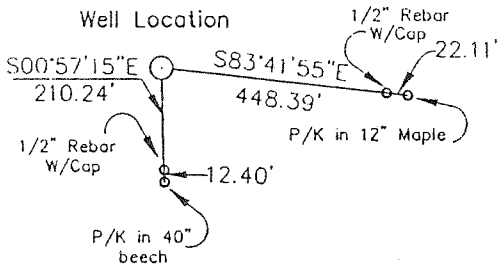


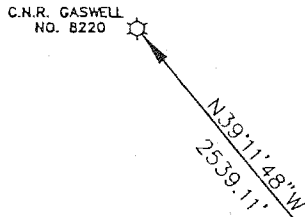
REFERENCE POINTS



Scale: 1" = 200'

LATITUDE 37° 45' 00"

LONGITUDE 82° 17' 30"



G. & M. Development, Inc.  
(Oil & Gas Owner)  
Harold Thompson  
(Coal & Surface Owner)  
30 Ac.  
Lessee - Tug Fork Development  
Coal Lessee - Unleased

Cotiga Development Company  
(Fee Owner)  
Lessee - C.N.R.

(Winifrede Land Co.)  
Ethel P. Stokes  
1000 Ac.  
Lessee - C.N.R.

Well Location  
G. & M. No. 1

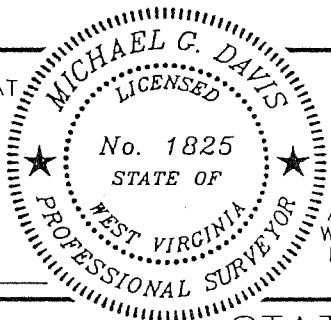
N77°03'37"E  
138.83'

S65°17'55"W  
529.51'

EXISTING GASWELL

NOTE:  
ALL KNOWN WELLS WITHIN  
2400' SHOWN ON PLAT

**E ELKHORN ENGINEERING INC.**  
C.N.R. GASWELL



I, THE UNDERSIGNED, DO 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.

P.S. 1825 *Michael G. Davis*

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPGRAPHIC MAPS

DATE December 2, 19 99

OPERATORS WELL NO. G. & M. No. 1

API WELL NO. 047 059 01348  
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 : 44,000 FILE NO. \_\_\_\_\_  
PROVEN SOURCE OF ELEVATION BM @ Road Intersection SCALE 1" = 400'  
Elv. 636.54' msl

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS  
10 McJUNKIN RD., NITRO, WV 25143-2506

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF 'GAS' PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 1460.20' WATERSHED Miller's Creek of Tug River  
DISTRICT Tug River COUNTY Mingo QUADRANGLE Williamson

SURFACE OWNER Harold Thompson (Surface & Coal) ACREAGE 30  
ROYALTY OWNER G. & M. Development, Inc. LEASE ACREAGE 30

PROPOSED WORK:  
DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG & ABANDON  CLEAN OUT & REPLUG  OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_ TARGET FORMATION Devonian Shale  
ESTIMATED DEPTH 3600'

WELL OPERATOR Tug Fork Development DESIGNATED AGENT Sid Wheeler  
ADDRESS 3930 Brandywine Drive ADDRESS Box 101  
Catlettsburg, Ky. 41129 Kenova, WV. 25530

6-6 243

MINGO 1348

MAR 2 2000

WR-35

DATE: 5/18/01  
API #: 47 59 01348

*AWB*

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

Well Operator's Report of Well Work

Farm name: HAROLD THOMPSON Operator Well No.: G+M #1  
 LOCATION: Elevation: 1460.20 Quadrangle: WILLIAMSON  
 District: TUG RIVER County: MINGO  
 Latitude: 1470 Feet South of 37 Deg. 45 Min. 00 Sec.  
 Longitude 6120 Feet West of 02 Deg. 17 Min. 30 Sec.

Company: TUG FORK DEVELOPMENT

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: <u>3930 BRANDYWINE DR</u>	<u>1330</u>	<u>30</u>	<u>30</u>	<u>DRIVE PIPE</u>
<u>CATLETTSBURG, KY 41129</u>	<u>958</u>	<u>297</u>	<u>297</u>	<u>110</u>
Agent: <u>SIDNEY WHEELER</u>	<u>7</u>	<u>2387</u>	<u>2387</u>	<u>365</u>
Inspector: <u>OFIE HELMICK</u>	<u>4 1/2</u>	<u>3840</u>	<u>3840</u>	
Date Permit Issued: <u>3/8/00</u>				
Date Well Work Commenced: <u>1/11/01</u>				
Date Well Work Completed: <u>4/18/01</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Depth (feet): <u>3962</u>				
Fresh Water Depth (ft.): <u>N/A</u>				
Salt Water Depth (ft.): <u>1250, 1810</u>				
Is coal being mined in area (N/Y)? <u>N</u>				
Coal Depths (ft.): <u>N/A</u>				

RECEIVED  
Office of Oil & Gas  
Permitting  
MAY 24 2001  
WV Division of  
Environmental Protection

OPEN FLOW DATA

Producing formation DEVONIAN SHALE Pay zone depth (ft) 2850-3715  
 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

Second producing formation INTUN/BIG LME Pay zone depth (ft) 2133-2394 / 2190-2198  
 Gas: Initial open flow \_\_\_\_\_ MCF/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
 Final open flow 372 MCF/d Final open flow \_\_\_\_\_ Bbl/d  
 Time of open flow between initial and final tests 72 Hours  
 Static rock Pressure 390 psig (surface pressure) after 72 Hours

COMMINGLED

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.

Signed: W.D. Curbedge  
 By: W.D. CURBEDGE  
 Date: 5/19/01

MAY 25 2001

MINGO 1348

G&M #1  
47-59-01348

FORMATIONS	INTERVAL	SHOWS		PERFORATIONS
		GAS	WATER	
FILL	0-30			
SAND AND SHALE	30-1110			
SAND	1110-1294			
SAND AND SHALE	1294-1358		1250-SALT	
SALT SAND	1358-1548			
SAND AND SHALE	1548-1792			
MAXON	1792-1845		1810-SALT	
LIME AND SHALE	1845-1990			
LITTLE LIME	1990-2028			
BIG LIME	2028-2204			2190-2198 (4HOLES)
INJUN	2204-2276			2233-2374 (20 HOLES)
WEIR	2276-2450			
SLATE	2450-2748			
COFFEE SHALE	2748-2772			
BEREA	2772-2850			
BROWN SHALE	2850-2910	2870		2850-2913 (12 HOLES)
WHITE SLATE	2910-3470			
BROWN SHALE	3470-3742	3640		3477-3715 (24 HOLES)
WHITE SLATE	3742-3962			

#### STIMULATION

INJUN	N2 FRAC W/ 846 MSCF OF N2
BROWN SHALE	N2 FRAC W/ 1.5 MMSCF OF N2