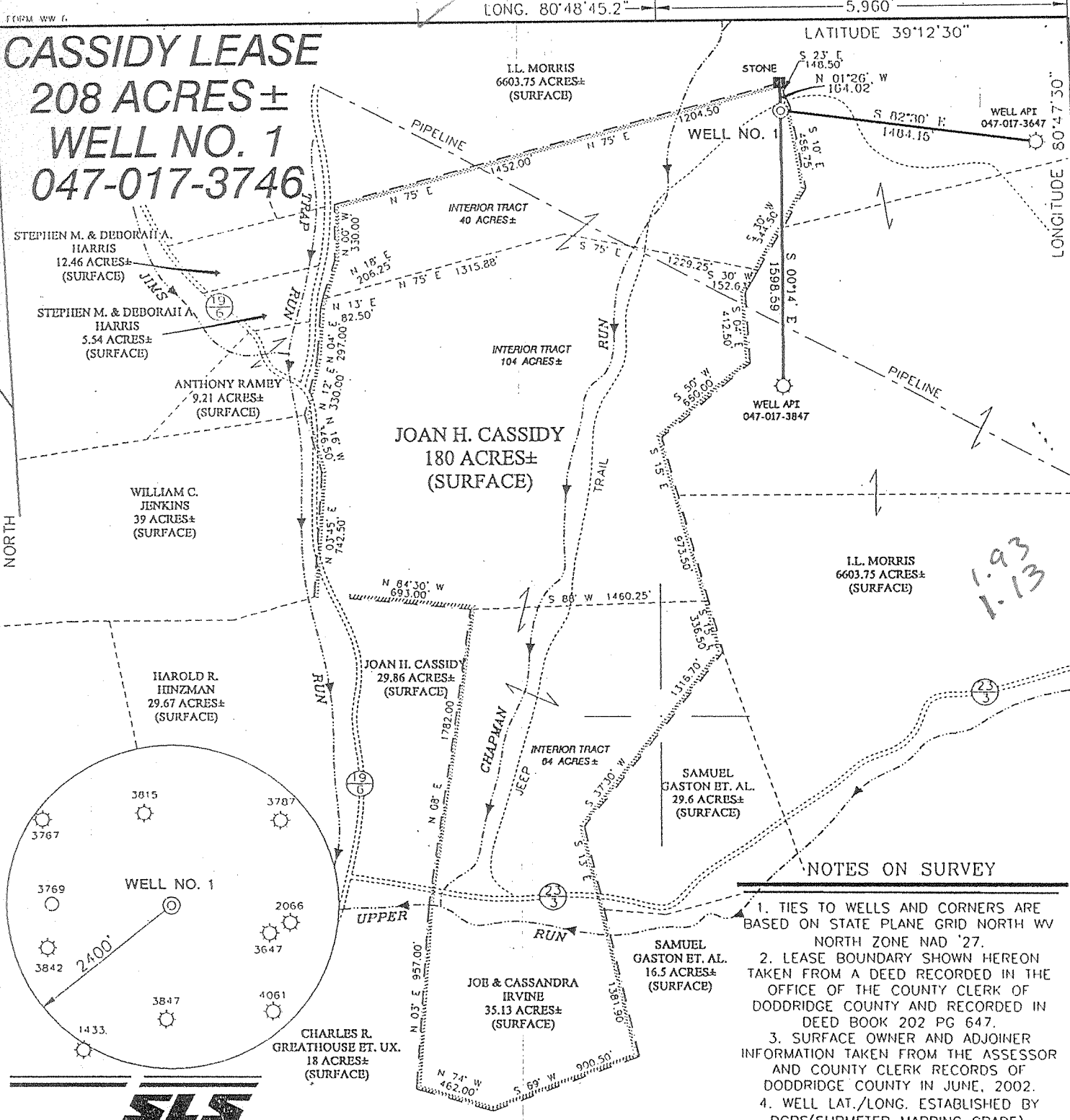


CASSIDY LEASE 208 ACRES ± WELL NO. 1 047-017-3746

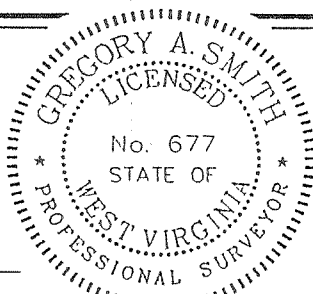


NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD '27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A DEED RECORDED IN THE OFFICE OF THE COUNTY CLERK OF DODDRIDGE COUNTY AND RECORDED IN DEED BOOK 202 PG 647.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN JUNE, 2002.
4. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

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 ENVIRONMENTAL PROTECTION.

