# RUBBERIZED ASPHALT CONCRETE DISTRICT 1 PROJECT

## VOLUME 2 - PRE-CONSTRUCTION REPORT

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## ACKNOWLEDGEMENTS

Mike Cook and Al Vasquez of Caltrans coordinated the pre-construction field work and Mark Hoffman and Neil Weldek of Caltrans conducted deflection testing, coring, and installation of paddles. Additional support was provided by Caltrans District 1 personnel for locating digouts. Granite Construction Company provided traffic control.

# 1.0 INTRODUCTION

The District 1 rubberized asphalt concrete (RAC) experimental project is located on State Route 20 in Mendocino County near Calpella from Cold Creek Bridge (BR No.10-0040) to 1.8 km (1.1 miles) west of the Lake County line. The project is approximately 8.1 km (5.1 miles) long, beginning at KP R60.9 (PM R37.9) and ending at KP 69.2 (PM 43.0).

This is a federal aid project (ACNH-P020(132)E) and the contract No. is 01-316104 (01-Men-20-R60.9/69.2). Table 1-1 shows the approximate locations of the test sections.

Table 1-1 Test Sections Locations

| Section | Mix | Process | Thick (mm) | From KP (PM) | To KP (PM) | Length m (ft) |
|---|---|---|---|---|---|---|
| 1 | RUMAC | Dry | 60 | 61.70 (38.35) | 62.76 (39.01) | 1060 (3478) |
| 2 | Type-D MB | Terminal Blend | 60 | 62.76 (39.01) | 63.82 (39.66) | 1060 (3478) |
| 3 | RAC-G | Wet | 60 | 63.85 (39.68) | 64.80 (40.27) | 950 (3117) |
| 4 | DGAC (Type A) | Control | 105 | 64.80 (40.27) | 65.74 (40.86) | 940 (3084) |
| 5 | Recycled RAC (Cancelled) | Conventional | - | 65.74 (40.86) | 66.74 (41.48) | 1000 (3281) |

A fifth section containing recycled RAC was proposed but eventually cancelled because of timing and cost issues. Shown in Figure 1-1 is the layout of the test sections. Within each test section is a 150 m (500 ft) performance evaluation section (Figure 1-2).

For METS, the primary objectives of this study are as follows:

- assess relative performance (field and laboratory) of the DGAC, RAC-G, MB-D, and RUMAC mixes;
- evaluate constructability of asphalt rubber using the wet, dry, and terminal blend processes; and
- compare field and lab performance with findings from the Firebaugh project and the HVS study for similar mixes.

Additionally, emissions testing will be conducted during plant production of the various rubber modified mixes.

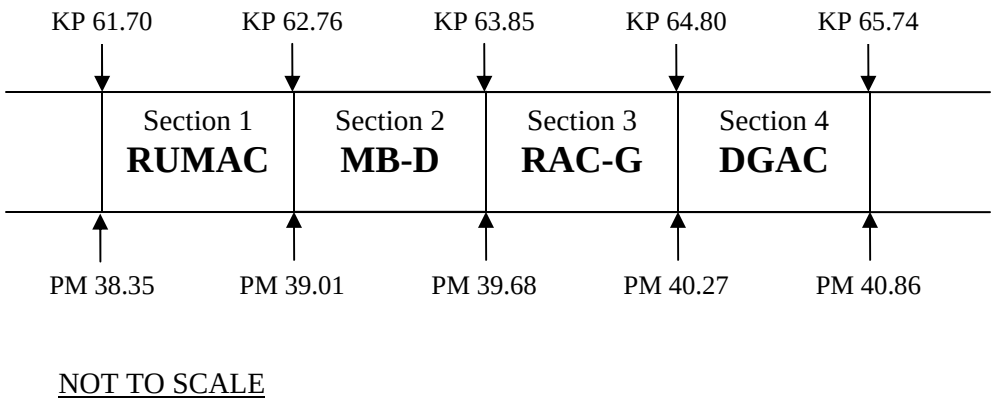



Figure 1-1 Layout of Test Sections

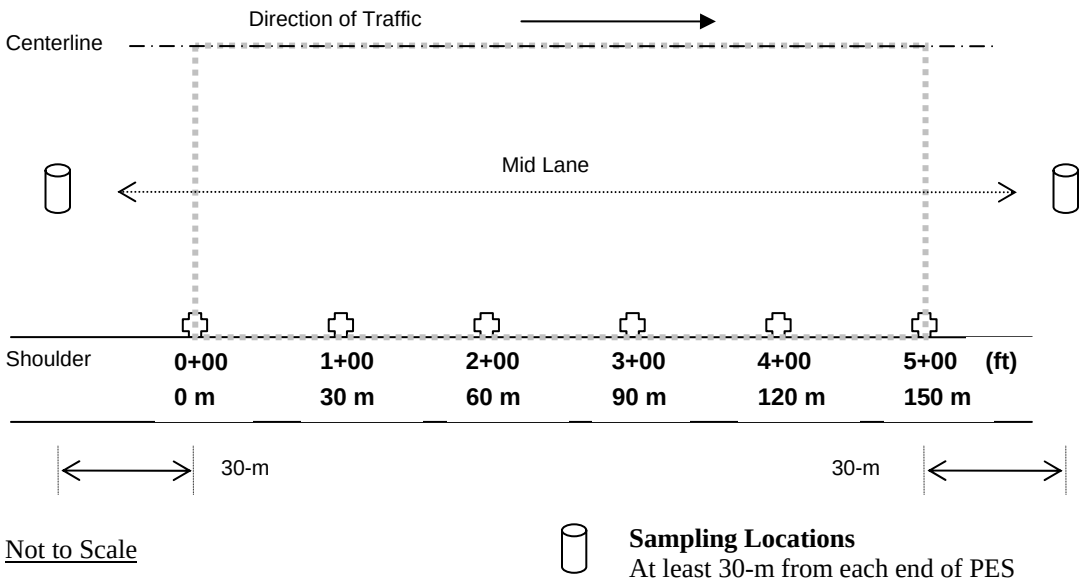



Figure 1-2 Layout of Performance Evaluation Section (PES)

# 2.0 PRE-CONSTRUCTION ACTIVITIES

Key field activities for pre-construction include deflection testing and a visual distress survey of the existing pavement to establish performance evaluation sections (PESs).

## 2.1 ESTABLISHMENT OF PERFORMANCE EVALUATION SECTIONS (PESS)

The deflection testing was performed in the westbound (WB) lane (one lane in each travel direction) at 40-m (125 ft) intervals within each test section. Areas of severe distress and/or planned digouts were excluded from FWD testing whenever possible. Within each test section a PES of 150 m (500 ft) in length was selected based on deflection, pavement condition, and roadway geometry. In most cases, the PES was established based on available non-digout area within the test section. Table 2-1 is a summary of the established PES locations.

Table 2-1 Approximate Test Section/PES Locations (WB)

| Section/ PES | Mix | Test Section | | | | PES (PM) | |
|---|---|---|---|---|---|---|---|
| | | Between (KP) | | Between (PM) | | Begin | End |
| 1 | RUMAC | 61.70 | 62.76 | 38.3468 | 39.0056 | 38.9811 | 38.8864 |
| 2 | Type-D MB | 62.76 | 63.82 | 39.0056 | 39.6644 | 39.1400 | 39.0453 |
| 3 | RAC-G | 63.85 | 64.80 | 39.6830 | 40.2735 | 40.0056 | 39.9109 |
| 4 | DGAC (Type A) | 64.80 | 65.74 | 40.2735 | 40.8577 | 40.4345 | 40.3398 |
| 5 | Cancelled | 65.74 | 66.74 | 40.8577 | 41.4792 | 41.1030 | 41.0083 |

Four of the five PESs were located in areas where there were no marked digouts. The ending of PES 3 was approximately 2 m (6 ft) into a marked digout area; all other areas in this test section showed severe distress (primarily fatigue cracking) and/or were marked as digouts. Paddles showing the beginning and ending of each PES were installed off the shoulder.

## 2.2 DEFLECTION TESTING, CORING, AND CONDITION SURVEY ON THE ESTABLISHED PESS

After establishing the PESs, deflection testing was conducted within the PES in the outer wheel path and mid-lane at 15 m (50 ft) intervals according to the FWD testing plan presented in the work plan. Figure 2-1 shows the distribution of the normalized deflection collected in the outer wheel path. Detailed deflection data are provided in Appendix A.

One core was obtained at the beginning of each PES: 1, 3, 4 and 5. Two cores at the beginning of PES 2 were extracted because the travel lane pavement appeared to be widened. As shown in Table 2-2 field cores revealed that the existing pavement generally consists of 125 to 165 mm (5 to 6.5 inches) of asphalt concrete (AC) over approximately 150 mm (6 inches) of cement treated base (CTB). Note that the construction plan shows the existing pavement has 60-90 mm AC, 200 mm CTB, and 300-480 mm aggregate subbase. The existing pavement data showing in the construction plan are not compatible with the core data.

Table 2-2 Core Information

| PES | Layer Type | Core Description | Pavement Data from Construction Plan |
|---|---|---|---|
| 1 | AC over CTB | AC 150 mm, CTB broken | AC, 60-90 mm<br>CTB, 200 mm<br>Aggr. Subbase, 300-480 mm |
| 2 | AC over CTB | AC 165 mm, CTB broken (CL)<br>AC 190 mm, CTB 175 mm (OWP) | |
| 3 | AC over CTB | AC 125 mm, 150 mm CTB | |
| 4 | AC over CTB | AC 125 mm, CTB broken | |
| 5 | AC over CTB | AC 125 mm, CTB broken | |

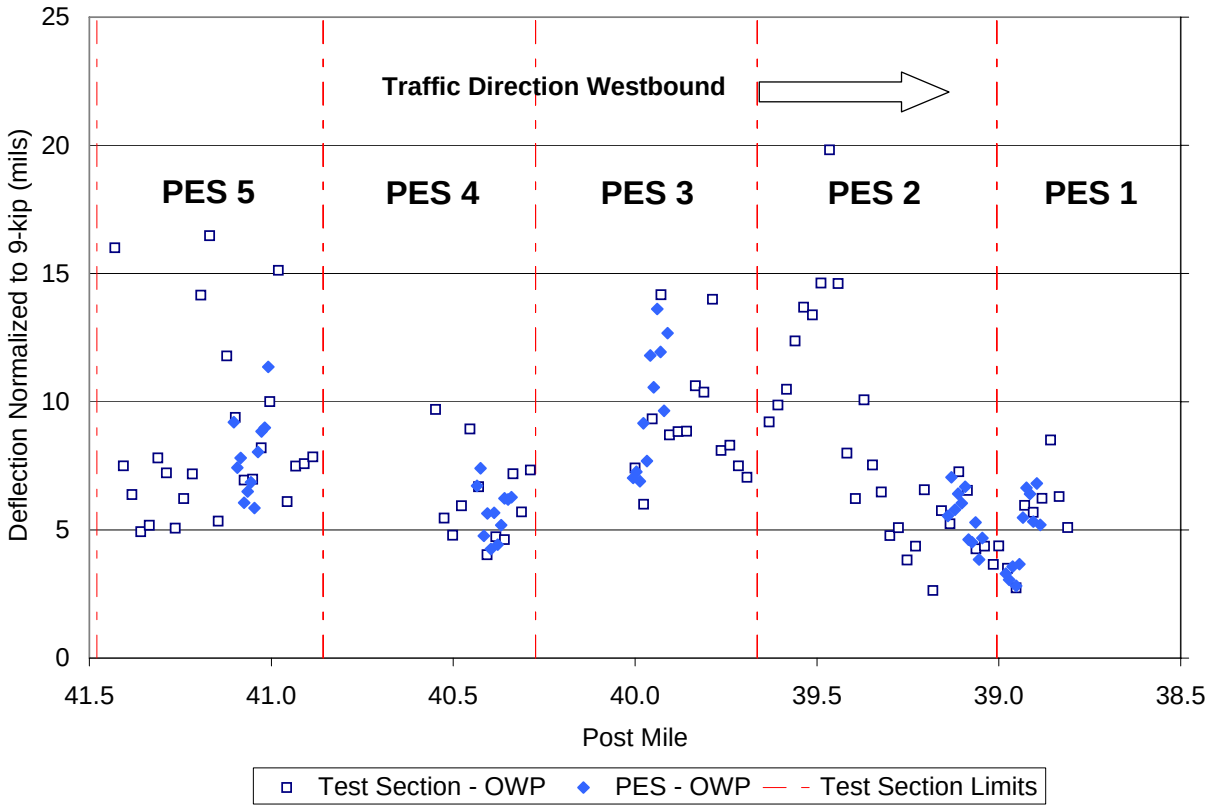



Figure 2-1 Distribution of Normalized Deflections in the Outer Wheel Path

As noted above, a pavement condition survey of the PESs was performed. Although the severities of distresses vary, the primary wheel path distresses were longitudinal cracking and/or fatigue cracking. Low to moderate severity of block cracking and transverse cracking were also observed. Maximum rut depths in both outer and inner wheel paths were measured using a 6-ft straight edge starting at the beginning of the PES and at 15 m (50 ft) intervals thereafter. The maximum rut depths varied by PES. In most locations, the rut depths were generally less than 7 mm. Detailed distress maps and measured rut depths for each PES are provided in Appendix B. Photographs taken during the field work are shown in Appendix C.

# 3.0 SUMMARY

This report documents the work conducted during the pre-construction phase. Five PESs were established based on the deflection data. Paddles were installed off the shoulder for easy location of the PESs.

Based on the core information, the existing pavement generally consists of 125 to 165 mm (5 to 6.5 inches) of AC over approximately 150 mm (6 inches) of CTB. The primary wheel path distresses were moderately severe longitudinal cracking and/or fatigue cracking. Maximum rut depths varied by PES but in most locations were less than 7 mm.

The construction of this project will take place in August 2005. A construction report is to be developed for the completed project.

# APPENDIX A
# DEFLECTION DATA

This appendix provides deflection data collected during the field work. Tables A-1 through A-5 show deflection test locations and deflections normalized to 40 kN (9,000 lb) load. The deflection test locations were calculated from post mile marks alongside westbound of the State Route 20, since the Digital Measurement Instrument (DMI) mounted on the falling weight deflectometer was not functioning at the time of field testing.

Table A-1. Deflection Testing Location and Normalized (9-kip) Deflection for Test Section 1

| Test Point | Test Section Post Mile | Outer Wheel Path Deflection, mils | PES Post Mile | Outer Wheel Path Deflection, mils |
|---|---|---|---|---|
| 1 | 39.0000 | 4.372 | 38.9811 | 3.296 |
| 2 | 38.9763 | 3.497 | 38.9716 | 3.060 |
| 3 | 38.9527 | 2.736 | 38.9621 | 3.565 |
| 4 | 38.9290 | 5.960 | 38.9527 | 2.818 |
| 5 | 38.9053 | 5.680 | 38.9432 | 3.666 |
| 6 | 38.8816 | 6.229 | 38.9337 | 5.477 |
| 7 | 38.8580 | 8.511 | 38.9242 | 6.638 |
| 8 | 38.8343 | 6.296 | 38.9148 | 6.405 |
| 9 | 38.8106 | 5.095 | 38.9053 | 5.324 |
| 10 | End of test | | 38.8958 | 6.816 |
| 11 | | | 38.8864 | 5.192 |

**Test Section 1 OWP. Starting at PM 39.0000. Test interval 40 m (125 ft).**

```
M3
Date-Time:  4-28-2005 11: 6:30
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test 1 pattern 1 rwt
Temp:   77.21
Operator: hoffman
Comments: test 1 pm 39.00 pattern 1  rwt
1 1   0.000 1  9.13  4.48  3.08  2.58  2.20  1.86  1.33  0.96  0.69  2.95  3.50  93.8
1 1   0.000 1  8.81  4.29  2.98  2.50  2.11  1.81  1.28  0.93  0.67  2.82  3.42  93.8
1 1   0.000 1  8.74  4.19  2.97  2.45  2.08  1.77  1.24  0.91  0.69  2.80  3.38  93.8
Drop Sequence Completed Time: 11:08
GPS: Quality : DGPS Fix   Latitude = 39°14.271247  N   Longitude = 123°6.695022   W   PDOP = 2.50
Note: test 1-1
2 1   0.000 1  8.74  3.41  2.38  2.02  1.82  1.60  1.09  0.82  0.61  1.98  2.37  97.4
2 1   0.000 1  8.72  3.38  2.37  2.00  1.80  1.61  1.07  0.79  0.62  1.97  2.39  97.4
2 1   0.000 1  8.79  3.41  2.36  2.04  1.82  1.60  1.09  0.82  0.61  1.99  2.39  97.4
Drop Sequence Completed Time: 11:10
GPS: Quality : DGPS Fix   Latitude = 39°14.285906  N   Longitude = 123°6.713452   W   PDOP = 2.60
Note: test 1-2
3 1   0.000 1  9.13  2.81  2.32  2.02  1.72  1.51  1.10  0.80  0.57  2.03  2.28  87.2
3 1   0.000 1  9.06  2.75  2.24  1.97  1.68  1.45  1.08  0.79  0.54  1.99  2.21  87.2
3 1   0.000 1  9.01  2.71  2.25  1.96  1.68  1.47  1.08  0.78  0.55  1.97  2.22  87.2
Drop Sequence Completed Time: 11:11
GPS: Quality : DGPS Fix   Latitude = 39°14.300500  N   Longitude = 123°6.732042   W   PDOP = 2.60
Note: test 1-3
4 1   0.000 1  8.76  5.89  4.51  3.79  3.16  2.58  1.57  1.13  0.78  3.91  4.81  88.6
4 1   0.000 1  8.79  5.81  4.50  3.80  3.16  2.58  1.58  1.13  0.78  3.92  4.77  88.6
4 1   0.000 1  8.74  5.71  4.41  3.75  3.12  2.52  1.55  1.10  0.80  3.87  4.72  88.6
Drop Sequence Completed Time: 11:11
GPS: Quality : DGPS Fix   Latitude = 39°14.315251  N   Longitude = 123°6.750959   W   PDOP = 2.60
Note: test 1-4
5 1 326.000 1  8.69  5.58  4.01  3.27  2.57  2.07  1.19  0.80  0.54  3.50  4.40  87.5
5 1 326.000 1  8.69  5.47  3.97  3.23  2.57  2.05  1.17  0.78  0.56  3.48  4.32  87.5
5 1 326.000 1  8.62  5.36  3.92  3.20  2.53  2.00  1.16  0.78  0.51  3.45  4.27  87.5
Drop Sequence Completed Time: 11:12
GPS: Quality : DGPS Fix   Latitude = 39°14.329820  N   Longitude = 123°6.769567   W   PDOP = 2.60
Note: test 1-5
6 1 650.000 1  8.98  6.29  4.71  3.71  2.87  2.22  1.23  0.79  0.59  3.87  4.77  89.0
6 1 650.000 1  8.84  6.09  4.60  3.66  2.81  2.20  1.21  0.79  0.59  3.80  4.66  89.0
6 1 650.000 1  8.81  6.05  4.59  3.64  2.80  2.20  1.21  0.78  0.60  3.79  4.64  89.0
Drop Sequence Completed Time: 11:13
GPS: Quality : DGPS Fix   Latitude = 39°14.344282  N   Longitude = 123°6.788082   W   PDOP = 2.60
Note: test 1-6
7 1 321.000 1  8.81  8.48  6.64  5.29  4.01  3.07  1.69  1.04  0.68  5.95  7.17  89.4
7 1 321.000 1  8.86  8.33  6.55  5.22  3.97  3.03  1.70  1.01  0.67  5.85  7.05  89.4
7 1 321.000 1  8.81  8.23  6.50  5.20  3.98  3.00  1.68  1.03  0.67  5.82  7.00  89.4
Drop Sequence Completed Time: 11:14
GPS: Quality : DGPS Fix   Latitude = 39°14.358916  N   Longitude = 123°6.806952   W   PDOP = 2.60
Note: test 1-7
8 1   0.000 1  8.28  5.82  4.59  3.67  2.78  2.25  1.33  0.78  0.53  3.69  4.41  85.0
8 1   0.000 1  8.28  5.75  4.55  3.62  2.74  2.23  1.33  0.76  0.51  3.66  4.38  85.0
8 1   0.000 1  8.30  5.82  4.59  3.68  2.78  2.26  1.34  0.79  0.50  3.72  4.40  85.0
Drop Sequence Completed Time: 11:15
GPS: Quality : DGPS Fix   Latitude = 39°14.372894  N   Longitude = 123°6.825972   W   PDOP = 2.60
Note: test 1-8
9 1 340.000 1  9.20  5.26  3.94  3.30  2.74  2.24  1.41  1.00  0.71  3.82  4.42  94.1
9 1 340.000 1  9.08  5.14  3.89  3.27  2.71  2.24  1.41  0.98  0.71  3.76  4.35  94.1
9 1 340.000 1  9.03  5.06  3.83  3.25  2.70  2.21  1.38  0.98  0.67  3.71  4.29  94.1
Drop Sequence Completed Time: 11:16
GPS: Quality : DGPS Fix   Latitude = 39°14.386570  N   Longitude = 123°6.845750   W   PDOP = 2.70
Note: test 1-9
```

**PES 1 OWP. Starting at PM 38.9811. Test interval 15 m (50 ft).**

```
M3
Date-Time:  4-28-2005 11:30: 0
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test 1 pattern 2 rwt
Temp:   74.46
Operator: hoffman
Comments: test 1 pm 39.00+100' pattern 2  rwt
1 1 883.000 1  6.05  2.14  1.64  1.37  1.13  0.98  0.70  0.50  0.39  1.50  1.77 100.3
1 1 883.000 1  9.23  3.38  2.61  2.20  1.82  1.56  1.08  0.81  0.62  2.35  2.79 100.3
1 1 883.000 1 12.04  4.40  3.40  2.86  2.37  2.04  1.43  1.05  0.77  3.04  3.60 100.3
Drop Sequence Completed Time: 11:31
GPS: Quality : DGPS Fix   Latitude = 39°14.282933  N   Longitude = 123°6.709758   W   PDOP = 2.00
Note: test 1-1
2 1 1010.000 1  5.93  1.98  1.50  1.28  1.10  0.96  0.65  0.47  0.39  1.45  1.68 102.9
2 1 1010.000 1  9.06  3.08  2.35  2.00  1.74  1.49  1.04  0.77  0.60  2.28  2.59 102.9
2 1 1010.000 1 11.77  3.94  3.05  2.60  2.24  1.91  1.35  1.00  0.77  2.89  3.30 102.9
Drop Sequence Completed Time: 11:32
GPS: Quality : DGPS Fix   Latitude = 39°14.288763  N   Longitude = 123°6.717387   W   PDOP = 2.00
Note: test 1-2
3 1 1137.000 1  5.86  2.27  1.77  1.53  1.27  1.04  0.69  0.48  0.35  1.64  1.93 102.2
3 1 1137.000 1  8.86  3.51  2.74  2.38  1.98  1.64  1.08  0.78  0.57  2.51  2.96 102.2
3 1 1137.000 1 11.89  4.64  3.67  3.16  2.66  2.20  1.43  1.06  0.77  3.34  3.90 102.2
Drop Sequence Completed Time: 11:32
GPS: Quality : DGPS Fix   Latitude = 39°14.294900  N   Longitude = 123°6.724833   W   PDOP = 2.00
Note: test 1-3
4 1 1260.000 1  5.91  1.79  1.40  1.24  1.07  0.92  0.66  0.49  0.35  1.27  1.48  91.2
4 1 1260.000 1  8.91  2.79  2.16  1.91  1.64  1.43  1.04  0.78  0.54  1.95  2.31  91.2
4 1 1260.000 1 11.67  3.67  2.88  2.53  2.18  1.94  1.36  1.03  0.75  2.53  2.94  91.2
Drop Sequence Completed Time: 11:33
GPS: Quality : DGPS Fix   Latitude = 39°14.300601  N   Longitude = 123°6.732058   W   PDOP = 2.10
Note: test 1-4
5 1 1385.000 1  5.96  2.43  1.73  1.46  1.19  0.98  0.63  0.44  0.32  1.48  1.80  88.3
5 1 1385.000 1  8.96  3.65  2.58  2.19  1.81  1.49  0.99  0.68  0.50  2.24  2.71  88.3
5 1 1385.000 1 11.89  4.75  3.41  2.87  2.40  1.98  1.32  0.92  0.68  2.94  3.50  88.3
Drop Sequence Completed Time: 11:34
GPS: Quality : DGPS Fix   Latitude = 39°14.306403  N   Longitude = 123°6.739477   W   PDOP = 2.10
Note: test 1-5
6 1 1514.000 1  5.98  3.59  2.81  2.33  1.80  1.36  0.84  0.61  0.47  2.29  2.72  99.2
6 1 1514.000 1  8.94  5.44  4.27  3.54  2.78  2.10  1.32  0.96  0.71  3.50  4.13  99.2
6 1 1514.000 1 11.89  7.06  5.55  4.64  3.64  2.75  1.74  1.24  0.94  4.53  5.34  99.2
Drop Sequence Completed Time: 11:35
GPS: Quality : DGPS Fix   Latitude = 39°14.312595  N   Longitude = 123°6.747154   W   PDOP = 2.10
Note: test 1-6
7 1 1641.000 1  6.05  4.36  3.32  2.73  2.09  1.63  0.96  0.63  0.43  2.83  3.47  90.1
7 1 1641.000 1  8.84  6.52  4.94  4.06  3.14  2.46  1.45  0.96  0.71  4.25  5.17  90.1
7 1 1641.000 1 11.65  8.41  6.42  5.26  4.08  3.22  1.93  1.28  0.99  5.50  6.68  90.1
Drop Sequence Completed Time: 11:35
GPS: Quality : DGPS Fix   Latitude = 39°14.318201  N   Longitude = 123°6.754523   W   PDOP = 2.10
Note: test 1-7
8 1 1773.000 1  5.79  4.15  3.17  2.41  1.76  1.37  0.81  0.53  0.40  2.65  3.25  99.6
8 1 1773.000 1  8.74  6.22  4.73  3.65  2.66  2.09  1.28  0.85  0.61  3.95  4.86  99.6
8 1 1773.000 1 11.55  7.98  6.08  4.68  3.49  2.74  1.68  1.06  2.27  5.10  6.22  99.6
Drop Sequence Completed Time: 11:36
GPS: Quality : DGPS Fix   Latitude = 39°14.324122  N   Longitude = 123°6.762145   W   PDOP = 2.10
Note: test 1-8
9 1 1898.000 1  6.13  3.58  2.70  2.24  1.81  1.43  0.83  0.50  0.34  2.45  2.91 104.7
9 1 1898.000 1  9.18  5.43  4.10  3.40  2.77  2.22  1.29  0.79  0.53  3.67  4.36 104.7
9 1 1898.000 1 11.79  6.88  5.20  4.36  3.57  2.85  1.67  1.00  0.68  4.63  5.50 104.7
Drop Sequence Completed Time: 11:37
GPS: Quality : DGPS Fix   Latitude = 39°14.329846  N   Longitude = 123°6.769360   W   PDOP = 2.10
Note: test 1-9
10 1 2027.000 1  5.93  4.55  3.54  2.89  2.21  1.68  0.97  0.63  0.45  3.00  3.62 103.6
10 1 2027.000 1  8.86  6.71  5.22  4.30  3.32  2.57  1.44  0.94  0.67  4.46  5.26 103.6
10 1 2027.000 1 11.57  8.54  6.69  5.50  4.30  3.31  1.90  1.24  0.87  5.71  6.72 103.6
Drop Sequence Completed Time: 11:38
GPS: Quality : DGPS Fix   Latitude = 39°14.335630  N   Longitude = 123°6.776844   W   PDOP = 2.00
Note: test 1-10
11 1 2158.000 1  6.10  3.48  2.20  1.74  1.33  1.05  0.61  0.44  0.33  2.17  2.78  91.2
```

```
11 1 2158.000 1  8.98  5.18  3.30  2.62  2.03  1.63  0.96  0.69  0.52  3.21  4.09  91.2
11 1 2158.000 1 11.47  6.51  4.21  3.34  2.61  2.08  1.26  0.88  0.66  4.05  5.09  91.2
Drop Sequence Completed Time: 11:38
GPS: Quality : DGPS Fix   Latitude = 39°14.341310  N   Longitude = 123°6.784514   W   PDOP = 2.00
Note: test 1-11
```

**PES 1 CL. Starting at PM 38.9811. Test interval 15 m (50 ft).**

```
M3
Date-Time:  4-28-2005 11:40:50
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test 1 pattern 2 center
Temp:   83.22
Operator: hoffman
Comments: test 1 pm 39.00+100' pattern 2  center
1 1 3456.000 1  6.10  1.96  1.55  1.29  1.08  0.93  0.66  0.50  0.36  1.30  1.52 100.0
1 1 3456.000 1  9.08  3.04  2.43  2.03  1.67  1.45  1.00  0.76  0.58  2.03  2.33 100.0
1 1 3456.000 1 11.89  3.96  3.18  2.65  2.21  1.88  1.32  1.00  0.73  2.64  3.04 100.0
Drop Sequence Completed Time: 11:41
GPS: Quality : DGPS Fix   Latitude = 39°14.282887  N   Longitude = 123°6.710191   W   PDOP = 2.00
Note: test 1-1
2 1 3585.000 1  5.88  2.20  1.53  1.31  1.10  0.93  0.64  0.46  0.37  1.42  1.82 104.7
2 1 3585.000 1  9.03  3.39  2.38  2.06  1.75  1.50  1.05  0.76  0.60  2.24  2.74 104.7
2 1 3585.000 1 11.84  4.34  3.04  2.63  2.27  1.91  1.34  0.97  0.75  2.86  3.51 104.7
Drop Sequence Completed Time: 11:42
GPS: Quality : DGPS Fix   Latitude = 39°14.288585  N   Longitude = 123°6.717596   W   PDOP = 2.00
Note: test 1-2
3 1 3720.000 1  6.01  2.12  1.60  1.40  1.17  0.98  0.67  0.49  0.37  1.46  1.70 104.0
3 1 3720.000 1  8.81  3.26  2.46  2.15  1.84  1.57  1.05  0.75  0.54  2.24  2.59 104.0
3 1 3720.000 1 11.65  4.21  3.18  2.79  2.39  2.05  1.36  0.98  0.65  2.88  3.31 104.0
Drop Sequence Completed Time: 11:42
GPS: Quality : DGPS Fix   Latitude = 39°14.294672  N   Longitude = 123°6.725482   W   PDOP = 2.00
Note: test 1-3
4 1 3843.000 1  5.88  1.85  1.39  1.21  1.04  0.89  0.62  0.45  0.34  1.34  1.55 101.4
4 1 3843.000 1  8.81  2.85  2.20  1.89  1.61  1.41  0.98  0.73  0.52  2.01  2.33 101.4
4 1 3843.000 1 11.79  3.75  2.89  2.54  2.17  1.85  1.32  0.98  0.72  2.65  2.99 101.4
Drop Sequence Completed Time: 11:43
GPS: Quality : DGPS Fix   Latitude = 39°14.300131  N   Longitude = 123°6.732810   W   PDOP = 2.00
Note: test 1-4
5 1 3974.000 1  6.25  1.76  1.35  1.17  1.04  0.91  0.66  0.46  0.34  1.21  1.37 103.3
5 1 3974.000 1  9.18  2.66  2.07  1.78  1.59  1.40  0.99  0.72  0.52  1.84  2.06 103.3
5 1 3974.000 1 11.91  3.45  2.65  2.35  2.09  1.82  1.29  0.96  0.67  2.37  2.63 103.3
Drop Sequence Completed Time: 11:44
GPS: Quality : DGPS Fix   Latitude = 39°14.306111  N   Longitude = 123°6.740271   W   PDOP = 2.00
Note: test 1-5
6 1 4095.000 1  6.01  2.68  2.02  1.64  1.33  1.07  0.73  0.56  0.42  1.60  1.89 104.4
6 1 4095.000 1  8.98  4.17  3.16  2.58  2.07  1.70  1.13  0.86  0.62  2.46  2.95 104.4
6 1 4095.000 1 11.84  5.46  4.19  3.41  2.73  2.26  1.51  1.14  0.81  3.22  3.82 104.4
Drop Sequence Completed Time: 11:45
GPS: Quality : DGPS Fix   Latitude = 39°14.312009  N   Longitude = 123°6.747772   W   PDOP = 2.00
Note: test 1-6
7 1 4226.000 1  6.03  3.46  2.48  2.04  1.68  1.34  0.84  0.59  0.45  2.00  2.54 105.5
7 1 4226.000 1  8.89  5.26  3.81  3.13  2.60  2.10  1.30  0.94  0.69  3.07  3.90 105.5
7 1 4226.000 1 11.82  6.85  5.01  4.13  3.45  2.77  1.73  1.25  0.92  3.99  5.01 105.5
Drop Sequence Completed Time: 11:45
GPS: Quality : DGPS Fix   Latitude = 39°14.318036  N   Longitude = 123°6.755227   W   PDOP = 2.00
Note: test 1-7
8 1   0.000 1  6.08  3.43  2.48  1.97  1.58  1.27  0.80  0.54  0.37  2.18  2.74 104.4
8 1   0.000 1  8.91  5.14  3.72  2.96  2.38  1.95  1.21  0.84  0.61  3.26  4.04 104.4
8 1   0.000 1 11.60  6.74  4.90  3.89  3.14  2.59  1.62  1.11  0.81  4.21  5.29 104.4
Drop Sequence Completed Time: 11:46
GPS: Quality : DGPS Fix   Latitude = 39°14.323917  N   Longitude = 123°6.762566   W   PDOP = 2.00
Note: test 1-8
9 1   0.000 1  5.96  3.63  2.63  2.12  1.64  1.25  0.72  0.49  0.35  2.48  3.02  95.2
9 1   0.000 1  9.11  5.59  4.05  3.27  2.57  1.99  1.14  0.76  0.54  3.79  4.57  95.2
9 1   0.000 1 11.67  7.01  5.16  4.15  3.29  2.56  1.48  1.00  0.69  4.75  5.71  95.2
Drop Sequence Completed Time: 11:47
GPS: Quality : DGPS Fix   Latitude = 39°14.329738  N   Longitude = 123°6.769773   W   PDOP = 2.00
Note: test 1-9
```

```
10 1 116.000 1  5.88  3.21  2.32  1.89  1.54  1.30  0.85  0.57  0.44  2.10  2.55 105.1

10 1 116.000 1  8.81  5.06  3.73  3.03  2.46  2.07  1.37  0.95  0.63  3.32  3.94 105.1
10 1 116.000 1 11.50  6.49  4.85  3.91  3.21  2.73  1.82  1.24  0.83  4.26  5.04 105.1
Drop Sequence Completed Time: 11:48
GPS: Quality : DGPS Fix   Latitude = 39°14.335212  N   Longitude = 123°6.777351   W   PDOP = 2.00
Note: test 1-10
11 1 221.000 1  6.08  2.41  1.69  1.37  1.14  0.97  0.63  0.44  0.33  1.38  1.70 102.5
11 1 221.000 1  9.06  3.80  2.70  2.20  1.82  1.55  1.00  0.72  0.54  2.21  2.66 102.5
11 1 221.000 1 11.91  4.94  3.49  2.85  2.42  2.03  1.29  0.95  0.68  2.90  3.45 102.5
Drop Sequence Completed Time: 11:48
GPS: Quality : DGPS Fix   Latitude = 39°14.341053  N   Longitude = 123°6.785148   W   PDOP = 2.00
Note: test 1-11
```

