6.46 Site SDI-16,308

6.46.1 Site Description

This site consists of a large lithic scatter and quarry area located on the highest elevation on the western quarter of the project, and on the associated west-facing slopes. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.46–1. Elevations at the site range from 1,020 to 1,169 feet AMSL. Vegetation at the site consists of chamise chaparral. The only modern disturbance at the site is a road and fence line that runs through the northern portion of the site. The setting of the site is shown in Plate 6.46–1.

Site SDI-16,308 is located outside of the currently proposed construction zone and, therefore, was not subjected to a testing and evaluation program by BFSA. The area in which the site is located is proposed for open space easement. As part of the current Village 13 study, Site SDI-16,308 was visited by BFSA on October 1, 2002, during which time the boundaries of the surface artifact scatter were mapped and recorded. The intention of this investigation was limited to recording of the visible site boundaries. No artifacts were collected and no excavations were conducted at the site.

6.46.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,308 consisted of the identification and mapping of the surface scatter boundaries. The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a surface lithic scatter containing approximately 1,500 specimens, including primarily lithic production waste and some lithic tools. The artifacts were distributed in multiple areas of concentration, notably a quarry in the western extension of the site, and then dispersed across the site. All artifacts appear to be derived from locally available metavolcanic rock. No evidence of ecofacts or features was observed, and no culturally diagnostic tools were identified. The surface expression of the site measures approximately 216 meters (710 feet) from east to west by 210 meters (680 feet) from north to south, and covers approximately 4,800 square meters (52,240 square feet) (Figure 6.46–1).

6.46.3 Summary

Site SDI-16,308 is a low to moderate density surface scatter and possible quarry site where prehistoric activities appear to have focused primarily on lithic procurement and manufacture. The presence of some tools suggests that food collecting and processing were also possible activities at the time. Due to the fact that the site is located outside the construction zone, no subsurface excavations were conducted at the site. Based on similar sites tested during the current investigation, the potential for subsurface deposits at Site SDI-16,308 is moderate.

The area of Site SDI-16,308 is proposed for open space easement and will not be directly impacted by the proposed development. Because the site has not been evaluated for significance, the site is considered a significant resource according to CEQA criteria and County of San Diego guidelines.

Figure 6.46–1
Surface Boundary Location Map — Site SDI-16,308

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,308 looking southwest.

Plate 6.46–1

6.47 Site SDI-16,309

6.47.1 Site Description

This site consists of a quarry and dense lithic scatter located on a southwest-trending ridge on the southwest slopes of the Jamul Mountains, east of Upper Otay Lakes Reservoir and downslope of Sites SDI-16,310 and SDI-16,314, in the northwest corner of the project. The site was located by BFSA during a survey conducted in November 2000. The overall configuration of the resource is shown in Figure 6.47–1. Elevations at the site range from 740 to 810 feet AMSL. Native vegetation of dense chamise chaparral covers most of the site area, although a dirt road extends across the southern edge of the site. The setting of the site is shown in a photograph provided in Plate 6.47–1a.

Site SDI-16,309 is located within the currently proposed construction zone and was therefore subjected to a testing and evaluation program by BFSA. Testing of the site consisted of the mapping and recordation of surface artifacts, and the excavation of 28 shovel test pits and one test unit. The field investigations were conducted between August 7 and 15, 2002.

6.47.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,309 were executed using the standard methodologies described in Section 5.0. Lithic artifacts were recovered from both surface and subsurface contexts.

Surface Recordation

The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a number of surface artifacts and quarry sources. A total of 3,246 artifacts were recovered from the 280 surface locations that produced artifacts (laboratory analysis revealed that several of the specimens collected from surface locations were not cultural). The recovery is summarized in Table 6.47-1, while detailed provenience information for the surface artifacts is presented in Table 6.47–2. In addition to the collection of individual surface artifacts, 11 surface scrapes were utilized to sample the areas of increased quarrying activity across the site (Figure 6.47–1). The quarry areas are located in three general areas, which are shown in Figure 6.47–1. The surface scrapes resulted in the recovery of 593 pieces of lithic production waste, making a total of 3,839 artifacts from the surface collection.

A wide range of artifacts was recovered from the surface of the site. Lithic production waste accounts for 95.99% (N=3,685) of the collection, while the remaining artifacts consisted of smaller quantities of precision (3.41%; N=131), percussion (0.29%; N=11), and core (0.26%; N=10) tools. The most common tools recovered from the surface of the site included retouched and utilized lithic production waste, which accounted for 93.13% (N=122) of the precision tools and 79.22% of all tools recovered from the surface. Other individual tool types recovered included core tools, hammerstones, a biface, a perforator, scrapers, and multi-use hammer/cores.

The surface collection locations illustrated in Figure 6.47–1 represent the general boundaries of the site, while the surface scrapes represent more concentrated artifact scatters. The area of the site, delineated by the artifact collections, measures approximately 350 meters (1,151 feet) from southwest to northeast by 295 meters (967 feet) from northwest to southeast, and covers 43,359 square meters (466,720 square feet) (Figure 6.47–1).

Subsurface Excavation

The potential for subsurface archaeological deposits at Site SDI-16,309 was investigated by excavating a series of 28 STPs. The placement of the STPs, shown in Figure 6.47–1, was generally based on the distribution of surface artifacts, particularly the areas that showed evidence of quarrying activities. The STPs were excavated to a minimum of 30 centimeters, or until bedrock was encountered. Eleven of the STPs produced cultural material, with recovery ranging from one artifact in STPs 11, 14, and 16 to over 60 artifacts in STPs 23 and 26. A total of 234 artifacts were recovered from the STPs, all of which were identified as lithic production waste. Recovery from the STPs is summarized in Table 6.47–3 and detailed in Table 6.47–4. The maximum depth of recovery was 30 centimeters in STPs 9 and 26, although 53.85% (N=126) of the overall STP recovery was from the upper 10 centimeters and another 38.46% (N=90) was from between 10 and 20 centimeters.

The shovel tests identified three subsurface deposits, all located in the same areas identified during the surface investigation as quarry areas (Figure 6.47–1). The most productive shovel tests, STPs 23 and 26, were excavated in the two lower areas. The upper area measures approximately 27 meters (90 feet) by 24 meters (80 feet); the lower right area measures approximately 64 meters (210 feet) by 35 meters (115 feet); and the lower left area, the largest of the three, measures approximately 81 meters (265 feet) by 55 meters (180 feet). Together, the three areas cover 5,486 square meters (59,047 square feet).

The testing program included the excavation of a single test unit at Site SDI-16,309. The test unit was placed within the subsurface area identified on the upper slope. The unit was excavated in standard decimeter levels to 30 centimeters and all removed soils were sifted through 1/8-inch mesh hardware cloth. Excavations resulted in the recovery of 73 artifacts, and included 17 pieces of debitage, 55 flakes, and one retouched flake (Tables 6.47–5 and 6.47–6). The maximum depth of recovery was 20 centimeters, although 86.30% of the collection was recovered from the upper 10 centimeters. The soil profile from Test Unit 1 was characterized as shallow, fine brown (7.5YR 4/4 to 10YR 5/4) sandy loam with underlying metavolcanic rock. A drawing of the north wall of Test Unit 1 is presented in Figure 6.47–2. A color photograph of the north wall of Test Unit 1 is provided in Plate 6.47–1b.

The excavation of the STPs and test unit determined that the site exhibits shallow subsurface deposits localized near areas that have been utilized for quarrying. The subsurface deposits extend to a maximum depth of 30 centimeters, but most of the material was within the

upper 20 centimeters. The subsurface deposit at Site SDI-16,309 is composed almost completely of lithic production waste.

6.47.3 Laboratory Analysis

The laboratory analysis for Site SDI-16,309 included the standard procedures described in Section 5.0 of this report. All artifacts recovered from the field investigations conducted at the site were returned to the laboratory facility of BFSA to be cataloged and analyzed. A summary of artifacts recovered from the site is presented in Table 6.47–7. The recovery from Site SDI-16,309 included 4,146 lithic artifacts.

Lithic Artifact Analysis

Lithic production waste accounted for the largest category of lithic artifacts, representing 96.26% (N=3,991) of the lithic artifact collection and included 17 cores, 1,055 pieces of debitage or shatter, and 2,919 flakes. The remaining lithic collection from Site SDI-16,309 consisted of precision (3.18%; N=132), percussion (0.27%; N=11), core (0.24%; N=10), and multi-use (0.05%; N=2) tools. Measurements of all lithic tools are presented in Table 6.47–8.

The precision tool category included one biface, one perforator, 30 pieces of retouched lithic production waste, seven scrapers, and 93 pieces of utilized lithic production waste. Precision tools identified as perforators, modified flakes with a worn, pointed end, are relatively rare at the Village 13 sites; the specimen from Site SDI-16,309 measures over six centimeters in length. The biface is an unfinished tool identified as a Stage I biface, typically consisting of a blank with a natural cross section that exhibits irregular removal of bifacial flakes from one or more edges. The flaking and utilization pattern on four of the scrapers resulted in the identification of these specimens as flake scrapers; the remaining scrapers were either fragmented or exhibited irregular utilization, thus preventing assignment to a specific scraper type. The percussion tool category was represented by 11 hammerstones and included single-edge, spherical, and circular use ware patterns. The artifacts identified as core tools are generally cores with some evidence of retouch or utilization on at least one edge of the artifact, but not enough so that the artifact can be classified as a specific precision or multi-use tool. Ten core tools were recovered from Site SDI-16,309. Select lithic tools from the site are shown in Plates 6.47–2 and 6.47–3.

The lithic material of the recovered artifacts consisted entirely of medium- or fine-grained metavolcanic rock, which is immediately available on the site itself (Tables 6.47–2, 6.47–4, and 6.47–6). Activities indicated by the artifacts recovered from the site include procurement of lithic materials, lithic tool production and maintenance, as well as processing of plant and/or animal resources.

6.47.4 Discussion

The testing demonstrated that Site SDI-16,309 consists of a large scatter of surface artifacts and a shallow subsurface deposit. The overall site dimensions, identified by the surface scatter and positive subsurface excavation, measure 360 meters (1,151 feet) by 295 meters (967 feet), and covers 43,359 square meters (466,720 square feet). Together, the three subsurface areas identified at the site cover 5,486 square meters (59,047 square feet). Based on the artifacts recovered, the site appears to represent a quarry and temporary camp where lithic resource procurement, lithic tool production and/or maintenance, and plant and/or animal resource processing occurred.

Since none of the artifacts recovered from the site were culturally diagnostic, no cultural affiliation could be assigned to the resource. Site SDI-16,309 is unique among the Village 13 sites not only in the quantity but also in the variety of tools recovered from the site. The range of lithic tools includes core, percussion, precision, and multi-use tools, and further indicates that resource processing, in addition to quarrying and lithic manufacturing activities, occurred at the site. Although the site exhibits no ecofacts or features, the variety and quantity of tools indicates that the site retains additional research potential beyond the surface artifacts. The surface scatter at the site has only been sampled, thus surface artifacts remain at the site.

6.47.5 Summary

The analysis of the cultural materials recovered from Site SDI-16,309 revealed a large, moderately dense surface scatter and shallow cultural deposit. The recovered materials indicate that site activities were focused primarily on lithic procurement and manufacture, with additional plant and/or animal resource processing represented by a variety of precision tools.

Based on the variety and quantity of tool types recovered, Site SDI-16,309 exhibits significant cultural deposits and retains research potential. Both surface sampling and subsurface excavations at the site indicate Site SDI-16,309 contains materials that would contribute additional information important to the understanding of prehistoric resource procurement and economy in the region. Based on the information derived from the testing program, Site SDI-16,309 is considered a significant resource according to CEQA criteria and County of San Diego guidelines.

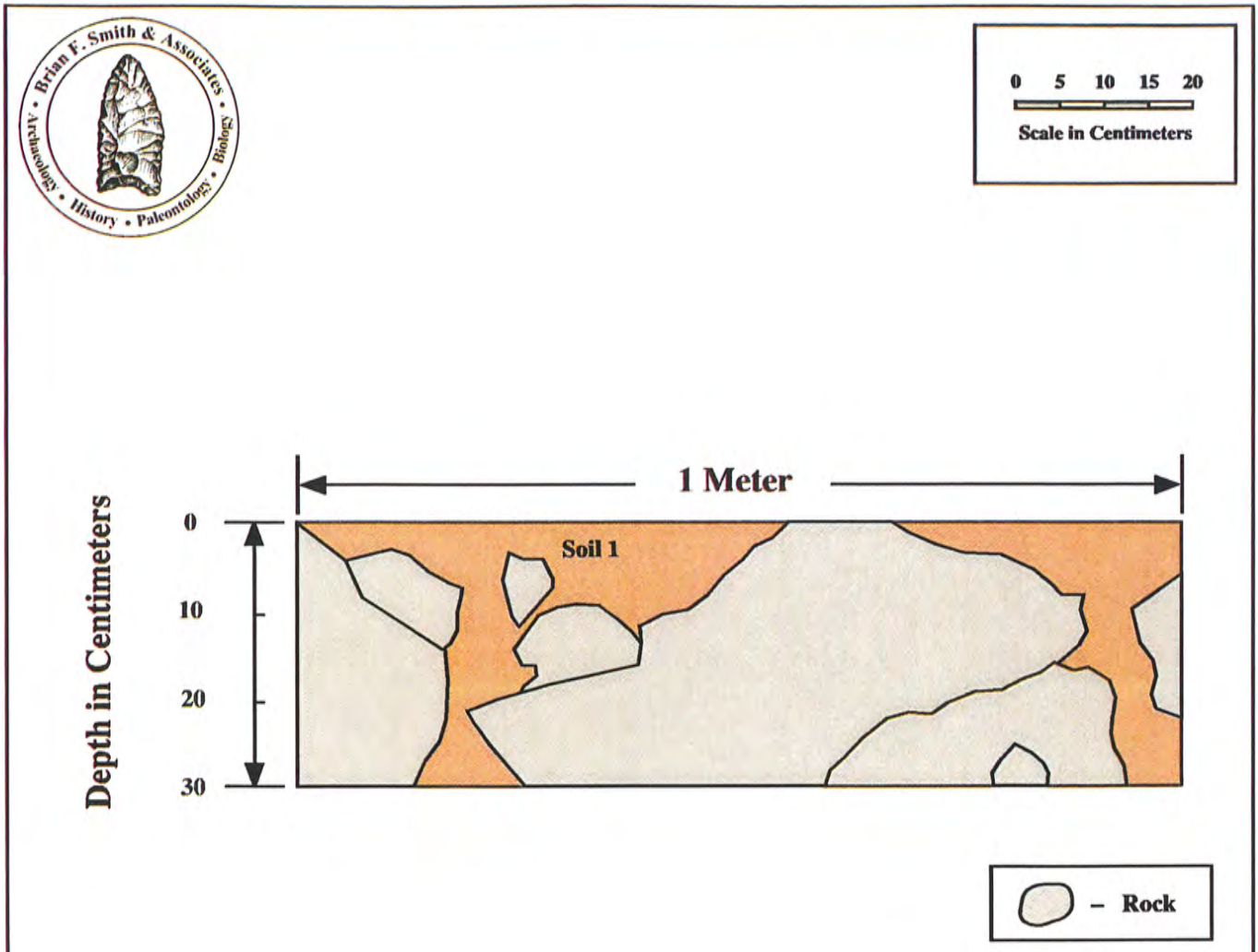
Figure 6.47–1
Excavation Location Map — Site SDI-16,309

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,309 looking southwest.

View of the north profile of Test Unit 1, 0 to 30 centimeters, at Site SDI-16,309.

Plate 6.47–1

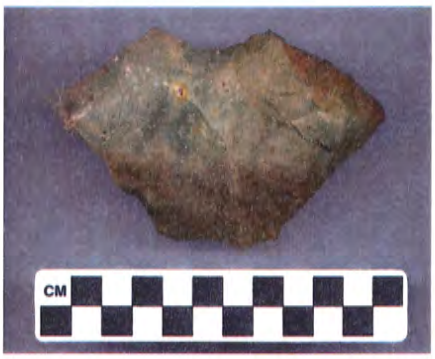


Soil Types

1 Light brown (7.5YR 5/4) compact sandy loam

Figure 6.47–2
North Wall Profile of Test Unit 1
Site SDI-16,309
The Village 13 Project

Catalog #43
FGM Perforator



Catalog # 974
FGM Flake Scraper

Catalog # 396
FGM Flake Scraper

Catalog #710
FGM Scraper

View of select artifacts from Site SDI-16,309

Plate 6.47–2

Catalog # 594
MGM Core Tool, showing tool edge

Catalog # 396
FGM Flake Scraper

Catalog #710
FGM Scraper

Catalog #104
MGM Scraper

View of select artifacts from Site SDI-16,309

Plate 6.47–3

TABLE 6.47–1

Summary of Surface Recovery
Site SDI-16,309

Recovery Category	Surface	Surface Scrape	Total	Percent
Core Tools:				
Core Tools	10	-	10	0.26
Lithic Production Waste:				
Cores	15	2	17	0.44
Debitage	816	174	990	25.79
Flakes	2,284	394	2,678	69.76
Percussion Tools:				
Hammerstones	9	2	11	0.29
Precision Tools:				
Biface	-	1	1	0.03
Perforator	1	-	1	0.03
Retouched Debitage	13	1	14	0.36
Retouched Flakes	12	3	15	0.39
Scrapers	6	1	7	0.18
Utilized Debitage	27	8	35	0.91
Utilized Flakes	51	7	58	1.51
Multi-Use Tools:				
Hammer/Cores	2	-	2	0.05
Total	3,246	593	3,839	100.00
Percent	84.55	15.45	100.00	

Rounded numbers may not add to 100%.

TABLE 6.47–2

Surface Recovery Data
Site SDI-16,309

(Placed in Appendix III)

TABLE 6.47–3

Summary of Shovel Test Recovery
Site SDI-16,309

Recovery Category	Quantity	Percent
Lithic Production Waste:		
Debitage	48	20.51
Flakes	186	79.49
Total	234	100.00

Rounded numbers may not add to 100%.

