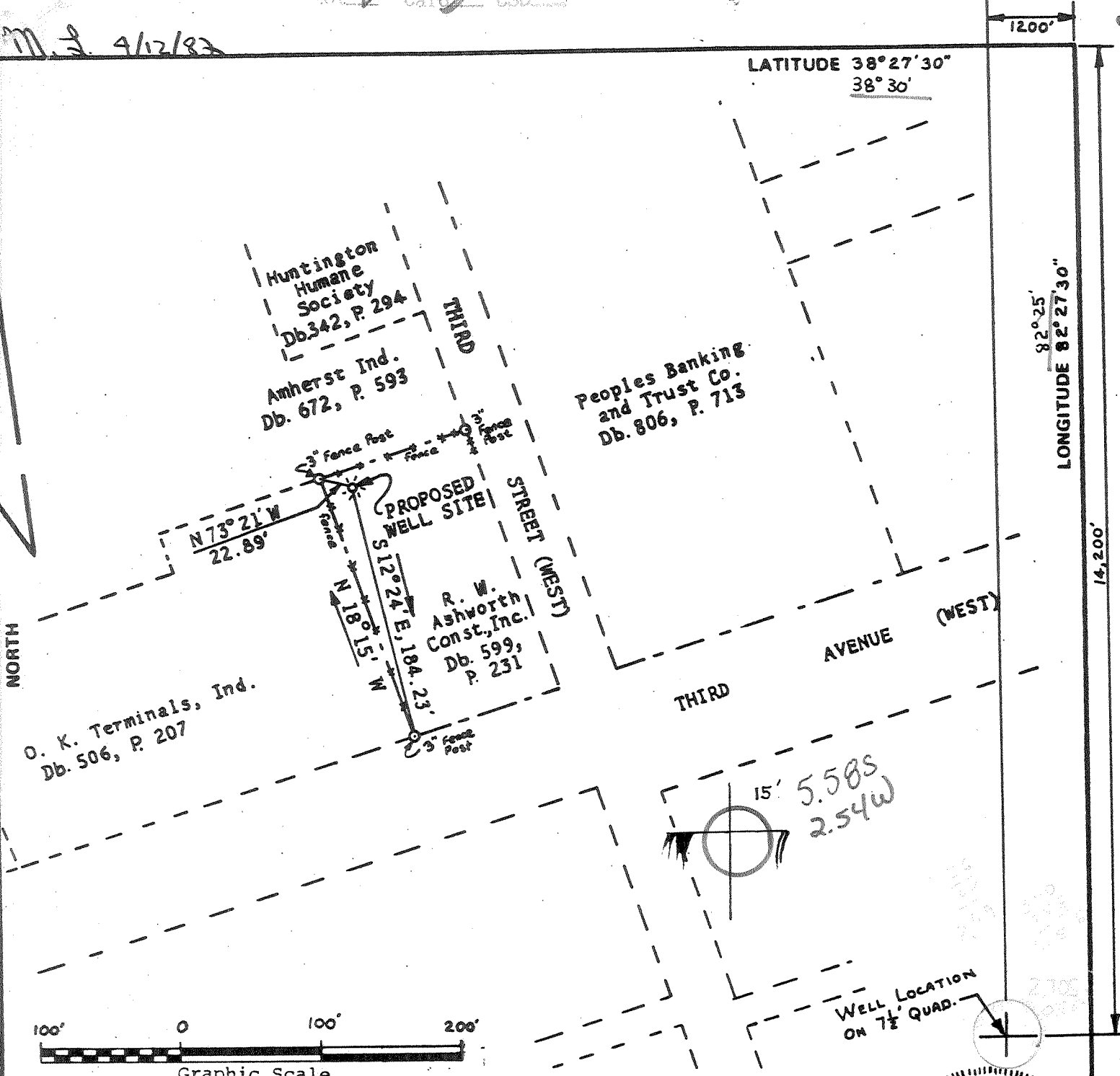
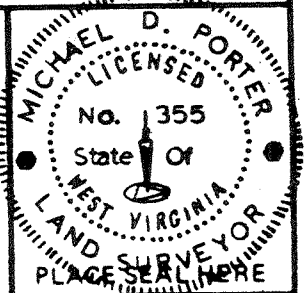


M.S. 4/12/82



FILE NO. 82-3
 DRAWING NO. 820322
 SCALE 1" = 100'
 MINIMUM DEGREE OF ACCURACY 1:2000
 PROVEN SOURCE OF ELEVATION NGS-BM-8116
Disk in Floodwall at 10th street in Huntington, WV

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) Michael D. Porter
 R.P.E. _____ L.L.S. 355