Table A-2. Deflection Testing Location and Normalized (9-kip) Deflection for Test Section 2

| Test Point | Test Section Post Mile | Outer Wheel Path Deflection, mils | PES Post Mile | Outer Wheel Path Deflection, mils |
|---|---|---|---|---|
| 1 | 39.6311 | 9.213 | 39.1400 | 5.545 |
| 2 | 39.6074 | 9.872 | 39.1305 | 7.050 |
| 3 | 39.5837 | 10.483 | 39.1211 | 5.781 |
| 4 | 39.5600 | 12.371 | 39.1116 | 6.406 |
| 5 | 39.5364 | 13.685 | 39.1021 | 6.041 |
| 6 | 39.5127 | 13.386 | 39.0927 | 6.687 |
| 7 | 39.4890 | 14.630 | 39.0832 | 4.619 |
| 8 | 39.4653 | 19.824 | 39.0737 | 4.521 |
| 9 | 39.4417 | 14.609 | 39.0642 | 5.294 |
| 10 | 39.4180 | 7.994 | 39.0548 | 3.845 |
| 11 | 39.3943 | 6.222 | 39.0453 | 4.680 |
| 12 | 39.3706 | 10.073 | End of test | |
| 13 | 39.3470 | 7.530 | | |
| 14 | 39.3233 | 6.475 | | |
| 15 | 39.2996 | 4.779 | | |
| 16 | 39.2759 | 5.085 | | |
| 17 | 39.2523 | 3.829 | | |
| 18 | 39.2286 | 4.367 | | |
| 19 | 39.2049 | 6.565 | | |
| 20 | 39.1813 | 2.633 | | |
| 21 | 39.1576 | 5.751 | | |
| 22 | 39.1339 | 5.235 | | |
| 23 | 39.1102 | 7.265 | | |
| 24 | 39.0866 | 6.537 | | |
| 25 | 39.0629 | 4.259 | | |
| 26 | 39.0392 | 4.364 | | |
| 27 | 39.0155 | 3.657 | | |

**Test Section 2 OWP. Starting at PM 39.6311. Test interval 40 m (125 ft).**

```
M3
Date-Time:  4-28-2005  8: 8:42
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test 2 pattern1 rwt
Temp:   59.87
Operator: hoffman
Comments: test 2 pm 39.65 -100' pattern 1 rwt
1 1 -2147483647.000 1  8.23  8.54  7.28  6.18  4.86  3.71  1.92  1.02  0.57  6.58  7.57  63.0
1 1 -2147483647.000 1  8.30  8.48  7.23  6.13  4.87  3.73  1.90  1.01  0.57  6.52  7.54  63.0
1 1 -2147483647.000 1  8.45  8.55  7.30  6.22  4.91  3.77  1.94  1.04  0.59  6.60  7.60  63.0
Drop Sequence Completed Time: 08:13
GPS: Quality : DGPS Fix   Latitude = 39°13.941402  N   Longitude = 123°6.162870   W   PDOP = 2.20
Note: test 1-1
2 1 -2147483647.000 1  8.33  9.31  7.85  6.59  5.11  3.83  1.81  0.87  0.47  7.11  8.28  64.5
2 1 -2147483647.000 1  8.33  9.13  7.72  6.52  5.06  3.80  1.82  0.90  0.51  6.96  8.10  64.5
2 1 -2147483647.000 1  8.42  9.07  7.67  6.45  5.02  3.79  1.81  0.89  0.48  6.89  8.01  64.5
Drop Sequence Completed Time: 08:13
GPS: Quality : DGPS Fix   Latitude = 39°13.949247  N   Longitude = 123°6.187273   W   PDOP = 2.20
Note: test 1-2
3 1 -2147483647.000 1  8.30  9.89  8.22  6.92  5.35  3.98  1.91  0.98  0.58  7.73  8.95  63.7
3 1 -2147483647.000 1  8.33  9.74  8.10  6.84  5.31  3.97  1.94  1.00  0.59  7.58  8.82  63.7
3 1 -2147483647.000 1  8.62  9.78  8.19  6.90  5.36  4.00  1.95  1.00  0.59  7.61  8.83  63.7
Drop Sequence Completed Time: 08:14
GPS: Quality : DGPS Fix   Latitude = 39°13.957763  N   Longitude = 123°6.211425   W   PDOP = 2.20
Note: test 1-3
4 1 -2147483647.000 1  8.40 11.87  9.33  7.45  5.35  3.70  1.55  0.85  0.66  8.41 10.24  61.9
4 1 -2147483647.000 1  8.30 11.39  8.98  7.23  5.19  3.60  1.52  0.84  0.64  8.10  9.86  61.9
4 1 -2147483647.000 1  8.42 11.27  8.97  7.22  5.19  3.63  1.54  0.88  0.63  8.06  9.78  61.9
Drop Sequence Completed Time: 08:15
GPS: Quality : DGPS Fix   Latitude = 39°13.966348  N   Longitude = 123°6.235338   W   PDOP = 2.20
Note: test 1-4
5 1 -2147483647.000 1  8.54 13.25 12.06  9.21  4.45  2.34  1.13  0.91  0.83  9.01 10.96  60.8
5 1 -2147483647.000 1  8.59 12.96 11.83  9.09  4.41  2.30  1.17  0.92  0.84  8.83 10.71  60.8
5 1 -2147483647.000 1  8.59 12.90 11.79  9.10  4.41  2.33  1.19  0.92  0.85  8.79 10.65  60.8
Drop Sequence Completed Time: 08:16
GPS: Quality : DGPS Fix   Latitude = 39°13.975135  N   Longitude = 123°6.259821   W   PDOP = 2.20
Note: test 1-5
6 1 -2147483647.000 1  8.57 13.11 10.57  8.51  6.08  4.17  1.50  0.66  0.44  8.67 10.74  59.7
6 1 -2147483647.000 1  8.67 12.81 10.33  8.36  6.01  4.14  1.48  0.68  0.42  8.52 10.50  59.7
6 1 -2147483647.000 1  8.72 12.69 10.25  8.32  6.00  4.14  1.49  0.67  0.42  8.43 10.42  59.7
Drop Sequence Completed Time: 08:16
GPS: Quality : DGPS Fix   Latitude = 39°13.983532  N   Longitude = 123°6.283429   W   PDOP = 2.20
Note: test 1-6
7 1 -2147483647.000 1  8.57 14.25 12.17 10.07  7.52  5.30  2.12  0.82  0.67 10.01 12.05  63.4
7 1 -2147483647.000 1  8.74 14.10 12.07 10.06  7.51  5.33  2.16  0.85  0.69  9.94 11.91  63.4
7 1 -2147483647.000 1  8.57 13.72 11.81  9.82  7.37  5.22  2.12  0.83  0.66  9.70 11.66  63.4
Drop Sequence Completed Time: 08:17
GPS: Quality : DGPS Fix   Latitude = 39°13.992239  N   Longitude = 123°6.307024   W   PDOP = 2.20
Note: test 1-7
8 1 -2147483647.000 1  8.54 19.03 14.96 11.56  7.90  4.53  2.09  1.22  0.82 13.46 16.93  64.5
8 1 -2147483647.000 1  8.57 18.85 14.89 11.56  7.91  4.59  2.12  1.23  0.84 13.46 16.79  64.5
8 1 -2147483647.000 1  8.64 18.84 14.92 11.60  8.00  4.62  2.12  1.25  0.87 13.48 16.87  64.5
Drop Sequence Completed Time: 08:18
GPS: Quality : DGPS Fix   Latitude = 39°14.001143  N   Longitude = 123°6.331356   W   PDOP = 2.20
Note: test 1-8
9 1 -2147483647.000 1  8.79 14.46 12.34 10.51  8.44  6.64  3.63  2.25  1.42 10.93 12.54  67.7
9 1 -2147483647.000 1  8.59 14.02 12.00 10.29  8.27  6.52  3.56  2.21  1.36 10.67 12.20  67.7
9 1 -2147483647.000 1  8.79 14.00 12.00 10.30  8.29  6.55  3.61  2.23  1.41 10.67 12.23  67.7
Drop Sequence Completed Time: 08:19
GPS: Quality : DGPS Fix   Latitude = 39°14.009795  N   Longitude = 123°6.355300   W   PDOP = 2.20
Note: test 1-9
10 1 -2147483647.000 1  9.03  8.10  6.42  5.19  4.02  3.10  1.72  1.14  0.81  5.36  6.55  66.7
10 1 -2147483647.000 1  8.91  7.91  6.31  5.10  3.97  3.06  1.69  1.12  0.76  5.30  6.46  66.7
10 1 -2147483647.000 1  8.89  7.82  6.25  5.05  3.94  3.03  1.70  1.13  0.77  5.26  6.42  66.7
Drop Sequence Completed Time: 08:19
GPS: Quality : DGPS Fix   Latitude = 39°14.018637  N   Longitude = 123°6.378854   W   PDOP = 2.20
Note: test 1-10
11 1 -2147483647.000 1  8.84  6.15  5.32  4.59  3.73  3.07  1.79  1.15  0.75  4.76  5.49  61.9
```

```
11 1 -2147483647.000 1  8.79  6.08  5.28  4.55  3.72  3.01  1.77  1.18  0.74  4.71  5.42  61.9
11 1 -2147483647.000 1  8.74  6.00  5.18  4.47  3.66  3.00  1.75  1.15  0.75  4.66  5.31  61.9
Drop Sequence Completed Time: 08:20
GPS: Quality : DGPS Fix   Latitude = 39°14.027608  N   Longitude = 123°6.402948   W   PDOP = 2.20
Note: test 1-11
12 1 -2147483647.000 1  8.84 10.13  8.54  7.23  5.70  4.42  2.40  1.47  1.05  7.25  8.51  68.8
12 1 -2147483647.000 1  8.91  9.90  8.37  7.09  5.63  4.37  2.40  1.50  1.07  7.15  8.35  68.8
12 1 -2147483647.000 1  8.84  9.73  8.26  7.02  5.56  4.33  2.37  1.49  1.03  7.04  8.20  68.8
Drop Sequence Completed Time: 08:21
GPS: Quality : DGPS Fix   Latitude = 39°14.036753  N   Longitude = 123°6.426522   W   PDOP = 2.20
Note: test 1-12
13 1 -2147483647.000 1  8.86  7.60  6.53  5.58  4.44  3.48  1.82  1.05  0.71  5.49  6.43  64.8
13 1 -2147483647.000 1  8.96  7.46  6.41  5.50  4.40  3.44  1.82  1.05  0.69  5.40  6.33  64.8
13 1 -2147483647.000 1  8.94  7.33  6.30  5.42  4.35  3.39  1.80  1.06  0.66  5.33  6.22  64.8
Drop Sequence Completed Time: 08:22
GPS: Quality : DGPS Fix   Latitude = 39°14.046799  N   Longitude = 123°6.449647   W   PDOP = 2.20
Note: test 1-13
14 1 -2147483647.000 1  8.72  6.39  5.50  4.78  3.98  3.21  1.91  1.17  0.74  4.79  5.57  65.6
14 1 -2147483647.000 1  8.64  6.20  5.37  4.68  3.88  3.14  1.87  1.13  0.73  4.70  5.43  65.6
14 1 -2147483647.000 1  8.84  6.26  5.38  4.68  3.91  3.17  1.90  1.15  0.74  4.71  5.45  65.6
Drop Sequence Completed Time: 08:22
GPS: Quality : DGPS Fix   Latitude = 39°14.057999  N   Longitude = 123°6.471932   W   PDOP = 2.20
Note: test 1-14
15 1 -2147483647.000 1  9.20  4.97  4.25  3.69  3.04  2.51  1.61  1.09  0.77  3.76  4.29  64.8
15 1 -2147483647.000 1  9.01  4.78  4.07  3.52  2.95  2.43  1.56  1.06  0.77  3.62  4.12  64.8
15 1 -2147483647.000 1  9.08  4.74  4.05  3.51  2.94  2.44  1.57  1.07  0.75  3.62  4.14  64.8
Drop Sequence Completed Time: 08:26
GPS: Quality : DGPS Fix   Latitude = 39°14.070304  N   Longitude = 123°6.493333   W   PDOP = 2.50
Note: test 1-15
16 1 -2147483647.000 1  8.94  5.14  4.44  3.88  3.22  2.61  1.53  0.98  0.65  3.84  4.42  63.4
16 1 -2147483647.000 1  8.79  4.96  4.30  3.76  3.13  2.53  1.49  0.95  0.62  3.71  4.33  63.4
16 1 -2147483647.000 1  8.89  4.94  4.28  3.75  3.13  2.54  1.49  0.96  0.64  3.73  4.31  63.4
Drop Sequence Completed Time: 08:27
GPS: Quality : DGPS Fix   Latitude = 39°14.083525  N   Longitude = 123°6.513127   W   PDOP = 2.50
Note: test 1-16
17 1 -2147483647.000 1  9.13  3.92  3.40  2.93  2.44  1.94  1.16  0.77  0.52  3.04  3.52  60.8
17 1 -2147483647.000 1  9.06  3.85  3.37  2.91  2.43  1.96  1.17  0.77  0.51  3.03  3.46  60.8
17 1 -2147483647.000 1  8.98  3.79  3.32  2.86  2.39  1.92  1.16  0.74  0.52  3.00  3.43  60.8
Drop Sequence Completed Time: 08:28
GPS: Quality : DGPS Fix   Latitude = 39°14.097870  N   Longitude = 123°6.532172   W   PDOP = 2.20
Note: test 1-17
18 1 -2147483647.000 1  8.64  4.25  3.40  2.81  2.28  1.82  1.07  0.69  0.42  2.90  3.56  61.5
18 1 -2147483647.000 1  8.72  4.24  3.39  2.82  2.30  1.83  1.07  0.69  0.43  2.92  3.58  61.5
18 1 -2147483647.000 1  8.69  4.15  3.34  2.78  2.27  1.81  1.07  0.68  0.40  2.89  3.51  61.5
Drop Sequence Completed Time: 08:28
GPS: Quality : DGPS Fix   Latitude = 39°14.112932  N   Longitude = 123°6.550203   W   PDOP = 2.20
Note: test 1-18
19 1 -2147483647.000 1  8.67  6.46  5.62  4.85  3.96  3.15  1.67  0.99  0.62  4.63  5.45  61.9
19 1 -2147483647.000 1  8.72  6.33  5.53  4.78  3.93  3.12  1.65  1.00  0.61  4.59  5.34  61.9
19 1 -2147483647.000 1  8.67  6.22  5.44  4.71  3.88  3.08  1.63  0.98  0.61  4.53  5.30  61.9
Drop Sequence Completed Time: 08:29
GPS: Quality : DGPS Fix   Latitude = 39°14.128964  N   Longitude = 123°6.566397   W   PDOP = 2.70
Note: test 1-19
20 1 -2147483647.000 1  8.86  2.61  2.04  1.75  1.45  1.26  0.85  0.65  0.52  1.79  2.11  61.9
20 1 -2147483647.000 1  8.86  2.59  2.04  1.75  1.46  1.27  0.84  0.64  0.55  1.80  2.08  61.9
20 1 -2147483647.000 1  8.84  2.57  2.00  1.74  1.46  1.24  0.85  0.65  0.54  1.77  2.08  61.9
Drop Sequence Completed Time: 08:30
GPS: Quality : DGPS Fix   Latitude = 39°14.146240  N   Longitude = 123°6.581637   W   PDOP = 2.70
Note: test 1-20
21 1 -2147483647.000 1  8.84  5.72  4.75  3.99  3.13  2.47  1.49  1.02  0.78  4.13  4.87  61.5
21 1 -2147483647.000 1  9.08  5.78  4.81  4.04  3.18  2.49  1.52  1.03  0.76  4.18  4.95  61.5
21 1 -2147483647.000 1  8.98  5.69  4.70  3.97  3.12  2.48  1.46  1.02  0.78  4.09  4.86  61.5
Drop Sequence Completed Time: 08:31
GPS: Quality : DGPS Fix   Latitude = 39°14.163608  N   Longitude = 123°6.595392   W   PDOP = 2.70
Note: test 1-21
22 1 -2147483647.000 1  8.94  5.25  4.45  3.86  3.27  2.76  1.87  1.36  1.03  4.03  4.59  65.9
22 1 -2147483647.000 1  8.94  5.20  4.42  3.83  3.27  2.75  1.85  1.34  1.04  4.02  4.56  65.9
22 1 -2147483647.000 1  8.94  5.15  4.40  3.84  3.25  2.74  1.86  1.36  1.03  3.99  4.55  65.9
Drop Sequence Completed Time: 08:32
GPS: Quality : DGPS Fix   Latitude = 39°14.188182  N   Longitude = 123°6.614830   W   PDOP = 2.40
Note: test 1-22
```

```
23 1 -2147483647.000 1  8.94  7.27  6.38  5.59  4.65  3.89  2.54  1.78  1.28  5.84  6.60  65.9
23 1 -2147483647.000 1  8.86  7.11  6.23  5.49  4.58  3.85  2.50  1.75  1.26  5.70  6.47  65.9
23 1 -2147483647.000 1  8.76  7.06  6.19  5.42  4.52  3.83  2.47  1.75  1.26  5.65  6.38  65.9
Drop Sequence Completed Time: 08:32
GPS: Quality : DGPS Fix   Latitude = 39°14.198917  N   Longitude = 123°6.623114   W   PDOP = 2.20
Note: test 1-23
24 1 -2147483647.000 1  9.03  6.64  5.62  4.84  3.97  3.20  1.84  1.10  0.68  4.90  5.74  69.2
24 1 -2147483647.000 1  8.74  6.38  5.38  4.64  3.80  3.11  1.75  1.05  0.64  4.71  5.51  69.2
24 1 -2147483647.000 1  8.91  6.36  5.38  4.65  3.81  3.10  1.76  1.07  0.66  4.70  5.53  69.2
Drop Sequence Completed Time: 08:33
GPS: Quality : DGPS Fix   Latitude = 39°14.215883  N   Longitude = 123°6.637262   W   PDOP = 2.20
Note: test 1-24
25 1 -2147483647.000 1  9.01  4.31  3.71  3.19  2.55  2.03  1.12  0.66  0.45  3.40  3.90  67.4
25 1 -2147483647.000 1  8.91  4.23  3.64  3.14  2.52  2.00  1.12  0.66  0.45  3.33  3.77  67.4
25 1 -2147483647.000 1  8.96  4.18  3.60  3.10  2.50  2.00  1.12  0.64  0.45  3.30  3.72  67.4
Drop Sequence Completed Time: 08:34
GPS: Quality : DGPS Fix   Latitude = 39°14.232784  N   Longitude = 123°6.652432   W   PDOP = 2.20
Note: test 1-25
26 1 -2147483647.000 1  9.06  4.39  3.72  3.11  2.45  1.91  1.10  0.70  0.47  3.24  3.77  70.7
26 1 -2147483647.000 1  8.91  4.34  3.66  3.08  2.43  1.89  1.08  0.68  0.46  3.17  3.76  70.7
26 1 -2147483647.000 1  8.84  4.27  3.63  3.05  2.39  1.87  1.08  0.67  0.46  3.15  3.65  70.7
Drop Sequence Completed Time: 08:35
GPS: Quality : DGPS Fix   Latitude = 39°14.249058  N   Longitude = 123°6.668315   W   PDOP = 2.20
Note: test 1-26
27 1 -2147483647.000 1  9.01  3.70  3.15  2.72  2.27  1.90  1.24  0.86  0.64  2.83  3.26  67.0
27 1 -2147483647.000 1  8.86  3.61  3.07  2.66  2.24  1.88  1.22  0.85  0.65  2.80  3.14  67.0
27 1 -2147483647.000 1  8.86  3.55  3.05  2.66  2.22  1.84  1.22  0.87  0.65  2.76  3.11  67.0
Drop Sequence Completed Time: 08:36
GPS: Quality : DGPS Fix   Latitude = 39°14.264493  N   Longitude = 123°6.685940   W   PDOP = 2.10
Note: test 1-27
```

**PES 2 OWP. Starting at PM 39.1400. Test interval 15 m (50 ft).**

```
M3
Date-Time:  4-28-2005  8:50: 5
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test 2 pattern2 rwt
Temp:   59.87
Operator: hoffman
Comments: test 2 pm 39.14 pattern 2 rwt
1 1 -2147483647.000 1  5.79  3.57  2.94  2.51  2.03  1.66  1.09  0.84  0.70  2.72  3.19  69.9
1 1 -2147483647.000 1  8.96  5.52  4.56  3.90  3.19  2.62  1.70  1.33  1.06  4.22  4.92  69.9
1 1 -2147483647.000 1 11.89  7.25  6.09  5.18  4.23  3.51  2.27  1.80  1.42  5.54  6.38  69.9
Drop Sequence Completed Time: 08:55
GPS: Quality : DGPS Fix   Latitude = 39°14.174980  N   Longitude = 123°6.604113   W   PDOP = 4.30
Note: test 1-1
2 1 -2147483647.000 1  5.91  4.36  3.34  2.69  2.05  1.60  0.99  0.74  0.59  2.71  3.36  71.8
2 1 -2147483647.000 1  8.54  6.69  5.05  4.06  3.10  2.44  1.47  1.06  0.79  4.10  5.09  71.8
2 1 -2147483647.000 1 11.72  9.09  6.84  5.48  4.25  3.34  1.98  1.46  1.12  5.57  6.91  71.8
Drop Sequence Completed Time: 08:56
GPS: Quality : DGPS Fix   Latitude = 39°14.182296  N   Longitude = 123°6.609811   W   PDOP = 2.70
Note: test 1-2
3 1 -2147483647.000 1  5.91  3.83  3.31  2.88  2.38  2.01  1.29  0.98  0.77  2.97  3.43  72.9
3 1 -2147483647.000 1  9.06  5.82  5.01  4.37  3.69  3.07  1.96  1.47  1.09  4.50  5.16  72.9
3 1 -2147483647.000 1 12.04  7.57  6.58  5.75  4.85  4.10  2.63  2.00  1.49  5.89  6.68  72.9
Drop Sequence Completed Time: 08:57
GPS: Quality : DGPS Fix   Latitude = 39°14.189155  N   Longitude = 123°6.615295   W   PDOP = 2.70
Note: test 1-3
4 1 -2147483647.000 1  5.88  4.06  3.50  3.07  2.62  2.24  1.48  1.13  0.83  3.20  3.73  68.8
4 1 -2147483647.000 1  8.64  6.15  5.28  4.65  3.98  3.40  2.24  1.71  1.28  4.81  5.58  68.8
4 1 -2147483647.000 1 11.60  8.13  6.98  6.19  5.32  4.57  3.06  2.34  1.81  6.34  7.29  68.8
Drop Sequence Completed Time: 08:57
GPS: Quality : DGPS Fix   Latitude = 39°14.196023  N   Longitude = 123°6.620950   W   PDOP = 2.70
Note: test 1-4
5 1 -2147483647.000 1  5.88  3.82  3.31  2.92  2.48  2.10  1.40  0.98  0.70  3.15  3.48  69.6
5 1 -2147483647.000 1  8.79  5.90  5.11  4.53  3.86  3.28  2.21  1.57  1.11  4.89  5.43  69.6
5 1 -2147483647.000 1 11.60  7.77  6.81  6.03  5.17  4.44  3.01  2.16  1.60  6.47  7.13  69.6
Drop Sequence Completed Time: 08:58
GPS: Quality : DGPS Fix   Latitude = 39°14.203060  N   Longitude = 123°6.626580   W   PDOP = 2.70
Note: test 1-5
6 1 -2147483647.000 1  6.08  4.30  3.41  2.86  2.29  1.87  1.17  0.72  0.46  3.09  3.61  69.2
6 1 -2147483647.000 1  8.91  6.62  5.23  4.40  3.56  2.91  1.83  1.19  0.75  4.81  5.68  69.2
6 1 -2147483647.000 1 11.62  8.57  6.81  5.72  4.65  3.87  2.43  1.55  1.05  6.23  7.34  69.2
Drop Sequence Completed Time: 08:59
GPS: Quality : DGPS Fix   Latitude = 39°14.210034  N   Longitude = 123°6.632214   W   PDOP = 2.70
Note: test 1-6
7 1 -2147483647.000 1  5.88  2.94  2.51  2.17  1.79  1.48  0.89  0.57  0.38  2.26  2.59  73.2
7 1 -2147483647.000 1  9.08  4.66  3.97  3.46  2.88  2.38  1.48  0.94  0.61  3.53  4.11  73.2
7 1 -2147483647.000 1 12.08  6.08  5.22  4.54  3.79  3.16  1.97  1.27  0.84  4.64  5.32  73.2
Drop Sequence Completed Time: 08:59
GPS: Quality : DGPS Fix   Latitude = 39°14.216736  N   Longitude = 123°6.638027   W   PDOP = 2.70
Note: test 1-7
8 1 -2147483647.000 1  5.91  2.88  2.36  2.00  1.61  1.28  0.74  0.49  0.33  2.10  2.46  63.7
8 1 -2147483647.000 1  8.72  4.38  3.58  3.06  2.48  1.97  1.19  0.77  0.50  3.26  3.83  63.7
8 1 -2147483647.000 1 11.72  5.88  4.82  4.09  3.35  2.69  1.62  1.05  0.70  4.38  5.10  63.7
Drop Sequence Completed Time: 09:00
GPS: Quality : DGPS Fix   Latitude = 39°14.223670  N   Longitude = 123°6.644112   W   PDOP = 1.90
Note: test 1-8
9 1 -2147483647.000 1  5.88  3.41  2.62  2.17  1.67  1.29  0.67  0.39  0.23  2.24  2.61  70.3
9 1 -2147483647.000 1  8.96  5.27  4.04  3.37  2.63  2.03  1.10  0.64  0.40  3.49  4.13  70.3
9 1 -2147483647.000 1 11.96  6.89  5.30  4.44  3.48  2.72  1.48  0.84  0.52  4.62  5.40  70.3
Drop Sequence Completed Time: 09:01
GPS: Quality : DGPS Fix   Latitude = 39°14.230449  N   Longitude = 123°6.650179   W   PDOP = 2.70
Note: test 1-9
10 1 -2147483647.000 1  6.01  2.59  2.11  1.82  1.47  1.17  0.70  0.43  0.31  1.85  2.20  75.1
10 1 -2147483647.000 1  9.20  3.93  3.24  2.79  2.29  1.84  1.09  0.66  0.47  2.77  3.32  75.1
10 1 -2147483647.000 1 11.91  5.07  4.18  3.60  2.99  2.45  1.46  0.89  0.61  3.57  4.23  75.1
Drop Sequence Completed Time: 09:02
GPS: Quality : DGPS Fix   Latitude = 39°14.236793  N   Longitude = 123°6.656153   W   PDOP = 2.70
Note: test 1-10
11 1 -2147483647.000 1  6.05  3.10  2.56  2.14  1.68  1.31  0.74  0.45  0.31  2.19  2.61  75.4
```

```
11 1 -2147483647.000 1  8.98  4.67  3.82  3.24  2.56  2.02  1.12  0.68  0.50  3.32  3.91  75.4
11 1 -2147483647.000 1 11.89  6.10  5.03  4.22  3.37  2.66  1.54  0.96  0.61  4.29  5.07  75.4
Drop Sequence Completed Time: 09:02
GPS: Quality : DGPS Fix   Latitude = 39°14.243494  N   Longitude = 123°6.662771   W   PDOP = 2.70
Note: test 1-11
```

**PES 2 CL. Starting at PM 39.1400. Test interval 15 m (50 ft).**

```
M3
Date-Time:  4-28-2005  9: 5:15
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test 2 pattern2 center
Temp:   65.71
Operator: hoffman
Comments: test 2 pm 39.14 pattern 2  center
1 1 -2147483647.000 1  6.13  2.21  1.84  1.66  1.49  1.36  1.07  0.88  0.72  1.73  1.95  72.9
1 1 -2147483647.000 1  8.98  3.37  2.82  2.52  2.26  2.05  1.62  1.31  1.02  2.62  2.92  72.9
1 1 -2147483647.000 1 11.99  4.48  3.75  3.38  3.06  2.80  2.19  1.78  1.42  3.54  3.86  72.9
Drop Sequence Completed Time: 09:05
GPS: Quality : DGPS Fix   Latitude = 39°14.174831  N   Longitude = 123°6.604981   W   PDOP = 2.70
Note: test 1-1
2 1 -2147483647.000 1  6.01  2.37  1.89  1.62  1.40  1.22  0.92  0.71  0.59  1.60  1.91  74.3
2 1 -2147483647.000 1  9.06  3.58  2.83  2.41  2.09  1.82  1.34  1.07  0.86  2.38  2.96  74.3
2 1 -2147483647.000 1 12.06  4.81  3.80  3.27  2.83  2.50  1.82  1.43  1.14  3.21  3.94  74.3
Drop Sequence Completed Time: 09:06
GPS: Quality : DGPS Fix   Latitude = 39°14.181592  N   Longitude = 123°6.610709   W   PDOP = 2.70
Note: test 1-2
3 1 -2147483647.000 1  5.81  2.16  1.86  1.68  1.46  1.35  1.04  0.83  0.68  1.75  1.95  75.1
3 1 -2147483647.000 1  8.74  3.23  2.79  2.50  2.24  2.01  1.56  1.23  0.98  2.64  2.93  75.1
3 1 -2147483647.000 1 11.69  4.28  3.69  3.29  2.95  2.65  2.06  1.63  1.28  3.48  3.80  75.1
Drop Sequence Completed Time: 09:07
GPS: Quality : DGPS Fix   Latitude = 39°14.188467  N   Longitude = 123°6.615946   W   PDOP = 2.70
Note: test 1-3
4 1 -2147483647.000 1  6.08  3.19  2.76  2.46  2.15  1.89  1.38  1.04  0.85  2.48  2.82  76.9
4 1 -2147483647.000 1  8.94  4.74  4.11  3.66  3.22  2.84  2.07  1.54  1.18  3.68  4.14  76.9
4 1 -2147483647.000 1 11.94  6.28  5.47  4.88  4.29  3.78  2.78  2.09  1.62  4.87  5.49  76.9
Drop Sequence Completed Time: 09:08
GPS: Quality : DGPS Fix   Latitude = 39°14.195589  N   Longitude = 123°6.621611   W   PDOP = 2.70
Note: test 1-4
5 1 -2147483647.000 1  5.98  2.77  2.41  2.17  1.92  1.70  1.23  0.95  0.72  2.14  2.45  76.5
5 1 -2147483647.000 1  8.96  4.28  3.73  3.35  2.97  2.61  1.95  1.47  1.12  3.30  3.71  76.5
5 1 -2147483647.000 1 11.96  5.64  4.94  4.43  3.93  3.48  2.60  1.98  1.48  4.35  4.87  76.5
Drop Sequence Completed Time: 09:08
GPS: Quality : DGPS Fix   Latitude = 39°14.202500  N   Longitude = 123°6.627343   W   PDOP = 2.70
Note: test 1-5
6 1 -2147483647.000 1  6.01  2.31  1.85  1.61  1.35  1.16  0.81  0.57  0.40  1.65  1.96  76.5
6 1 -2147483647.000 1  9.03  3.54  2.87  2.44  2.10  1.81  1.25  0.92  0.65  2.54  2.93  76.5
6 1 -2147483647.000 1 12.01  4.69  3.83  3.29  2.81  2.43  1.73  1.21  0.88  3.40  3.88  76.5
Drop Sequence Completed Time: 09:09
GPS: Quality : DGPS Fix   Latitude = 39°14.209569  N   Longitude = 123°6.633080   W   PDOP = 2.70
Note: test 1-6
7 1 -2147483647.000 1  6.01  2.24  1.80  1.56  1.28  1.08  0.70  0.48  0.36  1.61  1.85  77.6
7 1 -2147483647.000 1  9.01  3.46  2.82  2.41  2.00  1.68  1.13  0.80  0.56  2.47  2.87  77.6
7 1 -2147483647.000 1 12.06  4.59  3.75  3.24  2.67  2.24  1.50  1.06  0.77  3.25  3.75  77.6
Drop Sequence Completed Time: 09:12
GPS: Quality : DGPS Fix   Latitude = 39°14.216011  N   Longitude = 123°6.637669   W   PDOP = 2.70
Note: test 1-7
8 1 -2147483647.000 1  5.88  2.09  1.64  1.39  1.13  0.95  0.64  0.44  0.33  1.52  1.80  68.1
8 1 -2147483647.000 1  8.98  3.27  2.60  2.20  1.81  1.50  1.02  0.71  0.51  2.34  2.77  68.1
8 1 -2147483647.000 1 11.79  4.29  3.42  2.92  2.41  2.00  1.37  0.94  0.66  3.12  3.64  68.1
Drop Sequence Completed Time: 09:13
GPS: Quality : DGPS Fix   Latitude = 39°14.223586  N   Longitude = 123°6.644637   W   PDOP = 4.10
Note: test 1-8
9 1 -2147483647.000 1  5.93  2.19  1.70  1.43  1.18  0.98  0.60  0.38  0.27  1.57  1.86  77.6
9 1 -2147483647.000 1  8.84  3.41  2.65  2.27  1.86  1.57  0.97  0.61  0.43  2.45  2.91  77.6
9 1 -2147483647.000 1 11.79  4.53  3.58  3.03  2.52  2.09  1.30  0.86  0.59  3.22  3.79  77.6
Drop Sequence Completed Time: 09:14
GPS: Quality : DGPS Fix   Latitude = 39°14.230182  N   Longitude = 123°6.650739   W   PDOP = 2.70
Note: test 1-9
```

```
10 1 -2147483647.000 1  6.01  1.80  1.44  1.23  1.07  0.93  0.65  0.48  0.38  1.28  1.49  77.6
10 1 -2147483647.000 1  8.91  2.74  2.21  1.92  1.65  1.43  1.02  0.73  0.59  1.96  2.27  77.6
10 1 -2147483647.000 1 11.82  3.70  2.99  2.58  2.21  1.91  1.35  0.99  0.74  2.65  2.99  77.6
Drop Sequence Completed Time: 09:14
GPS: Quality : DGPS Fix   Latitude = 39°14.236894  N   Longitude = 123°6.657034   W   PDOP = 2.70
Note: test 1-10
11 1 -2147483647.000 1  5.91  2.62  1.96  1.62  1.32  1.09  0.74  0.52  0.39  1.58  1.96  78.0
11 1 -2147483647.000 1  9.01  4.04  3.03  2.49  2.06  1.69  1.14  0.81  0.58  2.45  2.99  78.0
11 1 -2147483647.000 1 11.89  5.25  3.98  3.29  2.71  2.26  1.52  1.05  0.79  3.16  3.87  78.0
Drop Sequence Completed Time: 09:15
GPS: Quality : DGPS Fix   Latitude = 39°14.243434  N   Longitude = 123°6.663543   W   PDOP = 2.80
Note: test 1-11
```

