



Date: _	June	7th	,	19	82
Operati Well N		1815-	-2		Stolebystackogeneens allywyd yn alegy ysgangon a

API Well No. 47 085 State County

Permit

5734

STATE OF WEST VIRGINIA DEPARTMENT OF MINES. OIL AND GAS DIVISION

OIL AND GAS WELL PERMIT APPLICATION

		Gas						
	(If "Gas", Pro	duction	_/ Undergroun	d storage	/ D	eep	_/ Shallow	/)
OCATION:	Elevation:	9281	Watershed:	Nutter	Fork			
	District:G	rant	County:	Ritchie)uadrangle:	Schultz	71/21
ELL OPERAT	OR Petroleum	Development (Corporation	DESIGNATED	AGENT	John R	. Mitchell	
Address	PO Box 26, 10	3 East Main S	Street	Address	PO Box	26, 103	East Main	Street
	Bridgeport, W			_			26330	
IL & GAS	was Criffin D	modustion Co.	MID 02017	COAL OPEN	4 TOD			
	NER Griffin P							
Address	320 South Bo			Address				.0
	1800	noma 74103		-				
Acreage	T000	·	december recommendation of the second se	COAL OWNE	R(S) WIT	H DECLAR	ATION ON R	ECORD:
URFACE OWN	WER Westvaco		Walter from the management of	Name	none			
Address	c <u>/o W. V. Woo</u>	dlands. Mer.		Address		47/		
J	Parkersburg, 1	<u>WV 26101</u>						1000
Acreage	52.7			Name			_	1207
	IF MADE) TO:						OIL AND GAS WYDEPARTME	3 DIVISION OF MINI
Address								
		•	-	COAL LESSE	E WITH	DECLARAT	TION ON REC	ORD:
IL & GAS IN	SPECTOR TO BE	NOTIFIED		Name				
Name Deo								
	Rt 1, Box 5	**************************************					· · · · · · · · · · · · · · · · · · ·	**************************************
		V 25274		•				
	- SHITTE (100 - ME							
· · · · · · · · · · · · · · · · · · ·			MP All AP ARE WILL			hash a rahe		
	ed well operator is e			•				
				•				
ther contract	ed well operator is e	April 29th .	, 19 <u>82</u> , to t	•				
ther contract_2	ed well operator is e	April 29th .	, 19 <u>82</u> , to t	he undersigned	well opera	ator from N	Magnum Oil	Corpor
ther contract F said deed, le	ed well operator is e dated/ dated/ ease, or other continuous 10th, 19	April 29th ract has been reco	, 19 <u>82</u> , to to orded:)	the undersigned	well opera	ator from N	Magnum Oil	Corpor
F said deed, le ecorded on Ma	ed well operator is e / dated ease, or other contact 10th, 19 Book	April 29th ract has been reco 82 , in the off 143 at pag	orded:) fice of the Clerk o	he undersigned f the County Co permit is reque	well opera	of Rito	Magnum Oil	Corpor
F said deed, le ecorded on Ma	ed well operator is e / dated ease, or other continue 10th, 19 Book VORK: Drill_X	April 29th ract has been reco 82 , in the off 143 at pag / Drill deeper	orded:) fice of the Clerk of th	the undersigned f the County Co permit is reque	well operation of the sted as followers acture or s	of Rito	Magnum Oil	Corpor
F said deed, le ecorded on Ma	ed well operator is extended to the dated to	April 29th ract has been rece 82 , in the off 143 at pag / Drill deeper _ d formation	orded:) fice of the Clerk of the/ Redril	the undersigned f the County Co permit is reque l/ Fra new formation_	well operation of sted as followed acture or s	of <u>Rite</u>	Magnum Oil chie c	Corpor
F said deed, le ecorded on Ma	ed well operator is extended to the dated to	April 29th ract has been reco 82 , in the off 143 at pag / Drill deeper	orded:) fice of the Clerk of the/ Redril	the undersigned f the County Co permit is reque l/ Fra new formation_	well operation of sted as followed acture or s	of <u>Rite</u>	Magnum Oil chie c	Corpor
F said deed, le	ed well operator is example. A dated	April 29th ract has been rece 82 , in the off 143 at pag / Drill deeper _ d formation iical change in we	orded:) fice of the Clerk of th	the undersigned f the County Co permit is reque 1/ Fra new formation_	well opera	of <u>Rite</u>	Magnum Oil chie c	Corpor
ther contract_2 F said deed, lecorded on _Ma a., in PROPOSED V	ed well operator is extended and dated and dated are asse, or other contract 10th and 19 Book Plug off old Other phys planned are	April 29th ract has been rece 82 , in the off 143 at pag / Drill deeper _ d formation sical change in we as shown on the very	orded:) fice of the Clerk of th	the undersigned f the County Co permit is reque / Fra new formation e reverse side	ommission sted as followers or secture or secture.	of Rite	Magnum Oil	Corpor
F said deed, le Recorded on Marian PROPOSED W	ed well operator is extended and dated and dat	April 29th ract has been rece 82 , in the off 143 at pag / Drill deeper _ d formation _ dical change in we as shown on the wood owner(s), and co	orded:) fice of the Clerk of th	f the County Copermit is reque / Framew formation e reverse side	ommission sted as fol acture or s	of Ritcollows:	Magnum Oil Chie Co	Corpor
F said deed, le ecorded on Marian PROPOSED W	ed well operator is extended and dated and dated are asse, or other contract 10th and 19 Book Plug off old Other phys planned are	April 29th ract has been rece 82 , in the off 143 at pag / Drill deeper _ d formation _ dical change in we as shown on the wood owner(s), and co	orded:) fice of the Clerk of th	f the County Copermit is reque / Framew formation e reverse side	ommission sted as fol acture or s	of Ritcollows:	Magnum Oil Chie Co	Corpor

