

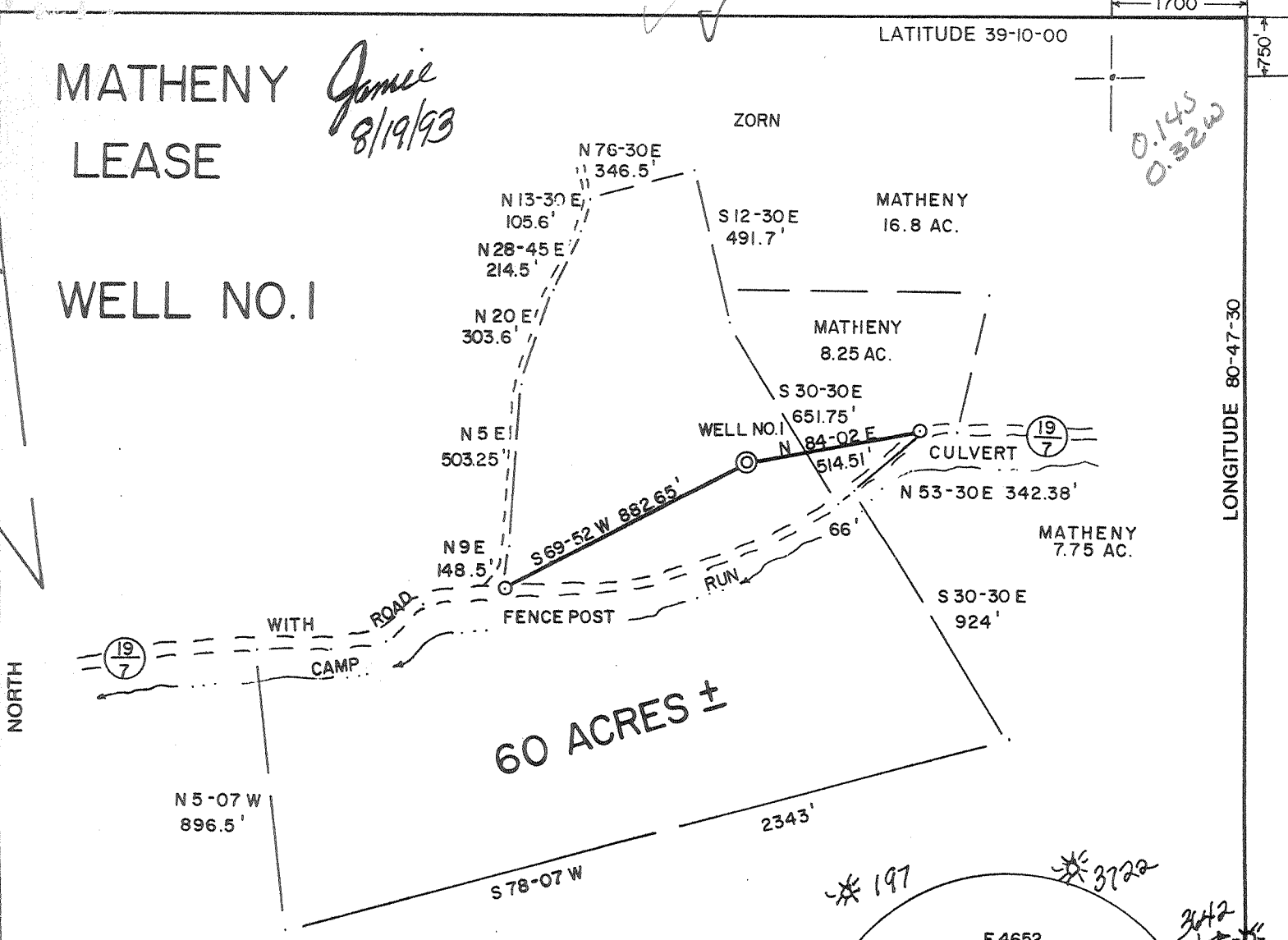
MATHENY
LEASE

*Jamie
8/19/93*

LATITUDE 39-10-00

1700'

