



1)	Date: Sep	temb	er 26	, 19_	85
2)	Operator's Well No.	JK-	1240		
3)	API Well No.	47	-095-1115		0
		State	County	F	Permit

# STATE OF WEST VIRGINIA DIVISION OF OIL DEPARTMENT OF ENERGY, OIL AND GAS DIVISION DEPARTMENT OF ENERGY APPLICATION FOR A WELL WORK PERMIT

4) WELL TY					X	•			v v
		(If "Gas"			X		storage	/ Deep	/ Shallow X/)
5) LOCATIO		Elevation:			1.	Watershed: _			Daniel and 7 Fly
		District:				County:			Pennsboro 7,5'5%
				orise	es, co	DE: 24150	7) DESIGNATED		ard Reddecliff
Addres	s	P.O.		1111 0	C001		Address	The second secon	Box 48
		MARKET SECOND VI	annon,	No.	6201				hannon, WV 26201
8) OIL & GA							9) DRILLING CO		0 1111 0
Name		obert	CONTRACTOR STATEMENT OF THE STATEMENT OF				Name		Drilling Co.
Addres		eneral			C140	CORP.	Address	P.O. Box 4	
		iddleb						Buckhannon	
10) PROPOSI	ED WELI	WORK:	Drill	Χ	_/ Dril	l deeper	/ Redrill	/ Stimulate	Χ/
			Plug o	ff old	formatio	n/ Perfor	ate new formation_		
			Other p	hysical		in well (specify)	18 A		
11) GEOLOG	ICAL TA	RGET FO	RMATION	Ι,		Street			
12) Estim	ated depth	of comple	eted well,		5995'	feet			
13) Appro					125'	feet; salt	,N/A	feet.	
14) Appro	oximate co	al seam de	pths:		N/A	Is co	al being mined in the	area? Yes	/ NoX
15) CASING	AND TUI	BING PRO	GRAM						
CASING OR TUBING TYPE	1	SPE	CIFICATION   Weight	S		FOOTAGE I	NTERVALS	CEMENT FILL-UP	PACKERS
TOBING TIPE	Size	Grade	per ft.	New	Used	5 For delling	Left in well	OR SACKS (Cubic feet)	1
Conductor	11 3/	4 H-40	42	X		23 30E	25000	O Sacks Co	Sinds by rule 150
Fresh water	8 5/	8 ERW	23	X		1100 1/600	11001/600	To Surface	Au ville 15 av
Coal		8 ERW	23	X		11001600		To Surface	Sizes Sizes
Intermediate								1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Production	41/3	J-55	10.5	X		5995'	5945'	300 Sacks	Depths set
Tubing					4.2				red by rule 15-01
Line, s							THE STATE OF THE S	0. 00 1040	Perforations:
									Top Bottom
(2)	146		A Second				The same of the same of		Dottoni
				z intell	ashani	gu kollo kan	19. 3 2 2 2		be leget notice kind A
345 12 34.	44					OFFICE USE C	ONLY		containing that
						DRILLING PE	RMIT		
	17	-095-	1115						and the wife of the section of
Permit number_	41	-095-	1113						tember 30 1985
This served serve								Da	
quirements subje	ct to the	conditions	contained	herein a	on snown	e reverse hereof	of permission granted	d to drill in accordan	nce with the pertinent legal re-
io. 8) Prior to the	e construc	tion of ros	ds, locatio	ns and	pits for a	ny permitted work.	In addition, the we	en to the District Oil Il operator or his cor	and Gas Inspector, (Refer to stractor shall notify the proper
district oil and g	as inspect	or 24 hour	s before ac	tual pe	rmitted w	vork has commenced	i.)		A Colombia Santa Santa Santa
The permitted we	ork is as o	lescribed in	the Notic	e and A	pplicatio	n, plat, and reclama	tion plan, subject to	any modifications a	nd conditions specified on the
reverse hereof.									
Permit expires _	se	ptemb	er 30	, 19	187	unless well	work is commenced	prior to that date and	prosecuted with due diligence.
Bond:	Agent	T	lat:	Casi	na	Fee WPCP	100	)+h	Regarder .
0	1	+	1	ha	11	WICH	S&E	Other	
	10	12 K	nu	on	11/20	08/ MX	LADA	The same of the same	Yearon 1
						1	YI	, 0	
NOTE						/_	1 Jara	aret!	Llasse
NOTE: Keep or	ne copy o	f this perm	it posted a	t the di	rilling loc	ation. Di	fector, Div	sion of Oil	and Gas
	A Company	See	the reverse	side o	the ADI	DI ICANT'S CODY	for instance of		05/03/2024File

X wolleds -

Pennsbaro 7,5'

P.O. 80X 48 Buckhannon, WV 26201

Tyler Ousday Pennsudro /s

Notes S.W. Jack Drilling Co. . P.O. Box 48

Buckhannon, WY 26201

#### OFFICE USE ONLY

#### PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK

a valorent of a deferrises, core:

05/03/2024

Buckharmon, WV 26201

Middlebourne, UV 26149

		isoni?	yaran onangeri On the	ng wifts MOTTS MOST THORNES AND 1030 ICHO
			16065	How havelenger to depth but always as
	Jest A\W		1522	10) Approximate reals dignice. Fresh, L.
	all collegions dinterment Ye		E AVI	14) Approximate and sensitive that
The Carrier of the Albert	CMCY			electra Statestana and Statestana an
A Contract of the Contract of	TOTAL TOTAL	りでは	ps) I in result	On Charles to
S CTS Dy rule 150	TARRITO TO STA	11001/600	Y Y	26 1.13 E. T. 3.000
face by other 15.05	The World Sur	20076001	Y X	l a skalew   23 l
		E LICE ONLY		
avla	o male tarOFFIC	E USE ONLY	e y	10.014.05 Cp. 110.01
This part of Form WW-2(B)	is to record the	dates of ce	ertain oc	currences and any
follow-up inspections.				
(E.01106) 404	Date			Date(s)
Application received		Follow-up	inspection(	s)
Well work started	MINI	SPULLINIAN	,,	
Wen work states	TIME	DMELING PE		
Completion of the drilling		,,	,,	W an Dec - 47-095-1115
process				
Well Record received	of permission confine to at it is	nelius is evidence	mwada noi ma	permit covering the well-district and well- district subject to the conditions contain to he
Well Record received	STORES OF HOMEON'S MODIFIED AND STATE	and hellmoso ve		
Reclamation completed				ion coist mon Af notice in the line is
leathers and conditions specified on the	about the ote wints that wife			cradited work is as described in the Notice
OTHER INSPECTIONS	and or horizonace described with the winds		1987	Begins Asptember 30,
		alice and the second second		
Reason:	Land of March	<b>Carl 1</b> 200	90.53	one offer mis
Reason:	Berge	181 MR	2042	The muse
Reason.	1.1	1		
	A CONTRACTOR OF THE PARTY OF TH			

