

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENTFORM APPROVED  
OMB No. 1004-0136  
Expires November 30, 2000

## 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-70298
1b. Type of Well: <input type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other: CBM <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. ATLANTIS COM 4-S
3b. Phone No. (include area code) Ph: 505.325.1821 Fx: 505.327.4613		9. API Well No. 30-045-32564
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface SWSE 905FSL 1725FEL 36.50180 N Lat, 108.17340 W Lon At proposed prod. zone		10. Field and Pool, or Exploratory BASIN FRUITLAND COAL
14. Distance in miles and direction from nearest town or post office* APPROX. 8-MILES NORTH OF KIRTLAND, NEW MEXICO		11. Sec., T., R., M., or Blk. and Survey or Area 0 Sec 3 T30N R14W Mer NMP SME: FEE
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 905 FEET	16. No. of Acres in Lease 160.00	12. County or Parish SAN JUAN
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft.	19. Proposed Depth 1520 MD	13. State NM
21. Elevations (Show whether DF, KB, RT, GL, etc.) 5730 GL	22. Approximate date work will start 12/01/2004	17. Spacing Unit dedicated to this well 320.00 E/2
		20. BLM/BIA Bond No. on file
		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:

- |   |  |
|---|--|
| 1. Well plat certified by a registered surveyor.  | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).    |
| 2. A Drilling Plan.   | 5. Operator certification  |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office). | 6. 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 FAGRELIUS	Date 09/01/2004
Title GEOLOGIST		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed)	Date 11/24/04
Title AFM		
Office FFO		

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:

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 Fruitland Coal will be completed from approximately 1230' - 1360'. The interval will be fractured.

NMOC

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

State of New Mexico  
Energy, Minerals & Natural Resources Department

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

District II  
PO Drawer 90, Artesia, NM 88211-0719

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

2004 SEP 1 PM 4 08

☐ AMENDED REPORT

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

District IV  
PO Box 2088, Santa Fe, NM 87504-2088

RECEIVED

WELL LOCATION AND ACRES DEDICATION PLAT

*API Number <b>30045-32564</b>		*Pool Code <b>71629</b>	*Pool Name <b>BASIN FRUITLAND COAL</b>
*Property Code <b>34481</b>	*Property Name <b>ATLANTIS COM</b>		*Well Number <b>4S</b>
*GRID No. <b>006515</b>	*Operator Name <b>DUGAN PRODUCTION CORPORATION</b>		*Elevation <b>5730'</b>

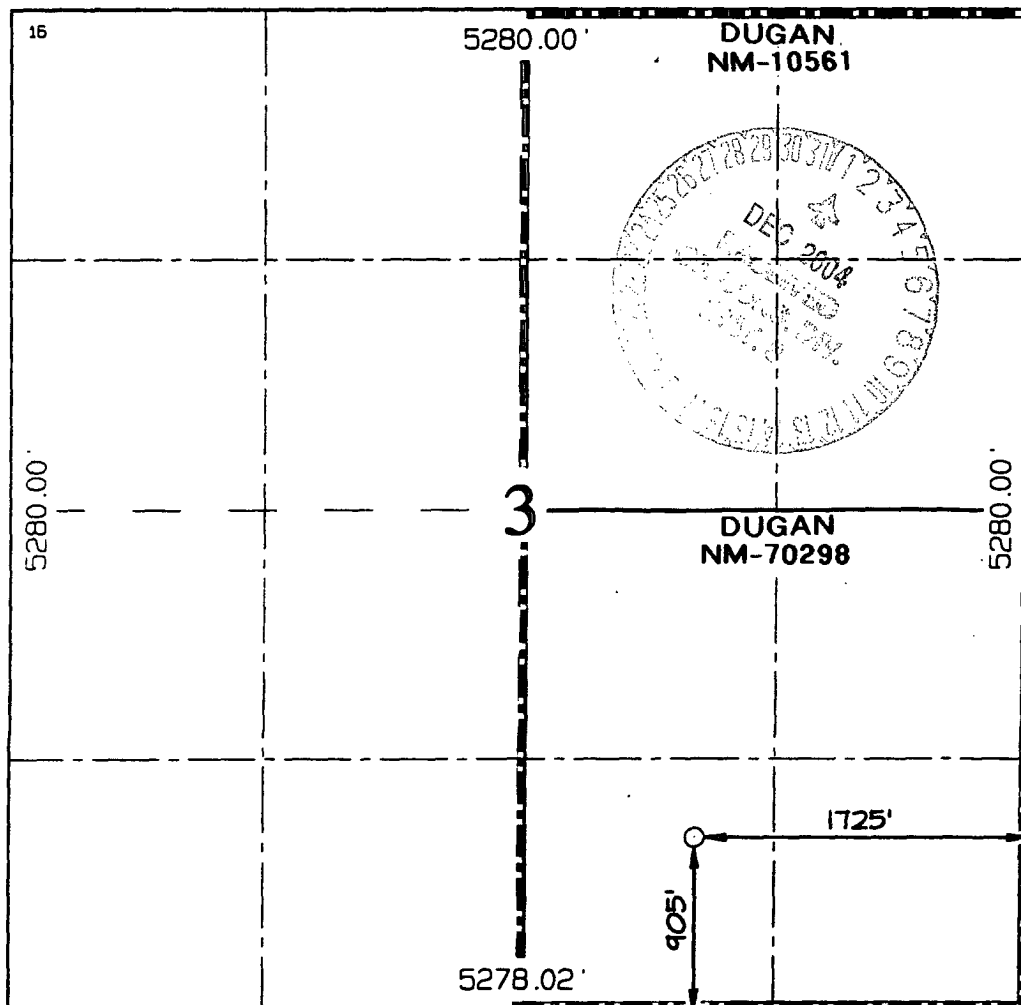
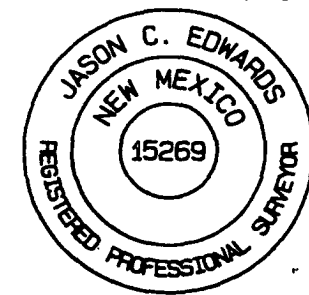
10 Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	3	30N	14W		905	SOUTH	1725	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 <b>320.0 Acres - (E/2)</b>					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

