SUMMARIES OF CASE RISK COMPARISONS PRESENTED DURING JUNE 1st – 2nd Meeting
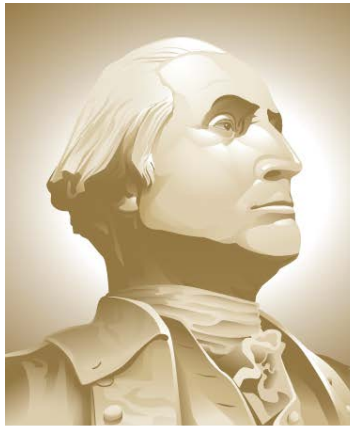
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June 1st - 2nd, 2016

Summary Risk Comparison

		OIL_2500_MORE	OIL_1000_2500	OIL_1_1000	OIL_0_1	ANY SIZE
VTRA ' 10: Base Case	Base Case % Potential Annual Oil Loss	54.4%	14.4%	30.5%	0.7%	100.0%
	Base Case % Potenial Annual Accident Frequency	0.03%	0.03%	1.7%	98.2%	100.0%
	Average potential spill size per accident (in m^3)	6,072	1,653	66.0	0.03	3.7
	Probability of at least one accident in 1 year by spill size	0.14%	0.14%	7.1%	98.7%	98.8%
	Probability of at least one accident in 10 years by spill size	1.43%	1.39%	52.3%	100.0%	100.0%
	Probability of at least one accident in 25 years by spill size	3.53%	3.44%	84.3%	100.0%	100.0%
		OIL_2500_MORE	OIL_1000_2500	OIL_1_1000	OIL_0_1	ANY SIZE
VTRA ' 15: Cal. Case	Base Case % Potential Annual Oil Loss	16.7% (-37.7%| x0.31)	5.1% (-9.3%| x0.35)	19.9% (-10.6%| x0.65)	0.2% (-0.44%| x0.36)	41.9% (-58.1%| x0.42)
	Base Case % Potenial Annual Accident Frequency	0.01% (-0.02%| x0.32)	0.01% (-0.02%| x0.36)	1.7% (+0.0%| x1.03)	98.0% (-0.2%| x1.00)	99.8% (-0.2%| x1.00)
	Average potential spill size per accident (in m^3)	5745 (-327.0 | x0.95)	1627 (-25.5 | x0.98)	42.0 (-24.1 | x0.64)	0.01 (0.0 | x0.36)	1.5 (-2.1 | x0.42)
	Probability of at least one accident in 1 year by spill size	0.05% (-0.10%| x0.32)	0.05% (-0.09%| x0.36)	7.3% (+0.2%| x1.02)	98.7% (0.0%| x1.00)	98.8% (0.0%| x1.00)
	Probability of at least one accident in 10 years by spill size	0.47% (-0.96%| x0.33)	0.50% (-0.89%| x0.36)	53.2% (+0.9%| x1.02)	100.0% (0.0%| x1.00)	100.0% (0.0%| x1.00)
	Probability of at least one accident in 25 years by spill size	1.16% (-2.37%| x0.33)	1.25% (-2.19%| x0.36)	85.0% (+0.7%| x1.01)	100.0% (0.0%| x1.00)	100.0% (0.0%| x1.00)

