RECEIVED

SEP 10 2010

Farmington Field Office
Bureau of Land Management

Form 3160-3
(August 2007)

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No. NMNM 97993

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

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

1b. Type of Well: ☑ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. Enervest Federal No. 1

2. Name of Operator Enervest Operating, L.L.C.

9. API Well No. 30-039-30992

3a. Address 1001 Fannin, Suite 800 Houston, TX 77002

3b. Phone No. *(include area code)* 713-495-6537 (Bridget Helfrich)

10. Field and Pool, or Exploratory Gavilan-Mancos

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*

At surface 1490 FSL and 791 FWL (L)

At proposed prod. zone BHL = 790' FSL & 1650' FEL (O)

11. Sec., T. R. M. or Blk. and Survey or Area Sec 25-Twp26N-Rge2W

14. Distance in miles and direction from nearest town or post office*

12. County or Parish Rio Arriba Co.

13. State NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease	17. Spacing Unit dedicated to this well
		640.00 AC
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 10,240'	20. BLM/BIA Bond No. on file NMB000503
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 7725'	22. Approximate date work will start* 10/01/2010	23. Estimated duration

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

RCVD SEP 29 '10
OIL CONS. DIV.
DIST. 3

25. Signature	Name *(Printed/Typed)*	Date
Bridget Helfrich	Bridget Helfrich	08/24/2010

Title: Regulatory Tech.

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
Wayne Townsend	Wayne Townsend	9-28-10

Title: Acting AFM — Office: FFO

Application approval 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.
Conditions of approval, if any, are attached.

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.

(Continued on page 2)

*(Instructions on page 2)

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

CONFIDENTIAL

A COMPLETE C-144 MUST BE SUBMITTED TO AND APPROVED BY THE NMOCD FOR: A PIT, CLOSED LOOP SYSTEM, BELOW GRADE TANK, OR PROPOSED ALTERNATIVE METHOD, PURSUANT TO NMOCD PART 19.15.17, PRIOR TO THE USE OR CONSTRUCTION OF THE ABOVE APPLICATIONS.

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

OCT 06 2010

Hold C104 for Directional Survey and "As Drilled" plat

NMOCD

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

RECEIVED

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

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 July 16, 2010
Submit one copy to appropriate District Office
☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

[1] API Number	[2] Pool Code	[3] Pool Name
30-039-30992	27194	GAVILAN-MANCOS

[4] Property Code	[5] Property Name	[6] Well Number
38336	ENERVEST FEDERAL	1

[7] OGRID No.	[8] Operator Name	[9] Elevation
143199	ENERVEST OPERATING, L.L.C.	7725'

[10] Surface Location

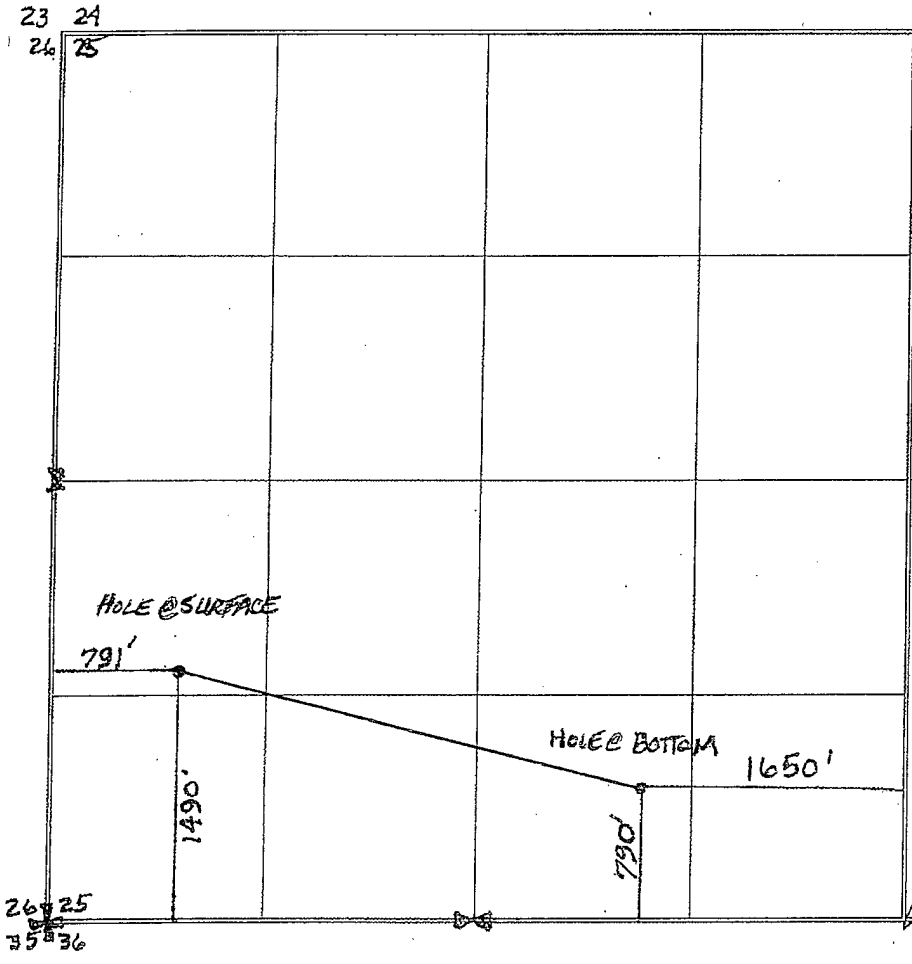
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
L	25	26N	2W		1490	South	791	West	Rio Arriba

