Created on: 2/24/2014 3:03 PM

Time(Local)	User	Description
2-24-2014 3:03:46 PM	mshp	Operation : Verify Arbitrator video files(.AV video) Success

MISSOURI STATE HIGHWAY PATROL
MISSOURI UNIFORM CRASH REPORT
TECHNICAL SUPPLEMENT

CRASH DATE	SUPP RPT DATE	TRP / DIST / PCT	COUNTY	REPORT / CASE / INCIDENT NUMBER
[redacted]	[redacted]	F	Cooper	[redacted]

SUPPLEMENT REPORTING OFFICER	DSN / BADGE	SUPPLEMENT REVIEWING OFFICER	DSN / BADGE
Corporal G. D. Ward	1189	Sergeant H. A. Sears	1200

On [redacted] at approximately 0955 hours, I was notified by Troop F radio of a fatality motor vehicle crash which had occurred in Cooper County as a vehicle was being pursued by the Boonville Police Department. The Boonville Police Department had requested a technical crash investigation. Trooper Z.A. Czerniewski initiated the crash investigation and submitted the original crash report, indicating it occurred on [redacted] at approximately 0926 hours, on Old [redacted] involving a single vehicle and a single fatality.

At 1016 hours, I arrived at the crash scene. I contacted Trooper Czerniewski and he reviewed the scene with me. He explained the Boonville Police Department had been in pursuit of Vehicle #1, a 1989 Buick Skylark four door sedan, which was westbound on Old Highway 40, a Cooper County roadway, [redacted], a private roadway, when the vehicle traveled off the left side of the roadway and Driver #1 overcorrected. The vehicle entered a critical speed yaw, returned to the roadway, crossed the roadway, traveled off the right side of the roadway, struck a guardrail end, vaulted, overturned, struck the ground, struck a utility pole and struck a fence before coming to rest. Vehicle #1 came to rest on its wheels facing south. Driver #1 was ejected as Vehicle #1 overturned and was located under the vehicle at its final rest location.

Trooper Czerniewski stated the scene was still intact other than the removal of the deceased Driver #1.

The physical evidence at the scene was consistent with Trooper Czerniewski's explanation of the crash events. The physical evidence included pre-impact tire marks from Vehicle #1 as it traveled off the left side of the roadway. The tire marks course west with the rear wheels tracking outside the path of the front wheels. The tire marks returned to the roadway and ended near the center of the roadway. Another set of pre-impact tire marks were visible off the right side of the roadway and led to the damaged guardrail end. Gouge marks in the dirt created as Vehicle #1 overturned were visible along the embankment northwest of the guardrail along with two damaged fences and a broken utility pole. Trooper Czerniewski had placed paint on the roadway to mark evidence such as tire marks and at the Vehicle #1 axles to mark their final rest locations.

The crash occurred during the early morning hours of daylight under clear skies on a dry roadway with no atmospheric conditions present which would have adversely affected driver visibility.

One witness was identified in Trooper Czerniewski's original report. The witness was the Boonville Police Officer who was pursuing Vehicle #1. He stated to Trooper Czerniewski, "He traveled off the left side and almost hit a car head on. Then he returned to the road and traveled off the right side. He hit the guardrail and went airborne."

The Boonville Police Department provided a copy of Witness #1's in-car patrol car video footage. A copy of the video is included with this report as an attachment.

Trooper Czerniewski stated he was stopped at [redacted] as Vehicle #1 and Witness #1 passed. He stated he did not observe the crash but his in-car patrol car video footage did capture the vehicles as they passed his location. A copy of his video is included with this report as an attachment.

I examined Vehicle #1 at the crash scene. It was equipped with lap and shoulder belt restraints for the seat position occupied at the time of the crash. The seat belt was locked in its fully retracted position. The pretensioner had fired and locked the seat belt in the position where it was at the time of the crash. Based upon my examination, Driver #1 was not making use of the seat belt restraint for his seat position.

Vehicle #1 exhibited extensive damage from overturning. The front grill, bumper cover and headlight assemblies were missing. The front of the vehicle and front fenders were forced upward and rearward. The rear bumper cover and taillight assemblies were missing. The rear bumper and rear fenders were forced downward and forward. Both "A" pillars, that vehicle member at which the front doors hinge, where forced rearward and into the area normally occupied by Driver #1 during the collision with the utility pole.

I examined and photographed the crash scene and also charted the scene using assigned electronic mapping instruments. I later prepared a scale diagram which is included with the report as an attachment.

Math calculations determined Vehicle #1 was traveling at approximately 92.4 miles per hour when it vaulted off the guardrail and began overturning.

According to determinations reached in this report, this crash occurred when Driver #1 was traveling at a speed in excess of the posted 55 mile per hour speed limit and failed to maintain Vehicle #1's path of travel within the westbound lane of Old Highway 40. Vehicle #1 crossed the roadway, traveled off the left side of the roadway and Driver #1 overcorrected. Vehicle #1 entered a critical speed

yaw and returned to the roadway. Driver #1 was unable to regain control of Vehicle #1 as it crossed the roadway and traveled off the right side of the roadway. Vehicle #1 struck a guardrail end, vaulted, began overturning, impacted the ground several times as it side rolled, impacted 2 fences, impacted a utility pole and came to rest with Driver #1 trapped underneath Vehicle #1.

The calculated vault speed of 92.4 miles is consistent with the Boonville Police Department in-car video in which Witness #1 stated they were traveling at about 100 miles per hour. Vehicle #1 is visible throughout its pre-impact path of travel in the video and at no time are the brake lights illuminated. At the start of the video, Vehicle #1 pulls to the shoulder and all brake lights illuminate. Since they never illuminate during the pre-impact path of travel, it can be reasoned that Driver #1 never applied his brakes in an attempt to slow Vehicle #1.

That Driver #1 did not survive the collision is not considered surprising, given his close proximity to the harshest of direct collision engagements and the intrusion of the Vehicle #1 “A” pillars into the space he occupied, considered in tandem with his lack of use of the seat belt restraints for his position which resulted in him being totally ejected from Vehicle #1 and coming rest with Vehicle #1 upon him.

Attachments:

1. Photo Log
2. Math Computations
3. Scale Diagram
4. Expert AutoStats Manufacture specification for a 1989 Buick Skylark 4 Door Sedan
5. Boonville Police Department in-car video footage (file included with CD copy)
6. Missouri State Highway Patrol in-car video footage (file included with CD copy)

Photo Log

Digital photographs DSCN0279 through DSCN0290 were taken by Trooper Z. A. Czerniewski at the crash scene on [redacted]

279. View looking west, east of the crash scene.
280. Progressive view from previous view.
281. Progressive view from previous view.
282. Progressive view from previous view. Note: Blue paint denotes pre-impact tire marks
283. Progressive view from previous view.
284. Progressive view from previous view.
285. View of damaged guardrail, looking northwest.
286. View of damaged utility lines, looking northwest.
287. View of Vehicle #1 at final rest, looking northwest.
288. Progressive view from previous view.
289. View of damaged fence and utility pole, looking north.
290. View of Vehicle #1 at final rest, looking north.

I took digital images DSC_0001 through DSC_0091 at the crash scene on [redacted]

1. View of Old Highway 40 looking west, standing east of the crash scene.
2. Progressive view from previous view.
3. Progressive view from previous view.
4. Progressive view from previous view.
5. Progressive view from previous view.
6. Progressive view from previous view.
7. Progressive view from previous view. Note: Orange paint denotes location Vehicle #1 traveled off the left side of the roadway.
8. Progressive view from previous view.
9. Progressive view from previous view.
10. Progressive view from previous view.
11. Progressive view from previous view.
12. Progressive view from previous view.
13. Progressive view from previous view. Note: Orange paint denotes location Vehicle #1 returned to roadway.
14. Progressive view from previous view.
15. Progressive view from previous view.
16. Progressive view from previous view.
17. Progressive view from previous view.
18. Progressive view from previous view.
19. Progressive view from previous view.
20. Progressive view from previous view.
21. Progressive view from previous view.
22. Progressive view from previous view.
23. View of Vehicle #1 at final rest, looking north from roadway.
24. View of Vehicle #1 debris, damaged fence and damaged utility pole, looking north from roadway.
25. View of Old Highway 40, looking west. Note: Orange paint denotes tire marks where Vehicle #1 traveled off the left side of the roadway.

26. Progressive view from previous view.
27. Progressive view from previous view.
28. Progressive view from previous view.
29. Progressive view from previous view.
30. Progressive view from previous view.
31. Progressive view from previous view.
32. Progressive view from previous view.
33. Progressive view from previous view.
34. Progressive view from previous view. Note: Orange paint denotes tire marks where Vehicle #1 returned to roadway.
35. Progressive view from previous view.
36. Progressive view from previous view.
37. Progressive view from previous view.
38. Progressive view from previous view.
39. Progressive view from previous view.
40. Progressive view from previous view.
41. Progressive view from previous view.
42. Progressive view from previous view.
43. Progressive view from previous view. Note: Orange paint denotes tire marks from Vehicle #1 as it approached the guardrail end. Note2: Orange and blue paint denotes location Boonville Police Department vehicle parked and are unrelated to actual crash situation.
44. Progressive view from previous view.
45. Progressive view from previous view.
46. View of Vehicle #1 at final rest from location Vehicle #1 went airborne, looking west.
47. Progressive view from previous view.
48. Progressive view from previous view.
49. View of divot in ground where Vehicle #1 ended its airborne flight as it overturned.
50. Progressive view from previous view.
51. Progressive view from previous view.
52. Progressive view from previous view.
53. Progressive view from previous view.
54. Progressive view from previous view.
55. Progressive view from previous view.
56. View of Vehicle #1 at final rest from front.
57. View of Vehicle #1 at final rest from left front.
58. View of Vehicle #1 at final rest from left.
59. View of Vehicle #1 at final rest from left rear.
60. View of Vehicle #1 at final rest from rear.
61. View of Vehicle #1 at final rest from right rear.
62. View of Vehicle #1 at final rest from right.
63. View of Vehicle #1 at final rest from right front.
64. View of Vehicle #1 left front seat belt restraint locked in retracted position.
65. View of Vehicle #1 left front seat belt latch unlatched.

66. View looking east, west of the crash scene.
67. View of right front marker lens in grass.
68. Progressive view from previous view.
69. Progressive view from previous view.
70. View of Vehicle #1 front bumper cover.
71. View of Vehicle #1 front bumper cover right side.
72. View of Vehicle #1 front bumper cover center.
73. View of Vehicle #1 front bumper cover left side.
74. View of Vehicle #1 front grill and headlight debris.
75. Progressive view from previous view.
76. View of Vehicle #1 rear reflector and taillight assembly.
77. View of Vehicle #1 rear reflector and taillight assembly left side.
78. View of Vehicle #1 rear reflector and taillight assembly center.
79. View of Vehicle #1 rear reflector and taillight assembly right side.
80. View of damaged guardrail, looking west.
81. Progressive view from previous view.
82. Progressive view from previous view.
83. Progressive view from previous view.
84. Progressive view from previous view.
85. Progressive view from previous view.
86. Progressive view from previous view.
87. Progressive view from previous view.
88. Progressive view from previous view.
89. Progressive view from previous view.
90. Progressive view from previous view.
91. Progressive view from previous view.

Math Computations:

Item I:

Computations to determine the frictional coefficient of the Old Highway 40 roadway, using the following generally accepted formula:

$$f = \frac{F}{W}$$

Where F is the force in pounds necessary to maintain movement of the drag sled once motion is achieved, and W is the weight of the sled, 30 pounds.

Pulls averaging 25.25 pounds were recorded on the asphalt pavement in the direction of the pre-impact tire marks of Vehicle #1 as it traveled off the left side of the roadway.

Inserting values:

$$f = \frac{25.25}{30}$$

$$= .841666667$$

$$\approx .84$$

Pulls averaging 15 pounds were recorded on the south gravel shoulder in the direction of the pre-impact tire marks of Vehicle #1 as it traveled off the left side of the roadway, rendering a frictional coefficient of .5; pulls averaging 25.57 were recorded on the grass in the direction of the pre-impact tire marks of Vehicle #1, rendering a coefficient of .85; pulls averaging 15.14 pounds were recorded on the south gravel shoulder in the direction of the pre-impact tire marks of Vehicle #1 as it returned to the roadway, rendering a coefficient of friction of .5; pulls averaging 21.66 pounds were recorded on the asphalt pavement in the direction of the striations of the Vehicle #1 tires, rendering a coefficient of friction of .72.

