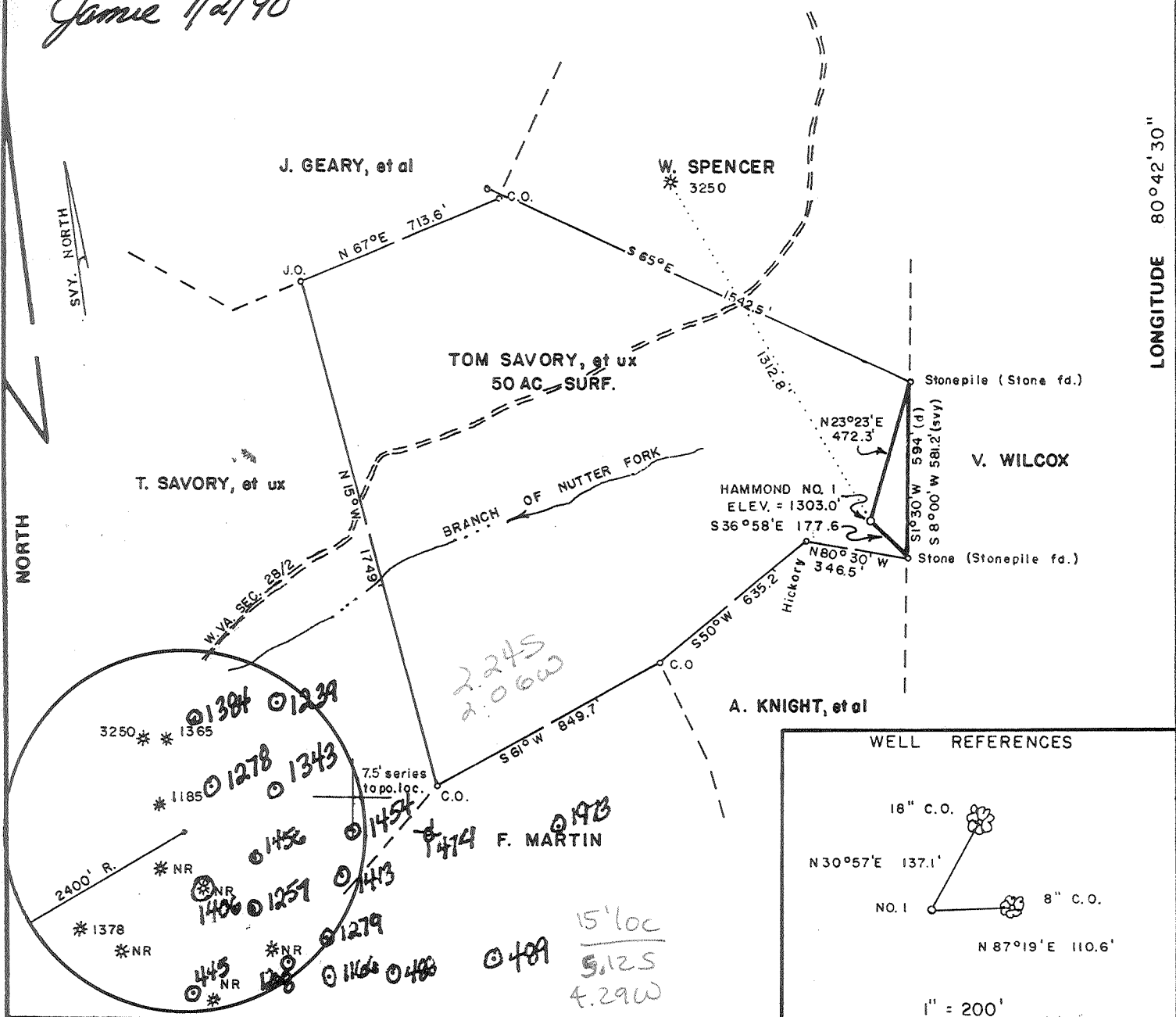


H. L. HAMMOND LEASE 50 AC. ±

LATITUDE 39°22'30"

Jemie 7/2/90



LONGITUDE 80°42'30"

NORTH

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION Jct. of Rd. Sec. 28 & 28/2
 SW of Loc. Elev. = 862'

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

WELL REFERENCES
 18" C.O.
 N30°57'E 137.1'
 NO. 1
 8" C.O.
 N87°19'E 110.6'
 1" = 200'

MARK C. ECHARD
 LAND SURVEYOR
 PLACE SEAL HERE

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



DATE JUNE 8, 19 90
 OPERATOR'S WELL NO. ONE
 API WELL NO. 47-017-3833
 STATE COUNTY 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 1303.0' WATER SHED NUTTER FORK
 DISTRICT WEST UNION 8 COUNTY DODDRIDGE
 QUADRANGLE SMITHBURG 7.5' Centerpoint WC
 SURFACE OWNER TOM SAVORY, et ux ACREAGE 50
 OIL & GAS ROYALTY OWNER H.L. HAMMOND LEASE ACREAGE 50
 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-RILEY ESTIMATED DEPTH 5500' ±
 WELL OPERATOR D.A.C. DESIGNATED AGENT KENNETH MASON JUL 6 1990
 ADDRESS P.O. BOX 99 ADDRESS P.O. BOX 99
 ALMA, W.V. 26320 ALMA, W.V. 26320

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Division

AUG 08 90

Permitting
Oil and Gas Section

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

03-Jul-90
API # 47-17-03833

Well Operator's Report of Well Work

Farm name: SAVORY, TOM Operator Well No.: HAMMOND #1

LOCATION: Elevation: 1303.00 Quadrangle: WEST UNION

District: WESTUNION County: DODDRIDGE
Latitude: 11790 Feet South of 39 Deg. 22Min. 30 Sec.
Longitude 10900 Feet West of 80 Deg. 42 Min. 30 Sec.