Summary Risk Comparison

		OIL_2500_MORE	OIL_1000_2500	OIL_1_1000	OIL_0_1	ANY SIZE
VTRA '15 CAL. CASE	Base Case % Potential Annual Oil Loss	39.8%	12.2%	47.4%	0.6%	100.0%
	Base Case % Potenial Annual Accident Frequency	0.01%	0.01%	1.7%	98.2%	100.0%
	Average potential spill size per accident (in m^3)	5,745	1,627	42.0	0.01	1.5
	Probability of at least one accident in 1 year by spill size	0.05%	0.05%	7.3%	98.7%	98.8%
	Probability of at least one accident in 10 years by spill size	0.47%	0.50%	53.2%	100.0%	100.0%
	Probability of at least one accident in 25 years by spill size	1.16%	1.25%	85.0%	100.0%	100.0%
		OIL_2500_MORE	OIL_1000_2500	OIL_1_1000	OIL_0_1	ANY SIZE
VTRA '15 CASE Q: GW - 487	Base Case % Potential Annual Oil Loss	37.8% (-2.0%| x0.95)	13.0% (+0.8%| x1.07)	54.9% (+7.5%| x1.16)	0.7% (+0.15%| x1.25)	106.5% (+6.5%| x1.07)
	Base Case % Potenial Annual Accident Frequency	0.01% (0.00%| x0.93)	0.01% (+0.00%| x1.09)	2.4% (+0.7%| x1.38)	126.4% (+28.1%| x1.29)	128.8% (+28.8%| x1.29)
	Average potential spill size per accident (in m^3)	5845 (+99.7 | x1.02)	1596 (-31.5 | x0.98)	35.2 (-6.8 | x0.84)	0.01 (0.0 | x0.97)	1.3 (-0.3 | x0.83)
	Probability of at least one accident in 1 year by spill size	0.04% (0.00%| x0.93)	0.05% (+0.00%| x1.09)	10.0% (+2.7%| x1.36)	99.6% (+1.0%| x1.01)	99.6% (+0.9%| x1.01)
	Probability of at least one accident in 10 years by spill size	0.43% (-0.03%| x0.93)	0.55% (+0.05%| x1.09)	65.0% (+11.8%| x1.22)	100.0% (0.0%| x1.00)	100.0% (0.0%| x1.00)
	Probability of at least one accident in 25 years by spill size	1.08% (-0.08%| x0.93)	1.36% (+0.11%| x1.09)	92.8% (+7.7%| x1.09)	100.0% (0.0%| x1.00)	100.0% (0.0%| x1.00)

Summary Risk Comparison

		OIL_2500_MORE	OIL_1000_2500	OIL_1_1000	OIL_0_1	ANY SIZE
VTRA '15 CAL. CASE	Base Case % Potential Annual Oil Loss	39.8%	12.2%	47.4%	0.6%	100.0%
	Base Case % Potenial Annual Accident Frequency	0.01%	0.01%	1.7%	98.2%	100.0%
	Average potential spill size per accident (in m^3)	5,745	1,627	42.0	0.01	1.5
	Probability of at least one accident in 1 year by spill size	0.05%	0.05%	7.3%	98.7%	98.8%
	Probability of at least one accident in 10 years by spill size	0.47%	0.50%	53.2%	100.0%	100.0%
	Probability of at least one accident in 25 years by spill size	1.16%	1.25%	85.0%	100.0%	100.0%
		OIL_2500_MORE	OIL_1000_2500	OIL_1_1000	OIL_0_1	ANY SIZE
VTRA '15 CASE R: KM - 348	Base Case % Potential Annual Oil Loss	60.1% (+20.2%| x1.51)	19.0% (+6.8%| x1.56)	49.8% (+2.4%| x1.05)	1.1% (+0.49%| x1.84)	130.0% (+30.0%| x1.30)
	Base Case % Potenial Annual Accident Frequency	0.02% (+0.01%| x1.94)	0.02% (+0.01%| x1.47)	1.8% (+0.1%| x1.05)	104.3% (+6.0%| x1.06)	106.1% (+6.1%| x1.06)
	Average potential spill size per accident (in m^3)	4466 (-1278.9 | x0.78)	1726 (+98.7 | x1.06)	42.0 (+0.1 | x1.00)	0.02 (+0.0 | x1.73)	1.9 (+0.3 | x1.22)
	Probability of at least one accident in 1 year by spill size	0.09% (+0.04%| x1.94)	0.07% (+0.02%| x1.47)	7.7% (+0.3%| x1.05)	99.0% (+0.3%| x1.00)	99.0% (+0.3%| x1.00)
	Probability of at least one accident in 10 years by spill size	0.90% (+0.44%| x1.94)	0.74% (+0.24%| x1.47)	54.9% (+1.7%| x1.03)	100.0% (0.0%| x1.00)	100.0% (0.0%| x1.00)
	Probability of at least one accident in 25 years by spill size	2.24% (+1.08%| x1.93)	1.83% (+0.58%| x1.47)	86.4% (+1.3%| x1.02)	100.0% (0.0%| x1.00)	100.0% (0.0%| x1.00)

