

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

COMPANY Pauley Oil
 LEASE S. Rolfs #4
 FIELD Genesee - Edwards
 LOCATION SE-NW-SE-NW
 SEC 15 TWP 17 RGE 8
 COUNTY Ellsworth STATE KS
 CONTRACTOR Minnesota Drilling LLC
 SPUD 3/20/2013 COMP 3/27/13
 RTD 3277 LTD _____
 MUD UP 2500 TYPE MUD Chemical

ELEVATIONS
 KB 1770
 DF _____
 GL 1757
 Measurements Are All From _____

CASING
 SURFACE 2 5/8" @ 442'
 PRODUCTION 5 1/2"
 ELECTRICAL SURVEYS
 NO E-logs Run

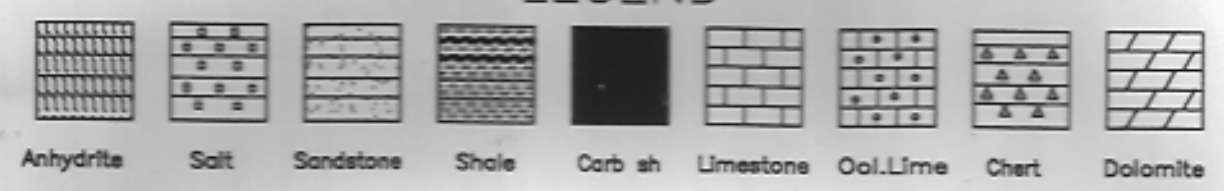
SAMPLES SAVED FROM 2600 TO _____
 DRILLING TIME KEPT FROM 2600 TO _____
 SAMPLES EXAMINED FROM 2600 TO _____
 GEOLOGICAL SUPERVISION FROM 2600 TO _____
 GEOLOGIST ON WELL Wright Urban

FORMATION TYPES	LOG	SAMPLES
Heehner	NO log	2695 - 2225
Tarrant		2719 - 249
Douglas		2729 - 959
Lawansing		2835 - 1065
BVC		3161 - 1391
Atbuckie	NO log	3266 - 1496
Brown lime		2816 - 1746
Conglomerate		3193 - 1413
RTD		3277 - 1507

REMARKS

5 1/2" production casing was set & cemented on the S. Rolfs #4.
 Respectfully submitted
 Wyatt Urban

LEGEND



DEPTH	DRILLING TIME Logarithmic Scale)

50:32

2011 001

GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

ANY Pauley Oil
 # S. Rolfs #4
 D Geneena - Edwards
 TION SE-NW-SE-NW
15 TWP 17 RGE 8
 CITY Ellsworth STATE KS
 RACTOR Minnesota Drilling LLC
3/20/2013 COMP 3/27/13
3277 LTD _____
 UP 2500 TYPE MUD Chemical

ELEVATIONS
 KB 1770
 DF _____
 GL 1757
 Measurements Are All From _____

CASING
 SURFACE 858 @ 442'
 PRODUCTION 5 1/2"
 ELECTRICAL SURVEYS
 NO E-logs Ran

PLES SAVED FROM 2600 TO _____
 LING TIME KEPT FROM 2600 TO _____
 PLES EXAMINED FROM 2600 TO _____
 LOGICAL SUPERVISION FROM 2600 TO _____
 GIST ON WELL Wyatt Urban

FORMATION TOPS	LOGS	SAMPLES
<u>bone</u>	<u>NO log</u>	<u>2695 - 925</u> <u>2719 - 949</u>
<u>phos</u>	<u>3</u>	<u>2749 - 959</u>
<u>ssing</u>		<u>2835 - 1065</u>
<u>ckle</u>	<u>Ab log</u>	<u>3161 - 1391</u> <u>3266 - 1496</u>

5/2" production casing
 was set & cemented on the
 S. Rolfs #4.