TABLE 6.47–4

Shovel Test Excavation Data
Site SDI-16,309

Shovel Test	Datum	Location from Datum Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
1	A	0°/0 Feet	0-10 cm.		No Recovery		1002
			10-20 cm.		No Recovery		1003
			20-30 cm.		No Recovery		1004
2	A	24°/75 Feet	0-10 cm.		No Recovery		1005
			10-20 cm.		No Recovery		1006
			20-30 cm.		No Recovery		1007
3	A	24°/185 Feet	0-10 cm.		No Recovery		1008
			10-20 cm.		No Recovery		1009
			20-30 cm.		No Recovery		1010
4	A	24°/285 Feet	0-10 cm.		No Recovery		1011
			10-20 cm.		No Recovery		1012
			20-30 cm.		No Recovery		1013
5	A	24°/380 Feet	0-10 cm.		No Recovery		1014
			10-20 cm.		No Recovery		1015
			20-30 cm.		No Recovery		1016
6	C	208°/262 Feet	0-10 cm.		No Recovery		1017
			10-20 cm.		No Recovery		1018

Shovel Test	Datum	Location from Datum Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
			20-30 cm.		No Recovery		1019
7	C	186°/299 Feet	0-10 cm.		No Recovery		1020
			10-20 cm.		No Recovery		1021
8	C	232°/290 Feet	0-10 cm.		No Recovery		1022
			10-20 cm.		No Recovery		1023
			20-30 cm.		No Recovery		1024
9	C	223°/266 Feet	0-10 cm.	2	Debitage	FGM	1025
				15	Flakes	FGM	1026
			10-20 cm.	2	Debitage	FGM	1027
				12	Flakes	FGM	1028
			20-30 cm.	5	Flakes	FGM	1029
				1	Flake	MGM	1030
10	C	221°/578 Feet	0-10 cm.		No Recovery		1031
			10-20 cm.		No Recovery		1032
			20-30 cm.		No Recovery		1033
11	C	226°/633 Feet	0-10 cm.	1	Flake	MGM	1034
			10-20 cm.		No Recovery		1035
			20-30 cm.		No Recovery		1036
12	C	228°/681 Feet	0-10 cm.		No Recovery		1037
			10-20 cm.		No Recovery		1038

Shovel Test	Datum	Location from Datum Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
			20-30 cm.		No Recovery		1039
13	C	236°/758 Feet	0-10 cm.		No Recovery		1040
			10-20 cm.		No Recovery		1041
			20-30 cm.		No Recovery		1042
14	C	224°/743 Feet	0-10 cm.	1	Flake	MGM	1043
			10-20 cm.		No Recovery		1044
			20-30 cm.		No Recovery		1045
15	C	220°/790 Feet	0-10 cm.		No Recovery		1046
			10-20 cm.		No Recovery		1047
16	C	209°/506 Feet	0-10 cm.	1	Flake	FGM	1048
			10-20 cm.		No Recovery		1049
			20-30 cm.		No Recovery		1050
17	C	202°/486 Feet	0-10 cm.	2	Debitage	FGM	1051
				5	Flakes	FGM	1052
			10-20 cm.	3	Debitage	FGM	1053
				2	Flakes	FGM	1054
			20-30 cm.		No Recovery		1055
18	C	194°/530 Feet	0-10 cm.	2	Debitage	FGM	1056
			10-20 cm.		No Recovery		1057
			20-30 cm.		No Recovery		1058

Shovel Test	Datum	Location from Datum Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
19	C	220°/99 Feet	0-10 cm.		No Recovery		1059
			10-20 cm.		No Recovery		1060
			20-30 cm.		No Recovery		1061
20	C	256°/27 Feet	0-10 cm.		No Recovery		1062
			10-20 cm.		No Recovery		1063
			20-30 cm.		No Recovery		1064
21	C	211°/530 Feet	0-10 cm.		No Recovery		1065
			10-20 cm.		No Recovery		1066
			20-30 cm.		No Recovery		1067
22	C	210°/455 Feet	0-10 cm.	2	Debitage	FGM	1068
				9	Flakes	FGM	1069
22	C	210°/455 Feet	10-20 cm.		No Recovery		1070
			20-30 cm.		No Recovery		1071
23	C	209°/475 Feet	0-10 cm.	6	Debitage	FGM	1072
				29	Flakes	FGM	1073
			10-20 cm.	10	Debitage	FGM	1074
				34	Flakes	FGM	1075
			20-30 cm.		No Recovery		1076
24	C	189°/553 Feet	0-10 cm.		No Recovery		1077

Shovel Test	Datum	Location from Datum Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
			10-20 cm.		No Recovery		1078
			20-30 cm.		No Recovery		1079
25	C	232°/683 Feet	0-10 cm.	4	Debitage	FGM	1080
				3	Flakes	FGM	1081
				6	Flakes	MGM	1082
			10-20 cm.	3	Debitage	FGM	1083
				3	Flakes	FGM	1084
			20-30 cm.		No Recovery		1085
26	D	152°/202 Feet	0-10 cm.	6	Debitage	FGM	1086
				15	Flakes	FGM	1087
				5	Debitage	MGM	1088
				10	Flakes	MGM	1089
			10-20 cm.	13	Flakes	FGM	1090
				8	Flakes	MGM	1091
			20-30 cm.	1	Debitage	FGM	1092
				11	Flakes	FGM	1093
			30-40 cm.		No Recovery		1094
27	D	164°/170 Feet	0-10 cm.	2	Flakes	FGM	1095
27	D	164°/170 Feet	10-20 cm.		No Recovery		1096
			20-30 cm.		No Recovery		1097

Shovel Test	Datum	Location from Datum Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
28	D	168°/156 Feet	0-10 cm.		No Recovery		1098
			10-20 cm.		No Recovery		1099
			20-30 cm.		No Recovery		1100

TABLE 6.47–5

Summary of Test Unit Recovery
Site SDI-16,309

Artifact Category	Depth (in centimeters) 0-10	10-20	20-30	Total	Percent
Lithic Production Waste:					
Debitage	15	2	-	17	23.29
Flakes	47	8	-	55	75.34
Precision Tools:					
Retouched Flake	1	-	-	1	1.37
Total	63	10	0	73	100.00
Percent	86.30	13.70	0.00	100.00	

Rounded numbers may not add to 100%.

TABLE 6.47–6

Test Unit Excavation Data
Site SDI-16,309

Test Unit	Location from Datum B Azimuth/Range	Depth	Quantity/ Weight	Recovery	Description	Cat. No.
1	223°/268 Feet	0-10 cm.	1	Retouched Flake Fragment	FGM	1101
			14	Debitage	FGM	1102
			46	Flakes	FGM	1103
			1	Debitage	MGM	1104
			1	Flake	MGM	1105
		10-20 cm.	2	Debitage	FGM	1106
			8	Flakes	FGM	1107
		20-30 cm.		No Recovery		1108

TABLE 6.47–7

Summary of Artifact Recovery
Site SDI-16,309

Recovery Category	Surface	Shovel Tests	Test Units	Total	Percent
Core Tools:					
Core Tools	10	-	-	10	0.24
Lithic Production Waste:					
Cores	17	-	-	17	0.41
Debitage	990	48	17	1055	25.45
Flakes	2678	186	55	2919	70.41
Percussion Tools:					
Hammerstones	11	-	-	11	0.27
Precision Tools:					
Biface	1	-	-	1	0.02
Perforator	1	-	-	1	0.02
Retouched Debitage	14	-	-	14	0.34
Retouched Flakes	15	-	1	16	0.39
Scrapers	7	-	-	7	0.17
Utilized Debitage	35	-	-	35	0.84
Utilized Flakes	58	-	-	58	1.40
Multi-Use Tools:					
Hammer/Cores	2	-	-	2	0.05
Total	3839	234	73	4146	100.00
Percent	92.60	5.64	1.76	100.00	

Rounded numbers may not add to 100%.

TABLE 6.47–8

Lithic Tool Measurement Data
Site SDI-16,309

Cat. No.	Tool Description	Dimensions (in centimeters) Length	Width	Thickness	Weight (in grams)	Material
Core Tools:						
41	Core Tool	5.4	3.7	2.8	52.7	FGM
51	Core Tool	14.8	13.1	7.4	1,418.0	MGM
264	Core Tool Fragment	6.5	5.7	2.6	122.1	FGM
265	Core Tool	6.7	5.8	5.4	294.7	FGM
276	Core Tool Fragment	10.7	9.0	7.4	628.5	FGM
324	Core Tool Fragment	10.1	6.5	6.0	353.6	MGM
341	Core Tool	8.8	7.0	3.6	242.7	FGM
353	Core Tool	6.5	6.0	4.8	249.5	MGM
357	Core Tool	10.5	8.7	4.2	383.3	MGM
595	Core Tool	9.8	8.7	4.7	491.6	MGM
Percussion Tools:						
Hammerstones:						
26	Hammerstone, Single-Edged	9.1	7.4	6.8	404.7	FGM
27	Hammerstone Fragment, Undetermined	6.9	5.9	4.8	295.0	FGM
28	Hammerstone Fragment, Undetermined	5.0	4.8	3.3	123.2	FGM
103	Hammerstone, Spherical	7.4	5.6	5.5	277.9	MGM
207	Hammerstone, Circular	13.0	9.0	5.5	946.4	MGM
235	Hammerstone Fragment, Undetermined, Burned	9.0	7.6	4.4	261.1	FGM
266	Hammerstone, Spherical	9.2	6.1	5.7	312.5	FGM
388	Hammerstone Fragment, Undetermined, Burned	5.0	2.9	0.9	9.5	MGM
580	Hammerstone Fragment, Undetermined	11.0	8.4	6.0	450.8	MGM
965	Hammerstone Fragment, Undetermined	6.0	5.2	4.3	157.1	FGM
992	Hammerstone, Circular	12.1	10.2	4.6	1,875.5	MGM
Precision Tools:						
Bifaces:						
944	Biface, Stage I	11.3	6.9	3.0	219.5	FGM
Perforators:						
43	Perforator	6.3	5.5	3.4	74.4	FGM
32	Retouched Debitage Fragment	4.0	3.3	1.6	20.1	FGM
52	Retouched Debitage Fragment	7.9	5.2	4.0	150.6	FGM
75	Retouched Debitage	9.2	6.2	3.8	183.7	MGM
86	Retouched Debitage Fragment	4.5	2.5	1.6	21.5	MGM
167	Retouched Debitage	2.9	2.7	1.5	12.1	FGM
542	Retouched Debitage	9.3	8.2	5.4	446.2	MGM
661	Retouched Debitage	9.3	6.9	4.5	241.6	FGM

Cat. No.	Tool Description	Dimensions (in centimeters) Length	Width	Thickness	Weight (in grams)	Material
Retouched Debitage:						
756	Retouched Debitage	11.2	9.9	7.6	956.0	FGM
761	Retouched Debitage	8.1	4.4	3.2	93.6	MGM
831	Retouched Debitage	4.1	4.0	1.9	34.4	MGM
887	Retouched Debitage	8.1	6.2	5.7	501.1	FGM
905	Retouched Debitage	6.2	4.6	2.6	84.4	FGM
937	Retouched Debitage	7.2	3.6	1.7	37.4	FGM
979	Retouched Debitage Fragment	7.7	5.1	3.7	107.7	FGM
Retouched Flakes:						
30	Retouched Flake	8.2	6.7	2.7	192.5	FGM
31	Retouched Flake	8.2	7.1	2.6	131.2	FGM
42	Retouched Flake Fragment	7.0	3.2	2.8	65.2	FGM
44	Retouched Flake Fragment	7.0	7.0	2.1	90.1	FGM
60	Retouched Flake	4.4	4.3	1.0	18.0	FGM
135	Retouched Flake	5.6	5.2	1.5	32.2	MGM
156	Retouched Flake	6.7	4.8	2.1	52.7	MGM
187	Retouched Flake	10.6	7.9	2.4	142.1	MGM
300	Retouched Flake	4.8	3.4	1.7	14.8	FGM
752	Retouched Flake	10.1	8.5	2.3	194.4	MGM
898	Retouched Flake	5.6	2.7	0.7	11.5	FGM
927	Retouched Flake	8.4	6.0	1.5	64.4	FGM
940	Retouched Flake	8.9	6.1	3.0	137.5	FGM
980	Retouched Flake	13.4	6.9	3.4	317.2	FGM
987	Retouched Flake Fragment	4.5	3.5	1.0	20.4	FGM
1101	Retouched Flake Fragment	4.8	2.1	0.7	6.8	FGM
Scrapers:						
132	Flake Scraper Fragment	6.9	5.1	1.7	39.9	FGM
384	Flake Scraper Fragment	5.7	2.7	1.3	19.3	FGM
396	Flake Scraper	6.5	5.2	2.6	88.0	MGM
974	Flake Scraper	11.8	7.5	1.2	114.6	FGM
104	Scraper	11.3	7.1	3.7	395.4	MGM
Scrapers (continued):						
638	Scraper Fragment	4.1	2.4	1.5	13.4	FGM
710	Scraper	5.7	3.2	2.2	41.0	FGM
Utilized Debitage:						
35	Utilized Debitage	4.3	4.3	3.5	71.6	FGM
225	Utilized Debitage	8.4	5.6	2.7	145.0	FGM
799	Utilized Debitage	3.4	3.0	1.4	11.7	FGM
813	Utilized Debitage	5.5	3.3	2.0	31.4	FGM
823	Utilized Debitage	4.5	3.1	1.5	16.9	FGM
832	Utilized Debitage	4.5	2.9	1.9	28.2	FGM

Cat. No.	Tool Description	Dimensions (in centimeters) Length	Width	Thickness	Weight (in grams)	Material
833	Utilized Debitage	8.5	4.6	4.3	158.9	FGM
838	Utilized Debitage	6.0	4.7	2.6	74.4	FGM
862	Utilized Debitage	3.9	2.9	1.4	12.2	FGM
865	Utilized Debitage	5.6	3.0	1.7	24.0	FGM
868	Utilized Debitage	2.5	2.3	2.1	13.1	MGM
878	Utilized Debitage	5.3	3.7	2.4	33.4	FGM
884	Utilized Debitage	4.3	2.9	1.7	19.3	FGM
889	Utilized Debitage	6.7	2.1	1.4	14.4	FGM
890	Utilized Debitage	6.2	4.5	2.7	58.5	FGM
907	Utilized Debitage	8.5	7.9	5.0	400.0	FGM
910	Utilized Debitage	6.5	5.1	3.3	109.8	FGM
945	Utilized Debitage	7.1	6.4	4.2	184.5	FGM
946	Utilized Debitage	10.1	6.0	4.0	351.0	FGM
953	Utilized Debitage	9.7	1.8	1.4	18.4	FGM
959	Utilized Debitage	8.0	5.4	2.5	101.5	FGM
966	Utilized Debitage	11.1	7.3	3.3	220.6	FGM
988	Utilized Debitage	4.6	2.9	1.2	16.6	FGM
989	Utilized Debitage	7.4	5.4	2.3	79.7	FGM
993	Utilized Debitage	5.5	3.3	1.7	32.6	MGM
Utilized Flakes:						
12	Utilized Flake	3.1	1.8	0.6	3.7	FGM
19	Utilized Flake	5.0	4.7	1.1	19.1	FGM
33	Utilized Flake	4.6	4.0	1.1	14.5	FGM
34	Utilized Flake	5.1	3.6	1.5	21.6	FGM
45	Utilized Flake	8.1	4.7	1.5	44.8	FGM
74	Utilized Flake	5.4	3.8	1.4	27.0	FGM
85	Utilized Flake Fragment	5.4	4.4	0.9	20.9	MGM
196	Utilized Flake Fragment	8.3	7.5	2.4	148.6	FGM
241	Utilized Flake	7.6	7.5	2.1	121.4	FGM
242	Utilized Flake	8.0	7.0	2.5	135.0	FGM
287	Utilized Flake	6.3	2.8	1.5	25.1	FGM
301	Utilized Flake	4.9	3.6	1.3	21.8	FGM
302	Utilized Flake	6.6	5.6	2.1	80.7	FGM
315	Utilized Flake	8.7	6.7	3.0	115.3	FGM
374	Utilized Flake Fragment	5.2	1.9	1.5	13.7	FGM
400	Utilized Flake	4.3	3.5	1.3	16.9	FGM
405	Utilized Flake Fragment	9.2	3.6	2.4	72.7	FGM
416	Utilized Flake Fragment	4.7	2.8	1.5	12.4	FGM
422	Utilized Flake	4.8	4.0	0.6	13.3	FGM
423	Utilized Flake Fragment	4.5	2.8	0.7	11.5	FGM
424	Utilized Flake	5.1	2.4	1.1	11.1	FGM
429	Utilized Flake	4.0	1.9	0.5	5.0	FGM
433	Utilized Flake	5.1	3.5	1.6	23.4	FGM
436	Utilized Flake	4.0	2.3	1.0	9.9	FGM
551	Utilized Flake	5.0	3.8	1.7	30.4	MGM
556	Utilized Flake	7.4	4.4	1.9	60.9	MGM
611	Utilized Flake Fragment	6.9	3.3	1.6	43.7	FGM

Cat. No.	Tool Description	Dimensions (in centimeters) Length	Width	Thickness	Weight (in grams)	Material
Utilized Flake (continued):						
657	Utilized Flake	7.1	5.0	1.8	62.7	FGM
662	Utilized Flake Fragment	4.8	4.4	1.2	27.1	FGM
718	Utilized Flake Fragment	4.2	1.8	0.7	5.7	FGM
728	Utilized Flake Fragment	4.8	2.6	1.0	9.0	FGM
732	Utilized Flake Fragment	2.9	2.4	0.6	5.0	FGM
754	Utilized Flake Fragment	6.5	5.9	2.4	65.1	FGM
764	Utilized Flake	4.3	3.3	1.4	15.7	FGM
779	Utilized Flake Fragment	3.4	3.0	0.9	9.7	FGM
780	Utilized Flake	4.8	3.8	1.3	17.5	FGM
792	Utilized Flake	6.2	3.6	1.2	26.2	FGM
793	Utilized Flake	5.7	3.3	1.0	16.3	FGM
794	Utilized Flake	6.3	5.0	1.9	43.0	FGM
814	Utilized Flake	4.0	3.8	0.9	13.0	FGM
815	Utilized Flake	5.8	5.2	1.5	45.4	FGM
828	Utilized Flake	4.3	4.2	1.9	30.3	FGM
855	Utilized Flake	3.5	2.5	0.7	5.5	MGM
879	Utilized Flake	3.7	2.8	1.2	9.9	MGM
880	Utilized Flake	6.8	4.0	1.3	30.4	FGM
891	Utilized Flake	3.6	3.6	0.9	13.7	FGM
899	Utilized Flake	5.1	3.2	1.3	15.3	FGM
906	Utilized Flake Fragment	4.9	4.0	0.5	13.9	FGM
920	Utilized Flake Fragment	3.2	2.3	1.0	8.4	FGM
921	Utilized Flake	5.8	4.1	1.4	23.9	FGM
928	Utilized Flake Fragment	4.2	3.4	1.0	14.8	FGM
964	Utilized Flake	8.6	8.4	2.3	136.3	FGM
967	Utilized Flake	9.4	7.4	2.9	165.0	FGM
971	Utilized Flake	8.3	5.0	2.0	98.4	MGM
981	Utilized Flake Fragment	9.2	4.4	2.0	87.3	FGM
984	Utilized Flake	6.5	4.8	2.1	56.2	MGM
996	Utilized Flake Fragment	7.8	6.0	1.9	61.9	FGM
999	Utilized Flake	8.0	6.3	1.4	52.6	MGM
Multi-Use Tools:						
Hammer/Cores:						
29	Hammer/Core Fragment	8.5	7.0	3.7	185.3	FGM
258	Hammer/Core	6.6	5.7	4.7	173.5	FGM

6.48 Site SDI-16,310

6.48.1 Site Description

Site SDI-16,310 consist of a small, sparse lithic scatter located on the southeast slope of a southwest-trending ridge between SDI-16,309 and SDI-16,314, southeast of a seasonal drainage, in the northwest corner of the project. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.48–1. The site is located at an elevation of 830 feet AMSL. The current vegetation consists primarily of native chamise chaparral with scattered grasses and low shrubs. The setting of Site SDI-16,310 is shown in a photograph provided in Plate 6.48–1.

Site SDI-16,310 is located within the currently proposed construction zone and was therefore subjected to a testing and evaluation program by BFSA. Testing of the site consisted of the mapping and recordation of all surface artifacts and the excavation of five shovel test pits. The field investigations were conducted on August 20, 2002.

6.48.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,310 were executed using the standard methodologies described in Section 5.0. A small amount of lithic artifacts was recovered from the surface of the site; however, no subsurface deposits were identified.

Surface Recordation

The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a limited number of surface artifacts. A total of 11 artifacts were recovered from the nine surface locations that produced artifacts (laboratory analysis revealed that several of the specimens collected from surface locations were not cultural). The recovery is summarized in Table 6.48–1, while detailed provenience information for the surface artifacts is presented in Table 6.48–2. Lithic production waste accounts for 90.91% (N=10) of the collection, while the remaining artifact consisted of a single biface. The area of the site, delineated by the artifact scatter, measures approximately 52 meters (170 feet) from southwest to northeast by 35 meters (115 feet) from northwest to southeast, and covers 1,252 square meters (13,473 square feet) (Figure 6.48–1).

Subsurface Excavation

The potential for subsurface archaeological deposits at Site SDI-16,310 was investigated by excavating a series of five STPs. The placement of the STPs, shown in Figure 6.48–1, was based on the distribution of the surface artifacts. The STPs were excavated to a minimum of 30 centimeters, or until bedrock was encountered. No artifacts were recovered from the STPs excavated at Site SDI-16,310. Locational and depth information for the shovel tests is presented in Table 6.48–3.

Due to the lack of evidence for a subsurface deposit, a test unit was not excavated at Site SDI-16,310 as part of the testing program. The excavation of the STPs determined that no subsurface deposits are present at Site SDI-16,310.

6.48.3 Discussion

The testing demonstrated that Site SDI-16,310 consists of a sparse scatter of lithic artifacts on the surface of the site with no evidence of subsurface deposits. The overall site dimensions, identified by the surface scatter, measure 52 meters (170 feet) by 35 meters (115 feet), and covers 1,252 square meters (13,473 square feet). Lithic production waste accounted for the largest category of artifacts from Site SDI-16,310, representing 90.91% (N=10) of the lithic artifact collection and included one core and nine flakes. The remaining specimen was identified as a complete Stage I biface—a blank with a natural cross section that exhibits irregular removal of flakes from both sides. Measurements for the biface are provided in Table 6.48–4. All artifacts collected from Site SDI-16,310 were derived from locally available fine- or medium-grained metavolcanics, including the biface, which was derived from fine-grained material (Table 6.48–2). The site appears to represent a limited-use site where a small amount of lithic tool production and/or maintenance occurred.