Table A-3. Deflection Testing Location and Normalized (9-kip) Deflection for Test Section 3

| Test Point | Test Section Post Mile | Outer Wheel Path Deflection, mils | PES Post Mile | Outer Wheel Path Deflection, mils |
|---|---|---|---|---|
| 1 | 40.0000 | 7.408 | 40.0056 | 7.026 |
| 2 | 39.9763 | 6.001 | 39.9961 | 7.265 |
| 3 | 39.9527 | 9.333 | 39.9866 | 6.899 |
| 4 | 39.9290 | 14.170 | 39.9772 | 9.160 |
| 5 | 39.9053 | 8.700 | 39.9677 | 7.684 |
| 6 | 39.8816 | 8.831 | 39.9582 | 11.801 |
| 7 | 39.8580 | 8.847 | 39.9488 | 10.560 |
| 8 | 39.8343 | 10.618 | 39.9393 | 13.621 |
| 9 | 39.8106 | 10.371 | 39.9298 | 11.938 |
| 10 | 39.7869 | 13.991 | 39.9203 | 9.648 |
| 11 | 39.7633 | 8.093 | 39.9109 | 12.678 |
| 12 | 39.7396 | 8.299 | End of test | |
| 13 | 39.7159 | 7.497 | | |
| 14 | 39.6922 | 7.056 | | |

**Test Section 3 OWP. Starting at PM 40.0000. Test interval 40 m (125 ft).**

```
M3
Date-Time:  4-27-2005 13:16:15
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test 3 pattern1
Temp:   78.58
Operator: HOFFMAN
Comments: test 3 pm40.00
1 1 -2147483647.000 1  9.30  7.74  5.97  5.00  4.04  3.23  1.85  1.19  0.77  5.48  6.53  98.5
1 1 -2147483647.000 1  9.28  7.60  5.92  4.96  4.03  3.20  1.84  1.19  0.78  5.40  6.45  98.5
1 1 -2147483647.000 1  9.23  7.55  5.87  4.91  3.97  3.19  1.81  1.16  0.78  5.34  6.33  98.5
Drop Sequence Completed Time: 13:17
GPS: Quality : DGPS Fix   Latitude = 39°13.839667  N   Longitude = 123°5.776100   W   PDOP = 1.80
Note: test 1-1
2 1 -2147483647.000 1  9.25  6.26  4.51  3.84  3.11  2.49  1.55  1.00  0.65  3.96  4.84 101.4
2 1 -2147483647.000 1  9.20  6.09  4.41  3.75  3.05  2.46  1.52  1.01  0.64  3.87  4.77 101.4
2 1 -2147483647.000 1  9.16  6.06  4.41  3.74  3.02  2.45  1.52  0.97  0.63  3.86  4.76 101.4
Drop Sequence Completed Time: 13:19
GPS: Quality : DGPS Fix   Latitude = 39°13.848635  N   Longitude = 123°5.799710   W   PDOP = 1.80
Note: test 1-2
3 1 -2147483647.000 1  9.01  9.56  8.13  6.77  5.32  4.18  2.26  1.31  0.74  6.80  8.18  91.2
3 1 -2147483647.000 1  9.16  9.42  8.04  6.70  5.27  4.16  2.25  1.33  0.74  6.72  8.08  91.2
3 1 -2147483647.000 1  9.16  9.36  8.03  6.67  5.25  4.16  2.25  1.31  0.78  6.74  8.07  91.2
Drop Sequence Completed Time: 13:20
GPS: Quality : DGPS Fix   Latitude = 39°13.856908  N   Longitude = 123°5.824133   W   PDOP = 1.90
Note: test 1-3
4 1 -2147483647.000 1  8.96 14.45 12.53 10.55  7.62  5.16  2.33  1.35  0.90  9.89 12.11  91.9
4 1 -2147483647.000 1  8.94 13.99 12.22 10.37  7.52  5.06  2.29  1.34  0.89  9.71 11.83  91.9
4 1 -2147483647.000 1  8.96 13.85 12.15 10.31  7.51  5.04  2.29  1.34  0.91  9.66 11.79  91.9
Drop Sequence Completed Time: 13:21
GPS: Quality : DGPS Fix   Latitude = 39°13.863611  N   Longitude = 123°5.848642   W   PDOP = 1.90
Note: test 1-4
5 1 -2147483647.000 1  9.08  8.86  7.65  6.54  5.20  4.05  2.16  1.26  0.74  6.44  7.52  93.8
5 1 -2147483647.000 1  9.08  8.83  7.66  6.59  5.23  4.06  2.14  1.26  0.78  6.45  7.50  93.8
5 1 -2147483647.000 1  9.18  8.74  7.60  6.53  5.18  4.02  2.13  1.27  0.77  6.41  7.41  93.8
Drop Sequence Completed Time: 13:22
GPS: Quality : DGPS Fix   Latitude = 39°13.869733  N   Longitude = 123°5.874140   W   PDOP = 1.90
Note: test 1-5
6 1 -2147483647.000 1  9.01  8.97  7.41  6.13  4.76  3.63  1.85  1.16  0.84  6.31  7.49  93.4
6 1 -2147483647.000 1  9.03  8.82  7.35  6.09  4.74  3.60  1.85  1.19  0.81  6.26  7.39  93.4
6 1 -2147483647.000 1  9.06  8.80  7.37  6.13  4.78  3.62  1.86  1.21  0.82  6.30  7.42  93.4
Drop Sequence Completed Time: 13:23
GPS: Quality : DGPS Fix   Latitude = 39°13.875937  N   Longitude = 123°5.899408   W   PDOP = 1.90
Note: test 1-6
7 1 -2147483647.000 1  8.81  8.82  7.16  5.50  4.11  3.17  1.72  1.05  0.79  5.97  7.71  89.0
7 1 -2147483647.000 1  8.79  8.60  7.02  5.41  4.07  3.13  1.71  1.02  0.77  5.85  7.52  89.0
7 1 -2147483647.000 1  8.79  8.52  6.98  5.40  4.04  3.10  1.68  1.03  0.76  5.85  7.43  89.0
Drop Sequence Completed Time: 13:25
GPS: Quality : DGPS Fix   Latitude = 39°13.881784  N   Longitude = 123°5.924777   W   PDOP = 1.90
Note: test 1-7
8 1 -2147483647.000 1  8.67 10.41  7.68  6.34  4.97  3.93  2.12  1.41  0.97  6.27  7.93 101.1
8 1 -2147483647.000 1  8.67 10.21  7.58  6.28  4.91  3.89  2.10  1.41  0.94  6.18  7.83 101.1
8 1 -2147483647.000 1  8.69 10.09  7.53  6.24  4.89  3.88  2.10  1.40  0.93  6.14  7.80 101.1
Drop Sequence Completed Time: 13:26
GPS: Quality : DGPS Fix   Latitude = 39°13.887798  N   Longitude = 123°5.950063   W   PDOP = 1.90
Note: test 1-8
9 1 -2147483647.000 1  8.59 10.06  8.33  6.43  4.66  3.21  1.66  1.02  0.79  5.83  7.44  91.2
9 1 -2147483647.000 1  8.64  9.92  8.22  6.36  4.60  3.19  1.64  1.01  0.81  5.78  7.38  91.2
9 1 -2147483647.000 1  8.64  9.83  8.16  6.32  4.56  3.15  1.66  1.01  0.77  5.75  7.36  91.2
Drop Sequence Completed Time: 13:26
GPS: Quality : DGPS Fix   Latitude = 39°13.893931  N   Longitude = 123°5.975683   W   PDOP = 1.90
Note: test 1-9
10 1 -2147483647.000 1  8.47 13.44  9.51  6.82  4.60  2.86  1.14  0.62  0.51  7.14 12.56  95.2
10 1 -2147483647.000 1  8.52 13.15  9.35  6.71  4.52  2.83  1.16  0.66  0.50  7.02 13.59  95.2
10 1 -2147483647.000 1  8.40 12.88  9.17  6.58  4.44  2.79  1.13  0.63  0.51  6.87 13.86  95.2
Drop Sequence Completed Time: 13:27
GPS: Quality : DGPS Fix   Latitude = 39°13.899823  N   Longitude = 123°6.000484   W   PDOP = 1.90
Note: test 1-10
```

```
11 1 -2147483647.000 1  8.91  8.18  6.25  5.00  3.80  2.90  1.57  0.95  0.58  5.07  6.19 102.5
11 1 -2147483647.000 1  8.91  7.96  6.16  4.93  3.75  2.86  1.56  0.93  0.59  5.00  6.14 102.5
11 1 -2147483647.000 1  8.96  7.94  6.15  4.91  3.75  2.86  1.59  0.94  0.60  5.03  6.11 102.5
Drop Sequence Completed Time: 13:28
GPS: Quality : DGPS Fix   Latitude = 39°13.905774  N   Longitude = 123°6.025920   W   PDOP = 2.70
Note: test 1-11
12 1 -2147483647.000 1  8.84  8.34  6.97  5.78  4.46  3.43  1.83  1.05  0.63  5.79  6.96 102.9
12 1 -2147483647.000 1  8.98  8.20  6.88  5.74  4.44  3.38  1.82  1.06  0.65  5.75  6.87 102.9
12 1 -2147483647.000 1  9.03  8.22  6.91  5.74  4.43  3.40  1.81  1.05  0.67  5.76  6.87 102.9
Drop Sequence Completed Time: 13:29
GPS: Quality : DGPS Fix   Latitude = 39°13.911825  N   Longitude = 123°6.051117   W   PDOP = 2.70
Note: test 1-12
13 1 -2147483647.000 1  8.72  7.38  5.84  4.85  3.81  2.87  1.48  0.91  0.66  5.25  6.14  96.7
13 1 -2147483647.000 1  8.84  7.32  5.81  4.88  3.80  2.87  1.48  0.91  0.67  5.23  6.10  96.7
13 1 -2147483647.000 1  8.79  7.25  5.82  4.87  3.81  2.89  1.48  0.93  0.67  5.21  6.05  96.7
Drop Sequence Completed Time: 13:30
GPS: Quality : DGPS Fix   Latitude = 39°13.917945  N   Longitude = 123°6.076460   W   PDOP = 2.70
Note: test 1-13
14 1 -2147483647.000 1  8.91  7.11  5.54  4.41  3.36  2.61  1.53  0.93  0.59  4.86  5.93  92.3
14 1 -2147483647.000 1  8.94  6.94  5.42  4.32  3.31  2.58  1.51  0.93  0.61  4.79  5.80  92.3
14 1 -2147483647.000 1  8.86  6.89  5.40  4.32  3.32  2.57  1.51  0.93  0.60  4.76  5.78  92.3
Drop Sequence Completed Time: 13:30
GPS: Quality : DGPS Fix   Latitude = 39°13.924237  N   Longitude = 123°6.101849   W   PDOP = 2.00
Note: test 1-14
```

**PES 3 OWP. Starting at PM 40.0056. Test interval 15 m (50 ft).**

```
M3
Date-Time:  4-27-2005 13:47:50
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test 3 pattern2 rwt
Temp:   82.70
Operator: hoffman
Comments: test 3 pm40.00 pattern 2
1 1 -2147483647.000 1  6.10  4.71  3.33  2.82  2.25  1.76  1.03  0.66  0.45  3.04  3.64  98.5
1 1 -2147483647.000 1  8.98  7.01  4.84  4.12  3.36  2.64  1.57  0.99  0.64  4.39  5.24  98.5
1 1 -2147483647.000 1 11.94  9.01  6.16  5.25  4.33  3.42  2.04  1.30  0.81  5.58  6.64  98.5
Drop Sequence Completed Time: 13:51
GPS: Quality : DGPS Fix   Latitude = 39°13.837511  N   Longitude = 123°5.771052   W   PDOP = 2.20
Note: test 1-1
2 1 -2147483647.000 1  5.74  4.64  3.71  3.09  2.41  1.92  1.14  0.76  0.51  3.01  3.57 103.3
2 1 -2147483647.000 1  9.08  7.33  5.77  4.76  3.77  3.02  1.80  1.20  0.78  4.70  5.57 103.3
2 1 -2147483647.000 1 11.99  9.31  7.24  5.97  4.73  3.83  2.30  1.51  0.99  5.91  7.01 103.3
Drop Sequence Completed Time: 13:52
GPS: Quality : DGPS Fix   Latitude = 39°13.841176  N   Longitude = 123°5.780368   W   PDOP = 2.20
Note: test 1-2
3 1 -2147483647.000 1  6.01  4.72  3.41  2.74  2.11  1.61  0.93  0.57  0.38  2.65  3.37  93.8
3 1 -2147483647.000 1  9.08  6.96  5.04  4.01  3.12  2.43  1.40  0.85  0.55  3.86  4.86  93.8
3 1 -2147483647.000 1 12.28  9.01  6.51  5.17  4.05  3.22  1.88  1.20  0.80  4.94  6.24  93.8
Drop Sequence Completed Time: 13:53
GPS: Quality : DGPS Fix   Latitude = 39°13.845009  N   Longitude = 123°5.789685   W   PDOP = 2.20
Note: test 1-3
4 1 -2147483647.000 1  6.05  6.50  4.76  3.77  2.81  2.12  1.08  0.64  0.40  3.83  4.83 102.5
4 1 -2147483647.000 1  9.01  9.17  6.75  5.31  4.00  2.99  1.56  0.91  0.64  5.40  6.77 102.5
4 1 -2147483647.000 1 12.11 11.68  8.62  6.78  5.13  3.87  2.03  1.20  0.83  6.85  8.57 102.5
Drop Sequence Completed Time: 13:54
GPS: Quality : DGPS Fix   Latitude = 39°13.848656  N   Longitude = 123°5.799264   W   PDOP = 2.20
Note: test 1-4
5 1 -2147483647.000 1  6.01  5.33  4.09  3.32  2.58  2.04  1.14  0.65  0.42  3.60  4.30 103.6
5 1 -2147483647.000 1  8.96  7.65  5.88  4.75  3.76  2.98  1.67  1.00  0.63  5.16  6.14 103.6
5 1 -2147483647.000 1 11.99  9.72  7.48  6.06  4.79  3.82  2.19  1.32  0.85  6.57  7.76 103.6
Drop Sequence Completed Time: 13:54
GPS: Quality : DGPS Fix   Latitude = 39°13.851990  N   Longitude = 123°5.808649   W   PDOP = 2.20
Note: test 1-5
6 1 -2147483647.000 1  5.93  8.09  6.85  5.53  4.13  3.04  1.39  0.76  0.46  5.70  6.92 102.2
6 1 -2147483647.000 1  9.03 11.84 10.10  8.16  6.17  4.59  2.15  1.18  0.75  8.33  9.96 102.2
6 1 -2147483647.000 1 11.91 14.69 12.61 10.27  7.85  5.84  2.79  1.50  0.98 10.37 12.33 102.2
Drop Sequence Completed Time: 13:57
GPS: Quality : DGPS Fix   Latitude = 39°13.855243  N   Longitude = 123°5.818385   W   PDOP = 2.20
Note: test 1-6
7 1 -2147483647.000 1  6.05  7.17  6.04  4.99  3.81  2.91  1.60  0.95  0.61  5.13  6.14  89.7
7 1 -2147483647.000 1  8.94 10.49  8.88  7.36  5.68  4.38  2.42  1.44  0.93  7.42  8.86  89.7
7 1 -2147483647.000 1 11.96 13.61 11.56  9.56  7.42  5.76  3.20  1.94  1.23  9.57 11.34  89.7
Drop Sequence Completed Time: 13:58
GPS: Quality : DGPS Fix   Latitude = 39°13.858028  N   Longitude = 123°5.828096   W   PDOP = 2.20
Note: test 1-7
8 1 -2147483647.000 1  6.01  9.33  7.81  6.12  4.48  3.19  1.49  0.91  0.59  6.77  8.12  94.8
8 1 -2147483647.000 1  8.94 13.53 11.40  8.98  6.74  4.83  2.29  1.40  0.85  9.76 11.64  94.8
8 1 -2147483647.000 1 11.60 16.77 14.22 11.25  8.51  6.14  2.95  1.76  1.10 12.12 14.28  94.8
Drop Sequence Completed Time: 13:59
GPS: Quality : DGPS Fix   Latitude = 39°13.860745  N   Longitude = 123°5.838150   W   PDOP = 2.20
Note: test 1-8
9 1 -2147483647.000 1  6.05  8.46  6.82  5.50  4.12  3.11  1.64  0.92  0.53  6.27  7.50  92.3
9 1 -2147483647.000 1  9.16 12.15  9.79  7.93  6.02  4.59  2.46  1.36  0.84  9.09 10.80  92.3
9 1 -2147483647.000 1 12.33 15.43 12.50 10.16  7.78  5.97  3.22  1.82  1.09 11.64 13.68  92.3
Drop Sequence Completed Time: 14:00
GPS: Quality : DGPS Fix   Latitude = 39°13.863348  N   Longitude = 123°5.847998   W   PDOP = 2.20
Note: test 1-9
10 1 -2147483647.000 1  6.13  6.84  5.93  4.96  3.90  3.07  1.69  0.96  0.59  5.13  5.97  94.1
10 1 -2147483647.000 1  9.30  9.97  8.62  7.20  5.76  4.55  2.55  1.50  0.92  7.47  8.61  94.1
10 1 -2147483647.000 1 12.45 12.69 10.98  9.22  7.43  5.91  3.34  1.98  1.21  9.49 10.88  94.1
Drop Sequence Completed Time: 14:00
GPS: Quality : DGPS Fix   Latitude = 39°13.865900  N   Longitude = 123°5.858357   W   PDOP = 2.20
Note: test 1-10
11 1 -2147483647.000 1  6.13  8.82  7.65  6.47  5.10  3.80  1.87  1.04  0.61  6.38  7.59  99.6
```

```
11 1 -2147483647.000 1  9.03 12.72 11.05  9.35  7.46  5.66  2.80  1.57  0.92  9.28 10.98  99.6
11 1 -2147483647.000 1 12.21 16.31 14.23 12.07  9.72  7.43  3.75  2.14  1.22 11.95 14.02  99.6
Drop Sequence Completed Time: 14:01
GPS: Quality : DGPS Fix   Latitude = 39°13.868355  N   Longitude = 123°5.868323   W   PDOP = 2.20
Note: test 1-11
```

**PES 3 CL. Starting at PM 40.0056. Test interval 15 m (50 ft).**

```
M3
Date-Time:  4-27-2005 14: 3:44
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test 3 pattern2 center
Temp:   74.12
Operator: hoffman
Comments: test 3 pm40.00 pattern 2 center
1 1 -2147483647.000 1  6.15  3.71  3.07  2.59  2.07  1.67  1.01  0.65  0.43  2.72  3.17  96.3
1 1 -2147483647.000 1  9.38  5.67  4.64  3.91  3.15  2.56  1.55  1.03  0.70  4.13  4.76  96.3
1 1 -2147483647.000 1 12.26  7.19  5.84  4.93  4.00  3.24  2.01  1.32  0.90  5.19  6.02  96.3
Drop Sequence Completed Time: 14:04
GPS: Quality : DGPS Fix   Latitude = 39°13.837355  N   Longitude = 123°5.771287   W   PDOP = 2.20
Note: test 1-1
2 1 -2147483647.000 1  6.13  3.90  3.03  2.49  1.98  1.61  0.96  0.63  0.44  2.66  3.11  99.6
2 1 -2147483647.000 1  9.06  5.77  4.47  3.66  2.93  2.39  1.48  0.97  0.66  3.87  4.53  99.6
2 1 -2147483647.000 1 12.18  7.48  5.80  4.75  3.82  3.14  1.94  1.28  0.87  5.03  5.87  99.6
Drop Sequence Completed Time: 14:05
GPS: Quality : DGPS Fix   Latitude = 39°13.841017  N   Longitude = 123°5.780387   W   PDOP = 2.20
Note: test 1-2
3 1 -2147483647.000 1  6.01  3.15  2.57  2.22  1.82  1.47  0.90  0.58  0.37  2.23  2.61 100.3
3 1 -2147483647.000 1  9.01  4.67  3.81  3.28  2.70  2.20  1.33  0.88  0.61  3.36  3.87 100.3
3 1 -2147483647.000 1 11.99  6.08  4.88  4.22  3.51  2.87  1.74  1.15  0.79  4.33  4.98 100.3
Drop Sequence Completed Time: 14:05
GPS: Quality : DGPS Fix   Latitude = 39°13.844623  N   Longitude = 123°5.789648   W   PDOP = 2.20
Note: test 1-3
4 1 -2147483647.000 1  5.93  3.11  2.52  2.20  1.87  1.57  0.96  0.61  0.43  2.21  2.56 101.1
4 1 -2147483647.000 1  9.08  4.66  3.82  3.32  2.85  2.39  1.49  0.98  0.64  3.34  3.84 101.1
4 1 -2147483647.000 1 12.16  6.07  4.96  4.32  3.73  3.11  1.94  1.29  0.88  4.33  4.94 101.1
Drop Sequence Completed Time: 14:06
GPS: Quality : DGPS Fix   Latitude = 39°13.848137  N   Longitude = 123°5.799230   W   PDOP = 2.20
Note: test 1-4
5 1 -2147483647.000 1  6.05  3.03  2.53  2.21  1.85  1.55  1.00  0.64  0.44  2.26  2.56 102.5
5 1 -2147483647.000 1  9.20  4.54  3.79  3.29  2.79  2.33  1.49  0.96  0.64  3.37  3.82 102.5
5 1 -2147483647.000 1 12.16  5.96  4.97  4.31  3.62  3.05  1.98  1.28  0.87  4.37  4.94 102.5
Drop Sequence Completed Time: 14:07
GPS: Quality : DGPS Fix   Latitude = 39°13.851424  N   Longitude = 123°5.808757   W   PDOP = 2.20
Note: test 1-5
6 1 -2147483647.000 1  6.05  4.65  4.03  3.46  2.77  2.22  1.30  0.80  0.51  3.50  4.05 102.9
6 1 -2147483647.000 1  9.01  6.92  5.96  5.08  4.11  3.30  1.98  1.25  0.77  5.25  6.00 102.9
6 1 -2147483647.000 1 11.74  8.78  7.59  6.48  5.27  4.24  2.54  1.56  0.97  6.58  7.58 102.9
Drop Sequence Completed Time: 14:08
GPS: Quality : DGPS Fix   Latitude = 39°13.857401  N   Longitude = 123°5.828411   W   PDOP = 2.20
Note: test 1-6
7 1 -2147483647.000 1  6.03  5.74  4.59  3.86  3.15  2.53  1.50  0.89  0.55  4.22  4.85 102.9
7 1 -2147483647.000 1  8.86  8.41  6.71  5.65  4.60  3.75  2.23  1.34  0.83  6.20  7.14 102.9
7 1 -2147483647.000 1 11.69 10.79  8.64  7.25  5.98  4.82  2.93  1.74  1.12  8.01  9.14 102.9
Drop Sequence Completed Time: 14:09
GPS: Quality : DGPS Fix   Latitude = 39°13.862801  N   Longitude = 123°5.848225   W   PDOP = 2.20
Note: test 1-7
8 1 -2147483647.000 1  6.03  4.88  4.28  3.64  2.91  2.34  1.36  0.81  0.51  3.65  4.30 101.8
8 1 -2147483647.000 1  8.94  7.22  6.32  5.36  4.32  3.49  2.10  1.27  0.78  5.41  6.29 101.8
8 1 -2147483647.000 1 12.13  9.50  8.32  7.10  5.74  4.61  2.82  1.73  1.01  7.12  8.17 101.8
Drop Sequence Completed Time: 14:09
GPS: Quality : DGPS Fix   Latitude = 39°13.865469  N   Longitude = 123°5.858044   W   PDOP = 2.20
Note: test 1-8
9 1 -2147483647.000 1  5.93  5.91  5.03  4.24  3.36  2.61  1.44  0.84  0.50  4.47  5.20 101.1
9 1 -2147483647.000 1  8.98  8.90  7.55  6.39  5.11  3.98  2.28  1.35  0.82  6.76  7.74 101.1
9 1 -2147483647.000 1 11.87 11.38  9.68  8.21  6.59  5.18  2.96  1.77  1.04  8.66  9.85 101.1
Drop Sequence Completed Time: 14:10
GPS: Quality : DGPS Fix   Latitude = 39°13.867554  N   Longitude = 123°5.866029   W   PDOP = 2.20
Note: test 1-9
```

```
10 1 -2147483647.000 1  6.08  7.94  7.01  5.95  4.63  3.52  1.86  1.04  0.60  5.86  6.81  95.6
10 1 -2147483647.000 1  8.86 11.46 10.12  8.60  6.78  5.19  2.78  1.55  0.87  8.50  9.84  95.6
10 1 -2147483647.000 1 11.87 14.62 12.97 11.02  8.77  6.79  3.71  2.09  1.21 10.87 12.54  95.6
Drop Sequence Completed Time: 14:11
GPS: Quality : DGPS Fix   Latitude = 39°13.868069  N   Longitude = 123°5.868202   W   PDOP = 2.20
Note: test 1-10
```

Table A-4. Deflection Testing Location and Normalized (9-kip) Deflection for Test Section 4

| Test Point | Test Section Post Mile | Outer Wheel Path Deflection, mils | PES Post Mile | Outer Wheel Path Deflection, mils |
|---|---|---|---|---|
| 1 | 40.5485 | 9.694 | 40.4345 | 6.721 |
| 2 | 40.5248 | 5.458 | 40.4250 | 7.402 |
| 3 | 40.5012 | 4.796 | 40.4156 | 4.764 |
| 4 | 40.4775 | 5.943 | 40.4061 | 5.640 |
| 5 | 40.4538 | 8.939 | 40.3966 | 4.256 |
| 6 | 40.4302 | 6.684 | 40.3872 | 5.670 |
| 7 | 40.4065 | 4.035 | 40.3777 | 4.429 |
| 8 | 40.3828 | 4.729 | 40.3682 | 5.183 |
| 9 | 40.3591 | 4.618 | 40.3588 | 6.230 |
| 10 | 40.3355 | 7.190 | 40.3493 | 6.185 |
| 11 | 40.3118 | 5.697 | 40.3398 | 6.275 |
| 12 | 40.2881 | 7.334 | End of test | |
| 13 | 40.2644 | 11.590 | | |

**Test Section 4 OWP. Starting at PM 40.5485. Test interval 40 m (125 ft).**

```
M3
Date-Time:  4-27-2005 10:19:20
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test sec 4 40.85 wb pattern 1
Temp:   62.79
Operator: HOFFMAN
Comments: test sec  pattern 1 every 125 ft right wt
1 1 -2147483647.000 1  9.13 10.14  7.94  6.53  5.09  3.94  2.03  1.09  0.60  7.66  9.18  79.5
1 1 -2147483647.000 1  9.03  9.63  7.55  6.26  4.88  3.79  1.97  1.05  0.59  7.28  8.73  79.5
1 1 -2147483647.000 1  8.96  9.44  7.44  6.15  4.80  3.71  1.92  1.01  0.59  7.16  8.52  79.5
Drop Sequence Completed Time: 10:36
GPS: Quality : DGPS Fix   Latitude = 39°13.506977  N   Longitude = 123°5.329296   W   PDOP = 1.70
Note: test5right1-1
2 1 -2147483647.000 1  9.13  5.58  4.44  3.58  2.77  2.16  1.19  0.72  0.44  3.83  4.49  80.2
2 1 -2147483647.000 1  8.94  5.44  4.34  3.49  2.72  2.12  1.18  0.71  0.43  3.72  4.42  80.2
2 1 -2147483647.000 1  8.89  5.33  4.28  3.46  2.68  2.08  1.17  0.71  0.43  3.68  4.34  80.2
Drop Sequence Completed Time: 10:37
GPS: Quality : DGPS Fix   Latitude = 39°13.522012  N   Longitude = 123°5.347795   W   PDOP = 1.70
Note: test5right1-2
3 1 -2147483647.000 1  9.01  4.86  3.90  3.20  2.51  1.92  1.04  0.63  0.36  3.38  4.06  80.6
3 1 -2147483647.000 1  8.79  4.70  3.77  3.09  2.42  1.87  1.03  0.61  0.35  3.26  3.91  80.6
3 1 -2147483647.000 1  8.79  4.61  3.74  3.07  2.41  1.84  1.00  0.62  0.32  3.22  3.85  80.6
Drop Sequence Completed Time: 10:37
GPS: Quality : DGPS Fix   Latitude = 39°13.536811  N   Longitude = 123°5.366006   W   PDOP = 1.70
Note: test5right1-3
4 1 -2147483647.000 1  8.74  5.87  5.02  4.19  3.26  2.50  1.26  0.63  0.43  4.27  5.00  76.9
4 1 -2147483647.000 1  8.67  5.69  4.85  4.08  3.19  2.45  1.24  0.62  0.46  4.17  4.85  76.9
4 1 -2147483647.000 1  8.79  5.74  4.89  4.12  3.23  2.48  1.23  0.60  0.43  4.20  4.90  76.9
Drop Sequence Completed Time: 10:38
GPS: Quality : DGPS Fix   Latitude = 39°13.546006  N   Longitude = 123°5.376959   W   PDOP = 1.70
Note: test5right1-4
5 1 -2147483647.000 1  8.89  8.99  7.28  5.79  4.33  3.29  1.59  1.04  0.70  5.67  6.99  75.8
5 1 -2147483647.000 1  8.81  8.74  7.11  5.72  4.28  3.24  1.60  1.04  0.73  5.56  6.81  75.8
5 1 -2147483647.000 1  8.94  8.73  7.16  5.78  4.32  3.30  1.63  1.08  0.75  5.60  6.92  75.8
Drop Sequence Completed Time: 10:39
GPS: Quality : DGPS Fix   Latitude = 39°13.566669  N   Longitude = 123°5.402128   W   PDOP = 1.70
Note: test5right1-5
6 1 -2147483647.000 1  8.94  6.86  5.07  4.38  3.60  2.95  1.85  1.27  0.88  3.98  4.57  79.8
6 1 -2147483647.000 1  9.13  6.71  5.01  4.33  3.59  2.97  1.84  1.27  0.89  3.99  4.55  79.8
6 1 -2147483647.000 1  9.13  6.63  4.99  4.33  3.61  2.96  1.86  1.26  0.90  3.98  4.49  79.8
Drop Sequence Completed Time: 10:40
GPS: Quality : DGPS Fix   Latitude = 39°13.581392  N   Longitude = 123°5.420504   W   PDOP = 1.70
Note: test5right1-6
7 1 -2147483647.000 1  9.25  4.19  3.47  2.97  2.49  2.07  1.29  0.87  0.59  3.02  3.45  77.6
7 1 -2147483647.000 1  9.08  4.10  3.41  2.92  2.45  2.03  1.26  0.86  0.57  2.96  3.44  77.6
7 1 -2147483647.000 1  9.06  3.99  3.34  2.86  2.40  2.00  1.23  0.84  0.55  2.91  3.36  77.6
Drop Sequence Completed Time: 10:41
GPS: Quality : DGPS Fix   Latitude = 39°13.596231  N   Longitude = 123°5.438805   W   PDOP = 1.70
Note: test5right1-7
8 1 -2147483647.000 1  9.03  4.82  3.98  3.36  2.73  2.20  1.37  1.01  0.78  3.41  3.93  78.0
8 1 -2147483647.000 1  9.06  4.73  3.90  3.33  2.71  2.21  1.37  1.03  0.75  3.39  3.93  78.0
8 1 -2147483647.000 1  8.84  4.60  3.83  3.26  2.66  2.13  1.35  0.99  0.71  3.31  3.82  78.0
Drop Sequence Completed Time: 10:42
GPS: Quality : DGPS Fix   Latitude = 39°13.611086  N   Longitude = 123°5.457175   W   PDOP = 1.70
Note: test5right1-8
9 1 -2147483647.000 1  9.20  4.74  3.74  3.20  2.63  2.16  1.35  0.95  0.67  3.46  4.00  78.7
9 1 -2147483647.000 1  8.91  4.59  3.66  3.12  2.58  2.12  1.34  0.93  0.64  3.38  3.87  78.7
9 1 -2147483647.000 1  9.08  4.62  3.67  3.15  2.60  2.14  1.34  0.92  0.67  3.41  3.91  78.7
Drop Sequence Completed Time: 10:43
GPS: Quality : DGPS Fix   Latitude = 39°13.625888  N   Longitude = 123°5.475280   W   PDOP = 1.70
Note: test5right1-9
10 1 -2147483647.000 1  8.98  7.23  5.70  4.65  3.63  2.85  1.69  1.07  0.73  4.93  5.99  78.4
10 1 -2147483647.000 1  8.81  7.02  5.52  4.51  3.56  2.79  1.65  1.08  0.73  4.82  5.81  78.4
10 1 -2147483647.000 1  8.86  7.04  5.55  4.55  3.57  2.83  1.67  1.07  0.72  4.85  5.87  78.4
Drop Sequence Completed Time: 10:45
GPS: Quality : DGPS Fix   Latitude = 39°13.640490  N   Longitude = 123°5.493422   W   PDOP = 2.20
Note: test5right1-10
11 1 -2147483647.000 1  8.94  5.70  4.36  3.72  3.12  2.60  1.66  1.14  0.80  3.60  4.26  74.3
```

```
11 1 -2147483647.000 1  8.76  5.57  4.24  3.65  3.06  2.54  1.63  1.14  0.76  3.54  4.21  74.3
11 1 -2147483647.000 1  8.89  5.56  4.28  3.66  3.07  2.57  1.66  1.13  0.79  3.59  4.23  74.3
Drop Sequence Completed Time: 10:46
GPS: Quality : DGPS Fix   Latitude = 39°13.655456  N   Longitude = 123°5.511715   W   PDOP = 2.20
Note: test5right1-11
12 1 -2147483647.000 1  9.08  7.50  5.68  4.82  3.90  3.12  1.93  1.27  0.91  4.81  5.81  74.3
12 1 -2147483647.000 1  8.98  7.27  5.56  4.71  3.82  3.08  1.89  1.27  0.87  4.73  5.72  74.3
12 1 -2147483647.000 1  8.89  7.19  5.52  4.66  3.76  3.04  1.85  1.23  0.90  4.68  5.67  74.3
Drop Sequence Completed Time: 10:47
GPS: Quality : DGPS Fix   Latitude = 39°13.670185  N   Longitude = 123°5.529923   W   PDOP = 2.30
Note: test5right1-12
13 1 -2147483647.000 1  8.67 11.34  9.43  7.83  5.88  4.33  2.30  1.27  0.85  8.05  9.65  73.2
13 1 -2147483647.000 1  8.79 11.30  9.45  7.85  5.91  4.37  2.31  1.31  0.84  8.09  9.66  73.2
13 1 -2147483647.000 1  8.84 11.23  9.38  7.80  5.89  4.33  2.31  1.30  0.82  8.07  9.72  73.2
Drop Sequence Completed Time: 10:48
GPS: Quality : DGPS Fix   Latitude = 39°13.685054  N   Longitude = 123°5.547914   W   PDOP = 2.30
Note: test5right1-13
```

