



## **CONTACT INFORMATION**

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## ARKLA EXPLORATION

NJN WR 9/2/83: Provided Hal Susie and Mark Jordan of the Arizona State Land Department with information on the Holbrook Potash Deposit from our New Mexico and Arizona Land Company file and Arkla Exploration file. Mr. Jordan reported that they have additional information on the deposit from a drilling project which occurred in the 1970's! The State Land Department is evaluating its lands in Apache and Navajo counties south of the Indian reservation to see which it should trade/sell/consolidate before the Navajo-Hopi relocation takes place.

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Core Hole No. 6 (Cont'd):

1506'-1594'

Description: Same description as above, with moly smears and fractures on fault planes varying from 1/10" to 2/10" thick.

1594'-1646'

Description: Highly altered gray granite, very hard. Very minute specks  $\text{MoS}_2$  in spotted pyrite. Thin moly shows from 1621' to 1637' and 1642. Chalcopyrite ( $\text{CuS}_2$ ) shows in this core.

Holbrook Potash Program

N.M.&ALCo. #23

Description: Joint operation with Franklin, Aston & Fair. Total depth 1919'. Red beds Lower Supai, Upper Pennsylvanian. Apache Lime is thinning. No shows indicated on the mud log, the electric log shows no porosity. The lower 9' of the basal of the Fort Apache is dense, sandy dolomitic.

Hole abandoned, moving No. 44, Section 8, Twp. 17N, Rge. 23E.

Very truly yours,

ELG:mc

E. L. Gorsuch

1130  
xxx

September 9, 1966

George M. Rayburn, President  
New Mexico & Arizona Land Company  
906 Olive Street  
St. Louis, Missouri 63101

Re: Weekly Progress Report - Yellow Basin Project - Holbrook Potash Program

Dear Sir:

Core Hole No. 6

1290'-1352'

Description: Biotite granite, highly altered and fractured, with pink ortho clays - mottled, medium texture, numerous fractures, sparsely disseminated pyrite. Some moly shows at 1328'.

1352'-1358'

Description: Clay filled fault gouge.

1358'-1421'

Description: Rubble, clay, fault gouge, highly oxidized. Moly at 1409' pin-head size in cercite seam.

1421'-1477'

Description: Highly altered ortho granite, pink, mottled, highly fractured. Few sparse moly shows along fracture plane and in cercite.

Core Hole No. 8

231'-293'

Description: Biotite granite, mottled, pink with manganese and iron oxide stains along the fracture plane. Less oxidation the lower portion of the core. Pyrite shows at 262'.

George M. Rayburn

-2-

September 9, 1966

Halbrook Potash Program

N.M.&ALCo.#23

Description: This is the hole currently being drilled with Franklin, Aston & Fair. No shows of  $K_2O$  or  $KCl$ . Drilling ahead at 1430'.

Very truly yours,

ELG:mc

E. L. Gorsuch

1130

XXX

September 1, 1966

George M. Rayburn, President  
New Mexico & Arizona Land Company  
906 Olive Street  
St. Louis, Missouri 63101

Re: Weekly Progress Report - Yellow Basin Project, Mohave Co., Arizona

Dear Sir:

Core Hole No. 8

Description: Coring at 231'. Biotite granite, gray, highly altered in places, with some calcite and clay. Quartz veinlets running at 75° to the core. Some shows of moly scattered throughout from the surface down.

Holbrook Potash Program

Hole No. 4

Description: Well blew out with low pressure, high volume gas at 1005'. No indication of hydrocarbons and apparently this gas comes from the fracture in the salt zone just above the potash. Potash core shows 4 to 4½' of good mineralization and 5' of moderate potash mineralization.

Moving to the fifth hole of the coring program, which will be the joint program with Franklin, Aston & Fair.

