

Case No
4312

Large Exhibits

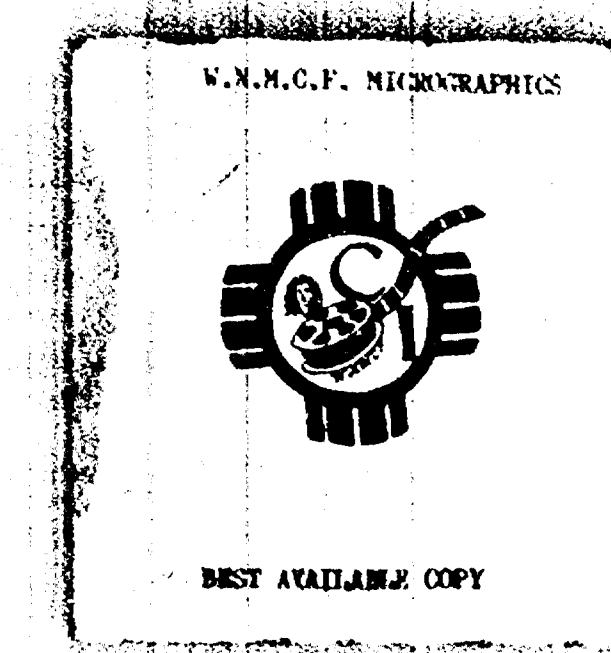
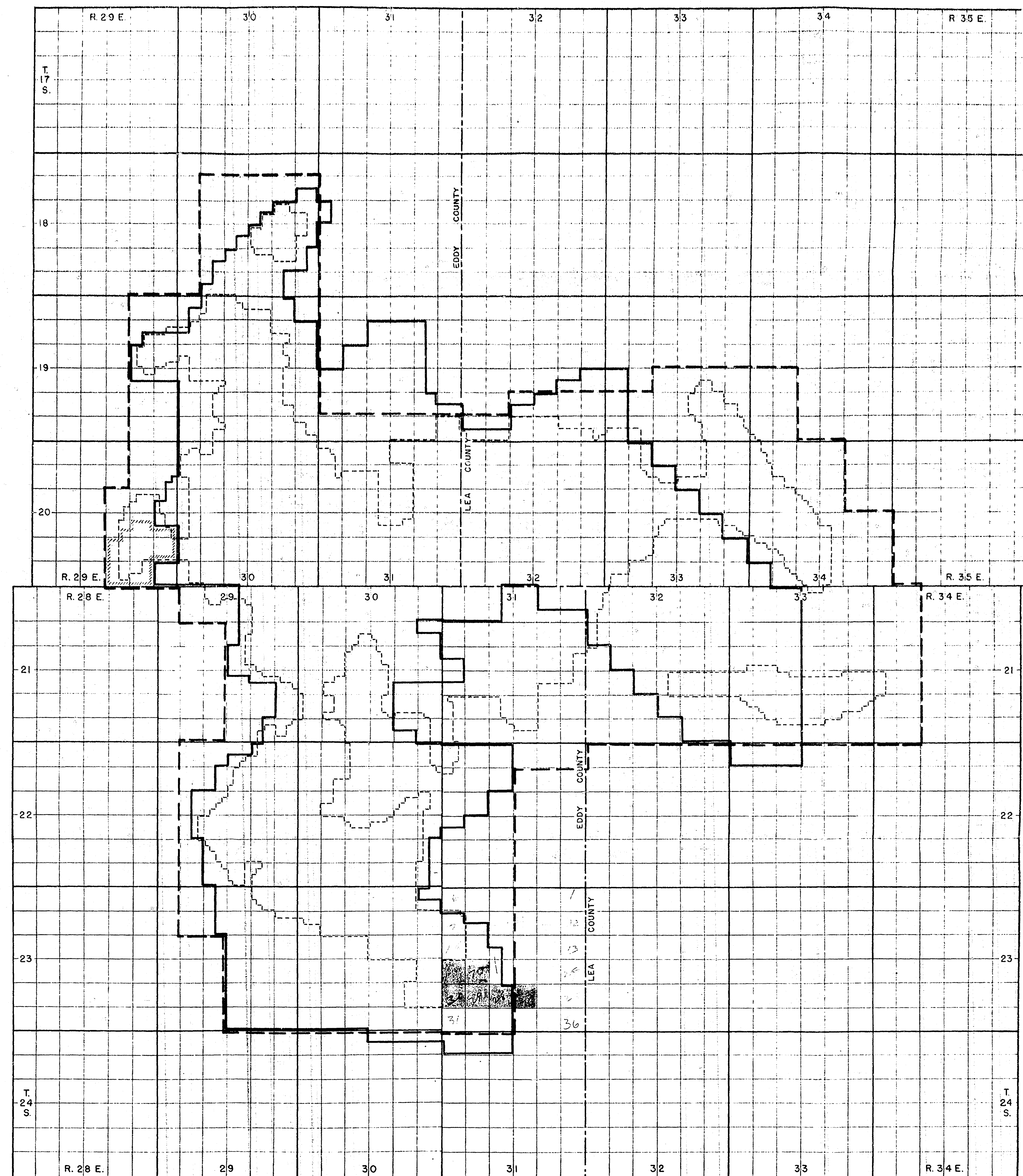


