APPENDIX II

DIFFERENCE-OF-PROPORTION TESTS AND RESULTS

FREQUENCIES OF RAW MATERIAL AT SEVERAL NEW CASTLE COUNTY SITES

	137	D138	D140	E81	D125	D55A
Jasper	25(43)	33(59)	50(38)	101(66)	377(64)	20(15)
Jasper C	14(24)	0(0)	11(8)	5(3)	10(2)	7(5)
Quartz	14(24)	13(23)	24(18)	18(12)	135(23)	29(22)
Quartz C	8(14)	0(0)	6(5)	2(1)	19(3)	13(10)
Other	19(33)	10(18)	59(44)	35(23)	76(13)	84(63)
Other C	7(12)	0(0)	11(8)	7(46)	19(3)	40(30)
Total C	29(50)	0(0)	28(27)	14(9)	48(8)	60(45)
Total L	58	56	133	154	588	133

	E46	E6A	D100	D19	D55B	E6B
Jasper	1518(18)	7604(55)	96(33)	477(73)	175(8)	1937(66)
Jasper C	321(4)	739(5)	55(19)	0(0)	11(1)	185(6)
Quartz	5171(60)	1927(14)	118(40)	173(27)	962(42)	351(12)
Quartz C	1076(13)	197(1)	26(9)	0(0)	149(7)	47(2)
Other	1919(22)	4223(31)	79(27)	0(0)	1167(51)	661(22)
Other C	514(6)	2055(15)	38(13)	0(0)	674(29)	369(13)
Total C	1911(22)	2173(16)	119(41)	0(0)	514(22)	137(5)
Total L	8608	13746	293	650	2304	2949

Key:

D137 = 7NC-D-137
D138 = 7NC-D-138
D140 = 7NC-D-140
E81 = 7NC-E-81
D125 = 7NC-D-125
D55A = 7NC-D-55A

E46 = 7NC-E-46
E6A = 7NC-E-6A
D100 = 7NC-D-100
D19 = 7NC-D-19
D55B = 7NC-D-55B
E6B = 7NC-E-6B

C - cortex
L - lithic
D137 - Stuart Forest
D140 - Barratt's Run East
D138 - Comly

SUMMARY OF DIFFERENCE-OF-PROPORTION TESTS -
RAW MATERIAL TYPES AMONG PREHISTORIC SITES

	D137/D138	D140	E81	D125	D55A	E46
Jasper	*1.69	*.71	2.97	3.15	4.20	5.05
Jasper C	3.93	2.98	4.74	8.61	3.83	8.03
Quartz	*.12	*.96	2.25	*.20	*.35	5.56
Quartz C	2.88	2.26	3.82	3.83	*.81	*.29
Other	*1.82	*1.50	*1.49	4.06	3.87	*1.90
Other C	2.68	*.82	*1.96	3.26	2.65	1.94
Total C	6.12	4.02	6.60	9.38	*.62	5.06

	D137/E6A	D100	D19	D55B	E6B
Jasper	*1.86	*1.51	4.87	9.59	3.58
Jasper C	6.27	*.94	12.65	17.39	5.41
Quartz	2.21	2.31	*.41	2.69	2.82
Quartz C	7.76	*1.15	9.52	2.21	6.86
Other	*.33	*.89	14.79	2.69	*1.86
Other C	*.61	*.18	.89	*1.85	2.62
Total C	7.09	*1.32	18.40	3.41	8.34

	D138/D140	E81	D125	D55A	E46	E6A
Jasper	2.69	*.88	*.77	6.13	8.03	*.54
Jasper C	2.21	*1.36	*.98	*1.74	*1.47	*1.78
Quartz	*.81	2.08	4.33	*.21	5.60	1.97
Quartz C	*1.61	*.85	*1.36	2.42	2.82	*.90
Other	3.45	*.76	*1.03	5.68	*.79	2.08
Other C	2.21	*1.62	*1.36	4.62	*1.88	3.13
Total C	3.72	2.33	2.22	6.08	3.99	3.24

