3.4 **The prehistoric lithic assemblage** by I.P. Brooks

Introduction

A total of 1656 flint and chert artefacts were recovered during the excavations at Fullerton. The majority of these were found in two trenches, trench 1 with 889 artefacts (53.68 per cent) and trench 5 with 518 artefacts (33.10 per cent) The other trenches contained: trench 2 127 artefacts (7.67 per cent), trench 3 24 artefacts (1.45 per cent, trench 4 73 artefacts (4.41 per cent) and trench 6 14 artefacts (0.85 peninsula cent). The majority of the artefacts were recovered from Roman or later contexts and can therefore be regarded as essentially residual; however, context 565 in trench 6 was a pre-Roman soil, but unfortunately only two artefacts were recovered from sampling this layer.

A wide range of artefacts was recovered, covering a long time span. Of particular note were a series of Upper Palaeolithic tools and some waste, although elements of Mesolithic to Bronze Age assemblages were also noted.

The assemblage is summarized in Appendix 1. The description of the artefacts follows that of Inizan *et al.* (1992) and the flint colours are defined by the Geological Society of America's Rock-Color Chart (Goddard *et al*. 1948). The flakes were divided into three groups: primary flakes with completely cortical dorsal surfaces, secondary with partly cortical dorsal surfaces and tertiary with uncorticated dorsal surfaces.

Raw materials

Of the 1656 artefacts recovered the raw material type could not be determined on 469 (28.3 per cent) artefacts because they were either burnt and discoloured, or were patinated to a sufficient degree that the raw material was not determinable. Of the remaining 1187 artefacts the vast majority were of flint, with only one object of Portland Chert.

The flint from the site was highly variable with the flint types ranged between a highly translucent dusky yellowish brown (10 YR 2/2) to an opaque very light grey (N8); however, the majority of the artefacts were on flint with a moderate to good translucency possibly suggesting some basic selection of raw materials was taking place. It is noticeable, however, that where cortex survives on the artefacts it is thin and worn suggesting a secondary source for the flint. The site is on a deposit of clay-with-flints and it is suggested that this was the main source of the flint being exploited on the site. It is also possible that a small percentage was being brought to the site from further afield as is suggested by the presence of a Portland Chert worked lump with the assemblage. Whilst Portland Bill is traditionally regarded as the source for this chert type, it has a much wider distribution in Dorset and is often associated with Carstens series soils (Sharples 1991, 254).

Distribution

The distribution of lithic artefacts across the site reflects, to a large degree, the distribution and volume of contexts excavated with large volume context such as trench 5 contexts 573 and 574 containing significantly higher numbers of artefacts. There is, however, a slight suggestion of a higher density of flint artefacts towards the north of the site, particularly in trenches 1 and 6 which may be related to the survival of a pre-Roman soil at this end of the excavation. This is particularly noticeable with the Upper Palaeolithic and Mesolithic artefacts which tended to concentrate in trench 1.

Late Upper Palaeolithic

A small group of ten artefacts of probable Late Upper Palaeolithic date were recovered during the course of the excavation; these tend to concentrate in trench 1 with only two artefacts being recovered from outside this trench. Three points, all from trench 1, have been found together with a backed blade, four large blade fragments, a single platform blade core and a double burin. All of these artefacts are distinctive, not only in their size and form, but also in the level of patination.

The three points, or point fragments, consisted of a tanged point, the broken tang of a second point and a possible Creswell point.

The core is basically a single platform, pyramidal core, with blade removals around the total periphery. There is some indication that the platform has been rejuvenated at least once and there has been one attempt to remove a flake from the distal end, presumably in an unsuccessful attempt to produce a bipolar core.

Late Mesolithic

A level of Late Mesolithic activity on or near the site is indicated by the recovery of a limited number of tools and some waste. The clearly Late Mesolithic artefacts are all concentrated in trench 1. They consist of two dihedral burins, three microburins, a fine end scraper on a bladelet and two other bladelets, one of which has a series of fine denticulate removals along one edge. This limited number and range of artefact types would suggest that only limited activities, possibly a hunting stand, were being carried out in the immediate area of the excavation. The concentration of these datable artefacts, however, suggests that the main focus of activity may have been further north.

