

Long Ridge M-15

Reclamation Status	Site Stabilization
Priority	Low
Cuttings Pile Treatment	mixed w/ cement; landfarming
TPH Status	Fails
SAR	SAR over 12
Arsenic status	max = 4.2 (fails)
Forms Submitted	Form 27 July 2012
Other Issues	PAHs
Actions Needed	resample pile and bk arsenic fall 2013

Parameter	Table 910-1	M-15 Pile	M-15 Pile Pre Pilot Test	M-15 PT-2 L525693-2	M-15 Pile
	Date	06/10/2011	07/11/2011	08/13/2011	09/24/2012
TPH	500	6100	3100	1400	1600
Benzene	0.17	0.0048	0.35	<0.005	ND
Toluene	85	ND	0.53	<0.025	ND
Ethylbenzene	100	0.0038	0.11	<0.005	0.027
Xylenes	175	0.031	0.73	<0.015	ND

PAHs

Anthracene	1,000	ND	ND	<0.006	0.16
Acenaphthene	1,000	ND	ND	0.083	0.25
Benzo (a) anthracene	0.22	0.25	ND	0.04	ND
Benzo (b) fluoranthene	0.22	0.33	ND	<0.06	0.16
Benzo (k) fluoranthene	2.20	ND	ND	<0.06	ND
Benzo (a) pyrene	0.022	ND	ND	<0.06	0.098
Chrysene	22	0.22	ND	0.05	ND
Dibenzo (a,h) anthracene	0.022	ND	ND	<0.06	0.03
Pyrene	1,000	0.80	0.52	0.22	0.43
Fluoranthene	1,000	0.33	0.31	0.066	0.15
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	<0.06	ND
Fluorene	1,000	ND	ND	0.074	0.16
Napthalene	23	0.93	0.8	0.17	0.36

Inorganics

Conductivity	4mmhos	1.6		3.5	1.9
SAR	12	48		25	12
pH	6-9	12		8.5	8.4
Arsenic	0.39	4.5		5.8	6.4
Barium	15,000	310		430	340
Boron	2 mg/l hot water	ND			11
Cadmium	70	1.6		0.97	0.3
Chromium	120,000	16		15	20
Chromium VI	23	ND		<2	<2
Copper	3,100	24		21	20
Lead	400	16		8.2	15
Mercury	23	0.028		<0.02	0.022
Nickel	1,600	12		12	14
Selenium	390	ND		<1	ND
Silver	390	ND		<0.5	ND
Zinc	23,000	54		46	51

Old Mountain L-15

Reclamation Status	Site Stabilization
Priority	Medium
Cuttings Pile Treatment	mixed w/ cement; pilot test conducted by Confluence in Fall 2011
SAR	Very High
Arsenic status	max = 7.2 (fails)
TPH Status	Passes
Forms Submitted	Form 27 July 2012
Other Issues	pH still high; three PAHs fail
Actions Needed	resample landfarm and bk arsenic fall 2013

Parameter	Table 910-1	L-15 Pile				% reductio
		Date	06/09/2011	05/02/2012	09/26/2012	
TPH	500	1900	934	380	280	80
Benzene	0.17	0.012	ND	0.003	ND	
Toluene	85	ND	ND	ND	ND	
Ethylbenzene	100	0.0028	ND	ND	ND	
Xylenes	175	0.017	ND	0.014	ND	
PAHs						
Anthracene	1,000	ND	0.17	ND	0.049	
Acenaphthene	1,000		0.23	ND	0.046	
Benzo (a) anthracene	0.22	0.75	0.76	0.21	0.64	72
Benzo (b) fluoranthene	0.22	0.82	1.20	0.40	0.97	67
Benzo (k) fluoranthene	2.20	ND	0.32	0.098	0.180	69
Benzo (a) pyrene	0.022	ND	0.41	0.12	0.33	71
Chrysene	22	0.64	1.00	0.26	0.78	
Dibenzo (a,h) anthracene	0.022	ND	0.21	0.023	0.150	
Pyrene	1,000	0.56	0.66	0.22	0.54	
Fluoranthene	1,000	1.40	1.40	0.46	0.97	67
Indeno(1,2,3-cd) pyrene	0.22	0.36	0.32	ND	0.24	
Fluorene	1,000	0.18	0.12	ND	ND	
Napthalene	23	0.88	0.7	0.36	0.45	59
Inorganics						
Conductivity	4mmhos	3.6	2.2	1.9	1.5	
SAR	12	140	34	23	12	84
pH	6-9	12	12	11	9.9	
Arsenic	0.39	4.6	4.1	8.2	12	
Barium	15,000	330	290	340	300	
Boron	2 mg/l hot water	ND	16	14	18	
Cadmium	70	1.5	ND	ND	2.1	
Chromium	120,000	17	13	17	14	
Chromium VI	23	ND	ND	ND	ND	
Copper	3,100	23	21	19	18	
Lead	400	19	11	5.8	10	
Mercury	23	0.024	ND	ND	ND	
Nickel	1,600	12	11	11	17	
Selenium	390	ND	ND	1.3	2.3	
Silver	390	ND	ND	ND	ND	
Zinc	23,000	44	42	38	70	

Long Ridge M-16

Reclamation Status	Interim Reclamation completed
Priority	High
Cuttings Pile Treatment	None
TPH Status	Passes
SAR	SAR under 12
Arsenic	max = 7.1 (passes)
Forms Submitted	
Other Issues	need acenathene results
Actions Needed	submit Form 4

Parameter	Table 910-1	LR M-16 Pit		LR M-16 Pile		
	Date	10/13/2009	05/24/2010	10/13/2009	05/24/2010	09/23/2010
TPH	500	810	100	790	940	450
Benzene	0.17	ND	ND	ND	ND	ND
Toluene	85	ND	ND	ND	ND	ND
Ethylbenzene	100	ND	ND	ND	ND	ND
Xylenes	175	13	ND	ND	ND	ND

PAHs

Anthracene	1,000	ND	ND	ND	ND	ND
Acenaphthene	1,000					
Benzo (a) anthracene	0.22	ND	ND	ND	ND	ND
Benzo (b) fluoranthene	0.22	ND	ND	ND	ND	ND
Benzo (k) fluoranthene	2.20	ND	ND	ND	ND	ND
Benzo (a) pyrene	0.022	ND	ND	ND	ND	ND
Chrysene	22	ND	ND	ND	ND	ND
Dibenzo (a,h) anthracene	0.022	ND	ND	ND	ND	ND
Pyrene	1,000	0.29	ND	ND	0.26	ND
Fluoranthene	1,000	0.21	ND	ND	0.17	ND
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	ND	ND	ND
Fluorene	1,000	0.27	ND	ND	0.22	0.045
Napthalene	23	0.28	ND	0.37	0.20	0.18

Inorganics

Conductivity	4mmhos	6.34	0.25	4.35	0.89	0.75
SAR	12	9.5	2.2	8.3	7.0	4.8
pH	6-9	9.81	8.6	9.46	8.2	8.5
Arsenic	0.39	6.8	11	4.6	5.9	4.9
Barium	15,000	14,900	7,000	14,500	4,200	4600
Boron	2 mg/l hot water	1.2	0.23	0.8	0.26	0.3
Cadmium	70	ND	0.82	ND	0.81	0.58
Chromium	120,000	20	27	20	17	31
Chromium VI	23	ND	ND	ND	ND	ND
Copper	3,100	19	28	21	15	24
Lead	400	18	30	18	16	19
Mercury	23	0.045	0.03	0.03	0.038	0.026
Nickel	1,600	15	21	13	9.4	22
Selenium	390	ND	ND	ND	ND	ND
Silver	390	ND	ND	ND	ND	ND
Zinc	23,000	41	64	35	30	54

Long Ridge J-15

Reclamation Status	Site Stabilization
Priority	Low
Cuttings Pile Treatment	mixed w/ cement; landfarming
TPH Status	Fails
SAR	SAR over 12
Arsenic status	max = 5.5 (fails)
Forms Submitted	Form 27 July 2012
Other Issues	high SAR; fails for benzo(a)pyrene
Actions Needed	resample pile and bk arsenic fall 2013

Parameter	Table 910-1	LR J-15 Pit		LR J-15 (Prod.) Pit			LR J-15 Prod. Pile		
	Date	09/04/2009	09/04/2009	06/30/2010	06/30/2010	06/30/2010	06/30/2010	06/10/2011	09/24/2012
TPH	500	260	440	470	930	470	930	2200	690
Benzene	0.17	ND	ND	0.037	0.011	0.037	0.011	0.0055	ND
Toluene	85	ND	11	0.11	0.03	0.11	0.03	0.03	ND
Ethylbenzene	100	ND	ND	0.009	0.0041	0.009	0.0041	0.0042	ND
Xylenes	175	ND	17	0.1	0.032	0.1	0.032	0.028	ND
PAHs									
Anthracene	1,000	ND	ND	ND	ND	ND	ND	ND	0.032
Acenaphthene	1,000							0.20	0.027
Benzo (a) anthracene	0.22	ND	ND	ND	ND	ND	ND	0.22	0.060
Benzo (b) fluoranthene	0.22	ND	ND	ND	ND	ND	ND	ND	0.094
Benzo (k) fluoranthene	2.20	ND	ND	ND	ND	ND	ND	ND	0.029
Benzo (a) pyrene	0.022	ND	ND	ND	ND	ND	ND	ND	0.052
Chrysene	22	ND	ND	ND	ND	ND	ND	0.21	0.065
Dibenzo (a,h) anthracene	0.022	ND	ND	ND	ND	ND	ND	ND	0.017
Pyrene	1,000	ND	ND	0.037	0.068	0.037	0.068	0.38	0.11
Fluoranthene	1,000	ND	ND	ND	0.061	ND	0.061	0.33	0.092
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	ND	ND	ND	ND	ND	0.045
Fluorene	1,000	ND	ND	ND	0.74	0.29	0.74	0.17	0.022
Napthalene	23	ND	ND	0.23	0.19	0.23	0.19	0.5	0.092
Inorganics									
Conductivity	4mmhos	3.38	4.04	6.1	3.7	6.1	3.7	2.4	1.6
SAR	12	6.8	5.9	24	12	24	12	64	25
pH	6-9	9.16	9.12	8.8	8.7	8.8	8.7	12	8.9
Arsenic	0.39	5.7	12	5.2	5.9	5.2	5.9	8.6	7.1
Barium	15,000			5,500	5,600	5,500	5,600	300	400
Boron	2 mg/l hot water	0.55	0.44	0.52	0.29	0.52	0.29	ND	14
Cadmium	70	ND	ND	1.1	0.79	1.1	0.79	1.6	0.37
Chromium	120,000	29	25	25	31	25	31	15	17
Chromium VI	23	ND	ND	ND	ND	ND	ND	ND	ND
Copper	3,100	17	19	26	24	26	24	34	23
Lead	400	18	22	29	23	29	23	18	17
Mercury	23	0.023	0.04	0.027	0.041	0.027		0.027	ND
Nickel	1,600	16	17	20	21	20	0.041	18	13
Selenium	390	ND	ND	7.1	5.5	7.1	5.5	1.2	ND
Silver	390	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	23,000	42	56	53	58	53	58	64	55

