

New Mexico Oil Conservation Division, District I  
1625 N. French Drive  
Hobbs, NM 88240UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB NO. 1004-0135  
Expires: July 31, 2010**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 <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other		5. Lease Serial No. NMNM105885
2. Name of Operator CHESAPEAKE OPERATING INC		6. If Indian, Allottee or Tribe Name
3a. Address P.O. BOX 18496 OKLAHOMA CITY, OK 73154-0496		7. If Unit or CA/Agreement, Name and/or No NMNM124555
3b. Phone No. (include area code) Ph: 405-935-4275		8. Well Name and No. PERSEUS 10 FEDERAL COM 3H
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Sec 10 T15S R31E SENE 1980FNL 200FEL		9. API Well No. 30-005-29137
		10. Field and Pool, or Exploratory WILDCAT-WOLFCAMP
		11. County or Parish, and State CHAVES COUNTY, NM

**12. CHECK APPROPRIATE BOX(ES) 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"/> Alter 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 checked="" type="checkbox"/> Other
	<input type="checkbox"/> Change Plans	<input type="checkbox"/> Plug and Abandon	<input type="checkbox"/> Temporarily Abandon	Change to Original A
	<input type="checkbox"/> Convert to Injection	<input type="checkbox"/> Plug Back	<input type="checkbox"/> Water Disposal	PD

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 recompleate horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with 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 recompleation in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices 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.)

CHESAPEAKE, RESPECTFULLY, REQUESTS PERMISSION TO MAKE CHANGES TO THE CURRENT DRILLING PLAN AND RIG. WE HAVE A RIG THAT CAME AVAILABLE AND ANTICIPATE SPUDDING EITHER JUNE 7TH OR 8TH AND WE WOULD APPRECIATE AN APPROVAL TODAY.

Attached is a Schematic that changes our current Drilling Plan as well as information for the Patterson Rig #62 which will be drilling the Perseus.

Changes in Drilling Plan:

Surface Hole Size: 17-1/2"  
Surface Casing: 13-3/8" 48# H40  
Intermediate Hole Size: 12-1/4"

**RECEIVED**

JUN 09 2010

**HOBBSOCD**

14. I hereby certify that the foregoing is true and correct. <b>Electronic Submission #87350 verified by the BLM Well Information System For CHESAPEAKE OPERATING INC, sent to the Roswell Committed to AFMSS for processing by RUBEN SANCHEZ on 06/03/2010 (10RJS0596SE)</b>	
Name (Printed/Typed) LINDA GOOD	Title SR. REGULATORY COMPLIANCE SPEC
Signature (Electronic Submission)	Date 06/03/2010

**THIS SPACE FOR FEDERAL OR STATE OFFICE USE**

Approved By DAVID R GLASS	Title PETROLEUM ENGINEER	Date 06/03/2010
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 Roswell		

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.

**\*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\* BLM REVISED \*\***

7.m

**Additional data for EC transaction #87350 that would not fit on the form**

**32. Additional remarks, continued**

Intermediate Casing: 9-5/8" 40# J55

Production Hole Size: 8-3/4" slim down to 7-7/8" at KOP (8,374')

Production Casing: 5-1/2" 17# P110

Wellhead design has been changed to reflect new casing design (see schematic)

Cement volumes have been changed to reflect new casing design (see schematic)