Since none of the artifacts recovered from the site were culturally diagnostic, no cultural affiliation could be assigned to the resource. Given the sparse nature of the surface scatter, the paucity of artifact variability, and the lack of a subsurface deposit, it is unlikely that further excavation would produce additional data that would allow such a determination. The site exhibits no ecofacts, features, or unique elements. The mapping and collection of all surface artifacts have exhausted the research potential of this site. According to the criteria listed in CEQA, Section 15064.5, and the guidelines set forth by the County of San Diego, the site is evaluated as having limited significance based upon the recover of information that can contribute to the knowledge of prehistory in the region. However, the current program has exhausted the potential of the site to yield unique data and further study will not produce additional significant information.

6.48.4 Summary

The investigation of Site SDI-16,310 did not produce any unique scientific data regarding site function or content. The identified artifacts indicate that site activities were focused primarily on a limited amount of lithic tool production and possibly resource processing. The site represents one of several limited-use lithic manufacturing or maintenance sites in the area.

Based on the information derived from the testing program, the site is characterized as possessing limited significance according to County of San Diego cultural resource guidelines. The site exhibits a sparse artifact scatter that has been collected, and did not possess any segregated special use areas, features, or unique elements. The level of information already

obtained from this site has exhausted the research potential of the resource, and it is unlikely that any significantly different information would be gathered from further investigation. No further archaeological investigations are recommended for Site SDI-16,310.

Figure 6.48–1
Excavation Location Map — Site SDI-SDI-16,310

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,310 looking north.

Plate 6.48–1

TABLE 6.48–1

Summary of Surface Recovery
Site SDI-16,310

Recovery Category	Quantity	Percent
Lithic Production Waste:		
Core	1	9.09
Flakes	9	81.82
Precision Tools:		
Biface	1	9.09
Total	11	100.00

Rounded numbers may not add to 100%.

TABLE 6.48–2

Surface Recovery Data
Site SDI-16,310

Recovery Location	Location from Datum A Azimuth/Range	Quantity/ Weight	Recovery	Material	Cat. No.
1	165°/31 Feet		Not an Artifact		1
2	126°/46 Feet	1	Flake	MGM	2
3	210°/92 Feet	1	Flake	FGM	3
4	217°/143 Feet	1	Flake	FGM	4
5	212°/137 Feet	1	Flake	FGM	5
6	206°/145 Feet	1	Flake	MGM	6
7	200°/148 Feet		Not an Artifact		7
8	203°/249 Feet		Not an Artifact		8
9	220°/232 Feet		Not an Artifact		9
10	225°/265 Feet		Not an Artifact		10
11	289°/54 Feet	1	Flake	FGM	11
12	282°/42 Feet	1	Core Fragment	FGM	12
		2	Flakes	FGM	13
13	26°/6 Feet	1	Flake	MGM	14
			Not an Artifact	MGM	15
14	0°/0 Feet	1	Biface, Stage I	FGM	16
15	58°/5 Feet		Not an Artifact		17

TABLE 6.48–3

Shovel Test Excavation Data
Site SDI-16,310

Shovel Test	Location from Datum A Azimuth/Range	Depth	Recovery	Cat. No.
1	0°/0 Feet	0-10 cm.	No Recovery	18
		10-20 cm.	No Recovery	19
		20-30 cm.	No Recovery	20
2	211°/143 Feet	0-10 cm.	No Recovery	21
		10-20 cm.	No Recovery	22
		20-30 cm.	No Recovery	23
3	216°/95 Feet	0-10 cm.	No Recovery	24
		10-20 cm.	No Recovery	25
		20-30 cm.	No Recovery	26
4	279°/49 Feet	0-10 cm.	No Recovery	27
		10-20 cm.	No Recovery	28
		20-30 cm.	No Recovery	29
5	223°/234 Feet	0-10 cm.	No Recovery	30
		10-20 cm.	No Recovery	31
		20-30 cm.	No Recovery	32

TABLE 6.48–4

Lithic Tool Measurement Data
Site SDI-16,310

Cat. No.	Tool Description	Dimensions (in centimeters) Length	Width	Thickness	Weight (in grams)	Material
Precision Tools:						
Bifaces:						
16	Biface, Stage I	6.7	4.5	2.0	66.6	FGM

6.49 Site SDI-16,311

6.49.1 Site Description

This site consists of a lithic scatter located on a southwest-facing slope of a ridge directly east of Upper Otay Reservoir and Otay Lakes Road, at the northwest edge of the project. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.49–1. Elevations at the site range from 780 to 815 feet AMSL. Vegetation at the site consists of chamise chaparral, which covers most of the site area. A dirt road has been graded through the site, and modern trash is present along the road. The setting of the site is shown in a photograph provided in Plate 6.49–1.

As part of the Village 13 study, Site SDI-16,311 was visited by BFSA on September 26, 2002, during which time the boundaries of the surface artifact scatter were mapped and recorded. In 2002, no artifacts were collected and no excavations were conducted at the site, because Site SDI-16,311 fell outside the proposed construction zone and within a proposed open space area. However, Village 13 development plans changed and currently Site SDI-16,311 is within the proposed construction zone and therefore subject to a testing and evaluation program by BFSA. Testing of the site consisted of the mapping and recordation of all surface artifacts, followed by the excavation of 15 shovel test pits and two test units. The most recent field investigations were conducted July 14 and 15, 2008.

6.49.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,311 were executed using the standard methodologies described in Section 5.0. The locations of surface collections, shovel tests, test units, and the datum were recorded using a Trimble GEO XT GPS unit equipped with TerraSync software and field sketches. Lithic artifacts were recovered from the surface of the site and a sparse subsurface deposit was identified.

Surface Recordation

In 2002, BFSA surveyed Site SDI-16,311 in order to identify and map its surface boundaries. A surface lithic scatter containing approximately 60 specimens, including lithic production waste and one core, formed the basis for an initial surface expression measuring approximately 33 meters (110 feet) from east to west by 30 meters (100 feet) from north to south, and covering approximately 812 square meters (9,020 square feet). All artifacts appear to be derived from locally available metavolcanic rock. No evidence of ecofacts or features was observed, and no culturally diagnostic tools were identified.

On July 14, 2008, BFSA revisited Site SDI-16,311 to re-inspect the surface of the site for evidence of prehistoric activity, resulting in the identification of a limited number of surface artifacts. A total of 19 artifacts were recovered from the 14 surface locations that produced artifacts (laboratory analysis revealed that several of the specimens collected from surface

locations were not cultural). The recovery is summarized in Table 6.49–1, while detailed provenience information for the surface artifacts is presented in Table 6.49–2. Lithic production waste accounts for the entire surface collection (N=19). Two of the 19 artifacts recovered were cores. The surface collection is widely distributed across the site. Differences between the quantity and location of surface scatter observed in 2002 and the current surface scatter is the result of recent disturbance to the resource. Vehicular and pedestrian visitation to the area and slope erosion created through colluvial and alluvial processes are the most likely contributing factors to the observed site deflation. The area of the site, delineated by the most separated points of the artifact scatter, measures approximately 61 meters (200 feet) from west to east by 61 meters (200 feet) from north to south, and covers 1,887 square meters (20,320 square feet) (Figure 6.49–1).

Subsurface Excavation

The potential for subsurface archaeological deposits at Site SDI-16,311 was investigated by excavating a series of 15 STPs. The placement of the STPs, shown in Figure 6.49–1, was based on topography and the distribution of the surface artifacts. Four artifacts were recovered from the STPs excavated at Site SDI-16,311—two artifacts from STP 3 and two artifacts from STP 7. The maximum depth of recovery was 20 centimeters. The STPs were excavated to a minimum of 30 centimeters, or until bedrock was encountered. Locational and depth information for the shovel test pits is presented in Table 6.49–3.

The testing program included the excavation of two test units at Site SDI-16,311. The test units were placed near areas of dense surface artifact recovery and shovel test recovery (Figure 6.49–1). The test units were excavated in standard decimeter levels to 30 centimeters, or until bedrock was encountered, and all removed soils were sifted through 1/8-inch mesh hardware cloth. Excavations resulted in the recovery of five artifacts, all identified as lithic production waste (Table 6.49–4). The maximum depth of recovery was 10 centimeters. The soil profile from Test Unit 1 was characterized as dark brown (7.5YR 3/4) sandy clay. The soil profile from Test Unit 2 was characterized as strong brown (7.5YR 4/6) sandy clay. A sketch of the north wall of Test Unit 2 is presented in Figure 6.49–2. A color photograph of the north wall of Test Unit 2 is provided in Plate 6.49–2.

The excavation of the STPs and test units determined that Site SDI-16,311 exhibits two localized subsurface deposits. The subsurface areas are each similar in size and both possess sparse and shallow recovery, not exceeding 20 centimeters in depth. The northern subsurface deposit was located where surface artifact collection was most dense. This subsurface deposit consisted of six flakes. This deposit measured approximately seven meters (24 feet) east/west by five meters (18 feet) north/south and covered approximately 35 square meters (432 square feet). The southern subsurface deposit measured approximately seven meters (22 feet) east/west by five meters (18 feet) north/south and covered approximately 35 square meters (432 square feet).

Together, the excavations showed an estimated area of subsurface deposit that measured 70 square meters (864 square feet).

6.49.3 Laboratory Analysis

The laboratory analysis for Site SDI-16,311 included the standard procedures described in Section 5.0 of this report. All artifacts recovered from the field investigations conducted at the site were returned to the laboratory facility of BFSA to be cataloged and analyzed. A summary of artifacts recovered from the site is presented in Table 6.49–6. The recovery from Site SDI-16,311 included 28 lithic artifacts.

Lithic Artifact Analysis

Lithic production waste accounted for the entire site artifact assemblage. More specifically, the assemblage consisted of two cores (7.14%), one piece of debitage or shatter (3.57%), and 25 flakes (89.29%). No lithic tools were collected from Site SDI-16,311.

The material distribution of the lithic assemblage is presented in Table 6.49–7. The collection consists entirely of locally available lithic material, particularly that of fine- and medium-grained metavolcanic, which together account for 100.00% (N=29) of the collection. In fact, the bulk of the covered artifacts were manufactured from medium-grained metavolcanic rock (96.43 %; N=28).

6.49.4 Discussion

The testing demonstrated that Site SDI-16,311 consists of a minimal scatter of surface artifacts and two sparse, shallow localized subsurface deposits. The overall site dimensions, identified by the surface scatter and excavation, measure approximately 61 meters (200 feet) from west to east by 61 meters (200 feet) from north to south, and covers 1,887 square meters (20,320 square feet) (Figure 6.49–1). Based on the artifacts recovered, the site appears to represent a limited-use site where lithic tool production and/or maintenance occurred.

Since none of the artifacts recovered from the site were culturally diagnostic, no cultural affiliation could be assigned to the resource. Given the sparse nature of the subsurface deposit, and the fact that only lithic production waste was recovered from the site, it is unlikely that further excavation would produce additional data that would allow such a determination. The site exhibits no tools, ecofacts, features, or unique elements. In addition, 67.86% (N=19) of the artifacts recovered from the site were on the surface. The testing of Site SDI-16,311, including the collection of all surface artifacts, has exhausted the research potential of this resource. According to the criteria listed in CEQA, Section 15064.5, and the guidelines set forth by the County of San Diego, the site is evaluated as having limited significance based upon the information that can contribute to the knowledge of the prehistory of the region. However, the

current program has exhausted the potential of the site to yield unique data, and further study will not produce additional significant information.

6.49.5 Summary

The investigation of Site SDI-16,311 did not produce any unique scientific data regarding site function or content. The identified artifacts indicate that site activities were focused primarily on lithic tool production and/or maintenance. The site represents one of several limited-use lithic manufacturing sites in the area.

Based on the information derived from the testing program, the site is characterized as possessing limited significance according to County of San Diego cultural resource guidelines. The site exhibits a minimal surface scatter of artifacts that has been collected, and sparse, localized deposits composed entirely of lithic production waste that did not possess any intact features. The site is one of multiple limited-use lithic manufacturing sites in the area. The level of information already obtained from this site has exhausted the research potential of the resource and it is unlikely that any significantly different information would be gathered from further investigation. No further archaeological investigations are recommended for Site SDI-16,311.

Figure 6.49–1
Excavation Location Map — Site SDI-16,311

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,311 looking southwest.

Test Unit 2 north wall profile.

Plate 6.49–1

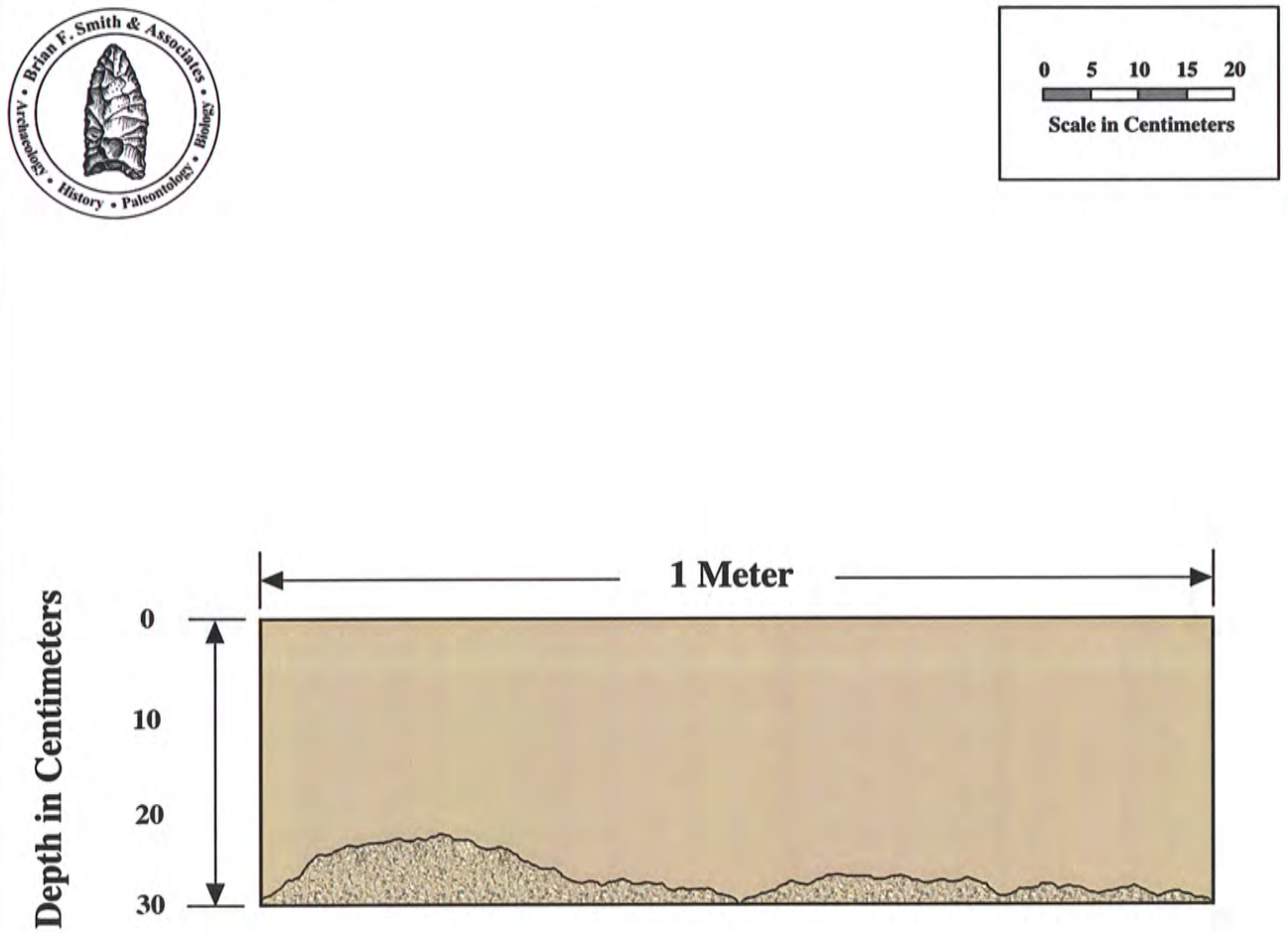


Figure 6.49–2

North Wall Profile of Test Unit 2

Site SDI-16,311

The Village 13 Project

TABLE 6.49–1

Summary of Surface Recovery
Site SDI-16,311

Recovery Category	Total	Percent
Lithic Production Waste:		
Cores	2	10.53
Flakes	17	89.47
Total	19	100.00
Percent	100.00	

TABLE 6.49–2

Surface Recovery Data
Site SDI-16,311

Surface	Quantity	Artifact Type	Material Type	Cat. No.
1	1	Flakes	MGM	1
2	1	Cores	MGM	2
	1	Flakes	MGM	3
3	3	Flakes	MGM	4
4	1	Flakes	MGM	5
5	1	Flakes	MGM	6
6		Not an Artifact		7
7	1	Flakes	MGM	8
8		Not an Artifact		9
9	1	Cores	MGM	10
	1	Flakes	MGM	11
10	1	Flakes	MGM	12
11		Not an Artifact		13
12	2	Flakes	MGM	14
13		Not an Artifact		15

Surface	Quantity	Artifact Type	Material Type	Cat. No.
14	1	Flakes	MGM	16
15	1	Flakes	MGM	17
16	1	Flakes	MGM	18
17	1	Flakes	MGM	19
18	1	Flakes	MGM	20

TABLE 6.49–3

Shovel Test Excavation Data
Site SDI-16,311

Shovel Test	Depth	Quantity	Artifact Type	Material Type	Cat. No.
1	0-10 cm.		No Recovery		21
	10-20 cm.		No Recovery		22
	20-30 cm.		No Recovery		23
2	0-10 cm.		No Recovery		24
	10-20 cm.		No Recovery		25
	20-25 cm.		No Recovery		26
3	0-10 cm.	1	Flakes	MGM	27
	10-20 cm.	1	Debitage	MGM	28
	20-30 cm.		No Recovery		29
	30-40 cm.		No Recovery		30
4	0-10 cm.		No Recovery		31
	10-20 cm.		No Recovery		32
	20-30 cm.		No Recovery		33
	0-10 cm.		No Recovery		34
5	10-20 cm.		No Recovery		35
	20-30 cm.		No Recovery		36
6	0-10 cm.		No Recovery		37
	10-20 cm.		No Recovery		38
	20-30 cm.		No Recovery		39
7	0-10 cm.		No Recovery		40
	10-20 cm.	1	Flakes	FGM	41
		1	Flakes	MGM	42

Shovel Test	Depth	Quantity	Artifact Type	Material Type	Cat. No.
	20-30 cm.		No Recovery		43
	30-40 cm.		No Recovery		44
8	0-10 cm.		No Recovery		45
	10-20 cm.		No Recovery		46
	20-30 cm.		No Recovery		47
9	0-10 cm.		No Recovery		48
	10-20 cm.		No Recovery		49
10	0-10 cm.		No Recovery		50
	10-20 cm.		No Recovery		51
	20-30 cm.		No Recovery		52
11	0-10 cm.		No Recovery		53
	10-20 cm.		No Recovery		54
	20-30 cm.		No Recovery		55
12	0-10 cm.		No Recovery		56
	10-20 cm.		No Recovery		57
	20-30 cm.		No Recovery		58
13	0-10 cm.		No Recovery		59
	10-20 cm.		No Recovery		60
	20-30 cm.		No Recovery		61
14	0-10 cm.		No Recovery		62
	10-20 cm.		No Recovery		63
	0-10 cm.		No Recovery		64
15	10-20 cm.		No Recovery		65
	20-30 cm.		No Recovery		66

TABLE 6.49–4

Summary of Test Unit Recovery
Site SDI-16,311

Artifact Category	Depth (in centimeters)			Total	Percent
	0-10	10-20	20-30		
Lithic Production Waste:					
Flakes	5	-	-	5	100.00
Total	5	0	0	5	100.00
Percent	100.00	0.00	0.00	100.00	

TABLE 6.49–5

Test Unit Excavation Data
Site SDI-16,311

Test Unit	Depth	Quantity	Recovery	Material	Cat. No.
1	0-10 cm.	4	Flakes	MGM	67
	10-20 cm.		No Recovery		68
	20-30 cm.		No Recovery		69
2	0-10 cm.	1	Flakes	MGM	70
	10-20 cm.		No Recovery		71
	20-30 cm.		No Recovery		72

TABLE 6.49–6

Summary of Artifact Recovery
Site SDI-16,311

Recovery Category	Surface	Shovel Test	Test Units	Total	Percent
Lithic Production Waste:					
Cores	2	-	-	2	7.14
Debitage	-	1	-	1	3.57
Flakes	17	3	5	25	89.29
Total	19	4	5	28	100.00
Percent	67.86	14.29	17.86	100.01	

**Rounded totals may not equal 100%*

TABLE 6.49–7

Lithic Material Distribution
Site SDI-16,311

Artifact Category	Material		Total	Percent
	FGM	MGM		
Lithic Production Waste:				
Cores	-	2	2	7.14
Debitage	-	1	1	3.57
Flakes	1	24	25	89.29
Total	1	27	28	100.00
Percent	3.57	96.43	100.00	

6.50 Site SDI-16,312

6.50.1 Site Description

This site consists of a quarry and dense lithic scatter located on a southeast-facing slope of a hill on the north side of Jamul Valley and east of Upper Otay Reservoir, near the northern boundary of the project. The site was located by BFSA during a survey conducted in November 2000. The southern half of the site is located within the proposed construction zone for the Otay Ranch Village 13 project and was therefore subjected to a testing program by BFSA. The general configuration of the resource is shown in Figure 6.50–1. Elevations at the site range from 550 to 875 feet AMSL. Native vegetation of chamise chaparral covers most of the site area, although some areas have been cleared for farming and/or grazing purposes. The setting of the site is shown in a photograph provided in Plate 6.50–1a.

