WELLINGTON OPERATING COMPANY
WELL 20-3 LABORATORY SUMMARY

			Sample Location																																		
Contaminant of Concern	**Concentration**		**Well 20-3 Backeround**	**Well 20-3 Pad Surface**	**Well 20-3 Well Head @ 8'**	**Well 20-3 Test @ 10'**	**FL East End**	**Well 20-3 S Wall @ 8'**	**Well 20-3 W Wall @ 8'**	**Well 20-3 N Wall @ 8'**	**Well 20-3 E Wall @ 8'**	**Well 20-3 WH FL @ 7'**	**PACE Well 20-3 S Wall @ 1'**	**PACE Well 20-3 S Wall @ 1' Silica Gel**	**ALS Well 20-3 S Wall @ 1'**	**PACE Well 20-3 W Wall @ 1'**	**PACE Well 20-3 W Wall @ 1' Silica Gel**	**ALS Well 20-3 W Wall @ 1'**	**PACE Well 20-3 N Wall @ 1'**	**PACE Well 20-3 N Wall @ 1' Silica Gel**	**ALS Well 20-3 N Wall @ 1'**	**PACE Well 20-3 E Wall @ 1'**	**PACE Well 20-3 E Wall @ 1' Silica Gel**	**ALS Well 20-3 E Wall @ 1'**	**PACE Well 20-3 Stockpile Pad East**	**PACE Well 20-3 Stockpile Pad East Silica Gel**	**ALS Well 20-3 Stockpile Pad East**	**PACE Well 20-3 Stockpile Pad West**	**PACE Well 20-3 Stockpile Pad West Silica Gel**	**ALS Well 20-3 Stockpile Pad West**	**PACE Well 20-3 Background @ 1'**	**PACE Well 20-3 Background @ 1' Silica Gel**	**PACE Well 20-3 Background @ 8'**	**PACE Well 20-3 Background @ 8' Silica Gel**
Soil TPH (total volatile [C6-C10] and extractable [C10-C36] hydrocarbons)	500 mg/kg		**72.2**	**42.9**	**9021.3**	**195.2**	**ND**	**ND**	**173.7**	**19.9**	**97.4**	**46.5**	**22.9**	**17.6**	**6.5**	**2424**	**1070**	**570**	**195**	**178**	**70**	**603**	**549**	**510**	**670**	**803**	**475**	**471**	**1364**	**840**	**14**	**38.9**	**22.5**	**12.4**	**< 10.8**		
Motor Oil Range (C24-C36)			57.4	42.9	4760	97.4	< 10.7	< 10.7	108	19.9	63.6	35.3	22.9	18.2	5.5	1850	1140	500	195	156	54	603	549	580	540	398	400	890	688	11	38.9	25.6	12.4	< 10.8		
TPH-DRO (C10-C28)			14.8	< 10.9	4240	94.6	< 10.7	< 10.7	65.7	< 10.9	33.8	11.2	< 10.5	< 10.5	1	574	352	70	< 108	72.9	16	< 215	173	90	263	193	71	474	354	3	< 10.9	< 10.9	< 10.8	< 10.8		
Gasoline Range Organics (C6-C10)			< 2.9	< 3.3	21.3	3.2	< 1.8	< 2.0	< 2.3	< 2.2	< 2.5	< 1.9	< 1.7		N.A.	< 2.5		N.A.	< 2.2		N.A.	< 2.2		N.A.	< 3.6		N.A.	< 3.7		N.A.	< 2.9		< 2.8			
Soils and Groundwater - liquid hydrocarbons including condensate and oil	below visual detection limits		YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES		N.A.	YES		N.A.	YES		N.A.	YES		N.A.	YES		N.A.	YES		N.A.	YES		YES			
Electrical conductivity (EC) (by saturated paste method)1,2	< 4mmhos/cm		0.694	0.806	0.381	0.153	0.527	0.241	0.549	0.419	0.637	0.245	0.924		N.A.	0.623		N.A.	2.92		N.A.	0.489		N.A.	1.57		N.A.	0.827		N.A.	3.1		1.58			
Sodium adsorption ratio (SAR) (by saturated paste method)1,2,3	<6		0.141	0.155	0.193	2.74	0.172	1.14	2.37	1.42	2.19	0.924	2.27		N.A.	1.07		N.A.	0.434		N.A.	3.01		N.A.	0.32		N.A.	0.218		N.A.	0.62		0.047			
pH (by saturated paste method)1,2	6–8.3		7.55	7.70	7.61	8.69	8.12	8.36	8.39	8.26	8.13	8.34	7.75		N.A.	7.77		N.A.	7.52		N.A.	8.34		N.A.	7.45		N.A.	7.51		N.A.	7.09		7.43			
boron (hot water soluble soil extract)1,2,3	2 mg/l		1.95	1.82	1.17	0.237	0.273	0.296	0.586	0.589	0.573	0.323	0.321		N.A.	0.674		N.A.	0.736		N.A.	0.523		N.A.	1.6		N.A.	1.19		N.A.	0.55		0.4			
