Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED

Budget Bureau No. 1004-0135 Expires: March 31,1993

5. Lease Designation and Serial No.

not use this form for proposals to drill or to deeper	OWNAETHS	25 P	M 12	47
not use this form for proposals to drill or to deeper	or reentry to	a differen	t reserv	oir.

SF 078110 Do 6. If Indian, Allotted or Tribe Name Use "APPLICATION FOR PERMIT -" for such proposats CEIVER SUBMIT IN TRIPLICATE 7. If Unit or CA, Agreement Designation 1. Type of Well Gas Well Well 2. Name of Operator 8. Well Name and No. Federal I #101 Dugan Production Corp. API Well No. 3. Address and Telephone No. 3D 045 31785 (505) 325 - 1821 P.O. Box 420, Farmington, NM 87499 n of Well (Footage, Sec., T., R., M., or Survey Description) . Field and Pool, or Exploratory Area Harper Hill Fruitland Sand PC/ Basin Fruitland Coal 660'FSL & 2085' FWL (SE/4 SW/4) anit N, Sec. 1, T29N, R14W, NMPM 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 Recompletion **New Construction** Plugging Back Subsequent Report Non-Routine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice **Altering Casing** Conversion to Injection Other Application to downhole Dispose Water commingle (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 proposes to downhole commingle production from the Harper Hill Fruitland Sand-Pictured Cliffs and the Basin Fruitland Coal gas pools upon completing the Federal I No. 101. The spacing units for both pools (S/2 for Fruitland Coal and SW/4 for Fruitland Sand/Pictured Cliffs) encompass only one federal lease (SF-078110) and all royalty interest is federal. Specifics for downhole commingling are presented in the attached application (NMOCD Form C-103).

1) HC 1947 AZ

		0.4		
14. I hereby certify that the	ne foregoing is true and correct			
Signed	John Roe Title	Engineering Manager	Date	07/22/2005
This space for Federal or S Approved by Conditions of approval,	An lovals Title	Petr. Eng	Date	8/10/05

