

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		5. Lease Serial No. NM-90477
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <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. Morrison SWD #2
3b. Phone No. (include area code) 505-325-1821		9. API Well No. 30-045-33684
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface: 1358 FNL & 700 FEL, Lat. 36.14404, Long. 107.73410 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. 13, T22N, R9W NMPm		12. County or Parish San Juan
13. State NM		
14. Distance in miles and direction from nearest town or post office Approx. 12-miles SW of Nageezi Trading Post, NM	15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drg. unit line, if any) 700 Feet	16. No. of acres in lease 480.0 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. 500'	19. Proposed Depth 6545'
20. BLM/BIA Bond No. on file NM0140	21. Elevations (Show whether DF, KDB, RT, GL, etc.) GL-6623 6598	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 <i>Kurt Fagrelus</i>	Name (Printed/Typed) Kurt Fagrelus	Date April 1, 2006
Title Geology		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFM	Date 8/24/06
Title 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.

*(Instructions on page 2)

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 6245' - 6445'. The interval will be acidized.

HOLD C104 FOR SWD order

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

NMOCB

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

District II
PO Drawer 00, 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 30-045-33684		*Pool Code 96 436	*Pool Name SWD ENTRADA
*Property Code 35968	*Property Name MORRISON SWD		*Well Number 2
*GRID No 006515	*Operator Name DUGAN PRODUCTION CORPORATION		*Elevation 6598'


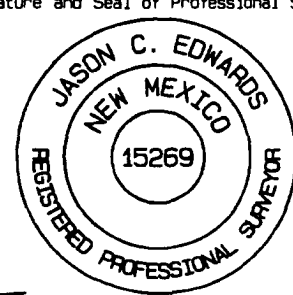
¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
H	13	22N	9W		1350	NORTH	365	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

5281.32'	5264.82'	13	5295.18'	5289.24'	1350' 365'	LAT: 36.14335°N LONG: 107.73297°W DATUM: NAD1983	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature Kurt Fagrelus Printed Name Geology Title July 27, 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: JUNE 5, 2006 Signature and Seal of Professional Surveyor  JASON C. EDWARDS 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

WELL API NO. 30-045-
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 NM-90477
7. Lease Name or Unit Agreement Name Morrison SWD
8. Well Number #2
9. OGRID Number 006515
10. Pool name or Wildcat Entrada SWD

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 SWD Water Disposal

2. Name of Operator Dugan Production Corp.

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

4. Well Location
Unit Letter A : 1350 feet from the north line and 365 feet from the east line
Section 13 Township 22N Range 9W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
GL- 6623'

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

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

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Reserve pit for drilling (lined) ☒ OTHER: ☐

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 for salt water disposal from approximately 6245' - 6445'. 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 ☐.

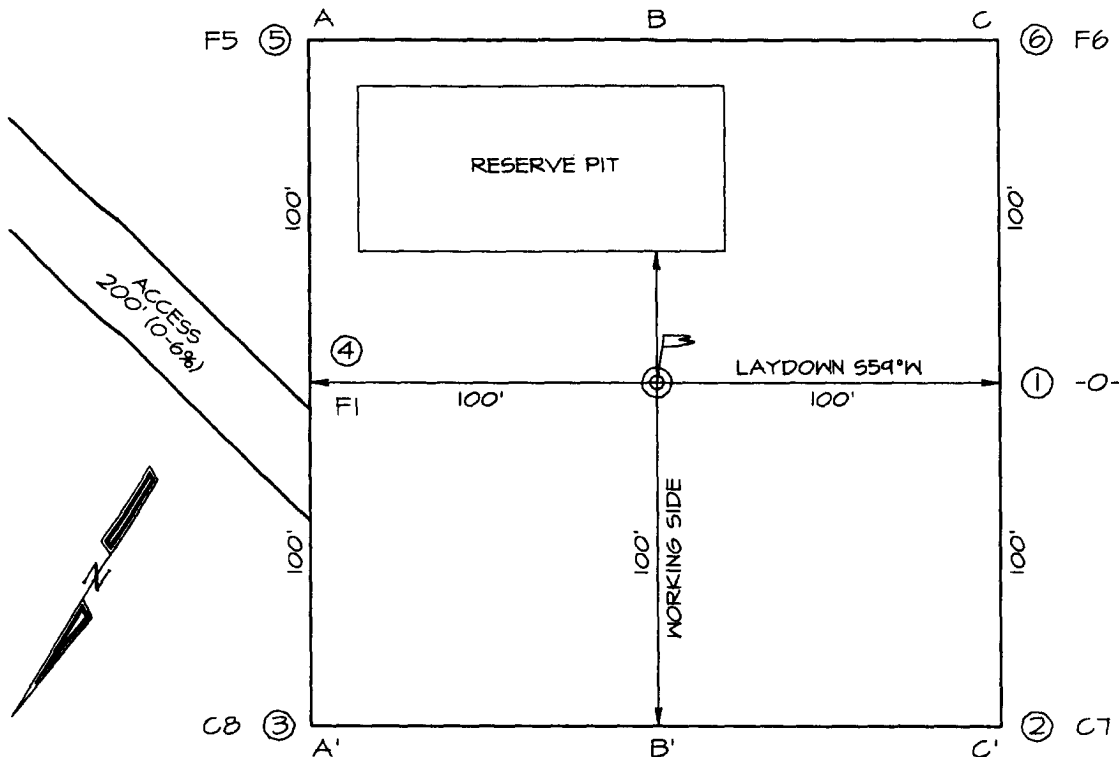
SIGNATURE Kurt Fagrellius TITLE Geology DATE April 3, 2006
Kurt Fagrellius kfagrellius@duganproduction.com 325-1821