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO: WEST VIRGINIA OIL AND GAS CONSERVATION COMMIS-SION 1615 WASHINGTON STREET EAST CHARLESTON, WV 25311 TELEPHONE: (304) 348-3092

Area Manager of Operations

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY: ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CO	ONTRAC	TOR (IF	KNOW	N)						
				Ad	dress					
GEOLOGICAL	. TARGI	ET FOR	MATION	, <u> </u>	larce	ellus Shale	<u> </u>			
Estimate	d depth	of comp	leted we	ll,	59	900 fe	et Rotar	y <u>x</u> / Cat	le tools/	
Approxi	nate wat	er strata	depths:	Fres	h,	388 feet	; salt, <u>5</u>	00 feet.		
Approxi	nate coa	l seam d	epths: _	N/A		Is coal	being mined	in the area? Yes	/ No <u>xx</u> /	
CASING AND	TUBIN	G PROG	RAM							
										M ogramowska
CASING OR TUBING TYPE	SP6	CIFICAT	ONS Weight	New	Used		INTERVALS	CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS	
Conductor										
Fresh Water	5/8"					420'	420"	cement to sur	Kinds	
Coal									Sizes	
intermediate -	5/8"					3500'	25001			-
Production	1 3,0					open hole	3500'	cement to sur	Depths set	
Tubing						Ppen note	CO ID		Deptils Set	AND STATE OF
Liners									_	
The state of the s									Perforations:	
		 							Top Bottom	
				1	<u> </u>					
prescr ''Recl previo Code	ribed by amation ously paid \$22-4-8a	Regulati Plan", a I on the s a from th	on 12, o pplicable ame well se owner	to the formal of any	eu the e recla ee requ y wate	ereof the other amation require uired by Code § er well or dwel	security allo d by Code \$2 22-4-12a, and ling within 20	elation 11, (ii) a bond in wed by Code & 22-4-222-4-12b and Regulation (v) if applicable, the color feet of the proposed well where fracturing	e, (iii) Form IV-9, on 23, (iv) unless onsent required by i well.	
be pa	rt of the v	work for	which a p	ermit i	s soug	tht and is noted	as such on the	Form IV-2 filed in cor	or stimulating is to inection therewith.	
THIS PERMIT	MUST B	E POSTE	D AT TH	ie Wel	L SITI	eo Mai				
ALL PROVISI	ions esi	NG IN	ACCORD	ANCE	WITH	CHAPTER 22	7			
						N IS HEREBY				
	-					NIT SHALL EXP	RE			
IF OPERATIO	NS HAL	ENOT	COMME	NCED	ВҮ) — / — ())	o o			
	in bistoria de la constancia de la const		on manufacturity of the state o	<u> </u>	and the second second	ดงกับของ - เกราะที่เมตรายวง จำนายการการกระบารการกระบารการกระบารการกระบารการกระบารการกระบารการการการการการการก				
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The	-11			, 1 - 4 -		.				
decla	ollowing tration u	waiver m nder Cod	e 22-4	mplete 20, if	the p	ne coal operator ermit is to be	and by any coa issued within	al owner or coal lessee fifteen (15) days of r	who has recorded a eceipt thereof.	
						WAIN	ER			
The undersign	ed has n	o obiectio	on to the	work	מנטמים		at this location	on, the well location ha	vell location has examined the s been added to the mine material operator has complied with	
							************************************	,		
Date:			, 19				By	·		
					•••		Its	·		-

IV-35 (Rev 8-81)

RECEIVED of West Birginia

JAN1 7 1983

Bepartment of Mines

OIL AND GAS DIVISION Gil und Gas Bivision WYDEPARTMENT OF MINES

Date	October	13,	1982	
Opera Well	tor's No.	181	5-2	
Farm	Griffin	Pro	ducin	g Co.
API N	lo.47 -	085	400	5734