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



DATE 29 MARCH, 1982
 OPERATOR'S WELL NO. 1
 API WELL NO. 47-011-0709
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 547.40msl WATER SHED Ohio River
 DISTRICT Kyle District-Huntington, WV COUNTY CABELL
 QUADRANGLE Huntington, Ohio - W.Va. Sylvania 15' NW
 SURFACE OWNER R. W. ASHWORTH CONSTRUCTION, INC. ACREAGE 1/2 Ac.
 OIL & GAS ROYALTY OWNER R. W. ASHWORTH CONST. INC. LEASE ACREAGE 1/2 Ac.
 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 Keifer & Brallier Shale ESTIMATED DEPTH 3500'
 WELL OPERATOR DELTA-MIKE, INC. DESIGNATED AGENT DAVID MANGUS
 ADDRESS P.O. Box 9172 HUNTINGTON, WV 25704 ADDRESS P.O. Box 9172 HUNTINGTON, WV 25704

DEEP
 WELL

3-01 DPT-Keifer 9/1982
 6 Huntington (205)



IV-35
(Rev 8-81)

Date July 16, 1982
Operator's
Well No. Ashworth Well #1
Farm _____
API No. 47 - 011 - 0709

State of West Virginia
Department of Mines
Oil and Gas Division

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil ___ / Gas x / Liquid Injection ___ / Waste Disposal ___ /
(If "Gas," Production x / Underground Storage ___ / Deep ___ / Shallow ___ /)

LOCATION: Elevation: 547.40 MSL Watershed Ohio River
District: Kyle County Cabell Quadrangle Hunt., Oh., WV.

COMPANY Delta-Mike, Inc.
ADDRESS P.O. Box 9172, Huntington, WV 25704
DESIGNATED AGENT David Mangus
ADDRESS P.O. Box 9172, Huntington, WV 25704
SURFACE OWNER R.W. Ashworth
ADDRESS 302 3rd. Ave. W., Huntington, WV 25701
MINERAL RIGHTS OWNER R.W. Ashworth
ADDRESS 302 3rd. Ave. W., Huntington, WV 25701
OIL AND GAS INSPECTOR FOR THIS WORK Ken
Butcher ADDRESS Barboursville, W.V.
PERMIT ISSUED 4/8/82
DRILLING COMMENCED 6/7/82
DRILLING COMPLETED 6/21/82
IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON _____

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	20'	20'	cement to surface
9 5/8			.
8 5/8	250'	250'	cement to 1500'
7	1800'	1800'	cement to 1500'
5 1/2			
4 1/2	3500'	3500'	cement to 3000'
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Brallier Shale Depth 3574 feet
Depth of completed well 3574 feet Rotary x / Cable Tools _____
Water strata depth: Fresh 190 feet; Salt 800 feet
Coal seam depths: 540 Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation Brallier Shale Pay zone depth 2100-2400 feet
Gas: Initial open flow 0 Mcf/d Oil: Initial open flow none Bbl/d
Final open flow 50,000 Mcf/d Final open flow none Bbl/d
Time of open flow between initial and final tests 12 hours
Static rock pressure 390 lbs psig (surface measurement) after 12 hours shut in
(If applicable due to multiple completion--)
Second producing formation _____ Pay zone depth _____ feet
Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ Mcf/d Oil: Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ hours
Static rock pressure _____ psig (surface measurement) after _____ hours shut in

(Continue on reverse side)

DEC 19 1983

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

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Topsoil, Mush, Sand, Gravel		soft	0	40	
Sand & Gravel		soft	40	60	
Shale	Gray	soft	60	87	
Coal	Black	soft	87	88	small amount water
Shale	Gray	soft	88	219	
Salt Sand	White	hard	219	265	
Shale	Gray	soft	265	273	
Salt Sand	White	hard	273	281	
Shale	Gray	soft	281	301	
Salt Sand	White	hard	301	345	
Shale	Gray	soft	345	351	
Salt Sand	White	hard	351	440	water at 430'
Shale	Gray	soft	440	455	
Shale	Black & Gray	soft	455	600	
Salt Sand & Shale	Gray	hard	600	750	
Salt Sand	White	hard	750	800	
Shale	Gray	soft	800	875	
Salt Sand & Shale	Gray	hard	875	920	
Salt Sand	Gray & Brown	hard	920	930	
Salt Sand & Shale	Gray	hard	930	1020	lot of water 1010'
Lime	Brown	hard	1020	1080	
Shale	Gray	soft	1080	1250	
Salt Sand & Shale		hard	1250	1300	
Shale	Gray	soft	1300	2475	smelled gas at 1750'
Gray & Brown Shale		soft	2475	2550	
Gray Shale		soft	2550	2700	
Shale	Gray & Brown	hard	2700	2780	
Shale	Gray & Brown	hard	2780	3000	
Lime <i>conglomerate</i>	Brown	hard	3000	3428	
Rock	Red		3428	3580	

3580
3000
580' exp. log

3580
547
3032
Socell
@TD.

