



1) Date: \_\_\_\_\_, 19\_\_\_\_  
 2) Operator's Well No. 340-5  
 3) API Well No. 47 - 87 - 3830  
 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: 1018' Watershed: Wolfpen Run  
 District: Harper County: Roane Quadrangle: Walton 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 W. H. Hersman  
 Address 710 Market St.  
Spencer, W.V. 25276  
 Acreage 144.5
- 12) COAL OPERATOR None  
 Address \_\_\_\_\_
- 8) SURFACE OWNER Betty F Hopkins  
 Address Rt. 2 Box 19  
Gandeeville, W.V. 25243  
 Acreage 144.5
- 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, 200 512 feet; salt, 700 feet.
- 19) Approximate coal seam depths: None Is coal being mined in the area? Yes  No
- 20) CASING AND TUBING PROGRAM

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 JUN - 8 1983  
 OIL & GAS DIVISION  
 DEPT. OF MINES

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' 550'	300' 550'	To surface	by Rule 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 Lewis Maxwell  
 My Commission Expires November 9, 1992
- Signed: Joe M. Laughlin  
 Its: President

47-087-3830 OFFICE USE ONLY August 10, 1983  
 DRILLING PERMIT  
 Permit number \_\_\_\_\_ Date 09/15/2023

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: <u>B</u>	Agent: <u>LS</u>	Plat: <u>AS</u>	Casing: <u>AS</u>	Fee: <u>958</u>
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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 US well location 08/15/2023 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\_\_\_\_

