of Empire in British North America, 1754-1766*. Random House Inc., New York.
- Armour, David A., 2000. *Colonial Michilimackinac* Mackinac State Historic Parks, Mackinac Island, Mich.
- Bauer, Skyler, 2013. Fort St. Joseph Archaeological Project: 2013 Field Season. *The SHA Newsletter*, 46 (4), p. 21-23.
- Belting, Natalia Maree. 2003. *Kaskaskia Under the French Regime*. Southern Illinois University Press, Carbondale, Illinois.
- Bergasse, Louis, and Gaston Rambert. 1954. *Histoire du commerce de Marseille Vol.IV*. Librairie Plon, Paris.
- Buti, Gilbert, 2008. « Des goûts et des couleurs. Draps du Languedoc pour clientèle levantine au XVIII<sup>e</sup> siècle », *Rives nord-méditerranéennes* [online], 29 (2008) accessed April 4, 2014. URL : <http://rives.revues.org/1393>
- Calver, William L, and Reginald Bolton. 1950. *History Written with Pick and Shovel: Military Buttons, Belt-plates, Badges and other relics excavated from Colonial, Revolutionary, and War of 1812 Camp Sites by the Field Exploration Committee of the New-York Historical Society*. New York Historical Society, New York.
- Cazals, Rémy, 1992. *Histoire de Castres, Mazamet, La Montagne*. Privat, Toulouse.
- Cotsonis, John A., 2008. *Onomastics, Gender, Office and Images on Byzantine Lead Seals: A Means of Investigating Personal Piety*. Centre for Byzantine, Ottoman and Modern Greek Studies, University of Birmingham. Birmingham, AL.

- Dechêne, Louise. 1988. *Habitants et marchands de Montréal au XVII<sup>e</sup> siècle*. Les Éditions du Boréal, Montreal, QC.
- Dunn, A.W., 1983. *A handlist of the Byzantine lead seals and tokens (and of Western and Islamic seals) in the Barber Institute of Fine Arts, University of Birmingham*. University of Birmingham, Barber Institute of Fine Arts, Birmingham, AL.
- Egan, Geoffrey, Michael Cowell, and Hero Granger-Taylor. 1995. *Lead Cloth Seals and Related Items in the British Museum*. Dept. of Medieval and Later Antiquities, British Museum, London.
- Ekberg, Carl J., 1996. *Colonial Ste. Genevieve: An Adventure on the Mississippi Frontier*. The Patrice Press, Tucson, AZ.
- Endrei, Walter, and Geoffrey Egan, 1982. The Sealing of Cloth in Europe, with Special Reference to the English Evidence. *Textile History* 13(1) 47-75.
- Evans, Lynn L. M. 2001. *House D of the Southeast Row House: Excavations at Fort Michilimackinac, 1989-1997*. Archaeological Completion Report Series. No. 17. Mackinac State Historic Parks, Mackinac Island, Mich.
- Fregault, Guy, 1955. *Histoire de la Nouvelle-France, Tome IX : La guerre de la conquête 1754-1760*. Fides, Montreal, QC.
- Gallup, Andrew and Donald F. Shaffer. 1992. *La Marine: The French Colonial Soldier in Canada 1745-1761*. Heritage Books, Inc. Westminster, Maryland.
- Gale, Ryan R. 2009. *The Great Northwest Fur Trade : A Material Culture, 1763-1850*. Track of the Wolf, Inc. Elk River, MN.
- Garsault, François Alexander de, 1771. *L'Art de la Lingere*. L'Imprimerie L.F.Delatour.
- Gilman, Carolyn, 1982. *Where Two Worlds Meet: The Great Lakes Fur Trade*. Museum Exhibit Series, Issue 2. Minnesota Historical Society Press, St. Paul.
- Good, Mary Elizabeth, 1972. *Guebert Site: an 18<sup>th</sup> century historic Kaskaskia Indian Village in Randolph County, Illinois*. Central States Archaeological Societies, Inc., and Mary Elizabeth Good.
- Havard, Gilles, 2003. *Empire et métissages: Indiens et Français dans le Pays d'en Haut 1660-1715*. Septentrion, Sillery.
- Havard, Gilles, and Cécile Vidal, 2008. *Histoire de l'Amérique française*. Éditions Flammarion, Paris.

