INFORMATION HANDOUT

For Contract No. 10-1E4204
At 10-SJ-12-11.0/15.0

Identified by
Project ID 1015000075

MATERIALS INFORMATION

WATER SOURCE INFORMATION

EXISTING PAVEMENT INERTIAL PROFILER (IP)

Alicea, Jose A@DOT

From: Doug Heberle <heberlewid@gmail.com>
Sent: Thursday, February 05, 2015 2:09 PM
To: Alicea, Jose A@DOT; Anders Christensen
Subject: Re: Caltrans - Request for Information on Non-Potable Water or Potable Water Source for Upcoming Construction Project

Hello Jose,
In regards to the Caltrans maintenance project on Hwy 12, Woodbridge Irrigation District (WID) may be listed as a potential source for non-potable water for construction use, as supply allows at the time of construction. As you are well aware, water supply may be sporadic in this drought and in light of any possible future restrictions out of WID's control, WID may not commit at this time to be able to provide the contractor for this project a guaranteed supply of water. However, if water is available at the time of demand, WID will be happy to work with Caltrans to provide the water needed for the execution of this project. If you have any questions, please do not hesitate to call.

Thank You,
Doug Heberle

On Tue, Feb 3, 2015 at 1:44 PM, Alicea, Jose A@DOT <jose.alicea@dot.ca.gov> wrote:

Hello Mr. Doug Heberle,

My name is Jose Alicea with District 10 Caltrans Maintenance Design,

I am writing, per our conversation, in regards to finding construction water sources for our upcoming 2016 Maintenance Cold In-Place Recycling Project on San Joaquin County, Route 12, just west of Lodi.

10-1E4204; SJ-12-PM 11.0/15.0

As part of our efforts to conserve water in the State, we have been directed to provide on our projects a non-potable water source in an information handout as part of our projects PS&E packages. .

This means that as the designer we need to check during design for a readily available non-potable water source 1st and if not possible, then a potable water source that the contractor can select to use during construction. I have included a copy of our Caltrans Directive and Water Usage Guidance.

Does Woodbridge Irrigation District have either non-potable and potable water sources for this construction project in this area?

We understand, if a source is available, the awarded contractor would need to contact Woodbridge Irrigation District to set up their own account for water if they choose this means.

If you could please let me know if you do have a source or any additional information on the process, I would greatly appreciate it. Once I hear back from you I will include this information in my PS&E Package.

Thank You.

Jose A. Alicea II, P.E.

(209) 948-7939

Caltrans D-10 Maintenance Engineering

1976 E. Dr. Martin Luther King Jr. Blvd

Stockton, Ca 9520

Thank You.

Jose A. Alicea II, P.E.

(209) 948-7939

Caltrans D-10 Maintenance Engineering

1976 E. Dr. Martin Luther King Jr. Blvd

Stockton, Ca 95205

Analysis: Ride Quality

Inputs

Threshold (in/mi): 180.00
Segment Length (ft): 528.00

Selections

File	Profile	Section	Apply 250mm Filter
20150727_10SJ12_EB_1_B_11.0_EXIST_HMA	Track 1	Full	Yes
20150727_10SJ12_EB_1_B_11.0_EXIST_HMA	Track 2	Full	Yes

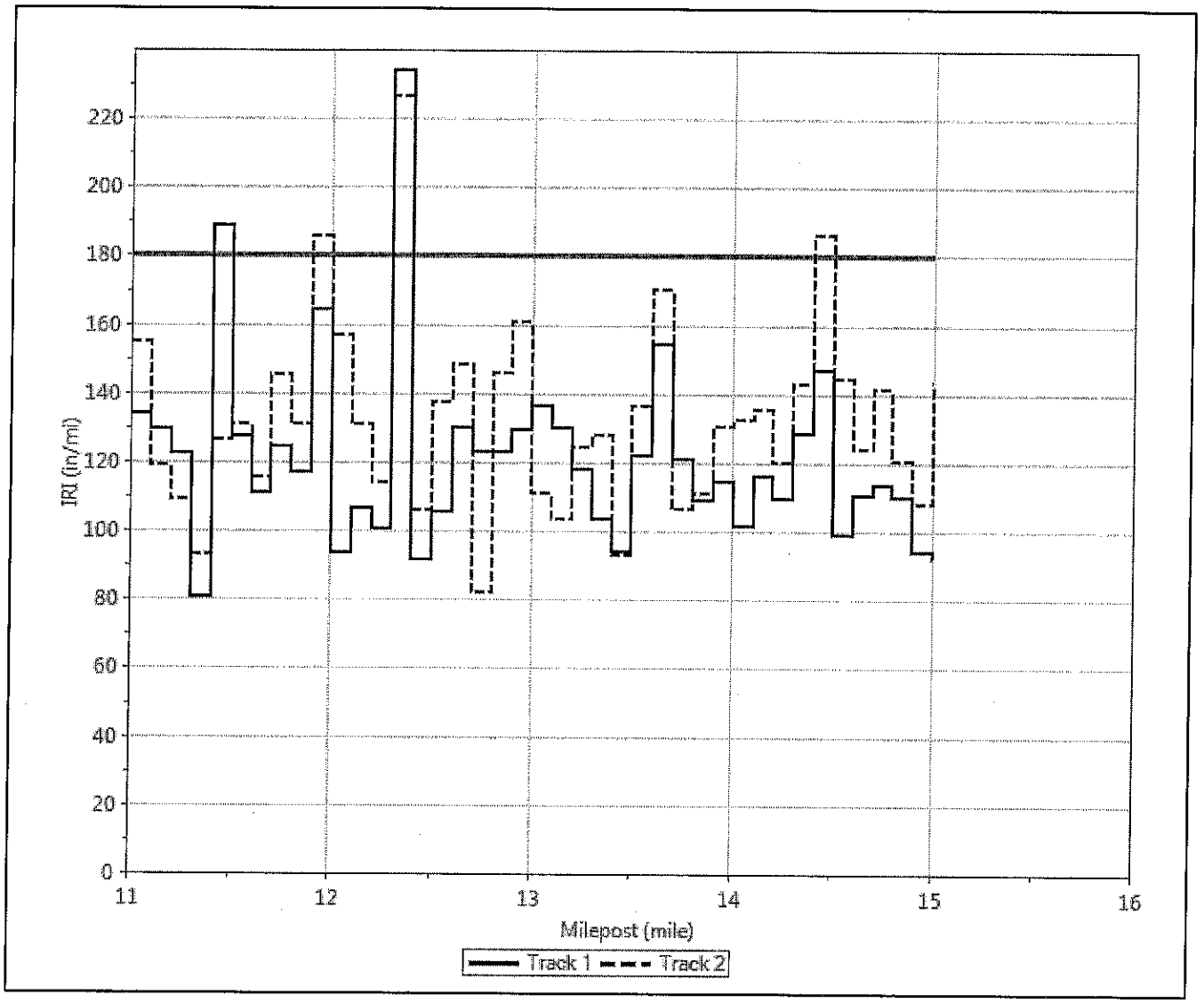
Leave-outs

Results

20150727_10SJ12_EB_1_B_11.0_EXIST_HMA

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Track 1 - IRI (in/mi)	Track 2 - IRI (in/mi)
11.0000	11.1000	528.00	134.08	154.78
11.1000	11.2000	528.00	129.68	119.01
11.2000	11.3000	528.00	122.31	109.10
11.3000	11.4000	528.00	80.52	93.13
11.4000	11.5000	528.00	188.47	126.33
11.5000	11.6000	528.00	127.56	130.84
11.6000	11.7000	528.00	111.19	115.62
11.7000	11.8000	528.00	124.54	145.36
11.8000	11.9000	528.00	117.26	131.15
11.9000	12.0000	528.00	164.17	185.76
12.0000	12.1000	528.00	93.81	156.82
12.1000	12.2000	528.00	106.50	130.81
12.2000	12.3000	528.00	100.78	114.09
12.3000	12.4000	528.00	234.09	226.33
12.4000	12.5000	528.00	91.50	106.19
12.5000	12.6000	528.00	105.76	137.46
12.6000	12.7000	528.00	129.99	148.44
12.7000	12.8000	528.00	122.93	82.19
12.8000	12.9000	528.00	122.90	145.95
12.9000	13.0000	528.00	129.47	160.94
13.0000	13.1000	528.00	136.29	111.21
13.1000	13.2000	528.00	129.81	103.41
13.2000	13.3000	528.00	118.18	124.66
13.3000	13.4000	528.00	103.79	127.92
13.4000	13.5000	528.00	93.87	93.04
13.5000	13.6000	528.00	122.13	136.48
13.6000	13.7000	528.00	154.49	170.39
13.7000	13.8000	528.00	120.87	106.34
13.8000	13.9000	528.00	109.02	111.18
13.9000	14.0000	528.00	114.35	130.52
14.0000	14.1000	528.00	101.56	132.37

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Track 1 - IRI (in/mi)	Track 2 - IRI (in/mi)
14.1000	14.2000	528.00	116.09	135.31
14.2000	14.3000	528.00	109.70	120.21
14.3000	14.4000	528.00	128.24	142.69
14.4000	14.5000	528.00	147.07	186.19
14.5000	14.6000	528.00	98.88	144.45
14.6000	14.7000	528.00	110.72	124.00
14.7000	14.8000	528.00	113.30	141.29
14.8000	14.9000	528.00	110.11	120.48
14.9000	15.0000	528.00	94.25	108.25
15.0000	15.0021	10.00	92.02	143.63



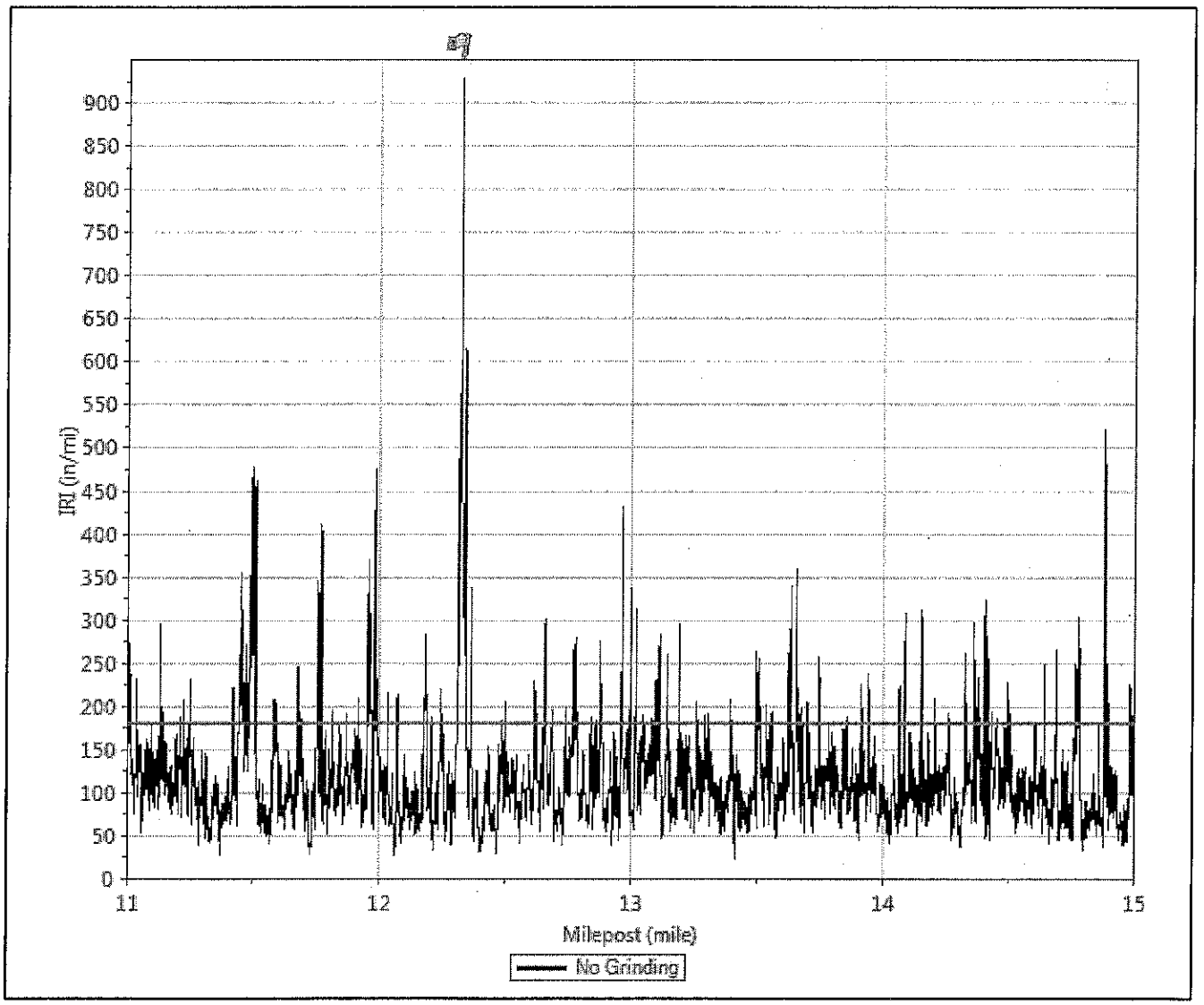
Analysis: Smoothness Assurance

Selections

File	Profile	Section	Apply 250mm Filter
20150727_10SJ12_EB_1_B_11.0_EXIST_HMA	Track 1	Full	Yes

Short Continuous

Segment Length (ft): 25.00
Threshold (in/mi): 180.00



No Grinding

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
11.0025	11.0075	274.02
11.0079	11.0084	186.26
11.0093	11.0140	238.37
11.0329	11.0355	231.91
11.0922	11.0924	181.02
11.0936	11.0937	180.86
11.1263	11.1333	294.64
11.1389	11.1408	193.46
11.1412	11.1416	186.52
11.2073	11.2079	185.47
11.2081	11.2086	186.99
11.2219	11.2222	182.68

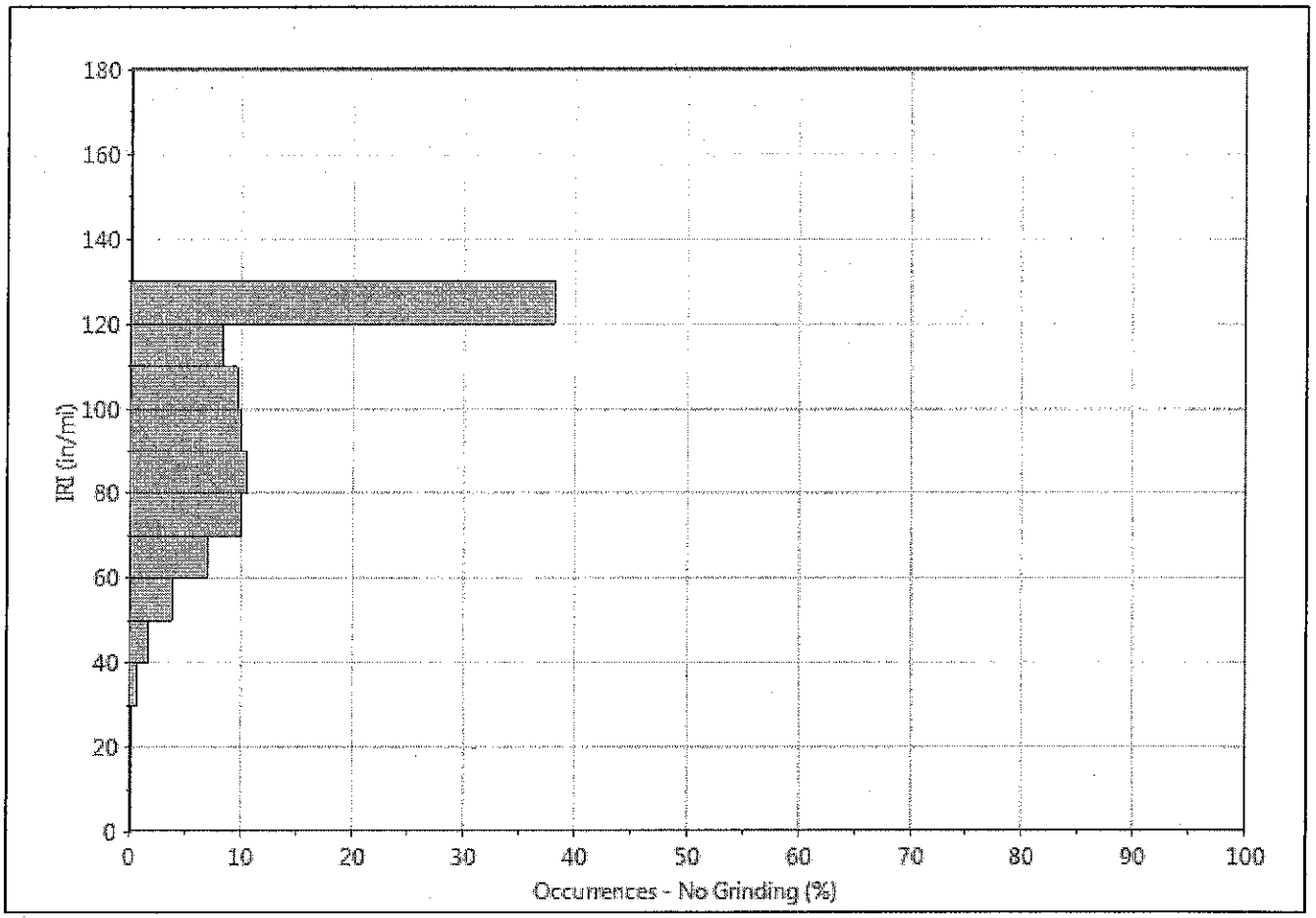
Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
11.2234	11.2259	208.10
11.2452	11.2454	181.16
11.2482	11.2530	231.95
11.4211	11.4239	222.25
11.4427	11.4637	355.77
11.4691	11.4745	271.00
11.4797	11.4843	226.64
11.4859	11.5047	477.97
11.5066	11.5070	187.58
11.5073	11.5077	183.31
11.5078	11.5139	461.62
11.5838	11.5879	207.37
11.5903	11.5918	203.11
11.5931	11.5946	201.76
11.5971	11.5977	184.42
11.6780	11.6819	245.84
11.6884	11.6894	192.92
11.6962	11.6972	185.68
11.7541	11.7632	345.07
11.7683	11.7773	411.03
11.8167	11.8188	194.98
11.8202	11.8205	181.75
11.8455	11.8460	182.08
11.8721	11.8730	191.09
11.9186	11.9189	182.85
11.9191	11.9212	209.94
11.9544	11.9599	368.24
11.9601	11.9619	214.06
11.9622	11.9717	306.95
11.9816	11.9897	475.54
11.9911	11.9915	187.85
11.9925	11.9926	181.29
11.9928	11.9957	230.71
12.0324	12.0352	215.13
12.0691	12.0718	213.96
12.1783	12.1885	282.46
12.2070	12.2075	187.96
12.2414	12.2417	183.16
12.2420	12.2438	202.25
12.2440	12.2489	220.00
12.3079	12.3455	928.47
12.3465	12.3471	186.07
12.3617	12.3670	338.11
12.4882	12.4887	183.85
12.4887	12.4889	181.36
12.4995	12.4998	182.38
12.4998	12.5025	205.69
12.6146	12.6182	230.08
12.6228	12.6255	217.39

