

ENERVEST OPERATING, LLC						
Jicarilla Contract 155 # 13N As Drilled						
TYPE	Dakota/MV	RIG	TBD		DATE	6-Aug-2013
FIELD		COUNTY	Rio Arriba		ELEVATION	6539'
GAS/OIL	Gas/Oil	MUD	LSND		BHT/BHP	160 deg- 1635 psi
LOCATION	SHL = 1550' FSL & 1810' FWL Unit K, Sec 30 , T26N, R5W		Lat: 36.45480, Long: 107.40400 (NAD 83)			
	BHL = 1484' FSL & 1803 FWL Unit K Sec 30, T26N, R5W					
COMMENTS: OBJECTIVE FORMATION: Dakota and Mesa Verde						
NOTES:						
				DEPTH TVD		
Surface Section						
TOC Surface 12 1/4" Hole > 9-5/8", 36#,J-55,LT&C			522'	Cement to Surf. 225 sx, 313 cu ft Type III 14.6 ppg, 1.39 yld Water based bentonite mud Drilled w/ PDC Bit		
Production Section						
8 3/4" Hole to 3044' >				Drilled w/PDC or Tri-Cone, motor, 4-1/2" DP 8.7- 9.0 PPG Bentonite Mud		
Ojo Alamo >			2226'			
TOC 2306'			2306'	Stage Collar Cementing Tool		
Kirtland > Fruitland Coal >			2463' 2730'			
Pictured Cliffs > Lewis Shale >			2872' 3019'			
			3017'	Stage Collar Cementing Tool		
TOC = 3030' 7 7/8" hole from 3044' to TD > Chacra >			3749'			
Cliffhouse >			4530'	Drilled w/PDC , motor, 4-1/2" DP 8.7-9.0 PPG Bentonite Mud		
Menefee >			4557'	Cement: Stg1 30 bbl Seal Bond 151 sx, 322 cu ft Prem Lite FM, 12.1 ppg, 2.13 yld 462 sx, 919 cu ft, Prel Lite HS FM, 12.5 ppg, 1.99 yld Stg 2 10 bbl SAPP 96 sx, 204 cu ft Prem Lite FM, 12.1 ppg, 2.13 yld Stg 3 10 bbl SAPP 50 sx, 70 cu ft Type III, 14.6 ppg 1.39 yld 351 sx, 748 cu ft Prem Lite FM, 12.1 ppg, 2.13 yld 50 sx, 70 cu ft Type III, 14.6 ppg 1.39 yld Logs: GR/RMT, GR CBL		
Point Lookout > Mancos (geologic) Mancos (Regulatory) >			5048' 5213' 5548'			
Gallup >			6238'			
Greenhorn >			6944'			
Graneros Shale >			7050'			
Dakota >			7077'			
5-1/2", 17#, N-80 & L-80 LT&C - To Surface			7380' TD 7390'	< PBTD = 7330' tbq tally < FC 7339'		
AFE # CO-1212-686 EV # 54012.018 API # 30-039-29936 REGULATORY ENGINEER GEOLOGIST Bart Trevino R Trueheart / L Diede G Kowalczyk (713) 495 5355 (713) 495 1561 / (505) 334 8867 (713) 495 6590						