

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

1. Type of Well

☐ Oil
Well

☒ Gas
Well

☐ Other

2. Name of Operator

Dugan Production Corp.

3. Address and Telephone No.

P.O. Box 420, Farmington, NM 87499 (505) 325 - 1821

Location of Well (Footage, Sec., T., R., M., or Survey Description)

1915' FNL & 1920' FWL (SE/4 NW/4)
Unit F, Sec. 25, T30N, R14W

5. Lease Designation and Serial No.

NM-0206994

6. If Indian, Allotted or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Jacobs Com #90S

9. API Well No.

30 045 33683

10. Field and Pool, or Exploratory Area

Basin Fruitland Coal/
Harper Hill Fruitland Sand-PC

11. County or Parish, State

San Juan, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

TYPE OF ACTION

☒ Notice of Intent

☐ Abandonment

☐ Change of Plans

☐ Subsequent Report

☐ Recompletion

☐ New Construction

☐ Final Abandonment Notice

☐ Plugging Back

☐ Non-Routine Fracturing

☐ Casing Repair

☐ Water Shut-Off

☐ Altering Casing

☐ Conversion to Injection

☒ Other

Application to downhole
commingle

☐ Dispose Water

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

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.)

Dugan Production proposed to downhole commingle production from the Harper Hill Fruitland Sand-Pictured Cliffs and the Basin Fruitland Coal gas pools upon completing the Jacobs Com No. 90S which was spudded 7-12-06. The spacing units for both pools encompass only federal leases and all royalty interest is federal. Specifics for downhole commingling are presented in the attached application (NMOCD Form C-103).

DHC 2344AZ

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

Signed John D. Roe Title Engineering Manager

Date 7/13/2006

(This space for Federal or State office use)

Approved by Joe Herdt Title Geo

Date 8-4-06

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes 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.

*See Instruction on Reverse Side

NMOCD

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

7. Lease Name or Unit Agreement Name

8. Well Number
90S

9. OGRID Number	006515
-----------------	--------

10. Pool name or Wildcat
Basin FR Coal & Harper Hill FR Sand PC

1. Type of Well: Oil Well ☐ Gas Well ☒ Other

2. Name of Operator
Dugan Production Corp.

3. Address of Operator
P. O. Box 420, Farmington, NM 87499-0420 (505)325-1821

4. Well Location
Unit Letter F : 1915 feet from the North line and 1920 feet from the West line
Section 25 Township 30N Range 14W NMPM San Juan County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5494' GL

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

Pit Location: UL _____ Sect _____ Twp _____ Rng _____ Pit type _____ Depth to Groundwater _____ Distance from nearest fresh water well _____
Distance from nearest surface water _____ Below-grade Tank Location UL _____ Sect _____ Twp _____ Rng _____ ;
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	<input type="checkbox"/>	PLUG AND ABANDON	<input type="checkbox"/>
TEMPORARILY ABANDON	<input type="checkbox"/>	CHANGE PLANS	<input type="checkbox"/>
PULL OR ALTER CASING	<input type="checkbox"/>	MULTIPLE COMPLETION	<input type="checkbox"/>

OTHER: Downhole commingle

SUBSEQUENT REPORT OF:

REMEDIAL WORK	<input type="checkbox"/>	ALTERING CASING	<input type="checkbox"/>
COMMENCE DRILLING OPNS.	<input type="checkbox"/>	PLUG AND	<input type="checkbox"/>
CASING TEST AND	<input type="checkbox"/>	ABANDONMENT	
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. This well was spudded on 7-12-06 and 5-1/2" casing will be cemented at $\pm 1340'$. The Basin Fruitland Coal and the Harper Hill Fruitland Sand-PC will be perforated. Both intervals will be fracture stimulated. It is proposed that both intervals be downhole commingled to clean up stimulation fluids and then produced.

1&2. NMOCD Order R-11363 established the Basin Fruitland Coal (71629) and Harper Hill Fruitland Sand-PC (78160) as pre-approved pools for downhole commingling.

