



KULTURHISTORISK
MUSEUM
UNIVERSITETET I OSLO
FORMINNESEKJONEN

Postboks 6762
St. Olavs Plass
0130, Oslo

RAPPORT

ARKEOLOGISK UTGRAVNING

Kokegropfelt

Hasleveien 58, Frydenberg
125/128, Oslo Kommune

FELTLEDER: Michael Derrick
PROSJEKTLEDER: Margrete Simonsen



Oslo 2011

**KULTURHISTORISK
MUSEUM
UNIVERSITETET
I OSLO**



Gårds-/ bruksnavn	G.nr./ b.nr.
Frydenberg	125/128
Kommune	Fylke
Oslo	Oslo
Saksnavn	Kulturminnetype
Reguleringplan for småhusområder i Oslo ytre by S-4220, Oslo kommune	Kokegropfelt
Saksnummer (arkivnr. Kulturhistorisk museum)	Tiltakskode/ prosjektkode
2008/8182	761015 / 43934
Eier/ bruker, adresse	Tiltakshaver
HF Eiendom AS	HF Eiendom AS
Tidsrom for utgraving	M 711-kart/ UTM-koordinater/ Kartdatum
19.05.09-25.05.09	(23) UTM sone 33 (EUREF89/WGS84)
ØK-kart	ØK-koordinater
CO 045-5-2	N: 6644616 Ø: 600085 H 97.09 m
A-nr.	C.nr.
2009/210	C57202
ID-nr (Askeladden)	Negativnr. (Kulturhistorisk museum)
102789	Cf 34101
Rapport ved:	Dato:
Michael Derrick	29.05.09
Saksbehandler:	Prosjektleder:
Margrete Simonsen	Margrete Simonsen

SAMMENDRAG

Hasleveien 58 ligger 3.5 km sørøst for Oslo sentrum på eiendommen Frydenberg, 125/128, 97.09 m.o.h. Eiendommen avgrenses av Hasleveien i sørvest og Frydenberg, 125/136 127/4 og 127/6 i henholdsvis nordvest, nord og sørøst. Undersøkelsen ble foretatt i hagen sørvest for huset og sjakten lå langs Hasleveien.

På bakgrunn av Byantikvarens tidligere registrering og dokumentasjon i området (Nilsen, 2006) skulle Kulturhistorisk Museum utføre en begrenset undersøkelse i utvalgte deler av det resterende området i Hasleveien. Byantikvarens undersøkelse avdekket 9 kokegropar, 2 mulig kokegropar og et kulturlag. Disse strukturene ble undersøkt av Kulturhistorisk museum, hvorav 7 ble avskrevet som natur. Totalt ble det funnet 3 kokegropar, 1 ildsted og en grøft. Ilstedet ble datert til senmesolittikum, to kokegropar ble datert til senneolittikum, 1 til romersk jernalder og grøften fikk datering til nyere tid.



Contents

1. BACKGROUND	4
2. STAFF AND TIMESCALE.....	4
3. PUBLIC VISITS	4
4. LANDSCAPE- FINDS AND ARCHAEOLOGY	4
5. EXCAVATION.....	6
5.1 Aims and priorities.....	6
5.2 Method	6
5.3 Excavation Progress	7
5.4 Problems and Limitations	7
5.5 Excavation.....	7
5.5.1 Finds.....	7
5.5.2 Structures	7
5.5.3 Dating.....	13
5.5.4 Analysis.....	14
5.6 Interpretation and Discussion	14
6. CONCLUSION.....	15
7. BIBLIOGRAPHY	16
8. APPENDIX.....	17
8.1. Structure List.....	17
8.2. Finds and Samples	18
8.3. Photo list	19
8.4. Analysis.....	20



**AN ARCHAEOLOGICAL EXCAVATION AT
HASLEVEIEN 58, FRYDENBERG, GNR 125 BNR
128, OSLO KOMMUNE**

MICHAEL DERRICK

1. BACKGROUND

An evaluation of the development area was undertaken by Oslo Byantikvaren i Oslo. Between 24.11.06 and 05.12.06 in advance of proposed building work conducted by HF Eiendom AS. A total of 5 trenches were excavated revealing 9 cooking pits, 2 possible cooking pits and a cultural layer concentrated in the south-western corner of the evaluation area. Permission was granted for archaeological excavation of the area by Riksantikvaren, in a letter dated 03.05.07.

Lokalitet	Gnr/bnr	Type kulturminne	Antall strukturer/ fornminner
ID102789	125/128	bosetningsspor	9 kokegropes 2 mulig kokegropes 1 kulturlag

2. STAFF AND TIMESCALE

Navn	Stillings	Periode
Michael Derrick	Feltleder	19.05.09-25.05.09
Tora Krogsæter Vinje	Assistent	19.05.09-25.05.09

