

Form 3160-3
(April 2004)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED
OMB No. 1004-0137
Expires March 31, 2007

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		3. Lease Serial No. SF-078155
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other (SWD) <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator Dugan Production Corp.		7. If Unit or CA Agreement, Name and No.
3a. Address 709 East Murray Drive, Farmington, NM 87401		8. Lease Name and Well No. West Bisti SWD #1
3b. Phone No. (include area code) 505-325-1821		9. API Well No. 30-045- 33828
4. Location of Well (Report location clearly and in accordance with any State requirements*) At surface 2500' FNL & 1855' FEL, Lat. 36.33509 N, Long. 108.18584 W At proposed prod. zone Same as above		10. Field and Pool, or Exploratory SWD; Entrada SWD
11. Sec., T. R. M. or Blk. and Survey or Area G Sec. 35, T26N, R13W NMPM		12. County or Parish San Juan
13. State NM		14. Distance in miles and direction from nearest town or post office* Approx. 20-miles SW of Farmington, New Mexico 87401
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1855 Feet	16. No. of acres in lease 1599.2 Acres	17. Spacing Unit dedicated to this well N.A.
18. Distance from proposed* location to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 300'	19. Proposed Depth 7165'	20. BLM/BIA Bond No. on file RCVD AUG 17 '07 OIL CONS. DIV. DIST. 3
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL - 6221'	22. Approximate date work will start* ASAP	23. Estimated duration 14-Days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, shall 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 shall 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 authorized officer.

25. Signature *Kurt Fagrelus* Name (Printed/Typed) Kurt Fagrelus Date June 27, 2006

Title Geology

Approved by (Signature) *[Signature]* Name (Printed/Typed) *[Signature]* Date 8/15/07

Title AFM Office PFO

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.

*(Instructions on page 2) obtain a SWD order prior to disposal.

A water based gel-mud will be used to drill surface and production casing hole. Standard 2,000 psi BOP will be used to drill production hole. The Entrada Sandstone will be completed from 7,915' - 7,115'. The interval will be acidized.

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

NMOCD

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

8-20-07
aw

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

NOTIFY AZTEC OCD 24 HRS. PRIOR TO CASING & CEMENT

District I
PO Box 1980, Hobbs, NM 88241-1980

District II
PO Drawer DD, Artesia, NM 88211-0719

District III
1000 Rio Brazos Rd., Aztec, NM 87410

District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-33828		*Pool Code 96436	*Pool Name SWD; ENTRADA SWD
*Property Code 36673	*Property Name WEST BISTI SWD		*Well Number 1
*OGRID No 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 6221'

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
G	35	26N	13W		2500	NORTH	1855	EAST	SAN JUAN

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

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

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

<div><p>16</p><p>5276.04'</p><p>2500'</p><p>1855'</p><p>5280.00'</p><p>35</p><p>DUGAN SF-078155</p><p>5280.00'</p><p>LAT: 36.44509°N LONG: 108.18584°W DATUM: NAD1983</p></div>	<div><p>¹⁷ OPERATOR CERTIFICATION</p><p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p><p><u>Kurt Fagrelus</u> Signature</p><p>Kurt Fagrelus Printed Name</p><p>Geology Title</p><p>June 27, 2006 Date</p><p>¹⁸ SURVEYOR CERTIFICATION</p><p>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</p><p>Date of Survey: JUNE 20, 2006</p><p>Signature and Seal of Professional Surveyor</p><div><p>JASON C. EDWARDS Certificate Number 15269</p></div></div>
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Submit 3 Copies To Appropriate District Office
District I
1625 N French Dr, Hobbs, NM 88240
District II
1301 W Grand Ave, 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 and Natural Resources

Form C-103
May 27, 2004

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.	30-045-33828
5. Indicate Type of Lease	Federal <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/> XX
6. State Oil & Gas Lease No.	Federal SF-078155
7. Lease Name or Unit Agreement Name	West Bisti SWD
8. Well Number #1	
9. OGRID Number	006515
10. Pool name or Wildcat	Entrada Salt Water Disposal

