

State of West Virginia
Department of Environmental Protection - Office of Oil and Gas
Well Operator's Report of Well Work

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Office of Oil and Gas
DEC 20 2023
WV Department of
Environmental Protection

API 47 - 015 - 03510 County Clay District Henry
Quad Elkhurst 7.5" Pad Name Brown, Goshorn, Swann Field/Pool Name _____
Farm name Brown, Goshorn, Swann Well Number C-2H WV0488
Operator (as registered with the OOG) Mountain V Oil and Gas Inc
Address PO Box 904 City Buckhannon State WV Zip 26201

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey
Top hole Northing 4260073.48 Easting 485108.39
Landing Point of Curve Northing 4259819.5 Easting 485171.9
Bottom Hole Northing 4259089.7 Easting 486148.1

Elevation (ft) 1246 GL Type of Well New Existing Type of Report Interim Final
Permit Type Deviated Horizontal Horizontal 6A Vertical Depth Type Deep Shallow
Type of Operation Convert Deepen Drill Plug Back Redrilling Rework Stimulate
Well Type Brine Disposal CBM Gas Oil Secondary Recovery Solution Mining Storage Other _____
Type of Completion Single Multiple Fluids Produced Brine Gas NGL Oil Other _____
Drilled with Cable Rotary

Drilling Media Surface hole Air Mud Fresh Water Intermediate hole Air Mud Fresh Water Brine
Production hole Air Mud Fresh Water Brine
Mud Type(s) and Additive(s)
PHPA aka Drill A or EZ Mud

Date permit issued 2/06/2023 Date drilling commenced 3/23/2023 Date drilling ceased 4/29/2023
Date completion activities began 5/25/2023 Date completion activities ceased 5/30/2023
Verbal plugging (Y/N) _____ Date permission granted _____ Granted by _____

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft none reported Open mine(s) (Y/N) depths na
Salt water depth(s) ft 1310' Void(s) encountered (Y/N) depths na
Coal depth(s) ft none reported Cavern(s) encountered (Y/N) depths na
Is coal being mined in area (Y/N) no

APPROVED

Reviewed by: 

03/01/2024

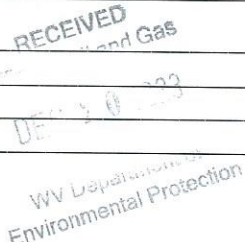
API 47-015 - 03510 Farm name Brown, Goshorn, Swann Well number C-2H WV0488

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/N) * Provide details below*
Conductor	20.0	13.375	36	X	36#	none	Yes
Surface	12.25	9.625	697	X	26#	60'	Yes
Coal							
Intermediate 1	8.75	7.0	2165	X	19#	none	Yes
Intermediate 2							
Intermediate 3							
Production	6.25	4.5	4380	X	10.5# & 11.6#	none	Yes
Tubing							
Packer type and depth set							

Comment Details _____

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft ³ /sks)	Volume (ft ³)	Cement Top (MD)	WOC (hrs)
Conductor	Ready Mix	5 yds	na	na	na	surface	na
Surface	Class A	250 sks	15.6	1.13	112	surface	8 hrs
Coal							
Intermediate 1	Class A	400 sks	15.6	1.13	293	surface	10 hrs
Intermediate 2							
Intermediate 3							
Production	Class A	345 sks	14.1	1.23	737	surface	na
Tubing							

Drillers TD (ft) 4443 Loggers TD (ft) na
 Deepest formation penetrated Big Injun Plug back to (ft) _____
 Plug back procedure _____



Kick off depth (ft) 1247'

Check all wireline logs run caliper density deviated/directional induction
 neutron resistivity gamma ray temperature sonic

Well cored Yes No Conventional Sidewall Were cuttings collected Yes No

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING _____
9.625" casing centralizers: Ran zero centralizers on 9.625" casing
7" casing centralizers: Ran bow-spring centralizers on jts: 1,2,3,4,5,6,8,10,12,14,16,18,44,45.
4.5" casing centralizers: Ran 43 rigid spiral centralizers, one on every third joint to 700'

