

Dan - Read the Following & take any  
necessary precautions. Some of our cores  
contain traces of silica.

Haw  
5-14-05

Post

# OSHA—Outreach Material for Silicosis

## What Is Silicosis?

Silicosis is lung damage caused by breathing dust containing extremely fine particles of crystalline silica. Crystalline silica is found in materials such as concrete, masonry and rock. When these materials are made into a fine dust and suspended in the air, breathing in these fine particles can produce lung damage.<sup>(1)</sup> Silicosis can lead to heart failure and increase the risk of other diseases such as TB (tuberculosis).<sup>(2, 3, 4)</sup>

## Symptoms of Silicosis:

- \* Initially there may be no symptoms.
- \* Later there may be difficulty in breathing and cough may be present.
- \* Infectious complications may cause fever, weight loss, and night sweats.

**See a physician if you experience these symptoms and suspect that you are exposed to crystalline silica.**

## How Do Construction Workers Get Exposed?

Most crystalline silica comes in the form of quartz. Common sand can be as much as 100% quartz. Concrete and masonry products contain quartz in the form of sand. Therefore, there are many ways to be exposed at construction sites.

## Some Activities In Which Quartz Dust May Be Present In The Air Include:

- \* Abrasive blasting using silica sand as the abrasive.
- \* Abrasive blasting of concrete.
- \* Chipping, hammering, and drilling rock.
- \* Crushing, loading, hauling, and dumping rock.
- \* Chipping, hammering, drilling, sawing, and grinding concrete or masonry.
- \* Demolition of concrete and masonry structures.
- \* Dry sweeping or pressurized air blowing of concrete or sand dust.

## How Is Silicosis Prevented?

The key to silicosis prevention is to prevent dust from being in the air. The Occupational Safety and Health Administration (OSHA) requires administrative or engineering controls be used whenever possible. A simple control may work. Example: A water hose to wet dust down at the point of generation. Here are some steps you can take to protect yourself:

- **Always use the dust control system** and keep it in good maintenance.
- **When sawing concrete or masonry use saws that provide water to the blade.**
- **During rock drilling use water through the drill stem** to reduce the amount of dust in the air.
- Use dust collection systems which are available for many types of dust generating equipment.
- Use local exhaust ventilation to prevent dust from being released into the air.
- **Minimize exposures to nearby workers** by using good work practices.
- **Use abrasives containing less than 1% crystalline silica during abrasive blasting** to prevent harmful quartz dust from being released in the air.
- **Measure dust levels in the air.**
- **Respirators should only be used after dust controls are in place.** Respirators should not be the primary method of protection. If controls cannot keep dust levels below the NIOSH Recommended Exposure Level (REL) then respirators should be used.

Select respirators that provide enough protection. **Keeping respirators fit for use requires continual maintenance.**

When respirators are used OSHA requires employers to establish a comprehensive respiratory protection program. Respiratory protection programs are outlined in the NIOSH Guide to Industrial Respiratory Protection.<sup>(5)</sup>

All workers breathing crystalline silica dust should have a medical examination. Medical Examinations:

- Chest X-ray (classified according to the 1980 International Labour Office (ILO) International Classification of Radiographs of Pneumoconioses<sup>(6)</sup>).
- Pulmonary function test.
- Annual evaluation for TB (tuberculosis)<sup>(7)</sup>.

| County   | ID No. | Qua | Qua | Qua | Sec. | Twn  | Rng  | Elev. | TopC | TD  | #Bxs |
|----------|--------|-----|-----|-----|------|------|------|-------|------|-----|------|
| CHEROKEE | PM 08  |     |     |     | 5    | 32 S | 23 E | 905   | 384  | 661 | 28   |
| CHEROKEE | PM 08T |     |     |     | 5    | 32 S | 23 E | 905   | 300  | 525 | 22   |
| CHEROKEE | PM 12  | SW  | NE  | NE  | 19   | 32 S | 22 E | 830   | 437  | 775 | 35   |
| LABETTE  | PM 13  | NW  | SW  | NW  | 12   | 33 S | 21 E | 810   | 434  | 745 | 21   |
| CHEROKEE | PM 16  | SW  | SW  | SE  | 32   | 32 S | 22 E | 835   | 390  | 638 | 26   |
| LABETTE  | PM 17  | NW  | SW  | NW  | 36   | 32 S | 21 E | 830   | 403  | 735 | 35   |
| CHEROKEE | PM 18  | SW  | SW  | SW  | 28   | 32 S | 22 E | 850   | 409  | 758 | 35   |
| CHEROKEE | PM 20  | SW  | NE  | NE  | 8    | 32 S | 22 E | 895   | 492  | 847 | 36   |
| CHEROKEE | PM 21  | NE  | NE  | NW  | 12   | 32 S | 22 E | 880   | 391  | 735 | 36   |
| CHEROKEE | PM 22  |     |     |     | 19   | 32 S | 23 E | 890   | 380  | 722 | 33   |