Respectfully Submitted
 Wyatt Urban

LEGEND



LITHOLOGY	DEPTH	DRILLING TIME (Logarithmic Scale)										SAMPLE DESCRIPTIONS	REMARKS
		.5	1	2	3	4	5	10	15	20	30		
	20											ls. exl tan, Dns, dy	
	40											ls. lim/whi/tan exl Dy	
												sh. gry silty	NO Geoclock 2644-2658
												gry sh. silty	
	60											NO Geoclock	
												ls. tan foss, dy chky Fr. p	KB-1770
	80											ls. tan gran. Dns	
												Hebner 2695	
	2700											sh. carb sh.	
												sh. gry/green soft.	
	20											for 2719	
												ls. tan/bcn exl, dy Dns. No stain, No odor.	
	40											Douglas 2729	
												sh-green/gry clay/soft	
	60											sd. gry/greenish f. grained well sorted	
	80											ls. tan/bcn exl, dy Dns-	
	2800											gry/green/mer sh. soft	

						SAMPLE DESCRIPTIONS	REN				
.5	1	2	3	4	5	10	15	20	30		
20											
40											
60											
80											
2700											
20											
40											
60											

SAMPLE DESCRIPTIONS

REN

.5 1 2 3 4 5 10 15 20 30

l.s. fxl tan, Tns, dy

l.s. lfm/wh/ton fxl
dy

sh. grx silty

grx sh. silty

l.s. tan foss, dy chky
frp

l.s. tan gran. Dns.

sh. carb sh.

sh. gry/green soft.

l.s. tan/ben fxl, dy Dns.
No odor

sh-green/gry clay, soft.

sh. gry/greenish f-grained
w/ shales

NO GEOLOG

- Hedner 2695

- for 2719

- Douglas 2729

No Geo
2644-20

KB-177

2800

20

40

60

80

2900

20

40

60

80

3000

Brown lime
2815

transing 2835

gry/green/mar sh. soft.

LS. Tan/brn fxl Dns
Few Foss.

LS. Whit/Tan fxl, Chky

LS. Whit/Tan fxl Dns
Few Foss, Few US ϕ

LS. Tan/Dkn fxl, Foss
Vik ϕ

• LS. Whit com good com ϕ
Lt. Brn str, sta, Fr. odor

• LS. Tan/Whit com good com ϕ
sta, good odor.

LS. Tan sub com scatt ϕ
Lt. str, Free oil (LF) ϕ
Fr. odor

sh. gry/bk silty

LS. Tan/gry fxl Dy Dns.
Lt. Brn str

LS. Whit fxl, Dns. Few Foss.

LS. Whit/Tan com good com ϕ
Lt. str.

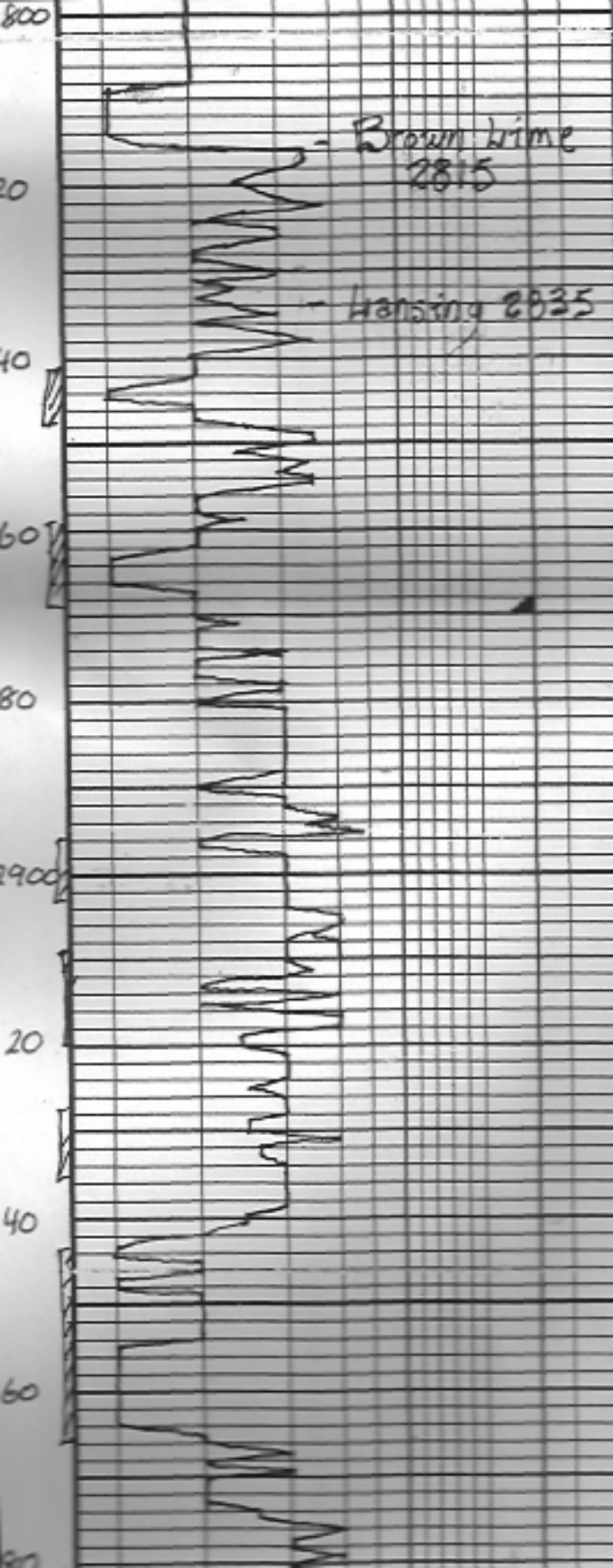
LS. Tan sub com fxl Dns.

