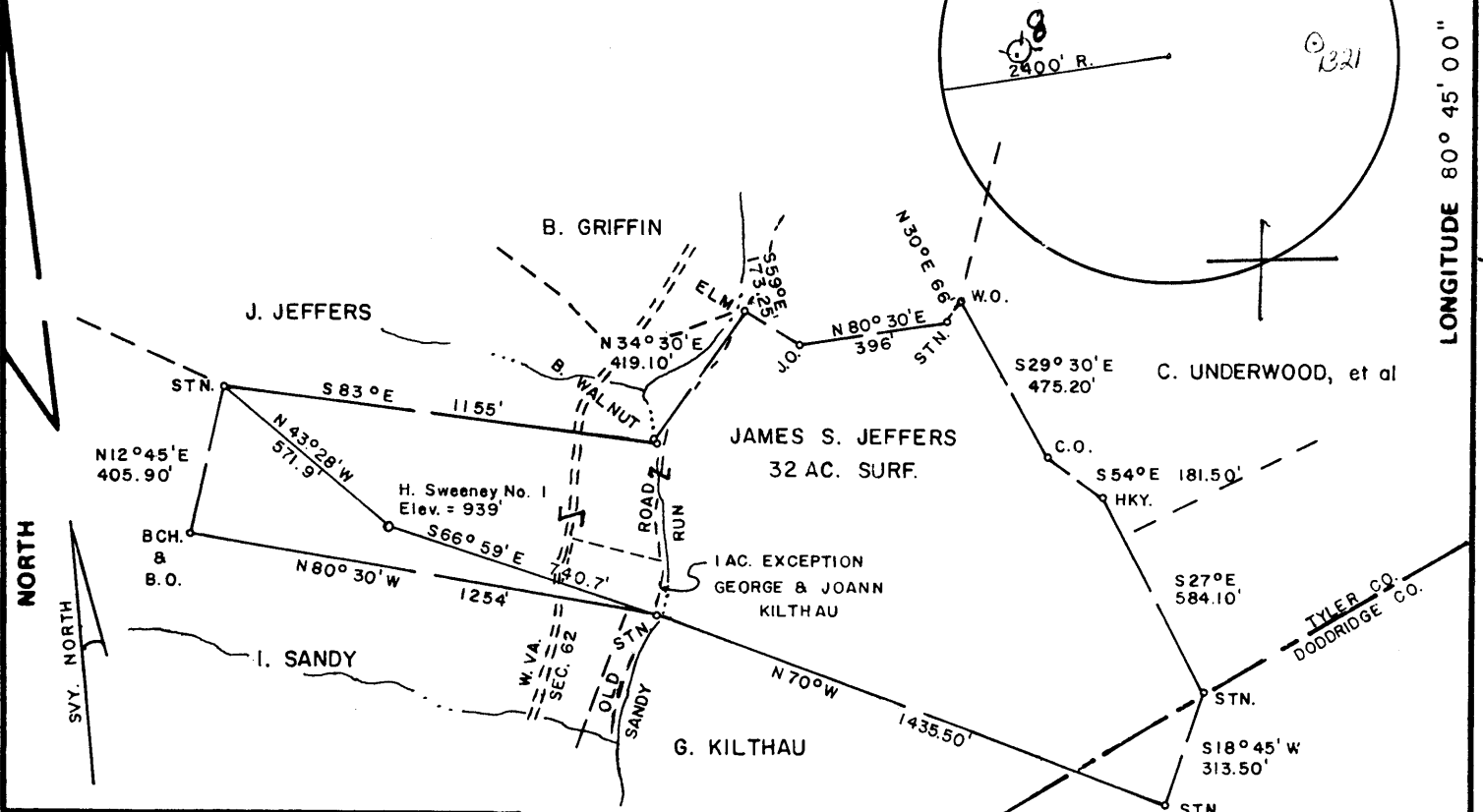


HIRAM SWEENEY HRS.

LATITUDE 39° 25' 00"

32 AC. LEASE

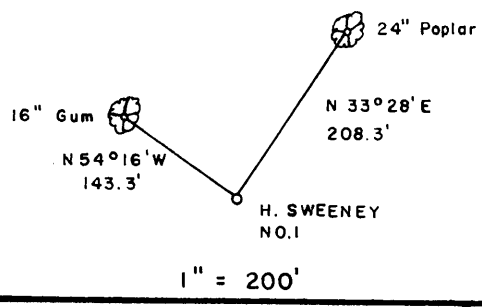
Janie 7/25/89



LONGITUDE 80° 45' 00"

13,250' S

WELL REFERENCES



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION Top of Knob 2300' ±
SE of Loc. Elev. = 1219'

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. *Mark C. Echard*
 (SIGNED) MARK C. ECHARD
 R.P.E. _____ L.L.S. 490



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE JULY 22, 1989
 OPERATOR'S WELL NO. ONE
 API WELL NO. 47-095-1320
 STATE WEST VIRGINIA COUNTY TYLER PERMIT

STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 939' WATER SHED SANDY RUN
 DISTRICT McELROY 6 COUNTY TYLER
 QUADRANGLE SHIRLEY 7.5' 607 1321a West Union EC
 SURFACE OWNER JAMES S. JEFFERS ACREAGE 32 AC.
 OIL & GAS ROYALTY OWNER HIRAM SWEENEY HRS. LEASE ACREAGE 32 AC.
 LEASE NO. _____
 PROPOSED WORK: DRILL 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 BENSON ESTIMATED DEPTH 5300' ±
 WELL OPERATOR D.A.C. DESIGNATED AGENT KENNETH MASON
 ADDRESS P.O. BOX 99 ADDRESS P.O. BOX 99
ALMA, W.VA. 26320 ALMA, W.VA. 26320

JUL 28 1989

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

Well Operator's Report of Well Work

Farm name: JEFFERS, JAMES S. Operator Well No.: H, SWEENEY #1

LOCATION: Elevation: 939.00 Quadrangle; SHIRLEY

District: MCELROY County: TYLER
Latitude: 13250 Feet South of 39 Deg. 25Min. 0 Sec.
Longitude 5850 Feet West of 80 Deg. 45 Min. 0 Sec.

