



1) Date: June 2, 1983
 2) Operator's Well No. 649-2
 3) API Well No. 47 - 87 - 3844
 State County Permit

DRILLING CONTRACTOR:

Unknown

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil / Gas
 B (If "Gas", Production / Underground storage / Deep / Shallow)
- 5) LOCATION: Elevation: 724' Watershed: Leatherwood Run
 District: Harper County: Roane Quadrangle: Kentucky 7 1/2'
- 6) WELL OPERATOR Key Oil, Inc.
 Address P.O. Box 709
 Spencer, W.Va. 25276
- 11) DESIGNATED AGENT Joe McLaughlin
 Address P.O. Box 709
 Spencer, W.Va. 25276
- 7) OIL & GAS ROYALTY OWNER Gatha Berry
 Address P.O. Box 177
 Craigsville, W.V. 26205
 Acreage 100
- 12) COAL OPERATOR None
 Address
- 8) SURFACE OWNER Gatha Berry
 Address P.O. Box 177
 Craigsville, W.V. 26205
 Acreage 100
- 13) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Name None
 Address
- 9) FIELD SALE (IF MADE) TO:
 Address
- 14) COAL LESSEE WITH DECLARATION ON RECORD:
 Name None
 Address
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Homer H. Dougherty
 Address Linden Route, Box 3-A
 Looneyville, WV 25259
- 15) PROPOSED WORK: Drill / Drill deeper / Redrill / Fracture or stimulate
 Plug off old formation / Perforate new formation
 Other physical change in well (specify)
- 16) GEOLOGICAL TARGET FORMATION, Marcellus Shale
- 17) Estimated depth of completed well, 5700 feet
- 18) Approximate water strata depths: Fresh, 200 feet; salt, 700 feet.
- 19) Approximate coal seam depths: None Is coal being mined in the area? Yes No

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20) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water	9 5/8	H-40	32.3	X		300'	300'	To surface	by 15-05
Coal									Sizes
Intermediate	7	J-55	23	X		2,200'	2,200'	To surface	
Production	4 1/2	J-55	10.5	X		5,700'	5,700'	As needed	Depths set
Tubing									
Liners									Perforations: Top Bottom

21) EXTRACTION RIGHTS

Check and provide one of the following:

- Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.
 The requirement of Code 22-4-1(c) (1) through (4). (See reverse side for specifics.)

22) ROYALTY PROVISIONS

Is the right to extract, produce or market the oil or gas based upon a lease or other continuing contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No

If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.

23) Required Copies (See reverse side.)

24) Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

Notary: Charles L. Mahew
 My Commission Expires November 9, 1992

Signed: Joe M. Laughlin
 Its: President

47-087-3844

OFFICE USE ONLY
DRILLING PERMIT

August 10, 1983

Permit number

09/15/2023 19

Date

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector. (Refer to No. 10) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

Permit expires April 10, 1984

unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing:	Fee:
<u>B</u>	<u>LS</u>	<u>[Signature]</u>	<u>[Signature]</u>	958