	D138/D100	D19	D55B	E6B
Jasper	3.71	2.31	13.38	*1.05
Jasper C	3.53	*0	*.51	*1.93
Quartz	2.41	*.55	2.78	2.57
Quartz C	2.31	*1.70	*1.96	*.95
Other	*1.43	10.85	4.84	*.81
Other C	2.85	*0	3.99	*1.65
Total C	5.87	*1.70	4.78	2.82

	D140/E81	D125	D55A	E46	E6A	D100
Jasper	4.73	5.62	4.17	5.95	4.09	*.97
Jasper C	*1.84	4.06	*.97	2.71	*1.46	2.77
Quartz	*1.51	*1.23	*.76	9.79	*1.32	4.50
Quartz C	*1.64	*.72	*1.66	2.77	2.94	*1.58
Other	3.89	8.39	3.07	6.03	3.38	3.55
Other C	*1.29	2.62	4.51	*1.10	2.15	*1.40
Total C	2.85	4.37	4.17	*.31	*1.64	3.93

	D140/D19	D55B	E6B
Jasper	8.01	11.62	6.62
Jasper C	7.38	9.23	*.92
Quartz	*2.07	5.41	2.11
Quartz C	5.43	*.89	2.53
Other	17.65	*1.41	5.85
Other C	7.38	3.82	*1.91
Total C	11.91	2.03	2.87

	E81/D125	D55A	E46	E6A	D100	D19
Jasper	*.33	8.64	15.19	2.54	6.64	*1.93
Jasper C	*1.21	*.85	*.31	*1.16	4.57	4.60
Quartz	3.07	2.30	12.11	*.82	6.24	3.91
Quartz C	*1.28	3.21	4.19	*.13	3.14	2.90
Other	3.03	6.93	*.12	2.14	*.97	12.42
Other C	*.78	5.82	*.74	3.61	2.81	5.45
Total C	*.37	6.95	3.89	2.27	6.92	7.75

	E81/D55B	E6B
Jasper	22.06	*0
Jasper C	4.13	*1.52
Quartz	7.37	*0
Quartz C	2.58	*.28
Other	6.71	*0
Other C	5.22	5.76
Total C	5.39	*1.25

	D125/D55A	E46	E6A	D100	D19	D55B	E6B
Jasper	10.27	26.95	4.20	8.79	3.52	31.12	*.729
Jasper C	2.44	2.55	3.92	9.13	3.33	3.11	4.43
Quartz	*.28	17.62	6.04	5.35	*1.48	8.38	7.11
Quartz C	3.30	6.71	3.50	3.58	4.61	2.99	2.67
Other	12.59	5.33	9.22	5.15	9.46	16.49	5.17
Other C	10.19	2.75	7.91	5.53	*4.61	10.64	*1.52
Total C	10.78	8.04	5.01	11.57	7.42	10.54	2.98

	D55A/E46	E6A	D100	D19	D55B	E6B
Jasper	*.78	9.29	3.80	12.73	3.07	11.86
Jasper C	*.92	*0	3.66	5.87	6.26	*.47
Quartz	8.92	2.56	3.71	*1.15	4.55	3.39
Quartz C	*.94	7.84	*.29	8.03	*1.48	6.67
Other	11.12	8.04	7.12	21.44	2.80	10.73
Other C	11.32	4.84	4.23	14.35	2.07	12.32
Total C	6.27	9.15	*.87	17.82	3.87	10.62

	E46/E6A	D100	D19	D55B	E6B
Jasper	55.78	6.61	33.33	11.82	49.18
Jasper C	5.63	12.58	5.01	8.07	5.82
Quartz	71.97	6.78	16.64	15.74	45.19
Quartz C	34.74	*1.85	9.58	8.14	17.25
Other	13.73	*1.88	13.52	26.84	*.13
Other C	20.48	4.88	6.41	23.84	2.69
Total C	12.03	7.38	13.48	7.07	11.49

	E6A / D100	D19	D55B	E6B
Jasper	7.67	9.07	42.1	10.32
Jasper C	9.82	6.06	10.31	*1.93
Quartz	12.60	8.89	32.06	3.03
Quartz C	10.07	3.07	15.39	*.65
Other	*1.38	16.81	18.74	8.99
Other C	*.94	10.64	8.91	15.03
Total C	11.36	11.00	15.63	4.51

