T.W. Wolff

STATE OF NEW MEXICO

INSPECTOR OF MINES DEPARTMENT
505 MARQUETTE, N.W., ROOM 1103
ALBUQUERQUE, NEW MEXICO 87101

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. 2900565
Jay Jay No. 1 Mine (Sohio Petroleum Company) (Name) | Mine | Typed May 20, 1976 / April 29, 1976 (Date of Inspection)

Underground Uranium Mine (Classification of Mine) | MValencia (County in which located) | Bruce Harvey, Safety Engineer (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 area of the mine, to measure quantity of air supplied to each man working underground and to calculate a time-weighted exposure for each of the various classes of mine personnel.

The above is in compliance with the Federal Metal and Nonmetallic Mine Safety Act (Public Law 89-577, 30 U.S.C. 725) and the State Plan Agreement between the U. S. Department of Interior, Mining Enforcement and Safety Administration, formerly the U. S. Bureau of Mines, and the State of New Mexico as of February 3, 1972.

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 and Operator: Sohio Petroleum Company

Location: 6 miles E of Seboyeta, NM, off State Highway No. 334.

Employment: 72

Work Schedule:
- Hours per shift 8
- Shifts per day 2
- Hours per week 40

Company Officials:
O. D. McDaniel, Operations Manager
Jack Burgess, Mine Superintendent
Pete Vinson, Mine Operations Superintendent
Bruce Harvey, Safety Engineer

Previous Radiation Inspection: September 18, 1975, and the report was posted.

Type of work: drift development and underground services development.

JOE D. LONGACRE, SR.
State Inspector of Mines

ONE COPY OF THIS REPORT SHALL BE POSTED IN A CONSPICUOUS PLACE AT THE MINE

The inspector was accompanied by Mr. Bruce Harvey during the entire period of this inspection. Mr. Harvey obtained duplicate radon-daughter samples for comparison purposes.

This mine is opened by one 14' I.D. concrete lined shaft, 672 feet deep. This shaft is used for ventilation, for hoisting men and materials and for hoisting development waste.

VENTILATION AND RADIATION

This mine was ventilated by some 57,000 cubic feet per minute of air delivered and exhausted through the following openings:

Opening	Size	Air Direction	Air Volume c.f.m.	Make of Fan	Fan HP	Depth of Opening
No. 1 B.H.	60" ID	exhaust	57,000	Joy Series 1000	1-100	615'
4 Compt. Shaft	14' ID	intake	57,000	--	-	672'

The main fan is electrically powered unit and is axial flow type unit. This fan is mounted at the surface collar of the borehole (B.H.). This borehole is steel lined throughout the length of the opening.

Air underground was distributed to the working places by directing the primary air flow, by the use of auxiliary fans and vent tubing.

Borehole No. 1 was equipped with a torpedo cage in order to hoist men from underground in extreme cases of emergency.

The following is a list of radon-daughter concentrations found in the working places as well as ventilation volumes found during this inspection. A time-weighted exposure calculation for the different types of mine personnel was not made due to the low concentrations of radon-daughters found during this inspection; therefore, the total mine exposure index will be too low, in result, it will be negligible.

Sample No.	Sample Location	Ventilation c.f.m.	Working Level
1	9000 shop development	1,800*	Nil
2	8900 drift development	2,000*	Nil
3	lunch room	convection	Nil
4	1700 drift development	convection	Nil
5	1000 drift development	4,800	Nil
6	1200 drift development	12,000	Nil
7	trench and station	57,000	0

* Notices Issued.

As it can be seen in the above figures, the concentration of radon-daughters in this mine, in terms of working levels are negligible; therefore, the company will not have problems with over-exposure to the working personnel, when always keeping the good system of ventilation control.

NOTICES ISSUED APRIL 29, 1976

Notice No. 1, SIM Rule No. 71-2(2c): Evidence of smoking was found by the fuel storage area near the powder magazine. (57.5-41M) Abated April 29, 1976.

Notice No. 2, SIM Rule No. 71-2(2c): Evidence of smoking was found in 1000 drift. (57.5-41M) Abated April 29, 1976.

Notice No. 3, SIM Rule No. 71-2(2c): Evidence of smoking was found in 1200 drift. (57.5-41M) Abated April 29, 1976.

Notice No. 4, SIM Rule No. 71-2(2c): Evidence of smoking was found in the main pump station. (57.5-41M) Abate by April 29, 1976.

Notice No. 5, SIM Rule No. 71-1(2c): The blasting line in 9000 drift shall be properly supported. (57.6-122M) Abated April 29, 1976.

Notice No. 6, SIM Rule No. 71-1(2c): The blasting line in 1000 drift shall be properly supported. (57.6-122M) Abated April 29, 1976.

Notice No. 7, SIM Rule No. 71-1(2c): The blasting line in 1200 drift shall be well supported and insulated. (57.6-122M) Abated April 29, 1976.

Notice No. 8, SIM Rule No. 74-1(2c): The powder magazine in 1000 drift shall be provided with "No Open Flame" signs. (57.6-6M) Abated April 29, 1976.

Notice No. 9, SIM Rule No. 71-2(2c): The blasting line in 1200 drift shall be shunted with copper or good electric conductor metal. (57.6-120(c)M) Abated April 29, 1976.

Notice No. 10, Section 63-4-5(c), NMSA: The discharge end of the vent tubing in 1700 drift shall be at thirty (30) feet or less from the working face. Abated April 29, 1976.

Notice No. 11, Section 63-28-9, NMSA: The dust condition in 9000 haulage shall be controlled. Abated April 29, 1976.

Notice No. 12, Section 63-28-9, NMSA: The dust condition in 1000 drift shall be controlled. Abated April 29, 1976.

Notice No. 13, Rules Governing Diesel Equipment in Underground Mines for the State of New Mexico, Rule No. 4(b): The 9000 drift development shall be provided with enough quantity of air to run 72 HP diesel equipment. Abated April 29, 1976.

Notice No. 14, Rules Governing Diesel Equipment in Underground Mines for the State of New Mexico, Rule No. 4(b): The 8900 drift development shall be provided with enough quantity of air to run 72 HP diesel equipment. Abated April 29, 1976.

Notice No. 15, SIM Rule No. 71-1(2c): The entrance to the escape borehole shall be kept free of junk and supplies. (57.11-1M) Abated April 29, 1976.

At the conclusion of this inspection, all the notices issued were discussed in detail with Messrs. Jack Burgess, Pete Vinson and Bruce Harvey.

ACKNOWLEDGEMENT

The courtesy and cooperation of Mr. Bruce Harvey, staff and personnel of the Jay Jay No. 1 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 Jr.
JOE D. LONGACRE, SR.
State Inspector of Mines