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
12.6558	12.6649	301.98
12.6650	12.6651	180.88
12.6859	12.6862	183.99
12.6865	12.6888	194.75
12.7418	12.7431	197.56
12.7701	12.7750	265.57
12.7789	12.7862	278.86
12.7880	12.7891	193.20
12.8467	12.8475	188.14
12.8617	12.8622	184.59
12.8771	12.8843	275.02
12.8846	12.8848	180.54
12.8854	12.8872	204.60
12.9619	12.9686	431.95
12.9963	13.0015	337.03
13.0169	13.0225	312.45
13.0443	13.0454	186.12
13.0466	13.0471	190.01
13.0785	13.0789	185.97
13.0879	13.0884	184.19
13.0953	13.0998	231.64
13.1081	13.1089	189.54
13.1091	13.1159	282.97
13.1407	13.1452	259.07
13.1869	13.1918	295.29
13.2594	13.2602	204.77
13.2900	13.2903	182.51
13.2908	13.2910	181.46
13.2915	13.2917	181.18
13.2918	13.2928	189.58
13.3054	13.3065	191.29
13.3921	13.3953	207.65
13.4929	13.4971	264.29
13.5035	13.5101	255.49
13.5107	13.5135	198.74
13.5321	13.5331	189.48
13.5335	13.5346	201.82
13.5559	13.5578	193.07
13.6193	13.6239	260.60
13.6285	13.6365	338.35
13.6527	13.6598	358.72
13.6658	13.6669	191.44
13.6769	13.6789	198.32
13.6965	13.7004	205.69
13.7434	13.7481	256.47
13.7849	13.7852	181.17
13.7859	13.7860	180.85
13.8541	13.8548	183.60
13.8548	13.8553	186.97

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
13.8564	13.8565	180.29
13.9095	13.9126	225.18
13.9178	13.9206	196.84
13.9392	13.9435	238.11
14.0618	14.0647	222.65
14.0839	14.0887	307.06
14.1486	14.1534	310.74
14.2032	14.2061	210.42
14.2587	14.2593	191.80
14.2601	14.2612	186.52
14.2616	14.2620	184.17
14.3231	14.3280	260.47
14.3567	14.3634	297.91
14.3724	14.3767	234.43
14.3820	14.3838	186.71
14.3987	14.4054	323.11
14.4111	14.4187	281.97
14.4298	14.4300	181.94
14.4310	14.4328	192.62
14.4330	14.4335	185.01
14.4523	14.4526	183.40
14.4547	14.4556	186.07
14.4918	14.4994	227.46
14.5018	14.5028	192.07
14.5032	14.5033	180.24
14.5039	14.5055	191.53
14.6043	14.6043	180.19
14.6067	14.6068	180.75
14.6397	14.6436	248.23
14.6437	14.6437	180.11
14.6859	14.6906	265.85
14.7628	14.7636	191.70
14.7639	14.7641	182.37
14.7649	14.7693	250.29
14.7695	14.7698	188.27
14.7729	14.7744	194.87
14.7751	14.7835	303.16
14.8582	14.8584	180.19
14.8774	14.8843	521.30
14.8910	14.8954	248.86
14.9809	14.9850	224.61
14.9955	14.9964	189.91
14.9975	14.9982	186.01
14.9984	14.9995	189.28

Short Continuous Histogram

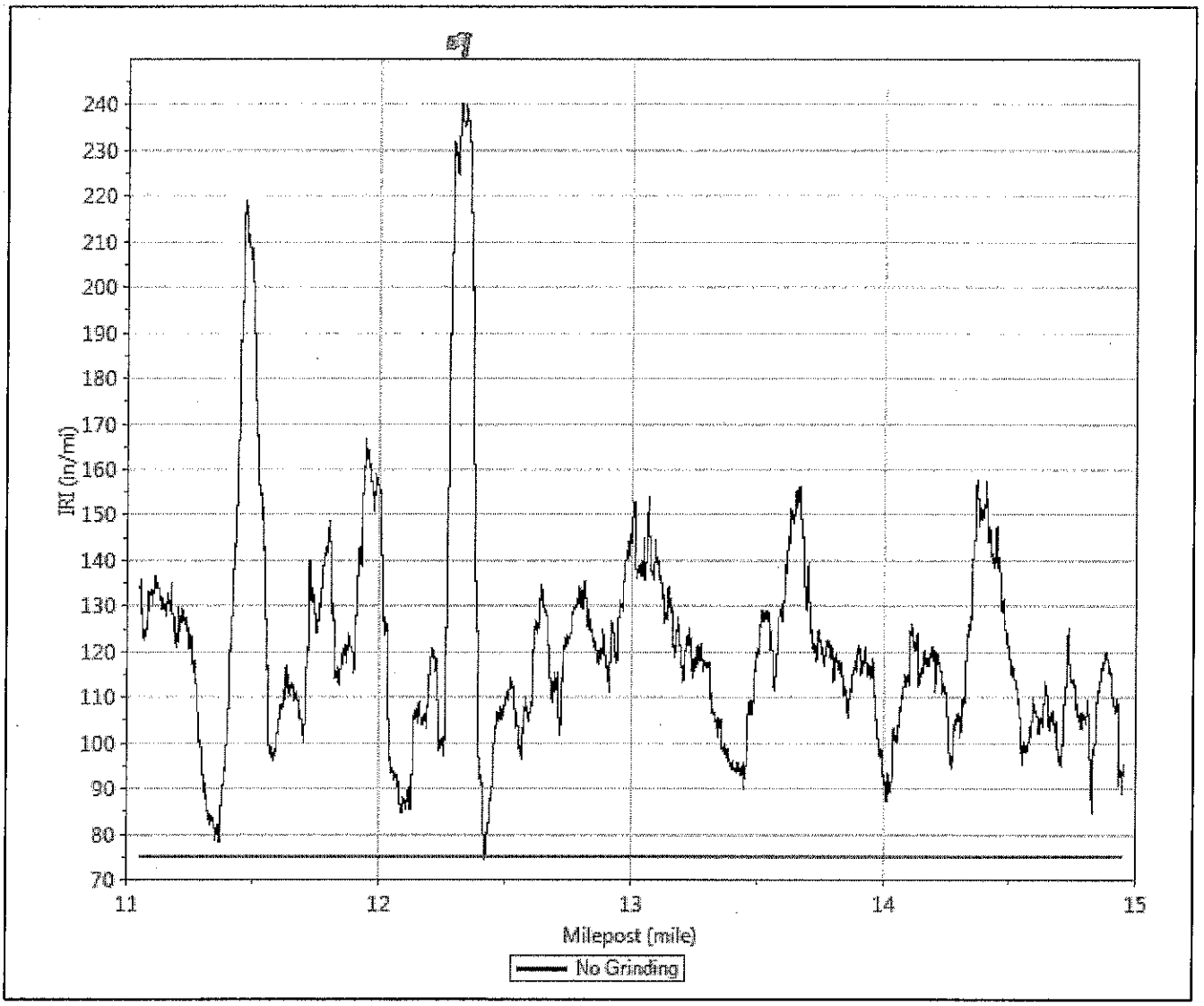
Total % Out of Spec (No Grinding): 12.16



Max IRI (in/mi)	Min IRI (in/mi)	No Grinding (%)
∞	120.00	38.09
120.00	110.00	8.39
110.00	100.00	9.64
100.00	90.00	10.07
90.00	80.00	10.56
80.00	70.00	9.97
70.00	60.00	7.01
60.00	50.00	3.77
50.00	40.00	1.72
40.00	30.00	0.75
30.00	20.00	0.04
20.00	10.00	0.00
10.00	0.00	0.00

Long Continuous

Segment Length (ft): 528.00
Threshold (in/mi): 75.00

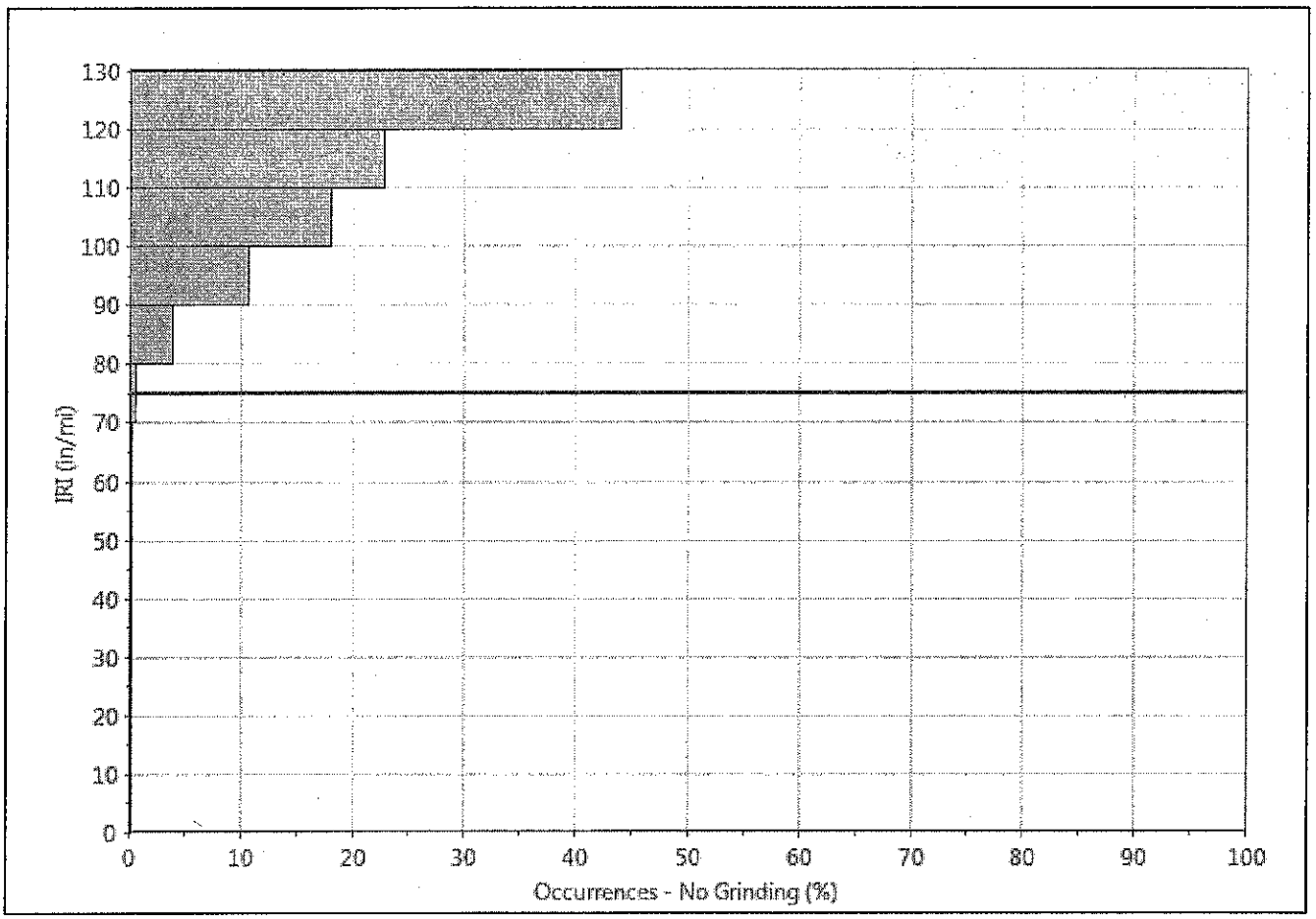


No Grinding

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
11.0500	12.4188	240.35
12.4216	14.9519	157.86

Long Continuous Histogram

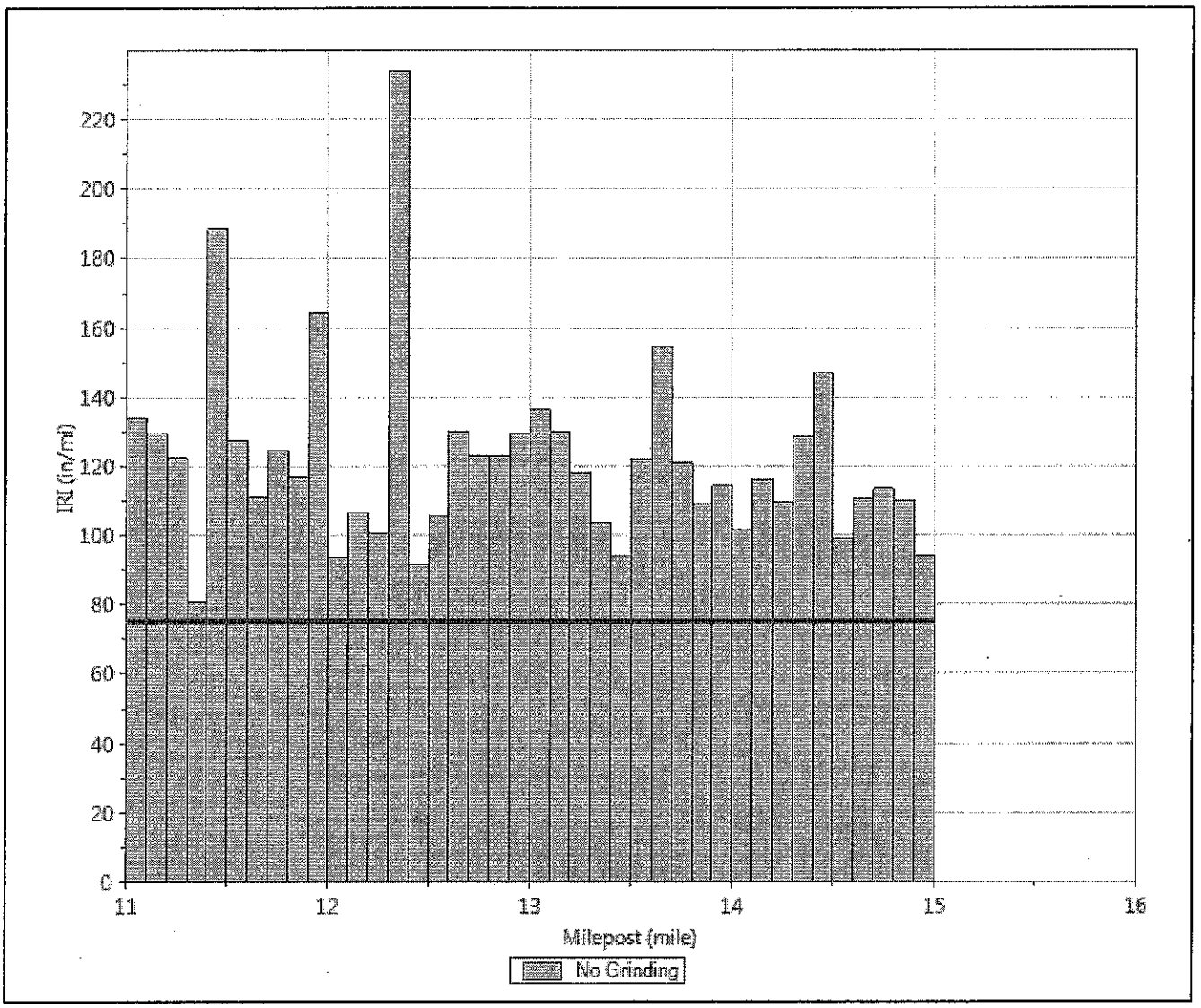
Total % Out of Spec (No Grinding): 99.93



Max IRI (in/mi)	Min IRI (in/mi)	No Grinding (%)
∞	120.00	44.03
120.00	110.00	22.77
110.00	100.00	18.13
100.00	90.00	10.64
90.00	80.00	3.86
80.00	70.00	0.57
70.00	60.00	0.00
60.00	50.00	0.00
50.00	40.00	0.00
40.00	30.00	0.00
30.00	20.00	0.00
20.00	10.00	0.00
10.00	0.00	0.00