Site SDI-16,312 is located on the border of the currently proposed construction zone and, therefore, the entire site was subjected to a testing and evaluation program by BFSA. Testing of the site consisted of the collection of a sample of the surface artifacts, and the excavation of 24 shovel test pits and one test unit. The field investigations were conducted between August 28 and September 3, 2002.

6.50.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,312 were executed using the standard methodologies described in Section 5.0. Lithic artifacts were recovered from surface and subsurface contexts of the site.

Surface Recordation

The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a large number of surface artifacts. Initially, the intention was to collect all surface artifacts; however, it soon became apparent that the scatter was too extensive to collect all of the artifacts. The collection strategy was then directed toward sampling the surface scatter such that the extent of the scatter as well as the composition of the quarry areas could be identified. Subsequently, individual surface collections were collected from the site's edges in order to establish the boundaries of the site, followed by the collection of artifacts from nine separate one-by-one meter areas (surface scrapes) in quarry areas where artifacts were more concentrated (Figure 6.50–1). A total of 438 artifacts were recovered from the surface of the site from both the individual artifact collections and the surface scrapes (Figure 6.50–1). The recovery is summarized in Table 6.50–1, while detailed provenience information for the surface artifacts is presented in Table 6.50–2. Lithic production waste accounts for 95.66% (N=419) of the collection, while the remaining artifacts consisted of core (0.91%; N=4), percussion (0.46%; N=2), precision (2.28%; N=10), and multi-use (0.68%; N=3) tools. Quarry areas were most concentrated along the leading edge of the slope (Surface Scrapes 1 through 9 in Figure 6.50–1).

The area of the site, delineated by the artifact scatter, measures approximately 178 meters (585 feet) from northwest to southeast by 94 meters (308 feet) from southwest to northeast, and covers 11,212 square meters (120,646 square feet) (Figure 6.50–1).

Subsurface Excavation

The potential for subsurface archaeological deposits at Site SDI-16,312 was investigated by excavating a series of 24 STPs. The placement of the STPs, shown in Figure 6.50–1, was based on the distribution of the surface artifacts. The STPs were excavated to a minimum of 30 centimeters, or until bedrock was encountered. A total of 76 artifacts were recovered from Site SDI-16,312. The recovery is summarized in Table 6.50–3 and detailed information is provided in Table 6.50–4. The STP assemblage was dominated by lithic production waste (97.37%; N=74), but also produced a hammerstone (STP 5) and a utilized flake (STP 6). Of the 24 STPs excavated, 13 were positive for cultural material, with recovery ranging from less than five artifacts (STPs 1, 2, 3, 4, 9, 10, 14, and 15) to 23 artifacts (STP 6). The maximum depth of recovery in the STPs was 20 centimeters.

The testing program included the excavation of a single test unit, which was placed according to the distribution of shovel test recovery (Figure 6.50–1). The unit was placed in the area most likely to contain a subsurface cultural deposit. The unit was excavated in standard decimeter levels to 30 centimeters and all removed soils were sifted through 1/8-inch mesh hardware cloth. Excavations resulted in the recovery of 105 artifacts, and included 24 pieces of debitage, 79 flakes, a perforator, and a piece of retouched lithic production waste (Tables 6.50–5 and 6.50–6). The maximum depth of recovery was, again, 20 centimeters. The soil profile from Test Unit 1 was characterized as dark brown to brown (10YR 4/3) silty loam with gravel inclusions to a depth of 10 centimeters, and underlain by compact brown (10YR 5/3) sandy loam with gravel and metavolcanic bedrock. A drawing of the north wall of Test Unit 1 is presented in Figure 6.50–2. A color photograph of the north wall of Test Unit 1 is provided in Plate 6.50–1b.

The excavation of the STPs and test unit determined that the site exhibits a widespread, shallow subsurface cultural deposit. The subsurface area measures approximately 139 meters (454 feet) from northwest to southeast by 55 meters (182 feet) from southwest to northeast, and covers 4,967 square meters (53,446 square feet). The deposit appears to extend to a maximum depth of 20 centimeters.

6.50.3 Laboratory Analysis

The laboratory analysis for Site SDI-16,312 included the standard procedures described in Section 5.0 of this report. All artifacts recovered from the field investigations conducted at the site were returned to the laboratory facility of BFSA to be cataloged and analyzed. A summary

of artifacts recovered from the site is presented in Table 6.50–7. The recovery from Site SDI-16,312 included 619 lithic artifacts.

Lithic Artifact Analysis

Lithic production waste accounted for the largest category of lithic artifacts, representing 96.28% (N=596) of the lithic artifact collection and included two cores, 176 pieces of debitage or shatter, and 418 flakes. The remaining lithic collection from Site SDI-16,312 consisted of four core tools (0.65%), three percussion tools (0.48%), 13 precision tools (2.10%), and three multi-use tools (0.48%). Measurements of all lithic tools are presented in Table 6.50–8.

The artifacts identified as core tools are generally cores with some evidence of retouch or utilization on at least one edge of the artifact, but not enough so that the artifact can be classified as a specific precision or multi-use tool. Four core tools were recovered from Site SDI-16,312.

Percussion tools consisted of three hammerstones. Two of the three hammerstones recovered were complete and identified as exhibiting spherical use-wear.

The precision tool category included one perforator, four pieces of retouched lithic production waste, and eight utilized pieces of lithic production waste. Precision tools identified as perforators, modified flakes with a worn, pointed end, were relatively rare at the Village 13 sites.

The category of multi-use tools was developed in order to accurately describe those specimens that exhibited several different use-wear patterns, which prevented the classification of the artifact into one of the existing tool categories. At Site SDI-16,312, the multi-use category included three hammer/cores.

Activities indicated by the artifacts recovered from the site include procurement of lithic materials, lithic tool production and maintenance, as well as processing of plant and/or animal resources. All tools from the site were recovered from the surface of the site. Select tools recovered from the site are shown in Plate 6.50–2.

The material distribution of the lithic assemblage is uniform as the collection consists entirely of locally available fine- and medium-grained metavolcanic (Tables 6.50–2, 6.50–4, 6.50–6).

6.50.4 Discussion

The testing demonstrated that Site SDI-16,312 consists of a large scatter of surface artifacts and a shallow, but widespread subsurface deposit across the site. The overall site dimensions, identified by the surface scatter and positive subsurface excavations, measure 178 meters (585 feet) by 94 meters (308 feet), and covers 11,212 square meters (120,646 square feet). The subsurface deposit measures approximately 139 meters (454 feet) by 55 meters (182 feet), and covers 4,967 square meters (53,446 square feet). Based on the artifacts recovered, the site appears to consist of scattered quarry areas and a temporary camp where lithic resource

procurement, lithic tool production and/or maintenance, and animal and/or plant resource processing, occurred.

This is one of the few Village 13 sites to produce a variety of lithic tools from both surface and subsurface contexts. Although the site exhibits no ecofacts or features, the variety of tools and extent of the quarrying activities represented by the artifacts represent unique elements compared to other Village 13 sites. While the subsurface deposit appears to be relatively shallow, the variety of lithic tools recovered from the test unit indicates the site retains additional research potential and might produce culturally diagnostic artifacts with further investigation.

The range of lithic tools includes core, percussion, multi-use, and precision tools, and further suggests that resource processing, in addition to quarrying and lithic manufacturing activities, occurred at the site. Because of the range of lithic tools recovered, the cultural deposit at Site SDI-16,312 exhibits additional research potential.

6.50.5 Summary

The analysis of the cultural materials recovered from Site SDI-16,312 revealed a dense surface scatter and a shallow, but extensive cultural deposit. The recovered materials indicate that site activities were focused primarily on lithic procurement and manufacture, with additional floral and/or faunal food processing represented by a variety of precision tools.

Based on the quantity of artifacts and the variety of tool types recovered, Site SDI-16,312 exhibits significant cultural deposits and retains research potential. All artifacts from the site have not been collected but rather sampled as part of the current investigation. The surface and subsurface contexts at Site SDI-16,312 contain materials that would contribute additional information important to the understanding of quarry and resource processing sites during the prehistoric occupation of the region. Based on the information derived from the testing program, Site SDI-16,312 is considered a significant resource according to CEQA criteria and County of San Diego guidelines.

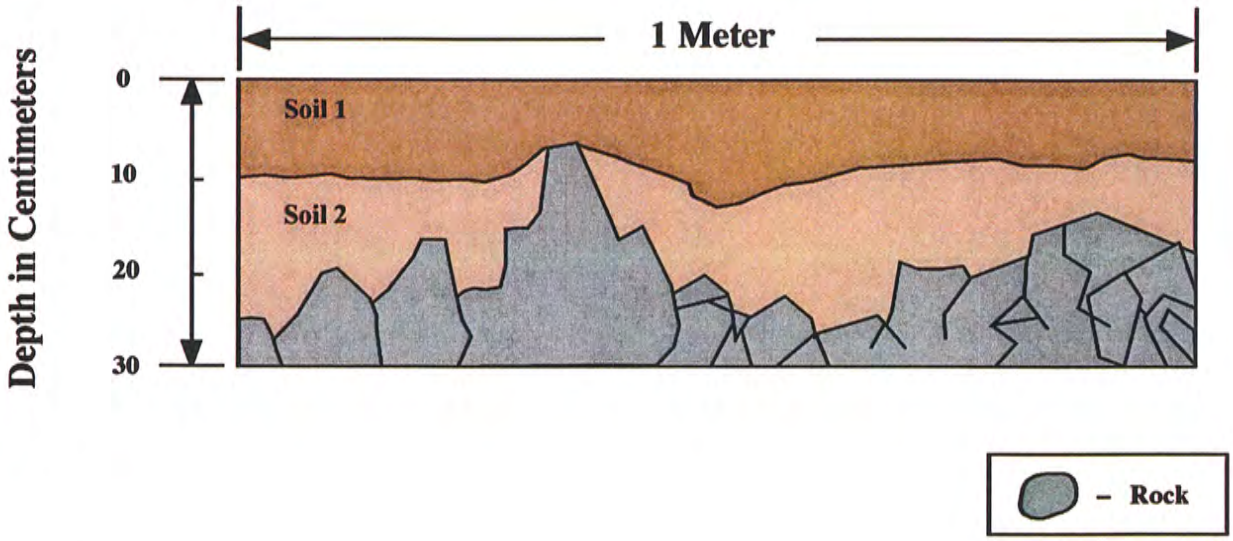
Figure 6.50–1
Excavation Location Map — Site SDI-16,312

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,312 looking northwest.

View of the north profile of Test Unit 1, 0 to 30 centimeters, at Site SDI-16,312.

Plate 6.50–1



Soil Types

1 Dark brown to brown (10YR 4/3) silty loam with gravel inclusions

2 Compact brown (10YR 5/3) sandy loam with gravel and metavolcanic rock

Figure 6.50–2
North Wall Profile of Test Unit 1
Site SDI-16,312
The Village 13 Project

Catalog #35
FGM Core Tool

Catalog #38
MGM Hammer/Core, showing battered edge

Catalog #72
MGM Hammer/Core Fragment

View of select artifacts from Site SDI-16,312

Plate 6.50-2

TABLE 6.50–1

Summary of Surface Recovery (Including Surface Scrapes)
Site SDI-16,312

Recovery Category	Surface	Surface Scrapes	Total	Percent
Core Tools:				
Core Tools	2	2	4	0.91
Lithic Production Waste:				
Cores	2	-	2	0.46
Debitage	17	116	133	30.37
Flakes	55	229	284	64.84
Percussion Tools:				
Hammerstones	-	2	2	0.46
Precision Tools:				
Retouched Debitage	-	2	2	0.46
Retouched Flake	-	1	1	0.23
Utilized Debitage	1	-	1	0.23
Utilized Flakes	3	3	6	1.37
Multi-Use Tools:				
Hammer/Core	1	2	3	0.68
Total	81	357	438	100.00
Percent	18.49	81.51	100.00	

Rounded numbers may not add to 100%.

TABLE 6.50–2

Surface Recovery Data (Including Surface Scrapes)
Site SDI-16,312

Recovery Location	Location from Datum D Azimuth/Range	Quantity	Recovery	Material	Cat. No.
1	68°/49 Feet	1	Core Fragment	FGM	1
		3	Flakes	MGM	2
2	4°/263 Feet	1	Hammer/Core	FGM	3
		1	Utilized Flake	FGM	4
		9	Flakes	FGM	5
		1	Debitage	MGM	6
		12	Flakes	MGM	7
3	337°/439 Feet	1	Core Fragment	MGM	8
		1	Debitage	MGM	9
		1	Flake	MGM	10
4	332°/391 Feet	1	Core Tool Fragment	FGM	11
		1	Flake	FGM	12
5	343°/509 Feet	1	Flake	MGM	13
6	354°/423 Feet	1	Utilized Flake	MGM	14
		1	Flake	MGM	15
7	357°/383 Feet	3	Flakes	FGM	16
		3	Flakes	MGM	17
8	22°/279 Feet	1	Flake	FGM	18
9	24°/189 Feet	1	Flake	FGM	19
		2	Debitage	MGM	20
10	323°/348 Feet	2	Flakes	FGM	21
		1	Debitage	MGM	22

Recovery Location	Location from Datum D Azimuth/Range	Quantity	Recovery	Material	Cat. No.
11	329°/405 Feet	4	Flakes	FGM	23
		1	Utilized Flake	MGM	24
		3	Flakes	MGM	25
12	311°/219 Feet	2	Debitage	FGM	26
		4	Flakes	FGM	27
		1	Debitage	MGM	28
		3	Flakes	MGM	29
13	295°/174 Feet	1	Flake	FGM	30
14	282°/167 Feet	1	Utilized Debitage Fragment	MGM	31
		1	Debitage	MGM	32
15	268°/132 Feet	6	Debitage	FGM	33
		2	Flakes	FGM	34
16	221°/103 Feet	1	Core Tool	FGM	35
		2	Debitage	FGM	36
SS-1	345°/372 Feet	1	Hammer/Core	FGM	37
		1	Hammer/Core	MGM	38
		2	Flakes	FGM	39
		9	Debitage	MGM	40
		7	Flakes	MGM	41
SS-2	334°/202 Feet	2	Debitage	FGM	42
		2	Flakes	FGM	43
		3	Flakes	MGM	44
SS-3	352°/320 Feet	2	Debitage	FGM	45
		2	Flakes	FGM	46
		1	Core Tool	MGM	47
		5	Debitage	MGM	48
		7	Flakes	MGM	49
SS-4	345°/324 Feet	2	Debitage	FGM	50
		8	Flakes	FGM	51

Recovery Location	Location from Datum D Azimuth/Range	Quantity	Recovery	Material	Cat. No.
		7	Debitage	MGM	52
		15	Flakes	MGM	53
SS-5	346°/274 Feet	1	Hammerstone, Spherical	FGM	54
		5	Flakes	FGM	55
		15	Debitage	MGM	56
		18	Flakes	MGM	57
SS-6	357°/177 Feet	1	Debitage	FGM	58
		1	Flake	FGM	59
		3	Debitage	MGM	60
		2	Flakes	MGM	61
SS-7	330°/266 Feet	2	Debitage	FGM	62
		7	Flakes	FGM	63
		1	Retouched Debitage	MGM	64
		4	Debitage	MGM	65
SS-7	330°/266 Feet	16	Flakes	MGM	66
SS-8	344°/406 Feet	1	Retouched Flake	MGM	67
		1	Debitage	MGM	68
		10	Flakes	MGM	69
SS-9	346°/361 Feet	8	Debitage	FGM	70
		2	Flakes	FGM	71
		1	Hammerstone, Spherical	FGM	72
		1	Core Tool Fragment	MGM	73
		1	Utilized Flake	MGM	74
		1	Utilized Flake	MGM	75
		1	Utilized Flake	MGM	76
		1	Retouched Debitage	MGM	77
		55	Debitage	MGM	78
		122	Flakes	MGM	79

TABLE 6.50–3

Summary of Shovel Test Recovery
Site SDI-16,312

Recovery Category	Quantity	Percent
Lithic Production Waste:		
Debitage	19	25.00
Flakes	55	72.37
Percussion Tools:		
Hammerstone	1	1.32
Precision Tools:		
Utilized Flake	1	1.32
Total	76	100.00

Rounded numbers may not add to 100%.

