

SAM GASKINS

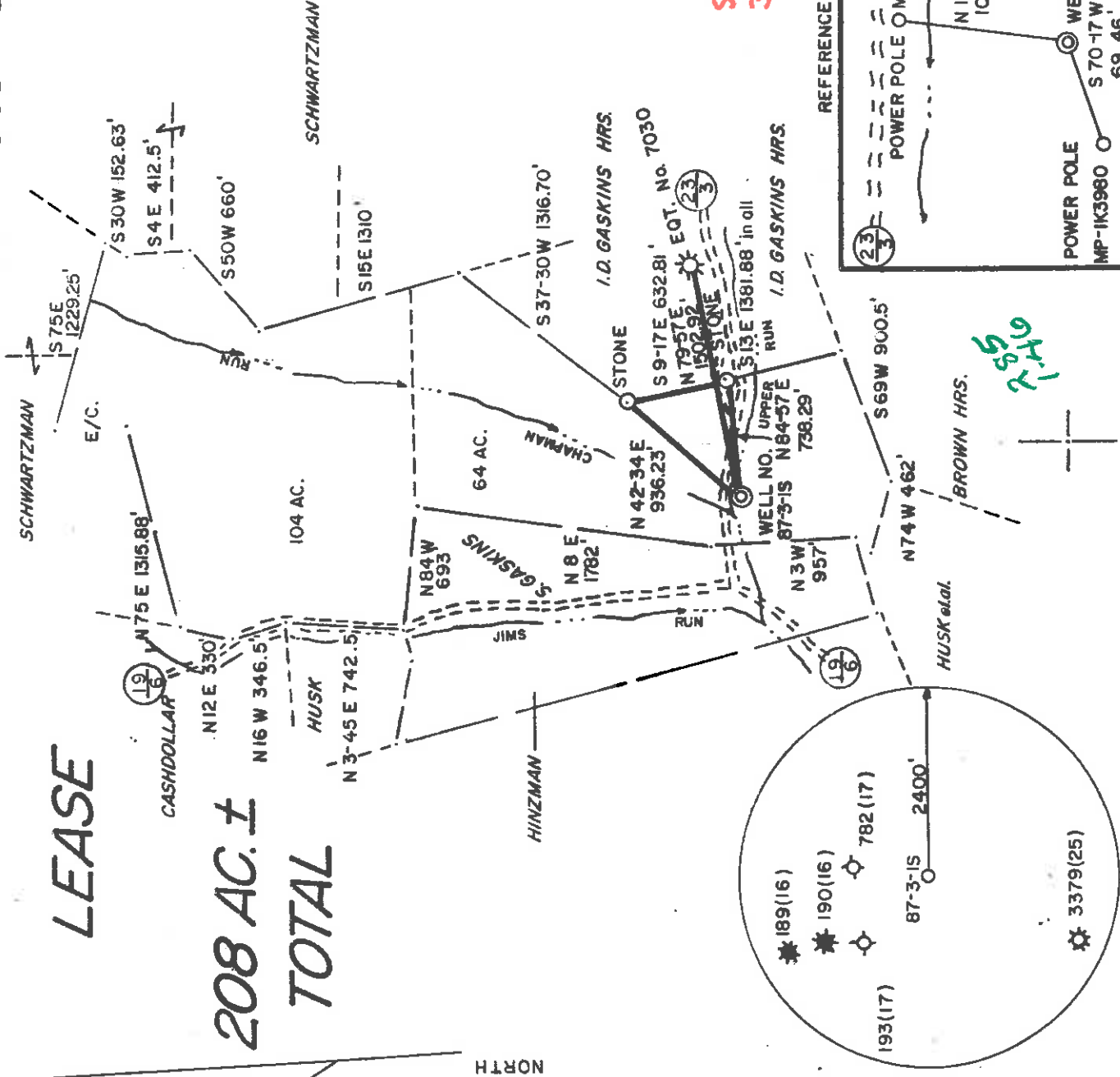
LEASE

WELL NO. 87-3-1S

208 AC. ±

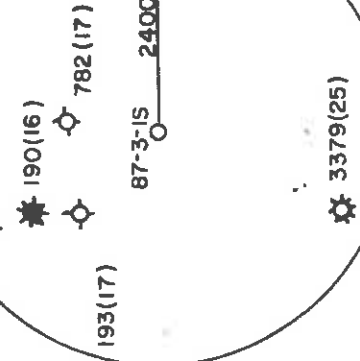
TOTAL

NORTH

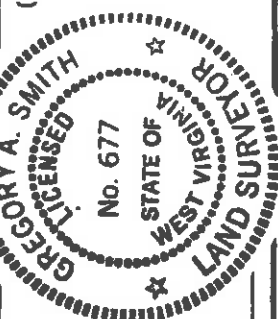
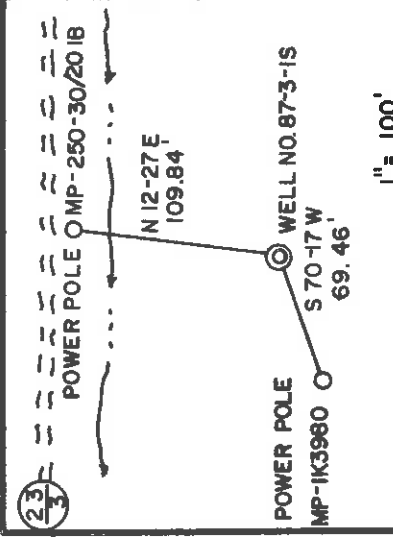


5.73
3.69

1.75
1.40



REFERENCES



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.

L.L.S. Gregory A. Smith
677

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE AUGUST 21, 19 87
OPERATORS WELL NO. 87-3-1S
API NO. _____
WELL NO. _____
STATE 47 COUNTY 017 PERMIT 3590
Frac

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 1707(22-42)
PROVEN SOURCE OF ELEVATION _____ SCALE 1"=1000'
JUNCT. OF ROADS ELEV. 856'

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



WELL TYPE: OIL _____ GAS LIQUID INJECTION _____ WASTE DISPOSAL _____ IF "GAS" PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW
LOCATION: ELEVATION 861' WATERSHED UPPER RUN
DISTRICT SOUTHWEST COUNTY DODDRIDGE
SURFACE OWNER SAMUEL C. & TERESA GASKINS
ROYALTY OWNER EVELENA ADAMS et al.
PROPOSED WORK:
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 WEIR _____ ESTIMATED DEPTH 2100'