Submit 3 Copies To Appropriate District Office	State of New Mex	tico	Form C-	103
District I	Energy, Minerals and Natura	al Resources	March 4,	2004
1625 N. French Dr., Hobbs, NM 88240			WELL API NO.	ľ
District II 1301 W. Grand Ave., Artesia, NM 88210	OIL CONSERVATION		30-045-31785	
District III	1220 South St. France	cis Dr.	5. Indicate Type of Lease - Federal STATE FEE	
1000 Rio Brazos Rd., Aztec, NM 87410 District IV	Santa Fe, NM 875	505	6. State Oil & Gas Lease No.	
1220 S. St. Francis Dr., Santa Fe, NM	,	ľ	Federal Lease SF-078110	-
87505				
SUNDRY NOTIC (DO NOT USE THIS FORM FOR PROPOS	CES AND REPORTS ON WELLS		7. Lease Name or Unit Agreement Nam	ne
DIFFERENT RESERVOIR. USE "APPLIC			Federal I	
PROPOSALS.)		<u></u>	8. Well Number	
1. Type of Well:	Other		101	ł
Oil Well Gas Well	Other			
2. Name of Operator		4	9. OGRID Number	İ
Dugan Production Corp.			006515 10. Pool name or Wildcat	
3. Address of Operator P. O. Box 420, Farmington, NM 87	//00-0/20 (505)3	1	10. Pool name or Wildcat Basin FR Coal & Harper Hill FR Sand	DC
	499-0420 (303)32	23-1021	Basin FR Coal & Harper Hill FR Sand	-
4. Well Location	660 feet from the South 1	line and 2085	feet from the West line	1
Section 1	Township 29N Range			}
	11. Elevation (Show whether DR,			
	5525' GL			
Pit or Below-grade Tank Application (For	pit or below-grade tank closures, a form (C-144 must be attached)		
Pit Location: ULSectTwp	RngPit typeDep	pth to Groundwater	Distance from nearest fresh water well	
Distance from nearest surface water	Below-grade Tank Location UL	SectTwp_	Rng;	
feet from theline and	feet from the line			l
		and an Other De	4.	
12. Check Appropriate Box to	indicate Nature of Notice, Re	eport or Other Da	ua	
NOTICE OF IN	TENTION TO:	SUBS	EQUENT REPORT OF:	
PERFORM REMEDIAL WORK	PLUG AND ABANDON	REMEDIAL WORK	☐ ALTERING CASING	
TEMPORARILY ABANDON	CHANGE PLANS	COMMENCE DRIL	.ING OPNS.□ PLUG AND	
			ABANDONMENT	
PULL OR ALTER CASING	MULTIPLE COMPLETION	CASING TEST AND		
	COMPLETION	OLIVILIA I JOB		
OTHER: Downhole commingle		OTHER:		
13. Describe proposed or complete	d operations. (Clearly state all pertinent	t details, and give perti	nent dates, including estimated date of starti	ng
			of proposed completion or recompletion. perforated 1061'-70, 1092'-96', 1157'-64' &	11721
			acture stimulated on 6-30-05 using 77,663 g	
			clean up stimulation fluids and then produc	
1&2. NMOCD Order R-11363 estab			and Sand-PC (78160) as pre-approved pools	
downhole commingling.		C. H		
			Hill Fruitland Sand-PC 1074'-79'; 1184'-90'. pols in a 16 section area adjacent or close to	41
	No. 1). A total of 14 FR Coal wells, 27 F			ine
Proposed Allocation	Fruitland Coal F	ruitland Sand/Pictured	Cliffs	
	Gas - 53%	47%	-	
	Vater - 53%	47%		
			ingling is necessary to economically & effic	
to be produced using only one	n this well is located within the city lim	its of Farmington and		
maximized as a result of this do	n, this well is located within the city lim set of artificial lift equipment. The value	its of Farmington and e of production from e	the downnoie comminging will allow both ither pool, will not be reduced, but will be	
	set of artificial lift equipment. The value ownhole commingling.	e of production from e	ther pool, will not be reduced, but will be	zones
	set of artificial lift equipment. The value ownhole commingling. ty and overriding) is identical for both z	e of production from e	ither pool, will not be reduced, but will be on holds 100% of the working interest and a	zones
royalty is Federal (Lease No. S	set of artificial lift equipment. The value ownhole commingling. ty and overriding) is identical for both z F-078110).	e of production from e	ther pool, will not be reduced, but will be	zones
royalty is Federal (Lease No. S A copy of this sundry is being s	set of artificial lift equipment. The value ownhole commingling. ty and overriding) is identical for both z F-078110). sent to the Bureau of Land Management	e of production from e	ither pool, will not be reduced, but will be on holds 100% of the working interest and a	zones
royalty is Federal (Lease No. S 7. A copy of this sundry is being s I hereby certify that the information a	set of artificial lift equipment. The value ownhole commingling. ty and overriding) is identical for both z F-078110). Sent to the Bureau of Land Management above is true and complete to the best	e of production from e cones. Dugan Producti	on holds 100% of the working interest and a	zones
royalty is Federal (Lease No. S 7. A copy of this sundry is being s I hereby certify that the information a grade tank has been/will be constructed or of	set of artificial lift equipment. The value ownhole commingling. ty and overriding) is identical for both z F-078110). sent to the Bureau of Land Management above is true and complete to the bestlosed according to NMOCD guidelines.	e of production from e cones. Dugan Producti st of my knowledge , a general permit ongineering Manager	ither pool, will not be reduced, but will be on holds 100% of the working interest and a and belief. I further certify that any pit or be an (attached) alternative OCD-approved plan	zones
royalty is Federal (Lease No. S 7. A copy of this sundry is being s I hereby certify that the information a grade tank has been/will be constructed or e SIGNATURE Type or print name John D. Roe	set of artificial lift equipment. The value ownhole commingling. ty and overriding) is identical for both z F-078110). Sent to the Bureau of Land Management above is true and complete to the bestlosed according to NMOCD guidelines.	e of production from e cones. Dugan Producti st of my knowledge , a general permit ongineering Manager	ither pool, will not be reduced, but will be on holds 100% of the working interest and a and belief. I further certify that any pit or be an (attached) alternative OCD-approved plan	zones
royalty is Federal (Lease No. S 7. A copy of this sundry is being s I hereby certify that the information a grade tank has been/will be constructed or of SIGNATURE Type or print name John D. Roe (This space for State use)	set of artificial lift equipment. The value ownhole commingling. ty and overriding) is identical for both z F-078110). sent to the Bureau of Land Management above is true and complete to the best closed according to NMOCD guidelines Define TITLE En E-mail address: johnroe@dug	e of production from e cones. Dugan Producti st of my knowledge , a general permit ongineering Manager	ither pool, will not be reduced, but will be on holds 100% of the working interest and a and belief. I further certify that any pit or be an (attached) alternative OCD-approved plan DATE July 21, 2005	zones
royalty is Federal (Lease No. S 7. A copy of this sundry is being s I hereby certify that the information a grade tank has been/will be constructed or e SIGNATURE Type or print name John D. Roe	set of artificial lift equipment. The value ownhole commingling. ty and overriding) is identical for both z F-078110). sent to the Bureau of Land Management above is true and complete to the bestlosed according to NMOCD guidelines.	e of production from e cones. Dugan Producti st of my knowledge , a general permit ongineering Manager	ither pool, will not be reduced, but will be on holds 100% of the working interest and a and belief. I further certify that any pit or be an (attached) alternative OCD-approved plan DATE July 21, 2005	zones