3. PUBLIC VISITS

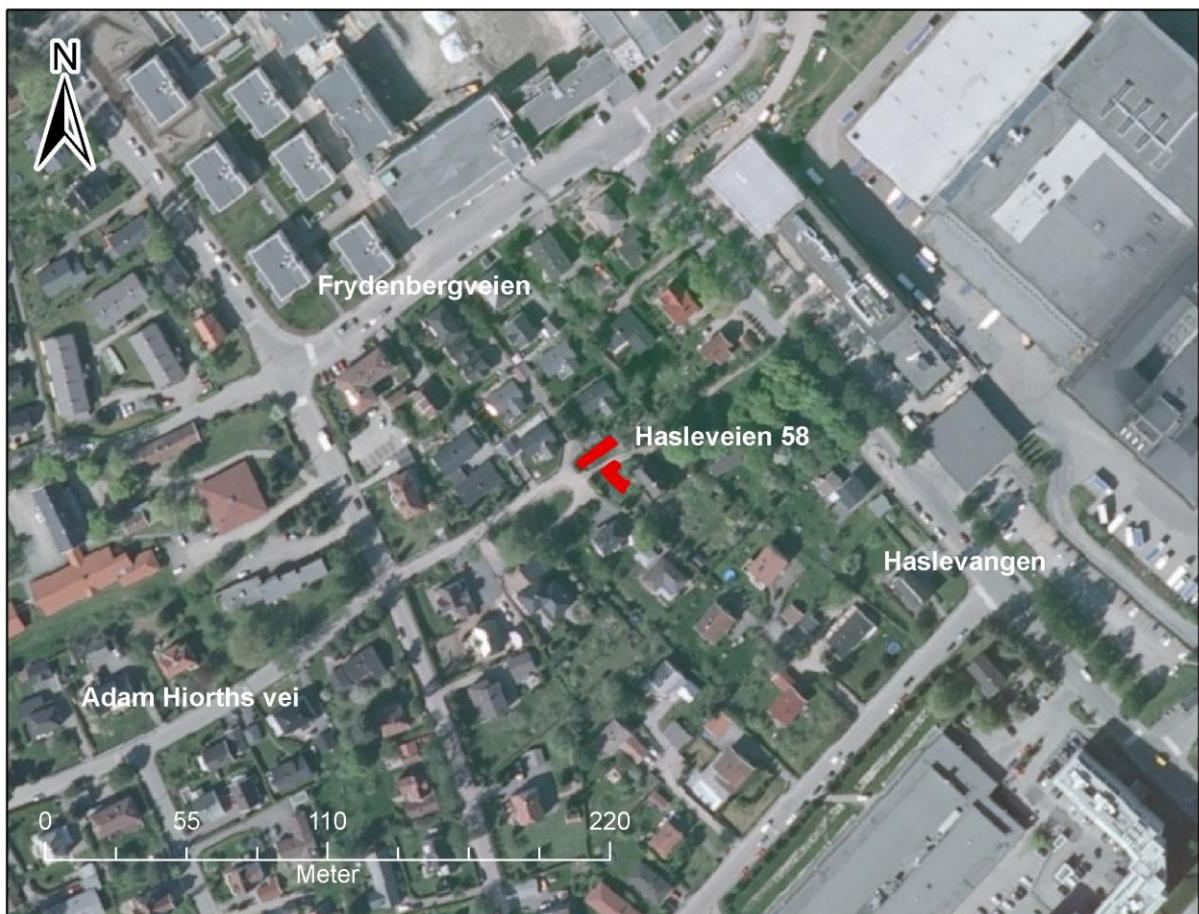
Margrete Simonsen visited the site several times during the course of the excavation.

4. LANDSCAPE- FINDS AND ARCHAEOLOGY

Hasleveien lies 3.5 km south-east of Oslo centre in Frydenberg gård 125/128. The excavation was situated in the south-western corner of the garden of Hasleveien 58 on land which sloped down from east to west at a height of 97.09 meters above sea-level. The underlying geology was light yellow clay.

The land now occupied by Hasleveien 58 was originally part of the 17th-century farm of Søndre Hasle which was earlier known as Hasle gård. This farm was first mentioned in a letter dated 1359 (Sollied 1947:222) and changed its name to Frydenberg gård in the mid 18th-century (*ibid*).





Location of the excavation area



Very little archaeological investigation has been carried out in the area however in 2005 Byantikvaren i Oslo evaluated a nearby area at Lørenveien 46/124 where they found a posthole and a cooking pit. The latter was dated to the pre-Roman Iron Age period. An evaluation took place in 2010 600 meters to the south-east of Hasleveien at Valle Hovin 122/1 which uncovered 16 cooking pits, several cairns and other associated structures (Thorkildsen, report *forthcoming*).

Several stray finds have been recovered from the surrounding area which suggests Stone Age, Iron Age, Viking and medieval activity in the vicinity. These are listed below:

Funn nr.	Sted	Gjenstandstype	Datering
C2825	Frydenberg gnr.125	Tveegglet sverd	Jernalder
C25898	Hasle/Hasle Store	Steinalderøkser	Steinalder
C13516	gnr.126		
C3076	Hasle/Hasle Store gnr.126	Øks av jern	Vikingtid
C4149	Hasle/Hasle Store gnr.126	Nøkkel av jern	Middelalder

5. EXCAVATION

5.1 AIMS AND PRIORITIES

The evaluation carried out by Oslo Byantikvaren i Oslo indicated the presence of cooking pits and a cultural layer (Nilsen 2006). On this basis a project plan was prepared by KHM which outlined areas of investigation to be explored during the excavation (Simonsen 2009). These were:

- To determine whether the cooking pits related to food preparation or other activities.
- To establish if there are similarities in shape, size depth and volume of stone in the cooking pits and whether this relates to their function.
- To establish if the cooking pit field was used continuously over a long or short period of time and whether they related to any buildings found in the area.
- To recover datable finds from the cultural layer which could also indicate the processes responsible for the creation of the layer.
- To determine whether the layer was the result of activity over a long time period and if it was contemporary with the cooking pits.

5.2 METHOD

This development area was marked out and a tracked excavator removed the topsoil in layers using a 1.5m bucket. The topsoil and modern leveling layers were removed to a depth of 1.30 m revealing the cooking pits and ditch which



were cleaned using hand tools. The soil was placed along the boundary of the garden in order to maximize the open area which measured 48 m² in total.

All structures were given a structure number, photographed, excavated and drawn in plan and profile at a scale of 1:20. Samples were taken from all the excavated structures in order to collect macrofossil traces and charcoal for dating. Finally the structures were mapped using a total station and the results tied into the geography of the area using NGO coordinates.

The boundaries of the trench were demarcated using safety tape and Hafslund scanned the area for live electricity cables in accordance with health and safety guidelines.

