

7/85





Date: 14	October ,	19_	86	
Operator's				

1)

3) API Well No. 47-039-4369 State

Permit

	OCT 15	) 1980	17171	אורדי בדו או	STA	ATE OF V	VEST VIRO	GINIA ND GAS DIV <b>VORK PERMI</b> T	ICION		
		011 &	GAS	AKIM	ENICA	) FENER TION FOR	GY, OIL A.	NU GAS DIV.	ISIUN		
DIV 4) WEIRF	ISION OF	OF EN	<b>VERGY</b>	Ar	PLICA	HON FOR	A WELL V	YORK FERINII	i.		
4) WEIRER	PE: X Oil		/ Ga		<u>X</u> /						
	B (If	"Gas", P	rounciro		<u>X</u>	/ Unde	erground stor	age		✓ Shallow _	XX_/)
5) LOCATIO	N: Elev	ation:		<u> </u>	آران	Wate	ershed: P	ond Fork	of Blue Cr	<u>eek</u> Mammath	7 5 1/00
		ict:	<u> Elk</u>		047	Cou	nty:K	anawna	Quadrangle:	- I Mon	7.5 42.5
=	ERATOR	<u> </u>	L Ene	rgy 2507	<u>Go</u> COI	DE: LL	007)		DAGENT <u>Denni</u> P.O. Box	<u>S. L. Man</u> 2587	.11
Address	5	P.O.	Box	<u> </u>	77 25	220		Address	Charlesto	n WV 25	329
			esto		<u> </u>	1329	0)	DDII LING C	ONTRACTOR:	119 WV 23	
8) OIL & GA	s inspect Carlos	OR TO E	SE NOTII	FIED			9)		ot Availabl	e	
	222	Pinc	ch Ri	dge	Road			Address			And the second s
Address			WV					, 144, 033			
10) PROPOSE		•	Drill			l deen	ar .	/ Redrill	/ Stimulate_X	X /	
10) PROPOSE	D WELL W	OKK.				_		new formation		***************************************	
			Other :	hysical	change	in well (sp	ecify)				
ii) GEOLOG	ICAL TARG	ET FOR!	MATION	, <u>Bi</u>	g Ľi	me, W	eir, D	<u>evonian,</u>	Shales401		
	ated depth of			52	90_		feet				
13) Appro	oximate trata	depths:	Fresh, _	50		fee			feet.		
	oximate coal s					690		eing mined in th	e area? Yes	/ No	_XX/
15) CASING	AND TUBIN	IG PROC	GRAM	A	erm	计#69	17			t.	
CASING OR TUBING TYPE		SPEC	IFICATION Weight			Countries of the Countr	FOOTAGE INTI	ERVALS	CEMENT FILL-UP OR SACKS	PACKE	RS
TOBING TITE	Size	Grade	per ft.	New	Used	For d	irilling	Left in well	(Cubic feet)		
Conductor					ļ	1 = 0		1 - 700 - 700	J 200	Kinds	1 F O F
Fresh water	9-5/8	<u>sml</u> s	00	X		178	F720 .	1783 72		11	15.05
Coal	/	smls	23	X	ļ	210	1	2101	200 cts	Sizes	
Intermediate	#,-,,		10 5		<del> </del>	H	100	F200	1280 /00 a tra		
Production	4-1/2	smls	\$10.5	X		32	290	5290	<b>200-</b> 400cts		as required a 15.01 .
Tubing					ļ					11	= 1J. UI *
Liners				-	ļ					Perforations:	Bottom
										100	вопол
			<u> </u>	<del>                                     </del>	<del> </del>						
	4			1	1	<u> </u>	L				
						OFFIC	E USE ON	ILY			
<del></del>		***************************************					ING PER				
		47-03	9-436	a					00	tober 17	19 86
Permit number		47-03	77-430	<i></i>		<u></u> .	:		Da		
This parmit any	varing the we	ll operato	or and we	Il locatio	on show	n helow is	evidence of	nermission gran	ted to drill in accordar		inent legal re-
anis permit cov quirements subj	ect to the co	nditions o	contained	herein a	and on t	he reverse	hereof Notific	cation must be g	given to the District Oil well operator or his cor	and Gas Inspect	or, (Refer to
io. 8) Prior to ti	he constructi	on of roa	ds, locati	ons and	pits for	any permi	tted work.	n addition, the	well operator or his cor	tractor shall not	ify the proper
district oil and	gas inspector	24 hours	s before a	ictual pe	rmitted	work nas	commencea.)				
	vork is as des	scribed in	the Noti	ce and A	Applicati	ion, plat, a	nd reclamati	on plan, subject	to any modifications a	nd conditions sp	ecified on the
reverse hereof.		Octob	er 17	, 198	88		unless well w	ork is commence	ed prior to that date and	prosecuted with	due diligence.
Permit expires	****										
_			_			_				•	
Bond:	Agent	:   ₽	lat:	Casi	ng	Fee .	WEEK	S&E UZ	Other		
	12		ハート			3971	/ ズ ヽ	1/X	y		

