

ENERVEST OPERATING, LLC				
Jicarilla A # 2F (As Completed)				
TYPE	Dakota/MV	DATE	20-Sep-2013	
FIELD	Tapicito	COUNTY	Rio Arriba	ELEVATION 6689' GL, 6702' KB
LOCATION	SHL= 1850' FNL & 1045' FEL Unit H, Sec 18, T26N, R5W		Lat: 36.48933, Long: 107.39553 (NAD 83)	
	BHL = 1881' FNL & 1082' FEL Unit H, Sec. 18, T26N, R5W		Lat: 36.48924, Long: 107.39559	
NOTES:				
DEPTH TVD				
Surface Section				
		12 1/4" Hole > 9-5/8", 36#, J-55, LT&C	523'	Cement to surface Water based bentonite mud Drilled Tri-Cone Bit
Production Section				
TOC =	320'	8 3/4" Hole to 3418' > 2 7/8" 6.5# J-55 tubing set @ 7561', SN @ 7560' >>>>		Drilled w/PDC, directional motor, 4-1/2" DP
		Ojo Alamo >	2562'	8.7- 9.0 PPG Bentonite Mud
TOC =	2643'		2643'	< < Stage Collar Cementing Tool
		Kirtland > Fruitland Coal >	2795' 3054'	
		Picture Cliffs > Lewis Shale >	3171' 3263'	
		Chacra > 7 7/8" hole from 3418' to TD >	4087'	
TOC =	4503'		4503'	< < Stage Collar Cementing Tool
Marker Jt	4853'-4875'	Cliffhouse >	4822'	
Men: 8-28-13: Perf: 4910-5296; Acid balls, Frac 160748# 20/40 + 37581 SLC with N2 foam, 49644 gal 15# gel and 1604100 scf N2 @ 79 bpm PTL: 7-28-13: Perf: 5412-5518; Acid balls, Frac 140000# 20/40 + 30665# SLC in N2 foam, 43470 gal 15# gel and 1466300 scf N2 @ 64 BPM		Menefee >	4858'	8.7-9.0 PPG Bentonite Mud Drilled with PDC, directional motor and 4 1/2" DP
		Point Lookout > Mancos (Geo) > Mancos (Regulatory) >	5400' 5553' 5900'	Stage 1 Cement: 410 sx (824 cu ft) FM Lite HS 33 bbl cement to surface Stage 2 Cement: 237 sx (506 cu ft) FM Lite Lead and 50 sx (70 cu ft) TypeIII circ 15 bbl cement to surface Stage 3 Cement: 412 sx (878 cu ft) FM Lite Lead and 50 sx (70 cu ft) TypeIII circ spacer, cmt 2 bbl short of surf
U Dak: 7-27-13: Perf: 7377-7430, 26 holes, Acid balls, frac 95760 gal slickwater with 66000# 20/40 @ 57 bpm L Dak: 8-27-13: Perf: 7502-7599, 36 holes, Acid balls, Frac 180600 gal slickwater with 159000# 20/40 @ 68 bpm		Gallup >	6565'	Logs: Cased-hole GR / Neutron after casing GR/CCL/CBL
		Greenhorn > Graneros Shale > Dakota >	7294' 7350' 7373'	< PBTD = 7720'Tbg tally << FC 7720'
		5-1/2", 17#, L-80 LT&C From 7767' to Surface	7767' 7772'	
AFE #	CO-1212-684	REGULATORY	Bart Trevino	(713) 495 5355
EV #	54012.002	ENGINEER	R Trueheart / L Diede	(713) 495 1561 / (505) 334 8867
API #	30-039-31166	GEOLOGIST	G Kowalczyk	(713) 495 6590

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