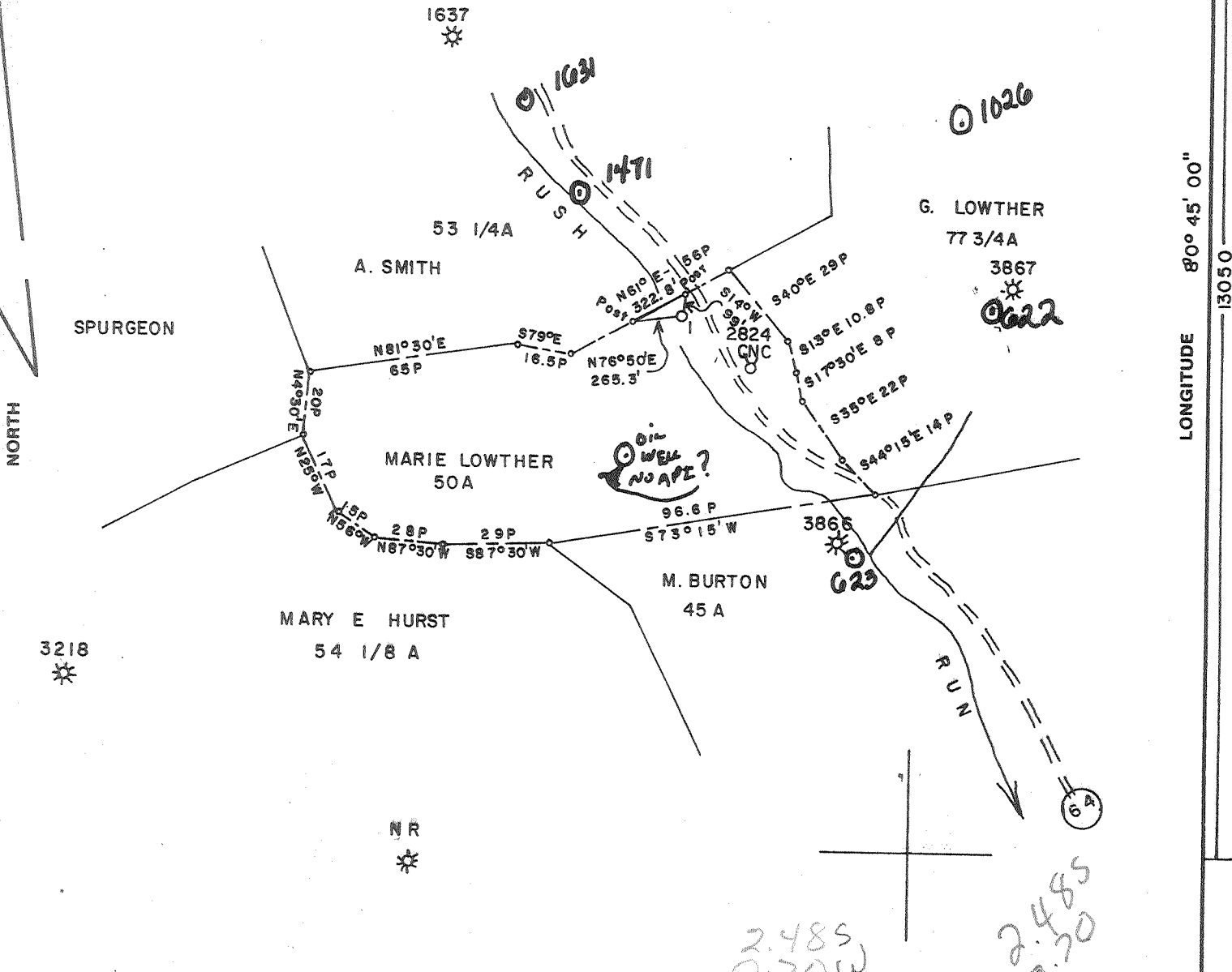


Jamie
9/17/91



LONGITUDE 80° 45' 00"

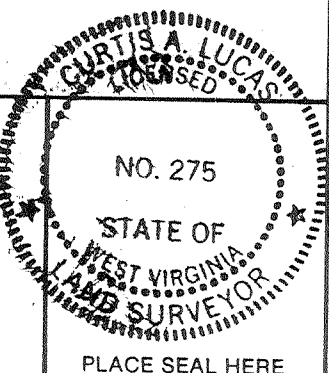
LOCATION REFERENCE

N61°45'W 86.6' POST IN FL
S5°30'W 139.4' ELEC. POLE

FILE NO. _____
 MAP _____ SQS _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION M. BURTON I, 47-017-3866, EL. 961.4

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.