[11] 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
O	25	26N	2W		790	South	1650	East	Rio Arriba

[12] Dedicated Acres	[13] Joint or Infill	[14] Consolidation Code	[15] Order No.
640			

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



[17] 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.

Bridget Helfrich 8-24-10
Signature Date

BRIDGET HELFRICH
Printed Name

bhelfrich@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.

ONE PENDERGRAFT NEW MEXICO 12652 REGISTERED LAND SURVEYOR

Date of Survey

Signature and Seal of Professional Surveyor

Certificate Number

Exhibit 1

ENERVEST

September 9, 2010

Bureau of Land Management
Farmington Field Office
1235 La Plata Hwy – Suite A
Farmington, NM 87401
Attn: Troy Salyers

RE: Enervest Federal No. 1
Request for Confidentiality

Dear Mr. Salyers,

On behalf of Enervest Operating, L.L.C., I would like to request confidentiality on our Application for Permit to Drill on the Enervest Federal No. 1 well.

If you have any questions, please contact me at 713-495-6537.

Thank you,

Bridget Helfrich

Bridget Helfrich
Regulatory Tech.

Enervest Operating, L.L.C.
Enervest Federal No. 1 well
Sec25-T26N-R2W
Rio Arriba Co., NM
Driving Directions

1. From Farmington, NM, take US-64 E to Bloomfield, bear right onto US 550 S for 66 miles.
2. Turn left onto NM-537 for 21 miles.
3. Turn right on CR 405, continue 5 miles on gravel road.
4. Turn left on un-named dirt road and travel 0.1 mile north.
5. Turn right at "Y" and continue on dirt road 4.4 miles.
6. At "T" turn left and continue 0.73 miles on Hwy 95.
7. Turn right on dirt road and continue 0.8 miles to location.

Exhibit 2

ENERVEST FEDERAL WELL # 1 - DRILLING PROGRAM - Alt # 2

1 Location :

Surface location: 1490' FSL & 791' FWL of sec 25 T26N R2W
Bottom Hole Location: 790' FSL & 1650' FEL OF SEC 25 T26N R2W

2 Estimated Tops of Important Geologic Markers

Formation	GL Depth	KB Depth	Elevation	Rock Type
	0	15	7727	
Ojo Alamo	3,604	3,619	4108	Sandstone
Fruitland	3,905	3,920	3807	Coal & Shale
Pictured Cliffs	3,947	3,962	3765	Sandstone
Lewis Shale	4,073	4,088	3639	Shale
Menefee	5,800	5,815	1912	Shale & Coal & Sandstone
Point Lookout	6,085	6,100	1627	Sandstone
Mancos	6,213	6,228	1499	Sandstone
Gallup	7,317	7,332	395	Sandstone & Shale
Target @ land	7,560	7,575	152	
Target @ BHL	7,540	7,555	172	Gallup formation

3 Notable Anticipated Fresh Water, Oil and Gas Formations

The Picture Cliffs and Gallup are potential oil and gas zones. Water zones will be protected by setting 13 3/8" casing to 300' and circulating cement back to the surface. All zones containing commercial quantities of oil or gas will have cement circulated across them by cementing the 9 5/8" & 7" Intermediate casings;
The 9 5/8" casing cement volumes will be pumped to provide cement back to surface.
The 7" casing cement volumes will be pumped to provide cement back to the 9 5/8".