TABLE 6.50–4

Shovel Test Excavation Data
Site SDI-16,312

Shovel Test	Location from Datum D Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
1	13°/115 Feet	0-10 cm.	2	Flakes	MGM	80
		10-20 cm.		No Recovery		81
		20-30 cm.		No Recovery		82
2	339°/111 Feet	0-10 cm.	4	Flakes	MGM	83
		10-20 cm.		No Recovery		84
		20-30 cm.		No Recovery		85
3	310°/148 Feet	0-10 cm.	1	Flake	FGM	86
			2	Flakes	MGM	87
		10-20 cm.		No Recovery		88
		20-30 cm.		No Recovery		89
4	359°/155 Feet	0-10 cm.	4	Flakes	MGM	90
		10-20 cm.		No Recovery		91
		20-30 cm.		No Recovery		92
5	18°/189 Feet	0-10 cm.	3	Debitage	FGM	93
			1	Hammerstone Fragment	MGM	94
			4	Debitage	MGM	95
		10-20 cm.		No Recovery		96
		20-30 cm.		No Recovery		97

Shovel Test	Location from Datum D Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
6	7°/246 Feet	0-10 cm.	3	Flakes	FGM	98
			1	Utilized Flake	MGM	99
			6	Debitage	MGM	100
			11	Flakes	MGM	101
6	7°/246 Feet	10-20 cm.	2	Flakes	MGM	102
		20-30 cm.		No Recovery		103
7	353°/322 Feet	0-10 cm.	8	Flakes	MGM	104
		10-20 cm.	2	Debitage	MGM	105
		20-30 cm.		No Recovery		106
8	348°/540 Feet	0-10 cm.		No Recovery		107
		10-20 cm.		No Recovery		108
		20-30 cm.		No Recovery		109
9	344°/385 Feet	0-10 cm.	4	Flakes	MGM	110
		10-20 cm.		No Recovery		111
		20-30 cm.		No Recovery		112
10	326°/171 Feet	0-10 cm.	1	Flake	MGM	113
		10-20 cm.		No Recovery		114
		20-30 cm.		No Recovery		115
11	314°/218 Feet	0-10 cm.		No Recovery		116
		10-20 cm.		No Recovery		117

Shovel Test	Location from Datum D Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
12	335°/268 Feet	0-10 cm.	3	Flakes	FGM	118
			2	Debitage	MGM	119
		10-20 cm.	1	Flake	FGM	120
			1	Flake	MGM	121
		20-30 cm.		No Recovery		122
13	342°/532 Feet	0-10 cm.		No Recovery		123
		10-20 cm.		No Recovery		124
		20-30 cm.		No Recovery		125
14	346°/207 Feet	0-10 cm.	1	Debitage	MGM	126
		10-20 cm.		No Recovery		127
		20-30 cm.		No Recovery		128
15	222°/91 Feet	0-10 cm.	1	Debitage	FGM	129
			2	Flakes	FGM	130
		10-20 cm.		No Recovery		131
		20-30 cm.		No Recovery		132
16	65°/126 Feet	0-10 cm.		No Recovery		133
		10-20 cm.		No Recovery		134
		20-30 cm.		No Recovery		135
17	146°/37 Feet	0-10 cm.		No Recovery		136
		10-20 cm.		No Recovery		137
		20-30 cm.		No Recovery		138

Shovel Test	Location from Datum D Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
18	345°/274 Feet	0-10 cm.	2	Flakes	FGM	139
		10-20 cm.	2	Flakes	FGM	140
			2	Flakes	MGM	141
19	99°/67 Feet	0-10 cm.		No Recovery		142
		10-20 cm.		No Recovery		143
		20-30 cm.		No Recovery		144
20	205°/122 Feet	0-10 cm.		No Recovery		145
		10-20 cm.		No Recovery		146
		20-30 cm.		No Recovery		147
21	0°/336 Feet	0-10 cm.		No Recovery		156
		10-20 cm.		No Recovery		157
21	0°/336 Feet	20-30 cm.		No Recovery		158
22	391°/410 Feet	0-10 cm.		No Recovery		159
		10-20 cm.		No Recovery		160
		20-30 cm.		No Recovery		161
23	20°/225 Feet	0-10 cm.		No Recovery		162
		10-20 cm.		No Recovery		163
		20-30 cm.		No Recovery		164
24	45°/150 Feet	0-10 cm.		No Recovery		165

Shovel Test	Location from Datum D Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
		10-20 cm.		No Recovery		166
		20-30 cm.		No Recovery		167

TABLE 6.50–5

Summary of Test Unit Recovery
Site SDI-16,312

Artifact Category	Depth (in centimeters) 0-10	10-20	20-30	Total	Percent
Lithic Production Waste:					
Debitage	24	-	-	24	22.86
Flakes	76	3	-	79	75.24
Precision Tools:					
Perforator	1	-	-	1	0.95
Retouched Debitage	1	-	-	1	0.95
Total	102	3	0	105	100.00
Percent	97.14	2.86	0.00	100.00	

Rounded numbers may not add to 100%.

TABLE 6.50–6

Test Unit Excavation Data
Site SDI-16,312

Test Unit	Location from Datum D Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
1	345°/380 Feet	0-10 cm.	1	Retouched Debitage Fragment	FGM	148
			3	Debitage	FGM	149
			5	Flakes	FGM	150
			1	Perforator	MGM	151
			21	Debitage	MGM	152
			71	Flakes	MGM	153
		10-20 cm.	3	Flakes	MGM	154
		20-30 cm.		No Recovery		155

TABLE 6.50–7

Summary of Artifact Recovery
Site SDI-16,312

Recovery Category	Surface	Shovel Tests	Test Units	Total	Percent
Core Tools:					
Core Tools	4	-	-	4	0.65
Lithic Production Waste:					
Cores	2	-	-	2	0.32
Debitage	133	19	24	176	28.43
Flakes	284	55	79	418	67.53
Percussion Tools:					
Hammerstones	2	1	-	3	0.48
Precision Tools:					
Perforator	-	-	1	1	0.16
Retouched Debitage	2	-	1	3	0.48
Retouched Flake	1	-	-	1	0.16
Utilized Debitage	1	-	-	1	0.16
Utilized Flakes	6	1	-	7	1.13
Multi-Use Tools:					
Hammer/Cores	3	-	-	3	0.48
Total	438	76	105	619	100.00
Percent	70.76	12.28	16.96	100.00	

Rounded numbers may not add to 100%.

TABLE 6.50–8

Lithic Tool Measurement Data
Site SDI-16,312

Cat. No.	Tool Description	Dimensions (in centimeters) Length	Width	Thickness	Weight (in grams)	Material
Core Tools:						
11	Core Tool Fragment	13.6	10.5	6.9	982.6	FGM
35	Core Tool	10.2	9.9	5.0	649.1	FGM
47	Core Tool	10.9	7.0	4.0	280.8	MGM
73	Core Tool Fragment	10.6	8.9	4.8	367.2	MGM
Percussion Tools:						
Hammerstones:						
54	Hammerstone, Spherical	13.1	8.9	7.6	971.1	FGM
72	Hammerstone, Spherical	6.5	4.9	2.5	104.4	FGM
94	Hammerstone Fragment, Undetermined	8.0	4.6	3.5	122.1	MGM
Precision Tools:						
Perforators:						
151	Perforator	11.1	8.3	2.5	167.6	MGM
Retouched Debitage:						
64	Retouched Debitage	4.3	3.3	1.5	26.0	MGM
77	Retouched Debitage	14.6	7.9	4.4	478.8	MGM
148	Retouched Debitage Fragment	4.8	3.3	2.9	26.1	FGM
Retouched Flakes:						
67	Retouched Flake	9.7	5.5	3.0	141.0	MGM
Utilized Debitage:						
31	Utilized Debitage Fragment	8.8	4.0	2.9	150.2	MGM
Utilized Flakes:						
4	Utilized Flake	7.4	4.2	1.7	43.2	FGM
14	Utilized Flake	5.3	3.8	1.0	18.8	MGM
24	Utilized Flake	10.2	8.2	3.2	214	MGM
74	Utilized Flake	11.8	7.1	2.1	154.7	MGM
75	Utilized Flake	7.8	7.7	2.1	98.2	MGM

Cat. No.	Tool Description	Dimensions (in centimeters) Length	Width	Thickness	Weight (in grams)	Material
76	Utilized Flake	5.4	5.1	1.3	28.4	MGM
99	Utilized Flake	11.6	9.0	2.1	244.8	MGM
Multi-Use Tools:						
Hammer/Cores:						
3	Hammer/Core	10.3	7.6	7.3	593.4	FGM
37	Hammer/Core	11.9	9.1	7.4	891.8	FGM
38	Hammer/Core	11.9	11.8	8.7	1030.9	MGM

6.51 Site SDI-16,313

6.51.1 Site Description

This site consists of a small lithic scatter located on a southwest-trending ridge on the southwest slopes of the Jamul Mountains, east of Upper Otay Lakes Reservoir and upslope of Site SDI-16,332, directly northwest of the center of the project. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.51–1. Elevations at the site range from 840 to 900 feet AMSL. Native vegetation of chamise chaparral covers the entire site, and metavolcanic rock outcrops are present directly upslope. The setting of the site is shown in a photograph provided in Plate 6.51–1a.

Site SDI-16,313 is located within the currently proposed construction zone and was therefore subjected to a testing and evaluation program by BFSA. Testing of the site consisted of the mapping and recordation of all surface artifacts, and the excavation of six shovel test pits and one test unit. The field investigations were conducted on September 4 and 5, 2002.

6.51.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,313 were executed using the standard methodologies described in Section 5.0. Lithic artifacts were recovered from surface and subsurface contexts, although the subsurface deposit was found to be sparse and shallow.

Surface Recordation

The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a number of surface artifacts. A total of 34 artifacts were recovered from the 20 surface locations that produced artifacts (laboratory analysis revealed that several of the specimens collected from surface locations were not cultural). All surface artifacts were collected from the surface of the site. The recovery is presented with provenience information in Table 6.51–1. The entire surface collection from Site SDI-16,313 was identified as flakes; no tools were observed on the surface of the site. The area of the site, delineated by the artifact scatter, measures approximately 46 meters (150 feet) from west to east by 37 meters (120 feet) from north to south, and covers 1,183 square meters (12,730 square feet) (Figure 6.51–1).

Subsurface Excavation

The potential for subsurface archaeological deposits at Site SDI-16,313 was investigated by excavating a series of six STPs. The placement of the STPs, shown in Figure 6.51–1, was based on the distribution of the surface artifacts. The STPs were excavated to a minimum of 30 centimeters, or until bedrock was encountered. Recovery from the STPs was limited to a single flake from STP 1 at a depth of 0 to 10 centimeters. Recovery, locational, and depth information for the shovel tests is presented in Table 6.51–2.

As originally proposed, the testing program included the excavation of a single test unit at Site SDI-16,313. The test unit was placed according to the surface artifact distribution as well as the single positive STP (Figure 6.51–1). The test unit was excavated in standard decimeter levels to 30 centimeters and all removed soils were sifted through 1/8-inch mesh hardware cloth. Excavations resulted in the recovery of five lithic artifacts, all of which were identified as flakes (Table 6.51–3). The maximum depth of recovery was 10 centimeters. The soil profile from Test Unit 1 was characterized as dark brown to dark yellow brown (10YR 4/3 to 4/4) fine sandy loam with metavolcanic rock inclusions to the maximum depth of the unit. A drawing of the north wall of Test Unit 1 is presented in Figure 6.51–2. A color photograph of the north wall of Test Unit 1 is provided in Plate 6.51–1b.

The excavation of the STPs and test unit determined that a sparse, shallow deposit of lithic debris is present at Site SDI-16,313. The estimated dimensions of the subsurface deposit are 20 meters (67 feet) from west to east by 14 meters (45 feet) from north to south, covering a total of 235 square meters (2,529 square feet). The paucity of positive STPs and the lack of artifacts below 10 centimeters indicates the deposit does not extend across the site, but is localized in the identified area.

6.51.3 Discussion

The testing demonstrated that Site SDI-16,313 consists of a sparse scatter of lithic artifacts on the surface of the site with a sparse, shallow subsurface deposit. The overall site dimensions, identified by the surface scatter and positive subsurface excavations, measure 46 meters (150 feet) by 37 meters (120 feet), and cover 1,183 square meters (12,730 square feet). The subsurface deposit identified at the site measures 20 meters (67 feet) by 14 meters (45 feet), and cover 235 square meters (2,529 square feet). The artifacts recovered from Site SDI-16,313 consisted of 40 flakes (Table 6.51–4). No tools were identified at the site. All flakes collected from Site SDI-16,313 were derived from locally available coarse-, medium- or fine-grained metavolcanics (Tables 6.51–1 through 6.51–3). The site appears to represent a limited-use site where a limited amount of lithic tool production and/or maintenance occurred.

Since none of the artifacts recovered from the site were culturally diagnostic, no cultural affiliation could be assigned to the resource. Given the sparse nature of the surface scatter and the limited subsurface deposit, and the lack of tools recovered from the site, it is unlikely that further excavation would produce additional data that would allow such a determination. The site exhibits no ecofacts, features, or unique elements. The mapping and collection of surface artifacts have exhausted the research potential of this site. According to the criteria listed in CEQA, Section 15064.5, and the guidelines set forth by the County of San Diego, the site is evaluated as having limited significance based upon the recover of information that can contribute to the knowledge of prehistory in the region. However, the current program has

exhausted the potential of the site to yield unique data and further study will not produce additional significant information.

6.51.4 Summary

The investigation of Site SDI-16,313 did not produce any unique scientific data regarding site function or content. The identified artifacts indicate that site activities were focused primarily on a limited amount of lithic tool production and/or maintenance. The site represents one of several limited-use lithic manufacturing or maintenance sites in the area.

Based on the information derived from the testing program, the site is characterized as possessing limited significance according to County of San Diego cultural resource guidelines. The site exhibits a sparse artifact scatter that has been collected, and did not possess any segregated special use areas, features, or unique elements. The level of information already obtained from this site has exhausted the research potential of the resource, and it is unlikely that any significantly different information would be gathered from further investigation. No further archaeological investigations are recommended for Site SDI-16,313.

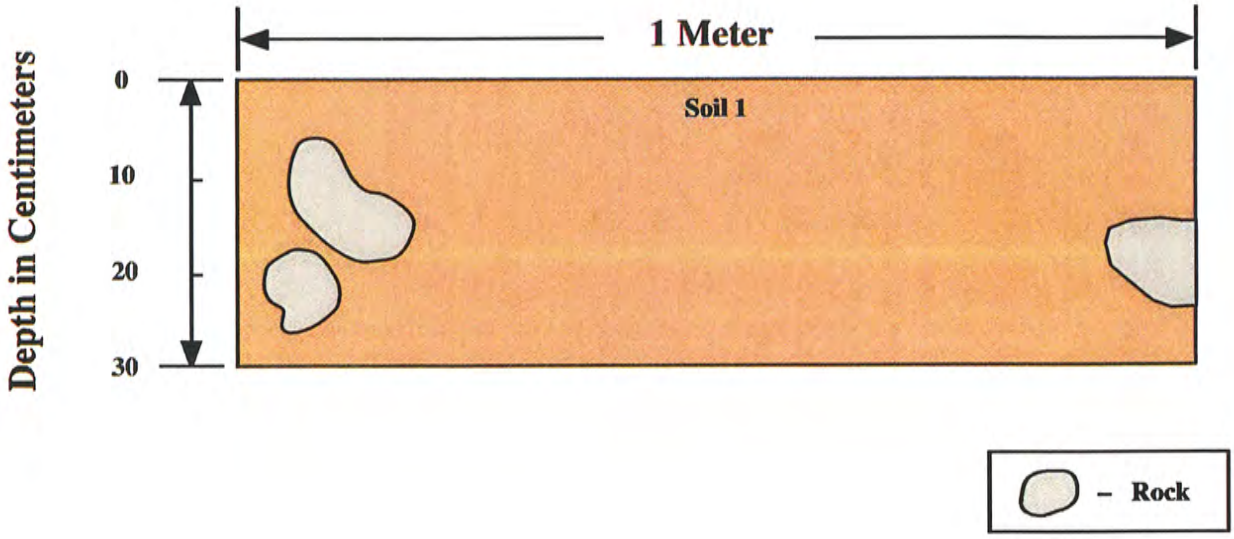
Figure 6.51–1
Excavation Location Map — Site SDI-16,313

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,313 looking southeast (arrow).

View of the north profile of Test Unit 1, 0 to 30 centimeters, at Site SDI-16,313.

Plate 6.51–1



Soil Types

1	Dark brown to dark yellow brown (10YR 4/3 to 4/4) fine sandy loam with metavolcanic rock inclusions

Figure 6.51–2
North Wall Profile of Test Unit 1
Site SDI-16,313
The Village 13 Project

TABLE 6.51–1

Surface Recovery Data
Site SDI-16,313

Recovery Location	Location from Datum A Azimuth/Range	Quantity/ Weight	Recovery	Material	Cat. No.
1	256°/18 Feet	1	Flake	FGM	1
		1	Flake	MGM	2
2	246°/27 Feet		Not an Artifact		3
3	289°/24 Feet	1	Flake	MGM	4
4	317°/23 Feet	2	Flakes	FGM	5
		2	Flakes	MGM	6
5	316°/16 Feet	1	Flake	FGM	7
6	11°/15 Feet	3	Flakes	MGM	8
7	2°/36 Feet	3	Flakes	MGM	9
8	8°/44 Feet	1	Flake	CGM	10
9	56°/49 Feet	1	Flake	FGM	11
10	83°/74 Feet		Not an Artifact		12
11	80°/81 Feet		Not an Artifact		13
12	130°/94 Feet	2	Flakes	MGM	14
13	159°/58 Feet		Not an Artifact		15
14	227°/30 Feet		Not an Artifact		16
15	217°/44 Feet	2	Flakes	FGM	17

Recovery Location	Location from Datum A Azimuth/Range	Quantity/ Weight	Recovery	Material	Cat. No.
16	235°/82 Feet	1	Flake	FGM	18
17	270°/47 Feet	2	Flakes	FGM	19
18	295°/56 Feet	1	Flake	FGM	20
19	297°/40 Feet	1	Flake	MGM	21
20	324°/61 Feet	1	Flake	MGM	22
21	334°/61 Feet	1	Flake	MGM	23
22	333°/47 Feet	1	Flake	FGM	24
23	322°/38 Feet	3	Flakes	MGM	25
24	331°/30 Feet	2	Flakes	FGM	26
25	53°/58 Feet		Not an Artifact		27
26	0°/0 Feet	1	Flake	FGM	28

TABLE 6.51–2

Shovel Test Excavation Data
Site SDI-16,313

Shovel Test	Location from Datum A Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
1	0°/0 Feet	0-10 cm.	1	Flake	MGM	29
		10-20 cm.		No Recovery		30
		20-30 cm.		No Recovery		31
2	57°/46 Feet	0-10 cm.		No Recovery		32
		10-20 cm.		No Recovery		33
		20-30 cm.		No Recovery		34
3	56°/96 Feet	0-10 cm.		No Recovery		35
		10-20 cm.		No Recovery		36
		20-30 cm.		No Recovery		37
4	112°/91 Feet	0-10 cm.		No Recovery		38
		10-20 cm.		No Recovery		39
		20-30 cm.		No Recovery		40
5	234°/95 Feet	0-10 cm.		No Recovery		41
		10-20 cm.		No Recovery		42
		20-30 cm.		No Recovery		43

Shovel Test	Location from Datum A Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
6	327°/68 Feet	0-10 cm.		No Recovery		44
		10-20 cm.		No Recovery		45
		20-30 cm.		No Recovery		46

TABLE 6.51–3

Test Unit Excavation Data
Site SDI-16,313

Test Unit	Location from Datum A Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
1	275°/31 Feet	0-10 cm.	5	Flakes	FGM	47
		10-20 cm.		No Recovery		48
		20-30 cm.		No Recovery		49

TABLE 6.51–4

Summary of Artifact Recovery
Site SDI-16,313

Recovery Category	Surface	Shovel Tests	Test Units	Total	Percent
Lithic Production Waste:					
Flakes	34	1	5	40	100.00
Total	34	1	5	40	100.00
Percent	85	2.50	12.50	100.00	

6.52 Site SDI-16,314

6.52.1 Site Description

This site consists of a lithic scatter located on a southwest-facing slope of a ridge in the northwest area of the project, on the flanks of the steeper slopes that characterize the northern portions of the project. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.52–1. Elevations at the site range from 900 to 925 feet AMSL. Vegetation at the site consists of chamise chaparral that covers most of the site area. The setting of the site is shown in a photograph provided in Plate 6.52–1.

Site SDI-16,314 is located outside of the currently proposed construction zone and, therefore, was not subjected to a testing and evaluation program by BFSA. The area in which the site is located is proposed for open space easement. As part of the current Village 13 study, Site SDI-16,314 was visited by BFSA on October 2, 2002, during which time the boundaries of the surface artifact scatter were mapped and recorded. The intention of this investigation was limited to recording of the visible site boundaries. No artifacts were collected and no excavations were conducted at the site

6.52.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,314 consisted of the identification and mapping of the surface scatter boundaries. The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a surface lithic scatter containing approximately 100 specimens, including lithic production waste. All artifacts appear to be derived from locally available metavolcanic rock. No evidence of ecofacts or features was observed, and no culturally diagnostic tools were identified. The surface expression of the site measures approximately 30 meters (100 feet) from east to west by 27 meters (90 feet) from north to south, and covers approximately 665 square meters (7,113 square feet) (Figure 6.52–1).

6.52.3 Summary

Site SDI-16,314 is a low-density surface scatter where prehistoric activities appear to have focused primarily on resource procurement. Due to the fact that the site is located outside the construction zone, no subsurface excavations were conducted at the site. Based on similar sites tested during the current investigation, the potential for subsurface deposits at Site SDI-16,314 is moderate.

The area of Site SDI-16,314 is proposed for open space easement and will not be directly impacted by the proposed development. Because the site has not been evaluated for significance, the site is considered a significant resource according to CEQA criteria and County of San Diego guidelines.

Figure 6.52–1
Surface Boundary Location Map — Site SDI-16,314

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,314 looking northeast.

Plate 6.52–1

6.53 Site SDI-16,315

6.53.1 Site Description

This site consists of a lithic scatter located on steep southwest-facing slopes near the peak on the north property line that represents the high point on the project. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.53–1. Elevations at the site range from 1,175 to 1,225 feet AMSL. Vegetation at the site consists of chamise chaparral that covers most of the site area. The setting of the site is shown in photographs provided in Plate 6.53–1.

