

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

NOV 20 2012

FORM APPROVED
OMB No. 1 004- 0137
Expires: March 31, 2007

SUNDRY NOTICES AND REPORTS ON WELLS
Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

SUBMIT IN TRIPLICATE - Other Instructions on reverse side.

1. Type of Well
☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator
EnerVest Operating, LLC

3a. Address **1001 Fannin St, Suite 800
Houston, TX 77002-6707**

3b. Phone No. (include area code)
713-495-5355

4. Location of Well (Footage, Sec., T., R., or Survey Description)
**1550' FSL & 1810' FWL (Unit K)
Sec 30 T26N R05W**

5. Lease Serial No.

Jicarilla Contract 155

6. If Indian, Allottee, or Tribe Name

Jicarilla Apache

7. If Unit or CA. Agreement Name and/or No.

8. Well Name and No.

Jicarilla 155 #13N

9. API Well No.

30-039-29936

10. Field and Pool, or Exploratory Area

Blanco Mesaverde/Basin Dakota

11. County or Parish, State

Rio Arriba

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input checked="" type="checkbox"/> Notice of Intent	<input type="checkbox"/> Acidize	<input type="checkbox"/> Deepen	<input type="checkbox"/> Production (Start/Resume)	<input type="checkbox"/> Water Shut-off
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Fracture Treat	<input type="checkbox"/> Reclamation	<input type="checkbox"/> Well Integrity
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> New Construction	<input type="checkbox"/> Recomplete	<input type="checkbox"/> Other
	<input checked="" type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and abandon	<input type="checkbox"/> Temporarily Abandon	
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug back	<input type="checkbox"/> Water Disposal	

13. Describe Proposed or Completed Operation (clearly state all pertinent details including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths or pertinent markers and sands. Attach the Bond under which the work will performed or provide the Bond No. on file with the BLM/ BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompleat in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notice shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

Enervest Operating, LLC respectfully submits a modified drilling plan for approval.

This well was initially permitted by CDX Gas. Enervest has modified the drilling plan from the original. The well will also be drilled utilizing a Closed Loop System to meet the requirements of the NMOCD pit rule. Attached please find the modified drilling plan, BOP diagram, Choke Manifold diagram, and Idealized Location Diagram/Drilling.

CONDITIONS OF APPROVAL

Adhere to previously issued stipulations.

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

14. I hereby certify that the foregoing is true and correct.

Name (Printed/ Typed)

Bart Trevino

Title

Regulatory Analyst

Signature

Date

November 19, 2012

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by **TL Saliers**

Title **PE**

Date **11/27/12**

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

FFO

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 any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on page 2)

NMOCD A

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-102
Revised August 1, 2011
Submit one copy to
appropriate
District Office

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-29936	² Pool Code 72319	³ Pool Name Blanco Mesaverde
⁴ Property Code 306758	⁵ Property Name JICARILLA Contract 155	⁶ Well Number 13N
⁷ OGRID No. 143199	⁸ Operator Name ENERVEST OPERATING, LLC.	⁹ Elevation 6539'