H7A

Reclamation Status	Reclamation Completed Fall 2011
Pile Treatment	mixed w native soil
TPH Status	passes
Form 27 and Sundry Submitted?	Yes
Other Issues	None

Parameter	Table 910-1	H7A-Pile			H7A-Pit	
		Date	11/23/2009	06/02/2010	05/28/2011	11/23/2009
TPH	500	680	740	46	620	280
Benzene	0.17	ND	ND	ND	ND	ND
Toluene	85	0.016	ND	ND	ND	ND
Ethylbenzene	100	ND	ND	ND	ND	ND
Xylenes	175	0.052	ND	ND	0.035	ND
PAHs						
Anthracene	1,000	ND	ND	ND	ND	ND
Acenaphthene	1,000			ND		
Benzo (a) anthracene	0.22	ND	ND	ND	ND	ND
Benzo (b) fluoranthene	0.22	ND	ND	ND	ND	ND
Benzo (k) fluoranthene	2.20	ND	ND	ND	ND	ND
Benzo (a) pyrene	0.022	ND	ND	ND	ND	ND
Chrysene	22	ND	ND	ND	ND	ND
Dibenzo (a,h) anthracene	0.022	ND	ND	ND	ND	ND
Pyrene	1,000	ND	ND	ND	ND	ND
Fluoranthene	1,000	ND	ND	ND	ND	ND
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	ND	ND	ND
Fluorene	1,000	0.25	ND	ND	0.22	0.05
Napthalene	23	0.26	ND	ND	0.25	0.05
Inorganics						
Conductivity	4mmhos	3.72	1.0	0.5	4.54	2.3
SAR	12	9.7	8.9	7.5	19	11
pH	6-9	9.18	8.2	8.6	9.27	8.1
Arsenic	0.39	15	16	14	16	19
Barium	15,000	3120	5000	2200	570	520
Boron	2 mg/l hot water	0.71	3.30	18	0.8	ND
Cadmium	70	ND	0.74	0.76	ND	0.71
Chromium	120,000	16	27	19	15	22
Chromium VI	23	ND	ND	ND	ND	ND
Copper	3,100	22	27	20	21	20
Lead	400	14	15	14	13	13
Mercury	23	0.025	0.03	0.025	0.027	0.23
Nickel	1,600	14	29	18	15	25
Selenium	390	ND	6.90	10	ND	6.8
Silver	390	ND	ND	ND	ND	ND
Zinc	23,000	48	70	54	47	60

K-17

Reclamation Status	Interim Reclamation Completed
Pile Treatment	None
TPH Status	passes
Form 27 and Sundry Submitted?	Yes; pile regraded
Other Issues	None

Parameter	Table 910-1	K-17 Pit	K-17 Cuttings	K-17 Condensate Pit	K-17 Condensate Pile				
	Date	10/08/2009	10/08/2009	01/21/2010	05/18/2010	05/24/2010	06/02/2010	07/28/2010	05/28/2011
TPH	500	200	430	410	700	700	181.5	910	66
Benzene	0.17	ND	ND	0.0036	ND	ND	ND	ND	ND
Toluene	85	ND	ND	0.034	ND	ND	ND	ND	ND
Ethylbenzene	100	ND	ND	0.0081	0.0027	0.0027	0.0087	ND	ND
Xylenes	175	ND	ND	0.18	0.082	0.082	0.01	0.0095	ND

PAHs

Anthracene	1,000	0.15	ND	0.035	ND	ND	ND	ND	ND
Acenaphthene	1,000								ND
Benzo (a) anthracene	0.22	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (b) fluoranthene	0.22	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (k) fluoranthene	2.20	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a) pyrene	0.022	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	22	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo (a,h) anthracene	0.022	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,000	0.32	ND	ND	ND	ND	ND	0.17	ND
Fluoranthene	1,000	0.38	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	1,000	ND	ND	0.15	ND	ND	ND	ND	ND
Napthalene	23	ND	ND	0.42	ND	ND	0.081	0.11	ND

Inorganics

Conductivity	4mmhos	7.6	7.6	6.7	2.9	2.9	2.3	1.4	2.4
SAR	12	12	12	9.9		9.7	9.2	14	4
pH	6-9	9.37	9.32	7.9	8.1	8.1	8.1	7.8	7.8
Arsenic	0.39	5.3	4	5.3		9	9.2	12	6.8
Barium	15,000	470	940	480		880	670	1500	990
Boron	2 mg/l hot water	0.29	0.43	0.22	0.2	0.2	0.2	ND	ND
Cadmium	70	ND	ND	1.1		1.1	1.1	0.46	0.77
Chromium	120,000	8.6	14	17		16	17	25	14
Chromium VI	23	ND	ND	ND		ND	ND	ND	ND
Copper	3,100	12	24	18		22	21	21	15
Lead	400	14	14	19		17	18	27	12
Mercury	23	0.14	0.11	0.034		0.03	ND	0.044	0.033
Nickel	1,600	15	15	26		3.2	21	23	14
Selenium	390	ND	ND	ND		1.7	14	ND	12
Silver	390	ND	ND	ND		ND	ND	ND	ND
Zinc	23,000	38	41	62		78	62	92	52

OM C-10

Reclamation Status	Site Stabilization
Priority	High
Cuttings Pile Treatment	mixed w native soil; landfarming
TPH Status	passes
SAR	SAR under 12
Arsenic status	max = 13 (passes)
Forms Submitted	
Other Issues	PAHs
Actions Needed	resample fall 2013

Parameter	Table 910-1	C-10 Pit	C-10 Pile				
	Date	11/17/2009	11/17/2009	05/24/2010	09/23/2010	06/09/2011	08/08/2012
TPH	500	30	750	320	120	92	53
Benzene	0.17	ND	0.005	ND	ND	ND	ND
Toluene	85	ND	0.013	ND	ND	ND	ND
Ethylbenzene	100	ND	ND	ND	ND	ND	ND
Xylenes	175	ND	0.014	ND	ND	ND	ND

PAHs							
Parameter	Table 910-1	C-10 Pit	11/17/2009	05/24/2010	09/23/2010	06/09/2011	08/08/2012
Anthracene	1,000	ND	ND	ND	0.036	0.0066	ND
Acenaphthene	1,000					ND	ND
Benzo (a) anthracene	0.22	ND	ND	0.32	0.34	0.097	0.160
Benzo (b) fluoranthene	0.22	ND	ND	0.66	0.88	0.27	0.36
Benzo (k) fluoranthene	2.20	ND	ND	0.11	ND	0.07	0.096
Benzo (a) pyrene	0.022	ND	ND	0.17	ND	0.12	0.16
Chrysene	22	ND	ND	0.30	ND	0.1	0.19
Dibenzo (a,h) anthracene	0.022	ND	ND	ND	ND	0.067	ND
Pyrene	1,000	ND	ND	0.51	ND	0.15	0.14
Fluoranthene	1,000	ND	ND	0.60	0.68	0.077	0.2
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	0.08	ND	0.12	0.093
Fluorene	1,000	ND	ND	ND	ND	ND	ND
Napthalene	23	ND	ND	ND	0.14	ND	0.065

Inorganics							
Parameter	Table 910-1	C-10 Pit	11/17/2009	05/24/2010	09/23/2010	06/09/2011	08/08/2012
Conductivity	4mmhos	1.08	2.86	0.85	1.1	0.54	0.72
SAR	12	3.6	9.6	6.5	6	6.7	5.9
pH	6-9	8.71	9.36	8.1	8.4	8.3	8.2
Arsenic	0.39	8.5	10	12	8.5	8.6	11
Barium	15,000	790	1,430	960	1,100	840	710
Boron	2 mg/l hot water	0.29	0.51	0.32	0.23	ND	ND
Cadmium	70	ND	ND	0.58	0.31	1.5	ND
Chromium	120,000	21	22	34	28	29	27
Chromium VI	23	ND	ND	ND	ND	ND	ND
Copper	3,100	16	21	31	28	20	21
Lead	400	17	16	27	27	15	29
Mercury	23	ND	0.028	0.024	0.024	0.027	0.022
Nickel	1,600	16	16	25	18	15	16
Selenium	390	ND	ND	ND	ND	ND	ND
Silver	390	ND	ND	ND	ND	ND	ND
Zinc	23,000	42	42	72	84	49	48

F-01

Reclamation Status	Site Stabilization
Priority	Low
Cuttings Pile Treatment	landfarming
TPH Status	passes
SAR	SAR under 12
Arsenic status	max = 4.5 (fails)
Forms Submitted	
Other Issues	PAHs
Actions Needed	resample pile and bk arsenic fall 2013

Parameter	Table 910-1	F-01 Pit			F-01 Pile	
	Date	11/17/2009	06/02/2010	05/28/2011	11/17/2009	09/24/2012
TPH	500	130	480	41	460	59
Benzene	0.17	ND	0.0055	ND	0.012	ND
Toluene	85	ND	ND	ND	0.11	ND
Ethylbenzene	100	ND	ND	ND	0.023	ND
Xylenes	175	ND	ND	ND	0.44	ND

