DRILLER'S LOG

ORIGINAL

Date 3/31/95

API # 15-091-22,612

Operator Robert Harwell

Contractor Central Plains Drilling License #

Address 2801 NW Expressway, #132 OKC 73112

Address 910 N. Poplar · Ottawa, Ks. 66067

Lease N. Gordon | Well # 12

County Johnson | State KS | Legs 21-14-22E

230 FSL ; 988 FEL - KCC Record SW SESE

Total	Formations	from	to	Total	Formations	from	to
60	Soil & clay	0	60	5	Lime	[illegible]	263
5	Lime	60	65	21	Shale	263	284
6	Shale	65	71	5	LIME	284	289
27	Lime	71	98	10	Shale	289	299
7	Shale	98	105	12	Lime	299	311
11	Lime	105	116	39	Shale	311	350
6	Shale	116	122	61	Lime	350	411
17	Lime	122	139	6	Shale	411	417
21	Shale	139	160	6	Lime (Hertha)	417	423
23	Lime	160	183	172	Shale	423	595
5	Shale	183	188	6	Lime	595	601
11	Lime	188	199	15	Shale	601	616
13	Shale	199	212	6	Lime	616	622
27	Lime	212	239	13	Shale	622	635
19	Shale	239	258	18	Lime	635	653

Total Footage Drilled 943'

Total Footage Cored

Mud Used

Spud Date: 3/31/95 23' of 6¼" 6 sx Portland

Bits Used, Size and Type 5¼" to 423' 5 1/8" to TD

Run pipe & cement 5/5/95

JUN 1 [illegible]

Cased—from 0 to 913' | Size 2 7/8"

Details

Driller	Hrs.	Helper	Hrs.
Helper	Hrs.	Helper	Hrs

DRILLER'S LOG

ORIGINAL

te 3/31/95 | API #

erator Robert Harwell | Contractor

ldress | Address

ase N. Gordon | Well # 12 | County | State | Legal

Total	Formations	from	to	Total	Formations	from	to
102	Shale	653	755				
5	Sand Oil	755	760				
113	Shale	760	878				
4	Sand Good	878	882				
3	Sand Broken (fair bleed)	882	885				
58	Shale	885	943				
	TD		943				

tal Footage Drilled | Total Footage Cored

ud Used | Spud Date:

ts Used. Size and Type

sed—from to | Size

tails - Remarks

ller Hrs. | Helper Hrs.

lour Hrs. | Helper Hrs