EXHIBIT 1



LEGEND

- OIL-POTASH AREA DESIGNATED BY THE SECRETARY OF THE INTERIOR ON OCTOBER 14, 1951
- - - OIL-POTASH AREA DESIGNATED BY THE SECRETARY MAY 11, 1955, EFFECTIVE MAY 10, 1955
- OIL-POTASH AREA COVERED BY N.M.O.C. ORDER NO. 8-1112 AS REVISED THRU 8-1113

//////// AREA WITHDRAWN 1951, 1949

SCALE IN MILES



UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
CONSERVATION DIVISION, BRANCH OF OIL & GAS OPERATIONS
MAP SHOWING

OIL-POTASH AREA
SOUTHEAST NEW MEXICO

MAP NO. ROSWELL 300 ROSWELL, NEW MEXICO
JANUARY 1, 1960

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 366
CASE NO. 4312

REVISED 1-1970 J.P.S.

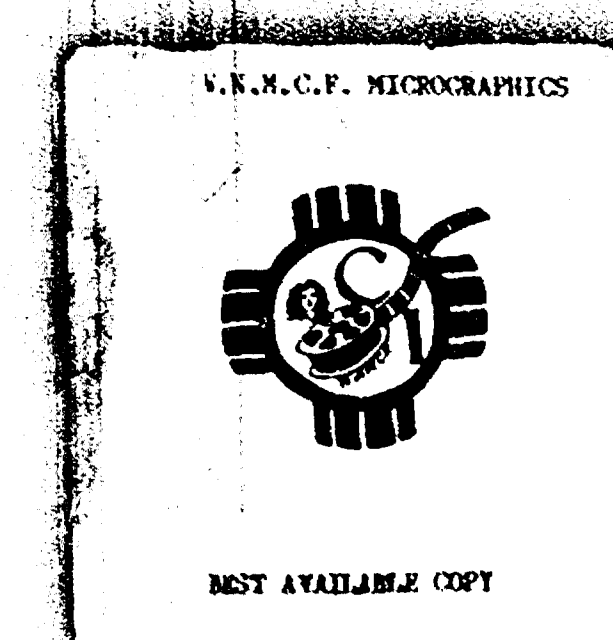
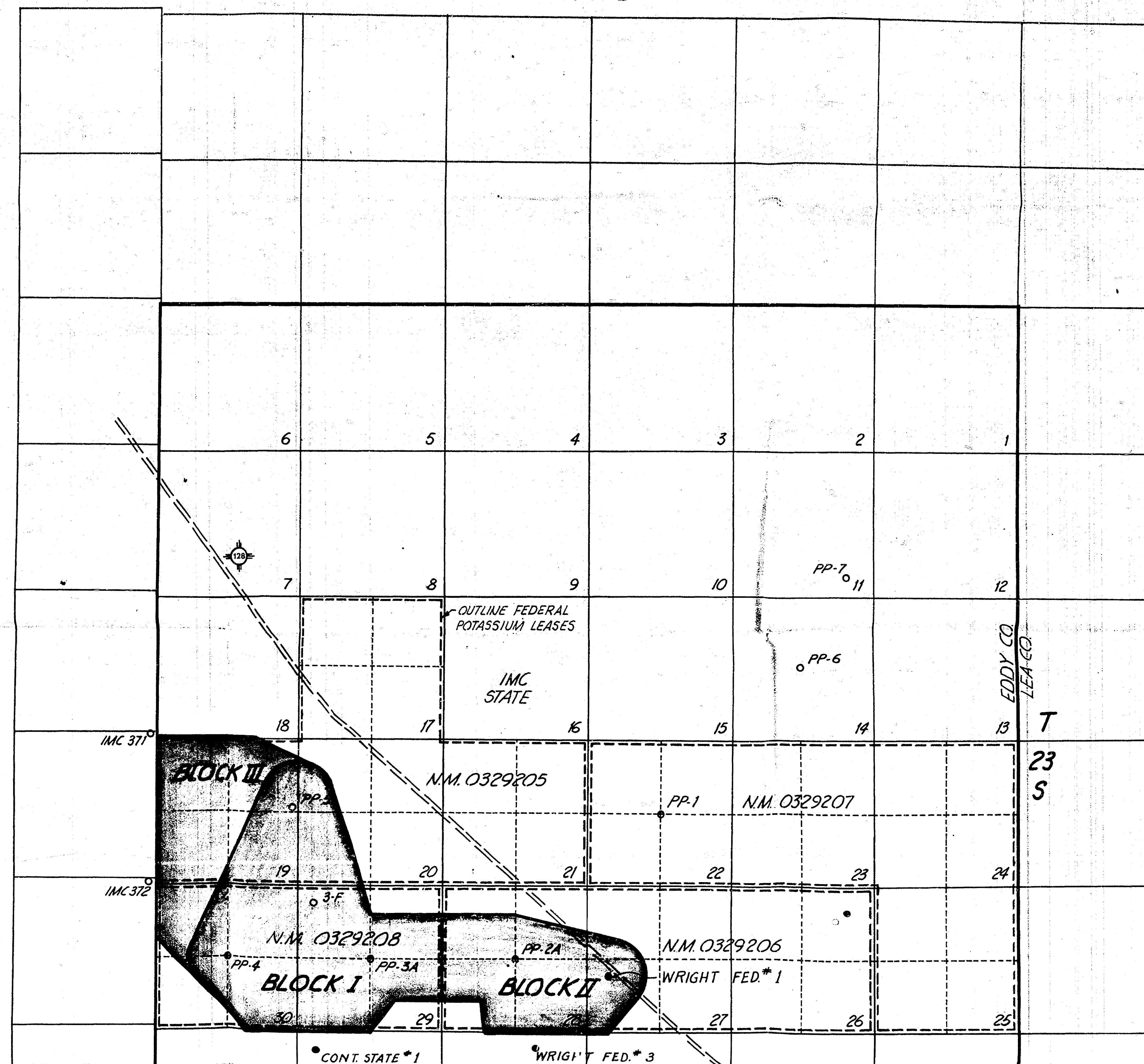
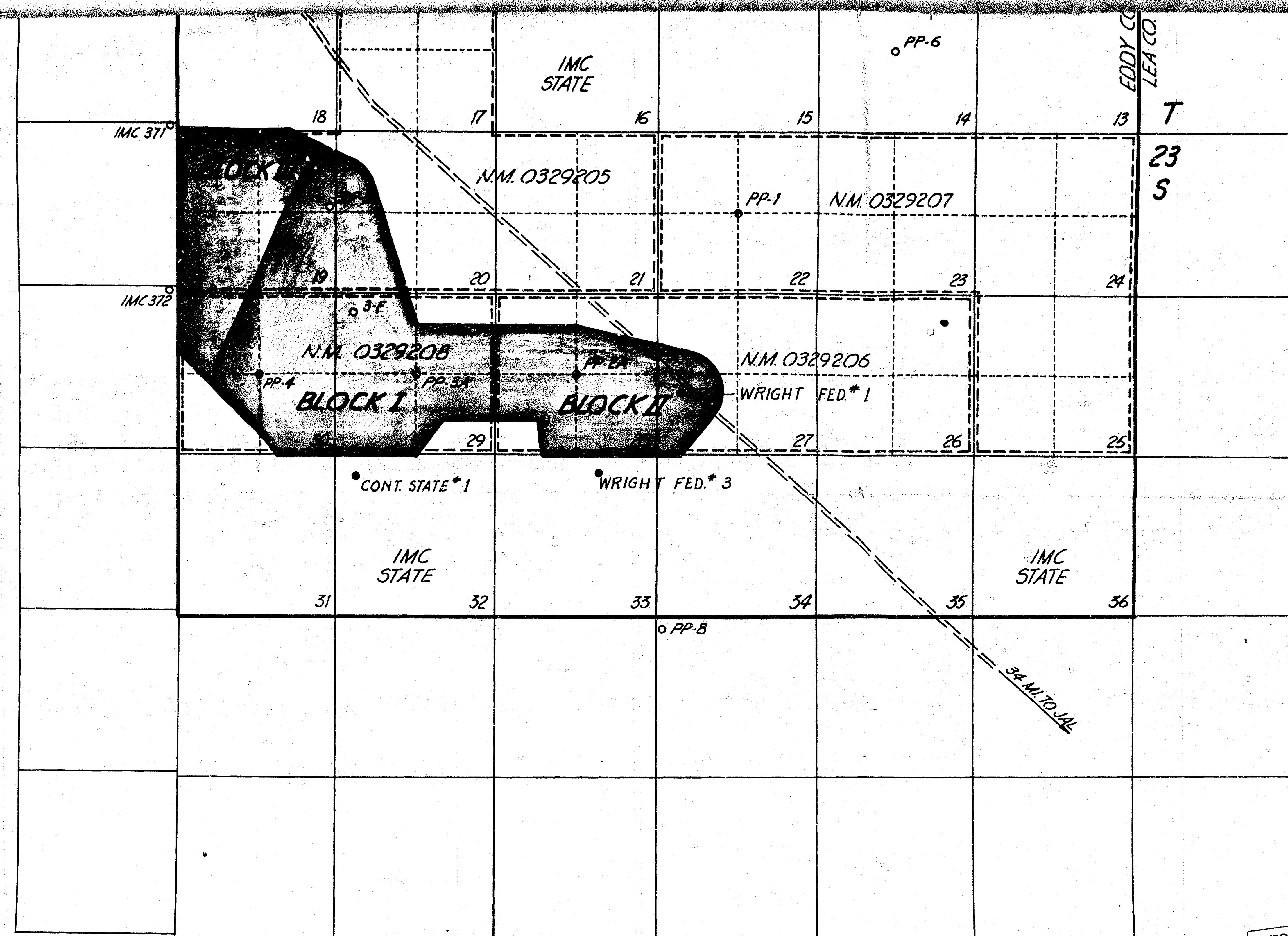