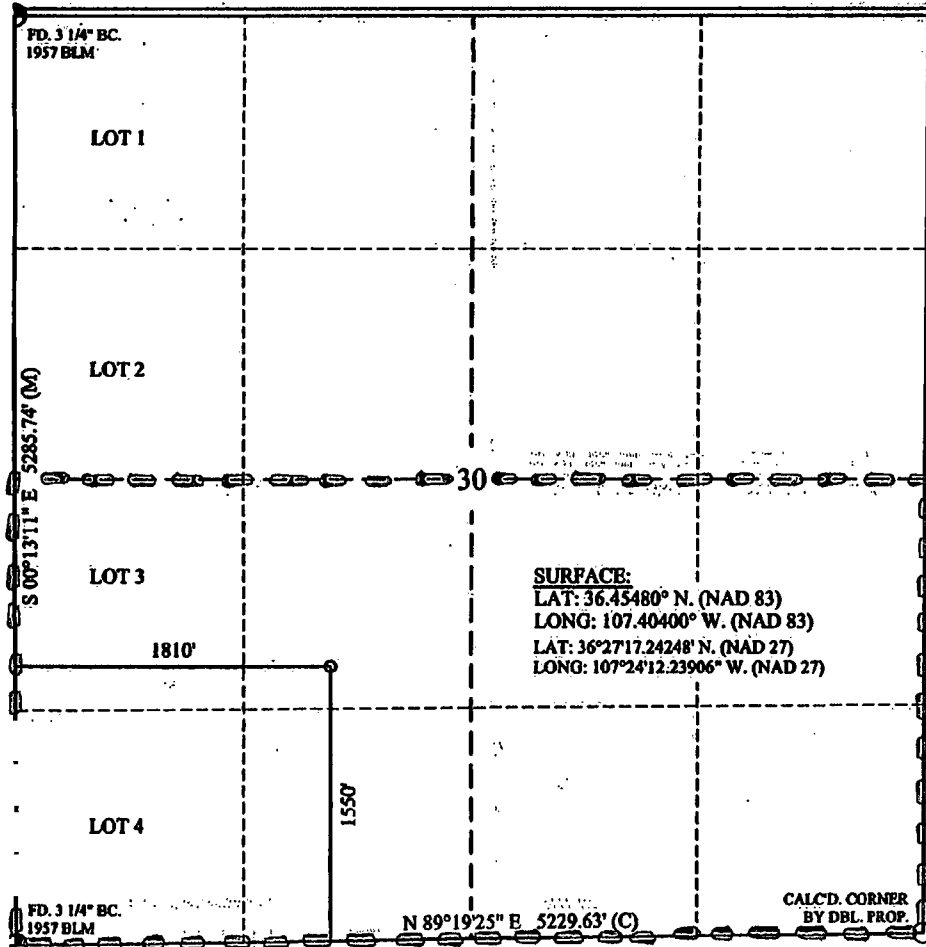
" Surface Location

UL or lot no. K	Section 30	Township 26-N	Range 5-W	Lot Idn	Feet from the 1550	North/South line SOUTH	Feet from the 1810	East/West line WEST	County RIO ARriba
--------------------	---------------	------------------	--------------	---------	-----------------------	---------------------------	-----------------------	------------------------	----------------------

" Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres MV - S/319.59			¹³ Joint or Infill Y		¹⁴ Consolidation Code		¹⁵ Order No. OIL CONS. DIV. DIST. 3		

No allowable will be assigned to this completion until all interest have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

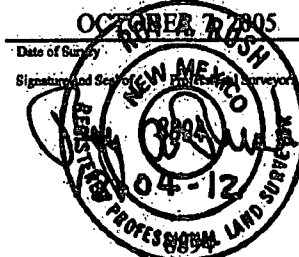
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Bart Trevino 2/27/13
Signature Date

Bart Trevino
Printed Name
btrevino@enervest.net
E-mail Address

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.



Certificate Number

EnerVest Operating, LLC

Jicarilla 155 # 13 N

1550' FSL, 1810' FWL Unit K Sec. 30, T26N R05W Rio Arriba County, NM
GL Elev: 6539'

Drilling Plan

All Lease and /or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations, BLM Onshore orders and EnerVest's approved Further Development Project Plan. The operator is fully responsible for the actions of its subcontractors. A copy of the APD and Conditions of Approval will be available to the field representatives to ensure compliance.

4.1, 4.2 ESTIMATED FORMATION TOPS (KB) and NOTABLE ZONES:

The following formation depths and proposed casing depths are used as an example only and will be furnished on a site-specific basis for each proposed well.

<u>Formation Name</u>	<u>Depth</u>	<u>Rock Type</u>	<u>Comments</u>
San Jose	Surface	Sandstone	
Ojo Alamo	2232'	Sandstone	Possible Gas, Water
Kirtland	2442'	Shale	
Fruitland	2682'	Coal, Shale, Sandstone	Possible Lost Circ, Gas, Water
Pictured Cliffs	2867'	Sandstone	Possible Lost Circ, Gas, water
Lewis	2955'	Shale	Sloughing Shale
Huerfano Bentonite	3292'	Shale	
Chacra	3743'	Siltstone	Gas, Water
Mesa Verde (Cliffhouse)	4512'	Sandstone	Possible Lost Circ, Gas, Water
Mesa Verde (Menefee)	4572'	Coal, Sandstone, Shale	Possible Lost Circ, Gas, Water
Mesa Verde (Point Lookout)	5073'	Sandstone	Possible Lost Circ, Gas, Water
Mancos	5288'	Shale	Sloughing Shale
Gallup	6270'	Siltstone, Shale	Gas, Oil
Greenhorn	7002'	Limestone	Gas, Oil
Graneros	7057'	Shale	Gas, Oil, Water
Dakota (Two Wells)	7085'	Sandstone	Gas, Oil, Water
Dakota (Paguete)	7182'	Sandstone	Gas, Oil, Water
Dakota (Upper Cubero)	7221'	Sandstone	Gas, Oil, Water
Dakota (Main Body)	7254'	Shale, Sandstone	Gas, Oil, Water
Dakota (Lower Cubero)	7305'	Shale, Sandstone	Gas, Oil, Water
Dakota (Burro Canyon)	7331'	Sandstone	Gas, Oil, Water
Proposed Total Depth	7430'		

Fresh water zones will be adequately protected by setting and cementing the surface casing. All zones containing commercial quantities of oil or gas will be cased and cemented.