Post-Mesolithic

The vast majority of the flint artefacts recovered are of post-Mesolithic date; they were spread across the site. However, no features of Neolithic or later date have been identified by the current excavation. Indeed the distribution most closely matches the volumes of the Roman features excavated with the larger features generally containing more flint artefacts. A total of 1638 flint artefacts are probably of post- Mesolithic date, of which 81 have been further modified to produce tools of recognizable forms. The range of artefacts and debris would suggest that activity was spread over a long period of time with datable artefacts ranging from polished axe fragments of Neolithic date to Early Bronze age scraper forms.

Tools

Eighty-one (4.9 per cent of the total assemblage) formal tools were recovered during the excavations at Fullerton, the majority of which were scrapers of one form or another; however, a wide range of other tools or tool debris was also found.

Three axes or fragments of axes were recovered; two of these were fragments of polished flint axes of Neolithic type, whilst the third was a rough flaked axe or possible rough out. This flaked axe has a well defined distal (working) edge, although the main body is rather crudely defined with surviving areas of cortex. It is unlikely that the axe was intended to be further refined and therefore was probably a completed tool in its own right. One of the polished axe fragments is the proximal end of a completely polished axe with a relatively

pointed distal end. This artefact appears to have been reused as a rough core. The third fragment is a tertiary flake with one polished face, presumably the result of damage, or reuse of a polished tool. The size would suggest that the original tool was probably an axe.

Other tools include three piercers or awls, seven notches, three knives or knife fragments and a single fabricator. Two of the awls recovered were poorly made with a point made by retouching one corner of the flake and no other modification. One, however, was carefully made with bifacial retouch forming a strong point and a flaring shank to this tool. The notches were relatively crude/expedient tools with a small, hollow area of retouch, typically on one side of the flake. As such they may be an *ad hoc* version of a hollow side scraper; however, they exhibit less refinement in the execution of the knapping strategy. They occur in the knapping traditions of most periods (Butler 2005, 54), but are rarely a common tool type. It is curious, therefore, that seven were found at Fullerton, although this still only represents 0.4 per cent of the total assemblage or 7.8 per cent of the tools. The knives consist of one complete knife on a tertiary blade, the distal end of a broken knife and a possible knife fragment. It is noticeable that the broken knife and possible knife are both on opaque, grey flint types, possibly suggesting a degree of raw material selection for this tool type. The complete knife on a tertiary blade was too patinated to determine its raw material type. The single fabricator may have been used for retouching other tools (Butler 2005, 56) although other suggestions for their use include grinding or part of a fire lighting kit.

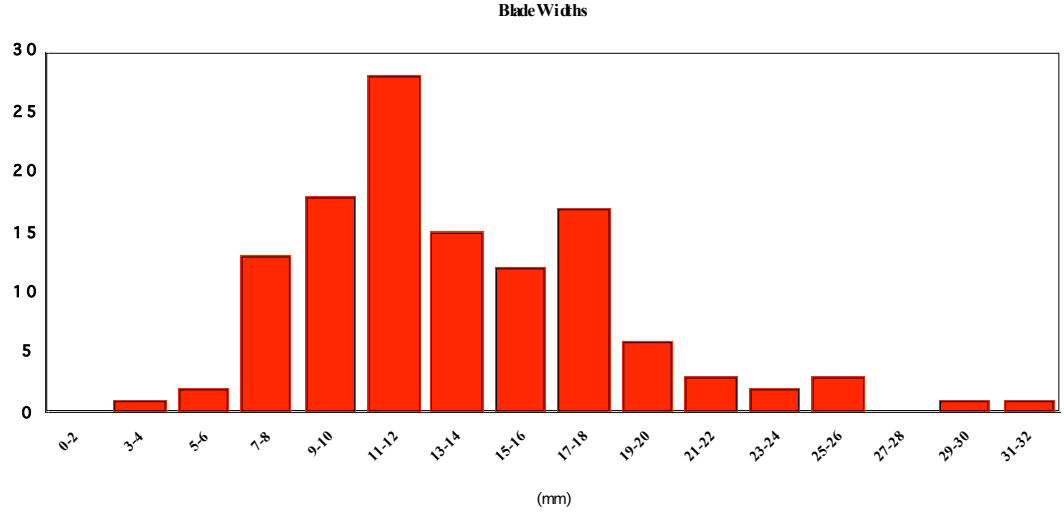
The majority of the tools recovered were scrapers of one form or another. These ranged from very crude end scrapers on large flakes or chunks of flint to finely made scrapers of Neolithic and Beaker type. A total of 55 scrapers (3.3 per cent of the total assemblage, 61.1 per cent of the tools) were found, 42 of which were fairly standard end, side or side/end forms with convexed or straight working edges. Six, however, were hollow scrapers, either end scrapers or side scrapers. Six very crude scrapers were also found; these were typically rough flakes or thermally broken pieces with a consistent pattern of retouch along part of one side or end. One core fragment was also reused as a scraper. The types of scrapers found are summarized below:

Scraper Type	**Number**
End	20
Side	12
Side/end	10
Hollow end	4
Hollow side	2
Crude	6
Other	1
Total	55

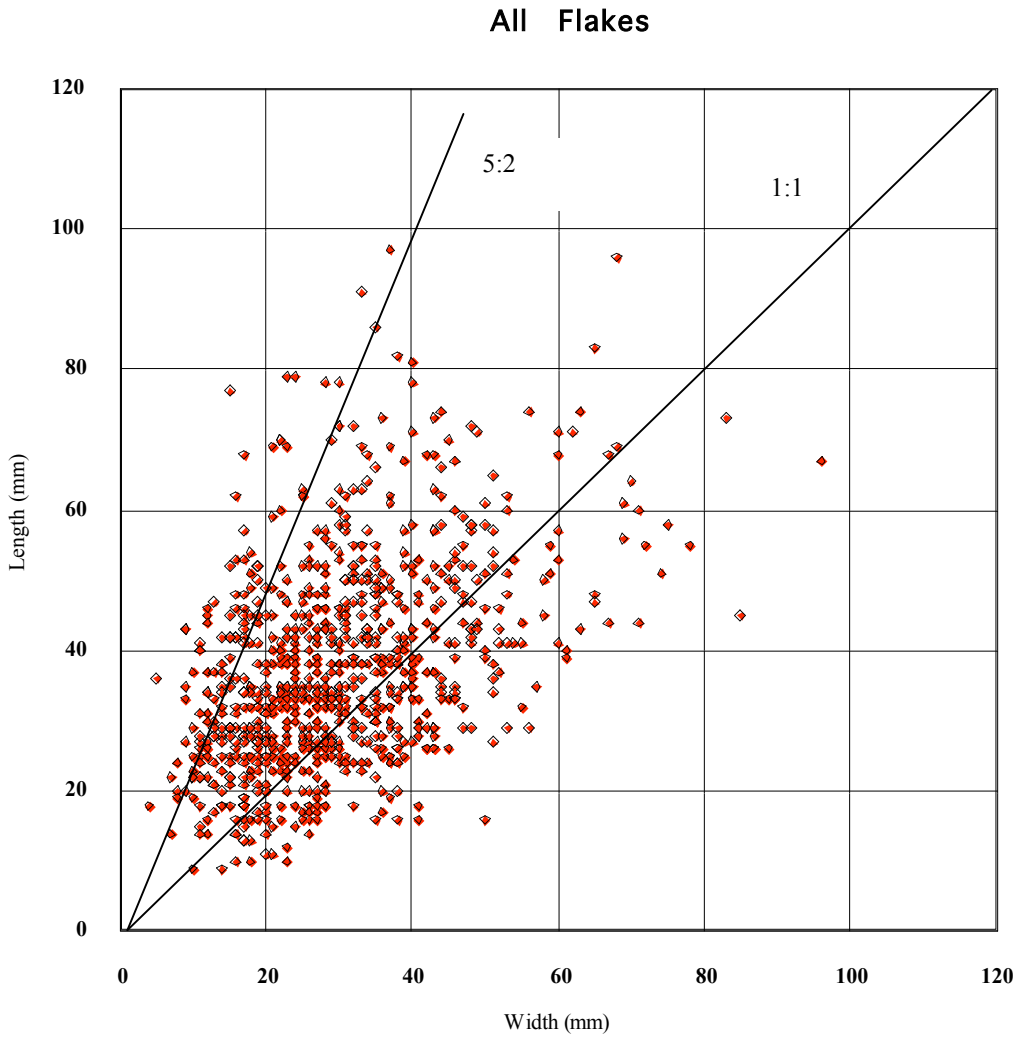
Whilst 81 formal tools of post-Mesolithic types were recovered there is considerable evidence for the use of knapping debris and naturally broken thermal flakes as *ad hoc* tools. Forty-one (2.5 per cent of the total assemblage) fragments of knapping debris had limited retouch on at least part of the artefacts and 136 (8.2 per cent) had macroscopic indications of significant use damage.