FORM WW-2A				
Obverse		1	) Date:	Santambarras
			Operator's	September 26 , 19 <u>8</u>
		2	) Well No.	
		3	) API Well N	
			, HELL IA	011 - 111
	DEPARTMENT	OF WEST VIRGINI	A	State County Perm
	PRIAKINENT OF E	NERGY, DIVISION C	F OIL & GAS	
4) SURFACE	MUTICE OF APPLIC	ATTON POR A TON	WORK PERMIT	
47 SURFACE	OWNER(S) OF RECORD TO BE SERVED	5 (1) COAL (		
(i) Name		Addres	DFERATOR	N/A
		dle		
nadi	ess P.O. Box 3025	5 (ii) COAT C	LINED (C) III	
(ii) Name	Parkersburg, WV 26101	Name	WHER(S) WITH	DECLARATION ON RECORD
Addre		Addres	The state of the s	N/A
ndult		nddles	8	
(iii) Name		Name		
Addre		Addres		
naule	88	nddres	B	
		5 (iii) COAT T	PCCEP TITME	
		Name	ESSEE MILH DE	CLARATION ON RECORD:
		Address	The state of the s	N/A
		Addles	8	
	TO THE PERSON(S) NAMED ABOVE: You also			
	TO THE PERSON(S) NAMED ABOVE: You sho	uld have received this For	m and the following	documents:
	(1) The Application for a Well We involved in the drilling or and if applicable	ork Permit on Form WW-2(B)	which are	
2 1 7				parties
	(3) The Construction and Reclamat to plug a well), which sets o	ion Plan on Form WW-9 (un	less the well work for	e only
	to plug a well), which sets or reclamation for the site and	access road.	d'sediment control an	nd for
1	THE PEACON YOU PRO			
	THE REASON YOU RECEIVED THESE DOCU WHICH ARE SUMMARIZED IN THE "INSTRUCTIO WW-2(B) DESIGNATED FOR YOU. HOWEVER, Y	NS" ON THE REVERSE SIDE OF	CHTS RECARDING THE AF	PPLICATION
	HOWEVER, Y	OU ARE NOT REQUIRED TO TAL	KE ANY ACTION AT AT	LICATION   TI
	erator proposes to file	of the West Virginia Code	the	AS
	erator proposes to file or has filed the for a Well Work Permit with the Director well at the location described on attack Copies of this Notice	s Notice and Application	and accompanying do	Cuments
	Copies of this Notice at a con attach	ned Application and denict	ed on the respect	to a Siz Ti
	Copies of this Notice, the Application, have been mailed by registered or certifiabove (or by publication in certain circ to the Director of t	the plat, and the Constru	ction and Reclamation	MH-O.
	above (or by publication in certain circ to the Director of the Division of Oil a	umstances) on or before t	hand to the person(s	named OO O
	6) EXTRACTION PLOURS	nd Cas.	ne day of mailing or	
	6) EXTRACTION RIGHTS			1985 & GAS ENERG
	Check and provide one of the followi	ne.		The state of the s
	hold the lease or leases	or other continuing conta	act or contains	G S
	The requirement of Code 22B-1-8(	or gas.	or contracts by	hich I
	The requirement of Code 22B-1-8(	through (4). (see )	reverse side for spec	ifics.)
	Is the right to extract, produce or m or other contract or contracts provide for compensation to the	arket the oil or gas base	d upon a lease 1	
				ision
	of oil or gas so extrac	ted, produced or marketed	? Yes Inherently re	elated
	If the answer shows to W.	ing additional to mandad		
	you may use Affidavit Form WW-60.	beeded.	If the answer is Ye	···
	See the reverse side for line from the			
	See the reverse side for line item in the required copies of the Notice and Reclamation Plan.	Application, plat and	ructions concerning	
truth of the	o inf	, , , , , , , , , , , , , , , , , , , ,	construction and	
Application	e information on the Notice	WELL OPERATOR J	9. 1 Года	
I I Car TOII	IS Verified and	1 2 dillon 0	& d Enterpris	ses, Inc.
	LEHEU ON Debalf of 11	By	DM I	10.00
119	bounty and State by	- James	ogianata il	walnut
s 27 day of	ard Reddecliff.	D	esignated Ager	it off
			.0. Box 48	7
y commission	expires 12/7/ 1992	Telosta	uckhannon, WV	26201
Dregory	U. Smith	Telephone 4	72-9403	
ptary Public,				05/03/2024
ate of	West Virginia County,			

#### INSTRUCTIONS TO APPLICANT

#### CONCERNING THE LINE ITEMS:

- 1) Date of Notice.
- 2) Your well name and number.
- 3) To be filled out by the Division of Oil & gas.
- 4) & 5) Use separate sheet if necessary.
  - 4) Surface owner(s) of record to be served with Notice and Application. However, see also Code \$22B-1-9(b) if "more than three tenants in common or other co-owners of interest described in subsection (a) of this section hold interests in such lands".
  - 5(i) "Coal Operator" means any person, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine.
- 5(ii, iiii) See Code \$22B-1-36.
  - 6) See Code §22-4-11(c). However, in lieu of filing the lease(s) or other continuing contract(s), the Applicant may fill out the information in the space provided below.
  - 7) See Code § § 22-4-11 (d, e).

#### CONCERNING THE REQUIRED COPIES FOR FILING AND SERVICE:

Filing. Code §22B-1-6 and Regulation 7.02 provide that the original and required copies of the Notice and Application must be filed with the Administrator, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code §22B-1-2C and the reclamation required by Code §22B-1-30 and Regulation 23, (iv) unless previously paid on the same well, the fees required by Code §22B-1-2(c) and 22B-1-29, and (v) if applicable, the consent required by Code §22B-1-21 from the owner of any water well on dwelling within 200 feet of the proposed well.

Service. In addition, service must be made on the surface owner(s) and the person(s) with an interest in the coal. See Code § \$ 22B-1-9, 22-B-1-13 and 22B-1-14.

# INFORMATION SUPPLIED UNDER CODE \$22B-1-8(d) IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on the obverse side of this Notice, I depose and say that I am the person who signed the Notice for the Applicant, and that--

- (1) the tract of land is the same tract described in the Application to which this Notice applies, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, lessor, etc. Grantee, lessee, etc. Royalty Book page

FORM WW - 2A continue

## INFORMATION SUPPLIED UNDER CODE § 22B-1-8(d)

Grantor, lessor, etc.	Grantee, lessee, etc.	Royalty	Book page
* Mary E. Micheal  * Irma G. McKelvey  * Hattie Scheffer, et.vir.  * Herma H. Hess, et.ux.  * Alena Kay Molnar, et.vir.  Garnet I. Hess Edith Griffin H.H. Furbee, hrs. W.H. Carter, hrs.	J & J Enterprises, Inc. J & J Enterprises, Inc.	1/12 1/12 1/12 1/12 1/12 1/12 1/4 0il 1/4	256/436 256/438 256/440 256/442 256/444 256/446

\* Leasing Rights

Its Date (Signature) 05/03/20246-85

(Signature) 05/03/20246-85

(Signature) Date (Signature)

# SITE REGISTRATION APPLICATION FORM STATE OF WEST VIRGINIA/NPDES GENERAL PERMIT FOR OIL DRILLING PIT WASTE DISCHARGE

OIL AND GAS

DIVISION OF UIL & GAS

DEPARTMENT OF ENERGY

(Continue on reverse side)

J- DEPARTMEN	T OF ENERG
1. Company Name J& J ENTERPRISES, INC.	***************************************
2. Mailing Address P. O. BOX 48, BUCKHANNON, WV 26201	
3. Telephone 472-9403 4.Well Name Hess Lease JK-1240	
5. Latitude 39-22-30 Longitude 80-52-30	
6. NPDES # WV0073343 7. Dept. Oil & Gas Permit NO. 47-095-	-1116
8. County Tyler 9. Nearest Town Centerville	1115
10. Nearest Stream Big Run  11. Tributary of Straight Run	
12. Will Discharge be Contracted Out? yes no	
·	
13. If Yes, Proposed Contractor PKC	
Address 44 Baltimore Street, Westover, WV 26505	
Telephone 304-291-5960	
A 14. Proposed Disposal Method. UIC	
Land application	
Reuse Centralized Treatmer	ıt
Thermal Evaporation Other	
15. Attach to this application a toronomic	
one submitted to the Office of Oil and Cos) showing that	_
water bodies, and drinking water wells known to the applicant	_
the area of the lease that may be impacted by any land applicant	in ation.
Nothing in the general pormit about	
Neither does anything in the gaporal assisting of riparian owners or othe	rs.
existing, obligations or duties of an operator pursuant to the	-
permit does not convey any property and the issuance of the ger	neral
issuance of the general permit give rise to any presumptions of law	or ·
findings of fact inuring to or for the benefit of persons other the State of West Virginia.	in the
-	
Gas: Initial open flow Mct/d Oll: Illicial open flow	
Combined Final open flow 696 Mcf/d Final open flow	_Bbl/d
Time of open flow between initial and final tests 4 hours	
Static rock pressure 1325 psig(surface measurement) after 96 hours s	nut in
(If applicable due to multiple completion)  4973-/403/2	2024 feet
Second producing formation Alexander, Benson Pay zone depth 5264-77  Gas: Initial open flow Mcf/d Oil: Initial open flow	Bbl/d
	Bbl/d
Final open flow Mcf/d Oil: Final open flow	,
	shut in
During Ions broomer	

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

Devonian Shale: Perforations: 5876-84 ( 16 holes)

Fracturing: 300 sks. 20/40 sand: 408 Bbls. fluid.

Alexander: Perforations: 5264-66 (8 holes) 5275-77 (8 holes)

Fracturing: 450 sks. 20/40 sand: 500 gal. acid: 518 Bbls. fluid.