LS. Tan sub com fxl fxl silty

sh. gry/bk

LS. gry fxl, Dns Few US ϕ

LS. gry/Whit sub com



Brown lime
2815

Hansing 2835

L.S. Tan/brn fxl Dns
Few Foss-

L.S. Whit/tan fxl, chky

L.S. Whit/tan fxl Dns
Few Foss, Poor us

L.S. Tan/Dkn fxl, Foss Bar
Vik P

• L.S. Whit com good com f
L. Brn str, sfo, st odor

• L.S. Tan/Whit com good com f
sfo, good odor

L.S. Tan sub com scatt f
L. str, Free oil (L.S.) st
ft. odor

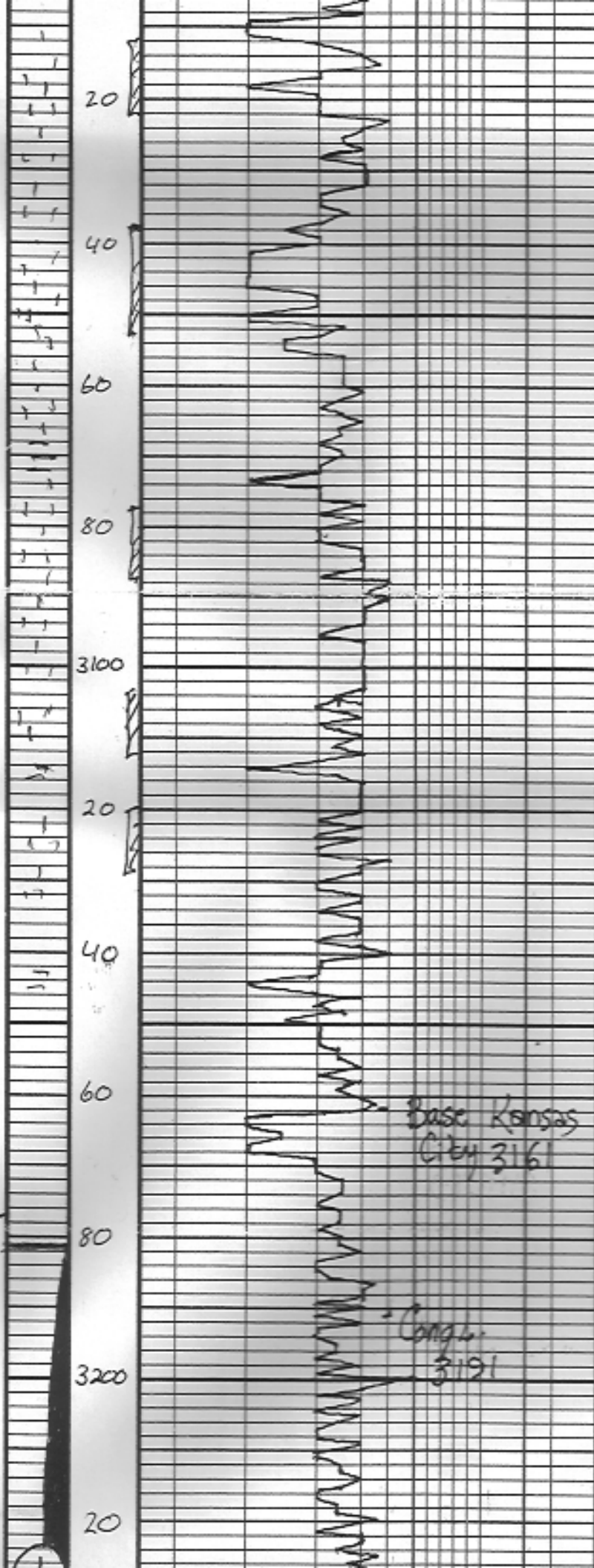
str. gry/bik silty

L.S. Tan/gry fxl Dy Dns
L. Brn str

L.S. Whit fxl, Dns. Few Foss-

