EXPOSURE GUIDELINES
8-HR. TWA LIMIT - 0.20 FIB/CC
30-MINUTE LIMIT = 1.0 FIB/CC
**LOD LIMIT OF DETECTION = 7 FIB/MM2
***LOQ LIMIT OF QUANTITATION = 100 FIB/MM2

ASBESTOS MONITORING DATA RESULTS: PIPELINE 1993

DATE	SAMPLE #	PERSONNEL	DESCRIPTION	DUR(MIN)	VOL(L)	** LOD FIB/CC	***LOQ FIB/CC
6/8/93	14539	*436-74-3503	Insulator: Removing tar coating from 10" pipe	30	78	0.01	<0.49

* The proper protective clothing was worn during the job. North 7700 half-face Respirator with HEPA filters was worn during the job.

Note: The Limit of Quantitation has been defined as 100 Fibers/MM2 using the minimum fiber loading criteria specified. In the NIOSH analytical method 7400, the stated range of the method is 100 to 1300 Fibers/MM2 filter area. Although samples below this range can be analyzed, the method has not been validated below 100 Fibers/MM2. However, the NIOSH method 7400 also establishes the estimated Limit of Detection as 7 Fibers/MM2 (Reference OSHA Std. 1910.1001, Appendix B). Based on this information, we will establish 100 Fibers/MM2 filter area as our Limit of Quantitation and 7 Fibers/MM2 filter area as our Limit of Detection (which is more representative of the actual fibers present) for asbestos monitoring. We will report both Limit of Quantitation and Limit of Detection.

If only Limit of Quantitation were expressed, the minimum reportable result would calculate to be 0.04 Fibers per cc for an 8-hr. Time weighted average sample at a flow rate of 2 liters per minute and 0.6 fibers per cc for a 30 minute time weighted average short term sample at a flow rate of 2 liters per minute.

DO 075172
CONFIDENTIAL

7-19-93

James Sparks

EXPOSURE GUIDELINES
8-HR. TWA LIMIT - 0.20 FIB/CC
30-MINUTE LIMIT = 1.0 FIB/CC
**LOD LIMIT OF DETECTION = 7 FIB/MM2
***LOQ LIMIT OF QUANTITATION = 100 FIB/MM2

ASBESTOS MONITORING DATA RESULTS: PIPELINE 1993

DATE	SAMPLE #	PERSONNEL	DESCRIPTION	DUR(MIN)	VOL(L)	** LOD FIB/CC	***LOQ FIB/CC
6/8/93	14538	*456-26-3737	*Insulator: Removing tar coating from 10" pipe* WET METHOD USED	30	78	0.01	<0.49

* The proper protective clothing was worn during the job. A P.A.P.R. Respirator with HEPA filters was worn during the job.

Note: The Limit of Quantitation has been defined as 100 Fibers/MM2 using the minimum fiber loading criteria specified. In the NIOSH analytical method 7400, the stated range of the method is 100 to 1300 Fibers/MM2 filter area. Although samples below this range can be analyzed, the method has not been validated below 100 Fibers/MM2. However, the NIOSH method 7400 also establishes the estimated Limit of Detection as 7 Fibers/MM2 (Reference OSHA Std. 1910.1001, Appendix B). Based on this information, we will establish 100 Fibers/MM2 filter area as our Limit of Quantitation and 7 Fibers/MM2 filter area as our Limit of Detection (which is more representative of the actual fibers present) for asbestos monitoring. We will report both Limit of Quantitation and Limit of Detection.

If only Limit of Quantitation were expressed, the minimum reportable result would calculate to be 0.04 Fibers per cc for an 8-hr. Time weighted average sample at a flow rate of 2 liters per minute and 0.6 fibers per cc for a 30 minute time weighted average short term sample at a flow rate of 2 liters per minute.

7-19-93

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