PAHs

Anthracene	1,000	0.19	0.087	ND	ND	ND
Acenaphthene	1,000			ND		ND
Benzo (a) anthracene	0.22	1.2	0.2	0.0071	ND	0.10
Benzo (b) fluoranthene	0.22	1.8	0.38	0.013	ND	0.22
Benzo (k) fluoranthene	2.20	0.82	0.1	ND	ND	ND
Benzo (a) pyrene	0.022	0.9	0.14	0.0062	ND	0.11
Chrysene	22	1.5	0.2	0.0084	ND	0.11
Dibenzo (a,h) anthracene	0.022	0.21	0.033	ND	ND	ND
Pyrene	1,000	1.4	0.19	0.012	ND	0.11
Fluoranthene	1,000	1.9	0.3	0.01	ND	0.12
Indeno(1,2,3-cd) pyrene	0.22	1.1	0.084	ND	ND	0.094
Fluorene	1,000	0.27	0.24	ND	ND	ND
Napthalene	23	0.3	0.18	0.017	ND	0.14

Inorganics

Conductivity	4mmhos	2.16	0.79	0.25	2.65	1.1
SAR	12	3.1	3.6	1.7	3.3	4.2
pH	6-9	9.43	8	8.3	8.96	7.9
Arsenic	0.39	4.8	13	6.5	5.5	7.9
Barium	15,000	580	380	340	480	320
Boron	2 mg/l hot water	0.23	0.27	ND	0.29	13
Cadmium	70	ND	0.67	0.69	0.81	0.38
Chromium	120,000	22	36	30	24	25
Chromium VI	23	ND	ND	ND	ND	ND
Copper	3,100	20	36	22	22	25
Lead	400	14	31	15	15	21
Mercury	23	0.021	0.041	0.027	0.021	0.022
Nickel	1,600	13	37	18	15	15
Selenium	390	ND	11	21	ND	1.3
Silver	390	ND	ND	ND	ND	ND
Zinc	23,000	43	61	48	45	62

I-01

Reclamation Status	Site Stabilization
Priority	Medium
Cuttings Pile Treatment	mixed w native soil; landfarming
TPH Status	passes
Forms Submitted	
SAR	SAR under 12
Arsenic	Max = 5.6 (fails)
Other Issues	
Actions Needed	resample BK arsenic

Parameter	Table 910-1	I-01 Pit				I-01 Pile		
		Date	11/17/2009	06/02/2010	07/28/2010	05/28/2011	#####	09/08/2010
TPH	500	2100	1300	710	46	70	830	230
Benzene	0.17	ND	0.006	0.0026	ND	ND	ND	ND
Toluene	85	0.77	ND	ND	ND	ND	ND	ND
Ethylbenzene	100	0.65	0.0041	ND	ND	ND	ND	ND
Xylenes	175	7.9	0.021	0.011	ND	ND	ND	ND
PAHs								
Anthracene	1,000	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	1,000				ND			ND
Benzo (a) anthracene	0.22	0.22	ND	0.1	0.0093	ND	ND	0.017
Benzo (b) fluoranthene	0.22	0.35	ND	ND	0.036	ND	ND	0.056
Benzo (k) fluoranthene	2.20	0	ND	ND	0.0074	ND	ND	0.021
Benzo (a) pyrene	0.022	0.19	ND	ND	0.0096	ND	ND	0.017
Chrysene	22	0.29	ND	0.073	0.013	ND	ND	0.017
Dibenzo (a,h) anthracene	0.022	ND	ND	ND	ND	ND	ND	ND
Pyrene	1,000	0.26	ND	0.13	0.015	ND	ND	0.029
Fluoranthene	1,000	ND	0.035	0.097	0.014	0.085	0.0560	0.031
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	ND	ND	ND	ND	ND
Fluorene	1,000	ND	0.25	ND	0.012	ND	0.079	0.012
Napthalene	23	0.27	0.11	0.076	0.034	0.12	0.062	0.034
Inorganics								
Conductivity	4mmhos	4.97	1.4	0.44	0.17	0.59	0.91	0.74
SAR	12	7.2	5.5	12	4	4.9	5.3	5.4
pH	6-9	9.29	7.9	8	8.7	8.2	7.1	8.1
Arsenic	0.39	7.4	5.3	7.8	7.9	2.9	9	8
Barium	15,000	2270	1800	1500	1400	420	1200	1200
Boron	2 mg/l hot water	0.49	1.5	ND	ND	ND	0.22	ND
Cadmium	70	ND	0.46	ND	0.67	0.76	0.44	0.65
Chromium	120,000	37	42	48	42	36	49	43
Chromium VI	23	ND	ND	ND	ND	ND	ND	ND
Copper	3,100	20	24	21	18	13	23	19
Lead	400	18	19	15	15	16	24	19
Mercury	23	0.024	0.031	0.025	ND	0.02	0.026	0.021
Nickel	1,600	19	39	27	21	20	28	22
Selenium	390	ND	8.9	ND	18	10	ND	19
Silver	390	ND	ND	ND	ND	0.5	ND	ND
Zinc	23,000	46	58	65	48	1.5	58	48

E-18

Reclamation Status	Site Stabilization/Water Storage
Priority	Low
Cuttings Pile Treatment	None
TPH Status	passes; results suspect
SAR	SAR under 12
Arsenic status	max = 13 (passes)
Forms Submitted	No
Other Issues	need acenaphthene results
Actions Needed	closed w/o forms?

Parameter	Table 910-1	E-18 Pit	E-18 Pile
	Date	11/22/2009	01/20/2010
TPH	500	1000	130
Benzene	0.17	0.016	ND
Toluene	85	0.063	ND
Ethylbenzene	100	0.011	ND
Xylenes	175	0.03	ND
PAHs			
Anthracene	1,000	ND	ND
Acenaphthene	1,000		
Benzo (a) anthracene	0.22	ND	0.14
Benzo (b) fluoranthene	0.22	ND	ND
Benzo (k) fluoranthene	2.20	ND	ND
Benzo (a) pyrene	0.022	ND	ND
Chrysene	22	ND	0.14
Dibenzo (a,h) anthracene	0.022	ND	ND
Pyrene	1,000	ND	0.3
Fluoranthene	1,000	ND	0.086
Indeno(1,2,3-cd) pyrene	0.22	ND	ND
Fluorene	1,000	ND	ND
Napthalene	23	600	0.18
Inorganics			
Conductivity	4mmhos	7.19	2.3
SAR	12	14	4.8
pH	6-9	9.35	8
Arsenic	0.39	14	10
Barium	15,000	560	400
Boron	2 mg/l hot water	1.6	ND
Cadmium	70	0.85	1.6
Chromium	120,000	20	25
Chromium VI	23	ND	ND
Copper	3,100	27	25
Lead	400	19	22
Mercury	23	0.057	0.029
Nickel	1,600	18	18
Selenium	390	ND	ND
Silver	390	ND	ND
Zinc	23,000	52	59

O-33

Reclamation Status	Interim Reclamation Completed
Pile Treatment	mixed w native soil
TPH Status	passes
Forms Submitted	Yes
Other Issues	None

Parameter	Table 910-1	O-33 Pit				O-33 Pile			
	Date	01/22/2010	06/02/2010	07/28/2010	05/27/2011	01/22/2010	06/02/2010	09/08/2010	05/27/2011
TPH	500	630	720	940	110	330	970	550	50
Benzene	0.17	ND	ND	0.0062	ND	ND	0.0045	0.0036	ND
Toluene	85	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	100	ND	ND	ND	ND	ND	0.0029	0.0046	ND
Xylenes	175	ND	ND	0.017	ND	ND	0.087	0.019	ND
PAHs									
Anthracene	1,000	ND	0.33	ND	ND	ND	0.053	ND	ND
Acenaphthene	1,000				ND				ND
Benzo (a) anthracene	0.22	0.46	ND	ND	ND	ND	0.39	0.38	0.034
Benzo (b) fluoranthene	0.22	0.76	0.58	0.5	ND	0.43	0.9	0.68	ND
Benzo (k) fluoranthene	2.20	ND	ND	ND	ND	ND	0.19	ND	ND
Benzo (a) pyrene	0.022	ND	ND	ND	ND	ND	0.29	ND	ND
Chrysene	22	0.43	ND	ND	ND	ND	0.42	0.35	0.039
Dibenzo (a,h) anthracene	0.022	ND	ND	ND	ND	ND	0.086	ND	ND
Pyrene	1,000	0.99	ND	ND	ND	0.46	0.43	0.39	0.088
Fluoranthene	1,000	0.46	0.49	0.33	ND	0.21	0.51	0.31	0.063
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	ND	ND	ND	0.2	ND	ND
Fluorene	1,000	0.13	0.18	ND	ND	0.065	0.26	0.17	ND
Napthalene	23	0.18	0.15	0.2	ND	0.091	0.24	0.12	0.041
Inorganics									
Conductivity	4mmhos	1.7	0.63	0.62	0.44	1.3	1	1.5	0.7
SAR	12	12	8.1	11	12	5.8	5.4	8.1	7.4
pH	6-9	8.1	8	7.7	8.4	8.1	8	7.8	7.9
Arsenic	0.39	15	9	14	11	15	11	11	11
Barium	15,000	450	320	520	470	450	440	440	370
Boron	2 mg/l hot water	ND	0.31	ND	ND	ND	0.29	0.21	ND
Cadmium	70	0.8	0.92	ND	1.8	0.83	0.61	0.63	1.8
Chromium	120,000	33	27	38	29	38	32	28	25
Chromium VI	23	ND	ND	ND	ND	ND	ND	ND	ND
Copper	3,100	23	22	24	20	26	25	24	19
Lead	400	29	18	32	17	31	23	22	19
Mercury	23	0.024	0.032	0.045	0.03	0.027	0.036	0.033	0.035
Nickel	1,600	24	37	28	17	27	42	22	16
Selenium	390	ND	7.9	ND	ND	10	10	ND	1.2
Silver	390	ND	ND	ND	ND	ND	0	ND	ND
Zinc	23,000	80	73	78	59	89	73	65	60

O-13

Reclamation Status	Interim Reclamation Completed
TPH Status	passes
SAR	SAR over 12
Arsenic status	max = 8.2 (fails)
Forms Submitted	Form 27 July 2012
Other Issues	used w/o bk arsenic; need acenaphthene results
Actions Needed	resample bk arsenic; submit Form 4