	Residential Soil Screening Level Concentrations (mg/kg)7	Protection of Groundwater Soil Screening Level Concentrations (mg/kg) Risk Based (R) and MCL Based (M)7,8																																			
benzene	1.2	0.0026 (M)	< 0.128	< 0.125	< 0.0108	< 0.0133	< 0.0082	< 0.0074	< 0.0111	< 0.0129	< 0.0092	< 0.0086	< 0.0073		N.A.			N.A.	< 0.0098		N.A.	< 0.0105		N.A.	< 0.0147		N.A.	< 0.0159		N.A.	< 0.0105		< 0.0084			
toluene	490	0.69 (M)	< 0.0319	< 0.0312	< 0.027	< 0.0332	< 0.0205	< 0.0186	< 0.0277	< 0.0323	< 0.0231	< 0.0215	< 0.0183		N.A.			N.A.	< 0.0245		N.A.	< 0.0263		N.A.	< 0.0367		N.A.	< 0.0396		N.A.	< 0.0262		< 0.021			
ethylbenzene	5.8	0.78 (M)	< 0.0319	< 0.0312	< 0.027	< 0.0332	< 0.0205	< 0.0186	< 0.0277	< 0.0323	< 0.0231	< 0.0215	< 0.0183		N.A.			N.A.	< 0.0245		N.A.	< 0.0263		N.A.	< 0.0367		N.A.	< 0.0396		N.A.	< 0.0262		< 0.021			
xylenes (sum of o-, m- and p- isomers = total xylenes)	58	9.9 (M)	< 0.0958	< 0.0935	< 0.081	< 0.0996	< 0.0615	< 0.0557	< 0.083	< 0.097	< 0.0693	< 0.0645	< 0.0548		N.A.			N.A.	< 0.0734		N.A.	< 0.0789		N.A.	< 0.110		N.A.	< 0.119		N.A.	< 0.0785		< 0.063			
1,2,4-trimethylbenzene	30	0.0081 (R)	< 0.0319	< 0.0312	< 0.027	< 0.0332	< 0.0205	< 0.0186	< 0.0277	< 0.0323	< 0.0231	< 0.0215	< 0.0183		N.A.			N.A.	< 0.0245		N.A.	< 0.0263		N.A.	< 0.0367		N.A.	< 0.0396		N.A.	< 0.0262		< 0.021			
1,3,5-trimethylbenzene	27	0.0087 (R)	< 0.0319	< 0.0312	< 0.027	< 0.0332	< 0.0205	< 0.0186	< 0.0277	< 0.0323	< 0.0231	< 0.0215	< 0.0183		N.A.			N.A.	< 0.0245		N.A.	< 0.0263		N.A.	< 0.0367		N.A.	< 0.0396		N.A.	< 0.0262		< 0.021			
acenaphthene	360	0.35 (R)	< 0.108	< 0.0109	0.564	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		< 0.0005			< 0.005	< 0.0107		< 0.0005	< 0.0213		< 0.050	< 0.0115		< 0.0049	< 0.0119		< 0.0049	< 0.0108		< 0.0108			
anthracene	1800	5.8 (R)	< 0.108	< 0.0109	< 0.0552	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		0.017			0.0076	< 0.0107		0.0029	< 0.0213		< 0.050	< 0.0115		< 0.0049	< 0.0119		< 0.0049	< 0.0108		< 0.0108			
benz[a]anthracene	1.1	0.011 (R)	< 0.108	< 0.0109	< 0.0552	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		0.011			< 0.016	< 0.0107		< 0.0016	< 0.0213		< 0.160	< 0.0115		< 0.016	< 0.0119		0.030	< 0.0108		< 0.0108			
benzo[b]fluoranthene	1.1	0.3 (R)	< 0.108	< 0.0109	0.1910	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		0.0079			< 0.012	< 0.0107		< 0.0012	< 0.0213		< 0.120	< 0.0115		< 0.012	< 0.0119		0.030	< 0.0108		< 0.0108			
benzo[k]fluoranthene	11	2.9 (R)	< 0.108	< 0.0109	< 0.0552	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		0.0032			< 0.009	< 0.0107		< 0.0009	< 0.0213		< 0.090	< 0.0115		< 0.0089	< 0.0119		0.0087	< 0.0108		< 0.0108			
benzo[a]pyrene	0.11	0.24 (M)	< 0.108	< 0.0109	< 0.0552	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		< 0.00069			< 0.010	< 0.0107		< 0.0007	< 0.0213		< 0.070	< 0.0115		< 0.0069	< 0.0119		< 0.0069	< 0.0108		< 0.0108			
chrysene	110	9 (R)	< 0.108	< 0.0109	0.687	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		0.015			< 0.008	< 0.0107		< 0.0008	< 0.0213		< 0.080	< 0.0115		< 0.0079	0.0296		0.050	< 0.0108		< 0.0108			
dibenzo(a,h)anthracene	0.11	0.096 (R)	< 0.108	< 0.0109	< 0.0552	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		< 0.0016			< 0.016	< 0.0107		< 0.0016	< 0.0213		< 0.160	< 0.0115		< 0.160	< 0.0119		< 0.0016	< 0.0108		< 0.0108			