See the reverse side of the APPLICANT'S COPY for instructions to the well operator

NOTE: Keep one copy of this permit posted at the drilling location.



WR-35

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY



### State of West Wirginia

DEPARTMENT OF ENERGY

Bil und Gas Bivision

Date	March 23	3, 1987	
Opera	tor's		
Well	No.Scholl	L 40	_
Farm	Schol1/	Wilcher	
	10.47 <b>-</b>		

WELL OPERATOR'S REPORT

OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

	Elevation: 1205 Watershed				
	District: Elk County Kana	awha	Quadrangle	e Mammoth	7.5
~>************************************	A11 1 C II to The Communication of the Communicatio				
	Allegheny & Western Fnergy Corp	Coning		Toff	Cement
	O.Box 2587 , Charleston, W.Va  D AGENT Dennis L. Mann	Casing	Used in		fill up
	P.O.Box 2587, Charleston, W.Va	Tubing	Drilling	in Well	Cu. ft.
	WNER Scholl/ Wilcher	Size 20-16			***************************************
	033 Quarrier St, Charleston, W.Va.	Cond.			
	RIGHTS OWNER Same	13-10"	700	700	275 sk
	- Dame	9 5/8	798	798	2/J SK
	GAS INSPECTOR FOR THIS WORK Carlos 223 Pinch Ridge Rd	8 5/8			
770 T	223 Pinch Ridge Rd ADDRESS <u>Elkview</u> , W.Va	7	2006	2006	200 sks
-	SSUED 8/17/86	5 1/2	<del></del>	L	205 also
	COMMENCED 11/10/86	4 1/2	5709	5709	225 sks
	COMPLETED 11/18/86	3			
	CABLE: PLUGGING OF DRY HOLE ON	2		<u> </u>	
CONTINUO	US PROGRESSION FROM DRILLING OR	Liners			
REWORKINO ON	G. VERBAL PERMISSION OBTAINED	used			
			Den	th 5200	feet
	ar manore constantos Doronion Ch	212			The state of the s
GEOLOGIC	AL TARGET FORMATION Devonian Sh	ale Rotary X	/ Cabl	e Tools	
Dep	th of completed well 5770 feet	Rotary X	/ Cabl	e Tools_	1.66
Dept Wate	th of completed well 5770 feet er strata depth: Fresh 50 feet;	Rotary X Salt 50	/ Cabl 0feet	e Tools_	
Dept Wate	th of completed well 5770 feet	Rotary X Salt 50	/ Cabl 0feet	e Tools_	e area? no
Depr Wate Coa OPEN FIO	th of completed well 5770 feet er strata depth: Fresh 50 feet; l seam depths: 200	Rotary X Salt 50 Is coal	/ Cabl 0 feet being min	e Tools_ .ed in the	e area?no
Depri Wate Coa OPEN FLO Pro	th of completed well 5770 feet er strata depth: Fresh 50 feet; l seam depths: 200  W DATA ducing formation Weir	Rotary X Salt 50 Is coal Pa	/ Cabl 0 feet being min y zone der	e Tools_ ed in the oth_2227	e area? no
Depri Wate Coa OPEN FLO Pro	th of completed well 5770 feet er strata depth: Fresh 50 feet; l seam depths: 200  W DATA ducing formation Weir : Initial open flow Mcf/d	Rotary X Salt 500 Is coal Pa Oil: In	/ Cabl 0 feet being min y zone dep	e Tools_ ed in the oth_2227 flow	e area? no feet Bbl/d
Depri Wate Coa. OPEN FLO	th of completed well 5770 feet er strata depth: Fresh 50 feet; l seam depths: 200  W DATA ducing formation Weir : Initial open flow Mcf/d Final open flow 20 Mcf/d	Rotary X Salt 500 Is coal Pa Oil: In	/ Cabl 0 feet being min y zone dep itial open nal open f	e Tools_ed in the oth 2227_flow_	feet  Bbl/6
Deprivate Coal OPEN FLOT Pro	th of completed well 5770 feet er strata depth: Fresh 50 feet; l seam depths: 200  W DATA ducing formation Weir : Initial open flow Mcf/d Final open flow 20 Mcf/d Time of open flow between ini	Rotary X Salt 500 Is coal Pa Oil: In Fi tial and f	/ Cabl 0	e Tools_ed in the oth 2227 flow_s 24 ho	feet  Bbl/c  Bbl/c  Burs
