

**BOB SCHNEIDER**  
260 N. W. 220 ROAD  
HOISINGTON, KS 67444  
Home Phone: 620-633-1631  
Mobile: 620-783-0931

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

COMPANY	GRANDE MESA OP. CO.	ELEVATIONS	
LEASE	HESSE-CHRISTY #1-34		
FIELD	461' FNL + 2630' PEL		
LOCATION	SEC 34 Twp 13S Rge 32W		
SECTION	COUNTY LOGAN STATE KS		
CONTRACTOR	MURFIN DRILLING #24		
SPUD	9-7-11 CDR 9-16-11		
RTD	4672 LTD 4673		
MD UP	3400 TYPE Mud Chemical		
FORMATION	FORMATION TOPS & STRUCTURAL POSITION		
STAGE	ELECTRIC LOG TOP		
PERFORATE INTERVAL	SUB-SEA		
DEPTH	LOG TOP		
	STRUCTURE POSITION		
	A	B	C

REMARKS

The #1 Hesse-Christy #1-34 was spud to the FNL #1-34 from the Heeener to TD. The Johnson 201 had a positive DST. A pipe was run.

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Pipe: 115 57# 1518# I-55, Q 4669' PBD 4657', DV tool QD 2418'

1st stage: 115 57# EP 2.0/100, PWD 1244# MFL 4.0/244# MFL, P.D. @ 1130 PM.

2nd stage: 225 57# SMD, Micro-sift, P.D. @ 1130 PM. 3" centralizers, 24 facets, 3" guide shoe, 3" scratchers.

**RECOMMENDATIONS AND REMARKS**

FORMATION	PERFORATE INTERVAL	LOG ANALYSIS % PIR % SV	TREATMENT AND REMARKS
Stone Corral	2473 - 2479	LS-SB-S	
Blue River	2486 - 2492	LS-SB-S	
Heeener	3500 - 3505	LS-SB-S	
Lansing Creek	3955 - 3965	LS-SB-S	
Stark	4108 - 4113	LS-SB-S	
Hughes Valley	4223 - 4228	LS-SB-S	
Marathon	4288 - 4294	LS-SB-S	
Little George	4414 - 4415	LS-SB-S	
Mississippi	4537 - 4573	LS-SB-S	
Johnson	4672 - 4673	LS-SB-S	
Morrow	4673 - 4674	LS-SB-S	
Miss.	4674 - 4675	LS-SB-S	
Ridge	4700 - 4701	LS-SB-S	

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