	F WEST VIRGINIA GAS - DEPARTMENT OF MINES	Date: 5-27-8/ Farm N/Ag(c # /.
OIL AND GAS WELL	L PERMIT APPLICATION	API No. <u>47 - 073 - 121</u>
VELL TYPE: 0il X / Gas X / (If "Gas", Production / Under	ground storage/ Dee	C+-+- C+- D
OCATION: Elevation: 645 Water		
District: UNION Count		
ELL OPERATOR LAUDERMAN Oil & GAS Drig.	DESIGNATED AGENT Phill	ip MORGON
Address POBOX 266	Address 50M	ne
LADON C. Ly, WUN 2615	9	
IL & GAS OYALTY OWNER DANNY Nagle	COAL OPERATOR N/A.	
Address RFD BENS PUN	Address	
Starr Rt. WVA.		
Acreage 94	COAL OWNER(S) WITH DE	ECLARATION ON RECORD:
URFACE OWNER DANNY Nagle	Name N/A	DECEMEN
Address Spine	Address	MAY 9 0 1001
Acreage 94	Name	MAY 2 9 1981
IELD SALE (IF MADE) TO:	Address	DEPT. OF MINES
ame <i>N/µ</i>)	Add CSS	
Address	COAL LESSEE WITH DECL	ARATION ON RECORD:
	Name N/A	TOME OF THE PERSON
IL AND GAS INSPECTOR TO BE NOTIFIED:	Address	Militari da Padha Taranja 2001
ame Millip TRACY R+23 Alma, WIL	JA State to drive an	autorio di enned enveloppe fla
The undersigned well operator is entitled	to operate for oil or g	as purposes at the above
ocation under a deed/ lease X / other	contract/ dated 8	/20 , 19 <u>7/</u> , to the
dersigned well operator from Downld R. f said deed, lease or other contract has bee	Barnhart & Mildred m recorded:)	Barnhart
ecorded on $10/22$, 19 $7/$, in the office	of the Clerk of the Cou	nty Commission of Plensa
ounty, West Virginia, in St Marys Win Book 13	<u>/</u> , at page <u>≤//</u> . A perm	it is requested as follow
PROPOSED WORK: Drill V Drill Deeper_	/ Redrill/ Fract	ure or stimulate χ /
Plug off old formation	_/ Perforate new forma	tion <u>X</u> /
Other physical change in	well (specify)	
planned as shown on the	work order on the rever	se side hereof
The above named coal operator, coal owner (jection they wish to make or are required to rtment of Mines within fifteen (15) days aft Copies of this Permit Application and the registered mail or delivered by hand to the ssees on or before the day of the maililg or nt of Mines at Charleston, West Virginia. EASE SUBMIT COPIES OF ALL TOPHYSICAL LOGS DIRECTLY TO:	s), and coal lessee are make by Code § 22-4-3 muster the receipt of this Appendix above named coal operated delivery of this Permit	hereby notified that any st be filed with the De- pplication by Department, ation plan have been mail or, coal owner(s), and co Application to the Department
FICE OF OIL AND GAS	Walk On	aratar