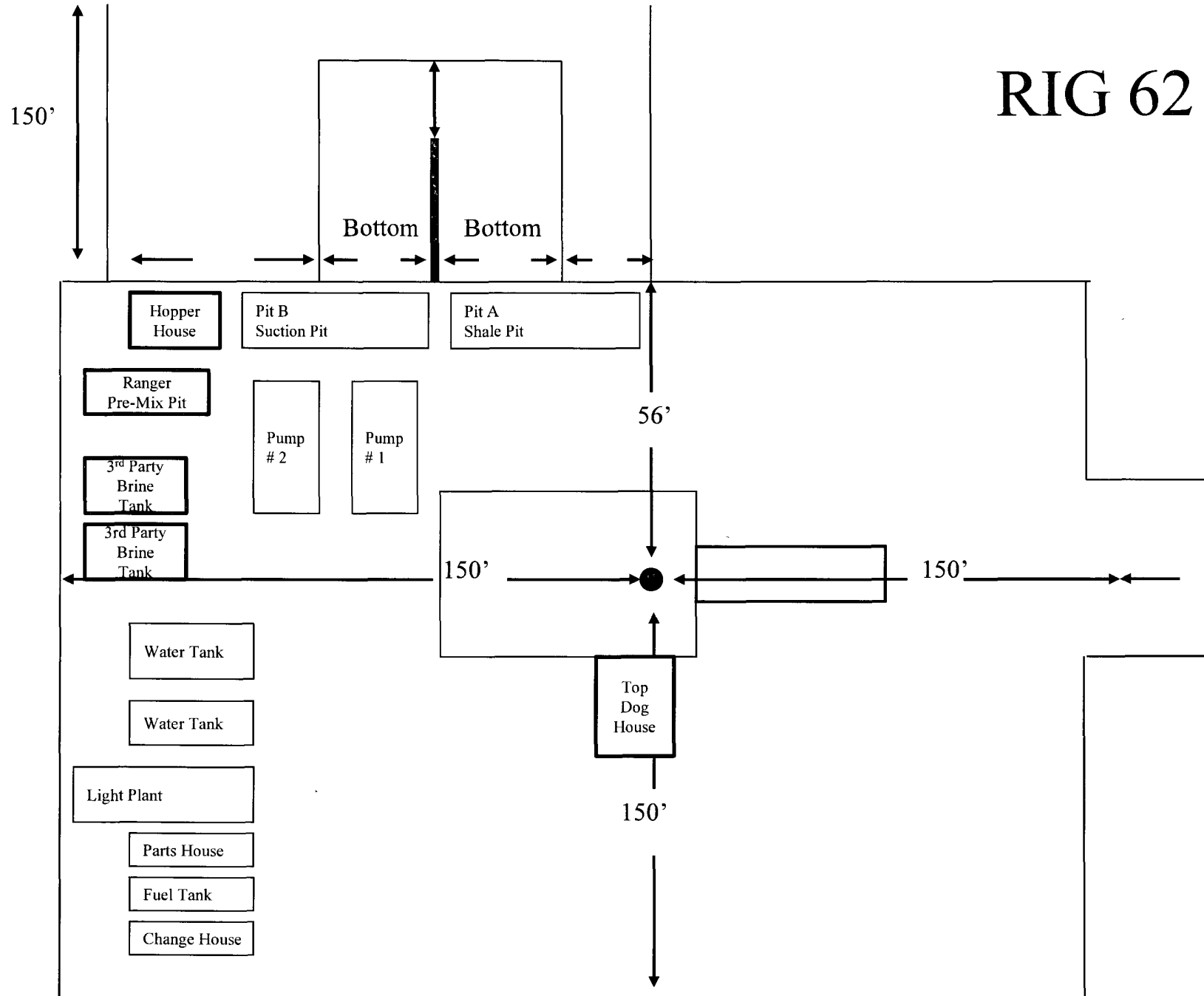
Patterson 62 has a 13-5/8" 5M BOP stack. 13-5/8" x 5M BOP would be installed after setting the 13-3/8" surface casing. The BOP would be pressure tested as a 3M stack at the 13-3/8" and 9-5/8" casing shoes. In this case, no formation integrity test would be done below the 13-3/8" and 9-5/8" casing shoes.

