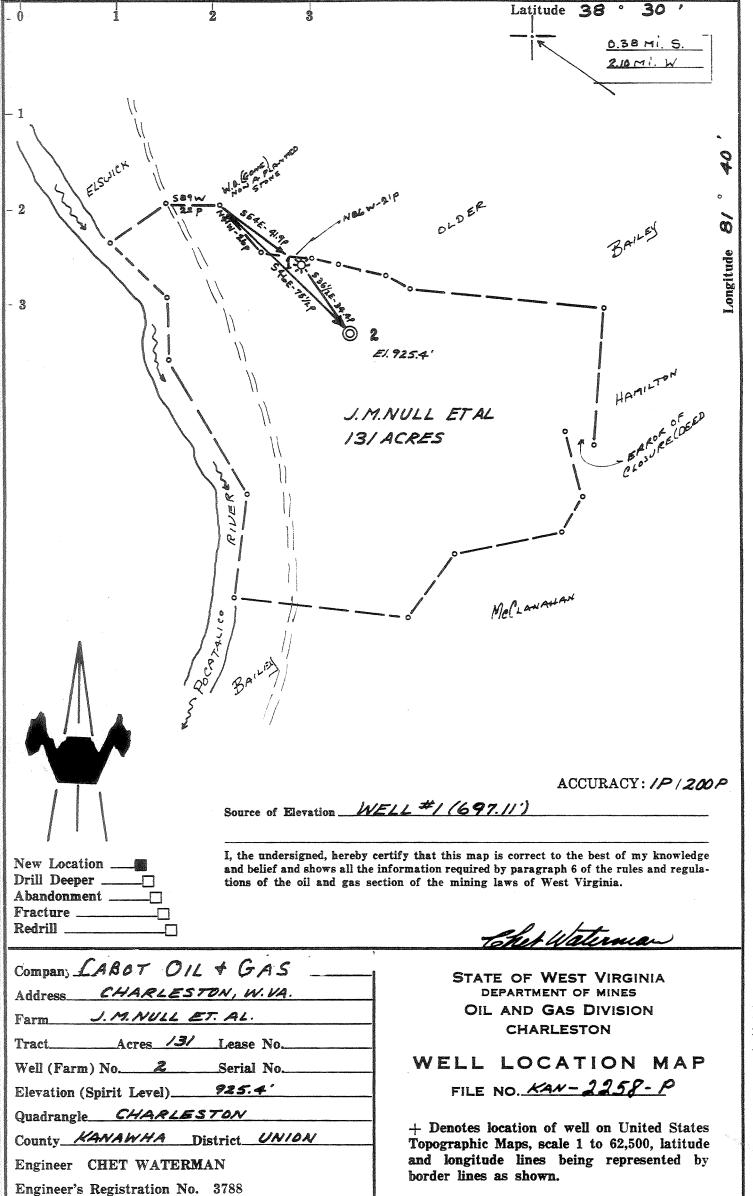
- 0 1	2 3	Latitude 38 ° 30 '
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-2	THE STATE OF THE PARTY OF THE P	Longitude 80
3		2 E1. 925.4'
	1,	MNULL ETAL  3/ ACRES  SPANNELOSED  CLOSUPE
	100	McCLANAMAN
	Se Baires	
	Source of Elevation	ACCURACY: /P/200P WELL #/ (697.//)
New Location	and belief and shows all tions of the oil and gas	by certify that this map is correct to the best of my knowledge the information required by paragraph 6 of the rules and regulass section of the mining laws of West Virginia.
Farm J. M. NULL	STON, W.VA. 25322 ET. AL.	STATE OF WEST VIRGINIA
Well (Farm) No. 2  Elevation (Spirit Level)	Serial No	WELL LOCATION MAP  FILE NO. KAN-2258-PP-FIRE.
Quadrangle CHARLE County KANAWHA Engineer CHET WATER	District UNION	+ Denotes location of well on United States
Engineer's Registration N File No. 68003 - 72 Date 5/6/68		— Denotes one inch spaces on border line of original tracing.