4 Casing Program (New Casing)

Hole Size	Interval	OD Casing	Weight	Grade	Connection	Section
17 1/2"	0-300	13 3/8"	54.5 #	J-55	STC	Surface
12 1/4"	0-4200	9 5/8"	40 #	N-80	LTC	Intermediate
8 3/4"	0-7905'MD	7"	26 #	P-110	Buttress	Intermediate
6 1/8"	10268'MD	4 1/2"	11.60#	P-110	LTC	Liner

Interval	OD Casing	Weight	Grade	Pressure Test		Length of test
0-300	13 3/8"	54.5 #	J-55	600#		30 minutes
0-4200	9 5/8"	40 #	N-80	1500#		30 minutes
0-7905'MD	7"	26 #	P-110	1500#		30 minutes
10268'MD	4 1/2"	11.60#	P-110	liner only, not cemented		

NMOCD requires casing test of 1/3 min. intern. Yield or not less than 600# or more than 1500#

5 Cement Program

Surface CSG:

Surface casing will be cemented to surface w/ 100% excess.
430 sacks Premium Cement + 3% Calcium Chloride + 0.125 lbm/sk Poly-E-Flake.
Mixed at 15.8 ppg, 1.17 cu ft/sx, 5.01 Gal/sk of water.
Two centralizers will be installed on the float joint and one every second joint thereafter.
Surface casing will be tested to 600# for 30 min and reported on IADC report form

9 5/8" Intermediate CSG:

Cement will be from 4200' to surface pumped in two stages thru DV tool at 3000'.

Stage 1

Lead cement: 200 sacks 94 lb/sx Premium cement + 3% Econolite + 10lb/sx Gilsonite plus 0.125 lb/sx Poly-E-Flake plus 3 lb/sx Pheno Seal Medium
Mixed at 11.5 ppg, 2.84 cu ft/sx, 16.08 Gal/sk of water, 1018 ft calc fill
Tail cement: 100 sx premium cement + 5 lb/sx Gilsonite plus0.125 lb/sx Poly-E-Flake
Mixed at 15.6 ppg, 1.19 cu ft/sx, 4.69 Gal/sk of water, 182 ft calc fill.

Stage 2

Lead cement: 530 sacks 94 lb/sx Premium cement + 3% Econolite + 5lb/sx Gilsonite plus 0.125 lb/sx Poly-E-Flake plus 3 lb/sx Pheno Seal Medium
mixed at 11.5 ppg, 2.82 cu ft/sx, 16.54 Gal/sk of water, 2784 ft calc fill
Tail cement: 100 sx premium cement + 5 lb/sx Gilsonite plus0.125 lb/sx Poly-E-Flake
Mixed at 15.6 ppg, 1.19 cu ft/sx, 4.69 Gal/sk of water, 216 ft calc fill.
Two centralizers will be installed on the float joint and on each side of the DV tool.
Additionally every other joint thru water bearing zones-Ojo Alamo, et al

7" Intermediate CSG:

Cementing will be from TD (7905'proposed) to 4000'
25 bbl Tuned spacer w/ solvent, 490 sacks 50/50 Poz Standard w/ 3 lbm/sk Pheno Seal Med plus 0.8% Halad R-9 (fluid loss add.) calc. fill 3233'
Tail cement: 100 sx premium cement + 0.125 lb/sx Poly-E-Flake + o.4% Halad (R) 9
Mixed at 15.8 ppg, 1.15 cu ft/sx, 4.94 Gal/sk of water, 467 ft calc fill.
Two centralizers will be installed on the float joint and on each side of the DV tool.

mixed at 13 lb/gal 1.46 cuft/sx 6.64 gal/sx of water 3960' calc fill 467
Two centralizers will be installed on the float joint and one every second joint through all prospective pays.
Intermediate csg will be tested to 1500# for 30 min and reported on IADC form

