Form 3160-3

# MENTALLIN

FORM APPROVED

UNITED ST DEPARTMENT OF T BUREAU OF LAND N	THE INTERIOR	Expires November 30, 2000  5. Lease Scrial No.	
APPLICATION FOR PERMIT		SF-078091  6. If Indian, Allottee or Tribe Name	
AT EIGATION FOR EXAMIT	oza Essalación, NM	•	
Ia. Type of Work: ☑ DRILL ☐ REENTER		7. If Unit or CA Agreement, Name and No.	
7		8. Lease Name and Well No.	
1b. Type of Well: □ Oil Well □ Gas Well ☑ Oth	ner: CBM Single Zone Multiple Zone	PATRIOT 92-S	
2. Name of Operator Contact: DUGAN PRODUCTION CORP.	KURT FAGRELIUS E-Mail: kfagrelius@duganproduction.com	9. API Well No. 300453203	 らフ
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 Exploratory BASIN FRUITLAND COAL	
4. Location of Well (Report location clearly and in accorda	nnce with any State requirements.*)	11. Sec., T., R., M., or Blk. and Survey or A	Area
At surface SENW 1850FNL 1950FWL	. 36.27410 N Lat, 108.13340 W Lon	Sec 28 T26N R13W Mer NMP	
At proposed prod. zone	3456783	F	
14. Distance in miles and direction from nearest town or post APPROX. 10-MILES NW OF CARSON TRADIN	IG POST	A12. County or Parish SAN JUAN NI	State M
5. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig, unit line, if any)	16. No. of Acres in Lease O	. Spacing Unit dedicated to this well	
1850 FEET	1920.00	320.00 N/2	
<ol> <li>Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.</li> </ol>	19. Proposed Depth	20. BLM/BIA Bond No. on file	
APPROX. 1600 FEET	1540 MD		
21. Elevations (Show whether DF, KB, RT, GL, etc. 6283 GL	22. Approximate date work will see 105/28/2004	23. Estimated duration 5-DAYS	
	24. Attachments		
The following, completed in accordance with the requirements of	of Onshore Oil and Gas Order No. 1, shall be attached to	his form:	
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest Sys SUPO shall be filed with the appropriate Forest Service Of</li> </ol>	tem Lands, the 5. Operator certification 6. Such other site specific in	ons unless covered by an existing bond on file formation and/or plans as may be required by	
	authorized officer.		
25. Signature Kurt Fzgreling	Name (Printed/Typed) KURT FAGRELIUS	Date 11/28/20	103
Title GEOLOGIST			
Approved by (Signalize)	Name (Printed/Typed)	Date /- 5	-05
Title	Office		

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

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:**

A water based gel-med will be used to drill surface and production casing hole. Standard 2,000 psi BOP will be used to drill production hole. The Fruitland Coal will be completed from approximately 1310' -1375'. The interval will be fractured.