Parameter	Table 910-1	O-13 Pit	O-13 Pile
	Date	01/22/2010	01/22/2010
TPH	500	330	180
Benzene	0.17	ND	ND
Toluene	85	ND	ND
Ethylbenzene	100	ND	ND
Xylenes	175	ND	ND

PAHs

Anthracene	1,000	ND	ND
Acenaphthene	1,000		
Benzo (a) anthracene	0.22	0.042	0.04
Benzo (b) fluoranthene	0.22	0.12	0.097
Benzo (k) fluoranthene	2.20	ND	ND
Benzo (a) pyrene	0.022	ND	ND
Chrysene	22	0.045	0.047
Dibenzo (a,h) anthracene	0.022	ND	ND
Pyrene	1,000	0.07	0.066
Fluoranthene	1,000	0.09	0.093
Indeno(1,2,3-cd) pyrene	0.22	ND	ND
Fluorene	1,000	0.081	0.078
Napthalene	23	0.13	0.14

Inorganics

Conductivity	4mmhos	2.2	1.4
SAR	12	11	5.3
pH	6-9	8.0	8
Arsenic	0.39	7.2	9.2
Barium	15,000	500	380
Boron	2 mg/l hot water	ND	0.2
Cadmium	70	0.95	0.73
Chromium	120,000	39	48
Chromium VI	23	ND	ND
Copper	3,100	22	21
Lead	400	32	20
Mercury	23	0.04	0.036
Nickel	1,600	26	26
Selenium	390	ND	4.5
Silver	390	ND	ND
Zinc	23,000	76	64

Old Mountain A-21

Reclamation Status	Site Stabilization/Water Storage
Priority	Medium
Cuttings Pile Treatment	mixed w native soil; landfarming
TPH Status	Passes
SAR	SAR under 12
Arsenic status	max = 9.4 (passes)
Forms Submitted	Form 27 July 2012
Other Issues	fails for benzo(a)pyrene
Actions Needed	resample fall 2013

Parameter	Table 910-1	A-21 Pit	A-21 Pile			
	Date	05/24/2010	05/24/2010	09/23/2010	06/09/2011	09/26/2012
TPH	500	88	910	580	660	89
Benzene	0.17	ND	0.003	ND	ND	ND
Toluene	85	ND	ND	ND	ND	ND
Ethylbenzene	100	ND	ND	ND	ND	ND
Xylenes	175	ND	ND	ND	ND	ND
PAHs						
Anthracene	1,000	ND	0.051	ND	ND	ND
Acenaphthene	1,000				ND	ND
Benzo (a) anthracene	0.22	ND	0.1	0.15	0.21	ND
Benzo (b) fluoranthene	0.22	ND	0.24	0.29	ND	0.096
Benzo (k) fluoranthene	2.20	ND	0.057	ND	ND	ND
Benzo (a) pyrene	0.022	ND	0.052	ND	ND	0.038
Chrysene	22	ND	0.15	0.17	ND	ND
Dibenzo (a,h) anthracene	0.022	ND	ND	ND	ND	0.008
Pyrene	1,000	ND	0.27	0.34	0.22	0.22
Fluoranthene	1,000	ND	0.29	ND	0.19	0.031
Indeno(1,2,3-cd) pyrene	0.22	ND	0.034	ND	ND	ND
Fluorene	1,000	ND	0.15	ND	ND	ND
Napthalene	23	ND	ND	0.1	ND	ND
Inorganics						
Conductivity	4mmhos	0.28	0.44	0.46	0.33	0.29
SAR	12	1.7	4.4	4.4	4.0	2.2
pH	6-9	7.9	8.2	8.6	8.6	8.3
Arsenic	0.39	4.7	6.5	7.0	7.7	4.0
Barium	15,000	220	370	570	450	480
Boron	2 mg/l hot water	0.23	0.22	0.3	ND	12
Cadmium	70	0.92	1.3	1.2	1.6	0.48
Chromium	120,000	16	26	35	32	34
Chromium VI	23	ND	ND	ND	ND	ND
Copper	3,100	9.3	16	23	20	19
Lead	400	10	14	18	18	12
Mercury	23	ND	0.024	0.025	0.034	0.021
Nickel	1,600	8.3	14	24	18	25
Selenium	390	ND	ND	ND	ND	4.8
Silver	390	ND	ND	ND	ND	ND
Zinc	23,000	27	40	65	50	63

F-06

Reclamation Status	Site Stabilization; pit material landfarm
Priority	High
Pile Treatment	cuttings and pit material landfarming
TPH Status	Fails for cuttings, passes for pit bottom materials
SAR	SAR very high
Arsenic status	not sampled
Forms Submitted	Yes for pit bottom material only
Other Issues	PAHs; release related pit bottom material in landfarm
Actions Needed	resample cuttings pile and bk arsenic fall 2013

Parameter	Table 910-1	F-06 Cuttings			Pit Bottom Materials		Soil Below Liner
	Date	08/19/2010	05/28/2011	09/24/2012	05/03/2012	09/24/2012	07/17/2012
TPH	500	8200	4702	4200	4,700	120	52
Benzene	0.17	0.4	ND	ND	4.2	ND	ND
Toluene	85	1.4	ND	ND	32	ND	ND
Ethylbenene	100	1.4	ND	0.1	8.4	ND	ND
Xylenes	175	12	ND	0.32	84	ND	ND
PAHs							
Anthracene	1,000	ND	0.27	0.48	0.19	ND	ND
Acenaphthene	1,000		ND	0.41	0.12	0.0094	ND
Benzo (a) anthracene	0.22	ND	0.14	0.35	0.066	0.0079	ND
Benzo (b) fluoranthene	0.22	ND	0.22	0.60	0.095	0.028	ND
Benzo (k) fluoranthene	2.20	ND	0.073	0.14	0.024	0.0066	ND
Benzo (a) pyrene	0.022	ND	0.1	0.25	0.048	0.012	ND
Chrysene	22	ND	0.14	0.38	0.089	0.016	ND
Dibenzo (a,h) anthracene	0.022	ND	ND	0.070	0.02	ND	ND
Pyrene	1,000	0.72	0.57	0.99	0.3	0.03	0.01
Fluoranthene	1,000	ND	0.22	0.60	0.1	0.009	ND
Indeno(1,2,3-cd) pyrene	0.22	ND	0.076	0.20	0.037	0.014	ND
Fluorene	1,000	ND	ND	0.58	0.53	0.0086	0.011
Napthalene	23	1.3	0.37	0.55	1.7	0.044	ND
Inorganics							
Conductivity	4mmhos	1.2	1.4	4.4	8.6	0.56	1.7
SAR	12	14	15	26	78	2.3	83
pH	6-9	7.1	8.1	8.2	7.8	8.2	8.6
Arsenic	0.39	2.4	4.8	11	2.5	8.9	2.7
Barium	15,000	170	230	350	490	320	450
Boron	2 mg/l hot water	1.9	ND	13	16	15	ND
Cadmium	70	ND	0.47	0.33	ND	0.31	ND
Chromium	120,000	14	27	25	12	38	62
Chromium VI	23	ND	ND	ND	ND	ND	ND
Copper	3,100	16	22	26	16	19	13
Lead	400	6.4	12	22	7.1	20	13
Mercury	23	ND	ND	0.036	0.061	ND	ND
Nickel	1,600	2	15	15	7.1	22	26
Selenium	390	ND	14	ND	ND	ND	ND
Silver	390	ND	ND	ND	ND	ND	ND
Zinc	23,000	28	38	52	24	54	46

C-19

Reclamation Status	Site Stabilization
Priority	Low
Cuttings Pile Treatment	landfarming
TPH Status	Passes
SAR	SAR under 12
Arsenic status	max = 3.7 (passes)
Form 27 and Sundry Submitted?	No
Other Issues	fails for benzo(a)pyrene
Actions Needed	sample pit bootm and landfarm in spring 2013

Parameter	Table 910-1	C-19 Pile				
		Date	07/15/2010	09/23/2010	05/27/2011	10/13/2011
TPH	500	3600	480	1200	1000	220
Benzene	0.17	0.075	0.0032	0.0027	ND	ND
Toluene	85	ND	ND	ND	ND	ND
Ethylbenzene	100	0.14	ND	ND	ND	0.0048
Xylenes	175	1	ND	0.0091	ND	0.015
PAHs						
Anthracene	1,000	ND	0.66	ND	0.023	ND
Acenaphthene	1,000			ND	ND	ND
Benzo (a) anthracene	0.22	ND	ND	ND	0.037	ND
Benzo (b) fluoranthene	0.22	ND	ND	ND	0.13	ND
Benzo (k) fluoranthene	2.20	ND	ND	ND	0.027	ND
Benzo (a) pyrene	0.022	ND	ND	ND	0.063	0.031
Chrysene	22	ND	ND	ND	0.065	ND
Dibenzo (a,h) anthracene	0.022	ND	ND	ND	0.01	ND
Pyrene	1,000	ND	ND	0.31	0.21	0.089
Fluoranthene	1,000	ND	ND	ND	0.054	ND
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	ND	0.03	ND
Fluorene	1,000	ND	ND	0.18	0.042	ND
Napthalene	23	0.94	0.69	0.39	0.32	0.17
Inorganics						
Conductivity	4mmhos	2.7	2.5	1.5	0.59	0.69
SAR	12	56	33	13	13	4.2
pH	6-9	12	8.4	8.1	7.5	8.1
Arsenic	0.39	7.9	6	6	9.1	3.8
Barium	15,000	280	290	310	390	60
Boron	2 mg/l hot water	0.2	0.24	ND	0.24	12
Cadmium	70	0.36	0.52	1.4	ND	ND
Chromium	120,000	16	17	16	23	16
Chromium VI	23	ND	ND	ND	ND	ND
Copper	3,100	20	25	17	32	16
Lead	400	11	12	15	14	15
Mercury	23	0.028	0.031	0.02	0.02	0.02
Nickel	1,600	8.8	14	11	18	17
Selenium	390	6.9	ND	7.2	ND	ND
Silver	390	ND	ND	ND	ND	ND
Zinc	23,000	35	44	66	58	41

CD-29

Reclamation Status	Site Stabilization/Water Storage
Priority	High - Chevron
Cuttings Pile Treatment	mixed w native soil
TPH Status	landfarm; passes
SAR	SAR under 12
Arsenic status	max = 12 (passes)
Forms Submitted	No
Other Issues	water storage site
Actions Needed	submit forms 27 and 4