3. Proposed perforated intervals: Basin Fruitland Coal intervals as developed which will be approximately 1038'-42', 1045'-48', 1068'-78', 1085'-89', 1164'-72', 1178'-82'. Harper Hill Fruitland Sand-PC intervals as developed which will be approximately 1055'-59'; 1134'-40' 1184'-90'.

4. Proposed allocation method: Fixed factors based upon an analysis of production from both pools in a 12 section area adjacent or close to the subject well (Ref. Attachment No. 1). A total of 15 FR Coal, 20 PC wells and 5 similarly downhole commingled wells were evaluated.

Proposed Allocation	<u>Fruitland Coal</u>	<u>Fruitland Sand/Pictured Cliffs</u>
Gas	- 57%	43%
Water	- 50%	50%

5. Both pools are anticipated to produce high volumes of water & the proposed downhole commingling is necessary to economically & efficiently produce both zones. The value of production from either pool, will not be reduced, but will be maximized as a result of this downhole commingling.

6. The working and overriding royalty interest is not identical for both pools. Royalty interest is federal and is identical. Dugan Production holds 87.5% of the Basin Fruitland Coal plus 100% of the Harper Hill Fruitland Sand-Pictured Cliffs working interest. Notice of this application is being provided to all interest owners by letter dated 7/12/06 (copy attached). No objection is anticipated.

7. A copy of this application is being sent to the BLM.

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 John D. Roe TITLE Engineering Manager DATE July 13, 2006
Type or print name John D. Roe E-mail address: johnroe@duganproduction.com Telephone No. 505-325-1821

(This space for State use)

APPROVED BY _____ TITLE _____ DATE _____

Conditions of approval, if any:

Attachment No. 1
Offset Well Production
Dugan's Pan American No. 3, Jacobs Com No. 90S, & Winifred Com No. 90S
Sections 24 & 25; T-30N; R-14W
San Juan County, New Mexico

