

KIM B. SHOEMAKER

CONSULTING GEOLOGIST

316-684-9709 * WICHITA, KS

GEOLOGIST'S REPORT

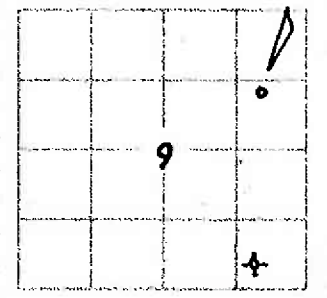
DRILLING TIME AND SAMPLE LOG

COMPANY RAYMOND OIL COMPANY, INC.
 LEASE # 1 JOAN DEEDS
 FIELD WILDCAT
 LOCATION 1582' FNL # 787' EEL
 SEC 9 T19SP 6s RGE 37w
 COUNTY SHERMAN STATE KANSAS
 CONTRACTOR L.D. DRILLING, INC.
 SPUD 9-16-14 COMP 9-27-14
 RTD 5030 LTD 5030
 MUD UP 3637 TYPE MUD CHEMICAL

ELEVATIONS
 KB 3400
 DF _____
 GI 3395
 Measurements Are All From 3400 KB
 CASING
 SURFACE 8 5/8" @ 303'
 PRODUCTION 5 1/2" @
 ELECTRICAL SURVEYS
 DUAL IND., N-DENS., MICRO, SONIC.

SAMPLES SAVED FROM 3800 TO 5030
 DRILLING TIME KEPT FROM 3800 TO 5030
 SAMPLES EXAMINED FROM 3800 TO 5030
 GEOLOGICAL SUPERVISION FROM 4100 TO 5030
 GEOLOGIST ON WELL KIM B. SHOEMAKER

FORMATION TOPS	LOG	SAMPLES
ANHYDRITE	3067+333	3072+328
B/ANK.	3102+298	3102+298
STOTLER	3920-520	3922-522
HEEBNER	4201-801	4206-806
LANSING	4257-857	4257-857
B/KC	4517-1117	4514-1114
PAWNEE	4632-1232	4633-1233
FORT SCOT	4696-1296	4695-1295
CHEROKEE	4722-1322	4723-1323
MISSISSIPPI	4930-1530	4930-1530



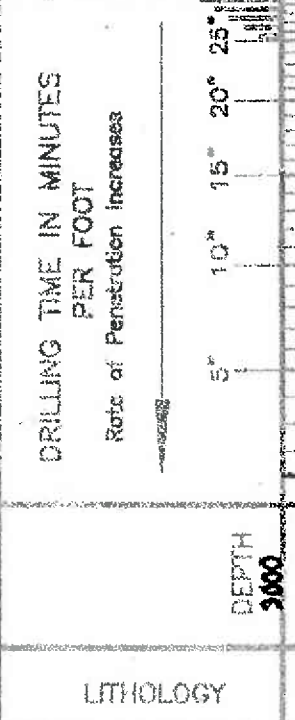
REMARKS

API: 15-181-20599

9-16-14 SPUD
 9-17 @ 306'
 9-18 @ 1764'
 9-19 @ 2800'
 9-20 @ 3606'
 9-21 @ 4150'
 9-22 @ 4450'
 9-23 @ 4589'
 9-24 @ 4660'
 9-25 @ 4779'
 9-26 @ 4938'
 9-27 @ 5030'

LEGEND

- Anhydrite
- Salt
- Sandstone
- Shale
- Carb sh
- Limestone
- Coal Lime
- Chert
- Dolomite



SAMPLE DESCRIPTIONS

REMARKS

ANHYDRITE 3072+328

B/ANK. 3102+298

B/ANK 3102+298

3100

3200

3800

3900

Samples are lagged

Sh. Rd Silty

Sh. Silty, Gr. Silty

ls. T. Silty, Dal.

Sh. Rd.

ls. T. Silty, Silty

Sh. Rd.

ls. wt. Silty, Silty

Sh. Rd.

Sh. Gr.