<div>15</div> 	<div>17 OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Kurt Fagrelus</i> Signature Kurt Fagrelus Printed Name Geologist Title August 23, 2004 Date</p>
	<div>18 SURVEYOR CERTIFICATION</div> <p>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.</p> <p>Date of Survey: JUNE 25, 2004 Signature and Seal of Professional Surveyor</p> <div><p><b>JASON C. EDWARDS</b> Certificate Number 15269</p></div>

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  
March 4, 2004

OIL CONSERVATION DIVISION 08  
1220 South St. Francis Dr.  
Santa Fe, NM 87505  
070 FARMINGTON NM

WELL API NO.
5. Indicate Type of Lease STATE <input type="checkbox"/> FEE <input type="checkbox"/> Fed. <input checked="" type="checkbox"/> XX
6. State Oil & Gas Lease No. Federal NM-70298
7. Lease Name or Unit Agreement Name Atlantis Com
8. Well Number 4-S
9. OGRID Number 006515
10. Pool name or Wildcat

**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

2. Name of Operator Dugan Production Corp.

3. Address of Operator  
709 East Murray Drive, Farmington, New Mexico 87401

4. Well Location  
Unit Letter 0 : 905 feet from the South line and 1725 feet from the East line  
Section 3 Township 30N Range 14W NMPM County San Juan

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
5730

Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)

Pit Location: UL 0 Sect 3 Twp 30N Rng 14W Pit type Drilling Depth to Groundwater 1360 Distance from nearest fresh water well N/A  
Distance from nearest surface water 1/4-mi Below-grade Tank Location UL      Sect      Twp      Rng      ; 71000  
feet from the      line and      feet from the      line

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 COMPLETION ☐

OTHER: Reserve pit for drilling, lined. ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐

COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐

CASING TEST AND CEMENT JOB ☐

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 reserve pit will be lined with an impervious material and be abandoned as per BLM conditions of approval, following completion of the well.

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 Fagrelus TITLE Geologist DATE 9-1-2004

