

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 * WICHITA, KS

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY L. D. DRILLING, INC.
 LEASE # 1-30 BAIRD
 FIELD WILDCAT
 LOCATION 1651' FSL & 2310' FEL
 SEC 30 TWP 66 RGE 35W
 COUNTY THOMAS STATE KANSAS
 CONTRACTOR L. D. DRILLING, INC.
 SPUD 5-13-16 COMP 5-23-16
 RTD 4850 LTD 4852
 MUD UP 3564 TYPE MUD CHEMICAL

ELEVATIONS
 KB 3277 *
 DF _____
 GL 3272
 Measurements Are All From 3277 KB
 CASING
 SURFACE 8 5/8" @ 342'
 PRODUCTION 5 1/2" @ 4617'
 ELECTRICAL SURVEYS
 DUAL IND, DENS-N., MICRO

SAMPLES SAVED FROM _____ 3600 TO 4850
 DRILLING TIME KEPT FROM _____ 3500 TO 4850
 SAMPLES EXAMINED FROM _____ 3600 TO 4850
 GEOLOGICAL SUPERVISION FROM _____ 3800 TO 4850
 GEOLOGIST ON WELL KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	2886+391	2886+391
B/ANN.	2923+354	2924+353
WAB, STOTLER	3788-511	3784-507
HEEBNER	4095-818	4094-817
LANSING	4144-867	4139-862
B/KC	4398-1121	4397-1120
PAWNEE	4516-1239	4510-1233
FORT SCOTT	4580-1303	4582-1305
CHEROKEE	4611-1334	4612-1335
MISSISSIPPI	4756-1479	4758-1481



APR 15 - 193 - 2096.3

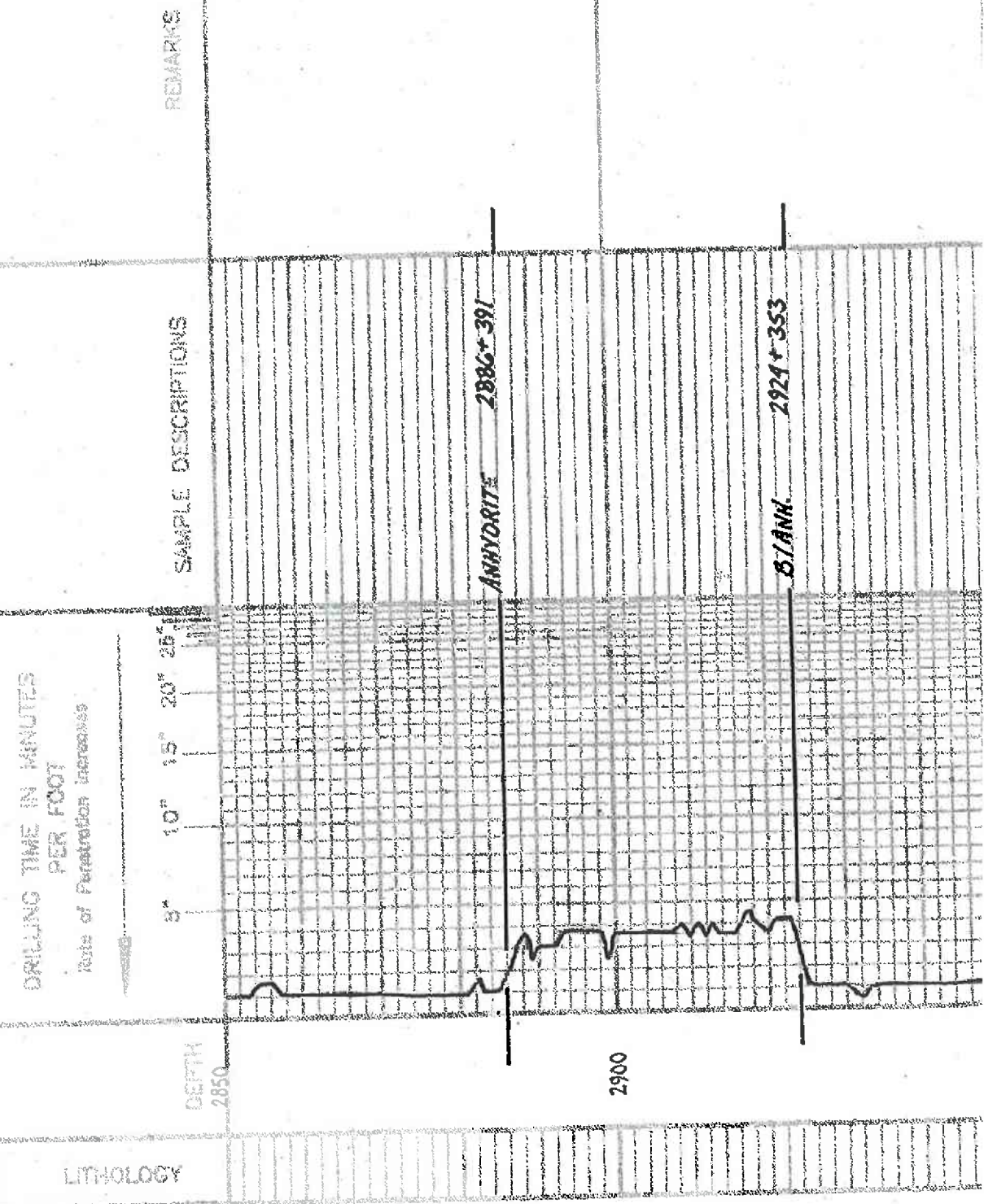
* Stated Ground Level Elevation: 3273.64
 Location lowered 16' = 3272.64