Fixed Interval

Segment Length (ft): 528.00
Threshold (in/mi): 75.00

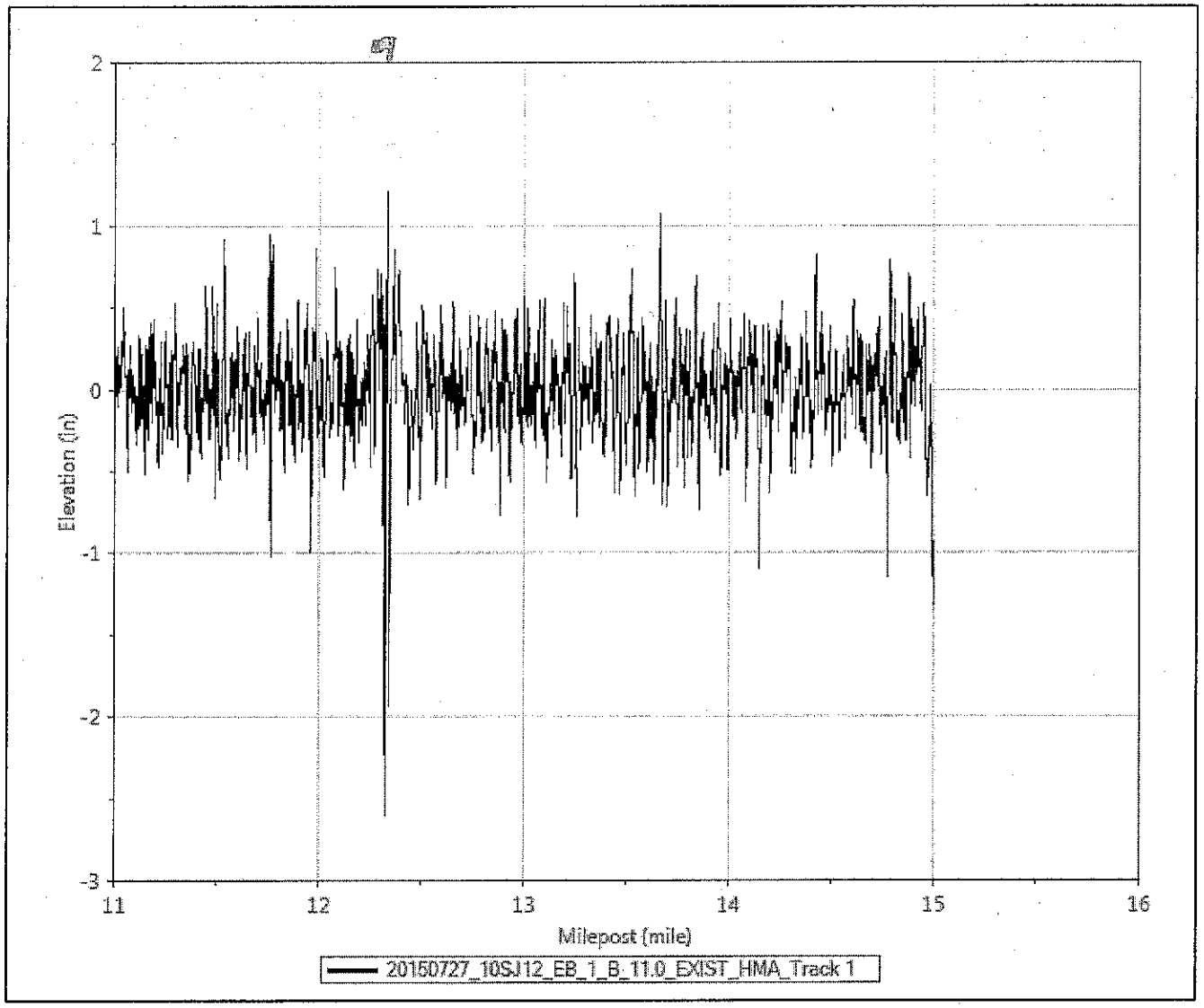


Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	No Grinding IRI (in/mi)	No Grinding Defect Count
11.0000	11.1000	528.0000	134.08	6
11.1000	11.2000	528.0000	129.68	3
11.2000	11.3000	528.0000	122.31	6
11.3000	11.4000	528.0000	80.52	0
11.4000	11.5000	528.0000	188.47	5
11.5000	11.6000	528.0000	127.56	8
11.6000	11.7000	528.0000	111.19	3
11.7000	11.8000	528.0000	124.54	2
11.8000	11.9000	528.0000	117.26	4
11.9000	12.0000	528.0000	164.17	9
12.0000	12.1000	528.0000	93.81	2
12.1000	12.2000	528.0000	106.50	1
12.2000	12.3000	528.0000	100.78	4

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	No Grinding IRI (in/mi)	No Grinding Defect Count
12.3000	12.4000	528.0000	234.09	3
12.4000	12.5000	528.0000	91.50	4
12.5000	12.6000	528.0000	105.76	1
12.6000	12.7000	528.0000	129.99	6
12.7000	12.8000	528.0000	122.93	4
12.8000	12.9000	528.0000	122.90	5
12.9000	13.0000	528.0000	129.47	2
13.0000	13.1000	528.0000	136.29	7
13.1000	13.2000	528.0000	129.81	4
13.2000	13.3000	528.0000	118.18	5
13.3000	13.4000	528.0000	103.79	2
13.4000	13.5000	528.0000	93.87	1
13.5000	13.6000	528.0000	122.13	5
13.6000	13.7000	528.0000	154.49	6
13.7000	13.8000	528.0000	120.87	4
13.8000	13.9000	528.0000	109.02	3
13.9000	14.0000	528.0000	114.35	3
14.0000	14.1000	528.0000	101.56	2
14.1000	14.2000	528.0000	116.09	1
14.2000	14.3000	528.0000	109.70	4
14.3000	14.4000	528.0000	128.24	5
14.4000	14.5000	528.0000	147.07	8
14.5000	14.6000	528.0000	98.88	3
14.6000	14.7000	528.0000	110.72	5
14.7000	14.8000	528.0000	113.30	6
14.8000	14.9000	528.0000	110.11	3
14.9000	15.0000	528.0000	94.25	4
15.0000	15.0021	10.0000	92.02	0

Comparison

Filter:None


2
1
0
-1
-2
-3
Elevation (in)
11
12
13
14
15
16
Milepost (mile)
20150727_10SJ12_EB_1_B_11.0_EXIST_HMA_Track 1

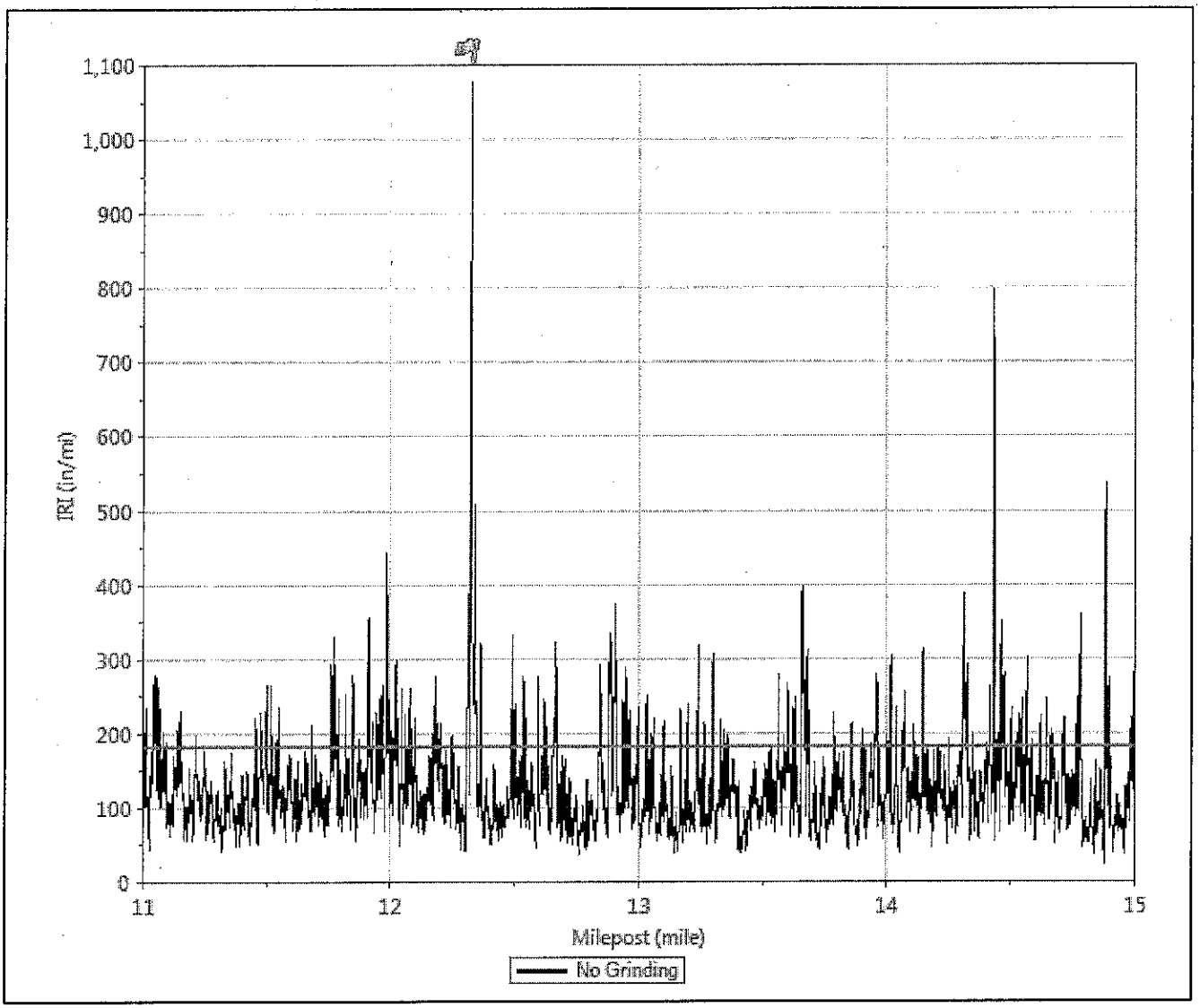
Analysis: Smoothness Assurance

Selections

File	Profile	Section	Apply 250mm Filter
20150727_10SJ12_EB_1_B_11.0_EXIST_HMA	Track 2	Full	Yes

Short Continuous

Segment Length (ft): 25.00
Threshold (in/mi): 180.00



No Grinding

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
11.0101	11.0143	235.13
11.0424	11.0426	184.81
11.0430	11.0518	278.30
11.0522	11.0525	182.62
11.0558	11.0605	275.81
11.0655	11.0701	234.95
11.0802	11.0821	201.34
11.0930	11.0935	188.49
11.0939	11.0942	181.69
11.0946	11.0947	180.19
11.1386	11.1403	204.38
11.1408	11.1427	216.49

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
11.1474	11.1510	230.39
11.2104	11.2115	194.45
11.2134	11.2151	198.00
11.4540	11.4547	190.26
11.4549	11.4577	221.02
11.4736	11.4739	184.92
11.4741	11.4790	226.87
11.4797	11.4799	186.73
11.4806	11.4812	184.45
11.4816	11.4831	196.79
11.4921	11.4938	196.94
11.4956	11.5018	264.46
11.5138	11.5193	264.76
11.5390	11.5404	193.75
11.5466	11.5512	234.61
11.6815	11.6831	210.55
11.7555	11.7633	292.07
11.7677	11.7773	328.45
11.7780	11.7803	225.80
11.7863	11.7910	246.35
11.8164	11.8212	252.07
11.8436	11.8437	180.61
11.8441	11.8501	278.96
11.8720	11.8729	191.54
11.9069	11.9174	354.26
11.9256	11.9300	216.63
11.9411	11.9461	226.99
11.9549	11.9593	244.97
11.9636	11.9687	263.70
11.9688	11.9715	231.58
11.9800	11.9904	444.26
11.9906	11.9917	209.91
11.9921	11.9971	245.50
12.0032	12.0047	203.58
12.0133	12.0149	202.16
12.0166	12.0169	185.58
12.0176	12.0250	298.24
12.0256	12.0305	220.78
12.0306	12.0308	182.58
12.0431	12.0472	258.94
12.0560	12.0597	225.16
12.0686	12.0690	182.87
12.0690	12.0713	208.33
12.0747	12.0794	260.21
12.0808	12.0847	215.55
12.0985	12.1017	219.69
12.1669	12.1679	200.68
12.1771	12.1831	275.86
12.1847	12.1852	186.82

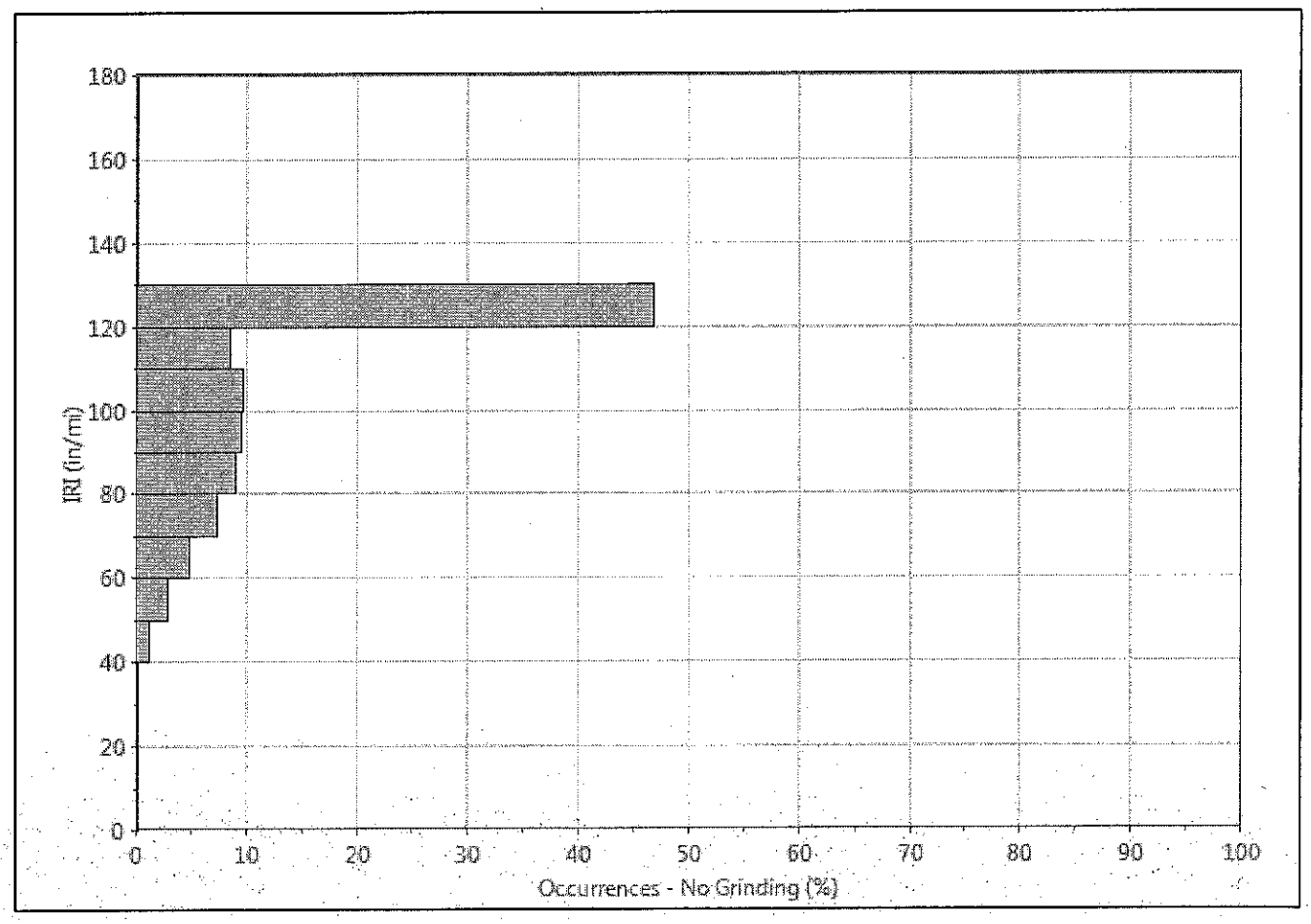
Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
12.1862	12.1889	213.77
12.1977	12.1978	180.33
12.1984	12.1995	192.93
12.2039	12.2056	213.81
12.2468	12.2482	197.59
12.2488	12.2490	182.40
12.3083	12.3165	386.69
12.3183	12.3478	1,077.33
12.3604	12.3614	189.79
12.3616	12.3683	320.19
12.4875	12.4939	332.13
12.5001	12.5047	239.49
12.5311	12.5313	181.61
12.5322	12.5381	277.22
12.5448	12.5487	220.13
12.5918	12.5964	275.95
12.6135	12.6181	246.23
12.6220	12.6271	242.27
12.6534	12.6721	321.97
12.8386	12.8388	181.26
12.8391	12.8455	293.54
12.8458	12.8508	252.79
12.8776	12.8896	334.99
12.8971	12.9094	372.50
12.9317	12.9385	243.07
12.9387	12.9388	180.71
12.9452	12.9513	287.34
12.9589	12.9638	230.78
12.9646	12.9657	200.28
12.9899	12.9938	207.99
12.9963	13.0008	234.48
13.0301	13.0349	251.26
13.0478	13.0487	184.12
13.0488	13.0489	180.25
13.0495	13.0518	198.53
13.0585	13.0625	220.05
13.0987	13.1030	215.18
13.1666	13.1711	232.62
13.1947	13.1990	238.02
13.2327	13.2357	224.59
13.2366	13.2422	317.42
13.2634	13.2671	213.66
13.2948	13.3035	306.88
13.3304	13.3323	219.26
13.3444	13.3446	181.89
13.3453	13.3480	203.25
13.3586	13.3593	184.32
13.3593	13.3611	196.17
13.5611	13.5661	278.41