Michael Lewis
 Administrator, Office of Oil and Gas

Line Item Explanation

- 1) Date of Application
- 2) Your well name and number
- 3) To be filled out by office of oil & gas
- 4A) "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves underground reservoirs: "Gas" means all natural gas and all other fluid hydrocarbons not defined as oil.
- 4B) "Shallow well" means any well drilled and completed in a formation above the top of the uppermost member of the "Onondaga Group" or a depth less than six thousand feet, whichever is shallower.
"Deep well" means any well drilled and completed in a formation at or below the top of the uppermost member of the "Onondaga Group" or at a depth less than six thousand feet, whatever is shallower.
- 5) Where well is located
- 6) Before a permit can be issued in a corporation, company partnership, or fictitious name, the name must be registered with the Secretary of State Office
- 7) Use separate sheet if necessary
- 8) Present surface owner at time application is filed.
- 9) Optional
- 11) See Reg. 7.01 relating to code §22-4-1k
- 12) "Coal Operator" means any persons, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine. See Note 24
- 13 & 14) As per §22-4-20; See Note 24
- 15) Work that will be attempted—A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.
- 16) Anticipated formation for which well will be completed
- 17) Self explanatory
- 18) Depth to deepest freshwater, and shallowest salt water, taken from nearby wells corrected for differences in elevation
- 19) All coal seam depths
- 20) Proposed casing program and cementing refer to Code 22-4-5, 22-4-6, 22-4-7, 22-4-8, 22-4-8a Reg 9.01, 15.01, 15.02, 15.03, 15.04, 25.01, 25.02, 25.03, 25.04
- 21) Code 22-4-11(c) - In lieu of filing the lease or leases or other continuing contract or contracts, the applicant for a permit described herein may file the following:
 - (1) A brief description of the tract of land including the district and county wherein the tract is located;
 - (2) The identification of all parties to all leases or other continuing contractual agreements by which the right to extract, produce or market the oil or gas is claimed;
 - (3) The book and page number wherein each such lease or contract by which the right to extract, produce or market the oil or gas is recorded;
 - (4) A brief description of the royalty provisions of each such lease or contract.
- 22) Code 22-4-11(d) and 22-4-11(e).
- 23) Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code §22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code §22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code §22-4-12a, and (v) if applicable, the consent required by Code §22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.
- 24) The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

.....

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof.

WAIVER

The undersigned coal operator _____ / owner _____ / lessee _____ / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: _____, 19_____

By _____

Its _____

09/15/2023

09/15/2023



State of West Virginia

Department of Mines
Oil and Gas Division

CONSTRUCTION AND RECLAMATION PLAN

DESIGNATED AGENT Joe McLaughlin

Address P.O. Box 709 Spencer, W.V. 25276

Telephone 927-5490

SOIL CONS., DISTRICT Little Kanawha

Key Oil, Inc. (Agent)

This plan has been reviewed by Little Kanawha SCD. All corrections and additions become a part of this plan:

8-20-82

(Date)

(SCD Agent)

Joe McLaughlin

ACCESS ROAD

Structure Drainage Ditch (A)

Spacing

Page Ref. Manual 2-12

Structure Cross Drains (B)

Spacing 400' - 135'

Page Ref. Manual 2-1

Structure Culvert (15") (C)

Spacing

Page Ref. Manual 2-7

LOCATION

Structure Diversion Ditch (1)

Material Soil

Page Ref. Manual 2-12

Structure Rip-Rap (2)

Material Logs q

Page Ref. Manual N/A 2-9

Structure (3)

Material

Page Ref. Manual

All structures should be inspected regularly and repaired if necessary. All commercial timber is to be cut and stacked and all brush and small timber to be cut and removed from the site before dirt work begins.

REVEGETATION

Treatment Area I & II

Lime or correct to pH 6.5 Tons/acre

Fertilizer 500 lbs/acre

(10-20-20 or equivalent)

Mulch Silva-fiber Tons/acre

Seed* Ky. 31 Tall Rescue 20 lbs/acre

Flatpea 20 lbs/acre

lbs/acre

*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

NOTES: Please request foundation seeding for one growing season. Attach separate sheets as necessary for comments.