5.3 EXCAVATION PROGRESS

The excavation began on 19.05.09. A trench was excavated along the south-western boundary of the area revealing a cultural layer and 2 other structures located during the evaluation. These were excavated and the trench backfilled in order to allow access into the property. The second area was situated on the opposite side of the driveway and comprised land which had been landscaped using domestic refuse and building material. The archaeological structures lay under this layer at a depth of 1.30 meters. The stripping was completed by midday on 20.05.09 and the excavation and documentation of the structures by 25.05.09.

5.4 PROBLEMS AND LIMITATIONS

The excavation area was bounded by a house immediately to the north-east, a road to the south-west and a property boundary to the north-west. The cramped conditions meant some areas had to be excavated, investigated and then rapidly backfilled before others could be opened. A 2 meter strip of land along the south-western boundary was also sacrificed in order to accommodate the excavated topsoil.

The landscaping activity within the garden had an adverse affect on the archaeological structures, some of which were found to be shallow and contaminated with modern refuse.

5.5 EXCAVATION

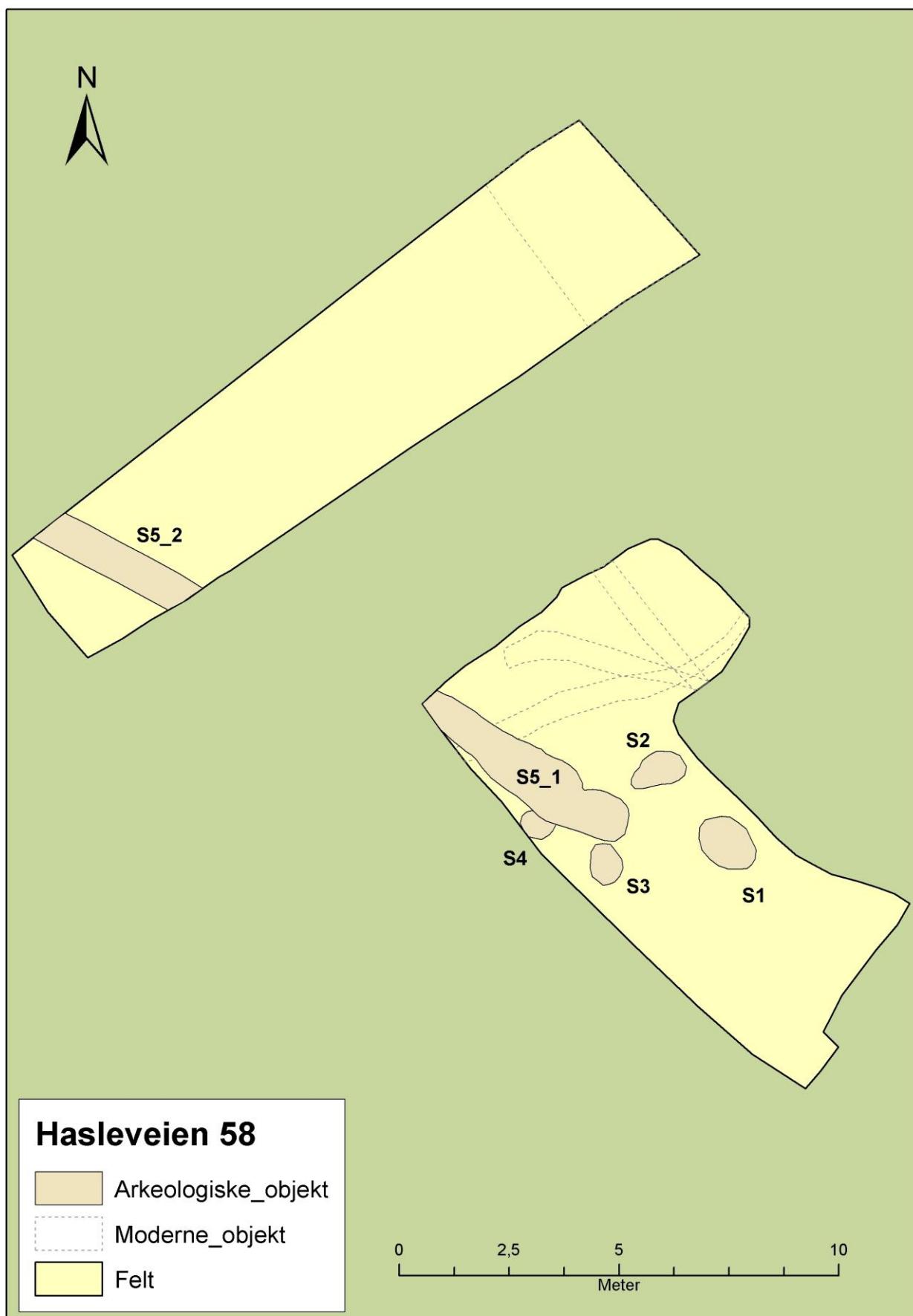
5.5.1 FINDS

A list of the macrofossil samples / charcoal samples can be found in the appendix. The samples were allocated the museum number C57202.

5.5.2 STRUCTURES

A total of 13 structures were uncovered and excavated. Eight were discarded as modern while the remaining 5 comprised 4 cooking pits and a ditch.