Item II:

Math computations to determine the speed of Vehicle #1 as it vaulted off the guardrail, using the following generally accepted formula:

$$S = \frac{2.73 \times D}{\cos\theta\sqrt{h + (D \times m)}}$$

Where *2.73* is a mathematical constant; *D* is the horizontal distance Vehicle #1 traveled while airborne, 160 feet; θ is the take-off angle expressed in degrees, 6.2°; *h* is the vertical distance Vehicle #1 fell while airborne, 5 feet; and *m* is the take-off angle expressed in a percentage, .11.

Inserting values:

$$S = \frac{2.73 \times 160}{\cos 6.2\sqrt{5 + (160 \times .11)}}$$

$$= \frac{436.8}{.994150964\sqrt{5 + (17.6)}}$$

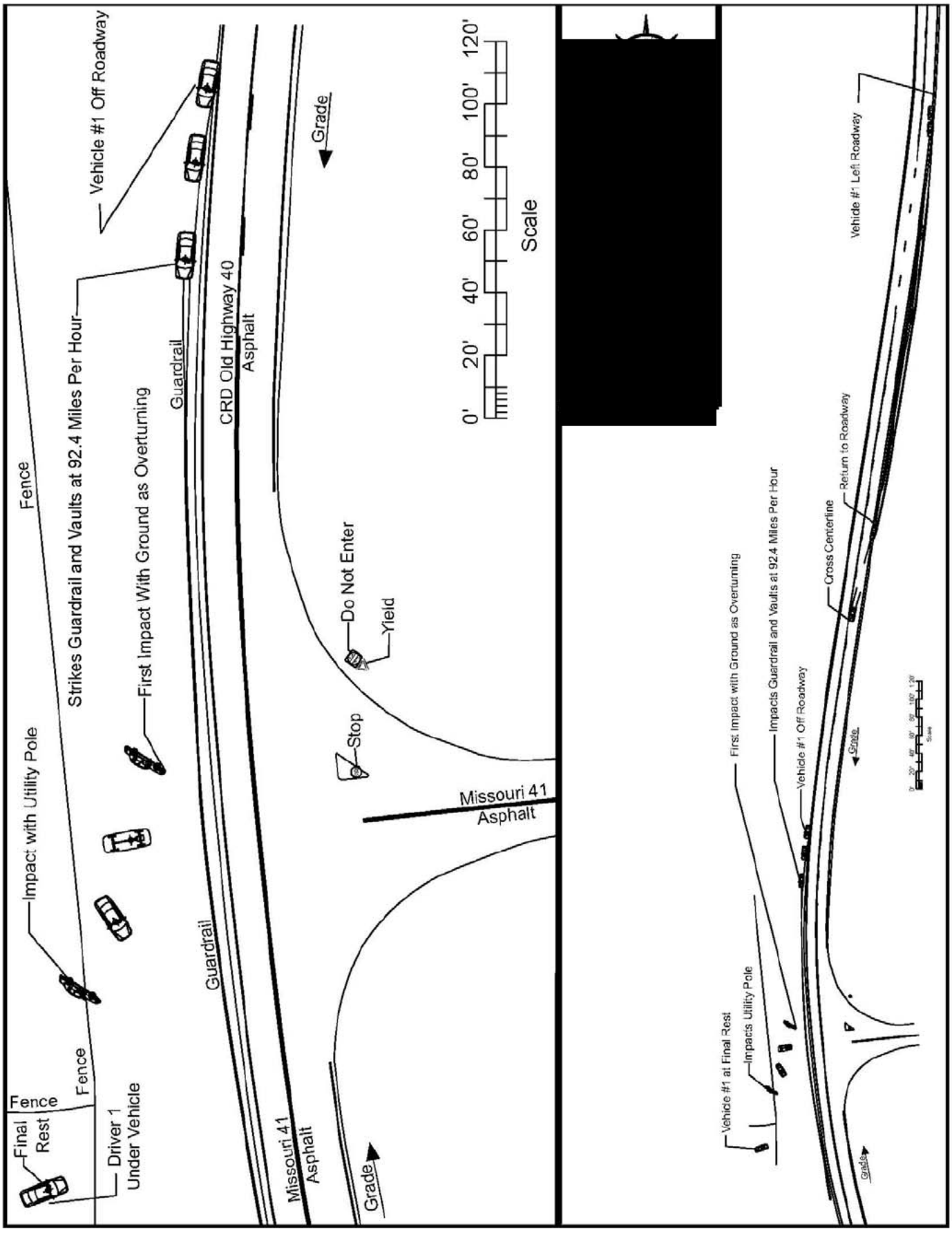
$$= \frac{436.8}{.994150964\sqrt{22.6}}$$

$$= \frac{436.8}{.994150964 \times 4.75394573}$$

$$= \frac{436.8}{4.72613973}$$

$$= 92.42215105$$

$$\approx 92.4\ miles\ per\ hour$$


Vehicle #1 Off Roadway
Fence
Strikes Guardrail and Vaults at 92.4 Miles Per Hour
First Impact With Ground as Overturning
Guardrail
CRD Old Highway 40
Asphalt
Grade
Impact with Utility Pole
Do Not Enter
Yield
Stop
Missouri 41
Asphalt
Guardrail
Fence
Final Rest
Fence
Driver 1
Under Vehicle
Missouri 41
Asphalt
Grade
0' 20' 40' 60' 80' 100' 120'
Scale
[redacted]
Vehicle #1 Left Roadway
Return to Roadway
Cross Centerline
First Impact with Ground as Overturning
Impacts Guardrail and Vaults at 92.4 Miles Per Hour
Vehicle #1 Off Roadway
Grade
Vehicle #1 at Final Rest
Impacts Utility Pole
Grade

Expert AutoStats®

Version 5.3.0

MISSOURI STATE HIGHWAY PATROL - CRASH TEAM 1
HHC P.O. BOX 517
HIGGINSVILLE MO 64037

[redacted]

1989 BUICK SKYLARK 4 DOOR SEDAN

Curb Weight:	2568 lbs.		1165	kg.
Curb Weight Distribution - Front:	65 %	Rear:	35	%
Gross Vehicle Weight Rating:		lbs.		kg.
Number of Tires on Vehicle:	4			
Drive Wheels:	FRONT			

Horizontal Dimensions	Inches	Feet	Meters
Total Length	180	15.00	4.57
Wheelbase:	103	8.58	2.62
Front Bumper to Front Axle:	37	3.08	0.94
Front Bumper to Front of Front Well:	20	1.67	0.51
Front Bumper to Front of Hood:	3	0.25	0.08
Front Bumper to Base of Windshield:	55	4.58	1.40
Front Bumper to Top of Windshield:	81	6.75	2.06
Rear Bumper to Rear Axle:	40	3.33	1.02
Rear Bumper to Rear of Rear Well:	19	1.58	0.48
Rear Bumper to Rear of Trunk:			
Rear Bumper to Base of Rear Window:			
Width Dimensions			
Maximum Width:	67	5.58	1.70
Front Track:	56	4.67	1.42
Rear Track:	55	4.58	1.40
Vertical Dimensions			
Height:	52	4.33	1.32
Ground to -			
Front Bumper (Top)	17	1.42	0.43
Headlight - center	26	2.17	0.66
Hood - top front:	30	2.50	0.76
Base of Windshield	37	3.08	0.94
Rear Bumper - top:	22	1.83	0.56
Trunk - top rear:			
Base of Rear Window:			

[redacted]

Expert AutoStats®

1989 BUICK SKYLARK 4 DOOR SEDAN

Interior Dimensions	Inches	Feet	Meters
Front Seat Shoulder Width	54	4.50	1.37
Front Seat to Headliner	38	3.17	0.97
Front Leg Room - seatback to floor (max)	43	3.58	1.09
Rear Seat Shoulder Width	53	4.42	1.35
Rear Seat to Headliner	37	3.08	0.94
Front Leg Room - seatback to floor (min)	34	2.83	0.86

Seatbelts: 3pt front, 2pt rear
Airbags: NO AIRBAGS

Steering Data

Turning Circle (Diameter)	420	35.00	10.67
Steering Ratio: 13.84:1			
Wheel Radius:	12	1.00	0.30
Tire Size (OEM): P205/70R14			

Acceleration & Braking Information

Brake Type: ALL DISC
ABS System: ABS UNKNOWN

Braking, 60 mph to 0 (Hard pedal, no skid, dry pavement):
d = 180.0 ft t = 4.1 sec a = -21.5 ft/sec² G-force = -0.67

Acceleration:

0 to 30mph	t =	5.8	sec	a =	7.6	ft/sec²	G-force = 0.24
0 to 60mph	t =	16.0	sec	a =	5.5	ft/sec²	G-force = 0.17
45 to 65mph	t =	10.3	sec	a =	2.8	ft/sec²	G-force = 0.09

Transmission Type: AUTOMATIC

Notes:
Federal Bumper Standard Requirements: 2.5 mph
This vehicles Rated Bumper Strength: 5 mph

N.S.D.C = 1986 - 1991

[redacted]

Expert AutoStats®

1989 BUICK SKYLARK 4 DOOR SEDAN

Other Information

Tip-Over Stability Ratio =	1.36	Stable
NHTSA Star Rating (calculated)		****

Center of Gravity (No Load):

Inches behind front axle	=	36.05
Inches in front of rear axle	=	66.95
Inches from side of vehicle	=	33.50
Inches from ground	=	20.41
Inches from front corner	=	80.37
Inches from rear corner	=	112.07
Inches from front bumper	=	73.05
Inches from rear bumper	=	106.95

Moments of Inertia Approximations (No Load):

Yaw Moment of Inertia	=	1439.04	lb*ft*sec²
Pitch Moment of Inertia	=	1393.32	lb*ft*sec²
Roll Moment of Inertia	=	312.24	lb*ft*sec²

Front Profile Information

Angle Front Bumper to Hood Front	=	77.0	deg
Angle Front of Hood to Windshield Base	=	7.7	deg
Angle Front of Hood to Windshield Top	=	14.4	deg
Angle of Windshield	=	26.6	deg
Angle of Steering Tires at Max Turn	=	28.1	deg

First Approximation Crush Factors:

Speed Equivalent (mph) of Kinetic Energy (KE) used in causing crush of indentation may be evaluated using the following formula, the appropriated Crush Factor (CF), and Maximum Indentation Depth (MID), in feet:

$$V(mph) = \sqrt{(30 * CF * MID)}$$

KE Equivalent Speed (Front/Rear/Side)	=	21 CF
Bullet vehicle IMPACT SPEED estimation based on TARGET VEHICLE damage ONLY (Tested for Rear/Side Impact only)	=	27 CF

These CF values are based upon analysis of NHTSA Barrier Crash data, and from over 1000 vehicle accidents where independant evaluation of speed was possible. (These are NOT 'A', 'B', 'C', or 'G' values)

The rear Impact data with more then 2-3 inches of crush damage should be looked at carefully, since some vehicles have very weak trunk & fender strength. Therefore, on some cars, especially GM, you estimate from the rear crush data may be high by as much as 4-5 mph (on a crush of 18 inches).