	D100 / D19	D55B	E6B
Jasper	11.82	13.27	11.11
Jasper C	11.38	18.74	7.79
Quartz	4.20	*.48	13.16
Quartz C	7.70	*1.54	8.01
Other	13.83	7.64	*1.76
Other C	9.37	3.68	6.01
Total C	17.38	3.97	12.82

	D19 / D55B	E6B
Jasper	35.71	32.46
Jasper C	*1.76	6.55
Quartz	7.00	9.62
Quartz C	6.65	3.23
Other	23.32	13.35
Other C	13.24	5.60
Total C	15.69	9.51

	D55B / E6B
Jasper	42.60
Jasper C	10.99
Quartz	24.79
Quartz C	9.24
Other	21.31
Other C	19.27
Total C	15.09

SUMMARY OF SIGNIFICANT DIFFERENCES AMONG PREHISTORIC RAW MATERIAL ASSEMBLAGES

	D 137	D 138	D 140	E 81	D 125	D 55A	E 46	E 6A	D 100	D 19	D 55B	E 6B
D137	---											
D138	4	---										
D140	3	5	---									
E81	5	2	3	---								
D125	6	2	5	2	---							
D55A	4	5	4	6	6	---						
E46	4	4	5	4	7	4	---					
E6A	4	4	4	4	7	6	7	---				
D100	1	6	4	6	7	5	5	5	---			
D19	6	2	6	6	5	6	7	7	7	---		
D55B	6	5	5	7	7	6	7	7	5	6	---	
E6B	6	2	5	1	5	6	6	5	6	7	7	---

RANKINGS OF SITES BY RAW MATERIAL CATEGORIES

Jasper		Jasper C		Quartz		Quartz C	
D19	(73)	D137	(24)	E46	(60)	D137	(14)
		D100	(19)			E46	(13)
E6B	(66)			D55B	(42)	D55A	(10)
E81	(66)	D140	(8)	D100	(40)	D100	(9)
D125	(64)	E6B	(6)				
D138	(59)	E6A	(5)	D19	(27)	D55B	(7)
		D55A	(5)	D137	(24)	D140	(5)
E6A	(55)			D125	(23)		
D137	(43)	E46	(4)			D125	(3)
		E81	(3)	D138	(23)		
D140	(38)			D55A	(22)	E6B	(2)
D100	(33)	D125	(2)	D140	(18)	E6A	(1)
						E81	(1)
E46	(18)	D55B	(1)	E6A	(14)	D138	(0)
D55A	(15)	D138	(0)				
		D19	(0)	E6B	(12)	D19	(0)
D55B	(8)			E81	(12)		

Other		Other C		Total C	
D55A	(63)	E81	(46)	D137	(50)
				D55A	(45)
D55B	(51)	D55A	(30)	D100	(41)
D140	(44)				
		D55B	(22)	D55B	(29)
D137	(33)				
E6A	(31)	E6A	(15)	E46	(22)
D100	(27)	D100	(13)	D140	(21)
		D137	(12)		
E81	(23)			E6A	(16)
E46	(22)	D140	(8)		
E6B	(22)			E6B	(13)
D138	(18)	E46	(6)	E81	(9)
		E6B	(5)		
D125	(13)			D125	(8)
		D125	(3)		
D19	(0)	D138	(0)	D138	(0)
				D19	(0)
		D19	(0)		

RANKED-PAIR FREQUENCIES - RAW MATERIAL DATA

	D137	D138	D140	E81	D125	D55A	E46	E6A	D100	D19	D55B	E6B
D137	---											
D138	0	---										
D140	0	1	---									
E81	0	3	0	---								
D125	1	2	0	1	---							
D55A	2	1	2	0	0	---						
E46	1	1	1	2	0	2	---					
E6A	3	1	1	1	0	1	0	---				
D100	5	0	1	0	0	2	1	0	---			
D19	1	2	0	0	1	0	0	0	0	---		
D55B	0	1	2	0	0	0	0	0	1	1	---	
E6B	0	3	1	5	1	1	2	2	0	0	0	---

