

Farm name:

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

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8M-3

Well Operator's Report of Well Work

Operator Well No:

U.S. Steel Mining Company, LLC

Location:	Elevation:	2,065.76		Quadr	angle: Pl	NEVILLE		
	District:	CENTER		County	y: W	YOMING		
		Latitude: 1450 Longitude: 7550	00 Feet S 0 Feet V	South of 37 Vest of 81	Deg. 35 Mi Deg. 32 Mi	n. 00 Sec. n. 30 Sec.		
Company:	CDX Gas, 5485 BEL DALLAS,	LLC FLINE ROAD, SUITE 28 TX 75240-0000	30					
Inspector:	OSEPH A. Z OFIE HELI ued:			Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill up	
Well Work	completed	01/01/00		13%"	35'	35	9 ft³	
Verbal plus Permission	oranted or	າ:	٠.	95/8"	1089	1089	341 ft³	
Total dept	x Car h (ft) 13	le Rig 5.20		7"	366	366	55 ft³	
Salt water	er aepins (n depths (ft)	t) <u>N/A</u> N/A the area (Y/N)? <u>Y</u>		27⁄a"	1258		221 fl -	
Is coal being mined in the area (Y/N)? Y Coal depths (ft): 152, 175, 199, 209, 317, 423, 573, 593, 712.5, 726, 890, 906.5, 978, 1205.5, 1257.5. OPEN FLOW DATA Producting formation Pocahontas No. 3 Seam and Penn Coals Gas: Initial open flow N/A Mcf/d Oil: Initial open flow Bbl/d Final open flow M/A Mcf/d Final open flow M/A Mcf/d Final open flow M/A Mcf/d Final open flow Bbl/d Final open flow M/A Mcf/d F								
DETAILED WELLBORI	GEOLOGI	CAL RECORD OF ALL F	FORMATIC	ONS, INCLUE	DING COAL	. ENCOUNT	ERED BY	THE
				For:	CDX Gas	пс		
				By: Date:	7.5).	10/20/0	<u>~~~</u> 00	<u></u>

Operator: 8M-3 API No. 47- 109-01856 C Location: Pineville

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

Well Log & Geologic Record (continued)

Formation	Тор	Bottom
Shale	783	800
Sandstone	800	881
Shale	881	890
Coal & Parting	890	894
Shale	894	906.5
Coal	906.5	908
Shale	908	915
Sandstone	915	930
Shale	930	950
Sandstone	950	970
Shale	970	978.5
Coal	978.5	980
Shale	980	989
Sand Shale	989	1011
Sandstone	1011	1101
Maybe Fracture Sandstone	1101	1103
Sandstone	1103	1125
Sandy Shale	1125	1135
Sandstone	1135	1145
Shale	1145	1150
Sandstone	1150	1161
Shale	1161	1164
Sandstone	1164	1174
Shale	1174	1178
Sandstone	1178	1201
Sandy Shale	1201	1205.5
Coal	1205.5	1209
Sandy Shale	1209	1240
Shale	1240	1257.5
Coal	1257.5	1261.5
Shale	1261.5	1300
Sandstone	1300	1315.20
		<u> </u>

