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**GEOLOGIST'S REPORT**  
 DRILLING TIME AND SAMPLE LOG

OPERATOR: Howell Oil Co. Inc. WELL NO.: B-14  
 LEASE: Sabin FIELD: Garreton  
 LOCATION: S/2 NE/4 NE/4  
 SEC. 13 TWP. 23 S RGE. 4 W  
 COUNTY: Reno STATE: Kansas  
 COMPANIES: Essel Drilling Co. Inc.  
 CONM.: 9-5-2018 COM#: 910-2000  
 RFD: 3-503 COG TO: 3198'  
 SAMPLES SAVED FROM: 3050 TO: 3120  
 DRILLING TIME KEPT FROM: 3050 TO: 3120  
 GEOLOGICAL SUPERVISION FROM: 2500 TO: 3120  
 MUD UP: 2-181 TYPE MUD: Chemical  
 FORMATION: LOG SWATH: STRUC. OF  
 Brown Limestone 2506 - 1024 2510 - 1028 2512 - 1030  
 Limestone 2512 - 1030 2514 - 1032 2516 - 1034  
 Phosphatic Shale 2516 - 1034 2518 - 1036 2520 - 1038  
 MISSISSIPPI 2520 - 1038 2522 - 1040 2524 - 1042  
 MISSISSIPPI 2524 - 1042 2526 - 1044 2528 - 1046  
 MISSISSIPPI 2528 - 1046 2530 - 1048 2532 - 1050

ELEVATION

KB	1482
OF	1470
Measurements Are All	
From	KB

CASING RECORD

Surface: 1 3/8" @ 311'  
 Production: 5 1/2"

DRILLING TIME AND SAMPLE LOG

DATE	DEPTH	NO.	SIZE	WELL	TYPE	DEPTH OF	DEPTH	DEPTH
9-5-2018	1018'	1	1 3/8"	Howell	S&C	316	316	114'
9-7-2018	1017'	1	1 3/8"	Howell	S&C	316	316	114'
9-8-2018	1018'	1	1 3/8"	Howell	S&C	316	316	114'
9-9-2018	1018'	1	1 3/8"	Howell	S&C	316	316	114'
9-10-2018	1018'	1	1 3/8"	Howell	S&C	316	316	114'

DRILL STEM TESTS

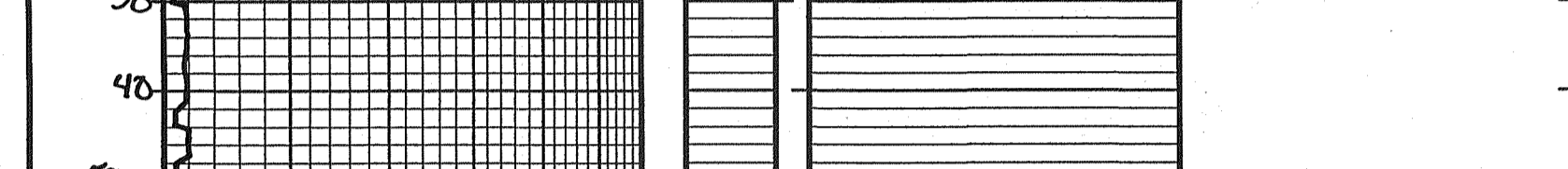
No.	Interval	SP/Min	SP/Min	SP/Min	SP/Min	HT-Inch	Remarks
							Name

REMARKS AND OBSERVATIONS: with good sample shows stratigraphic base that is final positive E-log base has 5 1/2 casing lands set to further evaluate

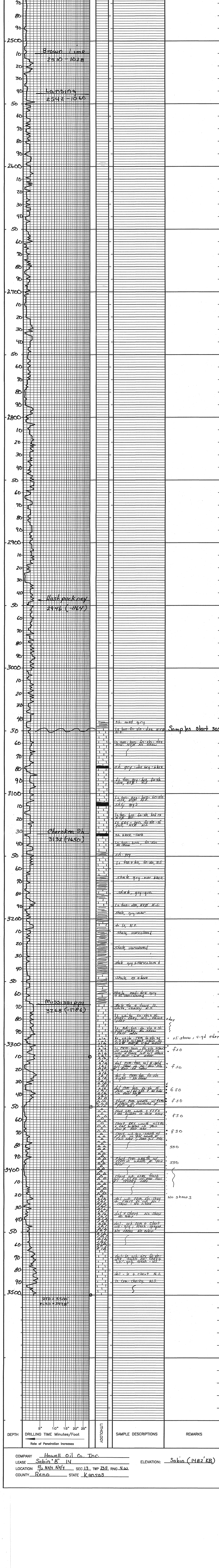
Reset fully

Bottom section

**LEGEND**



SCALE: 1" = 100'



REFERENCE WELL FOR STRUCTURAL COMPARISON: Howell Oil Co. Sabin B-15  
 880' ENL + 2020' FEL Sec. 13-T-23-S-R-4W, N&E KB