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

Agent: KENNETH R. MASON

Inspector: MIKE UNDERWOOD
Permit Issued: 07/02/90
Well work Commenced: July 11, 1990
Well work Completed: July 28, 1990
Verbal Plugging
Permission granted on:
Rotary ~~XXX~~ Cable _____ Rig _____
Total Depth (feet) 5545
Fresh water depths (ft) 55

Salt water depths (ft) 1402-1438
1891-1893
Is coal being mined in area (Y/N)?
Coal Depths (ft):

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size			to SURFACE
8 7/8	1412	1412	320 SKS
4 1/2		5400	220 SKS

OPEN FLOW DATA

Producing formation BENSON SANDSTONE Pay zone depth (ft) 5356-5359
Gas: Initial open flow - MCF/d Oil: Initial open flow - Bbl/d
Final open flow 348 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure 1425 psig (surface pressure) after 72 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: DRILLING APPALACHIAN CORP.

By: Kenneth Mason
Date: 8/2/90

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AUG 08 90

Permitting
Oil and Gas Section

GEOLOGICAL WELL RECORD DATA

WELL NAME: H. L. HAMMOND #1

PERMIT NUMBER: 47-017-3833

	TOP	BOTTOM	
SOIL	0	25	
BROKEN SAND	25	275	
SANDS AND SHALES	275	1085	
LITTLE DUNKARD	1238	1260	
BIG DUNKARD	1402	1438	SALT WATER
1ST SALT SAND	1821	1893	SALT WATER
2ND SALT SAND	1917	2024	
3RD SALT SAND	2044	2096	
MAXON	2154	2178	
BIG LIME	2213	2310	
BIG INJUN	2320	2482	GAS & OIL
WEIR	2603	2684	
GANTZ SAND	2807	2826	
GORDON SAND	3030	3064	GAS & OIL
WARREN	3698	3728	
RILEY	4894	4924	
BENSON	5356	5359	GAS
TOTAL DEPTH	5545		

WELL TREATMENT SCHEDULE

Benson Sand 5356 - 5359 Perforated with 15 holes
Formation Breakdown 3700 PSI

Hydraulic stimulation with Nitrogen Assist
Average Treating rate 19 barrels per minute
520 barrels of gel treated water
300 sacks of 20/40 sand
50 sacks of 80/100 sand
100,000 scf of Nitrogen

Average Treating Pressure 2221 PSI

10896

47-017-3833
Issued 7/2/90

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

Expires 7/2/92

- 1) Well Operator: DRILLING APPALACHIAN CORPORATION ³¹¹ 14425 (8) 670
- 2) Operator's Well Number: HAMMOND #1 3) Elevation: 1303'
- 4) Well type: (a) Oil X/ or Gas X/
- (b) If Gas: Production X/ Underground Storage /
Deep / Shallow X/
- 5) Proposed Target Formation(s): Benson/Riley ⁴⁸⁵
- 6) Proposed Total Depth: 5500± feet
- 7) Approximate fresh water strata depths: 87', 307'
- 8) Approximate salt water depths: 1226', 9321'
- 9) Approximate coal seam depths: OK NONE Reported
- 10) Does land contain coal seams tributary to active mine? Yes / No X
- 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	
Conductor	11-3/4	H-40	42#	30'	0'	
Fresh Water						
Coal						
Intermediate	8-5/8	J-55	23#	1403'	1403'	38CSR18-11 2.2
Production	4-1/2	J-55	10½#	5403'	5403'	38CSR18-11 1
Tubing						
Liners						

10896

C/S
30' 5/8" 11.3

PACKERS : Kind _____
Sizes _____
Depths set _____

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For Division of Oil and Gas Use Only

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

5434
17 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Agent
(Type)

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JUL 02 1990

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

Date: June 12, 1990
Operator's well number
HAMMOND #1
API Well No: 47 - 017 - 3833
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 Tom Savory
Address 4354 Kenneth Road
Stow, Ohio 44224
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Mike Underwood
Address Rte 2, Box 135
Salme, WV 26426
Telephone (304)- 782-1043

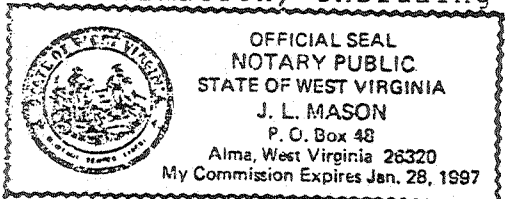
5) (a) Coal Operator:
Name --
Address _____
(b) Coal Owner(s) with Declaration
Name _____
Address _____
Name _____
Address _____
(c) Coal Lessee with Declaration
Name _____
Address _____

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
X 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 P. Mason
Its: President
Address PO Box 99
Alma, WV 26320
Telephone (304) 758-4638

Subscribed and sworn before me this 12th day of June, 1990

My commission expires 1/28/97 Notary Public