Parameter	Table 910-1	CD-29 Pile		Pit Bottom
	Date	09/23/2010	05/27/2011	07/23/2013
TPH	500	1200	260	470
Benzene	0.17	ND	ND	ND
Toluene	85	ND	ND	ND
Ethylbenzene	100	ND	ND	ND
Xylenes	175	0.018	ND	ND

PAHs

Anthracene	1,000	ND	ND	ND
Acenaphthene	1,000		ND	0.029
Benzo (a) anthracene	0.22	ND	ND	0.019
Benzo (b) fluoranthene	0.22	ND	ND	0.035
Benzo (k) fluoranthene	2.20	ND	ND	ND
Benzo (a) pyrene	0.022	ND	ND	0.016
Chrysene	22	ND	ND	0.031
Dibenzo (a,h) anthracene	0.022	ND	ND	ND
Pyrene	1,000	ND	0.064	0.091
Fluoranthene	1,000	ND	ND	0.02
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	0.013
Fluorene	1,000	ND	ND	0.13
Napthalene	23	ND	0.051	0.18

Inorganics

Conductivity	4mmhos	0.89	0.42	1.6
SAR	12	3.2	3.4	17
pH	6-9	8	8	8.2
Arsenic	0.39	13	9.5	12
Barium	15,000	560	390	410
Boron	2 mg/l hot water	0.3	ND	12
Cadmium	70	0.74	1.5	ND
Chromium	120,000	32	23	36
Chromium VI	23	ND	ND	ND
Copper	3,100	30	20	18
Lead	400	20	12	14
Mercury	23	0.033	0.032	0.031
Nickel	1,600	25	14	16
Selenium	390	ND	1.6	ND
Silver	390	ND	ND	ND
Zinc	23,000	69	46	50

Latham I-02

Reclamation Status	Interim Reclamation/Water Storage
Priority	Low
Pile Treatment	mixed w sawdust
TPH Status	passes
SAR	SAR under 12
Arsenic status	max = 18 (passes)
Forms Submitted	
Other Issues	
Actions Needed	submit Forms 27 and 4

Parameter	Table 910-1	Latham I-02 Pile	
	Date	09/23/2010	05/28/2011
TPH	500	1400	471
Benzene	0.17	0.0034	ND
Toluene	85	ND	ND
Ethylbenzene	100	ND	ND
Xylenes	175	ND	ND

PAHs

Anthracene	1,000	ND	ND
Acenaphthene	1,000		0.041
Benzo (a) anthracene	0.22	ND	0.039
Benzo (b) fluoranthene	0.22	ND	ND
Benzo (k) fluoranthene	2.20	ND	ND
Benzo (a) pyrene	0.022	ND	ND
Chrysene	22	ND	0.022
Dibenzo (a,h) anthracene	0.022	ND	ND
Pyrene	1,000	ND	0.094
Fluoranthene	1,000	ND	0.066
Indeno(1,2,3-cd) pyrene	0.22	ND	ND
Fluorene	1,000	ND	0.051
Napthalene	23	ND	0.11

Inorganics

Conductivity	4mmhos	2.2	1.1
SAR	12	16	7.6
pH	6-9	7.6	8.2
Arsenic	0.39	7.4	5.1
Barium	15,000	300	200
Boron	2 mg/l hot water	0.21	ND
Cadmium	70	0.57	0.46
Chromium	120,000	28	19
Chromium VI	23	2.1	ND
Copper	3,100	24	15
Lead	400	15	7.9
Mercury	23	0.021	ND
Nickel	1,600	21	13
Selenium	390	ND	7.9
Silver	390	ND	ND
Zinc	23,000	52	31

L-04

Reclamation Status	Interim Reclamation Completed
TPH Status	passes
Forms Submitted	Yes
Other Issues	None

Parameter	Table 910-1	L-04 Pit	L-04 Pile
	Date	09/30/2010	09/30/2010
TPH	500	66	200
Benzene	0.17	ND	ND
Toluene	85	ND	ND
Ethylbenzene	100	ND	ND
Xylenes	175	ND	0.009

PAHs

Anthracene	1,000	ND	ND
Acenaphthene	1,000		
Benzo (a) anthracene	0.22	ND	ND
Benzo (b) fluoranthene	0.22	ND	ND
Benzo (k) fluoranthene	2.20	ND	ND
Benzo (a) pyrene	0.022	ND	ND
Chrysene	22	ND	ND
Dibenzo (a,h) anthracene	0.022	ND	ND
Pyrene	1,000	ND	ND
Fluoranthene	1,000	ND	ND
Indeno(1,2,3-cd) pyrene	0.22	ND	ND
Fluorene	1,000	0.037	0.093
Napthalene	23	ND	0.064

Inorganics

Conductivity	4mmhos	2.6	2.3
SAR	12	16	19
pH	6-9	8.5	8.9
Arsenic	0.39	13	10
Barium	15,000	2000	4000
Boron	2 mg/l hot water	0.2	0.25
Cadmium	70	0.96	0.9
Chromium	120,000	22	23
Chromium VI	23	ND	ND
Copper	3,100	ND	ND
Lead	400	15	15
Mercury	23	ND	ND
Nickel	1,600	21	20
Selenium	390	7.6	8.7
Silver	390	ND	ND
Zinc	23,000	70	68

O-36B

Reclamation Status	Site Stabilization
Priority	High
Pile Treatment	landfarming; nitrogen amendment
TPH Status	Fails
SAR	SAR over 12
Arsenic status	max = 21 (passes)
Forms Submitted	
Other Issues	High SAR
Actions Needed	resample fall 2013

Parameter	Table 910-1	O-36B Pit	O-36B Pile			09/26/2012	05/28/2013
	Date		09/30/2010	05/26/2011	02/28/2012		
TPH	500	81	960	970	3070	3000	1703
Benzene	0.17	ND	ND	ND	0.034	0.0067	ND
Toluene	85	ND	ND	ND	0.84	0.092	ND
Ethylbenzene	100	ND	ND	ND	0.81	0.05	0.0051
Xylenes	175	ND	0.01	ND	5.1	0.67	0.11
PAHs							
Anthracene	1,000	ND	ND	ND	0.069	0.44	0.2
Acenaphthene	1,000	ND	ND	ND	0.032	0.34	0.31
Benzo (a) anthracene	0.22	ND	ND	ND	ND	ND	ND
Benzo (b) fluoranthene	0.22	ND	ND	ND	ND	ND	ND
Benzo (k) fluoranthene	2.20	ND	ND	ND	ND	ND	ND
Benzo (a) pyrene	0.022	ND	ND	ND	ND	ND	ND
Chrysene	22	ND	ND	ND	ND	ND	ND
Dibenzo (a,h) anthracene	0.022	ND	ND	ND	ND	ND	ND
Pyrene	1,000	ND	ND	0.34	0.089	0.44	0.26
Fluoranthene	1,000	ND	ND	ND	0.01	ND	ND
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	ND	ND	ND	ND
Fluorene	1,000	ND	ND	ND	0.15	0.43	0.33
Napthalene	23	ND	ND	0.23	1.2	0.80	0.84
Inorganics							
Conductivity	4mmhos	2	3.8	2.6	4.7	4.8	3.1
SAR	12	25	21	10	20	46	27
pH	6-9	9	9.1	11	12	12	12
Arsenic	0.39	19	13	6.7	11	13	11
Barium	15,000	660	6100	5300	5800	4700	4700
Boron	2 mg/l hot water	0.34	1.5	13	26	23	20
Cadmium	70	0.92	0.7	1.4	0.97	ND	0.54
Chromium	120,000	25	24	16	18	20	21
Chromium VI	23	ND	ND	ND	ND	ND	ND
Copper	3,100	ND	ND	17	18	17	22
Lead	400	16	17	15	18	15	18
Mercury	23	0.025	0.035	0.02	0.04	0.036	0.027
Nickel	1,600	22	20	11	11	15	15
Selenium	390	5.2	1.6	7.2	ND	2.7	2
Silver	390	ND	ND	ND	ND	ND	ND
Zinc	23,000	64	83	66	68	72	76

E-33

Reclamation Status	Site Stabilization/Water Storage
Priority	High - Chevron
Pile Treatment	
TPH Status	passes
SAR	SAR below 12
Arsenic status	Max = 14 (passes)
Forms Submitted	
Other Issues	
Actions Needed	

Parameter	Table 910-1	E-33 Pile	E-33 Pit Bottom		
	Date	07/06/2012	05/23/2013	06/05/2013	#####
TPH	500	8.3	3500	480	440
Benzene	0.17	ND	ND	ND	ND
Toluene	85	ND	ND	ND	ND
Ethylbenzene	100	ND	0.13	ND	ND
Xylenes	175	ND	4.6	0.0091	ND

PAHs

Anthracene	1,000	ND	0.18	0.016	ND
Acenaphthene	1,000	ND	0.16	0.018	ND
Benzo (a) anthracene	0.22	ND	0.06	0.043	0.043
Benzo (b) fluoranthene	0.22	ND	0.1	0.089	ND
Benzo (k) fluoranthene	2.20	ND	0.034	0.022	ND
Benzo (a) pyrene	0.022	ND	0.049	0.045	ND
Chrysene	22	ND	0.1	0.069	ND
Dibenzo (a,h) anthracene	0.022	ND	0.023	0.023	ND
Pyrene	1,000	ND	0.11	0.081	ND
Fluoranthene	1,000	ND	0.082	0.057	ND
Indeno(1,2,3-cd) pyrene	0.22	ND	0.047	0.037	ND
Fluorene	1,000	ND	0.47	0.057	ND
Napthalene	23	ND	0.94	0.083	ND

Inorganics

Conductivity	4mmhos	0.19	3	2.3	4.1
SAR	12	1.2	33	21	30
pH	6-9	8.2	9.1	8.2	8.2
Arsenic	0.39	7.9	6.5	10	17
Barium	15,000	330	520	400	680
Boron	2 mg/l hot wate	ND	28	17	ND
Cadmium	70	ND	ND	ND	0.93
Chromium	120,000	39	26	30	34
Chromium VI	23	ND	ND	ND	ND
Copper	3,100	26	24	25	27
Lead	400	33	13	15	15
Mercury	23	ND	0.057	0.042	0.034
Nickel	1,600	20	17	22	18
Selenium	390	ND	ND	3.5	ND
Silver	390	ND	ND	ND	ND
Zinc	23,000	52	42	57	67

