Form 3160-3 (August 1999)

DEPARTMENT OF THE INTERIOR BUREAU OF EAND MAI

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED O:46 No. 1004-0136 Expires November 30, 2000

5. Lease Serial No. , NM-17781

6. If Indian, Allottee or Tribe Name

(6)				
la. Type of Work: ☑ DRILL ☐ REENTER	CCICUS 070 Farmington, N	7. If Unit or CA Agreement, Nar	me and No.	
1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Oth  2. Name of Operator Contact: DUGAN PRODUCTION CORP.	ner Single Zone	8. Lease Name and Well No. Paul Revere  9. API Well No. 300453	#91-S	
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 Explorator Basin Fruit	land Coal	
4. Location of Well (Report location clearly and in accorda	nce with any State requirements.*)	11. Sec., T., R., M., or Blk. and	Survey or Area	
At surface NE/SE 1850' FSL and 750 At proposed prod. zone Same As Above	O' FEL NMPM 36.2818 No. Lat. 108.1053 W. Long.	I Sec. 23, T26	5N, R13W	
14. Distance in miles and direction from nearest town or post Approx. 10 Miles Northwest o	office* f Carson Trading Post, NM	12. County or Parish SAN JUAN	13. State NM	
15. Distance from proposed location to nearest property or	16. No. of Acres in Lease	17. Spacing Unit dedicated to this well		
lease line, ft. (Also to nearest drig. unit line, if any) 750'	1760	320-S/2		
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.  2,200	19. Proposed Depth	20. BLM/BIA Bond No. on tile		
21. Elevations (Show whether DF, KB, RT, GL, etc. GL-6072 1	22. Approximate date work will start ASAP	23. Estimated duration 5-DAYS		
	24. Attachments			
The following, completed in accordance with the requirements of	f Onshore Oil and Gas Order No. 1, shall be attached to t	his form:		
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	ons unless covered by an existing bo			
25. Signature Kurt Tzgrclin	Name (Printed/Typed) KURT FAGRELIUS	D	9/26/03	
Title GEOLOGIST				

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.

Name (Printed/Typed)

Office

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.

A water based gel-mud will be used to drill surface and production casing holes. Standard 2,000 psi BOP will be used to drill production casing hole. The Fruitland Coal will be completed from approximately 1085' - 1125'. The interval will be fractured.

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 PG Box 1980, Hoths, NM 88241-1980

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

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

'API Number

District IV PO 8cx 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 0-102 Revised February 21, 1994 Instructions on back

Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

Pool Name

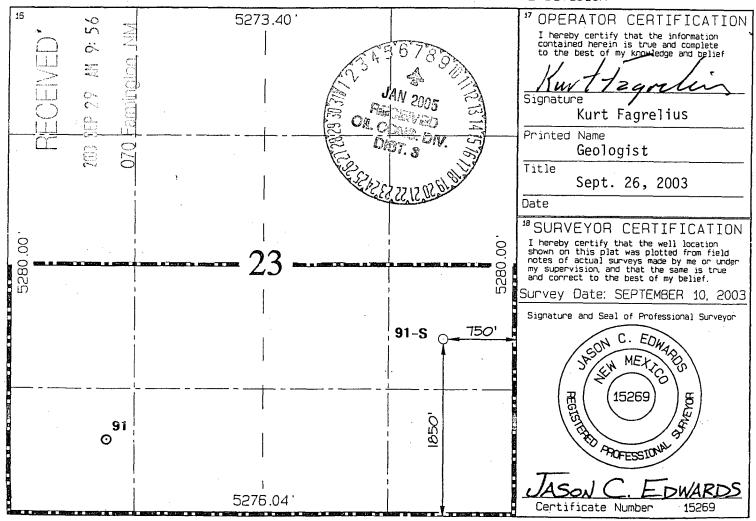
AMENDED	•	REPORT	
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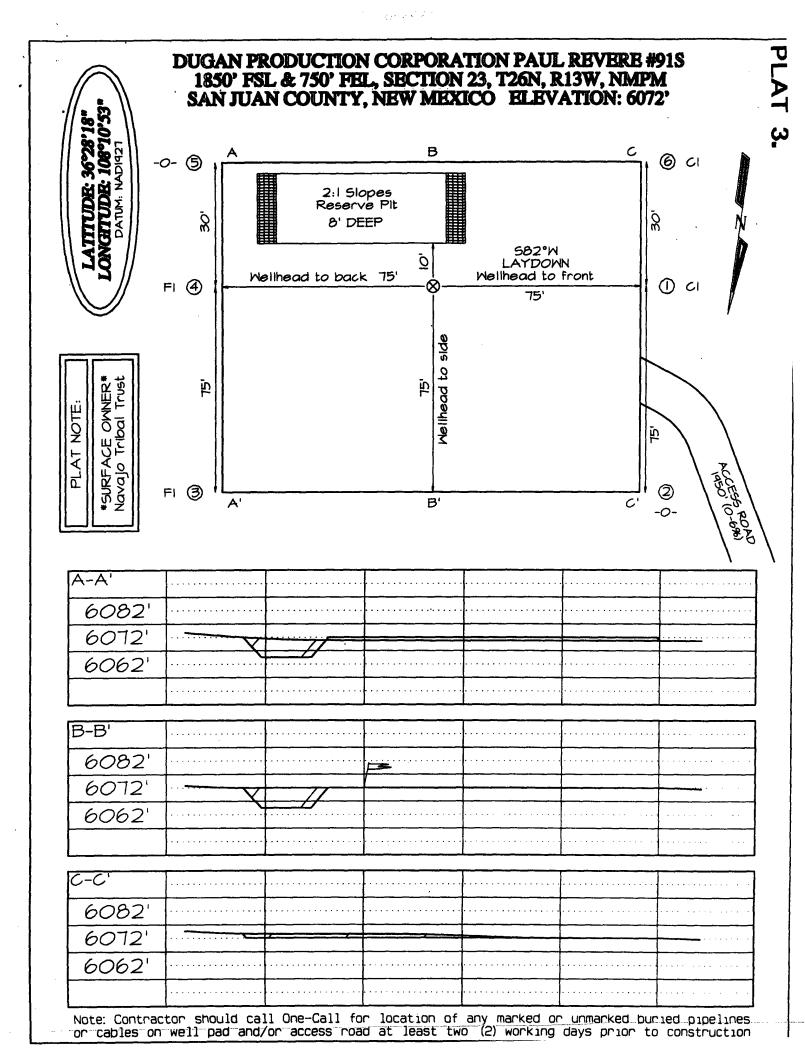
# WELL LOCATION AND ACREAGE DEDICATION PLAT