4 1/2" Liner:
Will not be cemented

6 Pressure Control & Wellhead Equipment

The maximum expected bottom hole pressure will be +/- 2000 psi.
A 13 5/8" 3000 psi double ram-type preventer and a 1000 psi rotating head
This unit will be hydraulically operated and tested by a third party.
The BOPs will be equipped with the rotating head on top. The double rams will be below the rotating head with the variable bore pipe rams on top and blind rams on the bottom.
The BOPE will be nippled up on the 13 3/8" surface casing and tested to 2,000 psi by a third party.
BOPs will be operationally checked each 24 hour period. Pressure tests will be conducted before drilling out from under all casing strings which are set and cemented, anytime a seal is broken.
Additional safety equipment will include a safety valve and sub with a full opening valve to fit the drill pipe and collars. The choke lines and a choke manifold will have at least a 3,000 psi WP rating.

7 Types and Characteristics of the Proposed Mud System

The surface hole will be drilled with a fresh water mud.
The intermediate hole will be drilled with a gel/polymer mud.
The second intermediate hole will be drilled on Air-N2 and KCL Mist
The production hole will be drilled with Oleo-diesel foam with air and N2

DEPTH	TYPE	WEIGHT	VISCOSITY	WATER LOSS
0-300'	Gel	8.4-8.6	60-75	NC
300'-4200'	Gel/Polymer	8.6-9.2	33-38	6
4200'-7002MD	Air-Oleo foam	0.25-0.5	30-34	NC
7002'-TD	Oleo foam	0.25-0.5	30-34	NC

Sufficient mud materials will be kept at the well site to maintain mud properties and meet minimum lost circulation and weight increase requirements at all times.

8 Auxillary Well Control and Monitoring Equipment

A. Upper Kelly cock will be kept in the drill string at all times.

B. A full opening drill pipe-stabbing valve with proper drill pipe connections will be on the rig floor at all times.

9 Logging, Testing and Coring Program

A. The electric logging program will consist of a Gamma Ray & Induction log from KOP (7002') to the surface casing shoe.
B. Gamma ray only will be run from KOP (7002') to TD.

C. Mud logger will be present from 5000' to TD.

D. No conventional coring is anticipated.

10 Abnormal conditions, Pressure, Temperatures and Potential Hazards

No abnormal pressures or temperatures or hydrogen sulfide are anticipated.
Lost returns have been experienced in offset wells.
Maximum bottom hole pressure will be +/-2000 psi.

11 Anticipated Starting Date and Duration of Operations

Anticipated start date is October 1, 2010.
Road and location work will not begin until approval has been received from the Surface Owner.
Once commenced, drilling operations should be finished in approximately 45 days and about 2 weeks to complete the well.

12 Safety

Conduct Tour Safety Meetings with all crews and record topics of these meetings on the IADC and morning reports. Document all personnel in attendence and topics

Casing and Cementing Procedures

BLM and NM OCD should be called before spudding, cementing, and drilling out

Test each string of casing per procedure after calling BLM and NM OCD for witnessing. Hold as prescribed in procedure.

Surface Casing

It is planned to preset the 13 3/8" surface casing by a third party prior to rig moving in
Planned depth is 300' +, 13 3/8" casing is to be furnished by Enervest, it's in M & R's yard
Antelope Wellheads should nipple up the A section once the 13 3/8" is set, and it should be set as low as possible below GL to accommodate the 13 5/8"x 5000# BOP stack w/ rotating head

12 1/4" hole to 4200'

After NU BOP's drill out with spud mud and water to 10' +/- and perform a shoe test to 10 ppg equiv.
Drill to 4200' +/- with PDC bit and water based drilling mud. Possible lost circulation in Picture Cliffs, Fruitland Coal (producing CBM zone in some areas).
At 4200', short trip, circulate 1 full circulation, POOH, LD 8" DC's.

9 5/8" Intermediate Casing

Run 9 5/8" casing with float shoe, float collar. Cement should be circulate to surface. If it falls back annulus should be topped out with 1" tubing. WOC.

8 3/4" hole 4200' to 7702' MD

Pick up air drilling tools, Drill out cement and shoe with rotary bit to 10' below shoe. POOH, PU hammer bit TIH, drill on Nitrogen to Mancos Shale or until hole problems begin. Start Foam or mist and drill to KOP at 7002'. POOH, PU directional tools, drill to 7702' MD building angle to 90 deg. if possible.
Jet hole clean, POOH, LD BHA and related tools.