307 6000

R 213  
R 212

126  
55° 07'

CRAWFORD

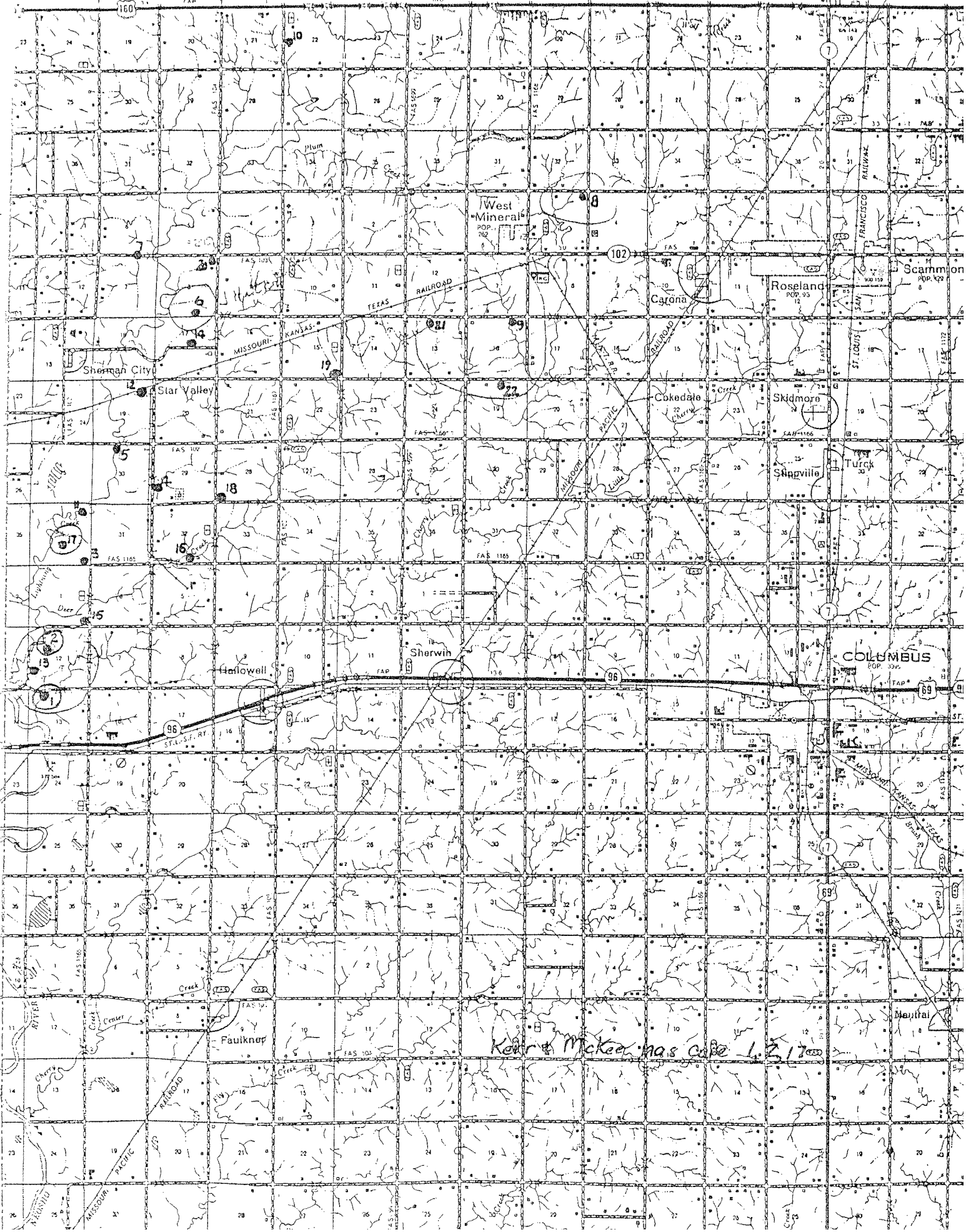
R 223  
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Cherokee