Operator ①	Well	Location UL-S-T-R	# Months Produced	02/06 DHC ③ %FC/%PC	Average Production - mcf/mo & (# of mo. if less than 12) ②									
					Fruitland Coal					Fruitland Sand-PC				
					1st 12 months	2nd 12 months	3rd 12 months	4th 12 months	5th 12 months	1st 12 months	2nd 12 months	3rd 12 months	4th 12 months	5th 12 months
DPC	Pinon Com #90	L-13-30N-14W	43		3,864	8,706	12,491	9,395 (7)		1,174	2,224	1,961	2,321 (5)	
DPC	Humble Kirtland #2	P-13-30N-14W	41		748	1,010	1,246	1,888 (5)		413	117	181 (10)		
DPC	Humble Kirtland Com #90	B-13-30N-14W	41							514	487	442	501 (7)	
DPC	Dinero #1	H-13-30N-14W	34 ④											
DPC	Pinon #2	F-13-30N-14W	43											
DPC	Mucho Deal Com #90S	D-14-30N-14W	17		408	569 (5)				3,924	3,582	5,241	3,440	2,003*
DPC	Mucho Deal #14	F-14-30N-14W	63		2,093	1,523	844	931 (4)		2,368	2,967 (6)			
DPC	Mucho Deal Com #90	K-14-30N-14W	40		2,772	3,483	2,436	2,097 (4)		2,634	4,889 (6)			
DPC	Mucho Deal Com #15	M-14-30N-14W	18											
DPC	Molly Pitcher #90	G-14-30N-14W	40		10,363	11,616 (6)				7,655	14,329	7,383	4,789 (6)	
DPC	Molly Pitcher #5	A-14-30N-14W	18											
DPC	Molly Pitcher #90S	P-14-30N-14W	18											
DPC	Molly Pitcher #3	J-14-30N-14W	42											
POGO	Morton #3 ②	E-23-30N-14W	32	77/23 ⑤	8,735	4,498	1,925 (8)			2,609	1,341	575 (8)		
POGO	Morton #4	K-23-30N-14W	32	77/23 ⑤	10,182	5,954	5,840 (8)			3,041	1,778	1,738 (8)		
POGO	Morton #2	I-23-30N-14W	32	77/23 ⑤	12,708	8,635	6,049 (8)			3,796	2,579	1,907 (8)		
POGO	Morton #1	G-23-30N-14W	43	77/23 ⑤	5,117	9,935	7,434			846	2,460	2,579	2,089 (7)	
MOG	Hagood #3	I-24-30N-14W	7							6966 (7)				
DPC	Pan American Federal #2	D-24-30N-14W	41							3,085	4,223	3,693	3,676 (5)	
MOG	Hagood #1	A-24-30N-14W	19							8,882	10,672 (7)			
LOC	WF Federal 25 #2	P-25-30N-14W	33	59/41 ⑥	5,177	4,774	5,146 (7)			4,951	4,173	3,474 (9)		
LOC	WF Federal 25 #1	H-25-30N-14W	42							4,734	4,491	5,734	4,840 (6)	
DPC	Winifred Com #90	O-26-30N-14W	55		802	2,271	1,884	3,291	4,367 (7)					
DPC	Beyond Petroleum Com #90	L-26-30N-14W	50		2,050	8,586	7,035	5,927	4,433 (2)					
DPC	Jacobs Com #90	G-26-30N-14W	55		4,004	3,634	6,059	5,015	7,232 (7)					
DPC	Jacobs #3	C-26-30N-14W	55							3,663	6,434	5,448	5,901	7,113 (7)
DPC	Tabor Com #90	H-35-30N-14W	68		3,486	5,314	9,099	4,166	5,671*					
DPC	Winifred #2	G-35-30N-14W	106							1,111	432	624	890	765*
DPC	Jiggs #2	I-35-30N-14W	66							4,897	5,074	6,449	4,287	4,189*
LADD	Aztec 35 #5	O-35-30N-14W	3 ⑦							239 (3)				
LOC	Perf #90	N-35-30N-14W	42		3,031	6,342	5,886	4,544 (6)		1,954	1,522	1,306	1,502	1,465*
LOC	Aztec #4	N-35-30N-14W	263 ⑧											
LOC	Perf #91	D-35-30N-14W	6		452 (6)									
DPC	Jiggs #1	E-35-30N-14W	60							4,399	5,276	3,860	1,686	1,587
DPC	Aztec 35 #3	D-35-30N-14W	72							1,428	1,191	763	709	422*
DPC	Stella Needs a Com #2	D-36-30N-14W	58							1,937	4,865	4,738	5,625	4,743 (10)
DPC	Camp David Com #1	G-36-30N-14W	101		3,913	2,924	4,800	4,420	6,064*					
DPC	Camp David Com #1S	I-36-30N-14W	25		6,383	16,912	15,323 (1)							
DPC	Camp David Com #2	O-36-30N-14W	57							2,426	5,206	3,971	3,086	2,623 (9)
DPC	O'Henry #1	N-36-30N-14W	101		1,009	724	995	1,921	2,262*					

Total all wells	87,297	107,410	94,672	43,595	30,029	79,646	90,312	61,967	45,342	24,910
# wells	20	19	17	11	6	25	23	20	15	9
Average/well	4,365	5,653	5,569	3,963	5,005	3,186	3,927	3,098	3,023	2,768
% of FC & PC	57.8	59.0	64.3	56.7	64.4	42.2	41.0	35.7	43.3	35.6
Avg. 1st 5 yrs			60.4					39.6		
Total excluding DHC wells	45,378	73,614	68,278	43,595	30,029	64,403	77,981	51,794	43,253	24,910
# wells	15	14	12	11	6	20	18	15	14	9
Average/well	3,025	5,258	5,690	3,963	5,005	3,220	4,332	3,453	3,090	2,768
% of FC & PC	48.4	54.8	62.6	56.2	64.4	51.6	45.2	37.8	43.8	35.6
Avg. 1st 5 yrs			57.3					42.7		