[redacted]

C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:05 [redacted]

1	X:	0.000	Y:	0.000	Z:	0.000	D: RP
99	X:	-3.316	Y:	-20.077	Z:	-0.325	D: RM
100	X:	-41.710	Y:	54.245	Z:	-18.226	D: LF
101	X:	-44.616	Y:	62.125	Z:	-17.750	D: LR
102	X:	-50.110	Y:	60.102	Z:	-17.857	D: RR
103	X:	-46.791	Y:	52.126	Z:	-18.374	D: RF
104	X:	-49.411	Y:	56.476	Z:	-18.200	D: FT
105	X:	-49.513	Y:	58.056	Z:	-18.138	D: FT
106	X:	-19.874	Y:	50.423	Z:	-17.688	D: FNC
107	X:	-20.803	Y:	60.492	Z:	-18.007	D: FNC
108	X:	-20.761	Y:	70.202	Z:	-18.241	D: FNC
109	X:	6.488	Y:	47.119	Z:	-16.550	D: POST
110	X:	14.082	Y:	45.275	Z:	-16.423	D: POST
111	X:	-18.354	Y:	41.178	Z:	-16.751	D: FNC
112	X:	-10.628	Y:	41.202	Z:	-16.588	D: FNC
113	X:	-1.461	Y:	42.202	Z:	-16.328	D: FNC
114	X:	6.942	Y:	43.081	Z:	-16.345	D: FNC
115	X:	35.137	Y:	45.545	Z:	-16.164	D: FNC
116	X:	43.840	Y:	46.402	Z:	-16.294	D: FNC
117	X:	15.733	Y:	44.409	Z:	-16.075	D: UT PL
118	X:	59.519	Y:	35.800	Z:	-14.691	D: DBR
119	X:	59.543	Y:	35.801	Z:	-14.687	D: DBR RED TAILLIGHT DEBRIS
120	X:	76.211	Y:	24.861	Z:	-9.537	D: DBR CLEAR CORNER FRONT LENS
121	X:	81.095	Y:	24.551	Z:	-9.015	D: GG
122	X:	76.803	Y:	25.056	Z:	-9.633	D: GG
123	X:	72.424	Y:	24.681	Z:	-9.650	D: GG
124	X:	70.496	Y:	24.520	Z:	-9.411	D: MPCT
125	X:	70.904	Y:	25.325	Z:	-9.990	D: MPCT
126	X:	69.486	Y:	26.129	Z:	-10.419	D: MPCT
127	X:	69.254	Y:	25.276	Z:	-10.071	D: MPCT
128	X:	89.449	Y:	20.420	Z:	-6.246	D: MPCT
129	X:	87.893	Y:	18.690	Z:	-5.360	D: MPCT
130	X:	76.484	Y:	22.748	Z:	-8.389	D: MPCT
131	X:	82.125	Y:	23.528	Z:	-8.438	D: MPCT
132	X:	61.486	Y:	36.940	Z:	-15.047	D: GG
133	X:	57.302	Y:	37.849	Z:	-15.111	D: GG
134	X:	41.815	Y:	38.105	Z:	-15.212	D: GG
135	X:	38.087	Y:	36.692	Z:	-15.090	D: GG
136	X:	34.460	Y:	36.874	Z:	-15.168	D: GG
137	X:	34.036	Y:	34.643	Z:	-14.780	D: GG
138	X:	30.533	Y:	36.696	Z:	-15.188	D: GG
139	X:	31.321	Y:	34.107	Z:	-14.771	D: GG
140	X:	33.800	Y:	33.182	Z:	-14.582	D: GG
141	X:	-172.839	Y:	-40.337	Z:	-3.303	D: EOA
142	X:	-141.280	Y:	-32.496	Z:	-2.322	D: EOA
143	X:	-91.101	Y:	-20.578	Z:	-0.911	D: EOA
144	X:	-37.974	Y:	-10.745	Z:	-0.100	D: EOA
145	X:	-9.310	Y:	-6.650	Z:	0.331	D: EOA

```
  146 X:    29.895 Y:    -1.748 Z:     0.609 D:  EOA
  147 X:    73.866 Y:     2.764 Z:     0.746 D:  EOA
  148 X:   144.803 Y:     7.984 Z:     0.466 D:  EOA
  149 X:   -79.856 Y:   -20.691 Z:    -0.707 D:  WL NORTH EDGE
  150 X:   -34.964 Y:   -12.731 Z:    -0.024 D:  WL
  151 X:    -6.999 Y:    -8.747 Z:     0.296 D:  WL
  152 X:    50.013 Y:    -2.126 Z:     0.731 D:  WL
  153 X:   132.077 Y:     4.935 Z:     0.568 D:  WL
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:05 [redacted]
--------------------------------------------------------------------------
----
  154 X:   182.803 Y:     6.809 Z:     0.183 D:  WL
  155 X:   250.648 Y:     5.467 Z:    -0.863 D:  WL
  156 X:   336.557 Y:    -0.984 Z:    -2.708 D:  WL
  157 X:   336.448 Y:     0.168 Z:    -2.750 D:  EOA
  158 X:   412.993 Y:   -10.192 Z:    -4.640 D:  WL
  159 X:   542.755 Y:   -29.384 Z:    -8.253 D:  WL
  160 X:   649.852 Y:   -45.737 Z:   -10.528 D:  WL
  161 X:   749.788 Y:   -61.190 Z:   -11.834 D:  WL
  162 X:   838.729 Y:   -74.711 Z:   -12.473 D:  WL
  163 X:   918.398 Y:   -86.410 Z:   -12.592 D:  WL
  164 X:   918.535 Y:   -85.470 Z:   -12.727 D:  EOA
  165 X:   957.305 Y:   -91.878 Z:   -12.880 D:  WL
  166 X:  1021.663 Y:  -100.530 Z:   -12.969 D:  WL
  167 X:  1115.029 Y:  -111.104 Z:   -13.098 D:  WL
  168 X:  1117.728 Y:  -109.786 Z:   -12.416 D:  WL
  169 X:  1119.591 Y:  -110.265 Z:   -12.423 D:  EOA
  170 X:   302.026 Y:     3.766 Z:    -1.988 D:  S
  171 X:   293.453 Y:     5.218 Z:    -1.824 D:  S
  172 X:   278.542 Y:     7.376 Z:    -1.459 D:  S
  173 X:   266.806 Y:     8.724 Z:    -1.162 D:  S
  174 X:   256.197 Y:     9.652 Z:    -1.091 D:  S
  175 X:   251.506 Y:    10.098 Z:    -1.035 D:  S
  176 X:   246.798 Y:    11.131 Z:    -1.039 D:  GRL
  177 X:   239.470 Y:    11.114 Z:    -0.834 D:  GRL
  178 X:   230.977 Y:    11.390 Z:    -0.724 D:  GRL
  179 X:   220.253 Y:    11.743 Z:    -0.524 D:  GRL
  180 X:   189.275 Y:    11.987 Z:    -0.321 D:  GRL
  181 X:   118.596 Y:     9.419 Z:     0.456 D:  GRL
  182 X:    72.566 Y:     6.574 Z:     0.208 D:  GRL
  183 X:    25.212 Y:     0.977 Z:     0.475 D:  GRL
  184 X:    -7.803 Y:    -3.898 Z:     0.198 D:  GRL
  185 X:   -42.494 Y:    -9.510 Z:    -0.296 D:  GRL
  186 X:   -77.717 Y:   -15.842 Z:    -0.946 D:  GRL
  187 X:   -89.734 Y:   -18.183 Z:    -1.190 D:  GRL
  188 X:  -103.212 Y:   -20.709 Z:    -1.534 D:  GRL
  189 X:  -103.520 Y:   -19.443 Z:    -1.857 D:  GRL
  190 X:   -93.239 Y:   -17.728 Z:    -1.387 D:  GRL
  191 X:   -81.676 Y:   -15.892 Z:    -1.185 D:  GRL
  192 X:   -77.740 Y:   -15.333 Z:    -1.105 D:  GRL
  193 X:   221.303 Y:    12.859 Z:    -0.616 D:  GRL
  194 X:   230.920 Y:    13.042 Z:    -0.844 D:  GRL
  195 X:   247.175 Y:    12.839 Z:    -0.984 D:  GRL
  196 X:   244.970 Y:    12.041 Z:    -0.374 D:  SCP
```

```
  197 X:   243.527 Y:    12.045 Z:    -0.278 D:  SCP
  198 X:   243.177 Y:    12.636 Z:    -0.218 D:  SCP UNDERCARRIAGE
SCRAPE
  199 X:   239.775 Y:    12.908 Z:     0.141 D:  SCP RUBBER TRANSFER
  200 X:   239.688 Y:    12.850 Z:     0.139 D:  SCP
  201 X:   235.488 Y:    12.863 Z:     0.491 D:  SCP
  202 X:   233.049 Y:    12.842 Z:     1.017 D:  SCP
  203 X:   228.996 Y:    12.518 Z:     1.401 D:  SCP RUBBER TRANSFER
  204 X:   227.041 Y:    12.509 Z:     1.572 D:  SCP
  205 X:   226.409 Y:    -4.191 Z:    -0.824 D:  YLX2
  206 X:   211.289 Y:    -3.942 Z:    -0.555 D:  YLX2
  207 X:   127.011 Y:    -7.162 Z:     0.305 D:  YLX2
  208 X:    65.948 Y:   -11.525 Z:     0.332 D:  YLX2
  209 X:    23.066 Y:   -16.299 Z:     0.029 D:  YLX2
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:05 0[redacted]
--------------------------------------------------------------------------
----
  210 X:    -4.806 Y:   -33.611 Z:    -1.067 D:  WL
  211 X:   -37.906 Y:   -38.163 Z:    -1.454 D:  WL
  212 X:   -31.659 Y:   -38.803 Z:    -1.554 D:  EOA
  213 X:    -0.885 Y:   -34.967 Z:    -1.377 D:  EOA
  214 X:    23.649 Y:   -39.955 Z:    -1.442 D:  EOA
  215 X:    41.993 Y:   -51.435 Z:    -1.732 D:  EOA
  216 X:    42.042 Y:   -51.537 Z:    -1.732 D:  EOA
  217 X:    53.056 Y:   -65.458 Z:    -1.497 D:  EOA
  218 X:    63.783 Y:   -91.478 Z:    -1.322 D:  EOA
  219 X:    69.089 Y:  -118.512 Z:    -1.921 D:  EOA
  220 X:    80.332 Y:  -118.322 Z:    -0.681 D:  YLX2
  221 X:    72.360 Y:   -44.432 Z:    -0.707 D:  YLX2
  222 X:    86.219 Y:   -45.331 Z:    -0.330 D:  WL
  223 X:    86.554 Y:   -45.768 Z:    -0.382 D:  WL
  224 X:    87.244 Y:   -45.401 Z:    -0.357 D:  WL
  225 X:    90.086 Y:   -40.957 Z:    -0.341 D:  WL
  226 X:    93.454 Y:   -36.336 Z:    -0.315 D:  WL
  227 X:    93.723 Y:   -35.697 Z:    -0.416 D:  WL
  228 X:    92.769 Y:   -35.445 Z:    -0.332 D:  WL
  229 X:    86.332 Y:   -36.265 Z:    -0.358 D:  WL
  230 X:    85.635 Y:   -36.808 Z:    -0.412 D:  WL
  231 X:    85.360 Y:   -37.740 Z:    -0.448 D:  WL
  232 X:    86.213 Y:   -45.323 Z:    -0.445 D:  WL
  233 X:    87.738 Y:   -41.969 Z:    -0.351 D:  STOP
  234 X:    92.906 Y:  -111.973 Z:    -0.886 D:  EOA
  235 X:    93.946 Y:   -79.622 Z:    -1.246 D:  EOA
  236 X:   103.057 Y:   -57.410 Z:    -1.383 D:  EOA
  237 X:   117.217 Y:   -39.858 Z:    -1.228 D:  EOA
  238 X:   132.553 Y:   -28.670 Z:    -1.125 D:  EOA
  239 X:   157.810 Y:   -20.042 Z:    -0.889 D:  EOA
  240 X:   188.476 Y:   -16.974 Z:    -1.103 D:  EOA
  241 X:   177.081 Y:   -15.942 Z:    -0.749 D:  WL
  242 X:   209.205 Y:   -15.904 Z:    -1.214 D:  WL
  243 X:   122.644 Y:   -42.922 Z:    -2.380 D:  DNE DO NOT ENTER/YIELD
  244 X:   121.772 Y:    12.565 Z:    -0.084 D:  SGN 41 / 70 / 135
  245 X:   436.170 Y:  -124.997 Z:   -15.946 D:  SGN
  246 X:   435.834 Y:  -125.957 Z:   -15.758 D:
```

```
  247 X:   263.390 Y:   -18.277 Z:    -2.035 D:  WL
  248 X:   252.351 Y:    -5.737 Z:    -1.129 D:  YL SOLID NORTH / DASH
SOUTH
  249 X:   264.049 Y:    -6.425 Z:    -1.380 D:  YL
  250 X:   292.285 Y:    -8.320 Z:    -2.017 D:  YL
  251 X:   303.342 Y:    -9.056 Z:    -2.260 D:  YL
  252 X:   303.817 Y:   -20.860 Z:    -2.965 D:  WL
  253 X:   385.263 Y:   -29.888 Z:    -4.691 D:  WL
  254 X:   470.641 Y:   -41.562 Z:    -6.355 D:  WL
  255 X:   470.221 Y:   -43.149 Z:    -6.561 D:  EOA
  256 X:   548.191 Y:   -52.892 Z:    -8.134 D:  WL
  257 X:   545.947 Y:   -61.815 Z:    -9.982 D:  SGN 55 MPH
  258 X:   605.606 Y:   -61.451 Z:    -9.318 D:  WL
  259 X:   703.853 Y:   -76.396 Z:   -10.891 D:  WL
  260 X:   838.685 Y:   -96.987 Z:   -12.175 D:  WL
  261 X:   890.012 Y:  -104.944 Z:   -12.095 D:  WL
  262 X:   889.609 Y:  -106.889 Z:   -12.238 D:  EOA
  263 X:   891.344 Y:   -93.389 Z:   -11.957 D:  YL END N SOLID
  264 X:   914.299 Y:   -96.601 Z:   -11.980 D:  YL
  265 X:   926.490 Y:   -98.450 Z:   -12.066 D:  YL
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:05 [redacted]
--------------------------------------------------------------------------
----
  266 X:   953.848 Y:  -102.383 Z:   -12.230 D:  YL
  267 X:   964.432 Y:  -103.837 Z:   -12.282 D:  YL
  268 X:   996.820 Y:  -108.016 Z:   -12.359 D:  YL
  269 X:  1006.042 Y:  -109.218 Z:   -12.395 D:  YL
  270 X:  1036.126 Y:  -112.852 Z:   -12.370 D:  YL
  271 X:  1045.291 Y:  -113.911 Z:   -12.409 D:  YL
  272 X:  1055.095 Y:  -115.690 Z:   -12.422 D:  YL S SOLID / N DASH
  273 X:  1102.925 Y:  -121.243 Z:   -12.431 D:  YL
  274 X:  1159.083 Y:  -125.216 Z:   -12.509 D:  YL
  275 X:  1228.082 Y:  -126.835 Z:   -12.070 D:  YL
  276 X:  1276.000 Y:  -126.078 Z:   -11.579 D:  YL
  277 X:  1276.956 Y:  -113.843 Z:   -12.036 D:  EOA
  278 X:  1276.954 Y:  -115.279 Z:   -11.837 D:  WL
  279 X:  1212.674 Y:  -116.170 Z:   -12.534 D:  WL
  280 X:  1130.976 Y:  -112.558 Z:   -12.779 D:  WL
  281 X:  1292.780 Y:  -139.525 Z:   -11.226 D:  EOA
  282 X:  1292.463 Y:  -137.269 Z:   -11.183 D:  WL
  283 X:  1212.264 Y:  -138.281 Z:   -12.066 D:  WL
  284 X:  1124.084 Y:  -134.108 Z:   -12.399 D:  WL
  285 X:  1032.766 Y:  -124.665 Z:   -12.204 D:  WL
  286 X:   943.827 Y:  -112.954 Z:   -12.215 D:  WL
  287 X:   943.489 Y:  -114.662 Z:   -12.362 D:  EOA
  288 X:   988.464 Y:  -120.905 Z:   -12.365 D:  S
  289 X:   966.627 Y:  -118.693 Z:   -12.467 D:  S
  290 X:   939.051 Y:  -115.198 Z:   -12.475 D:  S
  291 X:   904.364 Y:  -110.693 Z:   -12.397 D:  S
  292 X:   867.128 Y:  -105.309 Z:   -12.554 D:  S
  293 X:   832.079 Y:   -99.863 Z:   -12.413 D:  S
  294 X:   799.349 Y:   -94.799 Z:   -12.274 D:  S
  295 X:   775.202 Y:   -90.823 Z:   -12.036 D:  S
  296 X:   758.288 Y:   -88.289 Z:   -11.899 D:  S
```

```
  297 X:   741.362 Y:   -85.611 Z:   -11.730 D:  S
  298 X:   723.049 Y:   -82.653 Z:   -11.434 D:  S
  299 X:   704.881 Y:   -79.446 Z:   -11.055 D:  S
  300 X:   694.403 Y:   -77.539 Z:   -11.010 D:  S
  301 X:   676.025 Y:   -73.750 Z:   -10.735 D:  S
  302 X:   653.136 Y:   -69.068 Z:   -10.280 D:  S
  303 X:   648.111 Y:   -67.838 Z:   -10.176 D:  S WL N / LAST PNT WL S
  304 X:   633.262 Y:   -64.342 Z:    -9.873 D:  S
  305 X:   605.760 Y:   -57.065 Z:    -9.204 D:  S
  306 X:   578.485 Y:   -49.245 Z:    -8.561 D:  S
  307 X:   566.867 Y:   -46.292 Z:    -8.325 D:  S
  308 X:   555.190 Y:   -43.487 Z:    -8.071 D:  S
  309 X:   543.256 Y:   -40.579 Z:    -7.781 D:  S
  310 X:   543.467 Y:   -45.372 Z:    -7.871 D:  S
  311 X:   548.879 Y:   -46.570 Z:    -7.999 D:  S
  312 X:   556.070 Y:   -48.144 Z:    -8.159 D:  S
  313 X:   559.186 Y:   -48.945 Z:    -8.233 D:  S
  314 X:   573.599 Y:   -53.112 Z:    -8.557 D:  S
  315 X:   556.701 Y:   -48.918 Z:    -8.187 D:  S
  316 X:   551.263 Y:   -47.740 Z:    -8.073 D:  S
  317 X:   544.218 Y:   -46.044 Z:    -7.902 D:  S
  318 X:   686.211 Y:   -76.899 Z:   -10.925 D:  S
  319 X:   709.063 Y:   -81.782 Z:   -11.394 D:  S
  320 X:   733.041 Y:   -85.857 Z:   -11.795 D:  S
  321 X:   758.347 Y:   -89.646 Z:   -12.132 D:  S
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:05 [redacted]
--------------------------------------------------------------------------
----
  322 X:   799.237 Y:   -96.173 Z:   -12.522 D:  S
  323 X:   831.794 Y:  -100.992 Z:   -12.638 D:  S
  324 X:   864.700 Y:  -107.119 Z:   -12.709 D:  S
  325 X:   938.904 Y:  -116.704 Z:   -12.833 D:  S
  326 X:   979.137 Y:  -121.196 Z:   -12.540 D:  S
  327 X:   999.692 Y:  -123.340 Z:   -12.411 D:  S
  328 X:  1017.227 Y:  -124.631 Z:   -12.400 D:  S
  329 X:  1102.965 Y:  -133.819 Z:   -12.447 D:  S
  330 X:  1084.772 Y:  -133.107 Z:   -12.472 D:  S
  331 X:  1084.754 Y:  -133.790 Z:   -12.479 D:  S
  332 X:  1042.243 Y:  -130.580 Z:   -12.545 D:  S
  333 X:  1018.127 Y:  -128.530 Z:   -12.894 D:  S
  334 X:  1017.826 Y:  -129.060 Z:   -13.094 D:  S
  335 X:   999.534 Y:  -127.639 Z:   -13.394 D:  S
  336 X:   999.643 Y:  -126.415 Z:   -13.062 D:  S
  337 X:   975.172 Y:  -123.929 Z:   -13.431 D:  S
  338 X:   975.218 Y:  -125.273 Z:   -13.734 D:  S
  339 X:   952.509 Y:  -122.727 Z:   -13.928 D:  S
  340 X:   952.346 Y:  -121.398 Z:   -13.531 D:  S
  341 X:   905.240 Y:  -115.137 Z:   -13.560 D:  S
  342 X:   904.997 Y:  -116.736 Z:   -13.929 D:  S
  343 X:   876.274 Y:  -112.237 Z:   -14.071 D:  S
  344 X:   876.339 Y:  -111.243 Z:   -13.713 D:  S
  345 X:   839.403 Y:  -105.410 Z:   -13.987 D:  S
  346 X:   839.196 Y:  -106.430 Z:   -14.212 D:  S
  347 X:   821.411 Y:  -103.653 Z:   -14.054 D:  S
```

```
348 X:   821.660 Y:  -102.820 Z:   -13.785 D:  S
349 X:   788.878 Y:   -97.661 Z:   -13.685 D:  S
350 X:   788.742 Y:   -98.445 Z:   -13.905 D:  S
351 X:   762.174 Y:   -94.169 Z:   -13.673 D:  S
352 X:   762.158 Y:   -93.422 Z:   -13.475 D:  S
353 X:   741.168 Y:   -89.408 Z:   -13.071 D:  S
354 X:   741.102 Y:   -89.932 Z:   -13.225 D:  S
355 X:   720.392 Y:   -86.658 Z:   -12.900 D:  S
356 X:   720.418 Y:   -85.842 Z:   -12.820 D:  S
357 X:   688.239 Y:   -80.064 Z:   -11.933 D:  S
358 X:   688.097 Y:   -80.927 Z:   -12.243 D:  S
359 X:   670.755 Y:   -77.365 Z:   -11.739 D:  S
360 X:   670.838 Y:   -76.561 Z:   -11.520 D:  S
361 X:   655.913 Y:   -73.586 Z:   -11.177 D:  S
362 X:   655.725 Y:   -74.381 Z:   -11.353 D:  S
363 X:   635.544 Y:   -69.466 Z:   -10.311 D:  S
364 X:   635.421 Y:   -68.860 Z:   -10.218 D:  S
365 X:   623.752 Y:   -66.515 Z:    -9.943 D:  S
366 X:   606.579 Y:   -62.244 Z:    -9.330 D:  S
367 X:   602.940 Y:   -60.834 Z:    -9.225 D:  S
368 X:    -3.309 Y:   -20.069 Z:    -1.014 D:  RMDN
```


