

MONTANA DEPARTMENT OF TRANSPORTATION
HELENA, MONTANA 59620-1001

Avon North, 19 Miles North of Avon, Devil's Dip N & S
RTF 41-1(12)19, STPP 41-1(10)28
Final Report
July 2001

The stated project was constructed from July through August 1996. This project consisted of comparing Cold-In-Place Recycled asphalt (CIR) with varying depth and no overlay. Two CIR sections were implemented, 91.4mm CIR, and 61mm CIR respectively. This project is classified as a formal experimental project through the year 2001. The Federal Experimental number is MT97-01.

This project is located on Highway 141 (P-41) in the county of Powell. The mile posting starts at approximately MP 19 to MP 32. The 91.4mm section extends from milepost 20 through milepost 27. The 61mm section extends from milepost 28 through 32.

2000 IRI for these milepostings is rated as fair.

Transverse cracking for the 91.4mm section was as follows;

Averaged for both lanes (NB, SB) was 109.8 cracks/mile with a standard deviation (STD) of 1.4.

Transverse cracking for the 61mm section was as follows:

Averaged for both lanes (NB, SB) was 117 cracks/mile with a STD of 1.5

Rutting data is as follows:

91.4mm Section

Northbound (NB) outer wheel path (OWP) averaged rut at 7.1mm with a STD of 2.5. Inner wheel path (IWP) averaged rut at 4.9 with a STD of 1.8.

Southbound (SB) OWP rut at 10.8mm with a STD of 3.9, IWP rut at 5.8mm with a STD of 4.8.

The maximum rut in this section was at milepost 22 southbound at 17mm in both wheelpaths. The minimum rut was at milepost 23 southbound with 2mm in the IWP and 6mm in the OWP.

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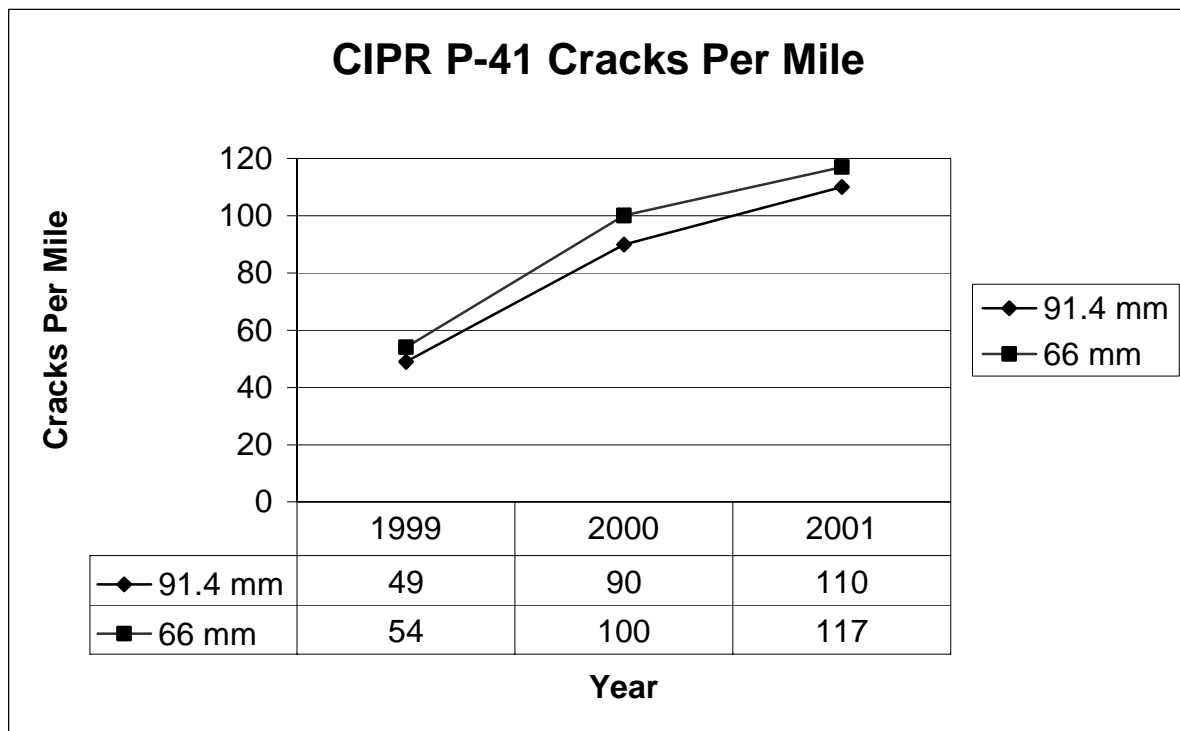
61mm Section

Northbound (NB) OWP rut at 5.2mm with a STD of 1.7. IWP rut at 4.2mm, with a STD of 1.2.
Southbound (SB) OWP rut at 9mm with a STD of 2.7, IWP rut at 6.4mm with a STD of 2.2.

The maximum rut in this section was at milepost 31 southbound at 9mm in the IWP and 12mm in the OWP.

The minimum rut in this section was at milepost 29 northbound at 3mm in the OWP and 4mm in the IWP. At milepost 32 northbound at 4mm in the OWP and 3mm in the IWP.

Both CIPR sections performed comparable and are rated as performing well.



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EXPERIMENTAL PROJECT DATA SHEET

NAME: 19 Miles North of Avon-North and Devil's Dip-North and South
 NUMBER: RTF 41-1(12)19 and STPP 41-1(10)28
 YEAR: 2001

Final Evaluation

Location	Treatment	No. of Cracks		Ruts (mm)			
		150' N	150'S	NB		SB	
				OWP	IWP	IWP	OWP
mp 20	91.4 mm CIPR	4	4.6	4	5	5	10
mp 21	91.4 mm CIPR	4	3.7	6	3	4	7
mp 22	91.4 mm CIPR	3.5	3.9	7	4	17	17
mp 23	91.4 mm CIPR	0	4	5	6	2	6
mp 24	91.4 mm CIPR	2.5	4.5	7	5	2	9
mp 25	91.4 mm CIPR	2	4	12	3	9	17
mp 26	91.4 mm CIPR	2	0.5	10	9	2	10
mp 27	91.4 mm CIPR	4.2	2.5	6	4	5	10
mp 28	61mm CIPR	2	2.5	8	6	3	8
mp 29	61mm CIPR	4	2	3	4	5	5
mp 30	61mm CIPR	3.2	6	6	5	8	12
mp 31	61mm CIPR	3.6	2	5	3	9	12
mp 32	61mm CIPR	2	6	4	3	7	8

91.4 mm CIPR	Avg	7.1	4.9	5.8	10.8
	Std	2.5	1.8	4.8	3.9

61 mm CIPR	Avg	5.2	4.2	6.4	9.0
	Std	1.7	1.2	2.2	2.7

91.4 mm CIPR	No. of Cracks/Mile	109.8
	STD	1.4

61 mm CIPR	No. of Cracks/Mile	117.2
	STD	1.5

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Representative Images of Project

