

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Max Flesher Operator Well No.: HR 443

LOCATION: Elevation: 675' Quadrangle: Reedy WV 7.5'

District: Reedy County: Roane
Latitude: 10775 Feet South of 38 Deg. 55 Min. 00 Sec.
Longitude 2983' Feet West of 81 Deg. 25 Min. 00 Sec.

Company: Hard Rock Exploration

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 1244 Martins Branch Road Charleston WV, 25312	20"	19	19	NA
Agent: Marc Scholl	13 3/8"	84	84	70 f3 CTS
Inspector: Ed Gainer	9 5/8"	633	633	306 f3 CTS
Date Permit Issued: 7/20/11	7"	2323	2323	537f3 CTS
Date Well Work Commenced: 2/7/12	4.5"	7538	7538	130 f3
Date Well Work Completed: 3/1/12				
Verbal Plugging:	Ran Gamma Log from KOP(3545' - 4164'TVD)			
Date Permission granted on:	Ran Gyro from 3500' to surface			
Rotary x Cable Rig	RECEIVED			
Total Depth (feet): 7630'TMD, 4164'TVD	Office of Oil & Gas			
Fresh Water Depth (ft.): 45', 250'	MAY 21 2012			
Salt Water Depth (ft.): 1587', 1871'				
Is coal being mined in area (N/Y)? N	WV Department of			
Coal Depths (ft.): <u>N/A</u>	Environmental Protection			

OPEN FLOW DATA

Producing formation Lower Huron Shale Pay zone depth (ft) 4288'MD- 7630 'MD
4117'TVD - 4164' TVD

Gas: Initial open flow 200 MCF/d Oil: Initial open flow Bbl/d
Final open flow 1500+ MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests 72 Hours
Static rock Pressure psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft)
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 initial and final tests Hours
Static rock Pressure psig (surface pressure) after 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.

Signed: James Flesher
By: President
Date: 5/21/2012

Formation:	Top:	Bottom:
Soil, Sand, Shale	0	1494
Salt Sand	1494	1754
Lime	1754	1794
Injun	1794	1814
Shale	1814	2199
Coffee Shale	2249	2264
Devonian Shale	2264	4164
Lower Huron Section	4080	4164

All depths shown As TVD

02/15/12 Run 175 jts of R-3 4.5" 11.6ppg N-80 casing with 15 stg to depth of 7538' set at 7546' KB.

02/16/12 RU 10k valve and DSA. Drop 2 1.25" balls and seat with N2 at 3500 scf/min. Pressure up to 2500psi and wait 20 min (11:30am). Continue to pressure up to open pump out shoe. RD N2 equipment and RU to 4.5"X7" annulus. Dump squeeze with 100sx crmt mixed at 15ppg

	Sleeve	Sleeve Size	Packers
Stage 1	P/O Shoe	N/A	7408
Stage 2	7274	1.250	7185
Stage 3	7051	1.500	6962
Stage 4	6828	1.750	6739
Stage 5	6605	1.875	6516
Stage 6	6382	2.000	6293
Stage 7	6159	2.125	6070
Stage 8	5936	2.250	5848
Stage 9	5713	2.375	5625
Stage 10	5491	2.500	5402
Stage 11	5268	2.750	5179
Stage 12	5045	2.875	4956
Stage 13	4822	3.125	4733
Stage 14	4599	3.250	4510
Stage 15	4376	3.500	4288
Anchor			2647

RECEIVED
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MAY 21 2012

WV Department of
Environmental Protection

03/01/12 MIRU Baker Services. Start pumping N2 on Stg 1 at 40k scf/min and work rate up according to pressure. Pump total of 1MMscf N2. Drop ball for Stg 2. Wait for ball to drop. Start pumping at 16k scf/min and land ball. Open sleeve at 461 lpsi. Up rate and pump total of 1MMscf N2. Drop ball for Stg 3. Wait for ball. Pump ball down at 18k scf/min and land ball. Open sleeve at 4736psi. Up rate and pump total of 1MMscf N2. Drop ball for Stg 4. Repeat for stgs 4- 15.

	Stg 1	Stg 2	Stg 3	Stg 4	Stg 5	Stg 6	Stg 7	Stg 8
Max P	5987	6148	5996	5986	5986	5878	5876	5718
Avg P	4490	5879	5790	5834	5809	5610	5835	5529
Max R	90.8	73.3	84.0	68.2	858.9	80.1	85.5	103.0
Avg R	67.7	52.5	76.9	56.0	83.2	74.8	79.0	96.6
5 min	2253	2780	2480	2910	2527	2472	2764	2675
	Stg 9	Stg 10	Stg 11	Stg 12	Stg 13	Stg 14	Stg 15	
Max P	5459	5713	5095	5253	5467	5301	5235	
Avg P	5331	5567	5007	5151	5379	5212	5206	
Max R	105.0	111.0	107.6	109.0	106.6	108.5	110.0	
Avg R	103.0	110.0	107	108.0	105.3	107.0	109.0	
5 min	2274	2399	2266	2310	2366	2226	2288	

10/19/2012