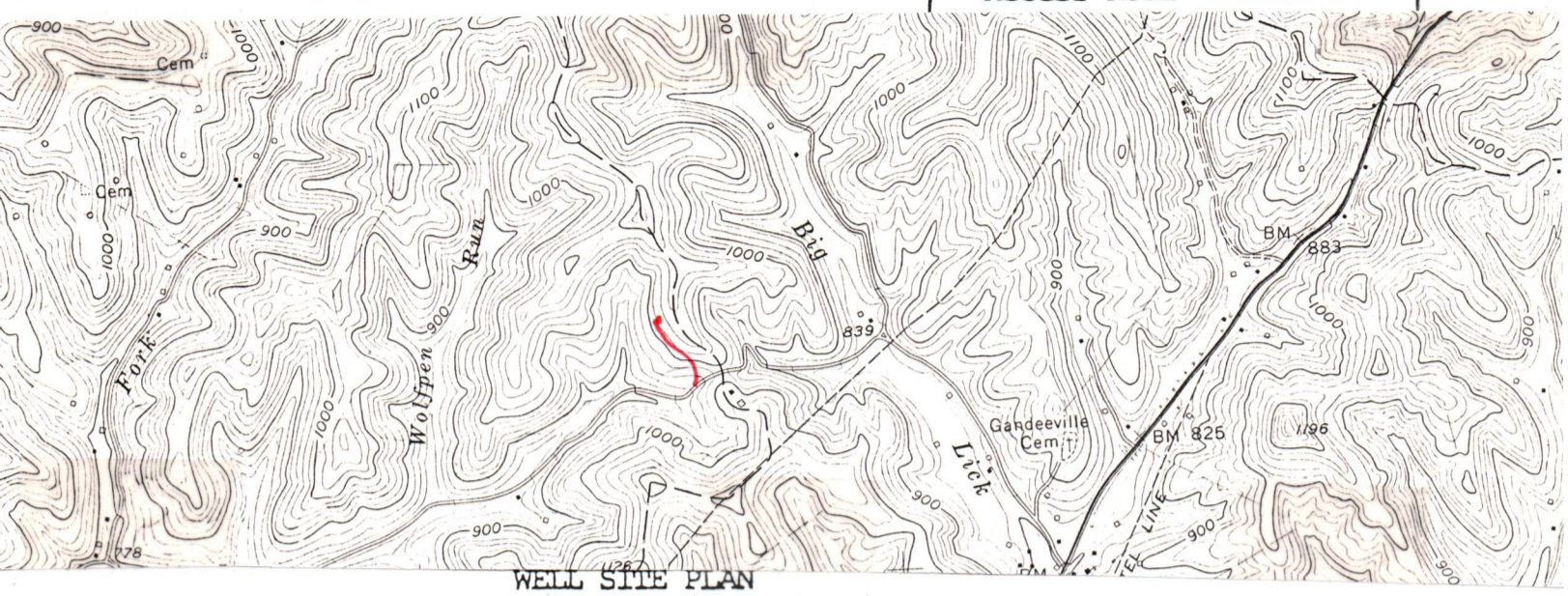
By \_\_\_\_\_  
Its \_\_\_\_\_

ATTACH OR PHOTOCOPY SECTION OF INVOLVED TOPOGRAPHIC MAP. QUADRANGLE \_\_\_\_\_

LEGEND

Well Site 













Access Road 

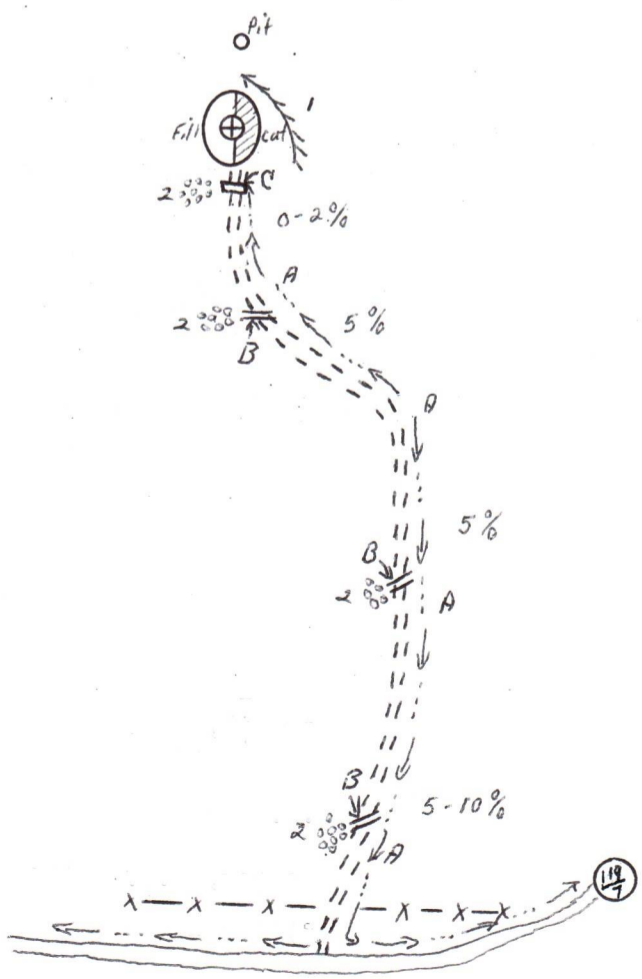


WELL SITE PLAN

Sketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with the first part of this plan. Include all natural drainage.

LEGEND

Property boundary 	Diversion 
Road 	Spring 
Existing fence 	Wet spot 
Planned fence 	Building 
Stream 	Drain pipe 
Open ditch 	Waterway 



09/15/2023



IV-9  
(Rev 8-81)

DATE Sept. 21, 1982

WELL NO. 340-5

State of West Virginia

API NO. 47 - 87 - 3830

Department of Mines  
Oil and Gas Division

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Key Oil, Inc.

DESIGNATED AGENT Joe McLaughlin

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

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

Telephone 927-5490

Telephone 927-5490

LANDOWNER Betty F. Hopkins

SOIL CONS. DISTRICT Little Kanawha

Revegetation to be carried out by Key Oil, Inc. (Agent)

This plan has been reviewed by Little Kanawha SCD. All corrections and additions become a part of this plan: 6-3-83

(Date)  
Jarrett Newton  
(SCD Agent)

ACCESS ROAD		LOCATION
Structure <u>Drainage Ditch</u>	(A)	Structure <u>Diversion Ditch</u> (1)
Spacing _____		Material <u>Soil</u>
Page Ref. Manual <u>2-12</u>		Page Ref. Manual <u>2-12</u>
Structure <u>Cross Drains</u>	(B)	Structure <u>Rip-Rap</u> (2)
Spacing <u>80' - 400'</u>		Material <u>Stone</u>
Page Ref. Manual <u>2-1</u>		Page Ref. Manual <u>2-9</u>
Structure <u>Culvert</u>	(C)	Structure _____ (3)
Spacing <u>(15")</u>		Material _____
Page Ref. Manual <u>2-7</u>		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.