31  
32

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33



Kerr & McKee has case 1.2.1

|      |                  |                                                                                              |
|------|------------------|----------------------------------------------------------------------------------------------|
|      |                  | 222,500 N<br>3,009,800 E<br>E1. 830                                                          |
| 20'  | 8x CASING TO 40' | sh, gray, hard, brown mottling, limy w/ shell frag                                           |
|      |                  | sh, blk, shell frag locally, pyritized plant frag,                                           |
| 40'  |                  | sh, lt gr, soft footage lost between 28' & 50' - 12' total loss                              |
|      |                  | sh, dk gr - blk, platy, pyr, carbonaceous, micaceous,                                        |
|      |                  | 1m carbonaceous sand at base, 1.5' coal seam at base                                         |
|      |                  | sh, lt gr, soft, crumbly at top, limy & silty towards base,                                  |
| 60'  |                  |                                                                                              |
|      |                  | 1.2' coal seam at top, rest is blk carbonaceous sh - 1m                                      |
|      |                  | sh, med gr, soft, platy, limy lt gr brown concentrations,                                    |
| 80'  |                  | 1m, 7' coal seam at base                                                                     |
|      |                  | sh, med lt gr, micaceous slightly silty, brown & black mottling, in lams w/ some lt gr lams, |
|      |                  | All layers lt gr siltstone & med-dk gr sh, micaceous,                                        |
| 100' |                  |                                                                                              |
|      |                  | sh, blk, platy, ironstone, plant frag, v. carbonaceous at base,                              |
| 120' |                  |                                                                                              |
|      |                  | .6' coal seam at base                                                                        |
|      |                  | sh, med lt gr, carbon frag, soft, silty                                                      |
|      |                  | siltstone, lt gr - med lt gr, shly, brown mineral garnet,                                    |
| 140' |                  | carbonaceous partings,                                                                       |
|      |                  | sh, blk, platy, ironstone, pyr fill, plant frag, silty lams at top                           |
| 160' |                  |                                                                                              |
|      |                  | .2' coal seam at base                                                                        |
|      |                  | sh, med lt gr, carbonaceous plant frag, lower 6' lost - ground up getting out of tube        |
|      |                  | sh, lt gr, silty,                                                                            |
| 180' |                  | sh, dk gr - blk, platy, ironstone, pyr fill,                                                 |
|      |                  | SILTY - lt gr lams                                                                           |
|      |                  |                                                                                              |
|      |                  | .2' coal seam at base                                                                        |
|      |                  | sh, med lt gr - lt gr carbonaceous,                                                          |

|      |                                                                                                                          |
|------|--------------------------------------------------------------------------------------------------------------------------|
|      | (cont'd)                                                                                                                 |
|      | sh, med lt gr - lt gr, carbonaceous, soft,                                                                               |
|      | garnets                                                                                                                  |
|      | ss, lt gr, highly oil stained brown gr, sh partings, fm-med gr ss,                                                       |
| 220' |                                                                                                                          |
|      | sh, blk, platy, ironstone, 1m at base w/ .2' coal seam at base                                                           |
|      | sh, med lt gr - med dk gr, plant frag, mids, brown blk mottling                                                          |
|      | sh, blk, platy, silty lams, mott at top,                                                                                 |
| 240' |                                                                                                                          |
|      | .2' coal seam at base                                                                                                    |
|      | sh, med lt gr, carbon mottling, soft                                                                                     |
|      | ss, fine, med lt gr, oil stained, blk sh partings, soft, carbonaceous sh at base                                         |
|      | sh, med lt gr - med dk gr, platy, ironstone, .2' coal seam at base                                                       |
| 260' |                                                                                                                          |
|      | sh, med lt gr, carbon, plant frag, mold, blk sh partings at base, calcimine garnet (?)                                   |
|      | sh, blk, platy, pyr streaks, plant frag                                                                                  |
|      | .3' coal seam at base                                                                                                    |
|      | sh, med lt gr, carbonaceous & pyritized plant frag, v. soft below coal, brown min.                                       |
|      | sh, alt layers med lt gr - dk gr sh, sand (gm), brown min throughout, some silty lams                                    |
| 280' |                                                                                                                          |
|      | sh, blk, platy, pyr streaks along lams, ironstone,                                                                       |
| 300' |                                                                                                                          |
|      | shell & corioid frag at base                                                                                             |
|      | sh, med lt gr, carbonaceous, brown mineral throughout                                                                    |
|      | sh, blk, platy, ironstone, many silty lams from middle to base                                                           |
| 320' |                                                                                                                          |
|      | All layers dk gr sh, lt gr ss, fine gr ss, w/ petroleum odor brown gr. in layers may be oil stained, v. fine lam, ss, sh |
|      | sh, blk, ironstone, foss. at top, silty lams & mottling, platy, pyr streaks along lams,                                  |
| 340' |                                                                                                                          |
|      | 1' coal seam                                                                                                             |
|      | .8' coal seam                                                                                                            |
| 360' |                                                                                                                          |
|      | .6' coal seam                                                                                                            |
|      | sh, med gr, soft, carbonaceous,                                                                                          |
| 380' |                                                                                                                          |
|      | sh, blk, platy, some silty mott,                                                                                         |
|      | 1.4' coal seam at base                                                                                                   |
|      | sh, med gr, carbonaceous,                                                                                                |
|      | sh, med gr, sandy                                                                                                        |
|      | sh, blk, sandy (v. lt gr) mott, ironstone, pyr                                                                           |

**LOCA**

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|                                     |
|-------------------------------------|
| 2' coal seam at base                |
| 54, blk, platy, silty at top, large |
| pyr. xtnls near base, also plant    |
| molds at base                       |
| 420'                                |
| Ls, lt gy, fine gr, oil stained,    |