P.S. 677 *Gregory A. Smith*



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

DATE JUNE 21 2002
 OPERATORS WELL NO. NO. 1
 API WELL NO. 47 - 017 - 3746
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 5046P1(123-50)
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 1196' SCALE 1" = 800'

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 1111' WATERSHED CHAPMAN RUN
 DISTRICT SOUTHWEST COUNTY DODDRIDGE QUADRANGLE OXFORD 7.5'

SURFACE OWNER JOAN H. CASSIDY ACREAGE 40±
 ROYALTY OWNER MABEL G. HAUGHT ET. AL. LEASE ACREAGE 208±

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) REWORK BRADFORD & GORDON TARGET FORMATION BRADFORD
 ESTIMATED DEPTH 4,410'

WELL OPERATOR TERM ENERGY CORP. DESIGNATED AGENT LEROY BAKER
 ADDRESS 713 EAST MAIN STREET HARRISVILLE, WV 26362 ADDRESS 713 EAST MAIN STREET HARRISVILLE, WV 26362

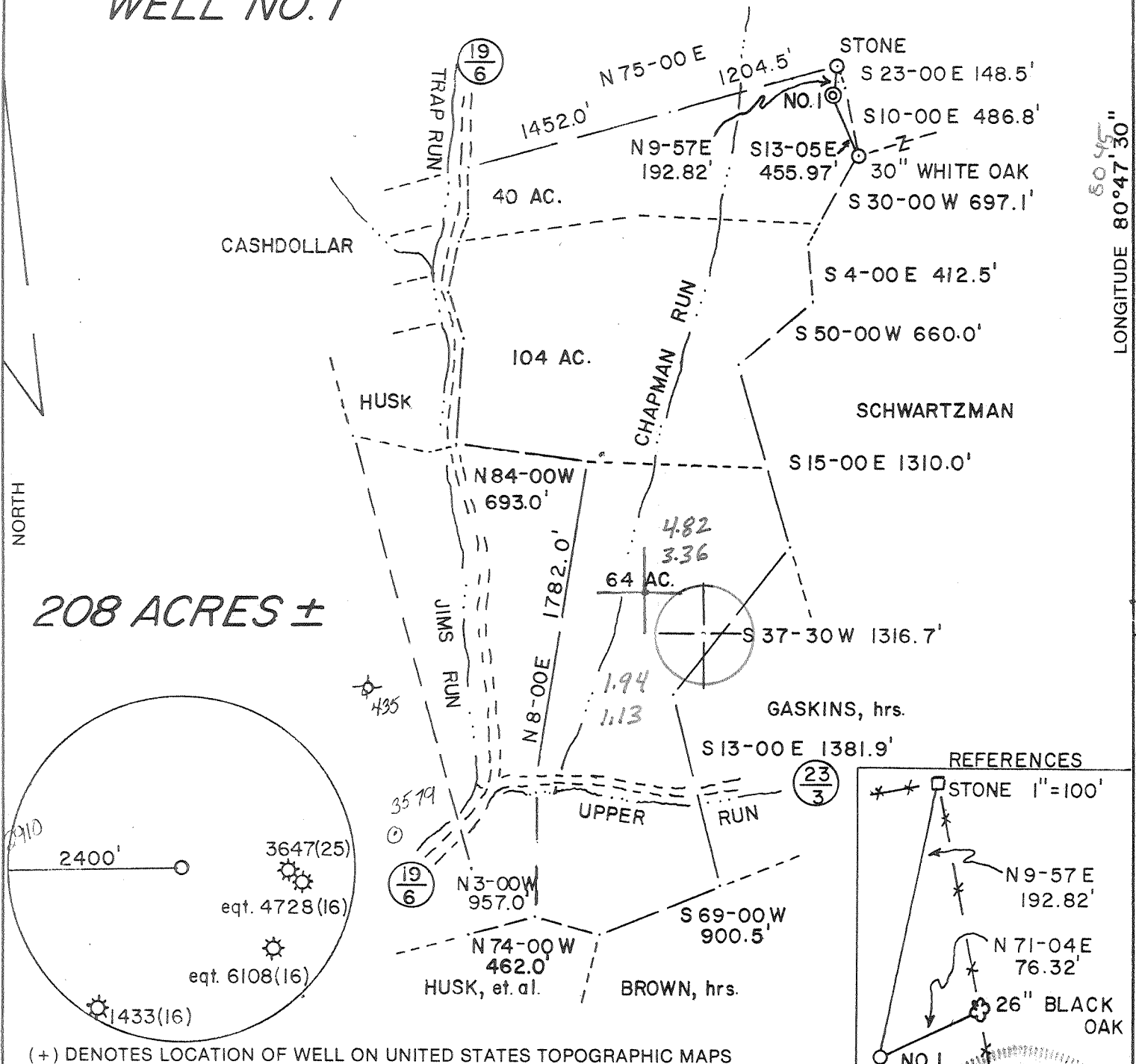
COUNTY NAME Dodd
 PERMIT 3746-F