Site SDI-16,315 is located outside of the currently proposed construction zone and, therefore, was not subjected to a testing and evaluation program by BFSA. The area in which the site is located is proposed for open space easement. As part of the current Village 13 study, Site SDI-16,315 was visited by BFSA on October 2, 2002, during which time the boundaries of the surface artifact scatter were mapped and recorded. The intention of this investigation was limited to recording of the visible site boundaries. No artifacts were collected and no excavations were conducted at the site.

6.53.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,315 consisted of the identification and mapping of the surface scatter boundaries. The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a surface lithic scatter containing approximately 200 specimens, including lithic production waste. Some exposed metavolcanic bedrock appears to have been quarried. All artifacts appear to be derived from locally available metavolcanic rock. No evidence of ecofacts or features was observed, and no culturally diagnostic tools were identified. The surface expression of the site measures approximately 131 meters (430 feet) from east to west by 89 meters (340 feet) from north to south, and covers approximately 8,744 square meters (105,264 square feet) (Figure 6.53–1).

6.53.3 Summary

Site SDI-16,315 is a low-density surface scatter where prehistoric activities appear to have focused primarily on resource procurement. Due to the fact that the site is located outside the construction zone, no subsurface excavations were conducted at the site. Based on similar sites tested during the current investigation, the potential for subsurface deposits at Site SDI-16,315 is moderate.

The area of Site SDI-16,315 is proposed for open space easement and will not be directly impacted by the proposed development. Because the site has not been evaluated for significance, the site is considered a significant resource according to CEQA criteria and County of San Diego guidelines.

Figure 6.53–1
Surface Boundary Location Map — Site SDI-16,315

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,315 looking east.

Plate 6.53–1

6.54 Site SDI-16,316

6.54.1 Site Description

This site consists of a quarry and lithic scatter located on a southwest-trending ridge on the southwest slopes of the Jamul Mountains, east of Upper Otay Lakes Reservoir and one ridge east of Site SDI-16,332, directly northwest of the center of the project. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.54–1. Elevations at the site range from 800 to 980 feet AMSL. Native vegetation of chamise chaparral covers most of the site area, although a dirt road extends across the south edge of the site. The setting of the site is shown in a photograph provided in Plate 6.54–1a.

Site SDI-16,316 is located within the currently proposed construction zone and was therefore subjected to a testing and evaluation program by BFSA. Testing of the site consisted of the mapping and recordation of all surface artifacts, and the excavation of 17 shovel test pits and one test unit. The field investigations were conducted on September 10, 2002.

6.54.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,316 were executed using the standard methodologies described in Section 5.0. Lithic artifacts were recovered from surface and subsurface contexts, although the subsurface deposit was sparse.

Surface Recordation

The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a number of surface artifacts and quarrying areas. A total of 18 artifacts were recovered from the ten surface locations that produced artifacts (laboratory analysis revealed that several of the specimens collected from surface locations were not cultural). The density of quarry material prevented a complete surface collection. The recovery is summarized in Table 6.54–1, while detailed provenience information for the surface artifacts is presented in Table 6.54–2. In addition to the collection of individual surface artifacts, ten surface scrapes were utilized to sample the areas of increased quarrying activity throughout the site (Figure 6.54–1). The surface scrapes resulted in the recovery of 181 lithic artifacts, making a total of 199 artifacts collected from the surface of the site.

A relatively wide range of artifacts was recovered from the surface of the site. Lithic production waste accounts for 93.47% (N=186) of the collection, while the remaining artifacts consisted of smaller quantities of precision (5.03%; N=10), core (1.01%; N=2), and percussion (0.50%; N=1) tools. The placement of the surface scrapes shows that most of the surface artifacts are concentrated in the center of the site. The most productive of these surface scrapes was SS 4. The area of the site, delineated by the artifact scatter and surface scrapes, measures

approximately 167 meters (548 feet) from north to south by 149 meters (488 feet) from west to east, and covers 15,498 square meters (166,754 square feet) (Figure 6.54–1).

Subsurface Excavation

The potential for subsurface archaeological deposits at Site SDI-16,316 was investigated by excavating a series of 17 STPs. The placement of the STPs, shown in Figure 6.54–1, was based on the distribution of the surface artifacts. The STPs were excavated to a minimum of 30 centimeters, or until bedrock was encountered. Five of the STPs produced cultural material, including STPs 2, 3, 4, 8, and 10. Recovery was either two or three artifacts in each of the STPs, making a total of 12 artifacts recovered from the shovel tests. Recovery from the STPs is summarized in Table 6.54–3 and detailed in Table 6.54–4.

The testing program included the excavation of a single test unit at Site SDI-16,316. The test unit was placed, based on the recovery from the STPs and the surface scrapes, in the area most likely to contain a subsurface deposit (Figure 6.54–1). The unit was excavated in standard decimeter levels to 30 centimeters and all removed soils were sifted through 1/8-inch mesh hardware cloth. Excavations resulted in the recovery of 52 artifacts, and included eight pieces of debitage, 43 flakes, and one utilized flake (Tables 6.54–4 and 6.54–5). The maximum depth of recovery was 20 centimeters. The soil profile from Test Unit 1 was characterized as dark brown to dark yellow brown (10YR 4/3 to 4/4) sandy loam with grass and gravel inclusions in the upper eight centimeters, underlain by dark yellow brown (10YR 4/3 to 4/4) fine sandy loam with gravel inclusions to a depth of approximately 23 centimeters, followed by dark yellow brown (7.5YR 3/4 to 4/4) decomposing metavolcanic rock. A drawing of the north wall of Test Unit 1 is presented in Figure 6.54–2. A color photograph of the north wall of Test Unit 1 is provided in Plate 6.54–1b.

The excavation of the STPs and test unit determined that the site exhibits a shallow subsurface deposits that measures approximately 66 meters (218 feet) from southwest to northeast by 59 meters (195 feet) from northwest to southeast, and covers 2,971 square meters (31,973 square feet). The deposit appears to extend to a maximum depth of 20 centimeters.

6.54.3 Laboratory Analysis

The laboratory analysis for Site SDI-16,316 included the standard procedures described in Section 5.0 of this report. All artifacts recovered from the field investigations conducted at the site were returned to the laboratory facility of BFSA to be cataloged and analyzed. A summary of artifacts recovered from the site is presented in Table 6.54–7. The recovery from Site SDI-16,316 included 263 lithic artifacts.

Lithic Artifact Analysis

Lithic production waste accounted for the largest category of lithic artifacts, representing 93.54% (N=246) of the lithic artifact collection and included two cores, 43 pieces of debitage or shatter, and 201 flakes. The remaining lithic collection from 16,316 consisted of precision (5.32%; N=14), core (0.76%; N=2), and percussion (0.38%; N=1) tools. Measurements of all lithic tools are presented in Table 6.54–8.

The precision tool category included three retouched flakes and 11 pieces of utilized lithic production waste. The artifacts identified as core tools are generally cores with some evidence of retouch or utilization on at least one edge of the artifact, but not enough so that the artifact can be classified as a specific precision or multi-use tool. Two core tools were recovered from Site SDI-16,316. The percussion tool category is represented by a single hammerstone that exhibits utilization in a circular pattern around its edges.

The lithic material of the recovered artifacts consisted entirely of medium- or fine-grained metavolcanic rock, which is immediately available on the site itself (Tables 6.54–2, 6.54–4, and 6.54–6). Activities indicated by the artifacts recovered from the site include procurement of lithic materials, lithic tool production and maintenance, as well as possible processing of plant and/or animal resources. Although several tool types were recovered from Site SDI-16,316, those recovered are similar to other sites investigated on the Village 13 project, specifically cores and core tools, and retouched and utilized lithic production waste.

6.54.4 Discussion

The testing demonstrated that Site SDI-16,316 consists of a quarry and lithic scatter with shallow, subsurface deposits near quarrying areas. The overall site dimensions, identified by the surface scatter and positive subsurface excavation, measure 167 meters (548 feet) by 149 meters (488 feet), and covers 15,498 square meters (166,754 square feet). The shallow subsurface deposit identified at the site measures approximately 66 meters (218 feet) from southwest to northeast by 59 meters (195 feet) from northwest to southeast, and covers 2,971 square meters (31,973 square feet). Based on the artifacts recovered, the site appears to represent a quarry area where lithic resource procurement, lithic tool production and/or maintenance, and possibly animal and/or plant resource processing, occurred.

Since none of the artifacts recovered from the site were culturally diagnostic, no cultural affiliation could be assigned to the resource. As stated above, the deposit identified at 16,316 is shallow, extending to a maximum depth of 20 centimeters. Most of the recovered material was identified as lithic production waste, while the tools recovered were types recovered at other Village 13 sites. The site exhibits no ecofacts, features, or unique elements. The testing of Site SDI-16,316, including the sampling of surface artifacts, has exhausted the research potential of this site. According to the criteria listed in CEQA, Section 15064.5, and the guidelines set forth by the County of San Diego, the site is evaluated as having limited significance based upon the

recover of information that can contribute to the knowledge of prehistory in the region. However, the current program has exhausted the potential of the site to yield unique data and further study will not produce additional significant information.

6.54.5 Summary

The investigation of Site SDI-16,316 did not produce any unique scientific data regarding site function or content. The identified artifacts indicate that site activities were focused primarily on lithic tool production and/or maintenance. The site represents one of several limited-use lithic manufacturing and possible resource processing sites in the area.

Based on the information derived from the testing program, the site is characterized as possessing limited significance according to County of San Diego cultural resource guidelines. The site exhibits a moderate surface scatter of artifacts that has been sampled, and a sparse, shallow deposit composed primarily of lithic production waste, but did not possess any intact features. The level of information already obtained from this site has exhausted the research potential of the resource, and it is unlikely that any significantly different information would be gathered from further investigation. No further archaeological investigations are recommended for Site SDI-16,316.

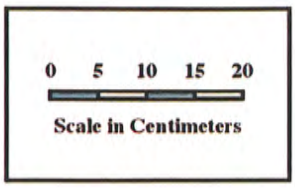
Figure 6.54–1
Excavation Location Map — Site SDI-16,316

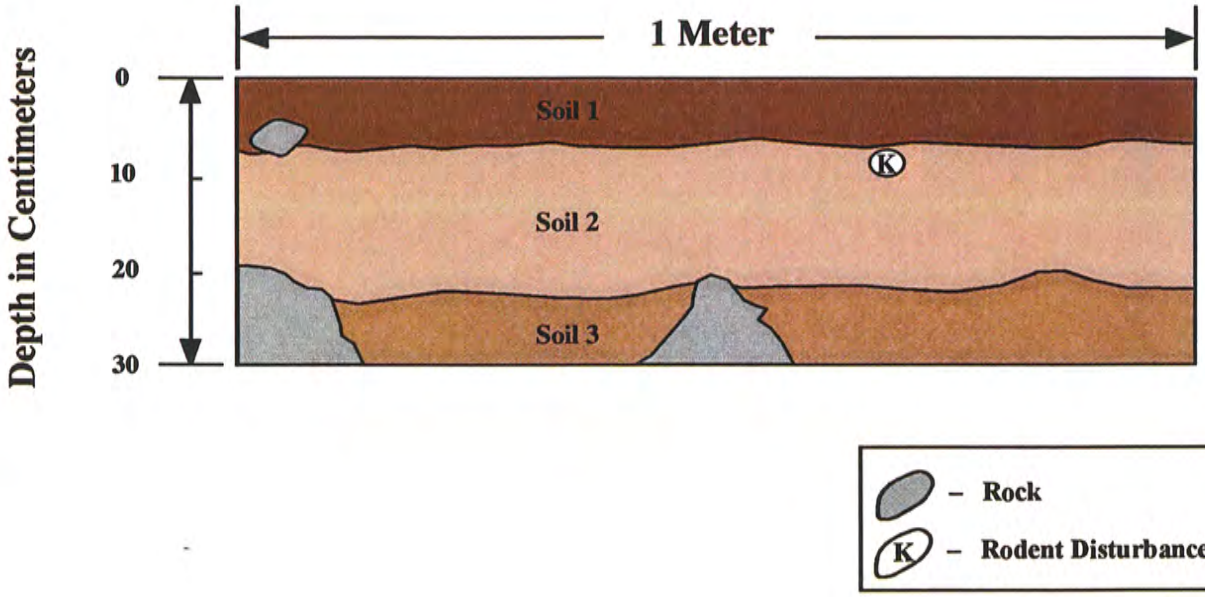
(Deleted for Public Review; Bound Separately)

View of Site SDI-16,316 looking east (Datum B identified by arrow).

View of the north profile of Test Unit 1, 0 to 30 centimeters, at Site SDI-16,316.

Plate 6.54–1





Soil Types

1 **Dark brown to dark yellow brown (10YR 4/3 to 4/4) sandy loam with grass and gravel**

2 **Dark yellow brown (10YR 4/3 to 4/4) fine sandy loam with gravel inclusions**

3 **Dark yellow brown (7.5YR 3/4 to 4/4) decomposing metavolcanic rock**

Figure 6.54–2
North Wall Profile of Test Unit 1
Site SDI-16,316
The Village 13 Project

TABLE 6.54–1

Summary of Surface Recovery
Site SDI-16,316

Recovery Category	Surface	Surface Scrapes	Total	Percent
Core Tools:				
Core Tools	-	2	2	1.01
Lithic Production Waste:				
Cores	-	2	2	1.01
Debitage	3	29	32	16.08
Flakes	12	140	152	76.38
Percussion Tools:				
Hammerstone	-	1	1	0.50
Precision Tools:				
Retouched Flakes	2	1	3	1.51
Utilized Flakes	1	6	7	3.52
Total 18	181	199	100.00	
Percent	9.05	90.95	100.00	

Rounded numbers may not add to 100%.

TABLE 6.54–2

Surface Recovery Data
Site SDI-16,316

Recovery Location	Datum	Location from Datum Azimuth/Range	Quantity	Recovery	Material	Cat. No.
1	A	185°/21 Feet	1	Flake	FGM	1
			1	Flake	MGM	2
2	A	271°/112 Feet	1	Flake	FGM	3
3	A	288°/157 Feet		Not an Artifact		4
4	A	302°/355 Feet		Not an Artifact		5
5	A	299°/282 Feet		Not an Artifact		6
6	A	306°/222 Feet		Not an Artifact		7
7	A	347°/351 Feet		Not an Artifact		8
8	C	283°/272 Feet	2	Flakes	FGM	9
9	C	285°/248 Feet	1	Retouched Flake Fragment	FGM	10
			1	Debitage	FGM	11
10	C	287°/253 Feet	1	Flake	FGM	12
11	C	188°/409 Feet	1	Utilized Flake Fragment	FGM	13
12	B	12°/61 Feet	1	Debitage	MGM	14
13	B	172°/226 Feet		Not an Artifact		15
14	B	164°/246 Feet	1	Flake	MGM	16
15	B	170°/363 Feet	3	Flakes	MGM	17

Recovery Location	Datum	Location from Datum Azimuth/Range	Quantity	Recovery	Material	Cat. No.
16	B	181°/351 Feet	1	Retouched Flake Fragment	MGM	18
			1	Debitage	MGM	19
			2	Flakes	MGM	20
SS-1	C	196°/181 Feet	1	Utilized Flake	FGM	21
			1	Core	FGM	22
			3	Debitage	FGM	23
			4	Flakes	FGM	24
SS-1	C	196°/181 Feet	1	Utilized Flake	MGM	25
			7	Flakes	MGM	26
SS-2	C	190°/152 Feet	3	Debitage	FGM	27
			20	Flakes	FGM	28
			4	Flakes	MGM	29
SS-3	C	164°/126 Feet	1	Core Tool Fragment	FGM	30
			2	Debitage	FGM	31
			16	Flakes	FGM	32
			1	Hammerstone, Circular	MGM	33
			1	Debitage	MGM	34
			2	Flakes	MGM	35
SS-4	C	180°/140 Feet	1	Utilized Flake Fragment	FGM	36
			1	Utilized Flake	FGM	37
			1	Utilized Flake	FGM	38
			1	Utilized Flake	FGM	39
			9	Debitage	FGM	40
			27	Flakes	FGM	41
			3	Debitage	MGM	42
			5	Flakes	MGM	43
SS-5	C	222°/54 Feet	5	Flakes	FGM	44
			1	Debitage	MGM	45
			1	Flake	MGM	46
SS-6	C	165°/218 Feet	1	Debitage	FGM	47
			1	Flake	FGM	48

Recovery Location	Datum	Location from Datum Azimuth/Range	Quantity	Recovery	Material	Cat. No.
SS-6	C	165°/218 Feet	3	Flakes	MGM	49
SS-7	C	178°/229 Feet	3	Debitage	FGM	50
			2	Flakes	FGM	51
			3	Flakes	MGM	52
SS-8	C	181°/330 Feet	1	Retouched Flake	MGM	53
			1	Core Tool	MGM	54
			2	Debitage	MGM	55
			19	Flakes	MGM	56
SS-9	B	199°/322 Feet	1	Debitage	MGM	57
			12	Flakes	MGM	58
SS-10	C	175°/289 Feet	1	Core	MGM	59
			9	Flakes	MGM	60

TABLE 6.54–3

Summary of Shovel Test Recovery
Site SDI-16,316

Recovery Category	Quantity	Percent
Lithic Production Waste:		
Debitage	3	25.00
Flakes	6	50.00
Precision Tools:		
Utilized Debitage	3	25.00
Total	12	100.00

Rounded numbers may not add to 100%.

TABLE 6.54–4

Shovel Test Excavation Data
Site SDI-16,316

Shovel Test		Location from Datum A Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
1	C	191°/336 Feet	0-10 cm.		No Recovery		61
			10-20 cm.		No Recovery		62
			20-30 cm.		No Recovery		63
2	C	183°/265 Feet	0-10 cm.	1	Utilized Debitage	MGM	64
				1	Utilized Debitage	MGM	65
				1	Debitage	MGM	66
			10-20 cm.		No Recovery		67
			20-30 cm.		No Recovery		68
3	C	175°/225 Feet	0-10 cm.	1	Utilized Debitage	FGM	69
				1	Flake	MGM	70
			10-20 cm.	1	Flake	FGM	71
			20-30 cm.		No Recovery		72
4	C	161°/185 Feet	0-10 cm.	1	Debitage	FGM	73
				1	Flake	FGM	74
			10-20 cm.		No Recovery		75
			20-25 cm.		No Recovery		76
5	B	170°/23 Feet	0-10 cm.		No Recovery		77
			10-20 cm.		No Recovery		78

Shovel Test		Location from Datum A Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
5	B	170°/23 Feet	20-30 cm.		No Recovery		79
6	B	161°/105 Feet	0-10 cm.		No Recovery		80
			10-20 cm.		No Recovery		81
			20-30 cm.		No Recovery		82
7	B	175°/170 Feet	0-10 cm.		No Recovery		83
			10-20 cm.		No Recovery		84
			20-30 cm.		No Recovery		85
8	C	190°/210 Feet	0-10 cm.	1	Debitage	FGM	86
				1	Flake	FGM	87
			10-20 cm.		No Recovery		88
			20-30 cm.		No Recovery		89
9	C	191°/161 Feet	0-10 cm.		No Recovery		90
			10-20 cm.		No Recovery		91
			20-30 cm.		No Recovery		92
10	C	193°/133 Feet	0-10 cm.	2	Flakes	FGM	93
			10-20 cm.		No Recovery		94
			20-30 cm.		No Recovery		95
11	B	259°/130 Feet	0-10 cm.		No Recovery		96
			10-20 cm.		No Recovery		97
			20-30 cm.		No Recovery		98

Shovel Test	Location from Datum A Azimuth/Range		Depth	Quantity	Recovery	Material	Cat. No.
12	C	215°/47 Feet	0-10 cm.		No Recovery		99
			10-20 cm.		No Recovery		100
			20-30 cm.		No Recovery		101
13	C	274°/227 Feet	0-10 cm.		No Recovery		102
			10-20 cm.		No Recovery		103
			20-30 cm.		No Recovery		104
14	C	210°/397 Feet	0-10 cm.		No Recovery		105
			10-20 cm.		No Recovery		106
14	C	210°/397 Feet	20-30 cm.		No Recovery		107
15	B	186°/327 Feet	0-10 cm.		No Recovery		108
			10-20 cm.		No Recovery		109
			20-30 cm.		No Recovery		110
16	B	155°/273 Feet	0-10 cm.		No Recovery		111
			10-20 cm.		No Recovery		112
			20-30 cm.		No Recovery		113
17	B	124°/202 Feet	0-10 cm.		No Recovery		114
			10-20 cm.		No Recovery		115
			20-30 cm.		No Recovery		116

TABLE 6.54–5

Summary of Test Unit Recovery
Site SDI-16,316

Artifact Category	Depth (in centimeters) 0-10	10-20	20-30	Total	Percent
Lithic Production Waste:					
Debitage	8	-	-	8	15.38
Flakes	30	13	-	43	82.69
Precision Tools:					
Utilized Flake	1	-	-	1	1.92
Total	39	13	0	52	100.00
Percent	75.00	25.00	0.00	100.00	

Rounded numbers may not add to 100%.