PROPOSED WORK ORDER

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

LLING CON	TRACTO	R (IF	KNOMI)			Overthr	. 2	- 2		
				Addres	s <u>C</u>	lorks be	19, W	UA	_	
			. 13		-			+2.00g	_	
LOGICAL T									_	
Estimat	ed dep	th of	complet	ed wel	1, _	4900	feet	Re	otary X/	Cable tools/
						sh, 90		44		
Approx1	mate c	oal se	am dept	hs:	N/A	. Is	coal bein	ng mine	ed in the a	rea? Yes/ No/
ING AND T	UBING	PROGRA	И							
ING OR	1	SPEC	IFICATI	ONS		FOOTAGE	INTERVALS	. 10	CEMENT FILL	-UP PACKERS
NG TYPE	Size	Grade	Weight per ft	New	Used	For drilling	Left in	-	OR SACKS	
iuctor						to the second of			. 0	Kinds
sh water	8 %		24	V		260	for,	muc	d KON	2021
		- Action Control				1100	Kor 1	210	18V/2011	31/zes
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iuction	4/2	710	10.5	V		TO 70	40	onno	wled	Depths set
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rs						To 120	o fee	+ 1	onn	Perforations:
1 - 1						Surfac	E		and the second	Top Bottom
									No.	
Table 1			4782			· Comment of the comment	more than market		* * ** * * * **	
THIS PER	MIT MI	UST BE	POSTE	D AT 1	THE W	/ELL SITE		,		
All provi	sions be	ing in	accordo	ance wit	th Cho	pler 22,				
						approved				
operation						expire if	1			
operation	s have	nor con	menced	DY A	—					
fre		351	upe	Division						
Depu	ly Direc	ior - Oil	a Gus	DIVISION						
		-						-		
		ale y								
or	coal	Lessee	who ha	8 recor	rded d	a declaratio	n under C	ade 6	22-4-20 :	y coal owner f the permit
18	10 08	issued	1 Withi	n fift	een (15) days of		hereof		
The	under	ne 1 cnac	1 0001	000000		WAIVE				
location has	examination, the	well i	s prop location	n has t	ell lo been a	ocation. If added to the	a mine map	ap exi	sts which of undersigns	he coal under this well covers the area of the ed has no objection to complied with all
TOTALE L	-darrei	mentos (. the	HESU V	r. gru:	ia Code and	the gover	ning r	egulations.	
	h-1.									
:	•	CAN ADDIANCE	_, 19_			•				
							Ву			
							Its			

	ate		11-		98/	_	#510
Well	No.	1.	Do	NN2/	NAC	210	
API		47		073	-	12/0	
		State	Co	unty	Pe	rmit	

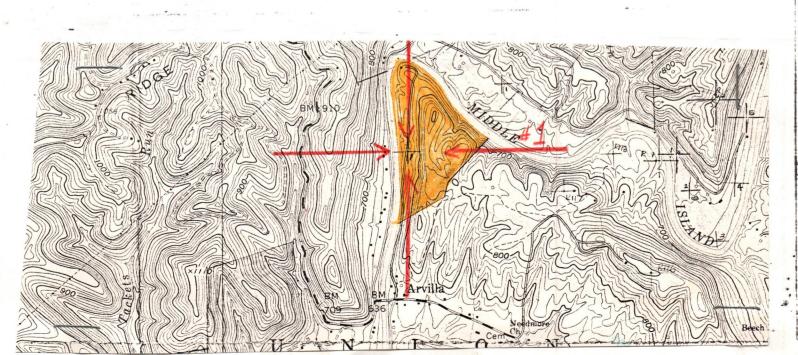
	ATE OF WEST				
	FFICE OF OII		(1)	1 Klan	74.51
Company Name LAuderman	OtCos	Designated Agent	Phillip	D 110R9	MM
Address Box 266 Paden	1 Coti VI	On Address	BAME	227 1	715
Telephone 304-337-	2215	Telephone	304	20060	2.0
Landowner DANNY NIG	le	Soil Cons. Distr	1 CL CPP		
Revegetation to be carried ou	t by EAVI	vie Herbole	4	(Agent)	
This plan has been reveiwed by	y _ (1)	ner Ohio,	SCD. All c	orrections	
and additions become a part o	f this plan:	5/15/81	Konne	the Killians	w .
		• **	(SCD	Agent)	
Access Road		Loca	tion	ne - Comment	
The state of the s	And - L	A Name I A state	There is not a		Company of the second contract of the second
Structure	_ (A)	Structure	and the second s	(1)	man and the second second
Spacing		-			
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Structure				AFE PIST	WITM
Spacing	- Contract C	Material		115000	VE
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Structure	(C)	Structure	- Load	MAX 29	1981
Spacing		Material			
Page Ref. Manual	Maria Contractor Contr	Page Ref. Manua	1	OIL & GAS I	DIVISION
All structures should be insp		arly and repaired	if necessa	FPT DE	MINES
Committee of the commit		The second secon	W. W		1 1111 4 1 1 1
AND THE RESIDENCE OF THE PROPERTY OF THE PROPE	Revegetat	ion	and the state of		
			A T	т	
Treatment Area I		<u>ireat</u>	ment Area I	4, 17	
	Tons/acre	Lime or correct to	DH /	_Tons/Acre	
or correct to pH 6-5	7	2.4			Kin attac
Fertilizer 600 (10-20-20 or equivale		Fertilizer (10-20		2 lbs/acre valent)	
Mulch Hard 2	Tons/Acre	Mulch flm/		Mons/Acre	
	lbs/acre	Seed* KY31	35	lbs/acre	
Red Top 5	lbs/acre lbs/acre	72ed 1	OP	5 lbs/acre lbs/acre	
	100				
*Inoculate all legumes such as	vetch, trefo	oil and clovers w	ith the pro	per	
bacterium. Inoculate with 3X r	ecommended a	inodit.			