D860 WELL

- OWWO- 6-6 EIK-Poca (Sissonville) (192)



File No. 68003 - 72 Drawing No.

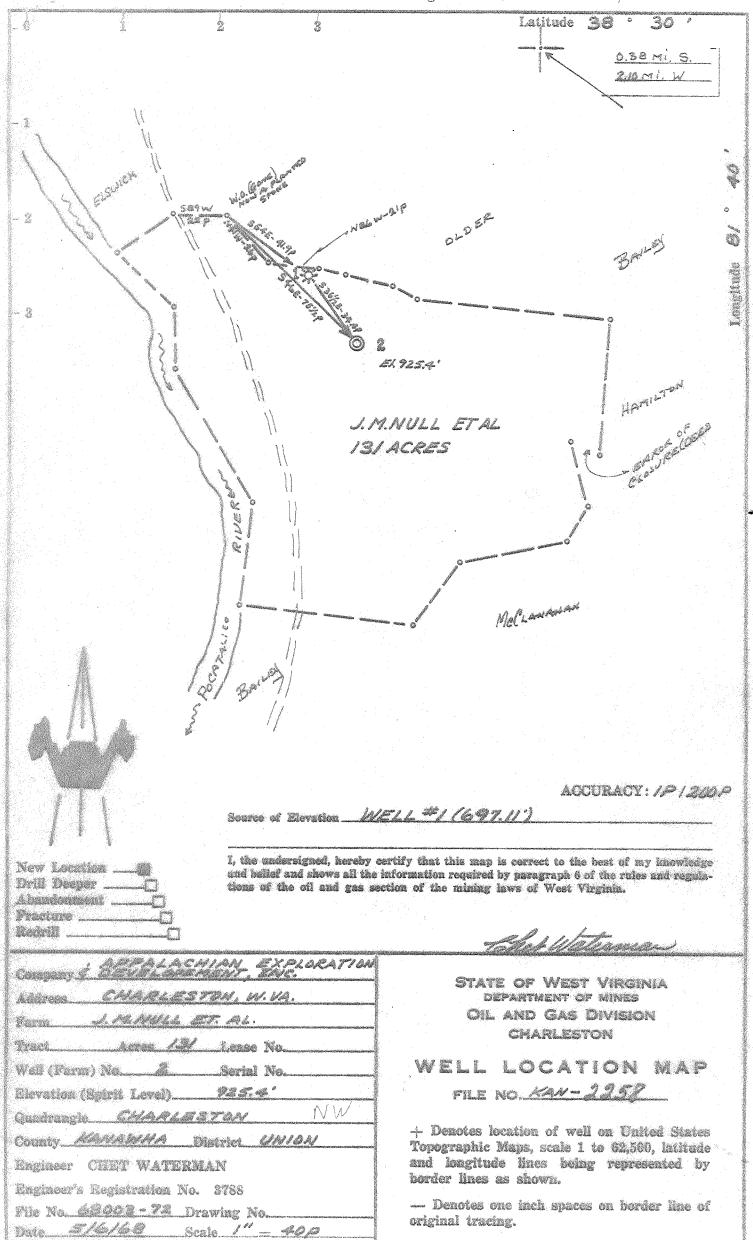
Date\_\_5/6/68

\_\_\_\_Scale\_\_/"\_\_\_ 40P

MAN, 2258-P

- Denotes one inch spaces on border line of

original tracing.



MAY 18 1968

6-6 Rocky Fork 312

Dup Well (newburg)



## STATE OF WEST VIRGINIA DEPARTMENT OF MINES

OIL AND GAS DIVISION 40

Rotary	查	
Spudder		
Cable Tools		
Storage		

Quadrangle Charleston N.W.