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
13.5852	13.5868	197.23
13.5962	13.6071	265.87
13.6190	13.6231	233.44
13.6308	13.6345	249.12
13.6521	13.6698	397.49
13.6739	13.6791	310.58
13.6806	13.6853	241.50
13.7834	13.7875	226.64
13.8537	13.8542	183.49
13.8548	13.8563	213.48
13.8575	13.8580	186.44
13.8962	13.8996	205.07
13.9006	13.9019	187.73
13.9023	13.9023	180.18
13.9326	13.9337	186.08
13.9515	13.9598	278.19
13.9599	13.9602	182.60
13.9968	13.9980	191.68
13.9993	14.0001	196.36
14.0006	14.0011	184.76
14.0115	14.0169	303.64
14.0362	14.0402	235.20
14.0609	14.0639	210.39
14.0648	14.0696	213.94
14.0703	14.0751	255.00
14.1040	14.1078	212.24
14.1135	14.1137	181.36
14.1139	14.1142	181.40
14.1147	14.1158	187.10
14.1412	14.1477	314.00
14.2062	14.2067	181.76
14.2504	14.2517	183.88
14.2522	14.2529	191.48
14.3081	14.3203	387.54
14.3206	14.3278	291.99
14.3452	14.3487	199.55
14.4011	14.4012	180.33
14.4016	14.4025	185.73
14.4130	14.4190	262.21
14.4275	14.4284	188.91
14.4289	14.4350	797.61
14.4445	14.4457	190.28
14.4496	14.4526	200.06
14.4584	14.4641	351.26
14.4647	14.4652	188.57
14.4674	14.4775	280.36
14.5003	14.5046	234.24
14.5219	14.5241	199.57
14.5326	14.5336	195.85

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
14.5342	14.5378	225.00
14.5383	14.5385	180.71
14.5447	14.5495	245.46
14.5628	14.5679	301.04
14.5841	14.5849	191.38
14.6166	14.6202	222.55
14.6404	14.6436	247.07
14.6574	14.6585	194.13
14.6651	14.6662	204.02
14.6680	14.6696	196.19
14.6715	14.6722	188.38
14.7058	14.7071	197.22
14.7130	14.7158	221.03
14.7623	14.7672	248.02
14.7725	14.7832	359.62
14.8775	14.8839	536.28
14.8857	14.8863	187.60
14.8910	14.8955	274.44
14.9812	14.9856	220.36
14.9932	14.9995	281.01

Short Continuous Histogram

Total % Out of Spec (No Grinding): 16.69

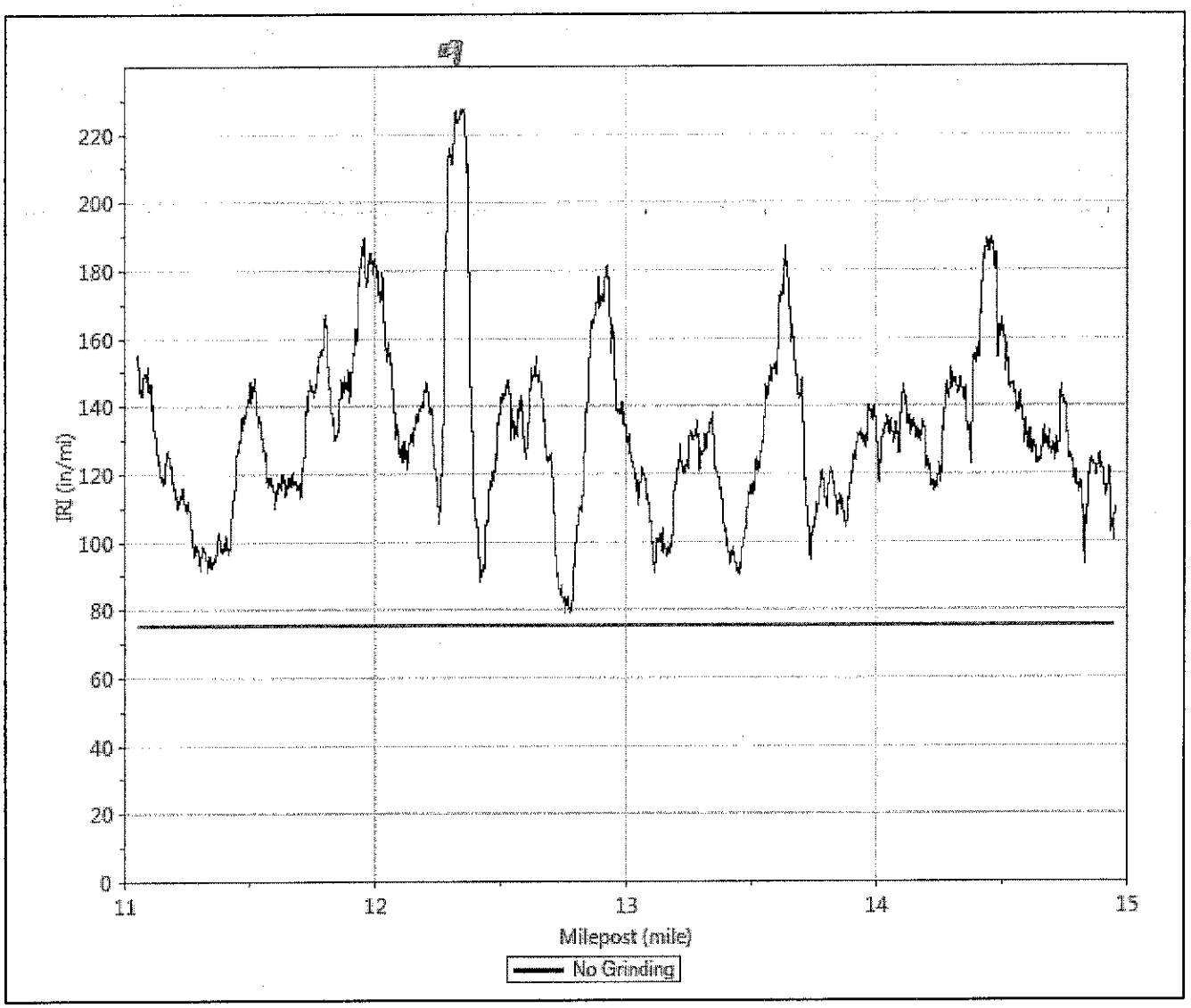


Max IRI (in/mi)	Min IRI (in/mi)	No Grinding (%)
∞	120.00	46.81

Max IRI (in/mi)	Min IRI (in/mi)	No Grinding (%)
10.00	0.00	0.00

Long Continuous

Segment Length (ft): 528.00
Threshold (in/mi): 75.00

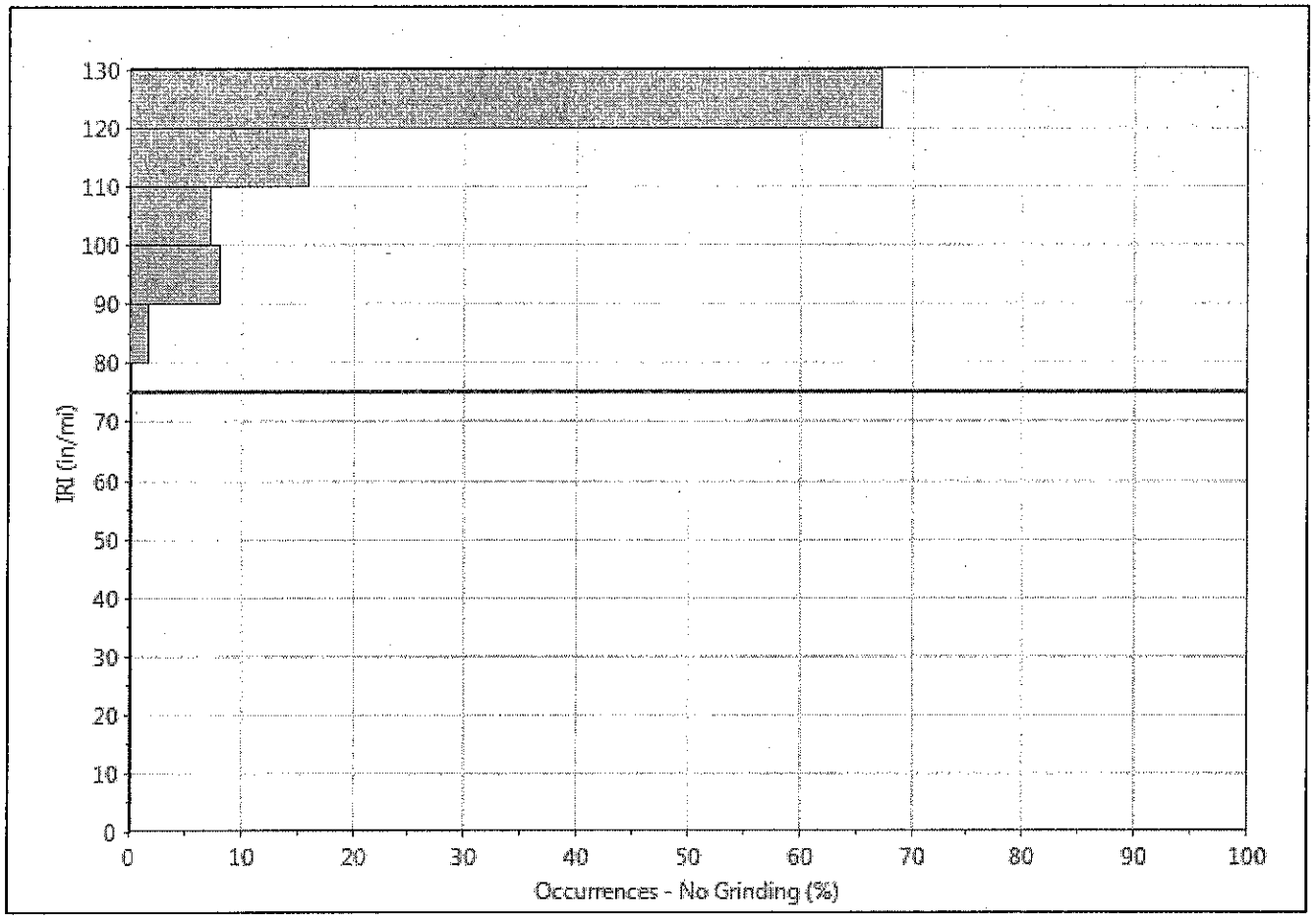


No Grinding

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
11.0500	14.9519	227.38

Long Continuous Histogram

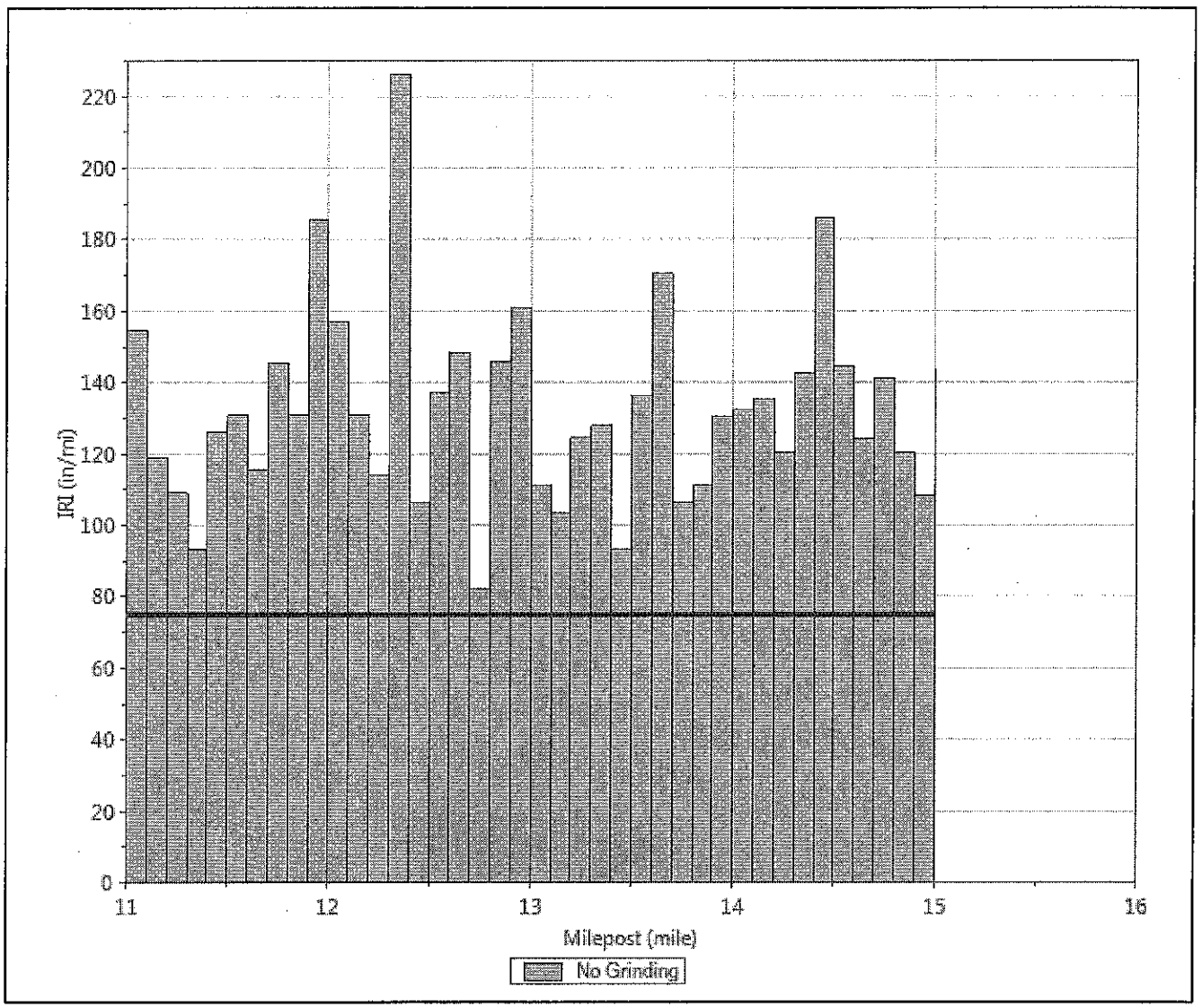
Total % Out of Spec (No Grinding): 100.00



Max IRI (in/mi)	Min IRI (in/mi)	No Grinding (%)
∞	120.00	67.18
120.00	110.00	15.84
110.00	100.00	7.15
100.00	90.00	8.01
90.00	80.00	1.63
80.00	70.00	0.18
70.00	60.00	0.00
60.00	50.00	0.00
50.00	40.00	0.00
40.00	30.00	0.00
30.00	20.00	0.00
20.00	10.00	0.00
10.00	0.00	0.00

Fixed Interval

Segment Length (ft): 528.00
Threshold (in/mi): 75.00

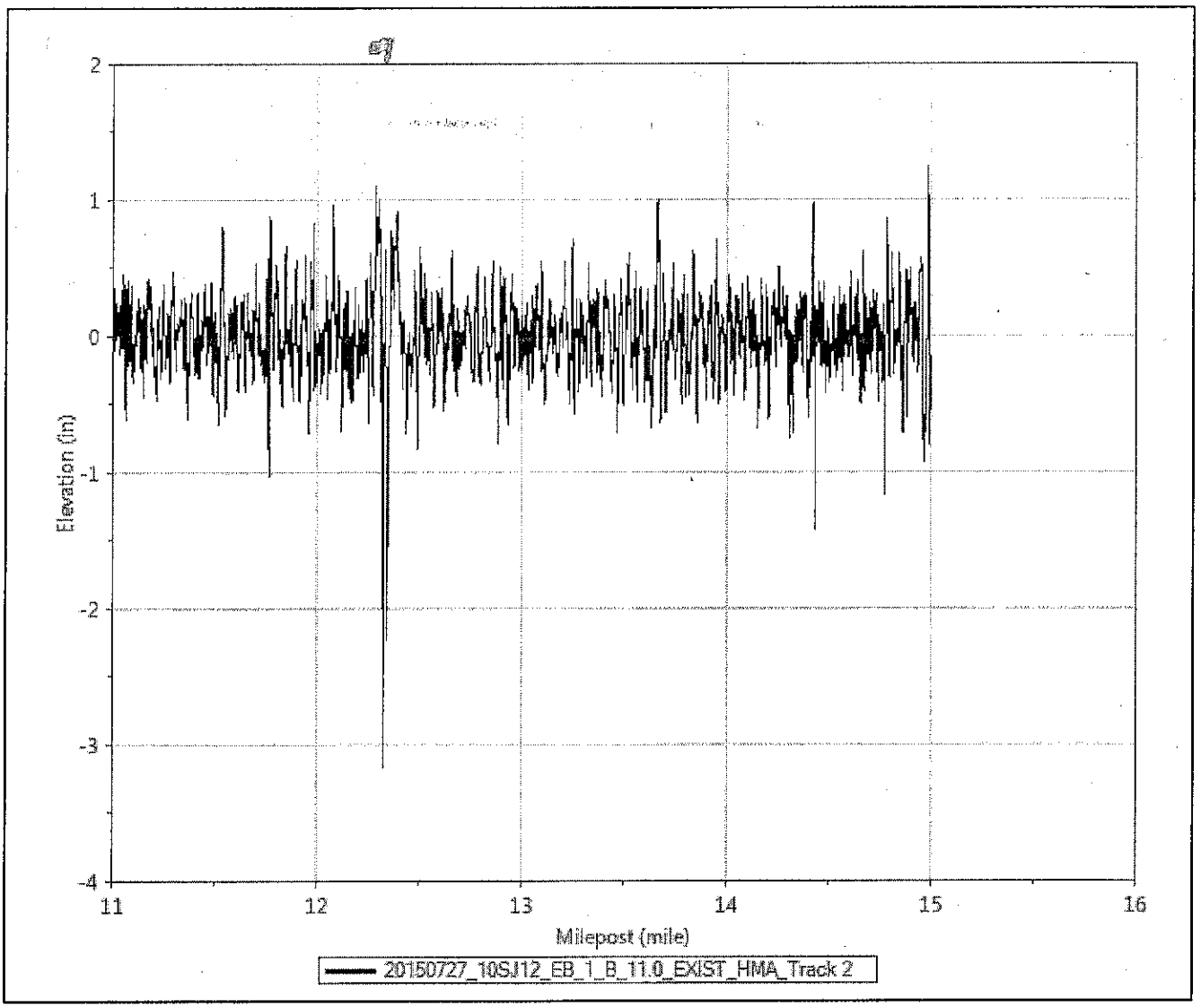


Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	No Grinding IRI (in/mi)	No Grinding Defect Count
11.0000	11.1000	528.0000	154.78	10
11.1000	11.2000	528.0000	119.01	3
11.2000	11.3000	528.0000	109.10	2
11.3000	11.4000	528.0000	93.13	0
11.4000	11.5000	528.0000	126.33	9
11.5000	11.6000	528.0000	130.84	4
11.6000	11.7000	528.0000	115.62	1
11.7000	11.8000	528.0000	145.36	4
11.8000	11.9000	528.0000	131.15	4
11.9000	12.0000	528.0000	185.76	9
12.0000	12.1000	528.0000	156.82	13
12.1000	12.2000	528.0000	130.81	7
12.2000	12.3000	528.0000	114.09	3