BOTTOM HOLE PRESSURE Pf=PweXGLS

 $t=60 + (5940.7 \times 0.0075) + 459.7 = 564.25 \times = \frac{1}{53.34} = \frac{1}{53.34(564.25)} = \frac{1}{=30,097=0.000033}$   $Pf=(1325)(2.72) \xrightarrow{(0.000033)(0.661)(5428.5)(0.9)} Pf=(1325)(2.72) \xrightarrow{(0.1066)} = (1325)(1.11)$ 

Pf=1470 psi

#### WELL LOG

ORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresand salt water, coal, oil and ga
Top soil & shale	0	15	3000
Sand & sandy shale	15	170	Damp @ 290'
Sandy shale, red rock & sand	170	365	
Sand, shale & red rock	365	745	½" stream @ 740'
Sandy shale & sand	745	1520	
Sand & sandy shale	1520	1670	½" stream @ 1615'
Sandy shale	1670	1920	Losbon Systems E. D.S. A. Children
Little Lime	1920	1940	Gas ck @ 2475 No show
Big Lime	1940	2005	
Sand & sandy shale	2005	2420	Gas ck @ 3467 No show
Sandy shale & sand	2420	2880	
Sandy shale & sand	2880	3455	Gas ck @ 4739 No show
Sandy shale & sand	3455	4560	the state of the s
Brown sand	4560	4720	Gas ck @ 4987 No. show
Sandy shale & sand	4720	5264	· Statement
Alexander	5264	5277	Gas ck @ 5295 No show
Sandy shale & sand	5277	5876	
Devonian Shale	5876	5884	Constant Del
Sandy shale	5884	5978	MINOG
Bealino 1986.70 185 shar	STEAL	T.D.	Se/he/A CELESA LIMESA
	E.	1.5.	
	5		
71400 71400 71400	arachi Seen	AU BUCH LIDNG OR GEGATED	TO NOTE THE PROSESSED OF DRAW OF CHANGE OF CHA
		. Tara salabi	MOLTEN CA TELEBRA UN TENNES
aford afdo \	Company of the	7	
	The same of the sa	The second Villa	
2991	a Salta	Januari Bart	
being mined in the ordal to	Is coal		
	-	an Shale	
the state of the s			moved actionant point and
		•	

(Attach separate sheets as necessary)

J & J Enterprises	, Inc.
Well Operator	05/03/2024
By: Daniel J.	Stark Daniel F. Stark-
Date:	11/25 /85 Asst.Geologist

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 intelligent of a well."

#### INSPECTOR'S PERMIT SUMMARY FORM

The state of the s

		9-30-	85	F					
WELL TYPE			47-095	1115 JUN 1 7 19					
		OPERATOR_	J. A. Enton	prises					
DISTRICT		TELEPHONE	TELEPHONE						
			-111						
			11/1	40					
SURFACE OWN	ER	COMMENTS	TELEP	HONE					
TARGET FORM	ATION	DATE APPLICAT:	ION RECEIVED						
DATE STARTE	D								
LOCATION	1	NOTIFIED	DRILLING COM	MENCED					
WATER DEPTH	C								
COAL DEDTIG	,	,	-,						
COAL DEPINS	,	,;							
		CACTNO							
Ran	feet of	CASING							
Ran	foot of	"pipe on	with	fill up					
Ran	feet of	"pipe on	with	fill up					
Ran	feet of	"pipe on	with	fill up					
	reet or	"pipe on	with	fill up					
Type	feet on	PLUGGING From To	P:	ipe Removed					
it Discharg	e date:	T							
ield analys									
ell Record	_	fe	cl						
1	^			,					
ate Release	a June 13, 1	1986	0 10						
	V	PI	4 11	05/03/2024					
		Inches	towal	0					
100		Inspec	tor's signatu	re					

#### FERC-121

1.0 API well number: (If not available, leave plank 11 dig	18.1	47	-095-1115		
2.0 Type of determination point sought (Use the codes found on the front of this form)		10 Section of		n/a	u-te
2.0 Depin of the ineriest nameletion for item (Only ment of to plant 1 or 107 in 2.0 lamber)	03	•	5884	teer	
4.0 Name, address and core number of applicant. (35 terres per time maximum. If once number not available, leave plans.)	143 -4		J Enterpr . Box 697	ises, Inc.	009480 Serier Case
	Struet Cata	Ind	iana,	Pa. 157 State Zip Cu	01
5.0 Location of this well. (Camplete (a) or (a).) (a) For onshore yields	E.o. : N.	ame	terville		···
(35 letters maximum for finic name.)	.   Sayety	Tyle	er	- WV Stare	
Ibi For OCS wells:		N/A			
	Ara \.a	Date of L		Block Nume	
for Name and identification number of this well. (35 letters and digits maximum)		JK-1	L240		
(a) If code 4 or 5 in 2.0 above, name of the reserving (35 letters measurer)	!	N/A			
G.O. (a) frame and code number of the purchaser: (35 letters and maits maximum. If code number not available, leter blank.)	Name	Purc	chaser not	yet desigr	nated
(b) Date of the contract.			Mo. Day	Yr.	
(c) Estimated annual production:				AlAlct	
	İ	(a) Base Price (S/MMBTU)	(b) Tax	(c) All Other Prices (Indicate (+) or (-).)	lette Testud of fall, this arest in the
2 Contract price (As of filling nate - Crimp are 17.3 illing nate - Crimp are 17.3		3.582	2 7 8.		3.860
3.0 Magazina hawka, rate (As at thirty date: Compagnets) 3 deciral places.)	1	3.582	278		3.860
NOV 27 1985			meclinai		
	Date error	11-26	85 (412)	349-6000 Cir - Minit 05	 //03/2024

DEC 15 1985

# DEPARTMENT OF MINES, OIL AND GAS DIVISION

COVER SHEET. STATE APPLICATION FOR WELL CLASSIFICATION

COTEN SHEET, STATE AFFETCATE	ON FOR WELL CLASSIFICATION
Date: 100 26,1985 2415	AGENCY USE ONLY
Applicant's Name: J&J ENTERPRISES, INC.	WELL DETERMINATION FILE NUMBER
Address: P.O. Box 697	
Indiana, PA. 15701	851127 -1030-095 - 1115
Gas Purchaser Contract No.	Use Above File Number on all Communications Relating to This Well
Date of Contract (Month, day and year)	
	Dishard Dallarliff
First Purchaser: Purchaser to be Determined	Designated Agent: Richard Reddecliff
Address:	Address: P.O. Box 48
(Street or P.O. Box)	Buckhannon, WVA 26201
(City) (State) (Zip Cod	FERC Buyer Code
NAME AND TITLE OF PERSON TO WHOM QUESTIONS CO	INCERNING THIS APPLICATION SHALL
Name: Vicki Vanderberg	
Signature: (Print).	ubu (Title)
Address: P.O. Box 697	
(Street or P.O. B Indiana, PA.	15701
Telephone: (City) (Sta 412 ) 349-	te) (Zip Code) hone Number)
(Certificate of Proof of Service to 1	
	ry Applied For
IGPA SECTION/SUBSECTION	
02 New Natural Gas 102-2 2.5 Mile Test 102-3 1000 Foot Deeper Test 102-4 New Onshore Reservoir 03 New Onshore Production Well	108 Stripper Well Natural Gas 108- Stripper Well 108-1 Seasonally Affected 108-2 Enhanced Recovery 108-3 Temporary Pressure Buildup
X 103 New Onshore Production Well	
07 High Cost Natural Gas 107-0 Deep (more than 15,000 feet)	AGENCY USE ONLY
107-1 Geopressured Brine 107-2 Coal Seams	
107-3 Devonian Shale 107-5 Production enhancement	7.50
107-6 New Tight Formation	QUALIFIED
107-7 Recompletion Tight Formation	
RECIEIVED NOV 27 1985	05/03/2024
BIVISION OF BIL & GAS . DEPARTMENT OF ENERGY	

