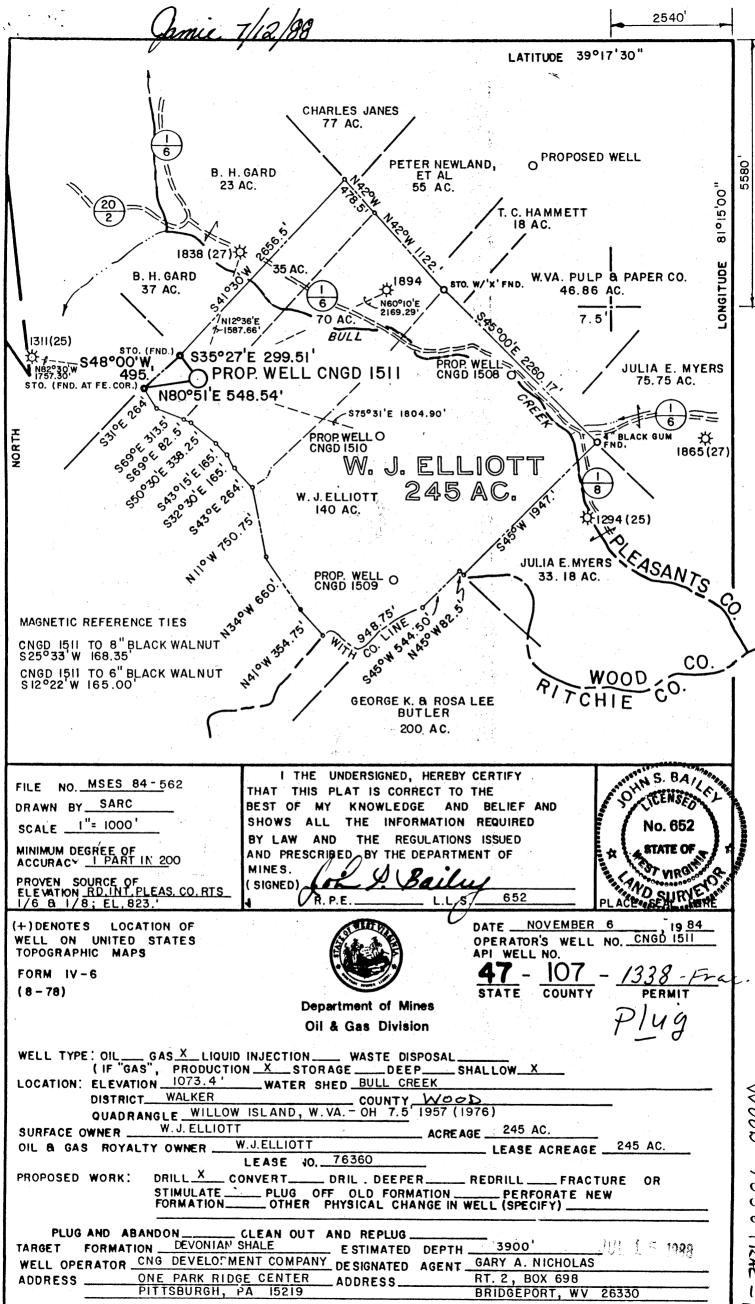
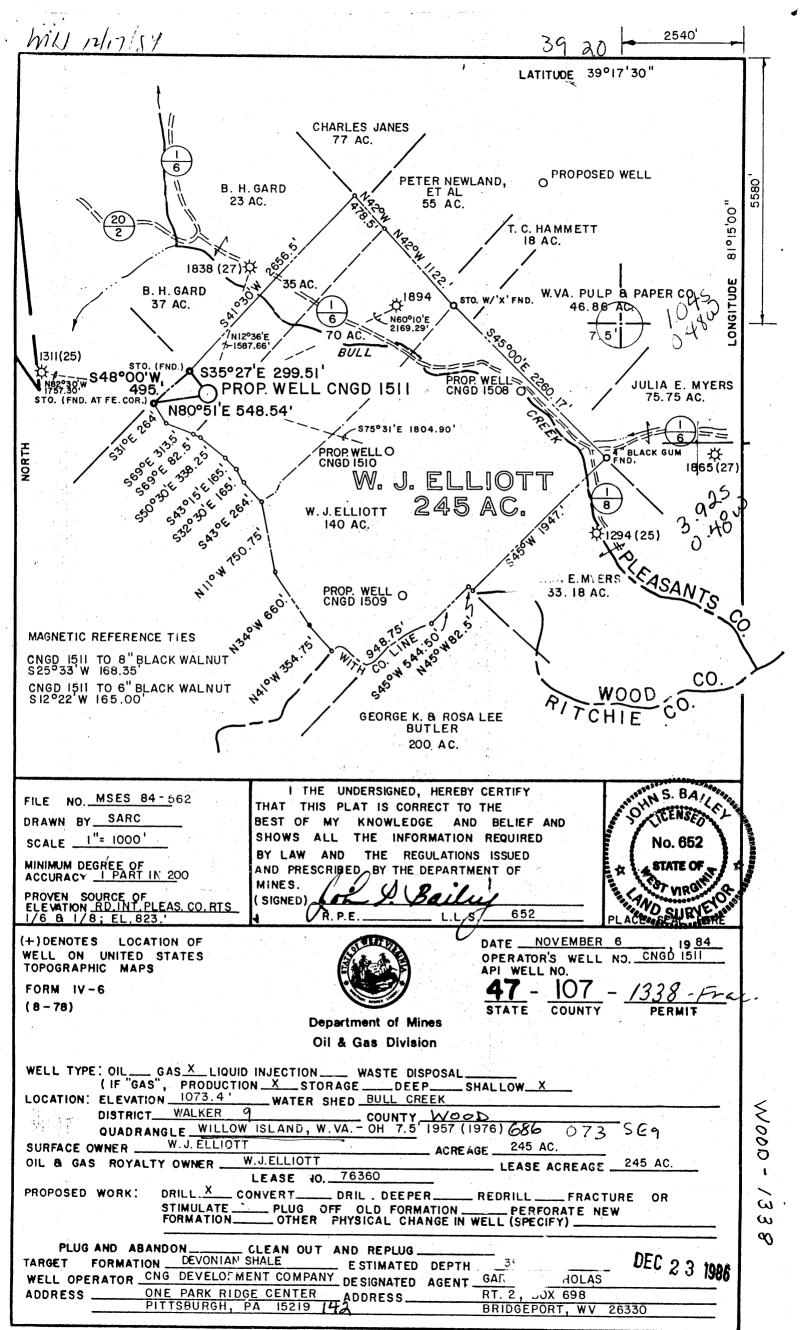