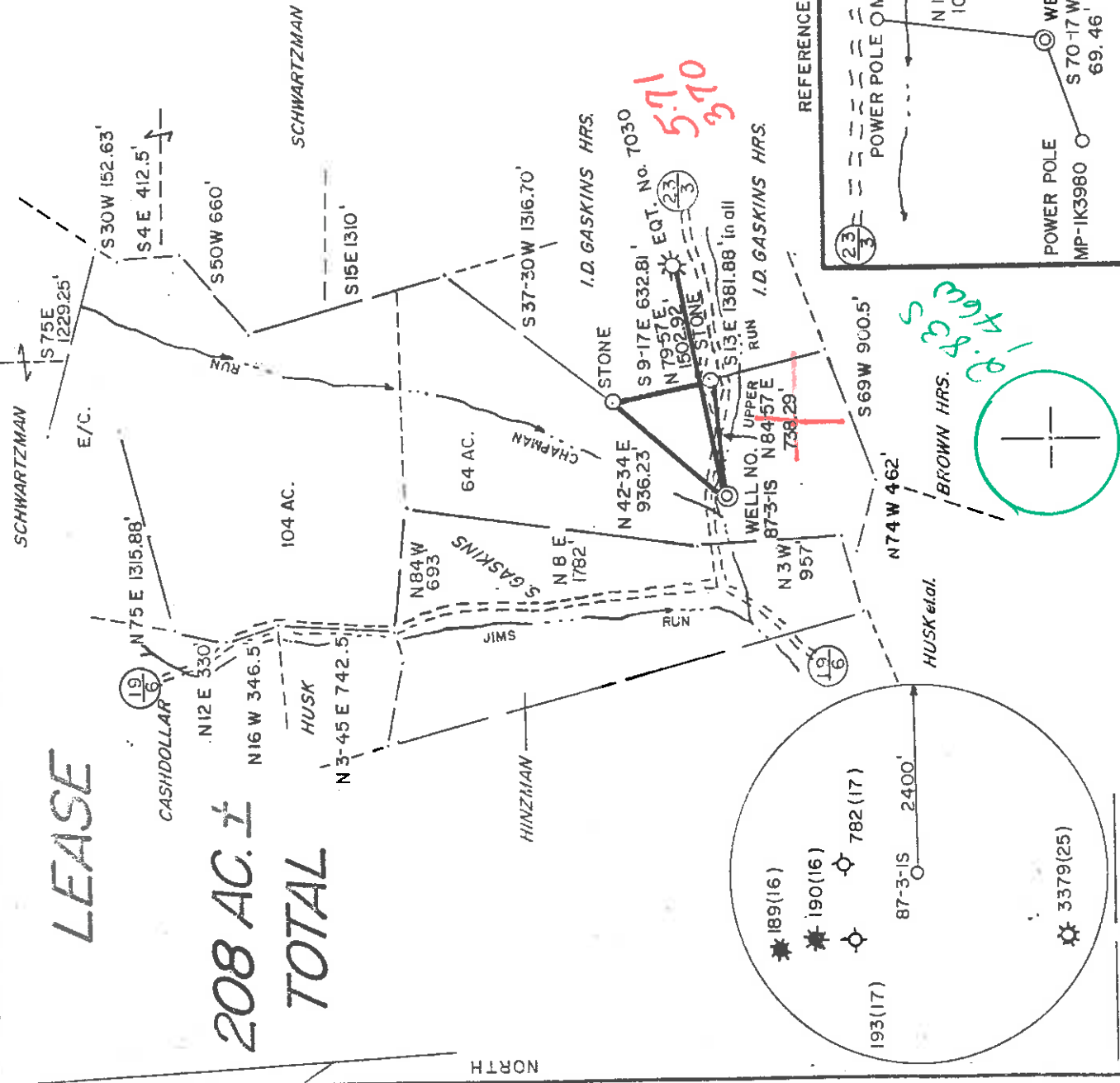
WELL OPERATOR _____ TERM ENERGY _____ DESIGNATED AGENT MICHAEL KELLY
ADDRESS 110 N. SPRING ST. HARRISVILLE, WV 26362
COUNTY NAME _____ PERMIT 3590

124568
OWWO 6-6 Straight Fork - Blue Stone Creek 13.3

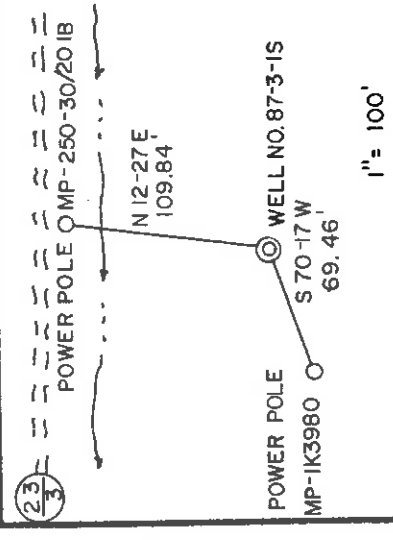
SAM GASKINS LEASE

WELL NO. 87-3-1S

208 AC. ± TOTAL



REFERENCES



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.