ate Received

Determination Date

# STATE OF WEST VIRGINIA DEPARTMENT OF HINES, OIL AND GAS DIVISION

Late 100 26 . 1985
Operator's JK-1240
API Well No. 47 - 095 - 115

0

# WELL CLASSIFICATION FORS

MGPA Section 103

	DESIGNATED AGENT James R. Willett
	ADDRESS S.W. Jack Drilling Company
	Pox 48 Buckhannon, W. VA. 26201
WELL OPERATOR J & J Enterprises, Inc.	LOCATION: Elevation //OO
ADDRESS P. O. Box 697	Katershed Big Run
Indiana, PA 15701	Centerville Tyler qual Pennsbo
CAS PURCHASER Purcahser not yet designate	ed <sub>Gas</sub> Purchase
ADDRESS	Contract No. Meter Chart Code
	Date of Contract
6 ft # # 6 p # 5	* * * * * * * *
Date surface drilling was begun: 0.400	er 18, 1985
Tallane the better hele amount of the will	
Indicate the bottom hole pressure of the well	and explain how this was calculated:
	was shut in several days after
	ment and pressure was measured
BOTTOM HOLE PRESSURE DE-DWOXGLS	a spring gauge.
t=60 +(5940 7 × 0 0075) 1450 7 = 564 05	$\frac{1}{x=53.34T} = \frac{1}{53.34(564.25)} = \frac{1}{30,097=0.000033}$
(0.000033) (0.661) (5429 E)	K=53.34T = 53.34(564.25) = 30,097=0.000033
Pf=(1325) (2.72) (0.00033) (0.001) (3428.5)	(0.9) $Pf = (1325) (2.72)^{(0.1066)} = (1325) (1.11)$
Pf=1470 psi	
within a proration unit, in existence at the tireservoir from which gas is or will be produced in compercial quantities or on which surface drives capable of producing gas in commercial quantities best of my information, knowledge and believes	
	James H. McClarain
	() Worker
	9
STATE OF WEST VIRGINIA, PA	
COUNTY OF Indiana . TO WIT:	
I. Vicki Vanderberg a Hotal	y Public in and for the state and county aforesaid.
do certify that J.H. McElwain , whose name	is signed to the writing above bearing de-
the day of how , 1985, has ac	knowledged the same before re, in my county aforesaid.
Given under my hand and official se	al this 26 day of how. 1985
My XMMMMMMMM expires on the	23 day of January 19 \$4.88
	10 1 11
[FOTABLAL SEAL]	05/03/2024
Learning sour	hotary Public

VICKI L. VANDERBERG, NOTARY PUBLIC INDIANA BOROUGH, INDIANA COUNTY MY'COMMISSION EXPIRES JAN. 23, 1988 Member, Pennsylvania Association of Notaria

05/03/2024

VICKI I. VANCELL MOTAGE P.J.
INDIANA SORCUGII CLIANA COUNTY
MY COMMISSION EXP. ICS JAM. 23, 1855
Penher, Pennsylvania - .ociation of Motor

1.0 API well number: (If not available, leave clink: 11 digits.)	+	4	17-095-1115		
2.0 Type of determination print southt (Upe the codes found on the front of this form )		107 Section of		n/a Carences d	A: <del>-</del>
2.0 Steps of the deer of name aton for step. 10ns, ment of the poor 103 or 107 in 2.0 days are		•	5884	feet	
4,0 Name, address and cone number of applicant. 135 interes per one maximum. If once number not available, leave plans,)	1	J Enterpris Box 697 iana	ses, Inc.	Pa. 1570 State Zio Co	
5.0 Location of this well (Camplete (a) or (a).)  (a) For unshore wells  (35 letters maximum for finic name.)	Cent Tyle	er		W	
lbi for CC5 wells:	N/A	Date of L		Block Num	
(c) Plame and identification number of this well (35 litters and digits maximum)	JK-1	.240	•		
(a) If code 4 or 5 in 2.0 above, name of the reservoirs (35 letters meaning)	N/A				
G.O. (a) frame and code number of the purchaser: (35 letters and deats maximum. If code number not available, letter blank.)	Purc	haser not ye	et designate	d	5.4° (.0':"
Its Date of the contract.			Mo. Day	Yr.	
(s) Estimated annual production:				MAIct	
		(a) Base Price (S/MMBTU)	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(ett. Testal of fa), this seed of t
7.0 Contract price (As of filing date: Chrop starts) ilection prices (		6.112	2 7 8		6 3 9 0
3.0 Chamber Barks, rate (As of third date Complete to 3 theories places)		6.112	2 7 8		6.390
DEC - 4 1985	12-2-		merlengen	349-6000	

# (07-84)

### STATE OF WEST VIRGINIA

# DEPARTMENT OF MINES, OIL AND GAS DIVISION

DEC 30 1985

# COVER SHEET, STATE APPLICATION FOR WELL CLASSIFICATION

Date: Dec 2,1985 24150	- AGENCY USE ONLY
Applicant's Name: J&J ENIERPRISES, INC.	WELL DETERMINATION FILE NUMBER
Address: P.O. Box 697	
Indiana, PA. 15701	851204 -1073-095-1115
Gas Purchaser Contract No.	Use Above File Number on all Communications Relating to This Well
Date of Contract (Month, day and year)	
First Purchaser: Purchaser to be Determined	Designated Agent: Richard Roddocliff
	Address: P.O. Pox 48
Address: (Street or P.O. Box)	Buckhannon, WA 26201
(City) (State) (Zip Code) FERC Seller Code 009480	FERC Buyer Code
HAME AND TITLE OF PERSON TO WHOM QUESTIONS CONCER	NING THIS APPLICATION SHALL
Rame: Vicki Vanderberg	
Signature: (Print).	(Title)
Address: P.O. Pox 697	
(Street or P.O. Box) Indiana, PA.	15701
Telephone: (City) (State) (Area Code) (Phone	(Zip Code)
(Certificate of Proof of Service to Purch	
NGPA Catagory Ap	
GPA SECTION/SUBSECTION	
102-2 2.5 Mile Test 102-3 1000 Foot Deeper Test 102-4 New Onshore Reservoir	108 Stripper Well Natural Gas 108- Stripper Well 108-1 Seasonally Affected 108-2 Enhanced Recovery 108-3 Temporary Pressure Buildup
103 New Onshore Production Well 103 New Onshore Production Well	100-3 Temporary Fressure Bulloup
107-0 Deep (more than 15,000 feet)	AGENCY USE ONLY
107-1 Geopressured Brine 107-2 Coal Seams  X 107-3 Devonian Shale 107-5 Production enhancement 107-6 New Tight Formation 107-7 Recompletion Tight Formation	
DEC - 4 1885	05/03/2024
DIVISION OF DIL & GAS DEPARTMENT OF ENERGY	

# DEVONIAN SHALE GAMMA RAY LOG ANALYSIS APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL PRICE UNDER THE NATURAL GAS POLICY ACT

Opera	cor:	J & J Ente	erprises, Inc	· .	Agent:	Ric	hard Reddecliff
Type	Determi	nation b	eing sought	- 107	(Devoni	ian S	Shale)
API !	Tell No.	: 47-095	5-1115		Well Na	ame:	Griffin (JK-1240)
West	Virgini	a Office	of Oil and	d Gas			
		SJA Fil					
Vo	1	Page	Line	-			
I.	NOTE:	Line, (c) int	<ul><li>b) a line r</li><li>ervals with</li></ul>	represe n Gamma	nting 0. Ray uni	.7 x its 1	n the (a) Shale Base (Shale Base Line), less than 0.7 x (Shal with this analysis.
II.	Gamma	Ray elev	ation indic	ces:			
		A. Sha	le Base Lir	ne (API	Units)		
		1.	GR Value a Remarks:			100	* API Units  * API Units  a shift in the GR
			Value from				API Units @ 5837'
III.		1. 2.	GR Value = Calculatio	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	* API Uni * API Un 7 (GR Va 7 (165 7 (100 an 0.7 x	its its lue *) =	at Base Line) at Base Line)  115.5 API Units 70 API Units lue at Base Line):
		Interval			kness iterval		Feet of less than*
	From**		Toネネオ		eet		0.7 (Shale Base Line) Feet
	2503'		5837'	33:	34'		103'
	5837'		5872'		35 <b>'</b>		0'
	Tota	l Devoni	al [Interva]	336	59'		
otal			Shale Base)				103'
			e Base Line		0306 x 10	00 =	

\*Marked on log included with analysis.
\*Top of Devonian Section Recorded on First Interval in this Column.
\*Lesser of TD or Bottom of Devonian Section Recorded as last Interval
in this Column.

### STATE OF WEST VIRGINIA

	. 1	16. 1	•
Date		11 (	

DEPARTMENT OF MINES OIL AND GAS DIVISION

Operator's Well No. JR-1.240

API Well No.