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	No Grinding IRI (in/mi)	No Grinding Defect Count
12.3000	12.4000	528.0000	226.33	4
12.4000	12.5000	528.0000	106.19	1
12.5000	12.6000	528.0000	137.46	5
12.6000	12.7000	528.0000	148.44	3
12.7000	12.8000	528.0000	82.19	0
12.8000	12.9000	528.0000	145.95	5
12.9000	13.0000	528.0000	160.94	8
13.0000	13.1000	528.0000	111.21	7
13.1000	13.2000	528.0000	103.41	3
13.2000	13.3000	528.0000	124.66	4
13.3000	13.4000	528.0000	127.92	6
13.4000	13.5000	528.0000	93.04	0
13.5000	13.6000	528.0000	136.48	3
13.6000	13.7000	528.0000	170.39	6
13.7000	13.8000	528.0000	106.34	1
13.8000	13.9000	528.0000	111.18	4
13.9000	14.0000	528.0000	130.52	7
14.0000	14.1000	528.0000	132.37	7
14.1000	14.2000	528.0000	135.31	5
14.2000	14.3000	528.0000	120.21	3
14.3000	14.4000	528.0000	142.69	3
14.4000	14.5000	528.0000	186.19	10
14.5000	14.6000	528.0000	144.45	8
14.6000	14.7000	528.0000	124.00	6
14.7000	14.8000	528.0000	141.29	4
14.8000	14.9000	528.0000	120.48	3
14.9000	15.0000	528.0000	108.25	2
15.0000	15.0021	10.0000	143.63	0

Comparison

Filter:None


2
1
0
-1
-2
-3
-4
Elevation (in)
11
12
13
14
15
16
Milepost (mile)
20150727_10SJ12_EB_1_B_11.0_EXIST_HMA_Track 2

Analysis: Ride Quality

Inputs

Threshold (in/mi): 180.00
Segment Length (ft): 528.00

Selections

File	Profile	Section	Apply 250mm Filter
20150727_10SJ12_WB_1_B_15.0_EXIST_HMA	Track 1	Full	Yes
20150727_10SJ12_WB_1_B_15.0_EXIST_HMA	Track 2	Full	Yes

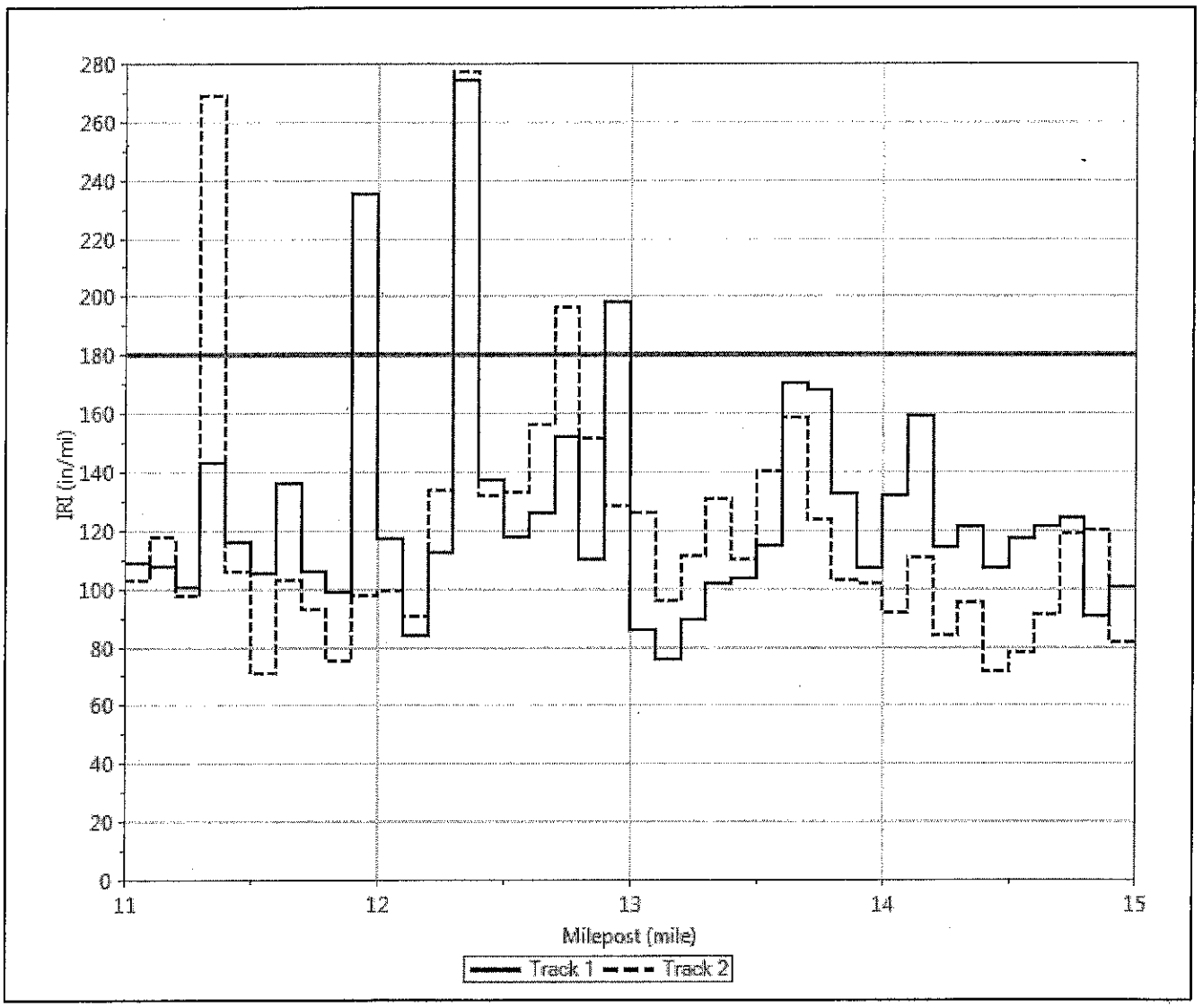
Leave-outs

Results

20150727_10SJ12_WB_1_B_15.0_EXIST_HMA

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Track 1 - IRI (in/mi)	Track 2 - IRI (in/mi)
14.9972	14.8972	528.00	100.47	81.25
14.8972	14.7972	528.00	90.38	119.79
14.7972	14.6972	528.00	123.76	119.00
14.6972	14.5972	528.00	121.29	90.82
14.5972	14.4972	528.00	116.88	77.76
14.4972	14.3972	528.00	106.96	71.77
14.3972	14.2972	528.00	121.22	95.18
14.2972	14.1972	528.00	114.13	83.74
14.1972	14.0972	528.00	159.02	110.42
14.0972	13.9972	528.00	131.92	91.76
13.9972	13.8972	528.00	107.19	101.74
13.8972	13.7972	528.00	132.41	102.85
13.7972	13.6972	528.00	167.85	123.61
13.6972	13.5972	528.00	170.29	158.04
13.5972	13.4972	528.00	114.82	140.26
13.4972	13.3972	528.00	103.13	109.94
13.3972	13.2972	528.00	101.86	130.28
13.2972	13.1972	528.00	89.39	111.33
13.1972	13.0972	528.00	75.75	95.50
13.0972	12.9972	528.00	85.65	126.11
12.9972	12.8972	528.00	197.97	127.99
12.8972	12.7972	528.00	109.75	151.14
12.7972	12.6972	528.00	151.90	196.20
12.6972	12.5972	528.00	125.92	155.97
12.5972	12.4972	528.00	117.47	132.66
12.4972	12.3972	528.00	137.30	131.74
12.3972	12.2972	528.00	273.88	276.97
12.2972	12.1972	528.00	111.96	133.64
12.1972	12.0972	528.00	84.10	90.22
12.0972	11.9972	528.00	116.73	99.25
11.9972	11.8972	528.00	235.25	97.31

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	Track 1 - IRI (in/mi)	Track 2 - IRI (in/mi)
11.8972	11.7972	528.00	98.84	75.22
11.7972	11.6972	528.00	105.51	92.63
11.6972	11.5972	528.00	135.79	102.61
11.5972	11.4972	528.00	105.03	70.79
11.4972	11.3972	528.00	115.56	105.84
11.3972	11.2972	528.00	142.69	268.68
11.2972	11.1972	528.00	100.16	97.41
11.1972	11.0972	528.00	107.32	117.26
11.0972	11.0004	510.17	108.62	102.63



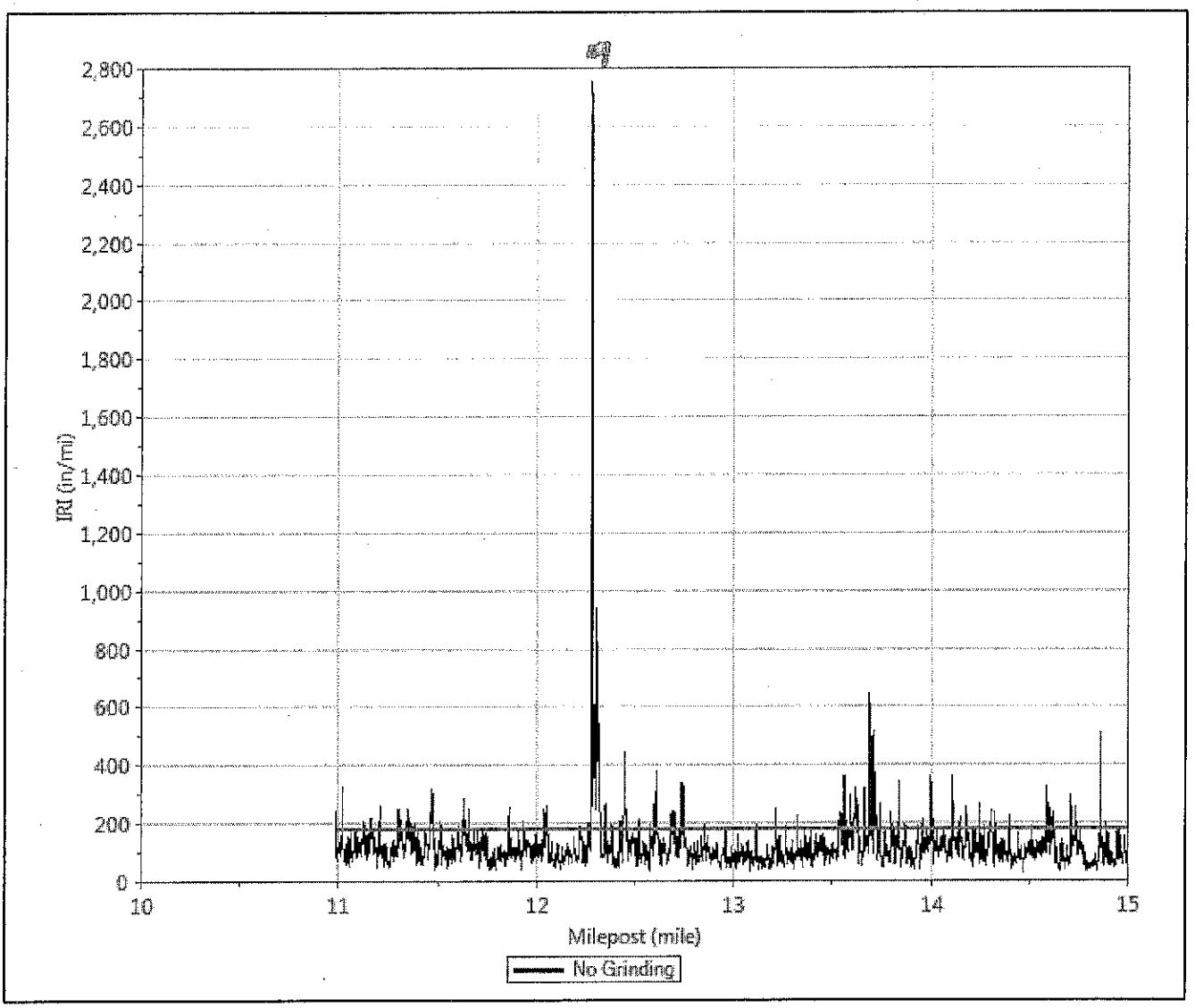
Analysis: Smoothness Assurance

Selections

File	Profile	Section	Apply 250mm Filter
20150727_10SJ12_WB_1_B_15.0_EXIST_HMA__RUN 1 T1 to T2 - 1	Track 1	Full	Yes

Short Continuous

Segment Length (ft): 25.00
Threshold (in/mi): 180.00



No Grinding

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
14.8893	14.8869	198.68
14.8659	14.8585	507.88
14.7619	14.7614	184.21
14.7387	14.7329	255.16
14.7198	14.7194	184.31
14.7188	14.7178	200.86
14.7128	14.7128	180.06
14.7127	14.7078	293.61
14.6263	14.6262	181.55
14.6262	14.6213	235.31
14.6193	14.6147	217.56
14.6019	14.5964	266.97

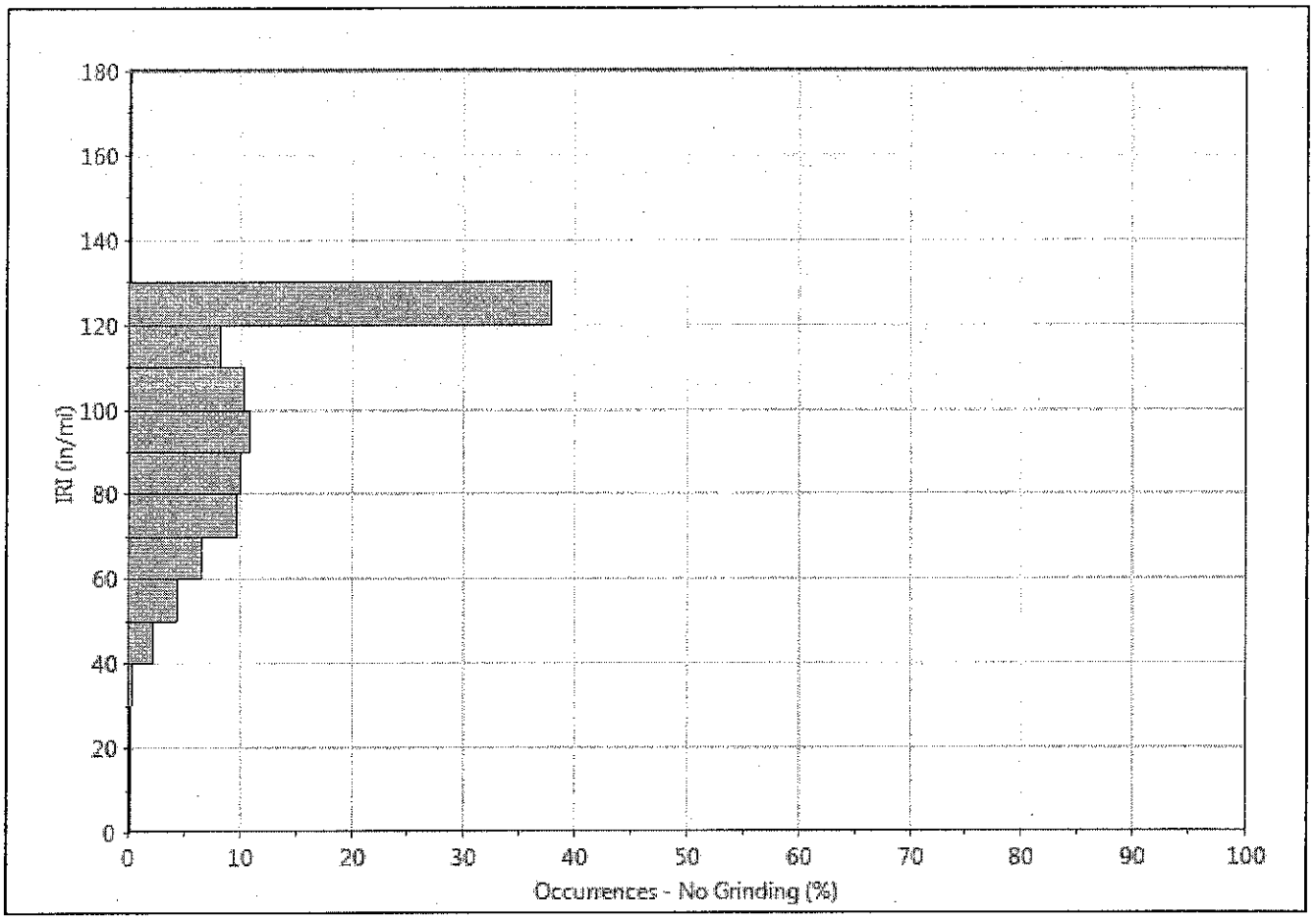
Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
14.5956	14.5936	217.44
14.5885	14.5836	323.07
14.5117	14.5108	186.36
14.4003	14.3956	224.35
14.3953	14.3951	181.87
14.3948	14.3945	184.38
14.3258	14.3217	236.36
14.3082	14.3079	181.84
14.3078	14.2995	244.79
14.2918	14.2915	182.72
14.2685	14.2678	188.32
14.2481	14.2436	264.37
14.2278	14.2277	180.15
14.2273	14.2272	180.52
14.1836	14.1826	192.90
14.1823	14.1730	253.18
14.1496	14.1453	221.08
14.1396	14.1395	180.51
14.1391	14.1367	203.63
14.1170	14.1153	203.97
14.1133	14.1055	360.77
14.0083	14.0037	269.25
14.0007	13.9944	360.07
13.9599	13.9595	184.70
13.9579	13.9562	211.71
13.9538	13.9528	194.73
13.9361	13.9356	188.22
13.9354	13.9352	181.40
13.8708	13.8681	194.82
13.8438	13.8381	344.37
13.8331	13.8324	195.14
13.8308	13.8296	202.38
13.8296	13.8291	183.54
13.8095	13.8092	183.89
13.8017	13.7977	234.28
13.7469	13.7421	267.60
13.7370	13.7365	183.96
13.7276	13.7161	373.73
13.7158	13.7155	183.13
13.7106	13.7042	511.06
13.6990	13.6944	212.07
13.6932	13.6858	641.99
13.6676	13.6574	319.25
13.6322	13.6233	284.17
13.6228	13.6108	318.51
13.5959	13.5884	294.46
13.5778	13.5741	206.33
13.5638	13.5584	361.79
13.5516	13.5468	223.07