TABLE 6.54–6

Test Unit Excavation Data
Site SDI-16,316

Test Unit	Location from Datum C Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
1	168°/154 Feet	0-10 cm.	1	Utilized Flake	FGM	117
			8	Debitage	FGM	118
			23	Flakes	FGM	119
			7	Flakes	MGM	120
		10-20 cm.	10	Flakes	FGM	121
			3	Flakes	MGM	122
		20-30 cm.		No Recovery		123

TABLE 6.54–7

Summary of Artifact Recovery
Site SDI-16,316

Recovery Category	Surface	Shovel Tests	Test Units	Total	Percent
Core Tools:					
Core Tools	2	-	-	2	0.76
Lithic Production Waste:					
Cores	2	-	-	2	0.76
Debitage	32	3	8	43	16.35
Flakes	152	6	43	201	76.43
Percussion Tools:					
Hammerstone	1	-	-	1	0.38
Precision Tools:					
Retouched Flakes	3	-	-	3	1.14
Utilized Debitage	-	3	-	3	1.14
Utilized Flakes	7	-	1	8	3.04
Total	199	12	52	263	100.00
Percent	75.67	4.56	19.77	100.00	

Rounded numbers may not add to 100%.

TABLE 6.54–8

Lithic Tool Measurement Data
Site SDI-16,316

Cat. No.	Tool Description	Dimensions (in centimeters) Length	Width	Thickness	Weight (in grams)	Material
Core Tools:						
30	Core Tool Fragment	7.1	4.7	2.5	87.9	FGM
54	Core Tool	16.1	9.2	7.7	1296.7	MGM
Percussion Tools:						
Hammerstones:						
33	Hammerstone, Circular	11.0	9.2	5.0	661.2	MGM
Precision Tools:						
Retouched Flakes:						
10	Retouched Flake Fragment	4.7	1.3	1.1	12.2	FGM
18	Retouched Flake Fragment	13.0	11.3	2.7	473.8	MGM
53	Retouched Flake	7.3	6.1	2.1	99.2	MGM
Utilized Debitage:						
64	Utilized Debitage	4.9	3.2	1.1	17.6	MGM
65	Utilized Debitage	4.1	3.3	1.5	24.1	MGM
69	Utilized Debitage	3.8	3.1	2.5	33.3	FGM
Utilized Flakes:						
13	Utilized Flake Fragment	7.3	3.3	1.8	31.4	FGM
21	Utilized Flake	10.2	5.8	1.2	60.2	FGM
25	Utilized Flake	4.0	1.8	1.1	8.6	MGM
36	Utilized Flake Fragment	3.7	3.7	1.2	16.8	FGM
37	Utilized Flake	6.4	4.6	1.1	35.7	FGM
38	Utilized Flake	6.9	3.8	1.1	23.5	FGM
39	Utilized Flake	7.2	5.0	2.4	74.1	FGM
117	Utilized Flake	5.7	3.1	0.9	13.4	FGM

6.55 Site SDI-16,317

6.55.1 Site Description

This site consists of a moderately dense lithic scatter located on steep southwest-facing slopes below the peak on the north property line that represents the high point on the project. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.55–1. Elevations at the site range from 950 to 1,025 feet AMSL. Vegetation at the site consists of chamise chaparral that covers most of the site area. The setting of the site is shown in a photograph provided in Plate 6.55–1.

Site SDI-16,317 is located outside of the currently proposed construction zone and, therefore, was not subjected to a testing and evaluation program by BFSA. The area in which the site is located is proposed for open space easement. As part of the current Village 13 study, Site SDI-16,317 was visited by BFSA on October 2, 2002, during which time the boundaries of the surface artifact scatter were mapped and recorded. The intention of this investigation was limited to recording of the visible site boundaries. No artifacts were collected and no excavations were conducted at the site.

6.55.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,317 consisted of the identification and mapping of the surface scatter boundaries. The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a surface lithic scatter containing approximately 1,000 specimens, including lithic production waste. Some exposed metavolcanic bedrock appears to have been quarried. All artifacts appear to be derived from locally available metavolcanic rock. No evidence of ecofacts or features was observed, and no culturally diagnostic tools were identified. The surface expression of the site measures approximately 94 meters (310 feet) from north to south by 76 meters (250 feet) from east to west, and covers approximately 5,358 square meters (57,384 square feet) (Figure 6.55–1).

6.55.3 Summary

Site SDI-16,317 is a moderate density surface scatter where prehistoric activities appear to have focused primarily on resource procurement. Due to the fact that the site is located outside the construction zone, no subsurface excavations were conducted at the site. Based on similar sites tested during the current investigation, the potential for subsurface deposits at Site SDI-16,317 is moderate.

The area of Site SDI-16,317 is proposed for open space easement and will not be directly impacted by the proposed development. Because the site has not been evaluated for significance, the site is considered a significant resource according to CEQA criteria and County of San Diego guidelines.

Figure 6.55–1
Surface Boundary Location Map — Site SDI-16,317

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,317 looking south.

Plate 6.55–1

6.56 Site SDI-16,318

6.56.1 Site Description

This site consists of a low-density lithic scatter located on steep south-facing slopes below the peak on the north property line that represents the high point on the project. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.56–1. Elevations at the site range from 1,275 to 1,320 feet AMSL. Vegetation at the site consists of dense chamise chaparral. The setting of the site is shown in a photograph provided in Plate 6.56–1.

Site SDI-16,318 is located outside of the currently proposed APE and, therefore, was not subjected to a testing and evaluation program by BFSA. The area in which the site is located is proposed for open space easement. As part of the current Village 13 study, Site SDI-16,318 was visited by BFSA on October 2, 2002, during which time the boundaries of the surface artifact scatter were mapped and recorded. The intention of this investigation was limited to recording of the visible site boundaries. No artifacts were collected and no excavations were conducted at the site.

6.56.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,318 consisted of the identification and mapping of the surface scatter boundaries. The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a surface lithic scatter containing approximately 50 specimens, including lithic production waste. All artifacts appear to be derived from locally available metavolcanic rock. No evidence of ecofacts or features was observed, and no culturally diagnostic tools were identified. The surface expression of the site measures approximately 48 meters (160 feet) from north to south by 42 meters (140 feet) from east to west, and covers approximately 1,450 square meters (15,531 square feet) (Figure 6.56–1).

6.56.3 Summary

Site SDI-16,318 is a moderate density surface scatter where prehistoric activities appear to have focused primarily on resource procurement. Due to the fact that the site is located outside the construction zone, no subsurface excavations were conducted at the site. Based on similar sites tested during the current investigation, the potential for subsurface deposits at Site SDI-16,318 is moderate.

The area of Site SDI-16,318 is proposed for open space easement and will not be directly impacted by the proposed development. Because the site has not been evaluated for significance, the site is considered a significant resource according to CEQA criteria and County of San Diego guidelines.

Figure 6.56–1
Surface Boundary Location Map — Site SDI-16,318

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,318 looking south.

Plate 6.56–1

6.57 Site SDI-16,319

6.57.1 Site Description

Site SDI-16,319 comprises a sparse lithic scatter located on a south-facing slope of the Jamul Mountains, east of Upper Otay Reservoir and north of Lower Otay Reservoir, near the center of the project. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.57–1. Elevations at the site range from 845 to 930 feet AMSL. The current vegetation in the area is characterized by scattered chamise chaparral and grasses. A graded dirt road extends through the site from west to east. The setting of Site SDI-16,319 is shown in a photograph provided in Plate 6.57–1a.

Site SDI-16,319 is located within the currently proposed construction zone and was therefore subjected to a testing and evaluation program by BFSA. Testing of the site consisted of the mapping and recordation of all surface artifacts, and the excavation of 11 shovel test pits and one test unit. The field investigations were conducted on June 17 and October 8, 2002.

6.57.2 Description of Field Investigations

Field investigations at Site SDI-16,319 conducted by BFSA were executed using the standard methodologies described in Section 5.0. Vegetation cover at the site consisted of various coastal sage scrub species over the majority of the site. Lithic artifacts were recovered from the surface of the site; subsurface investigations resulted in the conclusion that no subsurface deposits are present at the site.

Surface Recordation

The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a limited number of surface artifacts. A total of 26 artifacts were recovered from 16 different surface locations. The recovery is summarized in Table 6.57–1, while detailed provenience information for the surface artifacts is presented in Table 6.57–2. Most (92.31%; N=24) of the artifacts recovered from the site were identified as lithic production waste, while two (7.69%) precision tools were also recovered. The area of the site, delineated by the artifact scatter, measures approximately 155 meters (510 feet) from southwest to northeast by 91 meters (300 feet) from northwest to southeast, and covers 3,469 square meters (37,322 square feet) (Figure 6.57–1).

Subsurface Excavation

The potential for subsurface archaeological deposits at Site SDI-16,319 was investigated by excavating a series of 11 STPs. The placement of the STPs, shown in Figure 6.57–1, was based on the distribution of the surface artifacts. The STPs were excavated to a minimum of 30 centimeters, or until bedrock was encountered. No artifacts were recovered from the STPs

excavated at Site SDI-16,319. Locational and depth information for the shovel tests is presented in Table 6.57–3.

As originally proposed, the testing program included the excavation of a single test unit at Site SDI-16,319. Because all shovel tests were negative, the test unit was placed according to the surface artifact distribution (Figure 6.57–1). The test unit was excavated in standard decimeter levels to 30 centimeters and all removed soils were sifted through 1/8-inch mesh hardware cloth. No artifacts were recovered from the test unit excavation (Table 6.57–4). The soil profile from Test Unit 1 was characterized as dark brown to brown (10YR 4/3) sandy loam with occasional metavolcanic rock inclusions, underlain at between 10 to 20 centimeters by brown (10YR 5/3) sandy loam with increasing metavolcanic rock inclusions. A drawing of the north wall of Test Unit 1 is presented in Figure 6.57–2. A color photograph of the north wall of Test Unit 1 is provided in Plate 6.57–1b.

The excavation of the STPs and test unit determined that no subsurface deposits are present at Site SDI-16,319.

6.57.3 Discussion

The testing demonstrated that Site SDI-16,319 consists of a sparse scatter of lithic artifacts on the surface of the site; no subsurface cultural deposit was identified. The overall site dimensions, as identified by the surface scatter, measure 155 meters (510 feet) from southwest to northeast by 91 meters (300 feet) from northwest to southeast, and covers 3,469 square meters (37,322 square feet). The artifacts recovered from Site SDI-16,319 consisted of 24 pieces of lithic production waste, a single projectile point, and a utilized flake. All artifacts collected from Site SDI-16,319 were derived from locally available fine- or medium-grained metavolcanics (Table 6.57–2). The site appears to represent a limited-use site where lithic tool production and/or maintenance occurred. Measurements for the two tools recovered from the site are presented in Table 6.57–5.

These two tools represent completely different tool types. The projectile point (Plate 6.57–2) is a small, serrated, side-notched arrow point weighing 0.7 grams, while the utilized flake is a limited-use tool measuring over 15 centimeters in length and weighing over 1,200 grams. The presence of the projectile point on a site that otherwise represents a small, limited-use lithic production and/or maintenance site suggest the point was fortuitous, perhaps lost during hunting or other activities in the area, and was not itself directly associated with the activities at the site. This is supported by the fact that the lithic production waste assemblage from the site contained no pressure flakes; in fact the smallest flake from the site measured 1.8 centimeters. Therefore, while the presence of the point does indicate a Late Prehistoric use of the area, it does not necessarily help to date the utilization of this site.

Given the sparse nature of the surface scatter and the lack of a subsurface deposit, it is unlikely that further excavation would produce additional data that would contribute to

prehistoric utilization of the area. The site exhibits no ecofacts, features, or unique elements. As discussed above, the single culturally diagnostic artifact recovered appears to be a fortuitous element at the site and is probably not related to the use of the site. The mapping and collection of all surface artifacts have exhausted the research potential of this site. According to the criteria listed in CEQA, Section 15064.5, and the guidelines set forth by the County of San Diego, the site is evaluated as having limited significance based upon the recover of information that can contribute to the knowledge of prehistory in the region. However, the current program has exhausted the potential of the site to yield unique data and further study will not produce additional significant information.

6.57.4 Summary

The investigation of Site SDI-16,319 did not produce any unique scientific data regarding site function or content. The identified artifacts indicate that site activities were focused primarily on a limited amount of lithic tool production and/or maintenance. The projectile point identified on the site indicates the area was utilized during the Late Prehistoric period, but tells less about the specific use of this site since it does not appear to have been manufactured on site. Site SDI-16,319 represents one of several limited-use lithic manufacturing or maintenance sites in the area.

Based on the information derived from the testing program, the site is characterized as possessing limited significance according to County of San Diego cultural resource guidelines. The site exhibits a sparse artifact scatter that has been collected, and did not possess any segregated special use areas, features, or unique elements. With the exception of the fortuitous projectile point, the artifacts recovered are consistent with other small resource extraction sites on the project. The level of information already obtained from this site has exhausted the research potential of the resource, and it is unlikely that any significantly different information would be gathered from further investigation. No further archaeological investigations are recommended for Site SDI-16,319.

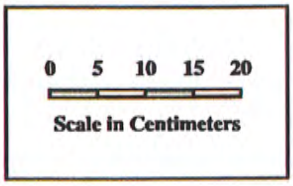
Figure 6.57–1
Excavation Location Map — Site SDI-16,319

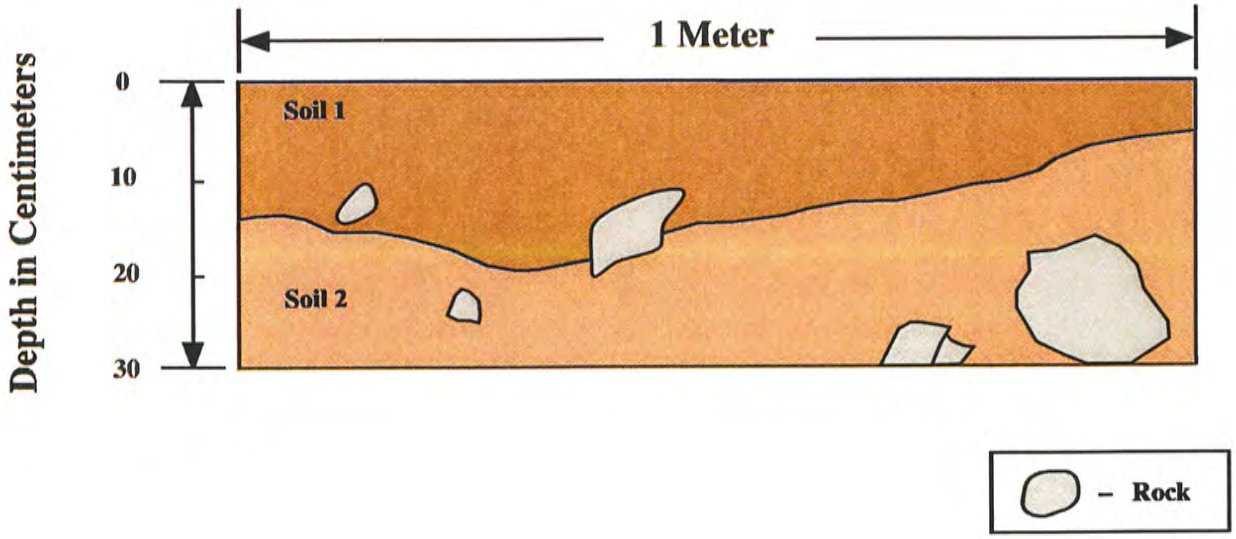
(Deleted for Public Review; Bound Separately)

View of Site SDI-16,319 looking northeast (arrow identifies Datum A).

View of the north profile of Test Unit 1, 0 to 30 centimeters, at Site SDI-16,319.

Plate 6.57–1





Soil Types

1 **Dark brown to brown (10YR 4/3) sandy loam with occasional metavolcanic rock inclusions**

2 **Brown (10YR 5/3) sandy loam with increasing metavolcanic rock inclusions**

Figure 6.57–2
North Wall Profile of Test Unit 1
Site SDI-16,319
The Village 13 Project

Catalog #15
FGM Point

View of select artifact from Site SDI-16,319

Plate 6.57-2

TABLE 6.57–1

Summary of Surface Recovery
Site SDI-16,319

Recovery Category	Quantity	Percent
Lithic Production Waste:		
Core	1	3.85
Debitage	5	19.23
Flakes	18	69.23
Precision Tools:		
Projectile Point	1	3.85
Utilized Debitage	1	3.85
Total	26	100.00

Rounded numbers may not add to 100%.

TABLE 6.57–2

Surface Recovery Data
Site SDI-16,319

Recovery Location	Location from Datum B Azimuth/Range	Quantity	Recovery	Material	Cat. No.
1	354°/95 Feet	1	Utilized Debitage	FGM	1
2	81°/154 Feet	1	Flake	MGM	2
3	89°/155 Feet	2	Flakes	MGM	3
4	91°/154 Feet	3	Flakes	MGM	4
5	100°/138 Feet		Not an Artifact		5
6	162°/74 Feet	2 2	Debitage Flakes	FGM FGM	6 7
7	166°/88 Feet	1	Debitage	FGM	8
8	135°/164 Feet		Not an Artifact		9
9	186°/70 Feet		Not an Artifact		10
10	210°/55 Feet		Not an Artifact		11
11	179°/93 Feet		Not an Artifact		12
12	262°/56 Feet	1	Flake	MGM	13
13	257°/111 Feet		Not an Artifact		14
14	251°/125 Feet	1	Projectile Point Fragment, Arrow, Serrated Edges, Side Notched	FGM	15
15	258°/140 Feet	1	Debitage	MGM	16

Recovery Location	Location from Datum B Azimuth/Range	Quantity	Recovery	Material	Cat. No.
16	262°/156 Feet		Not an Artifact		17
17	235°/152 Feet		Not an Artifact		18
18	197°/216 Feet	1	Flake	MGM	19
19	186°/163 Feet	1	Flake	MGM	20
20	194°/326 Feet		Not an Artifact		21
21	182°/299 Feet		Not an Artifact		22
22	200°/328 Feet	1	Core Fragment	MGM	23
23	207°/388 Feet	1 4	Debitage Flakes	MGM MGM	24 25
24	240°/115 Feet		Not an Artifact		26
25	242°/100 Feet	1	Flake	MGM	27
26	223°/113 Feet		Not an Artifact		28
27	286°/201 Feet	1	Flake	FGM	29
28	240°/17 Feet	1	Flake	MGM	30

TABLE 6.57–3

Shovel Test Excavation Data
Site SDI-16,319

Shovel Test	Datum	Location from Datum Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
1	B	95°/163 Feet	0-10 cm.		No Recovery		31
			10-20 cm.		No Recovery		32
			20-30 cm.		No Recovery		33
2	B	0°/0 Feet	0-10 cm.		No Recovery		34
			10-20 cm.		No Recovery		35
			20-30 cm.		No Recovery		36
3	B	165°/71 Feet	0-10 cm.		No Recovery		37
			10-20 cm.		No Recovery		38
			20-30 cm.		No Recovery		39
4	B	247°/109 Feet	0-10 cm.		No Recovery		40
			10-20 cm.		No Recovery		41
			20-30 cm.		No Recovery		42
5	B	233°/152 Feet	0-10 cm.		No Recovery		43
			10-20 cm.		No Recovery		44
			20-30 cm.		No Recovery		45
6	B	206°/213 Feet	0-10 cm.		No Recovery		46
			10-20 cm.		No Recovery		47

Shovel Test	Datum	Location from Datum Azimuth/Range	Depth	Quantity	Recovery	Material	Cat. No.
6	B	206°/213 Feet	20-30 cm.		No Recovery		48
7	B	191°/332 Feet	0-10 cm.		No Recovery		49
			10-20 cm.		No Recovery		50
			20-30 cm.		No Recovery		51
8	B	206°/383 Feet	0-10 cm.		No Recovery		52
			10-20 cm.		No Recovery		53
			20-30 cm.		No Recovery		54
9	A	210°/75 Feet	0-10 cm.		No Recovery		58
			10-15 cm.		No Recovery		59
10	A	240°/111 Feet	0-10 cm.		No Recovery		60
			10-20 cm.		No Recovery		61
11	A	270°/140 Feet	0-10 cm.		No Recovery		62
			10-20 cm.		No Recovery		63
			20-30 cm.		No Recovery		64

TABLE 6.57–4

Test Unit Excavation Data
Site SDI-16,319

Test Unit	Location from Datum B Azimuth/Range	Depth	Recovery	Cat. No.
1	250°/123 Feet	0-10 cm.	No Recovery	55
		10-20 cm.	No Recovery	56
		20-30 cm.	No Recovery	57

TABLE 6.57–5

Lithic Tool Measurement Data
Site SDI-16,319

Cat. No.	Tool Description	Dimensions (in centimeters) Length	Width	Thickness	Weight (in grams)	Material
Precision Tools:						
Projectile Points:						
15	Projectile Point, arrow, serrated edges, side notches, base missing	2.8	0.9	0.3	0.7	FGM
Utilized Flakes:						
1	Utilized Flake	15.3	11.6	8.6	1,259.4	FGM

6.58 Site SDI-16,320

6.58.1 Site Description

This site consists of a low-density lithic scatter located on steep east-facing slopes that characterize the northeast property area. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.58–1. Elevations at the site range from 1,350 to 1,400 feet AMSL. Vegetation at the site consists of dense chamise chaparral. The setting of the site is shown in a photograph provided in Plate 6.58–1.