**PES 4 OWP. Starting at PM 40.4345. Test interval 15 m (50 ft).**

```
M3
Date-Time:  4-27-2005 10:54:15
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test 4 pattern 2 rwt
Temp:   67.43
Operator: HOFFMAN
Comments: test 4  start pm 40.49+300 to 40.27
1 1 -2147483647.000 1  8.64  6.77  4.76  4.06  3.28  2.62  1.60  1.06  0.70  4.11  4.89  80.2
1 1 -2147483647.000 1  8.57  6.40  4.60  3.94  3.19  2.54  1.56  1.03  0.69  3.96  4.74  80.2
1 1 -2147483647.000 1  8.52  6.29  4.59  3.89  3.15  2.52  1.53  1.03  0.70  3.94  4.73  80.2
Drop Sequence Completed Time: 11:10
GPS: Quality : DGPS Fix   Latitude = 39°13.583357  N   Longitude = 123°5.422862   W   PDOP = 2.30
Note: test5right1-1
2 1 -2147483647.000 1  8.30  6.99  5.77  4.76  3.66  2.81  1.37  0.84  0.60  4.75  5.76  78.0
2 1 -2147483647.000 1  8.28  6.81  5.67  4.66  3.59  2.74  1.35  0.83  0.58  4.65  5.61  78.0
2 1 -2147483647.000 1  8.15  6.75  5.62  4.61  3.57  2.73  1.35  0.83  0.60  4.61  5.55  78.0
Drop Sequence Completed Time: 11:11
GPS: Quality : DGPS Fix   Latitude = 39°13.589206  N   Longitude = 123°5.430011   W   PDOP = 2.30
Note: test5right1-2
3 1 -2147483647.000 1  8.64  4.57  3.66  3.19  2.67  2.11  1.21  0.78  4.10  3.16  3.77  79.5
3 1 -2147483647.000 1  8.52  4.51  3.60  3.13  2.61  2.10  1.17  0.76  1.15  3.10  3.71  79.5
3 1 -2147483647.000 1  8.50  4.45  3.56  3.10  2.58  2.07  1.17  0.77  2.73  3.08  3.68  79.5
Drop Sequence Completed Time: 11:12
GPS: Quality : DGPS Fix   Latitude = 39°13.595279  N   Longitude = 123°5.437442   W   PDOP = 2.30
Note: test5right1-3
4 1 -2147483647.000 1  8.79  5.49  4.58  3.93  3.27  2.64  1.57  1.02  0.60  4.12  4.76  83.5
4 1 -2147483647.000 1  8.76  5.49  4.57  3.97  3.26  2.66  1.57  1.02  0.62  4.15  4.76  83.5
4 1 -2147483647.000 1  8.79  5.43  4.53  3.96  3.26  2.66  1.56  0.99  0.61  4.12  4.70  83.5
Drop Sequence Completed Time: 11:13
GPS: Quality : DGPS Fix   Latitude = 39°13.600947  N   Longitude = 123°5.444260   W   PDOP = 2.30
Note: test5right1-4
5 1 -2147483647.000 1  8.64  4.17  3.41  2.84  2.21  1.71  0.97  0.62  0.47  2.94  3.49  82.8
5 1 -2147483647.000 1  8.67  4.10  3.30  2.76  2.19  1.70  0.96  0.64  0.45  2.91  3.42  82.8
5 1 -2147483647.000 1  8.52  4.02  3.25  2.73  2.15  1.67  0.93  0.61  0.46  2.85  3.36  82.8
Drop Sequence Completed Time: 11:14
GPS: Quality : DGPS Fix   Latitude = 39°13.607249  N   Longitude = 123°5.451977   W   PDOP = 2.30
Note: test5right1-5
6 1 -2147483647.000 1  8.74  5.69  4.83  4.17  3.36  2.66  1.56  0.99  0.63  4.32  5.02  79.8
6 1 -2147483647.000 1  8.81  5.55  4.72  4.06  3.31  2.62  1.53  0.96  0.61  4.23  4.92  79.8
6 1 -2147483647.000 1  8.81  5.54  4.71  4.08  3.28  2.59  1.52  0.96  0.65  4.24  4.93  79.8
Drop Sequence Completed Time: 11:14
GPS: Quality : DGPS Fix   Latitude = 39°13.613101  N   Longitude = 123°5.459281   W   PDOP = 2.30
Note: test5right1-6
7 1 -2147483647.000 1  8.86  4.36  3.51  3.03  2.52  2.04  1.25  0.87  0.57  3.32  3.77  82.4
7 1 -2147483647.000 1  8.84  4.35  3.55  3.06  2.55  2.07  1.26  0.89  0.59  3.34  3.74  82.4
7 1 -2147483647.000 1  8.89  4.30  3.50  3.02  2.52  2.06  1.29  0.87  0.57  3.31  3.74  82.4
Drop Sequence Completed Time: 11:15
GPS: Quality : DGPS Fix   Latitude = 39°13.619233  N   Longitude = 123°5.466881   W   PDOP = 2.30
Note: test5right1-7
8 1 -2147483647.000 1  9.13  5.33  4.30  3.68  2.98  2.44  1.49  1.04  0.71  3.78  4.34  83.5
8 1 -2147483647.000 1  8.89  5.12  4.15  3.55  2.87  2.37  1.44  1.01  0.68  3.67  4.20  83.5
8 1 -2147483647.000 1  9.01  5.16  4.19  3.57  2.92  2.37  1.46  1.02  0.66  3.69  4.20  83.5
Drop Sequence Completed Time: 11:16
GPS: Quality : DGPS Fix   Latitude = 39°13.625121  N   Longitude = 123°5.473805   W   PDOP = 2.30
Note: test5right1-8
9 1 -2147483647.000 1  8.98  6.32  5.14  4.41  3.58  2.86  1.66  1.14  0.79  4.53  5.24  85.0
9 1 -2147483647.000 1  8.74  6.05  4.95  4.25  3.43  2.74  1.60  1.08  0.75  4.37  5.09  85.0
9 1 -2147483647.000 1  8.74  6.00  4.91  4.22  3.42  2.72  1.59  1.09  0.72  4.34  5.05  85.0
Drop Sequence Completed Time: 11:17
GPS: Quality : DGPS Fix   Latitude = 39°13.631226  N   Longitude = 123°5.481134   W   PDOP = 2.30
Note: test5right1-9
10 1 -2147483647.000 1  8.79  6.10  4.99  4.29  3.49  2.82  1.64  1.13  0.70  4.56  5.28  84.6
10 1 -2147483647.000 1  8.76  6.02  4.97  4.23  3.46  2.83  1.66  1.12  0.70  4.52  5.21  84.6
10 1 -2147483647.000 1  8.84  5.95  4.92  4.24  3.45  2.82  1.66  1.12  0.73  4.49  5.19  84.6
Drop Sequence Completed Time: 11:18
GPS: Quality : DGPS Fix   Latitude = 39°13.637006  N   Longitude = 123°5.488272   W   PDOP = 2.40
Note: test5right1-10
```

```
11 1 -2147483647.000 1  8.74  6.27  5.32  4.47  3.51  2.81  1.65  1.12  0.78  4.54  5.31  83.5
11 1 -2147483647.000 1  8.72  6.08  5.17  4.35  3.43  2.71  1.59  1.12  0.80  4.42  5.17  83.5
11 1 -2147483647.000 1  8.81  6.05  5.16  4.37  3.43  2.74  1.63  1.11  0.79  4.44  5.17  83.5
Drop Sequence Completed Time: 11:18
GPS: Quality : DGPS Fix   Latitude = 39°13.643177  N   Longitude = 123°5.495803   W   PDOP = 2.40
Note: test5right1-11
```

**PES 4 CL. Starting at PM 40.4345. Test interval 15 m (50 ft).**

```
M3
Date-Time:  4-27-2005 11:28:24
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test pattern 2 center
Temp:   73.78
Operator: HOFFMAN
Comments: test 4 pm 40.430 center
1 1 -2147483647.000 1  8.96  7.00  5.00  4.05  3.30  2.73  1.65  1.14  0.82  4.23  5.14  85.3
1 1 -2147483647.000 1  9.01  6.77  4.94  4.01  3.27  2.70  1.62  1.12  0.80  4.17  5.01  85.3
1 1 -2147483647.000 1  8.67  6.45  4.75  3.87  3.15  2.60  1.56  1.08  0.76  4.03  4.85  85.3
Drop Sequence Completed Time: 11:36
GPS: Quality : DGPS Fix   Latitude = 39°13.582832  N   Longitude = 123°5.423346   W   PDOP = 2.00
Note: test5right1-11
2 1 -2147483647.000 1  8.84  7.33  6.20  5.08  4.00  3.14  1.74  1.14  0.72  5.06  5.94  85.7
2 1 -2147483647.000 1  8.64  7.04  5.98  4.88  3.84  3.03  1.67  1.08  0.69  4.89  5.77  85.7
2 1 -2147483647.000 1  8.59  6.92  5.85  4.82  3.79  3.00  1.65  1.08  0.68  4.83  5.70  85.7
Drop Sequence Completed Time: 11:37
GPS: Quality : DGPS Fix   Latitude = 39°13.588885  N   Longitude = 123°5.430603   W   PDOP = 2.00
Note: test5right1-2
3 1 -2147483647.000 1  8.94  5.97  4.31  3.49  2.76  2.19  1.21  0.80  0.53  3.52  4.24  87.2
3 1 -2147483647.000 1  9.01  5.86  4.27  3.46  2.73  2.16  1.21  0.80  0.53  3.51  4.20  87.2
3 1 -2147483647.000 1  8.84  5.75  4.25  3.45  2.70  2.16  1.17  0.77  0.56  3.47  4.20  87.2
Drop Sequence Completed Time: 11:38
GPS: Quality : DGPS Fix   Latitude = 39°13.595097  N   Longitude = 123°5.437777   W   PDOP = 2.00
Note: test5right1-3
4 1 -2147483647.000 1  8.94  6.62  5.58  4.68  3.68  2.86  1.60  1.04  0.67  4.63  5.49  86.8
4 1 -2147483647.000 1  8.96  6.48  5.48  4.63  3.64  2.80  1.57  1.04  0.65  4.58  5.42  86.8
4 1 -2147483647.000 1  8.72  6.27  5.33  4.45  3.53  2.75  1.52  1.01  0.66  4.42  5.23  86.8
Drop Sequence Completed Time: 11:39
GPS: Quality : DGPS Fix   Latitude = 39°13.600883  N   Longitude = 123°5.445066   W   PDOP = 2.00
Note: test5right1-4
5 1 -2147483647.000 1  9.11  4.04  3.06  2.54  2.02  1.67  1.05  0.73  0.52  2.65  3.11  88.3
5 1 -2147483647.000 1  8.89  3.91  2.99  2.45  1.96  1.59  1.01  0.73  0.47  2.55  3.04  88.3
5 1 -2147483647.000 1  8.76  3.85  2.94  2.42  1.95  1.61  1.01  0.71  0.49  2.55  3.05  88.3
Drop Sequence Completed Time: 11:40
GPS: Quality : DGPS Fix   Latitude = 39°13.606856  N   Longitude = 123°5.452320   W   PDOP = 2.00
Note: test5right1-5
6 1 -2147483647.000 1  8.94  5.15  4.30  3.64  2.93  2.36  1.38  0.91  0.54  3.73  4.37  87.9
6 1 -2147483647.000 1  8.76  5.03  4.20  3.57  2.88  2.31  1.34  0.88  0.57  3.65  4.27  87.9
6 1 -2147483647.000 1  8.67  4.89  4.09  3.48  2.83  2.23  1.33  0.86  0.52  3.59  4.14  87.9
Drop Sequence Completed Time: 11:40
GPS: Quality : DGPS Fix   Latitude = 39°13.612904  N   Longitude = 123°5.459622   W   PDOP = 2.00
Note: test5right1-6
7 1 -2147483647.000 1  8.96  6.39  5.09  4.15  3.18  2.43  1.32  0.87  0.58  4.21  5.12  87.5
7 1 -2147483647.000 1  8.81  6.08  4.85  3.97  3.05  2.33  1.27  0.83  0.57  4.03  4.83  87.5
7 1 -2147483647.000 1  8.72  6.00  4.80  3.93  3.01  2.32  1.27  0.83  0.54  3.98  4.83  87.5
Drop Sequence Completed Time: 11:41
GPS: Quality : DGPS Fix   Latitude = 39°13.618687  N   Longitude = 123°5.466907   W   PDOP = 1.90
Note: test5right1-7
8 1 -2147483647.000 1  9.01  6.24  5.12  4.27  3.33  2.58  1.49  0.99  0.66  4.33  5.14  86.8
8 1 -2147483647.000 1  8.86  6.07  4.97  4.17  3.26  2.53  1.46  0.98  0.66  4.21  5.01  86.8
8 1 -2147483647.000 1  8.86  5.95  4.92  4.10  3.23  2.51  1.45  0.98  0.66  4.14  4.96  86.8
Drop Sequence Completed Time: 11:42
GPS: Quality : DGPS Fix   Latitude = 39°13.624634  N   Longitude = 123°5.474214   W   PDOP = 1.90
Note: test5right1-8
9 1 -2147483647.000 1  8.76  8.00  6.62  5.50  4.27  3.33  1.89  1.26  0.87  5.61  6.63  86.8
9 1 -2147483647.000 1  8.64  7.82  6.49  5.40  4.21  3.26  1.87  1.22  0.85  5.49  6.52  86.8
9 1 -2147483647.000 1  8.69  7.69  6.39  5.32  4.16  3.25  1.84  1.23  0.84  5.41  6.43  86.8
Drop Sequence Completed Time: 11:42
GPS: Quality : DGPS Fix   Latitude = 39°13.631030  N   Longitude = 123°5.482189   W   PDOP = 1.90
Note: test5right1-9
```

```
10 1 -2147483647.000 1  8.84  8.01  6.34  5.22  4.10  3.21  1.91  1.29  0.85  5.58  6.66  87.2
10 1 -2147483647.000 1  8.74  7.83  6.23  5.12  4.02  3.17  1.90  1.29  0.87  5.48  6.47  87.2
10 1 -2147483647.000 1  8.91  7.78  6.21  5.12  4.06  3.21  1.93  1.30  0.85  5.48  6.50  87.2
Drop Sequence Completed Time: 11:43
GPS: Quality : DGPS Fix   Latitude = 39°13.636641  N   Longitude = 123°5.488995   W   PDOP = 1.90
Note: test5right1-10
11 1 -2147483647.000 1  8.54  6.63  5.28  4.44  3.59  2.87  1.76  1.17  0.78  5.00  5.87  86.4
11 1 -2147483647.000 1  8.52  6.43  5.17  4.37  3.53  2.84  1.73  1.19  0.79  4.90  5.74  86.4
11 1 -2147483647.000 1  8.50  6.38  5.16  4.36  3.51  2.81  1.71  1.17  0.77  4.86  5.66  86.4
Drop Sequence Completed Time: 11:44
GPS: Quality : DGPS Fix   Latitude = 39°13.642770  N   Longitude = 123°5.496592   W   PDOP = 1.90
Note: test5right1-11
```

Table A-5. Deflection Testing Location and Normalized (9-kip) Deflection for Test Section 5

| Test Point | Test Section Post Mile | Outer Wheel Path Deflection, mils | PES Post Mile | Outer Wheel Path Deflection, mils |
|---|---|---|---|---|
| 1 | 41.4300 | 16.003 | 41.1030 | 9.205 |
| 2 | 41.4063 | 7.496 | 41.0935 | 7.427 |
| 3 | 41.3827 | 6.374 | 41.0841 | 7.805 |
| 4 | 41.3590 | 4.932 | 41.0746 | 6.060 |
| 5 | 41.3353 | 5.182 | 41.0651 | 6.495 |
| 6 | 41.3116 | 7.803 | 41.0556 | 6.857 |
| 7 | 41.2880 | 7.220 | 41.0462 | 5.850 |
| 8 | 41.2643 | 5.069 | 41.0367 | 8.034 |
| 9 | 41.2406 | 6.221 | 41.0272 | 8.840 |
| 10 | 41.2169 | 7.179 | 41.0178 | 8.990 |
| 11 | 41.1933 | 14.156 | 41.0083 | 11.360 |
| 12 | 41.1696 | 16.475 | End of test | |
| 13 | 41.1459 | 5.340 | | |
| 14 | 41.1222 | 11.783 | | |
| 15 | 41.0986 | 9.389 | | |
| 16 | 41.0749 | 6.943 | | |
| 17 | 41.0512 | 6.973 | | |
| 18 | 41.0275 | 8.200 | | |
| 19 | 41.0039 | 10.007 | | |
| 20 | 40.9802 | 15.121 | | |
| 21 | 40.9565 | 6.106 | | |
| 22 | 40.9328 | 7.491 | | |
| 23 | 40.9092 | 7.581 | | |
| 24 | 40.8855 | 7.846 | | |

**Test Section 5 OWP. Starting at PM 40.5485. Test interval 40 m (125 ft).**

```
M3
Date-Time:  4-27-2005  8: 2:57
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test sec 5 41.43 wb
Temp:   48.54
Operator: HOFFMAN
Comments: test sec 5 pattern 1 every 125 ft
1 1 -2147483647.000 1  8.59 15.46 12.48  9.33  5.84  3.25  1.46  0.99  0.76 10.90 13.47  57.5
1 1 -2147483647.000 1  8.57 15.23 12.28  9.22  5.79  3.23  1.45  0.98  0.75 10.89 13.30  57.5
1 1 -2147483647.000 1  8.62 15.15 12.24  9.21  5.81  3.29  1.44  0.99  0.76 10.83 13.24  57.5
Drop Sequence Completed Time: 08:14
GPS: Quality : DGPS Fix   Latitude = 39°12.930890  N   Longitude = 123°4.680200   W   PDOP = 2.20
Note: test5-1
2 1 -2147483647.000 1  8.96  7.56  5.88  4.87  3.82  2.98  1.58  0.96  0.61  5.39  6.48  57.1
2 1 -2147483647.000 1  8.84  7.37  5.76  4.79  3.77  2.95  1.58  0.94  0.63  5.30  6.34  57.1
2 1 -2147483647.000 1  8.94  7.34  5.76  4.78  3.77  2.95  1.59  0.92  0.61  5.28  6.30  57.1
Drop Sequence Completed Time: 08:16
GPS: Quality : DGPS Fix   Latitude = 39°12.943903  N   Longitude = 123°4.704484   W   PDOP = 2.20
Note: test5-2
3 1 -2147483647.000 1  9.01  6.42  5.22  4.43  3.61  2.91  1.70  1.10  0.65  4.93  5.76  59.0
3 1 -2147483647.000 1  8.86  6.30  5.14  4.35  3.54  2.85  1.67  1.06  0.65  4.84  5.60  59.0
3 1 -2147483647.000 1  8.86  6.21  5.08  4.32  3.53  2.84  1.66  1.07  0.64  4.80  5.54  59.0
Drop Sequence Completed Time: 08:17
GPS: Quality : DGPS Fix   Latitude = 39°12.956369  N   Longitude = 123°4.725534   W   PDOP = 2.20
Note: test5-3
4 1 -2147483647.000 1  8.89  4.93  4.09  3.53  2.90  2.35  1.41  0.95  0.60  3.73  4.30  58.6
4 1 -2147483647.000 1  8.84  4.83  4.02  3.50  2.89  2.33  1.39  0.94  0.59  3.66  4.21  58.6
4 1 -2147483647.000 1  8.91  4.84  4.04  3.52  2.90  2.35  1.41  0.95  0.60  3.66  4.24  58.6
Drop Sequence Completed Time: 08:18
GPS: Quality : DGPS Fix   Latitude = 39°12.969545  N   Longitude = 123°4.745568   W   PDOP = 2.20
Note: test5-4
5 1 -2147483647.000 1  8.57  5.02  4.38  3.80  3.11  2.53  1.59  1.10  0.74  3.89  4.44  59.0
5 1 -2147483647.000 1  8.67  4.95  4.31  3.74  3.09  2.51  1.58  1.09  0.71  3.84  4.37  59.0
5 1 -2147483647.000 1  8.62  4.92  4.30  3.74  3.07  2.51  1.58  1.07  0.73  3.86  4.35  59.0
Drop Sequence Completed Time: 08:18
GPS: Quality : DGPS Fix   Latitude = 39°12.983960  N   Longitude = 123°4.764814   W   PDOP = 2.70
Note: test5-5
6 1 -2147483647.000 1  8.40  7.38  5.69  4.79  3.86  3.07  1.80  1.16  0.80  5.37  6.25  59.3
6 1 -2147483647.000 1  8.40  7.29  5.65  4.77  3.83  3.07  1.81  1.17  0.82  5.36  6.19  59.3
6 1 -2147483647.000 1  8.62  7.37  5.72  4.84  3.89  3.11  1.86  1.22  0.82  5.41  6.25  59.3
Drop Sequence Completed Time: 08:19
GPS: Quality : DGPS Fix   Latitude = 39°12.998896  N   Longitude = 123°4.782542   W   PDOP = 2.60
Note: test5-6
7 1 -2147483647.000 1  9.11  7.45  6.03  5.02  4.16  3.48  2.28  1.62  1.12  5.37  6.28  59.7
7 1 -2147483647.000 1  9.13  7.27  5.95  4.94  4.11  3.43  2.25  1.62  1.11  5.28  6.13  59.7
7 1 -2147483647.000 1  9.11  7.22  5.90  4.92  4.08  3.43  2.25  1.58  1.09  5.27  6.16  59.7
Drop Sequence Completed Time: 08:20
GPS: Quality : DGPS Fix   Latitude = 39°13.014198  N   Longitude = 123°4.799853   W   PDOP = 2.60
Note: test5-7
8 1 -2147483647.000 1  9.08  5.16  4.54  4.09  3.60  3.09  2.03  1.31  0.78  3.85  4.37  59.0
8 1 -2147483647.000 1  8.96  5.05  4.43  4.01  3.52  3.04  1.99  1.32  0.79  3.76  4.29  59.0
8 1 -2147483647.000 1  9.16  5.11  4.50  4.07  3.57  3.08  2.02  1.32  0.78  3.81  4.35  59.0
Drop Sequence Completed Time: 08:21
GPS: Quality : DGPS Fix   Latitude = 39°13.029320  N   Longitude = 123°4.816982   W   PDOP = 2.20
Note: test5-8
9 1 -2147483647.000 1  8.94  6.26  4.58  3.78  3.01  2.33  1.21  0.82  0.54  4.09  4.88  61.9
9 1 -2147483647.000 1  8.86  6.09  4.48  3.70  2.96  2.32  1.23  0.81  0.54  4.00  4.74  61.9
9 1 -2147483647.000 1  8.98  6.16  4.54  3.75  3.00  2.35  1.24  0.82  0.52  4.04  4.82  61.9
Drop Sequence Completed Time: 08:22
GPS: Quality : DGPS Fix   Latitude = 39°13.045558  N   Longitude = 123°4.834101   W   PDOP = 2.20
Note: test5-9
10 1 -2147483647.000 1  9.01  7.32  6.23  5.44  4.50  3.60  2.09  1.35  0.82  5.51  6.35  61.2
10 1 -2147483647.000 1  8.98  7.14  6.11  5.33  4.40  3.54  2.07  1.35  0.81  5.41  6.16  61.2
10 1 -2147483647.000 1  8.94  7.02  6.04  5.24  4.34  3.49  2.05  1.34  0.79  5.32  6.13  61.2
Drop Sequence Completed Time: 08:23
GPS: Quality : DGPS Fix   Latitude = 39°13.061369  N   Longitude = 123°4.850570   W   PDOP = 2.20
Note: test5-10
```

```
11 1 -2147483647.000 1  8.81 14.07 11.62  9.65  7.51  5.82  3.13  1.89  1.15 10.62 12.30  61.5
11 1 -2147483647.000 1  8.74 13.72 11.38  9.45  7.41  5.77  3.10  1.87  1.12 10.42 12.06  61.5
11 1 -2147483647.000 1  8.84 13.72 11.43  9.51  7.45  5.82  3.14  1.87  1.15 10.51 12.10  61.5
Drop Sequence Completed Time: 08:24
GPS: Quality : DGPS Fix   Latitude = 39°13.077306  N   Longitude = 123°4.867372   W   PDOP = 2.20
Note: test5-11
12 1 -2147483647.000 1  8.67 16.01 13.76 11.81  9.68  8.09  3.60  2.62  1.72 13.70 15.10  62.6
12 1 -2147483647.000 1  8.64 15.82 13.57 11.64  9.59  8.01  3.61  2.59  1.69 13.57 14.93  62.6
12 1 -2147483647.000 1  8.72 15.82 13.61 11.66  9.62  8.03  3.62  2.60  1.68 13.55 15.00  62.6
Drop Sequence Completed Time: 08:25
GPS: Quality : DGPS Fix   Latitude = 39°13.093237  N   Longitude = 123°4.884247   W   PDOP = 2.20
Note: test5-12
13 1 -2147483647.000 1  9.13  5.45  4.62  4.03  3.42  2.89  1.91  1.41  0.98  4.28  4.86  61.5
13 1 -2147483647.000 1  8.98  5.35  4.53  3.94  3.34  2.85  1.85  1.35  0.94  4.19  4.75  61.5
13 1 -2147483647.000 1  9.01  5.29  4.47  3.92  3.32  2.82  1.87  1.37  0.96  4.18  4.73  61.5
Drop Sequence Completed Time: 08:26
GPS: Quality : DGPS Fix   Latitude = 39°13.109276  N   Longitude = 123°4.901556   W   PDOP = 2.20
Note: test5-13
14 1 -2147483647.000 1  8.81 11.53  9.87  8.61  7.08  5.83  3.45  2.24  1.46 10.39 11.31  62.3
14 1 -2147483647.000 1  8.57 11.33  9.72  8.50  6.99  5.72  3.42  2.25  1.43 10.23 11.08  62.3
14 1 -2147483647.000 1  8.69 11.27  9.71  8.45  6.99  5.74  3.41  2.23  1.43 10.18 11.03  62.3
Drop Sequence Completed Time: 08:27
GPS: Quality : DGPS Fix   Latitude = 39°13.125038  N   Longitude = 123°4.918117   W   PDOP = 2.20
Note: test5-14
15 1 -2147483647.000 1  8.81  9.26  7.97  6.87  5.66  4.60  2.72  1.73  1.09  6.82  7.88  62.3
15 1 -2147483647.000 1  8.72  9.14  7.88  6.81  5.62  4.57  2.69  1.72  1.09  6.75  7.79  62.3
15 1 -2147483647.000 1  8.84  9.11  7.85  6.79  5.61  4.55  2.70  1.71  1.11  6.71  7.78  62.3
Drop Sequence Completed Time: 08:27
GPS: Quality : DGPS Fix   Latitude = 39°13.140927  N   Longitude = 123°4.934877   W   PDOP = 2.20
Note: test5-15
16 1 -2147483647.000 1  8.96  7.01  6.00  5.26  4.45  3.77  2.48  1.77  1.20  5.47  6.19  63.7
16 1 -2147483647.000 1  9.01  6.93  5.96  5.22  4.43  3.77  2.48  1.76  1.20  5.41  6.11  63.7
16 1 -2147483647.000 1  8.89  6.78  5.86  5.15  4.35  3.69  2.44  1.76  1.15  5.32  6.02  63.7
Drop Sequence Completed Time: 08:28
GPS: Quality : DGPS Fix   Latitude = 39°13.156691  N   Longitude = 123°4.951646   W   PDOP = 2.20
Note: test5-16
17 1 -2147483647.000 1  8.94  7.01  6.08  5.16  4.22  3.49  2.12  1.48  1.02  5.25  6.19  62.3
17 1 -2147483647.000 1  8.81  6.82  5.94  5.05  4.14  3.40  2.09  1.46  0.98  5.14  6.01  62.3
17 1 -2147483647.000 1  8.84  6.77  5.92  5.04  4.14  3.42  2.08  1.45  1.02  5.12  5.98  62.3
Drop Sequence Completed Time: 08:29
GPS: Quality : DGPS Fix   Latitude = 39°13.172425  N   Longitude = 123°4.968305   W   PDOP = 2.20
Note: test5-17
18 1 -2147483647.000 1  8.98  8.29  7.41  6.53  5.48  4.55  2.70  1.85  1.25  6.30  7.14  63.7
18 1 -2147483647.000 1  8.79  8.02  7.16  6.32  5.31  4.41  2.63  1.83  1.22  6.13  6.92  63.7
18 1 -2147483647.000 1  8.89  7.98  7.16  6.34  5.30  4.41  2.66  1.85  1.22  6.12  6.92  63.7
Drop Sequence Completed Time: 08:30
GPS: Quality : DGPS Fix   Latitude = 39°13.188160  N   Longitude = 123°4.985251   W   PDOP = 2.20
Note: test5-18
19 1 -2147483647.000 1  8.86  9.95  8.88  7.90  6.66  5.52  3.56  2.49  1.69  8.44  9.42  63.4
19 1 -2147483647.000 1  8.79  9.77  8.76  7.76  6.56  5.48  3.54  2.49  1.66  8.29  9.26  63.4
19 1 -2147483647.000 1  8.81  9.70  8.69  7.71  6.53  5.44  3.53  2.48  1.68  8.23  9.19  63.4
Drop Sequence Completed Time: 08:31
GPS: Quality : DGPS Fix   Latitude = 39°13.204082  N   Longitude = 123°5.002063   W   PDOP = 2.20
Note: test5-19
20 1 -2147483647.000 1  8.62 14.66 12.31 10.54  8.07  5.90  2.88  1.97  1.50 12.13 14.30  62.6
20 1 -2147483647.000 1  8.54 14.30 12.08 10.35  7.94  5.83  2.84  1.94  1.45 11.89 13.92  62.6
20 1 -2147483647.000 1  8.57 14.27 12.09 10.36  7.98  5.88  2.86  1.96  1.48 11.87 13.91  62.6
Drop Sequence Completed Time: 08:32
GPS: Quality : DGPS Fix   Latitude = 39°13.219774  N   Longitude = 123°5.018720   W   PDOP = 2.20
Note: test5-20
21 1 -2147483647.000 1  8.81  6.05  5.14  4.42  3.65  2.96  1.75  1.22  0.86  4.62  5.27  63.4
21 1 -2147483647.000 1  8.96  6.06  5.12  4.45  3.68  3.02  1.80  1.20  0.86  4.65  5.31  63.4
21 1 -2147483647.000 1  8.91  5.99  5.08  4.39  3.65  2.98  1.77  1.22  0.86  4.57  5.25  63.4
Drop Sequence Completed Time: 08:32
GPS: Quality : DGPS Fix   Latitude = 39°13.235708  N   Longitude = 123°5.035497   W   PDOP = 2.20
Note: test5-21
22 1 -2147483647.000 1  8.81  7.47  6.18  5.30  4.12  3.11  1.49  0.81  0.60  6.19  6.91  61.9
22 1 -2147483647.000 1  8.74  7.26  6.04  5.17  4.03  3.08  1.49  0.78  0.58  6.06  6.74  61.9
22 1 -2147483647.000 1  8.76  7.17  5.98  5.12  4.00  3.05  1.47  0.79  0.60  5.95  6.64  61.9
Drop Sequence Completed Time: 08:33
GPS: Quality : DGPS Fix   Latitude = 39°13.251537  N   Longitude = 123°5.051991   W   PDOP = 2.20
```

```
Note: test5-22
23 1 -2147483647.000 1  8.91  7.65  6.01  5.01  3.94  3.10  1.64  0.99  0.63  5.38  6.48  60.4
23 1 -2147483647.000 1  8.96  7.48  5.88  4.93  3.90  3.05  1.64  1.02  0.63  5.31  6.38  60.4
23 1 -2147483647.000 1  8.84  7.37  5.85  4.89  3.88  3.07  1.65  1.02  0.63  5.24  6.28  60.4
Drop Sequence Completed Time: 08:34
GPS: Quality : DGPS Fix   Latitude = 39°13.267285  N   Longitude = 123°5.069043   W   PDOP = 2.20
Note: test5-23
24 1 -2147483647.000 1  8.84  7.80  6.27  5.22  3.98  3.02  1.65  1.04  0.72  5.42  6.56  61.9
24 1 -2147483647.000 1  8.79  7.62  6.05  5.05  3.87  2.92  1.60  1.02  0.70  5.39  6.48  61.9
24 1 -2147483647.000 1  8.72  7.55  6.03  5.01  3.85  2.92  1.59  0.99  0.71  5.36  6.42  61.9
Drop Sequence Completed Time: 08:35
GPS: Quality : DGPS Fix   Latitude = 39°13.283160  N   Longitude = 123°5.085827   W   PDOP = 2.20
Note: test5-24
```

