



Discovery Drilling

P.O. Box 763 • Hays, KS 67601 • OFFICE (785) 623-2920 • CELLULAR (785) 635-1511

DRILLER'S LOG

Operator: John O. Farmer, Inc. Lic# 5134 Contractor: Discovery Drilling Co., Inc. LIC#31548
370 West Wichita Avenue - P.O. Box 352 PO Box 763
Russell, KS 67665_0352 Hays, KS 67601

Lease: Harder # 1 Location: 1300 FNL - 2245 FWL
SW/SE/NE/NW
Section 11/ 17S/ 10E
Lyon County, KS

Loggers Total Depth: 3202' API#15- 111-20,547-00-00
 Rotary Total Depth: 3200' Elevation: 1320 GL - 1328 KB
 Commenced: 7/21/2019 Completed: 7/28/2019
 Casing: 8 5/8" @ 221' W/160sks Status: D & A
 KCC Contact: Larry Marchant - Mike Heffern
 Plugging Info: (1st Plug @ 3155'W/35sks)(2nd Plug @ 2800'W/35sks)
(3rd Plug @ 2300'W/35sks)(4th Plug @ 1400'W/35sks)
(5th Plug @ 270'W/35sks)(6th Plug @ 60'W/20sks)
(30sks In Rat Hole)(Total 225sks 60/40Poz 4%Gel-1/4#
FS/sk-By Quality Oilwell Cementing)(Completed @
9:15PM 7/28/2019)

DEPTHS & FORMATIONS (All from KB)

Surface Rock & Shale	<u>0'</u>	Arbuckle	<u>3156'</u>
Shale	<u>259'</u>	RTD	<u>3200'</u>
Shale & Lime	<u>940'</u>		
Mississippian	<u>2412'</u>		
Kinderhook	<u>2784'</u>		
Hunton	<u>2920'</u>		
Simpson	<u>3111'</u>		

STATE OF KANSAS)
) ss
 COUNTY OF ELLIS)

Thomas H. Alm of Discovery Drilling states that to the best of his knowledge the above and foregoing is a true and correct log of the above captioned well.

Thomas H. Alm

Subscribed and sworn to before me on 7-31-2019

My Commission expires: 6-28-2022

(Place stamp or seal below)

Notary Public