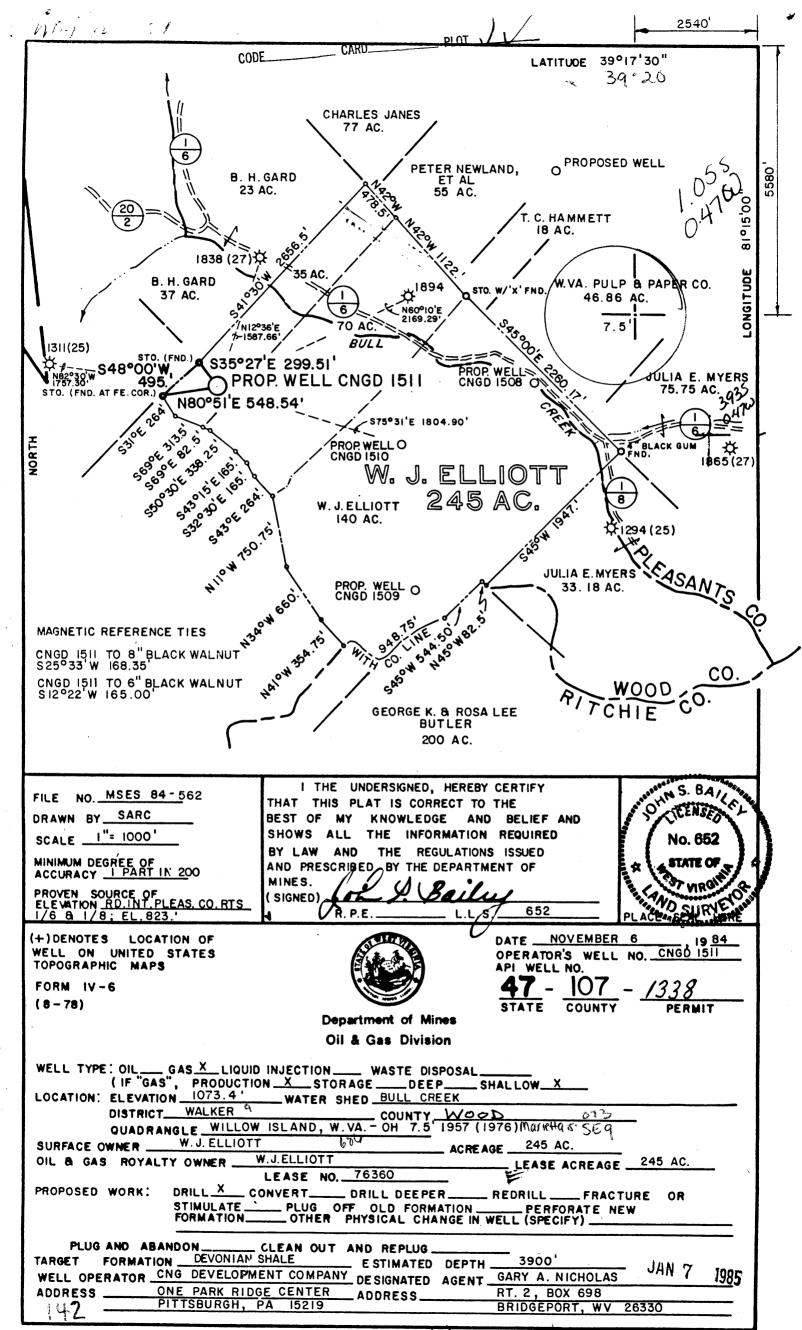
PREPARED BY MSES consultants inc.