WELL OPERATOR'S REPORT

of

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WEIL TYPE: Oil \times / Gas / Liquid Injection (If "Gas," Production / Underground	n/Wast und Storag	e Disposal pe/ Deep	/ / Sha	llow	_/)
LOCATION: Elevation: 928' Watershed N					
District: Grant County Rit	chie	Quadrangle	Schultz	7월"	
COMPANY PETROLEUM DEVELOPMENT CORPORATION					***********
ADDRESS PO Box 26, Bridgeport, WV 26330	I Consider	Used in	Left	Cement	
DESIGNATED AGENT John R. Mitchell	Caşing Tubing	Drilling		fill to	- g
ADDRESS PO Box 26, Bridgeport, WV 26330	Size				
SURFACE OWNER Westvaco	20-16	30°			
ADDRESS c/o W.V. Woodlands, Mgr, Parkersburg,WV	Cond.	3/4 356'	356'	200 s	ks
MINERAL RIGHTS OWNER Griffin Producing Company	9 5/8				
ADDRESS 320 South Boston, Suite #1504, Tulsa, OK		1927'	1927'	470 s	sks
OIL AND GAS INSPECTOR FOR THIS WORK Samuel	7				·
N. Hersman ADDRESS PO Box 66, Smithville, WV	5 1/2				
PERMIT ISSUED June 23, 1982	4 1/2	56861	56861	655 s	sks
DRILLING COMMENCED 8/20/82	3				
DRILLING COMPLETED 8/28/82	2				
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR	Liners				
REWORKING. VERBAL PERMISSION OBTAINED ON	useđ				
GEOLOGICAL TARGET FORMATION Marcellus Si	hale	Dep	th 5900		feet
Depth of completed well 5714 feet	Rotary_x	/ Cabl	e Tools_		aledan marrier de Maria
Water strata depth: Fresh 174 feet;	Salt	feet	· •		
Coal seam depths: 223, 857, 1212				area?	110
OPEN FLOW DATA					
Producing formation Devonian Shale	Pa	y zone dep	th 3070-5	667	feet
Gas: Initial open flow 400 Mcf/d	Oil: In	itial oper	flow	<u>Q_B</u>	bl/d
Final open flow 650 Mcf/d	Fi	nal open f	:low(1 (<u>)</u> B	bl/d
Time of open flow between ini-				,	
Static rock pressure 1100 psig(surfa	ce measure	ment) afte	<u> </u>	urs shu	rt in
(If applicable due to multiple completion	n)				
Second producing formation				. 9	feet
Gas: Initial open flow Mcf/d					
Final open flow Mcf/d					
Time of open flow between ini			•		
Static rock pressurepsig(surface	e measure	ment) after	<u> </u>	urs shu	rt in 1922
		(Cont	inue on r		

PORM IV-35 (REVERSE)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

N₂ & CO₂ 29 perfs - 5260'-5418' Physical Research 8 perfs - 5498'-5548' 2017 ton CO₂ & 580 MCF N₂ 9 perfs - 5633'-5667' mancellus 12 bb1 acid

 $m_2 \& \infty_2$ 47 perfs - 4041'-5168' 18 ton CO₂ & 530 MCF N₂

Huren - Phinestra 500 gals. acid

N₂ & CO₂ 40 perfs - 3070'-3956' 18 ton CO₂ & 570 MCF N₂

Up Dev -> Huron

WELL LOG

,			REMARKS				
ORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	Including indication of all fresh and salt water, coal, oil and gar				
KB-GL		10					
sand, shale, red rock	10	10	1.00				
big lime	W	1661	½" stream H ₂ O @ 174'				
	1661	1728	•				
big injun	1728	1840					
sand, shale	1840	2048	• • • • • • • • • • • • • • • • • • • •				
weir	2048	2105	oil @ 2053'				
sand, shale	2105	2220					
sunbury shale	2220	2230					
berea	2230	2244					
sand, shale	2244	2340					
gantz	2340	2361					
sand, shale	2361	2608					
gordon stray	2608	2627					
sand, shale	2627	·2640	,				
gordon	2640	2656					
sand, shale	2656	3218					
huron	3218	4350	gas show @ 3434' 2/10 thru 1"				
java	4350	4712	•				
angola	4712	5029	gas show @ 4904' 2/10 thru 1"				
rhinestreet	5029	5456	3				
sonyea	5456	5559					
genesee	5559	5628					
marcellus	5628	5698					
onondaga	5698	5714 TD	gas show @ TD 2/10 thru 1"				
		A transport and security of the second security of the second sec	9				
N. C.							
			Land 1 18				
			· and the				
			5456 552 444 10				
	8	X 2					

(Attach separate sheets as necessary)

PETROLEUM DEVELOPMENT CORPORATION October 13, 1982

Note: Regulation 2.02(i) provides as follows:

"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including enal, encountered in the drilling of a well."