

# FREEMAN LEASE *Janie 1/23/90*

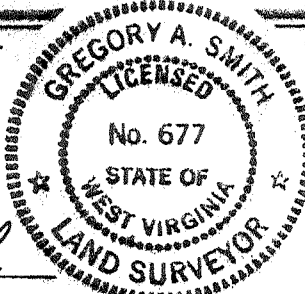
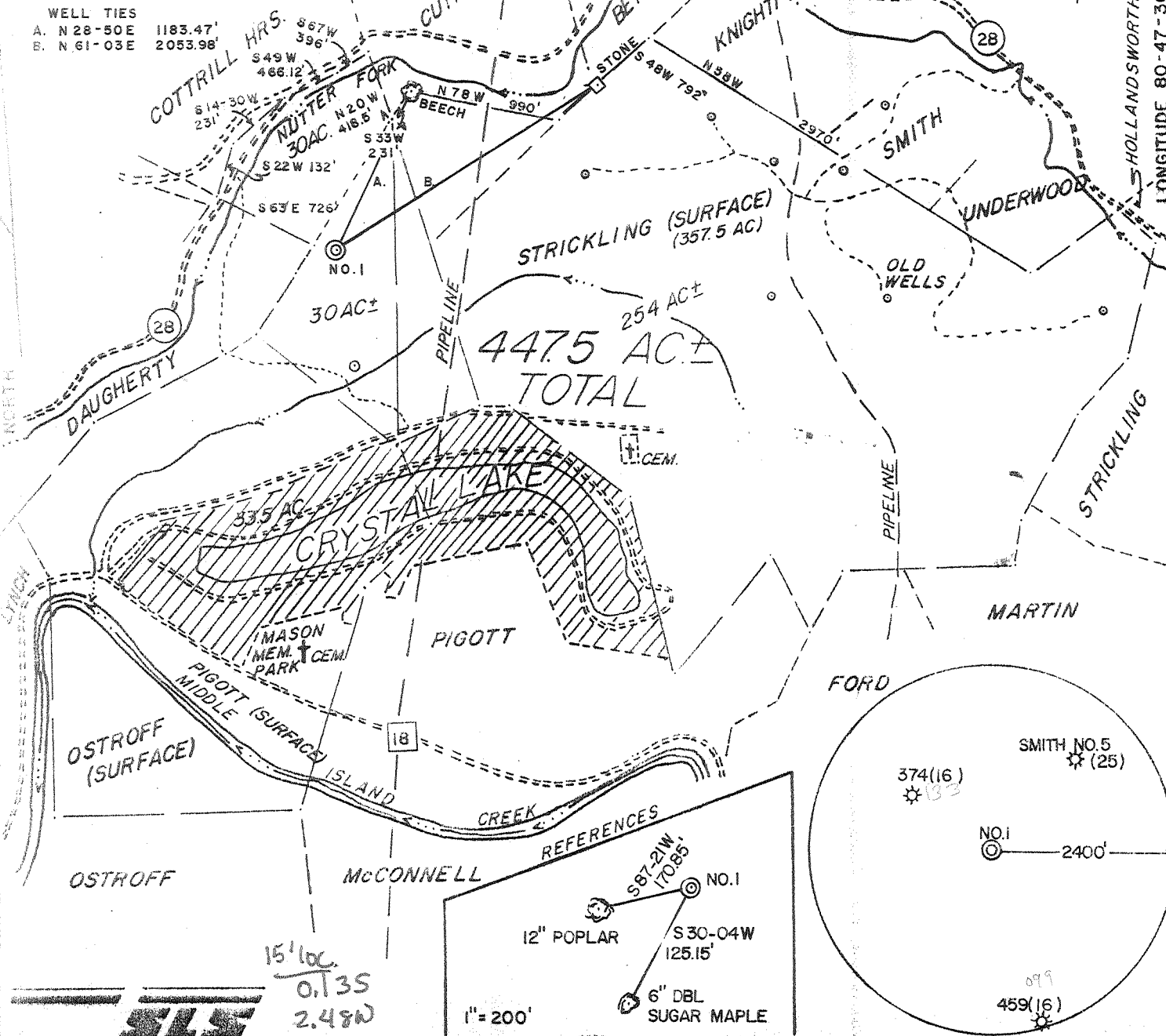
## 540 ACRES±

### WELL NO. 1

LATITUDE 39-20-00

LONGITUDE 80-47-30

WELL TIES  
A. N 28-50E 1183.47'  
B. N 61-03E 2053.98'



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. 677 *Gregory A. Smith*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
DATE DECEMBER 1, 19 89  
OPERATORS WELL NO. FREEMAN NO. 1  
API WELL NO. 47 - 017 - 3784  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 2181 (28-64)  
PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS SCALE 1"=1000' ELEVATION 765'

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 1010' WATERSHED NUTTER FORK  
DISTRICT WEST UNION 8 COUNTY DODDRIDGE QUADRANGLE WEST UNION 7.5'

SURFACE OWNER EARL STRICKLING ACREAGE 357.75  
ROYALTY OWNER JOSEPH FREEMAN HEIRS LEASE ACREAGE 357.75 OF 540

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) \_\_\_\_\_ TARGET FORMATION BENSON-ALEXANDER  
ESTIMATED DEPTH 5500'

WELL OPERATOR QUAKER STATE CORP DESIGNATED AGENT FRANK ROTUNDA  
ADDRESS 1226 PUTNAM-HOWE DR. BELPRE, OHIO 45714 ADDRESS PO. BOX 823 PARKERSBURG, W.V. 26101

