

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 21E  
R 22E

CRAWFORD

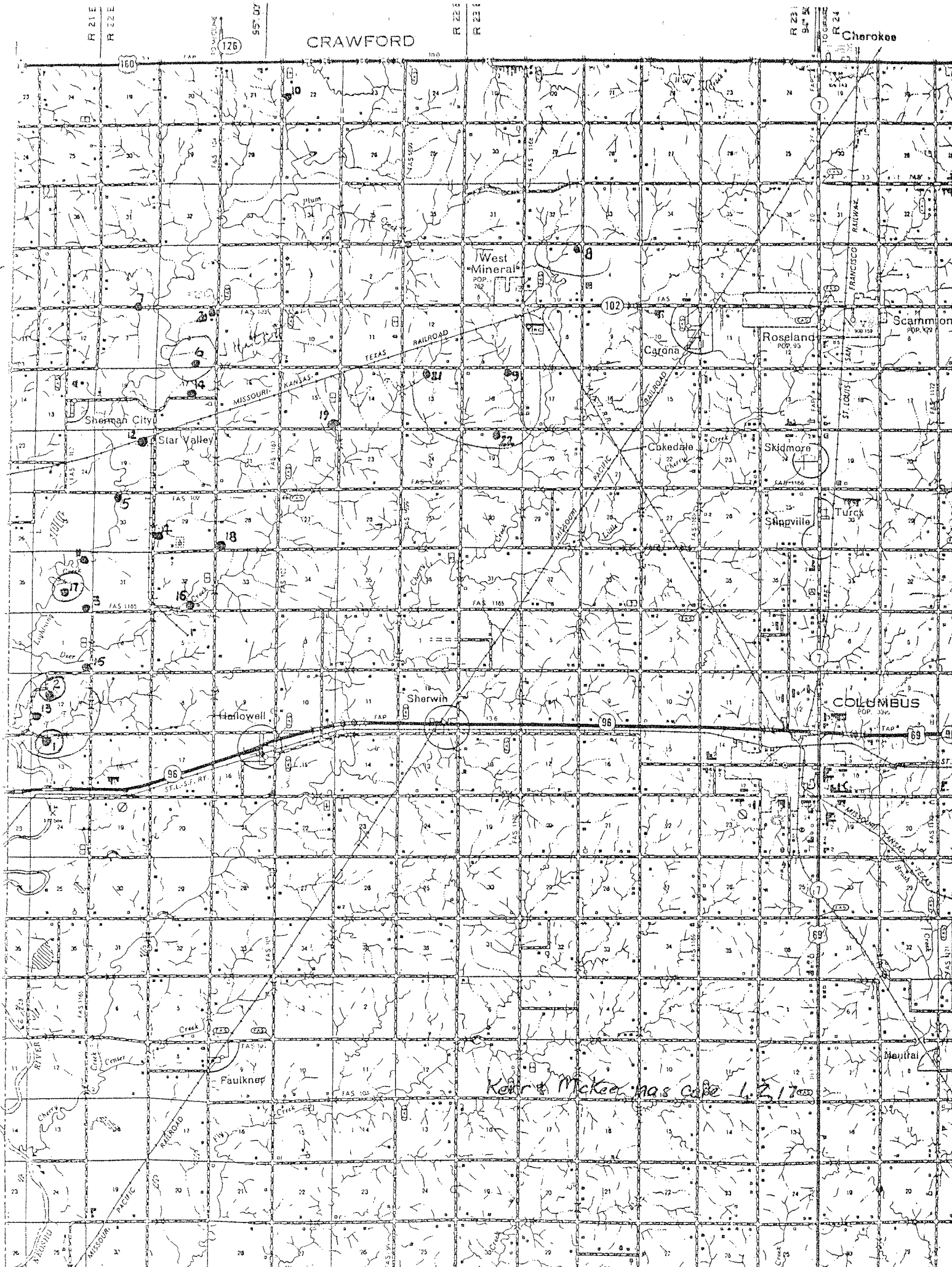
R 22E  
R 23E

R 23E  
R 24E

Cherokee

31  
32

32  
33



*Kear & McKee has case 1.2.17*

204, 725 N  
3,000, 800 E  
E1. 815

13-33-21E

20'	
40'	BK CASING SET TO 40'
60'	Sh, dk gray blk, dms, soft, very platy, pyr. x'tals to .2cm, brach. fossils, some w/ pyr. replacement COAL SEAM 1.2' UNDERCLAY, MED GR, V. SOFT, CARBON THROUGHOUT
80'	Sh, lt-med gray, dms, soft, alternate (lt & dk gr) sub parallel bands, calcite; silty other mineralization (pyr.?) in upper part of unit, very muddy in lower part Sh, gray blk, soft, pyr, mottled in upper part, some lmy sh-v. foss. in middle & bottom of unit UNDERCLAY, LT GR, SOFT, SILTSTONE, LT GR, V. FINE GR, SOME LR. SH PARTINGS, F. LAM TOWARD BOTTOM 6' COAL SEAM
100'	ALTERNATING LAYERS MED GR SILT & SH GR SH, F. LAM. Sh, dk gray, soft, lams. of siltstone in upper part, some replacement by pyr of plant frag(?) fn. laminated, lmy in lower part - small fragments, 6' COAL SEAM
120'	UNDERCLAY, LT GR, SOFT, 6' COAL SEAM
140'	Sh, med gr, silty, solution fill in middle of unit, unconsolidated in top of unit, plant foss frag, dessim pyr, mica, becoming silty at base with dk gr sh stringers ALT LAYERS LT GR SILT, DK GR SH. Sh, dk gr blk, fn. lam, soft, pyr plant frag, dessim pyr
160'	SILT SH, MED GR, LT GR, CARBONACEOUS, plant foss, solution fill - some calcite & brn mineral - pyr(?) Sh, med gr, silt lams, Sh, dk gr, mottled, brn molt areas have better cement, otherwise platy, ALT layers dk gr sh & lt gr silt, micaceous, plant foss, carbonaceous, Sh, dk gr blk, dessim pyr fill & calcite fill, some lt brn lams (silt?)
180'	Sh, lt gr, carbonaceous - plant foss, v. soft, pyr fill. Sh, dk gr blk, plant foss, stratified mottling, platy, soft, slightly lmy at base w/ shell frag. Sh, med gr, soft, poorly lam, abundant carbonaceous mat - plant foss, more competent at base