conoco
EXIT
40
EXIT
98


EXIT
40
EXIT


EXIT
40
M.P.H.
98
EXIT
← Pilot Grove 6
Arrow Rock 13 →


EXIT
40
M.P.H.
98
EXIT
← Pilot Grove 6
Arrow Rock 13 →
40
41


EXIT
40
M.P.H.
98
EXIT
← Pilot Grove 6
Arrow Rock 13 →
JCT
70
40
135
41


98
EXIT
Pilot Grove 6
Arrow Rock 13
JCI
70
40
135
41


Pilot Grove 6
Arrow Rock 13
JCT
70
40
135
41


Pilot Grove 6
Arrow Rock 13
JCT
70
40
135
41


Pilot Grove 6
Arrow Rock 13
JCT
INTERSTATE
70
40
135
41


ve 6
13


STATE TROOPER


40
70
135


41
70
135


DO NOT ENTER
41
70
135


DO NOT
ENTER
41
70
135


41
55


NORTH
41
SPEED LIMIT
55


ADULT
EXIT 84
SPEED LIMIT 55
NORTH
41


Pilot Grove 6
Arrow Rock 13
JCT
70
40
135
41


← Pilot Grove 6
Arrow Rock 13 →
JCT
70
135


← Pilot Grove 6
Arrow Rock 13 →


Pilot Grove 6
Arrow Rock 13


← Pilot Grove 6
Arrow Rock 13 →


STATE TROOPER


STATE TROOPER


41
70
135


41
70
135


41
70
135


41
70
135
41


41
70
135


70
135


INTERSTATE
MISSOURI
70
135


NORTH
41


SPEED LIMIT
55


HUNTER-DORMAN

BUICK


BUICK


← Pilot Grove 6
Arrow Rock 13 →
LEWIS & CLARK TRAIL


← Pilot Grove 6
Arrow Rock 13 →


Pilot Grove 6
Arrow Rock 13


41
70
135
EVROLET

Turn down

Caused

Multiple fixed objects (including utility pole)

Vaulting / Rollover

C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:59 [redacted]

==========
Traverse Print Out
==========
Job Description: Crew: Inst: Temp: Press:

--Evidence Recorder v 9.0.3.5 (2012-11-02)
--Evidence Recorder v 9.0.3.5 (2012-11-02)
JB,NM14-0222F027-1,DT02-22-2014,TM13:35:48
MO,AD0,UN2,SF1.000000,EC0,EO0.0,AU0
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
SP,PN1,N 0.0000,E 0.0000,EL0.0000,--RP
Store Point record, pt num = 1
x=0.000000, y=0.000000, z=0.000000, desc=RP
--Orientation
--Orientation
LS,HI5.240,HR7.000
OC,OP1,N 0.0000,E 0.0000,EL0.0000,--RP
BK,OP1,BP0,BS189.22460,BC189.22460
Setup Backsight BS Azimuth BS Reading Instrument Height
1 0 189.2246 189.2246 5.240
    1 X: 0.000 Y: 0.000 Z: 0.000 D: RP
BR,OP1,BP0,AR189.22460,ZE85.57580,SD20.4000
SS,OP1,FP99,AR189.22460,ZE85.57580,SD20.4000,--RM
Pt# HZAngle SlpDist VTAng ParOff PerpOff TgtHt Description
99 189.2246 20.400 85.5758 0.000 0.000 7.000 RM
LS,HI5.240,HR7.000
OC,OP1,N 0.0000,E 0.0000,EL0.0000,--RP
BK,OP1,BP99,BS189.22460,BC189.22460
Setup Backsight BS Azimuth BS Reading Instrument Height
1 99 N/A 189.2246 5.240
    1 X: 0.000 Y: 0.000 Z: 0.000 D: RP
   99 X: -3.316 Y: -20.077 Z: -0.325 D: RM
BR,OP1,BP99,AR189.22460,ZE85.57580,SD20.4000
--Orientation Notes
--Orientation Notes
-- Observed Values: HA 189°22'46" VA 85°57'58" SD 20.40' HD 20.35' HR 7.00'
-- Observed Values: HA 189°22'46" VA 85°57'58" SD 20.40' HD 20.35' HR 7.00'
-- Observed Reference: Direction (Point Stored)
-- Observed Reference: Direction (Point Stored)
SS,OP1,FP100,AR322.26340,ZE103.31490,SD70.3799,--LF
Pt# HZAngle SlpDist VTAng ParOff PerpOff TgtHt Description
100 322.2634 70.380 103.3149 0.000 0.000 7.000 LF
SS,OP1,FP101,AR324.18550,ZE101.48280,SD78.1398,--LR
101 324.1855 78.140 101.4828 0.000 0.000 7.000 LR
SS,OP1,FP102,AR320.10510,ZE101.37270,SD79.8898,--RR
102 320.1051 79.890 101.3727 0.000 0.000 7.000 RR
SS,OP1,FP103,AR318.05140,ZE103.20340,SD71.9899,--RF

```
103 318.0514   71.990 103.2034 0.000    0.000   7.000  RF
SS,OP1,FP104,AR318.49030,ZE102.21270,SD76.8198,--FT
104 318.4903   76.820 102.2127 0.000    0.000   7.000  FT
SS,OP1,FP105,AR319.32270,ZE102.06530,SD78.0398,--FT
105 319.3227   78.040 102.0653 0.000    0.000   7.000  FT
SS,OP1,FP106,AR338.29180,ZE106.22390,SD56.4899,--FNC
106 338.2918   56.490 106.2239 0.000    0.000   7.000  FNC
SS,OP1,FP107,AR341.01200,ZE104.15020,SD65.9999,--FNC
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:59 0[redacted]
--------------------------------------------------------------------------
----
107 341.0120   66.000 104.1502 0.000    0.000   7.000  FNC
SS,OP1,FP108,AR343.31310,ZE102.41150,SD75.0398,--FNC
108 343.3131   75.040 102.4115 0.000    0.000   7.000  FNC
SS,OP1,FP109,AR7.50220,ZE107.16240,SD49.8099,--POST
109   7.5022   49.810 107.1624 0.000    0.000   7.000  POST
SS,OP1,FP110,AR17.16390,ZE107.11020,SD49.6299,--POST
110  17.1639   49.630 107.1102 0.000    0.000   7.000  POST
SS,OP1,FP111,AR335.58360,ZE108.23340,SD47.5099,--FNC
111 335.5836   47.510 108.2334 0.000    0.000   7.000  FNC
SS,OP1,FP112,AR345.32110,ZE109.12470,SD45.0599,--FNC
112 345.3211   45.060 109.1247 0.000    0.000   7.000  FNC
SS,OP1,FP113,AR358.01030,ZE109.02040,SD44.6699,--FNC
113 358.0103   44.670 109.0204 0.000    0.000   7.000  FNC
SS,OP1,FP114,AR9.09130,ZE108.28540,SD46.0099,--FNC
114   9.0913   46.010 108.2854 0.000    0.000   7.000  FNC
SS,OP1,FP115,AR37.38590,ZE104.03280,SD59.2999,--FNC
115  37.3859   59.300 104.0328 0.000    0.000   7.000  FNC
SS,OP1,FP116,AR43.22260,ZE102.49360,SD65.4699,--FNC
116  43.2226   65.470 102.4936 0.000    0.000   7.000  FNC
SS,OP1,FP117,AR19.30300,ZE106.54020,SD49.2399,--UT PL
117  19.3030   49.240 106.5402 0.000    0.000   7.000  UT PL
SS,OP1,FP118,AR58.58240,ZE100.32480,SD70.6499,--DBR
118  58.5824   70.650 100.3248 0.000    0.000   7.000  DBR
SS,OP1,FP119,AR58.59000,ZE100.32240,SD70.6699,--DBR
119  58.5900   70.670 100.3224 0.000    0.000   7.000  DBR
SS,OP1,FP120,AR71.55590,ZE95.32280,SD80.5398,--DBR
120  71.5559   80.540  95.3228 0.000    0.000   7.000  DBR
SS,OP1,FP121,AR73.09230,ZE94.53390,SD85.0398,--GG
121  73.0923   85.040  94.5339 0.000    0.000   7.000  GG
SS,OP1,FP122,AR71.55540,ZE95.33580,SD81.1698,--GG
122  71.5554   81.170  95.3358 0.000    0.000   7.000  GG
SS,OP1,FP123,AR71.10550,ZE95.53140,SD76.9198,--GG
123  71.1055   76.920  95.5314 0.000    0.000   7.000  GG
SS,OP1,FP124,AR70.49160,ZE95.51110,SD75.0298,--MPCT
124  70.4916   75.030  95.5111 0.000    0.000   7.000  MPCT
SS,OP1,FP125,AR70.20400,ZE96.14180,SD75.7398,--MPCT
125  70.2040   75.740  96.1418 0.000    0.000   7.000  MPCT
SS,OP1,FP126,AR69.23320,ZE96.39110,SD74.7399,--MPCT
126  69.2332   74.740  96.3911 0.000    0.000   7.000  MPCT
SS,OP1,FP127,AR69.56570,ZE96.25560,SD74.1899,--MPCT
127  69.5657   74.190  96.2556 0.000    0.000   7.000  MPCT
SS,OP1,FP128,AR77.08270,ZE92.47560,SD91.8598,--MPCT
128  77.0827   91.860  92.4756 0.000    0.000   7.000  MPCT
```

```
SS,OP1,FP129,AR77.59430,ZE92.17390,SD89.9298,--MPCT
129  77.5943   89.930  92.1739 0.000    0.000   7.000  MPCT
SS,OP1,FP130,AR73.26120,ZE94.44560,SD80.0698,--MPCT
130  73.2612   80.070  94.4456 0.000    0.000   7.000  MPCT
SS,OP1,FP131,AR74.00480,ZE94.28120,SD85.6898,--MPCT
131  74.0048   85.690  94.2812 0.000    0.000   7.000  MPCT
SS,OP1,FP132,AR59.00120,ZE100.29410,SD72.9499,--GG
132  59.0012   72.950 100.2941 0.000    0.000   7.000  GG
SS,OP1,FP133,AR56.33160,ZE101.00060,SD69.9599,--GG
133  56.3316   69.960 101.0006 0.000    0.000   7.000  GG
SS,OP1,FP134,AR47.39280,ZE103.22330,SD58.1499,--GG
134  47.3928   58.150 103.2233 0.000    0.000   7.000  GG
SS,OP1,FP135,AR46.04090,ZE104.08470,SD54.5399,--GG
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:59 [redacted]
--------------------------------------------------------------------------
----
135  46.0409   54.540 104.0847 0.000    0.000   7.000  GG
SS,OP1,FP136,AR43.03430,ZE104.52410,SD52.2199,--GG
136  43.0343   52.220 104.5241 0.000    0.000   7.000  GG
SS,OP1,FP137,AR44.29360,ZE105.00280,SD50.2799,--GG
137  44.2936   50.280 105.0028 0.000    0.000   7.000  GG
SS,OP1,FP138,AR39.45430,ZE105.42400,SD49.5899,--GG
138  39.4543   49.590 105.4240 0.000    0.000   7.000  GG
SS,OP1,FP139,AR42.33430,ZE105.41380,SD48.0999,--GG
139  42.3343   48.100 105.4138 0.000    0.000   7.000  GG
SS,OP1,FP140,AR45.31430,ZE105.08490,SD49.0699,--GG
140  45.3143   49.070 105.0849 0.000    0.000   7.000  GG
SS,OP1,FP141,AR256.51490,ZE90.29530,SD177.4896,--EOA
141 256.5149  177.490  90.2953 0.000    0.000   7.000  EOA
SS,OP1,FP142,AR257.02480,ZE90.13190,SD144.9697,--EOA
142 257.0248  144.970  90.1319 0.000    0.000   7.000  EOA
SS,OP1,FP143,AR257.16170,ZE89.28440,SD93.3998,--EOA
143 257.1617   93.400  89.2844 0.000    0.000   7.000  EOA
SS,OP1,FP144,AR254.12020,ZE87.35280,SD39.4999,--EOA
144 254.1202   39.500  87.3528 0.000    0.000   7.000  EOA
SS,OP1,FP145,AR234.27450,ZE79.38410,SD11.6300,--EOA
145 234.2745   11.630  79.3841 0.000    0.000   7.000  EOA
SS,OP1,FP146,AR93.20440,ZE85.28340,SD30.0399,--EOA
146  93.2044   30.040  85.2834 0.000    0.000   7.000  EOA
SS,OP1,FP147,AR87.51250,ZE88.03290,SD73.9599,--EOA
147  87.5125   73.960  88.0329 0.000    0.000   7.000  EOA
SS,OP1,FP148,AR86.50380,ZE89.07140,SD145.0397,--EOA
148  86.5038  145.040  89.0714 0.000    0.000   7.000  EOA
SS,OP1,FP149,AR255.28270,ZE89.16070,SD82.4998,--WL
149 255.2827   82.500  89.1607 0.000    0.000   7.000  WL
SS,OP1,FP150,AR249.59340,ZE87.19430,SD37.2499,--WL
150 249.5934   37.250  87.1943 0.000    0.000   7.000  WL
SS,OP1,FP151,AR218.39530,ZE79.36000,SD11.3900,--WL
151 218.3953   11.390  79.3600 0.000    0.000   7.000  WL
SS,OP1,FP152,AR92.26010,ZE87.09060,SD50.1199,--WL
152  92.2601   50.120  87.0906 0.000    0.000   7.000  WL
SS,OP1,FP153,AR87.51360,ZE88.59270,SD132.1897,--WL
153  87.5136  132.190  88.5927 0.000    0.000   7.000  WL
SS,OP1,FP154,AR87.52010,ZE89.23290,SD182.9396,--WL
```

```
154  87.5201  182.940  89.2329 0.000    0.000   7.000  WL
SS,OP1,FP155,AR88.45020,ZE89.47420,SD250.7095,--WL
155  88.4502  250.709  89.4742 0.000    0.000   7.000  WL
SS,OP1,FP156,AR90.10030,ZE90.09410,SD336.5593,--WL
156  90.1003  336.559  90.0941 0.000    0.000   7.000  WL
SS,OP1,FP157,AR89.58170,ZE90.10070,SD336.4493,--EOA
157  89.5817  336.449  90.1007 0.000    0.000   7.000  EOA
SS,OP1,FP158,AR91.24490,ZE90.23580,SD413.1292,--WL
158  91.2449  413.129  90.2358 0.000    0.000   7.000  WL
SS,OP1,FP159,AR93.05560,ZE90.41040,SD543.5889,--WL
159  93.0556  543.589  90.4104 0.000    0.000   7.000  WL
SS,OP1,FP160,AR94.01330,ZE90.46160,SD651.5187,--WL
160  94.0133  651.519  90.4616 0.000    0.000   7.000  WL
SS,OP1,FP161,AR94.39560,ZE90.46020,SD752.3485,--WL
161  94.3956  752.348  90.4602 0.000    0.000   7.000  WL
SS,OP1,FP162,AR95.05250,ZE90.43440,SD842.1183,--WL
162  95.0525  842.118  90.4344 0.000    0.000   7.000  WL
SS,OP1,FP163,AR95.22300,ZE90.40220,SD922.5182,--WL
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:59 [redacted]
--------------------------------------------------------------------------
----
163  95.2230  922.518  90.4022 0.000    0.000   7.000  WL
SS,OP1,FP164,AR95.18580,ZE90.40520,SD922.5682,--EOA
164  95.1858  922.568  90.4052 0.000    0.000   7.000  EOA
