

LATITUDE 37 30

0000

7'5 OGIS topo location

7.5' loc _____ 15' loc @ 51 6.05s (calc.) 3.12 3.17w

company Meridian Ender Co.

Farm Berwind Land (1398)

Quad _ Delos 7.5 and 15' NE

County COYOMING

District CE175/

WELL LOCATION MAP File No. 109 - 1867

6.6. Big Creek (2671)

13-MAY-92 API #47-109-01267

REVISED:	12/16/92

State of West Virginia

Division of Environmental Protection

Section of Oil and Gas

Well Operator's Report of Well Work

Office of GR & Gra MAY 1 8 93

LOCATION:

Farm Name: BERWIND LAND CO

Operator

Well No.: 1398

WELCH Elevation: 2044.0 Quadrangle:

Environmental Protection

District: CENTER

WYOMING

Latitude: 300 Feet South of 37 Deg. 30 Min. 0 Sec. Longitude 4625 Feet West of 81 Deg. 32 Min. 30 Sec.

County:

Company: MERIDIAN EXPLORATION CORP.

2800 GULF TOWER

PITTSBURGH, PA 15219-0000

Agent: JOHN O. KIZER (C T CORP)

Inspector: RODNEY G. DILLON

Permit Issued: 05/13/92

Well work Commenced: 7/29/92
Well work Completed: 8/04/92

Verbal Plugging

Permission granted on:

Rotary X Cable Rig
Total Depth (feet) DTD:3630' LTD:3623'
Fresh water depths (ft) N/A Rotary X Cable _

Salt water depths (ft) 160'

Is coal being mined in area(Y/N)? N Coal Depths (ft): 1055'-1065'

Casing	Used in	Left in	Cement Fill Up
Tubing	Drilling		Cu. Ft.
Size		1 	
11-3/4"	i 35′	35′	
711	1255.7'	1255.7′	258.4
/	1 1255.7	1233.7	230.4
4-1/2**	3587′	3587′	272

OPEN FLOW DATA

	icing forma							
Gas:	Initial of	en flow_	391_M	CF/d Oil:	Initial	open i	flow_N/	A_Bbl/d
	Final oper	flow	391 M	CF/d	Final c	pen flo	OWN/	A_Bbl/d
	Time of or	en flow	between	initial	and fina	l tests	5 <u>7</u>	2Hours
Stati	ic rock Pre	essure	60 p	sig (surf	face pres	sure) a	after <u>7</u>	2_Hours

Second producing formation RavencliffPay zone depth (ft) 1798'-1830' Gas: Initial open flow 289 MCF/d Oil: Initial open flow N/A Bbl/d Final open flow 289 MCF/d Final open flow N/A Bbl/d Time of open flow between initial and final tests 72 Hours Static rock Pressure 350 psig (surface pressure) after 72 Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE. MAY 2 4 1993

105 MERIDIAN EXPLORATION CORP. For: Reviewed_ Recorded_ By: Karl C. Kimmich 12-16-42

Date:

2670 PSI

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PERFORATED INTERVALS

3148' - 3525' Big Lynn

1798' - 1803') 1813' - 1817') 1825' - 1830'

FIRST STAGE (Big Lime)

SECOND STAGE (Ravencliff)

Acid Treatment 8/12/92 9/18/92

1020 PSI **BKDN** BKDN 1020 PSI

AVE TRT **AVE TRT** 11 BPM @ 1400 PSI 13 BPM @ 1200 PSI. 25 BPM @ 2800 PSI

ISIP (FRAC) 1200 1300 ISIP (FRAC) 1400 SAND (20/40) (80/100) 66,100# SAND (20/40) N/A N/A H₂O (BBL) 300 209 H₂O (BBL) 364 N₂ (SCF) 359,000 N₂ (SCF) 83,000 920

8,500 gal. 15% HCL 5000 gal. 15% HCL ACID:

FORMATIONS TOPS BOTTOMS WATER AND GAS CHECKS

0 - 15'	Alluvium	
15 ' -115'	Shale	14
115'-165'	Sand	
165'-235'	Shale *	H ₂ O 160° 1/4" Stream:
235'-320'	Sand some Shale	
320'-410'	Sand	
410'-495'	Shale	GAS CHECKS:
495'-565'	Sand	
565'-635'	Shale	@ 1815': NS
635'-900'	Sand	@ 2525': NS
900'-960'	Shale	Collars: 179 MCF
960'-1000'	Shale	
1000'-1055'	Shales & Sands Interbedded	
1055'-1065'	Coal	
1065'-1105'	Shale some Sand	
1105'-1210'	Sand	
1210'-1305'	Shale	· ·
1305'-1390'	Sand	
1390'-1480'	Sand & Interbedded Shales	
1480'-1775'	Shale	
1775'-1835'	Ravencliff Sand	
1835'-1898'	Shale	
1898'-1945'	Avis Lime	
1945'-2000'	Shale	
2000'-2435'	Sands and Shale Interbedded	
2435'-2495'	Maxton Sand	
2495'-2755'	Interbedded Sands & Shales	
2755'-2835'	Lower Maxton	
2835'-2880'	Shale	
2880'-2955'	Little Lime	
2955'-3020'	Shale	
3020'-3055'	Lime	
3055'-3145'	Shale	
3145'-3623'	Big Lime	
3623'	Total Depth	
	*	

DF 3345

81961

4	10+1				109-1	267 5/13/92 5/13/94
FORM WW-2	3				Issued s	113/92
		TMENT OF	ENERGY, DI ORK PERMIT	APPLICATIO	CAPILED P	ageof 5/13/94
1) Well (perator:_	Meridian E	xploration (orporation	31805 (3)	664
2) Operat	or's Well	Number:_	1398		3) E	levation: 2044
			or Ga			
			Dee	P_/ 345	round Stora Shall	ge/ ow_ <u>X</u> /
5) Propos	ed Target	Formation	n(s):Rave	ncliff, Maxto	n, Big Lime	
			3630 strata dep	feet	N/A	RECEIVED Wy Division of Environmental Protection
8) Approx	imate salt	water de	epths:	N/A_		7 2 4 92
9) Approx	imate coal	seam dep	oths: 1000)', 1050'		Office of Oil & Gas
10) Does 1	and contai	n coal se	eams tribut	tary to act	ive mine?	es/ No_x/
11) Propos	ed Well Wo	rk: Dri	ll and stimu	late new well		
12)		CAGIN	IC NUD MUD			
TYPE				NG PROGRAM		
IIFE	8	PECIFICAT	TONS	FOOTAGE II	NTERVALS	CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11-3/4	LS	32	30'	301	Driven
Fresh Water						
Coal	-					
Intermediate	7"	H-40	17	1120'	1120'	1120' (168)
Production	4-1/2"	J-55	10.5	36301	3630	2100' (216)
Tubing						
liners						
ACKERS : Ki	nd					
De De	zes_ pths set					
De De				nd Gas Use	_	
		mm _! mett mo	ork Permit	II Recl	amation Fund	i WPCP
Plat						