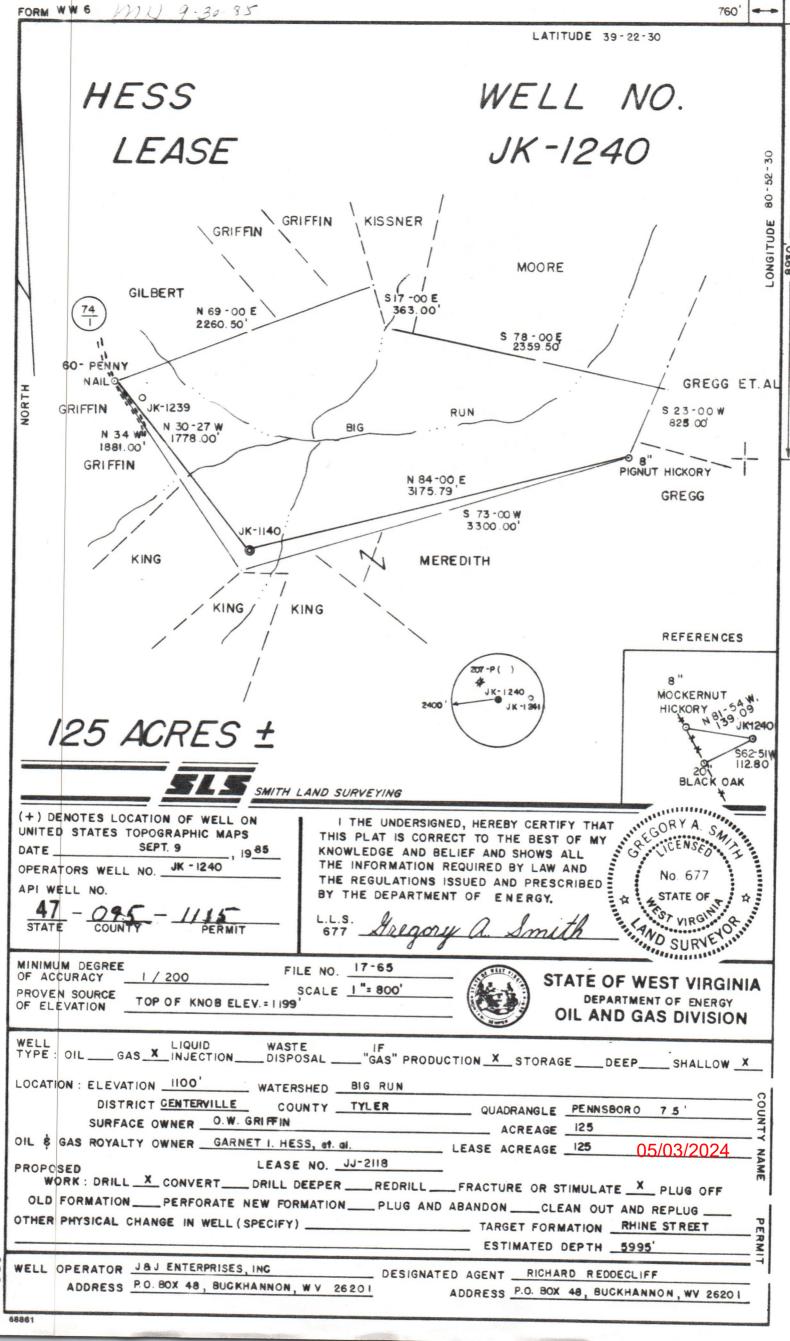
47 - COS- ///S State County Permit

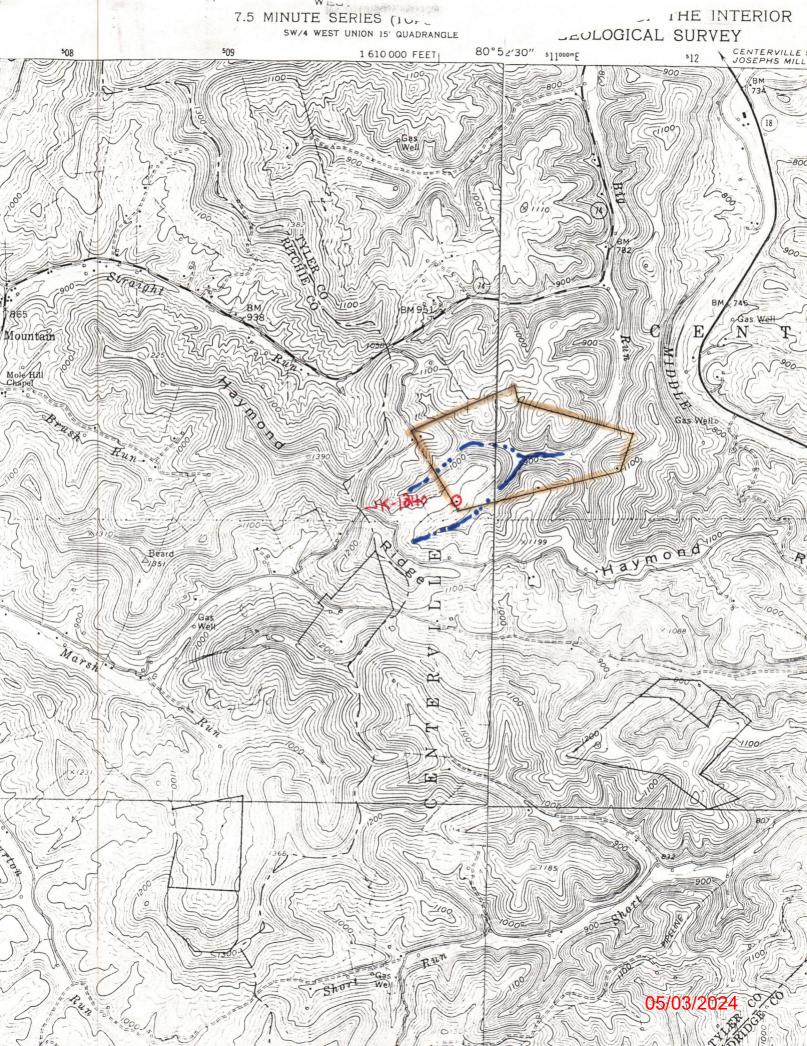
### WELL CLASSIFICATION FORM HIGH COST GAS WELL - DEVONIAN SHALE NGPA Section 107

	DESIGNATED AGENT Richard Reddecliff
	ADDRESS P.O. Box 48
•	Buckhannon, West Virginia, 26201
	LOCATION Elevation //OC
WELL OPERATOR J & J Enterprises, Inc.	Watershed Big Run
ADDRESS P.O. Box 697	Centerville County Tylerquad. 1000
Indiana, PA 15701	Gas Purchase Contract No.
GAS PURCHASER Not Yet Designated	
ADDRESS	Mcter Chart Code
	Date of Contract
* * * *  Date surface drilling began: OC+Ob	* * * * er 18 1985
Indicate the bottom hole pressure of the w	
indicate the bottom note pressure of the w	err and express now this was easterneed.
BOTTOM HOLE PRESSURE Pf=PweXGLS	
$t=60 + (5940.7 \times 0.0075) + 459.7 = 564.25 \times 564.25$	$\frac{1}{33.34T} = \frac{1}{53.34(564.25)} = \frac{1}{30.097} = 0.000033$
Pf = (1325)(2.72) (0.000033) (0.661) (5428.5) (0.	9) $pf = (1325)(2.72)^{(0.1066)} = (1325)(1.11)$
Pf=1470 nci	
AFF	IDAVIT
described in subparagraph (3)(i) or (3)(ii) report described in subparagraph (3)(ii)(R) of potentially disqualifying non-shale footpercent of the gross Devonian age interval not described in the application which is qualified as a high-cost natural gas well.	e of the producing interval which is not index of less than 0.7 if a Gamma Ray log (A) has been filed, or as indicated by the ); I have demonstrated that the percentage tage is equal to or less than five (5); and I have no knowledge of any information inconsistent with a conclusion that the well
STATE OF WEST VIRGINIA	
COUNTY OF Indiana , TO-WIT:	
Vicki L. Vanderberg , a Notary	Public in and for the state and county
aforesaid, do certify that James H. McElwa	in , whose name is signed to
the writing above, bearing date the acknowledged the same before me, in my coun	hay of Dec., 1985, has 05/03/2024
Given under my hand and official seal this	2 day of Dec , 1985.
ly term of office expires on the 23 day	~
	VANDERBERG, NOTARY PUBLIC
(NOTARIAL SEAL)	Ni COMMISSION EXPIRES JAN 23 1988  Ni COMMISSION EXPIRES JAN 23 1988  No Commission Association of Notaries
	Ponnsylvania Association of House