EXHIBIT 2

R-31-E





LANGBEINITE

	<u>HEIGHT</u>	<u>K₂O</u>	<u>TONNAGE (MILLIONS)</u>
BLOCK I	7'-4"	7.43%	28.7
BLOCK II	4'-1"	6.10%	10.8
BLOCK III	8'-1"	7.17%	12.75
TOTAL & AVGS.	6'-10"	7.12%	52.25

- OIL WELL TESTS - P & A
- POTASH CORE TESTS

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 2
CASE NO. 2312

U.S. POTASH & CHEMICAL CO.

CARLSBAD, NEW MEXICO

GRW

SCALE: 1" = 3 MI.

FEB. 7, 1970

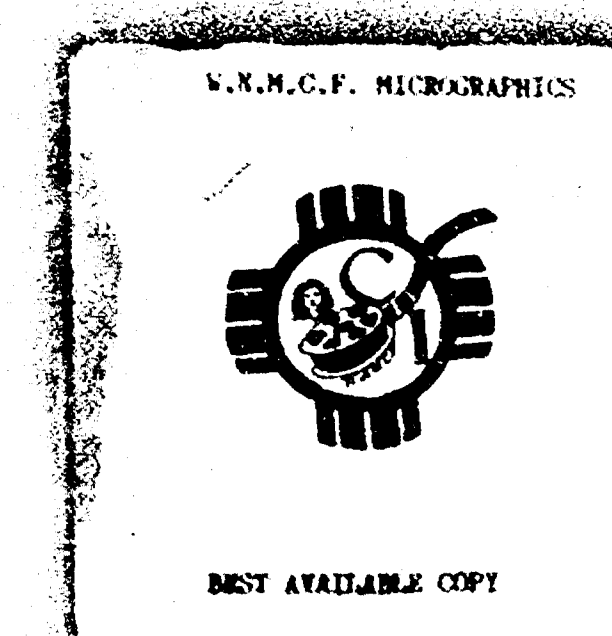


EXHIBIT 3
U.S. POTASH & CHEMICAL CO.
FEDERAL LEASES
ON
SECTIONS 19, 20, 27, 28, 29 AND 30
T. 23 S., R. 31 E., N.M.P.M., N.M.