L.L.S. *Gregory A. Smith*
677

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE AUGUST 21, 19 87
OPERATORS WELL NO. 87-3-1S
API WELL NO. 47 - 017 - 3590
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION JUNCT. OF ROADS ELEV. 856'
FILE NO. 1707(22-42)
SCALE 1"=1000'

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



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

LOCATION: ELEVATION 861' WATERSHED UPPER RUN
DISTRICT SOUTHWEST 7 COUNTY DODDRIDGE
SURFACE OWNER SAMUEL C. & TERESA GASKINS
ROYALTY OWNER EVELENA ADAMS et. al.

PROPOSED WORK:
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) _____

COUNTY NAME _____ PERMIT _____

LEASE NO. _____
QUADRANGLE *Holbrook NE* OXFORD 7.5' *526*
ACREAGE 64 OF 208 *058*
LEASE ACREAGE 64 OF 208 *3*

ESTIMATED DEPTH 2100'

WELL OPERATOR TERM ENERGY
ADDRESS 110 N. SPRING ST. HARRISVILLE, WV 26362
DESIGNATED AGENT *JK* MICHAEL KELLY
ADDRESS 110 N. SPRING ST. HARRISVILLE, WV 26362
SEP 21 1987

6-6 Straight Fork - Bluestone Ch (133)

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

Reviewed TM6
Recorded CH

Well Operator's Report of Well Work

Farm name: GASKINS, SAMUEL Operator Well No.: GASKINS 87-3-1S

LOCATION: Elevation: 861.00 Quadrangle: OXFORD

District: SOUTHWEST County: DODDRIDGE
Latitude: 14960 Feet South of 39 Deg. 12Min. 30 Sec.
Longitude 7700 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: 10/23/92
Well work Commenced: 11/17/92
Well work Completed: 11/17/92
Verbal Plugging
Permission granted on: _____
Rotary XX Cable _____ Rig
Total Depth (feet) 4951'
Fresh water depths (ft) 35'
Salt water depths (ft) N/A

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

OPEN FLOW DATA

Producing formation Alexander & Benson Pay zone depth (ft) 4519-4835
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 73 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 125 psig (surface pressure) after 24 Hours
Comingled Production Balltown, Riley,
Second producing formation & Benson Stray Pay zone depth (ft) 3707-4458
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 335 MCF/d Final open flow show _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 1150 psig (surface pressure) after 65 Hours

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	221'	221'	115
8 5/8"	1097'	1097'	238
4-1/2"	4906'	4906'	637

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.

RECEIVED
WV Division of Environmental Protection

DEC 08 02

Permitting
Office of Oil & Gas

FOR: Term Energy Corp
TERM ENERGY CORP.

BY: Jean Freeland Jean Freeland, Designated Agent
Date: December 7, 1992

MAY 14 1994

SAM GASKINS #1 RE FRAC

11-17-92

SET SMALL MOUTH PLUG AT 4460' FRAC RILEY AND BENSON STRAY.
SET WIDE MOUTH PLUG AT 3720' FRAC BALLTOWN

PERFORATED: BENSON STRAY 4454 - 4458; 15 HOLES .39
BALLTOWN 3707 - 3711.5; 12 HOLES .39

TWO STAGE ENGERGIIZE WATER FRAC

- BENSON STRAY: MAX TR PRESS 4000; AVG RATE 29.8; AVG PRESS 3714;
35,000# 20/40; 10,000# 80/100; MAX CONC 3; TOTAL
ACID 750 GAL; ISIP 1795; 5 MIN SIP 1106; TOTAL
NITROGEN 92,000 SCF; TOTAL FLUIDS 617 BBLs.

- BALLTOWN: MAX TR PRESS 4000; AVG RATE 13.9; AVG PRESS 3790;
22,400# 20/40; 5,000# 80/100; MAX CONC 3; TOTAL
ACID 500 GAL; ISIP 4000; 5 MIN SIP 2642; TOTAL
NITROGEN 40,000 SCF; TOTAL FLUIDS 394 BBLs.

