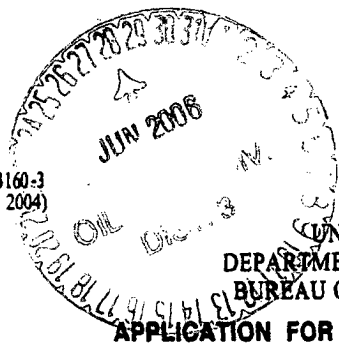


Form 3160-3
(April 2004)



UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

2006 APR 4 AM 10 03

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NM-57445
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" 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. Zappa SWD #4
3b. Phone No. (include area code) 505-325-1821		9. API Well No. 30-045-33685
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface 765' FNL & 1225' FEL, Lat. 36.13035, Long. 107.68249 At proposed prod. zone Same as above		10. Field and Pool, or Exploratory Entrada SWD
11. Sec., T. R. M. or Blk. and Survey or Area Sec. 21, T22N, R8W NMPM		12. County or Parish San Juan
13. State NM		14. Distance in miles and direction from nearest town or post office* Approx. 10 miles SW of Nageezi Trading Post, NM
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	765 Feet	16. No. of acres in lease 2,280 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.	N.A.	19. Proposed Depth 6525'
20. BLM/BIA Bond No. on file NM 0140		
21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL-6585'	22. Approximate date work will start* ASAP	23. Estimated duration 7-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:

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

25. Signature *Kurt Fagrelis* Name (Printed/Typed) Kurt Fagrelis Date 4-1-2006

Title Geology

Approved by (Signature) *[Signature]* Name (Printed/Typed) Date 6/26/06
Title AFM Office FPD

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)

HOLD C104 FOR SWD order

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 6205' - 6405'. The interval will be acidized.

✓

NMOC

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

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

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

RECEIVED
OTO FARMINGTON NM

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30-045-33685		*Pool Code 96436	*Pool Name SWD; ENTRADA
*Property Code 35801	*Property Name ZAPPA SWD		*Well Number 4
*GRID No. 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 6586'


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
A	21	22N	8W		765	NORTH	1225	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

¹⁶ 2632.74' 5305.08' 2643.96'	21	1317.69' LAT: 36.13035°N LONG: 107.68249°W DATUM: NAD83 2,280 Acres DUGAN NM-57445	1317.69' 765' 1225' 2646.60' 2654.85' 2618.88'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>Kurt Fagrelus</i> Signature Kurt Fagrelus Printed Name Geology Title March 31, 2006 Date
				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 Date of Survey: MARCH 16, 2006 Signature and Seal of Professional Surveyor  <i>JASON C. EDWARDS</i> Certificate Number 15269

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

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.)		WELL API NO. 30-045-33685
1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other SWD Water Disposal		5. Indicate Type of Lease Federal <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
2. Name of Operator Dugan Production Corp.		6. State Oil & Gas Lease No. Federal 57445
3. Address of Operator 709 East Murray Drive, Farmington, NM		7. Lease Name or Unit Agreement Name Zappa SWD
4. Well Location Unit Letter A : 765 feet from the north line and 1225 feet from the east line Section 21 Township 22N Range 8W NMPM County San Juan		8. Well Number #4
11. Elevation (Show whether DR, RKB, RT, GR, etc.) GL-6586		9. OGRID Number 006515
Pit or Below-grade Tank Application <input checked="" type="checkbox"/> or Closure <input type="checkbox"/>		
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		

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

NOTICE OF INTENTION TO: PERFORM REMEDIAL WORK <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> TEMPORARILY ABANDON <input type="checkbox"/> CHANGE PLANS <input type="checkbox"/> PULL OR ALTER CASING <input type="checkbox"/> MULTIPLE COMPL <input type="checkbox"/> OTHER: Reserve pit for drilling (lined) <input checked="" type="checkbox"/>	SUBSEQUENT REPORT OF: REMEDIAL WORK <input type="checkbox"/> ALTERING CASING <input type="checkbox"/> COMMENCE DRILLING OPNS. <input type="checkbox"/> P AND A <input type="checkbox"/> CASING/CEMENT JOB <input type="checkbox"/> OTHER: <input type="checkbox"/>
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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 6205' -6405' for water disposal. The interval will be acidized.

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 April 3, 2006
Type or print name Kurt Fagrelius E-mail address: kfagrelius@duganproduction.com Telephone No. 325-1821