Overview of the structures in the excavation area



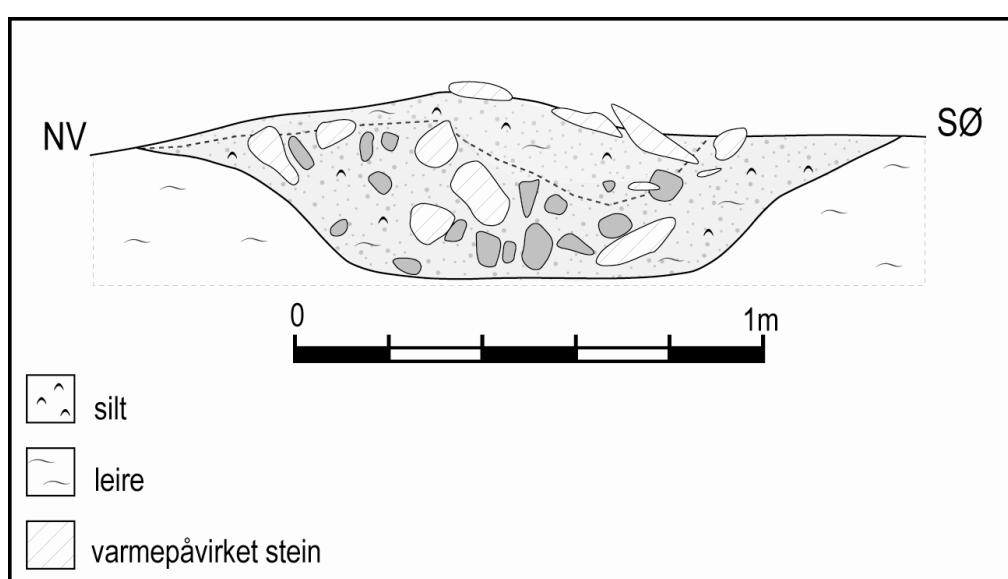
Cooking Pits

Three of the structures found in the excavation area were interpreted as cooking pits while S.4 was interpreted as a cooking pit or hearth. These pits were cut into the natural yellow clay and all were discrete and un-truncated, with the exception of S.4 which was cut by a post-medieval ditch (S.5).

Structure 1 was an oval cooking pit which measured 150 x 111 cm and was 44 cm deep. It had steep sides and a flat base. It contained grey-brown clay silt which became darker towards the bottom of the pit (see dashed line in profile below), charcoal flecks and 30 litres of fire-cracked stone and was dated to the Late-Neolithic period (2030-1940 BC).



Cooking Pit 1 in plan facing east (Cf 34101_12)

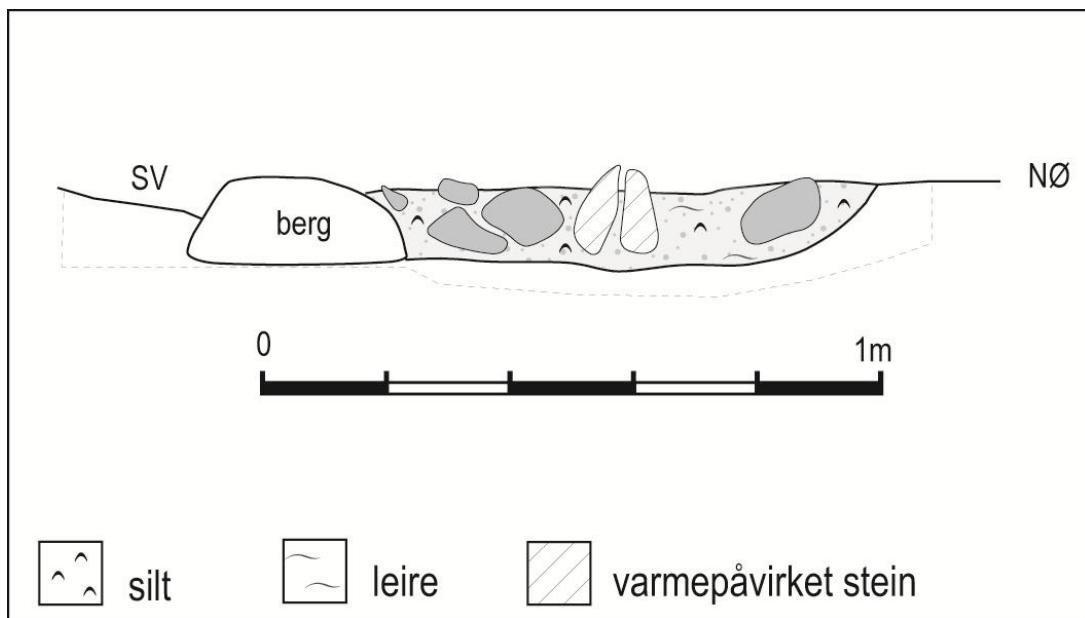


Profile of cooking pit 1

Structure 2 was an oval cooking pit measuring 129 x 75 cm and was 14 cm in depth. It had steep sides, a flat base and was filled with light-grey brown clay, charcoal flecks and 4 litres of fire-cracked stone. A charcoal sample from the base of the structure yielded a Roman Iron Age date (90- 195 AD).



Cooking Pit 2 in plan facing north-west (Cf 34101_13)



Profile of cooking pit 2

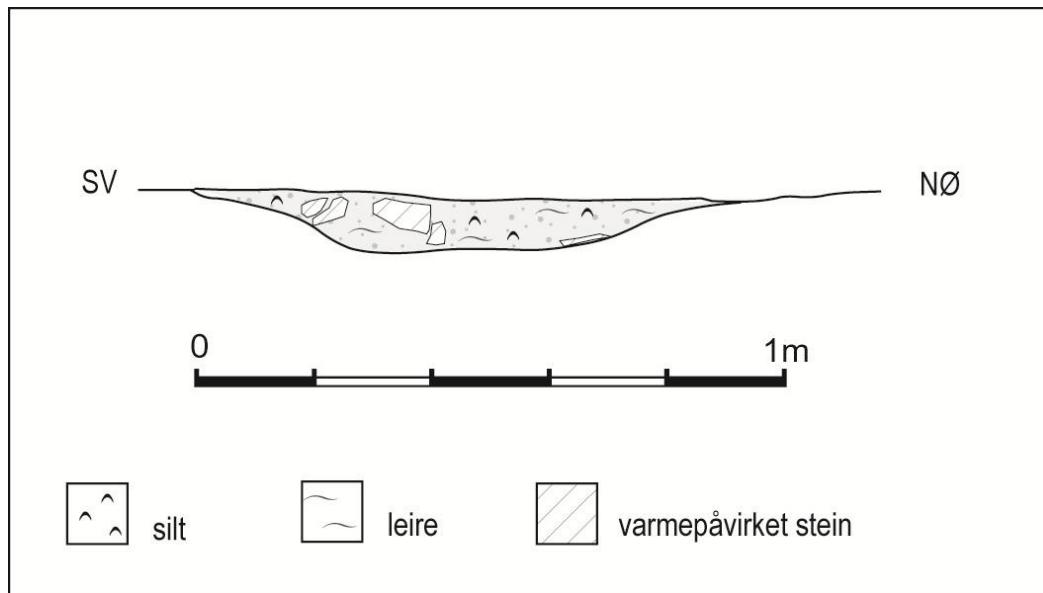
Cooking pit 3 was oval, measured 92 x 72 cm, was 10 cm in depth and had a flat base and 45-degree sides. It contained a mix of light-grey and grey brown clay



silt, charcoal flecks and 2 litres of fire-cracked stone. The pit was dated to between 2275 and 2145 BC.