Type or print name E-mail address: Telephone No.
For State Use Only

APPROVED BY: DATE AUG 28 2006
Conditions of Approval (if any): TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 43

DUGAN PRODUCTION CORPORATION MORRISON SWD #2
1350' FNL, 365' FEL, SECTION 13, T22N, R9W, NMPM
SAN JUAN COUNTY, NEW MEXICO GROUND ELEVATION: 6598'

PLAT 3.



LATITUDE: 36.14335° N
LONGITUDE: 107.73297° W
 DATUM: NAD1983

PLAT NOTE:

SURFACE OWNER
 Bureau of Land
 Management

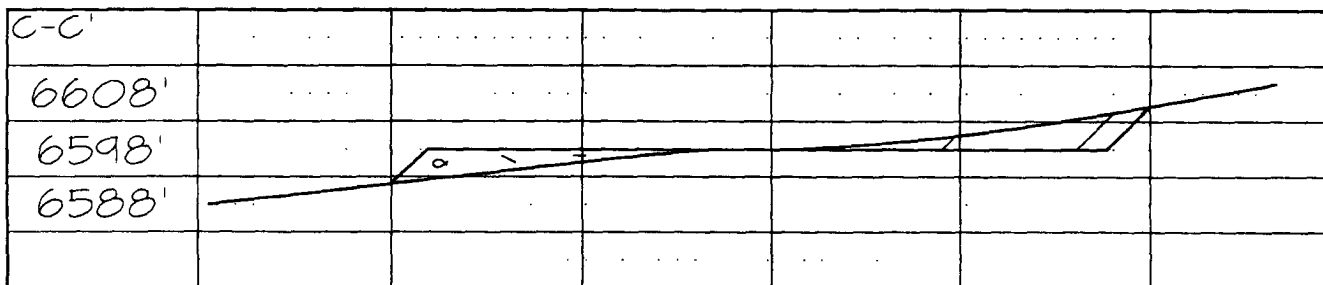
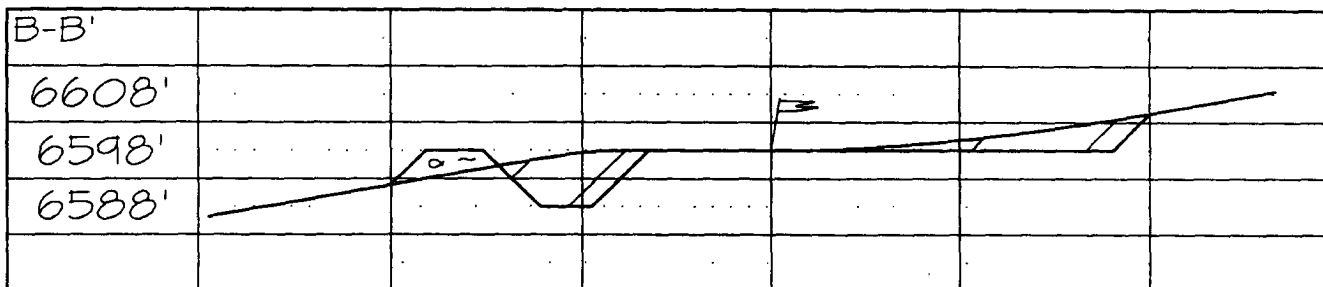
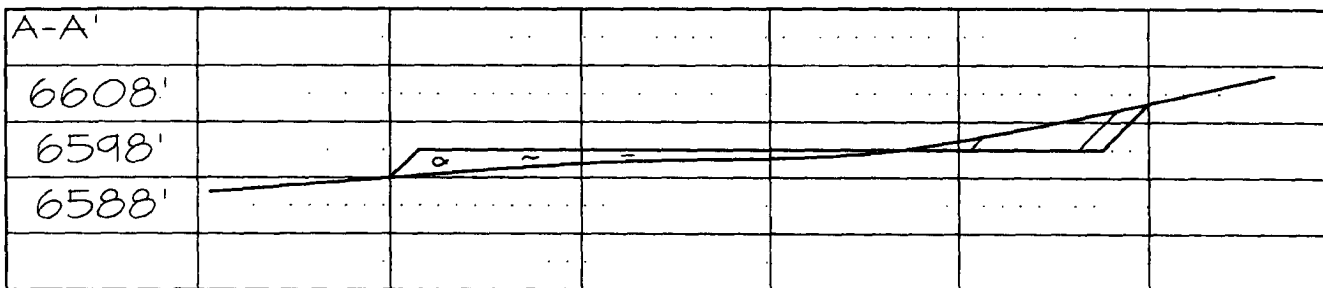