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
13.5463	13.5334	237.24
13.3271	13.3232	223.73
13.2643	13.2634	190.37
13.2170	13.2122	246.56
13.1160	13.1151	197.13
13.1146	13.1143	183.67
12.9621	12.9610	184.11
12.9580	12.9578	182.02
12.8553	12.8527	195.78
12.7498	12.7419	327.21
12.7406	12.7331	339.65
12.7032	12.6983	239.94
12.6980	12.6977	182.84
12.6922	12.6921	181.19
12.6907	12.6815	240.80
12.6811	12.6806	190.85
12.6135	12.6025	378.38
12.5999	12.5947	268.39
12.5808	12.5806	180.67
12.5804	12.5785	195.82
12.5249	12.5212	209.98
12.4614	12.4580	238.43
12.4536	12.4425	443.08
12.4284	12.4260	207.44
12.4257	12.4251	185.22
12.3842	12.3825	196.68
12.3819	12.3815	184.68
12.3541	12.3452	266.95
12.3241	12.2745	2,751.16
12.2680	12.2676	188.02
12.2653	12.2650	184.08
12.2643	12.2634	199.31
12.2214	12.2189	190.88
12.2185	12.2179	188.99
12.0569	12.0559	185.38
12.0556	12.0553	184.19
12.0549	12.0545	185.59
12.0541	12.0539	181.82
12.0537	12.0479	260.22
12.0368	12.0322	246.82
11.9453	11.9444	183.30
11.9442	11.9428	185.49
11.9364	11.9335	207.33
11.9332	11.9329	182.21
11.8633	11.8571	256.54
11.7257	11.7251	182.65
11.6819	11.6818	181.11
11.6596	11.6548	247.49
11.6450	11.6403	214.33

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
11.6367	11.6297	281.56
11.6272	11.6269	184.74
11.6266	11.6225	211.98
11.6030	11.6024	187.28
11.5193	11.5182	194.94
11.5116	11.5090	204.01
11.4776	11.4620	319.09
11.3815	11.3783	202.76
11.3754	11.3751	182.30
11.3663	11.3638	199.52
11.3606	11.3570	216.18
11.3546	11.3495	249.47
11.3483	11.3476	190.44
11.3460	11.3454	188.23
11.3449	11.3435	204.22
11.3180	11.3139	212.98
11.3042	11.2970	250.07
11.2100	11.2066	262.50
11.1706	11.1701	192.29
11.1697	11.1691	184.74
11.1675	11.1673	182.72
11.1671	11.1623	218.45
11.1309	11.1280	204.10
11.1269	11.1263	182.74
11.0866	11.0861	183.19
11.0263	11.0188	326.58
10.9879	10.9862	240.57

Short Continuous Histogram

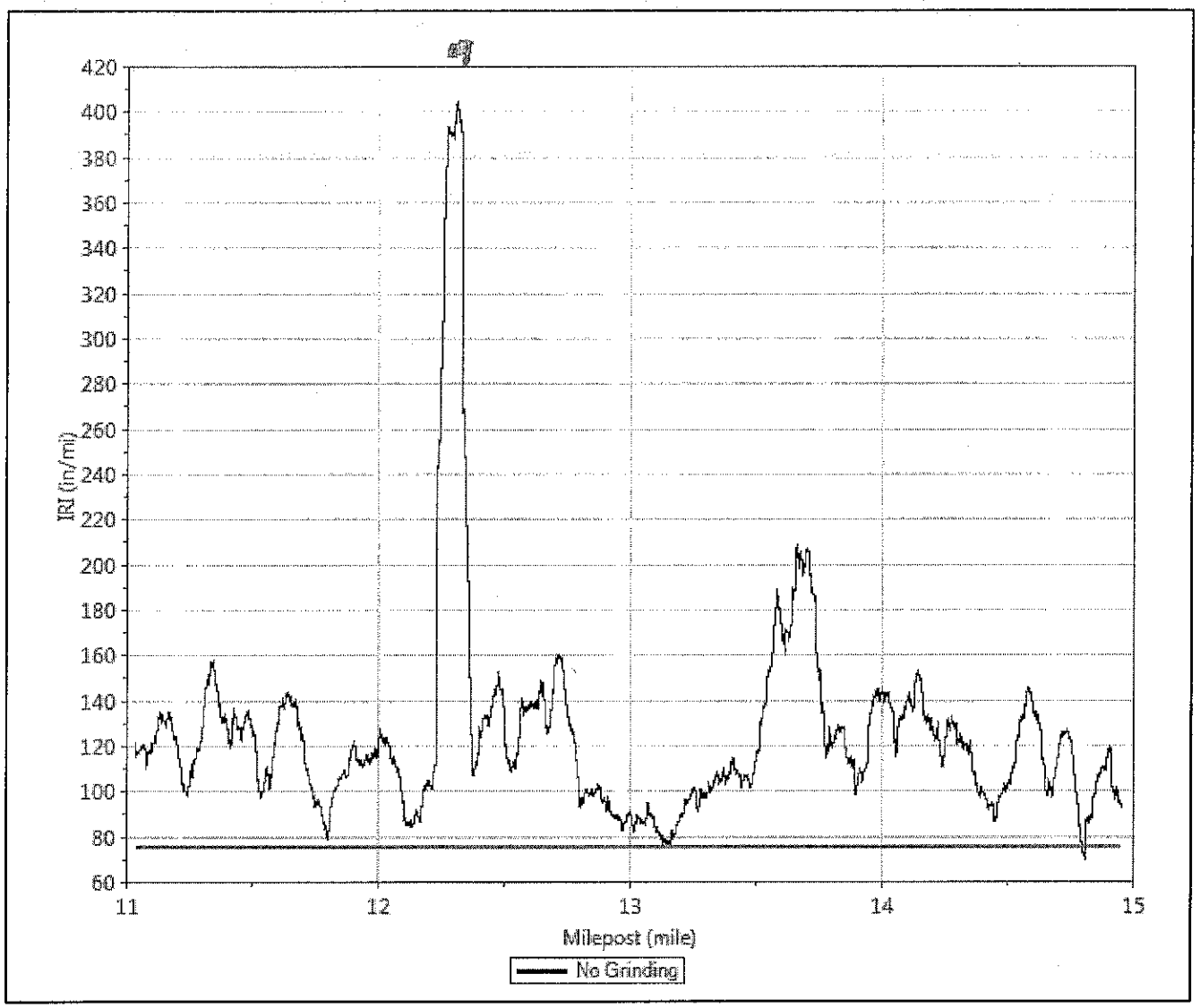
Total % Out of Spec (No Grinding): 12.29



Max IRI (in/mi)	Min IRI (in/mi)	No Grinding (%)
∞	120.00	37.83
120.00	110.00	8.14
110.00	100.00	10.32
100.00	90.00	10.86
90.00	80.00	9.98
80.00	70.00	9.63
70.00	60.00	6.46
60.00	50.00	4.28
50.00	40.00	2.21
40.00	30.00	0.29
30.00	20.00	0.00
20.00	10.00	0.00
10.00	0.00	0.00

Long Continuous

Segment Length (ft): 528.00
Threshold (in/mi): 75.00

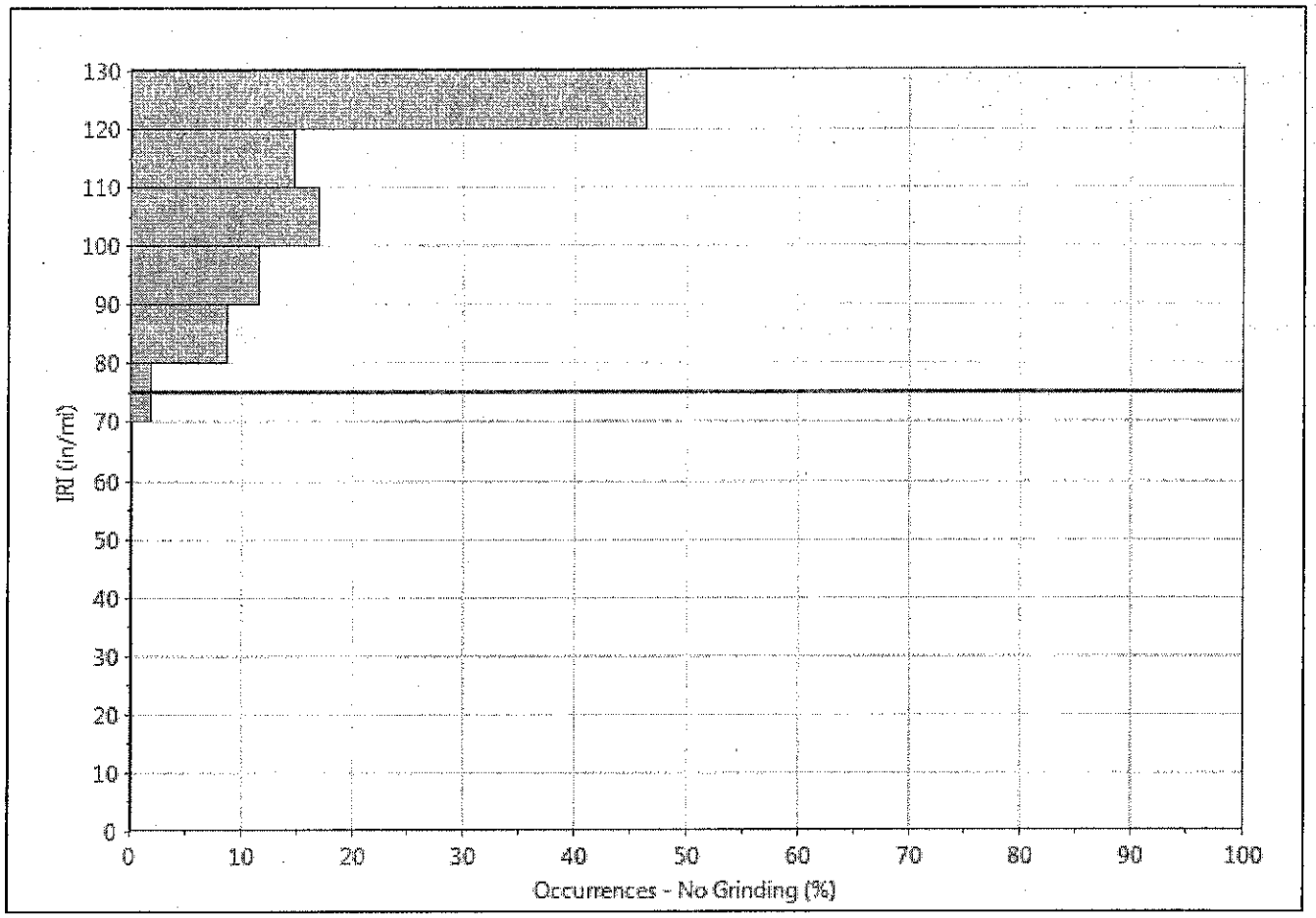


No Grinding

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
14.9500	14.8118	120.10
14.7981	11.0338	404.46

Long Continuous Histogram

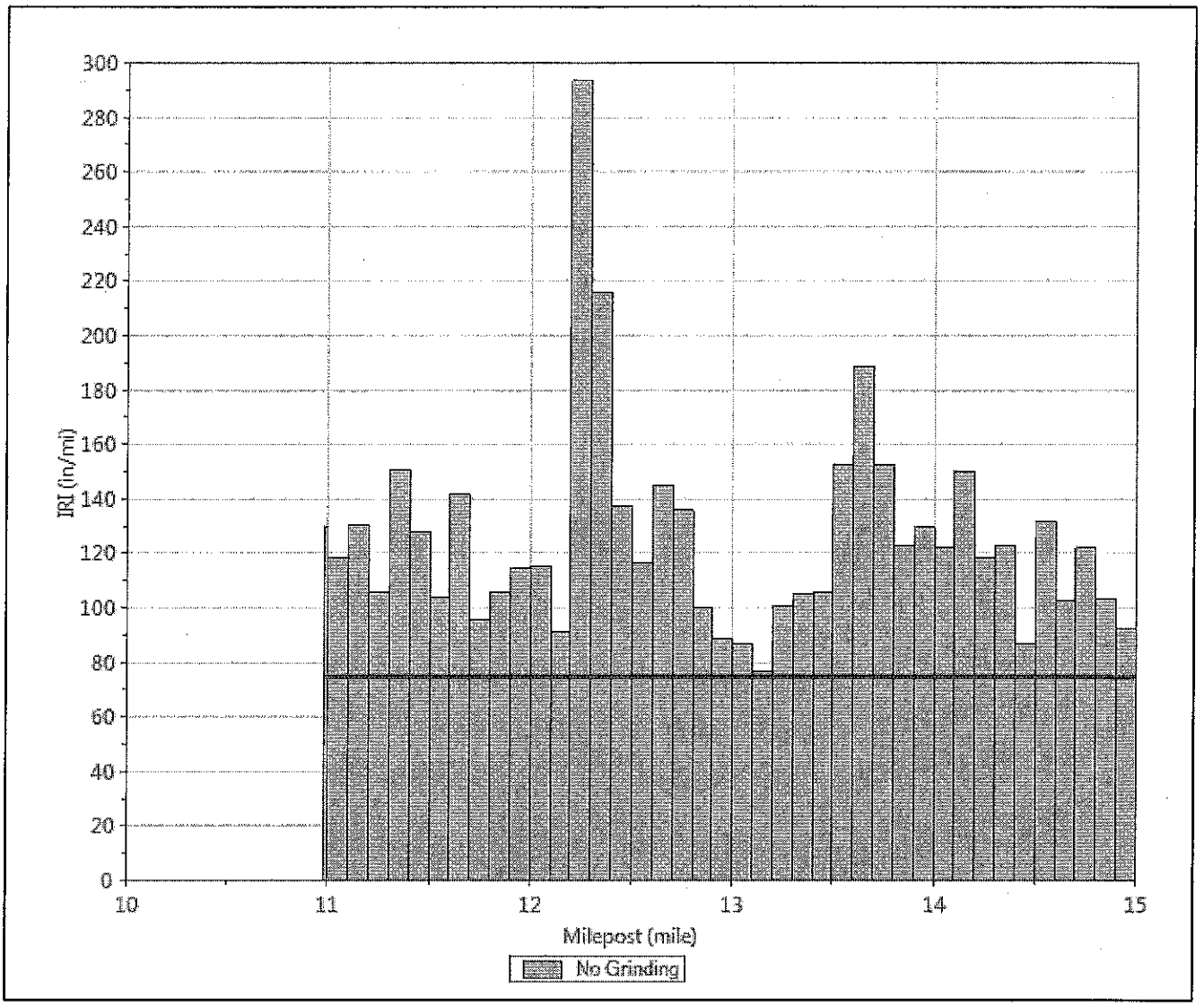
Total % Out of Spec (No Grinding): 99.65



Max IRI (in/mi)	Min IRI (in/mi)	No Grinding (%)
∞	120.00	46.28
120.00	110.00	14.66
110.00	100.00	16.94
100.00	90.00	11.52
90.00	80.00	8.77
80.00	70.00	1.84
70.00	60.00	0.00
60.00	50.00	0.00
50.00	40.00	0.00
40.00	30.00	0.00
30.00	20.00	0.00
20.00	10.00	0.00
10.00	0.00	0.00