L.S. Whit/tan com good com f
L. str.

L.S. Tan sub com fxl Dns.



L.S. gry/whr sub com

KB-1770

L.S. wht com good Vuggy ϕ
No str.

L.S. wht/tan sub ool
cf. +rc str.

blk sh.

L.S. gry fxl. Δy No str.

sh. gry/blk

L.S. gry fxl. Dns/chky
few foss.

L.S. wht/gry fxl Δy

Δy whr.

L.S. tan fxl Δy No str.

L.S. wht/crm, fxl. Dns
chky

Base Kansas
City 3161

sh. gry/blk/mar

L.S. wht/gry fxl. Foss. Dns

Congl.
3191

L.S. tan/whr fxl Δy Dns
No str. fre. pyrite.

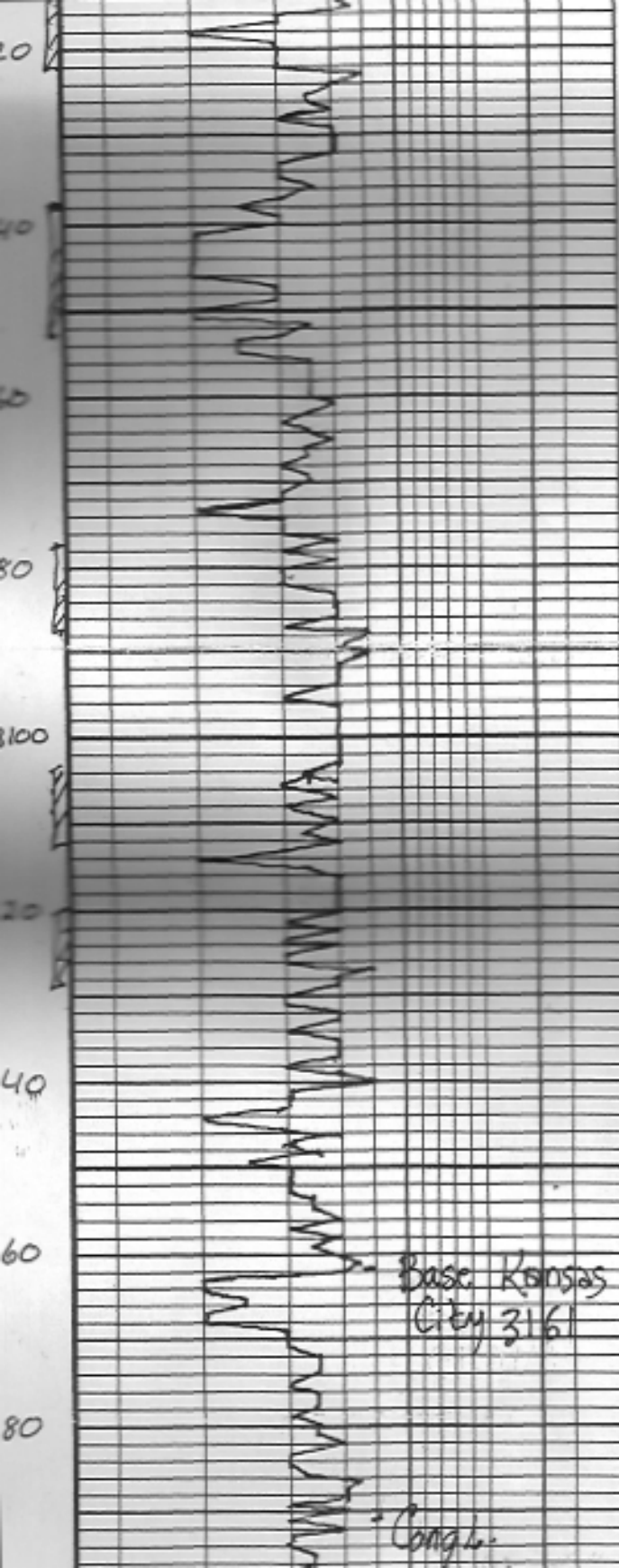
L.S. tan/whr ool/sub ool
Foss. scatt ϕ , ls. blk tra str.