PRILLING OPERATIONS ALCHORIZED ARE CONTROL COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

District I

PO Box 1980, Hobbs. NM 88241-1980

District II PO Drawer DD, Artesia, NM 88241-0719

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-:22

Revised February 21, 1984

Instructions on ass

Submit to Appropriate District Office

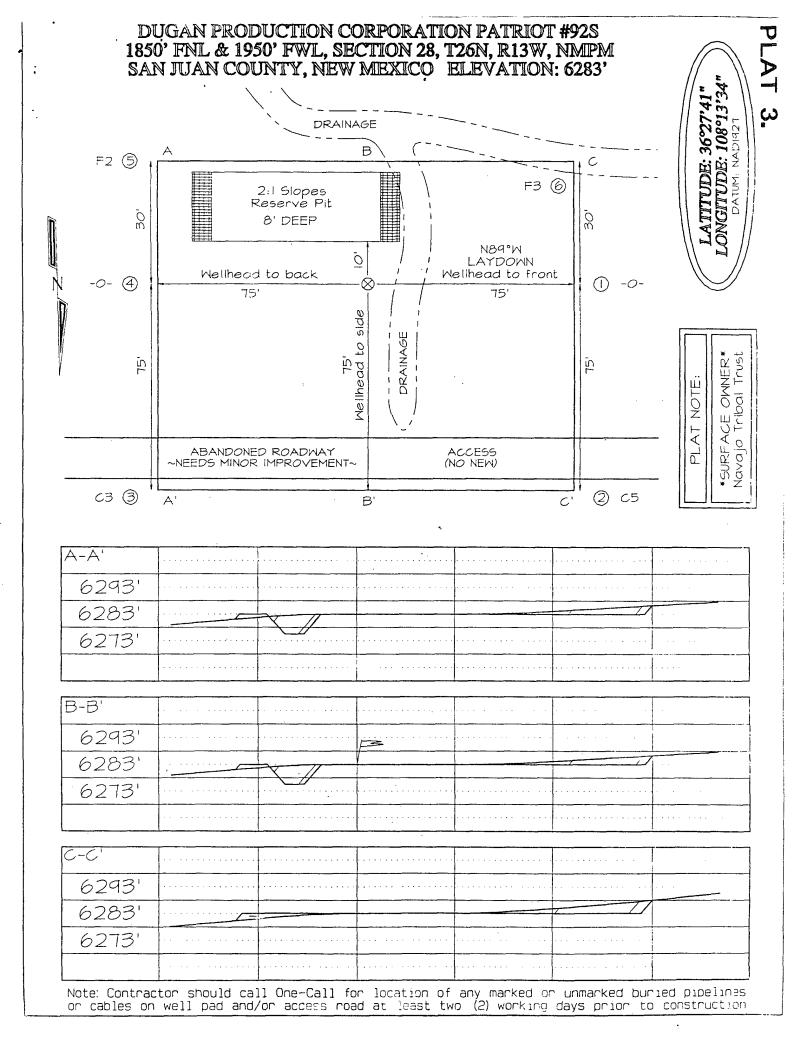
State Lease - 4 Cocies

Fee Lease - 3 Cocies

AMENDED REPC=-

## WELL LOCATION AND ACREAGE DEDICATION PLAT

20 -01 ( - 27	037	*Pool Code 71629			'Pool Name BASIN FRUITLAND COAL				
Property Code		<u> </u>	Prop	perty Name ATRIOT				• We	11 Number 925
'0GRID No. 006515		DUGA		ator Name TION CORPOR	RATION				levation 6283
			<sup>10</sup> Surfac	ce Location	)				<del></del>
F 28	Township 26N 1	Range Lot Idn	Feet from 1	the North/South		Feet from the 1950	East/West WES	i	SAN JUAN.
	<sup>11</sup> Bot		Location	If Differ	ent F	rom Surf	ace		
UL or lot no. Section	Township	Range Lot Ion	Feet from (	he North/South	line	Feet from the	East/West	: line	County
Pedicated Acres	0.0 Acres	- (N/2)	<sup>13</sup> Joint or Inf	ill <sup>14</sup> Consolidation	Code <sup>15</sup> O	nder Na.	-		
NO ALLOWABLE W	ILL BE ASS	SIGNED TO T ON-STANDARD	HIS COMPLE UNIT HAS	ETION UNTIL BEEN APPRO	ALL IN VED BY	ITERESTS H	IAVE BEE SION	N CON	SOLIDATEI
1950' . 00' .	92	5282.64 DUGAN 10 SF-07809	0% 01 0 92	JAN 2005  COMO DAY.  SERVINO DAY.	- 00 08C5	I hereby containe to the to th	e Kurt  Name Geolo  11/28  EYOR Clarify that this plat we cited to the be Date: NO	Fagre Signature	lius  FICATION  location  from field  grame is true  belief  R 26, 2003



# EXHIBIT B OPERATIONS PLAN

Patriot #92-S

#### APPROXIMATE FORMATION TOPS:

Ojo Alamo Less	than 185'	Pictured Cliffs	1390′
Kirtland	260′		
Fruitland	1015′	Total Depth	1540′

Catch samples every 10 feet from 1250 feet to total depth.

#### LOGGING PROGRAM:

Run cased hole GR-CCL-CNL from total depth to surface.

#### CASING PROGRAM:

Hole	Casing		Setting	Grade and
Size	Size	Wt./ft.	Depth	Condition
9-7/8"	<del>7"</del>	20#	120	J-55
6-1/4"	4-1/2"	10.5#	1,540	J-55

Plan to drill a 9-7/8" hole and set 120' of 7" OD, 20#, J-55 surface casing. Then plan to drill a 6-1/4" hole to total depth with gel-water mud program to test the Fruitland Coal. 4-1/2", 10.5#, J-55 production casing will be run and cemented. Cased hole GR-CCL-CNL log will be run. Productive zone will be perforated and fractured. After frac, the well will be cleaned out and production equipment will be installed.

#### CEMENTING PROGRAM:

Surface: Cement to surface with 70 cf Class B + 2% CaCl<sub>2</sub>. Circulate to surface.

Production Stage-Cement with 150 cft 2%Lodense with 光# celloflake/sx followed by 90 cf Class "B" with

1/4 celloflake/sx.

Total cement slurry for production stage is 240 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 7"x4-1/2" casing head, 1000# WP, tested to 2000#. Huber 4-1/2"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.

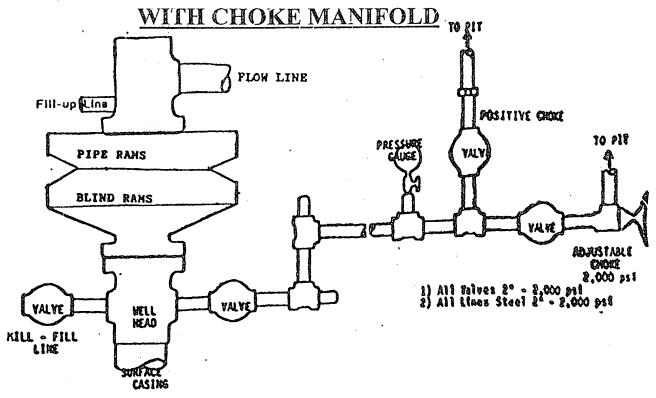
Fill-up line.

#### 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 DIAGRAM**



BOP and Related Equipment will include for a 2000 pol System:

2000 PSI DOUBLE BAM BLOWOUT PREVENTER

(aualola "\$) soid lilx

l kill line valve (2" minimum)

I choke line valve

2 chokes

Upper helly cock valve with handle available

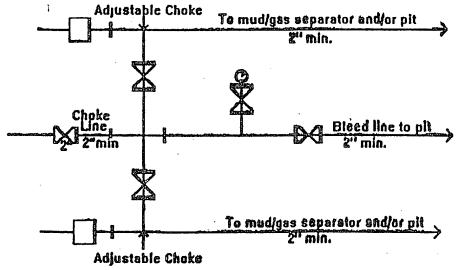
Safety valve and subs to fit all drill string toanections is use

Pressure gauge on choke manifold

3" mininum choke line

7111-up 1180 above the uppermost preventar

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 Very

**DUGAN PRODUCTION CORP.** 

PATRIOT #92-S