

Amended

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

API 47-103-02927 County WETZEL District Clay  
Quad LITTLETON 7.5' Pad Name GREEN DOT UNIT II Field/Pool Name MARCELLUS  
Farm name CRUPPENINK, QUENTIN Well Number GREEN DOT UNIT II 3H  
Operator (as registered with the OOG) STATOIL USA ONSHORE PROPERTIES, INC.  
Address 6300 Bridge Point Pky, Suite 500 City Austin State TX Zip 78730

As Drilled location NAD 83/UTM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing ~~432536~~ 4392664 Easting ~~1705204~~ 538823  
Landing Point of Curve Northing ~~432995~~ 4392809 Easting ~~1706167~~ 539115  
Bottom Hole Northing ~~429380~~ 4391726 Easting ~~1709924~~ 540278

Elevation (ft) 1480' 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)  
Surface - Drill Water; Intermediate - KCl/Polymer; Production - Cyberdrill

Date permit issued 11/21/13 Date drilling commenced 11/12/14 Date drilling ceased 12/03/14  
Date completion activities began 03/20/15 Date completion activities ceased 03/27/15  
Verbal plugging (Y/N) N/A Date permission granted \_\_\_\_\_ Granted by Office of Oil and Gas

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug **APR 06 2016**

Freshwater depth(s) ft 763' estimated Open mine(s) (Y/N) depths N  
Salt water depth(s) ft 2150' estimated Void(s) encountered (Y/N) depths N  
Coal depth(s) ft N Cavern(s) encountered (Y/N) depths N

Is coal being mined in area (Y/N) N

**APPROVED**

NAME: Jacqueline Horvath  
DATE: 6/1/2016

Reviewed by:

07/01/2016  
AX 04/06/16

API 47- 103 - 02927 Farm name CRUPPENINK, QUENTIN Well number GREEN DOT UNIT II 3H

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade w/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	24"	20"	100'	NEW	94#		
Surface	17 1/2"	13 3/8"	850'	NEW	J-55; 54.5#		Y
Coal							
Intermediate 1	12 1/4"	9 5/8"	2851'	NEW	J-55; 36#		Y, 15 BBLS
Intermediate 2							
Intermediate 3							
Production	8 1/2"	5 1/2"	13,245'	NEW	P-110; 20#		Y
Tubing	4 5/8"	2 3/4"	7614'	NEW	L-80		
Packer type and depth set		VersaSet Packer set at 7609'					

Comment Details \_\_\_\_\_

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor							
Surface	Class A	320	15.8	2.31	739	Surface	5 DAYS
Coal							
Intermediate 1	Class A	460	15.8	2.31	1063	2733'	33.5 HRS
Intermediate 2							
Intermediate 3							
Production	Class A	2255	13.5	1.29	6720	1147'	> 8 HRS
Tubing							

Drillers TD (ft) 13,270' Loggers TD (ft) 13,270'  
 Deepest formation penetrated MARCELLUS Plug back to (ft) N/A  
 Plug back procedure \_\_\_\_\_

Kick off depth (ft) \_\_\_\_\_

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  
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**Office of Oil and Gas**  
**APR 06 2016**

DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING \_\_\_\_\_  
 Surface: 1 Centralizer with stop collar 10 ft above floatshoe. One single bow every joint to 100ft below surface.  
 Intermediate: 1 centralizer with stop collar 10 ft above float shoe. 1 centralizer with stop collar 10 ft above float collar. 1 centralizer every joint for 100 ft (15 joints). One centralizer every 3 joints to 100ft below surface.  
 Production: 1 centralizer w/ stop collar 10ft above shoe. 1 centralizer 10ft above float collar. 1 centralizer every joint (floating) until KOP. 1 centralizer every 3 joints (floating) until 200ft inside intermediate shoe. 1 centralizer 50ft below mandrel hanger

WAS WELL COMPLETED AS SHOT HOLE  Yes  No DETAILS \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE?  Yes  No DETAILS FRACTURED FROM 12975' TO 7995'. 48 PERFS PER STAGE @ 6 SHOTS PER FOOT.

WERE TRACERS USED  Yes  No TYPE OF TRACER(S) USED \_\_\_\_\_

API 47- 103 - 02927

Farm name CRUPPENINK, QUENTIN

Well number GREEN DOT UNIT II 3H

PERFORATION RECORD

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
1	03/20/15	12975'	12675'	48	MARCELLUS
2	03/21/15	12675'	12495'	48	MARCELLUS
3	03/21/15	12375'	12195'	48	MARCELLUS
4	03/22/15	12075'	11895'	48	MARCELLUS
5	03/22/15	11775'	11595'	48	MARCELLUS
6	03/23/15	11475'	11295'	48	MARCELLUS
7	03/23/15	11175'	10995'	48	MARCELLUS
8	03/23/15	10875'	10695'	48	MARCELLUS
9	03/24/15	10575'	10395'	48	MARCELLUS
10	03/24/15	10275'	10095'	48	MARCELLUS
11	03/25/15	9975'	9795'	48	MARCELLUS
12	03/25/15	9675'	9495'	48	MARCELLUS
13	03/25/15	9375'	9155'	48	MARCELLUS
14	03/26/15	9075'	8895'	48	MARCELLUS
15	03/26/15	8775'	8597'	48	MARCELLUS
16	03/27/15	8175'	7995'	48	MARCELLUS

