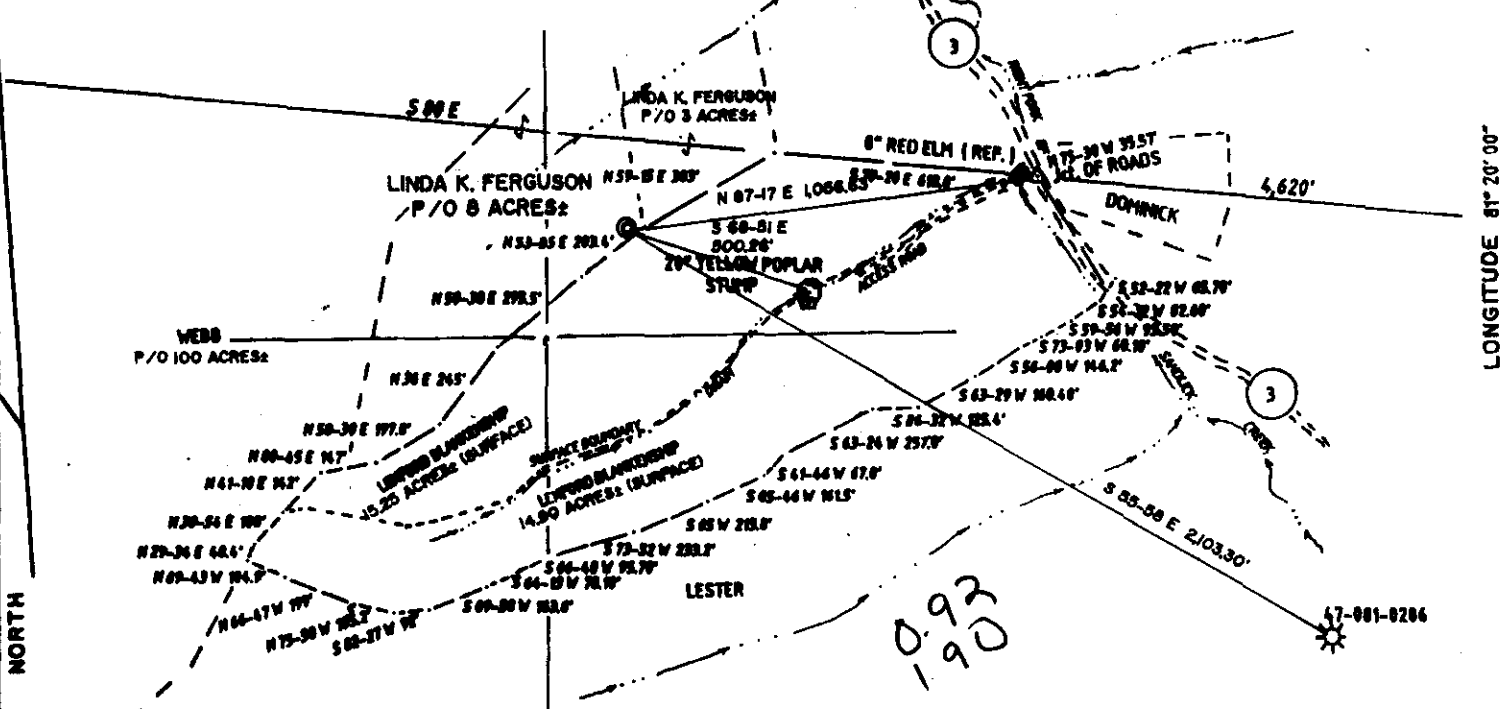
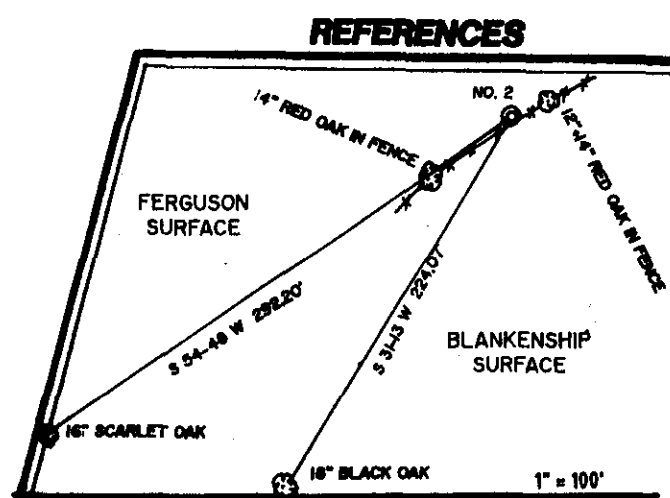
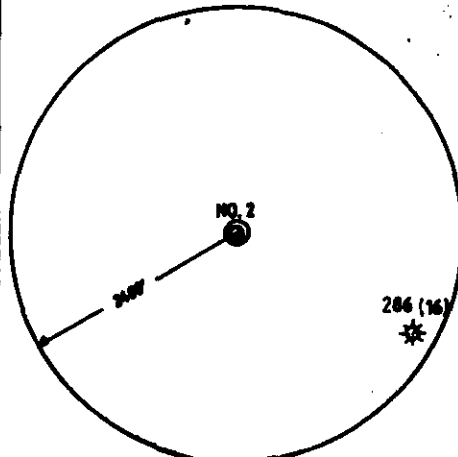


