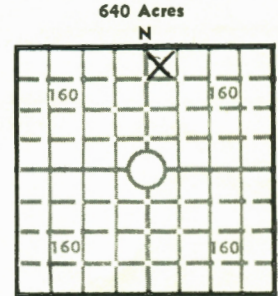


KANSAS DRILLERS LOG

15-009-20822  
13-31-20E

S. <sup>13</sup> T. 31 R. <sup>20</sup> E  
Loc. ~~SSE SW~~ ~~NW~~ NW NW NE

County Labette



Locate well correctly  
Elev.: Gr. 870' ± 10'

DF \_\_\_\_\_ KB \_\_\_\_\_

API No. 15 — 099 — 20,822  
County Number

Operator  
Missouri Lead-Zinc Company

Address  
1705 North Walnut Pittsburg, Kansas 66762

Well No. #1 Lease Name A. E. Manners

Footage Location  
feet from (N) (S) line feet from (E) (W) line

Principal Contractor (JOY SPADLING) NW-T. D. Air Rotary Co. Geologist Michael L. Ebers

Spud Date 11/22/77 Total Depth 885' P.B.T.D.

Date Completed 11/30/77 Oil Purchaser

CASING RECORD

Report of all strings set — surface, intermediate, production, etc.

| Purpose of string | Size hole drilled | Size casing set (in O.D.) | Weight lbs/ft. | Setting depth | Type cement | Sacks | Type and percent additives |
|-------------------|-------------------|---------------------------|----------------|---------------|-------------|-------|----------------------------|
| OVERBURDEN        | 6 1/4"            | 7"                        |                |               |             |       |                            |
|                   |                   |                           |                |               |             |       |                            |
|                   |                   |                           |                |               |             |       |                            |
|                   |                   |                           |                |               |             |       |                            |

LINER RECORD

PERFORATION RECORD

| Top, ft. | Bottom, ft. | Sacks cement | Shots per ft. | Size & type | Depth interval |
|----------|-------------|--------------|---------------|-------------|----------------|
|          |             |              |               |             |                |
|          |             |              |               |             |                |

| Size | Setting depth | Packer set at |
|------|---------------|---------------|
|      |               |               |

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

| Amount and kind of material used | Depth interval treated |
|----------------------------------|------------------------|
|                                  |                        |
|                                  |                        |
|                                  |                        |

INITIAL PRODUCTION

|  |           |   |                        |               |      |
|--|-----------|---|------------------------|---------------|------|
| Date of first production                           |           | Producing method (flowing, pumping, gas lift, etc.) |                        |               |      |
| RATE OF PRODUCTION PER 24 HOURS                    | Oil bbls. | Gas MCF   | Water bbls.            | Gas-oil ratio | CFPB |
| Disposition of gas (vented, used on lease or sold) |           |   | Producing interval (s) |               |      |

INSTRUCTIONS: As provided in KCC Rule 82-2-125, within 90 days after completion of a well, one completed copy of this Drillers Log shall be transmitted to the State Geological Survey of Kansas, 4150 Monroe Street, Wichita, Kansas 67209. Copies of this form are available from the Conservation Division, State Corporation Commission, 3830 So. Meridian (P.O. Box 17027), Wichita, Kansas 66217. Phone AC 316-522-2206. If confidential custody is desired, please note Rule 82-2-125. Drillers Logs will be on an open file in the Oil and Gas Division, State Geological Survey of Kansas, Lawrence, Kansas 66044.

Operator Missouri Lead & Zinc Co. DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.:

Well No. 1 Lease Name A.E. Manners STRAT TEST

S 13 T 31 R 20 E W

**WELL LOG**  
 Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries. SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.

| FORMATION DESCRIPTION, CONTENTS, ETC. | TOP | BOTTOM | NAME | DEPTH |
|---------------------------------------|-----|--------|------|-------|
| Overburden                            | 0   | 2      |      |       |
| Clay                                  | 2   | 14     |      |       |
| Shale                                 | 14  | 65     |      |       |
| Lime                                  | 65  | 82     |      |       |
| Shale                                 | 82  | 90     |      |       |
| Lime                                  | 90  | 105    |      |       |
| Shale                                 | 105 | 115    |      |       |
| Sand                                  | 115 | 130    |      |       |
| Shale                                 | 130 | 150    |      |       |
| Shale                                 | 150 | 210    |      |       |
| Lime                                  | 210 | 212    |      |       |
| Shale                                 | 212 | 320    |      |       |
| Sand                                  | 320 | 360    |      |       |
| Shale                                 | 360 | 387    |      |       |
| Sand                                  | 387 | 391    |      |       |
| Lime                                  | 391 | 394    |      |       |
| Shale                                 | 394 | 460    |      |       |
| Sand Gas in 510; 475#                 | 460 | 475    |      |       |
| Shale                                 | 475 | 510    |      |       |
| Sand                                  | 510 | 514    |      |       |
| Shale                                 | 514 | 555    |      |       |
| Lime & Chert                          | 560 | 860    |      |       |
| Green Shale                           | 860 | 872    |      |       |
| Lime Cotten                           | 872 | 885    |      |       |
| Flooded out at 885' (T.D.)            |     |        |      |       |

USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.

Date Received \_\_\_\_\_  
 Signature: *Charles F. Ebers*  
 Title: Exploration Geologist  
 Date: June 21, 1979

2071.6C

13-31-70E