DST 1 3181-32
30-30-30-30
Blow Weak
Recovery
5' mud (100% m)
No Pressures Rec

sh. Manson soft, Δy tan Δ

sh. wht/crm grt sub rounded
cf. tra str. N&O, NO odor

20



L.S. wht com good Vuggy &
NO STA

K13-1

L.S. wht/fgn sub ool
w/ f/c sta.

blk sh.

L.S. gry fxl dy NO STA.

sh. gry/blk

L.S. gry fxl was/ chky
few foss.

L.S. wht/gry fxl dy

dy wht

L.S. tan fxl dy NO STA

L.S. wht/blk, fxl was
-chky

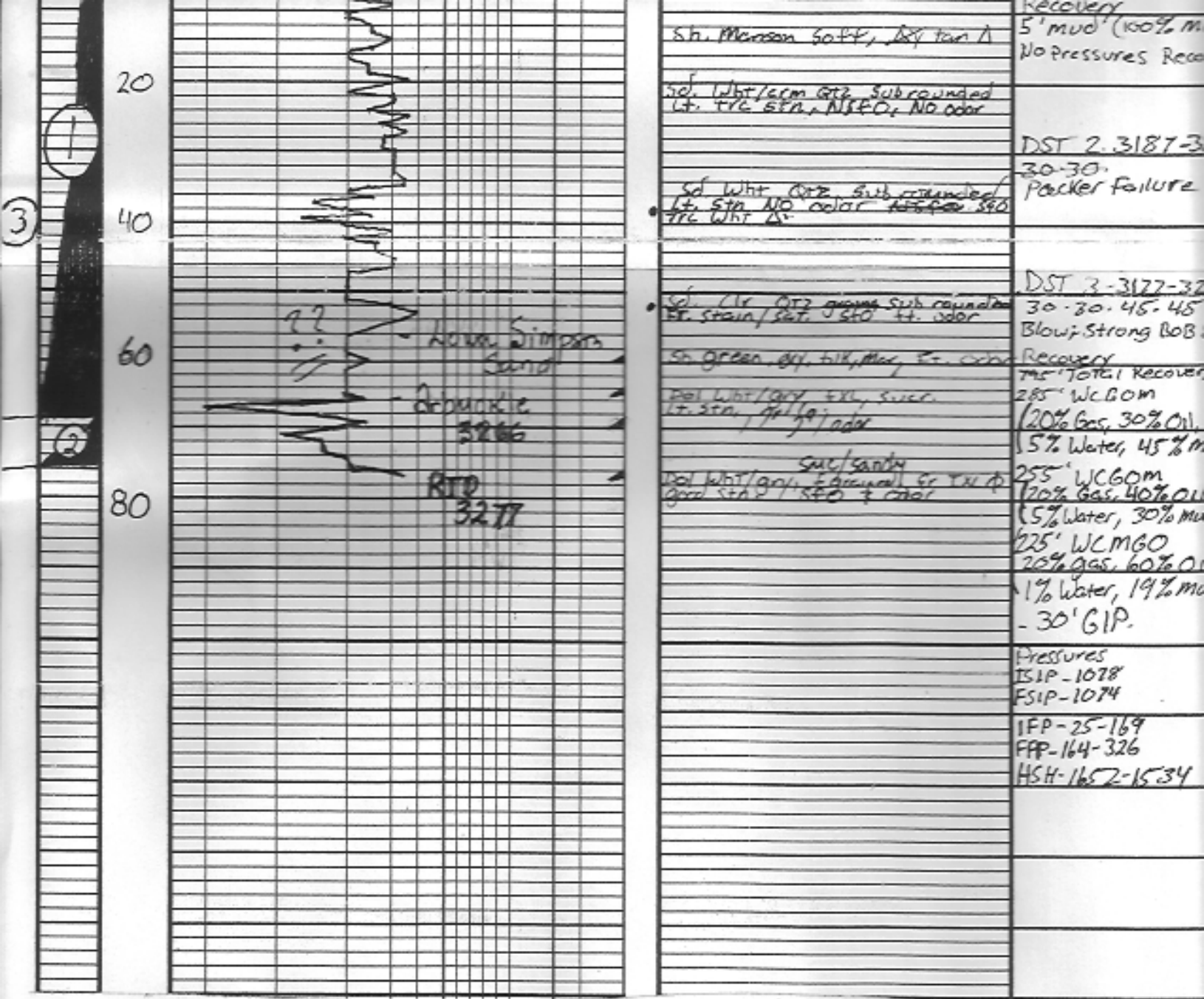
sh. gry/blk/mar

L.S. wht/gry fxl foss. Dns

L.S. brn/tan fxl dy Dns
NO STA. trc. pyrite.

Base Kansas
City 3161

Congl.



Sh. Masson soft, dry tan A

Recovery
5' mud (100% m.
No pressures Recov

sd. wht/gray gr. sub rounded
lt. t/c str. NISO, NO odor

DST 2-3187-3
30-30.
Packer failure

sd wht gr. sub rounded
lt. str. NO odor
t/c wht A

DST 3-3177-3
30-30-45-45
Blow; Strong BOB

sd. (lt. gr. gr. sub rounded
lt. stain/sat. STO tt. odor

Recovery
745' Total Recover

sh. green gr. blk, blk, gr. color

285' WC GOM