Hulse, Charles A., 1977. An Archaeological Evaluation of Fort St. Joseph: An Eighteenth Century Military Post and Settlement in Berrien County, Michigan. Master's Thesis, Department of Anthropology, Michigan State University, East Lansing, MI.

Hume, Ivor Noël, 1969. *A Guide to Artifacts of Colonial America*. University of Pennsylvania Press, Philadelphia.

Idle, Dunning, 2001. The Post of the St. Joseph River During the French Regime 1679-1761. Ph.D. Dissertation in History, Graduate School of the University of Illinois, University of Illinois, Urbana, IL Reprinted by Support the Fort.

Innis, Harold A., 2001. *The Fur Trade in Canada*. University of Toronto Press Incorporated, Toronto.

Jean, Régis et André Proulx, 1995. *Le commerce à Place-Royale sous le Régime français*. Gouvernement du Québec, Ministère de la culture et des communications, Québec.

Juen, Rachel and Michael Nassaney, 2012. *The Fur Trade*. Fort St. Joseph Archaeological Project Booklet Series, No. 2. Kalamazoo, MI: Western Michigan University, Department of Anthropology.

Kent, Timothy J., 2001. *Ft. Ponchartrain at Detroit: A Guide to the Daily Lives of Fur Trade and Military Personnel, Settlers, and Missionaries at French Posts*. Silver Fox Enterprises, Ossineke

Loren, Diana DiPaolo, 2010. *The Archaeology of Clothing and Bodily Adornment in Colonial America*. University Press of Florida, Gainesville, FL

MacDonald, David, 2013. Introduction to Colonial Era Lead Seals. *Le Journal* Vol.29, No.4 (Fall 2013). p. 1-6

MacDonald, David, 2012. A French Cloth Seal Recovered at Fort St. Joseph, Michigan. *Le Journal*, 28 (1) p. 8

MacDonald, David, 2012. Sealed and Delivered: Decoding Colonial-Era Lead Seals. *Journal of Early Americas*, 2 (3) p. 20-25

Maxwell, Moreau S. and Lewis R. Binford, 1961. *Excavation at Fort Michilimackinac : Mackinac City, Michigan, 1959 Season*. Museum, Michigan State University, East Lansing, MI.

Mazrim, Robert F., 2011. *At Home in the Illinois Country: French Colonial Domestic Site Archaeology in the Midwest 1730-1800*. Illinois State Archaeological Survey, Urbana, IL.

Miquelon, Dale, 1978. *Dugard of Rouen : French Trade to Canada and the West Indies 1729-1770*. McGill-Queen's University Press, Montreal and London.

- Miquelon, Dale, 1975. *Havy and Lefebvre of Quebec: A Case Study of Metropolitan Participation in Canadian Trade 1730-60*. The Canadian Historical Review Vol. 56 No.1 (March 1975) , p 1-24.
- Minard, Philippe, 1998. *La Fortune du Colbertisme : État et industrie dans la France des Lumières*, Paris, Fayard.
- Morand, Lynn L., 1994. *Craft Industries at Fort Michilimackinac, 1715-1781*. Archaeological Completion Report Series. No. 15. Mackinac State Historic Parks, Mackinac Island, Mich.
- Nassaney, Michael S., 2008. Identity Formation at a French Colonial Outpost in the North American Interior. *International Journal of Historical Archaeology* 12 (4): 297-318.
- Nassaney, Michael S., José Antonio Brandao, William M. Cremin, Brock A. Giordano, 2007. Archaeological Evidence of Economic Activities at an Eighteenth-Century Frontier Outpost in the Western Great Lakes. *Historical Archaeology*, 41(4): 3-19.
- Noble, Vergil E., 1983. Functional Analysis and Intra-Site Analysis in Historical Archaeology: A Case Study from Fort Ouaténon. Master's Thesis, Department of Anthropology, Michigan State University, East Lansing, MI.
- Oikonomidès, Nicolas, 1985. *Byzantine Lead Seals*. Issue 7 of Byzantine Collection Publications Series, No 7. Dumbarton Oaks, Washington D.C.
- Parker, Harold T. 1979. *The Bureau of Commerce in 1781 and Its Policies With Respect to French Industry*. Carolina Academic Press, Durham, North Carolina.
- Parker, Harold T. 1993. *An Administrative Bureau during the Old Regime: The Bureau of Commerce and Its Relations to French Industry from May 1781 to November 1783*. Associated University Presses, Inc. Cranbury, NJ.
- Peyser, Joseph L., 1978. *The Fort St. Joseph Manuscripts: Chronological Inventory and Translations* (Ms. on file, WMU Archives and Regional History Collections, Kalamazoo, Michigan)
- Reid, Allana J., 1951. *Intercolonial Trade During the French Regime*. The Canadian Historical Review Vol.32 No. 3 (Sept 1953), p 236-251.
- Reid, Allana J., 1953. *General Trade Between Quebec and France During the French Regime*. The Canadian Historical Review Vol.34 No. 1 (March 1953), p.18-32.
- Sabatier, Antoine, 1908. « *Étude Révisionnelle des Sceaux de Plomb Fiscaux et Commerciaux*, » Bulletin de la Société des Sciences & Arts de Beaujolais, No.33 (January-March, 1908), p. 5-30