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REVEGETATION

Treatment Area I & II

Lime \_\_\_\_\_ Tons/acre  
or correct to pH 6.5

Fertilizer 500 lbs/acre  
(10-20-20 or equivalent)

Mulch Hay or Straw Tons/acre

Seed\* Orchardgrass 12 lbs/acre  
Ladino Clover 3 lbs/acre  
\_\_\_\_\_ lbs/acre

Treatment Area I & II

Lime \_\_\_\_\_ Tons/acre  
or correct to pH \_\_\_\_\_

Fertilizer \_\_\_\_\_ lbs/acre  
(10-20-20 or equivalent)

Mulch \_\_\_\_\_ Tons/acre

Seed\* \_\_\_\_\_ lbs/acre  
\_\_\_\_\_ lbs/acre  
\_\_\_\_\_ lbs/acre

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

PLAN PREPARED BY Key Oil, Inc. 09/15/2023  
Doug McDonald

NOTES: Please request landowner's cooperation to protect new seedling for one growing season. Attach separate sheets as necessary for comments.

ADDRESS P.O. Box 709  
Spencer, W.V. 25276  
PHONE NO. (304)927-5490

B-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:	<u>47-087-3830</u>
Farm:	<u>Betty F. Hopkins</u>
Well No:	<u>340-5</u>
District:	<u>Harper</u>
County:	<u>Roane</u>
Issued:	<u>8-10-83</u>

Gentlemen:

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

XXXXX The well designated by the above captioned permit number has been released 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. 087-3830 County. Roane  
Company. Key Oil, Inc. Farm. Betty F. Hopkins  
Inspector. Homer Dougherty Well No. 340-5  
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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FEB 18 1985