EnerVest Operating, LLC

Jicarilla 155 # 13 N

1550' FSL, 1810' FWL Unit K Sec. 30, T26N R05W Rio Arriba County, NM
GL Elev: 6539'

4.3 PRESSURE CONTROL:

Maximum expected pressure is ~1635 (.22 pressure gradient) psi. The drilling contract has not yet been awarded, thus the exact BOP and Choke Manifold model to be used is not yet known. A typical 11" 2000 psi model is pictured in Exhibits A & B.

A remote accumulator will be used, the pressures, capacities location of the remote and manual controls will be identified at the time of the BLM supervised BOP test.

BOP equipment, accumulator, choke manifold and all accessories will meet or exceed BLM requirements as listed in Onshore Order #2 for the 2M systems. The pressure control equipment considerations include but will not be limited to:

1. BOP will be a double gate ram preventer with a set of blind rams and a set of properly-sized pipe rams.
2. Accumulator will have sufficient capacity to close the BOP rams and retain 200 psi above pre charge.
3. Accumulator fluid volume is to be maintained at manufacturer's recommendations.
4. BOP will also have manual closing handles available.
5. 2" minimum kill line and kill line valves (2).
6. Choke manifold (2" lines) with 2 adjustable chokes with valves and gauge.
7. Manually operated Kelly cocks available.
8. Safety valve and sub(s) with adequate opening for all drill strings used.
9. Fill line and flow line above the upper-most BOP rams.

BOPs will be pressure tested; after initial installation, before drilling out from under all set and cemented casing strings and any time a seal is broken. The BOPs will also be pressure tested a minimum of once every 21 days by a 3rd party. Additionally, the BOPs will be operationally checked every 24 hours.

All tests and pressure tests will be recorded on IADC log.

Ram type preventors, choke manifold and related pressure control equipment will be pressure tested to the rated working pressure of 2000 psi (high) and 250 psi (low).

The casing strings will be pressure tested per BLM Onshore Order #2 for 30 min as follows:

- a. Surface casing tested to 600 psi prior to drilling out the shoe.
- b. Intermediate casing tested to 1500 psi prior to drilling out the shoe. **(If intermediate casing is used.)**
- c. Production casing will be tested to 6000 psi (4 ½" 11.6# N-80) or 5600 psi (5 ½" 17# N-80) at the commencement of completion operations.

EnerVest Operating, LLC

Jicarilla 155 # 13 N

1550' FSL, 1810' FWL Unit K Sec. 30, T26N R05W Rio Arriba County, NM

GL Elev: 6539'

4.4 PROPOSED CASING PROGRAM (S):

The casings program is designed to use **Option A** below. If while drilling the hole conditions indicate that an intermediate casing may be needed then **Option B** will be used.

Casing Option A

Hole/Casing Description	Hole Size	Casing OD	Weight lb/ft	Grade	Age	Connection	Top MD	Bottom MD
Surface	12 1/4"	9 5/8"	36	J-55	New	ST&C	0	500'
Prod Casing (1)	8 3/4"	5 1/2"	17	N-80	New	LT&C	0	3050'
Prod Casing (2)	7 7/8"	5 1/2"	17	N-80	New	LT&C	3050'	7430'

Surface casing is to be cemented to surface. The production casing is to be cemented in 3 stages covering all zones of production potential and the 3rd stage is intended to circulate cement from the Lewis shale to surface.

Casing Option B

Hole/Casing Description	Hole Size	Casing OD	Weight lb/ft	Grade	Age	Connection	Top MD	Bottom MD
Surface	12 1/4"	9 5/8"	36	J-55	New	ST&C	0	500'
Intermediate	8 3/4"	7"	23	J-55	New	LT&C	0	3050'
Prod Casing	6 1/4"	4 1/2"	11.6	N-80	New	LT&C	0	7430'

Surface and Intermediate casings are to be cemented to surface, production casing is intended to be cemented with a 200' overlap into the intermediate casing.