Reclamation Status	Site Stabilization/Water Storage
Priority	High - Chevron
Pile Treatment	
TPH Status	pending
SAR	
Arsenic status	not sampled
Forms Submitted	not known
Other Issues	no sample results for this site
Actions Needed	sample bk arsenic

Parameter	Table 910-1	
	Date	
TPH	500	
Benzene	0.17	
Toluene	85	
Ethylbenzene	100	
Xylenes	175	

PAHs

Anthracene	1,000	
Acenaphthene	1,000	
Benzo (a) anthracene	0.22	
Benzo (b) fluoranthene	0.22	
Benzo (k) fluoranthene	2.20	
Benzo (a) pyrene	0.022	
Chrysene	22	
Dibenzo (a,h) anthracene	0.022	
Pyrene	1,000	
Fluoranthene	1,000	
Indeno(1,2,3-cd) pyrene	0.22	
Fluorene	1,000	
Napthalene	23	

Inorganics

Conductivity	4mmhos	
SAR	12	
pH	6-9	
Arsenic	0.39	
Barium	15,000	
Boron	2 mg/l hot water	
Cadmium	70	
Chromium	120,000	
Chromium VI	23	
Copper	3,100	
Lead	400	
Mercury	23	
Nickel	1,600	
Selenium	390	
Silver	390	
Zinc	23,000	

OM I-02

Reclamation Status	Interim Reclamation
Priority	Low
Pile Treatment	mixed w native soil and rock
TPH Status	Passes
SAR	less than 12
Arsenic status	max = 5.2 (passes)
Forms Submitted	
Other Issues	
Actions Needed	Submit Forms 27 and 4

Parameter	Table 910-1	I-02 Cuttings
	Date	09/26/2012
TPH	500	230
Benzene	0.17	ND
Toluene	85	ND
Ethylbenzene	100	ND
Xylenes	175	ND

PAHs

Anthracene	1,000	0.056
Acenaphthene	1,000	ND
Benzo (a) anthracene	0.22	ND
Benzo (b) fluoranthene	0.22	ND
Benzo (k) fluoranthene	2.20	ND
Benzo (a) pyrene	0.022	ND
Chrysene	22	ND
Dibenzo (a,h) anthracene	0.022	ND
Pyrene	1,000	ND
Fluoranthene	1,000	ND
Indeno(1,2,3-cd) pyrene	0.22	ND
Fluorene	1,000	0.20
Napthalene	23	0.069

Inorganics

Conductivity	4mmhos	0.48
SAR	12	3.2
pH	6-9	8.3
Arsenic	0.39	<1
Barium	15,000	230
Boron	2 mg/l hot water	10
Cadmium	70	ND
Chromium	120,000	44
Chromium VI	23	ND
Copper	3,100	16
Lead	400	11
Mercury	23	ND
Nickel	1,600	27
Selenium	390	3.3
Silver	390	ND
Zinc	23,000	51

OM B-10

Reclamation Status	Interim Reclamation
Priority	Low
Pile Treatment	
TPH Status	Passes
SAR	SAR less than 12
Arsenic status	max = 7.1 (passes)
Forms Submitted	
Other Issues	fails for benzo(a)pyrene only
Actions Needed	resample in fall 2013

Parameter	Table 910-1	B-10 Cuttings
	Date	09/26/2012
TPH	500	42
Benzene	0.17	ND
Toluene	85	ND
Ethylbenzene	100	ND
Xylenes	175	ND

PAHs

Anthracene	1,000	ND
Acenaphthene	1,000	ND
Benzo (a) anthracene	0.22	0.05
Benzo (b) fluoranthene	0.22	0.14
Benzo (k) fluoranthene	2.20	ND
Benzo (a) pyrene	0.022	0.058
Chrysene	22	0.064
Dibenzo (a,h) anthracene	0.022	0.012
Pyrene	1,000	0.077
Fluoranthene	1,000	0.051
Indeno(1,2,3-cd) pyrene	0.22	ND
Fluorene	1,000	ND
Napthalene	23	0.056

Inorganics

Conductivity	4mmhos	0.35
SAR	12	3
pH	6-9	8.5
Arsenic	0.39	3.9
Barium	15,000	310
Boron	2 mg/l hot water	12
Cadmium	70	ND
Chromium	120,000	30
Chromium VI	23	ND
Copper	3,100	19
Lead	400	11
Mercury	23	0.032
Nickel	1,600	22
Selenium	390	3.4
Silver	390	ND
Zinc	23,000	58

OM K-15

Reclamation Status	Site Stabilization
Priority	Low
Pile Treatment	
TPH Status	Passes
SAR	Less than 12
Arsenic status	shared w OM L-15: max = 7.2 (passes)
Forms Submitted	
Other Issues	fails for benzo(a)pyrene only
Actions Needed	resample fall 2013

Parameter	Table 910-1	K-15 Cuttings
	Date	09/26/2012
TPH	500	54
Benzene	0.17	ND
Toluene	85	ND
Ethylbenzene	100	ND
Xylenes	175	ND

PAHs

Anthracene	1,000	ND
Acenaphthene	1,000	ND
Benzo (a) anthracene	0.22	0.12
Benzo (b) fluoranthene	0.22	0.20
Benzo (k) fluoranthene	2.20	ND
Benzo (a) pyrene	0.022	0.10
Chrysene	22	ND
Dibenzo (a,h) anthracene	0.022	ND
Pyrene	1,000	ND
Fluoranthene	1,000	0.14
Indeno(1,2,3-cd) pyrene	0.22	ND
Fluorene	1,000	ND
Napthalene	23	ND

Inorganics

Conductivity	4mmhos	0.75
SAR	12	4.7
pH	6-9	8.2
Arsenic	0.39	<1
Barium	15,000	370
Boron	2 mg/l hot wate	ND
Cadmium	70	ND
Chromium	120,000	34
Chromium VI	23	ND
Copper	3,100	12
Lead	400	11
Mercury	23	ND
Nickel	1,600	23
Selenium	390	3.4
Silver	390	ND
Zinc	23,000	52

E-13

Reclamation Status	Interim Reclamation
Priority	Low
Pile Treatment	
TPH Status	
SAR	
Arsenic status	not sampled
Forms Submitted	unknown
Other Issues	no sample results for this site
Actions Needed	sample bk arsenic; submit form 4 and map

Parameter	Table 910-1	
	Date	
TPH	500	
Benzene	0.17	
Toluene	85	
Ethylbenzene	100	
Xylenes	175	

PAHs

Anthracene	1,000	
Acenaphthene	1,000	
Benzo (a) anthracene	0.22	
Benzo (b) fluoranthene	0.22	
Benzo (k) fluoranthene	2.20	
Benzo (a) pyrene	0.022	
Chrysene	22	
Dibenzo (a,h) anthracene	0.022	
Pyrene	1,000	
Fluoranthene	1,000	
Indeno(1,2,3-cd) pyrene	0.22	
Fluorene	1,000	
Napthalene	23	

Inorganics

Conductivity	4mmhos	
SAR	12	
pH	6-9	
Arsenic	0.39	
Barium	15,000	
Boron	2 mg/l hot water	
Cadmium	70	
Chromium	120,000	
Chromium VI	23	
Copper	3,100	
Lead	400	
Mercury	23	
Nickel	1,600	
Selenium	390	
Silver	390	
Zinc	23,000	

C-20

Reclamation Status	Site Stabilization/Water Storage
Priority	High - Chevron
Pile Treatment	
TPH Status	Fails
SAR	SAR above 12
Arsenic status	fails: all 3 below 1 mg/kg
Forms Submitted	
Other Issues	SAR and pH above limits
Actions Needed	resample pile and bk arsenic fall 2013;

Parameter	Table 910-1	C-20 Pile		Pit Bottom
	Date	07/06/2012	09/25/2012	07/23/2013
TPH	500	1901	1200	16051
Benzene	0.17	ND	ND	0.025
Toluene	85	ND	ND	0.39
Ethylbenzene	100	ND	ND	0.11
Xylenes	175	0.016	ND	2.2

PAHs

Anthracene	1,000	0.35	ND	2.0
Acenaphthene	1,000	0.72	0.35	1.3
Benzo (a) anthracene	0.22	ND	ND	ND
Benzo (b) fluoranthene	0.22	ND	ND	ND
Benzo (k) fluoranthene	2.20	ND	ND	ND
Benzo (a) pyrene	0.022	ND	0.018	ND
Chrysene	22	ND	ND	ND
Dibenzo (a,h) anthracene	0.022	ND	ND	ND
Pyrene	1,000	0.57	0.49	0.38
Fluoranthene	1,000	0.14	0.14	0.2
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	ND
Fluorene	1,000	0.35	0.30	8.0
Napthalene	23	1.3	1.40	2.2

Inorganics

Conductivity	4mmhos	2.1	1.6	3.6
SAR	12	17	13	36
pH	6-9	11	11	11
Arsenic	0.39	6.9	8.8	9.8
Barium	15,000	640	68	1700
Boron	2 mg/l hot wate	13	19	39
Cadmium	70	ND	0.31	2.5
Chromium	120,000	48	18	37
Chromium VI	23	ND	ND	ND
Copper	3,100	17	18	30
Lead	400	40	21	26
Mercury	23	ND	ND	0.042
Nickel	1,600	15	21	10
Selenium	390	ND	ND	ND
Silver	390	ND	ND	ND
Zinc	23,000	64	54	72

I-19

Reclamation Status	Site Stabilization/Water Storage
Priority	High - Chevron
Pile Treatment	
TPH Status	passes
SAR	SAR below 12
Arsenic status	fails: all 3 below 1 mg/kg
Forms Submitted	
Other Issues	
Actions Needed	resample pit bottom and bk arsenic

Parameter	Table 910-1	I-19 Pile	Pit Bottom
	Date	07/06/2012	07/23/2013
TPH	500	42	2100
Benzene	0.17	ND	ND
Toluene	85	ND	ND
Ethylbenzene	100	ND	ND
Xylenes	175	ND	ND