REMARKS

5-13-16 SPUD
 5-14 @ 345'
 5-15 @ 1865'
 5-16 @ 3890'
 5-17 @ 3625'
 5-18 @ 3865'
 5-19 @ 4210'
 5-20 @ 4485'
 5-21 @ 4548'
 5-22 @ 4850'
 5-23 @ 4850'

LEGEND

- Anhydrite
- Soft
- Sandstone
- Siltstone
- Calc. sh.
- Limestone
- Gul. L. lime
- Chert
- Dolomite



3500

3600

3700

✓ Displaced

MP 2

3504

MS 59

MP 2

MS 59

MP 2

MS 59

Samples are tagged

Dr. G. V. V. ch

#

59. Rd

LS. 7. wt. 17.14. Fos. 5.11

A. wh.

LS. 7. Dolomite. 5.11. Fos. 5.11

Dr. G. V. V. ch. 5.11

Sh. Rd

Sh. Rd. 5.11. 5.11

LS. 7. 5.11. 5.11. 5.11

Sh. 5.11. 5.11

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Sh. Rd. 5.11

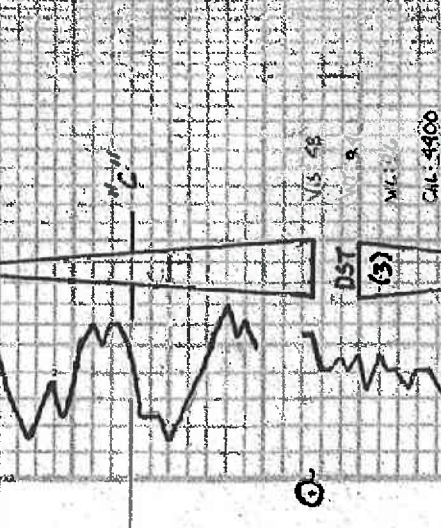
WAB, SIBTLER 3784-507

107

West. Mineral Co. Colonist -
 No. Vis. -
 No. 1000

Sh. - clay
 Sh. - w. l. red. foss. calc. in USA
 Fr. Vis. some sh. in
 L.L. sh. - R. sh. - S. sh. - G. sh. - F. sh. -
 F. sh. - 1000

Sh. - clay - vis. - clay
 Sh. - G. - D. - Silty
 G. - Silty - sh. - ls.



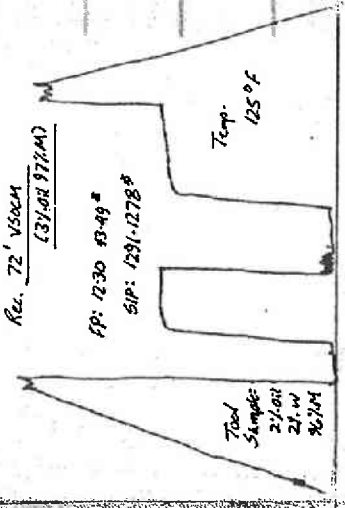
4500

DST 92 4190-4518

Isoperm Blow hole to 314'
 2' open: " " " 315'
 30-45-45-60

Rec. 72' V5004
 (37) at 971.40'

FP: 1230 4349'
 SIP: 1291-1278'



PANNEE 4510-4235

Sh. - red. vis. foss. calc. B. sh. -
 R. sh. - S. sh. - G. sh. - F. sh. -
 F. sh. - 1000

Sh. - red. vis. foss. calc. B. sh. -
 R. sh. - S. sh. - G. sh. - F. sh. -
 F. sh. - 1000

Sh. - G. - D. - Silty
 G. - Silty - sh. - ls.

