

05/24/2019



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0450
fax: (304) 926-0452

Austin Caperton, Cabinet Secretary
www.dep.wv.gov

Monday, May 20, 2019
PERMIT MODIFICATION APPROVAL
Vertical / New Drill

DALE, DAVID DBA DD OIL COMPANY
P. O. BOX 406

SPENCER, WV 252760406

Re: Permit Modification Approval for DRILCO 2018 1V
47-085-10373-00-00

CHANGED TARGET FORMATION TO MARCELLUS SHALE AT A DEPTH OF 6800' AND SET 4 1/2" CASING TO 6500'.

DALE, DAVID DBA DD OIL COMPANY

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.

James A. Martin
Chief

Operator's Well Number: DRILCO 2018 1V
Farm Name: SAMUEL & BARBARA KENSLER
U.S. WELL NUMBER: 47-085-10373-00-00
Vertical New Drill
Date Modification Issued: 05/20/2019

Promoting a healthy environment.

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: DD OIL CO 308509 RITCHIE UNION BURNTHOUSE
 DALE, DAVID DD OIL CO. Operator ID County District Quadrangle

2) Operator's Well Number: DRILCO 2018 1V 3) Elevation: 1245

4) Well Type: (a) Oil or Gas
 (b) If Gas: Production / Underground Storage
 Deep / Shallow

5) Proposed Target Formation(s): MARCELLUS Proposed Target Depth: 6700

6) Proposed Total Depth: 6820 Feet Formation at Proposed Total Depth: ONONDAGA LIME

7) Approximate fresh water strata depths: NONE

8) Approximate salt water depths: NONE

9) Approximate coal seam depths: NONE

10) Approximate void depths, (coal, Karst, other): NONE

11) Does land contain coal seams tributary to active mine? NONE

*DCM
5-20-19*

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)

BUILD WELL LOCATION AND DRILL THRU MARCELLUS SHALE,
TO RUN LOGS FROM BASE OF SHALE TO EVALUATE THE STRATOGRAPGHIC FOR POTENTIAL DEVELOPMENT
AND RESERVING THE RIGHT TO STIMULATE ANY FORMATIONS FROM THE MARCELLUS AND ABOVE

13) **CASING AND TUBING PROGRAM**

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor	13 3/8	MS/50	37 LBS	40 FT	40FT	CTS
Fresh Water	9 5/8	A500	26 LBS	400 FT	400 FT	CTS
Coal	NONE					
Intermediate	7	A500	17 LBS	1950 FT	1950	CTS
Production	4 1/2	WT65	10.5 LBS	6500 FT	6500	CEMENT BACK TO 7" 4,530
Tubing	NONE					
Liners	NONE					

Packers: Kind: NONE
 Sizes: NONE
 Depths Set NONE

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Office of Oil and Gas

MAY 20 2019

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6, Section 8(d)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
DRIICO OIL & GAS CORP (Hardman Drilling purchased by DRILCO OIL & GAS CORP) March 1995 Ritchie County	DD OIL CO PO BOX 406 SPENCER, WV 25276 (see attached Farm Out Assignment)	1/8	BOOK 122 PAGE 50

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WV Department of
Environmental Protection

**Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator:
By: Its:

DD OIL CO
HUGH D DALE
OPERATOR

FARM OUT ASSIGNMENT AND ASSOCIATED OIL AND GAS INTERESTS

4708510373 MOA
05/24/2019

State of West Virginia

County of RITCHIE

Record and Return to:

DRILCO OIL & GAS, INC
P.O. Box 385,
Grantsville, West Virginia, 26147

KNOW ALL MEN BY THESE PRESENTS THAT, the undersigned, **DRILCO OIL & GAS INCORPORATED** a West Virginia corporation, whose chief executive offices are located at 2021 Calhoun Hwy, Grantsville, West Virginia 26147, hereinafter referred to as "**Assignor**", for and in consideration of Ten Dollars (\$10.00) in hand paid and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, does hereby grant, convey, sell, assign, transfer and set over unto Drilco 2018 1H Drilling Program LLC, a West Virginia limited liability corporation, with its offices located at 2021 Calhoun Hwy, Grantsville, West Virginia 26147, ("**Assignee**"), the Property as defined below, as the Property covers and pertains directly to the WELLBORE, AS DEFINED BELOW, AND LAID OUT IN **DRILCO OIL & GAS INCORPORATED**, ONLY OF THE [INSERT WELL NAME] HARDMAN DRILLING (PURCHASED BY DRILCO OIL & GAS) Well, (the "**Well**") from a surface locatn on [INSERT SURFACE LOCATION] DRILCO OIL & GAS leased to Assignor by [INSERT MINERAL NAME] HARDMAN DRILLING (PURCHASED BY DRILCO OIL & GAS) under the lease(s) described below (collectively, the "**Lease(s)**"), and all production of oil, gas, and other minerals from the Wellbore, penetrated by the drill bit for this program, EXCEPTING AND RESERVING unto Assignor all of Assignor's right, title, and interest in the property otherwise relating to or in any manner pertaining to the lands which are the subject of the oil and gas Leases.

The term "**Property**" means all rights, title, and oil and gas leaseholds and interests in and to: (a) the wellbore of the well from the surface to its actual depth, *provided that*, such total depth shall not be deeper than 6,000 feet from the surface (the "**Wellbore**"); and (b) the exclusive right to penetrate into the subsurface with the wellbore in search of oil, natural gas, and other petroleum hydrocarbons; (c) all of the oil, gas, and/or minerals produced from the well so long as its total depth is no deeper than 6,000 feet from the surface including with limitation presently existing oil, and casinghead gas, natural gas and /or other hydrocarbons in the wellbore; TO HAVE AND TO HOLD the same unto the same terms and provisions contained in said leases, contracts and assignments relating thereto and to all laws, rules, and regulations of all governmental bodies and agencies having jurisdiction thereof, all of which Assignees herby assume insofar as same are applicable to the interest herby assigned, The term "**Leases(s)**" means DRILCO OIL & GAS CORP/ADA HALL LEASE.

This Assignment is being entered into and pursuant to and is subject to the terms, conditions, and reservations set forth in that certain **DRILCO OIL & GAS INCORPORATED** by and between Assignor and Assignee dated as of [INSERT AGREEMENT DATE] MARCH 1995. This Assignment is made without warranty of title. The provisions hereof shall be construed as covenants running with the respective Leases and rights assigned hereunder, and shall be binding upon the respective successors and assigns of Assignor and Assignee.

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Office of Oil and Gas

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WV Department of
Environmental Protection

ASSIGNOR: **DRILCO OIL & GAS, INC**
Federal ID #: 83-2371247

Physical Address: 2021 Calhoun Hwy, Grantsville WV 26147

By: [Signature]
Hugh D. Dale, Managing Partner

ASSIGNEE:

Address:

DD OIL COMPANY

PO BOX 406

SPENCER, WV 25276

NOTARY ACKNOWLEDGEMENT

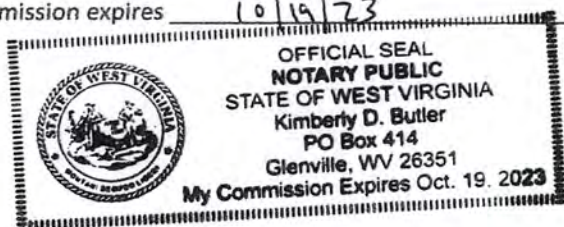
State of WV, COUNTY OF Calhoun

The foregoing instrument was acknowledged before me on 5-15-19 (date)

by Kimberly D Butler (name Notary Public)

Printed name Kimberly D. Butler

My commission expires 10/19/23



Federal ID/SSN : 55-0765849

By: [Signature]

DAVID DALE

Name (please print) _____

DRILCO 2018 #1V PAD 1

39°07'30"
47-085-10373M0

DRILCO 2018 #1V PAD 1

STATE PLANE
COORDINATES
(NORTH ZONE-NAD 27)

(N) 216244
(E) 1609279

L & L DECIMAL (NAD 27)

39.08550
60.87648

UTM (NAD 83)

4326281
510698

WALDO, ET AL
396.62 ACRES±
41-5

JERRYL
62.6 ACRES±
36-38.2

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KENSLER
90.26 ACRES±
41-8

KENSLER
105.073 ACRES±
41-7

30" BLACK
OAK, SNAG

REBAR

N 25° E
1300'

N 74° W
815'