**PES 5 OWP. Starting at PM 41.1030. Test interval 15 m (50 ft).**

```
M3
Date-Time:  4-27-2005  8:46: 8
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test sec 5 41.43 wb rwtrack
Temp:   57.30
Operator: HOFFMAN
Comments: test sec 5 pattern 2 every 50 ft right wheel
1 1 -2147483647.000 1  5.93  6.13  5.36  4.66  3.81  3.08  1.77  1.15  0.72  4.76  5.43  64.5
1 1 -2147483647.000 1  8.79  8.99  7.89  6.87  5.68  4.60  2.65  1.75  1.10  7.01  7.97  64.5
1 1 -2147483647.000 1 11.72 11.59 10.18  8.91  7.41  6.01  3.49  2.32  1.52  9.10 10.24  64.5
Drop Sequence Completed Time: 08:53
GPS: Quality : DGPS Fix   Latitude = 39°13.140806  N   Longitude = 123°4.934654   W   PDOP = 2.70
Note: test5r-1
2 1 -2147483647.000 1  5.93  5.02  4.41  3.91  3.30  2.70  1.63  1.02  0.64  3.87  4.39  64.5
2 1 -2147483647.000 1  8.98  7.41  6.51  5.75  4.88  4.05  2.42  1.53  0.96  5.73  6.50  64.5
2 1 -2147483647.000 1 11.99  9.62  8.42  7.49  6.38  5.29  3.20  2.04  1.30  7.47  8.47  64.5
Drop Sequence Completed Time: 08:54
GPS: Quality : DGPS Fix   Latitude = 39°13.147267  N   Longitude = 123°4.941485   W   PDOP = 2.70
Note: test5r-2
3 1 -2147483647.000 1  5.93  5.18  4.51  3.88  3.14  2.56  1.52  1.04  0.68  3.81  4.41  67.4
3 1 -2147483647.000 1  8.81  7.64  6.64  5.72  4.70  3.84  2.29  1.56  1.02  5.62  6.50  67.4
3 1 -2147483647.000 1 11.91  9.89  8.60  7.44  6.13  5.05  3.02  2.10  1.34  7.30  8.38  67.4
Drop Sequence Completed Time: 08:56
GPS: Quality : DGPS Fix   Latitude = 39°13.153796  N   Longitude = 123°4.948124   W   PDOP = 2.70
Note: test5r-3
4 1 -2147483647.000 1  5.98  4.13  3.58  3.14  2.68  2.27  1.44  0.98  0.65  3.21  3.67  65.9
4 1 -2147483647.000 1  9.03  6.08  5.27  4.63  3.97  3.36  2.16  1.53  1.02  4.75  5.41  65.9
4 1 -2147483647.000 1 12.08  7.77  6.71  5.92  5.09  4.32  2.80  1.96  1.30  6.00  6.87  65.9
Drop Sequence Completed Time: 08:57
GPS: Quality : DGPS Fix   Latitude = 39°13.160022  N   Longitude = 123°4.954872   W   PDOP = 2.70
Note: test5r-4
5 1 -2147483647.000 1  5.98  4.58  4.02  3.43  2.83  2.36  1.42  0.99  0.68  3.43  3.98  65.9
5 1 -2147483647.000 1  9.16  6.61  5.77  4.94  4.14  3.43  2.13  1.50  1.00  4.99  5.77  65.9
5 1 -2147483647.000 1 12.11  8.26  7.22  6.22  5.20  4.34  2.71  1.92  1.34  6.23  7.17  65.9
Drop Sequence Completed Time: 08:57
GPS: Quality : DGPS Fix   Latitude = 39°13.166245  N   Longitude = 123°4.961521   W   PDOP = 2.70
Note: test5r-5
6 1 -2147483647.000 1  6.15  4.86  4.18  3.53  2.82  2.24  1.32  0.95  0.64  3.57  4.23  65.2

6 1 -2147483647.000 1  9.03  6.88  5.92  5.04  4.07  3.25  1.96  1.39  0.94  5.14  5.97  65.2
6 1 -2147483647.000 1 11.91  8.75  7.54  6.40  5.20  4.25  2.55  1.82  1.19  6.54  7.60  65.2
Drop Sequence Completed Time: 08:58
GPS: Quality : DGPS Fix   Latitude = 39°13.172456  N   Longitude = 123°4.968225   W   PDOP = 2.70
Note: test5r-6
7 1 -2147483647.000 1  6.08  4.08  3.60  3.07  2.45  1.98  1.24  0.88  0.57  2.99  3.52  67.7
7 1 -2147483647.000 1  9.03  5.87  5.12  4.41  3.57  2.94  1.83  1.31  0.89  4.31  5.06  67.7
7 1 -2147483647.000 1 12.08  7.49  6.56  5.59  4.58  3.79  2.40  1.70  1.14  5.52  6.45  67.7
Drop Sequence Completed Time: 08:59
GPS: Quality : DGPS Fix   Latitude = 39°13.178677  N   Longitude = 123°4.974883   W   PDOP = 2.70
Note: test5r-7
8 1 -2147483647.000 1  5.88  5.43  4.74  4.11  3.31  2.68  1.66  1.09  0.70  4.00  4.62  68.8
8 1 -2147483647.000 1  8.94  7.98  6.95  5.98  4.88  3.99  2.49  1.66  1.06  5.86  6.81  68.8
8 1 -2147483647.000 1 11.91 10.22  8.85  7.66  6.29  5.13  3.25  2.18  1.43  7.51  8.73  68.8
Drop Sequence Completed Time: 09:00
GPS: Quality : DGPS Fix   Latitude = 39°13.185067  N   Longitude = 123°4.981667   W   PDOP = 2.70
Note: test5r-8
9 1 -2147483647.000 1  6.15  6.09  5.24  4.59  3.78  3.08  1.95  1.25  0.80  4.90  5.59  66.3
9 1 -2147483647.000 1  9.01  8.85  7.65  6.69  5.56  4.55  2.90  1.88  1.23  7.16  8.19  66.3
9 1 -2147483647.000 1 11.89 11.34  9.78  8.58  7.19  5.93  3.77  2.48  1.65  9.14 10.39  66.3
Drop Sequence Completed Time: 09:01
GPS: Quality : DGPS Fix   Latitude = 39°13.191517  N   Longitude = 123°4.988496   W   PDOP = 2.70
Note: test5r-9
10 1 -2147483647.000 1  5.88  5.98  5.25  4.58  3.75  3.05  1.89  1.22  0.80  4.68  5.31  66.7
10 1 -2147483647.000 1  8.84  8.83  7.76  6.78  5.56  4.58  2.86  1.87  1.21  6.94  7.87  66.7
10 1 -2147483647.000 1 11.89 11.43 10.04  8.76  7.28  6.02  3.78  2.52  1.65  8.99 10.15  66.7
Drop Sequence Completed Time: 09:02
GPS: Quality : DGPS Fix   Latitude = 39°13.197741  N   Longitude = 123°4.994828   W   PDOP = 2.70
Note: test5r-10
```

```
11 1 -2147483647.000 1  5.93  7.60  6.78  6.00  4.97  4.16  2.68  1.72  1.11  6.28  7.03  66.3
11 1 -2147483647.000 1  8.81 11.12  9.95  8.80  7.37  6.20  4.02  2.67  1.68  9.22 10.21  66.3
11 1 -2147483647.000 1 11.67 14.23 12.76 11.29  9.55  8.04  5.30  3.57  2.33 11.75 12.98  66.3
Drop Sequence Completed Time: 09:03
GPS: Quality : DGPS Fix   Latitude = 39°13.204054  N   Longitude = 123°5.001660   W   PDOP = 2.70
Note: test5r-11
```

**PES 5 CL. Starting at PM 41.1030. Test interval 15 m (50 ft).**

```
M3
Date-Time:  4-27-2005  9: 4:44
Sensors: 092011F  092012f  092013f  092014f  092015f  092016f  092017f  092018f  092019f  chop
Weight/spring: 3
Location: test sec 5 41.43 wb center
Temp:   59.01
Operator: HOFFMAN
Comments: test sec 5 pattern 2 every 50 ft center
1 1 -2147483647.000 1  5.91  6.17  5.36  4.62  3.77  3.00  1.80  1.14  0.71  4.60  5.35  69.2
1 1 -2147483647.000 1  9.11  9.35  8.07  6.98  5.75  4.58  2.82  1.81  1.13  6.98  8.15  69.2
1 1 -2147483647.000 1 11.89 11.81 10.22  8.88  7.35  5.86  3.61  2.34  1.44  8.83 10.28  69.2
Drop Sequence Completed Time: 09:13
GPS: Quality : DGPS Fix   Latitude = 39°13.140560  N   Longitude = 123°4.934721   W   PDOP = 2.70
Note: test5center-1
2 1 -2147483647.000 1  6.01  4.96  4.29  3.73  3.05  2.50  1.48  0.99  0.68  3.73  4.27  70.7
2 1 -2147483647.000 1  9.03  7.41  6.38  5.57  4.59  3.74  2.30  1.56  1.04  5.57  6.40  70.7
2 1 -2147483647.000 1 11.89  9.60  8.30  7.21  5.98  4.87  3.02  2.05  1.36  7.22  8.27  70.7
Drop Sequence Completed Time: 09:14
GPS: Quality : DGPS Fix   Latitude = 39°13.147021  N   Longitude = 123°4.941523   W   PDOP = 2.70
Note: test5center-2
3 1 -2147483647.000 1  5.98  4.75  4.12  3.60  2.99  2.49  1.57  1.02  0.66  3.63  4.16  70.3
3 1 -2147483647.000 1  8.86  6.92  6.03  5.24  4.39  3.65  2.34  1.51  1.01  5.33  6.07  70.3
3 1 -2147483647.000 1 11.69  8.88  7.74  6.75  5.69  4.72  3.00  1.98  1.32  6.82  7.74  70.3
Drop Sequence Completed Time: 09:14
GPS: Quality : DGPS Fix   Latitude = 39°13.153450  N   Longitude = 123°4.948320   W   PDOP = 2.70
Note: test5center-3
4 1 -2147483647.000 1  5.98  3.14  2.68  2.40  2.06  1.75  1.19  0.85  0.58  2.54  2.80  70.7
4 1 -2147483647.000 1  9.06  4.74  4.07  3.61  3.12  2.66  1.83  1.29  0.90  3.84  4.26  70.7
4 1 -2147483647.000 1 12.01  6.24  5.34  4.76  4.11  3.48  2.41  1.71  1.20  5.05  5.50  70.7
Drop Sequence Completed Time: 09:15
GPS: Quality : DGPS Fix   Latitude = 39°13.159832  N   Longitude = 123°4.955199   W   PDOP = 2.70
Note: test5center-4
5 1 -2147483647.000 1  6.01  3.74  3.24  2.86  2.46  2.10  1.42  0.99  0.70  2.97  3.32  69.9
5 1 -2147483647.000 1  8.94  5.54  4.79  4.27  3.68  3.13  2.14  1.52  1.07  4.42  4.92  69.9
5 1 -2147483647.000 1 11.96  7.14  6.21  5.51  4.75  4.03  2.77  1.98  1.39  5.68  6.31  69.9
Drop Sequence Completed Time: 09:17
GPS: Quality : DGPS Fix   Latitude = 39°13.165984  N   Longitude = 123°4.961599   W   PDOP = 2.70
Note: test5center-5
6 1 -2147483647.000 1  6.03  4.17  3.61  3.19  2.69  2.26  1.53  1.07  0.71  3.39  3.76  71.8
6 1 -2147483647.000 1  8.86  6.11  5.32  4.67  3.95  3.30  2.29  1.60  1.05  5.02  5.56  71.8
6 1 -2147483647.000 1 11.94  7.85  6.80  5.98  5.05  4.26  2.95  2.10  1.38  6.39  7.10  71.8
Drop Sequence Completed Time: 09:18
GPS: Quality : DGPS Fix   Latitude = 39°13.172174  N   Longitude = 123°4.968373   W   PDOP = 2.70
Note: test5center-6
7 1 -2147483647.000 1  5.91  4.45  3.92  3.44  2.87  2.36  1.53  1.04  0.70  3.44  3.90  72.1
7 1 -2147483647.000 1  8.89  6.58  5.78  5.07  4.25  3.52  2.29  1.58  1.06  5.09  5.75  72.1
7 1 -2147483647.000 1 11.87  8.46  7.41  6.48  5.44  4.51  2.95  2.05  1.35  6.50  7.37  72.1
Drop Sequence Completed Time: 09:18
GPS: Quality : DGPS Fix   Latitude = 39°13.178437  N   Longitude = 123°4.975134   W   PDOP = 2.70
Note: test5center-7
8 1 -2147483647.000 1  6.05  5.14  4.43  3.69  2.98  2.44  1.56  1.05  0.70  3.63  4.26  71.8
8 1 -2147483647.000 1  8.98  7.52  6.42  5.41  4.38  3.60  2.31  1.56  1.07  5.35  6.25  71.8
8 1 -2147483647.000 1 12.01  9.68  8.28  6.94  5.66  4.68  3.03  2.09  1.39  6.93  8.03  71.8
Drop Sequence Completed Time: 09:19
GPS: Quality : DGPS Fix   Latitude = 39°13.184758  N   Longitude = 123°4.981762   W   PDOP = 2.80
Note: test5center-8
9 1 -2147483647.000 1  5.79  5.39  4.78  4.21  3.52  2.95  1.90  1.29  0.87  4.19  4.71  71.4
9 1 -2147483647.000 1  8.94  8.24  7.25  6.41  5.42  4.54  2.95  2.02  1.36  6.43  7.28  71.4
9 1 -2147483647.000 1 11.74 10.49  9.29  8.13  6.92  5.80  3.80  2.63  1.77  8.18  9.25  71.4
Drop Sequence Completed Time: 09:20
GPS: Quality : DGPS Fix   Latitude = 39°13.191269  N   Longitude = 123°4.988635   W   PDOP = 2.80
Note: test5center-9
```

```
10 1 -2147483647.000 1  5.91  5.01  4.42  3.90  3.27  2.74  1.76  1.19  0.80  3.97  4.49  72.1
10 1 -2147483647.000 1  8.86  7.44  6.55  5.80  4.89  4.08  2.69  1.80  1.22  5.90  6.68  72.1
10 1 -2147483647.000 1 11.82  9.71  8.54  7.55  6.38  5.38  3.53  2.41  1.62  7.71  8.59  72.1
Drop Sequence Completed Time: 09:20
GPS: Quality : DGPS Fix   Latitude = 39°13.197794  N   Longitude = 123°4.995576   W   PDOP = 2.80
Note: test5center-10
11 1 -2147483647.000 1  5.88  5.90  5.39  4.87  4.14  3.48  2.29  1.52  1.03  4.95  5.43  71.8
11 1 -2147483647.000 1  8.94  8.88  8.12  7.28  6.24  5.23  3.46  2.39  1.57  7.41  8.18  71.8
11 1 -2147483647.000 1 11.77 11.42 10.44  9.36  8.05  6.78  4.51  3.12  2.13  9.48 10.46  71.8
Drop Sequence Completed Time: 09:21
GPS: Quality : DGPS Fix   Latitude = 39°13.203736  N   Longitude = 123°5.001931   W   PDOP = 2.80
Note: test5center-11
```

# APPENDIX B
# DISTRESS MAP AND RUT MEASUREMENTS

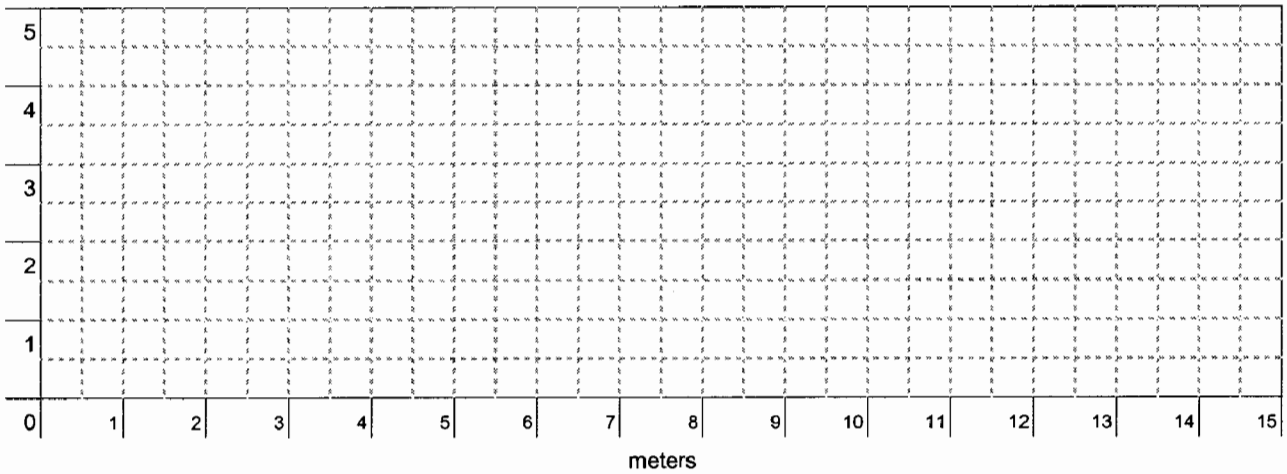
# DISTRESS DATA

# PERFORMANCE EVALUATION SECTION 1

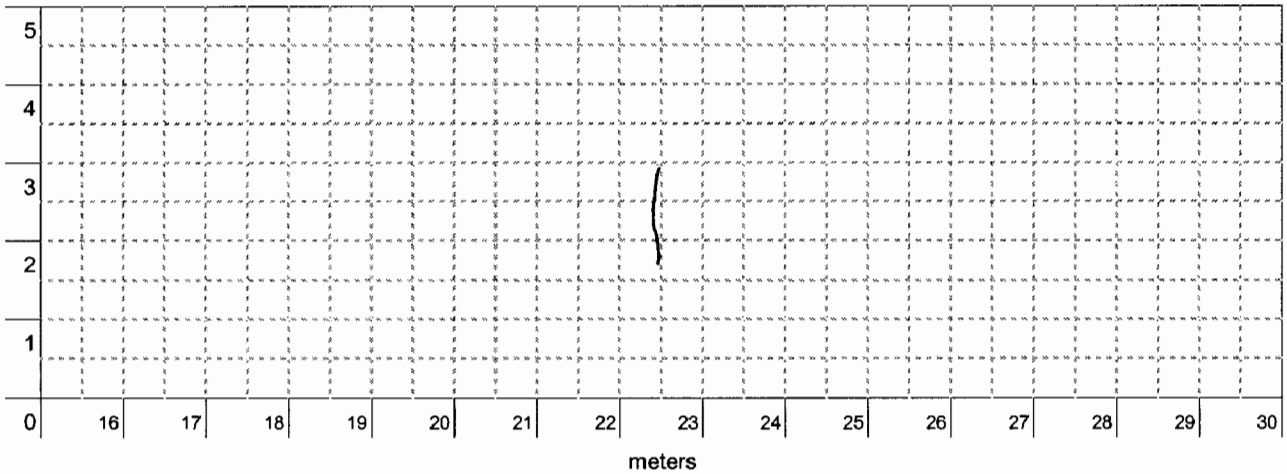
## DISTRESS MAP (PAGE 1)

Project Name: D1 RAC EA#: 01-316104 Date: 4/28/05
Test Section: 1 - RUMAC PES ID: 1 Surveyor: Itz

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

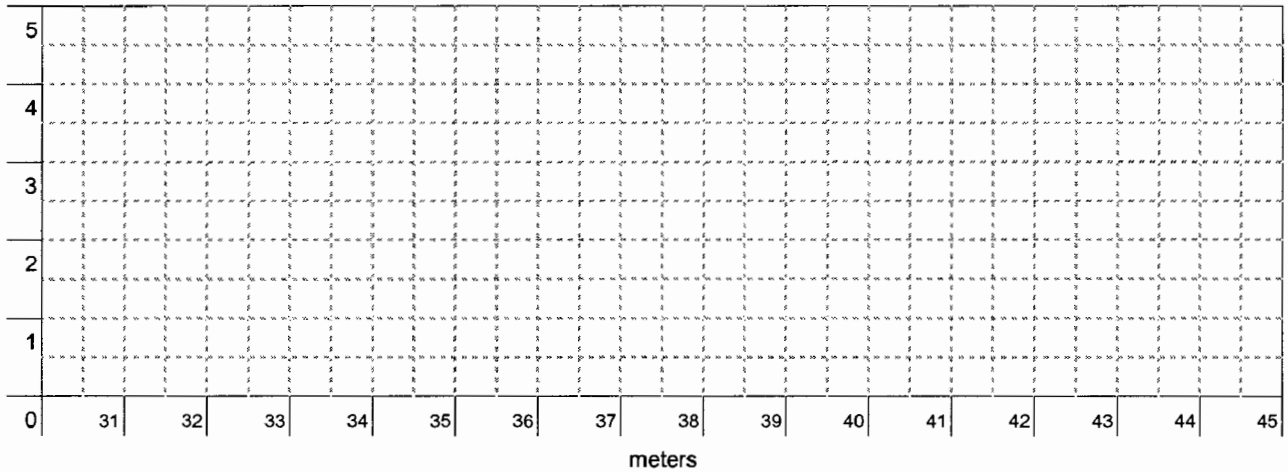



Comments:

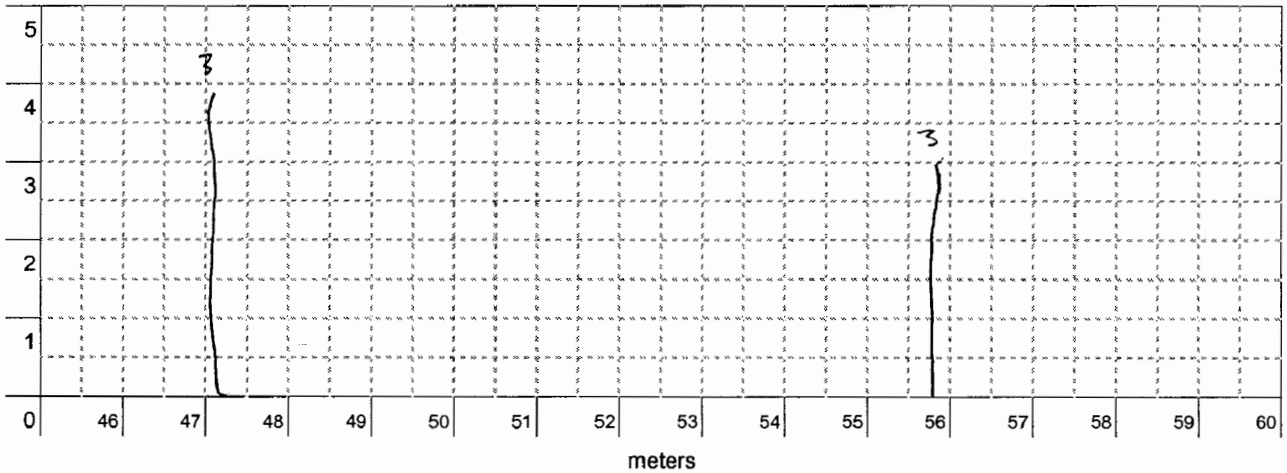
## DISTRESS MAP (PAGE 2)

Project Name: D1 RAC EA#: 01-316104 Date: 4/28/05
Test Section: 1 - RUMAC PES ID: 1 Surveyor: ltr

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

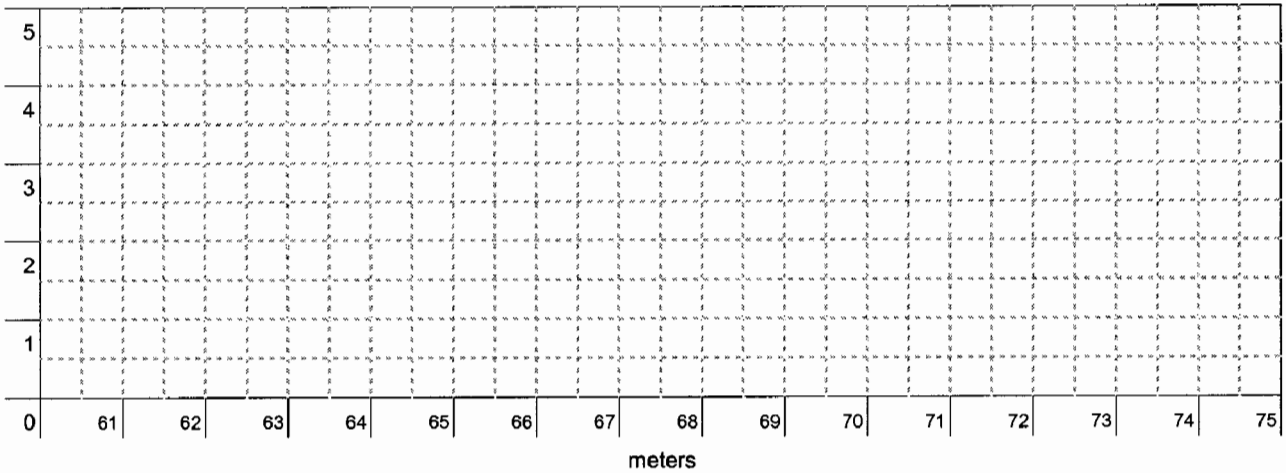



Comments:

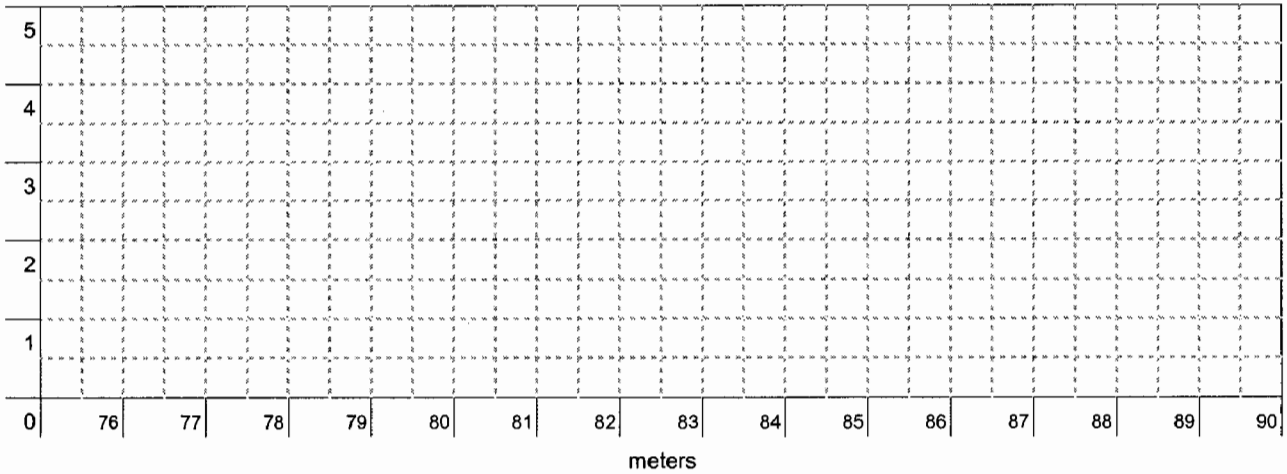
## DISTRESS MAP (PAGE 3)

Project Name: D1 RAC EA#: 01-316104 Date: 4/28/05
Test Section: 1-RUMAC PES ID: 1 Surveyor: ltc

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:



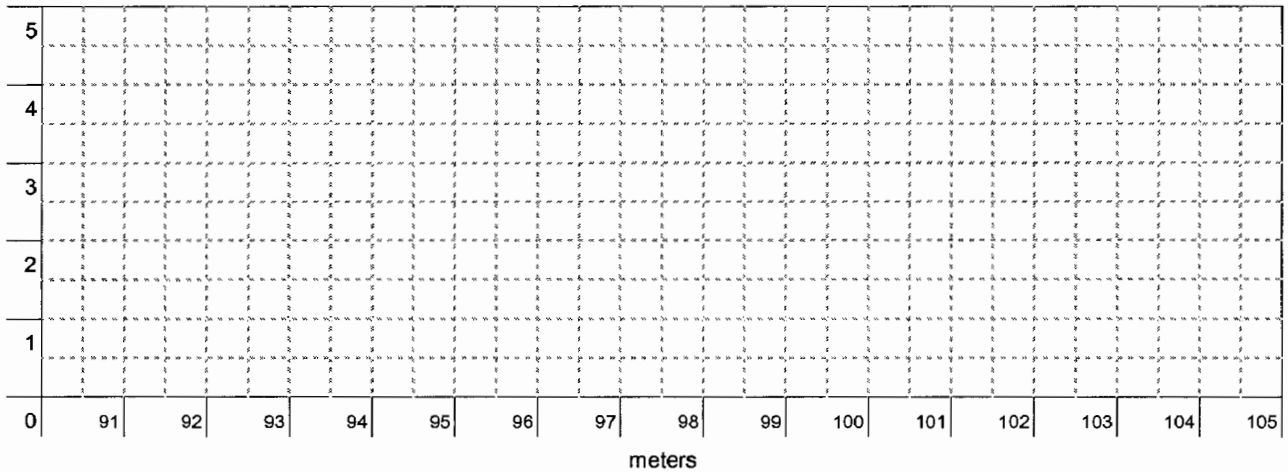

Comments:

# DISTRESS MAP (PAGE 4)

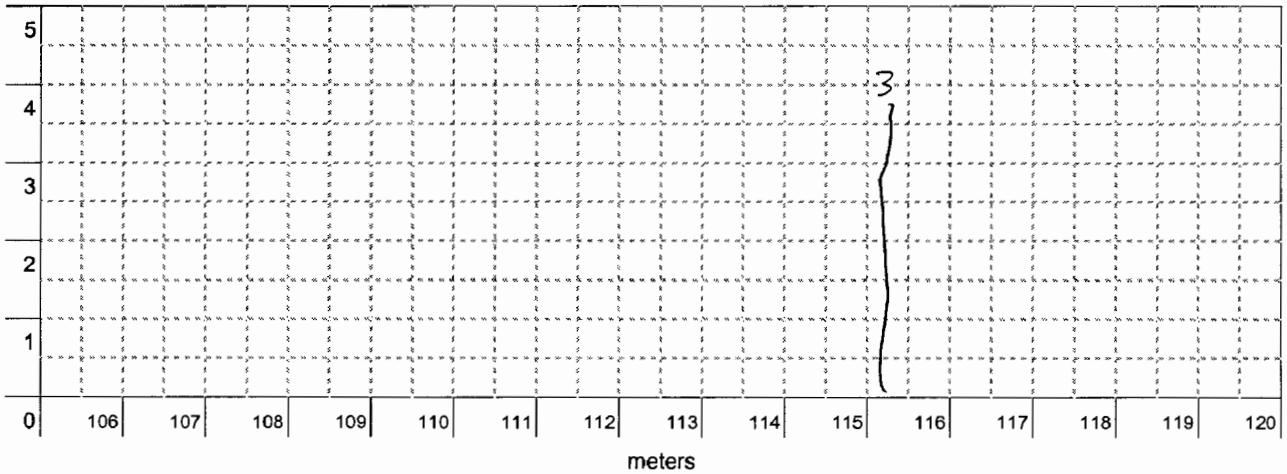
Project Name: D1 RAC EA#: 01-316104 Date: 4/28/05

Test Section: 1 - RUMAC PES ID: 1 Surveyor: HZ

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

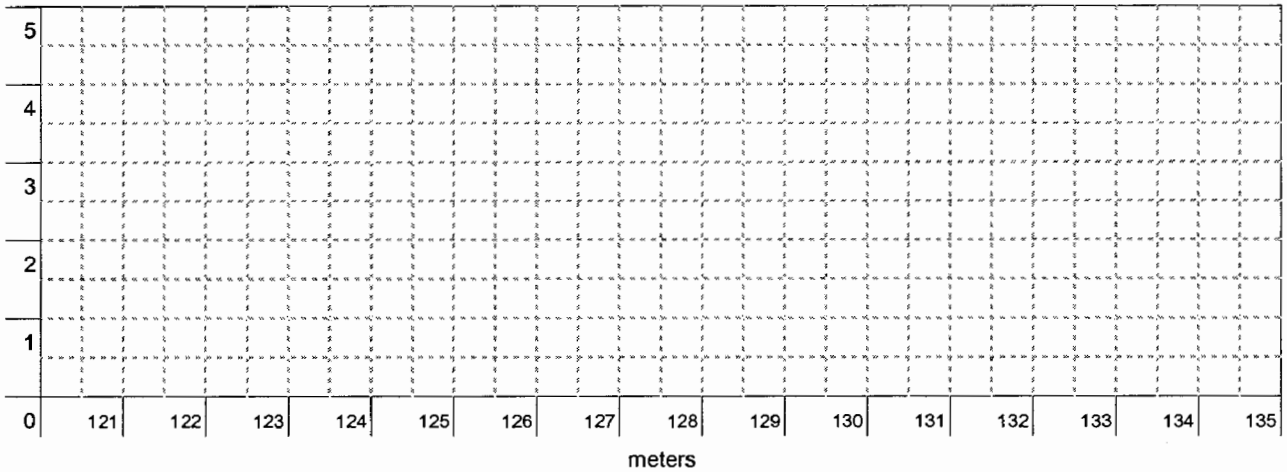



Comments:

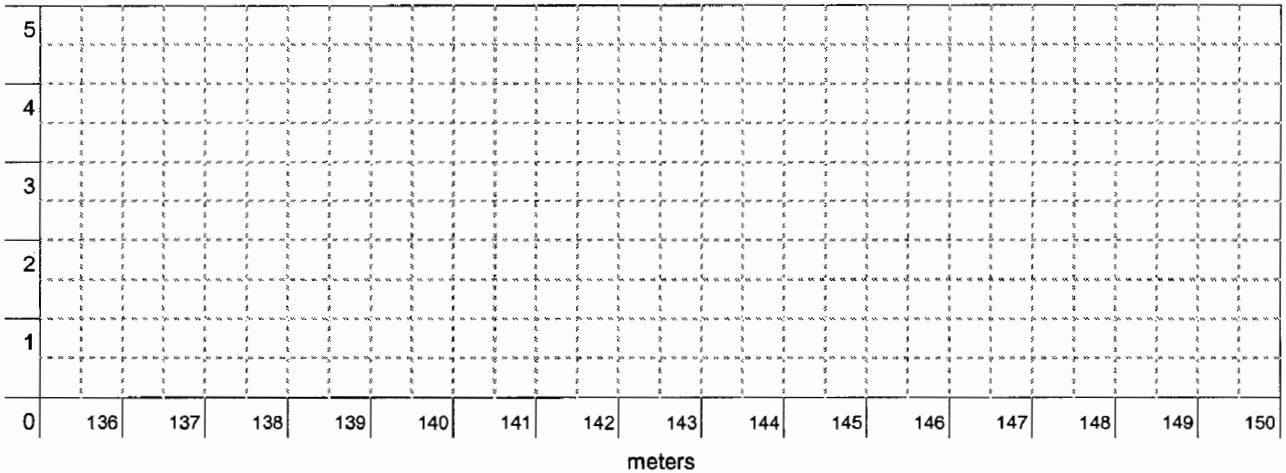
# DISTRESS MAP (PAGE 5)

Project Name: D1 RAC EA#: 01-316104 Date: 4/28/05
Test Section: 1- RUMAC PES ID: 1 Surveyor: 1t2

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments: _____




Comments: _____

## DISTRESS SURVEY SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 1)

DATE OF DISTRESS SURVEY: 4/28/05

SURVEYORS INITIALS: HZ

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,E P

EA # 01-316104

COUNTY Mendocino

PES ID# 1

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | SUBSECTION AND SEVERITY LEVEL | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | SUM | | |
| | | | 0-30 (m) [0-100 (ft)] | | | 30-60 (m) [100-200 (ft)] | | | 60-90 (m) [200-300 (ft)] | | | 90-120 (m) [300-400 (ft)] | | | 120-150 (m) [400-500 (ft)] | | | | | |
| | ITEM NO. | DISTRESS TYPE | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H |
| CRACKING | 1 | LONGITUDINAL NON-WHEELPATH (a) | | | | | | | | | | | | | | | | | | |
| | 2a | FATIGUE (Long. in wheelpath) (a) | | | | | | | | | | | | | | | | | | |
| | 2b | FATIGUE (b) | | | | | | | | | | | | | | | | | | |
| | 3 | TRANSVERSE (c) | | | | | 27 | | | | | | 14 | | | | | | 311 | |
| | 4 | REFLECTIVE (c) | | | | | | | | | | | | | | | | | | |
| | 5 | BLOCK (b) | | | | | | | | | | | | | | | | | | |
| | 6 | EDGE (a) | | | | | | | | | | | | | | | | | | |
| DEFORMATION | 7 | RUTTING (d) | | | | | | | | | | | | | | | | | | |
| | 8 | CORRUGATION (b) | | | | | | | | | | | | | | | | | | |
| | 9 | SHOVING (e) | | | | | | | | | | | | | | | | | | |
| | 10 | DEPRESSION (b) | | | | | | | | | | | | | | | | | | |
| | 11 | OVERLAY BUMPS (c) | | | | | | | | | | | | | | | | | | |

a = Length, meter; b = Area, square meter; c = Number and length, meter; d = Maximum depth, mm; e = Number and square meter; f = Yes/No/Unknown

## DISTRESS SURVEY SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 2)

DATE OF DISTRESS SURVEY: 4/28/05

EA # 01-316104

SURVEYORS INITIALS: HZ

COUNTY Mendocino

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,E P

PES ID# 1

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | SUBSECTION AND SEVERITY LEVEL | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | SUM | | |
| | | | 0-30 (m) [0-100 (ft)] | | | 30-60 (m) [100-200 (ft)] | | | 60-90 (m) [200-300 (ft)] | | | 90-120 (m) [300-400 (ft)] | | | 120-150 (m) [400-500 (ft)] | | | | | |
| | ITEM NO. | DISTRESS TYPE | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H |
| DETERIORATION | 12 | DELAMINATION (b) | | | | | | | | | | | | | | | | | | |
| | 13 | POTHOLES (e) | | | | | | | | | | | | | | | | | | |
| | 14 | PATCHING (e) | | | | | | | | | | | | | | | | | | |
| | 15 | RAVELING (b) | | | | | | | | | | | | | | | | | | |
| | 16 | STRIPPING (f) | | | | | | | | | | | | | | | | | | |
| | 17 | POLISHED AGGREGATE (b) | | | | | | | | | | | | | | | | | | |
| | 18 | PUMPING (c) | | | | | | | | | | | | | | | | | | |
| MAT PROBLEMS | 19 | SEGREGATION (b) | | | | | | | | | | | | | | | | | | |
| | 20 | CHECKING (b) | | | | | | | | | | | | | | | | | | |
| | 21 | BLEEDING (b) | | | | | | | | | | | | | | | | | | |

COMMENTS: _____

a = Length, meter; b = Area, square meter; c = Number and length, meter; d = Maximum depth, mm; e = Number and square meter; f = Yes/No/Unknown