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	03/20/15	82	8115	7521	4648	441,700	7396	
2	03/21/15	84	8121	7010	4975	441,700	7353	
3	03/21/15	82	8075	6713	5834	441,700	7134	
4	03/22/15	85	7859	5840	5760	441,700	7134	
5	03/22/15	84	7631	6474	5968	441,700	7127	
6	03/23/15	85	7832	6210	5471	441,700	7127	
7	03/23/15	84	7868	6484	4332	441,700	7082	
8	03/23/15	85	7548	6082	4323	441,700	7066	
9	03/24/15	85	7822	6619	4511	441,700	6926	
10	03/24/15	85	7469	6683	4273	441,700	7456	
11	03/25/15	85	4586	6504	4431	441,700	7018	
12	03/25/15	85	7579	6600	4562	441,700	7984	
13	03/25/15	85	7664	6840	4484	441,700	6908	
14	03/26/15	85	7330	5920	5562	441,700	6995	
15	03/26/15	85	7420	6395	5689	441,700	7148	
16	03/27/15	85	7182	8142	5382	441,700	6998	

Please insert additional pages as applicable.

07/01/2016

API 47- 103 - 02927

Farm name CRUPPENINK, QUENTIN

Well number GREEN DOT UNIT II 3H

**PERFORATION RECORD**

Stage No.	Perforation date	Perforated from MD ft.	Perforated to MD ft.	Number of Perforations	Formation(s)
17	03/27/15	8175	7995'	48	MARCELLUS

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)
17	03/27/15	84	7634	6638	4838	441,700	6682	

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**Office of Oil and Gas**

APR 06 2015

WV Department of  
Environmental Protection

Please insert additional pages as applicable.

API 47- 103 - 02927 Farm name CRUPPENINK, QUENTIN Well number GREEN DOT UNIT II 3H

<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>		
<u>MARCELLUS</u>	<u>7652'</u>	<u>TVD</u>	<u>7933'</u> <u>MD</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 3488 psi Bottom Hole \_\_\_\_\_ psi DURATION OF TEST 24 hrs

OPEN FLOW Gas 5683 mcfpd Oil \_\_\_\_\_ bpd NGL \_\_\_\_\_ bpd Water 316 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 <sub>2</sub> S, ETC)
	0		0		
Big Injun		2772'		2780'	SANDSTONE
GORDON	3359'	3401'	3368'	3410'	SANDSTONE
WARREN	4041'	4075'	4050'	4084'	SANDSTONE
WEST RIVER	7420'	7501'	7531'	7631'	SHALE
GENESE	7501'	7524'	7631'	7664'	SHALE, SLIGHT GAS SHOWS
TULLY	7524'	7549'	7664'	7701'	CARBONATE MUDSTONE
HAMILTON	7549'	7652'	7701'	7933'	SHALE
MARCELLUS	7652'	-	7933'	-	SHALE, GAS THROUGHOUT FORMATION

Please insert additional pages as applicable.

Drilling Contractor ORION DRILLING  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Logging Company HALLIBURTON  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Cementing Company HALLIBURTON  
Address \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Stimulating Company PRODUCERS SERVICE CORP  
Address 109 S. GRAHAM STREET City ZANESVILLE State OH Zip 43701

Please insert additional pages as applicable.

Completed by Bekki Winfree Telephone 713-240-9015  
Signature *Bekki Winfree* Title Sr. Regulatory Advisor Date 03/31/16

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

07/01/2016



March 31, 2016

West Virginia Department of Environmental Protection  
Office of Oil and Gas  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

Reference: Green Dot 3H, API 47-103-02927  
WR-36 – Initial Gas-Oil Ratio  
WR-35 – Updated for Production

Gentlemen:

Statoil USA Onshore Properties Inc. herein submits the WR-35 Initial Gas-Oil Ratio and updated WR-35 for Green Dot 3H (API No. 47-103-02927). The well was turned on directly to production on 7/19/15; however, it was only recently discovered that the corresponding paperwork had not been filed.

Should you have any questions or require additional information please contact the undersigned at 713-240-9015 or [bekw@statoil.com](mailto:bekw@statoil.com).

Sincerely,

A handwritten signature in blue ink that reads "Bekki Winfree".