PLAN PREPARED BY Key Oil, Inc. Doug McDonald

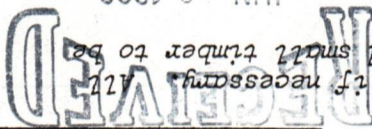
ADDRESS P.O. Box 709

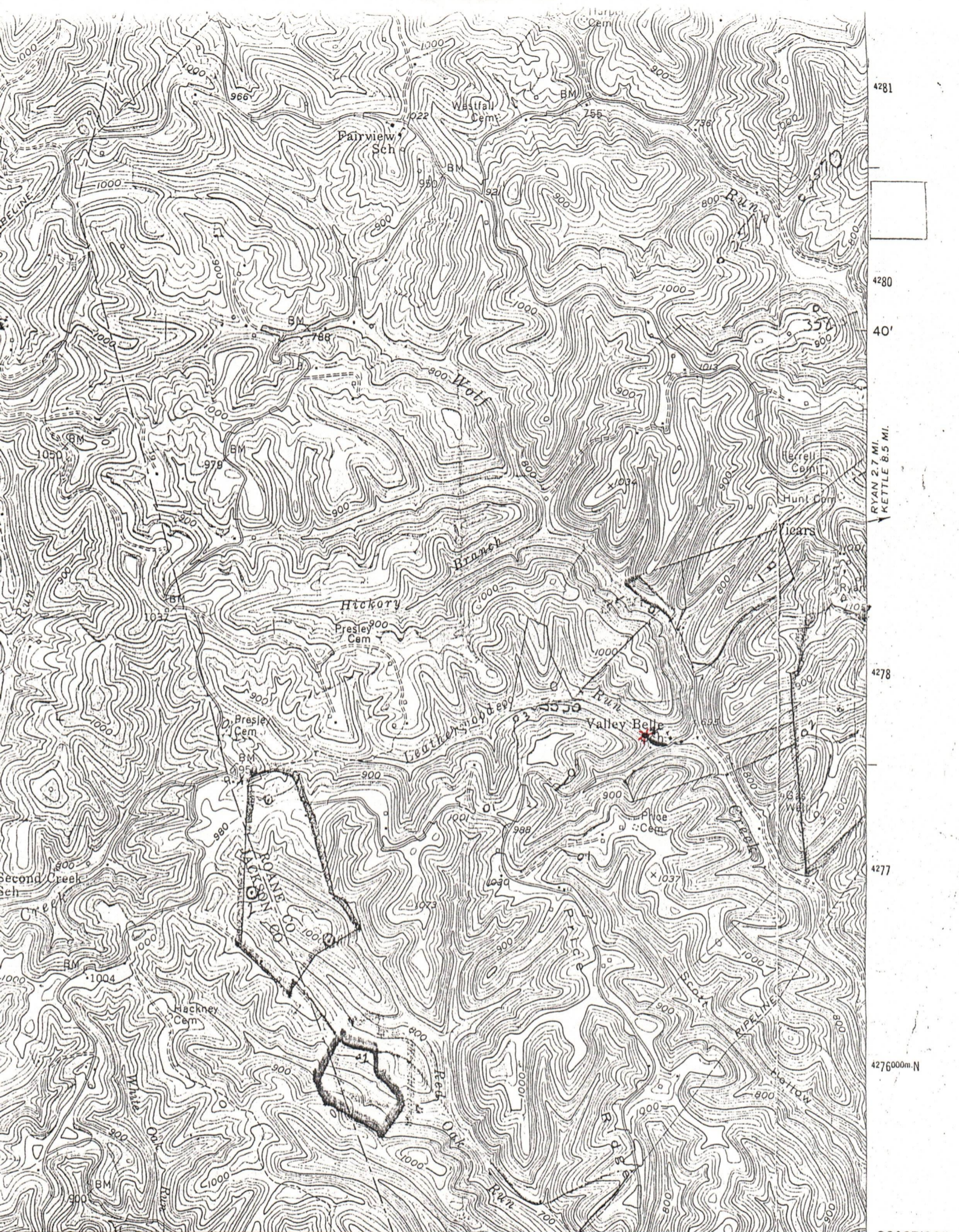
Spencer, W.V. 25276

PHONE NO. 304-927-5490

OIL & GAS DIVISION
TREATMENT AREA II MINES

JUN - 8 1983





4281
4280
40'
RYAN 2.7 MI.
KETTLE 8.5 MI.
4278
4277
4276000m N
38° 37' 30"
81° 30'

1.5 MI.
32'30" 453
454
455
456000m E.
1 MILE
7000 FEET
1 KILOMETER
RD 092
REQUEST



ROAD CLASSIFICATION
 Light-duty ————— Unimproved dirt - - - - -

09/15/2023

KENTUCK, W. VA.
 NE/4 KENNA 15' QUADRANGLE
 N3837.5—W8130/7.5
 1957
 PHOTOINSPECTED 1975
 AMS 4661 II NE—SERIES V854

(KETTLE 476) II SW

TB-11



State of West Virginia

Department of Mines
Oil and Gas Division

Charleston 25305

THEODORE M. STREIT
ADMINISTRATOR

BARTON B. LAY, JR.
DIRECTOR

February 19, 1985

Key Oil Company
P. O. Box 709
Spencer, WV 25276

In Re: Permit No: 47-087-3844
Farm: Gatha Berry
Well No: 649-2
District: Harper
County: Roane
Issued: 8-10-83