4.5 CASING CEMENT:

A prototypical cementing program is listed as follows, site-specific cement designs will be produced for each well as the hole conditions warrant. The cement program will be designed to meet the BLM Onshore Order #2 and NMOCD requirements.

Surface casing will be cemented to the surface.

Cement and properties; Mix and pump 225 sacks (313 cu ft) Type III cement (or equivalent) cement. Slurry density is to be 14.6 (yield = 1.39 cu ft/sx). Volume will include 100% excess. Cement is to be displaced using a top plug.

Two centralizers will be run on the shoe joint, one centralizer each on the next two joints and then one centralizer on every third joint thereafter.

EnerVest Operating, LLC

Jicarilla 155 # 13 N

1550' FSL, 1810' FWL Unit K Sec. 30, T26N R05W Rio Arriba County, NM
GL Elev: 6539'

The surface casing will be pressure tested to 600 psi prior to drilling out the shoe.

Production casing (for Casing Option A only) will be cemented in 3 stages covering all zones of production potential and the 3rd stage is intended to circulate cement from the Lewis shale to surface. Volumes based on 50% OH excess cement for stage 1 and 45% for stages 2 and 3.

Stage 1 Lead cement; mix and pump 116 sacks (247 cu ft) premium lite slurry with CaCl₂, cello flake and gilsonite. Estimated slurry density is to be 12.1 (yield = 2.13 cu ft/sx).

Stage 1 Tail cement; mix and pump 418 sacks (840 cu ft) premium lite high strength cement with CaCl₂, cellophane, gilsonite and fluid loss agent. Slurry density is to be 12.5 (yield = 2.01 cu ft/sx).

DV tool at +/- 3250 ft.

Stage 2 Lead cement; mix and pump 128 sacks (272 cu ft) premium lite slurry with CaCl₂, cello flake and gilsonite. Estimated slurry density is to be 12.1 (yield = 2.13 cu ft/sx).

Stage 2 Tail cement; mix and pump 50 sacks (70 cu ft) Type III cement (or equivalent) cement. Slurry density is to be 14.6 (yield = 1.39 cu ft/sx). or equivalent cement.

DV tool at +/- 2317 ft.

Stage 3 Lead cement; mix and pump 343 sacks (732 cu ft) premium lite slurry with CaCl₂, cello flake and gilsonite. Estimated slurry density is to be 12.1 (yield = 2.13 cu ft/sx).

Stage 3 Tail cement; mix and pump 50 sacks (70 cu ft) Type III cement (or equivalent) cement. Slurry density is to be 14.6 (yield = 1.39 cu ft/sx). or equivalent cement.

Two centralizers will be run on the shoe joint, one centralizer on every third joint into the surface casing.

Intermediate casing (for Casing Option B only) will be cemented to surface in 2 stages, stage tool to be set at +/- 2317'. Cement will be designed to circulate to surface. Volumes will be based on 45% excess in OH.

EnerVest Operating, LLC

Jicarilla 155 # 13 N

1550' FSL, 1810' FWL Unit K Sec. 30, T26N R05W Rio Arriba County, NM
GL Elev: 6539'

Stage 1 Lead cement; mix and pump 42 sacks (90 cu ft) premium lite slurry with CaCl₂, cello flake and gilsonite. Estimated slurry density is to be 12.1 (yield = 2.13 cu ft/sx).

Stage 1 Tail cement; mix and pump 50 sacks (70 cu ft) Type III cement (or equivalent) cement. Slurry density is to be 14.6 (yield = 1.39 cu ft/sx). or equivalent cement.

DV tool @ +/- 2317 ft.

Stage 2 Lead cement; mix and pump 177 sacks (377 cu ft) premium lite slurry with CaCl₂, cello flake and gilsonite. Estimated slurry density is to be 12.1 (yield = 2.13 cu ft/sx).

Stage 2 Tail cement; mix and pump 50 sacks (69 cu ft) Type III cement (or equivalent) cement. Slurry density is to be 14.6 (yield = 1.39 cu ft/sx). or equivalent cement.

Two centralizers will be run on the shoe joint, one centralizer on every other joint for 14 joints and then one centralizer on every third joint thereafter.

The Intermediate casing will be pressure tested to 1500 psi prior to drilling out the shoe.

Production casing (for Casing Option B only) will be cemented into the intermediate casing with a minimum of 200 ft overlap. Volumes based on 45% excess in OH.