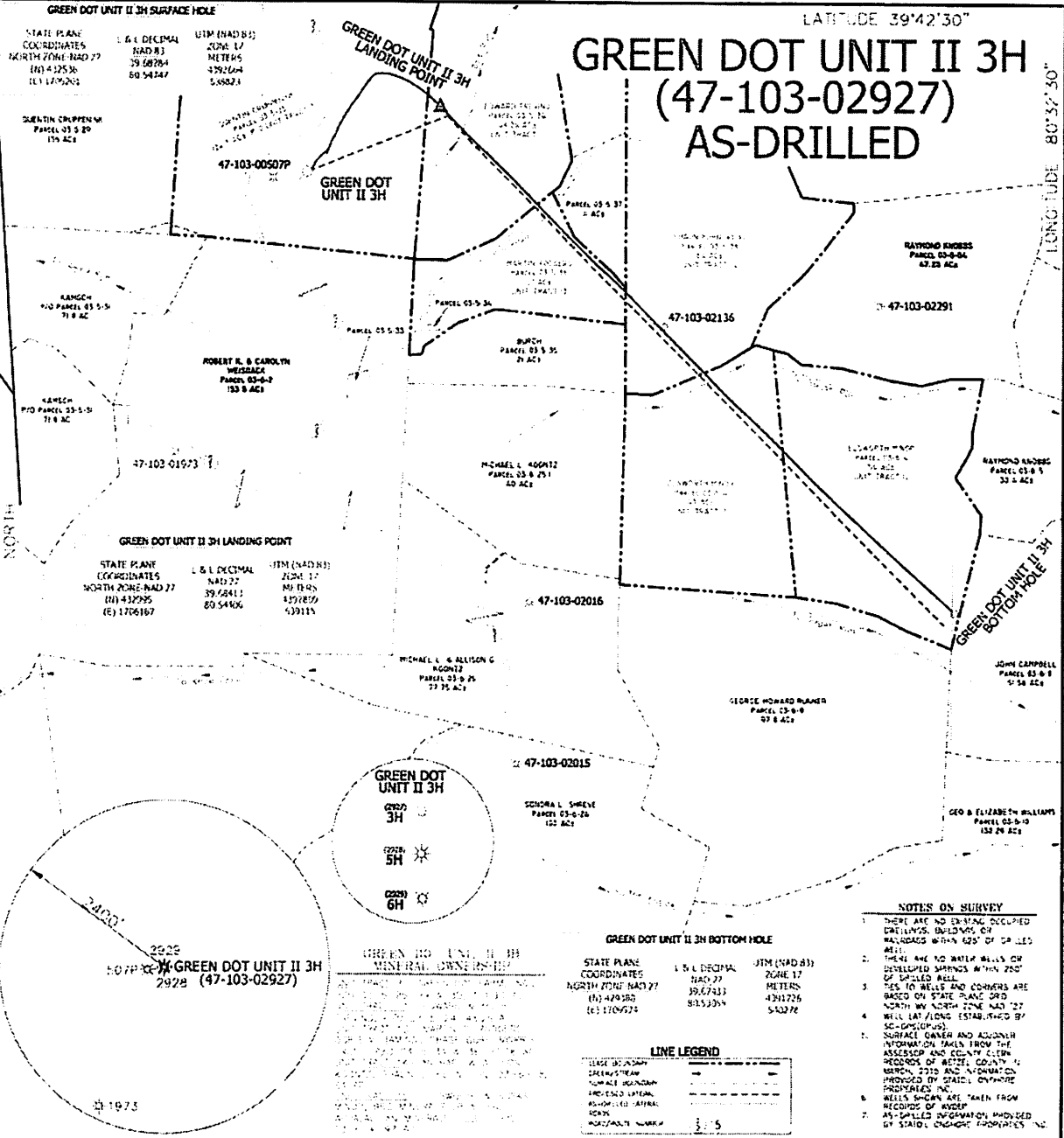
Bekki Winfree  
Sr. Regulatory Advisor – Marcellus Asset

Enclosure

RECEIVED  
Office of Oil and Gas  
APR 06 2016  
WV Department of  
Environmental Protection

07/01/2016





I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

P.S.  
S.S.A.

**HUPP Surveying & Mapping**  
P.O. Box 647 Grantsville, WV 26147  
(304) 354-7035 FAX: hupp@hupp.com

**DOYLE HUPP JR.**  
LICENSED PROFESSIONAL SURVEYOR  
No. 834  
STATE OF WEST VIRGINIA

(\*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
DATE JUNE 4, 20 15  
OPERATORS WELL NO. GREEN DOT UNIT II 3H  
AP           
WELL NO.           
STATE          COUNTY          PERMIT         

MINIMUM DEGREE OF ACCURACY 1/2500 FILE NO. W2377 (BK77-10) STATE OF WEST VIRGINIA  
PROVEN SOURCE OF ELEVATION 50-695 (OPUS) SCALE 1" = 100' DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

WELL TYPE: OIL  GAS  LIQUID WASTE  INJECTION  DISPOSAL  "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 1480' WATERSHED CROOKED RUN & BAT RUN  
DISTRICT CLAY COUNTY WETZEL QUADRANGLE LITTLETON 7.5'

SURFACE OWNER QUENTIN CRUPPENWIM ACREAGE 124.74  
ROYALTY OWNER GREEN DOT HARV. CO., et al LEASE ACREAGE 542.314

PROPOSED WORK: CASE NO.           
DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG AND ABANDON  CLEAN UP AND RE-PLUG  OTHER 07/01/2016  
PHYSICAL CHARACTER OF WELL (SEE P. 2) TARGET FORMATION MARCELLUS