TO 4951

DE 424

DE 439

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WV Division of
Environmental Protection

DEC 0 8 92

Permitting
Office of Oil & Gas

62541



WR-35

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OCT 05 1987

Date October 2, 1987
Operator's Sam Gaskins
Well No. Gaskins
Farm Gaskins
API No. 47 - 017 - 3590

State of West Virginia

DEPARTMENT OF ENERGY
Oil and Gas Division

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas x / Liquid Injection / Waste Disposal /
(If "Gas," Production x / Underground Storage / Deep / Shallow x /)

LOCATION: Elevation: 861 Watershed Upper Run
District: Southwest County Doddridge Quadrangle Oxford 7.5'

COMPANY TERM Energy Corporation
ADDRESS 110 N. Spring St., Harrisville, WV 26362
DESIGNATED AGENT Michael R. Kelley
ADDRESS 110 N. Spring St., Harrisville, WV 26362
SURFACE OWNER Samual Gaskins
ADDRESS Rt 1, Box 182, West Union, WV 26456
MINERAL RIGHTS OWNER Mary Grace Debrular, et al
ADDRESS Rt 1, Bx 147AA, Harrisville, WV 26362
OIL AND GAS INSPECTOR FOR THIS WORK Mike
Underwood ADDRESS Rt 2, Bx 114, Salem, WV
PERMIT ISSUED September 15, 1987
DRILLING COMMENCED September 18, 1987
DRILLING COMPLETED September 24, 1987
IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	221	221	115
9 5/8			
8 5/8	1097	1097	238
7			
5 1/2			
4 1/2	4906	4906	637
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Alexander Depth 4835 feet

Depth of completed well 4856 feet Rotary x / Cable Tools

Water strata depth: Fresh 35 feet; Salt none feet

Coal seam depths: none Is coal being mined in the area? none

OPEN FLOW DATA

Producing formation Alexander Pay zone depth 4835 feet

Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d

Final open flow 876 Mcf/d Final open flow none Bbl/d

Time of open flow between initial and final tests hours

Static rock pressure 1875 psig (surface measurement) after 8 hours shut in

(If applicable due to multiple completion--)

Second producing formation Benson / Riley Pay zone depth 4522 / 4120 feet

Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d

Final open flow Mcf/d Oil: Final open flow Bbl/d

Time of open flow between initial and final tests hours **OCT 12 1987**

Static rock pressure psig (surface measurement) after hours shut in

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Perfs: Alex: 4799 - 4835
Benson: 4519 - 4522
Riley: 4116 - 4120

Frac: Alex: 483,000 scf N₂
5,000# 80/100 sand
50,000# 20/40 sand
500 gal HCl
405 bbl H₂O
Benson/Riley (Frac'd as one stage)
15,000# 80/100 sand
65,000# 20/40 sand
1000 gal HCl
876 bbl H₂O

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Soil			0	10	
Shale and red rock			10	100	35' - Water
Sand			100	139	
Sand and Shale			139	169	
Shale and Sand			169	199	
Sand and Shale			199	229	
Sand			229	319	
Sand and Shale			319	349	
Shale and Red rock			349	410	
Sandy shale			410	450	
Sand			450	475	
Sandy shale			475	503	
Shale and Sand			503	534	
Shale			534	565	
Shale and sand			565	597	
Sand and Shale			597	628	
Sand and Shale			628	659	
Shale and red rock			659	690	
Red rock and sand			690	720	
sand and shale			720	751	
Sand			751	783	
Shale			783	814	
Shale			814	845	
Shale			845	876	
Shale			876	907	
Shale			907	938	
Shale			938	970	
Shale			970	1001	
Shale			1001	1032	
Shale			1032	1063	
Shale			1063	1094	
Shale			1094	1125	
Shale			1125	1140	
Shale			1140	1154	
Shale			1154	1187	
Shald and sand			1187	1217	
Sand and shale			1217	1249	
Shale			1249	1280	

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

TERM Energy Corporation
Well Operator
By: W. D. R. Kille General Manager
Date: October 2, 1987

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic
detailed geological record of all formations, including
well, encountered in the drilling of a well."