Gentlemen:

The FINAL INSPECTION REPORT for the above captioned well has been received in this office. Only the column checked below applies:

The well designated by the above captioned permit number has been released XXXXXX under your Blanket Bond. (PERMIT CANCELLED - NEVER DRILLED)

Please return the enclosed cancelled single bond which covered the well designated by the above permit number to the surety company who executed said bond in your behalf, in order that they may give you credit on their records.

Your well record was received and reclamation requirements approved. In accordance with Chapter 22, Article 4, Section 2, the above captioned well will remain under bond coverage for life of the well.

Very truly yours,

Theodore M. Streit, Administrator
Dept. Mines-Office of Oil & Gas

TMS/nw

09/15/2023

B-12

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION
STATUS INSPECTION REQUEST
INSPECTOR'S COMPLIANCE REPORT

Permit No. 087-3844 County. Roane
Company. Key Oil, Inc. Farm. Gatha Berry
Inspector. Homer Dougherty Well No. 649-2
Date. September 20, 1984 Issued. 8-10-83

RULE	DESCRIPTION	IN COMPLIANCE	
		YES	NO
23.06	Notification Prior to starting Work	___	___
25.04	Prepared before Drilling to prevent Waste	___	___
25.03	High-Pressure Drilling	___	___
16.01	Required Permits at Wellsite	___	___
15.03	Adequate Fresh Water Casing	___	___
15.02	Adequate Coal Casing	___	___
15.01	Adequate Production Casing	___	___
15.04	Adequate Cement Strength	___	___
23.02	Maintained Access Roads	___	___
25.01	Necessary Equipment to prevent Waste	___	___
23.03	Reclaimed Drilling Site	___	___
23.04	Reclaimed Drilling Pits	___	___
23.05	No Surface or Underground Pollution	___	___
7.03	Identification Markings	___	___

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DEPT. OF MINES

COMMENTS: Please issue final on cancellation if location is okay. Permit
expired on 4-10-84 and company says well was not drilled.