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OIL & GAS DIVISION DEPT. of MINES

## State of Mest Nirginia

Bepartment of Mines Bil und Gas Bivision

	February	19,	1985	)						
Operator's										
Well N	10. CNGI	WN_	1511							
	W. J. Ell									
	O. 47 -									

WELL OPERATOR'S REPORT

			STIMULATING,	OΒ	DUVETORT	CHANCE
DOTTITAC	בסאריוו ווידיאסא	AND/OR	STIMULATING	UR	PHISICAL	CIPAIGE
DETTING,	L LYNCI OLGING	120/011				

WEIL TYPE: Oil x / Gas / Liquid Injection (If "Gas," Production / Underground	/ Wast	te Disposal ge/ Deep	/ / Sha	llow/)
LOCATION: Elevation: 1073.4 Watershed	Bull Cr	eek		
District: Walker County Wood		_Quadrangle	Willow	Island
	!			
COMPANY CNG DEVELOPMENT COMPANY				Cement
ADDRESS P.O.Box 15746, Pittsburgh, PA 15244	Casing	Used in	Left	fill up
DESIGNATED AGENT Gary A. Nicholas	Tubing	Drilling	in Well	Cu. ft.
ADDRESS Rt. 2 Box 698, Bridgeport, WV 26330	Size			
SURFACE OWNER W. J. Elliott	20-16 Cond.			
ADDRESS Rt. 3 St. Marvs. WV 26170	12-31/A"	267	267	To Surf
MINERAL RIGHTS OWNER W. J. Elliott	9 5/8			
ADDRESS Rt. 3 St. Marys, WV 26170	8 5/8	1206	1206	To Surf
OIL AND GAS INSPECTOR FOR THIS WORK	7			
Glen Robinson ADDRESS Mineralwells, WV 26150	5 1/2			
PERMIT ISSUED 12-17-84	4 1/2	3580	3580	290 Thix.
DRILLING COMMENCED 1-14-85	3	3300		
DRILLING COMPLETED 1-19-85	2			
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON	Liners used			
GEOLOGICAL TARGET FORMATION Devonian Shale		Dep	oth 390	0feet
	Rotary	/ Cabl	e Tools_	•
Water strata depth: Fresh $\frac{180}{410}$ feet;				
Coal seam depths:				e area? No
	•	•		•
OPEN FLOW DATA	_		3026-	-3210 feet
Producing formation Devonian Shale	P	ay zone de	1924-	.20 Pb1 /d
Gas: Initial open flow Mcf/d	011: 1	nitial oper	1 IIOW	
Final open flow (est) (25) Mcf/d				
Time of open flow between init				
Static rock pressure (est) 185 psig (surface		ement) ait	erno	urs snut 11
(If applicable due to multiple completion		_		_
Second producing formation				
Gas: Initial open flow Mcf/d				
Final open flow Mcf/d				
Time of open flow between ini				
. Static rock pressurepsig(surfac	e measur	ement) afte	r_h	ours shut i

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

Perfco Perforated Shale 3026-3210; 22 holes (.39)

1924-20,0025 holes (.39)

