

**Analytical Results from the First Measurable
Storm Event Following Installation of
Control Measures at M-SMA-10.01**

December 7, 2012

NPDES PERMIT NO. NM0030759

LA-UR-12-26539

Tables 1 and 2 present the analytical results received from the confirmation monitoring sample collected at 1:34 pm on October 12, 2012, from the first measurable storm event following the installation of enhanced controls at Site Monitoring Area (SMA) M-SMA-10.01. The descriptions and photographs of each enhanced control installed at M-SMA-10.01 were provided to the U.S. Environmental Protection Agency on October 25, 2012 (EP2012-0262/LA-UR-12-24816) and are resubmitted here. Table 3 presents each applicable target action level (TAL) for the analytes monitored.

**Table 1
Radioactivity Results from the First Measurable Storm Event**

Sample ID	Analyte	Field Prep	Detect Status	Result (pCi/L)	Minimum Detectable Activity	Uncertainty	Qualifier	Data Receipt Date
WT_IPMOR-12-23510	Gross alpha	Unfiltered	Detect	19.6	2.88	1.75	NQ*	11/15/2012
WT_IPMOR-12-23510	Radium-226 and Radium-228	Unfiltered	Detect	3.99	1.11	0.57	NQ	11/15/2012

*NQ = Result is not qualified.

**Table 2
Metals and Cyanide Results from the First Measurable Storm Event**

Sample ID	Analyte	Field Prep	Detect Status	Result (µg/L)	Method Detection Limit	Quantitation Limit	Qualifier*	Data Receipt Date
WT_IPMOR-12-23512	Aluminum	Filtered	Detect	121	15	50	NQ	11/15/2012
WT_IPMOR-12-23512	Antimony	Filtered	Nondetect	1	1	3	U	11/15/2012
WT_IPMOR-12-23512	Arsenic	Filtered	Nondetect	1.7	1.7	5	U	11/15/2012
WT_IPMOR-12-23512	Boron	Filtered	Nondetect	15	15	50	U	11/15/2012
WT_IPMOR-12-23512	Cadmium	Filtered	Nondetect	0.11	0.11	1	U	11/15/2012
WT_IPMOR-12-23512	Chromium	Filtered	Nondetect	2	2	10	U	11/15/2012
WT_IPMOR-12-23512	Cobalt	Filtered	Detect	2.48	1	5	J	11/15/2012
WT_IPMOR-12-23512	Copper	Filtered	Detect	2.35	0.35	1	NQ	11/15/2012
WT_IPMOR-12-23510	Cyanide, weak acid dissociable	Unfiltered	Nondetect	1.67	1.67	5	U	11/15/2012
WT_IPMOR-12-23512	Lead	Filtered	Nondetect	0.5	0.5	2	U	11/15/2012
WT_IPMOR-12-23510	Mercury	Unfiltered	Nondetect	0.067	0.067	0.2	U	11/15/2012
WT_IPMOR-12-23512	Nickel	Filtered	Detect	1.69	0.5	2	J	11/15/2012
WT_IPMOR-12-23510	Selenium	Unfiltered	Nondetect	1.5	1.5	5	U	11/15/2012

Table 2 (continued)

Sample ID	Analyte	Field Prep	Detect Status	Result (µg/L)	Method Detection Limit	Quantitation Limit	Qualifier*	Data Receipt Date
WT_IPMOR-12-23512	Silver	Filtered	Nondetect	0.2	0.2	1	U	11/15/2012
WT_IPMOR-12-23512	Thallium	Filtered	Nondetect	0.45	0.45	2	U	11/15/2012
WT_IPMOR-12-23512	Vanadium	Filtered	Detect	2.49	1	5	J	11/15/2012
WT_IPMOR-12-23512	Zinc	Filtered	Nondetect	3.3	3.3	10	U	11/15/2012

* NQ = Result is not qualified; U = Result is not detected; J = Result is detected and is estimated to be between the method detection limit and the quantitation limit.

Table 3
Applicable TALs

Analyte	Units	CAS No.	MQL	ATAL	MTAL
Aluminum, Dissolved	µg/L	7429-90-5	2.5	n/a*	750
Antimony, Dissolved	µg/L	7440-36-0	60	640	n/a
Arsenic, Dissolved	µg/L	7440-38-2	0.5	9	340
Boron, Dissolved	µg/L	7440-72-8	100	5000	n/a
Cadmium, Dissolved	µg/L	7440-43-9	1	n/a	0.6
Chromium, Dissolved	µg/L	7440-47-3	10	n/a	210
Cobalt, Dissolved	µg/L	7440-48-4	50	1000	n/a
Copper, Dissolved	µg/L	7440-40-8	0.5	n/a	4.3
Cyanide, Weak Acid Dissociable	µg/L	57-12-5	10	5.2	22
Lead, Dissolved	µg/L	7439-92-1	0.5	n/a	17
Mercury	µg/L	7439-97-6	0.005	0.77	1.4
Nickel, Dissolved	µg/L	7440-02-0	0.5	n/a	170
Selenium	µg/L	7782-49-2	5	5	20
Silver, Dissolved	µg/L	7440-22-4	0.5	n/a	0.4
Thallium, Dissolved	µg/L	7440-28-0	0.5	6.3	n/a
Vanadium, Dissolved	µg/L	7440-62-2	50	100	n/a
Zinc, Dissolved	µg/L	7440-66-6	20	n/a	42
Gross Alpha	pCi/L	n/a	n/a	15	n/a
Radium-226 and Radium-228	pCi/L	n/a	n/a	30	n/a

Notes: CAS = Chemical Abstracts Service; MQL = minimum quantification level; ATAL = average TAL; MTAL = maximum TAL.

* n/a = Value is not applicable.



M012A03010006 and M012A03010007 Berms—Earthen Berm