



**STATE OF NEW MEXICO**  
**INSPECTOR OF MINES DEPARTMENT**  
2340 MENAUL, N.E., SUITE 106  
ALBUQUERQUE, NEW MEXICO 87107

*W. Jeff*  
**SAFETY FIRST**



JOE D. LONGACRE, SR.  
STATE INSPECTOR OF MINES

OFFICE TELEPHONE 842-3055  
RESIDENCE PHONE 344-1129

RADIATION  
**REPORT OF INSPECTION**

I.D. No. 2901660 - Doris Extension  
Section 21 (M & M Mining Company)  
(Name)

Mine

Typed July 26, 1978  
June 29, 1978  
(Date of Inspection)

Uranium  
(Classification of Mine)

McKinley  
(County in which located)

Trace Winchester, Safety Director  
(Company representative present at inspection)

Pursuant to the Mining Laws of the State of New Mexico, Section 63-4-8, an inspection, as designated above, has been made. During this inspection the following was noted:

**INTRODUCTION**

The primary purpose of this inspection was to check radon-daughter concentrations in each working place of the mine, to measure quantity of air supplied to each man working underground and to calculate a weighted exposure for each of the various classes of mine personnel.

For collecting the alpha particles, the MSA Monitaire air sampler, U. S. Bureau of Mines approval No. 2F-2004 was used. For counting the alpha disintegration, the PS-1 Eberline pulse rate meter in combination with the SPA-1 Eberline millipore filter radon probe was used.

**GENERAL INFORMATION**

Owner of Property: Ranchers Exploration and Development Corporation

Company Official:  
Robert H. Miles, Lessee and General Manager

Lessee: Robert Miles

Mining method: re-development for modified room and pillar extraction

Location: approximately 12 miles NE of Grants, NM, some 500 feet from Hwy. 53 north.

Principal product: uranium ore

Employment: 8

Last radiation inspection: April 13, 1978, and the report was posted.

Work Schedule:  
Hours per shift 8  
Shifts per day 1  
Hours per week 40

Lost-time injuries to date: none

First-aid training to date: 33%

9804280265 780726  
PDR ADCK 04008907  
C PDR

JOE D. LONGACRE, SR.  
State Inspector of Mines

The inspector was accompanied by Mrs. Trace Winchester during the entire period of this inspection.

The mine is opened by an 8'x9' decline adit, at some 900 feet in by the development drifts are carried out. This decline is used for ventilation, for haulage of ore and development muck, for hauling materials and as a travelway for all underground personnel.

This mine is also connected to the Flea Mine which at the present time, is used for exhausting all used air from the Doris workings and it can be also utilized as a second escapeway in extreme cases of emergency.

#### VENTILATION AND RADIATION

Fresh air entered the mine through the Doris decline at a rate of 52,500 cubic feet per minute and after ventilating the working faces of the Doris workings, used air was forced to exhaust through the Flea decline by a 75 HP Joy Series 1000, axial flow type electric fan.

Underground fresh air was distributed throughout the drifts and to the No. 1 Flea drift heading by an air propelled fan with the aid of a 16" vent tubing.

The following is a list of radon-daughter concentrations, air volume measurements and time-weighted exposure for each of the classes of mine personnel.

Sample No.	Sample Location	Ventilation c.f.m.	Man-Shift Exposure			Working Level
			M&M	Stopes	Haulages	
1	No. 2 drift right of portal	50,000	- Control	sample, no exposure		0.04
2	Flea decline exhaust	50,000	- Control	sample, no exposure		7.10
3	No. 1 heading drill	7,000	0.3	4.0		0.5
4	No. 1 haulage	12,000	0.2		1.0	0.2
5	No. 2 haulage	52,000	0.3		0.5	0.1
6	No. 3 haulage to portal	52,000	0.2		0.5	Nil

The time-weighted exposure for the various classes of mine personnel and the mine exposure index are as follows:

Maintenance and Management - 0.2 x working level  
Stopes and Developments - 0.5 x working level  
Haulageways - 0.2 x working level  
Total Mine Exposure Index - 0.4 x working level

#### ABATEMENT OF NOTICES ISSUED APRIL 13, 1978

Notice No. 1, SIM Rule No. 71-2(2c); (57.5-40M) Abated June 29, 1978

#### NOTICES ISSUED JUNE 29, 1978

Notice No. 1, Section 63-20-1, NMSA: An overhead clearance sign shall be posted at the mine gate. (57.9-60M) Abated June 29, 1978.

Notice No. 2, Section 63-28-20, NMSA: The underground stretcher shall be provided with splints. (57.15-1M) Abated June 29, 1978.



Notice No. 3, Section 63-25-20, NMSA: The blasting box shall be kept locked.  
(57.6-128M) Abated June 29, 1978.

Notice No. 4, Section 63-4-5(c), NMSA: The dusty condition around the slusher  
area shall be controlled. Abated June 29, 1978.

Notice No. 5, Rules and Regulations Effective in the Uranium Mining Areas, Rule  
No. 3: The No. 1 haulage area adjacent to the No. 1 heading shall be supported  
with roofbolts and heavy wire mesh fencing. Abated June 29, 1978.

Notice No. 6, SIM Rule No. 78-1(2a): The underground eating place shall be provided  
with a receptacle for the disposal of waste food. (57.20-13M) Abated June 29, 1978.

Notice No. 7, SIM Rule No. 76-1(2c): Evidence of cigarette smoking was found at  
the eating place. (57.5-41M) Abated June 29, 1978.

Notice No. 8, SIM Rule No. 78-1(2a): The bottom of the Flea mine decline escapeway  
shall be posted against unauthorized entry and designated by signs indicating them  
as areas in which approved respirators shall be worn. (57.5-45M) Abated June 29,  
1978.

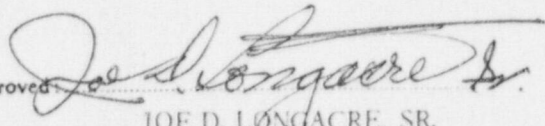
The above notices were discussed with Mrs. Trace Winchester and subsequently with  
Mr. Bob Miles.

#### ACKNOWLEDGEMENT

The courtesy and cooperation of Mrs. Trace Winchester and personnel of the Doris  
Extension, Section 21 Mine, during this inspection are hereby gratefully acknowledged.

Inspected and Reported by:  
L. A. Quinones  
Dust and Mine Gas Engineer  
Deputy Inspector of Mines

jmz

Approved:   
JOE D. LONGACRE, SR.  
State Inspector of Mines