Attachment No. 1 Offset Well Production Dugan's Federal I Wells No. 101, Com 102 & King Com No. 2 Sections 1, 11 & 12; T-29N; R-14W San Juan County, New Mexico

					2,262	1,921	995	724	1,009		89	N-36-30N-14W	-	DPC
								11.941 (2)	5.993		1	1-36-30N-14W	Camp David Com #18	
	0,000 (10)	_	1,000	1,001	6.064	4,420	4.800	2.924	3.913		3 4	G-36-30N-14W	- -	
	5 569 (10)	4 738	4 865	1 937							6	O-35-30N-14W	-	LADO
							6,695 (3)	6,233	2,825		27	N-35-30N-14W		LANCE
1,126	1,268	1,017	1,517	2,003							280	N-35-30N-14W		LANCE
4,146 (7)	4,522	6,602	4,793	4,584							55	I-35-30N-14W	\perp	DPC
					5,776	4,999	8,266	5,315	3,486		56	H-35-30N-14W	Tabor Com #90	DBC
862	529	434	1.044	799							126	G-35-30N-14W		
1 430	1 686	3 860	5 276	4 197							2 8	D-35-30N-14W	4	DPC
5,713	4,/3/	7/0	1,683	1,416							2 8	O-34-30N-14W	↓	LANCE
2,171 (9)	1,178	406	532	66	2,086 (9)	5,147	10,750	8,266	5,634	49/51 ®	57	N-34-30N-14W		LANCE
4,993 (8)	5,775	5,611	7,131	6,157	4,270 (8)	4,076	4,048	2189		3.00	ઝ	A-34-30N-14W		LANCE
		4,688 (3)	┼	2,761							27	K-14-29N-14W		LANCE
		9,919	!	10,079							36	I-14-29N-14W	**	LANCE
				5,426 (8)							8	H-14-29N-14W	_	LANCE
Ī	1,998 (6)			j								E-14-29N-14W		LANCE
2,668 (6)	2,850	2,752	3.5	1,929	2,668 (6)	2,850	2,752	3,517	7,929	50/50/0	2	M-13-29N-14W	**	LANCE
			4,868	3.381							24	E-13-29N-14W	4	ANCE
	1,112 (5)	1,349	1,420							_	4	A-13-29N-14W	#5	MSPC
Same let had	· 元本 中華語	A Charles Control	2,175	3,356	Commence of The Park	を という は は は は は は は は は は は は は は は は は は は	· · · · · · · · · · · · · · · · · · ·	2,326 (7)	1	74/26 @	24	A-13-29N-14W		LANCE
							4,455 (6)	4,374	2,584		30	E-11-29N-14W		DPC
4,551 (6)	6,236	4,002	5,978	7,973							2	C-11-29N-14W	\perp	DPC
_				_	501 (7)	491	413	710			\perp	B-11-29N-14W		DPC L
304 3 20 1 1 2	2.489 (6)	2.057	ΔĠ		STORY THE PARTY OF	Section of the Spinish	2.866 (3)	2.064	1.775	50/50 G		K-10-29N-14W		LANCE
		1.330 (6)		4.971							30	J-10-29N-14W		290
			2,653	3.317							24	D-10-29N-14W	1	LANCE
					1,428 (7)	1,669	2,247	3,397	5,226		55	B-10-29N-14W	4	DPC
1,002 (0)	1,210				3,837 (2)	3,668	4,615	4,701	5,341		8	L-3-29N-14W	WF Federal 3 #2	LANCE
1 900 (6)	2215	2811	5.033	8.486	0,101	,,0.0	0	9,00];;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;		55	.I-3-29N-14W	Federal I #7	200
4,703(2)	4,023	4,502	3,207	0,000	3 461 (9)	4.513	6216	5.501	6 283		57 8	H-3-29N-14W	Faderal #00	חשר ב
A 765 (0)	1000	1 383	2007	2 256	1,100 (0)	221,1	2,100	ر, این	4,000		3 8	D 2 20N 14W	WE Endom 3 #1	
1,092	972	1,017	596	1,046		773	3 436	3 436			55	J-2-29N-14W	Com #3	DPC
					4,243	5,401	6,841	8,887	4,388		22	J-2-29N-14W	Com #1	DPC
3,293	5,029	6,564	4,757	8,985							61	C-2-29N-14W	Com #4	DPC
	1,776 (8)	2,455	3,440	4,100							44	A-2-29N-14W	Com #2/2R	DPC
3,082	2,518	3,373	3,200	3,176							380	J-1-29N-14W	Federal I #5/5R	DPC
3.524	3,088	3,007	2,774	1,959							76	G-1-29N-14W	Federal I#6	DPC
3,485	4,365	4,297	4,079	5,129							413	C-1-29N-14W	Federal I #4/4R	DPC
						2,266 (5)	1,744	1,594	1,435		41	B-1-29N-14W	ŏ	DPC
4.097	4,123	4,582	3,487	3,247							353	P-18-29N-13W		ROC
									14,023 (5)		5	P-18-29N-13W		LANCE
	ų.	1477 (3)	_	1,376	中心 かられるからなる	SACTION PROPERTY.	1477 (3)	1,588	1,376	⊘ 05/05 ∴	27	Š	RPC 18 #3	LANCE
months	months	months	months	months	months	months	months	months	months	%FC/%PC	Produced		Well	Operator ®
5th 10	4# 13	3rd 12	2nd 12	1st 12	5th 12	4th 12	3rd 12	2nd 12	1st 12	DHC @	# Months	Location		
	-BO	Fruitland Sand-PC	Frui	(# C) 110.	Fruitland S	2	Fruitland Coal	<u>.</u>		10/02				
		1319	If loce than	p /# of mo	o mof/mo		Averan							
								w Mexico	County, Nev	San Juan County, New Mexico				