Lead cement; mix and pump 91 sacks (193 cu ft) premium lite slurry with CaCl₂, cello flake and gilsonite. Estimated slurry density is to be 12.1 (yield = 2.13 cu ft/sx).

Tail cement; mix and pump 239 sacks (481 cu ft) premium lite high strength cement with CaCl₂, cellophane, gilsonite and fluid loss agent. Slurry density is to be 12.5 (yield = 2.01 cu ft/sx).

Two centralizers will be run on the shoe joint, one centralizer on every other joint into the intermediate casing, then every 3rd joint to surface.

The production casing will be pressure tested for 30 minutes at the commencement of completion operations as outlined above

Where cement has not been circulated to surface (or to planned depth) a CBL or temperature survey will be run to determine the TOC for that casing string. A CBL log will be run in the production casing prior to the commencement of completion operations.

Cement specifications may vary slightly due to cement type and cement contractor availability.

EnerVest Operating, LLC

Jicarilla 155 # 13 N

1550' FSL, 1810' FWL Unit K Sec. 30, T26N R05W Rio Arriba County, NM

GL Elev: 6539'

4.6 MUD PROGRAM

Depth	Type	Wt / pp	Visc	Fluid Loss
0-500'	FW gel/Lime Spud Mud	8.4-9.0	30-40	N/C
500'-3050'	LSND/Gel sweeps, LCM as needed	8.5-9.4	40-60	20-40 cc
3050'- 7430'	LSND/Gel sweeps, LCM as needed	8.5-9.4	20-40	6-10 cc

The well will be drilled utilizing a closed loop mud handling system. The closed loop system will comply with the NMOCD pit rules pertaining to the use of the system and disposal of the drill cuttings and waste. Drilling mud will be moved for re-use to drill subsequent wells whenever possible.

Viscosity, mud weight and other physical and chemical characteristics of the drilling mud will be varied as required to keep the hole clean, circulate drill cuttings, prevent caving, prevent lost circulation and maximize penetration rate.

Sufficient mud and materials will be kept on site to maintain mud properties and meet lost circulation or mud weight requirements at all times.

Mud design may change depending on well conditions, LCM, fluid loss and viscosity will be determined by the EnerVest representative and the mud engineer on site.

4.7 CORING, TESTING, & LOGGING

No cores or drill stem tests are planned. Well logs to be run are:

Casing Option A

500' to TD; GR/ Cement Bond Log, at the commencement of completion operations.

1000' to TD; GR/Induction/Density Neutron. (Cased hole GR/Neutron will be run if the hole conditions do not allow the use of the open hole logs)

Casing Option B

500' to 3050'; GR/ Cement Bond Log, if cement is not circulated to surface in intermediate casing.

3050' to TD; GR/Induction/Density Neutron. (Cased hole GR/Neutron will be run if the hole conditions do not allow the use of the open hole logs)

Deviation surveys will be run at 500 ft intervals and at the base of each hole section prior to setting casing.

EnerVest Operating, LLC

Jicarilla 155 # 13 N

1550' FSL, 1810' FWL Unit K Sec. 30, T26N R05W Rio Arriba County, NM

GL Elev: 6539'

4.8 ANTICIPATED PRESSURES AND TEMPERATURES:

- | | | |
|----|------------------------------------|------------|
| a. | Expected bottom hole pressure: | < 1635 psi |
| b. | Anticipated abnormal pressure: | None |
| c. | Anticipated abnormal temperatures: | None |
| d. | Anticipated hazardous gas (H2S): | None |

If any of the foregoing conditions are unexpectedly encountered, suitable steps will be taken to mitigate according to accepted industry best practices.

4.9 OTHER INFORMATION:

The anticipated spud date is spring 2013. The spud date will be dependent on the weather conditions, road conditions and the Conditions of Approval.

The dirt work for road and well pad construction will commence upon approval of the APD and will be dependent on weather conditions.

The well will be spud after well pad construction is complete and a suitable rig becomes available. The duration of drilling operations is expected to be from two to three weeks. The drilling rig and associated equipment will be removed and preparations will be made for the completion of the well.

Completion will start about one to four weeks after the finish of the drilling operations. A completion rig will be moved in for the completion phase. The completion phase of the well is expected to +/- two weeks. The completion phase will include; perforating, acidizing, fracture stimulation and well testing.

Some events/situations may arise that could potentially change the starting date or project duration that are out of EnerVest's control. If such events/situations arise, the proper officials will be promptly notified.

