

LEASE:	TOWNSEND	SURF LOC:	3750' FNL & 1980' FWL; SEC 3, T16S, R35E
AREA:	LEA CO., NM	BHL:	STRAIGHT HOLE
WELL #:	#13		
FIELD:	TOWNSEND		

DIRECTIONAL	OPEN HOLE LOGGING	SANDS/ MARKERS	DEPTH		CASING PROFILE	HOLE SIZE	CASING DETAILS	MUD WT. & TYPE	MAXIMUM DOGLEG SEVERITY
			TVD	MD					
STRAIGHT HOLE	E-LOGS NONE		60'	60'		PRESET	20" CONDUCTOR	GEL/LIME SPUD MUD	
			500'	500'		17-1/2" HOLE	13-3/8", 48# H-40, STC	8.6 PPG	1°/100'
STRAIGHT HOLE	E-LOGS NONE	RUSTLER	1790'	1790'		11" HOLE		H ₂ S DETECTOR DRILL OUT W/ SPUD MUD - ADD BRINE AND CIRCULATE BRINE WATER RESERVE PIT pH = 10 LCM 32-34 VIS	
		YATES	2960'	2960'				SPOT OIL F/ CSG. 10.3 PPG	2°/100'
		SAN ANDRES	4625'	4625'			8-5/8, 32# K-55 HC, LTC		
			5000'	5000'					
	MUD LOGGER ON @ 5000' 10' SAMPLES	GLORIETTA	6160'	6160'		7-7/8" HOLE		CIRCULATE FRESH WATER RESERVE PIT pH = 10 LCM	
		TUBB	7340'	7340'					
			7100'	7100'			TOC		
		ABO	7600'	7600'					
		WOLFCAMP	9600'	9600'				8.5 PPG INC MW TO 9.0 W/ CUT BRINE FOR CISCO FL < 12	
		CISCO	10500'	10500'					
		STRAWN LS	11300'	11300'				ADD XCD AND REDUCE FL < 6 CC FOR ATOKA	
		ATOKA SH	11500'	11500'					
	DST???	Burnson	12050'	12050'				9.5 PPG pH = 10 VIS = 36-42	
		MORROW LS	11920'	11920'					
	DST???	MESA Sd	12200'	12200'					
		AUSTIN	12340'	12340'					
	E-LOGS DIL/ SFL - SP-GR - CAL	CHESTER	12560'	12560'			5-1/2", 17# L-80 & P-110, LTC		
STRAIGHT HOLE	CNL/ LDT - GR- CAL	Miss Lime TD	12600'	12600'				9.5 PPG	3°/100'
			12700'	12700'					

ELF 7/18/01
ABOVE DATE DOES NOT
INDICATE WHEN
CONFIDENTIAL LOGS
WILL BE RELEASED