Attach or photocopy section of involved Topographic map. Quadrangle Bens Run.

Legend:

Well Site

--- Access Road



Legend: Property Boundry

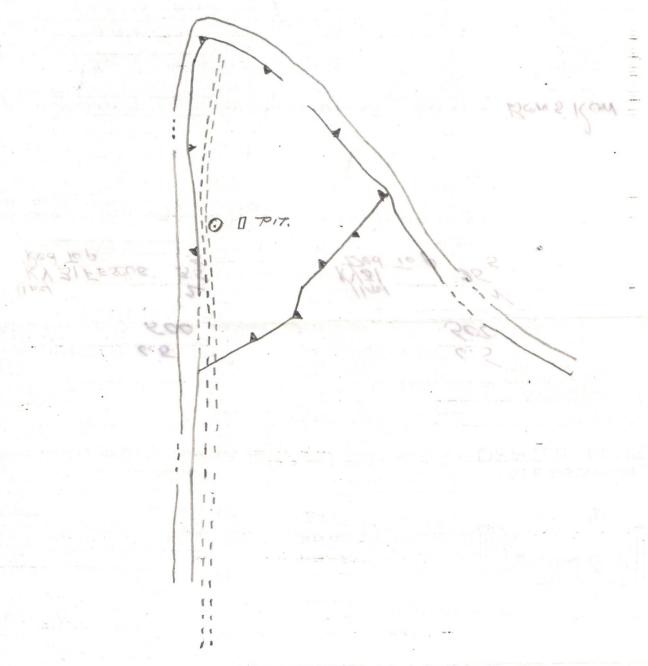
Road = = = =

Existing Fence - x - x - Planned Fence

Stream Open Ditch - ...

Diversion
Spring O
Wet Spot
Building
Drain Pipe C
Waterway
T

sketch to include well location, existing access road, roads to a rounted, wellsite, drilling pits and necessary structures numbered or lettered to core spend with first part of this plan. Include all natural drainage.



Comments: (1) No Access Road Needed

(2) Loca Low Loca feed in Bizush Azea

Signature flee Mayour Poby Joh Rodon City MUA 26159
Phone Madress Phone Madress

Please request landowners cooperation to protect new seeding for one growing scason.

S-11- 81 In Durney Magle



1V-35 (Tev 8-81)

OIL & GAS DIVISION

DEPT. of MINEState of Mest Birginia

Bepartment of Mines Wil und Gas Bivision

Date			1
Operator's			
Well No.	Nagle #	1	
Farm Dan	nny Nagle		
API NO47	- 073		1210