Company: DRILLING APPALACHIAN CORP
P. O. BOX 99
ALMA, WV 26320-0099

Agent: KENNETH R. MASON

Inspector: GLEN P. ROBINSON
Permit Issued: 07/26/89
Well work Commenced: August 2, 1989
Well work Completed: August 15, 1989
Verbal Plugging
Permission granted on: _____
Rotary ~~XX~~ Cable _____ Rig
Total Depth (feet) 5080
Fresh water depths (ft) 75

Salt water depths (ft) NA

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. to surface
8 5/8	1057	1057	
4 1/2		5031	480 sfs



DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

OPEN FLOW DATA

Producing formation BENSON Pay zone depth (ft) 4933-4980
Gas: Initial open flow 510W MCF/d Oil: Initial open flow - Bbl/d
Final open flow 628 MCF/d Final open flow - Bbl/d
Time of open flow between initial and final tests 30 Hours
Static rock Pressure 1475 psig (surface pressure) after 12 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.

SEP 15 1989

For: DRILLING APPALACHIAN CORP,

By: Kenneth R. Mason
Date: 9/11/89

GEOLOGICAL WELL RECORD DATA

PERMIT NUMBER: 47-095-1320

	TOP	BOTTOM	
SOIL	0	25	
BROKEN SAND	25	198	
SANDS AND SHALES	198	1095	
DUNKARD SAND	1095	1132	
1ST SALT SAND	1212	1290	
2ND SALT SAND	1395	1440	
3RD SALT SAND	1492	1530	
MAXON	1675	1675	
BIG LIME	1838	1892	
KEENER SAND	1892	1978	
BIG INJUN SAND	1975	2054	SHOW GAS
WEIR	2202	2288	
BEREA CAP	2370		
GANTZ SAND	2402	2420	
GORDON SAND	2634	2675	
FIFTH SAND	2832	2837	
WARREN	3283	3336	
RILEY	4479	4512	SHOW GAS
BENSON	4924	4931	SHOW GAS
TOTAL DEPTH	5080		

RECEIVED
SEP 12 1989

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

WELL TREATMENT SCHEDULE

Benson Sand 5056 - 5062 Perforated with 15 holes

Formation Break Down 2687 PSI

Hydraulic frac with Nitrogen assist

Average Treating Rate 18 barrels per min

550 barrels of gel treated water

300 sacks of 20/40 sand

50 sacks of 80/100 sand

Average Treating Pressure

2750 PSI

SEP 15 1989

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

- 1) Well Operator: Drilling Appalachian Corporation 14425 (5) 606
- 2) Operator's Well Number: Hiram Sweeney Heirs #1 3) Elevation: 939
- 4) Well type: (a) Oil / or Gas /
 (b) If Gas: Production / Underground Storage /
 Deep / Shallow /
- 5) Proposed Target Formation(s): Benson/Riley
- 6) Proposed Total Depth: 5300 ± feet
- 7) Approximate fresh water strata depths: 577' 187'
- 8) Approximate salt water depths: 1087' 1588'
- 9) Approximate coal seam depths: Possibly 368-572'
- 10) Does land contain coal seams tributary to active mine? Yes / No /
- 11) Proposed Well Work: Drill, perforate, stimulate new formation
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	
<u>WPC</u> Conductor	11-3/4"	H-40	42#	100'	100'	CTS
Fresh Water						
Coal						
Intermediate	8-5/8"	J-55	20#	1050'	1050'	38CSR18-11.3
Production	4-1/2"	J-55	10 1/2#	5075'	5075'	38CSR18.11-1
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

RECEIVED
 JUL 25 1989

For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
 DEPARTMENT OF ENERGY
 WPCP

4331 17
 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Blanket Bond Agent
 (Type)

RECEIVED
JUL 25 1989

- 1) Date: July 18, 1989
- 2) Operator's well number
Hiram Sweeney Heirs #1
- 3) API Well No: 47 - 095 - 1320
State - County - Permit

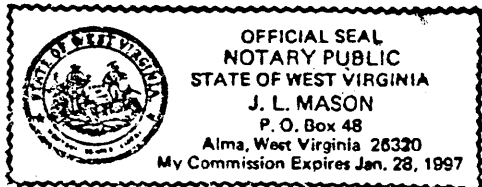
DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY
STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

- 4) Surface Owner(s) to be served:
 - (a) Name James S. Jeffers
Address 1101 St. Paul Street
ste 2007, Baltimore, MD 21202
 - (b) Name _____
Address _____
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
 - Name _____
Address _____
 - (b) Coal Owner(s) with Declaration
Name _____
Address _____
 - (c) Coal Lessee with Declaration
Name _____
Address _____
- 6) Inspector Glen Robinson
Address Rt. 1, #6 Mt. Pleasant Ests.
Mineral Wells, WV 26150
Telephone (304)-489-9162

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 5 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 DRILLING APPALACHIAN CORPORATION
 By: Kenneth Mason
 Its: President
 Address PO Box 99, Alma, WV 26320
 Telephone (304) 758-4638

Subscribed and sworn before me this 18th day of July, 19 89
 _____ Notary Public
 My commission expires 1/28/97