

Table 1  
Kobe Flange Spill Response  
Soil Sample Summary

LABORATORY DATA SUMMARY																			
Sample ID	POR	POR- Resample	DRAIN S1	S1-Resample	DRAIN S2	S2-Resample	DRAIN N1	DRAIN S3	DRAIN N2	DITCH UP	DITCH POR	DITCH MID	DITCH DOWN	Background W Ditch	Background E	Background E1	Background NE	COGCC TABLE 910-1 CONCENTRATION LEVELS	UNITS
Sample Depth	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"	0-6"		
Longitude N	39.366315	39.366315	39.366281	39.366281	39.366013	39.366013	39.366203	39.365792	39.366248	39.3666	39.3663	39.36606	39.365675	39.3665	39.3662	39.3657	39.365828		
Latitude W	-108.258432	-108.258432	-108.257745	-108.257745	-108.256767	-108.256767	-108.256923	-108.255744	-108.255154	-108.255	-108.255	-108.254127	-108.253334	-108.259	-108.258	-108.256	-108.255323		
Sample Type	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab	Grab		
Sample Date	10/1/19	10/9/19	10/1/19	10/9/19	10/1/19	10/9/19	10/1/19	10/1/19	10/1/19	10/1/19	10/4/19	10/4/19	10/4/19	10/4/19	10/1/19	10/1/19	10/1/19	10/1/19	
Analytical Parameters																			
TPH																			
TPH Gasoline Range Organics	254	0.284	42.3	0.195	7.43	0.377	0.458	0.591	1.18	0.358	0.689	0.252	0.398	NT	NT	NT	NT	500	mg/kg
TPH Diesel Range Organics	134	63.1	16.5	19.9	45.3	41.2	ND	15.7	27.9	ND	ND	22.4	ND	NT	NT	NT	NT		
BTEX																			
Benzene	0.00263	ND	0.00145	ND	0.00165	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	0.17	mg/kg
Toluene	0.389	ND	0.123	ND	0.131	ND	0.0279	0.0201	0.00553	ND	ND	ND	ND	NT	NT	NT	NT	85	mg/kg
Ethylbenzene	0.326	ND	0.0518	ND	0.0718	ND	0.0173	0.00663	0.00495	ND	ND	ND	ND	NT	NT	NT	NT	100	mg/kg
Total Xylene	13.5	ND	1.49	ND	2.02	0.011	0.5	0.164	0.131	ND	ND	ND	ND	NT	NT	NT	NT	175	mg/kg
Metals																			
Arsenic	4.02	4.17	4.74	2.54	2.73	4.49	3.33	3.75	5.56	5.76	4.98	8.90	9.29	7.29	2.81	5.02	2.65	0.39	mg/kg
Barium	300	304	326	289	199	343	294	392	336	741	775	715	433	NT	NT	NT	NT	15,000	mg/kg
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	70	mg/kg
Chromium	9.86	6.67	9.32	5.97	6.96	11.4	9.11	8.15	6.72	8.65	8.06	8.87	9.06	NT	NT	NT	NT	NA	mg/kg
Copper	10.4	6.73	9.38	7.48	6.17	11.8	9.07	11.6	9.61	12.50	11.0	10.8	7.9	NT	NT	NT	NT	3,100	mg/kg
Lead	6.79	5.47	6.44	5.29	4.32	7.61	6.93	7.98	6.91	8.49	ND	9.46	6.32	NT	NT	NT	NT	400	mg/kg
Mercury	0.0511	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	23	mg/kg
Nickel	9.28	7.29	9.12	5.59	6.44	11.2	13.3	8.35	6.42	9.69	9.05	10.2	9.58	NT	NT	NT	NT	1,600	mg/kg
Selenium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	390	mg/kg
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	390	mg/kg
Zinc	40.2	27.2	30.1	23.5	26.3	36.2	29.3	28.3	26.8	31.9	30.9	33.3	30.7	NT	NT	NT	NT	23,000	mg/kg
SAR Metals Analysis																			
Sodium Adsorption Ratio	41.6	30.2	50.8	42.7	52.6	32.7	35.2	44.9	54.2	2.58	2.69	3.08	3.12	1.12	1.0	17.90	0.2	<12	ratio
Polynuclear Aromatic Hydrocarbons																			
Acenaphthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	1,000	mg/kg
Anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	1,000	mg/kg
Benzo(a)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	0.22	mg/kg
Benzo(a)pyrene	ND	ND	ND	ND	ND	ND	0.0109	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	0.022	mg/kg
Benzo(b)fluoranthene	ND	ND	ND	ND	ND	ND	0.0147	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	0.22	mg/kg
Benzo(k)fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	2.2	mg/kg
Chrysene	ND	ND	ND	ND	ND	ND	0.00646	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	22	mg/kg
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	0.022	mg/kg
Fluoranthene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	1,000	mg/kg
Fluorene	0.0183	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	1,000	mg/kg
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND	ND	0.00179	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	0.22	mg/kg
Napthalene	0.228	ND	0.0304	ND	0.076	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	23	mg/kg
Pyrene	0.00631	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	NT	NT	NT	1,000	mg/kg
General Chemistry																			
Chromium, Hexavalent	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.65	8.06	8.87	9.06	NT	NT	NT	NT	23	mg/kg
Chromium, Trivalent	9.86	6.67	9.32	5.97	6.96	11.4	9.11	8.15	6.72	ND	ND	ND	ND	NT	NT	NT	NT	120,000	mg/kg
Specific Conductivity	14.80	16.30	6.08	9.52	12.4	1.35	10.0	15.7	9.88	0.408	0.431	0.226	0.212	0.78	0.347	0.59	0.0619	<4 or 2 x the background	mmhos/cm
pH	7.64	8.89	8.08	7.98	8.11	8.09	7.81	7.76	7.88	8.12	7.98	8.72	8.37	7.83	7.72	8.83	8.16	6-9	su

mg/kg - milligrams per kilogram  
mg/L - milligrams per liter  
J - indicates an estimated value  
mmhos/cm - millimhos per centimeter  
mv - millivolts  
su - standard units  
NA - not applicable  
NT - parameter was not tested  
ND - not detected above method detection limit

Over COGCC Table 910-1 concentration levels but under BACKGROUND level.  
Over COGCC Table 910-1 concentration levels and not within BACKGROUND level.  
Over COGCC Table 910-1 concentration levels