Flakes

The majority of the assemblage consisted of unmodified knapping debris. Seventy-eight per cent of the assemblage (1291 artefacts) consisted of flakes, blades or fragments of flakes or blades. Ninety-seven primary flakes, 390 secondary flakes, 375 tertiary flakes and 429 broken flakes were found. Of these 124 were defined as being blades or blade fragments, with 69 complete blades being recovered. The complete blades varied in size from 19 to 79 mm in length (average 45.6 mm) and between 5 and 32 mm in width (average 14.4 mm). The majority of the blades or blade fragments were between 7 and 18 mm in width with blades with a width of 11-12 mm being the most common, possibly suggesting a degree of standardization in the production of blade blanks.



The remaining complete flakes varied in size and character reflecting the mixed nature of the assemblage. The flakes varied between 6 and 100 mm in length and 5 and 100 mm in width. Their shapes also varied between squat flakes with a length to width ratio of less than 2:1 to fine blades with a length to width ratio of greater than 1:7. The range of complete flake sizes and shapes are shown below.



There is very little sign of heat damage within the assemblage; indeed only 32 (1.9 per cent of the total assemblage) showed any signs of having been heated or burnt.

Cores and other debris

Very few formal cores were found; indeed only 16 cores or core fragments were recovered. The majority of these were flake cores of various types with only two blade cores being found. The fake cores included a disc core, five rough multi-platformed flake cores and eight core fragments. One of the core fragments had been reused as a crude scraper. Some careful reduction of cores was being carried out on or near the site as is shown by the ten core rejuvenation flakes which were also found. The number of cores is rather small for the size of the assemblage (approximately 1 per cent of the assemblage); however, a further 159 worked lumps were also found, probably giving a much better indication of the level of knapping activity on the site. The cores or core fragments had an average weight of 122.3 g whereas the worked lumps had an average weight of only 29.5 g. It is assumed that the worked lumps are a reflection of the size and quality of the local flint resources, in which case it is possible that the flint raw materials used for the formal cores may have been brought to the site from elsewhere.

Discussion

The flint assemblage from the excavations at Fullerton is by far the largest and most diverse of those recovered from the Danebury Environs Roman Project suggesting that this is a favoured location throughout prehistory. The earliest artefacts recovered are a small group of ten Upper Palaeolithic artefacts found at the northern end of the site. It is possible that these early tools were associated with a deposit of pre-Roman soil in the south-east end of trench 1 (Cunliffe 2001, 2) although none of the artefacts were directly within this deposit. The artefacts as a whole showed little sign of post- deposition damage suggesting that they had not moved very far. The site, however, is at the foot of a slope and it is therefore possible that the true focus of Palaeolithic activity may be outside the area excavated. If so, Fullerton is probably one of at least 30 open air sites known, mostly from southern Britain (Barton 1992, 187). This group of artefacts included an obliquely blunted point of Creswellian type suggesting that the occupation took place around 13,000–12,000 uncal bp (Conneller and Ellis 2007, 220).

The second group of artefacts which appear to have a significant distribution are the eight clearly Late Mesolithic artefacts which also concentrate at the northern end of the excavation. It is also possible that a number of the blades and bladelets also recovered from the site may also be of this date. This class of artefact also tends to concentrate at the northern end of the site. The limited number and range of artefacts found would suggest that any use of the site was of a temporary nature, possibly a hunting stand, with the limited maintenance of hunting gear.

The vast majority of the assemblage was of Neolithic or later date. Unfortunately no Neolithic contexts were found during the 2000–2001 excavations although they were reported from the 1963–1965 excavations (Cunliffe 2000, 3). The distribution of these artefacts closely follows that of the Roman features with the larger volumed Roman features containing the larger number of flint artefacts. It is possible that the main focus for prehistoric activity may have been up slope from the excavated area with the flint artefacts moving down slope to be incorporated in the later deposits. The significant number of flint artefacts and the range of tools would suggest that Neolithic and later occupation probably took place within the immediate environment. The low numbers of cores and small size of worked lumps suggest that extraction and primary reduction of raw materials was not a key activity, although it is likely that the local clay with flint deposits which cap the bedrock (Cunliffe 2000, 3) were used as the primary source of flint. Other raw materials were likely to have been brought to the site, although it is impossible to determine from where, with the exception of the one fragment of Portland Chert which is likely to have come from south Dorset.