NM 0329205

EFFECTIVE: 3/1/67

TERM: 20 YEARS

ACREAGE: 2,566.40 ACRES

T. 23 S., R. 31 E., N.M.P.M., N.M.

SEC 17 ALL, SEC 19 LOTS 1, 2, 3, 4, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$.

SEC 20 ALL, SEC 21 ALL

NM 0329206

EFFECTIVE: 3/1/67

TERM: 20 YEARS

ACREAGE: 1,920.00 ACRES

T. 23 S., R. 31 E., N.M.P.M., N.M.

SEC 26 ALL, SEC 27 ALL, SEC 28 ALL.

NM 0329208

EFFECTIVE: 3/1/67

TERM: 20 YEARS

ACREAGE: 1,287.00 ACRES

T. 23 S., R. 31 E., N.M.P.M., N.M.

SEC 29 ALL, SEC 30 LOTS 1, 2, 3, 4, E $\frac{1}{2}$, E $\frac{1}{2}$ W $\frac{1}{2}$.

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 3
CASE NO. 44373



EXHIBIT 5

ECONOMIC MINERALS PRESENT

LANGBEINITE ($2\text{Mg SO}_4 \cdot \text{K}_2\text{SO}_4$)

100% LANGBEINITE = 22.695% K_2O

$4.4063 \times \text{K}_2\text{O} = \% \text{ LANGBEINITE}$

SYLVITE ($\text{KCL} \cdot \text{NaCL}$)

100% SYLVITE = 63.17% K_2O

$1.583 \times \text{K}_2\text{O} = \% \text{ SYLVITE}$

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 5
CASE NO. 4312



BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 5
CASE NO. 5432

U.S. POTASH & CHEMICAL CO.
CARLSBAD, NEW MEXICO

G.H.

FEB. -11-70



EXHIBIT #6

CONCLUSION:

POTASH CORE TESTS DRILLED TO DATE IN TOWNSHIP 23 SOUTH, RANGE 31 EAST, INDICATE A LANGBEINITE ORE BODY IN U.S.G.S. DESIGNATED 4TH ORE ZONE CONTAINING AN ESTIMATED 52.25 MILLION TONS OF ORE IN PLACE. THIS ORE CONTAINS 31.32% LANGBEINITE (7.12% K_2O) AND AVERAGES 6'-10" IN HEIGHT. IT IS LOCATED IN SECTIONS 19, 20, 27, 28, 29 AND 30.

LANGBEINITE CORE TEST DATA

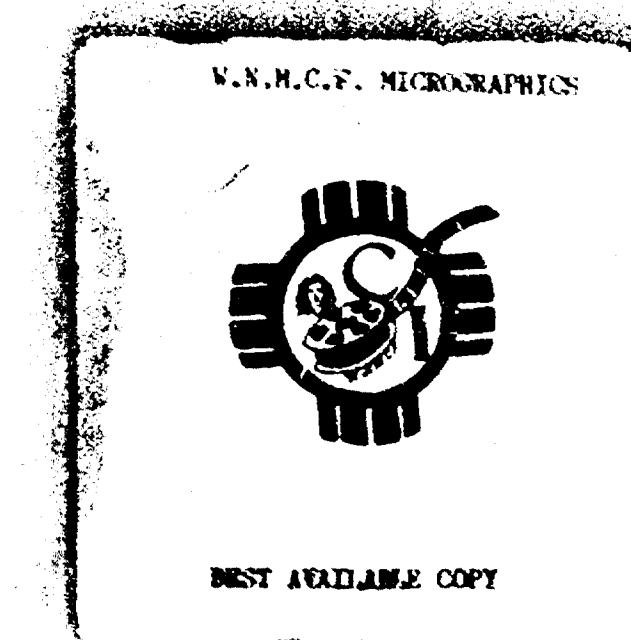
PP-2A, 528, T23S, R31E

4TH ORE ZONE-1661'-1" TO 1665'-2", 4'-1"