SS,OP1,FP165,AR95.28560,ZE90.39450,SD961.7681,--WL
165  95.2856  961.768  90.3945 0.000    0.000   7.000  WL
SS,OP1,FP166,AR95.37110,ZE90.37320,SD1026.6579,--WL
166  95.3711 1026.658  90.3732 0.000    0.000   7.000  WL
SS,OP1,FP167,AR95.41250,ZE90.34470,SD1120.6078,--WL
167  95.4125 1120.608  90.3447 0.000    0.000   7.000  WL
SS,OP1,FP168,AR95.36350,ZE90.32370,SD1123.1578,--WL
168  95.3635 1123.158  90.3237 0.000    0.000   7.000  WL
SS,OP1,FP169,AR95.37290,ZE90.32350,SD1125.0577,--EOA
169  95.3729 1125.058  90.3235 0.000    0.000   7.000  EOA
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
SS,OP1,FP170,AR89.17080,ZE90.02360,SD302.0494,--S
170  89.1708  302.049  90.0236 0.000    0.000   7.000  S
SS,OP1,FP171,AR88.58530,ZE90.00450,SD293.4994,--S
171  88.5853  293.499  90.0045 0.000    0.000   7.000  S
SS,OP1,FP172,AR88.28590,ZE89.56170,SD278.6394,--S
172  88.2859  278.639  89.5617 0.000    0.000   7.000  S
SS,OP1,FP173,AR88.07380,ZE89.52180,SD266.9495,--S
173  88.0738  266.950  89.5218 0.000    0.000   7.000  S
SS,OP1,FP174,AR87.50330,ZE89.51020,SD256.3795,--S
174  87.5033  256.380  89.5102 0.000    0.000   7.000  S
SS,OP1,FP175,AR87.42030,ZE89.50060,SD251.7095,--S
175  87.4203  251.709  89.5006 0.000    0.000   7.000  S
SS,OP1,FP176,AR87.25030,ZE89.49580,SD247.0495,--GRL
176  87.2503  247.049  89.4958 0.000    0.000   7.000  GRL
SS,OP1,FP177,AR87.20340,ZE89.46430,SD239.7295,--GRL
177  87.2034  239.730  89.4643 0.000    0.000   7.000  GRL
SS,OP1,FP178,AR87.10370,ZE89.44360,SD231.2595,--GRL
178  87.1037  231.260  89.4436 0.000    0.000   7.000  GRL
```

```
SS,OP1,FP179,AR86.56530,ZE89.40440,SD220.5696,--GRL
179  86.5653  220.570  89.4044 0.000    0.000   7.000  GRL
SS,OP1,FP180,AR86.22340,ZE89.33550,SD189.6596,--GRL
180  86.2234  189.660  89.3355 0.000    0.000   7.000  GRL
SS,OP1,FP181,AR85.27320,ZE88.55580,SD118.9898,--GRL
181  85.2732  118.990  88.5558 0.000    0.000   7.000  GRL
SS,OP1,FP182,AR84.49260,ZE88.27110,SD72.8899,--GRL
182  84.4926   72.890  88.2711 0.000    0.000   7.000  GRL
SS,OP1,FP183,AR87.46520,ZE84.56160,SD25.3299,--GRL
183  87.4652   25.330  84.5616 0.000    0.000   7.000  GRL
SS,OP1,FP184,AR243.27130,ZE77.20540,SD8.9400,--GRL
184 243.2713    8.940  77.2054 0.000    0.000   7.000  GRL
SS,OP1,FP185,AR257.23070,ZE88.04300,SD43.5699,--GRL
185 257.2307   43.570  88.0430 0.000    0.000   7.000  GRL
SS,OP1,FP186,AR258.28430,ZE89.24430,SD79.3198,--GRL
186 258.2843   79.320  89.2443 0.000    0.000   7.000  GRL
SS,OP1,FP187,AR258.32420,ZE89.38350,SD91.5598,--GRL
187 258.3242   91.560  89.3835 0.000    0.000   7.000  GRL
SS,OP1,FP188,AR258.39160,ZE89.52370,SD105.2698,--GRL
188 258.3916  105.270  89.5237 0.000    0.000   7.000  GRL
SS,OP1,FP189,AR259.21450,ZE90.03100,SD105.3298,--GRL
189 259.2145  105.330  90.0310 0.000    0.000   7.000  GRL
SS,OP1,FP190,AR259.14050,ZE89.46300,SD94.9098,--GRL
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:59 0[redacted]
--------------------------------------------------------------------------
----
190 259.1405   94.910  89.4630 0.000    0.000   7.000  GRL
SS,OP1,FP191,AR258.59220,ZE89.36150,SD83.2098,--GRL
191 258.5922   83.210  89.3615 0.000    0.000   7.000  GRL
SS,OP1,FP192,AR258.50340,ZE89.31360,SD79.2398,--GRL
192 258.5034   79.240  89.3136 0.000    0.000   7.000  GRL
--Evidence Recorder v 9.0.3.5 (2012-11-02)
--Evidence Recorder v 9.0.3.5 (2012-11-02)
JB,NM14-0222F027-1,DT02-22-2014,TM15:00:18
MO,AD0,UN2,SF1.000000,EC0,EO0.0,AU0
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
SS,OP1,FP193,AR86.40280,ZE89.42160,SD221.6796,--GRL
193  86.4028  221.680  89.4216 0.000    0.000   7.000  GRL
SS,OP1,FP194,AR86.46030,ZE89.46230,SD231.2895,--GRL
194  86.4603  231.290  89.4623 0.000    0.000   7.000  GRL
SS,OP1,FP195,AR87.01360,ZE89.49130,SD247.5095,--GRL
195  87.0136  247.510  89.4913 0.000    0.000   7.000  GRL
SS,OP1,FP196,AR87.11100,ZE89.40340,SD245.2695,--SCP
196  87.1110  245.269  89.4034 0.000    0.000   7.000  SCP
SS,OP1,FP197,AR87.10060,ZE89.39060,SD243.8295,--SCP
197  87.1006  243.830  89.3906 0.000    0.000   7.000  SCP
SS,OP1,FP198,AR87.01320,ZE89.38140,SD243.5095,--SCP
198  87.0132  243.510  89.3814 0.000    0.000   7.000  SCP
SS,OP1,FP199,AR86.55070,ZE89.32470,SD240.1295,--SCP
199  86.5507  240.130  89.3247 0.000    0.000   7.000  SCP
SS,OP1,FP200,AR86.55520,ZE89.32480,SD240.0395,--SCP
200  86.5552  240.040  89.3248 0.000    0.000   7.000  SCP
SS,OP1,FP201,AR86.52240,ZE89.27110,SD235.8495,--SCP
```

```
201  86.5224  235.850  89.2711 0.000    0.000   7.000  SCP
SS,OP1,FP202,AR86.50450,ZE89.19060,SD233.4195,--SCP
202  86.5045  233.420  89.1906 0.000    0.000   7.000  SCP
SS,OP1,FP203,AR86.52160,ZE89.12370,SD229.3595,--SCP
203  86.5216  229.360  89.1237 0.000    0.000   7.000  SCP
SS,OP1,FP204,AR86.50470,ZE89.09380,SD227.4095,--SCP
204  86.5047  227.410  89.0938 0.000    0.000   7.000  SCP
SS,OP1,FP205,AR91.03380,ZE89.45470,SD226.4495,--YLX2
205  91.0338  226.450  89.4547 0.000    0.000   7.000  YLX2
SS,OP1,FP206,AR91.04080,ZE89.40240,SD211.3296,--YLX2
206  91.0408  211.330  89.4024 0.000    0.000   7.000  YLX2
SS,OP1,FP207,AR93.13390,ZE89.04120,SD127.2297,--YLX2
207  93.1339  127.230  89.0412 0.000    0.000   7.000  YLX2
SS,OP1,FP208,AR99.54460,ZE88.12370,SD66.9799,--YLX2
208  99.5446   66.980  88.1237 0.000    0.000   7.000  YLX2
SS,OP1,FP209,AR125.14480,ZE86.22330,SD28.2999,--YLX2
209 125.1448   28.300  86.2233 0.000    0.000   7.000  YLX2
SS,OP1,FP210,AR188.08180,ZE88.49520,SD33.9599,--WL
210 188.0818   33.960  88.4952 0.000    0.000   7.000  WL
SS,OP1,FP211,AR224.48240,ZE89.40250,SD53.7899,--WL
211 224.4824   53.790  89.4025 0.000    0.000   7.000  WL
SS,OP1,FP212,AR219.12390,ZE89.45500,SD50.0799,--EOA
212 219.1239   50.080  89.4550 0.000    0.000   7.000  EOA
SS,OP1,FP213,AR181.26580,ZE89.22220,SD34.9799,--EOA
213 181.2658   34.980  89.2222 0.000    0.000   7.000  EOA
SS,OP1,FP214,AR149.22440,ZE89.36280,SD46.4299,--EOA
214 149.2244   46.430  89.3628 0.000    0.000   7.000  EOA
SS,OP1,FP215,AR140.46140,ZE89.58330,SD66.3999,--EOA
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:59 [redacted]
--------------------------------------------------------------------------
----
215 140.4614   66.400  89.5833 0.000    0.000   7.000  EOA
SS,OP1,FP216,AR140.47370,ZE89.58340,SD66.5099,--EOA
216 140.4737   66.510  89.5834 0.000    0.000   7.000  EOA
SS,OP1,FP217,AR140.58260,ZE89.49170,SD84.2598,--EOA
217 140.5826   84.260  89.4917 0.000    0.000   7.000  EOA
SS,OP1,FP218,AR145.06490,ZE89.46290,SD111.5198,--EOA
218 145.0649  111.520  89.4629 0.000    0.000   7.000  EOA
SS,OP1,FP219,AR149.45330,ZE90.04020,SD137.1797,--EOA
219 149.4533  137.180  90.0402 0.000    0.000   7.000  EOA
SS,OP1,FP220,AR145.49350,ZE89.34040,SD143.0197,--YLX2
220 145.4935  143.020  89.3404 0.000    0.000   7.000  YLX2
SS,OP1,FP221,AR121.33060,ZE89.17220,SD84.9198,--YLX2
221 121.3306   84.920  89.1722 0.000    0.000   7.000  YLX2
SS,OP1,FP222,AR117.44020,ZE89.09320,SD97.4198,--WL
222 117.4402   97.420  89.0932 0.000    0.000   7.000  WL
SS,OP1,FP223,AR117.52080,ZE89.11380,SD97.9198,--WL
223 117.5208   97.920  89.1138 0.000    0.000   7.000  WL
SS,OP1,FP224,AR117.29310,ZE89.10570,SD98.3598,--WL
224 117.2931   98.360  89.1057 0.000    0.000   7.000  WL
SS,OP1,FP225,AR114.26550,ZE89.10430,SD98.9698,--WL
225 114.2655   98.970  89.1043 0.000    0.000   7.000  WL
SS,OP1,FP226,AR111.14490,ZE89.10270,SD100.2798,--WL
226 111.1449  100.280  89.1027 0.000    0.000   7.000  WL
```

```
SS,OP1,FP227,AR110.51020,ZE89.13550,SD100.2998,--WL
227 110.5102  100.300  89.1355 0.000    0.000   7.000  WL
SS,OP1,FP228,AR110.54390,ZE89.10340,SD99.3198,--WL
228 110.5439   99.320  89.1034 0.000    0.000   7.000  WL
SS,OP1,FP229,AR112.47070,ZE89.08320,SD93.6498,--WL
229 112.4707   93.650  89.0832 0.000    0.000   7.000  WL
SS,OP1,FP230,AR113.15330,ZE89.10170,SD93.2198,--WL
230 113.1533   93.220  89.1017 0.000    0.000   7.000  WL
SS,OP1,FP231,AR113.51060,ZE89.11400,SD93.3398,--WL
231 113.5106   93.340  89.1140 0.000    0.000   7.000  WL
SS,OP1,FP232,AR117.43530,ZE89.13350,SD97.4098,--WL
232 117.4353   97.410  89.1335 0.000    0.000   7.000  WL
SS,OP1,FP233,AR115.33500,ZE89.10120,SD97.2698,--STOP
233 115.3350   97.270  89.1012 0.000    0.000   7.000  STOP
SS,OP1,FP234,AR140.19010,ZE89.39210,SD145.4997,--EOA
234 140.1901  145.500  89.3921 0.000    0.000   7.000  EOA
SS,OP1,FP235,AR130.16560,ZE89.45390,SD123.1498,--EOA
235 130.1656  123.150  89.4539 0.000    0.000   7.000  EOA
SS,OP1,FP236,AR119.07150,ZE89.49010,SD117.9698,--EOA
236 119.0715  117.970  89.4901 0.000    0.000   7.000  EOA
SS,OP1,FP237,AR108.46470,ZE89.45140,SD123.8098,--EOA
237 108.4647  123.810  89.4514 0.000    0.000   7.000  EOA
SS,OP1,FP238,AR102.12170,ZE89.43540,SD135.6197,--EOA
238 102.1217  135.620  89.4354 0.000    0.000   7.000  EOA
SS,OP1,FP239,AR97.14160,ZE89.41100,SD159.0797,--EOA
239  97.1416  159.080  89.4110 0.000    0.000   7.000  EOA
SS,OP1,FP240,AR95.08460,ZE89.48040,SD189.2396,--EOA
240  95.0846  189.240  89.4804 0.000    0.000   7.000  EOA
SS,OP1,FP241,AR95.08390,ZE89.40270,SD177.7996,--WL