220'	Sh, med gr, silt lams, Siltstone, lt gr, sh stringers, dessim pyr(?) ALT layers dk gr sh & lt gr silt Sh, dk gr blk, fn lam, v. foss at base - shell cement frag, pyr. fill Sh, lt to med gr, silty, towards base, mottled, pyr (lt, calcite), Sh, dk gr blk, fn lam, some silt mottling, crinoid stem frag. in middle of unit, plant frag., 2' coal seam at base
240'	med gr, Sh, lt gr, abundant plant foss, brwn min. fill, silty in some places, carbonaceous material parallel lam throughout, platy
260'	Sh, dk gr, carbonaceous, mottled, platy, 3' coal seam at base Sh, lt gr, unconsolidated at top, carb.
280'	Sh, blk, platy, pyr Sh, lt-med gr, poor lam., plant foss, pyr, mottled Sh, med-dk gr, platy, abund. plant foss, some silty lams, add white grains top of unit (calcite?)
300'	Sh, blk, platy, pyr fill along lam, some assoc. calcite Sh, dk gr, platy, pyritized plant frag, lmy in some parts, silty lams, maybe some
320'	Siltstone, dk gr, subparallel lams, shaly, some calcite along lams, petal. fragments, mica, interbedded dk gr sh, lt gr siltstone Carbonaceous, pyr, mottled, basal micaceous Sh, dk gr - blk ironstone lams, silty in upper part, shell cement frag, pyr, plant, pyr, small coal seams; underclay, pyr plant frag
340'	Sh, med gr, carbon matter, plant impurities, mottled w dk gr sh at base Sh, dk gr - blk, ironstone lam, pyr, platy, small coal seam at base
360'	Sh, med gr, med, carbon matter, mottled w blk carbon matter, Sh, blk, platy, pyr fill parallel to lams, pyr plant frag, ironstone lams - w/ mineral fill in ironstone,
380'	Lt, med gr, dms, calcite & red brn min (sphal.) fracture fill, silty, foss Sh, blk, platy, pyr plant frag, 3' coal seam at base, coal has pyr fill, calcite, w/ min fill Siltstone, med gr, carbon matter, small coal seam, underclay at base