Cooking Pit 3 in plan facing north-west (Cf 34101_23)

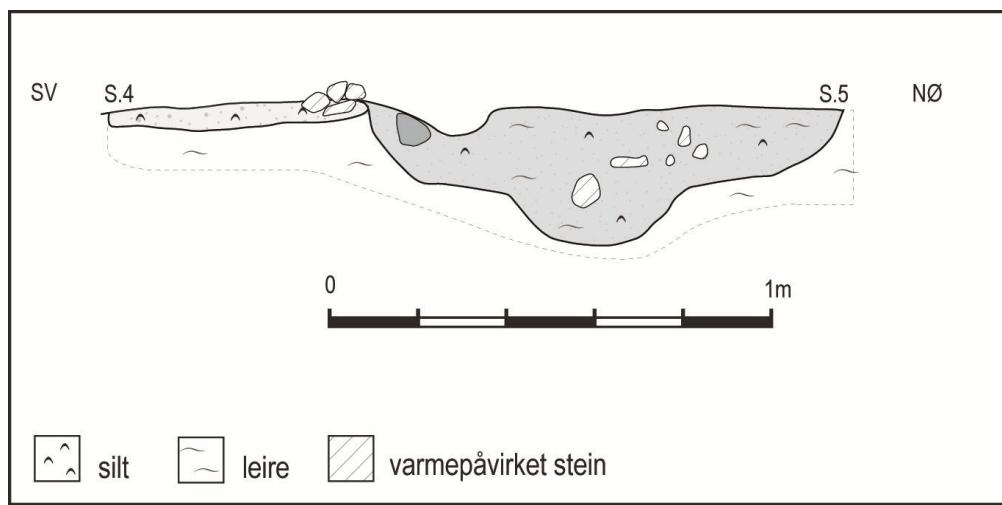


Profile of cooking pit 3

Structure 4 was very truncated and it was not possible to say whether it was the base of a cooking pit or a hearth. It was oval in plan and had a flat base and was cut on its north-east edge by ditch 5. It measured 78 x 66 cm, was 5 cm in depth and contained grey clay silt, 2 litres of fire-cracked stone, charcoal flecks and fragments. Radiocarbon dating provided a Late-Mesolithic date (4240-4100 BC).



Hearth 4 in plan facing east (Cf 34101_28)



Profile of hearth 4 and ditch 5

Ditch

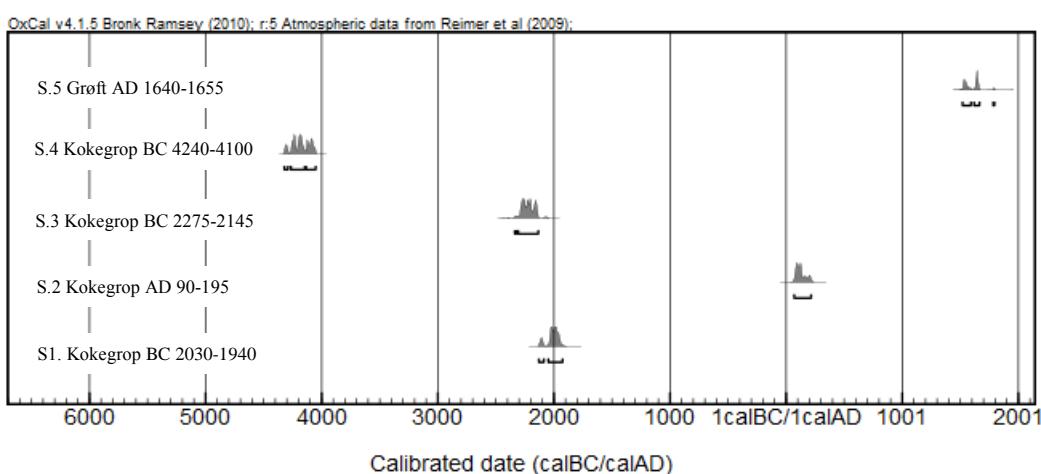
Structure 5 was a ditch which had been interpreted during the evaluation phase as a cultural layer. The visible part of the ditch was aligned east-west, measured 12m in length and was 1.3m wide. It was 22 cm in depth and contained grey clay silt, charcoal flecks and 2 litres of fire-cracked stone. It truncated cooking pit 4 and was cut by modern water and electrical cables. A charcoal sample taken from the ditch was dated to between 1640 and 1655 AD.



Grøft 5 Plan facing south-east (Cf 34101_26)

5.5.3 DATING

5 charcoal samples were taken from the macrofossil samples and sent to Vitenskapsmuseet NTNU Trondheim for dating (see appendix). A summary of the results are shown below:



5.5.4 ANALYSIS

Charcoal from five macrofossil samples were sent to Helge Høeg for species identification. See the appendix for results.

5.6 INTERPRETATION AND DISCUSSION

The cooking pits were roughly oval in shape, steep sided and flat based. The differences in depth, size and amount of fire-cracked stone can be explained by damage caused by modern activity. This was particularly evident along the south-western boundary which had been landscaped during the 20th-century. The cooking pits in this area (2, 3 and 4) were shallower and smaller than cooking pit 1 which lay to the east of the boundary.