Attachment No. 1 Offset Well Production

Dugan's Federal I Wells No. 101, Com 102 & King Com No. 2

Sections 1, 11 & 12; T-29N; R-14W

① - DPC - Dinan Production Corp. LADD - Ladd Petroleum Corp. LANCE - Lance Oil & Gas Co ROC - Richardson Operating Co.										_	DPC Camp Dav	e				
ction Corp. L											Camp David Com #2	Well				
ADD - Ladd Petrol											O-36-30N-14W	UL-S-T-R	Location			
eum Coro	Avg. 1st 5 yrs	% of FC & PC	Average/well	# wells	Total excluding DHC wells	Ay. Ist o jis	Avg 1st 6 yrs	Average/well	# wells	Total all wells	46	Produced	# Months			
LANCE - Lan	/rs	PC	#		g DHC wells	130	3 2			ilis		%FC/%PC	DHC @	10/04		San Juan County, New Mexico
ce Oil & Ga		53.4	4,443	7.4	62,198		22.7	4,009	20	80,188		months	1st 12			Sounty, Nev
S Co. ROC	52.9	54.1	4,572	13	59,436		23.7	4,178	19	79,386		months	2nd 12 3rd 12	Ţ		w Mexico
- Richards		53.0	4,119	12	49,423	32.3	24.9	4,195	17	71,316		months		Fruitland Coal	Average Produ	
on Operatir		50.9	3,107	70	31,070		52.4	3,319	13	43,143		months	4th 12		e Production	
in Co		52.3	3,186	9	28,672		57.4	3,141	12	37,696		months	5th 12		n - mcf/mo	
	47.1	46.6	3,873	27	104,574		47.8	3,686	33	121,632	2,259	months	1st 12		uction - mcf/mo & (# of mo. If less than 12) @	
		45.9	3,881	25	97,017		46.9	3,673	31	113,876	5,159	months	2nd 12	Fru	If less than	
		47.0	3,653	23	84,013	15	45.1	3,440	28	96,316	4.023	months	3rd 12	Fruitland Sand-PC	n 12) Ø	
		49.1	2,999	20	59,981		47.6	3,011	24	72,273	3.111 (10)	months	4th 12	PC		
		47.7	2,910	15	43,650		48.6	2,971	18	53,482		months	5th 12			