It is probable that production of flint artefacts continued well into the Bronze Age on the site with many of the squat flakes and some of the scrapers probably dating from the Early to Mid Bronze Age. It is also possible that some of the flintwork may be of Iron Age or Roman date, although it is highly probable that any artefacts produced at this late date would be relatively crude, *ad hoc*, tools and would therefore be very difficult to distinguish from other knapping debris in this mixed assemblage.

References

BARTON, R.N.E. 1992: *Hengistbury Head, Dorset. Vol. 2 The Late Upper Palaeolithic and Early Mesolithic Sites* (Oxford, OUCA Monogr. No. 34).

BUTLER, C. 2005: *Prehistoric Flintwork* (Stroud).

CONNELLER, C. and ELLIS, E. 2007: A final Upper Palaeolithic Site at La Sagesse Convent, Romsey, Hampshire. *Proceedings of the Prehistoric Society* 73, 191–227.

CUNLIFFE, B. 2000: *The Danebury Environs Project. 4. Fullerton Villa Excavation 2000. Interim Report.*

CUNLIFFE, B. 2001: *The Danebury Environs Project. 5. Fullerton Villa Excavation 2001. Interim Report.*

GODDARD, E.N., TRASK, P.D., DE FORD, R.K., ROVE, O.N., SINGEWALD, J.T. and OVERBECK, R.M. 1948: *Rock Color Chart* (Boulder, Colorado, Geological Society of America).

INIZIAN, M.-L., ROCHE, H. and TIXIER, J. 1992. *Technology of Knapped Stone* (CREP, Meudon).

RAWSON, P.F., CURRY, D., DILLEY, F.C., HANCOCK, J.M., KENNEDY, W.J., NEALE, J.W., WOOD, C.J. and WORSSAMM, B.C. 1978: *A correlation of Cretaceous rocks in the British Isles* (Geological Society of London, Special Report No. 9).

SHARPLES, N. 1991: The early prehistoric activity. In Sharples, N.M., *Maiden Castle. Excavations and field survey 1985-6* (London, Historic Buildings and Monuments Commission for England, Archaeol. Rep. 19).

Appendix 1: Summary of the Assemblage

Trench	Feature	Context	PF	SF	TF	BF	Tool	Worked Lump	Core	Other	Total
		⊕	1	2	4	2	1	1			11
Trench 1											
1		475	1	6	16	6	4	6			39
1		476	2	11	3	1	1	6			24
1		478	4	5	10	7	3	6			35
1		479		7	11	7	1	4		1	31
1		480	5	23	35	15	5	16	1	1	101
1		484	3	8	7	14	3	5		1	41
1		485		1	1	3		3			8
1		486	1	14	9	10	1	4			39
1		487		1	1	2		1			5
1		488				1					1
1		489		13	10	14	1	4			42
1		497		5	1	6	1				13
1		498	3	10	9	4	1	4			31
1		500		2	2	3		2			9
1		508		4	2	3					9
1		509		4		4	1	2	1		12
1		511		1	1	1					3
1		512		1	1	2		2		1	7
1		514		3	2	7					12
1		515		5		5		2			12
1		524		1	1	2	1	4			9
1		525	1		1	2					4
1		537		2	1						3
1		539		1		1					2
1		546		3	1	6	1	2			13
1		547				1		1			2
1		550				2					2
1		556	1						1		2
1		563		1							1
1		572	1		2	2					5
1		633		1							1
1		⊕	1	6	17	16	5	6		1	52
1	F1010	1					1				1
1	F87	4			1			2			3
1	F871	1	1				1	3			5
1	F871	2		4	2			1			7
1	F871	7		1							1
1	F872	3				1					1
1	F873	1			1						1
1	F873	2			1						1
1	F873	6			2	2					4
1	F873	1			1						1
1	F873	3		1							1
1	F883	3			1	2		1			4
1	F884	1		1	2	3		4			10
1	F884	510		2	1	5				1	9

