

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 YORK 25 C

FIELD WILDCAT

LOCATION 1815' FSL & 2310' FWL

SEC 25 TWP 15S RGE 31W

COUNTY GOVE STATE KANSAS

CONTRACTOR L. D. DRILLING, INC.

SPUD 1-9-16 COMP 1-18-16

RTD 4507 LTD 4509

MUD UP 3404 TYPE MUD CHEMICAL

ELEVATIONS

KB 2727

DF

GL 2722

Measurements Are All
From 2727 KB

CASING

SURFACE 8 5/8" @ 347'

PRODUCTION

ELECTRICAL SURVEYS

DUAL IND, DENS-N. MICRO

SAMPLES SAVED FROM 3400 TO 4507

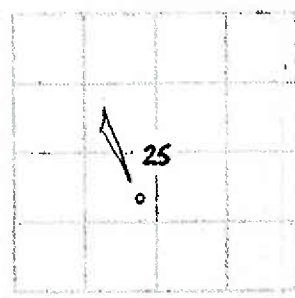
DRILLING TIME KEPT FROM 3300 TO 4507

SAMPLES EXAMINED FROM 3400 TO 4507

GEOLOGICAL SUPERVISION FROM 3700 TO 4507

GEOLOGIST ON WELL KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANNYDRITE	2172+555	2173+554
B/ANN.	2194+533	2195+532
STOTLER	3386-659	3386-659
HEEBNER	3764-1037	3763-1036
LANSING	3804-1077	3800-1073
STARK	4062-1335	4061-1334
MARMATON	4177-1450	4174-1447
FORT SCOTT	4320-1593	4319-1592
CHEROKEE	4344-1617	4343-1616
MISSISSIPPI	4433-1704	4430-1703



API: 15-063-22281

REMARKS

1-9-16 SPUD
 1-10 @ 330'
 1-11 @ 420'
 1-12 @ 1870'
 1-13 @ 2820'
 1-14 @ 3465'
 1-15 @ 3976'
 1-16 @ 4350'
 1-17 @ 4425'
 1-18 @ 4507'

LEGEND

-  Anhydrite
-  Soft
-  Sandstone
-  Shale
-  Dark sh.
-  Unweaken. Col. Lime
-  Chert
-  Dolomite



LITHOLOGY

REMARKS

SAMPLE DESCRIPTIONS

ANNYDRITE 2173+554

B/ANN 2195+532

2200

2250

3300

3400

3500

Samples are tagged

STOTLER 3386-659

LS. in Sh. Foss. SLI. A

LS. wt. VSI. Foss. Sh. Chalky

Sh. G.

LS. wt. Sh. Foss. SLI. A

Sh. Chalky SLI. A

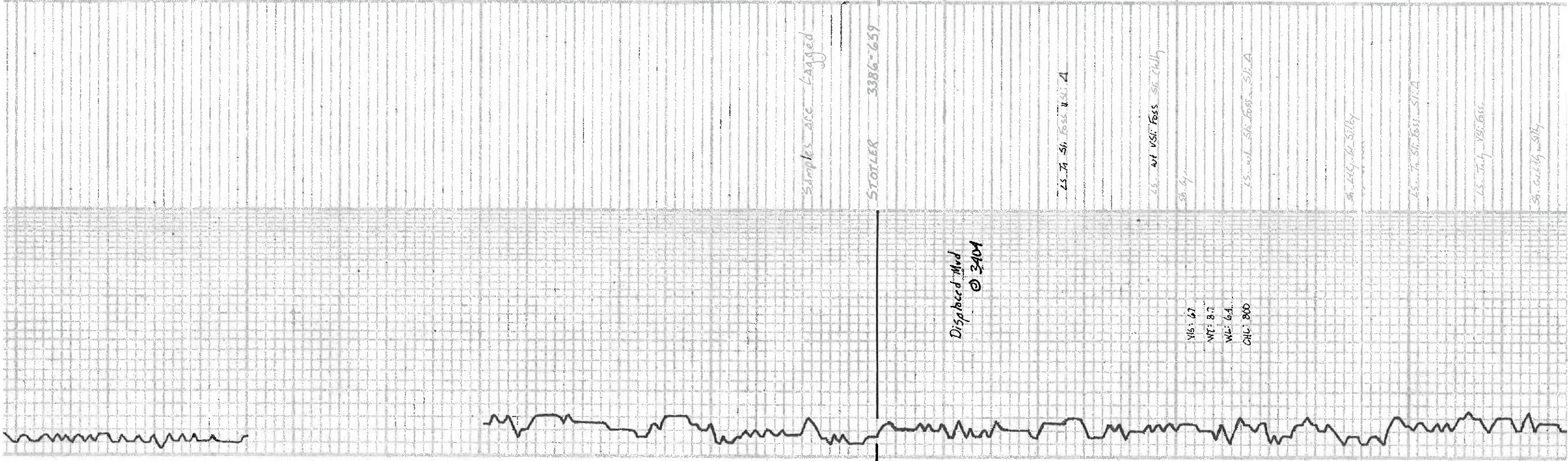
LS. in Sh. Foss. SLI. A

LS. in Sh. Foss.

Sh. Chalky SLI. A

Displaced Mud @ 3404

VIS: 67
WT: 87
WL: 64
CUC: 800



3600

3700

3800

LS. 49. VSI Foss. Sil. Chalk

LS. 48. VSI Foss. Caliche

Sh. G.

LS. 47. Foss. VSI Caliche VSI Chalk

LS. 46. Foss.

LS. 45. Foss. VSI

Sh. 44.

LS. 43. VSI Foss.