The radiocarbon dates obtained from the four cooking pits varied greatly. Cooking pit S.4 yielded a Late Mesolithic date (4240-4100 AD) while pits S.1 and S.3 were dated to the late Neolithic period (2030-1940 BC and 2275-2145 BC respectively). Cooking pit 2 gave a Roman Iron age date (90-195 AD).

The Late Mesolithic date obtained from cooking pit S.4 seems particularly erroneous. Such early dates are not usually associated with cooking pits and it is possible that the structure is in fact the remains of a hearth. The fire-cracked stones which were found on the surface of the structure, are likely to have come from cooking pits disturbed during the construction of the post-medieval ditch S.5. The abundance of charcoal throughout S.4 and the absence of fire-cracked stones within the structure itself could further confirm the hearth interpretation. It is difficult to speculate on what this structure could relate to as the investigation area is so small and as there have been no other archaeological finds dating to this period found in the vicinity. However the presence of any Mesolithic activity is in itself interesting.

Cooking pits S.1 and S.3 contained fire-cracked stone, charcoal flecks and fragments. They lacked the characteristic charcoal layer normally associated with cooking pits however the presence of fire-cracked stone within the masses suggested that stone had been heated within the structure. They were both dated to the Late Neolithic period which ties in well with the discovery of Neolithic stone axes which were found close to Hasleveien 58 at Hasle/Hasle Store gnr.126 (C25898 and C13516).

Cooking pit S.2 was dated to between 90 and 195 AD and utilised the bedrock on its south-western edge. Three parallels for this were found in Oslo at Slyngeveien 17 and Huseby 29/4 where a cooking pits were constructed within natural clefts in the bedrock and at Huseby Søndre where cooking pits had been constructed close to large boulders (Derrick 2009, Berge *forthcoming* and Bukkemoen, 2010). It is unclear why the cooking pit was dug against the bedrock in this fashion however a possible explanation could be that the warm bedrock helps the temperature within the cooking pit remain constant for a



longer period of time. Interestingly the cooking pit found at Slyngeveien was similarly dated to between 80 and 135 AD.

As mentioned above, the cooking pits lacked the characteristic layer of charcoal normally found in the base of such structures. The lack of a charcoal layer within cooking pits while not common is by no means unusual. Many of the cooking pits dug during the excavations at Hoffsvangen 172/1 and Østre Toten Prestegaard 94/19 also lacked a charcoal layer (Derrick 2011). The reasons for the lack of a charcoal layer could be due to a number of factors such as the leaching out of charcoal from older cooking pits, the removal of stone and subsequent weathering out of the charcoal, or even the use of different food preparation techniques.

Radiocarbon analysis dated ditch 5 to between 1640 and 1655 AD. The area would have been part of Søndre Hasle farm at this period and it is likely that the ditch was used for drainage or boundary demarcation. While the dating of the ditch is rather late, it is worth bearing in mind that these boundaries often reflect earlier more ancient land divisions.

6. CONCLUSION

The excavation at Hasleveien 58 comprised a small area of 48 m² and as a result only 3 cooking pits, a hearth and post-medieval ditch were unearthed. The hearth was dated to the Late Mesolithic period and it will be interesting to see if future archaeological work in the local vicinity produces structures of similar dates.

The redeposited fire-cracked stone found in ditch 5 could indicate that the area had originally contained more cooking pits suggesting a concentration which could constitute a small cooking pit field. The small excavation area however makes it impossible to identify whether the cooking pits lie on the edge of such a field or whether they are at the centre of the concentration. This will only become clear when more archaeological work is carried out in the local area.

Some recent archaeological evaluation in 2010 has unearthed 16 cooking pits, 600 meters to the south-east of Hasleveien at Valle Hovin (Thorkildsen report *forthcoming*). This could suggest that the cooking pits found at Hasleveien are part of a larger concentration. Further afield, cooking pits have been unearthed within the Oslo area at Slyngeveien 17, Huseby Søndre and Huseby 29/4 (Derrick 2009 and Bukkemoen 2010, Berge *forthcoming*, respectively).

It is evident that as new development encroaches on the outskirts of the city the number of cooking pits found in Oslo will rise exponentially thus providing us with a greater understanding of their chronology, function and distribution within the Oslo area.



7. BIBLIOGRAPHY

Berge, S.L. *forthcoming Rapport arkeologisk utgraving Huseby, 29/4, Oslo.* Kulturhistorisk museum Oslo.

Bukkemoen, G. 2010 *Rapport arkeologisk utgraving Husebybakken, Huseby Søndre, 29/115 Oslo.* Kulturhistorisk museum Oslo.

Derrick, M. 2009: *Rapport arkeologisk utgraving Slyngveien 17, Voksen 27/465, Oslo Kommune.* Kulturhistorisk museum Oslo.

Derrick, M. 2011: *An Archaeological Excavation of a Cooking Pit Field at Hoffsvangen 172/1 and Østre Toten Prestegaard 94/19, Østre Toten.* Kulturhistorisk museum Oslo

Nilsen, T. B., 2006: *Rapport. Arkeologisk registrering Hasleveien 58, GNR 125 BNR 128, Oslo kommune.* Byantikvaren i Oslo.

Simonsen, M.F., 2009: *Hasleveien 58, Bydel Grünerløkka Mindre vesentlig reguleringsendring plan og bygningsetatens vedtak.* Oslo kommune. Byantikvaren i Oslo.

Sollid H., 1947: *Akersgårder. Hovedblenes eierrekker.* Aker sogneselskap, Oslo.

Thorkildsen S. report *forthcoming:* *Rapport arkeologisk registrering Valle Hovik 122/1* upublisert registrerings rapport. Oslo Kommune Byantikvaren i Oslo.