Notes:

- ① - DPC = Dugan Production Corp., LADD = Ladd Petroleum Co., LOC = Lance Oil & Gas Co. (previously Richardson Oil & Gas), MOG = McElvain Oil & Gas, POGO = POGO Producing Co. (previously Calpine)
- ② - Production data from Dwhits/PI and ONGARD thru February 2006. All data normalized to 1st month of production. Fruitland Coal production from the Basin Fruitland Coal pool (71629) and Fruitland Sand-PC production from the Harper Hill Fruitland Sand-Pictured Cliffs gas pool (78160).
- * - production data exists beyond 5 years, however only the 1st 5 years is presented.
- ③ - Downhole commingling factors for February 2006. % of commingled gas from Fruitland Coal and % of commingled gas from Fruitland Sand/Pictured Cliffs.
- ④ - The Dinero No. 1 plugged and abandoned 9-27-88.
- ⑤ - Morton wells No. 1, 2, 3, & 4 (API Nos. 30-045-25506; 25766; 31215 & 31214, respectively) all approved for downhole commingling (NMOCD Orders DHC-1004AZ, DHC-1003AZ, DHC-1075AZ, DHC-3084, respectively) with allocation factors based upon an analysis of daily average production from 25 wells in Harper Hill & Twin Mounds Fruitland (Sand)-Pictured Cliffs pools plus 26 wells presented as Fruitland Coal wells (all in Sections 13 thru 30 of T-30N, R-14W). The analysis presented that production from the Fruitland Coal wells averaged 64 mcf/d and production from the Fruitland-Pictured Cliffs wells averaged 83 mcf/d. By subtracting the two averages, it was concluded the Pictured Cliffs wells averaged 19 mcf/d. Based upon this analysis, 19 mcf/d represented 23% of the total and 64 mcf/d represented 77% of the total. This analysis is believed to be incorrect. The 83 mcf/d presented for the Fruitland-Pictured Cliffs is actually for the Fruitland Sand & Pictured Cliffs and does NOT include Fruitland Coal production. Wells completed only in the Pictured Cliffs cannot be separated by subtracting production from the Fruitland Coal. Also, the 64 mcf/d presented as an average for the Fruitland Coal includes eight wells listed as being in the Twin Mounds Fruitland plus two wells in the Twin Mounds Fruitland Coal. There are no such pools for Fruitland Coal. Removing these 10 wells, the Fruitland Coal average reduces from 64 to 58 mcf/d. Revising the allocation factors, the 58 mcf/d for the Fruitland Coal represents 41% of the total (down from 77%) and the 83 mcf/d for The Fruitland Sand-Pictured Cliffs represents 59% of the total (up from 23%).
- ⑥ - WF Federal 25 No. 2 (API No. 30-045-30713) - Administrative Order DHC-1209AZ issued 11/16/04 initially allocated 49% to the Pictured Cliffs and 51% to the Fruitland Coal and starting 11/04, changed to 41.6% to the Pictured Cliffs and 58.4% to the Fruitland Coal.
- ⑦ - Aztec 35 No. 5 (API No. 30-045-23870) - Plugged & Abandoned 9/85.
- ⑧ - Aztec No. 4 (API No. 30-045-23869) - Produced from Pictured Cliffs perfs 1113'-1123' from 11/80 thru 1/99 with no initial stimulation. On 1/24/99 the Pictured Cliffs was frac'd with 70Q foam & 38,960# sand. Production increased from an average of 852 mcf/mo to ±12,200 mcf/month.



dugan production corp.