@ 27% LANGBEINITE (6.1% K_2O)

2ND ORE ZONE 1706'-8" TO 1709'-7", 2'-11"

@ 35.9% LANGBEINITE (8.1% K_2O)



ESTIMATED 32.25 MILLION TONS OF ORE
IN PLACE. THIS ORE CONTAINS 31.32 %
LANGBEINITE (7.12% K_2O) AND AVERAGES 6'-10"
IN HEIGHT. IT IS LOCATED IN SECTIONS 19,
20, 27, 28, 29 AND 30.

LANGBEINITE CORE TEST DATA

PP-2A, S28, T23S, R31E

4TH ORE ZONE - 1661'-1" TO 1665'-2", 4'-1"

@ 27% LANGBEINITE (6.1% K_2O)

2ND ORE ZONE 1706'-8" TO 1709'-7", 2'-11"

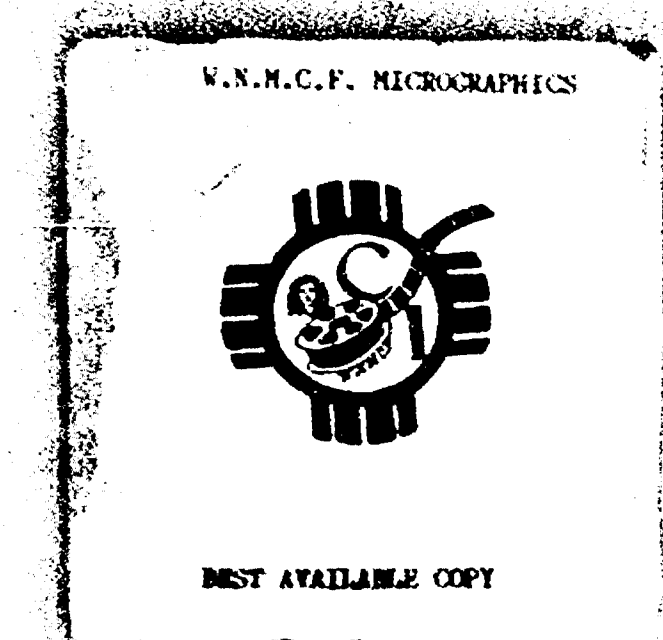
@ 35.9% LANGBEINITE (8.1% K_2O)

PP-3A, S29, T23S, R31E

4TH ORE ZONE 1569'-5" TO 1574'-10", 5'-5"

@ 36.8% LANGBEINITE (8.35% K_2O)

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 6 - 1
CASE NO. 4372



P.P.-4 - S30, T23S, R31E.

4TH ORE ZONE 1501'-10" TO 1509'-5", 7'-6"
@ 31.1 % LANGBEINITE (7.1% K₂O)

P.P.-5 - S19, T23S, R31E.

4TH ORE ZONE 1535'-0" TO 1544'-3", 9'-3"
@ 27.7 % LANGBEINITE (6.3% K₂O)
2ND ORE ZONE 1577'-11" TO 1581'-3", 3'-6"
@ 29.5 % LANGBEINITE (6.7% K₂O)

F-3 - S29, T23S, R31E.

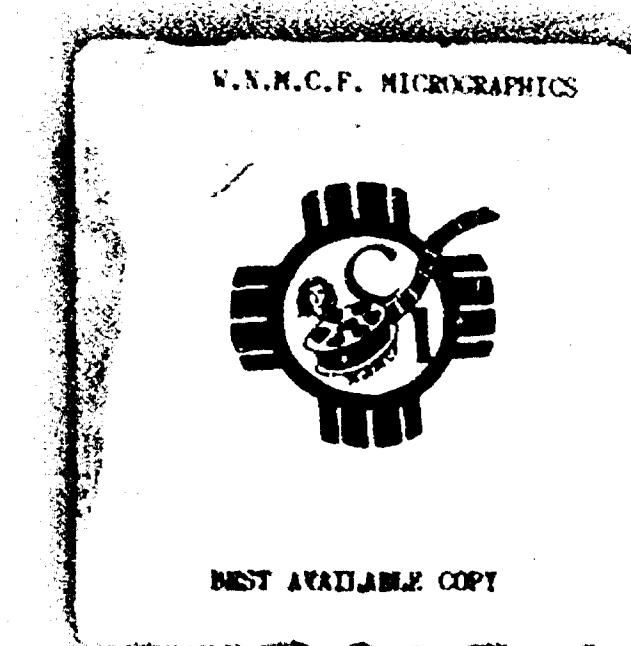
4TH ORE ZONE 1550'-1" TO 1557'-8", 7'-1"
@ 8.51 % K₂O AS LANGBEINITE AND
2.51 % K₂O AS SYLVITE