**EnerVest
Jicarilla 2012
Drilling Program
Blowout Preventer
2000 psi**

Exhibit A

- | Components | |
|------------|------------------|
| 1. | Wellhead 9 5/8" |
| 2. | Drilling Spool |
| 3. | Pipe Rams |
| 4. | Blind Rams |
| 5. | Spool |
| 6. | 2" Check Valve |
| 7. | 2" Manual Valves |

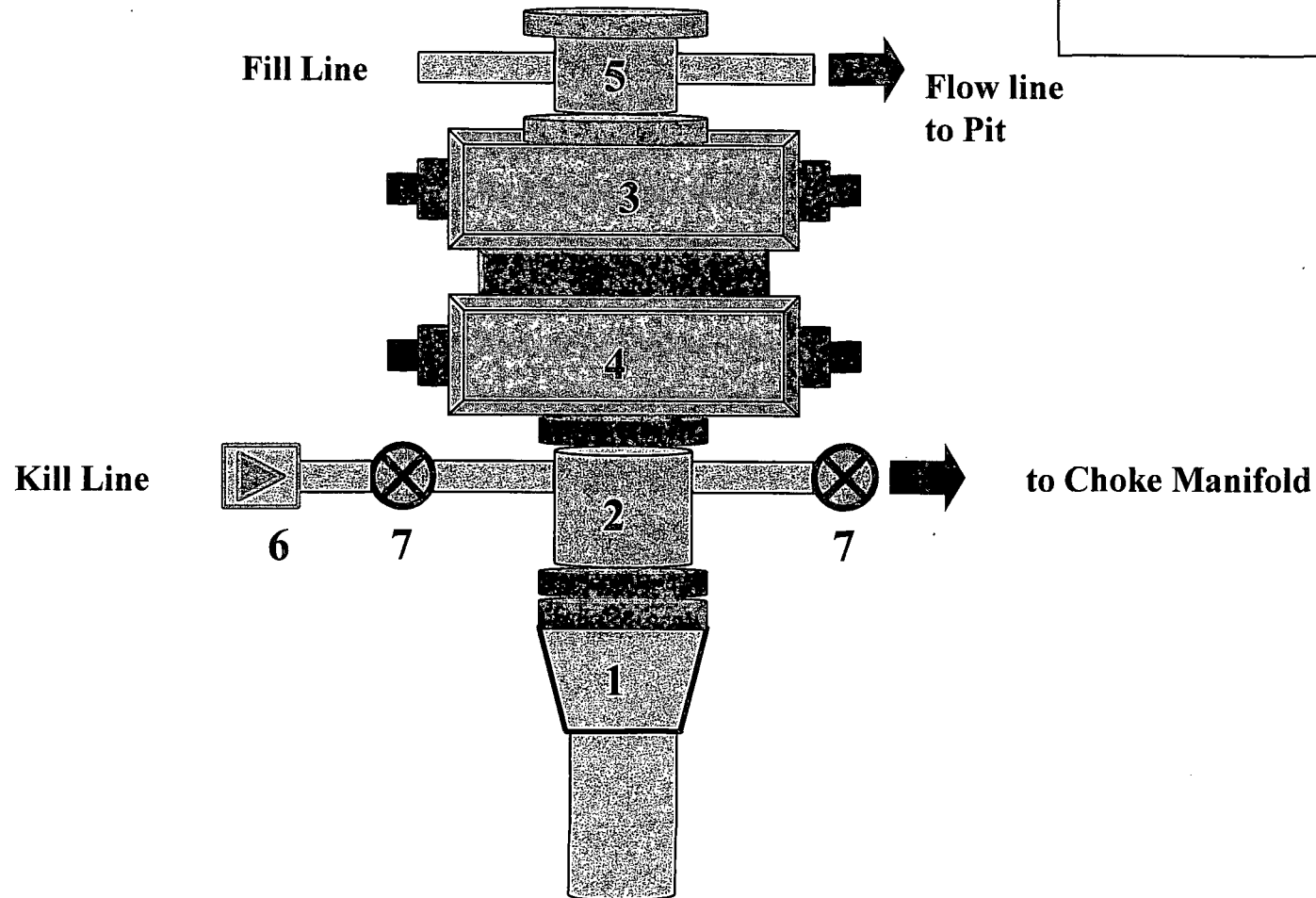


Exhibit B

**EnerVest
Jicarilla 2012 Drilling
Program
2000 psi Choke Manifold**

Components

1. 2" Valves (2M)
2. Adjustable Chokes
3. Gauge