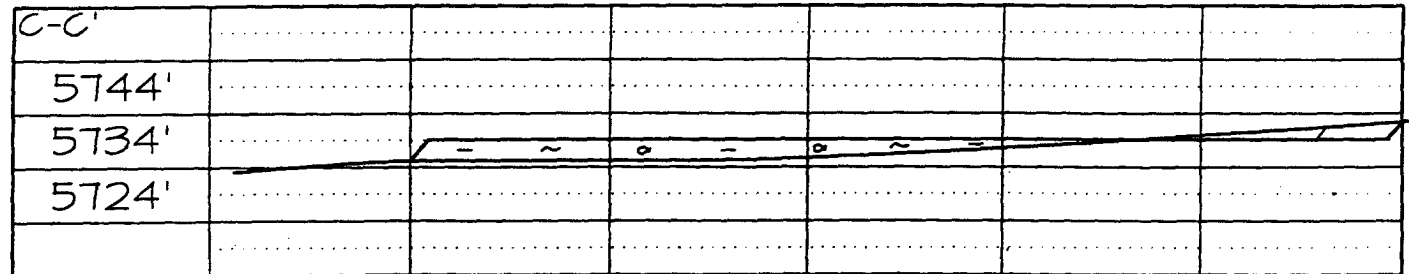
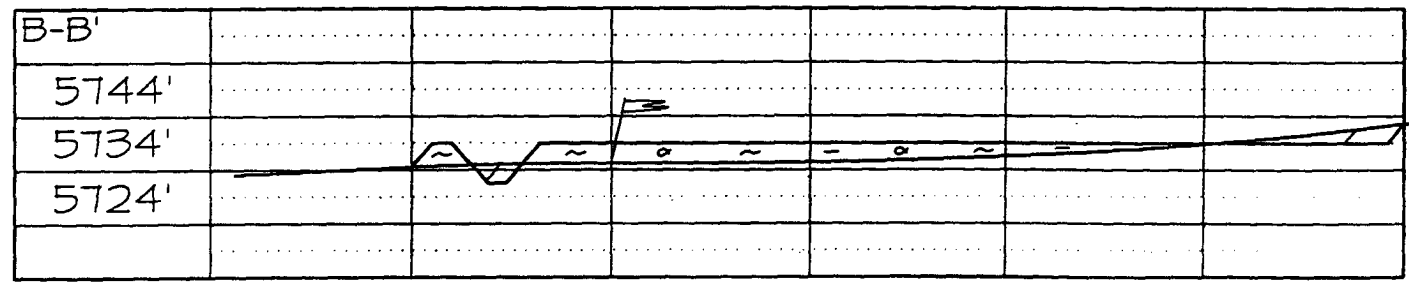
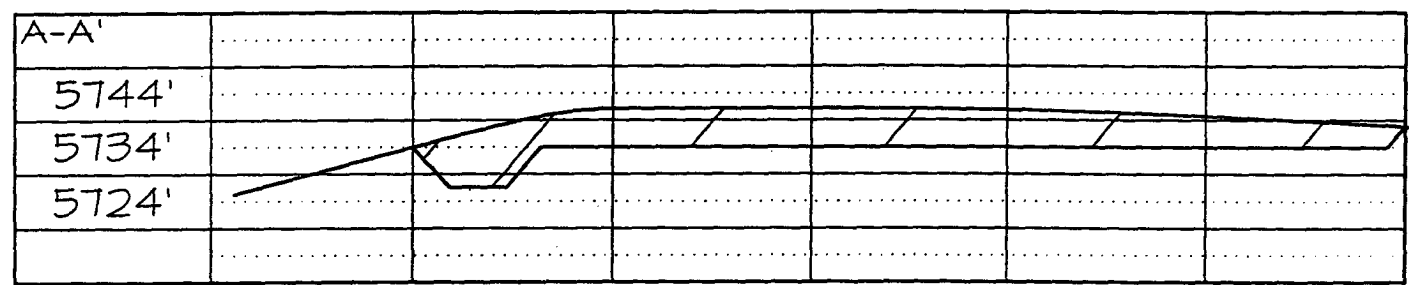
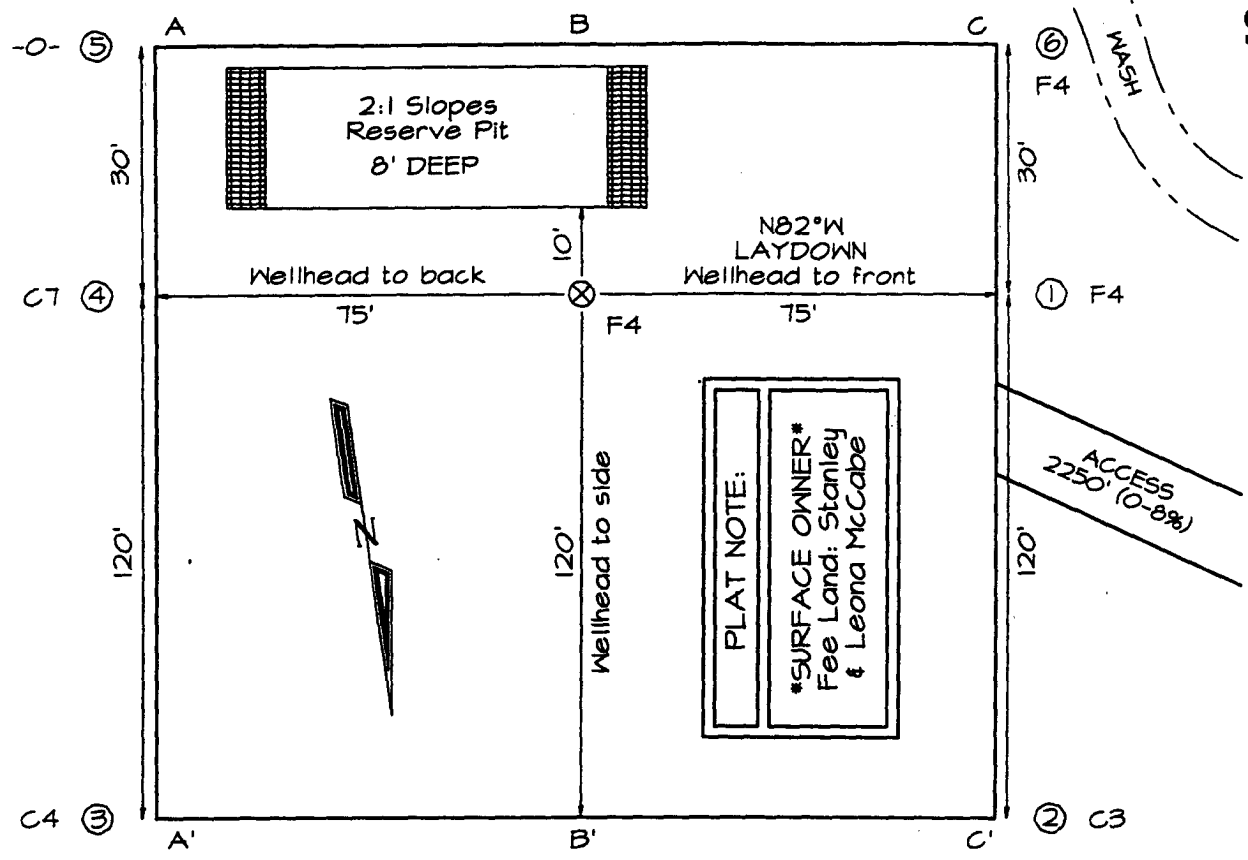
Type or print name Kurt Fagrelus E-mail address: kfagrelus@duganproduction.com Telephone No. 505-325-1821