241  95.0839  177.800  89.4027 0.000    0.000   7.000  WL
SS,OP1,FP242,AR94.20500,ZE89.51030,SD209.8096,--WL
242  94.2050  209.810  89.5103 0.000    0.000   7.000  WL
SS,OP1,FP243,AR109.17190,ZE90.16310,SD129.9397,--DNE
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:59 [redacted]
--------------------------------------------------------------------------
----
243 109.1719  129.940  90.1631 0.000    0.000   7.000  DNE
SS,OP1,FP244,AR84.06320,ZE89.12560,SD122.4298,--SGN
244  84.0632  122.430  89.1256 0.000    0.000   7.000  SGN
SS,OP1,FP245,AR105.59280,ZE91.47270,SD453.9491,--SGN
245 105.5928  453.949  91.4727 0.000    0.000   7.000  SGN
--Evidence Recorder v 9.0.3.5 (2012-11-02)
--Evidence Recorder v 9.0.3.5 (2012-11-02)
JB,NM14-0222F027-1,DT02-22-2014,TM17:03:34
MO,AD0,UN2,SF1.000000,EC0,EO0.0,AU0
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
--Resection
--Resection
SP,PN170,N 3.7663,E 302.0258,EL-1.9884,--S
Store Point record, pt num = 170
x=302.025800, y=3.766300, z=-1.988400, desc=S
SP,PN99,N -20.0774,E -3.3164,EL-0.3249,--RM
Store Point record, pt num = 99
```

```
x=-3.316400, y=-20.077400, z=-0.324900, desc=RM
--Resection Obs: Horz-Yes Vert-Yes
--Resection Obs: Horz-Yes Vert-Yes
LS,HI5.000,HR7.000
RS,PN170,CR321.58510,ZE85.03310,SD187.0696
Resection start 2004 record, instrument height = 5.000000
Resection shot 2004 record:
slope=187.069600 CR=321.5851 tght=7.000000 vert=85.0331 to_pt=170
--Resection Obs: Horz-Yes Vert-Yes
--Resection Obs: Horz-Yes Vert-Yes
RS,PN170,CR321.58120,ZE85.03410,SD187.0796
Resection shot 2004 record:
slope=187.079600 CR=321.5812 tght=7.000000 vert=85.0341 to_pt=170
--Resection Obs: Horz-Yes Vert-Yes
--Resection Obs: Horz-Yes Vert-Yes
RS,PN99,CR291.25370,ZE87.52330,SD452.0091
Resection shot 2004 record:
slope=452.009100 CR=291.2537 tght=7.000000 vert=87.5233 to_pt=99
--Resection Pnt: StdDevN=0.10' StdDevE=0.06'
--Resection Pnt: StdDevN=0.10' StdDevE=0.06'
SP,PN246,N -125.9568,E 435.8343,EL-15.7582,--
Resection finish 2004 record, pt num = 246
Store Point record, pt num = 246
x=435.834300, y=-125.956800, z=-15.758200, desc=
--Orientation
--Orientation
LS,HI5.000,HR7.000
OC,OP246,N -125.9568,E 435.8343,EL-15.7582,--
BK,OP246,BP170,BS314.06427,BC321.58510
Setup   Backsight   BS Azimuth      BS Reading      Instrument Height
246       170       N/A             321.5851        5.000
  246 X:   435.834 Y:  -125.957 Z:   -15.758 D:
  170 X:   302.026 Y:     3.766 Z:    -1.988 D:  S
BR,OP246,BP170,AR321.58510,ZE85.03310,SD187.0696
--Orientation Notes
--Orientation Notes
--  Observed Values:     HA 321°58'51" VA 85°03'31" SD 187.07' HD
186.37' HR 7.00'
--  Observed Values:     HA 321°58'51" VA 85°03'31" SD 187.07' HD
186.37' HR 7.00'
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:59 [redacted]
--------------------------------------------------------------------------
----
--  Observed Reference:  Point
--  Observed Reference:  Point
--  Distance Calculated: 186.37'
--  Distance Calculated: 186.37'
--  Distance Error:      0.01'
--  Distance Error:      0.01'
--  BS Elevation:        -1.64'
--  BS Elevation:        -1.64'
--  BS Elevation Error:  0.34'
--  BS Elevation Error:  0.34'
SS,OP246,FP247,AR309.51040,ZE85.34390,SD203.9096,--WL
```

```
Pt#   HZAngle   SlpDist  VTAng   ParOff   PerpOff TgtHt  Description
247 309.5104  203.910  85.3439 0.000    0.000   7.000  WL
SS,OP246,FP248,AR311.06080,ZE85.39530,SD219.9896,--YL
248 311.0608  219.990  85.3953 0.000    0.000   7.000  YL
SS,OP246,FP249,AR312.42000,ZE85.31310,SD209.9196,--YL
249 312.4200  209.920  85.3131 0.000    0.000   7.000  YL
SS,OP246,FP250,AR317.12120,ZE85.09070,SD186.2596,--YL
250 317.1212  186.260  85.0907 0.000    0.000   7.000  YL
SS,OP246,FP251,AR319.17300,ZE84.59140,SD177.3696,--YL
251 319.1730  177.370  84.5914 0.000    0.000   7.000  YL
SS,OP246,FP252,AR316.23300,ZE84.59240,SD169.3897,--WL
252 316.2330  169.390  84.5924 0.000    0.000   7.000  WL
SS,OP246,FP253,AR340.06220,ZE83.08120,SD109.3498,--WL
253 340.0622  109.350  83.0812 0.000    0.000   7.000  WL
SS,OP246,FP254,AR30.16530,ZE82.52470,SD91.9998,--WL
254  30.1653   92.000  82.5247 0.000    0.000   7.000  WL
SS,OP246,FP255,AR30.25120,ZE82.52540,SD90.3598,--EOA
255  30.2512   90.360  82.5254 0.000    0.000   7.000  EOA
SS,OP246,FP256,AR64.50000,ZE85.53340,SD134.3697,--WL
256  64.5000  134.370  85.5334 0.000    0.000   7.000  WL
SS,OP246,FP257,AR67.38520,ZE86.30290,SD127.6697,--SGN
257  67.3852  127.670  86.3029 0.000    0.000   7.000  SGN
SS,OP246,FP258,AR77.03520,ZE87.20210,SD181.8096,--WL
258  77.0352  181.810  87.2021 0.000    0.000   7.000  WL
SS,OP246,FP259,AR87.23330,ZE88.33240,SD272.6495,--WL
259  87.2333  272.649  88.3324 0.000    0.000   7.000  WL
SS,OP246,FP260,AR93.45210,ZE89.12290,SD403.9292,--WL
260  93.4521  403.929  89.1229 0.000    0.000   7.000  WL
SS,OP246,FP261,AR95.13120,ZE89.17110,SD454.6991,--WL
261  95.1312  454.699  89.1711 0.000    0.000   7.000  WL
SS,OP246,FP262,AR95.27460,ZE89.18130,SD454.2091,--EOA
262  95.2746  454.209  89.1813 0.000    0.000   7.000  EOA
SS,OP246,FP263,AR93.46460,ZE89.16200,SD456.7091,--YL
263  93.4646  456.709  89.1620 0.000    0.000   7.000  YL
SS,OP246,FP264,AR94.21290,ZE89.18340,SD479.3990,--YL
264  94.2129  479.399  89.1834 0.000    0.000   7.000  YL
SS,OP246,FP265,AR94.39370,ZE89.20110,SD491.4590,--YL
265  94.3937  491.459  89.2011 0.000    0.000   7.000  YL
SS,OP246,FP266,AR95.15480,ZE89.23210,SD518.5790,--YL
266  95.1548  518.579  89.2321 0.000    0.000   7.000  YL
SS,OP246,FP267,AR95.28220,ZE89.24250,SD529.0889,--YL
267  95.2822  529.089  89.2425 0.000    0.000   7.000  YL
SS,OP246,FP268,AR96.02140,ZE89.26560,SD561.2989,--YL
268  96.0214  561.299  89.2656 0.000    0.000   7.000  YL
SS,OP246,FP269,AR96.11150,ZE89.27410,SD570.4789,--YL
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:59 [redacted]
--------------------------------------------------------------------------
----
269  96.1115  570.479  89.2741 0.000    0.000   7.000  YL
SS,OP246,FP270,AR96.37060,ZE89.29090,SD600.4588,--YL
270  96.3706  600.459  89.2909 0.000    0.000   7.000  YL
SS,OP246,FP271,AR96.44120,ZE89.29500,SD609.5988,--YL
271  96.4412  609.599  89.2950 0.000    0.000   7.000  YL
SS,OP246,FP272,AR96.55090,ZE89.30230,SD619.3688,--YL
```

```
272  96.5509  619.369  89.3023 0.000    0.000   7.000  YL
SS,OP246,FP273,AR97.27510,ZE89.32330,SD667.1287,--YL
273  97.2751  667.129  89.3233 0.000    0.000   7.000  YL
SS,OP246,FP274,AR97.48370,ZE89.35030,SD723.2686,--YL
274  97.4837  723.269  89.3503 0.000    0.000   7.000  YL
SS,OP246,FP275,AR97.55570,ZE89.35190,SD792.2684,--YL
275  97.5557  792.268  89.3519 0.000    0.000   7.000  YL
SS,OP246,FP276,AR97.52380,ZE89.34430,SD840.1883,--YL
276  97.5238  840.188  89.3443 0.000    0.000   7.000  YL
SS,OP246,FP277,AR97.02380,ZE89.36370,SD841.2283,--EOA
277  97.0238  841.228  89.3637 0.000    0.000   7.000  EOA
SS,OP246,FP278,AR97.08300,ZE89.35480,SD841.2083,--WL
278  97.0830  841.208  89.3548 0.000    0.000   7.000  WL
SS,OP246,FP279,AR97.08500,ZE89.36530,SD776.9184,--WL
279  97.0850  776.918  89.3653 0.000    0.000   7.000  WL
SS,OP246,FP280,AR96.45530,ZE89.35230,SD695.2886,--WL
280  96.4553  695.289  89.3523 0.000    0.000   7.000  WL
SS,OP246,FP281,AR98.46340,ZE89.33480,SD857.0783,--EOA
281  98.4634  857.078  89.3348 0.000    0.000   7.000  EOA
SS,OP246,FP282,AR98.37320,ZE89.33370,SD856.7283,--WL
282  98.3732  856.728  89.3337 0.000    0.000   7.000  WL
SS,OP246,FP283,AR98.46420,ZE89.34480,SD776.5484,--WL
283  98.4642  776.548  89.3448 0.000    0.000   7.000  WL
SS,OP246,FP284,AR98.32510,ZE89.33140,SD688.3186,--WL
284  98.3251  688.319  89.3314 0.000    0.000   7.000  WL
SS,OP246,FP285,AR97.44420,ZE89.28010,SD596.9588,--WL
285  97.4442  596.959  89.2801 0.000    0.000   7.000  WL
SS,OP246,FP286,AR96.24100,ZE89.22300,SD508.1890,--WL
286  96.2410  508.189  89.2230 0.000    0.000   7.000  WL
SS,OP246,FP287,AR96.35400,ZE89.23280,SD507.8090,--EOA
287  96.3540  507.809  89.2328 0.000    0.000   7.000  EOA
SS,OP246,FP288,AR97.20430,ZE89.26270,SD552.6789,--S
288  97.2043  552.679  89.2627 0.000    0.000   7.000  S
SS,OP246,FP289,AR97.05060,ZE89.25440,SD530.8689,--S
289  97.0506  530.869  89.2544 0.000    0.000   7.000  S
SS,OP246,FP290,AR96.38390,ZE89.23550,SD503.3590,--S
290  96.3839  503.359  89.2355 0.000    0.000   7.000  S
SS,OP246,FP291,AR96.00110,ZE89.20410,SD468.8091,--S
291  96.0011  468.809  89.2041 0.000    0.000   7.000  S
SS,OP246,FP292,AR95.07410,ZE89.18340,SD431.8191,--S
292  95.0741  431.819  89.1834 0.000    0.000   7.000  S
SS,OP246,FP293,AR94.06050,ZE89.13440,SD397.1392,--S
293  94.0605  397.139  89.1344 0.000    0.000   7.000  S
SS,OP246,FP294,AR92.58120,ZE89.08200,SD364.8893,--S
294  92.5812  364.889  89.0820 0.000    0.000   7.000  S
SS,OP246,FP295,AR91.57300,ZE89.02210,SD341.2293,--S
295  91.5730  341.229  89.0221 0.000    0.000   7.000  S
SS,OP246,FP296,AR91.12220,ZE88.57580,SD324.6994,--S
296  91.1222  324.699  88.5758 0.000    0.000   7.000  S
SS,OP246,FP297,AR90.20470,ZE88.52460,SD308.2394,--S
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:59 [redacted]