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
GL-6221'

Pit or Below-grade Tank Application ☒ for Closure ☐
Pit type Drilling Depth to Groundwater +100' Distance from nearest fresh water well +1000' Distance from nearest surface water +200'
Pit Liner Thickness: 12 mil Below-Grade Tank: Volume _____ bbls; Construction Material Synthetic

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS)

1. Type of Well: Oil Well ☐ Gas Well ☒ Other Salt Water Disposal

2. Name of Operator
Dugan Production Corp.

3. Address of Operator
709 East Murray Drive, Farmington, NM

4. Well Location
Unit Letter G : 2500 feet from the north line and 1855 feet from the east line
Section 35 Township 26N Range 13W NMPM County San Juan

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:	SUBSEQUENT REPORT OF:
PERFORM REMEDIAL WORK <input type="checkbox"/>	REMEDIAL WORK <input type="checkbox"/>
TEMPORARILY ABANDON <input type="checkbox"/>	ALTERING CASING <input type="checkbox"/>
PULL OR ALTER CASING <input type="checkbox"/>	COMMENCE DRILLING OPNS. <input type="checkbox"/>
OTHER: Reserve pit for drilling (lined) <input checked="" type="checkbox"/>	CASING/CEMENT JOB <input type="checkbox"/>

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

A water based gel-mud will be used to drill surface and production casing hole. Standard 2,000 psi BOP will be used to drill production hole. The Entrada Sandstone will be completed from approximately 6,915' - 7,115'. The interval will be acidized.