(This space for State use)

APPROVED BY [Signature] TITLE SENIOR OIL & GAS INSPECTOR, DIST. IV DATE DEC-7 2004  
Conditions of approval, if any:

**DUGAN PRODUCTION CORPORATION ATLANTIS #4 S**  
**905' FSL & 1725' FEL, SECTION 3, T30N, R14W, NMPM**  
**SAN JUAN COUNTY, NEW MEXICO ELEVATION: 5730'**

**LATITUDE: 36°50'18"**  
**LONGITUDE: 108°17'34"**  
 DATUM: NAD1927



Note: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction

**EXHIBIT B**  
**OPERATIONS PLAN**  
Atlantis Com #4-S

**APPROXIMATE FORMATION TOPS:**

Kirtland	Surface	Pictured Cliffs	1370'
Fruitland	945'	<b>Total Depth</b>	<b>1520'</b>

Catch samples every 10 feet from 1100 feet to total depth.

**LOGGING PROGRAM:**

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

**CASING PROGRAM:**

<u>Hole</u> <u>Size</u>	<u>Casing</u> <u>Size</u>	<u>Wt./ft.</u>	<u>Setting</u> <u>Depth</u>	<u>Grade and</u> <u>Condition</u>
12-1/4"	8-5/8"	24#	120'	J-55
7"	5-1/2"	14#	1520'	J-55

Plan to drill a 12-1/4" hole and set 120' of 8-5/8" OD, 24#, J-55 surface casing. Then plan to drill a 7" hole to total depth with gel-water mud program to test the Fruitland Coal. 5-1/2", 14#, 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 80 cf Class B + 2% CaCl<sub>2</sub>.  
Circulate to surface.

Production Stage-Cement with 150 cf 2% Lodense with  
1/4# celloflake/sx followed by 75 cf Class "B" with  
1/4# celloflake/sx.  
Total cement slurry for production stage is 225 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 (H)
	320-8247 (M)

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

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