

# GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

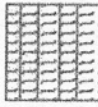
COMPANY <u>HESS OIL COMPANY</u> LEASE <u>JENNIFER #1</u> FIELD <u>- WILDCAT -</u> LOCATION <u>652' FSL, 803' FWL</u> SEC <u>15</u> TWSP <u>18 S</u> RGE <u>19 W</u> COUNTY <u>RUSH</u> STATE <u>KANSAS</u>	ELEVATIONS KB <u>2035'</u> DF <u>2033'</u> GL <u>2030'</u> Measurements Are All From <u>KB</u>
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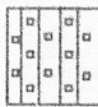
CONTRACTOR <u>MALLARD J.V.</u> SPUD <u>1-29-11</u> COMP <u>2-8-11</u> RTD <u>3970'</u> LTD <u>3967'</u> MUD UP <u>3375'</u> TYPE MUD <u>CHEMICAL</u>	CASING SURFACE <u>8-5/8" at 1218'</u> PRODUCTION <u>none</u> ELECTRICAL SURVEYS DUAL INDUCTION, NEUTRON, & SONIC
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SAMPLES SAVED FROM	<u>3400'</u>	TO	<u>TD</u>
DRILLING TIME KEPT FROM	<u>3300'</u>	TO	<u>TD</u>
SAMPLES EXAMINED FROM	<u>3400'</u>	TO	<u>TD</u>
GEOLOGICAL SUPERVISION FROM	<u>3298'</u>	TO	<u>TD</u>
GEOLOGIST ON WELL		<u>JAMES C. HESS</u>	


FORMATION TOPS	LOG	SAMPLES																	
ANHYDRITE		1209 (+826)	<table border="1" style="margin: auto;"> <tr><td colspan="4" style="text-align: center;">19 W</td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px; text-align: center;">15</td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> <tr><td style="width: 25px; height: 25px; text-align: center;">+</td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td><td style="width: 25px; height: 25px;"></td></tr> </table>	19 W									15			+			
19 W																			
	15																		
+																			
BASE ANHYDRITE		1245 (+790)																	
HEEBNER		3425 (-1390)																	
LANSING		3470 (-1435)																	
BASE KANSAS CITY		3745 (-1710)																	
PAWNEE		3830 (-1795)																	
FORT SCOTT		3862 (-1827)																	
ARBUCKLE		3903 (-1868)																	
RTD		3970 (-1935)	18 S																


# LEGEND

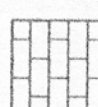
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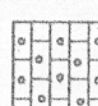
Anhydrite
- 


Salt
- 


Sandstone
- 

Shale
- 

Carb sh
- 

Limestone
- 

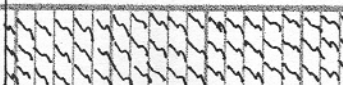
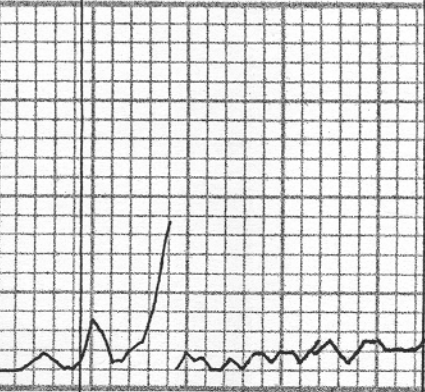

Ool. Lime
- 

Chert
- 

Dolomite

SCALE " = 100'

LOG 7703

Lithology	Drilling time in minutes	DEPTH	Sample Description	Remarks, drill stem tests, etc.
		1200		(+826) ANHYDRITE 1209 <del>(+827)</del>
		20		← Bit dull Ran 8 5/8" surface pipe
		40		BASE ANHYDRITE 1245 (+790)
		60		
		3300		



3300

20

40

60

80

3400

20

40

60

WT - Lm VFxlm sl ds Lm  
w/ some WT chalky Lm  
Some green + Red sh's

WT - Lm - VF-Fxlm Lm  
w/ some WT chalky Lm  
Some green + Red sh's

AA w/ more sh's No of  
Bl Carb. sh's

Mostly green + Red sh's  
Lm - Tan VFxlm sl chalky Lm  
Some WT chalky Lm

WT - Tan VFxlm sl chalky Lm  
Some WT chalky Lm  
Some green + Red sh's

AA w/ less sh's No of  
No show

WT - ff lcy VF-Fxlm Lm  
w/ pe's WT chalky Lm

HEEBNER 3425 (-1390)

No ♂ No show

60

WT - 1/2 heavy VF-Fx/M Lm  
w/PC's WT Chalky Lm  
Same Green + Red sh's

80

Lm - 1/2 heavy VF-Fx/M sl DS Lm  
w/PC's WT Chalky Lm  
Green + Red sh's  
NO SHOW