IMC 371 - S24, T23S, R30E.

4TH ORE ZONE - 7'-3" @ 5.4% K₂O AS
LANGBEINITE AND 6.3% K₂O AS SYLVITE

IMC 372 - S25, T23S, R30E

4TH ORE ZONE - 8'-6" @ 9.8 % K₂O AS
LANGBEINITE

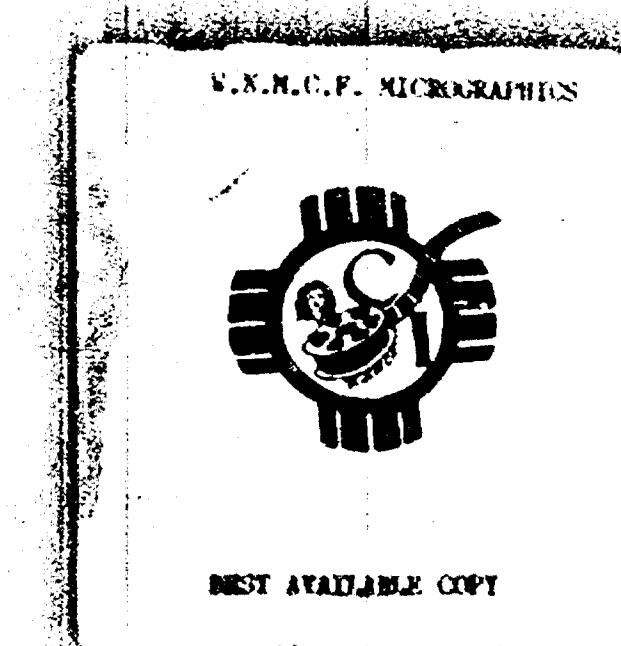


WRIGHT FED #1 S27, T23S, R31E.
4TH ORE ZONE, 5' @ 6 TO 8% K₂O AS
LANGBEINITE

WRIGHT FED #3 S33, T23S, R31E.
4TH ORE ZONE, 5' @ 4% K₂O AS
LANGBEINITE & SYLVITE

CONTINENTAL STATE #1 S32, T23S, R31E.
4TH ORE ZONE, 8' @ 8% K₂O AS
LANGBEINITE & SYLVITE

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
EXHIBIT NO. 6-10
CASE NO. 4312

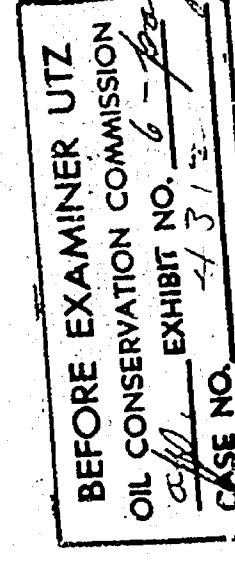


U.S. POTASH & CHEMICAL CO.
CARLSBAD NEW MEXICO
BW FEB 11, 1970

WRIGHT FED #1 S27, T23S, R31E.
4TH ORE ZONE, 5' @ 6 TO 8% K₂O AS
LANGBEINITE

WRIGHT FED #3 S33, T23S, R31E.
4TH ORE ZONE, 5' @ 4% K₂O AS
LANGBEINITE & SYLVITE

CONTINENTAL STATE #1 S32, T23S, R31E.
4TH ORE ZONE, 8' @ 8% K₂O AS
LANGBEINITE & SYLVITE



U.S. POTASH & CHEMICAL CO.
CARLSBAD NEW MEXICO
FW FEB 11, 1970