Sabatier, Antoine, 1912. *Sigillographie historique des administrations fiscales, communautés ouvrières et institutions diverses ayant employé des sceaux de plomb (XIV-XVIII siècles) : plombs historiés de la Saône et de la Seine*. H. Champion, Paris

Skinner, Claiborne A. 2008. *The Upper Country: French Enterprise in the Colonial Great Lakes*. Johns Hopkins University Press, Baltimore, Maryland.

Stone, Lyle. 1974. *Fort Michilimackinac 1715-1781 An Archaeological Perspective on the Revolutionary Frontier*. Anthropological Series Vol. 2. The Museum, Michigan State University, Lansing.

Tedesco, Carol. 2002. "Santa Margarita Lead Bale Seal: Artifact 49987" *The Navigator: Newsletter of the Mel Fisher Maritime Heritage Society*, Vol.18, No. 6. Accessible Online: [http://www.melfisher.org/pdf/Santa\\_Margarita\\_Lead\\_Bale\\_Seal.pdf](http://www.melfisher.org/pdf/Santa_Margarita_Lead_Bale_Seal.pdf)

Tichenor, Harold, 2002. *The Blanket: An Illustrated History of the Hudson's Bay Point Blanket*. Quantum Books, Wilmington, MA.

Trigger, Bruce, 1994. *Natives and Newcomers: Canada's "Heroic Age" Reconsidered*, Manchester, Manchester University Press.

Waselkov, Gregory A., 1999. *Old Mobile Archaeology*. University of South Alabama Archaeology Booklet 1. Center for Archaeological Studies, University of South Alabama, Mobile, AL.

Wheeler, Robert C., Walter A. Kenyon, Alan R. Woolworth, and Douglas A. Birk, 1975. *Voices from the rapids: an underwater search for fur trade artifacts, 1960-73*. Minnesota Historical Archaeology Series, No.3. Minnesota Historical Society Press, St. Paul.

White, Richard. 2011. *The Middle Ground: Indians, Empires, and Republics in the Great Lakes Region, 1650-1815*. Cambridge University Press, New York, NY.

White, Sophie. 2012. *Wild Frenchmen and Frenchified Indians: Material Culture and Race in Colonial Louisiana*. University of Pennsylvania Press, Philadelphia, Pennsylvania.

## Websites

<http://dnr.alaska.gov/parks/oha/castlehill/chpteleven.htm> (Alaska Department of Natural Resources (DNR) Castle Hill Archaeological Project) Accessed 3/29/14.

<http://www.lakenhal.nl/en/> (Website for Lakenhal Museum) Accessed 3/29/14.

<http://fr.wikipedia.org/wiki/Mazamet> (Wikipedia Article on Mazamet) Accessed 3/29/14.

<http://www.jeuxpac.net/jeu3-objets-f.html> (Pointe-à-Callière Fiche Objets) Accessed 3/30/14.

<http://www.mcq.org/place-royale/en/themes.php?id=6&ver=1> (Centre d'Interprétation de Place Royale) Accessed 3/30/14.

“Pulcher”. 1997. In *Collins Latin Dictionary*. Retrieved from <http://search.credoreference.com/content/entry/hcdlat/pulcher/0> Accessed 3/30/14.

“Roubaix”. (2013). In *The Hutchinson unabridged encyclopedia with atlas and weather guide*. Retrieved from <http://search.credoreference.com/content/entry/heliconhe/roubaix/0> Accessed 3/30/14.