WELL NO. 1



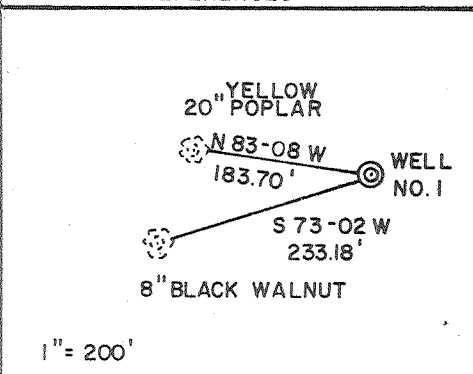
*0.145
0.322*

LONGITUDE 80-47-30

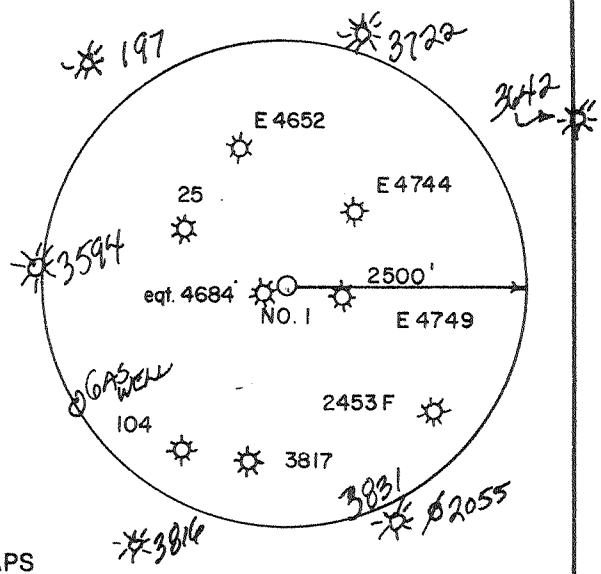
NORTH

60 ACRES ±

REFERENCES



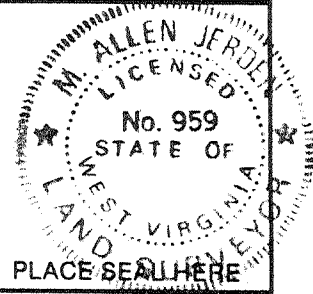
*0.145
2.55 .15*



1" = 200'
(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 500'
MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION TOP OF KNOB 1222'

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 ENERGY.
(SIGNED) M. Allen Jorden
R.P.E. _____ L.L.S. 959



STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE JULY 26, 19 93
OPERATOR'S WELL NO. MATHENY NO. 1
API WELL NO. _____

47 - 017 - 04033
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 970' WATERSHED CAMP RUN
DISTRICT SOUTHWEST 7 COUNTY DODDRIDGE
QUADRANGLE OXFORD 7.5' *Holbrook ec*

SURFACE OWNER BARRY L. MATHENY ACREAGE 60
OIL & GAS ROYALTY OWNER BARRY L. MATHENY et als. LEASE ACREAGE 60

PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION ALEXANDER ESTIMATED DEPTH 5200'
WELL OPERATOR TERM ENERGY CORP. *etc* DESIGNATED AGENT JEAN FREELAND
ADDRESS 713 E. MAIN ST. HARRISVILLE, WV 26362 ADDRESS 713 E. MAIN ST. HARRISVILLE, WV 26362

AUG 28 1993

Straight Fork-Bluestone Creek (133)

COUNTY NAME
PERMIT

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: MATHENY, BARRY

Operator Well No.: MATHENY #1

LOCATION: Elevation: 970.00 Quadrangle: OXFORD

District: SOUTHWEST County: DODDRIDGE
Latitude: 750 Feet South of 39 Deg. 10Min. Sec.
Longitude 1700 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: TERM ENERGY CORP.
713 EAST MAIN STREET
HARRISVILLE, WV 26362-0000

Agent: JEAN FREELAND

Inspector: MIKE UNDERWOOD
Permit Issued: 08/20/93
Well work Commenced: 08/26/93
Well work Completed: 09/15/93
Verbal Plugging
Permission granted on: _____
Rotary xx Cable _____ Rig
Total Depth (feet) 5000'
Fresh water depths (ft) 25'

Salt water depths (ft) None

Is coal being mined in area (Y/N)? N
Coal Depths (ft): NA

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	17'	0	0
8 5/8"	1066.30'	1066.30'	277.3
4 1/2"	4714'	4714'	704.25

OPEN FLOW DATA

Producing formation Benson/Benson Stray Pay zone depth (ft) 4532'-4616.5
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

Comingled Production Weir, Berea, Gordon
Second producing formation Balltown, & Bradford Pay zone depth (ft) 1954'-4201.5'
Gas: Initial open flow 575 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 425 MCF/d Final open flow show Bbl/d
Time of open flow between initial and final tests 24 Hours
Static rock Pressure 950 psig (surface pressure) after 22 Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Reviewed TMG
Recorded _____

For: Term Energy Corp
TERM ENERGY CORP.