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

	Middle I	sland Cree	k	
District: Union County Ple	easants (Quadrangle	e Bens R	Run
				8
TWD		· · · · · · · · · · · · · · · · · · ·		
DDRESS 45 North Road, Niles, Ohio 44446		W3 :-	Toff	Cement
	Casing	Used in		fill up
DESIGNATED AGENT John Graham ADDRESS 209 Second ST. St. Marys, WV 26170	Tubing	brilling	in well	Cu. ft.
	Size 20-16			
SURFACE OWNER Danny Nagle	Cond.			-
ADDRESS St. Marys, WV 26170	13-10"			
MINERAL RIGHTS OWNER Danny Nagle	9 5/8			
ADDRESS St. Marys, WV 26170	8 5/8 5	880	880	to surfac
OIL AND GAS INSPECTOR FOR THIS WORK	7			1 11
nil Tracy ADDRESS Rt 3 Alma, WV 26320	5 1/2			
PERMIT ISSUED 5/26/81	4 1/2 9	4689	4689	440 sks
DRILLING COMMENCED 6/26/81	3			
DRITLING OXHPLETED 6/1/81	2			
IF APPLICABLE: PLUCGING OF DRY HOLE ON	Linung		9	
CONTINUOUS PROCRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON	Liners			
Production of the Control of the Con		Den	th 4758	feet
GENERAL TARGET FORMATION Ohio Shale				
Depth of completed well 4758 feet	Colt 11	00 finat	C 10015_	
	Sait		ed in the	area? No
Water strata depth: Fresh 90,140 feet;	Te mal	haing min		
Water strata depth: Fresh 90,140 feet; Coal seam depths: 1000,1110,1395	_ Is coal	being min		
Coal seam depths: 1000,1110,1395 OPEN FLOW DATA	_ Is coal			٠.
Coal seam depths: 1000,1110,1395 OPEN FLOW DATA Producing formation Benson Riley	_ Is coal Pay	zone dep	th_4355-4	
Coal seam depths: 1000,1110,1395 OPEN FLOW DATA	_ Is coal Pay	zone dep	th_4355-4	368 feet
OPEN FLOW DATA Producing formation Benson Riley Gas: Initial open flow 00,000 Mcf/d	Pay Oil: Ini	zone dep	th 4355-4	368 feet 0 Rb1/d
Coal seam depths: 1000,1110,1395 OPEN FLOW DATA Producing formation Benson Riley	Pay Oil: Ini	zone dep tial open nal open f	flow	0 Bbl/c
OPEN FILM DATA Producing formation Benson Riley Gas: Initial open flow 100,000 Mcf/d Final open flow testing Mcf/d Time of open flow between ini	Is coal Pay Oil: Ini Fir tial and fi	zone dep tial open hal open f nal tests	flowtesting	0 Bbl/c
OPEN FLOW DATA Producing Tomation Benson Riley Gas: Initial open flow 100,000 Mcf/d Final open flow testing Mcf/d Time of open flow between ini Static rock pressure 600 psig(surfa	Pay Oil: Ini Fir tial and fire measurem	zone dep tial open nal open f nal tests ment) afte	flow	0 Bbl/cours
OPEN FILOW DATA Producing Tomation Benson Riley Gas: Initial open flow100,000 Mcf/d Final open flow testing Mcf/d Time of open flow between ini Static rock pressure 600 psig(surfa (If applicable due to multiple completion Second producing formation Shale	Pay Oil: Ini Fir tial and fi ce measurem n) Pay	zone dep tial open nal open f nal tests ment) afte	flow flow testing er 72 hou	0 Bbl/cours urs shut in
OPEN FILOW DATA Producing Tomation Benson Riley Gas: Initial open flow100,000 Mcf/d Final open flow testing Mcf/d Time of open flow between ini Static rock pressure 600 psig(surfa (If applicable due to multiple completion Second producing formation Shale	Pay Oil: Ini Fir tial and fi ce measurem n) Pay	zone dep tial open nal open f nal tests ment) afte	flow flow testing er 72 hou	0 Bbl/cours urs shut in
OPEN FLOW DATA Producing Tomation Benson Riley Gas: Initial open flow100,000 Mcf/d Final open flow testing Mcf/d Time of open flow between ini Static rock pressure 600 psig(surfa (If applicable due to multiple completion Second producing formation Shale Gas: Initial open flow 100,000 Combined	Pay Oil: Ini Fir tial and fi ce measurem n) Pay Oil: Ini	zone depotial open fanal tests ment) after y zone depotitial open	flow flow testing r 72 hou th 3128-3	0 Bbl/cours ars shut in 8811 fee 0 Bbl/c
OPEN FLOW DATA Producing condition Benson Riley Gas: Initial open flow100,000 Mcf/d Final open flow testing Mcf/d Time of open flow between ini Static rock pressure 600 psig(surfa (If applicable due to multiple completion Second producing formation Shale	Pay Oil: Ini Fir tial and fi ce measurem n) Pay Oil: Ini Oil: Fir	zone depotial open fanal tests ment) after zone depotial open fanal open fana	flow flow testing from flow from from from from from flow flow flow flow	0 Bbl/0 Bbl/0 Bbl/0 Bbl/0 Bbl/0 Bbl/0 Bbl/0