Deprivation   Deprivation	th of completed well 5770 feet er strata depth: Fresh 50 feet; l seam depths: 200  W DATA ducing formation Weir : Initial open flow Mcf/d Final open flow 20 Mcf/d Time of open flow between initic rock pressure 640 psig(surfate)	Rotary X Salt 500 Is coal Pa Oil: In Fi tial and f	/ Cabl 0	e Tools_ed in the oth 2227 flow_s 24 ho	feet  Bbl/c  Bbl/c  Burs
Deprivation (If	th of completed well 5770 feet er strata depth: Fresh 50 feet; l seam depths: 200  W DATA ducing formation Weir : Initial open flow Mcf/d Final open flow 20 Mcf/d Time of open flow between initic rock pressure 640 psig(surfate)  C applicable due to multiple completion	Rotary X Salt 500 Is coal Pa Oil: In Fi tial and f ce measure n)	/ Cabl 0feet being min y zone dep itial open nal open f inal tests ment) afte	e Tools_ed in the oth 2227 flow_s 24 hour 24 hour	feet  Bbl/c  Bbl/c  Bbl/c  surs shut in
Deprivation Material Coal Coal Coal Coal Coal Coal Coal Co	th of completed well 5770 feet er strata depth: Fresh 50 feet; l seam depths: 200  W DATA ducing formation Weir : Initial open flow Mcf/d    Final open flow 20 Mcf/d    Time of open flow between initic rock pressure 640 psig(surface) cond producing formation Devonian	Rotary X Salt 500 Is coal Pa Oil: In Fi tial and f ce measure n) Shale Pa	/ Cabl 0	e Tools_ed in the oth 2227 flow_er 24 house oth 2355	feed Bbl/cours ars shut in
Deprivation Material Coal Coal Coal Coal Coal Coal Coal Co	th of completed well 5770 feet er strata depth: Fresh 50 feet; l seam depths: 200  W DATA ducing formation Weir : Initial open flow Mcf/d Final open flow 20 Mcf/d Time of open flow between initic rock pressure 640 psig(surfate applicable due to multiple completion cond producing formation Devonian S: Initial open flow Mcf/d	Rotary X Salt 500 Is coal Pa Oil: In Fi tial and f ce measure n) Shale Pa Oil: Ir	/ Cabl 0	e Tools_ed in the oth 2227 flow_er 24 house oth 2355 in flow_er flow_e	fee Bbl/cours urs shut in
Deprivation Material Coal Coal Coal Coal Coal Coal Coal Co	th of completed well 5770 feet er strata depth: Fresh 50 feet; l seam depths: 200  W DATA ducing formation Weir : Initial open flow Mcf/d    Final open flow 20 Mcf/d    Time of open flow between initiatic rock pressure 640 psig(surfate applicable due to multiple completion cond producing formation Devonian s: Initial open flow Mcf/d Final open flow 187 Mcf/d	Rotary X Salt 500 Is coal Pa Oil: In tial and f ce measure n) Shale Pa Oil: Ir Oil: Fi	/ Cabl 0	e Tools  ed in the oth 2227  flow  124 house th 2355  flow  flow  5th 2355	fee Bbl/ours urs shut in fee Bbl/obbl/
Deprimental Material Coal Coal Coal Coal Coal Coal Coal Co	th of completed well 5770 feet er strata depth: Fresh 50 feet; l seam depths: 200  W DATA ducing formation Weir : Initial open flow Mcf/d Final open flow 20 Mcf/d Time of open flow between initic rock pressure 640 psig(surfate applicable due to multiple completion cond producing formation Devonian S: Initial open flow Mcf/d	Pa Oil: In tial and f ce measure n) Shale Pa Oil: Ir Oil: Fi	/ Cabl 0	e Tools_ed in the oth 2227 flow_cth_2355 flow_cth_2355 flow_cth_524 houses_24 house_24 houses_24 house_24 houses_24 houses_24 houses_24 houses_24 houses_24 houses_24	fee Bbl/ours shut in fee Bbl/ours

