Table 4-2
Summary of ESI Source Sediment and Soil Analytical Data
Fansteel Metals/FMRI
EPA Region 6

Analyte	SCDM Benchmark (lowest value)	Backgroud (SED-BKG) or RL	CAS.NO	Units	Station Sample ID Date Type	P8 SED-P8-20190408 4/8/2019 Field Sample		P8 SED-DUP1-20190408 4/8/2019 Field Duplicate		P9 SED-P9-20190408 4/8/2019 Field Sample		SS SS-STP-20190408 4/8/2019 Field Sample		SS SS-DUP1-20190408 4/8/2019 Field Duplicate	
SVOC															
1,1Â´-Biphenyl	-	8.1	92-52-4	ug/kg	--	9.5	U	9.8	U	9.2	U	**4**	JQ	1.9	U
2,3,4,6-Tetrachlorophenol	-	8.1	58-90-2	ug/kg	--	16	U	17	U	16	U	3.3	U	3.3	U
2,4,6-Trichlorophenol		8.1	88-06-2	ug/kg	--	9.5	U	9.8	U	9.2	U	1.9	U	1.9	U
2,4-Dichlorophenol	4000	8.1	120-83-2	ug/kg	--	7.3	U	7.5	U	7	U	1.5	U	1.5	U
2-Methylnaphthalene	6000	8.1	91-57-6	ug/kg	--	2.8	U	2.9	U	**19**		**8.1**		0.57	U
3&4-Methylphenol	100000	8.1	3/4-CRESOL	ug/kg	--	5.6	U	5.8	U	5.4	U	1.1	U	1.1	U
Acenaphthene	90000	4.1	83-32-9	ug/kg	--	2.8	U	2.9	U	2.7	U	**50**	JK	0.57	UJK
Anthracene	400000	4.1	120-12-7	ug/kg	--	**3**	JQ	**7.2**	JQ	2.7	U	**130**	JK	**1.8**	JQK
Benz(a)anthracene	40	4.1	56-55-3	ug/kg	--	**13**	JQ	9.3	U	8.7	U	**330**	JK	**7**	JK
Benzaldehyde	-	8.1	100-52-7	ug/kg	--	**38**	n	6.9	U	6.5	U	1.4	U	1.4	U
Benzo(a)pyrene	4	4.1	50-32-8	ug/kg	--	**13**	JQ	**8.2**	JQ	**14**	JQ	**280**	JK	**7.6**	JK
Benzo(b)fluoranthene	-	4.1	205-99-2	ug/kg	--	**18**	JQ	**18**	JQ	6.5	U	**360**	JK	**11**	JK
Benzo(g,h,i)perylene	-	4.1	191-24-2	ug/kg	--	3.9	U	4.1	U	3.8	U	**170**	JK	**5.2**	JK
Benzo(k)fluoranthene	400	4.1	207-08-9	ug/kg	--	**14**	JQ	**6.4**	JQ	**12**	JQ	**160**	JK	**6.7**	JK
Bis(2-ethylhexyl)phthalate	290	8.1	117-81-7	ug/kg	--	**19**	JQ	**12**	JQ	**39**		**8.4**		**3.5**	JQ
Butyl benzyl phthalate	2100	8.1	85-68-7	ug/kg	--	7.3	U	7.5	U	7	U	1.5	U	1.5	U
Carbazole	-	8.1	86-74-8	ug/kg	--	6.7	U	6.9	U	6.5	U	**110**	JK	1.4	U
Chrysene	4000	4.1	218-01-9	ug/kg	--	**19**		**12**	JQ	4.3	U	**370**	JK	**10**	JK
Dibenz(a,h)anthracene	4	4.1	53-70-3	ug/kg	--	9	U	9.3	U	8.7	U	**84**	JK	1.8	U
Dibenzofuran	1000	4.1	132-64-9	ug/kg	--	3.9	U	**6.9**	JQ	3.8	U	**34**	JK	0.8	U
Di-n-butyl phthalate	100000	8.1	84-74-2	ug/kg	--	6.7	U	6.9	U	6.5	U	**3.9**	JQ	**6.4**	JQ
Fluoranthene	60000	4.1	206-44-0	ug/kg	--	**35**		**21**		**16**	JQ	**720**	JK	**17**	JK
Fluorene	60000	4.1	86-73-7	ug/kg	--	6.2	U	**10**	JQ	6	U	**42**	JK	1.3	UJK
Indeno(1,2,3-cd)pyrene	400	4.1	193-39-5	ug/kg	--	**8.5**	JQ	4.6	U	4.3	U	**200**	JK	0.91	UJK
Naphthalene	30000	4.1	91-20-3	ug/kg	--	3.4	U	3.5	U	3.2	U	**11**		0.68	U
Pentachlorophenol	10	8.1	87-86-5	ug/kg	--	19	U	19	U	18	U	3.8	U	3.8	U
Phenanthrene	-	4.1	85-01-8	ug/kg	--	**23**		**49**		**18**	JQ	**620**	JK	**8.9**	JK
Pyrene	40000	4.1	129-00-0	ug/kg	--	**28**		**16**	JQ	**25**		**580**	JK	**17**	JK
PCBs															
Aroclor-1254	2	21	11097-69-1	ug/Kg-dry	--	19	U	20	U	19	U	5.4	UJK	**210**	JK
VOC															
Toluene	100,000	5	108-88-3	ug/Kg-dry	--	**6**	JQ	2.4	U	1.8	U	**1.7**	JQ	**1.5**	JQ