Pg. 3

WELL LOG 017-3590

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sand and shale			1280	1311	
Shale			1311	1342	
Shale			1342	1323	
Shale			1373	1403	
Shale and sand			1403	1434	
Shale			1434	1465	
Shale			1465	1496	
Shale and sand			1496	1527	
Sand and shale			1527	1558	
Shald and sand			1558	1585	
Big Lime			1585	1660	
Big Injun			1660	1730	
Sand and shale and red rock			1730	1805	
Sand and shale			1805	1928	
Sand and shale			1928	2021	
Shale and sand			2021	2113	
Sand and shale			2113	2205	
Shale and sand			2205	2328	
Sand & Shale			2328	2480	
Shale and sand			2480	2513	
Sand and shale			2513	2606	
Shale and sand			2606	2729	
Sand and shale			2729	2823	
Shale and sand			2823	2917	
Sand and shale			2917	3039	
Sand and shale			3039	3193	
Sand and shale			3193	3285	
Sand and shale			3285	3380	
Sand and shale			3380	3471	
Sand and Shale			3471	3680	
Sand and shale			3680	3750	
Sand Balltown			3750	3870	
Sandy shale			3870	4035	
Sand			4035	4123	
Sandy shale			4123	4216	
Shale and sand			4216	4309	
Sand and shale			4309	4401	
Shale and sand			4401		

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Riley 4112-4138

over →

(Attach separate sheets as necessary)

TERM Energy Corporation
Well Operator

By: Michael R. Kelle General Manager

Date: October 2, 1987

Note: Regulation 2.02(i) provides as follows:
 "The term 'log' or 'well log' shall mean a systematic
 detailed geological record of all formations, including
 sand, encountered in the drilling of a well."

OCT 12 1987

Pg. 4

WELL LOG

017-3590

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Sand and Shale	4401	4528	Including indication of all fresh and salt water, coal, oil and gas
Benson	4528	4533	
Sand and shale	4533	4590	
Sand	4590	4598	
Sand and shale	4598	4652	
Leopold	4652	4655	
Sand	4655	4686	
Sand and Shale	4686	4711	
Sand	4711	4737	
Shale	4737	4764	
Alexander	4764	4863	
Shale	4863	4906	
Sand and shale	4906	4951	
TOTAL DEPTH	4951		

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DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

(Attach separate sheets as necessary)

Well Operator

By:

Date:

Note: Regulation 2.02(i) provides as follows:
 "The term 'log' or 'well log' shall mean a systematic
 detailed geological record of all formations, including
 all, encountered in the drilling of a well."

Permitting
Office of Oil & Gas

WELL WORK PERMIT APPLICATION

Expires 10/23/94

Well Operator: Term Energy Corporation 49105 (7) 525

Operator's Well Number: Sam Gaskins 3) Elevation: 861'

Well type: (a) Oil ___ / or Gas X /

(b) If Gas: Production X / Undergound Storage ___
Deep ___ / Shallow X /

Proposed Target Formation(s): Benson Stray & Balltown ⁴³⁵

Proposed Total Depth: 4856' feet (actual)

Approximate fresh water strata depths: 35' (actual)

Approximate salt water depths: none

Approximate coal seam depths: none

Does land contain coal seams tributary to active mine? Yes ___ / No X /

Proposed Well Work: Set Small mouth plug below Benson Stray; Frac Benson Stray. (4445-4462)
Set wide mouth Plug below Balltown, Frac Balltown. (3656-3721')
Comingle Production with lower formations

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
Conductor	13-10"	Prime	42#	221'	221'	Fill-up (cu. ft.) 115'
Fresh Water	8 5/8"	Prime	23#	1097'	1097'	238
Coal						
Intermediate						
Production	4 1/2"	Prime	15.5#	4906'	4906'	637
Tubing						Fill-up
Liners						

