

**Comparison of Cook Inlet Keeper Oil Pipeline Report Accident Statistics
With Post-Report Accident Statistics for 9/15/02 - 9/15/03**

Statistic	Report	Post-Report ¹
Frequency	66/60 months	10/12 months
Onshore/Offshore	88% / 12%	100% / 0%
Cause:		
Corrosion	27%	0%
Unknown/unreported	26%	30%
Human error/maintenance-related	20%	20%
Pipeline infrastructure failure	14%	20%
Abandoned pipeline release	8%	10%
Frozen pipeline	5%	20%
Third-party damage	2%	0%
Type/Location:		
Onshore oil gathering: Swanson River Field	41%	50%
Onshore oil processing, including West McArthur River Unit and Trading Bay Production Facility	36%	50%
Offshore pipelines	14%	0%
Tank farm	8%	0%
Onshore oil transmission	2%	0%
Number of Spills by Operator ² :		
Unocal	76%	80%
Forest Oil	12%	20%
XTO Energy	8%	0%
Tesoro	2%	0%
BP	2%	0%
Cook Inlet Pipe Line	0%	0%
Kenai Pipe Line	0%	0%
Annual release volume	52,324 gal.	1,138 gal. ³
Average/median spill size	3,964 / 15	114 ³ / 14
Releases >50 gal.	30%	30%
Largest spills	Top 8-Unocal	Top 4-Unocal

¹ Excludes Marathon's gas line produced water spill on 6/24/03 to ensure a consistent methodology with the earlier report's analysis.

² As discussed on p. 18 of the previous report ("Lurking Below"), "Keeper believes that using the number of spills rather than the volume released results in a better measure of operator performance since a few large volume spills can distort the results. In fact, 99% of the known volume spilled during the 1997-2001 was from Unocal operations (as opposed to 76% of the number of spills), with the January 6, 1999 spill alone representing 87% of the total volume released from pipelines in the Cook Inlet watershed during this period." Additionally, a large number of small volume spills indicates a systemic problem that should be remedied, and thus is noteworthy.

³ No unusually large spills during the post-report period (such as the January 1999 229,000 gal. release by Unocal in the Swanson River Field), so the annual release and average spill volumes are not as high.

Analysis:

Similarities:

- Spill rate at approximately 1 release/month;
- “Unknown” release cause nearly 1/3 of the time;
- Human error causes approximately 1/5 of the releases;
- Swanson River Field gathering and wastewater lines represent approximately half the releases;
- Onshore oil processing represents a very high percentage of releases;
- Unocal and Forest Oil still have the highest release frequency (80% and 20%, respectively) and disproportionately high spill rates, with Unocal and Forest Oil representing 39.5% and 1% of Cook Inlet oil industry’s pipeline mileage;
- Cook Inlet Pipe Line and Kenai Pipe Line with zero reported releases;
- 30% of releases are >50 gallons; and,
- Largest spills dominated by Unocal pipelines.

Notable improvements:

- No offshore pipeline releases;
- No corrosion-related releases;
- Much smaller annual and average release volume;
- XTO Energy, Tesoro, and BP with zero reported releases.

Notable backsliding:

- Quadrupling of freezing-related spills (sudden cold in March 2003 was a factor)