



DEC 22 1995

WR-35

Permitting Office of Oil & Gas

Q4-DEC-96 API **#** 47 - 109 -1522-C

State of Pest Virginia Division of Environmental Protection Section of Oil and Gas

Weil Operator's Report of Weil Work

Farm name:	POCAHONTAS LAND CORP.		Operator W	/eli No.:	USM-11		
Location:	Elevation:	1,820.1	Quadrangle	e: USGS	7 1/2' Pinev	ville	
	District: Latitude: Longitude:	CENTER 54132.67 Feet North 394.23 Feet East	County:	WYOM	IING		
Well work con Well work con	e Helmick 07 nmenced: 08/ ppleted: 09/	V/14/95 V/19/95 V/19/95	Casing &Tubing	Used in Drilling 25' 745'	Left in Well 25' 745'	Cement Fill up 11 ft ³ 255 ft ³	•
Verbal pluggin permission gra	g anted on: Cable		4-1/2"	 · · · · ·	850'	157 ft ³	
Total depth (ft) Fresh water dep Salt water dep Is coal being n	924. epths (ft)	a (Y/N)?Y_	2-3/8"		854'		-
OPEN FLOW Produc Gas:	cing formation _ Initial open flow Final open flow	Pocahontas No. 3 Seaw _ 2 _ Mcf/d w _ 1 Mcf/d	Oil:	Initial o	pen flow _ pen flow	7' 	3bl/d 8bl/d
Static ı	Time of open t	flow between initial and 10 psig (surfa	final tests: _	24	nol	urs Durs	
Second Gas:	d Producing for Initial open flow Final open flow	rmation <u>Pocahontas No</u> w <u>1</u> Mcf/d w5 Mcf/d flow between initial and	o. 4 Seam Oil:	Pay zon Initial o Final op 24	ne depth (fi pen flow _ pen flow _ hou	N/AI	<u></u> 3bl/d Bbl/d
FRACTURING SYSTEMATIC	OR STIMUL	FORM, PUT THE FOLL ATING, PHYSICAL CH GEOLOGICAL RECO ELLBORE. For:	HANGE, ÉTO	C. 2) TH LL FORM/	IE WELL I	LOG WHICH	I IS A
By: Joseph A. Zupanick Date: December 4, 1995							

Operator:

USM-11

API:

47-109-1522-C

Location:

Pineville

Details of Perforated Intervals, Fracturing or Stimulation, Physical Change, Etc.

Fracture Data: **Pocahontas #3 Seam** (854.7-859') Sand 20/40 m (38,180#), 16/30 m (28,260#) fresh H2o treated with Biocide 1,954 Bbls. Spotted 300 gls. HCL 15% and flushed. Treating pressure = begin 1560 psig, end 2120 psig.

Pocahontas #4 Seam (789.6' - 793') Sand 20/40 m (28,850#) 16/30 m (28,590#) H20 treated with Biocide 1,560 Bbls. Treating pressure= begin 2550 psig, end 1810 psig.

Well Log & Geologic Record

Formation	Тор	Bottom
		:
Siltstone & Shale	0	275
Shale	275	310
Sandstone	310	380
Sandstone & Shale	380	470
Sandstone & Shale	470	735
Sandstone & Silt	735	770
Sandstone, Silt & Shale	770	789
Coal	789	793
Shale & Siltstone	793	855
Coal	855	859
Silt & Shale	855	925
-		* 1
		,
	10	
₹ * *	87.67	

104-13

Page _____ of ____

109 1522

JUN 0 6 199 DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1)	Permitting Office of Oil & Gas S. Steel Mining Co., Inc.	505/0	(3)	549	
2)	Operator's Well Number USM-11		3) Elevation	n: 1820.1	07/14/99
,	Well Type: (a) Oil/ or (b) If Gas: Production_ Deep_	Unde			07/14/9 507/14/9
5)	Proposed Target Formation(s): Pocahontas No	. 3 Seam & Pocahonta	is No. 4 Scam		
6)	Proposed Total Depth: 850	feet	:		
7)	Approximate fresh water strata depths: 200±			 	
8)	Approximate salt water depths: N/A				
9)	Approximate coal seam depths: 725'/Poca. 6 -				
10)	Does land contain coal seams tributary to active n	nine? Yes X (Poca.	3) / N	0	
11)	Does land contain coal seams tributary to active no Proposed Well Work:	rulate 1/1	wo co	el Mest	well.
12)	CASING AND	TUBING PROGRAM	•		
TYPE	SPECIFICATIONS	FOC	TAGE INTERV	ALS (CEMENT

ТҮРЕ		SPECIFICAT	ΓΙΟΝS	FOOTAGE	E INTERVALS	CEMENT	1
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)	
Conductor	11 3/4		64	25	25	20	
Fresh Water	7"		17"	745	745 G/S	38591 38658A	1-1/3
Coal		-				138 CSRA	11.2.2
Intermediate							
Production	4 1/2"		9.5	845	845	95	
Tubing					38	154/9-11	1/
Liners							

Kind_ Sizes Depths set

For Division of Oil and Gas Use Only

Fee(s) paid:

Well Work Permit

Reclamation Fund

WPCP

(Type)

GENERAL INFORMATION





JUN 0 6 1995 Permit Application Fee of \$400.00 enclosed.

