

**National Transportation Safety Board
Internal Inspection Factual
Bellingham, Washington
Accident DCA99-MP008**

Appendix 14

Olympic field excavation inspection summary

SUMMARY OF 1997 CALIPER PIG INSPECTION AND FIELD INVESTIGATION

3/98

0000085

Pipeline Segment Stationing	Defect/Discrepancy	Finding	Scheduled or actual investigation 1997	Repair / Replacement Required	Reinforcement Recommended (Full Encirclement Sleeve)	Recoat and Retrenching Recommended	Completion Date 1997
FERNDALE 16" 843+69	TO .45" Total Sharp**	ALLEN 16"	No Inspection				
ANACORTES None	TO None	ALLEN 16"					
RENTON None	TO None	SEATTLE 12"					
RENTON None	TO None	SEA-TAC 12"					
ALLEN 987+15	TO .70" Ttl, .49" Sharp	RENTON 20" .312" Sharp	6/17	No	No	Yes	6/18
1450+21	.59" Total Sharp**	Wet Area	No Inspection				
1724+53	.63" Ttl, .44" Sharp**	Buckle / Dent	6/23	Yes	Cut out	Yes	6/25 / 9/13
3076+53	.70" Ovality**	In 45 deg. Fitting	No Inspection				
ALLEN 783+45.5	TO 1.12" Total Sharp	RENTON 16" .75" Sharp	4/2	No	Yes	Yes	4/4
1783+64	1.02" Total Sharp	.625" Sharp	4/7	No	Yes	Yes	4/9
3549+50	.94" Ttl, .67" Sharp	Less than .50" Flat	4/3	No	No	Yes	4/5
3595+37	1.06" Ttl, .77" Sharp	Greater than .50" Sharp	4/7	No	Yes	Yes	4/16
1724+64	.59" Total Sharp	.75" Sharp	4/11	No	Yes	Yes	4/17
2141+66	.43" Total Sharp**	In .500" WT pipe	No Inspection				
2268+93	.63" Ttl, .50" Sharp	.375" Sharp	5/13	No	No	Yes	5/14
2278+98	.70" Ttl, .57" Sharp	.375" Sharp ***	5/12	No	Cut out***	Yes***	5/12 / 10/8
2283+48	.54" Ttl, .37" Sharp	.56" Sharp	5/5	No	Yes	Yes	5/9
2319+41	.80" Total Sharp	.50" Sharp	5/14	No	No	Yes	5/15
2319+92	.74" Total Sharp	.375" Sharp	5/15	No	No	Yes	5/16
2340+35	.50" Ttl, .39" Sharp	.375" Sharp	5/1	No	No	Yes	5/2
2383+31	.78" Total Sharp	.344" Sharp	5/16	No	No	Yes	5/19
2416+49	.76" Total Sharp	.50" Sharp ****	5/20	Yes	Yes	Yes	5/22
2451+94	.84" Total Sharp	.562" Sharp ****	5/21	Yes	Yes	Yes	5/22
2587+82	.48" Total Sharp	.25" Sharp	4/28	No	No	Yes	4/29
3073+29	.84" Total Flat	In Gate Valve	5/30	No	No	No	5/30
3084+00	.50" Total Sharp**	.50" Sharp	5/28	Yes	Yes	Yes	5/29

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SUMMARY OF 1997 CALIPER PIG INSPECTION AND FIELD INVESTIGATION

0000086

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Pipeline Segment Stationing	Defect/Discrepancy	Finding	Scheduled or actual Investigation 1997	Repair/ Replacement Required	Reinforcement Recommended (Full Encirclement Sleeve)	Recoat and Retrenching Recommended	Completion Date 1997
3111+07	.80" Total Sharp	.625" Sharp	6/11	No	Yes	Yes	6/12
3839+30	.69" Ttl, .37" Sharp**		No Inspection				
3992+23	.59" Ttl, .33" Flat**		No Inspection				
1956+51	1.06" Ttl, .65 Sharp	Fitting out of round	11/3	No	No	Yes	11/4
2045+27	1.80" Ttl, 1.26" Sharp	Too deep next to levee	Bore Replacement	Yes	No, new crossing	New Crossing	11/6
2045+56	1.40" Ttl, .96" Sharp	.95" Sharp in pipe 4" from bend	Bore Replacement	Yes	No, new crossing	New Crossing	11/6
2046+61	.94" Ttl, .35" Sharp	Under slough	Bore Replacement	No	No, new crossing	New Crossing	11/6

Definitions:

- Total**
- Sharp**
- Flat**
- ****
- ...**
-**

Is a measurement made from the baseline of the record to the peak.
 Anomaly as a reduction in pipe diameter, occurring within a span of 2 feet or less.
 Anomaly as a reduction in pipe diameter having a span exceeding 2 feet but, not greater than 5 feet.
 May investigate if risk is justified by engineering opinion.
 Also found localized corrosion near weld, while not technically requiring repair, this segment will be cut out and replaced during the installation of the new bored crossing of Ebey Slough.
 Small gouge found in pipe wall in the dent, requiring repair.