(CHK PN 618836)

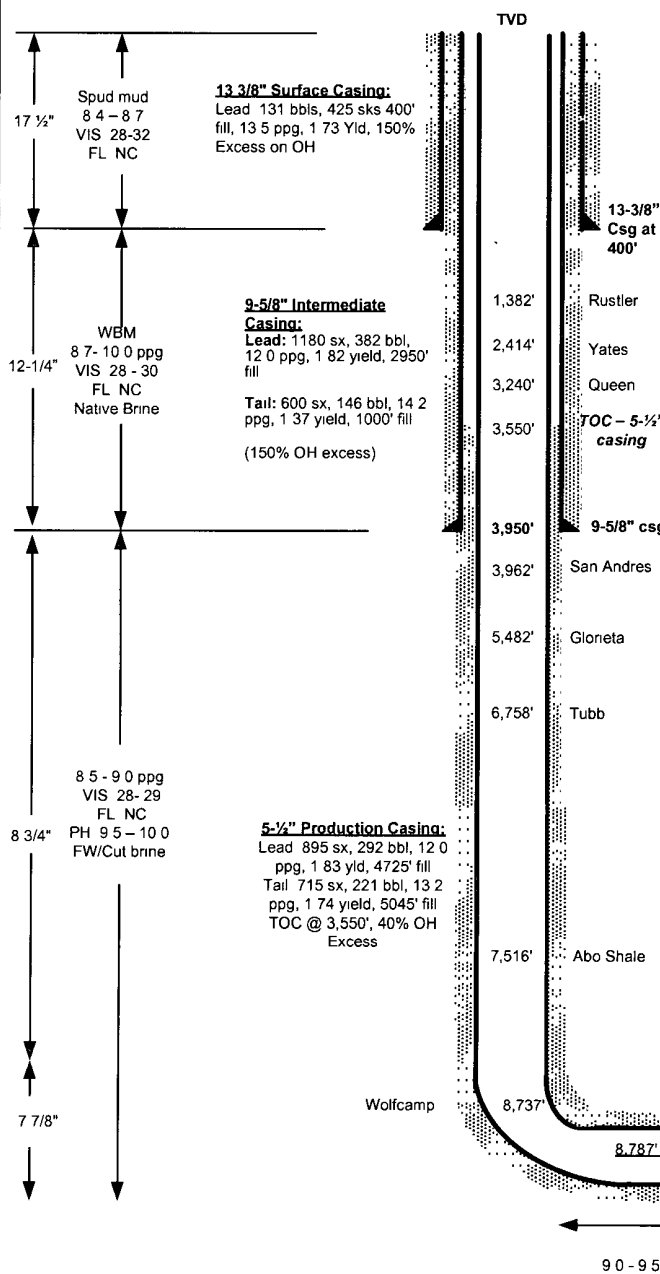
## Revisions to Operator-Submitted EC Data for Sundry Notice #87350

	Operator Submitted	BLM Revised (AFMSS)
Sundry Type:	APDCH NOI	APDCH NOI
Lease:	NMNM105885	NMNM105885
Agreement:		NMNM124555
Operator:	CHESAPEAKE OPERATING, INC. P.O. BOX 18496 OKLAHOMA CITY, OK 73154-0496 Ph: 405-935-4275	CHESAPEAKE OPERATING INC P.O. BOX 18496 OKLAHOMA CITY, OK 73154-0496 Ph: 405.767.4275
Admin Contact:	LINDA GOOD SR. REGULATORY COMPLIANCE SPEC E-Mail: linda.good@chk.com  Ph: 405-935-4275	LINDA GOOD SR. REGULATORY COMPLIANCE SPEC E-Mail: linda.good@chk.com  Ph: 405-935-4275
Tech Contact:	LINDA GOOD SR. REGULATORY COMPLIANCE SPEC E-Mail: linda.good@chk.com  Ph: 405-935-4275	LINDA GOOD SR. REGULATORY COMPLIANCE SPEC E-Mail: linda.good@chk.com  Ph: 405-935-4275
Location: State: County:	NM CHAVES	NM CHAVES
Field/Pool:	WILDCAT; WOLFCAMP	WILDCAT-WOLFCAMP
Well/Facility:	PERSEUS 10 FEDERAL COM 3H Sec 10 T15S R31E SENE 1980FNL 200FEL	PERSEUS 10 FEDERAL COM 3H Sec 10 T15S R31E SENE 1980FNL 200FEL