WT - 1/2 heavy VF-Fx/M Lm  
w/PC's WT Chalky Lm  
Same Green + Red sh's

3500

Lm - Tan VF-Fx/M Lm  
w/PC's WT Chalky Lm  
Same Green + Red sh's

Tan Fx/M Oolitic Lm Good ♂  
w/Few sh's NO SHOW

20

Lm - Tan VF-Fx/M sl Foss. Lm  
w/PC's WT Chalky Lm  
Same Green + Red sh's

AA w/less sh's  
NO ♂ NO SHOW

40

Lm - Tan VF-Fx/M DS Lm  
w/PC's WT Chalky Lm  
Few Green + Red sh's

AA w/more sh's  
NO ♂ NO SHOW

60

WT - Tan VF-Fx/M sl Foss Lm  
PC's WT Sharp Δ's  
Few Green + Red sh's

Tan VF-Fx/M DS sl Foss Lm  
w/some WT Sharp Δ's  
Few sh's

AA w/Few sh's  
weak ♂ NO SHOW

80

Lm - Tan Fx/M oolitic sl oolitic Lm  
w/Few sh's Good ♂ NO SHOW

Lm - Tan VF-Fx/M sl Foss. Lm  
w/PC's WT Sharp Δ's  
Few Green + Red sh's

3600

AA w/more sh's  
NO ♂ NO SHOW

Tan VF-Fx/M sl Foss. Lm  
w/PC's WT Sharp Δ's  
Few Green + Red sh's

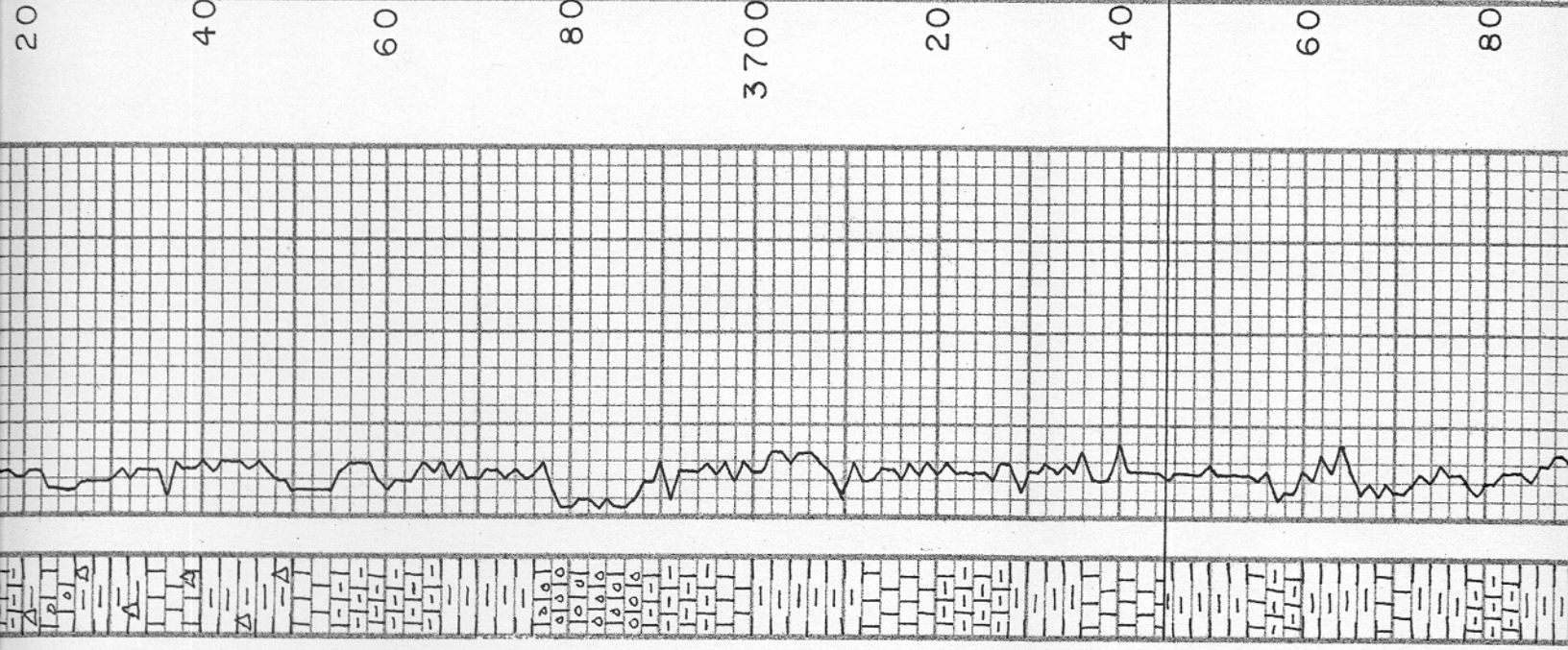
20

Lm - Tan Fx/M sl Foss. Lm  
PC's sl oolitic PC's WT Sharp Δ

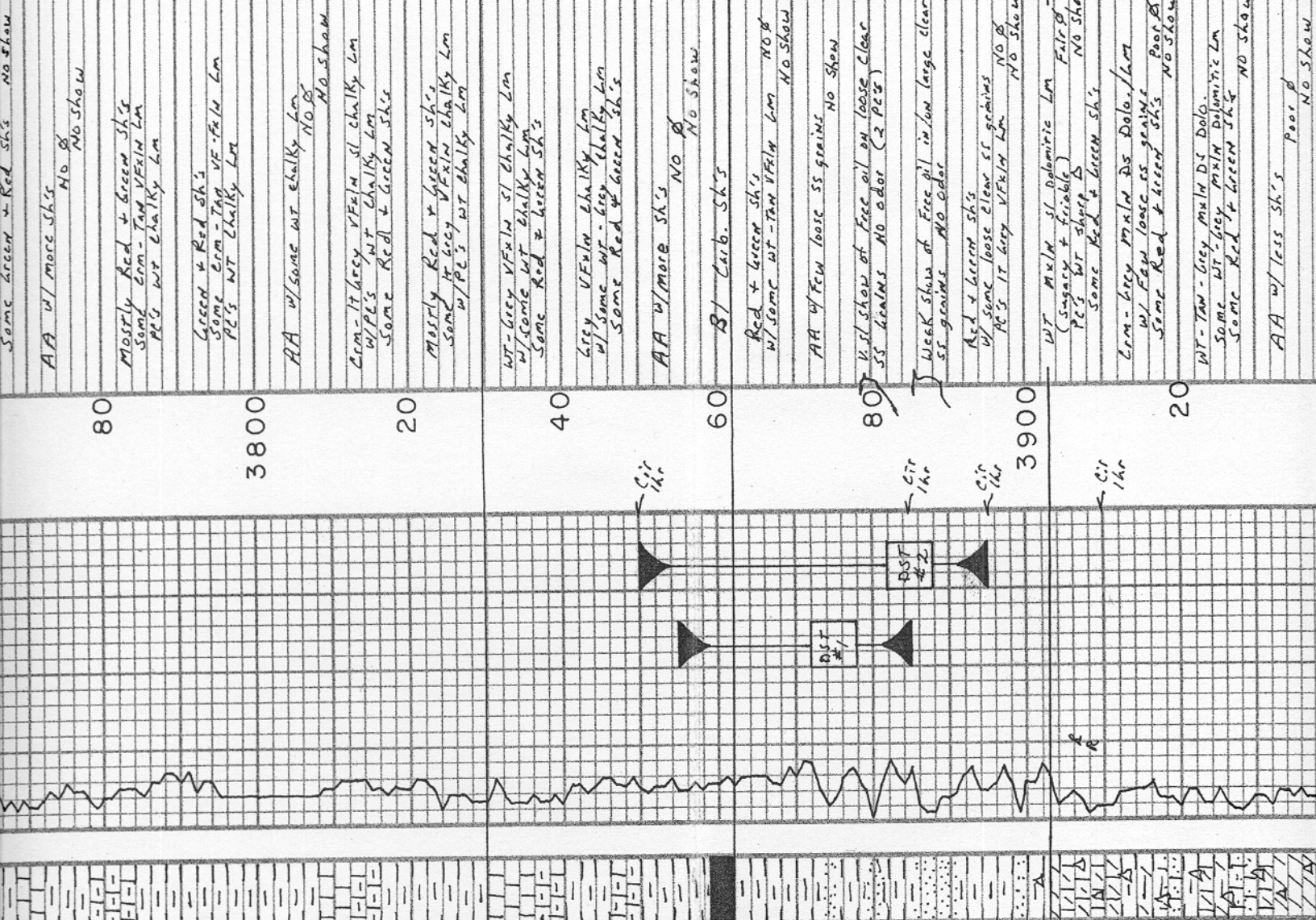


20  
 Crm - Tan Fx/ln sl Foss. Lm  
 PC's sl oolitic PE's w/ sharp Δ  
 some green + Red sh's  
 AA w/more sh's No Ø  
 No show  
 40  
 WT - Tan VFx/ln sl chalky Lm  
 w/PE's w/ sharp Δ  
 some green + Red sh's  
 AA w/ less sh No Ø  
 No show  
 60  
 WT - Crm - VFx/ln DS Lm  
 w/ some wt chalky Lm  
 some green + Red sh's  
 AA w/more sh's No Ø  
 No show  
 80  
 TAN Fx/ln oolitic Lm  
 w/Few sh's No show  
 Good Ø  
 3700  
 Crm - Tan VF-Fx/ln sl Foss. Lm  
 w/ some wt chalky Lm  