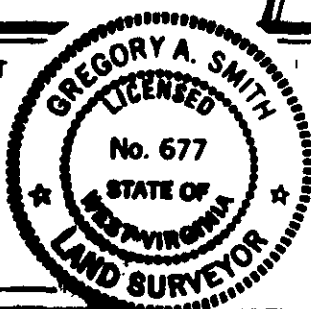
# SHUMATE LEASE P/O 216 ACRES±



## SHUMATE WELL NO. 2



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. *Gregory A. Smith*  
677

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE NOVEMBER 22, 19 93  
 OPERATORS WELL NO. SHUMATE WELL NO. 2  
 API WELL NO. 47 - 081 - 0970  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 3111 (43-14)  
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 1721' SCALE 1" = 500'

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 1929' WATERSHED RIGHT FORK OF SANDLICK CREEK  
 DISTRICT TRAP HILL COUNTY RALEIGH QUADRANGLE ECCLES 75' 415 SC

SURFACE OWNER LINDA K. FERGUSON ACREAGE P/O 11 ACRES OF 216±  
 ROYALTY OWNER JAMES C. SHUMATE, HERS ET AL. LEASE ACREAGE 216

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 Reg. Zone  
 ESTIMATED DEPTH 9000'

WELL OPERATOR D.C. MALCOLM Inc. DESIGNATED AGENT D.C. MALCOLM  
 ADDRESS SUITE 920 COMMERCE SQ., CHARLESTON, WV 25301 ADDRESS SUITE 920 COMMERCE SQ., CHARLESTON, WV 25301

6-6 243

COUNTY NAME PERMIT

S/S

**RECEIVED**  
 WV Division of  
 Environmental Protection  
**JUN 15 94**  
 Permitting  
 Office of Oil & Gas

State of West Virginia  
 Division of Environmental Protection  
 Section of Oil and Gas

Well Operator's Report of Well Work

Farm name: BLANKENSHIP, LENFORD ETUX Operator Well No.: SHUMATE #2

LOCATION: Elevation: 1,929.00 Quadrangle: ECCLES

District: TRAP HILL County: RALEIGH  
 Latitude: 4860 Feet South of 37 Deg. 50Min. Sec.  
 Longitude 10030 Feet West of 81 Deg. 20 Min. Sec.

Company: MALCOLM, D. C., INC.  
 920 COMMERCE SQUARE  
 CHARLESTON, WV 25301-0000

Agent: DUNCAN C. MALCOLM

Inspector: RODNEY DILLON  
 Permit Issued: 12/16/93  
 Well work Commenced: 12/20/93  
 Well work Completed: 01/31/94  
 Verbal Plugging  
 Permission granted on: n/a  
 Rotary X Cable \_\_\_\_\_ Rig  
 Total Depth (feet) 3017'  
 Fresh water depths (ft) 79', 750'

Salt water depths (ft) \_\_\_\_\_  
None Reported

Is coal being mined in area (Y/N)? N  
 Coal Depths (ft): 400', 474', 636', 646'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
9 5/8"	30'	30'	---
7"	1352'	1352'	270 sx CTS
4 1/2"	2759'	2759'	80 sx
2 3/8"		2659'	

OPEN FLOW DATA

Producing formation Big Lime Pay zone depth (ft) 2653'-2663'  
 Gas: Initial open flow show MCF/d Oil: Initial open flow 0 Bbl/d  
 Final open flow 169\* MCF/d Final open flow 0 Bbl/d  
 Time of open flow between initial and final tests 4 Hours  
 Static rock Pressure 430 psig (surface pressure) after 12 Hours

Second producing formation Maxton Pay zone depth (ft) 2034'-2054'  
 Gas: Initial open flow show MCF/d Oil: Initial open flow 0 Bbl/d  
 Final open flow 169\* MCF/d Final open flow 0 Bbl/d  
 Time of open flow between initial and final tests 4 Hours  
 Static rock Pressure 430 psig (surface pressure) after 12 Hours

\*Note: Production is co-mingled

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: Douglas C. Malcolm  
 MALCOLM, D. C., INC.