# RIG 62



**Well** : Perseus 10 Federal Com 3H  
**Field** : Northwest Shelf Project – Chaveroo Prospect  
**County** : Chaves **State** : NM  
**Surf Locat** : Section 10-15S-31E, 1980' FNL & 200' FEL Lat: 33.032139 Long: -103.801072 (NAD27)  
**BH Locat** : Section 10-15S-31E, 1980' FNL & 330' FWL Lat: 33.032091 Long: -103.816447 (NAD27)  
**KB Elev** : 4,421' [Patterson 62] **Grd Elev** : 4,404' [Plat]



## Wellhead Equipment

Tree Connection	
Backpressure Valve	
Tubing Spool	11" 5M x 7 1/16" 10K
Casing Spool	13-5/8" 5M x 11" 5M
Bradenhead	13-3/8" SOW x 13-5/8" 5M

## Logging Program

Company	Log Type	Interval
XX	GR/Neut from KOP to Surface casing shoe	
XX	Curve and lateral	

Mud logging personnel at intermediate casing shoe to TD

## Tubular Detail

	Size	Wt	Grd	Conn.	From	To
Surface	13-3/8"	48#	H-40	STC	0'	400'
Inter	9-5/8"	40#	J-55	LTC	0'	3,950'
Prod	5 1/2"	17.0#	P-110	LTC	0'	Lateral TD

## Lateral Directional Plan

	MD	INC	AZM	TVD	BUR	DLS
KOP	8,374'	0	0	8,374'	0	0
EOB	9,021'	90.50	269.5	8,784'	14.0	14.0
TD	13,320'	90.50	269.5	8,746'	0	0

## Vendors

Rig	Patterson 62
Directional	XX
Mud	XX
Cement	XX
Wellhead	XX
Wireline Logging	XX
Mud Logging	XX

\*\*Mud logging at intermediate casing shoe

**Directional Planning:** Drill to KOP at 8,374' MD/8,374' TVD, build angle at 14.0°/100' along 269.5° azimuth to 90.5° inc at 9,021' MD/8,784' TVD. Drill lateral to well TD at 13,320' MD/8,746' TVD, 4,712' VS

Drawn by	Date	AFE No	Property No	Drilling Engineer	Drilling Superintendent	Geologist
CG	Rev #3 06/2/10	146037	618836	Chris Gray	Cecil Luttrull	Robert Martin