RCVD AUG 17 '07
OIL CONS. DIV.
DIST. 3

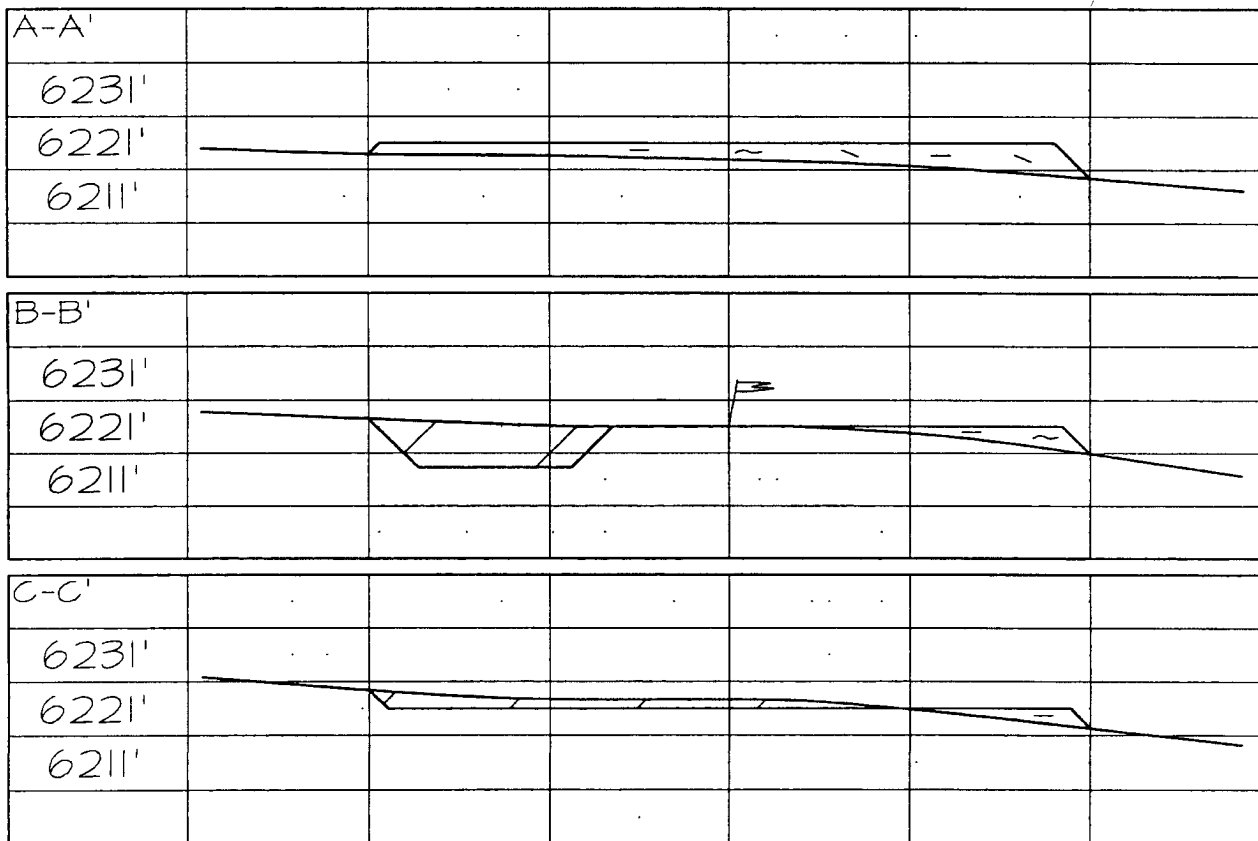
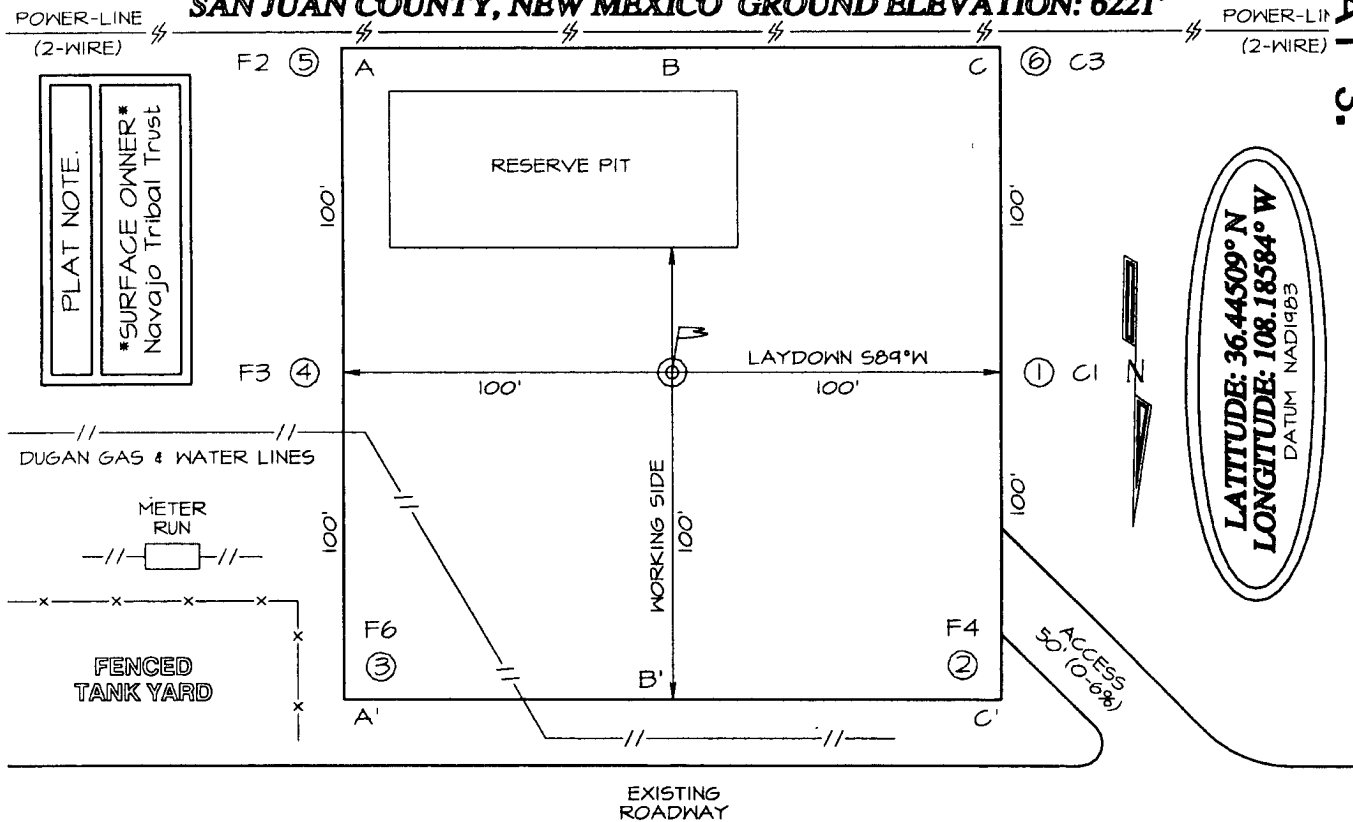
I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Kurt Fagrelius TITLE Geology DATE June 27, 2006
Type or print name Kurt Fagrelius E-mail address: kfagrelius@duganproduction.com Telephone No. 505-325-1821

