Form 3160-3 (August 1999) UNITED ST	ATES ECEVED	FORM APPRO OMB No. 1004 Expires November	-0136
DEPARTMENT OF BUREAU OF LAND	MANAGEMENT	5. Lease Serial No. 3 NM-10561	
APPLICATION FOR PERMIT	TO DRILL OR REENTER	6. If Indian, Allottee or Tribe	Vame
1a. Type of Work: ☑ DRILL ☐ REENTER	20 C 4 S 12 P	7. If Unit or CA Agreement, N  8. Lease Name and Well No.	ame and No.
1b. Type of Well: ☐ Oil Well ☐ Gas Well   ☑ Oth	ner: INJ Single Zone Multiple Zone	BIG FIELD SWD 9	
2. Name of Operator Contact: DUGAN PRODUCTION CORP.	KURT FAGRELIUS E-Mail: kfagrelius@duganproduction.com	9. API Well No. 30045.	35528
3a. Address 709 EAST MURRAY DRIVE FARMINGTON, NM 87401	3b. Phone No. (include area code) Ph: 505.325.1821 Fx: 505.327.4613	10. Field and Pool, or Explorate SALT WATER DISPOSE SWO: En Hada	SÁL WELL
4. Location of Well (Report location clearly and in accorda	nce with any State requirements.*)	11. Sec., T., R., M., or Blk. and	
At surface NWSW 1960FSL 660FWL At proposed prod. zone	36.48440 N Lat, 108.18100 W Lon	L Sec 15 T30N R14W M SME: BLM	er NMP
14. Distance in miles and direction from nearest town or post APPROX. 5-MILES NORTH OF FARMINGTON	office* , NM	12. County or Parish SAN JUAN	13. State NM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 660'	16. No. of Acres in Lease 1397.16	17. Spacing Unit dedicated to	his well
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. APPROX. 1000'	19. Proposed Depth 7500 MD	20. BLM/BIA Bond No. on file	e
21. Elevations (Show whether DF, KB, RT, GL, etc. 5733 GL	22. Approximate date work will start 05/01/2004	23. Estimated duration 15-DAYS	
	24. Attachments		
The following, completed in accordance with the requirements or	f Onshore Oil and Gas Order No. 1, shall be attached to	this form:	<u> </u>
Well plat certified by a registered surveyor.     A Drilling Plan.     A Surface Use Plan (if the location is on National Forest Syst SUPO shall be filed with the appropriate Forest Service Of	Item 20 above).  Em Lands, the 5. Operator certification	ons unless covered by an existing be	
25. Signature Kurt Fayrelius	Name (Printed/Typed) KURT FAGRELIUS		Date 03/26/2004
Title GEOLOGIST		·	
Approved by (Stypathyle) Manhae (2)	Name (Printed/Typed)		Date - 18 04 :
Title	Office		<del>(</del>

Application approval does not warrant or certify 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.

## **Additional Operator Remarks:**

Drill and complete produced water disposal well. Disposal interval is the Entrada Sandstone. Permission will be received from the NMOCD prior to placing well into injection service.