S 09° W
547'

47-085-07155

SMITH
87.6 ACRES±
41-6

SIMMONS, ET AL
1.073 ACRES±
41-7.2

34
5

47-085-02447

KENSLER
25.87 ACRES±
41-7.1

WELL

47-085-03507

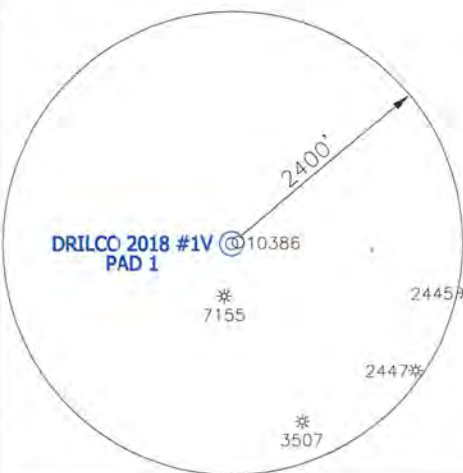
NORTH

To Left Fork

To Big Run

LINE LEGEND

LEASE BOUNDARY	---
SURFACE BOUNDARY	---
CREEK/STREAM	---
ROADS	---
WELL TIES	---



NOTES ON SURVEY

1. NO DWELLINGS WITHIN 625' WERE FOUND.
2. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250' WERE FOUND.
3. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD '27.
4. WELL LAT./LONG. ESTABLISHED BY DGPS (SUB-METER GRADE).
5. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF RITCHIE COUNTY IN JUNE, 2018 AND INFORMATION PROVIDED BY D D OIL COMPANY.
6. WELLS SHOWN ARE TAKEN FROM RECORDS OF WVDEP.

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT 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.
834

HUPP Surveying & Mapping
P.O. Box 647 Grantsville, WV 26147
(304) 354-7035 EMAIL: hupp@frontiernet.net



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE MAY 20, 2019

OPERATORS WELL NO. DRILCO 2018 #1V
PAD 1

API WELL NO. 47-085-10373V
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. W2606 (BK91-13)
PROVEN SOURCE OF ELEVATION DGPS (SUB-METER) SCALE 1" = 500'

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



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

LOCATION : ELEVATION 1,245' WATERSHED BIG RUN
DISTRICT UNION COUNTY RITCHIE QUADRANGLE BURNT HOUSE 7.5'

SURFACE OWNER SAMUEL & BARBARA KENSLER ACREAGE 105.073±
ROYALTY OWNER J.A. HALL HEIRS, et al LEASE ACREAGE 133±

PROPOSED WORK : LEASE NO. _____
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD
FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION ALEXANDER, MARCELLUS
ESTIMATED DEPTH 6,800'

WELL OPERATOR D D OIL COMPANY DESIGNATED AGENT HUGH DALE
ADDRESS P.O. BOX 385 GRANTSVILLE, WV 26147 ADDRESS P.O. BOX 385 GRANTSVILLE, WV 26147

LONGITUDE 80°52'30"

14,340'

LAT. 39°05'07.8"

COUNTY NAME

PERMIT

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47-085-10373 MOD

05/24/2019

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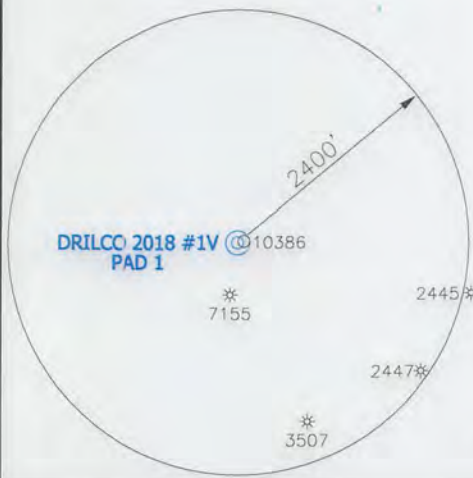
- LEASE BOUNDARY: Dashed line
- SURFACE BOUNDARY: Solid line
- CREEK/STREAM: Blue line with arrows
- ROADS: Dotted line
- WELLS: Sun symbol
- TIES: Dashed line with dots

20' Spacing

#1H (47-085-10386)

#1V (47-085-10373)

PAD 1



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