fluoranthene	240	8.9 (R)	< 0.108	< 0.0109	< 0.0552	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		0.100			0.067	< 0.0107		0.016	< 0.0213		0.200	< 0.0115		< 0.011	< 0.0119		0.190	< 0.0108		0.0201			
fluorene	240	0.54 (R)	< 0.108	< 0.0109	1.48	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		0.0054			< 0.011	< 0.0107		< 0.0011	< 0.0213		< 0.110	< 0.0115		< 0.011	0.0561		< 0.0011	< 0.0108		< 0.0108			
indeno(1,2,3-cd)pyrene	1.1	0.98 (R)	< 0.108	< 0.0109	< 0.0552	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		< 0.00079			< 0.008	< 0.0107		< 0.0008	< 0.0213		< 0.080	< 0.0115		< 0.0079	< 0.0119		0.0038	< 0.0108		< 0.0108			
1-methylnaphthalene	18	0.006 (R)	< 0.108	< 0.0109	4.46	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		N.A.			N.A.	< 0.0107		N.A.	< 0.0213		N.A.	< 0.0115		N.A.	0.0566		N.A.	< 0.0108		< 0.0108			
2-methylnaphthalene	24	0.019 (R)	< 0.108	< 0.0109	0.85	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		N.A.			N.A.	< 0.0107		N.A.	< 0.0213		N.A.	< 0.0115		N.A.	0.0526		N.A.	< 0.0108		< 0.0108			
naphthalene	2	0.0038 (R)	< 0.108	< 0.0109	< 0.0552	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		< 0.0006			< 0.0006	< 0.0107		< 0.0006	< 0.0213		< 0.060	< 0.0115		< 0.0059	< 0.0119		< 0.0059	< 0.0108		< 0.0108			
pyrene	180	1.3 (R)	< 0.108	< 0.0109	0.355	< 0.0114	< 0.0106	< 0.0106	< 0.0111	< 0.0108	< 0.0109	< 0.0108	< 0.0105		< 0.0006			0.045	< 0.0107		0.011	< 0.0213		0.110	< 0.0115		< 0.0059	0.0157		0.140	< 0.0108		0.0165			
	Residential Soil Screening Level Concentrations (mg/kg)7	Residential / Protection of Groundwater																																			
Metals in Soils 1, 6, 9, 10, 11																																					
arsenic	0.68	0.29 (M)	4.1	4.2	3.5	3	3.8	2.8	4	4.9	3.8	2.5	3.8		N.A.	4.3		N.A.	4.7		N.A.	4.2		N.A.	4.0		N.A.				N.A.	4.6		2.8			
barium	15000	82 (M)	93.4	96.7	178	56.3	107	123	136	136	153	103	123		N.A.	146		N.A.	117		N.A.	126		N.A.	126		N.A.				N.A.	161		71.7			
cadmium	71	0.38 (M)	0.53	0.54	0.32	< 0.16	0.53	0.31	0.43	0.6	0.38	0.22	0.41		N.A.	0.80		N.A.	0.31		N.A.	0.51		N.A.	0.60		N.A.				N.A.	0.80		0.28			
chromium (VI)	0.3	0.00067 (R)	< 1.09	< 1.09	< 1.10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0		N.A.	< 1.0		N.A.	< 1.0		N.A.	< 1.0		N.A.	< 1.0		N.A.	< 1.0		N.A.	< 1.0		< 2.0			
copper	3100	46(M)	11.1	11.7	8.1	5.7	7.4	6.7	8.9	9.7	8.7	6	7.7		N.A.	16.5		N.A.	12.5		N.A.	25.8		N.A.	15.8		N.A.				N.A.	17		6.2			
lead	400	14 (M)	8.3	8.9	8.0	7.1	5.8	4.9	7	7	6.8	4.2	4.5		N.A.	47.0		N.A.	12.5		N.A.	44.0		N.A.	21		N.A.				N.A.	22.9		5.6			
nickel	1500	26 (R)	10.8	11.3	8.9	9.8	8.1	7.3	9.7	11.1	9.8	6.7	8.1		N.A.	11.6		N.A.	12.0		N.A.	11.1		N.A.	11.3		N.A.				N.A.	13.1		6.5			
selenium	390	0.26 (M)	< 1.1	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.0	< 1.0	< 1.0	< 1.0		N.A.	< 1.1		N.A.	< 1.0		N.A.	< 1.1		N.A.	< 1.1		N.A.				N.A.	< 2.0		< 1.0			
silver	390	0.8 (R)	< 0.53	< 0.51	< 0.56	< 0.53	< 0.54	< 0.53	< 0.55	< 0.52	< 0.52	< 0.050	< 0.51		N.A.	< 0.54		N.A.	< 0.051		N.A.	< 0.53		N.A.	< 0.56		N.A.				N.A.	< 0.51		< 0.51			
zinc	23000	370 (R)	38.7	41.7	2.2	41.7	27.8	23.8	30.5	34.5	30.7	21.5	23.9		N.A.	156		N.A.	49.7		N.A.	71.1		N.A.	61.7		N.A.				N.A.	67.2		27.1			