Pool Code

30-01	-31	921		71629						
Property 381	Code	°Property Name PAUL REVERE							°Well Number 91S	
'OGRID N 00651	1	*Operator Name DUGAN PRODUCTION CORPORATION						*Elevation 6072		
					<sup>10</sup> Surface	Location				
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West 1	line	County
I	23	26N	13W		1850	SOUTH	750	EAST	.	SAN JUAN
· .		<sup>11</sup> B	ottom	Hole L	ocation I	f Different	From Surf	ace		
UL or lot no,	Sect 10h	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West 1	ine	County
<sup>12</sup> Dedicated Acres		).0 Acres	s - (S	/2)	<sup>13</sup> Joint or Infill	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.	<u> </u>		
NO ALLOW	ADLE M	TII DC 4	CCTCNC	70 TU	TO COMPLETE	ON LINIT I ALL	TUTCOCCTC			

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





# EXHIBIT B OPERATIONS PLAN

Paul Revere #91-S

#### APPROXIMATE FORMATION TOPS:

Ojo Alamo	Surface	Pictured Cliffs	1130′
Kirtland	60 <i>′</i>		
Fruitland	690 <i>'</i>	Total Depth	1270′

Catch samples every 10 feet from 1000 feet to total depth.

## LOGGING PROGRAM:

Run casedhole GR-CCL-CNL from total depth to surface.

## CASING PROGRAM:

Hole	Casing		Setting	Grade and
Size	Size	Wt./ft.	Depth	Condition
<del>9-7/</del> 8"	7"	20#	120′	J-55
6-1/4"	4-1/2"	10.5#	1270′	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:

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

Production Stage-Cement with 130 cf 2%Lodense with

%# celloflake/sx followed by 70 cf Class "B" with

%# celloflake/sx.

Total cement slurry for production stage is 200 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.

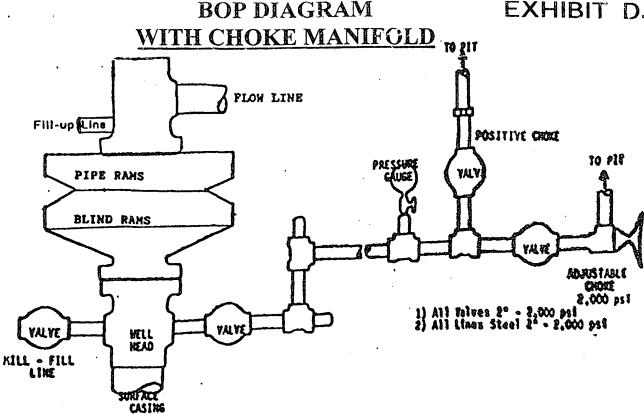
2" minimum choke line.

Fill-up line.

#### Contacts:

Dugan Pro	od.Corp.	Office	&	Radio	Dispatch:	325-1821
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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 RAM BLOWOUT PREVENTER

(analaia "\$) enil lllx

l kill line valve (3" minimum)

l choke line valve

2 chokes

Upper kelly cock valve with handle available

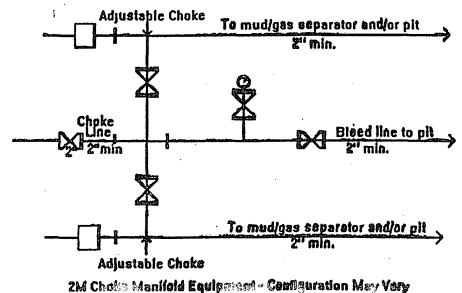
Safety valve and subs to fit all drill string connections in use

Pressure gauge on choke manifold

2" minimum choke line

Fill-up 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.



DUGAN PRODUCTION CORP.

PAUL REVERE #91-S