## RUTTING MEASUREMENTS SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 3)

DATE OF DISTRESS SURVEY: 4/28/05

EA # 01-316104

SURVEYORS INITIALS: HZ

COUNTY Mendocino

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,B) _____

PES ID# 1

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| TRANSVERSE DISTANCE | | LONGITUDINAL DISTANCE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 (m) (0 ft) | 15 (m) (50 ft) | 30 (m) (100 ft) | 45 (m) (150 ft) | 60 (m) (200 ft) | 75 (m) (250 ft) | 90 (m) (300 ft) | 105 (m) (350 ft) | 120 (m) (400 ft) | 135 (m) (450 ft) | 150 (m) (500 ft) |
| EDGE OF PAVEMENT | Depth (mm) | | | | | | | | | | | |
| | Location (m) | | | | | | | | | | | |
| WHEEL PATH | Depth (mm) | 2 | 2 | 2 | 4 | 3 | 1 | 10 | 2 | 2 | 3 | 4 |
| | Location (m) | | | | | | | | | | | |
| MID LANE | Depth (mm) | | | | | | | | | | | |
| | Location (m) | | | | | | | | | | | |
| WHEEL PATH | Depth (mm) | 1 | 1 | 1 | 2 | 3 | 1 | 4 | 2 | 3 | 3 | 2 |
| | Location (m) | | | | | | | | | | | |
| CENTER LINE | Depth (mm) | | | | | | | | | | | |
| | Location (m) | | | | | | | | | | | |

COMMENTS: 6-foot straightedge was used

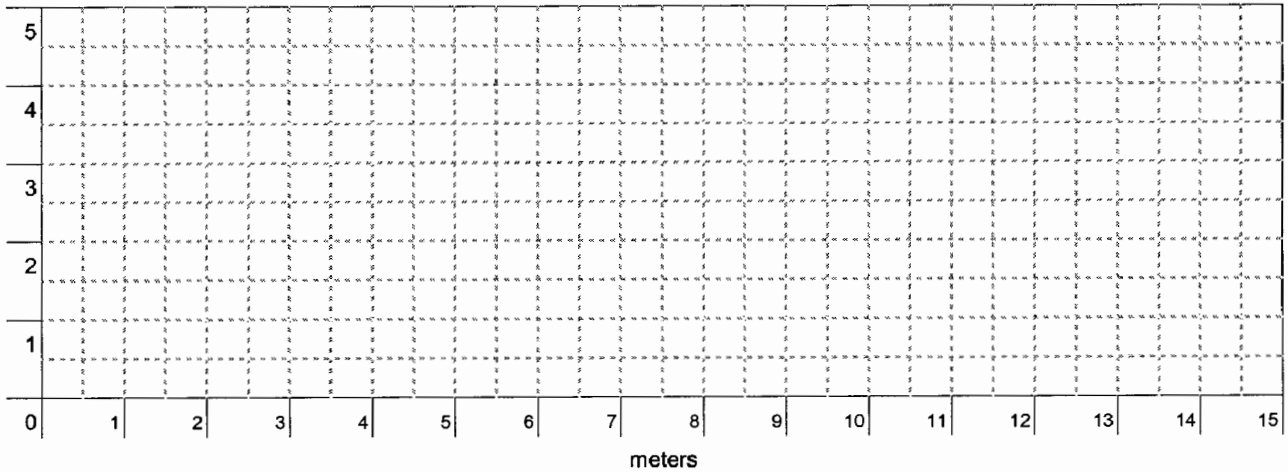
# DISTRESS DATA

# PERFORMANCE EVALUATION SECTION 2

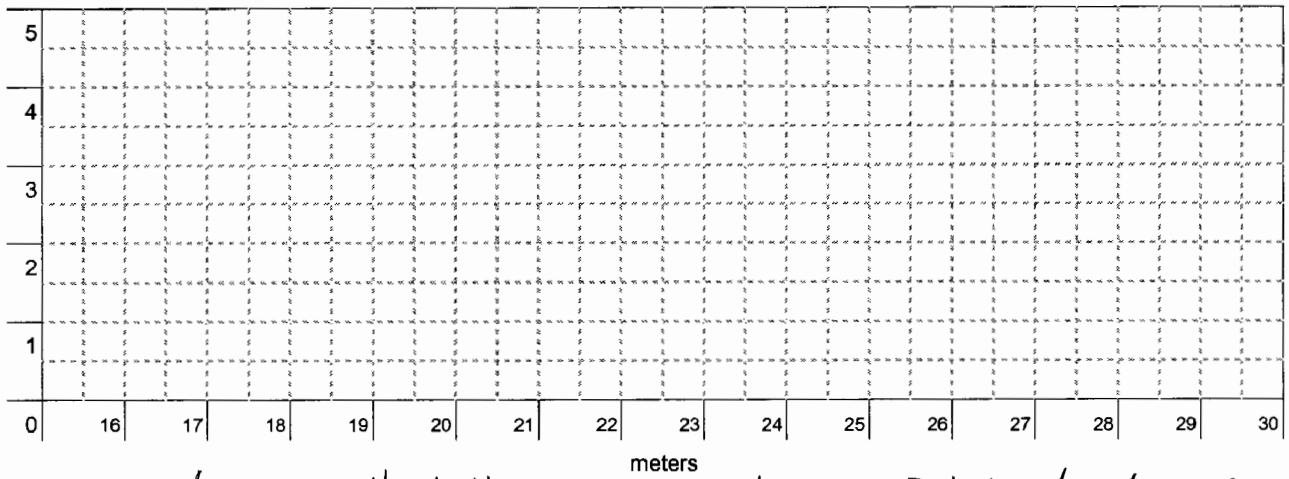
## DISTRESS MAP (PAGE 1)

Project Name: D1 RAC EA#: 01-316104 Date: 4/28/05
Test Section: 2 - MB-D PES ID: 2 Surveyor: HR

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

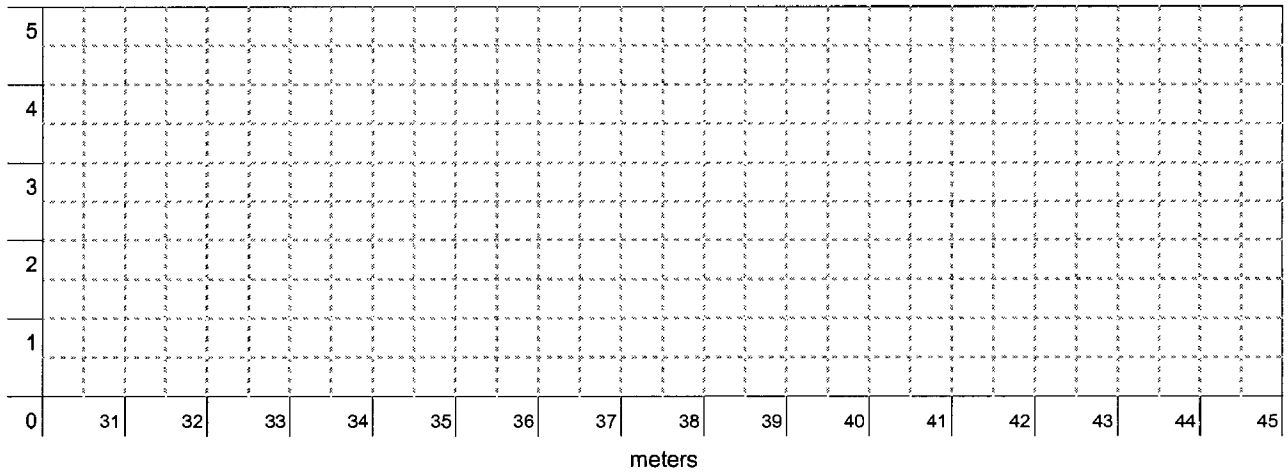



Comments: It appears that there is a construction joint about 6 ft from inner pavement edge.

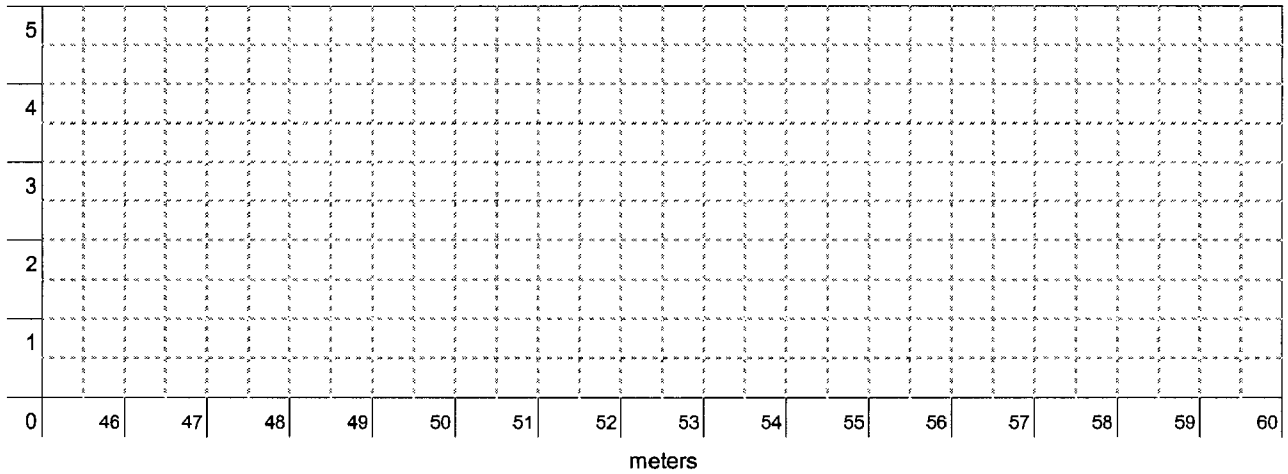
## DISTRESS MAP (PAGE 2)

Project Name: D1 RAC EA#: 01-316104 Date: 4/28/05
Test Section: 2 - MB-D PES ID: 2 Surveyor: Hz

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments: _____

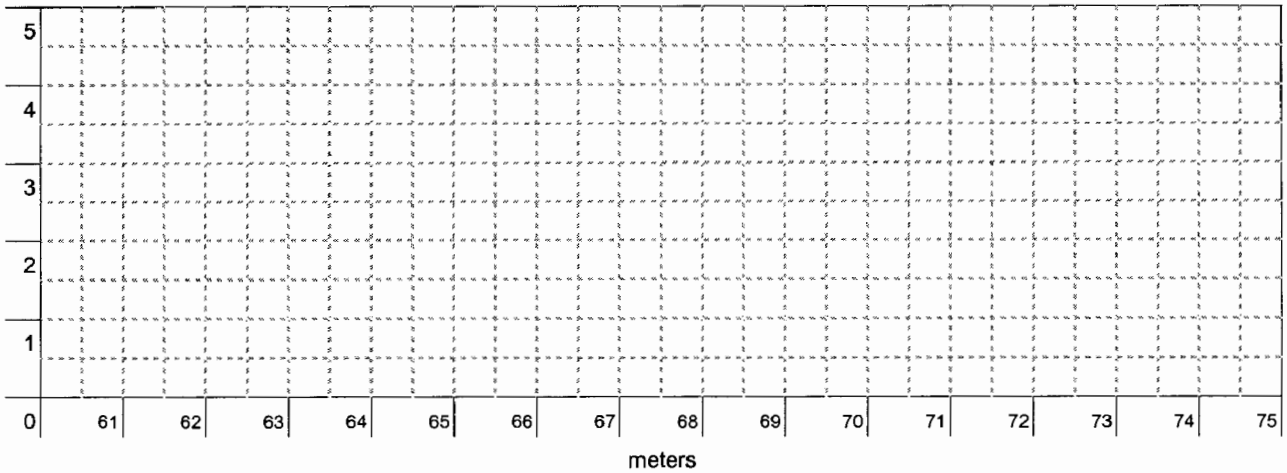



Comments: _____

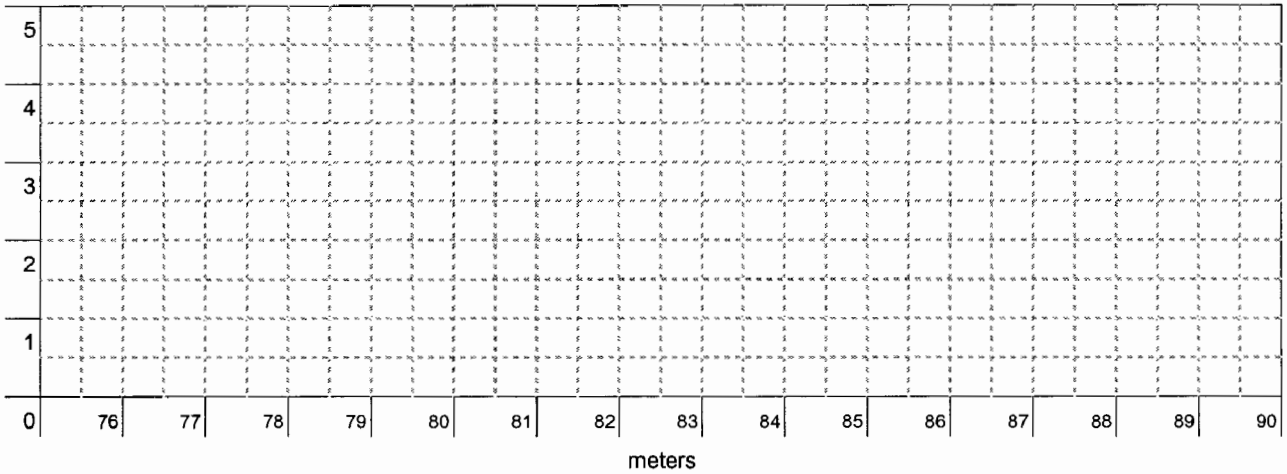
# DISTRESS MAP (PAGE 3)

Project Name: D1 RAC EA#: 01-316104 Date: 4/28/05
Test Section: 2 - MB - D PES ID: 2 Surveyor: HR

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

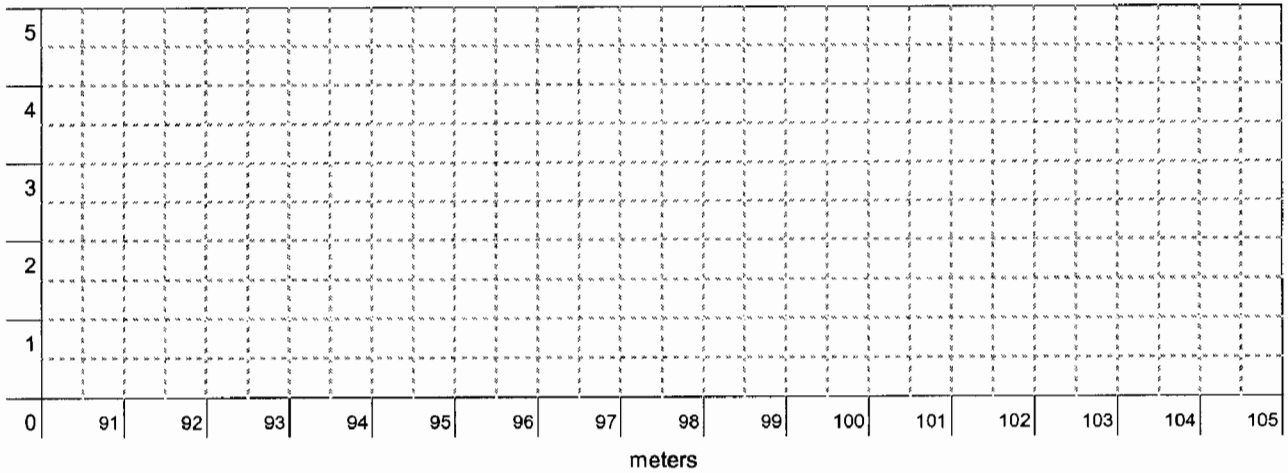



Comments:

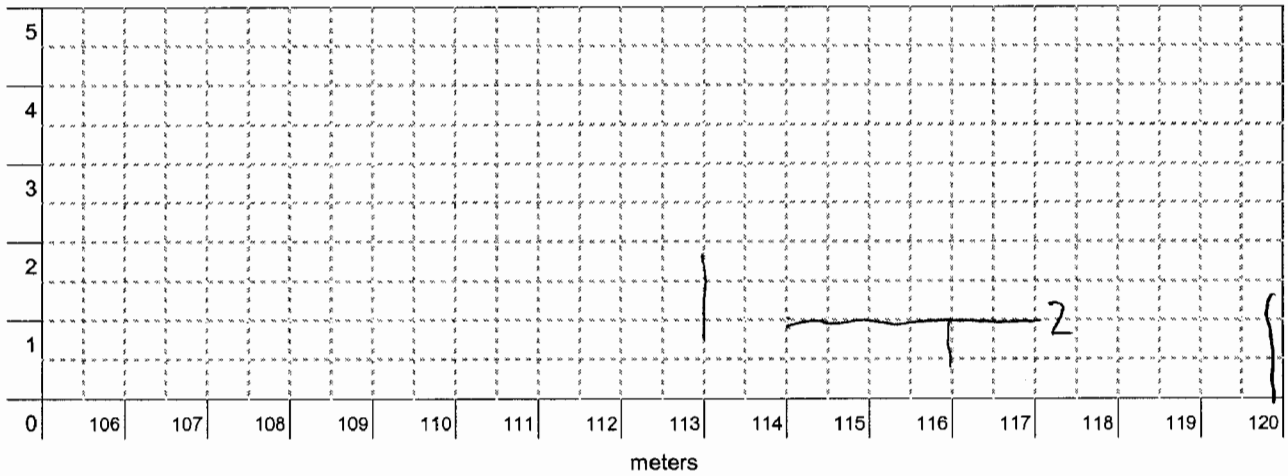
## DISTRESS MAP (PAGE 4)

Project Name: D1 RAC EA#: 01-316104 Date: 4/28/05
Test Section: 2-MB-D PES ID: 2 Surveyor: HZ

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

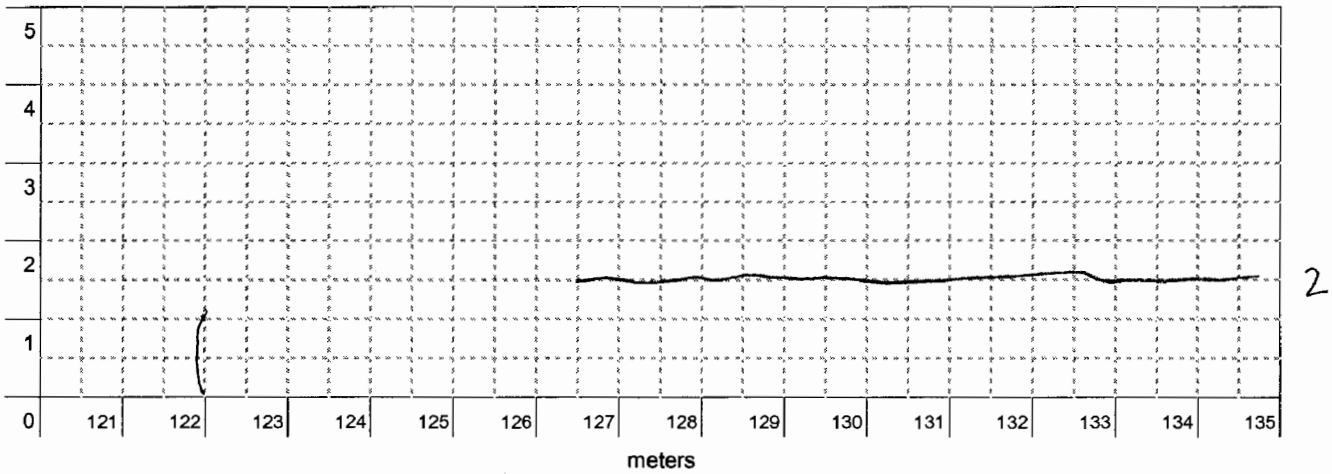



Comments:

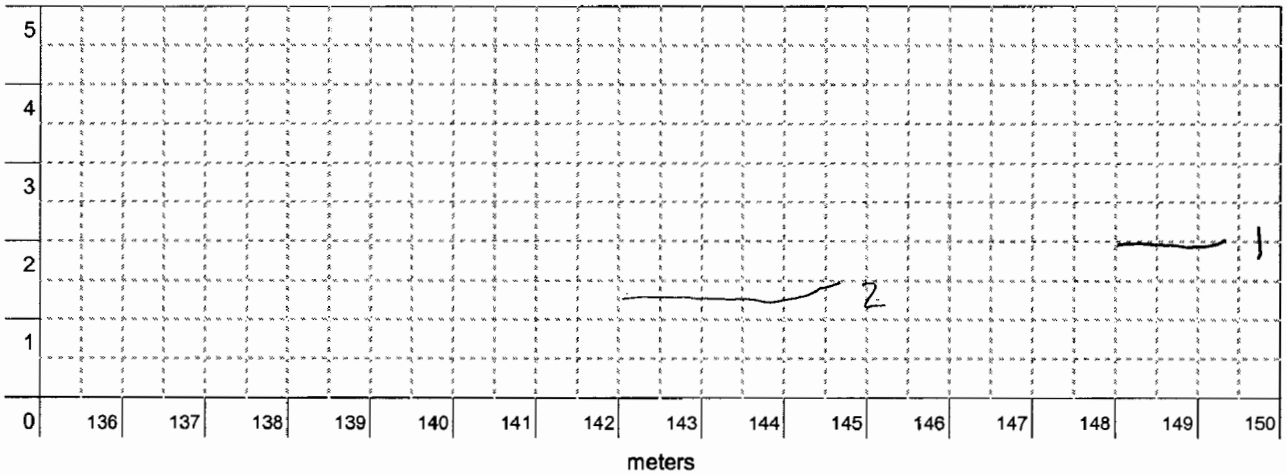
## DISTRESS MAP (PAGE 5)

Project Name: D1 RAC EA#: 01-316104 Date: 4/28/05
Test Section: 2 - MB-D PES ID: 2 Surveyor: HZ

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:




Comments:

## DISTRESS SURVEY SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 1)

DATE OF DISTRESS SURVEY: 4/28/05

SURVEYORS INITIALS: HZ

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,E

EA # 01-316104

COUNTY Mendocino

PES ID# 2

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | SUBSECTION AND SEVERITY LEVEL | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | SUM | | |
| | | | 0-30 (m) [0-100 (ft)] | | | 30-60 (m) [100-200 (ft)] | | | 60-90 (m) [200-300 (ft)] | | | 90-120 (m) [300-400 (ft)] | | | 120-150 (m) [400-500 (ft)] | | | | | |
| | ITEM NO. | DISTRESS TYPE | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H |
| CRACKING | 1 | LONGITUDINAL NON-WHEELPATH (a) | | | | | | | | | | | | | | 1 | | | 1 | |
| | 2a | FATIGUE (Long. in wheelpath) (a) | | | | | | | | | | | 3 | | | 11 | | | 14 | |
| | 2b | FATIGUE (b) | | | | | | | | | | | | | | | | | | |
| | 3 | TRANSVERSE (c) | | | | | | | | | | | | | | | | | | |
| | 4 | REFLECTIVE (c) | | | | | | | | | | | | | | | | | | |
| | 5 | BLOCK (b) | | | | | | | | | | | | | | | | | | |
| | 6 | EDGE (a) | | | | | | | | | | | | | | | | | | |
| DEFORMATION | 7 | RUTTING (d) | | | | | | | | | | | | | | | | | | |
| | 8 | CORRUGATION (b) | | | | | | | | | | | | | | | | | | |
| | 9 | SHOVING (e) | | | | | | | | | | | | | | | | | | |
| | 10 | DEPRESSION (b) | | | | | | | | | | | | | | | | | | |
| | 11 | OVERLAY BUMPS (c) | | | | | | | | | | | | | | | | | | |

a = Length, meter; b = Area, square meter; c = Number and length, meter; d = Maximum depth, mm; e = Number and square meter; f = Yes/No/Unknown

## DISTRESS SURVEY SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 2)

DATE OF DISTRESS SURVEY: 4/28/05

EA # 01-316104

SURVEYORS INITIALS: HR

COUNTY Mendocino

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,E

PES ID# 2

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | SUBSECTION AND SEVERITY LEVEL | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | SUM | | |
| | | | 0-30 (m) [0-100 (ft)] | | | 30-60 (m) [100-200 (ft)] | | | 60-90 (m) [200-300 (ft)] | | | 90-120 (m) [300-400 (ft)] | | | 120-150 (m) [400-500 (ft)] | | | | | |
| | ITEM NO. | DISTRESS TYPE | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H |
| DETERIORATION | 12 | DELAMINATION (b) | | | | | | | | | | | | | | | | | | |
| | 13 | POTHOLES (e) | | | | | | | | | | | | | | | | | | |
| | 14 | PATCHING (e) | | | | | | | | | | | | | | | | | | |
| | 15 | RAVELING (b) | | | | | | | | | | | | | | | | | | |
| | 16 | STRIPPING (f) | | | | | | | | | | | | | | | | | | |
| | 17 | POLISHED AGGREGATE (b) | | | | | | | | | | | | | | | | | | |
| | 18 | PUMPING (c) | | | | | | | | | | | | | | | | | | |
| MAT PROBLEMS | 19 | SEGREGATION (b) | | | | | | | | | | | | | | | | | | |
| | 20 | CHECKING (b) | | | | | | | | | | | | | | | | | | |
| | 21 | BLEEDING (b) | | | | | | | | | | | | | | | | | | |

COMMENTS: _____

a = Length, meter; b = Area, square meter; c = Number and length, meter; d = Maximum depth, mm; e = Number and square meter; f = Yes/No/Unknown

## RUTTING MEASUREMENTS SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 3)

DATE OF DISTRESS SURVEY: 4/28/05

EA # 01-316104

SURVEYORS INITIALS: HZ

COUNTY Mendocino

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,B) _____

PES ID# 2

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | LONGITUDINAL DISTANCE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 (m) (0 ft) | 15 (m) (50 ft) | 30 (m) (100 ft) | 45 (m) (150 ft) | 60 (m) (200 ft) | 75 (m) (250 ft) | 90 (m) (300 ft) | 105 (m) (350 ft) | 120 (m) (400 ft) | 135 (m) (450 ft) | 150 (m) (500 ft) |
| TRANSVERSE DISTANCE | EDGE OF PAVEMENT | Depth (mm) | | | | | | | | | | | |
| | | Location (m) | | | | | | | | | | | |
| | WHEEL PATH | Depth (mm) | 2 | 4 | 4 | 5 | 2 | 4 | 4 | 4 | 4 | 3 | 3 |
| | | Location (m) | | | | | | | | | | | |
| | MID LANE | Depth (mm) | | | | | | | | | | | |
| | | Location (m) | | | | | | | | | | | |
| | WHEEL PATH | Depth (mm) | 2 | 2 | 2 | 1 | 1 | 2 | 2 | 2 | 1 | 2 | 2 |
| | | Location (m) | | | | | | | | | | | |
| | CENTER LINE | Depth (mm) | | | | | | | | | | | |
| | | Location (m) | | | | | | | | | | | |

COMMENTS: _____

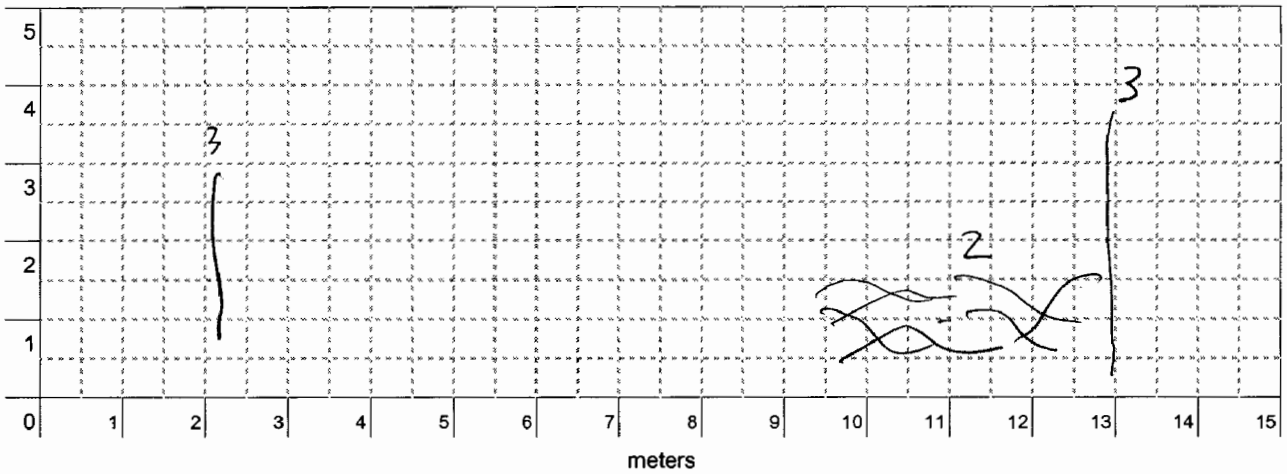
# DISTRESS DATA

# PERFORMANCE EVALUATION SECTION 3

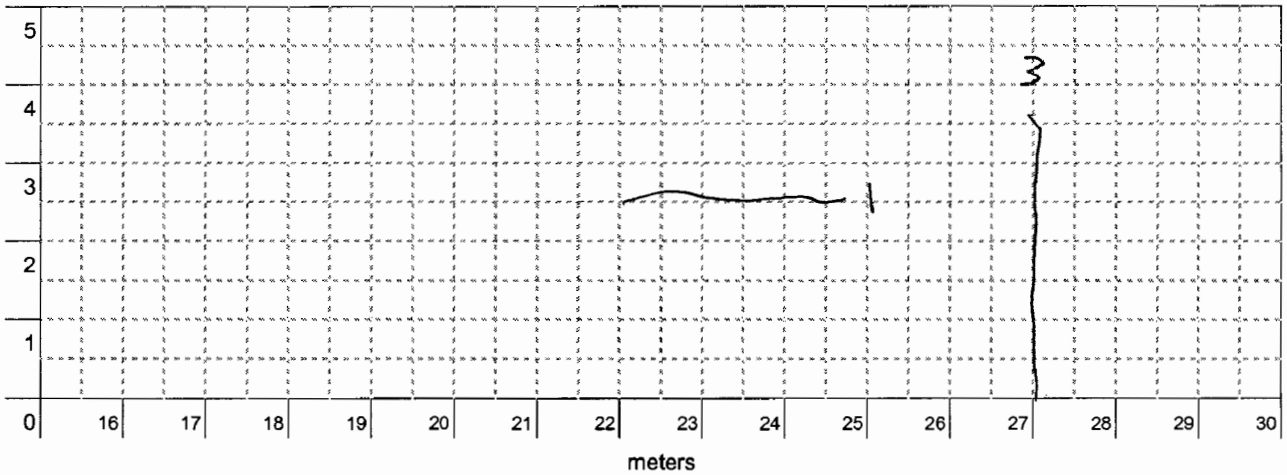
# DISTRESS MAP (PAGE 1)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 3 - RAC-G PES ID: 3 Surveyor: HR

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

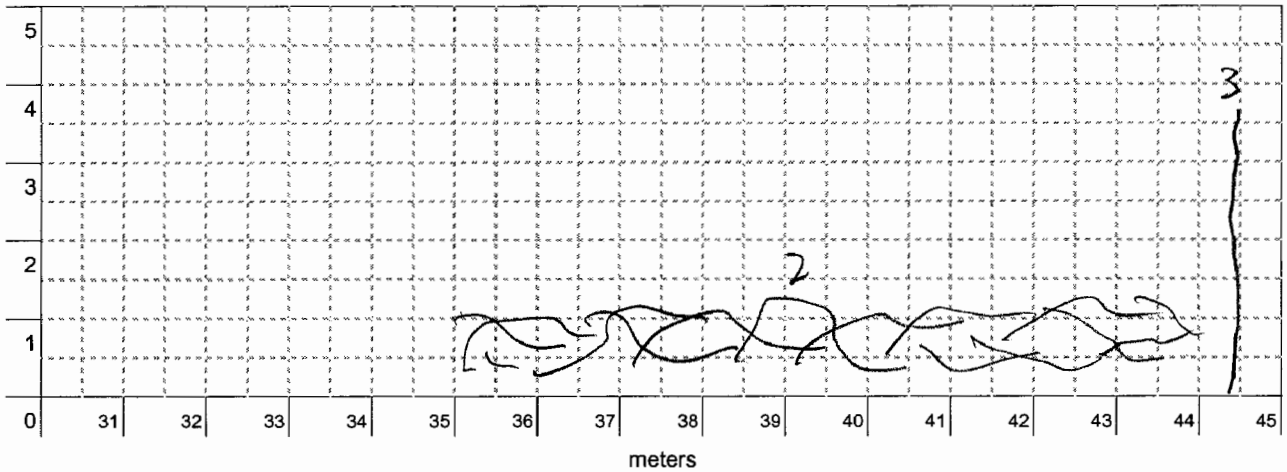



Comments:

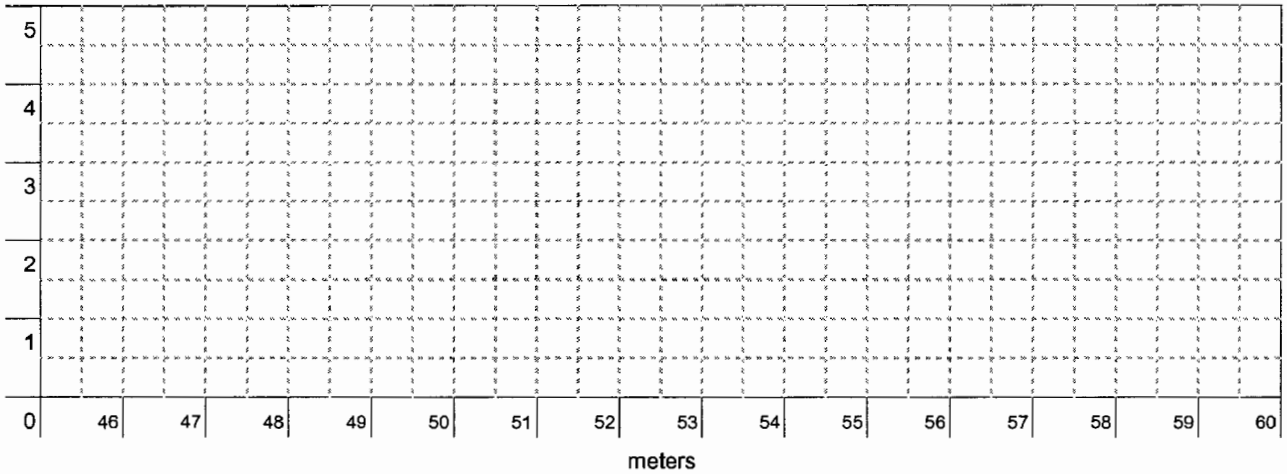
## DISTRESS MAP (PAGE 2)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 3 - RAC-G PES ID: 3 Surveyor: ltz