- w uno unyan ntouccion coip., Land Lada neiroleum coip., Lance Lame Oil & Gas Co., ROC Richardson Operating Co.
- @ Production data from Dwights/PI and ONGARD thru October, 2004 for ROC & LANCE and thru 2/05 for DPC 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 (78160) and Twin Mounds (86620)
- Fruitland Sand-Pictured Cliffs pools, plus West Kutz Pictured Cliffs pool (79680).

Downhole commingling factors for October 2004. % of total gas from Fruitland Coal and % of total gas from Fruitland Sand/Pictured Cliffs

- @ RPC 18 Well No. 3 (API No. 30-045-30943) DHC-894AZ approved 9-10-02 authorizes downhole commingling of Basin Fruitland Coal with West Kutz Pictured Cliffs Fixed allocation factor of 50/50. Used for production 8/02 thru 10/04.
- 9 Ropco 10 Well No. 2 (API No. 30-045-30448) DHC-908AZ approved 9/23/02 authorizes downhole commingling of Basin Fruitland Coal with Harper Hill Fruitland Sand-Pictured Cliffs Fixed allocation factor of 50/50 used for production 8/02 thru 9/04.
- ® Navajo 13 Well No. 1 (API No. 30-045-30652) DHC-965AZ approved 11/02 authorizes downhole commingling of Basin Fruitland Coal with West Kutz Pictured Cliffs. Fixed proposed new fixed allocation factors of 78.3% Fruitland Coal and 21.7% Pictured Cliffs. allocation factor of 49% Fruitland Coal and 51% Pictured Cliffs proposed and fixed allocation factor of 50/50 used for production 5/03 thru 9/04. On 11/15/04, Richardson Operating
- Tribal H No. 5 (API No. 30-045-13101) Administrative Order DHC-2478 dated 10/12/99 authorized downhole commingling of Basin Fruitland Coal with West Kutz Pictured Cliffs allocation factor o 50/50 has been used for all production 5/00 thru 10/04. Allocation factors to be based upon an exponential decline of 18%/year for the PC (PC volume=PC base rate x e - v) and by subtraction for the Fruitland Coal. A fixed allocation
- @- WF Federal 34 Well No. 3 (API No. 30-045-29881) Administrative Order DHC-2699 dated 4/3/00 authorizes the downhole commingling of Basin Fruitland Coal with Harper Hill Fruitland Sand-Pictured Cliffs. Allocation factors to be based upon an exponential decline of 7%/year for the Pictured Cliffs (PC volume=PC base rate x e ") and by subtraction for the Fruitland Coal. Allocation factors for production changes monthly and annual averages are: 2000 = 44.6% Coal & 55.4% PC; 2001 = 26.2% Coal & 73.8% PC;
- 2002 = 38.1% Coal & 61.9% PC; 2003 = 40.8% Coal & 59.2% PC; 1st 9 months 2004 = 49.0% Coal & 51.0% PC.

 9 WF Federal 34 No. 2 (API No. 30-045-29882) Administrative Order DHC-2608 dated 2/1/00 authorizes the downhole commingling of Basin Fruitland Coal with Harper Hill 2003 = 81.4% Coal & 18.6% PC; 2004 = 49.0% Coal & 51.0% PC Allocation factors for production changes monthly and annual averages are: 2000 = 89.4% Coal & 10.6% PC; 2001 = 94.0% Coal & 6.0% PC; 2002 = 96.4% Coal & 3.6% PC; Fruitland Sand-Pictured Cliffs. Allocation factors to be based upon an exponential decline of 7%/year for the PC (PC volume = PC base rate x e - v) and by subtraction for the coal