

North Slope Model Drill Rigs														
Based on December 1, 1998 Revised Modeling Analysis for Mobile Exploration Drilling and Well Testing, North Slope, Alaska. ARCO Alaska, Inc.														
Maximum annual fuel consumption for a winter drilling season														
500000 gallons														
Fuel source estimates														
Engines	Other fuel burning equipment		For engines prorate fuel use by total horsepower above and at or below 600hp per engines											
			Total hp - small engines			Total hp - large engines								
			2055			3645								
Percent of total fuel used						Emission Factors from								
75%			25%			27%			48%			AP-42: 3.4-1, 3.3-2, 1.3-2		
North Slope														
Large engines				Small engines				Other fuel burning equipment						
240000 gallons/season				135000				125000 gallons						
32887.2 mmbtu				18499.05 small										
105239 lb nox	52.61952 tpy nox			81580.8105 lb nox	40.79041 tpy nox	2500 lb nox	1.25 tpy nox	94.659925						
16443.6 lb so2	8.2218 tpy so2			9249.525 lb so2	4.624763 tpy so2	8875 lb so2	4.4375 tpy so2	17.284063						
3288.72 lb PM-10	1.64436 tpy PM-10			5734.7055 lb PM-10	2.867353 tpy PM-10	135 lb PM-10	0.0675 tpy PM-10	4.5792128						
27954.12 lb co	13.97706			17574.0975 lb co	8.787049	625 lb co	0.3125	23.076609						
2959.848 lb VOC	1.479924			6659.658 lb VOC	3.329829	0 lb VOC	0	4.809753						
	77.94266				60.3994		6.0675	144.40956 PTE (4 mos drilling) for Portable Drill Rigs North of 69 Degree						
	975.8422				756.2005		75.9651	\$ 2,556.05 for winter drilling (4 mos.) 18 AAC 50.410(g)(3)(A)(i)						
								\$ 7,668.15 for entire year (12 mos.) 18 AAC 50.410(g)(3)(A)(ii)						
Not North Slope														
Maximum annual fuel consumption for a winter drilling season														
Based on Nabors 160 rig														
70155 gallons														
Fuel source estimates														
Engines	Other fuel burning equipment		For engines prorate fuel use by total horsepower above and at or below 600hp per engines											
			Total hp - small engines			Total hp - large engines								
			183.58			3800								
Percent of total fuel used														
90%			10%			4%			86%					
North Slope														
Large engines				Small engines				Other fuel burning equipment						
60333.3 gallons/season				2806.2				7015.5 gallons						
8267.472 mmbtu				384.533586 small										
26455.91 lb nox	13.22796 tpy nox			1695.793114 lb nox	0.847897 tpy nox	2500 lb nox	1.25 tpy nox	15.325852						
4133.736 lb so2	2.066868 tpy so2			192.266793 lb so2	0.096133 tpy so2	8875 lb so2	4.4375 tpy so2	6.6005014						
826.7472 lb PM-10	0.413374 tpy PM-10			119.2054117 lb PM-10	0.059603 tpy PM-10	135 lb PM-10	0.0675 tpy PM-10	0.5404763						
7027.351 lb co	3.513676			365.3069067 lb co	0.182653	625 lb co	0.3125	4.0088291						
744.0725 lb VOC	0.372036			138.432091 lb VOC	0.069216	0 lb VOC	0	0.4412523						
	19.59391				1.255502		6.0675	26.916911 PTE for Portable Drill Rigs outside of North of 69 Degree						
	245.3157				15.71889		75.9651	\$ 476.43 per well rate for Portable Drill Rigs outside of North of 69 Degree						
								\$ 2,382.15 per 5 wells 18 AAC 50.410(g)(3)(B)(i)						
								\$ 4,764.29 per 10 wells 18 AAC 50.410(g)(3)(B)(ii)						
								\$ 7,146.44 per 15 wells 18 AAC 50.410(g)(3)(B)(iii)						
Rate is based on PTE multiplied by current/proposed Title 1 (ECPR) Emission Fee Rate (18 AAC 50.410)														