

KANSAS DRILLERS LOG

API No. 15 — 083 — 20,523
County Number

Operator

National Oil Company

Address

200 W. Douglas, Suite 550, Wichita, KS 67202

Well No.

4

Lease Name

Grass

Footage Location

1980 feet from (S) line 660 feet from (E) line

Principal Contractor

H-30, Inc.

Geologist

Benny Singleton

Spud Date

March 18, 1977

Total Depth

4437

P.B.T.D.

Date Completed

March 27, 1977

Oil Purchaser

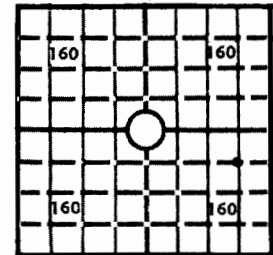
Koch Oil Co.

S. 11 T.21S R.25W

Loc. C NE SE

County Hodgeman

640 Acres
N



Locate well correctly

Elev.: Gr. 2298

DF 2300 KB 2303

CASING RECORD

Report of all strings set — surface, intermediate, production, etc.

Purpose of string	Size hole drilled	Size casing set (in O.D.)	Weight lbs/ft.	Setting depth	Type cement	Sacks	Type and percent additives
Surface		8-5/8	20	519		300	
Production		5½		4428	60-40 Poz	125	18% salt, 10#/sx gils, 3/4% CFR2

LINER RECORD

PERFORATION RECORD

Top, ft.	Bottom, ft.	Sacks cement	Shots per ft.	Size & type	Depth interval

Size	Setting depth	Packer set at			
2-3/8	4409'				

ACID, FRACTURE, SHOT, CEMENT SQUEEZE RECORD

Amount and kind of material used	Depth interval treated
250 gal BDA acid	4428-37'

INITIAL PRODUCTION

Date of first production		Producing method (flowing, pumping, gas lift, etc.)		
April 29, 1977		Pumping		
RATE OF PRODUCTION PER 24 HOURS	Oil	Gas	Water	Gas-oil ratio
	100 bbls.	MCF	-0- bbls.	CFPB
Disposition of gas (vented, used on lease or sold)			Producing interval (s)	
			4428-37'	

INSTRUCTIONS: As provided in KCC Rule 82-2-125, within 90 days after completion of a well, one completed copy of this Drillers Log shall be transmitted to the State Geological Survey of Kansas, 4150 Monroe Street, Wichita, Kansas 67209. Copies of this form are available from the Conservation Division, State Corporation Commission, 3830 So. Meridian (P.O. Box 17027), Wichita, Kansas 66217. Phone AC 316-522-2206. If confidential custody is desired, please note Rule 82-2-125. Drillers Logs will be on open file in the Oil and Gas Division, State Geological Survey of Kansas, Lawrence, Kansas 66044.

Operator National Oil Company		DESIGNATE TYPE OF COMP.: OIL, GAS, DRY HOLE, SWDW, ETC.: Oil																															
Well No. 4	Lease Name Grass																																
S <u>11</u> T <u>21</u> S R <u>25</u> W ^E _W C NE SE																																	
WELL LOG		SHOW GEOLOGICAL MARKERS, LOGS RUN, OR OTHER DESCRIPTIVE INFORMATION.																															
Show all important zones of porosity and contents thereof; cored intervals, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.																																	
FORMATION DESCRIPTION, CONTENTS, ETC.	TOP	BOTTOM																															
			NAME DEPTH																														
DST #1, 4414-27'; 30-45-30-45; No blow, flushed tool, wk blow for 1" & died; Rec 20' mud w/scum of oil; Show free oil in tool; ISIP 976; FSIP 936; IFP 61-61; FFP 81-81; T 108°. DST #2, 4414-39'; 30-45-60-45; Str blow thruout; Rec 300' GIP, 300' oil (38 grav), 540' GCMO; ISIP 876; FSIP 873; IFP 81-183; FFP 255-356; T 110°. <u>Log Tops</u> <table style="width: 100%; border-collapse: collapse;"> <tr><td>Anhydrite</td><td style="text-align: right;">1554</td><td style="text-align: right;">+749</td></tr> <tr><td>Heebner</td><td style="text-align: right;">3741</td><td style="text-align: right;">-1438</td></tr> <tr><td>Lasning</td><td style="text-align: right;">3781</td><td style="text-align: right;">-1478</td></tr> <tr><td>B/Ks City</td><td style="text-align: right;">4165</td><td style="text-align: right;">-1862</td></tr> <tr><td>Marmaton</td><td style="text-align: right;">4198</td><td style="text-align: right;">-1895</td></tr> <tr><td>Pawnee</td><td style="text-align: right;">4264</td><td style="text-align: right;">-1961</td></tr> <tr><td>Ft. Scott</td><td style="text-align: right;">4312</td><td style="text-align: right;">-2009</td></tr> <tr><td>Cherokee</td><td style="text-align: right;">4334</td><td style="text-align: right;">-2031</td></tr> <tr><td>Miss Lime</td><td style="text-align: right;">4410</td><td style="text-align: right;">-2107</td></tr> <tr><td>Miss Dolo</td><td style="text-align: right;">4416</td><td style="text-align: right;">-2113</td></tr> </table>				Anhydrite	1554	+749	Heebner	3741	-1438	Lasning	3781	-1478	B/Ks City	4165	-1862	Marmaton	4198	-1895	Pawnee	4264	-1961	Ft. Scott	4312	-2009	Cherokee	4334	-2031	Miss Lime	4410	-2107	Miss Dolo	4416	-2113
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USE ADDITIONAL SHEETS, IF NECESSARY, TO COMPLETE WELL RECORD.																																	
Date Received	Signature Geologist Title May 16, 1977 Date																																

COMPANY The National Oil Company

SEC. 11 T. 21S. 25W

FARM Grass

NO. 4

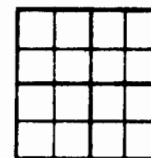
LOC. NE SE

TOTAL DEPTH 4,437'
 COMM. March 18, 1977
 SHOT OR TREATED
 CONTRACTOR H-30, Inc.
 ISSUED March 31, 1977

COMP. March 27, 1977

COUNTY Hodgeman

KANSAS



CASING

20	10	
15	8-5/8"	519' cemented w/300 sxs cement ELEVATION 2303' K.B.
12	6	
13	5 1/2"	4,428' cemented w/125 sxs cement PRODUCTION

FIGURES INDICATE BOTTOM OF FORMATIONS

Clay and Shale	520'
Shale	1,551'
Anhydrite	1,563'
Shale	1,650'
Shale and Lime	2,525'
Lime and Shale	3,782'
Lime	4,437'
Rotary Total Depth	4,437'

I hereby certify the above and foregoing to be
 a true and correct log of the above described
 well as shown by the drilling reports.

H-30, INC.

Dean Britting
 Dean Britting

State of Kansas

County of Sedgwick

ss:

Subscribed and Sworn to before me a Notary Public
 for said county and state this 31st. day of March,
 1977.