WAS WELL COMPLETED AS SHOT HOLE Yes No DETAILS _____

WAS WELL COMPLETED OPEN HOLE? Yes No DETAILS _____

WERE TRACERS USED Yes No TYPE OF TRACER(S) USED _____

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PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	5/25/2023	4355	4295	30	Big Injun
2	5/26/2023	4265	4195	30	Big Injun
3	5/26/2023	4165	4095	30	Big Injun
4	5/26/2023	4065	3945	30	Big Injun
5	5/26/2023	3915	3795	30	Big Injun
6	5/30/2023	3765	3645	30	Big Injun
7	5/30/2023	3615	3495	30	Big Injun
8	5/30/2023	3465	3345	30	Big Injun
9	5/30/2023	3315	3195	30	Big Injun
10	5/30/2023	3165	3050	30	Big Injun
11	5/30/2023	2996	2895	30	Big Injun
12	5/30/2023	2865	2745	30	Big Injun
13	5/30/2023	2715	2595	30	Big Injun
14	5/30/2023	2565	2445	30	Big Injun
15					
16					

Please insert additional pages as applicable.

STIMULATION INFORMATION PER STAGE

Complete a separate record for each stimulation stage.

Stage No.	Stimulations Date	Ave Pump Rate (BPM)	Ave Treatment Pressure (PSI)	Max Breakdown Pressure (PSI)	ISIP (PSI)	Amount of Proppant (lbs)	Amount of Water (bbls)	Amount of Nitrogen/other (units)
1	5/25/202	55	2663	1401	1262	25100	875	0
2	5/26/202	61	3052	1701	1097	25100	853	0
3	5/26/202	66	2931	2777	1025	25700	883	0
4	5/26/202	58	2860	1150	1085	24900	868	0
5	5/26/202	57	3122	2719	1118	25200	824	0
6	5/30/202	64	2915	2342	914	25200	845	0
7	5/30/202	70	3324	2924	750	25100	825	0
8	5/30/202	66	2916	3089	930	25100	816	0
9	5/30/202	65	2749	3289	671	25400	866	0
10	5/30/202	60	3082	2059	724	25100	825	0
11	5/30/202	66	2582	3432	725	25200	745	0
12	5/30/202	71	2675	2720	701	25100	755	0
13	5/30/202	70	3283	3247	804	25300	742	0
14	5/30/202	66	3048	2881	567	25500	752	0
15								
16								

Please insert additional pages as applicable.

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PRODUCING FORMATION(S)	DEPTHS	
BIG INJUN	2113-2099	TVD 2445-4355 MD

Please insert additional pages as applicable.

GAS TEST Build up Drawdown Open Flow OIL TEST Flow Pump
 SHUT-IN PRESSURE Surface 185 psi Bottom Hole _____ psi DURATION OF TEST 48 hrs
 OPEN FLOW Gas test _____ mcfpd Oil test _____ bpd NGL 0 bpd Water 0 bpd GAS MEASURED BY Estimated Orifice Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H ₂ S, ETC)
sand,shale	0	302	0	302	1 1/2' stream @ 1310'
sand,shale,RR	302	1362	302	1362	intermittent gas and oil shows from 2326 to TD
Salt Sand	1362	1930	1362	2084	
Little Lime	1930	1952	2084	2108	
Pencil Cave	1952	1986	2108	2130	
Big Lime	1986	2092	2130	2350	
Big Injun	2092		2350	4443	

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Please insert additional pages as applicable.

Drilling Contractor Highlands Drilling
 Address PO box 2159 City Clintwood State VA Zip 24228
 Logging Company Schlumberger
 Address 95 Rutherford Run City Bradford State PA Zip 16701
 Cementing Company Lightning Energy Services
 Address 104 Heliport Road City Bridgeport State wv Zip 26330
 Stimulating Company Reliance Well Services
 Address 510 Cranberry St., Suite 230 City Erie State PA Zip 16507

Please insert additional pages as applicable.

Completed by Mike Shaver Telephone 304 842-6320
 Signature _____ Title President Date _____

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

03/01/2024