PACKERS : Kind

Sizes

Depths set

267/34

For Divison of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP

Plat WW-9 WW-2B Bond (Type)

07 0 2 92

1) Date: September 29, 1992
2) Operator's well number
Sam Gaskins
3) API Well No: 47 - 017 - 3590 -PRAC
State - County - Permit

Office of Oil & Gas
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 Joe Irvine 5) (a) Coal Operator:
Address Rt. 1 Box 182 Name None
West Union, WV 26456 Address _____
- (b) Name _____ (b) Coal Owner(s) with Declaration
Address _____ Name _____
Address _____
- (c) Name _____ Name _____
Address _____ Address _____
- 6) Inspector Mike Underwood (c) Coal Lessee with Declaration
Address Rt. 2 Box 135 Name _____
Salem, WV 26426 Address _____
Telephone (304) - _____

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)

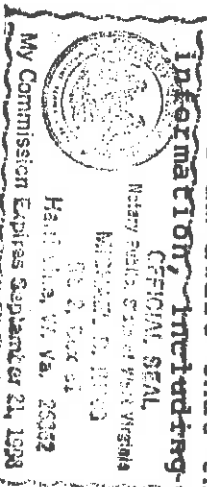
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through _____ on the above named parties, by: _____

Personal Service (Affidavit attached)
 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
 Its: Designated Agent
 Address 713 E. Main St.
Harrisville, WV 26362
 Telephone (304) 643-4500

Subscribed and sworn before me this 29th day of September, 1992

My commission expires September 21, 1998 _____ Notary Public

1) Date: August 27, 19 87
 2) Operator's Sam Gaskins #87-3-1S
 Well No. 47
 3) API Well No. 017 3590
 State County Permit



FORM WV-2 (B) FILE COPY

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 SEP 02 1987

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

4) WELL TYPE: A Oil Gas B (if "Gas", Production Shallow Deep
 Elevation: 861
 District: South West
 5) LOCATION: Watershed: Doddridge 017 Quadrangle: Oxford 7.5-525
 6) WELL OPERATOR: TERM Energy Corp CODE: 29105 DESIGNATED AGENT Michael R. Kelley
 Address: 110 N. Spring St Harrisville, WV 26362
 8) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name: Mike Underwood
 Address: Route 2, Box 114 Salem, WV 26426

9) DRILLING CONTRACTOR:
 Name: Nexus Drilling Corp.
 Address: Post Office Box 32 Jane Lew, WV 26378
 10) PROPOSED WELL WORK: Drill / Plug off old formation / deeper / Perforate new formation
 Redrill / Stimulate

11) GEOLOGICAL TARGET FORMATION, ALEXANDER
 12) Estimated depth of completed well, 5000 feet
 13) Approximate trata depths: Fresh, 90 feet; salt, none feet.
 14) Approximate coal seam depths: none feet. Is coal being mined in the area? Yes No

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	Left in well	For drilling		
Conductor	9 5/8	Prime	23	X	200	CTS by 38	Kinds CSR18-11.3
Fresh water	10 3/4						Sizes
Coal	7				1100	CTS by 38	Depths set
Intermediate					5000	250 SKS or as req. by	
Production	4 1/2	Prime	10.5	X		38 CSR18	Types
Tubing							Top
Liners							Bottom

OFFICE USE ONLY
 DRILLING PERMIT
 Permit number 47-017-3590 Date September 15 19 87

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. 8) 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.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.
 Permit expires September 15, 1989 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <input checked="" type="checkbox"/>	Agent: <input checked="" type="checkbox"/>	Fee: <u>229</u>	Other: <input checked="" type="checkbox"/>
---	--	-----------------	--

NOTE: Keep one copy of this permit posted at the drilling location.
 Director, Division of Oil and Gas
 See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

10767

