

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)

1140' FSL & 1980' FWL (SE/4 SW/4)
Unit N, Sec. 24, T30N, R14W

5. Lease Designation and Serial No.

SF-081231-B

6. If Indian, Allotted or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

Pan American #3

9. API Well No.

30 045 33697

10. Field and Pool, or Exploratory Area

Basin FR Coal & Harper Hill FR 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 <u>Application to downhole commingle</u>	☐ 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 Pan American No. 3. The spacing units for both pools (W/2 for Fruitland Coal and SW/4 for Fruitland Sand-Pictured Cliffs) encompass only one federal lease (SF-081231-B) and all royalty interest is federal. Specifics for downhole commingling are presented in the attached application (NMOCD Form C-103).

DHC 2341 A2

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

Signed John D. Roe Title Engineering Manager Date 7/7/2006

(This space for Federal or State office use)

Approved by Joe Hewitt Title Geologist 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

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
1220 South St. Francis Dr.
Santa Fe, NM 87505

WELL API NO.
30-045-33504

5. Indicate Type of Lease - *FEDERAL*
STATE ☐ FEE ☐

6. State Oil & Gas Lease No.
Federal Lease SF-081231-B

7. Lease Name or Unit Agreement Name

Pan American

8. Well Number
3

9. OGRID Number
006515

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

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

P. O. Box 420, Farmington, NM 87499-0420

(505)325-1821

4. Well Location

Unit Letter N : 1140 feet from the South line and 1980 feet from the West line

Section 24 Township 30N Range 14W NMPM San Juan County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5649' 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 ☐ PLUG AND ABANDON ☐

TEMPORARILY ABANDON ☐ CHANGE PLANS ☐

PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐

OTHER: Downhole commingling ☒

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. This well was spudded on 6-29-06 and 5-1/2" casing will be cemented at $\pm 1540'$. 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 @ approximately 1210'-1215' & 1350'-1362'. Harper Hill Fruitland Sand-PC @ approximately 1227'-1231', 1314'-1320' & 1364'-69'.

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 20 FR Coal wells, 25 PC wells (5 of which are downhole commingled), were evaluated.

Proposed Allocation	Fruitland Coal	Fruitland Sand/Pictured Cliffs
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 ownership (working, royalty and overriding) is identical for both zones. Dugan Production holds 100% of the working interest and all royalty is Federal (Lease No. SF-081231-B).

7. A copy of this sundry is being sent to the Bureau of Land Management.

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 7, 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											
DPC	Humble Kirtland Com #90	B-13-30N-14W	41		748	1,010	1,246	1,888 (5)		413	117	181 (10)	501 (7)	
DPC	Dinero #1	H-13-30N-14W	34 ④							514	487	442		
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		10,363	11,616 (6)				7,655	14,329	7,383	4,789 (6)	
DPC	Molly Pitcher #90	G-14-30N-14W	40											
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 ⑦	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 ⑥	10,182	5,954	5,840 (8)			3,041	1,778	1738 (6)		
POGO	Morton #2	I-23-30N-14W	32	77/23 ⑤	12,708	8,635	6,049 (6)			3,786	2,579	1807 (6)		
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	58/41 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)						
LOC	Aztec #4	N-35-30N-14W	263 ⑧							1,954	1,522	1,306	1,502	1,465*
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 Dwhights/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.