Permit No. Kanawha -2258

WELL RECORD

		010	101	, T	<b></b>
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CHARRA LAOVITTALITA						encinculation, and the entitlement and analysis of the entitle and the entitle	MIND)
Company Appa	lachian Exp	oloration & Darleston, W.	Development,: Va. 25322	Inc <sub>Casing</sub> and Tubing	Used in Drilling	Left in Well	Packers
arm J. M.	Null	)	Acres131	Size			Kind of Packer None
ocation (waters)	2. 4 4 6 6 6 6 6 6 6 6	W	925.4	13-3/8		64	# 041210 V4 & 90410 V4
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District Union		by J.M. Nu	11	ax9-5/8	2025	2025	
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WEY TO ACTIVE	en metalis	Water 503	B barrels, 19	5,000% sand,	1500 gallo	ns acid	FEET INCHE
1							
DESILT AFTER	TREATMENT	Initial open Flow	or hhla) 6.80	00 Mcf.		6.800,0	00
PACK PRESSIBI	E AFTER TRE	ATMENT 164	2	HOURS			
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Formation	Color	Hard or Soft	TOP	Bofform	Oil, Gas or Weter	Despets	Renne Fes
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Sand		Soft	1286	1.724			
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	L Marinona	Soft	1.734	1781	13/2/		The state of
Big Lime 7		Hard	1781	1933	4177		
Shale	10	Soft	1933	1940	Mary Mary Mary Mary Mary Mary Mary Mary	A CONTRACTOR	Marine Company
Sand Ing		Soft	1940	1991	100	A STATE OF STATE OF	
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Shale		Soft	2413	4886			
.Onondaga		Hard	4886	4972			eo.
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Dolomite		Hard	5006	5732	Land Control		
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		november de la constant de la consta			V	E. Mines	100
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Formation	Color	Hard or Soft	Top 10	Bottom	Oil, Gas or Weter	Depth Found	Remarks
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13-3/8	60	5-18-68	Halliburte				
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<b>,</b>	200	5-28-68	Halliburte	•			a the 42 to all the see to
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						mary 11,	10.69

APPALACHIAN FORMATION & DEVELORMENT, INC.
APPROVED

By District Production Superintendent
(Title)

FILE COPY



1)	Date:		<u>June</u>	8		1	984
2)	Operator' Well No	s J	М.	Nu 1 1	#2		
	API Well		47		039	-	2258-PP-FI
			State		County		Permit

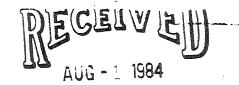
## STATE OF WEST VIRGINIA DEPARTMENT OF MINES, OIL AND GAS DIVISION APPLICATION FOR A WELL WORK PERMIT