Permitting Office of Oil & Gas

22-14-6 (b) (Com. Sub. for H.B. 4371)

(2) Pocahontas Land Corporation is the Fee Owner of the tract. (Waiver Attached)

USX Corporation is the Lessee of all Coal Seams on this tract. (Waiver Attached)

Mistic Energy, Inc., is the Lessee of the Sewell Seam. The proposed well will be located on or near the sewell seam outcrop adjacent to an area that has been mined-out. (Waiver Attached)

- U. S. Steel Mining Co., Inc., is the Sub-lessee of the Poca. No. 3 & No. 4 Seams and the operator of the Poca. No. 3. (Waiver Attached)
- (4) The approximate depth to which the well will be drilled is 850'. The coal seams to be penetrated are the Poca. No. 6 (36" average thickness) at $725'\pm$, the Poca. No. 4 (36" average thickness) at $795'\pm$ and the Poca. No. 3 (48" average thickness) at $850'\pm$. Both the Poca. 3 and Poca. 4 Seams will be completed for production.
- (5) Frac with 30,000 # 20/40 mesh sand & 30,000 gals F.W.

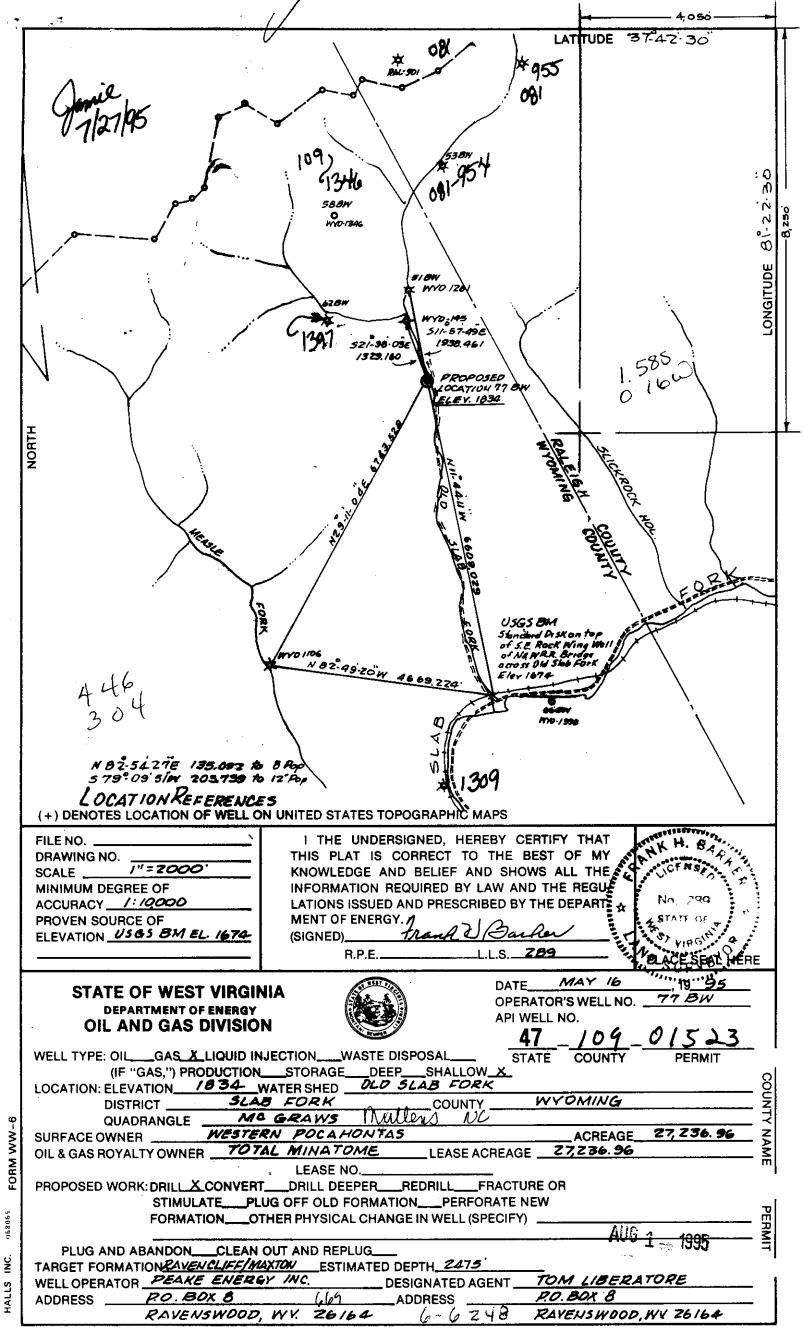
38 CSR 18

There are no known wells or springs within 1000 feet of the well.