Halliburton Frac lat St

Halliburton Frac 1st Stage - Break 2750, 10 pumps, Avg. BPM 75,000, Avg. PSI 2850, 500 gal MOD 202 Acid, ISIP 1800, 5 min 1600,

2nd Stage - Break 2950, 10 pumps, Avg. BPM 60,000, Avg. PSI 3500, 500 gal MOD 202 Acid, ISIP 1950, 5 min 1650

WELL LOG

		<b>,</b>	DEADING
FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Clay	0	5	Water @ 180' 410' - 1/2" stream
Sh, Sd & RR	5	960	1025' - 3" stream
Big Lime & Injun	960	1140	·
Sand and Shale	1140	3594	Huron@T.D.
LOG TOPS			
BIG INJUN		1215	: . :
BEREA	1574	1580	
ans seed by ing.			, in the second
s know who it's 1550 in 1850			
La Mariotti (28 Em)			
<b>Y</b> in the second of the secon			,
			•

				•
(Attach	n separate	sheets as nec	esgary)	•
	Well Operat	or	<u>v</u>	
By:_ Date	:Februar	y 19, 1985		

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





1)	Date:	November	16,	, 19	84
2)	Operator's Well No	1511			
3)	API Well N		107 -	1338	
		State	Coun	ts:	Darmit

### OIL & GAS DIVISION

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

DEPT	. OF	MIN	ES	AP	PLICATION	ON FOR A WEL	L WORK PERMIT			
4) WELL TY	PE: A (	Oil X	/ G	as	/					
			Productio	n		/ Underground	storage	_/ Deep	/ Shallow	
5) LOCATIO	N: El	evation: _	107	3.4			Bull Creek			
	Di	istrict:	Wa 1			County:	Wood	Quadrangle:	Willow Is	land
6) WELL OP			<u>Develo</u>				7) DESIGNATED	AGENT Mr. G		
Address	c/ <u>o</u> F	Paul W	. Garre	ett, l	0. E	30x_15746	Address	Crosswind Co	orporate P	ark
	F	Pittsb	urgh, I	PA 1!	5244	10110	Kt. 2, Box	698, Bridgep	ort, NV 2	26330
8) OIL & GA						70	9) DRILLING CO			
Name							Name <u>Sam</u>	<u>Jack Drilli</u>		
Address			Mt. P			ate_	Address	P. 0. Box 4		
			ls, WV					Buckhannon,	WV 26201	1
10) PROPOSE	D WELL	WORK:		<u>X</u>			/ Redrill		<u>X/</u>	
							ate new formation_			
anaraa	~ <u> </u>			<i>u</i>		vell (specify)				
11) GEOLOGI					900	n Shale				
12) Estima	•	•	•	1	305	feet	_	_		
13) Appro		_			-000	•	,			v
14) Appro 15) CASING A					· · · · · · · · · · · · · · · · · · ·	Is co	al being mined in the	area? Yes	/ No	
CASING OR	110 108 11		CIFICATION	6	6)	POOTACE	ALTERNATION .	n	li .	
TUBING TYPE	6:	i	Weight			FOOTAGE I	1	CEMENT FILL-UP OR SACKS	PACKE	:RS
Conductor	Size 16	Grade	per ft.	New	Used	For drilling	Left in well	(Cubic feet)		
Fresh water	11	/4 H-4	42	х		20 - 30	286 255	To Surface	Kinds	
Coal	11 3/	// - 11	4 72	^		2300 33	230 333	10 Surface	By Rule 1	5.05
Intermediate	8.5	/8 X-4	2 23	X		1500	1500	To Surface	Sizes	
Production		$\frac{10}{12}$ J-5		x		3900	3900	200 <b>-</b> 400	B	
Tubing			55 4.6	<del></del>		3300	3900	200 - 400	By Rule 1	F 01
Liners	/	10 011	1 7.0	^					Perforations:	3.01
		1				<del></del>			Top	Bottom
									100	Bottom
•										
74-1-1										
			·····	<del></del> -	0	FFICE USE C	DNLY			
•					D	RILLING PE	RMIT			
Permit number_		47-10	7-1338	3				Decembe	r 17.	19 84
							***************************************	Dat		
This permit cove	ring the w	vell operat	or and wel	location	n shown be	elow is evidence o	of permission granted	d to drill in accordan	ice with the perti	inent legal re-
quirements subje	ct to the c	conditions	contained	herein ar	nd on the r	everse hereof. No	otification must be g	iven to the District O	il and Gas Inspe	ctor (Refer to
district oil and g	as inspecto	or 24 hour	s before a	ctual per	mitted wor	k has commenced	L.In addition, the we	ii operator or his con	tractor shall not	ify the proper
							ation plan, subject to	any modifications a	nd conditions em	saified on the
everse hereof.					piiounon,	piat, and reciamo	aron plan, subject to	any modifications a	na conuntions sp	scribed on the
Permit expires _	Dec	ember	17, 19	186		unless well	work is commenced p	orior to that date and	prosecuted with	due diligence.
			·							
Bond:	Ager	nt:	Plat:	Casing	F	æ ,			1.	•
20	las	$u \mid V$	nu	m	100	4-	7//		~ /·	
00	rrit	7 /	1110	11/1	119	10	Y Kin	unti	11/2	
							1 july	was I	Jus	2
NOTE: Keep o	ne copy of	f this nern	nit posted :	at the dri	illing locati	on.	Admit	sistrator, Office of O	il and Gas	
Resp 0		perii	posted !	ul:	rocati	····				File
		See	the revers	e side of	the APPL	ICANT'S COPY	for instructions to t	he well operator.		•