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Metals															
Aluminum		7390	7429-90-5	mg/Kg-dry	--	26300		31200		37800		21800		22300	
Antimony		0.605	7440-36-0	mg/Kg-dry	--	0.686	JQL	0.908	JQL	1.13	JQL	0.372	JQL	0.484	JQL
Arsenic	0.0027	0.865	7440-38-2	mg/Kg-dry	--	19		19.6		21.3		6.06		6.38	
Barium	300	23.4	7440-39-3	mg/Kg-dry	--	125		156		133		690	JK	401	JK
Beryllium	3	0.605	7440-41-7	mg/Kg-dry	--	8.87		10.4		13.8		0.927		0.979	
Cadmium	0.7	0.605	7440-43-9	mg/Kg-dry	--	1.64		1.85		2.78		0.277	JQL	0.324	JQ
Calcium	-	568	7440-70-2	mg/Kg-dry	--	259000	JL	261000	JL	258000	JL	7040	JL	8640	JL
Chromium	0.0083	2.69	7440-47-3	mg/Kg-dry	--	299	JL	352	JL	1080	JL	66.8	JK	39.2	JK
Cobalt	0.4	0.904	7440-48-4	mg/Kg-dry	--	9.8		11.7		19		5.14		4.91	
Copper	60	0.548	7440-50-8	mg/Kg-dry	--	12.7		14.1		19		12		11	
Iron	1000	2230	7439-89-6	mg/Kg-dry	--	16000		22500		32200		16700		12600	
Lead	-	1.79	7439-92-1	mg/Kg-dry	--	9.96		12.1		10.5		113		116	
Magnesium	-	235	7439-95-4	mg/Kg-dry	--	7590		6500		4890		2410		2250	
Manganese	210	44.2	7439-96-5	mg/Kg-dry	--	7660		9070		15000		390		326	
Nickel	30	6.3	7440-02-0	mg/Kg-dry	--	47.1	JL	46.5	JL	73.1	JL	24.4	JL	19.3	JL
Potassium	-	151	2023695	mg/Kg-dry	--	1580	JL	2120	JL	1310	JL	4420	JL	4480	JL
Selenium	7	0.167	7782-49-2	mg/Kg-dry	--	4.9		5.31		5.21		4.93		5.42	
Silver	7	0.605	7440-22-4	mg/Kg-dry	--	2.7		3.09		5.05		1.58		2.23	
Sodium	-	96.8	7440-23-5	mg/Kg-dry	--	1200		1460		1190		1030		1480	
Zinc	400	4.21	7440-66-6	mg/Kg-dry	--	108	JK	194	JK	153	JL	52	JL	39.4	JL
Mercury	240	0.974	7439-97-6	ug/Kg-dry	--	41.6		75.8		47		199		181	
Cyanide- Total	0.9	2.45	57-12-5	mg/Kg-dry	--	1.24	JQ	1.18	J	0.93	JQ	0.326	U	0.314	U
RAD*															
Ra-226	3,950	0.7	13982-63-3	pCi/g	--	12		13.1		28		88.1		81.5	
Ra-228	1,420	0.92	15262-20-1	pCi/g	--	12.7		12.4		25.7		18		15.2	
Th-228	4,820	0.98	14274-82-9	pCi/g	--	13.1		13.9		26.3		16.1		18.5	
Th-230	17,100	0.56	14269-63-7	pCi/g	--	15.7		17		29.4		63		72	
Th-232	15,300	1.05	7440-29-1	pCi/g	--	13.4		14.1		23.6		15.8		18.6	
U-234	21,300	0.49	13966-29-5	pCi/g	--	75		93		267	JL	42.7		47.3	
U-235	20,800	0.026	15117-96-1	pCi/g	--	3.65		4.2		12.2	JL	2.48		2.69	
U-238	16,800	0.52	7440-61-1	pCi/g	--	78		94		279	JL	44.5		48.7	

Note:
ug/L - microgram per liter, mg/L - milligram per liter ,
pCi/g - picocurie per gram

Highlighted yellow - Above 3x Background or R

Highlighted orange - above lowest SCDM benchmark

U - Analyzed but not detected

J - Analyte detected below Quantitation Limit

H - Biased high

L - Biased low

K - Unknown bias

Q - The reported concentration is less than the sample quantitation limit for the specific analyte in the sample.

* Rad results compared to 3x background or RL, not 2 standard deviations above the mean