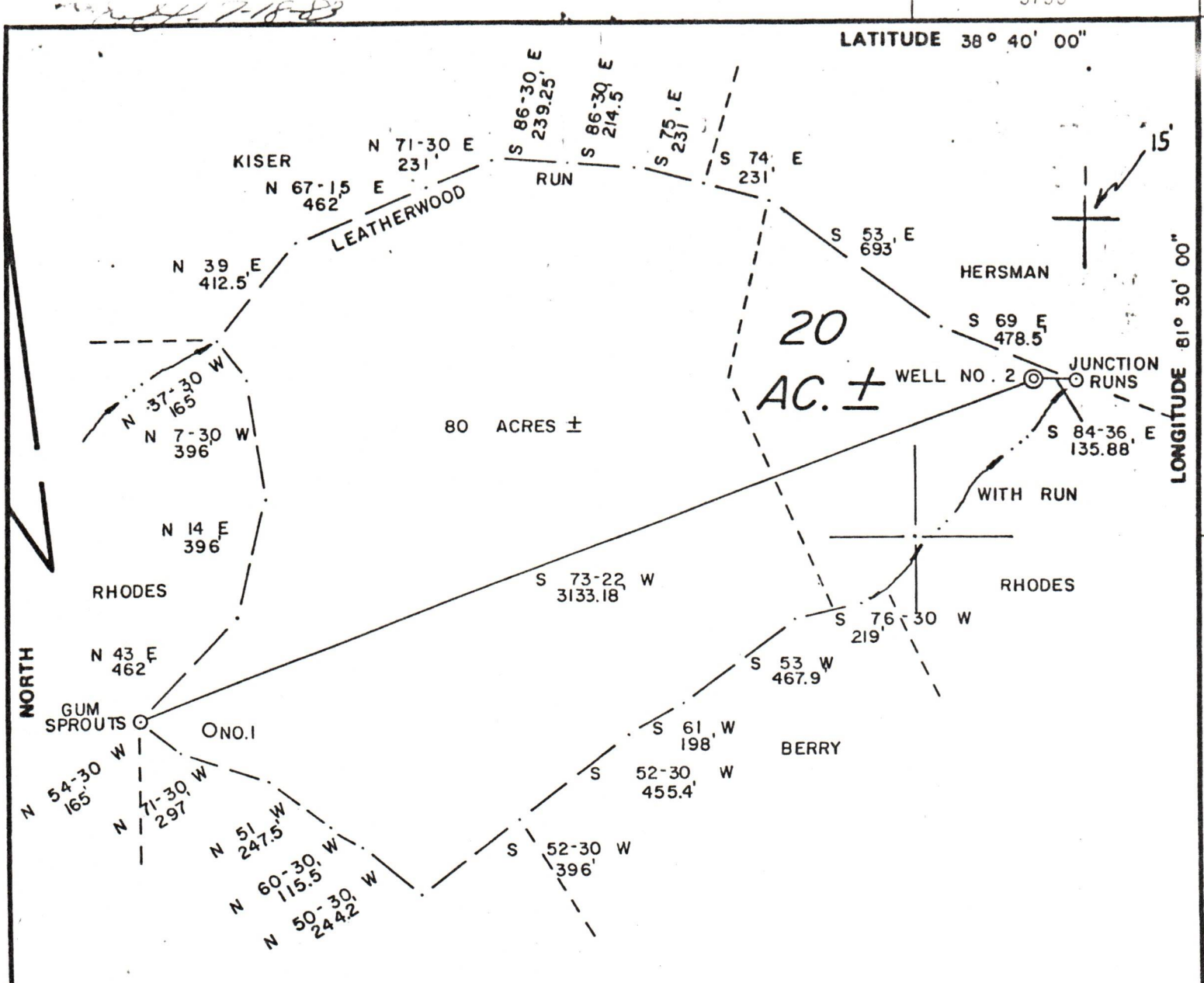
I have inspected the above well and (Have/Have Not) found it to be in compliance with all of the rules and regulations of the Office of Oil and Gas-Department of Mines of the State of West Virginia.

SIGNED: Homer Hu Dougherty
DATE: 2/13/85

09/15/2023

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09/15/2023

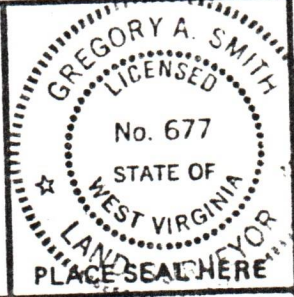


BERRY LEASE
WELL NO. 2

○ BERRY NO.1
(15 ACRE TRACT)

FILE NO. 8-6
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS
 ELEV. 988'

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES.
 (SIGNED) Gregory A. Smith
 R.P.E. _____ L.L.S. 677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6
 (8-78)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

DATE JULY 28, 1982
 OPERATOR'S WELL NO. 2
 API WELL NO. _____
47 087 - 3844
 STATE COUNTY PERMIT
cancelled

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 724' WATER SHED LEATHERWOOD RUN
 DISTRICT HARPER COUNTY ROANE
 QUADRANGLE KENTUCK 7.5'
 SURFACE OWNER DAYTON & DESSIE RHODES ACREAGE 20
 OIL & GAS ROYALTY OWNER GATHA BERRY et. al. LEASE ACREAGE 09/15/2023
 LEASE NO. 649
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION MARCELLUS ESTIMATED DEPTH 4925'
 WELL OPERATOR KEY OIL COMPANY DESIGNATED AGENT JOE McLAUGHLIN
 ADDRESS P.O. BOX 709 SPENCER W.V. 25276 ADDRESS P.O. BOX 727 SPENCER W.V. 25276