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

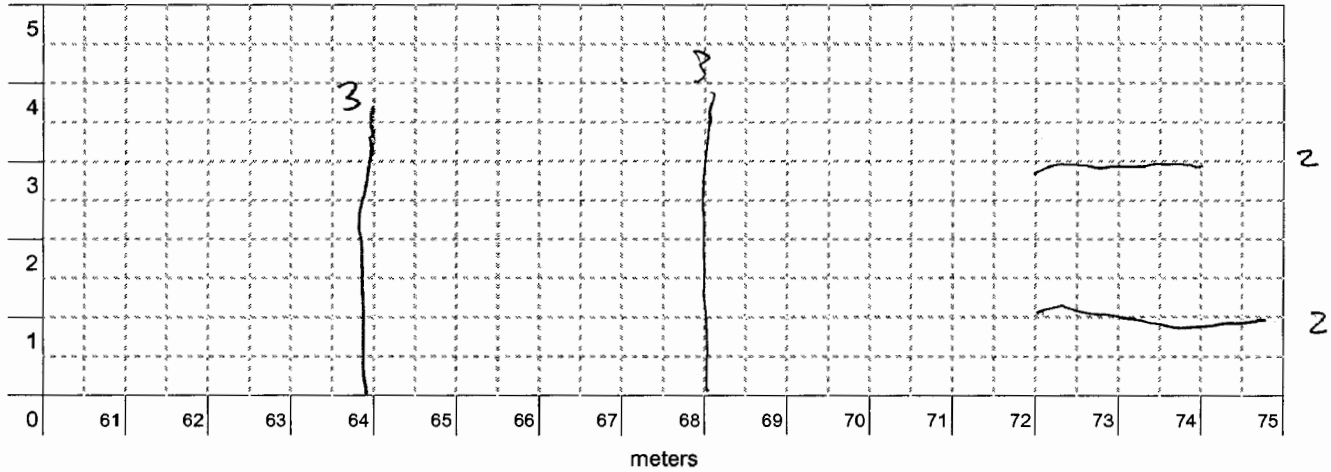



Comments:

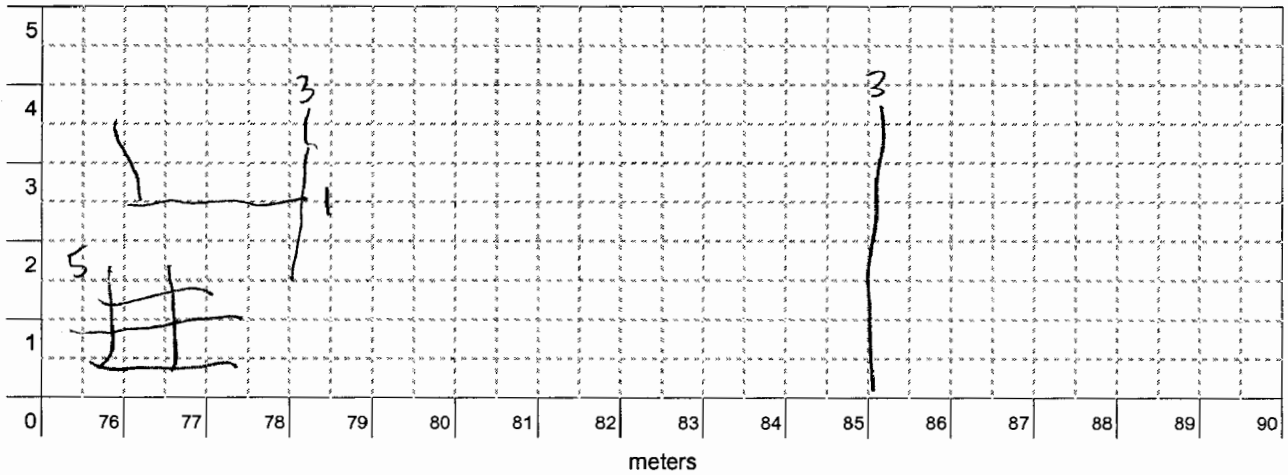
# DISTRESS MAP (PAGE 3)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 3-RAC-G PES ID: 3 Surveyor: JR

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

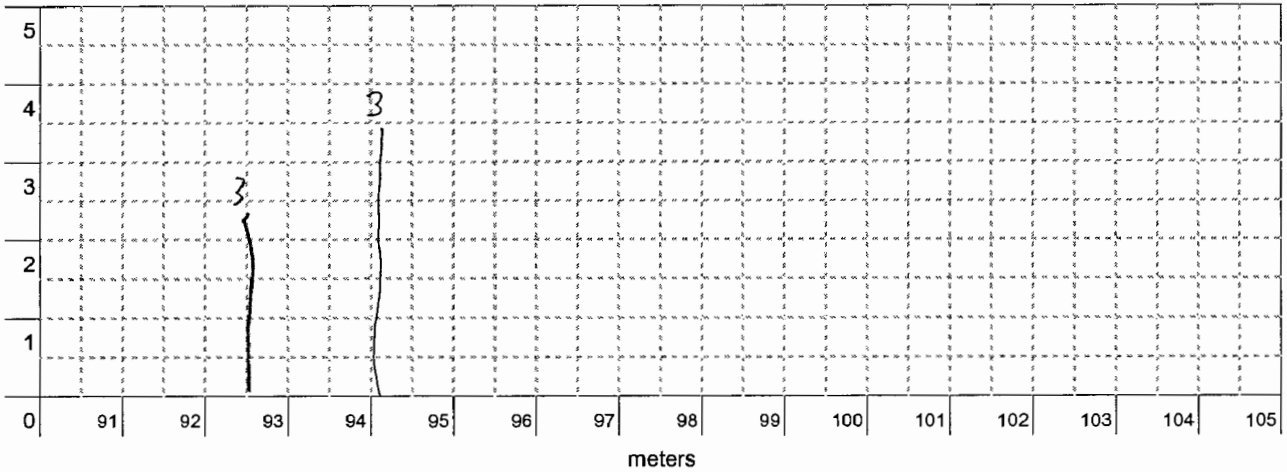



Comments:

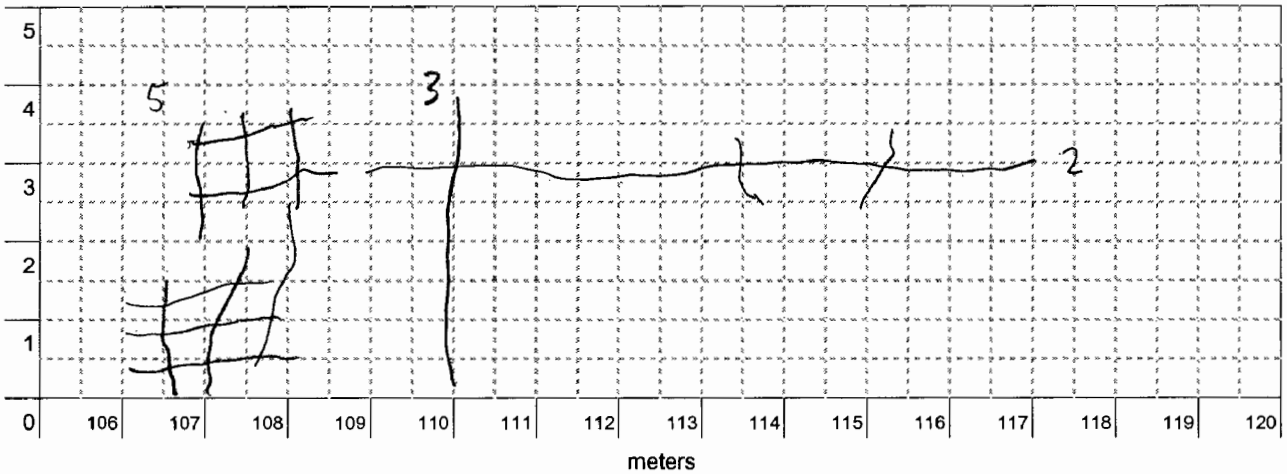
## DISTRESS MAP (PAGE 4)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 3 - RAC-G PES ID: 3 Surveyor: HR

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

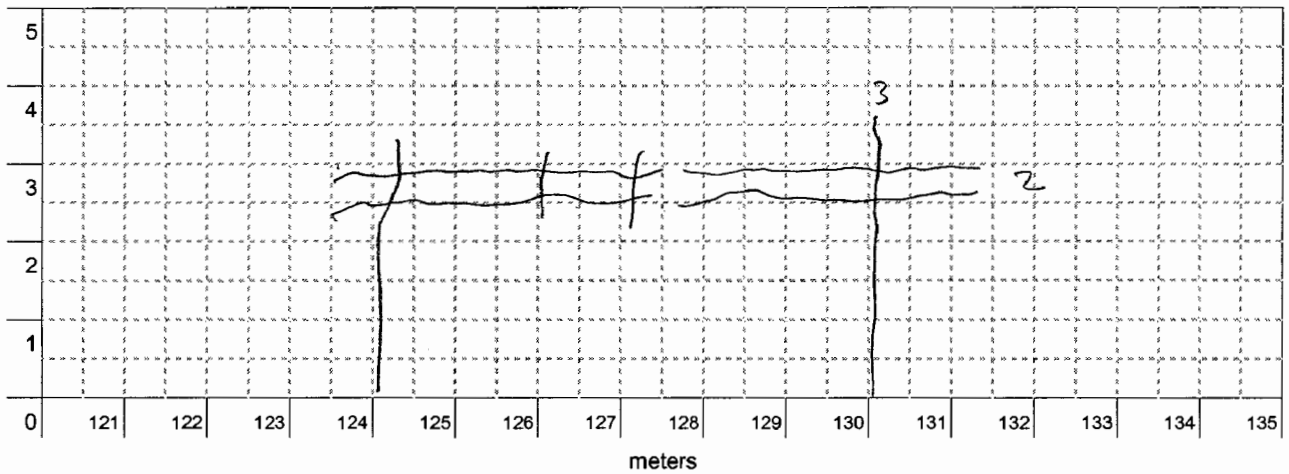



Comments:

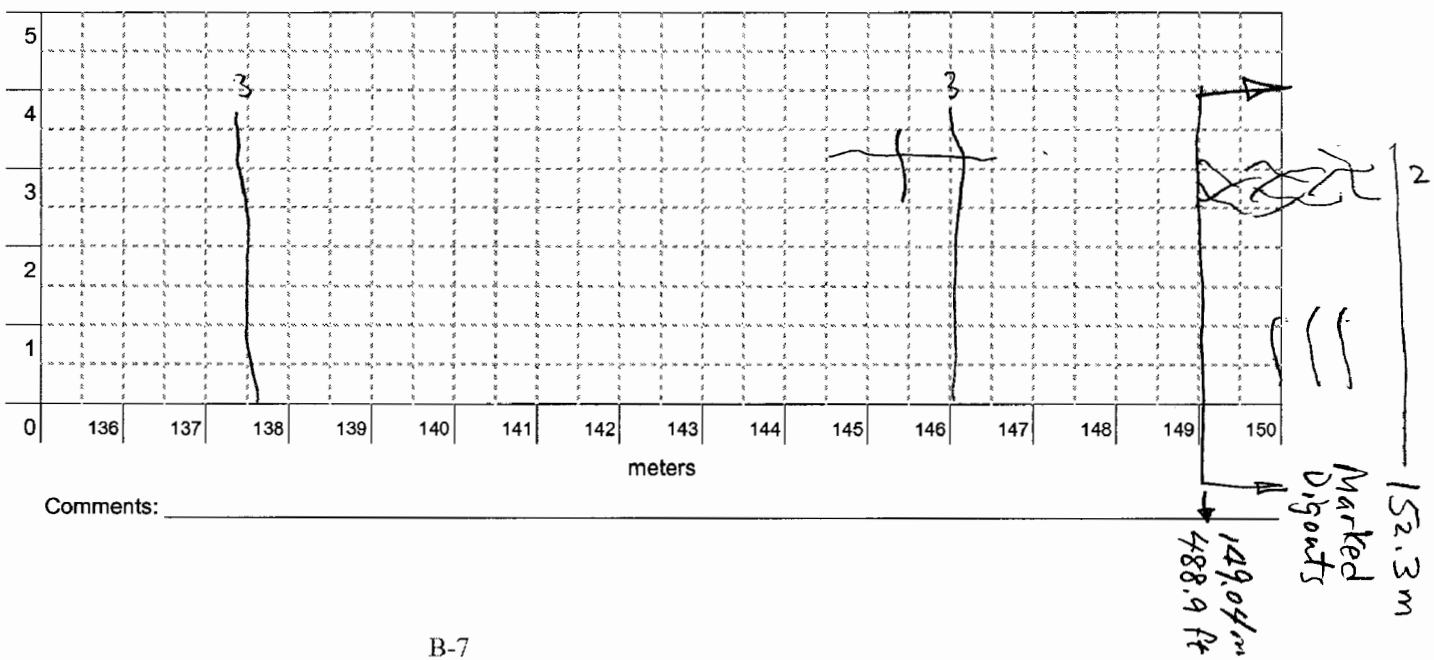
# DISTRESS MAP (PAGE 5)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 3 - RAC-G PES ID: 3 Surveyor: HR

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:




Comments:

## DISTRESS SURVEY SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 1)

DATE OF DISTRESS SURVEY: 4/27/05

SURVEYORS INITIALS: HZ

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,E

EA # 01-316104

COUNTY Mendocino

PES ID# 3

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | SUBSECTION AND SEVERITY LEVEL | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | SUM | | |
| | | | 0-30 (m) [0-100 (ft)] | | | 30-60 (m) [100-200 (ft)] | | | 60-90 (m) [200-300 (ft)] | | | 90-120 (m) [300-400 (ft)] | | | 120-150 (m) [400-500 (ft)] | | | | | |
| | ITEM NO. | DISTRESS TYPE | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H |
| CRACKING | 1 | LONGITUDINAL NON-WHEELPATH (a) | | 3 | | | | | | 2 | | | | | | | | | 2 | |
| | 2a | FATIGUE (Long. in wheelpath) (a) | | | | | | | | 5 | | | 8 | | | 8 | | | 21 | |
| | 2b | FATIGUE (b) | | 3 | | | 5 | | | | | | | | | 3 | | | 11 | |
| | 3 | TRANSVERSE (c) | | 3 9 | | | 1 3 | | | 4 11 | | | 3 10 | | | 4 15 | | | 15 48 | |
| | 4 | REFLECTIVE (c) | | | | | | | | | | | | | | | | | | |
| | 5 | BLOCK (b) | | | | | | | | 2 | | | 4 | | | | | | 6 | |
| | 6 | EDGE (a) | | | | | | | | | | | | | | | | | | |
| DEFORMATION | 7 | RUTTING (d) | | | | | | | | | | | | | | | | | | |
| | 8 | CORRUGATION (b) | | | | | | | | | | | | | | | | | | |
| | 9 | SHOVING (e) | | | | | | | | | | | | | | | | | | |
| | 10 | DEPRESSION (b) | | | | | | | | | | | | | | | | | | |
| | 11 | OVERLAY BUMPS (c) | | | | | | | | | | | | | | | | | | |

a = Length, meter; b = Area, square meter; c = Number and length, meter; d = Maximum depth, mm; e = Number and square meter; f = Yes/No/Unknown

## DISTRESS SURVEY SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 2)

DATE OF DISTRESS SURVEY: 4/27/05

SURVEYORS INITIALS: HL

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,B

EA # 01-31604

COUNTY Mendocino

PES ID# 3

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | SUBSECTION AND SEVERITY LEVEL | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | SUM | | |
| | | | 0-30 (m) [0-100 (ft)] | | | 30-60 (m) [100-200 (ft)] | | | 60-90 (m) [200-300 (ft)] | | | 90-120 (m) [300-400 (ft)] | | | 120-150 (m) [400-500 (ft)] | | | | | |
| | ITEM NO. | DISTRESS TYPE | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H |
| DETERIORATION | 12 | DELAMINATION (b) | | | | | | | | | | | | | | | | | | |
| | 13 | POTHOLES (e) | | | | | | | | | | | | | | | | | | |
| | 14 | PATCHING (e) | | | | | | | | | | | | | | | | | | |
| | 15 | RAVELING (b) | | | | | | | | | | | | | | | | | | |
| | 16 | STRIPPING (f) | | | | | | | | | | | | | | | | | | |
| | 17 | POLISHED AGGREGATE (b) | | | | | | | | | | | | | | | | | | |
| | 18 | PUMPING (c) | | | | | | | | | | | | | | | | | | |
| MAT PROBLEMS | 19 | SEGREGATION (b) | | | | | | | | | | | | | | | | | | |
| | 20 | CHECKING (b) | | | | | | | | | | | | | | | | | | |
| | 21 | BLEEDING (b) | | | | | | | | | | | | | | | | | | |

COMMENTS: _____

a = Length, meter; b = Area, square meter; c = Number and length, meter; d = Maximum depth, mm; e = Number and square meter; f = Yes/No/Unknown

## RUTTING MEASUREMENTS SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 3)

DATE OF DISTRESS SURVEY: 4/27/05

EA # 01-316104

SURVEYORS INITIALS: HZ

COUNTY Mendocino

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,B) _____

PES ID# 3

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | LONGITUDINAL DISTANCE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 (m) (0 ft) | 15 (m) (50 ft) | 30 (m) (100 ft) | 45 (m) (150 ft) | 60 (m) (200 ft) | 75 (m) (250 ft) | 90 (m) (300 ft) | 105 (m) (350 ft) | 120 (m) (400 ft) | 135 (m) (450 ft) | 150 (m) (500 ft) |
| TRANSVERSE DISTANCE | EDGE OF PAVEMENT | Depth (mm) | | | | | | | | | | | |
| | | Location (m) | | | | | | | | | | | |
| | WHEEL PATH | Depth (mm) | 4 | 4 | 6 | 3 | 4 | 7 | 3 | 3 | 2 | 1 | 0 |
| | | Location (m) | | | | | | | | | | | |
| | MID LANE | Depth (mm) | | | | | | | | | | | |
| | | Location (m) | | | | | | | | | | | |
| | WHEEL PATH | Depth (mm) | 4 | 4 | 6 | 3 | 6 | 4 | 4 | 5 | 2 | 5 | 10 |
| | | Location (m) | | | | | | | | | | | |
| | CENTER LINE | Depth (mm) | | | | | | | | | | | |
| | | Location (m) | | | | | | | | | | | |

COMMENTS: _____

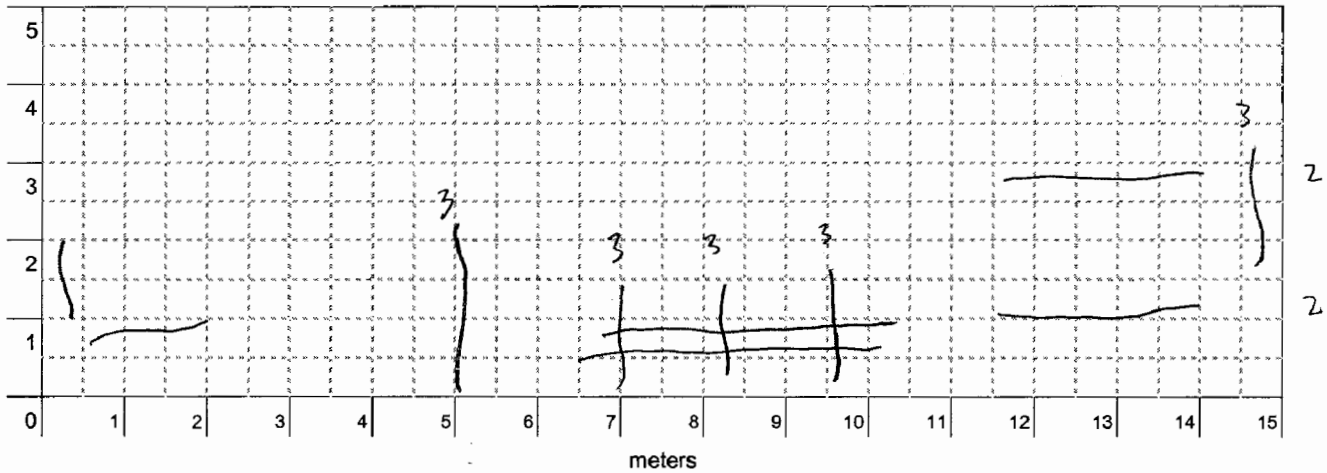
# DISTRESS DATA

# PERFORMANCE EVALUATION SECTION 4

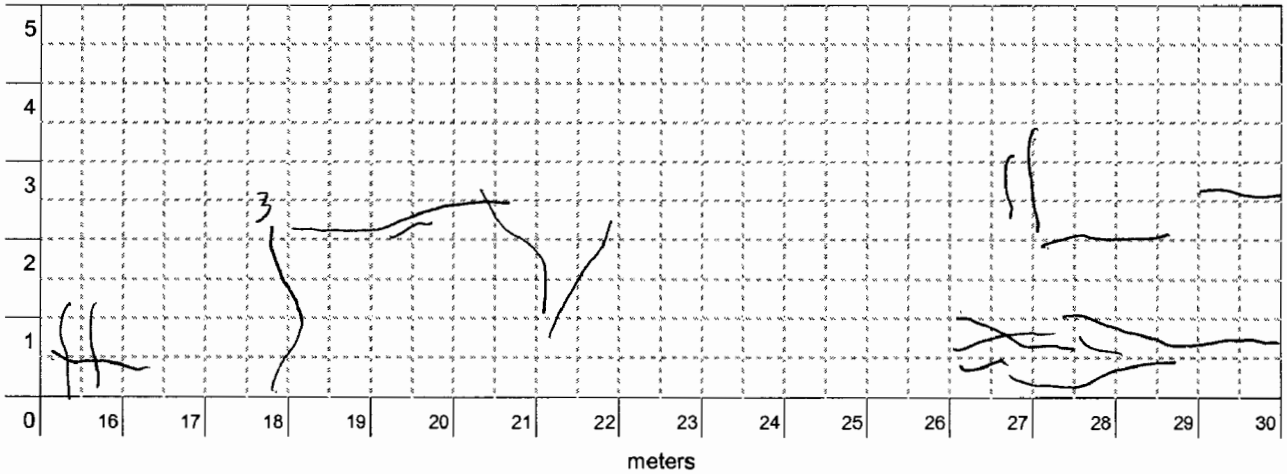
## DISTRESS MAP (PAGE 1)

Project Name: D1RAC EA#: 01-316104 Date: 4/27/05
Test Section: 4 - DGAC PES ID: 4 Surveyor: ltz

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

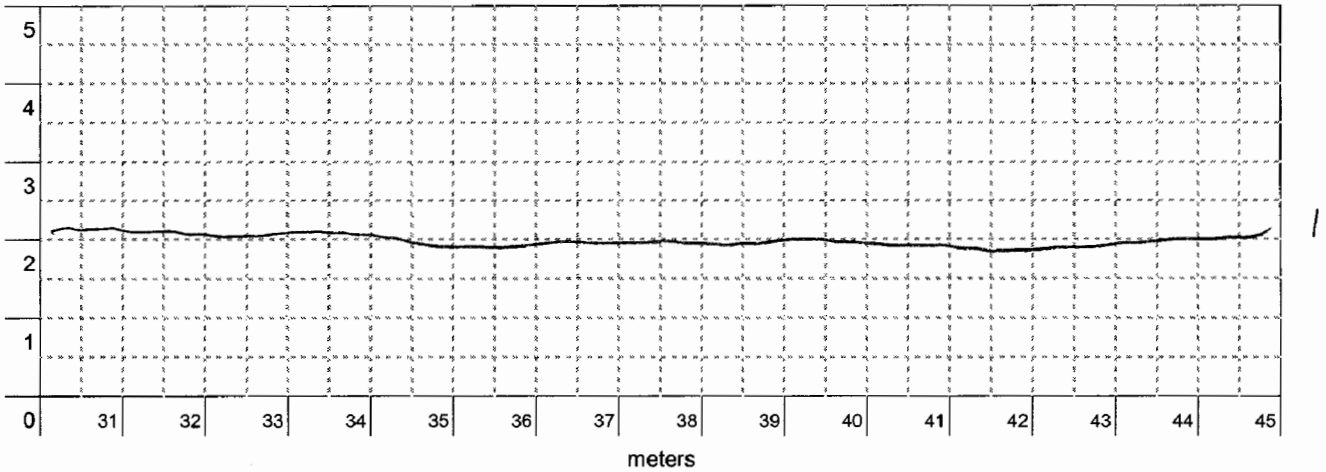



Comments:

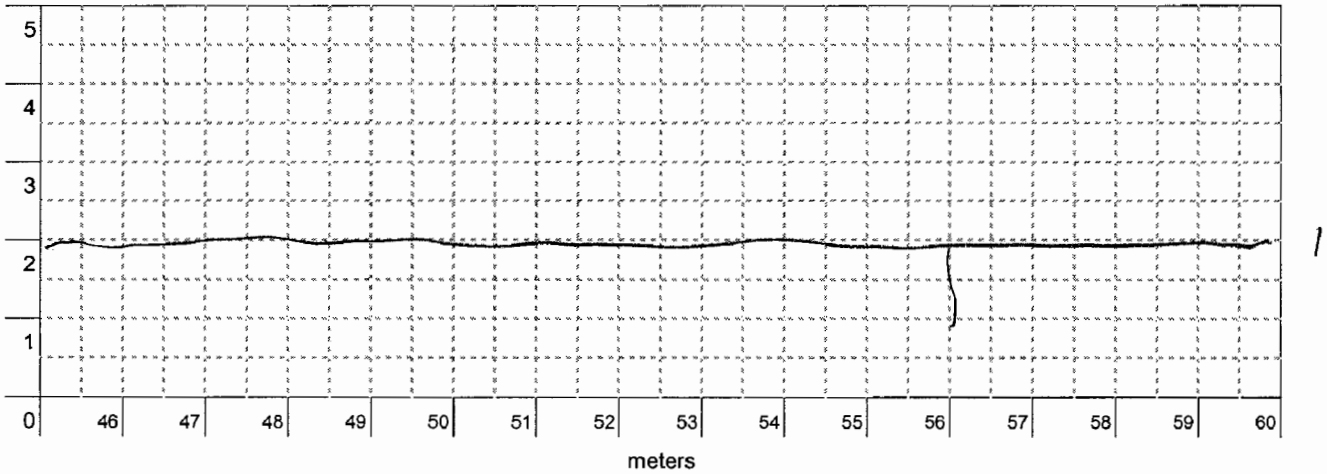
# DISTRESS MAP (PAGE 2)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 4 - DGAC PES ID: 4 Surveyor: Itz

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

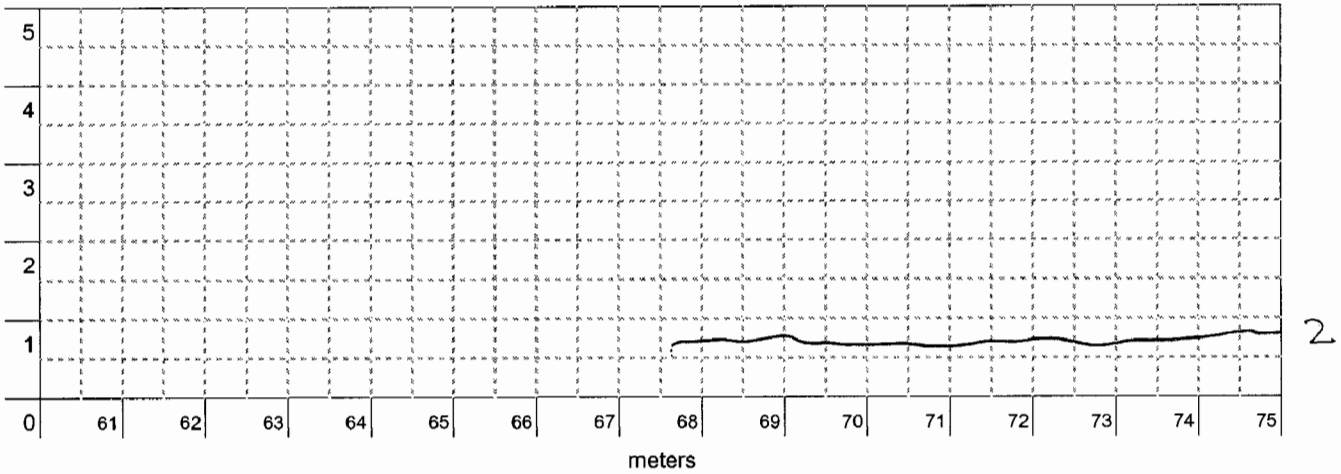



Comments:

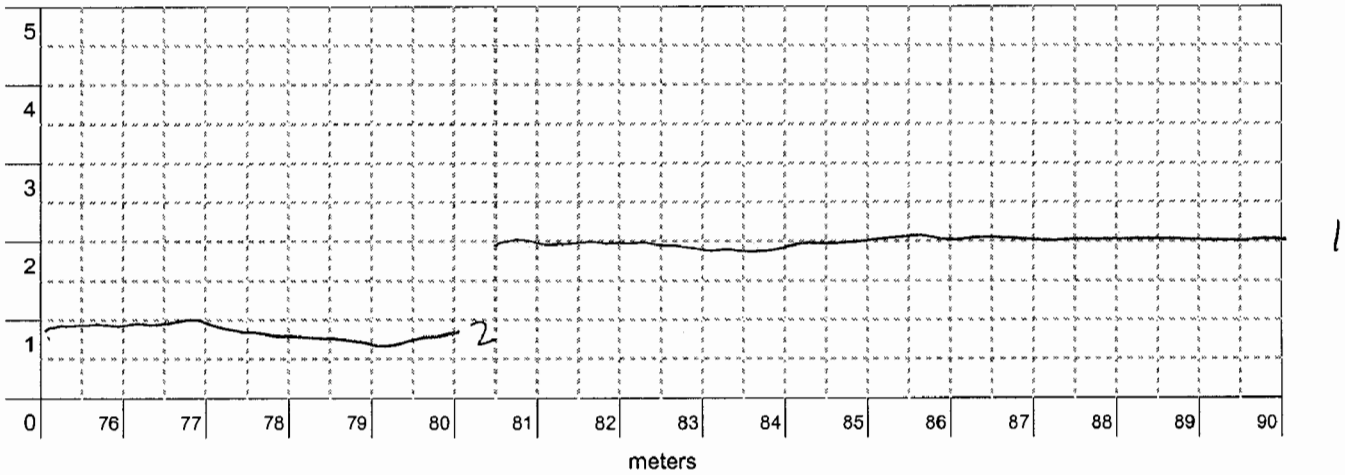
## DISTRESS MAP (PAGE 3)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 4 - DGAC PES ID: 4 Surveyor: HZ

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

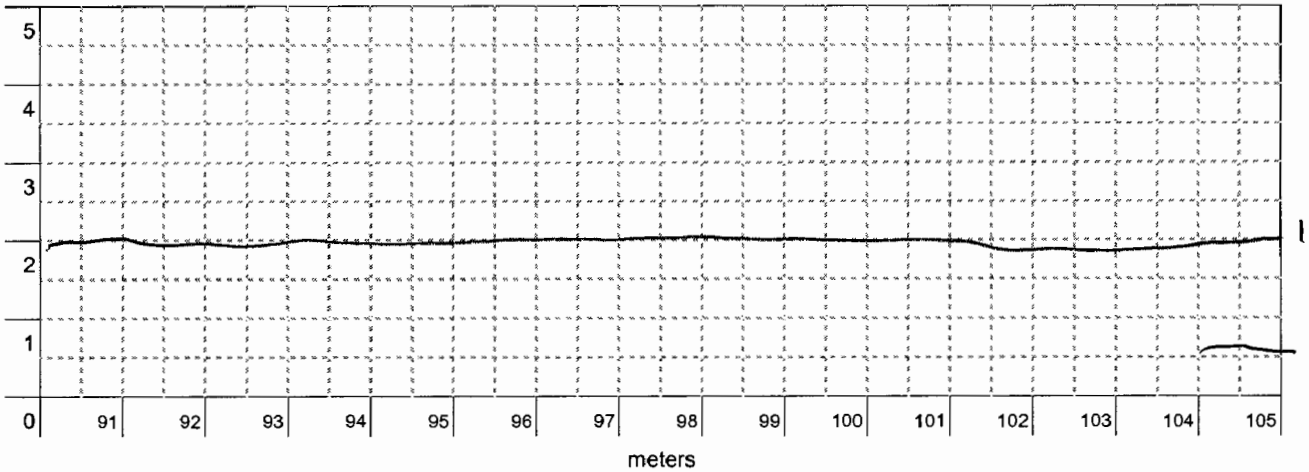



Comments:

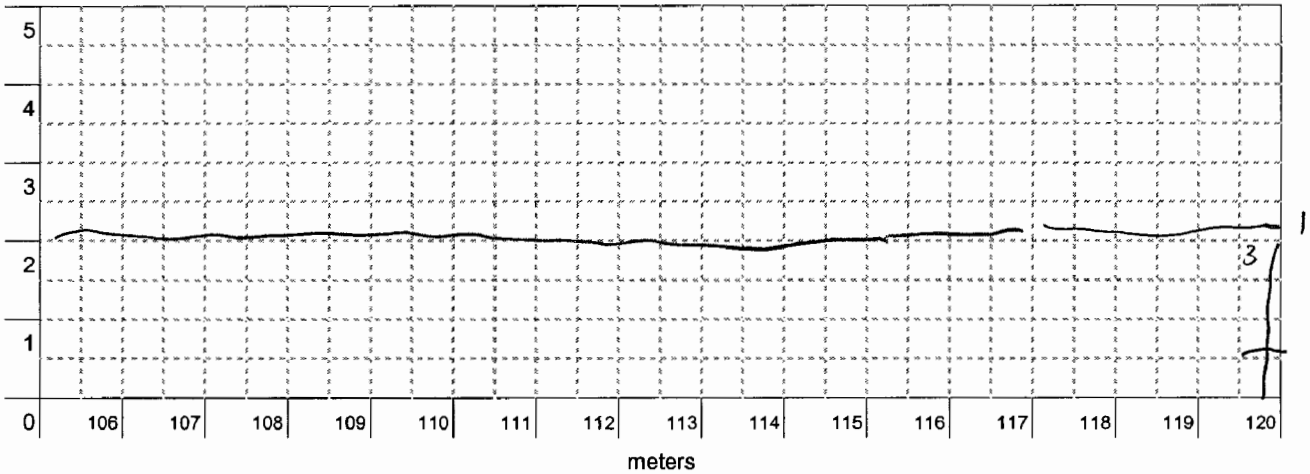
## DISTRESS MAP (PAGE 4)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 4 - DGAC PES ID: 4 Surveyor: Hz

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

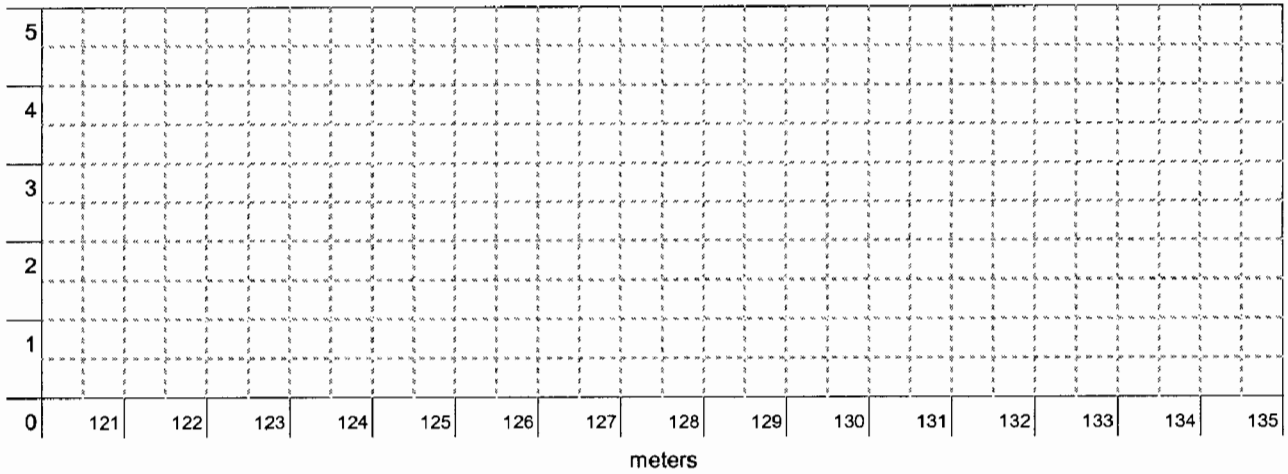



Comments:

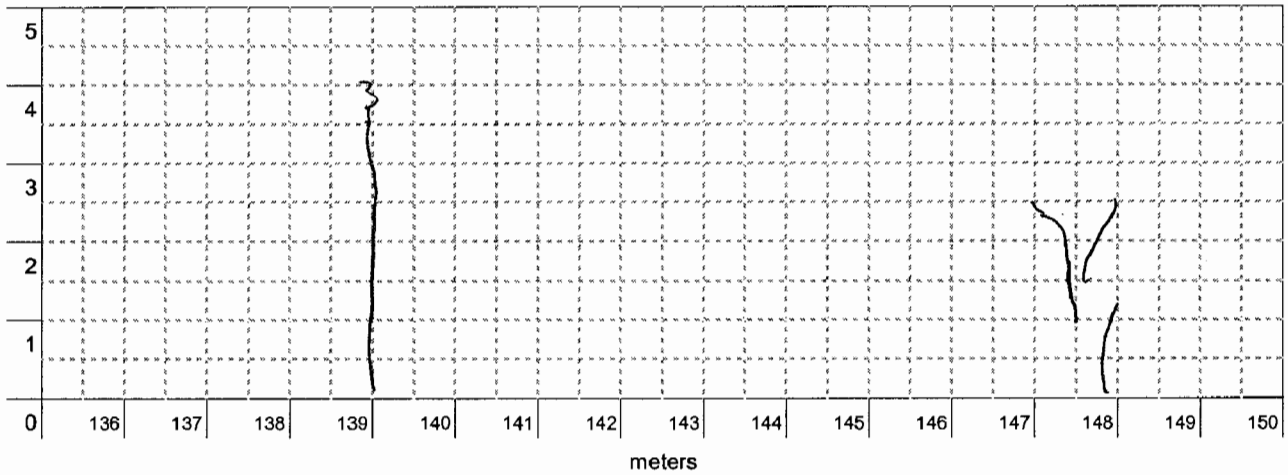
# DISTRESS MAP (PAGE 5)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 4 - D6AC PES ID: 4 Surveyor: ltr

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:




Comments:

## DISTRESS SURVEY SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 1)

DATE OF DISTRESS SURVEY: 4/27/05

SURVEYORS INITIALS: HZ

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,E

EA# 01-316104

COUNTY Mendocino

PES ID# 4

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | SUBSECTION AND SEVERITY LEVEL | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | SUM | | |
| | | | 0-30 (m) [0-100 (ft)] | | | 30-60 (m) [100-200 (ft)] | | | 60-90 (m) [200-300 (ft)] | | | 90-120 (m) [300-400 (ft)] | | | 120-150 (m) [400-500 (ft)] | | | | | |
| | ITEM NO. | DISTRESS TYPE | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H |
| CRACKING | 1 | LONGITUDINAL NON-WHEELPATH (a) | | | | | 30 | | | 9.5 | | | 30 | | | | | | 69.5 | |
| | 2a | FATIGUE (Long. in wheelpath) (a) | | 5 | | | | | | 12 | | | 1 | | | | | | 18 | |
| | 2b | FATIGUE (b) | | 3 | | | | | | | | | | | | | | | 3 | |
| | 3 | TRANSVERSE (c) | | 6 9 | | | | | | | | | 1 2 | | | 1 4 | | | 8 15 | |
| | 4 | REFLECTIVE (c) | | | | | | | | | | | | | | | | | | |
| | 5 | BLOCK (b) | | | | | | | | | | | | | | | | | | |
| | 6 | EDGE (a) | | | | | | | | | | | | | | | | | | |
| DEFORMATION | 7 | RUTTING (d) | | | | | | | | | | | | | | | | | | |
| | 8 | CORRUGATION (b) | | | | | | | | | | | | | | | | | | |
| | 9 | SHOVING (e) | | | | | | | | | | | | | | | | | | |
| | 10 | DEPRESSION (b) | | | | | | | | | | | | | | | | | | |
| | 11 | OVERLAY BUMPS (c) | | | | | | | | | | | | | | | | | | |

a = Length, meter; b = Area, square meter; c = Number and length, meter; d = Maximum depth, mm; e = Number and square meter; f = Yes/No/Unknown

## DISTRESS SURVEY SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 2)

DATE OF DISTRESS SURVEY: 4/27/05

EA # 01-316104

SURVEYORS INITIALS: ltz

COUNTY Mendocino

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,E

PES ID# 4

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | SUBSECTION AND SEVERITY LEVEL | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | SUM | | |
| | | | 0-30 (m) [0-100 (ft)] | | | 30-60 (m) [100-200 (ft)] | | | 60-90 (m) [200-300 (ft)] | | | 90-120 (m) [300-400 (ft)] | | | 120-150 (m) [400-500 (ft)] | | | | | |
| | ITEM NO. | DISTRESS TYPE | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H |
| DETERIORATION | 12 | DELAMINATION (b) | | | | | | | | | | | | | | | | | | |
| | 13 | POTHOLES (e) | | | | | | | | | | | | | | | | | | |
| | 14 | PATCHING (e) | | | | | | | | | | | | | | | | | | |
| | 15 | RAVELING (b) | | | | | | | | | | | | | | | | | | |
| | 16 | STRIPPING (f) | | | | | | | | | | | | | | | | | | |
| | 17 | POLISHED AGGREGATE (b) | | | | | | | | | | | | | | | | | | |
| | 18 | PUMPING (c) | | | | | | | | | | | | | | | | | | |
| MAT PROBLEMS | 19 | SEGREGATION (b) | | | | | | | | | | | | | | | | | | |
| | 20 | CHECKING (b) | | | | | | | | | | | | | | | | | | |
| | 21 | BLEEDING (b) | | | | | | | | | | | | | | | | | | |

COMMENTS: _____

a = Length, meter; b = Area, square meter; c = Number and length, meter; d = Maximum depth, mm; e = Number and square meter; f = Yes/No/Unknown

## RUTTING MEASUREMENTS SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 3)

**DATE OF DISTRESS SURVEY:** 4/27/05

**EA #** 01-316104

**SURVEYORS INITIALS:** YZ

**COUNTY** Mendocino

**PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,B)** _____

**PES ID#** 4

**AIR TEMP** BEFORE ____ °C AFTER ____ °C

**PAVEMENT SURFACE TEMP** BEFORE ____ °C AFTER ____ °C

| TRANSVERSE DISTANCE | | LONGITUDINAL DISTANCE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 0 (m) (0 ft) | 15 (m) (50 ft) | 30 (m) (100 ft) | 45 (m) (150 ft) | 60 (m) (200 ft) | 75 (m) (250 ft) | 90 (m) (300 ft) | 105 (m) (350 ft) | 120 (m) (400 ft) | 135 (m) (450 ft) | 150 (m) (500 ft) |
| EDGE OF PAVEMENT | Depth (mm) | | | | | | | | | | | |
| | Location (m) | | | | | | | | | | | |
| WHEEL PATH | Depth (mm) | 0 | 12 | 8 | 4 | 3 | 5 | 2 | 2 | 2 | 2 | 1 |
| | Location (m) | | | | | | | | | | | |
| MID LANE | Depth (mm) | | | | | | | | | | | |
| | Location (m) | | | | | | | | | | | |
| WHEEL PATH | Depth (mm) | 8 | 12 | 13 | 4 | 6 | 5 | 3 | 5 | 3 | 3 | 1 |
| | Location (m) | | | | | | | | | | | |
| CENTER LINE | Depth (mm) | | | | | | | | | | | |
| | Location (m) | | | | | | | | | | | |

**COMMENTS:** 6-foot straight edge

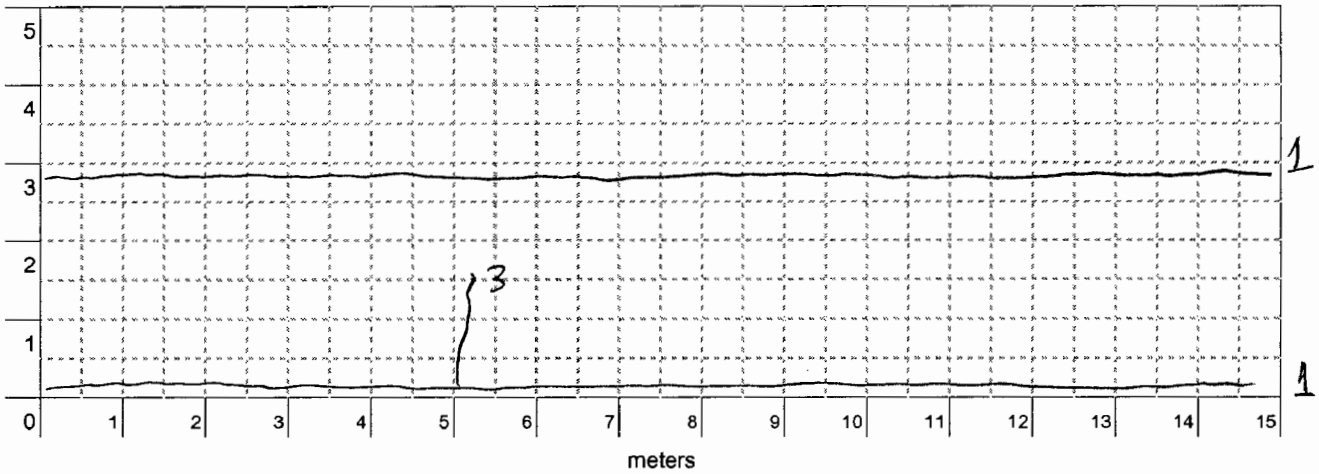
# DISTRESS DATA

# PERFORMANCE EVALUATION SECTION 5

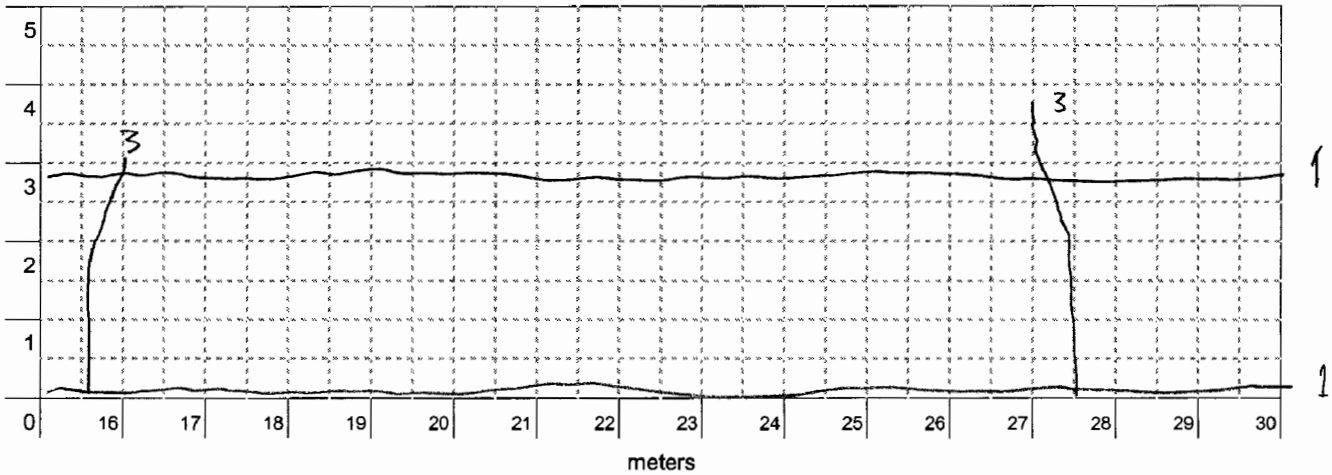
## DISTRESS MAP (PAGE 1)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 5-Recycled RAC PES ID: 5 Surveyor: HZ

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

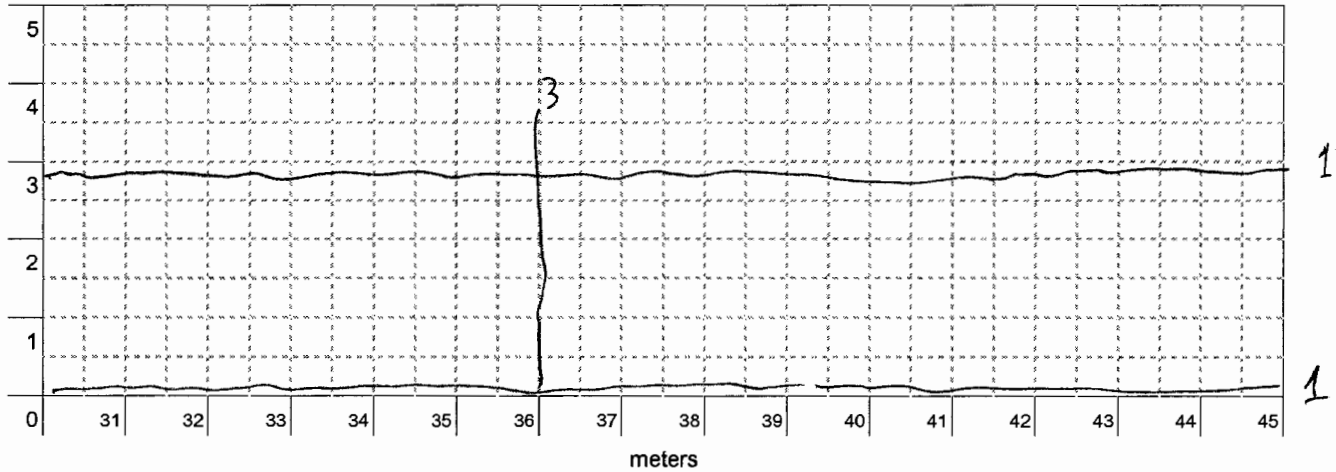



Comments:

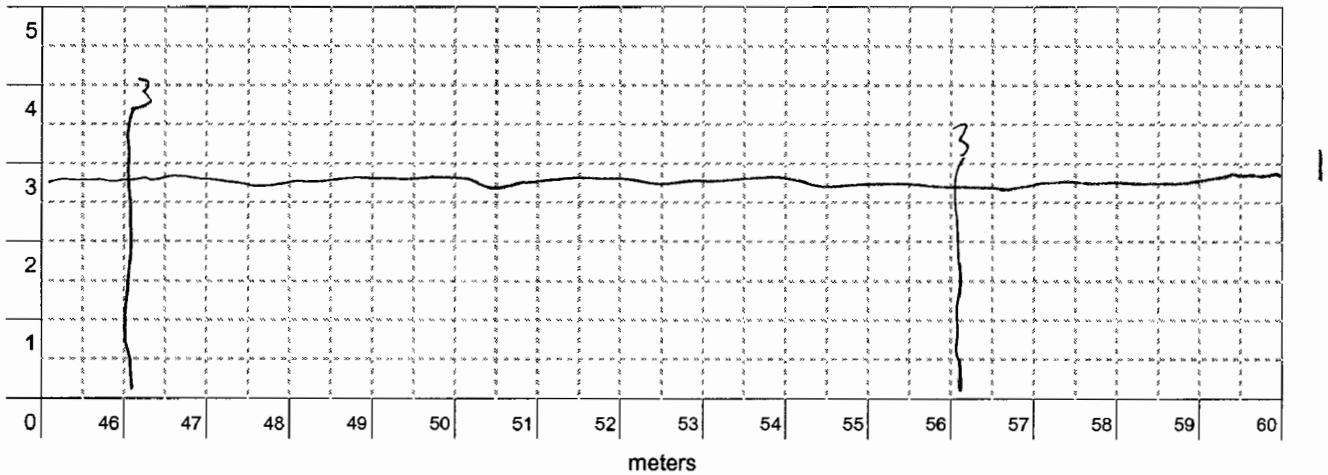
## DISTRESS MAP (PAGE 2)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 5 Recycled RAC PES ID: 5 Surveyor: HZ

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

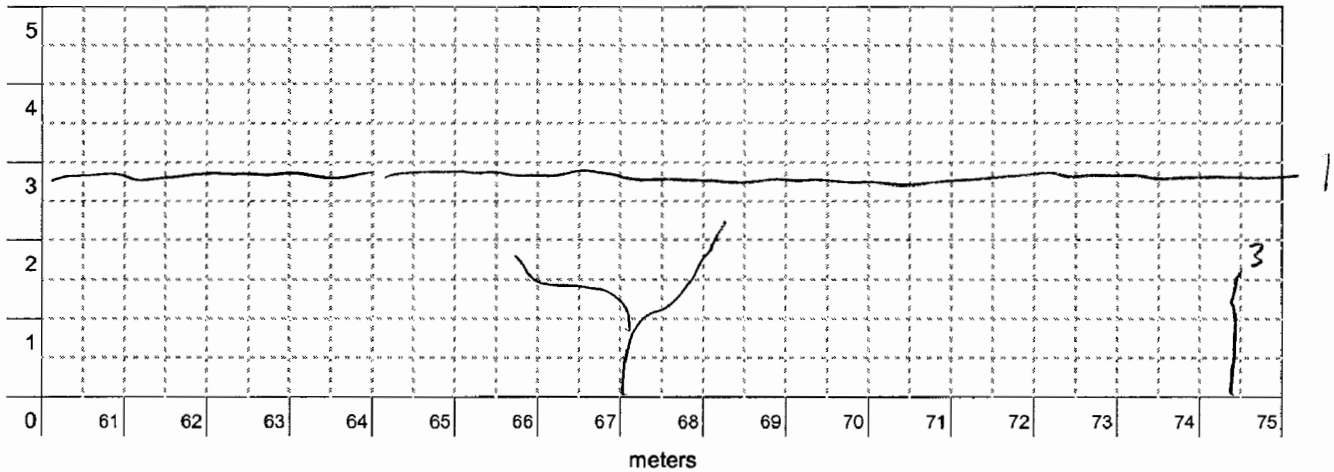



Comments:

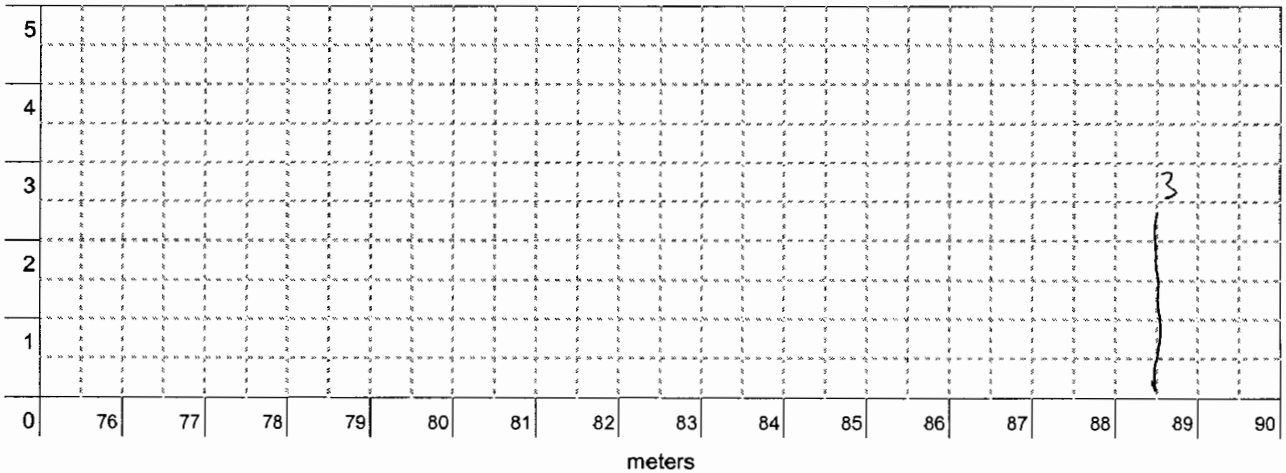
## DISTRESS MAP (PAGE 3)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 5-Recycled RAC PES ID: 5 Surveyor: HZ

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments: _____

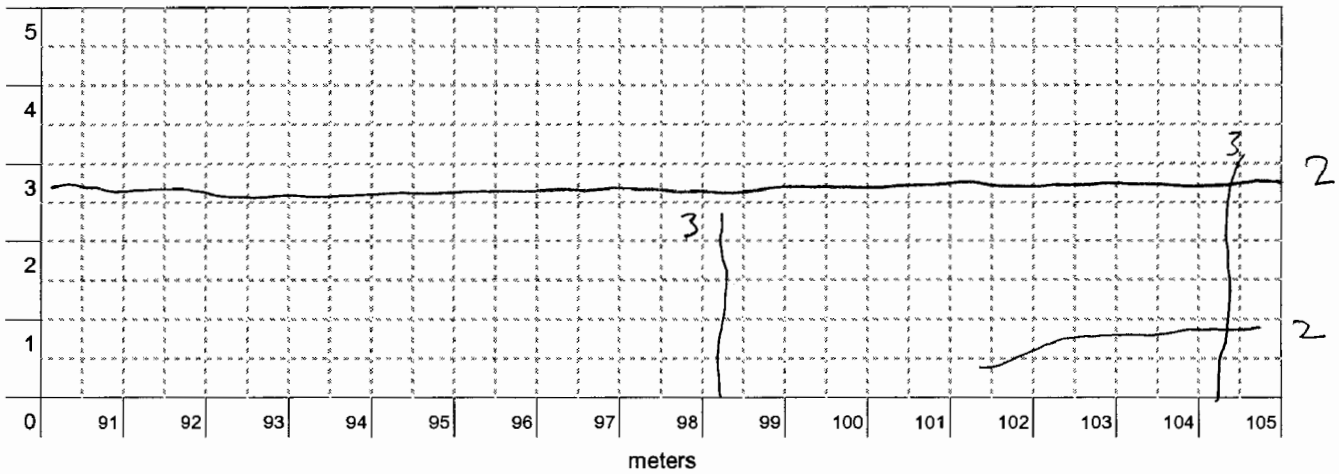



Comments: _____

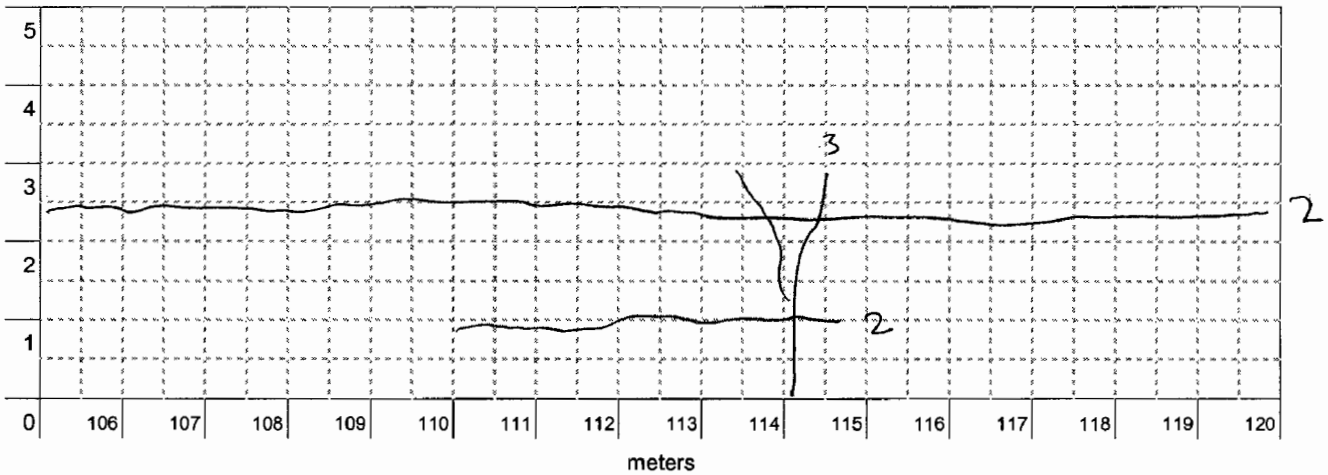
## DISTRESS MAP (PAGE 4)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 5-Recycled RAC PES ID: 5 Surveyor: HZ

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:

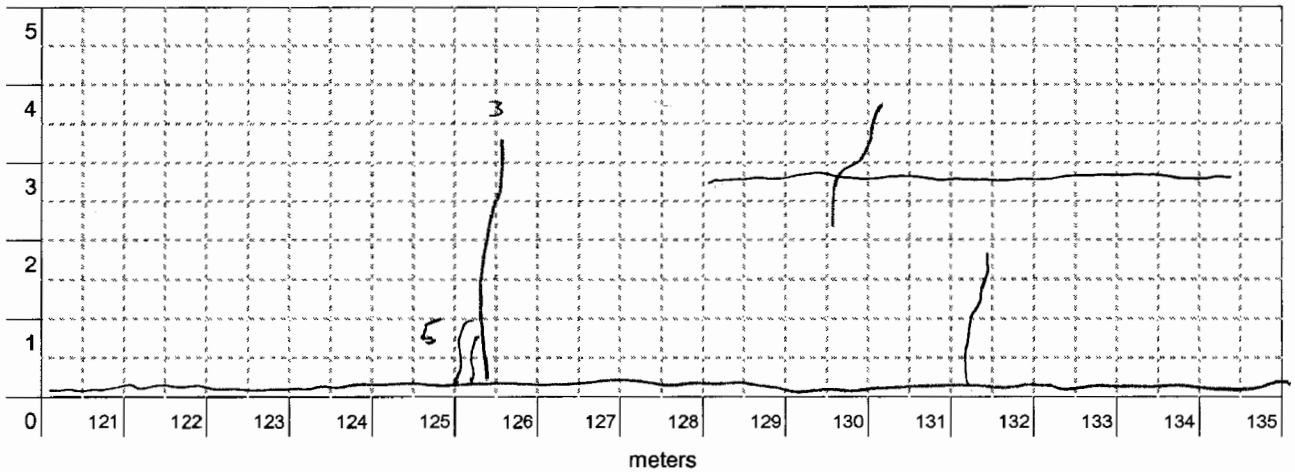



Comments:

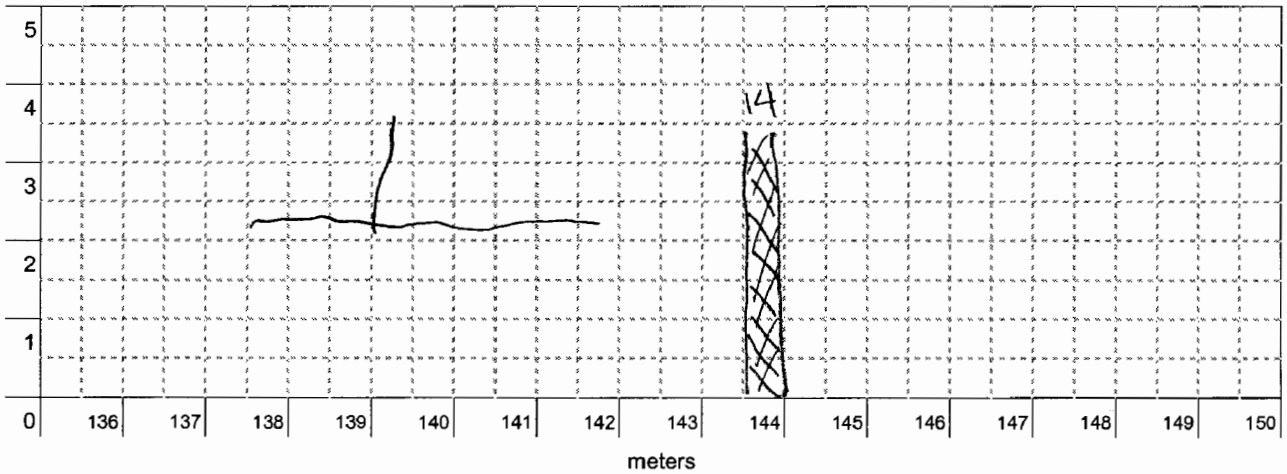
## DISTRESS MAP (PAGE 5)

Project Name: D1 RAC EA#: 01-316104 Date: 4/27/05
Test Section: 5-Recycled RAC PES ID: 5 Surveyor: JTR

| ID | Distress Type |
|---|---|
| 1 | Longitudinal cracking |
| 2 | Fatigue cracking |
| 3 | Transverse cracking |
| 4 | Reflective cracking |
| 5 | Block cracking |
| 6 | Edge cracking |
| 7 | Rutting |
| 8 | Corrugation |
| 9 | Shoving |
| 10 | Depression |
| 11 | Overlay bumps |
| 12 | Delamination |
| 13 | Potholes |
| 14 | Patching |
| 15 | Raveling |
| 16 | Stripping |
| 17 | Polished aggregate |
| 18 | Pumping |
| 19 | Segregation |
| 20 | Checking |
| 21 | Bleeding |




Comments:




Comments:

2
152.6

## DISTRESS SURVEY SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 1)

DATE OF DISTRESS SURVEY: 4/27/05

SURVEYORS INITIALS: HZ

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,E

EA # 4/27/05

COUNTY Mendocino

PES ID# 5

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | SUBSECTION AND SEVERITY LEVEL | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | SUM | | |
| | | | 0-30 (m) [0-100 (ft)] | | | 30-60 (m) [100-200 (ft)] | | | 60-90 (m) [200-300 (ft)] | | | 90-120 (m) [300-400 (ft)] | | | 120-150 (m) [400-500 (ft)] | | | | | |
| | ITEM NO. | DISTRESS TYPE | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H |
| CRACKING | 1 | LONGITUDINAL NON-WHEELPATH (a) | | 30 | | | 15 | | | | | | | | | | | | 45 | |
| | 2a | FATIGUE (Long. in wheelpath) (a) | | 30 | | | 30 | | | 15 | | | 37 | | | 10 | | | 122 | |
| | 2b | FATIGUE (b) | | | | | | | | | | | | | | | | | | |
| | 3 | TRANSVERSE (c) | | 3 8 | | | 3 10 | | | 2 4 | | | 3 8 | | | 1 3 | | | 12 33 | |
| | 4 | REFLECTIVE (c) | | | | | | | | | | | | | | | | | | |
| | 5 | BLOCK (b) | | | | | | | | | | | | | | | | | | |
| | 6 | EDGE (a) | | | | | | | | | | | | | | | | | | |
| DEFORMATION | 7 | RUTTING (d) | | | | | | | | | | | | | | | | | | |
| | 8 | CORRUGATION (b) | | | | | | | | | | | | | | | | | | |
| | 9 | SHOVING (e) | | | | | | | | | | | | | | | | | | |
| | 10 | DEPRESSION (b) | | | | | | | | | | | | | | | | | | |
| | 11 | OVERLAY BUMPS (c) | | | | | | | | | | | | | | | | | | |

a = Length, meter; b = Area, square meter; c = Number and length, meter; d = Maximum depth, mm; e = Number and square meter; f = Yes/No/Unknown

## DISTRESS SURVEY SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 2)

DATE OF DISTRESS SURVEY: 4/27/05

EA # 01-316104

SURVEYORS INITIALS: TR

COUNTY Mendocino

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,E

PES ID# 5

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | SUBSECTION AND SEVERITY LEVEL | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 1 | | | 2 | | | 3 | | | 4 | | | 5 | | | SUM | | |
| | | | 0-30 (m) [0-100 (ft)] | | | 30-60 (m) [100-200 (ft)] | | | 60-90 (m) [200-300 (ft)] | | | 90-120 (m) [300-400 (ft)] | | | 120-150 (m) [400-500 (ft)] | | | | | |
| | ITEM NO. | DISTRESS TYPE | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H | L | M | H |
| DETERIORATION | 12 | DELAMINATION (b) | | | | | | | | | | | | | | | | | | |
| | 13 | POTHOLES (e) | | | | | | | | | | | | | | | | | | |
| | 14 | PATCHING (e) | | | | | | | | | | | | | | 14 | | | 14 | |
| | 15 | RAVELING (b) | | | | | | | | | | | | | | | | | | |
| | 16 | STRIPPING (f) | | | | | | | | | | | | | | | | | | |
| | 17 | POLISHED AGGREGATE (b) | | | | | | | | | | | | | | | | | | |
| | 18 | PUMPING (c) | | | | | | | | | | | | | | | | | | |
| MAT PROBLEMS | 19 | SEGREGATION (b) | | | | | | | | | | | | | | | | | | |
| | 20 | CHECKING (b) | | | | | | | | | | | | | | | | | | |
| | 21 | BLEEDING (b) | | | | | | | | | | | | | | | | | | |

COMMENTS: _____

a = Length, meter; b = Area, square meter; c = Number and length, meter; d = Maximum depth, mm; e = Number and square meter; f = Yes/No/Unknown

## RUTTING MEASUREMENTS SUMMARY FOR PERFORMANCE EVALUATION SECTION (PAGE 3)

DATE OF DISTRESS SURVEY: 4/27/05

EA # 01-316104

SURVEYORS INITIALS: tk

COUNTY Mendocino

PHOTOS, VIDEO, OR BOTH WITH SURVEY (P,V,B) _____

PES ID# 5

AIR TEMP BEFORE ____ °C AFTER ____ °C

PAVEMENT SURFACE TEMP BEFORE ____ °C AFTER ____ °C

| | | | LONGITUDINAL DISTANCE | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0 (m) (0 ft) | 15 (m) (50 ft) | 30 (m) (100 ft) | 45 (m) (150 ft) | 60 (m) (200 ft) | 75 (m) (250 ft) | 90 (m) (300 ft) | 105 (m) (350 ft) | 120 (m) (400 ft) | 135 (m) (450 ft) | 150 (m) (500 ft) |
| TRANSVERSE DISTANCE | EDGE OF PAVEMENT | Depth (mm) | | | | | | | | | | | |
| | | Location (m) | | | | | | | | | | | |
| | WHEEL PATH | Depth (mm) | 9 | 9 | 9 | 9 | 0 | 4 | 4 | 4 | 7 | 6 | 3 |
| | | Location (m) | | | | | | | | | | | |
| | MID LANE | Depth (mm) | | | | | | | | | | | |
| | | Location (m) | | | | | | | | | | | |
| | WHEEL PATH | Depth (mm) | 9 | 9 | 9 | 8 | 8 | 6 | 9 | 9 | 7 | 6 | 2 |
| | | Location (m) | | | | | | | | | | | |
| | CENTER LINE | Depth (mm) | | | | | | | | | | | |
| | | Location (m) | | | | | | | | | | | |

COMMENTS: 6-foot straight edge

# APPENDIX C
# PHOTOS TAKEN DURING THE FIELD WORK

Beginning of PES 1

End of PES 1

Pavement Condition within PES 1

Beginning of PES 2

Pavement Condition within PES 2

Beginning of PES 3

End of PES 2

Pavement Condition within PES 3 (Rut Measurement with a 6-ft Straight Edge)

End of PES 3

Pavement Condition within PES 4

Beginning of PES 4

End of PES 4

Beginning of PES 5

End of PES 5

Pavement Condition within PES 5 (Rut Measurement with a 6-ft Straight Edge)