 some green + Red sh's  
 AA w/more green + Red sh's  
 No Ø  
 No show  
 20  
 WT - Tan VFx/ln DS Lm  
 w/PE's wt chalky Lm  
 some green + Red sh's  
 40  
 WT - Crm VF-Fx/ln sl Foss. Lm  
 w/PE's wt chalky Lm  
 few green + Red sh's  
 AA w/more sh's No Ø  
 No show  
 40  
 WT - Tan VFx/ln Lm  
 few green + Red sh's  
 60  
 Mostly green Red + Bl sh's  
 some wt - Tan VFx/ln DS Lm  
 w/PE's wt chalky Lm  
 AA No Ø No show  
 80  
 WT - Tan VFx/ln DS Lm  
 w/PE's wt chalky Lm  
 some green + Red sh's No show  
 AA w/more sh's No Ø  
 No show  
 80  
 Mostly Red + Green sh's  
 some Crm - Tan VFx/ln Lm  
 PE's wt chalky Lm

BASE KANSAS CITY 3745  
 (-1710)



A series of small symbols (triangles and dashes) arranged in a grid-like pattern, likely representing a data log or a specific type of recording.



AA w/ more sh's  
No  $\emptyset$   
No show

Mostly Red + Green sh's  
Some gray - Tan VFXM LM  
PE's w/ chalky LM

Green + Red sh's  
Some gray - Tan VFXM LM  
PE's w/ chalky LM

AA w/ some wt chalky LM  
No  $\emptyset$   
No show

Gray - lt grey VFXM sl chalky LM  
w/ PE's w/ chalky LM  
Some Red + Green sh's

Mostly Red + Green sh's  
Some lt grey VFXM chalky LM  
w/ PE's w/ chalky LM

WT - Grey VFXM sl chalky LM  
w/ some wt chalky LM  
Some Red + Green sh's

Grey VFXM chalky LM  
w/ some wt - grey chalky LM  
Some Red + Green sh's

AA w/ more sh's  
No  $\emptyset$   
No show

B/ Carb. sh's

Red + Green sh's  
w/ some wt - Tan VFXM LM  
No  $\emptyset$   