EXHIBIT B
OPERATIONS PLAN
Morrison SWD #2

APPROXIMATE FORMATION TOPS:

Kirtland	Surface		
Fruitland	275'	Greenhorn	4820'
Pictured Cliffs	630'	Graneros	4870'
Lewis	755'	Dakota	4895'
Cliff House	1330'	Morrison	5195'
Menefee	1425'	Bluff	5700'
Point Lookout	2910'	Todilto	6160'
Mancos	3080'	Entrada	6220'
Gallup	3860'	Total Depth	6540'
Skelly	3920'		

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#	6275'	K-55
7-7/8"	5-1/2"	17#	6540'	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 6275') and 5-1/2", 17# (6275' to 6540') 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)

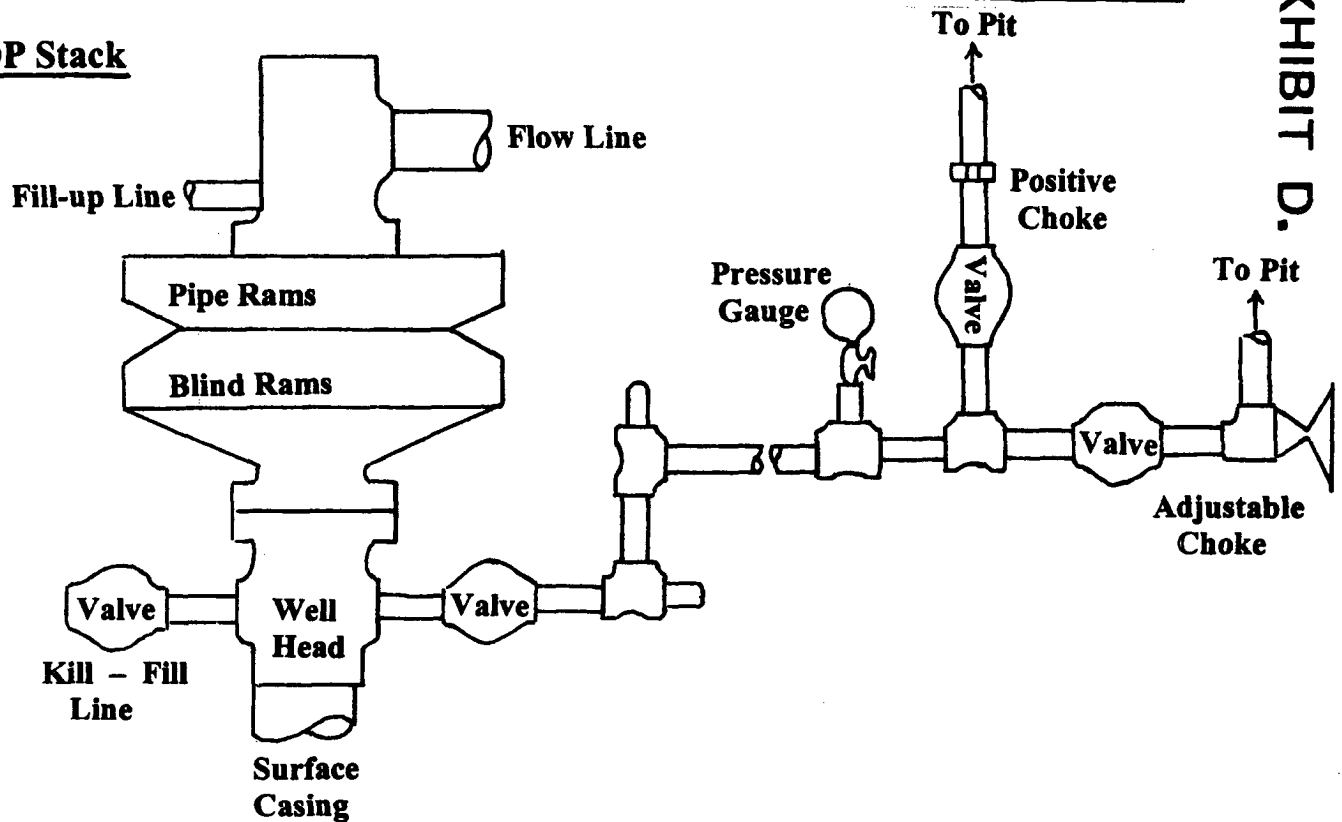
Kurt Fagrelus	325-4327 (H)
	320-8248 (M)