July 12, 2006

Interest Owners (address attached)
Dugan Production Corp.'s
Proposed Jacobs Com No. 90S
SE1/4 Section 25, T-30N, R-14W
San Juan County, New Mexico

Dear Interest Owners,

According to our records, you have an interest ownership (working, royalty and/or overriding royalty) in the subject well and as such we are writing to advise that we are preparing applications to the New Mexico Oil Conservation Division (NMOCD) and the Bureau of Land Management (BLM) to commingle production from the Basin Fruitland Coal and the Harper Hill Fruitland Sand-Pictured Cliffs gas pools within the wellbore of the proposed Jacobs Com No. 90S. This well will be spudded on July 12th and 5½" casing will be cemented at ±1340'. We are planning to complete the Jacobs Com No. 90S in the Fruitland Coal, Fruitland Sand and Pictured Cliffs intervals. It is a common practice to complete these three intervals together since they are fairly close to each other, the fluids (gas and water) in each interval are compatible and each pool is anticipated to produce water that is more efficiently pumped as a commingled stream as opposed to installing dual sets of production equipment. We are proposing that the commingled production from all intervals be allocated 57% to the Basin Fruitland Coal gas pool (which will have a 320 acre spacing unit, consisting of the NW/4 of Section 25 plus the NE/4 of adjacent Section 26) and 43% to the Harper Hill Fruitland Sand-Pictured Cliffs gas pool (which will have a 160 acre NW/4 spacing unit). These allocation factors represent an average of the production from 40 wells (15 Fruitland Coal wells, 20 Fruitland Sand-Pictured Cliffs wells and 5 wells that are similarly downhole commingled) in the immediate vicinity of the Jacobs Com No. 90S.

We believe the proposed allocation factors will provide a fair and equitable split of the commingled production between the Basin Fruitland Coal and the Harper Hill Fruitland Sand-Pictured Cliffs gas pools and are consistent with allocation factors currently approved for other similarly commingled wells in this area. Since production operations will be more efficient with the two pools commingled downhole, it will be possible to recover a larger portion of the natural gas reserves from both pools.

Should you have questions, need additional information or desire to receive a copy of our applications, please let me know. I can be reached at the letterhead address and phone. Should you have an objection or concern as to the proposed downhole commingling, please let me know or you can contact the NMOCD in Aztec directly by calling 505-334-6178 and speaking to either Mr. Steve Hayden or Mr. Charlie Perrin. I would appreciate also being advised of your objection. Any objection you have should be given within 20 days from the date of this letter.

Sincerely,

John D. Roe
Engineering Manager

JDR/tmf

enclosure

INTEREST OWNERS
DUGAN PRODUCTION CORP.'S
PROPOSED JACOBS COM NO. 90S
SE/W SECTION 25, T-30N, R-14W
SAN JUAN COUNTY, NEW MEXICO
PROPOSED COMPLETION & SPACING UNIT
HARPER HILL FRUITLAND SAND-PICTURED CLIFFS GAS POOL – 160.0 ACRES – NW/4 SECTION 25
BASIN FRUITLAND COAL GAS POOL – 320.0 ACRES – NW/4 SECTION 25 PLUS NE/4 SECTION 26

<u>INTEREST OWNER</u>	<u>Harper Hill Fruitland Sand-Pictured Cliffs</u>		<u>Basin Fruitland Coal</u>	
	<u>Gross</u>	<u>Net</u>	<u>Gross</u>	<u>Net</u>
<u>Working Interest</u>				
Dugan Production Corp.	100.000000%	83.750000%	87.500000%	73.937500%
Jim L. & Mary Lou Jacobs Living Trust UTA 11/6/97 3505 Crescent Ave. Farmington, NM 87401	-0-	-0-	12.500000%	10.687500%
<u>Royalty</u>				
USA-Bureau of Land Mgmt 1235 La Plata Highway Farmington, NM 87401	-0-	12.500000%	-0-	12.500000%
<u>Overriding Royalty Interest</u>				
Forrest Jacobs 1000 SW Santa Fe Lake Road Towanda, KS 67144-9213	-0-	-0-	-0-	1.000000%
F. H. & Louise G. Carpenter P. O. Box 608 Sourlake, TX 77659	-0-	3.750000%	-0-	1.875000%
TOTAL WELL	100.000000%	100.000000%	100.000000%	100.000000%