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

2227-2237 perf w/ 21 holes frac w/ 10,000 gel acid + 92,100 scf n2 2355-3142 perf w/ 31 hole frac w/ 60,000# 20/40 sd = 1.140,000 scf n2 3197-4563 perf w/ 40 holes frac w/ 60,000# 20/40 sd + 1,140,000 scf n2 4610-5649 perf W/ 35 holes frac w/ 60,000# 20/40 sd + 1,000,000 scf n2



WELL LOG

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh
FORMATION COLOR 1920 CT. DOLL			and salt water, coal, oil and gas
SANDSTONE & SHALE SALTSAND SHALE SALTSAND SHALE MAXON LITTLE LIME PENCIL CAVE BIG LIME SHALE WEIR SAND SHALE SUNBURY SHALE SANDY SILTSTONE & SHALE LIT. BROWN & GREY SHALE MARCELLUS SHALE ONONDAGA LIMESTONE	0 1062 1225 1327 1449 1681 1748 1787 1794 2005 2127 2260 2519 2786 5647 5740	1062 1225 1327 1449 1681 1748 1787 1794 2005 2127 2260 2500 2519 2786 5647 5740 5770	ALL DEPTHS 10 KB TD 4770 KB
	Control of the Contro		
404 2519	- Company of the Comp		
1813 1 3644			
825 4719			1275
830 5019			
835 . 5319			
			enta de la sunta de quer

(Attach separate sheets as necessary)

Allegheny & Western Energy Corp
Well Operator
By: Den &. M.
By: X. I.i.
Date: Vice President / Cheif of Operations

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 and, encountered in the drilling of a well."



# IV-35 (Rev 8-81)

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

•	AUGUST TE TE
	15 to 15
	四人
	to Jane Williams
	- Contraction

## State of Mest Birginia

Bepariment of Mines noieiviC esd dau liD

No. Britance	NAME OF TAXABLE PARTY.	
Date Mar	ch 23.	,1987
Operator	S	
Well No.	Scholl	40
Farm	Scholl	/Wilcher