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

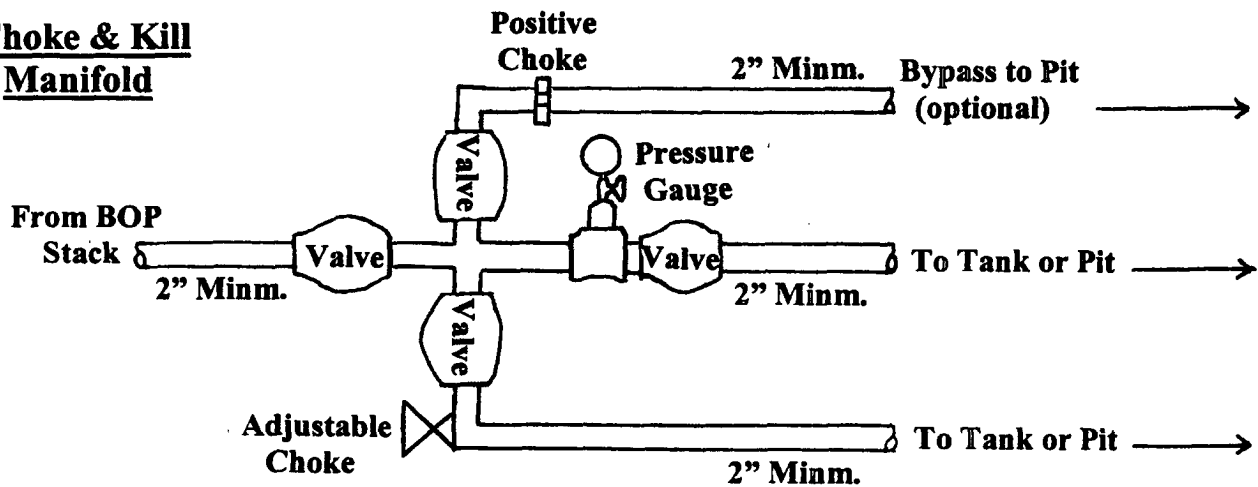
Well Control Equipment Schematic for 2,000 psi BOP

EXHIBIT D.

BOP Stack



Choke & Kill Manifold



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

DUGAN PRODUCTION CORP.
MORRISON SWD #2

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT -" for such proposals

SUBMIT IN TRIPLICATE

RECEIVED

OTO FARMINGTON NM

1. Type of Well <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other Salt Water Disposal Well	5. Lease Designation and Serial No. NM-90477
2. Name of Operator Dugan Production Corp.	6. If Indian, Allotted or Tribe Name
3. Address and Telephone No. 709 East Murray Drive, Farmington, New Mexico	7. If Unit or CA, Agreement Designation
Location of Well (Footage, Sec., T., R., M., or Survey Description) 1100' FNL & 700' FEL Sec. 13, T22N, R9W	8. Well Name and No. Morrison SWD #2
	9. API Well No. 30-045- 33684
	10. Field and Pool, or Exploratory Area Entrada SWD
	11. County or Parish, State San Juan

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"/> Abandonment	<input type="checkbox"/> Change of Plans
<input type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion	<input type="checkbox"/> New Construction
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Casing Repair	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Altering Casing	<input type="checkbox"/> Conversion to Injection
	<input checked="" type="checkbox"/> Other <u>Move location.</u>	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log forms.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)

Original location submitted on APD dated April 1, 2006 was moved to address archeology concerns.

Original location: 1100' FNL & 700' FEL, Sec. 13, T22N, R9W

New Location: 1350' FNL & 365' FEL, Sec. 13, T22N, R9W

A new C-102, Exhibit A (developmental plan), Exhibit B (operations plan), Plat 2 (pipeline survey), Plat 3 (cut and fill diagram), Exhibit E (topographic map) and NM State Form C-103 are included to reflect the new location. These exhibits replace those submitted with the original APD.

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

Signed Kurt Fegreling Title Geology Date July 27, 2006

This space for Federal or State office use

Approved by [Signature] Title AFM Date 8/24/06

Conditions of approval, if any