District I PO 8ox 1980, Hobbs, NM 88241-1980

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

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

Oistrict 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											
30-00	API Number	5225	-8 6	*Pool Co 2434	de	SWDIE	- 4	Pool Nam	e		
Property	<u> </u>	,,,,,	0	. 4 130	Property	Name	701	MORC		We	ell Number
34-07	7				BIG FIE					9.0	9 Elevation
00651				DUGAN	Operator" PRODUCTIO	Name ON CORPORATI	ON				5733
<u> </u>	·	•			<sup>10</sup> Surface	Location		<del></del>			
UL or lot no.	Section 15	Township 30N	Range 14W	Lot Idn	Feet from the 1960	North/South line	Fee	t from the	East/He	st line	SAN JUAN
			Bottom	Hole L	Location I	L	For	om Surf	<u> </u>		SAN OUAN
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line		et from the	East/We	st line	County
<sup>12</sup> Deducated Acres			<u></u>	l	<sup>13</sup> Joint or Infill	<sup>34</sup> Consolidation Code	15 Orde	r No.			<u> </u>
			<u> </u>				<u> </u>				
NO ALLOW	IABLE W	ILL BE A	ASSIGNEI NON-ST	D TO TH CANDARD	IS COMPLETION UNIT HAS BE	ON UNTIL ALL EN APPROVED	INTE BY T	ERESTS H	AVE BE	EN CON	SOLIDATED
16 5280.00°			53	15-		2004 2004 35 020 1- 307 132 EOFINI	. 2280.00	I hereby contained to the to t	Certify to derein in the set of my less of less	that the is true and knowledge of Fag ologis of ERTIFUTE the well was plotte eys made that the sheet of my ECEMBE	FICATION Il location of from field by me or under same is true y belief. R 16, 2003
	ļ		53	105.74	Name and C	***************************************		UASo Centifi	cate Num	. ED	15269

# EXHIBIT B OPERATIONS PLAN Big Field SWD #9

#### APPROXIMATE FORMATION TOPS:

Kirtland	Surface	Gallup	5130′
Fruitland	1000′	Skelly	5388 <b>′</b>
Pictured Cliffs	1370′	Greenhorn	5870 <b>′</b>
Lewis	1465′	Graneros	5935 <b>′</b>
Cliff House	2940'	Dakota	5965 <b>′</b>
Menefee	3020′	Morrison	6195′
Point Lookout	3790′	Bluff	6975 <b>′</b>
Mancos	4160′	Todilto	7170′
		Entrada	7210′
		Total Depth	7500′

Catch samples every 10 feet from 5900 feet to 6200 and from 7100 to total depth.

#### LOGGING PROGRAM:

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

### CASING PROGRAM:

Hole	Casing		Setting	Grade and
Size	Size	Wt./ft.	Depth	Condition
12-1/4"	<del>8-5/</del> 8"	24#	320′	J-55
7"	5-1/2"	15.5#	6400′	K-55
7 <b>"</b>	5-1/2"	17#	7500′	K-55

Plan to drill a 12-1/4" hole and set 320' of 8-5/8" OD, 24#, K-55 surface casing. Then plan to drill a 7" hole to total depth with gel-water mud program. 5-1/2", 15.5# (surface to 6400') and 5-1/2", 17# (6400' to 7500') K-55 production casing will be run and cemented. 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 200 cf Class B + 2% CaCl<sub>2</sub>. Circulate to surface.

Production Stage-Cement with 1300 cf 2%Lodense with

¼# celloflake/sx followed by 650 cf Class "B" with ¼# celloflake/sx.

Total cement slurry for production stage is 1950 cf. Circulate cement 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.