(SIGNED) *Curtis A. Lucas*
 CURTIS A. LUCAS LLS 275



PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE AUGUST 13, 1991
 FARM LOWTHER NO. 1
 API WELL NO.

47 - 017 - 3909
 STATE COUNTY PERMIT

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___

(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X

LOCATION: ELEVATION 981 WATER SHED RUSH RUN

DISTRICT COVE 2 COUNTY DODDRIDGE

QUADRANGLE OXFORD Holbrook EC

SURFACE OWNER ALMA J. BURTON ACREAGE 50

OIL & GAS ROYALTY OWNER MARIE LOWTHER LEASE ACREAGE 50

LEASE NO. _____

PROPOSED WORK: DRILL X 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 ALEXANDER ESTIMATED DEPTH 5500

WELL OPERATOR INTERSTATE DRILLING INC DESIGNATED AGENT KENNETH L. POTE

ADDRESS RT. 3, BOX 89-V WESTON WV 26452

ADDRESS RT. 3, BOX 89-V WESTON WV 26452

6-6 SEP 23 1991
 Straight Fork - Bluestone
 Creek (133)

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

Env.
MAR 6 1993
Permitted
Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: BURTON, ALMA J Operator Well No.: M. LOWTHER 1

LOCATION: Elevation: 981.00 Quadrangle: AUBURN

District: COVE County: DODDRIDGE
Latitude: 13050 Feet South of 39 Deg. 10Min. 0 Sec.
Longitude 3700 Feet West of 80 Deg. 45 Min. 0 Sec.

Company: INTERSTATE DRILLING, INC.
ROUTE 3, BOX 89-V
WESTON, WV 26452-9620

Agent: KENNETH L. POTE

Inspector: MIKE UNDERWOOD
Permit Issued: 09/19/91
Well work Commenced: 12/18/92
Well work Completed: 12/28/92
Verbal Plugging _____
Permission granted on: _____
Rotary Cable _____ Rig
Total Depth (feet) 5297'
Fresh water depths (ft) 48'
Salt water depths (ft) --

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.
16"	16'		
11-3/4"	32'		
8-5/8"	1120.15'	1120.15'	285 Sks.
4-1/2"		5233.15'	540 Sks.

OPEN FLOW DATA

Producing formation Cedar Creek and Elk Pay zone depth (ft) 5054'-5221'
Gas: Initial open flow -- MCF/d Oil: Initial open flow -- Bbl/d
Final open flow 335 MCF/d Final open flow -- Bbl/d
Time of open flow between initial and final tests -- Hours
Static rock Pressure 1340 psig (surface pressure) after 72 Hours

Second producing formation / See Details on Reverse Side 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

*Co-mingled with first stage.

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: INTERSTATE DRILLING, INC.

Reviewed TMG
Recorded _____

By: [Signature]
Date: February 24, 1993

MAR 8 1993

DN 981

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

5-STAGE FOAM FRAC:

CEDAR CREEK & ELK
5054'-5221' W/16 HOLES; 5,000# 80/100; 25,000# 20/40; 90 BBLs. SL FLUID

136 436
RILEY, BENSON & ALEXANDER
4644'-4987' W/14 HOLES; 5,000# 80/100; 25,000# 20/40; 90 BBLs. SL FLUID

439 439
BRADFORD
4423'-4460' W/8 HOLES; 5,000# 80/100; 20,000# 20/40; 87 BBLs. SL FLUID

930 430
BALLTOWN
3895'-4025' W/9 HOLES; 5,000# 80/100; 20,000# 20/40; 87 BBLs. SL FLUID

433 433
WARREN & SPEECHLEY
3261'-3508' W/12 HOLES; 5,000# 80/100; 25,000# 20/40; 90 BBLs. SL FLUID

DRILLER'S LOG:

SWAMP			0'	10'	
SAND & SHALE	GRAY	MEDIUM	10'	28'	
SAND	GRAY	MEDIUM	28'	61'	1-1/2" STREAM OF WATER @ 48'
SHALE & REDROCK	RED	MEDIUM	61'	155'	
SAND & SHALE	GRAY	HARD	155'	195'	
REDROCK & SHALE	RED	MEDIUM	195'	668'	
SAND & SHALE	GRAY	MEDIUM	668'	1750'	
LIME			1750'	1788'	
SAND & SHALE			1788'	1915'	
L. LIME			1915'	1928'	
SAND & SHALE			1928'	1953'	
B. LIME			1953'	2024'	
INJUN	GRAY	HARD	2024'	2087'	
SAND & SHALE	GRAY	MEDIUM	2087'	4436'	GAS CK. @ 2238' - NO SHOW OIL ODOR @ 2611' GAS CK. @ 2706' 2/10 THRU 2" H2O
BRADFORD	BROWN	MEDIUM	4436'	4480'	
SAND & SHALE	GRAY	MEDIUM	4480'	4651'	
RILEY	GRAY-RED	MEDIUM	4651'	4665'	
SAND & SHALE	GRAY	MEDIUM	4665'	4866'	
BENSON	BROWN	MEDIUM	4866'	4878'	
SAND & SHALE	GRAY	MEDIUM	4878'	4978'	
ALEXANDER	GRAY-WH.	MEDIUM	4978'	4981'	
SAND & SHALE	GRAY	MEDIUM	4981'	5108'	
ELK	GRAY	MEDIUM	5108'	5114'	
SAND & SHALE	GRAY	MEDIUM	5114'	5299'	
TOTAL DEPTH			5299'		

60 act

DF 137
DFT 136

10661

017-3909

Division of Energy

Issued 09/19/91 SEPT 03 91

Expires 09/19/93 page 3 of 8

FORM WW-2B

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

- 1) Well Operator: Interstate Drilling, Inc. 23950 (2) 224
2) Operator's Well Number: M. Lowther #1 3) Elevation: 981'
4) Well type: (a) Oil / or Gas x /
(b) If Gas: Production x / Underground Storage /
Deep / Shallow x /
5) Proposed Target Formation(s): Alexander 439
6) Proposed Total Depth: 5500 feet
7) Approximate fresh water strata depths: 25'; 150' 155'
8) Approximate salt water depths: 1050' 1420'
9) Approximate coal seam depths:
10) Does land contain coal seams tributary to active mine? Yes / No x /
11) Proposed Well Work: Drill and Stimulate New Well
12)

CASING AND TUBING PROGRAM

Table with columns: TYPE, SPECIFICATIONS (Size, Grade, Weight per ft.), FOOTAGE INTERVALS (For drilling, Left in well), CEMENT (Fill-up (cu. ft.)). Rows include Conductor, Fresh Water, Coal, Intermediate, Production, Tubing, and Liners.

PACKERS : Kind
Sizes
Depths set

0011233
23

For Division of Oil and Gas Use Only

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

1) Date: August 26, 1991
2) Operator's well number
M. Lowther #1
3) API Well No: 47 - 017 - 3909
State - County - Permit

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

RECEIVED
Division of Energy

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

SEPT 03 1991
Permitting
Oil and Gas Section

4) Surface Owner(s) to be served:
(a) Name Ms. Alma J. Burton
Address Rt. 1, Box 118
New Milton, WV 26411
(b) Name _____
Address _____
(c) Name _____
Address _____

5) (a) Coal Operator:
Name _____
Address _____
(b) Coal Owner(s) with Declaration
Name Same as Mineral Owner
Address _____
Name _____
Address _____

6) Inspector Mr. Mike Underwood
Address Route 2, Box 135
Salem, WV 26426
Telephone (304) - 782-1043

(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 8 on the above named parties, by:

- x _____ 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 Interstate Drilling, Inc.
BY: [Signature]
Its: Manager of Operations
Address Route 3, Box 89-V
Weston, WV 26452
Telephone (304) 269-6441

Subscribed and sworn before me this 28th day of August, 1991

[Signature] Notary Public
My commission expires October 31, 1994