CASSIDY LEASE WELL NO. 1

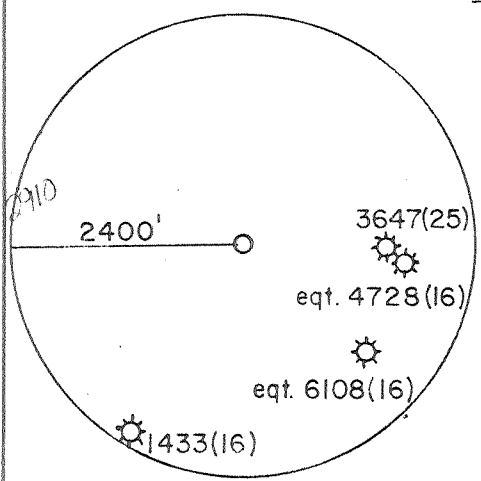
Janie 9/5/89

LATITUDE 39°12'30"

3915



208 ACRES ±

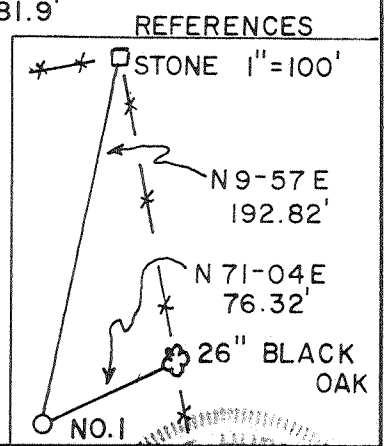


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. 66 (3-5)
 DRAWING NO. _____
 SCALE 1"=1000'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION JCT OF ROADS
ELEV. 856

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) Doyle Hupp Jr.
 R.P.E. _____ L.L.S. 834



STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE AUGUST 21, 19 89
 OPERATOR'S WELL NO. CASSIDY NO. 1
 API WELL NO. _____

47 017 3740
 STATE COUNTY PERMIT

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

LOCATION: ELEVATION 1118 WATERSHED CHAPMAN RUN
 DISTRICT SOUTHWEST 7 COUNTY DODDRIDGE 617
 QUADRANGLE OXFORD 7.5 526 Holbrook 058 +15' NE

SURFACE OWNER JOAN H. CASSIDY ACREAGE 40
 OIL & GAS ROYALTY OWNER MABEL G. HAUGHT, et. al. LEASE ACREAGE 208
 LEASE NO. _____