STOTLER 3922-522

ls. wt. Silty, Silty, Silty

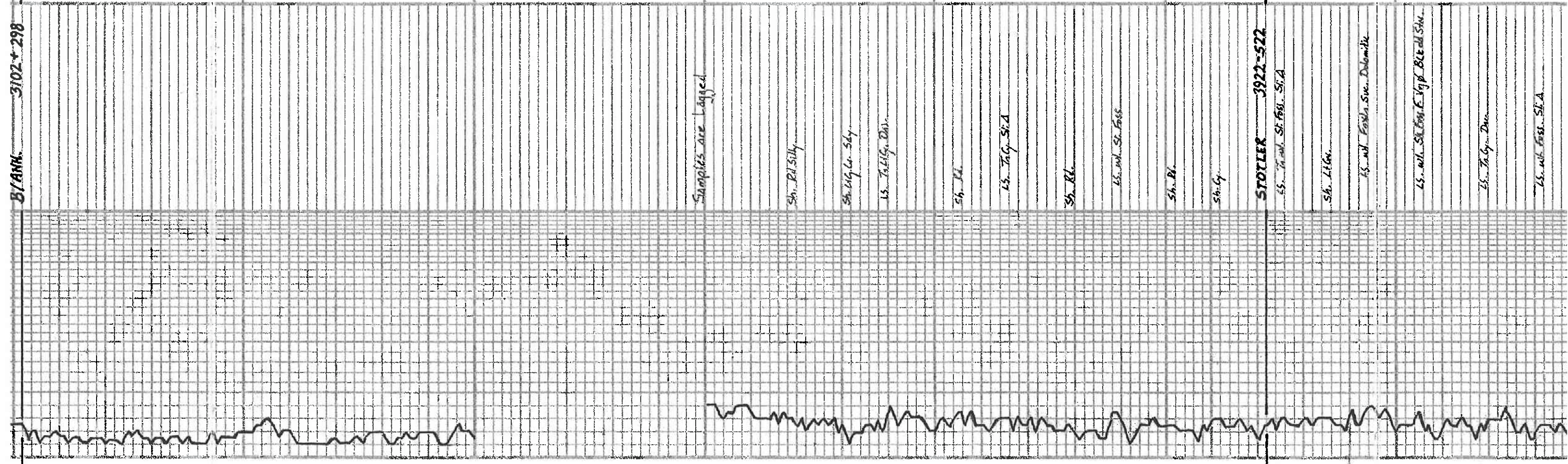
Sh. T. Gr.

ls. wt. Fossiliferous, Dolomite

ls. wt. Silty, Silty, E. Silty, Blue Silty

ls. T. Silty, Dal.