1) Dat	e: Nov	embe:	r 3,	, 19	86
2) Ope		151		W	
	Well No.	47	-107-1338	-F	
٠,	• •	State	County		Permit

### STATE OF WEST VIRGINIA

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY

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

					v							
4) 1	WELL TYP				s A	/					, a, ,, Y	
				Production							_/ Shallow X	_/)
5) 1	LOCATION	N: Ele	evation: _	107 Wal	kor \	42 9	_ Wat	ersnea:	Bull Ci	Ovedreneles	Willow Island	1085
Δ. I	WELL ORE	en a morte	NG Dev	elonme	nt C		_ C00	2//0	7) DESIGNATE	DAGENT Gary Ni	cholas	20.
0)	WELL UPE	c/o Ch	ervl S	. Hart	le P	.O. B	$0 \times 157$	746	Address	Crosswind C	Corporate Park	
	Audiess			gh, PA							geport, WV 263	330
8) (	OIL & GAS								9) DRILLING C			
	Name								Name	Sam Jack Dr	illing Co.	
	Address	R	t. 1.	#6 Mt.	Ple	asant	Estat	:e 🤇	Address		3	
				wells.				`		_Buckhannon,	<u>WV 26201</u>	
10)	PROPOSEI	WELL	WORK:	Drill		_/ Drill	deep	er	/ Redrill	/ Stimulate	<u>X</u> _/	
,				Plug of	f old f	ormation	ı	_/ Perfor	ate new formation	1/		
				Other p	hysical	change i	n well (sp	ecify) Re	e-stimulate	shale interva	11 1890-1920	
11)	GEOLOGIC	CAL TAR	GET FOR	MATION	, <u>D</u>	evoni.	an Sha	ile 40	) \			
1	2) Estimat	ted depth	of comple	ed well,				feet				
1	3) Арргох	cimate tra	ta depths:	Fresh, _			fe		,			
1	4) Approx	timate coa	ıl seam dep	oths:				Is co	al being mined in th	ie area? Yes	/ No	/
15)	CASING A	ND TUB	ING PRO	GRAM							tı.	
	ING OR		SPEC	CIFICATION:	S			FOOTAGE I	NTERVALS	OR SACKS	PACKERS	
		Size	Grade	per ft.	New	Used	For	drilling	Left in well	(Cubic feet)		
Condu	ctor		<u> </u>	ļ	ļ	ļ	ļ		<b></b>		Kinds	
Fresh	water		<del>,</del> —	EVI A	1	1	1000	<del>) [/</del>	word		1	
Coal			ea	100	rus	<b>7</b> ~ ~	reco	<u> </u>	1000		Sizes	
Interm			<del> </del>	<del> </del>		<del> </del>	-			#	Danih est	
Produc			<del> </del>	<del> </del>	<del> </del>	<del></del>			<del> </del>		Depths set	
Tubing			-	<del> </del>	l	<del> </del> -					Perforations:	
Linc.s				<del> </del>		<u> </u>				1	Top Botton	n
			<del> </del>	<del> </del>								<u> </u>
			1	<b> </b>		ļ						
		1				<u></u>		:				-
	,						OFFIC	E USE	ONLY			
					1-1		DRILI	ING PE	ERMIT			
			47-10	7-1338	-F					Decem	ber 12 19	86
Permi	it number						-			Da	te	
This r	permit cove	ring the w	vell operat	or and we	ll locati	on show	n below is	s evidence	of permission gran	ted to drill in accorda	nce with the pertinent le	gal re-
quirer	nents subje	ct to the c	conditions	contained	herein	and on th	ne reverse	hereof No	tification must be s	given to the District Oil	and Gas Inspector, (Rel ntractor shall notify the	fer to
No. 8)	Prior to the t oil and ga	e construc	tion of re	ads, locations before a	ons and	pits for	any perm work has	itted work	in addition, the	well operator or his col	ttractor snall notify the	proper
										to any modifications	and conditions specified	on the
	ermitted wo	ork is as d	iescribea i	n the Notic	e and A	Аррисан	on, piat,	inu reciam	iation pian, subject	to any mounications a	ma conditions specifica	on the
	it expires _		Decem	ber 12	, 198	38	,	_unless wel	l work js comment	ed prior to that date and	d prosecuted with due dili	gence.
	_					/						
		A		D1 -4V	Cons		Fee	WPCP	√ S&E	Other	$\Lambda$	
) Bo	ond:	Agent	·	Plat!	Casi	·		TAKE THE	Sae	Other		
		pr	3 /	1 (0)	1 N	<u> </u>	6208	LKY	كالم	////		
			•				154	, ,	//	1141		
					•			•		1/1/1	THE STATE OF THE S	
NOT	E: Keep o	ne copy o	this peri	nit posted	at the c	arilling lo	cation.	D	irector, Di	Vision of 0il	and Gas .	File