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 5350'
 WELL OPERATOR TERM ENERGY DESIGNATED AGENT JEAN FREELAND
 ADDRESS 110 N. SPRING ST. HARRISVILLE, WV 26362 ADDRESS 110 N. SPRING ST. HARRISVILLE, WV 26362

SEP 23 1989

6-6 Straight Fork - Bluestone Creek (133)

FORM WW-6

COUNTY NAME PERMIT

State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

Well Operator's Report of Well Work

Farm name: CASSIDY, JOAN H. Operator Well No.: CASSIDY #1

LOCATION: Elevation: 1118.00 Quadrangle: OXFORD

District: SOUTHWEST County: DODDRIDGE
Latitude: 10210 Feet South of 39 Deg. 12Min. 30 Sec.
Longitude 6000 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: TERM ENERGY CORP.
110 N. SPRING ST.
HARRISVILLE, WV 26362-0000

Agent: JEAN FREELAND

Inspector: MIKE UNDERWOOD
Permit Issued: 09/20/89
Well work Commenced: 10/1/89
Well work Completed: 12/15/89
Verbal Plugging
Permission granted on:
Rotary x Cable _____ Rig _____
Total Depth (feet) 5264
Fresh water depths (ft) 203 damp

Salt water depths (ft) none

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	25'	0	0
8 5/8"	1235.55'	1235.55'	391.8
4 1/2"	5206.75'	5206.75'	266



OPEN FLOW DATA

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Producing formation Alexander-Leopold Pay zone depth (ft) 4954 to 5107
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 450 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 1300 psig (surface pressure) after 18 Hours

Second producing formation Benson Stray & Benson Pay zone depth (ft) 4721-4804
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 800 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 1625 psig (surface pressure) after 24 Hours

*Additional
one
completed*

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.

For: TERM ENERGY CORP.

By: Jean Freeland
Date: 12-29-89

JAN 19 1990

10/13/89, Perforated	Alexander	5091-5107	15 holes, .39
	Leopold	4954-4957	4 holes, .39
	Benson	4721-4728	8 holes, .39
	Benson Stray	4801-4804	4 holes, .39

1 stage 75 Quality Nitrogen Foam Frac-

-Alexander & Leopold; Max TR Press. 3500, Avg. rate 38, Avg. Press. 3400, 60,000# 20/40, 5,000# 80/100, Max Conc. 4, Total acid 500 gal, ISIP 1250, SIP 1180 5 min, Total Nitrogen 595,000 scf, Total fluids 266 BBls.

1 stage Energize Water Frac

-Benson & Benson Stray; Max TR Press. 2010, Avg. rate 21, Avg Press. 1900, 41000# 20/40, 10,000# 80/100, Max conc. 4, Total Acid 500 gal, ISIP 1250 SIP 1000 5 min, Total Nitrogen 80,000 scf, Total Fluids 640 BBls.

RECEIVED
JAN 11 1990

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Driller's Log

	<u>Top</u>	<u>Bottom</u>	
Sand, Shale & RR	0	1782	
Little Lime	1782	1810	water
Shale	1810	1822	Damp at 203'
Big Lime	1822	1890	
Big Injun	1890	1955	
Sand & Shale	1955	5248	

Geophysical Log

	<u>Top</u>	<u>Bottom</u>
Big Lime	1818	1892
Big Injun	1892	1965
Weir	2123	2244
Berea	2321	2325
Gordon	2554	2558
Warren	3204	3348
Balltown	3956	4038
Riley	4375	4426
Benson Stray	4715	4731
Benson	4800	4804
Leopold	4954	4958
Alexander	5045	5145

0/1/8

WR-35
RECEIVED
NOV 14 1989

21-Sep-89
API # 47-17-03746

State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY Well Operator's Report of Well Work

Farm name: CASSIDY, JOAN H. Operator Well No.: CASSIDY #1

LOCATION: Elevation: 1118.00 Quadrangle: OXFORD

District: SOUTHWEST County: DODDRIDGE
Latitude: 10210 Feet South of 39 Deg. 12Min. 30 Sec.
Longitude 6000 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: TERM ENERGY CORP.
110 N. SPRING ST.
HARRISVILLE, WV 26362-0000