8. APPENDIX

8.1. STRUCTURE LIST

Struktur Nmr.	Struktur	Form i Flate	Snittet	Dybde	Lengde	Bredde	sider i profil	bunn i profil	Beskrivelse
S.1	Kokegrop	Oval	Ja	44	150	111	Skrå	Flat	Oval kokegrop fylt med gråbrun leireholdig silt, varmepåvirket stein og kullbiter. Ingen kullag i bunn
S.2	Kokegrop	Oval	Ja	14	129	75	Skrå	Flat	Oval kokegrop fylt med lys gråbrun leire, varmepåvirket stein, vanlig stein og kullbiter.
S.3	Kokegrop	Oval	Ja	10	92	72	Skrå	Flat	Oval kokegrop fylt med en blanding av lys grå og gråbrun leire silt med varmepåvirket stein og kullbiter
S.4	Mulig kokegrop/ildsted	Oval	Ja	5	78	66	Ujevn	Flat	Oval struktur som kan være en ildsted eller rest av en kokegrop. Det er fylt med grå leireholdig silt, masse kullbiter, vanlig og varmepåvirket stein. Det ble kutt av grøft 5.
S.5	Grøft	Ujevn	Ja	22	1200	130	Skrå	Flat	Drenerings eller eiendomsgrense grøft fylt med grå leireholdig silt, kullbiter, vanlig og varmepåvirket stein



8.2. FINDS AND SAMPLES

C57202/1-5

Boplass mesolitikum, neolitikum og nyeretid fra HASLEVEIEN 58 (125 /128), OSLO K., OSLO.

Funnomstendighet: Arkeologisk utgraving av tre kokegropet et ildsted og en grøft. Strukturene ble første gang avdekket ved sjakting utført av Byantikvaren i Oslo i 2006 (Nilsen 2006). Undersøkelsesområdet ligger i SV hjørne i Hasleveien 58 i svakt hellede terrenget fra ø mot V. Det ble avdekket et område på 48 kvadratmeter. Kull fra fem macrofossileprøver er vedartbestemt av Helge Høeg og datert ved NTNU. Restmaterialet oppbevares i magasinet (Derrick 2011).

Makroprøver

- 1) Fra kokegrop 1. Kullprøven ble tatt fra makroprøven. 40 biter er vedartbestemt. Av disse var 10 betula (bjerk), 1 salix/populus, 21 Tilia og 8 quercus. 2,2 g tilia og vier/osp er radiologisk datert til 3640 +/- 25 BP. 2030-1940 BC (TRa-1708). *Vekt:* 7,0g
- 2) Fra kokegrop 2. Kullprøven ble tatt fra makroprøven. 40 biter er vedartbestemt. Av disse var 24 betula og 6 corylus. 0,1g corylus er radiologisk datert til 1880 +/- 25 BP 90-195 AD (TRa-1708). *Vekt:* 2,0g.
- 3) Fra kokegrop 3. Kullprøven ble tatt fra makroprøven. 20 biter er vedartbestemt. Av disse var 9 betula og 11 quercus. 0,9 g quercus er radiologisk datert til 3790 +/- 30 BP 2275-2145 BC (TRa-1708). *Vekt:* 1,5g.
- 4) Fra ildsted 4. Kullprøven ble tatt fra makroprøven. 20 biter er vedartbestemt. Av disse var 12 betula, 2 Corylus og 6 Pinus. 0,2 g Pinus er radiologisk datert til 5350 +/- 30 BP 4240-4100 BC (TRa-1708). *Vekt:* 0,8g
- 5) Fra grøft 5. Kullprøven ble tatt fra makroprøven. 10 biter er vedartbestemt. Av disse var 8 betula, 1 quercus og 1 Pinus. 0,1 g Pinus og Quercus er radiologisk datert til 275 +/- 25 BP 1640-1655 AD (TRa-1708). *Vekt:* 0,3g

Orienteringsoppgave: Hasleveien 58 ligger 3,5 km SØ for Oslo sentrum på eiendommen Frydenberg, 125/128, 97.09 m.o.h. Eiendommen avgrenses av Hasleveien i SØ og Frydenberg, 125/136 127/4 og 127/6 i henholdsvis nordvest, N og SØ. Undersøkelsen ble foretatt i hagen sørvest for huset og sjakten lå langs Hasleveien.

Kartreferanse/-koordinater: ØK, *Prosjeksjon:* EU89-UTM; Sone 33 N: 6644616 Ø: 600085.

LokalitetsID: 102789

Litteratur: Turid Brox Nilsen, 05.12.2006, Arkeologisk Registrering Hasleveien 58, Gnr 125 Bnr 128 Oslo Kommune

Michael Derrick 2011 Arkeologisk utgravingen Hasleveien 58, Frydenberg 125/128 Oslo Kommune. Kulturhistorisk museum

Funnet av: Michael Derrick, 2009.



MAKROPRØVE LISTE							
Prøve Nr.	Struk Nr.	Strukt. type	C-Nr.	Vekt	Vedart	C14-dat.	Kommentar
MP1	1	Kokegrop	C57202/1	7,0g	Bjørk, selje, vier/osp, lind og eik	BC 2030-1940	Kullprøve fra MP1
MP2	2	Kokegrop	C57202/2	2,0g	Bjørk, hassel	AD 90-195	Kullprøve fra MP2
MP3	3	Kokegrop	C57202/3	1,5g	Bjørk, eik	BC 2275-2145	Kullprøve fra MP 3
MP4	4	Kokegrop	C57202/4	0,8g	Bjørk, hassel, furu	BC 4240-4100	Kullprøve fra MP 4
MP5	5	Grøft	C57202/5	0,3g	Bjørk, furu, eik	AD 1640-1655	Kullprøve fra MP 5