AN WEST TW	PE: A O	<b>:1</b> .	/ C		v /					
4) WELLII						/ I Imdonoscend	storage	, 5		37
E) TOCATIO				4.	^			co River	Shallow —	/)
s) LOCATIO		vation: _	0 24	-0,		Watershed: _			29/	/7 7 (0)
		trict:			Cown	County: _ Of WV	Kanawha		Pocatalico	
•		) Box		<u> </u>	CULP	<u>. U                                   </u>		AGENT Robert		<u>i</u>
Addres				25	2.3.0	•	Address	P.O. Box 62		
			on, WV		322	·····		<u>Charleston</u>	WV 25322	നന
B) OIL & GA				FIED			9) DRILLING CO		101266	JVIA
	Rodney					***************************************	NameU	NKNUWN		- 5
Addres		). Box		LIV O	67.07	275 2747	Address		44	4 1001
						<u>375</u> –3747			<u> </u>	1 1984
) PROPOSI	ED WELL	WORK:			_/ Dril	deeper	/ Redrill	/ Stimulate	X OIL & GAS	DIVISIO
							ate new formation			
			Other p	hysical	change	n well (specify)	<u>queeze ceme</u>	nt 7" casing	300trage	: MIN
) GEOLOG										***************************************
						feet	•			
							3			
						Is co	al being mined in the	area? Yes	/ No	/
5) CASING	AND TUBI	NG PRO	GRAM	WOR	KOVER					
CASING OR		SPEC	IFICATION:	S		FOOTAGE	NTERVALS	CEMENT FILLUP	PACKERS	j
TUBING TYPE	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well	OR SACKS (Cubic feet)		
onductor	13		48			EXISTING	64'	100 sks.	Kinds	
resh water									1	
cal	9-5/8	-	32			EXISTING	2025'	625 sks.	Sizes	
termediate	711:	***************************************	23			EXISTING	57001	200 sks.	H 312C3	
roduction	4-1/2		11.6		<b>†</b>	-/1011110	5250-5705	60 sks.	Depths set	
ubing	2-3/8	***************************************	4.7			PULL	5690	00 3K3.	Depuis set	
iners		***************************************			1				Perforations:	
	1								Top	D
	2-3/8		4.7			RE-RUN	4175		ТОР	Bottom
£ ;						I IL NOW	1		<b> </b>	
lewburg w	as nluc	ided b	ack on	4/1	7/84	Cement	plug 5700-50	200 ;	. И	
hru verb					,, 0 .			ge Plug @ 498	۱ ۸ ۱	
min Acin	αι αμρι	<u>vvu i s</u>				OFFICE USE		ge riug e +se		
**************************************			·····	······································		DRILLING PE				***************************************
							AAIVEE E			
rmit number_	47-	039-22	258-PP-	-FRAC			<del></del>	June 27,		19 84
								Da		
nis permit cove	ring the we	ell operato	or and well	llocation	on showi	below is evidence	of permission grante	ed to drill in accordan	nce with the pertine	ent legal re-
urements subje	ect to the co	nditions (	contained.	herein a	ind on th	e reverse hereof. No	tification must be g	iven to the District Oi ell operator or his cor	ll and Gas Inspecto	r, (Refer to
strict oil and g	as inspector	24 hours	before ac	tual pe	rmitted v	vork has commence	d.)	en operator or his cor	itractor snall notity	tne proper
								a amu madici		A.C. 1
verse hereof.	OIR IS AS UC	serroca m	the Mone	c anu A	ррисан	m, piat, and reclams	ation plan, subject to	o any modifications a	ind conditions spec	itied on the
rmit expires	Jun	e 27,	1986			unless well	work is commenced	prior to that date and	prosecuted with du	e diligence
•								prior to mut wate and	prosecuted with un	c amgence.
Dond.	A		31-0-1			V				
Bond: ANKET	Agent		Plat:	Casin		Fee //3 -				
. 4.45.02.90mg		1 /	nul	m	417	84			2	
			-/I			<u>u</u>	MARIA	aut. )	blass	
							I JULIGE	nistrator Office of O	il and Co	
							/ /4/01m1	DISTRICT CHINCE OF E	UL 200 L-20	

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.

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I:-35 (Rev â-ol) OIL & GAS DIVISION
DEPT. OF MINES
Date July 27, 1984

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	ب وساء وسامت	i de	-3		

State of Mest Birginia Well No.

Pepartment of Mines Gil und Gas Bivision

Fam		M. Nu	*
API	No. 47	039	2258-PP-F

WELL OPERATOR'S REPORT

OF

DOTTT TAY		AND AND	STIMULATING,	07	T17 77 20	
- Chillian Co	ERALIURLING	ANU/UK	STIMULATING	UK	PHYSICAL.	CHANGE
CONTRACTOR OF THE PARTY OF THE		,				