Summary of Waivers

Surface Owner Coal Owner	-	Pocahontas Land Corp. Pocahontas Land Corp.	-	Waiver Included Waiver Included
Coal Lessee	-	USX Corporation	-	Waiver Included
Coal Operator(s) Poca. 3 Seam Sewell Seam	-	U. S. Steel Mining Co., Inc. Mistic Energy, Inc.	-	Waiver Included Waiver Included
Gas Owner Gas Lessee	- -	Pocahontas Land Corp. Cabot Oil and Gas Co.	-	Waiver Included Waiver Included

1	Denos 1	of	HECEIVED		1)	Date:				
•		of WW2-A	WY Division of Environmental Protection			O _I	perator's	Well	Number	
	(09/87)				_,		SM-11			
	(03/0/	,	JUH 0 8 1995	3) API	Well					1522-C
			Permitting	·				State -	County	- Permit
			Permitting Office of On PACE	OF WEST	VIR	GINIA				
			DEPARTMENT OF EN	ekgy, di	A 121C	N OF	OIL AN	D GAS		
			NOTICE AND APPLICA							
	4)		wner(s) to be served:				oal Opera		ina Ca	Ina
		(a) Name_	Pocahontas Land Corpora	ation	Na	ame	U. S. St	eer Min	ing Co.,	IIIC.
		Address	800 Princeton Avenue		- A(iaress	Dinovilla	WW '	24974	
			Bluefield, WV 24701	<u>.</u>						
					A	_				<u> </u>
		(h) Nama			(h		Owner(s)		•	
					•	,	, ,			oration
		(c) Name					800 Pri			
							To 1 (* 1			
	6)	Inspector	Ofie Helmick		(c) Coal	Lessee wi	ith Decl	aration	
	-,	Address	P. O. Box 398		N	ame	USX Cor	poratio	<u>n</u>	
		-	Brenton, WV 24818			ddress_	P.O. Be			
			(304) - <u>732-9135</u>							
			TO THE PERSON(S) NA							
		Included i	s the lease or leases or oth	er continui:	ng con	tract or	contracts	by whi	ch I hold	the right
	to ext	ract oil and	gas OR							
			is the information require	ed by Chap	oter 22	B, Arti	icle 1, Se	ction 80	d) of the	e Code of
	West	Virginia (se	e page 2)							
		I certify the	hat as required under Chap	pter 22B of	the <u>W</u>	<u>/est_V11</u>	ginia Coc	de I hav	e served	copies of
		_	plication, a location plat,	and accomp	panyın	ig docui	ments pag	ges I thi	ougn	on the
•	above	named par		- 44 4 5						
			ersonal Service (Affidavit		:_+ _++	abad\				
			ertified Mail (Postmarked	•	-	acneu)				
		PU	blication (Notice of Publi	canon anac	neu)	_				
		I hove to	ad and understand Chapt	er 22B and	1 38 ('SR 11.	-18 and	Таотее	to the	terms and
	condi		permit issued under this			.OK 11	To, una	1 46100		torring and
	COLUI		under penalty of law that			allv ex	amined a	and am	familia	with the
	inforr	nation subr	nitted on this application	form and	all res	sponsibl	le for ob	taining	the info	rmation, I
			nformation is true, accura							·
- ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	8	I am awa	re that there are significa	int penalties	s for s	ubmitti	ng false i	informa	tion, inc	luding the
	a Poossil		e and imprisonment.	•					•	_
		, ,	Well Operator U.	S. Steel M	ining	Co., In	c			
ASTACK STATES	<u> </u>		By: John J.	Mude	25					
OFFICIAL SEAL OTARY PUBLI TE OF WEST VIRG LAINE C. KAS HADOW WOOD V			Its: John L. Schr	oder, III -	Gene	ral Ma	nager			
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- P = E	* § }		Pineville, W							
	_ ₹ }		Telephone <u>(304)</u> 7							
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	13	·	Jestaine	<u>ر ب ر</u>	7	\underline{w}	, U		Not	ary Public
Market.	Му с	ommission	expires March	15, 2	<u> 300</u>	7				-
	- 37									



State of West Virginia Division of Environmental Protection Section of Oil and Gas

C. .

Well Operator's Report of Well Work

Farm Name: WESTERN POCAHONTAS PROP. Operator's Well No.: 77-BW

Location: Elevation: 1834.00 Quadrangle: McGRAWS District: SLAB FORK County: RALEIGH

Latitude: 8250 feet south of 37 Deg. 42 Min. 30 Sec.