For State Use Only
APPROVED BY: [Signature] TITLE Deputy Oil & Gas Inspector, District #3 DATE AUG 20 2007
Conditions of Approval (if any): _____

DUGAN PRODUCTION CORPORATION WEST BISTI SWD #1
2500' FNL, 1855' FEL, SECTION 35, T26N, R13W, NMPM
SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 6221'

PLAT 3.



FILENAME: 2613356T

SHEET 2 OF 3

NCE SURVEYS, INC.

DRAWN BY EDO

CHECKED BY JCE

EXHIBIT B
OPERATIONS PLAN
West Bisti Unit SWD #1

APPROXIMATE FORMATION TOPS:

Ojo Alamo	75'	Gallup	4595'
Kirtland	175'	Skelly	4855'
Fruitland	845'	Greenhorn	5615'
Pictured Cliffs	1195'	Graneros	5675'
Lewis	1455'	Dakota	5740'
Cliff House	2040'	Morrison	5965'
Menefee	2120'	Bluff	6595'
Point Lookout	3695'	Todilto	6895'
Mancos	3895'	Entrada	6915'
		Total Depth	7165'

LOGGING PROGRAM:

Run IES from total depth to surface and CDL over selected intervals.

CASING PROGRAM:

Hole Size	Casing Size	Wt./ft.	Setting Depth	Grade and Condition
12-1/4"	8-5/8"	24#	480'	J-55
7-7/8"	5-1/2"	15.5#	6400'	K-55
7-7/8"	5-1/2"	17#	7165'	K-55

Plan to drill a 12-1/4" hole and set 480' of 8-5/8" OD, 24#, K-55 surface casing. Then plan to drill a 7-7/8" hole to total depth with gel-water mud program. 5-1/2", 15.5# (surface to 6400') and 5-1/2", 17# (6400' to 7165') K-55 production casing will be run and cemented in three stages with DV tools set at 5000' and 1650'. Open hole IES and CDL logs will be run. Injection zone will be perforated and acidized. After completion, the well will be cleaned out and injection equipment will be installed.

CEMENTING PROGRAM:

Surface: Cement to surface with 300 cf Class B + 2% CaCl₂.
Circulate to surface.

1st Stage Cement with 175 sks Premium Lite High Strength BJ cement with additives. Total cement slurry for 1st stage is 380 cf. Projected top for 1st stage 5000'.
Circulate to surface.