8.3. PHOTO LIST

Fotoliste, Negativnr. Cf.34097

Filnavn	Motivbeskrivelse	Retning_Sett_Mot	Utfyllende_Info
CF34101_31.jpg	S.3 kokegrop profil	V	Foto: MD
CF34101_1.jpg	Hasleveien 58, Gnr: 125 Bnr. 128, Oslo. Oversikt over området	NØ	Foto: MD (Michael Derrick)
CF34101_2.jpg	Oversikt over området	SV	Foto:MD
CF34101_3.jpg	Oversikt over området	NV	Foto: MD
CF34101_4.jpg	Oversikt over området	Ø	Foto: MD
CF34101_5.jpg	Oversikt over området sjakt 4 (registrering)	V	Foto: MD
CF34101_6.jpg	Moderne lag i sjakt 4	NV	Foto: MD
CF34101_7.jpg	Oversikt over området	NV	Foto: MD
CF34101_8.jpg	Sjakt 4	NØ	Foto: MD
CF34101_9.jpg	Sjakt 4	SV	Foto: MD
CF34101_10.jpg	Moderne lag sjakt 3 (registrering)	SØ	Foto: MD
CF34101_11.jpg	Nabogården (lavere nivå enn vår området)	S	Foto: MD
CF34101_12.jpg	S.1 Kokegrop plan	Ø	Foto: MD
CF34101_13.jpg	S.2 Kokegrop	Ø	Foto: MD
CF34101_14.jpg	Oversikt over området	NV	Foto: MD
CF34101_15.jpg	Oversikt over området	NV	Foto: MD
CF34101_16.jpg	Oversikt over området	NNØ	Foto: MD
CF34101_17.jpg	Oversikt over området	SV	Foto: MD
CF34101_18.jpg	Oversikt over området	SV	Foto: MD
CF34101_19.jpg	Oversikt over området	N	Foto: MD
CF34101_20.jpg	Oversikt over området	V	Foto: MD
CF34101_21.jpg	S.6 plan avskrevet	NW	Foto: MD
CF34101_22.jpg	Oversikt over S.4 (kokegrop) og S.5 (grøft) plan.	NØ	Foto: MD
CF34101_23.jpg	S.3 Kokegrop plan	V	Foto: MD
CF34101_24.jpg	Oversikt over området	V	Foto: MD
CF34101_25.jpg	Oversikt over området	SØ	Foto: MD
CF34101_26.jpg	Oversikt over området	SØ	foto: MD
CF34101_27.jpg	S.2 kokegrop profil	NV	Foto: MD
CF34101_28.jpg	S.4 ildsted plan	V	Foto: MD
CF34101_29.jpg	S.4 (ildsted) og S.5 (grop) profil	Ø	Foto: MD
CF34101_30.jpg	S1 kokegrop profil	NV	Foto: MD



8.4. ANALYSIS**LABORATORIET FOR RADIOLIGISK DATERING**

Adr.: NTNU – Gløshaugen, Sem Sælandsvei 5, 7491 Trondheim
Telefon 73593310 Telefax 73593383

DATERINGSRAPPORT

Oppdragsgiver: Simonsen, Margrete F.
Kulturhistorisk museum, Fornminneseksjonen/U10
Postboks 6762 St. Olavs plass, 0130 Oslo

DF-4466

Lab. ref.	Oppdragsgiver ref.	Materiale	Datert del	$\text{^4}C$ alder for nedslid	Kalibrert alder	$\pm \text{^4}C$ %
TRa-2531	S1, MP1, C57202/1 Hasleveien 58, Frydenberg, Oslo	Trekull Lind		3640 ± 25	BC2030-1940	-25.2
TRa-2532	S2, MP2, C57202/2 Hasleveien 58, Frydenberg, Oslo	Trekull Hassel		1880 ± 25	AD90-195	-27.1
TRa-2533	S3, MP3, C57202/3 Hasleveien 58, Frydenberg, Oslo	Trekull Eik		3790 ± 30	BC2275-2145	-25.4
TRa-2534	S4, MP4, C57202/4 Hasleveien 58, Frydenberg, Oslo	Trekull Furu		5350 ± 30	BC4240-4100	-25.4
TRa-2535	S5, MP5, C57202/5 Hasleveien 58, Frydenberg, Oslo	Trekull Furu, eik		275 ± 25	AD1640-1655	-24.4

05 MAY 2011

Laboratoriet for Radiologisk Datering

Dato:

Helene svarva

Einar Vernes



Kulturhistorisk museum, Universitetet i Oslo
Fornminneseksjonen

Høeg – Pollen 876 812 262 MVA,
Helge Irjens Høeg,
Gloppæsen 10,
3261 LARVIK

Larvik. 9/6-10.

Til Anne Skogsfjord, Boks 6762 St. Olavs plass, 0130 OSLO.

Analyse av 5 kullprover fra Hasleveien 58, Frydenberg, 125/128, OSLO, Tiltakskode 761015.

MP 1, S 1, C 57202/1.

Det ble bestemt 40 biter. Av disse var 10 *Betula* (bjerk), 1 *Salix/Populus* (selje, vier/osp), 21 *Tilia* (lind) og 8 *Quercus* (eik). Godt daterbart materiale 0,8 + 2,2 g.

MP 2, S 2, C 57202/2.

Det ble bestemt 40 biter. Av disse var 24 *Betula* (bjerk) og 6 *Corylus* (hassel). Godt daterbart materiale 0,7 + 0,1 g.

MP 3, S 3, C 57202/3.

Det ble bestemt 20 biter. Av disse var 9 *Betula* (bjerk) og 11 *Quercus* (eik). Godt daterbart materiale 0,2 g.

MP 4, S 4, C 57202/4.

Det ble bestemt 20 biter. Av disse var 12 *Betula* (bjerk), 2 *Corylus* (hassel) og 6 *Pinus* (furur). Godt daterbart materiale 0,2 g.

MP 5, S 5, C 57202/5.

Det ble bestemt 10 biter. Av disse var 8 *Betula* (bjerk), 1 *Quercus* (eik) og 1 *Pinus* (furur). Godt daterbart materiale 0,1 g.

Ruf Irs Høeg