--------------------------------------------------------------------------
----
297  90.2047  308.239  88.5246 0.000    0.000   7.000  S
```

```
SS,OP246,FP298,AR89.17420,ZE88.45100,SD290.5294,--S
298  89.1742  290.529  88.4510 0.000    0.000   7.000  S
SS,OP246,FP299,AR88.03400,ZE88.35370,SD273.1195,--S
299  88.0340  273.120  88.3537 0.000    0.000   7.000  S
SS,OP246,FP300,AR87.15470,ZE88.31500,SD263.1495,--S
300  87.1547  263.149  88.3150 0.000    0.000   7.000  S
SS,OP246,FP301,AR85.36220,ZE88.21480,SD245.8995,--S
301  85.3622  245.899  88.2148 0.000    0.000   7.000  S
SS,OP246,FP302,AR83.11540,ZE88.05360,SD224.7496,--S
302  83.1154  224.750  88.0536 0.000    0.000   7.000  S
SS,OP246,FP303,AR82.33260,ZE88.01370,SD220.2196,--S
303  82.3326  220.220  88.0137 0.000    0.000   7.000  S
SS,OP246,FP304,AR80.32110,ZE87.49000,SD206.9696,--S
304  80.3211  206.970  87.4900 0.000    0.000   7.000  S
SS,OP246,FP305,AR75.48010,ZE87.19440,SD183.5596,--S
305  75.4801  183.560  87.1944 0.000    0.000   7.000  S
SS,OP246,FP306,AR69.35580,ZE86.45000,SD162.2297,--S
306  69.3558  162.230  86.4500 0.000    0.000   7.000  S
SS,OP246,FP307,AR66.34130,ZE86.28480,SD153.6397,--S
307  66.3413  153.640  86.2848 0.000    0.000   7.000  S
SS,OP246,FP308,AR63.13340,ZE86.10470,SD145.3997,--S
308  63.1334  145.400  86.1047 0.000    0.000   7.000  S
SS,OP246,FP309,AR59.23300,ZE85.50290,SD137.5797,--S
309  59.2330  137.580  85.5029 0.000    0.000   7.000  S
SS,OP246,FP310,AR61.02480,ZE85.47400,SD134.8197,--S
310  61.0248  134.820  85.4740 0.000    0.000   7.000  S
SS,OP246,FP311,AR62.47250,ZE85.57310,SD138.4797,--S
311  62.4725  138.480  85.5731 0.000    0.000   7.000  S
SS,OP246,FP312,AR64.57340,ZE86.09560,SD143.5397,--S
312  64.5734  143.540  86.0956 0.000    0.000   7.000  S
SS,OP246,FP313,AR65.53280,ZE86.15090,SD145.7297,--S
313  65.5328  145.730  86.1509 0.000    0.000   7.000  S
SS,OP246,FP314,AR70.00030,ZE86.37150,SD156.1097,--S
314  70.0003  156.110  86.3715 0.000    0.000   7.000  S
SS,OP246,FP315,AR65.21220,ZE86.10470,SD143.6497,--S
315  65.2122  143.650  86.1047 0.000    0.000   7.000  S
SS,OP246,FP316,AR63.44480,ZE86.01350,SD139.7697,--S
316  63.4448  139.770  86.0135 0.000    0.000   7.000  S
SS,OP246,FP317,AR61.28020,ZE85.48490,SD135.0197,--S
317  61.2802  135.020  85.4849 0.000    0.000   7.000  S
--Evidence Recorder v 9.0.3.5 (2012-11-02)
--Evidence Recorder v 9.0.3.5 (2012-11-02)
JB,NM14-0222F027-1,DT02-22-2014,TM17:53:06
MO,AD0,UN2,SF1.000000,EC0,EO0.0,AU0
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
SS,OP246,FP318,AR86.46590,ZE88.27570,SD255.2295,--S
318  86.4659  255.230  88.2757 0.000    0.000   7.000  S
SS,OP246,FP319,AR88.41060,ZE88.40580,SD276.8494,--S
319  88.4106  276.849  88.4058 0.000    0.000   7.000  S
SS,OP246,FP320,AR90.11060,ZE88.51390,SD299.9594,--S
320  90.1106  299.959  88.5139 0.000    0.000   7.000  S
SS,OP246,FP321,AR91.26430,ZE89.00250,SD324.5994,--S
321  91.2643  324.599  89.0025 0.000    0.000   7.000  S
SS,OP246,FP322,AR93.11010,ZE89.10380,SD364.6593,--S
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
```

```
Job Description:
22:41:59 [redacted]
--------------------------------------------------------------------------
----
322  93.1101  364.659  89.1038 0.000    0.000   7.000  S
SS,OP246,FP323,AR94.15410,ZE89.15380,SD396.7792,--S
323  94.1541  396.779  89.1538 0.000    0.000   7.000  S
SS,OP246,FP324,AR95.21140,ZE89.19340,SD429.3091,--S
324  95.2114  429.309  89.1934 0.000    0.000   7.000  S
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
--Evidence Recorder v 9.0.3.5 (2012-11-02)
--Evidence Recorder v 9.0.3.5 (2012-11-02)
JB,NM14-0222F027-1,DT02-22-2014,TM18:47:22
MO,AD0,UN2,SF1.000000,EC0,EO0.0,AU0
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
SS,OP246,FP325,AR96.48550,ZE89.26210,SD503.1790,--S
325  96.4855  503.179  89.2621 0.000    0.000   7.000  S
SS,OP246,FP326,AR97.22010,ZE89.26590,SD543.3489,--S
326  97.2201  543.349  89.2659 0.000    0.000   7.000  S
SS,OP246,FP327,AR97.36110,ZE89.27240,SD563.8889,--S
327  97.3611  563.889  89.2724 0.000    0.000   7.000  S
SS,OP246,FP328,AR97.44180,ZE89.28190,SD581.4188,--S
328  97.4418  581.419  89.2819 0.000    0.000   7.000  S
SS,OP246,FP329,AR98.32390,ZE89.32380,SD667.1987,--S
329  98.3239  667.199  89.3238 0.000    0.000   7.000  S
SS,OP246,FP330,AR98.30010,ZE89.32000,SD648.9987,--S
330  98.3001  648.999  89.3200 0.000    0.000   7.000  S
SS,OP246,FP331,AR98.33380,ZE89.32020,SD648.9887,--S
331  98.3338  648.989  89.3202 0.000    0.000   7.000  S
SS,OP246,FP332,AR98.18210,ZE89.30270,SD606.4488,--S
332  98.1821  606.449  89.3027 0.000    0.000   7.000  S
SS,OP246,FP333,AR98.07200,ZE89.31170,SD582.3188,--S
333  98.0720  582.319  89.3117 0.000    0.000   7.000  S
SS,OP246,FP334,AR98.10280,ZE89.32270,SD582.0188,--S
334  98.1028  582.019  89.3227 0.000    0.000   7.000  S
SS,OP246,FP335,AR98.02240,ZE89.33230,SD563.7189,--S
335  98.0224  563.719  89.3323 0.000    0.000   7.000  S
SS,OP246,FP336,AR97.54560,ZE89.31220,SD563.8289,--S
336  97.5456  563.829  89.3122 0.000    0.000   7.000  S
SS,OP246,FP337,AR97.39130,ZE89.32250,SD539.3589,--S
337  97.3913  539.359  89.3225 0.000    0.000   7.000  S
SS,OP246,FP338,AR97.47470,ZE89.34210,SD539.3989,--S
338  97.4747  539.399  89.3421 0.000    0.000   7.000  S
SS,OP246,FP339,AR97.30390,ZE89.34310,SD516.6990,--S
339  97.3039  516.699  89.3431 0.000    0.000   7.000  S
SS,OP246,FP340,AR97.21480,ZE89.31520,SD516.5490,--S
340  97.2148  516.549  89.3152 0.000    0.000   7.000  S
SS,OP246,FP341,AR96.32550,ZE89.29160,SD469.5491,--S
341  96.3255  469.549  89.2916 0.000    0.000   7.000  S
SS,OP246,FP342,AR96.44350,ZE89.31570,SD469.2691,--S
342  96.4435  469.269  89.3157 0.000    0.000   7.000  S
SS,OP246,FP343,AR96.05050,ZE89.31140,SD440.6691,--S
343  96.0505  440.669  89.3114 0.000    0.000   7.000  S
SS,OP246,FP344,AR95.57210,ZE89.28270,SD440.7691,--S
```

```
344  95.5721  440.769  89.2827 0.000    0.000   7.000  S
SS,OP246,FP345,AR94.57160,ZE89.27550,SD404.1092,--S
345  94.5716  404.109  89.2755 0.000    0.000   7.000  S
SS,OP246,FP346,AR95.05510,ZE89.29490,SD403.8492,--S
C:\Users\wardg\Documents\MicroSurvey\Forensic Scenes\14-0222F027-1
Job Description:
22:41:59 [redacted]
--------------------------------------------------------------------------
----
346  95.0551  403.849  89.2949 0.000    0.000   7.000  S
SS,OP246,FP347,AR94.33300,ZE89.27020,SD386.2392,--S
347  94.3330  386.239  89.2702 0.000    0.000   7.000  S
SS,OP246,FP348,AR94.26140,ZE89.24400,SD386.5392,--S
348  94.2614  386.539  89.2440 0.000    0.000   7.000  S
SS,OP246,FP349,AR93.17120,ZE89.20280,SD354.1993,--S
349  93.1712  354.199  89.2028 0.000    0.000   7.000  S
SS,OP246,FP350,AR93.24410,ZE89.22350,SD353.9993,--S
350  93.2441  353.999  89.2235 0.000    0.000   7.000  S
SS,OP246,FP351,AR92.18200,ZE89.17100,SD327.9093,--S
351  92.1820  327.909  89.1710 0.000    0.000   7.000  S
SS,OP246,FP352,AR92.10310,ZE89.15060,SD327.9693,--S
352  92.1031  327.969  89.1506 0.000    0.000   7.000  S
SS,OP246,FP353,AR91.02350,ZE89.07360,SD307.5494,--S
353  91.0235  307.549  89.0736 0.000    0.000   7.000  S
SS,OP246,FP354,AR91.08190,ZE89.09180,SD307.4194,--S
354  91.0819  307.419  89.0918 0.000    0.000   7.000  S
SS,OP246,FP355,AR90.00210,ZE89.01520,SD287.2994,--S
355  90.0021  287.299  89.0152 0.000    0.000   7.000  S
SS,OP246,FP356,AR89.50440,ZE89.00560,SD287.4394,--S
356  89.5044  287.439  89.0056 0.000    0.000   7.000  S
SS,OP246,FP357,AR87.33500,ZE88.41570,SD256.6095,--S
357  87.3350  256.610  88.4157 0.000    0.000   7.000  S
SS,OP246,FP358,AR87.44530,ZE88.46010,SD256.3095,--S
358  87.4453  256.310  88.4601 0.000    0.000   7.000  S
SS,OP246,FP359,AR86.10570,ZE88.33460,SD239.9695,--S
359  86.1057  239.970  88.3346 0.000    0.000   7.000  S
SS,OP246,FP360,AR85.59550,ZE88.30430,SD240.2195,--S
360  85.5955  240.220  88.3043 0.000    0.000   7.000  S
SS,OP246,FP361,AR84.29010,ZE88.20010,SD226.3195,--S
361  84.2901  226.320  88.2001 0.000    0.000   7.000  S
SS,OP246,FP362,AR84.40080,ZE88.22320,SD225.9495,--S
362  84.4008  225.950  88.2232 0.000    0.000   7.000  S
SS,OP246,FP363,AR82.04290,ZE87.56420,SD207.6796,--S
363  82.0429  207.680  87.5642 0.000    0.000   7.000  S
SS,OP246,FP364,AR81.54160,ZE87.55110,SD207.7296,--S
364  81.5416  207.730  87.5511 0.000    0.000   7.000  S
SS,OP246,FP365,AR80.18570,ZE87.43450,SD197.2496,--S
365  80.1857  197.250  87.4345 0.000    0.000   7.000  S
SS,OP246,FP366,AR77.24220,ZE87.21080,SD182.4396,--S
366  77.2422  182.440  87.2108 0.000    0.000   7.000  S
SS,OP246,FP367,AR76.34390,ZE87.16330,SD179.5496,--S
367  76.3439  179.550  87.1633 0.000    0.000   7.000  S
SS,OP246,FP368,AR291.25320,ZE87.52380,SD452.0391,--RMDN
368 291.2532  452.039  87.5238 0.000    0.000   7.000  RMDN
--Evidence Recorder v 9.0.3.5 (2012-11-02)
--Evidence Recorder v 9.0.3.5 (2012-11-02)
```

```
JB,NM14-0222F027-1,DT02-22-2014,TM19:09:46
MO,AD0,UN2,SF1.000000,EC0,EO0.0,AU0
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
--Instrument Selected: Type=Total Station,Profile=RC-PR3,Model=SRX
```