FREQUENCIES OF RAW MATERIAL AND CORTEX FOR SEVERAL NEW CASTLE COUNTY SITES

Site	Function	Cortex	Crypto	Q & Qz	N
7NC-D-129	P	25	1329	420	1749
7NC-E-46	H/S	2102	2312	7253	10,512
7NC-D-54	C	361	412	760	1288
7NC-D-55A	C	59	21	91	132
7NC-D-55B	C	668	184	2028	2304
7NC-D-62	C	495	81	370	475
7NC-E-6A (2A)	MBBC	496	3364	1820	5515
7NC-E-6A (2B)	MBBC	496	4965	1427	6206
7NC-E-6B	MBBC	383	1445	442	2949
7NC-D-3	QR	0	188	140	368
7NC-D-19	QR	0	483	170	653
7NC-D-5	QR	0	56	30	94
7NC-D-137	P/S(?)	29	25	14	58
7NC-D-138	P/S(?)	0	33	13	56
7NC-D-140	P/S(?)	28	50	24	133
7NC-E-81	P/S(?)	14	101	18	154

Key:

P - procurement
H/S - hunting/staging
C - cobble
MBBC - macro-band base camp
QR - quarry reduction
P/S(?) - procurment/staging (?)

PRESENCE/ABSENCE OF SIGNIFICANT DIFFERENCES FOR CORTEX AMONG PREHISTORIC SITES

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	X														
2	0	X													
3	+	+	X												
4	+	+	+	X											
5	+	+	+	+	X										
6	+	+	+	0	+	X									
7	+	+	+	+	0	+	X								
8	0	+	+	+	+	+	+	X							
9	0	+	+	+	+	+	+	+	X						
10	0	+	+	+	+	+	+	+	+	X					
11	+	+	+	+	+	+	+	+	+	+	X				
12	+	+	+	+	+	+	+	+	+	+	0	X			
13	+	+	+	+	+	+	+	+	+	+	0	0	X		
14	+	+	+	+	+	+	+	+	+	+	0	+	+	X	
15	+	+	+	+	+	+	+	+	+	+	0	+	+	0	X

Key:
+ - significant difference
0 - no difference

PRESENCE/ABSENCE OF SIGNIFICANT DIFFERENCES FOR CRYPTOCRYSTALLINE USE AMONG PREHISTORIC SITES

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	X														
2	+	X													
3	0	+	X												
4	+	+	+	X											
5	0	+	0	+	X										
6	+	+	+	+	+	X									
7	+	+	+	+	0	+	X								
8	+	+	+	+	+	+	+	X							
9	+	+	+	+	+	+	+	+	X						
10	+	+	+	+	+	+	+	+	+	X					
11	+	+	+	+	+	+	+	0	+	+	X				
12	+	+	+	+	+	+	+	+	+	0	0	X			
13	+	0	+	+	+	+	+	+	+	+	+	+	X		
14	+	+	+	+	0	+	0	+	+	+	+	+	+	X	
15	+	+	+	+	+	+	+	+	+	+	0	+	+	+	X

Key:
+ - significant difference
0 - no difference

PRESENCE/ABSENCE OF SIGNIFICANT DIFFERENCES FOR QUARTZ AND QUARTZITE AMONG PREHISTORIC SITES

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	X														
2	+	X													
3	0	+	X												
4	+	+	+	X											
5	0	+	0	+	X										
6	+	+	+	+	+	X									
7	+	+	+	+	+	+	X								
8	+	+	+	+	+	+	+	X							
9	+	0	+	+	+	+	+	+	X						
10	+	+	+	+	+	+	+	+	+	X					
11	+	0	+	+	+	+	+	0	+	+	X				
12	+	+	+	+	+	+	+	+	+	+	0	X			
13	+	0	+	+	+	+	+	+	0	+	0	+	X		
14	0	+	0	+	0	+	+	+	+	+	+	+	+	X	
15	+	0	+	+	+	+	+	+	0	+	0	+	0	+	X

Key:
+ - significant difference
0 - no difference