=		RECEIVED WV Division of			
Page	1.65	WV Division of Environmental Protection			
Form		Environmental Protect	1)	Date:	April 16, 1992
(09/	87)	APR 2 4 92	2)	operator	's well number
Surfa	ace Owner		3)	API Well	No: 47 - 109 - 1267
		Office of Oil & Gas			State - County - Permit
		or oil & Gas	OB WBam	' VIRGINIA	
		DEPARTMENT OF ENE	RGY. DI	VIGINIA	OIL AND CAG
		NOTICE AND APPLIC	ATION F	OR A WELL	WORK PERMIT
4)	Surface (wner(s) to be serv			
- /	(a) Name	Berwind Land Co.	ea:		oal Operator:
	Address _	1050 One Valley Squ	are	Address	
		Charleston, WV 253	01		
	(D) Name			(b) Coal	Owner(s) with Declaration
	wagtess -			Name	Berwind Land Co.
	(c) Name			Address	1050 One Valley Square
	Address _			Name	Charleston, WV 25301
				Address	
6)	Ingnector	Rodney Dillon			
• ,	Address	Rodney Dillon P.O. Box 131		(c) Coal	Lessee with Declaration
		Bradley, WV 25818			
	Telephone	(304) - 877 y 2912			
		TO THE DEDGOMAN W			
		TO THE PERSON(S) N.	AMED AB	OVE TAKE	NOTICE THAT:
	Includèd	is the lease or lea	ases or	other co	ntinuing contract or
Contr	acts by w	nich I hold the ri	aht to	extract o	il and mac OD
24	ructaded	15 the information	requir	ed by Chai	nter 228 Article 1
secri	.un o(u) o I certifu	f the Code of West	Virgin	ia (see pa	age 2) B of the <u>West Virginia Code</u>
I hav	e served	copies of this not	ice and	mapter 22. Applicat	ion, a location plat, and
accom	mbanatud d	ocuments pages 1 t	hrough	on the	e above named parties, by:
,	Pers	onal Service (Affi	davit a	ttached)	
	^ Cert	ified Mail (Postma:	rked po	stal rece.	ipt attached)
	PUDI	ication (Notice of	Publica	ation atta	ached)
		INSTRUCTIONS TO	SURFACE	OWNERS N	AMED AROVE
		(Conti	nued on	Reversel	
to do	The well	operator named belo	ow is a	pplying fo	or a permit from the State
than	three per	as well work. (<u>No</u> Sons, then these ma	<u>ce</u> : it :	the surface	ce tract is owned by more rved on you because your
manic	abhearea	on the Sheriff's ta	ax fick	et on the	land or because you
actua	TIN OCCUP	y the surface tract	t. In 1	either cad	se. You may be the only
OWHET	MIIO MITI	actually receive 1	Thace m	atorialo :	\ Caa
west	virginia	Code. Well work pe Well Ope	ermits a	are valid Meridia	for 24 months. Exploration Corn.
		By:	racor -	Meridian Eric P.	Linn Gra
		Its:		Vice Pro	esident
		Address		707 Grai	nt St.
		Talanha		412-471-	rgh, PA 15219
Subsci	ribed and	Telephon sworn before me th		Alz-4/I-	CANAL Cale And Constant of the Constant
			1 -		A The Court of the
LIAI	mmission e		all an	U Jona	WARL Notato Public
my Col	иштрр10Л 6	xbrts	10, 19	Y 3	as a construction of the c

(9-04) ,R-38 DATE:

API# 47-109-01267

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Department, 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.

.Farm пате	Serwind Land Co). 	_Operator Wel	II No.: 1398		
E L	elevation: 2045.81 District: Center atitude: 300 ongitude: 4625	Feet South of	Quadrangle: \(\) County: \(\) f \(\) 81 \(\) Deg		Sec. 0 Sec.	
Well Type: Ol	LGAS	<u> </u>				
Agent <u>Dwie</u>	Pinnacle Mining O Box 338 Pinville, WV 24 at Gillespie Date: 10/23/08	874	Coal Operator or Owner Coal Operator or Owner	Office of		
STATE OF	WEST VIRGINIA,	ss:	AFFIDAVIT E		ial Protection	
employed by that	ha whaten named	re experienced in well operator, an commenced on	the work of pad participated the 27th	lugging and fill in the work of	g first duly swom accoing oil and gas wells ar plugging and filling the	nd were e above
TYPE	FROM	TO	PIPERE	MOVED	LEFT	
Gel Hole Cement Cement	Syrface 3371 1853 2 1304- 1456	3623 3100 1750 Every 10 feet			7 inch 1255.7	
Peri. 4 1/	1156-1054	Every 10 feet			<u> </u>	
Pulled 4 I					2490	
Cement.	1286	Surface ric				
Plugged ac	cording to lul	C regulation	to allow mi	ning through	1.	
plugging and 1	of monument: Er illing said well was	completed on the	oith API # 4 25 day of	NOV	and that the work, 20 08 .	
Му сопті	subscribe before nession expires:	Notary Public	ders Joy	bev , 20	OFFICE NOTAR STATE OF W MICHAEL 233 WHISP	PUBLIC Y PUB