(20% Gas, 30% Oil,
5% Water, 45% m.

sd. wht/gray ex. succ.
lt. str., yellow odor

255' WC GOM
(20% Gas, 40% Oil,
5% Water, 30% m.

sd. wht/gray ex. succ.
good str. 2' STO & odor

225' WC MGO
(20% Gas, 60% Oil,
1% Water, 19% m.

Kewanee Simpson Sand

Bedrock
3266

RFD
3277

Pressures
ISIP-1078
FSIP-1074

IFP-25-169
FFP-164-326
HSH-1652-1534

20

40

60

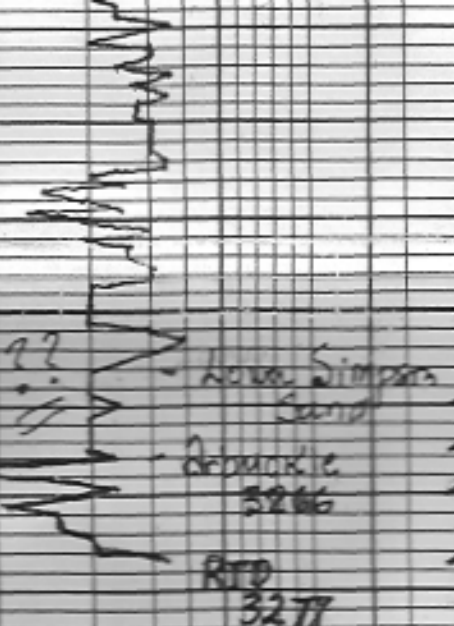
80

1

2

3

20
40
60
80



50. Whit/crm grt. sub rounded
lt. trc str, N&D, NO odor

DST 2-3
30-30.
Packer fo

50. Whit crt. sub rounded
lt. str NO odor ~~3206~~ 320

50. Lt. grt grms sub rounded
lt. str/str. N&D ++ odor

DST 2-3
30-30.
Blow-Stron

50. Green grt. sub, med, E. odor

Recovery

50. Whit/gray silt, succ.
lt. str, /gr/lt/odor

745' TOTAL
285' WC G
120% Gas, 3
15% Water,

50. Whit/gray silt/sandy
lt. str /gr/lt/odor

255' WC G
120% Gas, 8
15% Water,

225' WC M
20% Gas, 1
1% Water,
- 30' GIP.

Pressures
ISIP-1078
FSIP-1074
IFP-25-16
FFP-164-32
HSH-1652-