API No. 47 - 039 - 4369

Revised

WELL OPERATOR'S REPORT

OF FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

FW AGG 33 PM - SM		<b>5</b> .		
WEIL TYPE: Oil / Gas X / Liquid Injection (If "Gas," Production X / Undergrou	/ Wast	e Disposa. ge/ Deep	L/ p/ Sha	11 <u>ow X</u> /)
IOCATION: Elevation: 1205 Watershed I				
District: EIk County Kanav	vha ;	Quadrangle	e Mammot	h 7.5
		r		
COMPANY Allegheny & Western Fnergy Corp				Cement
ADDRESS P.O.Box 2587, Charleston, W.Va., 25329	Casing			fill up
DESIGNATED AGENT Dennis L. Mann	Tubing	Drilling	in Well	Cu. ft.
ADDRESS P.O.Box 2587, Charleston, W.Va., 25329	Size 20-16		der de la company de la compan	
SURFACE OWNER Scholl/Wilcher:	Condi			
ADDRESS 1033 Quarrier St., Charleston, W.Va.	13-10"			
MINERAL RIGHTS CWNER Same	9 5/8	798	798	275 sks
ADDRESS_	8 5/8			
OIL AND GAS INSPECTOR FOR THIS WORK Carlos 223 Pinch Ridge Rd;	7	2006	2006	200 sks
ADDRESS 223 Pinch Ridge Rd : Flkview, W Va 25071	5 1/2;			
PERMIT ISSUED 8/17/86	4 1/2	5709	5709	· 225 sks
DRILLING COMMENCED 11/10/86	3 :			
DRILLING COMPLETED 11/18/86	2 ;			
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR	Liners			
REWORKING. VERBAL PERMISSION OBTAINED	used:			
ON				1
GEOLOGICAL TARGET FORMATION Devonian Shale		Dep	th 5290	feet
Depth of completed well 5762 feet	Rotary	Cabl	e Tools_	
Water strata depth: Fresh 50 feet;	Salt	500 feet		
Coal seam depths: 200	Is coal	being min	ed in the	e area? <u>no</u>
OPEN FLOW DATA				
	Pa	y zone dep	oth 222	27 feet
Gas: Initial open flow Mcf/d	Oil: In	itial open	flow	Bbl/d
Final open flow (20) Mcf/d	,			
Time of open flow between init				
Static rock pressure 640 psig(surfac				
(If applicable due to multiple completion				
Second producing formation Devonian Shall	e Pa	y zone dep	oth 2	2519 feet
Gas: Initial open flow Mcf/d	Oil: Ir	itial oper	ı flöw	Bbl/d
Final open flow (187) Mcf/d				
Time of open flow between init				85
Static rock pressure 640 psig(surface		• • • •		
		i i (Contá	ຳກາເລັດກິກ	ananca cida

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

2227-2237 perf w/ 21 holes frac w/ 10,000 gel acid + 92,100 scf n2 2355-3142 perf w/ 31 holes frac w/ 60,000# 20/40 sd = 1.140,000 scf n2 3197-4563 perf w/ 40 holes frac w/ 60,000# 20/40 sd + 1,140,000 scf n2 4610-5649 perf w/ 35 holes frac w/ 60,000# 20/40 sd + 1,000,000 scf n2

MAY 21 1987

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

### WELL LOG

***************************************				· · · · · · · · · · · · · · · · · · ·		REMARKS
					~~~~~	
FORMATION	COLOR	HARD C	DR SOFT	TOP FEET	BOTTOM FEET	and salt water, coal, oil and gas
		ENCINEED FRANCISCO CONTRACTOR OF THE PERSON				The Dail Water Court of the Cou
					7050	TET DEFOUND 101 ICD
	STONE &	SHALE		0	1062	ALL DEPTHS 10' KB
	SAND			1062	1225	
SHAL				1225	1327	
	SAND			1327	1449	The second secon
SHAL				1449	1681	
MAXO				1681	1748	
· ·	LE LIME			1748	1787	
	IL CAVE			1787	1794	
	LIME			1794	2005	
SHAL				2005	2127	
	SAND			2127	2260	
SHAL		-		2260	2500	
	BURY SHA			2500	2519	
	Y SILTS			2519	2786	•
	BROWN &		SHALE	2786	5647	
	ELLUS S		•	5647	5740	and the second s
ONON	IDAGA LI	MESTONE	T ~:	5740	5762	TD 5762' KB
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(Attach separate sheets as necessary)

Allegheny & Western	Energy Corp	
Well Operator	. , ,	
By: Deni	2. Me	,Vice President
Date:	May 4	,1987

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 will, encountered in the drilling of a well."