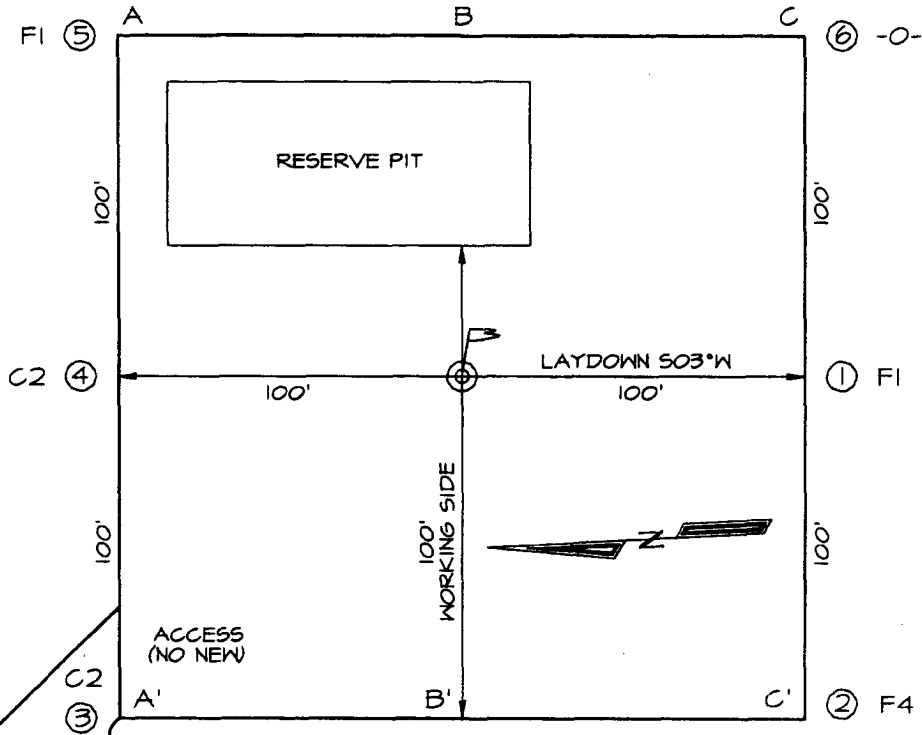
For State Use Only

APPROVED BY: [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 8 DATE JUN 28 2006
Conditions of Approval (if any): 28 2006

DUGAN PRODUCTION CORPORATION ZAPPA SWD #4
765' FNL, 1225' FEL, SECTION 21, T22N, R8W, NMPM
SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 6586'

PLAT 3.

PLAT NOTE:
 SURFACE OWNER
 Bureau of Land
 Management



LATITUDE: 36.13035° N
 LONGITUDE: 107.68249° W
 DATUM: NAD1983

UNIMPROVED ROADWAY

// DUGAN P/L //

//

// DUGAN P/L //

A-A'						
6596'						
6586'						
6576'						

B-B'						
6596'						
6586'						
6576'						

C-C'						
6596'						
6586'						
6576'						

EXHIBIT B
OPERATIONS PLAN
Zappa SWD #4

APPROXIMATE FORMATION TOPS:

Kirtland	Surface		
Fruitland	315'	Greenhorn	4805'
Pictured Cliffs	615'	Graneros	4845'
Lewis	740'	Dakota	4880'
Cliff House	1315'	Morrison	5180'
Menefee	1410'	Bluff	5685'
Point Lookout	2895'	Todilto	6145'
Mancos	3065'	Entrada	6205'
Gallup	3845'	Total Depth	6525'
Skelly	3905'		

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#	360'	J-55
7-7/8"	5-1/2"	15.5#	6300'	K-55
7-7/8"	5-1/2"	17#	6525'	K-55

Plan to drill a 12-1/4" hole and set 360' of 8-5/8" OD, 24#, J-55 surface casing. Then plan to drill a 7-7/8" hole to total depth with gel-water mud program. Open hole IES and CDL logs will be run. 5-1/2", 15.5# (surface to 6300') and 5-1/2", 17# (6300' to 6325') K-55 production casing will be run and cemented in two stages with DV tool set at 3125'. 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 250 cf Class B + 2% CaCl₂. Circulate to surface.

1st Stage Cement with 300 sks Premium Lite High Strength BJ cement with additives. Total cement slurry for 1st stage is 630 cf. Projected top for 1st stage is 3125'. Circulate to surface.

2nd Stage Cement with 315 sks Premium Lite cement with

additives followed with 75 sks Neat type 3 BJ cement with additives. Total cement slurry for 2nd stage is 800 cf. Projected top for 2nd stage is surface. Circulate to surface.

Total cement for both stages is 1430 cf.

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, 2000# WP, tested to 4000#.
Huber 5-1/2"x2-7/8" tubing head, 2000# WP, tested to 4000#.

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)