7

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

Perforated 3126-3811 21 shots

Fractured 60,000 # sand, 235 BBLs Water, 605,500 SCF Nitrogen foam

Perforated 4064-4373 22 shots

Fractured 60,000# Sand, 250 BBLs Water, 630,000 SCF Nitrogen

WELL LOG

FORMATION	WLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all free and salt water, coal, oil and coals
Sand & Shale Shale Sand Shale Sand Shell Sand Shale Sand	Gray Hard Gray Med Gray Hard Dark Hard Gray Hard Dark Med Light Soft Gray Med 1t Gray Med Dk Gray Med	0 880 920 944 1020 1045 1199 1280 1333 1366	880 920 944 1020 1045 1199 1280 1333 1366 1418	Freshwater Coal Seam Saltwater, Coal seam GAs Coal Seam
Shale Sand Shale Sand Shale	Gray Hard Gray Soft GRay Med Gray Med	14 18 14 86 15 19 1655	1416 1486 1519 1655 4758	Saltwater Big Injun Gas & Oil Gordon Devonian Sha

(Attach separate sheets as necessary)

BKK Prospecting, LTD

Well Operator

By: Designated Agent

Date: January 15, 1982

Note: Regulation 2.02(i) provides as follows:

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





OIL & GAS DIVISION
DEPT. OF MINES

State of West Virginia Department of Mines Gil and Gas Division

Charleston 25305

FINAL INSPECTION REPORT
INSPECTORS COMPLIANCE REPORT

Lauderma	n Oil & Gas dba/ July 25,		
COMPANY	BKK Prospecting, Ltd.		73-1210 (5-29-81)
45 No	rth Road	FARM & WELL NO	Danny Nagle #1
Niles	Ohio 44446	DIST. & COUNTY	Union/Pleasants
RULE	DESCRIPTION	IN YE	COMPLIANCE S NO
23.06	Notification Prior to Starting World		
25.04	Prepared before Drilling to Prevent		
25.03	High-Pressure Drilling	/	/
16.01	Required Permits at Wellsite		
15.03	Adequate Fresh Water Casing		
15.02	Adequate Coal Casing	-	
15.01	Adequate Production Casing	7	/
15.04	Adequate Cement Strenght		
15.05	Cement Type		
23.02	Maintained Access Roads		
25.01	Necessary Equipment to Prevent Wast	te	
23.04	Reclaimed Drilling Pits		N
23.05	No Surface or Underground Pollution	1	11
23.07	Requirements for Production & Gathe	ering Pipelines	1/
16.01	Well Records on Site		
16.02	Well Records Filed		V
7.05	Identification Markings		
I HAVE I	NSPECTED THE ABOVE CAPTIONED WELL AN	ND RECOMMEND THAT	T BE RELEASED:
		SIGNED Kille	Towlke
		DATE July	31,1884
Your wel	l record was received and reclamation	on requirements and	roved. In accordance
with Cha	pter 22, Article 4, Section 2, the a	above well will rem	ain under bond
coverage	for the life of the well.		- 1
		7-11	16
		Administrator-	Oil & Gas Division
IMS/chm		September	27, 1984

DATE