Agent: JEAN FREELAND

Inspector: MIKE UNDERWOOD
Permit Issued: 09/20/89
Well work Commenced: 10/1/89
Well work Completed: 10/13/89
Verbal Plugging
Permission granted on: _____
Rotary x Cable _____ Rig
Total Depth (feet) 5264
Fresh water depths (ft) 203 damp
Salt water depths (ft) none

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

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4"	25'	0	0
8 5/8"	1235.55'	1235.55'	391.8
4 1/2"	5206.75'	5206.75'	266

OPEN FLOW DATA

Producing formation Alexander-Leopold Pay zone depth (ft) 4954 to 5107
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 450 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 1300 psig (surface pressure) after 18 Hours

Second producing formation _____ Pay zone depth (ft) _____
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

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.

For: TERM ENERGY CORP.

By: Jean Freeland, Agent
Date: November 8, 1989

NOV 20 1989

10/13/89 Perforated Alexander 5091-5107 15 holes, .39
 Leopold 4954-4957 4 holes, .39

1 stage 75 Quality Nitrogen Foam Frac-

-Alexander & Leopold; Max TR Press. 3500, Avg. rate 38, Avg. Press. 3400,
 60,000# 20/40, 5,000# 80/100, Max Conc. 4, Total acid 500 gal, ISIP 1250,
 SIP 1180 5 min, Total Nitrogen 595,000 scf, Total fluids 266 BBls.

<u>Driller's Log</u>	<u>Top</u>	<u>Bottom</u>	
Sand, Shale & RR	0	1782	
Little Lime	1782	1810	water
Shale	1810	1822	Damp at 203'
Big Lime	1822	1890	
Big Injun	1890	1955	
Sand & Shale	1955	5248	

<u>Geophysical Log</u>	<u>Top</u>	<u>Bottom</u>
Big Lime	1818	1892
Big Injun	1892	1965
Weir	2123	2244
Berea	2321	2325
Gordon	2554	2558
Warren	3204	3348
Balltown	3956	4038
Riley	4375	4426
Benson Stray	4715	4731
Benson	4800	4804
Leopold	4954	4958
Alexander	5045	5145

RECEIVED
 NOV 14 1989

DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY

TD 5264

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

Express 9/20/91

- 1) Well Operator: TERM Energy Corp. 49105 (7) 525
- 2) Operator's Well Number: Cassidy #1 3) Elevation: 1118'
- 4) Well type: (a) Oil / or Gas /
(b) If Gas: Production / Underground Storage /
Deep / Shallow /
- 5) Proposed Target Formation(s): Alexander⁴³⁹
- 6) Proposed Total Depth: 5350 feet
- 7) Approximate fresh water strata depths: 118' 130 Feet, 236', 345'
- 8) Approximate salt water depths: 0
- 9) Approximate coal seam depths: 0 214'-216' 798'-795'
- 10) Does land contain coal seams tributary to active mine? Yes / No /
- 11) Proposed Well Work: Drill & 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	J55	42#	17'	0	0
Fresh Water	8 5/8	J55	20#	1218'	1218'	0.16 11/4 CTS
Coal					1318' MA	38CSRB-11.3 38CSRB-11.2
Intermediate						
Production	4 1/2	J55	11.6# 10.5#	126' 5077'	126' 5077'	250
Tubing						38CSRB-11.1
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

RECEIVED
AUG 29 1989

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

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

RECEIVED
AUG 29 1989

1) Date: August 28, 1989
2) Operator's well number
Cassidy #1
3) API Well No: 47 - 017 - 3746
State - County - Permit

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY
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 Joan H. Cassidy
Address 203 Central Ave.
Lynbrook, NY 11563
(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 _____
Address _____
Name _____
Address _____
(c) Coal Lessee with Declaration
Name N/A
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)
 Certified Mail (Postmarked postal receipt attached) Express Mail
 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: Agent
Address 110 N. Spring Street
Harrisville, WV 26362
Telephone (304) 643-4500

Subscribed and sworn before me this 28th day of August, 1989

Radney C. Windom Notary Public
My commission expires June 12, 1994