2nd Stage Cement with 300 sks Premium Lite FM BJ

cement with additives followed by 50 sks Neat type 3 BJ cement. Total cement slurry for 2nd stage is 730 cf. Projected top for 2nd stage 1650'. Circulate to surface.

3rd Stage Cement with 165 sks Premium Lite FM BJ cement with additives followed by 50 sks Neat type 3 BJ cement with additives. Total cement slurry for 3rd stage is 430 cf. Projected top for 3rd stage is surface. Circulate to surface.

An adequate spacer will be pumped ahead of the cement slurry to help prevent mud contamination of the cement. An adequate number of casing centralizers will be run through usable water zones to ensure that casing is centralized through these zones. The adequate number of centralizers will be determined based on API standards. Centralizers to impart a swirling action around the casing will be used just below and into the base of the lowest usable water zone. These devices will assist mud displacement, increase cement bonding potential and create an effective hydraulic seal. A chronological log will be kept which records the pump rate, pump pressure, slurry density, and slurry volume for the cement job. The log will be sent to the BLM after completion of the job.

WELLHEAD EQUIPMENT:

Huber 8-5/8"x5-1/2" casing head, 1000# WP, tested to 2000#.

Huber 5-1/2"x2-7/8" tubing head, 1000# WP, tested to 2000#.

BOP and Related Equipment will include for a 2000 psi system:

(Exhibit D)

Annular preventer, double ram, or 2 rams with one being blind and one being a pipe ram.

Kill line (2" minimum)

1 kill line valve (2" minimum)

1 choke line valve

2 chokes

Upper kelly cock valve with handle available

Safety valve and subs to fit all drill string connections in use.

Pressure gauge on choke manifold.

2" minimum choke line.

Fill-up line.

Contacts:

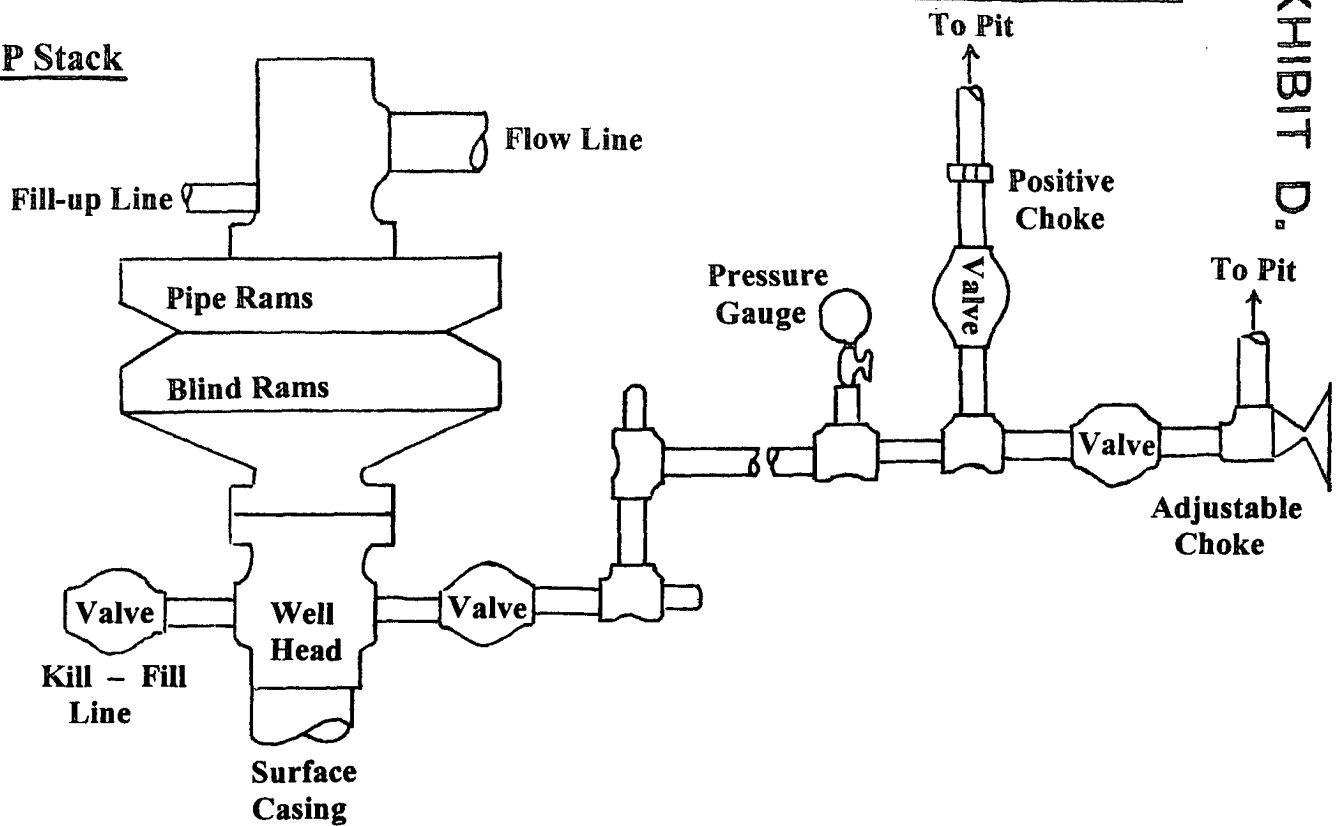
Dugan Prod.Corp. Office & Radio Dispatch: 325-1821