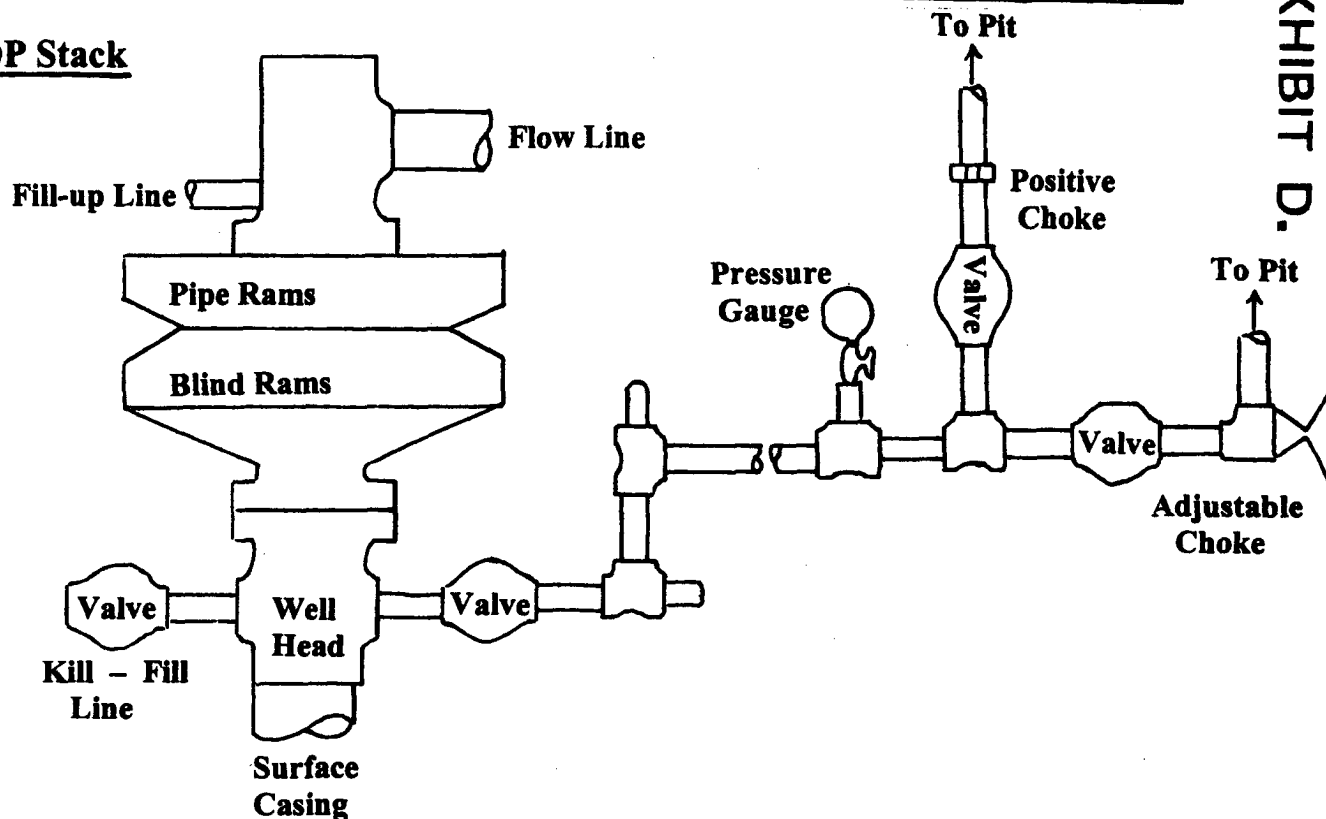
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)

John Alexander	325-6927 (H)
	320-1935 (M)

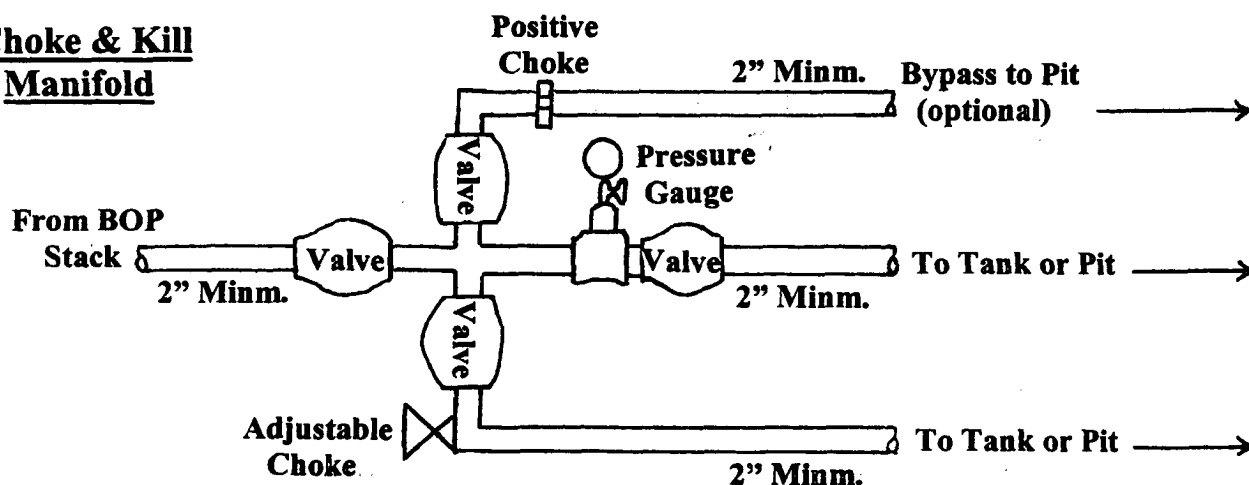
Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

BOP Stack



Choke & Kill Manifold



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

DUGAN PRODUCTION CORP.
ZAPPA SWD #4