ls. wt. Fossiliferous, Silty

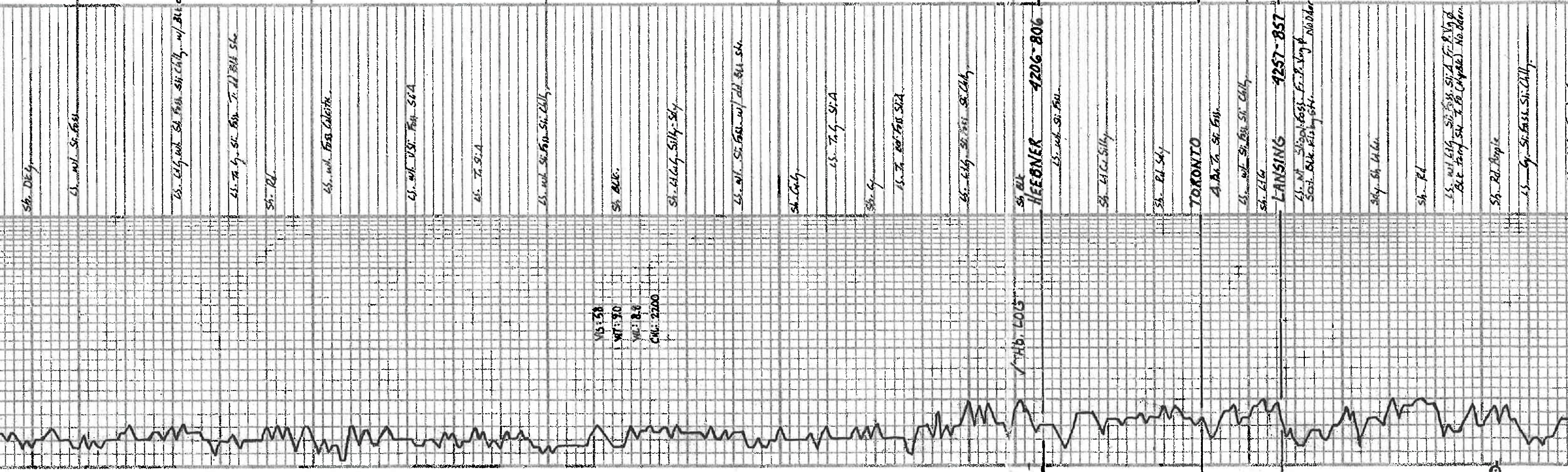


4000

4100

4200

4300



NS: 58
 WT: 30
 WT: 80
 CW: 2200

✓ HB. LOG
 SH. BL

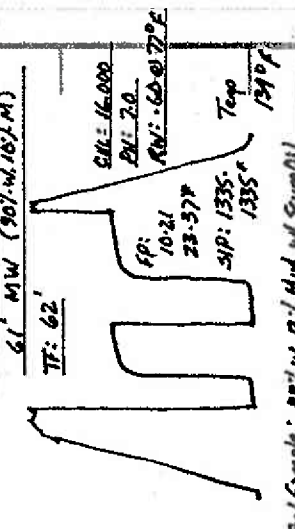
Sh. DEly
 ls. w/ Si. Foss.
 ls. clay w/ sh. Foss. sil. chly. w/ BL. and SM.
 ls. m. gy. sil. Foss. T. 22 2000 sil.
 Sh. PL.
 ls. w/ Foss. Calcite.
 ls. w/ VSI. Foss. SGA
 ls. T. SIA
 ls. w/ Si. Foss. Sil. chly.
 Sh. BL.
 Sh. clay. Silty. Silty.
 ls. w/ Si. Foss. w/ ch. sil. sil.
 Sh. Clay
 ls. T. gy. SIA
 Sh. gy.
 ls. T. 200 Foss. SIA
 ls. clay. sil. Foss. sil. chly.
 SH. BL
 HEERNER 4206-806
 ls. w/ Si. Foss.
 Sh. sil. clay
 Sh. PL. Silty
 TORONTO
 A. M. T. gy. Foss.
 ls. w/ Si. Foss. sil. chly.
 Sh. BL
 LANSING 4257-857
 ls. w/ Sh. Foss. F. T. Long P. No. 1000
 Soil. Blk. sil. gy. 6H.
 sil. sh. clay
 Sh. PL
 ls. w/ clay. sil. Foss. SIA. F. P. V. 10
 BL. tang. SW. T. 20 (Chy. 200) No. 1000
 Sh. PL. Purple
 ls. gy. sil. Foss. sil. chly.
 ls. sil. Foss. Foss. Sil.

ls. Gy. Dol.
Sh. L. Blue
ls. Tan. Sil. S. V. P. B. L. Key. Sh.
ls. Tan. Sil. S. V. P. B. L. Key. No. 0.02
ls. Tan. Sil. Foss. Sh. A

MUNCIE CREEK 4372-972

Sh. Bl.
ls. Bl. V. S. Foss.
Sh. Bl. Sil. S. V. P. B. L. Key.
ls. Tan. Sil. S. V. P. B. L. Key.

DST (1) 4371-9950
15' Open: Blow built to 2 1/4"
2' Open: " " " 2 1/2"
30' CO-45-75
Rec. 1' 1500 MAX. (21' Oil, 68' W. 33' M.)
6' MW (907' W. 107' M.)

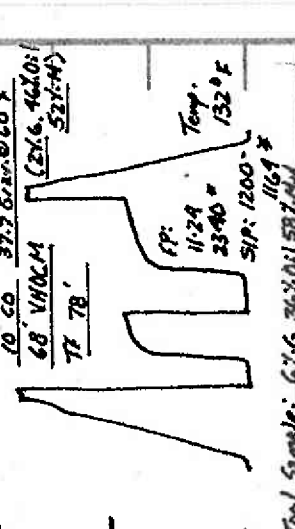


Sh. Bl.
ls. Tan. Sil. S. V. P. B. L. Key.
ls. Tan. Sil. S. V. P. B. L. Key.

DIACK 9729-1059

Sh. Bl.
ls. Tan. Sil. S. V. P. B. L. Key.
ls. Tan. Sil. S. V. P. B. L. Key.

DST (2) 4510-1589
15' Open: Blow built to 6 1/4"
2' Open: " " " 1 1/2"
30' CO-45-90
Rec. 175' G.L.P.
10' CO 37.7 Gram @ 60°F
68' VMCM (27.6, 46201, 521-M)
TF 78'



Sh. Bl. L.G.
ls. Tan. Sil. S. V. P. B. L. Key.

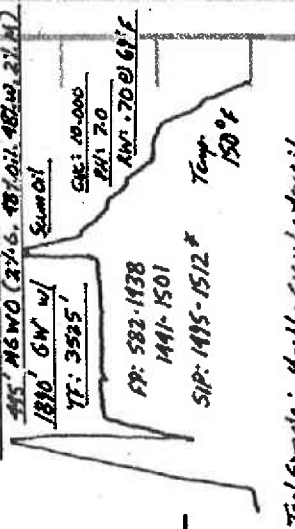
BIRC 4519-1114

Sh. Blue-Gru.
ls. Tan. Sil. S. V. P. B. L. Key.