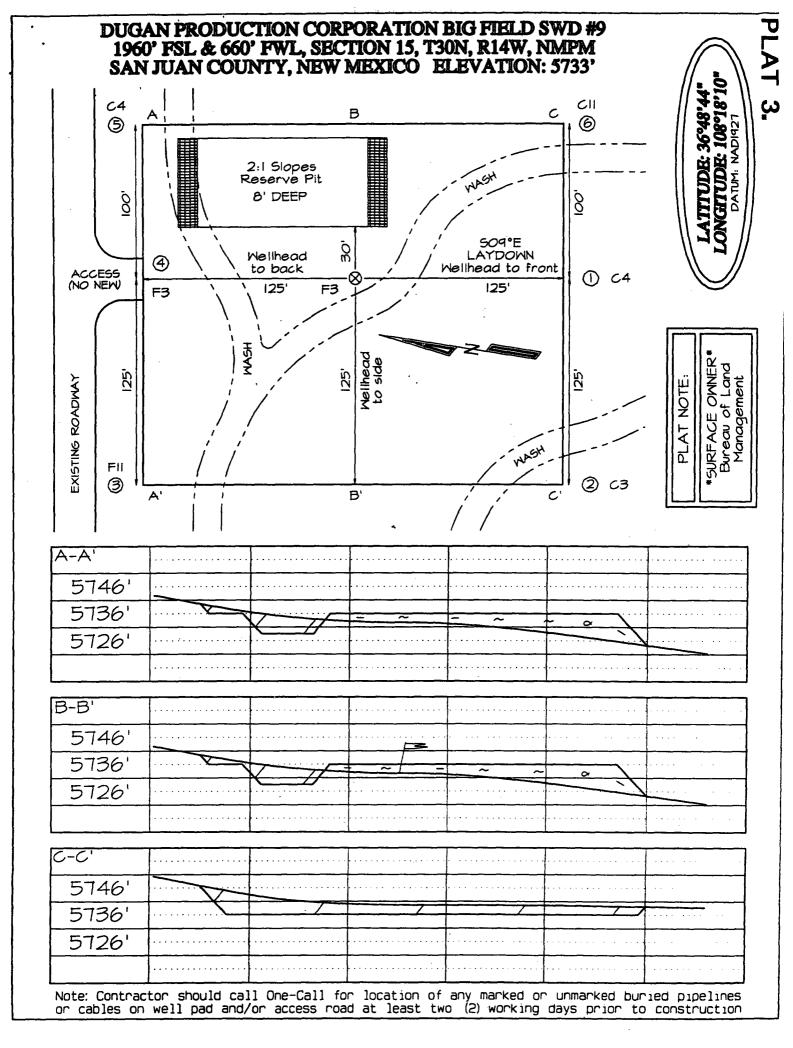
2" minimum choke line.

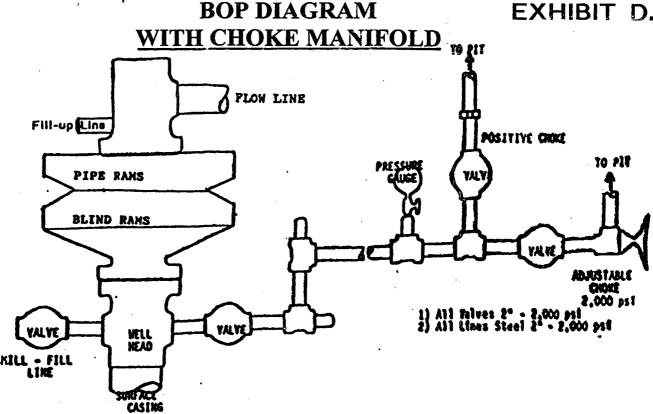
Fill-up line.

#### Contacts:

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

Mark	Brown	327-3632 320-8247	
Kurt	Fagrelius	325-4327 320-8248	
John	Alexander	325-6927 320-1935	





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

2000 PSI DOUBLE BAN BLOWOUT PREVENTER

Kill line (2" mimimum)

1 kill line valve (2" minimum)

1 choke line valve

2 chokes

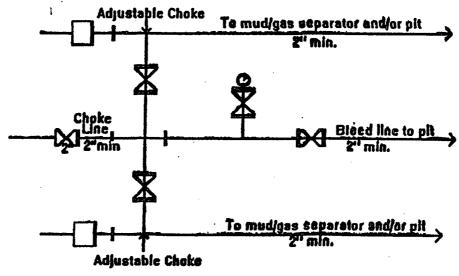
Upper kelly cock valve with handle available Safety valve and subs to fit all drill string connections in use

Pressure sause on choke manifold

2" minimum choke line

Fill-up like above the uppermost preventer

BOP equipment will be tested as required in Section III A.1 of Onshore Order 2, plus a 30% safety factor.



2M Choke Manifold Equipment - Configuration May Vory

**DUGAN PRODUCTION CORP.** 

**BIG FIELD SWD #9**