*Wilbur (1992)* *721* *Feb 02 1990*

JUN 13 90  
Permitting  
Oil and Gas Section

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

API # 47- 17-03784

Well Operator's Report of Well Work

Farm name: STRICKLING, EARL Operator Well No.: FREEMAN #1

LOCATION: Elevation: 1010.00 Quadrangle: WEST UNION

District: WESTUNION County: DODDRIDGE  
Latitude: 680 Feet South of 39 Deg. 20Min. 0 Sec.  
Longitude 1320 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: QUAKER STATE CORPORATION

1226 PUTNAM HOWE DR. P O B 189 | Casing | Used in | Left | Cement

BELPRE, OH 45714-0000

Agent: FRANK R. ROTUNDA

Inspector: MIKE UNDERWOOD

Permit Issued: 02/01/90

Well work Commenced: 02/14/90

Well work Completed: 02/24/90

Verbal Plugging

Permission granted on: N/A

Rotary X Cable Rig

Total Depth (feet) 5090

Fresh water depths (ft) 70, 184

Salt water depths (ft) 1425

Is coal being mined in area (Y/N)? N

Coal Depths (ft): N/A

& Tubing Size	Drilling	in Well	Fill Up Cu. Ft.
9 5/8"	399'	399'	c.t.s.
7"	1238'	1238'	c.t.s.
4 1/2"	5024'	5024'	120 sx

OPEN FLOW DATA

Producing formation Benson Pay zone depth (ft) 4859'  
Gas: Initial open flow show MCF/d Oil: Initial open flow --- Bbl/d  
Final open flow 80 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

Second producing formation Riley Pay zone depth (ft) 4515'  
Gas: Initial open flow show MCF/d Oil: Initial open flow --- Bbl/d  
Final open flow comm. 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: Frank R. Rotunda  
QUAKER STATE CORPORATION

By: Frank Rotunda, Designated Agent  
Date: May 1, 1990

JUN 14 1990

8170

Perf: 4859' - 4925' with 20 shots  
Frac: 850 bbl. gel, 488 sx. sand, 145M SCF N2  
Perf: 4515' - 4668' with 23 shots  
Frac: 223 bbl. fluid, 312 sx. sand, 358M SCF N2

LOG: surface FEET: .0 - 50  
shale 50 - 70  
sand 70 - 78  
shale 78 - 184  
sand 184 - 194  
silt/shale 194 - 497  
sand 497 - 515  
shale 515 - 630  
sand 630 - 645  
shale 645 - 670  
sand 670 - 735  
shale 735 - 890  
sand 890 - 917  
shale 917 - 1070  
sand 1070 - 1096  
shale 1096 - 1135  
sand 1135 - 1175  
silt/shale 1175 - 1425  
salt sands 1425 - 1730  
silt/shale 1730 - 1888  
lime 1888 - 1983  
Big Injun 1983 - 2075  
shale 2075 - 2216  
Weir 2216 - 2316  
silt/shale 2316 - 5090

10097

RECEIVED  
JAN 16 1990

Issued 2/10/90 017-3784  
Expires 2/10/92

FORM WW-2B

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

- 1) Well Operator: Quaker State Corporation 40400 (8) 670
- 2) Operator's Well Number: Freeman #1 3) Elevation: 1010'
- 4) Well type: (a) Oil  or Gas   
(b) If Gas: Production  Underground Storage   
Deep  Shallow
- 5) Proposed Target Formation(s): Benson, Riley <sup>435</sup>
- 6) Proposed Total Depth: 5100 feet
- 7) Approximate fresh water strata depths: 350
- 8) Approximate salt water depths: 1425
- 9) Approximate coal seam depths: N/A
- 10) Does land contain coal seams tributary to active mine? Yes  No
- 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						
Fresh Water	9 5/8"	H-40	29	400	400	C.T.S.
Coal						
Intermediate	7"	H-40	20	1225	1225	C.T.S.
Production	4 1/2"	J-55	10.5	5100	5100	As required by rule 38CR18 11.1
Tubing						
Liners						

10097

38CR18-11-3  
38CR18-11-7.2

PACKERS : Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

For Division of Oil and Gas Use Only

19655

Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
 Plat  WW-9  WW-2B  Bond \$50 Security  Agent  
 (Type)

**RECEIVED**  
JAN 16 1989  
DIVISION OF OIL & GAS  
DEPARTMENT OF ENERGY

Date: January 3, 1989  
Operator's well number  
Freeman #1  
API Well No: 47 - 017 - 3784  
State - County - Permit

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

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- |  |   |
|--|---|
| <p>4) Surface Owner(s) to be served:</p> <p>(a) Name <u>Earl Strickling</u><br/>Address <u>Starr Route</u><br/><u>West Union, WV 26456</u></p> <p>(b) Name _____<br/>Address _____</p> <p>(c) Name _____<br/>Address _____</p> | <p>5) (a) Coal Operator:</p> <p>Name <u>N/A</u><br/>Address _____</p> <p>(b) Coal Owner(s) with Declaration</p> <p>Name <u>N/A</u><br/>Address _____</p> <p>Name _____<br/>Address _____</p> <p>(c) Coal Lessee with Declaration</p> <p>Name <u>N/A</u><br/>Address _____</p> |
| <p>6) Inspector <u>Harold Mike Underwood</u><br/>Address <u>Route 2, Box 114</u><br/><u>Salem, WV 26426</u><br/>Telephone <u>(304)-782-1043</u></p>  |   |

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  
XX 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 8 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 Quaker State Corporation  
 By: Frank Rotunda *Frank Rotunda*  
 Its: Designated Agent  
 Address P.O. Box 823  
Parkersburg, WV 26102  
 Telephone (614) 423-9543

Subscribed and sworn before me this 11th day of January, 1990

Dolores L. Branch Notary Public  
Dolores L. Branch  
Notary Public, State Of Ohio

My commission expires \_\_\_\_\_