MARMATON 4526-1126

ls. Tan. Sil. S. V. P. B. L. Key.
ls. Tan. Sil. S. V. P. B. L. Key.

DST (3) 4617-1660
15' Open: Bottom bucket 38 min Sec.
2' Open: " " " 1 1/2 min
30' CO-45-120
Rec. 115' G.L.P. 15' CO 38.7 Gram @ 60°F
175' MW 60 (36) 6.31701, 221, W. 11, M)
45' MW 70 (27) 6.48701, 487, W. 21, M)
1810' GW w/ Sumoil
TF: 3525'



Sh. Bl. L.G.
ls. Tan. Sil. S. V. P. B. L. Key.

PAWNEE 4633-1233

ls. Gy. Sil. Foss.
ls. Gy. Sil. Foss.

DST (1)
MUNCIE LOG

Vis: 65
WT: 9.0
MC: 8.0
CIP: 3000

DST (2)

Vis: 49
WT: 9.2
MC: 8.8
CIP: 3000

DST (3)

Vis: 57

4400

4500

4600

Tool Sample: 88' W. 2' N. of Summit

Tool Sample: Mostly Gas w/ water sat.

WT: 93
MC: 112
CUL: 4200

Alg. fss.

Sh. Gls.

LS. w/ Sh. Foss. Sh. A

Alg. fss.

SA BL

FORT SCOT 4685-1295

LS. Foss. Sh. Foss. Sh. CA.

4700

LS. Drgy. YSU. Fall

CHEROKEE 1723-1323
Sh. Bl. Carb.

LS. Sh. Bl. Foss. Sh. A

LS. Ltg. V. Sil. Foss. Sil. Chly.

DST (4)

DST (4) 4751-4779

15' OPEN: Bottom bucket 10 min.
3' OPEN: " " " 13 "

30-60-45-90

Sh. Gls. Drgy.
Sh. Blue-Gy. Sdy

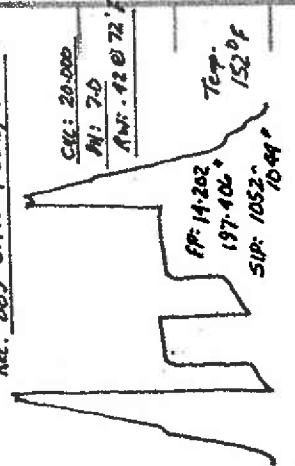
LS. Sh. Bl. Foss. Sh. A

Sh. Sil. M. Co. G. Bl. Spk. Bl. F. Sdy
Bl. Flky Sh. No. Flow No. Odr.

WT: 51
MC: 112
CUL: 3800

Sh. Bl. - LS. w/ Sdy. Bl. Co. G. Sh. Bl. A

Total Sample: 100% W



Sh. Bl. Bl. G.

Sh. Purple. Sdy.

Sh. Gls. Bl. Co. G. Bl. Sil. Bl.

Sh. Yellow. blue. Sdy.

Sh. Sh. Yellow. Rd. Purple

LS. Sil. Foss.

Sh. Blue-Gy. Sdy.

Sh. Gy. Drgy.

Sh. Bl. Blue. Purple

LS. w/ Foss.

Sh. Sil.
MISSISSIPPI 4930-1530

Dol. Bl. Foss. Sil.

Dol. Bl. Foss. w/ Sil. Bl.

Sh. Gls.

Dol. Gy. Bl. Foss. w/ Drgy. Foss.

LS. Gy.

Dol. Gls. Sil.

Dol. G. Foss. Dol.

WT: 51
MC: 103
CUL: 4500

4800

4900

4900

5000

RTD 5090-1630

VIS: 51
WT: 945
WV: 10.8
CAL: 1500

Sh. G. Dk. Grey

Sh. G. Blue-Black

Δ wt. Fast.

Sh. G. Lta
MISSISSIPPI 4930-1530

Dol. G. Ex. In. S. U.

Dol. G. Ex. In. W. J. To. G. In.

Sh. G. Lta

Dol. G. Dk. Grey Ex. In. W. Dk. Grey In.

Δ G.

Dol. G. Lta Silty.

Dol. G. Ex. In. Dns.

Dol. G. Lta. V. Ex. In.

Δ wt. Fast.

Δ Δ

Δ Δ

Δ Δ