05/03/2024

A SONOUS COLARY PUBLIC CLARMS LOW EXS IES JAM 23, 1988 CLARMS LOW EXS IES JAM 23, 1988 CLARY WARD A Sociation of Motorles







# AFFIDAVIT OF PERSONAL SERVICE ON SURFACE OWNER

R	C		W	
	SEP	30	1985	

STATE OF West Virginia COUNTY OF Tyler	SEP 3 0 1985
Site and Drilling Pit Registration Application undersigned, being first duly sworn, strue and complete copy of all sides of—  (1) Notice on Form ww-2(A) x / Form ww (2) Application on Form ww-2(B) / Form (3) Plat showing the well location on Form (4) Construction and Reclamation Plan on is to plug a well) all with respect to operator's Well No.s JK-12 Centerville District, Tyler upon the person or organization named	-3(A) / Form ww -4(A) / ww -3(B) / Form ww -4(B) / m ww -6, and Form ww -9 (unless the application 39 &JK-1240 located in
Φ.W. Griffin & Edith Griffin	
the zoth day of september , 1985 in the	ounty, State of West Virginia ne manner specified below.
[COMPLETE THE APPROPRIATE SECTION	[אכ
For an individual:	
Handing it to him / her / or, to take it when I offered it, by leaving	ecause he / she / refused to it in his / her / presence.
[ ] Handing it to a member of his or her named of abode of the person to be served, it to the person to be served as soon	and asking the family member to since
For a partnership:  [ ] Handing it to  partnership or, because the partner rover, by leaving it in the presence of	, a partner of the
For a limited partnership:  [ ] Handing it to the general partner, na because the general partner refused to over, by leaving it in the presence of the second seco	med , or,
For a corporation: [ ] Handing it to the corporation's emploattorney in fact / named	
(SI	gnature of person executing service)
Taken, subscribed and sworn before me this My commission expires 9/30/94	26th day of September , 19 85.
	une Davis
(AFFIX SEAL IF NOTARIZED IF OUTSIDE THE STATE)	Notary Public



1)	Date: Sep	tember	26	. 1985
2)	Operator's Well No.	JK-12	40	
3)	API Well No.	47		
-,	711 1 11011 1101	State	Country	Darmit

Date 9-26-85

STATE OF WEST VIRGINIA

		DEP	VISI	ON OF	OIL & G	AS API	PLICATI	ON FOR A WE	ELL WORK PERMIT	ISION		
4) WI	ELL T	YPE: A			/ Ga							V
		]	B (I	f "Gas",	Production	1 <sub>0</sub> A		/ Underground		_/ Deep	_/ Shallow _	
5) LO	CAT	ION:		vation: _	Conte	rvill	0	Watershed:	Tyler		Pennshore	7.51
				trict:	Enterp			County: 24150		Quadrangle:	rd Reddec	177
		PERAT		A B B	ox 48	11000	» COL	)E, a vaso	7) DESIGNATED	AGENT P.O.	Box 48	
	Addr	ess _		Marie Control of the Control	nnon,	WV 26	201		Address	Buckh	annon, WV	26201
8) 01	2.0	AS INS			BE NOTII				9) DRILLING CO	THE SHARE WAS A SHARE WAS A SHARE		
Na Na		JAS INS	Ph 8	the same of the sa	owther	ILD			Name	S.W. Jack D	rilling Co	).
	Addr	ess	Ger	neragl	Delive	ry		Lines and the	Address	P.O. Box 48		
			Mi	ddlebo	urne,	WV 26	149			Buckhannon,	MA Seso1	
10) PR	OPO	SED WE	II V	WORK.	Drill	X ,	Drill	deeper	/ Redrill	/ Stimulate	Х ,	
10, 11		320 W		VORIA.		f old for			orate new formation			
								well (specify)				
11) GE	OLO	GICAL	TARC	GET FOR	MATION	K	nine :	Street				
12)	Esti	mated de	pth o	f complete	ed well,		995.	fee	et sizh			
13)	App	roximate	trata	a depths:	Fresh, _		25'	feet; sa	lt,N/A	feet.		X
14)	App	roximate	coal	seam dep	ths:	FV.	/A	ls c	coal being mined in the	area? Yes	/ No	A
15) CA	SINC	AND T	UBI	NG PROC	GRAM							
CASING				SPEC	IFICATIONS Weight		-	FOOTAGE	INTERVALS	CEMENT FILL-UP OR SACKS	PACKE	RS
TOBING		Si	ze l	Grade	per ft.	New	Used	For drilling	Left in well	(Cubic feet)		
Conductor		11.	3/4	H=40	42	X		30*	11001	U Sacks	Kinds	
Fresh water	T	-	0/8	ERW	23	A		1100'	1100	To Surface		
Coal		8	5/6	ERW	23	A		1100.	1100.	To Surface	Sizes	
Intermedia	te	43.		1 88	10.5	V		E00E1	5945*	200 Cacke	CONTRACTOR OF THE PARTY OF THE	
Production		435		J-55	10.5	Α		5995'	3343	or as requir	Depths set	15-01
Tubing										or as requir	ed by full	10-01
Liners											Perforations:	
											Тор	Bottom
								Color Color Color				
ecord	sig	less gn(s)	th	an 15 e foll	days f	ram t	he fi ntary	ling of the Statement	he Applicatio	s. However, on if the surf ction" on a fa	ace owner	(s) of
									F NO OBJECTIC			
Well 3) a or pr	Wo: sur opo:	his April Per Vey posed work I fur	ppl mi lat ell rth	ication for the confidence on Forest confidence on	on, and orm Wworm WW- on my ite tha	that -2(A) -6, an surfa t I h	I had (2) d (4) ace land ave no	ve receive an Applic a Constru nd as desc o objectio	ed copies of cation for a uction and Re cribed therei on to the pla	surface owner (L) a Notice Well Work Per clamation Pla n. nned work des ased on those	of Applic mit on Fo an on Form scribed in	ation for rm WW-2(B WW-9, al
For e	xec	ution	by	corpo	ration	, par	tners	hip, etc.	(For ex	ecution by na	atural per	sons)
		401011	DY.	COLPC		-, -	LICE D				)	
AME:									1	110016	1001	
									X .	(Signatura)	Afr	
Y										(Signature)	Date 9	11.
ts						Date_			X	(Signature)	05/03/	2024

# INSTRUCTIONS TO SURFACE CWNERS AND EXPLANATION OF METHODS AND TIME LIMITS TO COMMENT ON OIL AND GAS WELL WORK PERMIT

The well operator named in the Notice and this Application and the attached materials is applying for a permit from the State to do oil or gas well drilling or other well work. You are being served with these materials because surface owners have the right to file comments before the permit is issued. (NOTE: If the surface tract is owned by more than three persons, in multiple heirship for example, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22B, Article 1 of the W. Va. Code. Permits are valid for 24 months.

If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator named in the materials and the Director of the Division of Oil and Gas in the West Virginia Department of Energy immediately.

NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT AT ALL.

WHERE TO FILE COMMENTS AND OBTAIN ADDITIONAL INFORMATION :

Director, Division of Oil and Gas West Virginia Department of Energy 1615 Washington Street, East Charleston, West Virginia 25311-2192 (304) - 348 - 3500

Who may file comments? If you wish to file comments, you must be an owner of record of (1) and interest in the surface tract on which the well already is or is about to be located, or (2) an interest in any other surface tract over the same oil or gas lease which will be utilized for roads or other land disturbances.

Time limits for comments. The law requires these materials to be delivered on or before the date the operator files his Application. You have FIFTEEN (15) DAYS after the filing date to file your comments as provided in METHODS FOR FILING COMMENTS below. You may call the Director's office at the above telephone number to be sure of the date. However, if you have been contacted by the well operator, and if you have signed a "voluntary statement of no objection" to any of the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number, and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Methods for filing comments. Comments must be filed in person or received in the mail at the Director's office by the time stated above. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling.

The Director for Oil and Gas has the power to deny or condition a well work

permit based on your comments on the following grounds:

"(1) The proposed well work will constitute a hazard to the safety of persons; or

- "(2) The plan for soil erosion and sediment control is not adequate or effective; or
- "(3) Damage would occur to publicly owned lands or resources; or
- "(4) The proposed well work fails to protect fresh water sources or supplies."

