

Consulting Petroleum Geologist		GEOLOGIC REPORT		DRILL STEM TESTS			
1411 Washington Circle Hays, KS 67601		Phone: 620-428-1356 (cell) 785-621-2286		No.	Interval	FPP/Time	ISIP/Time
						FSP/Time	ISP-FPP
							RECOVERY
COMPANY <u>H+C Oil Operating, Inc.</u>		LOG					
WELL <u>Bills # 19-1</u>	FIELD <u>Sidcat</u>	LOCATION <u>1250' FSL + 1750' FEL</u>	PRODUCTION <u>D+A</u>				
SEC. <u>19</u>	TWP. <u>4S</u>	RGE. <u>21W</u>	ELEVATION <u>KB 2135</u>				
COUNTY <u>Graham</u>	STATE <u>Kansas</u>	Drilling Measured From: <u>KB</u>	DF <u>2130</u>				
OPERATOR <u>H+C Oil Operating, Inc.</u>	CONTRACTOR <u>American Eagle, Rig # 3</u>	Samples Saved From <u>3100</u> To: <u>TD</u>	GL <u>2130</u>				
COMM: <u>10-29-13</u>	COMP: <u>11-5-13</u>	Drilling Time from <u>3000</u> To: <u>TD</u>					
SURF: <u>4 1/4" @ 222'</u>	CASING RECORD	Samples Examined From: <u>3100</u> To: <u>TD</u>					
TOTAL DEPTH DRILLERS: <u>3765'</u>	PROD: <u>None</u>	Geological Supervision from <u>3000</u> To Total Depth					
TOTAL DEPTH LOG: <u>3762'</u>		Wellsite Geologist <u>Marc Downing</u>					
Electrical Surveys <u>Pioneer</u>							
CNL/CDL							
DTL							
MEL							
REMARKS AND RECOMMENDATIONS Due to DST recovery + log evaluation, it was decided to plug + abandon the well.							
Marc Downing							
FORMATION TOPS AND STRUCTURAL POSITION							
FORMATION	SAMPLE TOP	ELECTRIC LOG TOP	SUB-SEA DATUM	STRUCTURAL POSITION			
<u>Top Anhydrite</u>	<u>1496</u>	<u>1691</u>	<u>+444</u>	<u>+3</u>			
<u>Base Anhydrite</u>	<u>1743</u>	<u>1722</u>	<u>+413</u>	<u>NA</u>			
<u>Topeka</u>	<u>3105</u>	<u>3161</u>	<u>-964</u>	<u>+9</u>			
<u>Heebner</u>	<u>3320</u>	<u>3314</u>	<u>-1193</u>	<u>+8</u>			
<u>Toronto</u>	<u>3343</u>	<u>3341</u>	<u>-1206</u>	<u>+8</u>			
<u>LKC</u>	<u>3359</u>	<u>3356</u>	<u>-1221</u>	<u>+9</u>			
<u>BKC</u>	<u>3545</u>	<u>3360</u>	<u>-1225</u>	<u>+11</u>			
<u>Arbuckle</u>	<u>3718</u>	<u>3710</u>	<u>-1575</u>	<u>-22</u>			
REFERENCE WELL FOR STRUCTURE N-B Co., Inc.							
Daniel Kirby #1 SSW-SE Sec. 19-4S-21W							