Trench	Feature	Context	PF	SF	TF	BF	Tool	Worked Lump	Core	Other	Total
1	F890	1	3		7	11		3			24
1	F892	2		3	5	2	1	5			16
1	F896			1	2						3
1	F918	1		2	1	4				1	8
1	F919	1			1			1			2
1	F919	2		1							1
1	F919	3	3	1		2					6
1	F920	1		8	2	5		4			19
1	F920	2	2	4	10	8	1	11			36
1	F921	1			1	1					2
1	F921	2			1						1
1	F922	1		2	2	1					5
1	F922	2		1	2	1					4
1	F923	536		1							1
1	F924	1	1	8	4	5	1	5		2	26
1	F925	1		5	1	4	1				11
1	F926	536			4			1		1	6
1	F928	538	1	1	3	3		1			9
1	F931	2			1						1
1	F933	1	1		1	1				1	4
1	F937	1	1	3		5		1			10
1	F938	1		1	1	5					7
1	F943	1			1	1					2
1	F951	1			1						1
1	F955	1		1		1					2
1	F983	2		1		1					2
1	F994	1				1					1
1	F995	1a	1								1
1	Ph1151	1	1			1		3			5
1	Ph1152	2			1	1				1	3
1	Ph1153	1		1							1
1	Ph1155	1		1	1	4					6
1	Ph1157	1	1	1	1	14	2	3			22
1	Ph1169	1			1						1
1	Ph1174	1		1							1
1	Ph1176	1				1					1
1	Ph1180	1	2	3		1	1	1			8
1	Ph1183	1	1		1	3					5
1	Ph1183	2		1							1
1	Ph1184	1		1		1					2
1	Ph1187	1	1	1		1					3
Trench 1 Total			**43**	**202**	**212**	**249**	**38**	**130**	**3**	**12**	**889**
Trench 2											
2		481		3	1	5	4	1			14
2		506		2	2	1	1				6
2		507		2	3	4	1			1	11
2		521						1			1
2		541	2	1	1			2			6
2		543						1			1
2		638		1	1						2
2		+		21	12	20	5	15		3	76

Trench	Feature	Context	PF	SF	TF	BF	Tool	Worked Lump	Core	Other	Total
2	F874/2	540		1							1
2	F893/3	3	2	1				1			4
2	F931	2	1	1	1	1		1			5
Trench 2 Total			**5**	**33**	**21**	**31**	**11**	**22**	**0**	**4**	**127**
Trench 3											
3		482		2		1	1				4
3		526			1			1			2
3	F878	1			1	1	1				3
3	F879	2					1				1
3	F881	3			1						1
3	F881	4			1						1
3	F888	3				1					1
3	F888	5	1		1						2
3	F888	6	1								1
3	F888	7		2	2					1	5
3	F888	8		1							1
3	F917	2				1		1			2
Trench 3 Total			**2**	**5**	**7**	**4**	**3**	**2**	**0**	**1**	**24**
Trench 4											
4		491				2					2
4		502			1	4		1			6
4		594	1		3						4
4		595	1			2					3
4		621			4						4
4		651							1		1
4		656			1						1
4		⊕	4	5		1		5	1		16
4	F907	1			1						1
4	F972	1		5	8	13	1	1			28
4	F973	1		4		2					6
4	Ph1151	2					1				1
Trench 4 Total			**6**	**14**	**18**	**24**	**2**	**7**	**2**	**0**	**73**
Trench 5											
5		573	18	46	33	38	15	25	5	2	182
5		574	16	50	44	60	12	31	6	1	220
5		575						1			1
5		577		1	1						2
5		578	2	14	8	6	1	2			33
5		581		6	6	4		2			18
5		583	1	3	2			1			7
5		584	1	2							3
5		585		1		2	1	1			5
5		586			3	1					4
5		587			1						1
5		588			1						1
5		590				1					1
5		591		1	1						2
5		598						4			4
5		603						1			1

Trench	Feature	Context	PF	SF	TF	BF	Tool	Worked Lump	Core	Other	Total
5		613			3						3
5		614			3						3
5		635			1			3			4
5		636						1			1
5		644			1	1					2
5		680				2					2
5		+	1	4	2	2	3	2			14
5		581					1				1
5	F997	1		1							1
5	Ph1204	1		1							1
5	Ph1211	1	1								1
Trench 5 Total			**40**	**130**	**110**	**117**	**33**	**74**	**11**	**3**	**518**
Trench 6											
6		565				1	1				2
6		674					1				1
6		⊕		4	3			2			9
6	F930	1				1					1
6	F996	1								1	1
Trench 6 Total			**0**	**4**	**3**	**2**	**2**	**2**	**0**	**1**	**14**
All Trenches											
Total			97	390	375	429	90	238	16	21	1,656
			5.9%	23.6%	22.6%	25.9%	5.4%	14.4%	1.0%	1.3%	100.0%

Key

PF Primary Flake

SF Secondary Flake

TF Tertiary Flake

BF Broken Flake

WL Worked Lump

Core Cores and Core debris