ENERVEST OPERATING, LLC

Jicarilla Apache Tribal 125 # 17 (As Completed) API# 30-039-31185

TYPE	Dakota/Gallup	RIG	TBD	DATE	17-Dec-2013
FIELD		COUNTY	Rio Arriba	ELEVATION	7085'
GAS/OIL	Gas/Oil	MUD	LSND	BHT/BHP	166 deg- 1757 psi
LOCATION	737' FNL & 1032' FWL Unit D, Sec 25, T25N, R4W			Lat: 36.37600, Long: 107.20942 (NAD 83)	

COMMENTS: OBJECTIVE FORMATION: Dakota

NOTES: Vertical hole, no directional tools were run. Totco surveys only

	DEPTH TVD
Surface Section	
12 1/4" Hole >	
9-5/8", 36#,J-55,LT&C	**525'**
Production Section **7 7/8" Hole to TD**	
Tubing:	
Prod Tbg; 2 3/8" 4.7 # J-55 tbg set @ 7944' >	
TAC @ 6507'	
SN @ 7874'	
4' perf sub	
2 jts 2 3/8" MA	
Bull plug	
Rods/pump: **Ojo Alamo >**	**2898'**
1 1/4" x26' polish rod w/ 14' liner	
112- 7/8" guided rods	**2933'**
189 - 3/4" guided rods	
12 - 1 1/2" sinker bars **Kirtland >**	**3144'**
2"x1 1/2"x20' RWBC pump **Fruitland Coal >**	**3349'**
1" x 6' dip tube	
Pictured Cliffs >	**3435'**
Lewis Shale >	**3519'**
Csg Marker Jt @ 5174'-5194' **Chacra >**	**4328'**
	4836'
Cliffhouse >	**5098'**
Menefee >	**5144'**
Point Lookout >	**5628'**
Mancos >	**5773'**
Mancos (Regulatory) >>	6128'
Gallup >	**6772'**
Greenhorn >	**7567'**
Graneros Shale >	**7629'**
Dakota >	**7655'**
4-1/2", 11.6#, N-80 LT&C - Surface to 7998'	**TD = 7999'**

Cement to surface

Stage3: 10 bbl spacer, Lead of 914 cu ft, 429 sx Premium Lite + 3% CaCl2 + 0.25 pps Cello Flake + 5 pps LCM-1 + 8% gel+ 0.4% SMS + 0.4% FL-52A @ 12.1, yld 2.13 and Tail of 69 cu ft, 50 sx Type III + 1% CaCl2+ 0.25 pps Cello Flake + 0.2% FL-52A @ 14.6 ppg, yld 1.38. 25 bbl cmt returns

< < Stage Collar Cementing Tool

RCVD DEC 20 '13
OIL CONS. DIV.
DIST. 3

Stage 2: 10 bbl spacer, Lead of 577 cu ft, 271 sx Premium Lite + 3% CaCl2 + 0.25 pps Cello Flake + 5 pps LCM-1 + 8% gel+ 0.4% SMS + 0.4% FL-52A @ 12.1, yld 2.13 and Tail of 69 cu ft, 50 sx Type III + 1% CaCl2+ 0.25 pps Cello Flake + 0.2% FL-52A @ 14.6 ppg, yld 1.38. 25 bbl cmt returns

< < Stage Collar Cementing Tool

Stage 1: 30 bbl Seal Bond +, 1060 cu ft , 525 sx Premum Lite HS FM + 0.3% R-3+ 2% KCl+ 0.25 pps Collo-Flake+ 0.3% CD-32+ 5 pps LCM-1+ 1% FL-52A @ 12.5 ppg, 2.02 yld 20 bbl cmt returns

Upper Dakota; 12-2-13: perfs: 7658-7757'. 23 holes. Acid bd and balls. Frac with 118692 gal 2% KCl slickwater and 96864# 20/40 mesh sand @ 50 bpm.

Lower Dakota; 12-2-13; perfs: 7795-7816, 30 holes, Acid b/d and balls. Frac with 147449 gal 2% KCl slickwater and 110236# 20/40 sand @ 60 bpm.

Logs: Quad Combo w/ Dipole sonic
28 rotary sidewall cores in Gallup and Dakota

FC = 7955'
PBTD = 7968' CBL log depth

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EV #	37308.001	ENGINEER	R Trueheart / L Diede	(713) 495 1561 / (505) 334 8867
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