If you want a copy of the permit as it is finally issued, or a copy of the order denying the permit, you should request a copy from the Director.

List of Water Testing Laboratories. The Director maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Director's office or an Oil and Gas Inspector to obtain a copy of the list.



Rev 8-81)

# State of Mest Wirginia

Bepartment of Mines Bil und Gas Bivision

Date	November 25, 1985
Operator's Well No.	JK-1240
Farm	Hess
API No. 4	7 - 095 - 1115

## WELL OPERATOR'S REPORT

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

	Elevation: 1100 Watershed	Big Run			
ora ile i	District: Centerville County Ty	yler	Quadrangle	Pennsbo	ro 7.5
				Alessa a	i si Lkozi ge'
OMPANY	J&J Enterprises, Inc.		Daer 2	lbor Sau	c Lode Vice
	P.O. Box 48, Buckhannon, WV 26201	Casing	Used in	Left	Cement fill up
ESIGNATE	AGENT Richard Reddecliff	Tubing	Drilling	in Well	Cu. ft.
DDRESS P.	O. Box 48, Buckhannon, WV 26201	Size			Political and
SURFACE OV	WNER O.W. Griffin	20-16 Cond.		9.0.2	
ADDRESS F	P.O. Box 3025, Parkersburg, WV 26101	13-10"	30	0	0 sks.
MINERAL RI	ICHIS OWNER Garnet I, Hess, et al	9 5/8		bride 18	Cara Agrees
ADDRESS_	7302	8 5/8	1268	1268	270 sks
	AS INSPECTOR FOR THIS WORK Robert	7		ibana 3	Loffe giota
Lowthe	er ADDRESS General Delivery Middlebourne, WV 26149	5 1/2			holmove
	SUED 9/30/85	4 1/2	5940.70	5940.70	285 sks
DRILLING	COMMENCED 10/18/85	3			
DRILLING	COMPLETED 10/24/85	2			
	ABLE: PLUGGING OF DRY HOLE ON	Liners			
CONTINUOU	S PROGRESSION FROM DRILLING OR VERBAL PERMISSION OBTAINED	Liners used		-	
CONTINUOU REWORKING ON	IS PROGRESSION FROM DRILLING OR	used	Dep	oth	fee
CONTINUOU REWORKING ON GEOLOGICA	S PROGRESSION FROM DRILLING OR  VERBAL PERMISSION OBTAINED  Rhine Stre	used			
CONTINUOU REWORKING UN GEOLOGICA Dept	S PROGRESSION FROM DRILLING OR  VERBAL PERMISSION OBTAINED	used et Rotary	/ Cab	le Tools_	fee
CONTINUOU REWORKING ON CEDIOGICA Dept	S PROGRESSION FROM DRILLING OR  L VERBAL PERMISSION OBTAINED  Rhine Stre  h of completed well 5978 fee	used et Rotary et; Salt	Cab:	le Tools_	
COAL	S PROGRESSION FROM DRILLING OR  L VERBAL PERMISSION OBTAINED  Rhine Stre  th of completed well 5978 fee  r strata depth: Fresh 740,1615 fee  seam depths: None	used et Rotary et; Salt	Cab:	le Tools_	
CONTINUOU REWORKING ON Dept Wate Coal	S PROGRESSION FROM DRILLING OR  L VERBAL PERMISSION OBTAINED  AL TARGET FORMATION Rhine Stre  th of completed well 5978 fee  er strata depth: Fresh 740,1615 fee  seam depths: None	used  et  t Rotary  t; Salt  Is coal	/ Cabi	le Tools_t	ne area? N
CONTINUOU REWORKING ON Dept Wate Coal	S PROGRESSION FROM DRILLING OR  L VERBAL PERMISSION OBTAINED  Rhine Streeth of completed well 5978 feeter strata depth: Fresh 740,1615 feeter strata depths: None  DATA  Rucing formation Devonian Shale	used  et  t Rotary  t; Salt  Is coal	/ Cabi	le Tools_t ned in th	ne area? N
CONTINUOU REWORKING ON GEOLOGICA Dept Wate Coal OPEN FLOW Prod Gas:	S PROGRESSION FROM DRILLING OR  L VERBAL PERMISSION OBTAINED  AL TARGET FORMATION Rhine Streeth of completed well 5978 feet strata depth: Fresh 740,1615 feet seam depths: None  NO DATA  Sucing formation Devonian Shale  Initial open flow Mcf/	used  t Rotary  t; Salt  Is coal	/ Cabi	le Tools_t ned in th oth_5876.	ne area? N
CONTINUOU REWORKING ON GEOLOGICA Dept Wate Coal OPEN FLOW Prod Gas:	S PROGRESSION FROM DRILLING OR  L VERBAL PERMISSION OBTAINED  AL TARGET FORMATION Rhine Streeth of completed well 5978 feet strata depth: Fresh 740,1615 feet seam depths: None  NO DATA  Lucing formation Devonian Shale  Linitial open flow Mcf/  Mcf/  Mcf/ Mcf/ Mcf/ Mcf/ Mcf/ Mcf	used  t Rotary  t; Salt  Is coal  d Oil: In  d F	/ Cabi	le Tools  the in the pth 5876- n flow flow	ne area? N -84 fee Bbl. Bbl.
ODMITNUOU REWORKING ON GEOLOGICA Dept Wate Coal OPEN FLOW Prod Gas: Combine	S PROGRESSION FROM DRILLING OR  L VERBAL PERMISSION OBTAINED  AL TARGET FORMATION Rhine Streeth of completed well 5978 feet restrata depth: Fresh 740,1615 feet seam depths: None  NOATA Devonian Shale  Initial open flow Mcf/  Time of open flow between in	used  et  t Rotary  t; Salt  Is coal  d Oil: In  d Finitial and	/ Cabi feed	the Tools   ne area? N -84 fe Bbl. Bbl.	
ODNITINUOU REWORKING ON Dept Wate Coal OPEN FLOW Processing Combine	S PROGRESSION FROM DRILLING OR  L VERBAL PERMISSION OBTAINED  AL TARGET FORMATION Rhine Streeth of completed well 5978 feet restrata depth: Fresh 740,1615 feet seam depths: None  DATA  DATA  Lucing formation Devonian Shale  Initial open flow Mcf/  Time of open flow between in the rock pressure 1325 psig(sur	used  et  t Rotary  t; Salt  Is coal  d Oil: In  d Finitial and  rface measur	/ Cabi feed	hed in the pth 5876 flow flow s 4 ler 96 he	ne area? N -84 fee Bbl. Bbl. hours ours shut
OONTINUOUREWORKING ON GEOLOGICA Dept Wate Coal OPEN FLOW Proc Gas: Combine	S PROGRESSION FROM DRILLING OR  L VERBAL PERMISSION OBTAINED  AL TARGET FORMATION Rhine Streeth of completed well 5978 feet restrata depth: Fresh 740,1615 feet seam depths: None  DATA  DATA  Lucing formation Devonian Shale  Initial open flow Mcf/  Time of open flow between in the rock pressure 1325 psig(sur	used  et  t Rotary  t; Salt  Is coal  d Oil: In  d Finitial and  rface measur	/ Cabi feed	hed in the pth 5876 flow flow s 4 ler 96 he	ne area? N -84 fee Bbl. Bbl. hours ours shut
CONTINUOU REWORKING ON Dept Wate Coal OPEN FLOW Process Combine State (If Second	S PROGRESSION FROM DRILLING OR  L TARGET FORMATION Rhine Stre  th of completed well 5978 fee  er strata depth: Fresh 740,1615 fee  seam depths: None  DATA  ducing formation Devonian Shale  Initial open flow Mcf/  Time of open flow between in  tic rock pressure 1325 psig(sur  applicable due to multiple complete  ond producing formation Alexander,	used  et  t Rotary  t; Salt  Is coal  d Oil: In  initial and  rface measur  tion)  Benson P	/ Cabi feed	hed in the pth 5876 had been 96 had been 5264	ne area? N -84 fee Bbl. Bbl. bours ours shut
CONTINUOU REWORKING ON Dept Wate Coal OPEN FLOW Process Combine State (If Second	S PROGRESSION FROM DRILLING OR  L VERBAL PERMISSION OBTAINED  AL TARGET FORMATION Rhine Streeth of completed well 5978 feet restrata depth: Fresh 740,1615 feet seam depths: None  DATA  DATA  Lucing formation Devonian Shale  Initial open flow Mcf/  Time of open flow between in the rock pressure 1325 psig(sur	used  et  t Rotary  t; Salt  Is coal  d Oil: In  initial and  face measur  tion)  Benson  P  /d Oil: I	/ Cabi	hed in the pth 5876 had been flow 4976 had been flow to flow the flow flow flow flow flow flow flow flow	ne area?_N  -84 fee  Bbl.  Bbl.  bours  curs shut  5/03/2024  Ebl.