By: Jean Freeland Jean Freeland, Designated Agent
Date: 9-16-93

09-15-93

PERFORATED:	BENSON	4615 - 4616.5;	6	HOLES	.39
	BENSON STRAY	4532 - 4535;	6	HOLES	.39
	BRADFORD	4199 - 4201.5;	6	HOLES	.39
	BALLTOWN	3788 - 3790;	6	HOLES	.39
	GORDON	2351 - 2373;	8	HOLES	.39
	BEREA	2144 - 2144.5;	2	HOLES	.39
	WEIR	1954 - 1975.5;	8	HOLES	.39

THREE STAGE ENGERGIZED WATER FRAC.

- BENSON & BENSON STRAY MAX TR PRESS 2650; AVG RATE 25; AVG PRESS 2380; 40,000# 20/40; 5,000# 80/100; MAX CONC 4; TOTAL ACID 500 GAL; ISIP 1350; 5 MIN SIP 1080; TOTAL NITROGEN 103,800 SCF; TOTAL FLUIDS 549 BBLs.
- BRADFORD & BALLTOWN: MAX TR PRESS 3590; AVG RATE 25.5; AVG PRESS 3060; 27,700# 20/40; 5,000# 80/100; MAX CONC 3.5; TOTAL ACID 1250 GAL; ISIP 1800; 5 MIN SIP 1100; TOTAL NITROGEN 74,350 SCF; TOTAL FLUIDS 491 BBLs.
- GORDON, BEREA, & WEIR: MAX TR PRESS 3450; AVG RATE 26.5; AVG PRESS 2960; 40,000# 20/40; 5,000# 80/100; MAX CONC 3.5; TOTAL ACID 1250 GAL; ISIP 1900; 5 MIN SIP 1420; 10 MIN SIP 1370; TOTAL NITROGEN 83,800 SCF; TOTAL FLUIDS 533 BBLs.

<u>WELL LOG</u>	<u>TOP</u>	<u>BOTTOM</u>	<u>WATER</u>
SAND, SHALE, & RR	0	1644	25' - 1 1/2" STREAM
BIG LIME	1644	1719	
BIG INJUN	1719	1802	
SAND & SHALE	1802	5000	

<u>GEOPHYSICAL LOG</u>	<u>TOP</u>	<u>BOTTOM</u>
BIG LIME	1658	1726
BIG INJUN	1726	1804
WEIR	1942	2062
BEREA	2142	2148
GORDON GROUP	2295	2379
WARREN	3016	3122
SPEECHLY GROUP	3136	3746
BALLTOWN	3746	3882
BRADFORD	4166	4234
BENSON STRAY	4520	4554
BENSON	4610	4622
LEOPOLD	4734	4744
ALEXANDER	4860	4960

TO
DF-424
OFF-439

2581

STATE OF WEST VIRGINIA

DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

17830

Permitting
Well Operator: Term Energy Corporation ⁵³⁶ 49105 ⁽⁷⁾ 526
Operator's Well Number: Matheny #1 ^{Issued 08/20/93}
^{Expires 08/20/95} 3) Elevation: 970'

Well type: (a) Oil ___ / or Gas X /
(b) If Gas: Production X / Underground Storage ___ /
Deep ___ / Shallow X /

- 5) Proposed Target Formation(s): Alexander ⁴³¹
- 6) Proposed Total Depth: 5300 feet
- 7) Approximate fresh water strata depths: 130'
- 8) Approximate salt water depths: 1430'
- 9) Approximate coal seam depths: None
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No X /
- 11) Proposed Well Work: Drill and stimulate new well.
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	11 3/4"	J-55	42#	17'	0	<u>0.16 miles</u>
Fresh Water	8 5/8"	J-55	20#	1070'	1070'	<u>CTS</u>
Coal						<u>38' 8" 11.3</u>
Intermediate						<u>38' 8" 11.2.2</u>
Production	4 1/2"	J-55	11.6# 10.5#	84' 4949'	84' 4949'	<u>250</u>
Tubing						<u>38' 8" 11.1</u>
Liners						

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond LC Blanket Agent
(Type)

002/16

1) Date: July 28, 1993
2) Operator's well number
Matheny #1
3) API Well No: 47 - 017 - 4033
State - County - Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Barry Matheny
Address 52 Stuart Circle
Hurricane, WV 25526
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Mike Underwood
Address Rt. 2 Box 135
Salem, WV 26426
Telephone (304)-782-1043

5) (a) Coal Operator:
Name None
Address _____
(b) Coal Owner(s) with Declaration
Name N/A
Address _____
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
_____ Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by:

- _____ Personal Service (Affidavit attached)
- XX Certified Mail (Postmarked postal receipt attached)
- _____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.
I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Term Energy Corporation
By: Jean Freeland *Jean Freeland*
Its: Designated Agent
Address 713 E. Main St.
Harrisville, WV 26362
Telephone (304) 643-4500

Subscribed and sworn before me this 29 day of July, 1993
Rodney C. Windom Notary Public
My commission expires 6-12-94