PAHs

Anthracene	1,000	ND	0.58	
Acenaphthene	1,000	ND	0.06	
Benzo (a) anthracene	0.22	ND	ND	
Benzo (b) fluoranthene	0.22	ND	ND	
Benzo (k) fluoranthene	2.20	ND	ND	
Benzo (a) pyrene	0.022	ND	ND	elevated DL
Chrysene	22	ND	ND	
Dibenzo (a,h) anthracene	0.022	ND	ND	elevated DL
Pyrene	1,000	0.0079	0.073	
Fluoranthene	1,000	ND	ND	
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	
Fluorene	1,000	ND	1.2	
Napthalene	23	0.022	ND	

Inorganics

Conductivity	4mmhos	0.6	3.1
SAR	12	3.3	25
pH	6-9	8.4	8.8
Arsenic	0.39	4.3	9.7
Barium	15,000	560	1800
Boron	2 mg/l hot water	ND	11
Cadmium	70	ND	1.2
Chromium	120,000	28	41
Chromium VI	23	ND	ND
Copper	3,100	14	31
Lead	400	12	21
Mercury	23	ND	0.067
Nickel	1,600	13	14
Selenium	390	ND	ND
Silver	390	ND	ND
Zinc	23,000	52	59

LR D-21

Reclamation Status	Interim Reclamation
Priority	Not drilled
Pile Treatment	
TPH Status	
SAR	
Arsenic status	not sampled
Forms Submitted	unknown
Other Issues	no sample results for this site
Actions Needed	None

Parameter	Table 910-1	
	Date	
TPH	500	
Benzene	0.17	
Toluene	85	
Ethylbenzene	100	
Xylenes	175	

PAHs

Anthracene	1,000	
Acenaphthene	1,000	
Benzo (a) anthracene	0.22	
Benzo (b) fluoranthene	0.22	
Benzo (k) fluoranthene	2.20	
Benzo (a) pyrene	0.022	
Chrysene	22	
Dibenzo (a,h) anthracene	0.022	
Pyrene	1,000	
Fluoranthene	1,000	
Indeno(1,2,3-cd) pyrene	0.22	
Fluorene	1,000	
Napthalene	23	

Inorganics

Conductivity	4mmhos	
SAR	12	
pH	6-9	
Arsenic	0.39	
Barium	15,000	
Boron	2 mg/l hot water	
Cadmium	70	
Chromium	120,000	
Chromium VI	23	
Copper	3,100	
Lead	400	
Mercury	23	
Nickel	1,600	
Selenium	390	
Silver	390	
Zinc	23,000	

F-30

Reclamation Status	Site Stabilization/Water Storage
Priority	High - Chevron
Pile Treatment	none
TPH Status	passes
SAR	SAR below 12
Arsenic status	max = 3.2 (fails)
Forms Submitted	
Other Issues	cuttings spread on side of well pad
Actions Needed	resample pit bottom and bk arsenic

Parameter	Table 910-1	Cuttings	Boreholes	Pit Bottom
	Date	08/01/2012	09/25/2012	07/23/2013
TPH	500	260	89	1200
Benzene	0.17	ND	ND	ND
Toluene	85	ND	ND	ND
Ethylbenzene	100	ND	ND	ND
Xylenes	175	ND	ND	ND

PAHs

Anthracene	1,000	ND	0.0064	ND
Acenaphthene	1,000	ND	ND	0.022
Benzo (a) anthracene	0.22	0.007	0.022	ND
Benzo (b) fluoranthene	0.22	0.043	0.046	0.019
Benzo (k) fluoranthene	2.20	0.006	0.0095	ND
Benzo (a) pyrene	0.022	0.012	0.02	ND
Chrysene	22	0.01	0.025	ND
Dibenzo (a,h) anthracene	0.022	ND	0.007	ND
Pyrene	1,000	0.017	0.031	0.017
Fluoranthene	1,000	0.015	0.042	0.016
Indeno(1,2,3-cd) pyrene	0.22	ND	0.016	ND
Fluorene	1,000	ND	0.0061	0.2
Napthalene	23	0.034	0.022	0.026

Inorganics

Conductivity	4mmhos	1.3	0.64	5.0
SAR	12	2.7	2.2	24
pH	6-9	8.2	8.3	7.9
Arsenic	0.39	<1	9.4	8.1
Barium	15,000	1100	59	2700
Boron	2 mg/l hot wate	17	15	16
Cadmium	70	0.65	0.33	ND
Chromium	120,000	28	15	25
Chromium VI	23	ND	ND	ND
Copper	3,100	17	15	18
Lead	400	16	20	11
Mercury	23	ND	ND	0.046
Nickel	1,600	20	19	17
Selenium	390	ND	ND	ND
Silver	390	ND	ND	ND
Zinc	23,000	71	44	48

O-32

Reclamation Status	Site Stabilization/Water Storage
Priority	Low
Pile Treatment	sawdust
TPH Status	Passes
SAR	SAR under 12
Arsenic status	max = 7.8 (passes)
Forms Submitted	
Other Issues	PAH detection limits
Actions Needed	submit Forms 27 and 4

Parameter	Table 910-1	O-32 Pile
	Date	07/11/2011
TPH	500	251
Benzene	0.17	ND
Toluene	85	ND
Ethylbenzene	100	ND
Xylenes	175	ND

PAHs

Anthracene	1,000	ND
Acenaphthene	1,000	ND
Benzo (a) anthracene	0.22	ND
Benzo (b) fluoranthene	0.22	ND
Benzo (k) fluoranthene	2.20	ND
Benzo (a) pyrene	0.022	ND
Chrysene	22	ND
Dibenzo (a,h) anthracene	0.022	ND
Pyrene	1,000	ND
Fluoranthene	1,000	ND
Indeno(1,2,3-cd) pyrene	0.22	ND
Fluorene	1,000	0.041
Napthalene	23	0.057

Inorganics

Conductivity	4mmhos	0.43
SAR	12	4.7
pH	6-9	7.7
Arsenic	0.39	5.1
Barium	15,000	400
Boron	2 mg/l hot water	ND
Cadmium	70	ND
Chromium	120,000	24
Chromium VI	23	ND
Copper	3,100	22
Lead	400	15
Mercury	23	0.037
Nickel	1,600	16
Selenium	390	ND
Silver	390	ND
Zinc	23,000	53

O-06

Reclamation Status	Site Stabilization/Water Storage
Priority	High - Chevron
Pile Treatment	sawdust and landfarming
TPH Status	Fails
SAR	SAR under 12
Arsenic status	not sampled
Form 27 and Sundry Submitted?	
Other Issues	Bk Arsenic needed; PAHs
Actions Needed	resample pile and bk arsenic fall 2013

Parameter	Table 910-1	O-06 Pile		
		Date	07/11/2011	10/02/2011
TPH	500	960	1700	750
Benzene	0.17	ND	ND	ND
Toluene	85	ND	ND	ND
Ethylbenzene	100	ND	ND	ND
Xylenes	175	ND	ND	ND

PAHs				
Parameter	Table 910-1	07/11/2011	10/02/2011	09/24/2012
Anthracene	1,000	0.043	ND	ND
Acenaphthene	1,000	ND	ND	ND
Benzo (a) anthracene	0.22	0.11	0.13	ND
Benzo (b) fluoranthene	0.22	0.25	0.34	0.24
Benzo (k) fluoranthene	2.20	0.082	ND	ND
Benzo (a) pyrene	0.022	0.15	0.16	0.15
Chrysene	22	0.1	0.14	0.13
Dibenzo (a,h) anthracene	0.022	ND	0.037	0.044
Pyrene	1,000	0.26	0.095	0.23
Fluoranthene	1,000	0.18	0.23	0.15
Indeno(1,2,3-cd) pyrene	0.22	0.063	ND	ND
Fluorene	1,000	0.055	ND	ND
Napthalene	23	0.2	0.23	0.43

Inorganics				
Parameter	Table 910-1	07/11/2011	10/02/2011	09/24/2012
Conductivity	4mmhos	0.7	0.98	0.95
SAR	12	5.6	5.2	4.8
pH	6-9	7.8	7.8	8.2
Arsenic	0.39	4.8	6.6	9.8
Barium	15,000	690	640	590
Boron	2 mg/l hot water	ND	12	11
Cadmium	70	ND	ND	0.36
Chromium	120,000	16	21	21
Chromium VI	23	ND	ND	ND
Copper	3,100	18	24	22
Lead	400	10	13	17
Mercury	23	0.02	0.031	0.022
Nickel	1,600	11	21	17
Selenium	390	ND	ND	ND
Silver	390	ND	ND	ND
Zinc	23,000	46	54	59

O-29

Reclamation Status	Site Stabilization/Water Storage
Priority	High
Pile Treatment	Two piles - landfarm; sawdust and landfarm
TPH Status	passes for both piles
SAR	SAR under 12 for both piles
Arsenic status	
Forms Submitted	
Other Issues	one PAH fails for pit material pile
Actions Needed	

Parameter	Table 910-1	O-29 Pit Pile			O-29 Cuttings
	Date	05/27/2011	08/01/2012	06/05/2013	08/01/2012
TPH	500	1390	160	28	26
Benzene	0.17	0.64	ND	ND	ND
Toluene	85	1.5	ND	ND	ND
Ethylbenzene	100	2	ND	ND	ND
Xylenes	175	7.1	ND	ND	ND

PAHs					
Anthracene	1,000	0.084	0.012	0.0085	ND
Acenaphthene	1,000	ND	0.007	ND	ND
Benzo (a) anthracene	0.22	0.038	0.035	0.021	0.013
Benzo (b) fluoranthene	0.22	ND	0.092	0.031	0.041
Benzo (k) fluoranthene	2.20	ND	0.029	0.0084	0.0096
Benzo (a) pyrene	0.022	ND	0.032	0.017	0.014
Chrysene	22	0.049	0.041	0.033	0.018
Dibenzo (a,h) anthracene	0.022	ND	ND	0.007	ND
Pyrene	1,000	0.1	0.045	0.034	0.013
Fluoranthene	1,000	0.066	0.061	0.034	0.018
Indeno(1,2,3-cd) pyrene	0.22	ND	0.0097	0.012	ND
Fluorene	1,000	0.2	0.021	0.014	ND
Napthalene	23	0.17	0.029	0.034	0.009