Site SDI-16,320 is located outside of the currently proposed construction zone and, therefore, was not subjected to a testing and evaluation program by BFSA. The area in which the site is located is proposed for open space easement. As part of the current Village 13 study, Site SDI-16,320 was visited by BFSA on October 3, 2002, during which time the boundaries of the surface artifact scatter were mapped and recorded. The intention of this investigation was limited to recording of the visible site boundaries. No artifacts were collected and no excavations were conducted at the site.

6.58.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,320 consisted of the identification and mapping of the surface scatter boundaries. The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a surface lithic scatter containing approximately 30 specimens, including lithic production waste. All artifacts appear to be derived from locally available metavolcanic rock. No evidence of ecofacts or features was observed, and no culturally diagnostic tools were identified. The surface expression of the site measures approximately nine meters (30 feet) from north to south by eight meters (28 feet) from east to west, and covers approximately 68 square meters (730 square feet) (Figure 6.58–1).

6.58.3 Summary

Site SDI-16,320 is a low-density surface scatter where prehistoric activities appear to have focused primarily on resource procurement. Due to the fact that the site is located outside the construction zone, no subsurface excavations were conducted at the site. Based on similar sites tested during the current investigation, the potential for subsurface deposits at Site SDI-16,320 is moderate.

The area of Site SDI-16,320 is proposed for open space easement and will not be directly impacted by the proposed development. Because the site has not been evaluated for significance, the site is considered a significant resource according to CEQA criteria and County of San Diego guidelines.

Figure 6.58–1
Surface Boundary Location Map — Site SDI-16,320

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,320 looking northwest.

Plate 6.58–1

6.59 Site SDI-16,321

6.59.1 Site Description

This site consists of a sparse lithic scatter located on a steep south-facing ridge that characterizes the northeast property area. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.59–1. Elevations at the site range from 1,050 to 1,075 feet AMSL. Vegetation at the site consists of dense chamise chaparral. The setting of the site is shown in a photograph provided in Plate 6.59–1.

Site SDI-16,321 is located outside of the currently proposed construction zone and, therefore, was not subjected to a testing and evaluation program by BFSA. The area in which the site is located is proposed for open space easement. As part of the current Village 13 study, Site SDI-16,321 was visited by BFSA on October 3, 2002, during which time the boundaries of the surface artifact scatter were mapped and recorded. The intention of this investigation was limited to recording of the visible site boundaries. No artifacts were collected and no excavations were conducted at the site.

6.59.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,321 consisted of the identification and mapping of the surface scatter boundaries. The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a sparse surface lithic scatter containing approximately 30 specimens, including lithic production waste. All artifacts appear to be derived from locally available metavolcanic rock. No evidence of ecofacts or features was observed, and no culturally diagnostic tools were identified. The surface expression of the site measures approximately 183 meters (600 feet) from north to south by 96 meters (320 feet) from east to west, and covers approximately 14,230 square meters (157,440 square feet) (Figure 6.59–1).

6.59.3 Summary

Site SDI-16,321 is a low-density surface scatter where prehistoric activities appear to have focused primarily on resource procurement and possibly quarrying of metavolcanic rock. Due to the fact that the site is located outside the construction zone, no subsurface excavations were conducted at the site. Based on similar sites tested during the current investigation, the potential for subsurface deposits at Site SDI-16,321 is moderate.

The area of Site SDI-16,321 is proposed for open space easement and will not be directly impacted by the proposed development. Because the site has not been evaluated for significance, the site is considered a significant resource according to CEQA criteria and County of San Diego guidelines.

Figure 6.59–1
Surface Boundary Location Map — Site SDI-16,321

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,321 (arrow) looking south.

Plate 6.59–1

6.60 Site SDI-16,322

6.60.1 Site Description

This site consists of a moderately dense lithic scatter and quarry located on top of the 1,735-foot peak on the northern property boundary. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.60–1. Elevations at the site range from 1625 to 1,735 feet AMSL. Vegetation at the site consists of dense chamise chaparral. The site has been disturbed by a road cut and some clearing, and the site area is littered with modern trash. The setting of the site is shown in a photograph provided in Plate 6.60–1.

Site SDI-16,322 is located outside of the currently proposed construction zone and, therefore, was not subjected to a testing and evaluation program by BFSA. The area in which the site is located is proposed for open space easement. As part of the current Village 13 study, Site SDI-16,322 was visited by BFSA on October 4, 2002, during which time the boundaries of the surface artifact scatter were mapped and recorded. The intention of this investigation was limited to recording of the visible site boundaries. No artifacts were collected and no excavations were conducted at the site

6.60.2 Description of Field Investigations

Field investigations conducted by BFSA at Site SDI-16,322 consisted of the identification and mapping of the surface scatter boundaries. The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a moderate to dense surface lithic scatter containing approximately 1,000 specimens, primarily lithic production waste. Several boulders were observed with evidence of quarrying activity. All artifacts appear to be derived from locally available metavolcanic rock. No evidence of ecofacts or features was observed, and no culturally diagnostic tools were identified. The surface expression of the site measures approximately 137 meters (450 feet) from north to south by 79 meters (260 feet) from east to west, and covers approximately 8,875 square meters (96,026 square feet) (Figure 6.60–1).

6.60.3 Summary

Site SDI-16,322 is a moderate to high-density surface scatter where prehistoric activities appear to have focused primarily on quarrying of metavolcanic rock. Due to the fact that the site is located outside the construction zone, no subsurface excavations were conducted at the site. Based on similar sites tested during the current investigation, the potential for subsurface deposits at Site SDI-16,322 is moderate.

The area of Site SDI-16,322 is proposed for open space easement and will not be directly impacted by the proposed development. Because the site has not been evaluated for significance,

the site is considered a significant resource according to CEQA criteria and County of San Diego guidelines.

Figure 6.60–1
Surface Boundary Location Map — Site SDI-16,322

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,322 (foreground) looking south.

Plate 6.60–1

6.61 Site SDI-16,323

6.61.1 Site Description

Site SDI-16,323 is composed of a sparse lithic scatter located east of a seasonal drainage on a lower terrace of a long southwestern facing ridgeline in the eastern half of the project. The site was located by BFSA during a survey conducted in November 2000. The general configuration of the resource is shown in Figure 6.61–1. Elevations at the site range from 770 to 790 feet AMSL. The current vegetation is characterized by scattered chamise chaparral and grasses. There are also numerous metavolcanic rock outcrops located throughout the site, especially in the southeast corner of the site. A dirt road was graded directly northeast of the site, but does not appear to have impacted the site. The setting of Site SDI-16,323 is shown in a photograph provided in Plate 6.61–1a.

Site SDI-16,323 is located within the currently proposed construction zone and was therefore subjected to a testing and evaluation program by BFSA. Testing of the site consisted of the mapping and recordation of all surface artifacts, and the excavation of 10 shovel test pits and one test unit. The field investigations were conducted on June 17 and 18, 2002.

6.61.2 Description of Field Investigations

Field investigations at Site SDI-16,323 conducted by BFSA were executed using the standard methodologies described in Section 5.0. Vegetation cover at the site consisted of chamise chaparral over the majority of the site. Lithic artifacts were recovered from the surface of the site; subsurface investigations resulted in the conclusion that no subsurface deposits are present at the site.

Surface Recordation

The entire surface of the site was inspected for evidence of prehistoric activity, resulting in the identification of a limited number of surface artifacts. A total of 17 artifacts were recovered from the surface of the site from 14 different surface locations. The recovery is summarized in Table 6.61-1, while detailed provenience information for the surface artifacts is presented in Table 6.61-2. All artifacts recovered from the site were identified as lithic production waste. The artifacts were distributed over a wide area southwest of the dirt road. The area of the site, delineated by the artifact scatter, measures approximately 61 meters (200 feet) from west to east by 56 meters (185 feet) from north to south, and covers 2,439 square meters (26,248 square feet) (Figure 6.61–1).

Subsurface Excavation

The potential for subsurface archaeological deposits at Site SDI-16,323 was investigated by excavating a series of 10 STPs. The placement of the STPs, shown in Figure 6.61–1, was based on the distribution of the surface artifacts. The STPs were excavated to a minimum of 30

centimeters, or until bedrock was encountered. No artifacts were recovered from the STPs excavated at Site SDI-16,323. Locational and depth information for the shovel tests is presented in Table 6.61–3.

As originally proposed, the testing program included the excavation of a single test unit at Site SDI-16,323. Because all shovel tests were negative, the test unit was placed according to the surface artifact distribution (Figure 6.61–1). The test unit was excavated in standard decimeter levels to 30 centimeters and all removed soils were sifted through 1/8-inch mesh hardware cloth. No artifacts were recovered from the test unit excavation (Table 6.61–4). The soil profile from Test Unit 1 was characterized as fine brown (7.5YR 4/4 to 10YR 5/4) sandy loam to the maximum depth of the excavation (30 centimeters). A drawing of the north wall of Test Unit 1 is presented in Figure 6.61–2. A color photograph of the north wall of Test Unit 1 is provided in Plate 6.61–1b.

The excavation of the STPs and test unit determined that no subsurface deposits are present at Site SDI-16,323.

6.61.3 Discussion

The testing demonstrated that Site SDI-16,323 consists of a sparse scatter of lithic artifacts on the surface of the site; no subsurface cultural deposit was identified. The overall site dimensions, identified by the surface scatter, measure 61 meters (200 feet) by 56 meters (185 feet), and cover 2,439 square meters (26,248 square feet). The artifacts recovered from Site SDI-16,323 consisted of 17 pieces of lithic production waste; no tools were recovered. All artifacts collected from Site SDI-16,323 were derived from locally available fine- or medium-grained metavolcanics (Table 6.61–2). The site appears to represent a limited-use site where lithic tool production and/or maintenance occurred.

Since none of the artifacts recovered from the site were culturally diagnostic, no cultural affiliation could be assigned to the resource. Given the sparse nature of the surface scatter and the lack of a subsurface deposit, it is unlikely that further excavation would produce additional data that would allow such a determination. The site exhibits no ecofacts, features, or unique elements. The mapping and collection of surface artifacts have exhausted the research potential of this site. According to the criteria listed in CEQA, Section 15064.5, and the guidelines set forth by the County of San Diego, the site is evaluated as having limited significance based upon the recover of information that can contribute to the knowledge of prehistory in the region. However, the current program has exhausted the potential of the site to yield unique data and further study will not produce additional significant information

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6.61.4 Summary

The investigation of Site SDI-16,323 did not produce any unique scientific data regarding site function or content. The identified artifacts indicate that site activities were focused primarily on a limited amount of lithic tool production and possibly resource processing. The site represents one of several limited-use lithic manufacturing or maintenance sites in the area.

Based on the information derived from the testing program, the site is characterized as possessing limited significance according to County of San Diego cultural resource guidelines. The site exhibits a sparse artifact scatter that has been collected, and did not possess any segregated special use areas, features, or unique elements. The level of information already obtained from this site has exhausted the research potential of the resource, and it is unlikely that any significantly different information would be gathered from further investigation. No further archaeological investigations are recommended for Site SDI-16,323.

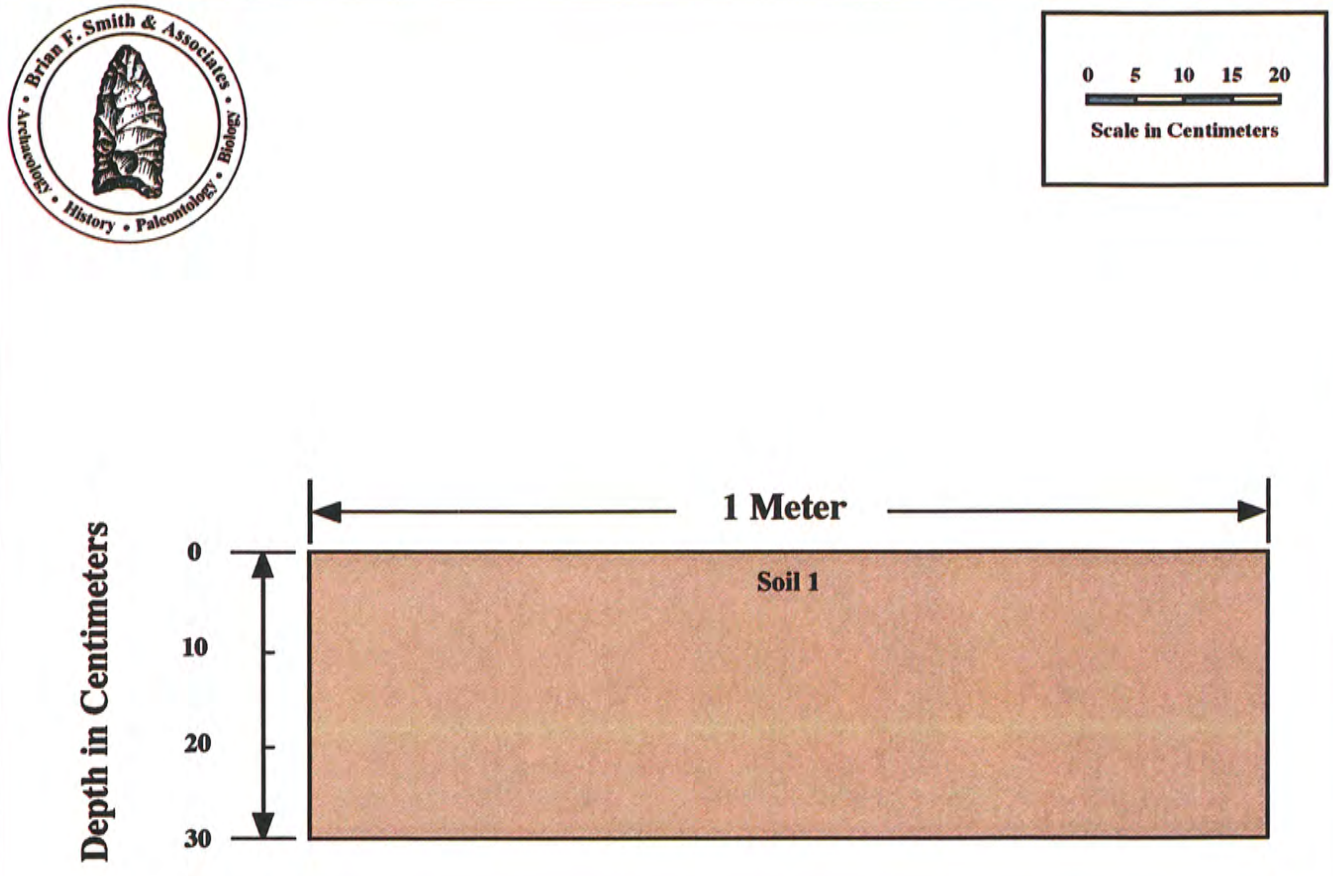
Figure 6.61–1
Excavation Location Map — Site SDI-16,323

(Deleted for Public Review; Bound Separately)

View of Site SDI-16,323 looking south (arrow).

View of the north profile of Test Unit 1, 0 to 30 centimeters, at Site SDI-16,323.

Plate 6.61–1



Soil Types

1 **Fine brown (7.5YR 4/4 to 10YR 5/4) sandy loam**

Figure 6.61–2
North Wall Profile of Test Unit 1
Site SDI-16,323
The Village 13 Project

TABLE 6.61–1

Summary of Surface Recovery
Site SDI-16,323

Recovery Category	Quantity	Percent
Lithic Production Waste:		
Debitage	1	5.88
Flakes	16	94.12
Total	17	100.00

Rounded numbers may not add to 100%.

TABLE 6.61–2

Surface Recovery Data
Site SDI-16,323

Recovery Location	Location from Datum A Azimuth/Range	Quantity	Recovery	Material	Cat. No.
1	64°/73 Feet	2	Flakes	FGM	1
2	60°/52 Feet	2	Flakes	MGM	2
3	90°/56 Feet	1	Flake	FGM	3
4	129°/99 Feet	1	Flake	FGM	4
5	186°/49 Feet	1	Flake	FGM	5
6	155°/18 Feet	1	Flake	MGM	6
7	103°/36 Feet	1	Debitage	FGM	7
8	58°/15 Feet	1	Flake	FGM	8
9	20°/64 Feet	1	Flake	FGM	9
10	358°/79 Feet	2	Flakes	FGM	10
11	289°/32 Feet	1	Flake	MGM	11
12	228°/50 Feet	1	Flake	MGM	12
13	224°/127 Feet	1	Flake	FGM	13
14	268°/95 Feet	1	Flake	FGM	14

TABLE 6.61–3

Shovel Test Excavation Data
Site SDI-16,323

Shovel Test	Location from Datum A Azimuth/Range	Depth	Recovery	Cat. No.
1	0°/0 Feet	0-10 cm.	No Recovery	15
		10-20 cm.	No Recovery	16
		20-30 cm.	No Recovery	17
2	0°/48 Feet	0-10 cm.	No Recovery	18
		10-20 cm.	No Recovery	19
		20-30 cm.	No Recovery	20
3	0°/84 Feet	0-10 cm.	No Recovery	21
		10-20 cm.	No Recovery	22
		20-30 cm.	No Recovery	23
4	90°/62 Feet	0-10 cm.	No Recovery	24
		10-20 cm.	No Recovery	25
		20-30 cm.	No Recovery	26
5	90°/141 Feet	0-10 cm.	No Recovery	27
		10-20 cm.	No Recovery	28
		20-30 cm.	No Recovery	29
6	180°/55 Feet	0-10 cm.	No Recovery	30
		10-20 cm.	No Recovery	31
7	180°/135 Feet	0-10 cm.	No Recovery	32
		10-20 cm.	No Recovery	33
		20-30 cm.	No Recovery	34
8	225°/97 Feet	0-10 cm.	No Recovery	35

Shovel Test	Location from Datum A Azimuth/Range	Depth	Recovery	Cat. No.
8	225°/97 Feet	10-20 cm.	No Recovery	36
9	270°/56 Feet	0-10 cm.	No Recovery	37
		10-20 cm.	No Recovery	38
		20-30 cm.	No Recovery	39
10	270°/142 Feet	0-10 cm.	No Recovery	40
		10-20 cm.	No Recovery	41
		20-30 cm.	No Recovery	42

TABLE 6.61–4

Test Unit Excavation Data
Site SDI-16,323

Test Unit	Location from Datum A Azimuth/Range	Depth	Recovery	Cat. No.
1	89°/43 Feet	0-10 cm.	No Recovery	43
		10-20 cm.	No Recovery	44
		20-30 cm.	No Recovery	45