Longitude: 2100 feet west of 81 Deg. 22 Min. 30 Sec.

Company: PEAKE ENERGY, INC. P.O. BOX 8 | Casing | Used in | Left | Cement! RAVENSWOOD, WV 26164 | & | Fillup | Tubing | Drilling | in Well (sx) Agent: Thomas S. Liberatore Size Inspector: RODNEY DILLON Permit Issued: 07/28/95 Well Work Commenced: 08/01/95 | 12 3/4 | 26 | 2 | Well Work Completed: 08/07/95 | Class A | Verbal Plugging 45', 220'
Salt Water Depths:

140 Is Coal being mined ? No 4 1/2 2327 2327 Pozmix Coal Depths: see log on back

OPEN FLOW DATA

Ravencliff Sandstone 1401-1440 Producing Formation Upper Maxon Sandstone Pay Zone Depth: 1858-1864 Gas: Initial open flow -- Mcf/d Oil: Initial open flow -- Bbl/d Final open flow * Mcf/d Final open flow -- Bbl/d Time of open flow between inital and final tests -- Hours Static rock pressure * psig (surf. pressure) after -- Hours

Middle Maxon Sand 2031-2053 2nd Producing Form: Lower Maxon Sand Pay Zone Depth: 2262-2290 Gas: Initial open flow -- Mcf/d Oil: Initial open flow 0 Bbl/d Final open flow 2,890* Mcf/d Final open flow 0 Bbl/d Time of open flow between inital and final tests 4 Hours Static rock pressure 255 * psig (surf. pressure) after 72 Hours *Rock pressures & open-flows age combined.

NOTE: Details of Fracturing, Performing, & Well Log on Back.

For: PEAKE ENERGY, INC.

By: Thomas S. Liberatore, General Manager Date: September 25, 1995

---- 8550 2 40**0**5

FORM WR-35 (Reverse)

PERMIT #: 47-109-1523

CO. WELL #: 77-BW

ELEVATION: 1834 GL, 1839 KB

DETAILS OF PERFORATIONS, FRACTURING, OR PHYSICAL CHANGE, ETC.

8/31/95: PERFORATED THE LOWER MAXON FROM 2262-2290, 60 HOLES.

FRAC. THE LOW. MAX. USING 1000 GAL 15% ACID, 186

BBL OF WATER, 25,000 # SAND & 366,000 SCF

OF NITROGEN.

9/05/95: PERF'D THE MID. MAX. FROM 2031-2053, 42 HOLES.

FRAC. MID. MAX USING 500 GAL ACID, 247 BBL OF WATER,

57,800 # OF SAND, & 361,000 SCF OF NITROGEN. PERF'D. THE UPPER MAX FROM 1858-64, 24 HOLES. FRAC THE UP. MAX USING 500 GAL. ACID, 183 BBL

OF WATER, 32,500 # SAND & 492,000 SCF OF NITROGEN. PERF'D THE RAVENCLIFF FROM 1401-40, 56 HOLES.

FRAC. THE RAV. USING 500 GAL ACID, 223 BBL OF WATER, 50,000 # SAND, & 715,000 SCF OF NITROGEN.

WELL LOG (all depths taken from KB)

ROCK TYPE OR FORMATION	TOP	BOTTOM	REMARKS
SAND with:	0	306	
Water	45		
Coal	72	73	
Coal	115	116	
Water	220		
SHALE & SAND	306	427	
COAL	427	428	•
SHALE	428	495	
COAL	495	496	·
SHALE & SAND	496	767	
COAL	767	768	
SAND & SHALE	768	1214	
PRINCETON SAND	1214	1271	
SHALE	1271	1388	
RAVENCLIFF SAND	1388		S/GAS
AVIS LIMESTONE (L. Stone Gap)	1456	1498	
SHALE	1498	1840	
MIDDLE MAXON STRAY	1840	1876	
SHALE	1876	1998	
MIDDLE MAXON SAND	1998	2057	S/GAS
SHALE	2057	2259	
LOWER MAXON SAND	2259	2304	SLT. S/GAS
SHALE	2304	2344	
LITTLE LIME (Reynolds)	2344	2363	
TOTAL DEPTH	2363		

Well was making approx. 33 Mcf/d natural at T.D.