## SCHEMATIC OF CHOKE MANIFOLD SHOWING CLOSED LOOP SYSTEM

**WELL** Perseus 10 Fed Com 3H  
**RIG** Patterson 62

**COUNTY** Chaves

**STATE** : New Mexico

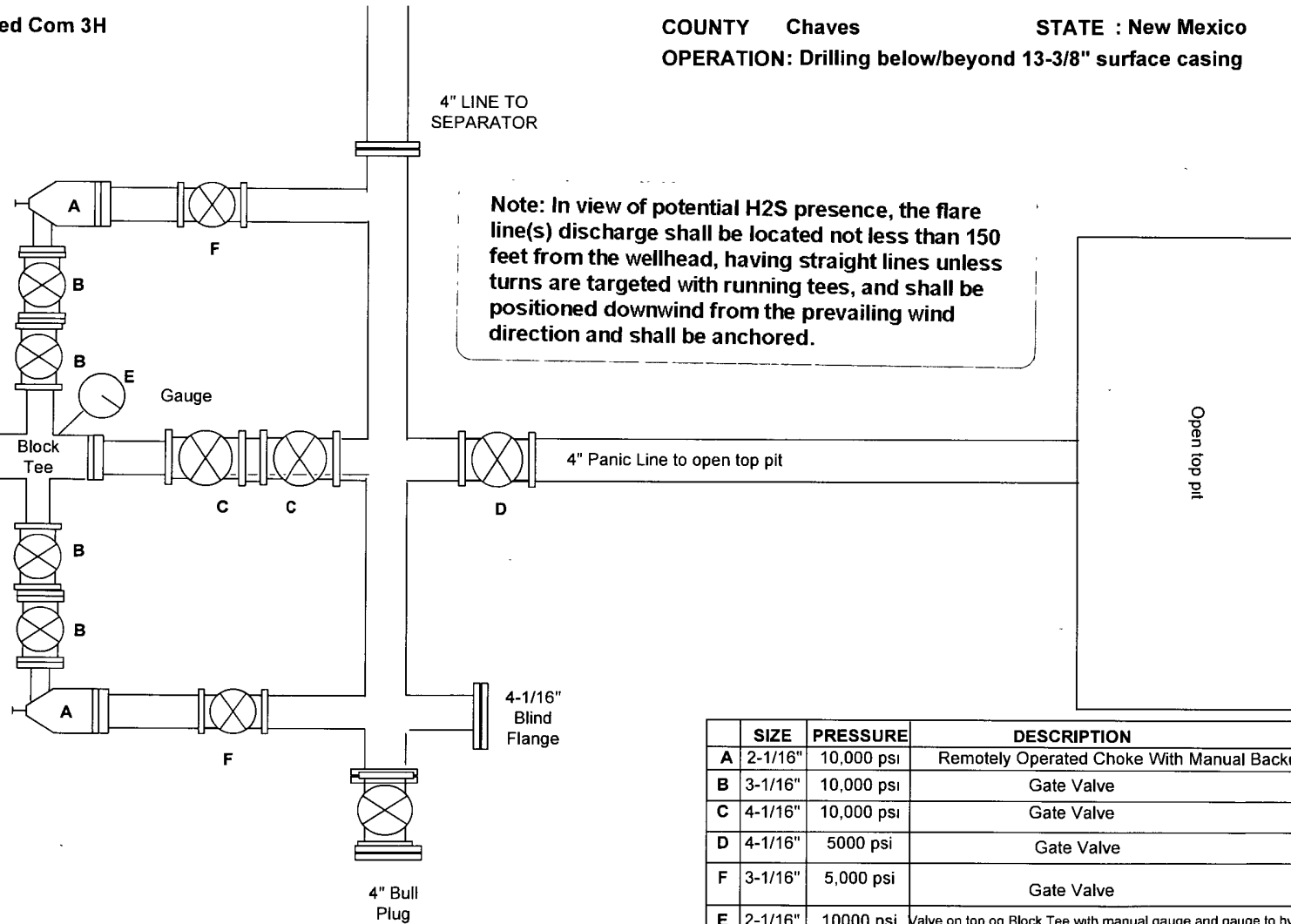
**OPERATION:** Drilling below/beyond 13-3/8" surface casing

4" LINE TO  
SEPARATOR

**Note:** In view of potential H2S presence, the flare line(s) discharge shall be located not less than 150 feet from the wellhead, having straight lines unless turns are targeted with running tees, and shall be positioned downwind from the prevailing wind direction and shall be anchored.

6-1/2", 10,000 psi rated  
flexible line connection to  
BOP Stack.

4-1/16" 5000 psi Gate  
Valve and 4-1/16" 5000  
psi HCR Valve upstream  
of choke manifold)



	SIZE	PRESSURE	DESCRIPTION
A	2-1/16"	10,000 psi	Remotely Operated Choke With Manual Backup
B	3-1/16"	10,000 psi	Gate Valve
C	4-1/16"	10,000 psi	Gate Valve
D	4-1/16"	5000 psi	Gate Valve
F	3-1/16"	5,000 psi	Gate Valve
E	2-1/16"	10000 psi	Valve on top of Block Tee with manual gauge and gauge to hydraulic choke

Patterson 62 BOP Stack