Inorganics					
Conductivity	4mmhos	0.86	0.74	0.55	0.38
SAR	12	20	4.6	3.5	3.1
pH	6-9	7.7	7.8	8	8.2
Arsenic	0.39	9.7	4.2	11	3.1
Barium	15,000	540	400	370	280
Boron	2 mg/l hot water	ND	11	ND	12
Cadmium	70	1.7	ND	ND	ND
Chromium	120,000	26	28	31	29
Chromium VI	23	ND	ND	ND	ND
Copper	3,100	23	23	22	17
Lead	400	16	15	16	13
Mercury	23	0.057	0.033	0.026	ND
Nickel	1,600	15	21	20	18
Selenium	390	ND	ND	3	ND
Silver	390	ND	ND	ND	ND
Zinc	23,000	54	66	59	52

CD-32

Reclamation Status	Site Stabilization/Water Storage
Priority	Low
Pile Treatment	mixed w native soil
TPH Status	passes
SAR	SAR under 12
Arsenic status	max = 22 (passes)
Form 27 and Sundry Submitted?	No
Other Issues	
Actions Needed	submit forms

Parameter	Table 910-1	CD-32 Pile
	Date	05/27/2011
TPH	500	40
Benzene	0.17	ND
Toluene	85	ND
Ethylbenzene	100	ND
Xylenes	175	ND

PAHs

Anthracene	1,000	ND
Acenaphthene	1,000	ND
Benzo (a) anthracene	0.22	ND
Benzo (b) fluoranthene	0.22	ND
Benzo (k) fluoranthene	2.20	ND
Benzo (a) pyrene	0.022	ND
Chrysene	22	ND
Dibenzo (a,h) anthracene	0.022	ND
Pyrene	1,000	ND
Fluoranthene	1,000	ND
Indeno(1,2,3-cd) pyrene	0.22	ND
Fluorene	1,000	ND
Napthalene	23	ND

Inorganics

Conductivity	4mmhos	0.56
SAR	12	3.7
pH	6-9	7.8
Arsenic	0.39	6.8
Barium	15,000	390
Boron	2 mg/l hot water	<10
Cadmium	70	1.5
Chromium	120,000	23
Chromium VI	23	<2
Copper	3,100	23
Lead	400	14
Mercury	23	0.02
Nickel	1,600	16
Selenium	390	1
Silver	390	<0.5
Zinc	23,000	50

J-20

Reclamation Status	Site Stabilization/Water Storage
Priority	High - Chevron
Pile Treatment	landfarming and nitrogen amendment
TPH Status	passes
SAR	SAR under 12
Arsenic	Max = 13 (passes)
Forms Submitted	
Other Issues	fails for benzo(a)pyrene only
Actions Needed	resample pit bottom; sample landfarm fall 2013

Parameter	Table 910-1	J-20 Pile		Pit Bottom
	Date	05/03/2012	09/25/2012	07/23/2013
TPH	500	300	257.8	840
Benzene	0.17	ND	0.0025	ND
Toluene	85	ND	ND	ND
Ethylbenzene	100	ND	0.017	ND
Xylenes	175	ND	0.026	ND

PAHs

Anthracene	1,000	0.034	0.044	ND
Acenaphthene	1,000	0.022	0.05	0.018
Benzo (a) anthracene	0.22	0.035	0.03	0.016
Benzo (b) fluoranthene	0.22	0.075	0.042	0.023
Benzo (k) fluoranthene	2.20	0.02	0.01	ND
Benzo (a) pyrene	0.022	0.051	0.028	0.017
Chrysene	22	0.052	0.029	0.02
Dibenzo (a,h) anthracene	0.022	0.014	0.0065	ND
Pyrene	1,000	0.15	0.049	0.059
Fluoranthene	1,000	0.053	0.051	0.023
Indeno(1,2,3-cd) pyrene	0.22	0.03	0.016	ND
Fluorene	1,000	0.042	0.069	0.02
Napthalene	23	0.22	0.16	0.084

Inorganics

Conductivity	4mmhos	1.2	0.97	1.4
SAR	12	9.2	7.9	4
pH	6-9	8.3	8.1	8.4
Arsenic	0.39	7.4	6.6	8.2
Barium	15,000	270	260	640
Boron	2 mg/l hot water	13	11	ND
Cadmium	70	ND	0.36	0.99
Chromium	120,000	14	13	27
Chromium VI	23	<2	<2	ND
Copper	3,100	17	14	22
Lead	400	11	15	14
Mercury	23	ND	ND	ND
Nickel	1,600	10	9	12
Selenium	390	ND	ND	ND
Silver	390	ND	ND	ND
Zinc	23,000	40	45	60

J-13

Reclamation Status	Site Stabilization
Priority	High
Pile Treatment	1st mixed w sawdust and landfarmed; 2nd pile unknown
TPH Status	1st pile fails; 2nd large pile ok
SAR	SAR under 12 for both piles
Arsenic status	max = 2.5 (fails)
Forms Submitted	
Other Issues	2nd large pile found in Aug; PAHs fail for both piles
Actions Needed	

Parameter	Table 910-1	J-13 Pile (1st)				J-13 Pit		J-13 2r
	Date	05/27/2011	10/02/2011	01/04/2012	05/28/2013	05/27/2011	10/02/2011	09/06/2012
TPH	500	670	1408	1420	120	261.2		150
Benzene	0.17	0.12	ND	ND	ND	ND		ND
Toluene	85	0.18	ND	0.026	ND	ND		ND
Ethylbenzene	100	0.18	0.015	0.047	ND	ND		ND
Xylenes	175	1.2	0.3	0.21	ND	ND		ND
PAHs								
Anthracene	1,000	ND	0.068	0.062	0.011	ND	ND	ND
Acenaphthene	1,000	ND	0.082	0.065	0.013	ND	0.033	ND
Benzo (a) anthracene	0.22	ND	0.13	0.14	0.069	ND	0.14	0.094
Benzo (b) fluoranthene	0.22	0.037	0.35	0.35	0.19	ND	0.34	0.17
Benzo (k) fluoranthene	2.20	ND	0.091	0.11	0.064	ND	0.076	0.036
Benzo (a) pyrene	0.022	ND	0.14	0.13	0.099	ND	0.098	0.08
Chrysene	22	ND	0.18	0.14	0.12	ND	0.17	0.094
Dibenzo (a,h) anthracene	0.022	ND	0.036	0.018	0.024	ND	0.032	ND
Pyrene	1,000	0.069	0.5	0.44	0.097	0.18	0.27	0.11
Fluoranthene	1,000	0.087	0.48	0.38	0.079	0.16	0.32	0.15
Indeno(1,2,3-cd) pyrene	0.22	ND	0.057	0.035	0.07	ND	0.046	0.062
Fluorene	1,000	0.071	0.2	0.083	0.03	0.17	0.08	ND
Napthalene	23	0.067	0.25	0.13	0.12	ND	0.18	0.085
Inorganics								
Conductivity	4mmhos	0.78	1.1	1.2	0.83	0.36		0.56
SAR	12	8.8	8.7	7.4	3.9	11		3.8
pH	6-9	7.7	7.8	7.7	8.1	8.8		8.4
Arsenic	0.39	4.8	4.4	7.2	7.8	6.9		3.9
Barium	15,000	560	650	710	490	1000		450
Boron	2 mg/l hot water	<10	15	11	ND	<10		12
Cadmium	70	1.2	<0.25	<0.25	ND	1.8		<1.2
Chromium	120,000	19	22	28	29	25		30
Chromium VI	23	<2	<2	<2	ND	<2		<10
Copper	3,100	21	26	26	27	24		24
Lead	400	13	15	16	15	15		35
Mercury	23	0.054	0.058	0.056	0.033	0.033		0.024
Nickel	1,600	12	22	20	21	20		22
Selenium	390	1.1	<1	<1	1.3	<1		<1
Silver	390	<0.5	<0.5	<0.5	ND	<0.5		<0.5
Zinc	23,000	45	57	58	59	52		59

EL-12/I-11

Reclamation Status	Interim Reclamation Completed
TPH Status	passes
Forms Submitted	Unknown
Other Issues	Site closed w/o Sundry; EL-12 cuttings moved to I-11

Parameter	Table 910-1	EL-12 Pit	EL-12 Pit	EL-12 Cuttings	I-11 Pit
	Date	08/12/2009	10/08/2009	"I-11 Pile" 10/08/2009	12/14/2009
TPH	500	91	130	240	46
Benzene	0.17	0	ND	ND	ND
Toluene	85	13	ND	ND	ND
Ethylbenzene	100	0	ND	ND	ND
Xylenes	175	95	ND	ND	ND

PAHs

Anthracene	1,000	ND	ND	ND	ND
Acenaphthene	1,000				
Benzo (a) anthracene	0.22	ND	ND	ND	ND
Benzo (b) fluoranthene	0.22	ND	ND	ND	ND
Benzo (k) fluoranthene	2.20	ND	ND	ND	ND
Benzo (a) pyrene	0.022	ND	ND	ND	ND
Chrysene	22	ND	ND	ND	ND
Dibenzo (a,h) anthracene	0.022	ND	ND	ND	ND
Pyrene	1,000	ND	0.22	0.78	ND
Fluoranthene	1,000	ND	0.23	0.79	ND
Indeno(1,2,3-cd) pyrene	0.22	ND	ND	ND	ND
Fluorene	1,000	ND	ND	ND	ND
Napthalene	23	76	ND	ND	ND

Inorganics

Conductivity	4mmhos		0.967	1.97	0.24
SAR	12	1.70	9.5	9.5	0.95
pH	6-9	7.25	8.94	9.17	8.4
Arsenic	0.39	12	13	8.7	4.8
Barium	15,000	10	870	610	370
Boron	2 mg/l hot water	0.16	0.23	0.62	ND
Cadmium	70	ND	ND	ND	0.87
Chromium	120,000	14	20	14	45
Chromium VI	23	ND	ND	ND	ND
Copper	3,100	19	24	23	21
Lead	400	10	18	14	16
Mercury	23	0.03	0.04	0.023	0.024
Nickel	1,600	20	21	15	26
Selenium	390	ND	ND	ND	ND
Silver	390	ND	ND	ND	ND
Zinc	23,000	45	47	40	58