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

Devonian Shale: Perforations: 5876-84 (16 holes)

Fracturing: 300 sks. 20/40 sand: 408 Bbls. fluid.

Alexander: Perforations: 5264-66 ( 8 holes) 5275-77 ( 8 holes)

Fracturing: 450 sks. 20/40 sand:500 gal. acid: 518 Bbls. fluid.

BOTTOM HOLE PRESSURE Pf=PweXGLS

 $t=60 + (5940.7 \times 0.0075) + 459.7 = 564.25 \times = 53.34 \times$ Pf= $(1325)(2.72)^{(0.1066)}$ =(1325)(1.11)Pf=(1325)(2.72) (0.000033)(0.661)(5428.5)(0.9)

Pf=1470 psi

#### WELL LOG

RMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all freshand salt water, coal, oil and ga
Top soil & shale	0	15	
Sand & sandy shale	15	170	Damp @ 290'
Sandy shale, red rock & sand	170	365	
Sand, shale & red rock	365	745	½" stream @ 740'
Sandy shale & sand	745	1520	TOLL STATE OF THE
Sand & sandy shale	1520	1670	½" stream @ 1615'
Sandy shale	1670	1920	16 No. 2 September 2 Line A. Carve 2
Little Lime	1920	1940	Gas ck @ 2475 No show
Big Lime	1940	2005	
Sand & sandy shale	2005	2420	Gas ck @ 3467 No show
Sandy shale & sand	2420	2880	
Sandy shale & sand	2880	3455	Gas ck @ 4739 No show
Sandy shale & sand	3455	4560	
Brown sand	4560	4720	Gas ck @ 4987 No. show
Sandy shale & sand	4720	5264	
Alexander	5264	5277	Gas ck @ 5295 No show
Sandy shale & sand	5277	5876	
Devonian Shale	5876	5884	de la company de la Deli
Sandy shale	5884	5978	eano.
Late the gave between the state of the state			Barrier Service Control
		T.D.	
		THOU THEAT	
**************************************	TOTAL TELE	TO SECTION	FORES VILLE STORE AND THE
	a seem of	15.74	O MOT CONTROL OF THE PROPERTY OF
70 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)			
			TODAY
			Clew houselesses to dispersion
	The state of the s		
	fa9 ;		with the section of the
	intsa :		
	lan si		Legal Culture States System
	ifae ;		iz void culture est void production in the culture of the culture

(Attach separate sheets as necessary)

J & J Enterpris	es, Inc.	the second of
Well Operator		
By: Daniel O		05/03/2024 Daniel F.Stark-
Date:	11/25	/85 Asst.Geologist

Regulation 2.02(i) provides as follows:

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



DIVISION OF OIL & GAS DEPARTMENT OF ENERGY



Field Review

September 24,1985 JK-1240

### State of Mest Mirginia API NO. 47 Bepartment of ENERGY Gil and Gas Zivision

#### CONSTRUCTION AND RECLAMATION PLAN

	DESIGNATED AGENT Richard Reddecliff	
The second secon	Address P.O. Box 48 - Buckhannon, WV 2620	
	Telephone 472-9403	
	SOIL CONS. DISTRICT Upper Ohio	
J&:	J Enterprises, Inc. (Agent)	
Upper	Ohio son. All corrections	
an: 9	1-26-85	
(1)	(Date)	
2	(SO) Agent)	
	io April	
	LOCATION	
(A)	Structure Diversion Ditch (1)	
	Material Earthen	
	Page Ref. Manual 2-12	
(B)	Structure Sediment Barrier (2)	
	Material Logs &/or Brush	
	Page Ref. Marmal 2-16	
(C)	Structure	
	Material (3)	
	Page Ref. Manual	
dirt work		
10		
	Treatment Area II	
е	Lime 3 Tons/acre or correct to pH 6.5	
	or correct to pH 6.5	
	Fertilizer 600 31 /	
	Fertilizer 600 lbs/acre (10-20-20 or equivalent)	
e	(10-20-20 or equivalent)	
	(10-20-20 or equivalent)  Mulch Hay 2 Tons/acre	
e	(10-20-20 or equivalent)  Mulch Hay 2 Tons/acre  Seed* Orchard Grass 30 lbs/acre	
е	(10-20-20 or equivalent)  Mulch Hay 2 Tons/acre  Seed* Orchard Grass 30 lbs/acre  Ladino Clover 5 lbs/acre	
e	(10-20-20 or equivalent)  Mulch Hay 2 Tons/acre  Seed* Orchard Grass 30 lbs/acre  Ladino Clover 5 lbs/acre	
e	(10-20-20 or equivalent)  Mulch Hay 2 Tons/acre  Seed* Orchard Grass 30 lbs/acre  Ladino Clover 5 lbs/acre  Red Clover 5 lbs/acre  and clovers with the proper bacterium.	
trefoil o	(10-20-20 or equivalent)  Mulch Hay 2 Tons/acre  Seed* Orchard Grass 30 lbs/acre  Ladino Clover 5 lbs/acre  Red Clover 5 lbs/acre  Discrete 1 lbs/acre  Red Clover 5 lbs/acre  Smith Land Surveying 03/2024	
trefoil o	(10-20-20 or equivalent)  Mulch Hay 2 Tons/acre  Seed* Orchard Grass 30 lbs/acre  Ladino Clover 5 lbs/acre  Red Clover 5 lbs/acre  and clovers with the proper bacterium.  FAPED BY Smith Land Surveying 03/2024	
trefoil (	(10-20-20 or equivalent)  Mulch Hay 2 Tons/acre  Seed* Orchard Grass 30 lbs/acre  Ladino Clover 5 lbs/acre  Red Clover 5 lbs/acre  and clovers with the proper bacterium.	
	(A)  (B)  (C)  (C)  (C)	

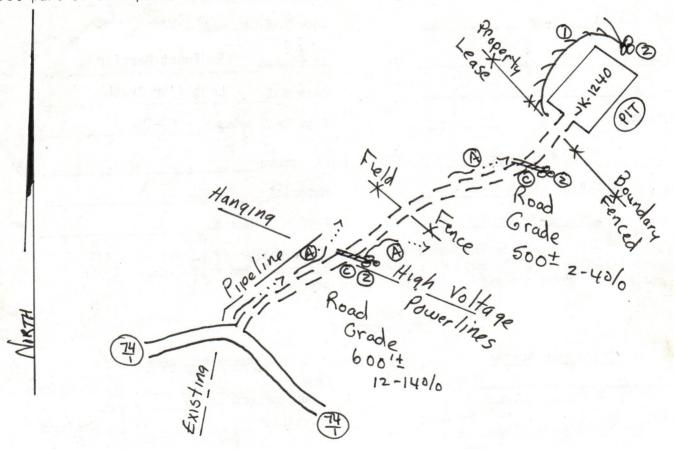
ATTACH OR PHOTOCOPY SECTION OF INVOLVED TOPOGRAGHIC MAP. QUADRANGLE West Union 7.5'

WELL SITE ACCESS ROAD —



#### WELL SITE PLAN

Sketch to include well location, existing access road, roads to be constructed, well-site, drilling pits and necessary structures numbered or lettered to correspond with the first part of this plan. Include all natural drainage.



Drilling pit may vary in location other than that shown on this plan and/or other pits may be added due to soil type, newly discovered water systems, and the encounter of rock when building location.

Access road subject to change between company and land owner, or aquirement of right-of-way. If change is made , a revised reclamation plan will be submitted. All cuts 2:1 slope. All topsoil to be stockpiled and used in reclamation. All grades for roads and locations as well as sediment structures shown on drawing.

	LEGEND	
DRAIN PIPE 0 ->- 0 ->-	PROPERTY BOUNDARY	05/03/2024
ROAD		xxx
DIVERSION	PLANNED FENCE -	//
WATERWAY STREAM	BUILDING WET SPOT -	SL5
OPEN DITCH>	SPRING O-	SMITH LAND SURVEYING CO.  III SOUTH ST.  GLENVILLE, WV. 26351