Sh. 42. Silty

LS. 41. Foss. VSI

LS. 40. Foss. Caliche

Sh. 39.

LS. 38. VSI Foss.

LS. 37. Foss. Caliche

LS. 36. Foss. Sil. Caliche VSI Chalk

LS. 35. VSI Foss.

LS. 34. Foss.

LS. 33. VSI Foss. VSI Chalk

HEEBNER 3763-1036

Sh. 32.

LS. 31. VSI Foss. Silty

LANSING 3800-1073

LS. 30. VSI Foss.

LS. 29. VSI Foss. VSI Chalk

Sh. 28.

LS. 27. VSI Foss.

LS. 26. VSI Foss. Sil. Chalk

TORONTO

LANS LOG



LS. T. wt. VSI. Foss. Sil. Chalky

Sh. G.

LS. Cl. Br. VSI. Foss. Sil. A

LS. T. wt. Sil. Foss. Sil. A

LS. T. G. calc. sh. ool. ool. SS.

LS. G. Br. VSI. Foss. Sil. Chalky

LS. G. Br. VSI. Foss. Sil. Chalky

LS. wt. G. VSI. Foss. Sil. Chalky

MUNCIE CREEK 3968-1241

Sh. Br. G. VSI. Foss. Sil. Chalky

Sh. G. Br. G.

LS. wt. G. VSI. Foss. Sil. Chalky

LS. wt. G. VSI. Foss. Sil. Chalky

Sh. G. Br. G.

LS. wt. G. VSI. Foss. Sil. Chalky

LS. wt. G. VSI. Foss. Sil. Chalky

Sh. G. Br. G.

LS. wt. G. VSI. Foss. Sil. Chalky

STARK 4067-1334

LS. wt. G. VSI. Foss. Sil. Chalky

LS. G. Br. VSI. Foss. Sil. Chalky

LS. wt. G. VSI. Foss. Sil. Chalky

LS. G. Br. VSI. Foss. Sil. Chalky

HUSHPUCKNEY 4096-1369

LS. wt. G. VSI. Foss. Sil. Chalky

LS. G. Br. VSI. Foss. Sil. Chalky

LS. G. Br. VSI. Foss. Sil. Chalky

LS. wt. G. VSI. Foss. Sil. Chalky

LS. G. Br. VSI. Foss. Sil. Chalky

BIRC 4138-1411

LS. wt. G. VSI. Foss. Sil. Chalky

Sh. G. Br. G.

LS. wt. G. VSI. Foss. Sil. Chalky

Sh. G. Br. G.

Sh. Orange Rd. Silty. S. G.

MARMATON 4174-1447

LS. T. VSI. Foss. Sil. A

Sh. G. Br. G.

LS. wt. G. VSI. Foss. Sil. Chalky

VIS: 61
WT: 90
NL: 6A
CAL: 800

✓ Norm. 102

3900

4000

4100

4200

LS. wt. 50 lbs. Sh. Chalk

Sh. 4.16

LS. 7.4 USIA

Sh. 9.8 V. Chalk

Sh. 8.1

LS. 7.5 Sh. 6.8 Sh. A.

SH OK 4. PAWNEE 4266-1539

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. 7.1 V. 5.1 V. 5.1 A.

Sh. 2.1 6.7 6

LS. 7.1 Sh. 6.8 Sh. A.

MYRICK STATION 4299-1572

LS. wt. 50 lbs. Sh. A. 6.5 wt. chalk

LS. wt. 50 lbs. Sh. Chalk

Sh. 1.1 6.2 6

FORT SCOTT 4319-1592

LS. 6.1 Chalk 6.00 Sh. 6.8 Sh. A.

LS. 6.1 Sh. 6.8 Sh. A. 6.00

CHEROKEE 4343-1616

LS. 6.1 Sh. 6.8 Sh. A. 6.00

LS. 6.1 Sh. 6.8 Sh. A. 6.00

LS. 6.1 Sh. 6.8 Sh. A. 6.00

LS. 6.1 Sh. 6.8 Sh. A. 6.00

LS. 6.1 Sh. 6.8 Sh. A. 6.00

LS. 6.1 Sh. 6.8 Sh. A. 6.00

JOHNSON 4381-1654

LS. 6.1 Sh. 6.8 Sh. A. 6.00

LS. 6.1 Sh. 6.8 Sh. A. 6.00

LS. 6.1 Sh. 6.8 Sh. A. 6.00

LS. 6.1 Sh. 6.8 Sh. A. 6.00

LS. 6.1 Sh. 6.8 Sh. A. 6.00

LS. 6.1 Sh. 6.8 Sh. A. 6.00

MISSISSIPPI 4430-1703

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

LS. wt. 40 lbs. Sh. 6.8 Sh. A.

RTD 4507-1780

DST (1) 4361-2419

15' open. Row bolt 7.6"

2' OPEN " 6 1/2"

30-95-95-60

Rec. 54' Mud

63' SWM (224 W. 887 AM)

63' MW (668 W. 371 AM)

TF: 180'

FP: 24-63

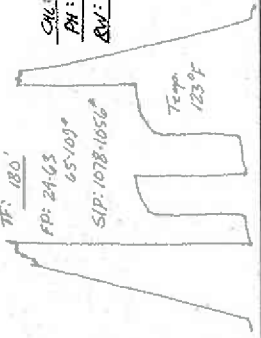
65-109°

SIP: 1078-1056°

CAL: 24-002

PH: 7.0

RV: 3720789



Tool Sample: 267 W 791 Mud

VIS: 59
WT: 84
WL: 64

DST CAL: 900

V JOHNSON LOG

VIS: 59

WT: 91

WL: 68

CAL: 1100

4300

4400

4500