OIL CONSERVATION COMMISSION
P. O. BOX 871
SANTA FE, NEW MEXICO

INSPECTION REPORT

April 6, 1953

COPY

ICECO, INC.
Tucumcari, New Mexico

Re: Libby #1
SWNE Sec. 31-20N-31E
Libby #2
SWNW Sec. 32-20N-31E
De Baca #2
NWNE Sec. 31-20N-31E
HARDING COUNTY

All of these wells are presently producing CO_2 gas from an approximate depth of 1970', (data on exact productive intervals not available.) A low pressure gas (helium or carbon dioxide) zone is present at approximately 545'.

A recent check of shut-in pressure data on the above captioned wells in the Bueyeros Carbon Dioxide Field on file at the Iceco office in Tucumcari reflects the following:

Well	Date of Gauge	Shut-in Pressure lbs./sq. in.
De Baca #2	Jan. 31, 1952	380
	July 19, 1952	370
	Sept. 14, 1952	385
	Sept. 30, 1952	410
	Oct. 28, 1952	390
	Mar. 13, 1953	380
Libby #1	July 8, 1950	400
	Sept. 15, 1950	420
Libby #2	Aug. 27, 1950	400
	Oct. 2, 1951	380
	Oct. 29, 1951	360
	Mar. 1, 1952	410
	Mar. 29, 1952	390

The above listed pressures have been recorded after the wells were shut in for periods of three or four days. The dry ice plant served by these wells operates for only three and four days at a time and flow

pressures are not too indicative of reservoir potential as the flow pressure drops very low when the plant is in operation and varies directly with the amount of ice produced. Similarly, the length of the shut-in period greatly influences the pressure build-up and subsequent shut-in pressures, as recorded.

Complaints from the land owner concerning seepage of gas in the nearby Ute Creek have been received by this Commission. During my inspection I witnessed a large amount of seepage in the stream bed which I estimate to be not more than fifteen feet lower than the well-head connections of the above wells. The amount of this seepage does not vary in the least with the time or amount of production from the three wells when opened during manufacture of dry ice at the plant. Similarly there is no apparent increase in gas volume at the seepage after the wells are shut in. This leads to the conclusion that the escaping gas is not from the zone presently being exploited but from some shallower horizon.

It also has been assumed that the seepage is due to the proximity of the wells to the creek bed (see attached map). If this were a feasible reason then one might expect the well nearest the seepage, Libby #2, to show the greatest decrease in shut-in pressures, assuming of course, that the gas escaping had followed the lines of least resistance and consequently was greatest from the closest well bore.

The fact remains that waste is occurring and the only other possible source of this gas has to be the shallower low pressure horizon. This zone is of comparatively insignificant commercial value at present, but in the interest of conservation, the seepage should be remedied, if at all possible, through the present well bores.

EUGENE A. CHAVEZ,
Geologist-District 4

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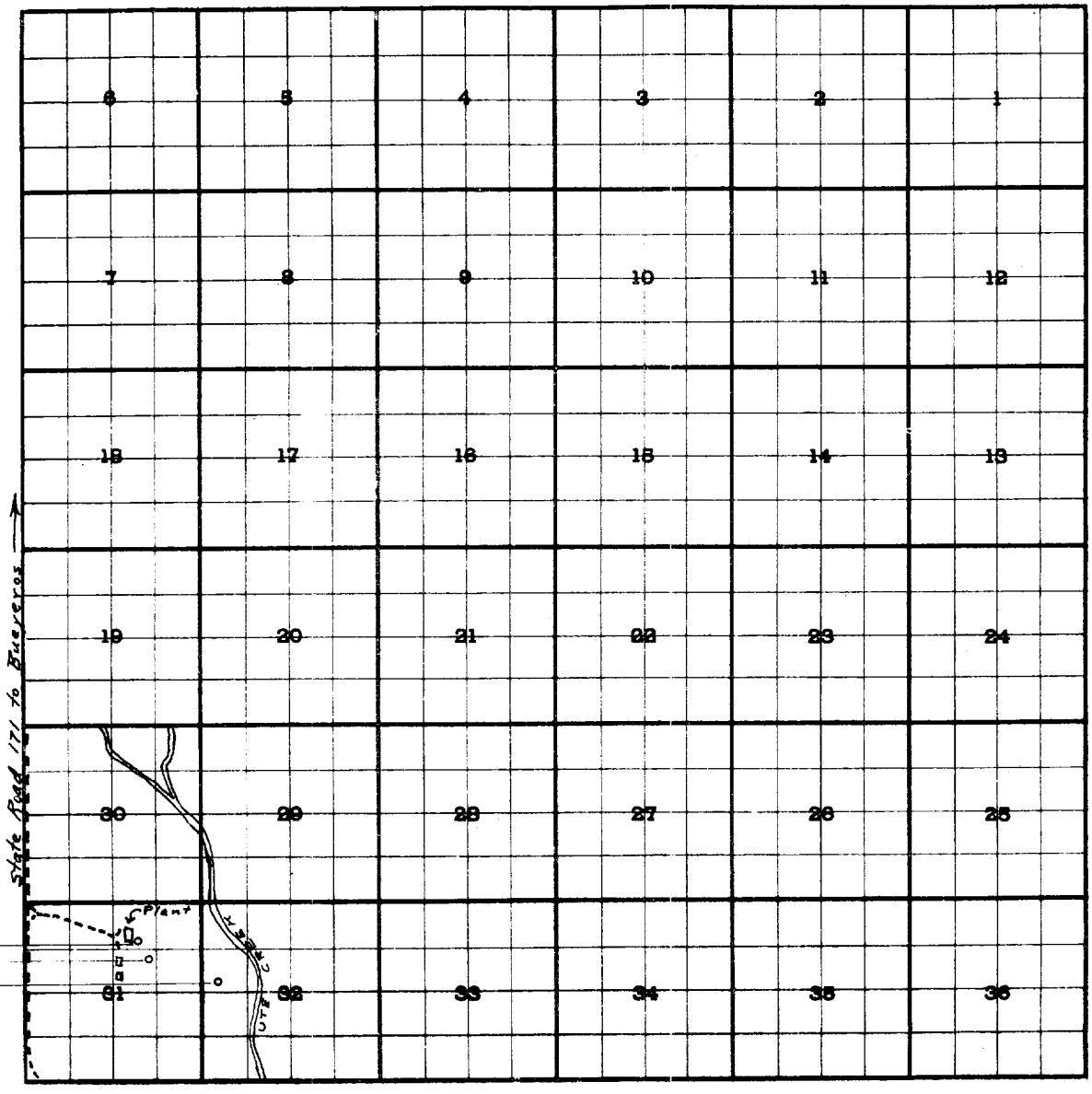
County HARDING Pool BUEYEROS (CO_2)

TOWNSHIP 20 North RANGE 31 East, NEW MEXICO PRINCIPAL MERIDIAN



Libby #1—SW NE Sec. 31-T20N-R31E (1650'/N & E lines)

Libby #2—SW NW Sec. 32-T20N-R31E

De Baca #2—NW NE Sec. 31-T20N-R31E (675'/N & 336'/S lines)