OCATION: Elevation: 925.4 Watershed  District: Union County Kar		River		•
District: Union Combo Kar	nawha			•
	This program was a second or the second of t	_Quadrangl	e Pocatal	ico (7-1/2)
CMPANY Cabot Oil & Gas Corporation of WV				
DDRESS Box 628, Charleston, WV 25322	Caşing	Used in	Left	Cement
ESIGNATED AGENT Robert E. Horrell	Tubing	Drilling		fill up Cu. ft.
DDRESS Box 628, Charleston, WV 25322	Size			
URFACE OWNER Dennis L. Null	20-16			
ODRESS Rt. 4, Box 155, Charleston, WV 25312	Cond.			
INERAL RIGHTS OWNER See attached sheet	13-10"			
DDRESS	9 5/8			
IL AND GAS INSPECTOR FOR THIS WORK Rodney G.	8 5/8			
illon ADDRESSBox 7, Williamstown, WV 261				
ERMIT ISSUED 6/27/84	5 1/2			
ORKOVER PLAZAME COMMENCED 4/18/84	4 172	existing		5 <mark>0-5705')</mark>
ORKOVER RIXXXIX COMPLETED 7/9/84	2-3/8	pulled 56	<u> </u>	
F APPLICABLE: PLUGGING OF DRY HOLE ON	1-1/2	4168.35	4168.35	
ONTINUOUS PROGRESSION FROM DRILLING OR	Liners			
EXORKING. VERBAL PERMISSION OBTAINED N	used			
	<u> </u>			
EOLOGICAL TARGET FORMATION Huron Shale		Dep	th 3970-4	1180 feet
Depth of completed well feet	Rotary	/ Cable	e Tools_	·
Water strata depth: Freshfeet;	; Salt	fæt		
Coal seam depths:	Is coal	L being min	ed in the	area?
PEN FLOW DATA			(4000	
Producing formation Huron Shale	P:	ay zone dep		001,3974-39 173 <b>feet</b>
		itial open		
4 hr. Final open flow (180) Mcf/d		inal open f		
Time of open flow between ini			Committee of the last of the l	
Static rock pressure 510 psig(surfa		-		
(If applicable due to multiple completion				ro ande Mi
Second producing formation_		y zor dep	~ <b>}~</b>	feet
		itial open	The state of the s	
Final open flow Mcf/d			The state of the s	Bbl/d
Time of open flow between ini			. //	Bbl/d UF 27 1984
Static rock pressure psig(surface		-	ho	urs ~ `

DETAILS OF PEUCRATED DITEILALS, FRACTURING OR STIPLIATING, PHYSICAL CHARM, ETC.

4/18/84 - R/U HOWCO to plug back Newburg. 35 sks. Neat 3% CaCl<sub>2</sub>. Cement plug 5700-5250'.

4/19/84 - Set Model S bridge plug @ 4980' w/2 sks. calseal.

7/03/84 - Set Baker Model S 7" permanent plug @ 4,300'. Perforated Huron Shale from 4000-4001' (2 holes); 3974-3957' (2 holes); 3989-4173' (16 holes). R/U Halliburton.

Dumped 500 gals. 15% HCL acid. Displaced w/112,000 SCF N<sub>2</sub>. B/D press. 1690#. Treated w/708 sks. 20/40 Sand. Max. conc. 2#/gal. 17,000 SCF/min. N<sub>2</sub> for 75 Quality foam.

AIR 40 bpm foam. ATP 1717#. Total fluid 371 bbls., S/L 321 bbls. Total N<sub>2</sub> 625,000 SCF. ISIP 2,930#; 15 min. 2290#.

7/8/84 - Ran 123 jts. of 1-1/2" - 4168.35'. Seating nipple @ 4168'.

## WELL LOG

	LOR HARD OR SOFT	TOP FEET		REMARKS	
FORMATION CO			BOTTOM FEET	Including indication of all fresh	
				REMARKS Including indication of all fresh and salt water, coal, oil and gas	
See attached original well record.					
well record.				•	
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	, ·	1	<b>6</b>	•	

(Attach separate sheets as necessary)

CABOT OIL & GAS CORPORATION OF WEST VIRGINIA

Metr Obergrot

By: Robert & Harrell

Date: July 27, 1984

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