Cementing 7" casing

PU 7' 26# P-110 buttress thread casing as follows: PU Weatherford 7' up jet float shoe w/ buttress thrd.
PU 1 jt 7" 26# P-110 butt. Casing, 1 Weatherford 7" float collar, 7" 26# P-110 but. Thrd. casing to MD of 4000' from surface. PU 7" 26# But. Thrd Mechanical Stage tool. Finish to surface with 7" 26# P-110 casing
Centralize as follows:
Two centralizers on shoe joint, then every 2nd joint through all prospective pays.
Above Stage tool - two centralizers on stage joint, then every 2nd joint through all prospective pays to 4200'.
Drill hole to fit casing plus 10'. Hole will be horizonal or 80-90 deg. when TD'd.
Land casing so it is 10 ft above bottom and set in slips, with 5-7' casing above floor
Cement as per Halliburton recommendation at 5 BPM.
Near end of displacement, PU on casing and lower 2-5 ft. or until casing take weight, or pressure increases above normal. Set casing on slips, bump plug, pressure over, release pressure to check to see that plugs are holding, SI WOC.

All centralizers to be: Weatherford Model 312XX & S313XX single bow latch-on turbolizes with integral stops.

WELL	ENERVEST FEDERAL WELL # 1		ENERVEST		
TYPE	Horizontal REV. 1	RIG	Aztec Rig 222	DATE	9/9/2010
FIEI	Gavilan	COUNTY	Rio Arriba, New Mexico	ELEVATION	7712' Est.
GAS/	Gas/Oil	MUD	Water/Mud/Oleo-Foam	CEMENT	TBD from Caliper Log
SURF LOC	1490' FSL & 791' FWL OF SEC 25 T26N R2W			BHT/BHP	170 F/2000 psi
BHL	790' FSL & 1650' FEL OF SEC 25 T26N R2W				

COMMENTS: OBJECTIVE FORMATION: Gallup
NOTE:

HOLE SECTIONS	SURVEYS	WOB/GPM BIT	FORMATION TOPS HOLE SIZES	DEPTH TVD	MUD WEIGHT	OPEN HOLE LOGS	CEMENT	WELLHEAD	REMARKS

Surface Section
Inclination @ 300'
17-1/2" HOLE >
13-3/8" 54.5# J55 STC @ 300'
300'
8.4 - 8.6 PPG NATIVE 50-60 Vis.

Intermediate Section
Inclination every 500'
12-1/4" HOLE >

8.6 - 9.2 PPG Clean Faze System
POSSIBLE LOST RETURNS (Mix 20-25% LCM if needed)

3000' Stage Collar cementing Tool

Ojo Alamo > **3619'**

Fruitland Coal > **3920'**
Picture Cliffs > **3962'**
Lewis Shale > **4088'**
9 5/8" 40 # N-80 LTC @ 4200'

8-3/4" HOLE > Air Package Needed

Menefee > **5815'**
Point Lookout > **6100'**
Mancos > **6228'**

Hammer bits if possible

Curve Section

KOP at 7002'
Azimuth 104.89 deg
900' Curve / 500' Vertical Seciton
DLS 11 +/- deg

7" 26# P-110 Buttress 7905' to Surface

Gallup > **7477'**

Open hole logs at KOP
GR/Induction
At KOP will be pumping 30 to 40 GPM
Oleo Foam for Directional Tools
LOST RETURNS DUE TO FRACTURED FORMATION

7" csg set at 90 deg

Horizontal Section
AZMITH = 101.53 Deg
3100' Lateral @ 90 Deg
3700' Vertical Section

7575' **6 1/8" Hole** 4 1/2" Packers Plus System

TD @ 7555' TVD
TD @ 10268' MD

4 1/2" 11.6 # P-110 Hydril 521 thrd from TD of 10,268MD to 7002'KOP

Oleo_Foam Mist (Oil-Based Drilling Fluid)
0.5 PPG
2000 CFM Membrane Nitrogen
Oleo Foam HT/Oil /blend Diesel