Mark Brown	327-3632 (H)
	320-8247 (M)
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)
John Alexander	325-6927 (H)
	320-1935 (M)

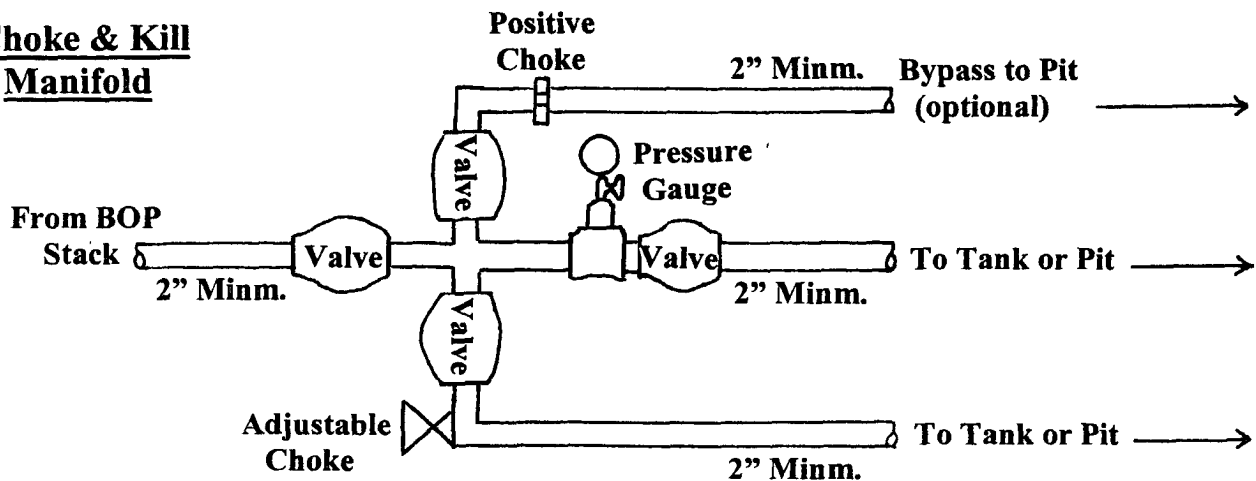
Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

BOP Stack



Choke & Kill Manifold



Working Pressure for all equipment is 2,000 psi or greater

DUGAN PRODUCTION CORP.
WEST BISTI SWD #1