Fixed Interval

Segment Length (ft): 528.00
Threshold (in/mi): 75.00

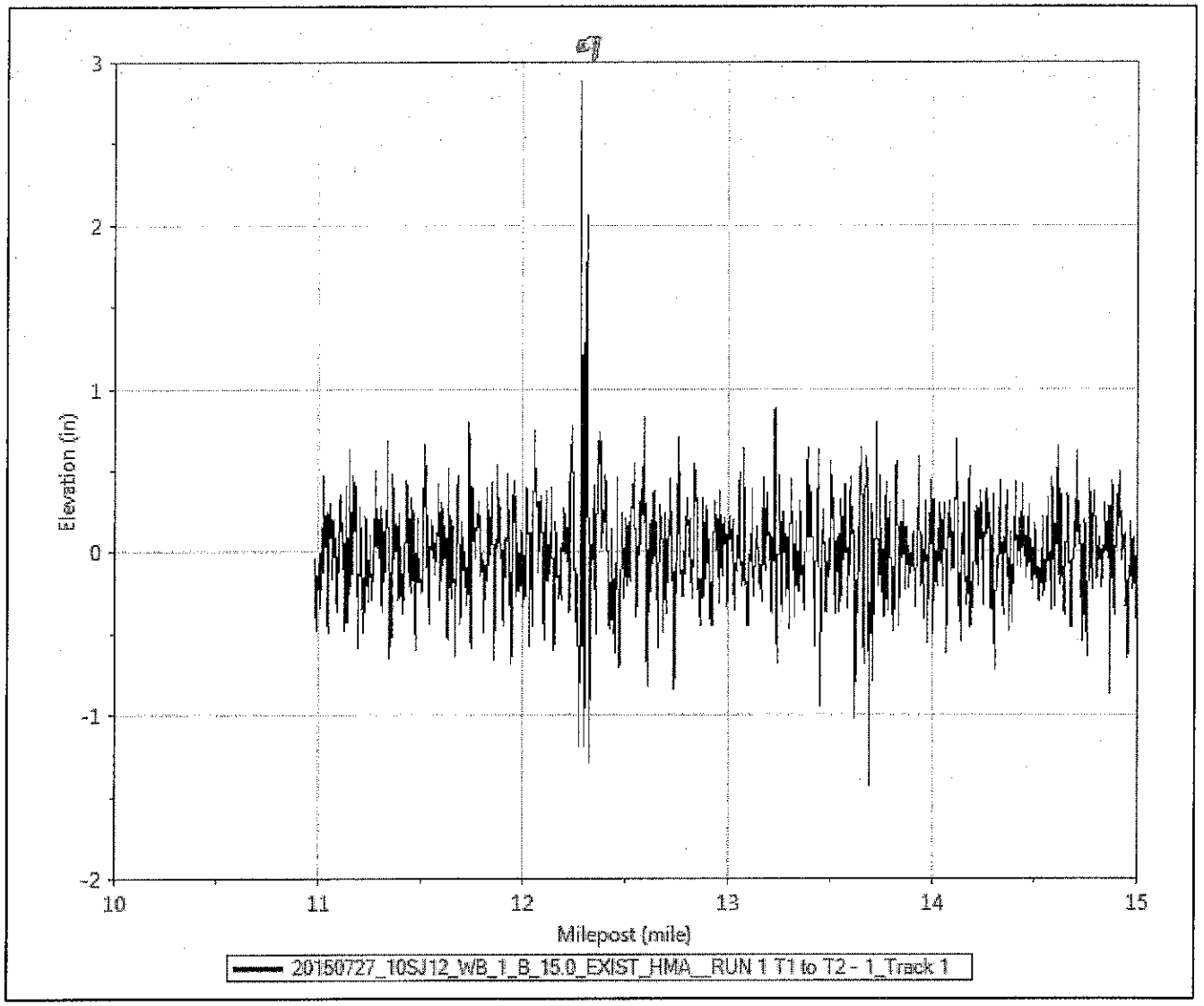


Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	No Grinding IRI (in/mi)	No Grinding Defect Count
15.0000	14.9000	528.0000	92.68	0
14.9000	14.8000	528.0000	103.30	2
14.8000	14.7000	528.0000	122.06	6
14.7000	14.6000	528.0000	102.69	4
14.6000	14.5000	528.0000	131.63	4
14.5000	14.4000	528.0000	87.00	1
14.4000	14.3000	528.0000	122.59	6
14.3000	14.2000	528.0000	118.08	6
14.2000	14.1000	528.0000	150.13	7
14.1000	14.0000	528.0000	122.13	2
14.0000	13.9000	528.0000	129.43	6
13.9000	13.8000	528.0000	122.82	7
13.8000	13.7000	528.0000	152.39	6

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	No Grinding IRI (in/mi)	No Grinding Defect Count
13.7000	13.6000	528.0000	188.51	5
13.6000	13.5000	528.0000	152.75	5
13.5000	13.4000	528.0000	105.57	0
13.4000	13.3000	528.0000	105.30	1
13.3000	13.2000	528.0000	100.48	2
13.2000	13.1000	528.0000	76.35	2
13.1000	13.0000	528.0000	86.71	0
13.0000	12.9000	528.0000	88.72	2
12.9000	12.8000	528.0000	99.83	1
12.8000	12.7000	528.0000	136.05	3
12.7000	12.6000	528.0000	145.02	6
12.6000	12.5000	528.0000	116.39	4
12.5000	12.4000	528.0000	137.48	4
12.4000	12.3000	528.0000	215.71	4
12.3000	12.2000	528.0000	293.42	6
12.2000	12.1000	528.0000	90.98	0
12.1000	12.0000	528.0000	115.16	6
12.0000	11.9000	528.0000	114.50	4
11.9000	11.8000	528.0000	105.77	1
11.8000	11.7000	528.0000	95.71	1
11.7000	11.6000	528.0000	142.04	7
11.6000	11.5000	528.0000	103.59	2
11.5000	11.4000	528.0000	128.11	1
11.4000	11.3000	528.0000	150.73	10
11.3000	11.2000	528.0000	105.53	2
11.2000	11.1000	528.0000	130.67	6
11.1000	11.0000	528.0000	118.29	2
11.0000	10.9837	85.4167	129.89	1

Comparison

Filter:None


3
2
1
0
-1
-2
Elevation (in)
10
11
12
13
14
15
Milepost (mile)
20150727_10SJ12_WB_1_B_15.0_EXIST_HMA__RUN 1 T1 to T2 - 1_Track 1

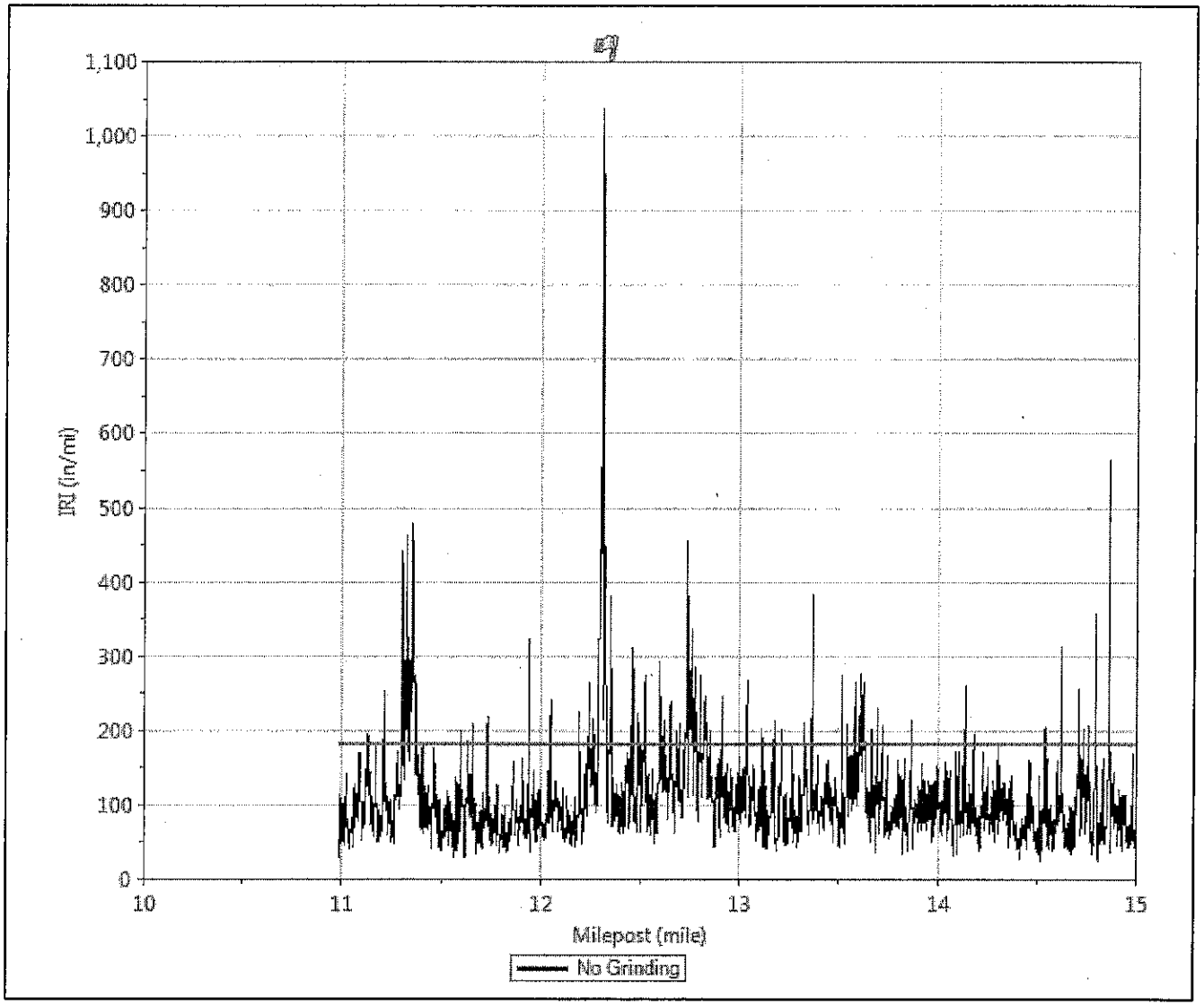
Analysis: Smoothness Assurance

Selections

File	Profile	Section	Apply 250mm Filter
20150727_10SJ12_WB_1_B_15.0_EXIST_HMA__RUN 1 T1 to T2 - 1	Track 2	Full	Yes

Short Continuous

Segment Length (ft): 25.00
Threshold (in/mi): 180.00



No Grinding

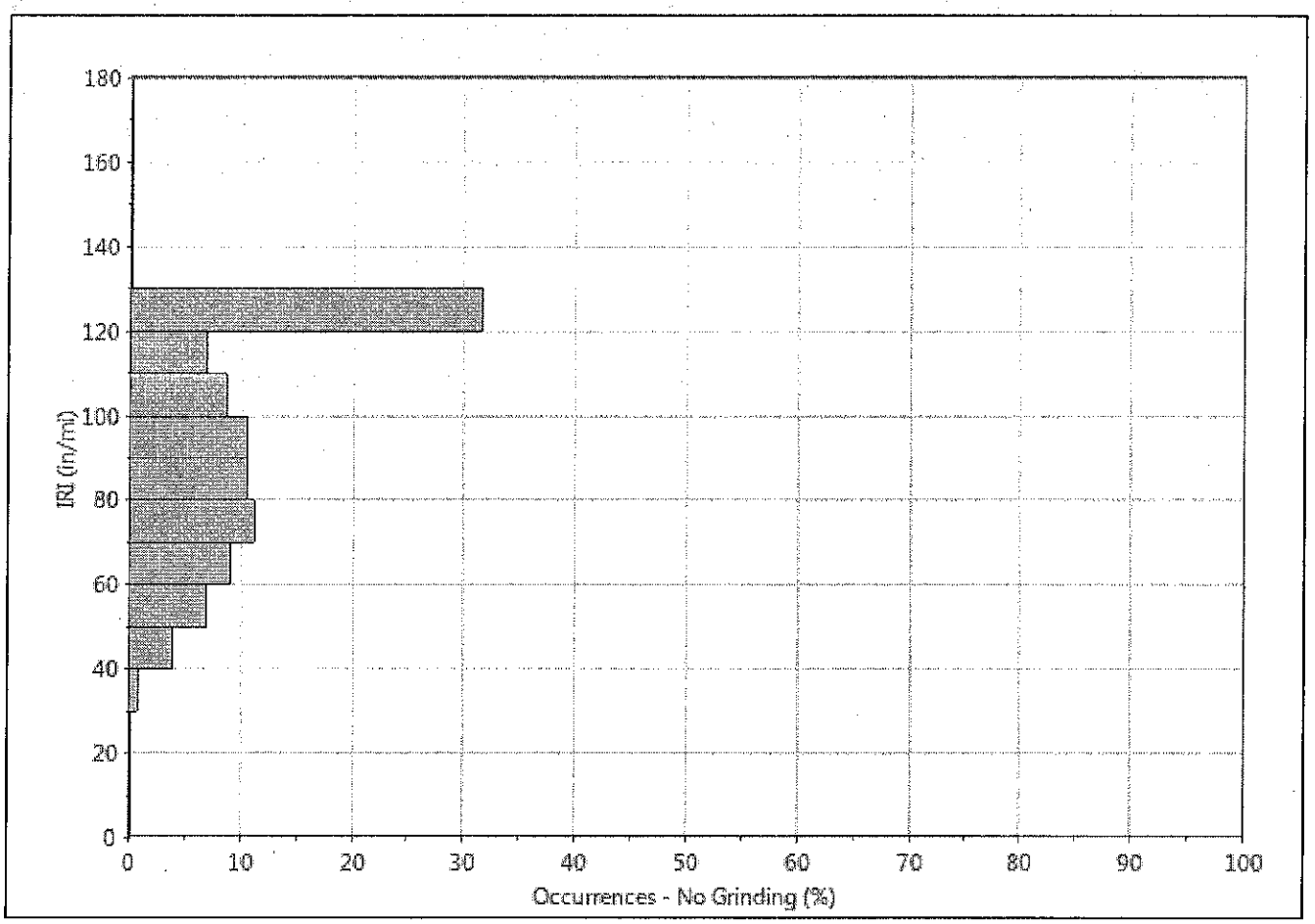
Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
14.8667	14.8598	563.76
14.7978	14.7900	356.85
14.7608	14.7595	206.25
14.7366	14.7352	202.18
14.7344	14.7339	189.00
14.7121	14.7073	255.42
14.6259	14.6211	313.17
14.5412	14.5387	204.02
14.5379	14.5376	183.86
14.3006	14.3005	180.56
14.1825	14.1803	195.18
14.1414	14.1364	259.84

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
13.8674	13.8643	213.46
13.7200	13.7188	205.85
13.7177	13.7170	191.49
13.6951	13.6909	229.86
13.6909	13.6908	180.58
13.6653	13.6634	202.28
13.6298	13.6282	215.02
13.6276	13.6154	264.24
13.6121	13.6061	275.90
13.6058	13.6048	201.36
13.6039	13.6037	185.14
13.6033	13.5998	219.98
13.5836	13.5835	180.08
13.5834	13.5756	263.56
13.5435	13.5408	209.32
13.5404	13.5393	198.65
13.5161	13.5114	273.80
13.3699	13.3618	381.85
13.3345	13.3344	180.58
13.3287	13.3246	211.39
13.2659	13.2659	180.32
13.2658	13.2655	181.30
13.2142	13.2130	202.37
13.1784	13.1742	214.56
13.1146	13.1138	189.97
13.1138	13.1132	182.04
13.1130	13.1115	201.29
13.0436	13.0360	266.81
12.9140	12.9084	246.01
12.8532	12.8517	200.67
12.8330	12.8142	246.78
12.8044	12.8040	185.03
12.8039	12.7965	273.36
12.7831	12.7708	285.22
12.7645	12.7420	335.48
12.7389	12.7270	454.39
12.7215	12.7208	188.73
12.7204	12.7192	198.36
12.6949	12.6938	208.66
12.6937	12.6934	182.85
12.6832	12.6823	198.97
12.6540	12.6493	239.11
12.6186	12.6161	213.78
12.6075	12.6026	246.77
12.6000	12.5930	293.56
12.5250	12.5145	274.77
12.4929	12.4928	180.50
12.4922	12.4918	182.99
12.4889	12.4852	222.71

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
12.4635	12.4574	311.07
12.4530	12.4506	206.87
12.3538	12.3525	189.95
12.3523	12.3520	180.52
12.3518	12.3422	381.14
12.3242	12.2852	1,036.71
12.2640	12.2611	216.04
12.2592	12.2590	180.38
12.2427	12.2379	265.63
12.1948	12.1902	225.75
12.0528	12.0482	240.26
11.9451	11.9402	322.44
11.7354	11.7305	217.57
11.6579	11.6560	209.96
11.6342	11.6337	185.13
11.5990	11.5960	200.19
11.3769	11.3696	262.71
11.3690	11.3687	184.36
11.3659	11.3426	478.27
11.3420	11.3414	190.93
11.3408	11.3355	294.53
11.3351	11.3137	462.72
11.3120	11.3111	202.20
11.3109	11.3076	232.82
11.3067	11.2953	439.87
11.2115	11.2111	182.78
11.2101	11.2069	253.55
11.1359	11.1357	182.70
11.1316	11.1314	180.78
11.1310	11.1278	194.96