			OFFICE
AFE #	REGULATORY	Tim Kelley & Ronnie Young	(970)-385-4722
EV #	ENGINEER	Harvey Barney	713-203-9322
API #	GEOLOGIST	Gary Kowalczyk	(713) 495-6590

ENERVEST

BOP DIAGRAM
Enervest Federal #1
Rio Arriba, New Mexico

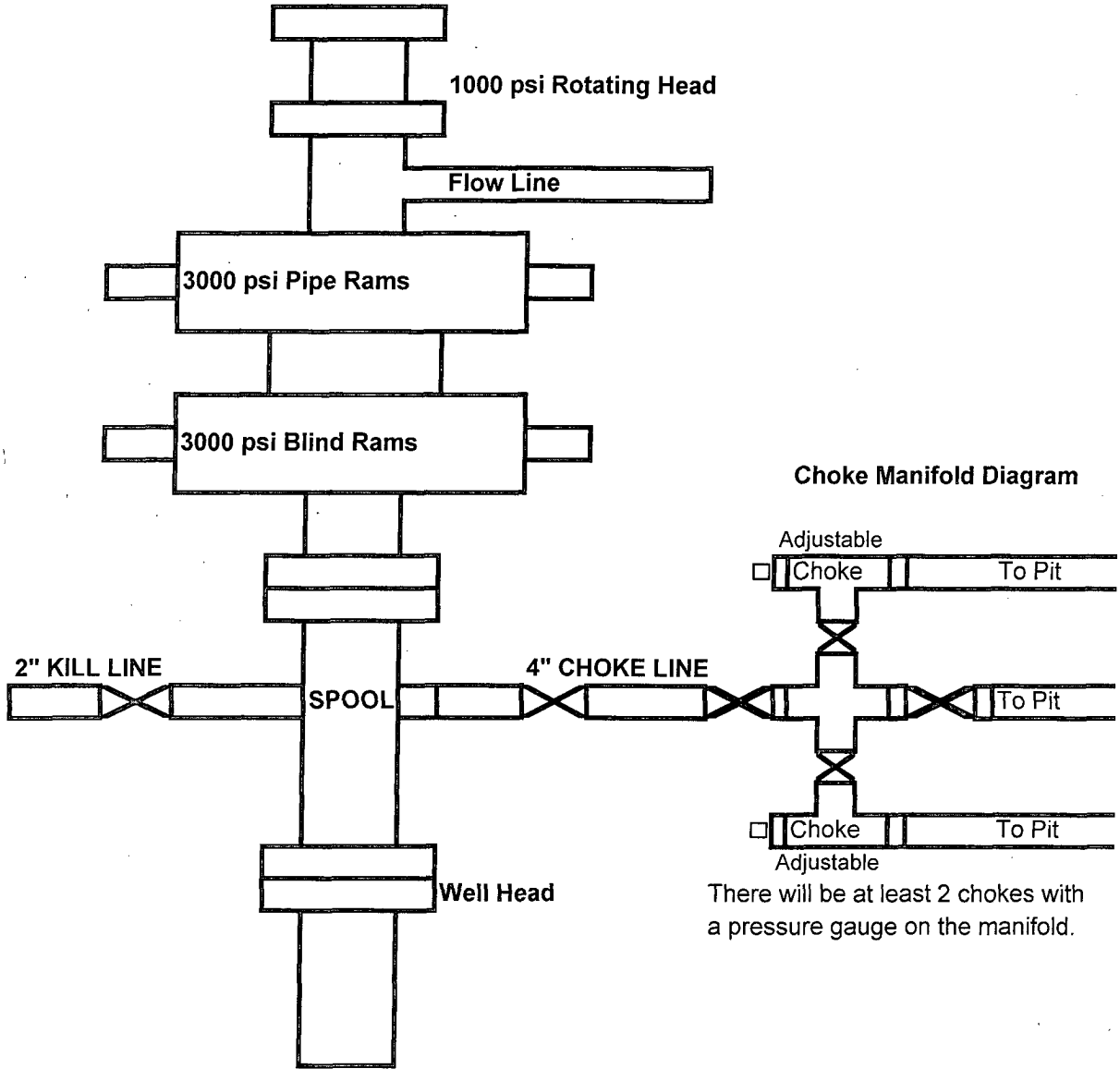


Exhibit 11