B SUNDRY	UNITED STATES EPARTMENT OF THE INTUREAU OF LAND MANAGI NOTICES AND REPORT is form for proposals to d II. Use form 3160-3 (APD)	EMENT APR 1220	011	OMB N Expires: 5. Lease Serial No. JIC110 6. If Indian, Allottee of	
	PLICATE - Other instructi		Cilioa -	JICARILLA APA	ACHE ement, Name and/or No.
I. Type of Well ☐ Oil Well ☐ Gas Well ☐ Oth	,	ons on reverse side.		8. Well Name and No. JICARILLA A 8N	
2. Name of Operator ENER VEST OPERATING LL	Contact: J	ANET M. BIENSKI ervest.net		9. API Well No. 30-039-29839-0	00-X1
3a. Address 1001 FANNIN STREET SUIT HOUSTON, TX 77002-6708 4. Location of Well (Footage, Sec., 1	E 800	3b. Phone No. (include area code Ph: 713-495-1571 Fx: 713-982-1501)	10. Field and Pool, or BASIN DAKOTA BLANCO MESA	A AVERDE
Sec 17 T26N R5W NWSE 14 36.290150 N Lat, 107.225600		11. County or Parish, and State RIO ARRIBA COUNTY, NM			
12. CHECK APP	ROPRIATE BOX(ES) TO	INDICATE NATURE OF	NOTICE, RE	EPORT, OR OTHE	R DATA
TYPE OF SUBMISSION		ТҮРЕ О	F ACTION		
Notice of Intent Subsequent Report	Acidize Alter Casing	☐ Deepen ☐ Fracture Treat	□ Reclama		Water Shut-Off Well Integrity
☐ Final Abandonment Notice	☐ Casing Repair ☐ Change Plans ☐ Convert to Injection	□ New Construction□ Plug and Abandon□ Plug Back	☐ Recomp ☐ Tempora ☐ Water D	arily Abandon	Other Change to Original A PD
13. Describe Proposed or Completed Op If the proposal is to deepen direction Attach the Bond under which the we following completion of the involve testing has been completed. Final A determined that the site is ready for	ally or recomplete horizontally, girk will be performed or provide the doperations. If the operation resulbandonment Notices shall be filed final inspection.)	we subsurface locations and measure Bond No. on file with BLM/BL its in a multiple completion or reconly after all requirements, included	ured and true ve A. Required sult ompletion in a result of the control of the con	rtical depths of all perting sequent reports shall be new interval, a Form 310	nent markers and zones. e filed within 30 days 60-4 shall be filed once
EnerVest Operating, L.L.C. re original APD. (Attached pleas which reflect the changes liste	se find Drlg Prog Replacem				
1) 400' of 9-5/8" surf csg (orig 2) Surf csg test press of 600 3) Run 4-1/2" long string in li	g btm was 250'). psi. eu of 4-1/2" prod liner.	ACTION DOE OPERATOR F	s not relie Rom obtair Non requie	eptance of this Ve the lessee an Ning any other RED for operatio I Lands	BRS
				, of	RECEIVED Y
14. Thereby certify that the foregoing is	Electronic Submission #10	5992 verified by the BLM We	II Information	System (%)	RECEIVED &

For ENER VEST OPERATING LLC, sent to the Rio Puerco
Committed to AFMSS for processing by TROY SALYERS on 04/12/2011 (11TS0026SE)

M. BIENSKI

Title REGULATORY ASSISTANT Name (Printed/Typed) JANET M. BIENSKI

04/06/2011 Signature (Electronic Submission) Date

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

TitlePETROLEUM ENGINEER Approved By TROY SALYERS

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office Rio Puerco

Date 04/12/2011

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

4. CASING AND CEMENTING DESIGN:

Casing Program:

Hole Size	<u>Depth</u>	Casing Size
121/4"	400'	9 5/8"
83/4"	3520' +/- Lewis seat	7"
61/4"	<u>7600</u> '	41/2"

Csg Size	Casing Type	Top (MD)	Bottom (MD)	Wt (lb./ ft)	Grade	Thread	Condition
9-5/8"	Surface	0,	400'	36.0	J55/K55	STC	New
7"	Intermediate	0'	3520'+/-	23.0	N80	LTC	New
41/2"	Prod. Csg.	0'	7600'	11.6	N80	LTC	New

	Casing	Data		Collapse	Burst	Min. Tensile
OD	Wt/Ft	Grade	Thread	(psi)	(psi)	(Lbs.)
9-5/8"	36.0 lbs.	J55	STC	2,020	3,520	394,000
7"	23.0 lbs.	N80	LTC	3,830	6,340	442,000
41/2"	11.6 lbs.	N80	LTC	6,350	7,780	223,000

MINIMUM CASING DESIGN FACTORS:

COLLAPSE: 1.125 BURST: 1.00 TENSION: 1.80

Area Fracture Gradient Range: 0.7 - 0.8 psi/foot

Maximum anticipated reservoir pressure: 2,500 psi Maximum anticipated mud weight: 9.0 ppg

Maximum surface treating pressure: 3,500 - 3,750 psi

Float Equipment:

<u>Surface Casing</u>: Guide shoe on bottom and 3 centralizers on the bottom 3 joints.

<u>Intermediate Casing</u>: Float shoe on bottom joint and a float collar one joint up from float shoe. One centralizer 10 ft. above float shoe and nine centralizers spaced every joint above the float collar. Stage tool above the Kirtland formation. One centralizer below stage tool and one centralizer above stage tool.

<u>Production Casing</u>: $4 \frac{1}{2}$ " cement nosed guide shoe and a float collar on top of bottom joint with centralizers over potential hydrocarbon bearing zones.

Cementing Program:

9-5/8" Surface casing: 400'

240 sx HES Prem cement with 2% CaCl₂ + 0.125 ppsx Poly-E-Flake. 100% excess to circulate cement to surface. WOC 12 hrs.

Slurry weight:	15.8 ppg
Slurry yield:	1.17 ft ³ /sack

Volume basis:	42' of 9-5/8" shoe joint	18.3 cf
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250' of 12-1/4" x 9-5/8" annulus	125.3 cf
100% excess (annulus)	125,3 cf
Total	268.9 cf

Note:

1. Design top of cement is the surface.

7" Intermediate Casing: 3520'

Slurry weight:	14.5 ppg	Annular Vol	= 130.8 cf + 65.4 cf (50% Access)
Slurry yield:	1.4 ft ³ /sack		= 196.2 cf

Slurry weight:
$$12.4 \text{ ppg}$$
 Volume $= 582.7 \text{ cf}$