Sh. - clay
 Sh. - G. - D. - Silty

Sh. - clay
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Sh. - clay
 Sh. - G. - D. - Silty

4500

4600

4700

4800

4900

5000

5100

5200

5300

5400

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5800

5900

6000

6100

6200

6300

6400

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6900

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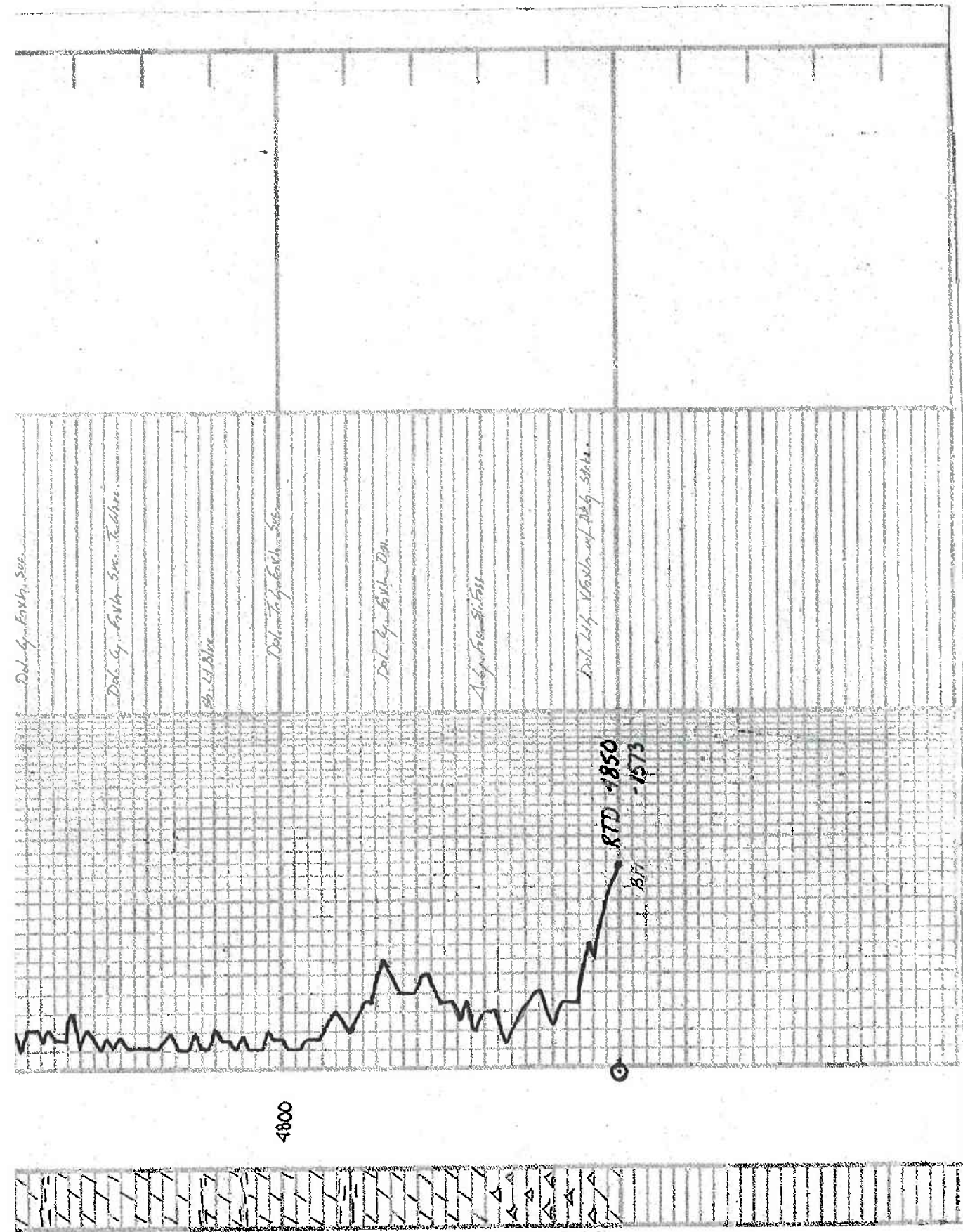
27100

27200

27300

27400

27500



4800

Dol. G. Earth. Sec.

Dol. G. Earth. Sec. ... Tufface.

Sh. Sl. Blue

Dol. G. Earth. Sec.

Dol. G. Earth. Sec.

Arg. Foss. St. Pass

Dol. G. Earth. Sec.

RTD - 1850
877

1573

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