Short Continuous Histogram

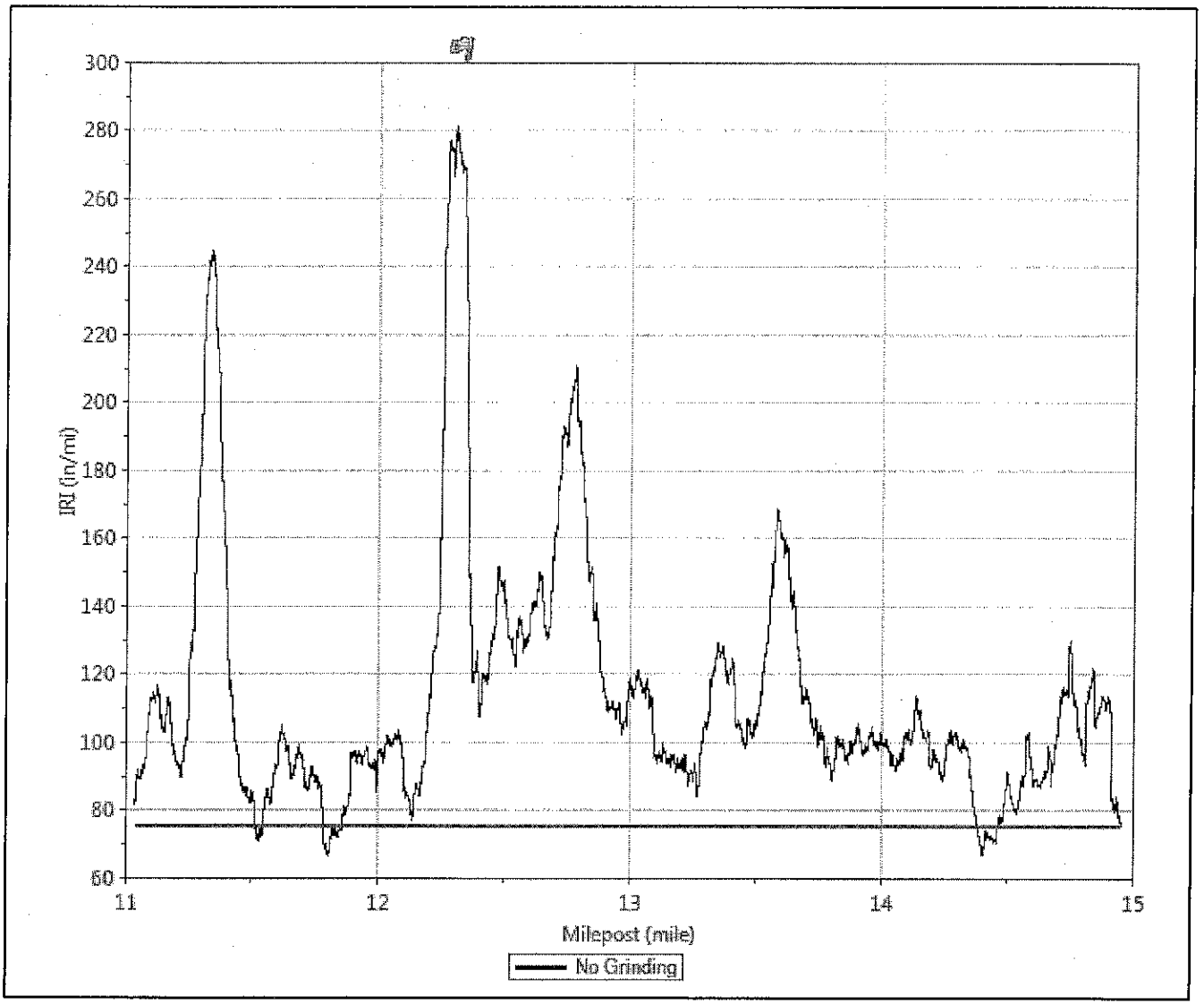
Total % Out of Spec (No Grinding): 10.19



Max IRI (in/mi)	Min IRI (in/mi)	No Grinding (%)
∞	120.00	31.57
120.00	110.00	6.91
110.00	100.00	8.61
100.00	90.00	10.55
90.00	80.00	10.56
80.00	70.00	11.13
70.00	60.00	8.98
60.00	50.00	6.88
50.00	40.00	3.93
40.00	30.00	0.79
30.00	20.00	0.09
20.00	10.00	0.00
10.00	0.00	0.00

Long Continuous

Segment Length (ft): 528.00
Threshold (in/mi): 75.00

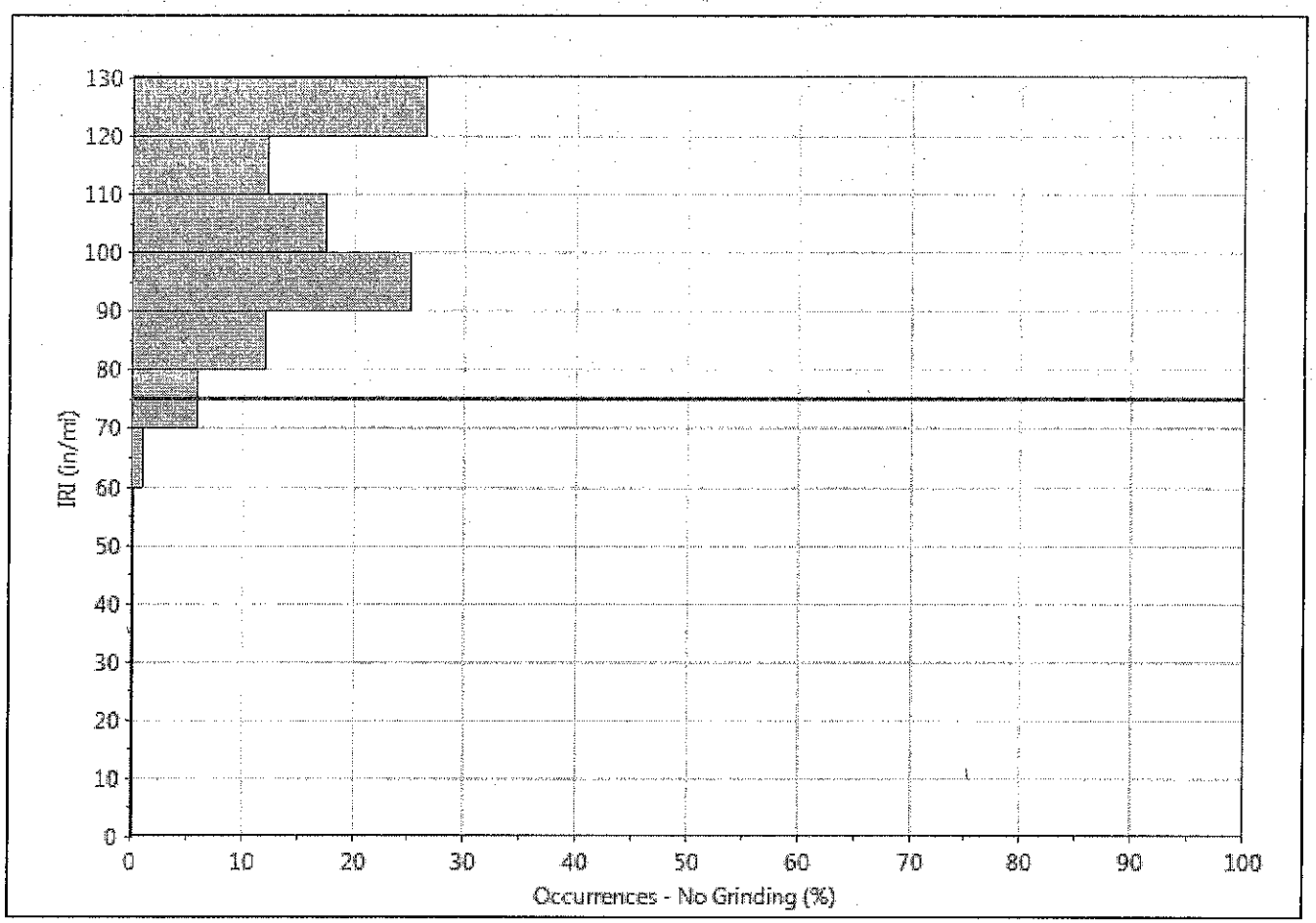


No Grinding

Start Milepost (mile)	Stop Milepost (mile)	IRI (in/mi)
14.9500	14.4619	129.85
14.3838	11.8571	281.38
11.8561	11.8543	75.45
11.8541	11.8530	75.36
11.7837	11.7835	75.04
11.7834	11.5472	105.03
11.5386	11.5382	75.15
11.5374	11.5372	75.04
11.5167	11.0338	244.81

Long Continuous Histogram

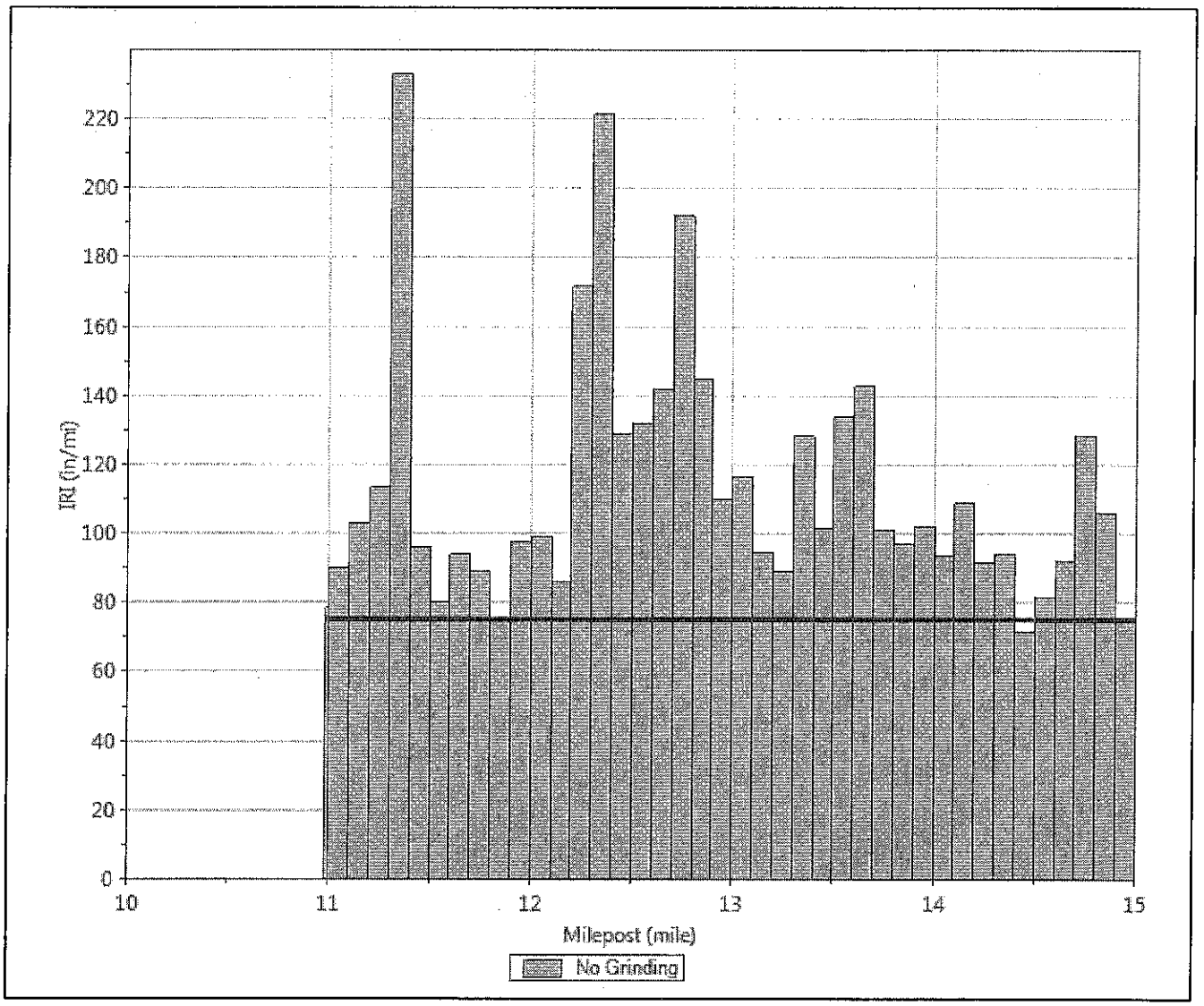
Total % Out of Spec (No Grinding): 95.44



Max IRI (in/mi)	Min IRI (in/mi)	No Grinding (%)
∞	120.00	26.39
120.00	110.00	12.17
110.00	100.00	17.42
100.00	90.00	25.09
90.00	80.00	12.07
80.00	70.00	5.87
70.00	60.00	0.99
60.00	50.00	0.00
50.00	40.00	0.00
40.00	30.00	0.00
30.00	20.00	0.00
20.00	10.00	0.00
10.00	0.00	0.00

Fixed Interval

Segment Length (ft): 528.00
Threshold (in/mi): 75.00

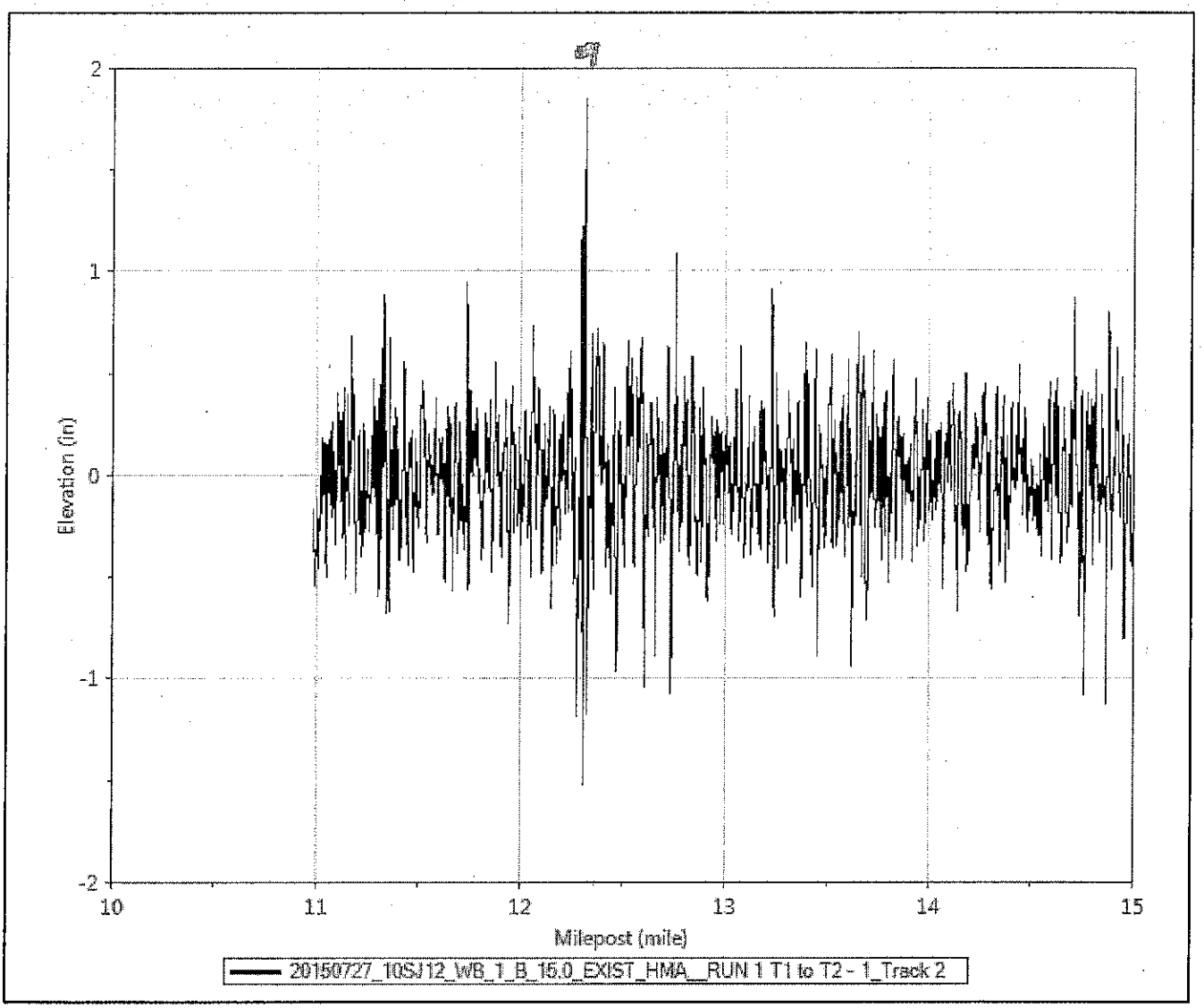


Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	No Grinding IRI (in/mi)	No Grinding Defect Count
15.0000	14.9000	528.0000	75.80	0
14.9000	14.8000	528.0000	106.03	1
14.8000	14.7000	528.0000	128.57	5
14.7000	14.6000	528.0000	91.91	1
14.6000	14.5000	528.0000	81.84	2
14.5000	14.4000	528.0000	71.80	0
14.4000	14.3000	528.0000	93.96	1
14.3000	14.2000	528.0000	91.67	0
14.2000	14.1000	528.0000	108.88	2
14.1000	14.0000	528.0000	93.43	0
14.0000	13.9000	528.0000	102.31	0
13.9000	13.8000	528.0000	97.06	1
13.8000	13.7000	528.0000	101.04	2

Start Milepost (mile)	Stop Milepost (mile)	Length (ft)	No Grinding IRI (in/mi)	No Grinding Defect Count
13.7000	13.6000	528.0000	142.68	9
13.6000	13.5000	528.0000	133.70	6
13.5000	13.4000	528.0000	101.39	0
13.4000	13.3000	528.0000	128.27	3
13.3000	13.2000	528.0000	89.05	3
13.2000	13.1000	528.0000	94.55	4
13.1000	13.0000	528.0000	116.63	1
13.0000	12.9000	528.0000	109.90	1
12.9000	12.8000	528.0000	144.77	4
12.8000	12.7000	528.0000	191.96	6
12.7000	12.6000	528.0000	142.08	6
12.6000	12.5000	528.0000	131.81	2
12.5000	12.4000	528.0000	128.91	5
12.4000	12.3000	528.0000	221.48	4
12.3000	12.2000	528.0000	171.61	4
12.2000	12.1000	528.0000	86.23	1
12.1000	12.0000	528.0000	99.25	1
12.0000	11.9000	528.0000	97.84	1
11.9000	11.8000	528.0000	74.69	0
11.8000	11.7000	528.0000	89.02	1
11.7000	11.6000	528.0000	93.93	2
11.6000	11.5000	528.0000	80.06	1
11.5000	11.4000	528.0000	96.24	0
11.4000	11.3000	528.0000	233.16	9
11.3000	11.2000	528.0000	113.33	3
11.2000	11.1000	528.0000	103.27	3
11.1000	11.0000	528.0000	90.17	0
11.0000	10.9837	85.4167	78.56	0

Comparison

Filter:None


2
1
0
-1
-2
Elevation (in)
10
11
12
13
14
15
Milepost (mile)
20150727_10SJ12_WB_1_B_15.0_EXIST_HMA__RUN 1 T1 to T2 - 1_Track 2