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



# STATE OF WEST VIRGINIA DEPARTMENT OF ENERGY DIVSION OF OIL AND GAS

DIVISION OF OIL & GAS DEPARTMENT OF ENERGY IDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVITE SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

arm name:	ELLIOTT, W	. J.	Operator	Well No.:Ci	NGD 1511	
OCATION:		1073.40	Quadransle: W		נו	
	District:			ounts: WOOD		
•			South of 39			
	Lonsitude	2540 Feet	West of 81	Des. 15 Mir	n. O Sec.	
					Elliott	
			_ or Own	er _KL.	3 Managar III 26170	
Br	idgeport, WV	26330	<u>.</u>	3[	Marys, WV 26170	
Asent:		was any some spin pass there have been some finder	_ Cosl O	perator		
[nspector:	Glen P. Robir	ison	_ or Own	ier		
Permit Issu	ed: 07/13/8	8				
		. 1	AFFIDAVIT			
	ST VIRGINIA	<b>7</b>				
County of _	<u>Wood</u>	_ ss‡				
•		;	and H	alliburton	t	peins
					ey are experie	
in the wor	k of plussi	ns and fill:	ins oil and s	ias wells and	d were emplose	eq pa
					articipated ir	
work of pl	ussins and	filling the	e above well,	that said	work was comme	inced
			, 19 <u>88</u> ,	and that th	e well was plu	ıased
	in the foll PE	and Mr. 200 5 2		PIPE REM	OVED LEFT	
		2210			11" - 26	! .7
<u>  90   8KS   Ceme</u>	<u>                                      </u>	1126	_ 1 <del>- 1 _ 2</del>	.	18 5/8-120	6 1
Cut 4.5" @	570'			570	8 5/8-120	.0
1 60 sks cemen	<u></u>	570	370	. ,		
, <u>6% Gel</u>	· · · · · · · · · · · · · · · · · · ·	370	120	<b>1</b>		1
60 sks ceme	nt I	120	0	1		
l			_			
<b></b>			_ 1	[[[[]	12/2/2/	) l
<b> </b>			_		15/5/2	<u>} 1</u>
Descri	ption of mo	nument: <u>48</u>	<u>x 8" cap - Ven</u>	t Hole on Side	Plate Reads:	
	m.t 4 h.mm.m			-107-1338-P	l was complete	ad nn
end the	day of Aug	ust	. 1988 .	illa seru wer	T Mes Chiletene	; .a. (21)
VII	065 UI	t		Red	(a) 1	
And furthur	deronents	saith not.	\$100 000 000 000 000 000 000	1000	12992	
			1/5	1 Date		
Sworn and e	uherrihe he	fore we this	5 18 4 day	of Ausus	, 19	8 5'
19 commissi	on expires:	07/11/23				
	· · · · ·	, ,	mo	ry Cla	! Mefutt	
				/ Notar	Cllefitt y Public SEP	0 6 1000
,					SEP	U U 1300