

ENERVEST OPERATING, LLC

Jicarilla Apache Tribal 124 # 15 (AS Completed)

TYPE	Dakota	RIG	TBD	DATE	23-Sep-2014
FIELD	San Juan	COUNTY	Rio Arriba	ELEVATION	GL=7024' , KB=7037'
GAS/OIL	Gas/Oil	MUD	LSND	BHT/BHP	203 deg / 1422 psi
LOCATION	SHL: 1586' FSL & 465' FWL Unit L, Sec 24, T25N, R4W			SHL: -107.21065 W, 36.382186 N (NAD 27)	
	BHL: 1648' FSL & 706' FWL Unit L, Sec 24, T25N, R4W			BHL: -107.209828 W, 36.38235 N, (NAD 27)	

COMMENTS: OBJECTIVE FORMATION: Dakota

NOTES: This well will be drilled as an "S" shaped well

		DEPTH TVD	
Surface Section	Cemented to Surface		
	12 1/4" Hole > 8-5/8", 24#, J-55, ST&C	515'	Cement to surface with 297 sx (413 cu ft) Type III cement Circulate 25 bbls cement to surface.
Production Section	Cemented to Surface with 3 Stages		< < < Start to drill directionally @ 636' and 75 deg azimuth
	7 7/8" Hole from 500' to TD >		
Production Tubing: 2 3/8" 4.7# J-55 set @ 7868'. SN @ 7858'. Tubing anchor @ 5829' w/ 40000# shear. 1"x8' mud anchor, 2"x1 1/2"x20'RWAC-ZDV pump, spiral rod guide, 1"x1' lift sub, 17 - 1 1/4"sinker bars & 3/4" plain rods to surface.	Ojo Alamo >	2,872'	
	Kirtland >	2899' 3,111'	< < Stage Collar Cementing Tool (log depth)
	Fruitland Coal >	3,332'	
	Picture Cliffs >	3,414'	
	Lewis >	3,492'	
	Chacra >	4,305'	
			< < Resume vertical hole @ +/- 5922' MD Vertical Section = +/- 249 E & N
		4756'	< < Stage Collar Cementing Tool (log depth)
	Cliffhouse >	5069	RCUD SEP 24'14 OIL CONS. DIV. DIST. 3
	Menefee >	5116	
	Marker Jt 5136'-5152' >>>>>>		
	Point Lookout >	5569	Stage 1: 30 bbl Seal Bond, 524 sx (1053 cu ft) Prem Lite HS @ 12.5 ppg, 2.01 yld, circ 32 bbl cement to surface.
Upper Dakota; 9-10-2014; 7629-7721, 51 - 0.40' HOLES. Breakdown with 1000 gal 15% HCl and balls. Frac with 214670 gal 20# gel and 213960 # 20/40 mesh sand @ 71.2 bpm.	Mancos >	5746	Stage 2: 10 bbl SAPP, 268 sx (570 cu ft) Prem Lite @ 12.1 ppg, 2.13 yld, + 50 sx (70 cu ft) Type III @ 14.6 ppg, 1.39 yld. Circ 30 bbl cement to surface.
	Regulatory Mancos	6069	
Lower Dakota; 9-9-2014; 7762-7824, 42 - 0.40' holes. Breakdown w/ 1000 gal 15% HCl and balls, Frac with 175140 gal 20# gel and 168020# 20/40 sand @ 51.4 bpm	Gallup >	6737	Stage 3: 10 bbl SAPP, 405 sx (862 cu ft) Prem Lite @ 12.1 ppg, 2.13 yld + 50 sx (69 cu ft) Type III cement. Circ 7 bbl cement to surface.
	Greenhorn >	7538	
	Graneros Shale >	7598	
	Marker Jt 7597'-7622' >>>>>>		
	Dakota >	7628 7622	
			<<<< FC @ 7931'
	4-1/2", 11.6#, N-80 LT&C - 7976' to Surface	7980' 7974' TVD	
AFE #	CO 1401-209	REGULATORY	S Doescher
EV #	37305.015	ENGINEER	L Diede
API #	30-039-31228	GEOLOGIST	G Kowalczyk

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