John Young

TA [redacted] 35

From: Johansen, Mathew [mjohansen@doeal.gov]
Sent: Thursday, December 16, 2004 5:04 PM
To: 'John Young'; laurie trevizo
Cc: 'nylander@lanl.gov'; 'groffman@lanl.gov'; Johansen, Mathew; Whitacre, Thomas; 'katzman@lanl.gov'
Subject: ~~heads-up results~~ Well Analytical Results

John, Laurie,

This is to update you ahead of the holiday break on recent data. It is not a complete set, but we want to provide some of the more interesting recent data to you.

Attached are screening results from groundwater samples collected as part of the Mortandad Canyon characterization effort and drilling of R-6 on the mesa east of TA-21.

In addition, acetone was detected in screen-1, R-20 in the last four rounds of characterization sampling. Results include 209 ppb in March 9, 2004; 136 ppb in May 11, 2004; 164 ppb in September 20, 2004; and 54.8 ppb from the last sample round collected on November 3, 2004. An additional sampling round is planned for February 2005. We believe the acetone is related to the drilling fluids and would like to discuss this more with you.

In addition, Pat believes that ICPMS results from R-33 borehole samples show low levels of lanthanum series contaminants. The attachment does not include this data, but we'll provide it too you as soon as you would like after the break (when personnel are available).

If there are any questions please contact Armand Groffman 667-2682, Charlie, or me. I will be out until early January.

Happy Holidays.

Mat

LANL [redacted] Groundwater TA-3, TA-21, TA-54, Mortandad Canyon)

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Sample Id	Location	Collection Date	ClO4 (ppb)	NO2 (ppm)	NO3 (ppm)	(NO3+NO2) (ppm)	Sample Type	Geological Interval	Watershed
;AMO-04-5562	RES-2	10/20/04	45.0	<0.01	11.00	2.49	open borehole	alluvium	Mortandad Canyon
;AMO-04-5561	RES-4	09/23/04	22.0	<0.01	9.10	2.06	open borehole	alluvium	Mortandad Canyon
;AMO-04-5561	RES-4	09/22/04	26.0	<0.01	11.10	2.51	open borehole	alluvium	Mortandad Canyon
;AMO-04-5556	A-2	10/24/04	101.0	0.03	48.60	11.00	open borehole	alluvium	Mortandad Canyon
;AMO-04-5556	A-2 duplicate	10/24/04	112.0	0.02	49.00	11.09	open borehole	alluvium	Mortandad Canyon
;AMO-04-5552	B-6	10/27/04	<2.0	<0.01	0.01	0.00	open borehole	alluvium	Mortandad Canyon
;AMO-04-5550	B-8	10/19/04	48.0	<0.01	19.20	4.34	open borehole	alluvium	Mortandad Canyon
;AMO-04-5550	B-9	10/10/04	75.0	0.11	22.90	5.21	open borehole	alluvium	Mortandad Canyon
;AMO-04-5556	B-14	10/12/04	58.0	<0.01	17.00	3.85	open borehole	alluvium	Mortandad Canyon
;AMO-05-5678	I-4	11/03/04	99.0	1.71	34.13	8.24	open borehole	intermediate	Mortandad Canyon
;W06-04-5348	R-6 (591 ft)*	10/19/04	19.0	0.56	19.50	4.58	open borehole	intermediate	Los Alamos Canyon
;W06-04-5348	R-6 (615 ft)*	10/20/04	5.6	0.45	17.90	4.19	open borehole	intermediate	Los Alamos Canyon
;W06-04-5349	R-6 (800 ft)*	10/22/04	5.3	<0.01	22.10	5.00	open borehole	intermediate	Los Alamos Canyon
;WM4-05-5604	MCOBT 4.4	10/14/04	194.0	<0.01	84.40	19.10	well	intermediate	Mortandad Canyon
;AMO-05-5674	Well I-5	10/22/04	118.0	1.69	33.90	8.18	well	intermediate	Mortandad Canyon

* Depths represent bottom of borehole during drilling and sample collection. Samples are from perched water entering the borehole from the intermediate zone at approximately 603 feet as verified by downhole video logging.

RES=boreholes to corroborate resistivity survey results

A=alluvial borehole

B=bore hole

MCOBT 4.4=intermediate well

I=intermediate well

R=regional wells

Note--- calculated NO3+NO2 as N does not consider values < the detection limit (DL)