· Form 3160-3 (August 1999)

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

FORM APPROVED OMD No. 1664 0136

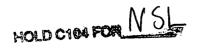
Lease			
	Nm_	10875	~
	1400	1007	,

	/ 년	1 1 -7 Ct 1 0c		
APPLICATION FOR PERMIT	TO DRILL OR RE	ENTER (25	6. If Indian, Allottee or Tribe	Name
la. Type of Work: ⊠ DRILL ☐ REENTER	$\mathcal{G}_{i,j}$	remington, NM	7. If Unit or CA Agreement,	Name and No.
lb. Type of Well: ☐ Oil Well ☑ Gas Well ☐ Oth	ner 🛭 🔀 Sing	gle Zone	8. Lease Name and Well No. Sly Slav Com	#90 € S
Name of Operator Contact: DUGAN PRODUCTION CORP.	KURT FAGRELIUS E-Mail: kfagrelius@duga	nproduction.com	9. API Well No. 30045 3	¥ 958
3a. Address 709 EAST MURRAY DRIVE FARMINGTON, NM 87401	3b. Phone No. (included Ph: 505.325.182) Fx: 505.327.4613	1	10. Field and Pool, or Explor Basin Fruitla	atory nd Coal
4. Location of Well (Report location clearly and in accorda	nce with any State requi	irements.*)	11. Sec., T., R., M., or Blk. a	nd Survey or Area
At surface SESE 866' FSL 237' At proposed prod. zone Same As Above	Fy/L, 36.4833	N Lat, 108.2135 W Lon	ho Sec. 13, T30N	, R15W NMP
14. Distance in miles and direction from nearest town or post Approx. 7-Miles North of Kir	office* tland, New M	exico 89107	12. County or Parish SAN JUAN	13. State NM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 237	16. No. of Acres in L	case, NOV 2002	17. Spacing Unit dedicated to	this well
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 800 '	19. Proposed Depth		720, BLM/BIA Bond No. on t	iie
21. Elevations (Show whether DF, KB, RT, GL, etc. 5529 GL	22. Approximate date ASAP	work will start	723. Estimated duration 5-DAYS	
	24. Att	achments 272		
The following, completed in accordance with the requirements o	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 Off 		Item 20 above). 5. Operator certification	ormation and/or plans as may be	
25. Signature Kurt Fagrolius	Name (Printed/Typed KURT FAGREI			Date 10/06/03
Title GEOLOGIST			,	
Approved by (Signature)	Name (Printed/Typ	V David J. Mantdew	ricz NO	V - 7 2003
Title	Office			
Application approval does not warrant or certify the applicant ho operations thereon. Conditions of approval, if any, are attached.	lds legal or equitable titl	le to those rights in the subject lea	ase which would entitle the appl	icant to conduct
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, r States any false, fictitious or fraudulent statements or representat	nake it a crime for any p ions as to any matter wit	erson knowingly and willfully to thin its jurisdiction.	make to any department or age	ncy of the United

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 casing hole. The Fruitland Coal will be completed from approximately 800' - 940'. The interval will be fractured.

LO DITING COTRATIONS AUTHORIZED ARE HURJECT TO COMPLIANCE WITH ATTACHED "LENERAL 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 1625 N. French Dr., Hobbs, NM 88240 District II 1301 W. Grand Avenue, Artesia, NM 88210 District III 1000 Rio Brazos Rd., Aztec, NM 87410

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

Section Township

"Joint or Infill

District IV

UL or lot no.

12 Dedicated Acres

320 E/2

State of New Mexico Energy, Minerals & Natural Resources Department OIL CONSERVATION DIVISION 1220 South St. Francis Dr. Santa Fe, NM 87505

Revised June 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies

East/West line

Fee Lease - 3 Copies

Form C-102

County

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 Pool Code

Lot Idn

15 Order No.

Range

* Consolidation Code

3004	5-31	958	7	1629	BA	SIN FRUI	TLAND	COAL			
SLY SLAV COM						'Well Number					
70GRID No. 006515			DUGA	N PR	PRODUCTION CORP.				SElevation 5527		
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	
Р	13	30 N	15 W		866	SOUTH	237	EAST	SAN	JUAN	
	-	**************************************	11 Bot	tom Hole	Location If	Different Fron	Surface		· · · ·	·····	

Feet from the

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

North/South line

Feet from the

16	262	9.85	/////263	.99	17 OPERATOR CERTIFICATION I hereby certify that the information contained herein is true
					and complete to the best of my knowledge and belief.
17	16/18?	OTTOR	DUGAN FEE-10034		Signature Kurt Fagrelis
684	fish NC	V 2003		7/////	Printed Name Kurt Fagrelius
2	(N)	19			Tide and E-mail Address
					Geologist Date
				DUGAN NM-16765	Oct. 3, 2003
		3 20 20 20 20 20 20 20 20 20 20 20 20 20	DÚC NM-1	GAN 0875	18SURVEYOR CERTIFICATION
					I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under
93				///////////////////////////////////////	my supervision, and that the same is true and correct to the
29.8				(/////65)	best of my belief.
262					Date of Survey
	007		DUGAN' FEE-10057	SLY SLAV # 90-S 237'	Signature and Seal of Professional Surveyor. Certificate Number SONA
	263	#.JU	/////2,630	1.71///////////////////////////////////	15512

EXHIBIT B OPERATIONS PLAN

Sly Slav Com #90-S

APPROXIMATE FORMATION TOPS:

Kirtland	Surface'	Pictured Cliffs	950 ′
Fruitland	635 <i>'</i>	Total Depth	1080′

Catch samples every 10 feet from 750 feet to total depth.

LOGGING PROGRAM:

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

CASING PROGRAM:

Hole	Casing		Setting	Grade and
Size	Size	Wt./ft.	<u>Depth</u>	Condition
9-7/8"	7"	20#	250′	J-55
6-1/4"	4-1/2"	10.5#	1080′	J-55

Plan to drill a 9-7/8" hole and set 250' 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:

Surface: Cement to surface with 100 cf Class B + 2% CaCl₂.

Circulate to surface.

Production Stage-Cement with 120 cf 2%Lodense with

/# celloflake/sx followed by 60 cf Class "B" with

/# celloflake/sx.

Total cement slurry for production stage is 180 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 Prod.Corp. Office & Radio Dispatch: 325-1821

Mark Brown	327-3632 320-8247	
Kurt Fagrelius	325-4327 320-8248	
John Alexander	325-6927 320-1935	