Summary Risk Comparison

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VTRA '15 CAL. CASE	Base Case % Potential Annual Oil Loss	39.8%	12.2%	47.4%	0.6%	100.0%
	Base Case % Potenial Annual Accident Frequency	0.01%	0.01%	1.7%	98.2%	100.0%
	Average potential spill size per accident (in m^3)	5,745	1,627	42.0	0.01	1.5
	Probability of at least one accident in 1 year by spill size	0.05%	0.05%	7.3%	98.7%	98.8%
	Probability of at least one accident in 10 years by spill size	0.47%	0.50%	53.2%	100.0%	100.0%
	Probability of at least one accident in 25 years by spill size	1.16%	1.25%	85.0%	100.0%	100.0%
		OIL_2500_MORE	OIL_1000_2500	OIL_1_1000	OIL_0_1	ANY SIZE
VTRA '15 CASE S: DP -668	Base Case % Potential Annual Oil Loss	38.1% (-1.7%| x0.96)	12.7% (+0.5%| x1.04)	63.0% (+15.7%| x1.33)	0.6% (+0.04%| x1.07)	114.5% (+14.5%| x1.15)
	Base Case % Potenial Annual Accident Frequency	0.01% (0.00%| x0.93)	0.01% (+0.00%| x1.05)	1.8% (+0.1%| x1.05)	102.1% (+3.9%| x1.04)	104.0% (+4.0%| x1.04)
	Average potential spill size per accident (in m^3)	5886 (+141.2 | x1.02)	1618 (-9.3 | x0.99)	53.0 (+11.1 | x1.26)	0.01 (+0.0 | x1.03)	1.7 (+0.2 | x1.10)
	Probability of at least one accident in 1 year by spill size	0.04% (0.00%| x0.93)	0.05% (+0.00%| x1.05)	7.7% (+0.4%| x1.05)	98.9% (+0.2%| x1.00)	99.0% (+0.2%| x1.00)
	Probability of at least one accident in 10 years by spill size	0.43% (-0.03%| x0.93)	0.53% (+0.02%| x1.05)	55.1% (+1.9%| x1.03)	100.0% (0.0%| x1.00)	100.0% (0.0%| x1.00)
	Probability of at least one accident in 25 years by spill size	1.08% (-0.08%| x0.93)	1.31% (+0.06%| x1.05)	86.5% (+1.4%| x1.02)	100.0% (0.0%| x1.00)	100.0% (0.0%| x1.00)

Summary Risk Comparison

VTRA '15 CAL. CASE		OIL_2500_MORE	OIL_1000_2500	OIL_1_1000	OIL_0_1	ANY SIZE
	Base Case % Potential Annual Oil Loss	39.8%	12.2%	47.4%	0.6%	100.0%
	Base Case % Potenial Annual Accident Frequency	0.01%	0.01%	1.7%	98.2%	100.0%
	Average potential spill size per accident (in m^3)	5,745	1,627	42.0	0.01	1.5
	Probability of at least one accident in 1 year by spill size	0.05%	0.05%	7.3%	98.7%	98.8%
	Probability of at least one accident in 10 years by spill size	0.47%	0.50%	53.2%	100.0%	100.0%
	Probability of at least one accident in 25 years by spill size	1.16%	1.25%	85.0%	100.0%	100.0%

VTRA '15 CASE T: GDK - 1503		OIL_2500_MORE	OIL_1000_2500	OIL_1_1000	OIL_0_1	ANY SIZE
	Base Case % Potential Annual Oil Loss	67.7% (+27.9%| x1.70)	20.2% (+8.0%| x1.65)	71.9% (+24.5%| x1.52)	0.7% (+0.09%| x1.15)	160.5% (+60.5%| x1.60)
	Base Case % Potenial Annual Accident Frequency	0.02% (+0.01%| x2.10)	0.02% (+0.01%| x1.60)	2.6% (+0.8%| x1.48)	132.5% (+34.3%| x1.35)	135.1% (+35.1%| x1.35)
	Average potential spill size per accident (in m^3)	4659 (-1085.8 | x0.81)	1679 (+52.0 | x1.03)	43.2 (+1.2 | x1.03)	0.01 (0.0 | x0.85)	1.8 (+0.3 | x1.19)
	Probability of at least one accident in 1 year by spill size	0.10% (+0.05%| x2.10)	0.08% (+0.03%| x1.60)	10.6% (+3.3%| x1.45)	99.7% (+1.0%| x1.01)	99.7% (+1.0%| x1.01)
	Probability of at least one accident in 10 years by spill size	0.97% (+0.51%| x2.09)	0.80% (+0.30%| x1.60)	67.4% (+14.2%| x1.27)	100.0% (0.0%| x1.00)	100.0% (0.0%| x1.00)
	Probability of at least one accident in 25 years by spill size	2.42% (+1.26%| x2.08)	2.00% (+0.75%| x1.60)	93.9% (+8.9%| x1.10)	100.0% (0.0%| x1.00)	100.0% (0.0%| x1.00)