No show

AA w/ few loose ss grains  
No show

U.S. show of Free oil on loose clear  
SS grains No odor (2 PCS)

Weak show of Free oil in low large clear  
SS grains NO odor

Red + Green sh's  
w/ some loose clear ss grains  
PE's lt grey VFXM LM  
No  $\emptyset$   
No show

WT MAIN sl Dolomitic LM  
(sagacity + friable)  
PE's wt shaly  $\Delta$   
Some Red + Green sh's

LM - Grey MAIN ds Dolo./LM  
w/ few loose ss grains  
Some Red + Green sh's  
Poor  $\emptyset$   
No show

WT - Tan - Grey main ds Dolo.  
Some wt - Grey main Dolomitic LM  
Some Red + Green sh's  
No show

AA w/ less sh's  
Poor  $\emptyset$   
No show

PAWNEE 3038 (-1795)

FORT SCOTT 3862 (-1827)

DST #1

3855 - 3885' KB

30' ANCHOR

TIMES:

60-45-30-45

RECOVERED:

50' M w/ few oil streaks

PRESSURES:

IH 1928\*

FH 1901\*

IF 22-32\*

FF 35-38\*

ISIP 916\*

FSIP 861\*

ARBUCKLE

3903

(-1868)

DST #2



FSIP 861#

WT - Tan grey, mult. DS Dolo.  
 Some WT grey, mult. DS Dolo.  
 Some Red + Green sh's NO show

AA w/ less sh's Poor #  
 No show

tan - Br mult. DS Dolo.  
 w/ some poor #  
 Few green sh's NO show

tan - Br mult. DS Dolo.  
 w/ some fair # "luggy"  
 Few green sh's NO show

WT - tan - Br mult. DS Dolo.  
 Poor #  
 Some green sh's NO show

40

60

80

4000

20

40

60

80

DST #2

3850 - 3895' KB  
45' ANCHOR

TIMES:

45-45-45-45

RECOVERED:

200' Water cut Mud  
w/ few oil spots

PRESSURES:

IH 1908#

IF 27-83#

FF 87-115#

FSIP 644#

FSIP 498#

RTD

3970

(-1935)