By: Douglas C. Malcolm  
 Date: 6-3-94 **JUN 17 1994**

081-0970  
Issued 12/16/93

FORM WW-2B NOV 3 0 93

Page of

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

Expires 12/16/95

18436

- 1) Well Operator: D. C. Malcolm, Inc. 29900 (7) 331
2) Operator's Well Number: Shumate #2 3) Elevation: 1929'
4) Well type: (a) Oil / or Gas X /
(b) If Gas: Production X / Underground Storage / Deep / Shallow XX /
5) Proposed Target Formation(s): Big Lime 345
6) Proposed Total Depth: 3000 feet
7) Approximate fresh water strata depths: 150', 225'
8) Approximate salt water depths: 1800'
9) Approximate coal seam depths: n/a
10) Does land contain coal seams tributary to active mine? Yes / No XX /
11) Proposed Well Work: Drill & Complete New Well
12)

CASING AND TUBING PROGRAM

Table with 7 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

For Division of Oil and Gas Use Only

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

T6

WV Division of  
Environmental Protection  
NOV 3 0 93  
Permitting  
Office of Oil & Gas

- 1) Date: November 29, 1993
- 2) Operator's well number  
Shumate #2
- 3) API Well No: 47 - 081 - 0970  
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 Lenford & Harriett Blankenship  
Address Box 400  
Glen Daniels, WV 25844
  - (b) Name Linda K. Ferguson  
Address Box 31  
Glen Daniel, WV 25844
  - (c) Name \_\_\_\_\_  
Address \_\_\_\_\_
- 5) (a) Coal Operator:
  - Name \_\_\_\_\_  
Address \_\_\_\_\_
  - (b) Coal Owner(s) with Declaration  
Name Western Pocahontas Properties  
Address P. O. Box 2827  
Huntington, WV 25727-2827  
~~Name~~ Attn: David T. Morrison, Sr. VP  
Address \_\_\_\_\_ Engineering
  - (c) Coal Lessee with Declaration  
Name New Beckley Mining Co.  
Address 39 Robin Place  
Beckley, WV 25801
- 6) Inspector Rod Dillon  
Address P. O. Box 131  
Bradley, WV 25818  
Telephone (304)-877-2912

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 \_\_\_ on the above named parties, by:

- \_\_\_ Personal Service (Affidavit attached)
- XX Certified Mail (Postmarked postal receipt attached)
- \_\_\_ Publication (Notice of Publication attached)

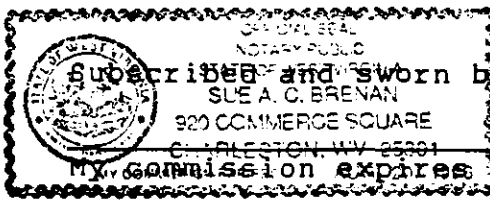
I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

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 D. C. Malcolm, Inc.  
 By: *Douglas C. Malcolm* Douglas C. Malcolm  
 Its: Production Manager  
 Address 920 Commerce Square  
Charleston, WV 25301  
 Telephone 304-343-9593

Subscribed and sworn before me this 29th day of November, 1993



*Sue A. Brennan* Notary Public

1. Perfed Big Lime 2653'-2663' (30 holes). Acidized with 4000 gal 15% HCl. BDP = 500 psi, ATP = 430 psi @ 8 bpm.
2. Perfed Maxton 2034'-2054' (40 holes). Fractured with 500 gal 15% HCl, 40000# sand, 126 bbls H<sub>2</sub>O, 170 mscf N<sub>2</sub> (75 quality foam). BDP = 1950 psi, ISIP = 1150 psi, ATP = 1280 psi @ 25 bpm

<u>Depth</u>	<u>Formation</u>	<u>Comments</u>
0- 400	sand & shale	1/4" H <sub>2</sub> O @ 79'
400- 403	coal	
403- 474	sand & shale	
474- 477	coal	
477- 636	sand & shale	
636- 639	coal	
639- 646	sand & shale	
646- 650	coal	
650-1213	sand & shale	H <sub>2</sub> O @ 750'
1213-1218	Red Rock	
1218-1632	sand & Shale	
1632-1730	Ravencliff	
1730-1893	sand & shale	
1893-1932	Avis Limestone	
1932-2249	sand & shale	
2249-2298	Maxton	
2298-2399	sand & shale	
2399-2560	Little Lime	
2560-2944	Big Lime	
2944-3017 (TD)	sand & shale	

2431