WV Division of Environmental Protection

Operator: 8M-3 API No. 47- 109-01856 C Location: Pineville

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

Well Log & Geologic Record

Formation Top Bottom Sandy Shale 0 111 Sandstone 1152 154 Shale 154 160 Sandstone 160 175 Coal 175 177 Shale 177 199 Coal 199 201 Shale 201 209 Coal 209 210 Shale 210 215 Sandstone 215 231 Shale 231 317 Coal 317 318 Sandstone 318 328 Shale 328 423 Coal 423 424 Shale 424 427 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 593 594				
Sandstone 111 152 Coal 152 154 Shale 154 160 Sandstone 160 175 Coal 175 177 Shale 177 199 Coal 199 201 Shale 201 209 Coal 209 210 Shale 210 215 Sandstone 215 231 Shale 231 317 Shale 231 317 Shale 318 328 Shale 328 423 Coal 423 424 Shale 424 427 Sandy Shale 427 447 Sandstone 447 459 Shale 513 515 Shale 513 515 Coal 519 520 Shale 523 593 Sonde 593 594	Formation	Тор	Bottom	
Coal 152 154 Shale 154 160 Sandstone 160 175 Coal 175 177 Shale 177 199 Coal 199 201 Shale 201 209 Coal 209 210 Shale 210 215 Sandstone 215 231 Shale 231 317 Coal 317 318 Sandstone 318 328 Shale 328 423 Coal 423 424 Shale 424 427 Sandy Shale 427 447 Sandstone 447 459 Shale 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594	Sandy Shale	0	111	
Shale 154 160 Sandstone 160 175 Coal 175 177 Shale 177 199 Coal 199 201 Shale 201 209 Coal 209 210 Shale 210 215 Sandstone 215 231 Shale 231 317 Coal 318 328 Shale 328 423 Coal 423 424 Shale 427 447 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642	Sandstone	111	152	
Sandstone 160 175 Coal 175 177 Shale 177 199 Coal 199 201 Shale 201 209 Coal 209 210 Shale 210 215 Sandstone 215 231 Shale 231 317 Coal 317 318 Sandstone 318 328 Shale 328 423 Coal 423 424 Shale 427 447 Sandstone 447 459 Shale 427 447 Sandstone 447 459 Shale 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 642 646	Coal	152	154	
Coal 175 177 Shale 177 199 Coal 199 201 Shale 201 209 Coal 209 210 Shale 210 215 Sandstone 215 231 Shale 231 317 Coal 318 328 Shale 328 423 Coal 423 424 Shale 424 427 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714	Shale	154	160	
Shale 177 199 Coal 199 201 Shale 201 209 Coal 209 210 Shale 210 215 Sandstone 215 231 Shale 231 317 Coal 317 318 Sandstone 318 328 Shale 328 423 Coal 423 424 Shale 424 427 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 642 646 Sandstone 646 712.5 <tr< td=""><td>Sandstone</td><td>160</td><td>175</td></tr<>	Sandstone	160	175	
Coal 199 201 Shale 201 209 Coal 209 210 Shale 210 215 Sandstone 215 231 Shale 231 317 Coal 317 318 Sandstone 318 328 Shale 328 423 Coal 423 424 Shale 427 447 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 714 717	Coal	175	177	
Shale 201 209 Coal 209 210 Shale 210 215 Sandstone 215 231 Shale 231 317 Coal 318 328 Shale 328 423 Coal 423 424 Shale 427 447 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 714 717 Sandy Shale 717 726	Shale	177	199	
Coal 209 210 Shale 210 215 Sandstone 215 231 Shale 231 317 Coal 317 318 Sandstone 318 328 Shale 328 423 Coal 423 424 Shale 427 447 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 717 726 Coal 726 727 Shale 727 760	Coal	199	201	
Shale 210 215 Sandstone 215 231 Shale 231 317 Coal 317 318 Sandstone 318 328 Shale 328 423 Coal 423 424 Shale 427 447 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 717 726 Coal 726 727 Shale 727 760 <td>Shale</td> <td>201</td> <td>209</td>	Shale	201	209	
Sandstone 215 231 Shale 231 317 Coal 317 318 Sandstone 318 328 Shale 328 423 Coal 423 424 Shale 427 447 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 717 726 Coal 726 727 Shale 727 760	Coal	209	210	
Shale 231 317 Coal 317 318 Sandstone 318 328 Shale 328 423 Coal 423 424 Shale 424 427 Sandy Shale 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 714 717 Sandy Shale 717 726 Coal 726 727 Shale 727 760	Shale	210	215	
Coal 317 318 Sandstone 318 328 Shale 328 423 Coal 423 424 Shale 427 447 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 717 726 Coal 726 727 Shale 727 760	Sandstone	215	231	
Sandstone 318 328 Shale 328 423 Coal 423 424 Shale 424 427 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 717 726 Coal 726 727 Shale 727 760	Shale	231	317	
Shale 328 423 Coal 423 424 Shale 424 427 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 714 717 Sandy Shale 717 726 Coal 726 727 Shale 727 760	Coal	317	318	
Coal 423 424 Shale 424 427 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 714 717 Sandy Shale 717 726 Coal 726 727 Shale 727 760	Sandstone	318	328	
Shale 424 427 Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 714 717 Sandy Shale 717 726 Coal 726 727 Shale 727 760	Shale	328	423	
Sandy Shale 427 447 Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 717 726 Coal 727 760	Coal	423	424	
Sandstone 447 459 Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 717 726 Coal 726 727 Shale 727 760	Shale	424	427	
Shale 459 513 Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 717 726 Coal 726 727 Shale 727 760	Sandy Shale	427	447	
Coal 513 515 Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 717 726 Coal 726 727 Shale 727 760	Sandstone	447	459	
Shale 515 519 Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 717 726 Coal 726 727 Shale 727 760	Shale	459	513	
Coal 519 520 Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 646 712.5 Coal 712.5 714 Shale 717 726 Coal 727 760	Coal	513	515	
Shale 520 523 Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 642 646 Sandstone 646 712.5 Coal 712.5 714 Shale 717 726 Coal 726 727 Shale 727 760	Shale	515	519	
Sandstone 523 593 Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 642 646 Sandstone 646 712.5 Coal 712.5 714 Shale 717 726 Coal 726 727 Shale 727 760	Coal	519	520	
Coal 593 594 Shale 594 605 Sandstone 605 642 Shale 642 646 Sandstone 646 712.5 Coal 712.5 714 Shale 717 726 Coal 727 760	Shale	520	523	
Shale 594 605 Sandstone 605 642 Shale 642 646 Sandstone 646 712.5 Coal 712.5 714 Shale 714 717 Sandy Shale 717 726 Coal 726 727 Shale 727 760	Sandstone	523	593	
Sandstone 605 642 Shale 642 646 Sandstone 646 712.5 Coal 712.5 714 Shale 714 717 Sandy Shale 717 726 Coal 726 727 Shale 727 760	Coal	593	594	
Shale 642 646 Sandstone 646 712.5 Coal 712.5 714 Shale 714 717 Sandy Shale 717 726 Coal 726 727 Shale 727 760	Shale	594	605	
Sandstone 646 712.5 Coal 712.5 714 Shale 714 717 Sandy Shale 717 726 Coal 726 727 Shale 727 760	Sandstone	605	642	
Coal 712.5 714 Shale 714 717 Sandy Shale 717 726 Coal 726 727 Shale 727 760	Shale	642	646	
Shale 714 717 Sandy Shale 717 726 Coal 726 727 Shale 727 760	Sandstone	646	712.5	
Sandy Shale 717 726 Coal 726 727 Shale 727 760	Coal	712.5	714	
Coal 726 727 Shale 727 760	Shale	714	717	
Shale 727 760	Sandy Shale	717	726	
	Coal	726	727	
Sandstone 760 783	Shale	727	760	
	Sandstone	760	783	

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