OIL & GAS DIVISION  
**DEPT. OF MINES**

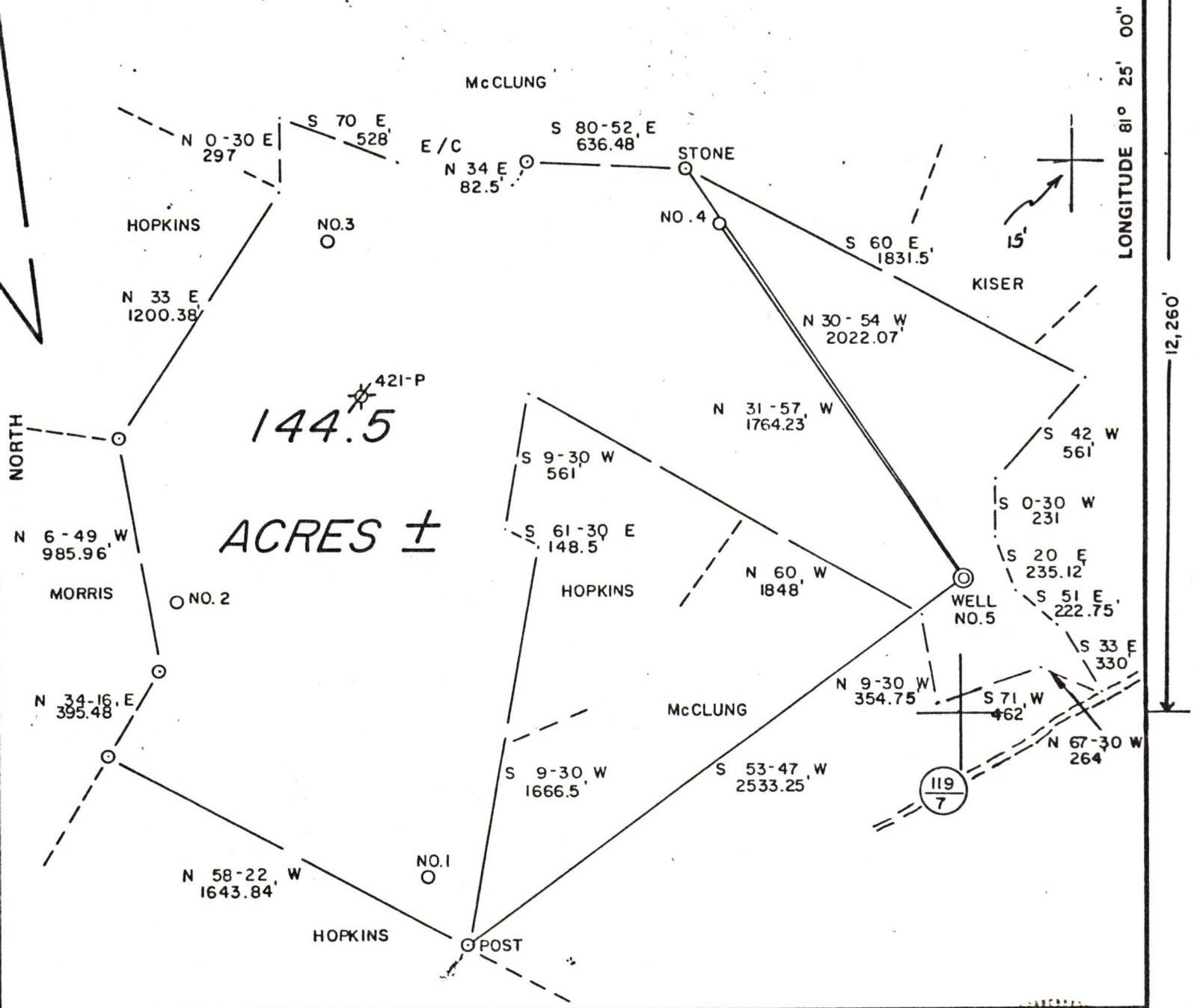
COMMENTS: Please issue final on cancellation if location is okay. Permit  
expired on 4-10-84 and company says well was not drilled.

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 H. Dougherty  
DATE: 2/13/85

09/15/2023

# HERSMAN LEASE WELL NO. 5

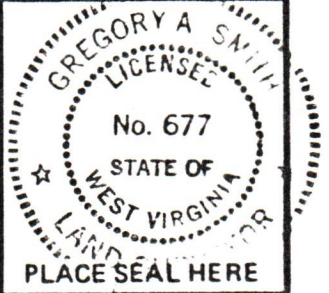


LONGITUDE 81° 25' 00"

12,260'

FILE NO. 8-35  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 600'  
 MINIMUM DEGREE OF ACCURACY 1 / 200  
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS  
 ELEV. 839'

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



STATE OF WEST VIRGINIA  
 DEPARTMENT OF MINES  
 OIL AND GAS DIVISION



DATE AUG. 19, 1982  
 OPERATOR'S WELL NO. 5  
 API WELL NO. \_\_\_\_\_  
47 - 087 - 3830  
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS  
 WELL TYPE: OIL \_\_\_ GAS X LIQUID INJECTION \_\_\_ WASTE DISPOSAL \_\_\_  
 (IF "GAS,") PRODUCTION X STORAGE \_\_\_ DEEP \_\_\_ SHALLOW X  
 LOCATION: ELEVATION 1018' WATER SHED WOLFPEN RUN  
 DISTRICT HARPER COUNTY ROANE  
 QUADRANGLE WALTON 7.5'

SURFACE OWNER BETTY F. HOPKINS ACREAGE 144.5  
 OIL & GAS ROYALTY OWNER W. H. HERSMAN LEASE ACREAGE 144.5  
 LEASE NO. 340

09/15/2023

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 5200'  
 WELL OPERATOR KEY OIL, INC. DESIGNATED AGENT JOE McLAUGHLIN  
 ADDRESS P.O. BOX 709 ADDRESS P.O. BOX 709  
SPENCER, W.V. 25276 SPENCER, W.V. 25276