Very truly yours,

ELG:mc

E. L. Gorsuch

1130  
XXXXX  
XXXXX

August 24, 1966

George M. Rayburn, President  
New Mexico and Arizona Land Company  
906 Olive Street  
St. Louis, Missouri 63101

Re: Weekly Progress Report - Yellow Basin Project, Mohave Co., Arizona

Dear Sir:

Core Hole No. 6

Description: Drilling below 1200' on August 23, 1966. Gray biotite granite, highly altered in places, some sericite and ortho clays, number of quartz veinlets, substantial ortho clays. Moly is scattered throughout interval from 593' to 1200' in sections from 12 to 20' zones, varying from pin-head size to match-head size, some streaks 6" to 8" long, varying from 1/4" to 1/2" thick. This core from the above depth has more moly shows than any of the others drilled to date.

Core Hole No. 8

Description: Spudded Tuesday afternoon, same date, north and west of Yellow Basin No. 6.

Holbrook Potash Program

No. 25

793'-1024'

Description: Preparing to move rig to the third hole in the 10-well series with results of chloroplatinate chemical analysis showing N.M. #15 has 8.84% potash from interval 1050' to 1061'.

Very truly yours,

E. L. Gorsuch

ELG:mc

1130  
xxx

August 18, 1966

George M. Rayburn, President  
New Mexico & Arizona Land Company  
906 Olive Street  
St. Louis, Missouri 63101

Re: Weekly Progress Report - Yellow Basin Project, Mohave Co., Arizona

Dear Sir:

The following are the results of core hole drilling as of today:

Core Hole No. 6

523'-593'

Description: Biotitic granite, vuggy. Some ceredite and ortho clays. Irregular, scattered pin-head size  $\text{MoS}_2$ . Moly from 257' to 270' and match-head size  $\text{MoS}_2$  at 574' and 584'.

Core Hole No. 7

239'-342'

Description: Hard, tight biotite granite, coarse textured. Occasional thin, pink ortho clay seams. Match-head size moly at 268' in pyrite zone. Moly shows at 236', 237' and 239'.

Holbrook Potash Program

Potash coring at 73'. Second hole in 10-well program.

Very truly yours,

ELG:mc

E. L. Gorsuch



August 11, 1966

217'-290'

Description: As above but less mineralization. Fault zone indicated at 261'. Some fluorite. Moly shows at 223', 240', 246', 260', 270', 272' and 276'.

290'-337'

Description: As above Mineralization at 320'. Moly shows at 305', 310', 334' and 337'.

337'-383'

Description: As above. The fragments of ortho clays indicated faulting in this core. Moly shows at 345', 358', 367', and 371'.

383'-444'

Description: As above with clay increasing, very porous. Traces of moly in fine specks from 391 to 417. Moly is disseminated in the ortho clays. Moly shows at 389', 392', 399', 405', 409', 416', 419', and 430'.

444'-500'

Description: Biotite granite. Soft inclusions of some quartz, ortho clays, and calcite. 452': moly on joint plane. Moly shows at 453', 459', 480', 494', and 497'.

500'-523'

Description: As above. Pin-head mineralization at 504', 505', 507', 509', 510', 517', 522', and 523. The above shows of moly are moly sulfide. At 509' there are indications of copper sulfide, known as bromide.

Holbrook Potash Program

New Mexico No. 5

Spud Date: 8/8/66

8/9/66: Ran one (1) joint of 1-5/8 submitted at 42'.

8/10/66: Drilling in shale at 380'.

Very truly yours,

ELG:mc

E. L. Gorsuch

April 13, 1966

George M. Rayburn, President  
New Mexico and Arizona Land Company  
906 Olive Street  
St. Louis, Missouri

Dear Sir:

Enclosed herewith you will find secondary report by Arthur G. McKee and Company on the Holbrook Potash Project.

Some minor changes have been made in this, but the report remains essentially the same. This report is more tempered and leaves openings for other exploration in the area.

Your attention is directed to the last paragraph on page 3 which will change the pay-out time of 6.4 years to 6.9.

Very truly yours,

ELG:mc

E. L. Gorsuch

Enclosure