3580
547
3032
top
2200' from surface

(Attach separate sheets as necessary)

Delta-Mike, Inc.
Well Operator
By: David M. Manger, President
Date: July 16, 1982

Note: Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including ~~encountered~~ encountered in the drilling of a well."



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES

Oil and Gas Division

RECEIVED

APR 12 1982

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

OIL AND GAS WELL PERMIT APPLICATION

TO THE DEPARTMENT OF MINES,
Charleston, W. Va.

DATE April 8, 1982

Surface Owner R. W. Ashworth Company Delta-Mike, Inc.

Address 302 Third Ave, Huntington, W. Va. 25704 Address P.O. Box 9172, Htg., W.Va. 25704

Mineral Owner same Farm Ashworth Acres 1

Address same Location (waters) Ohio River

Coal Owner same Well No. 1 Elevation 547.40

Address same District Huntington County Cabell

Coal Operator none Quadrangle Huntington

Address -

THIS PERMIT MUST BE POSTED AT THE WELL SITE.

ALL PROVISIONS BEING IN ACCORDANCE WITH CHAPTER 22,

ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY

APPROVED FOR Drilling. THIS PERMIT SHALL EXPIRE

IF OPERATIONS HAVE NOT COMMENCED BY 12-14-82

BY [Signature]

INSPECTOR
TO BE NOTIFIED Ken Butcher 25504

ADDRESS RFD 1, Barboursville, W. Va. 25708

PHONE 736-4885

GENTLEMEN:

The undersigned well operator is entitled to drill upon the above named farm or tract of land for oil and gas, having fee title thereto, (or as the case may be) under grant or lease dated March 24, 1982 by R. W. Ashworth made to Delta-Mike, Inc. and recorded on the 26 day of March 1982, in Cabell County, Book 245 Page 128

NEW WELL DRILL DEEPER REDRILL FRACTURE OR STIMULATE

OIL AND GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1969.

The enclosed plat was prepared by a registered engineer or licensed land surveyor and all coal owners and/or operators have been notified as of the above date.

The above named coal owners and/or operator are hereby notified that any objection they wish to make, or are required to make by Section 3 of the Code, must be received by, or filed with the Department of Mines within ten (10) days. *

Copies of this notice and the enclosed plat were mailed by registered mail, or delivered to the above named coal operators or coal owners at their above shown respective address _____ day _____ before, or on the same day with the mailing or delivery of this copy to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL
GEOPHYSICAL LOGS DIRECTLY TO:

WEST VIRGINIA GEOLOGICAL AND
ECONOMIC SURVEY
P. O. BOX 879
MORGANTOWN, WEST VIRGINIA 26505
AC-304 - 292-6331

Address
of
Well Operator

Very truly yours,
(Sign Name) [Signature]
Well Operator

P. O. Box 9172
Street

Huntington
City or Town

State

*SECTION 3 If no objections are filed or found by the Department of mines, within said period of ten days from the receipt of notice and plat by the department of mines, to said proposed location, the department shall forthwith issue to the well operator a permit reciting the filing of such plat, that no objections have been made by the coal operators or found thereto by the department and that the same is approved and the well operator authorized to proceed.

47-011-0709 PERMIT NUMBER

"I have read and understand the reclamation requirements as set forth in Chapter 22, Article 4, Section 12-b and will carry out the specified requirements."

Signed by [Signature]

MARKET BOND

[Signature]

THIS IS AN ESTIMATE ONLY
ACTUAL INFORMATION WILL BE SUBMITTED ON OG-10 UPON COMPLETION

PROPOSED WORK ORDER TO DRILL _____ DEEPEN _____ FRACTURE-STIMULATE _____
 DRILLING CONTRACTOR: (If Known) RESPONSIBLE AGENT:
 NAME Interstate Drilling Inc. NAME David Mangus
 ADDRESS P.O. Box 85, Orchard Hill, Ga. 30266 ADDRESS P.O. Box 9172, Htgn., WV 25704
 TELEPHONE 404-227-6580 TELEPHONE 522-4558 (304)
 ESTIMATED DEPTH OF COMPLETED WELL: 3500 ROTARY CABLE TOOLS _____
 PROPOSED GEOLOGICAL FORMATION: Brallier Shale & Keefer Sand
 TYPE OF WELL: OIL _____ GAS COMB. _____ STORAGE _____ DISPOSAL _____
 RECYCLING _____ WATER FLOOD _____ OTHER _____

TENTATIVE CASING PROGRAM:

CASING AND TUBING SIZE	USED FOR DRILLING	LIFT IN WELL	CEMENT TIE UP OR SACKS - CUBIC FT.
20 - 16			
13 - 10	20'	20'	Cement to surface
9 - 5/8			
8 - 5/8	250'	250'	" "
7	1800'	1800'	" 1500'
5 1/2			
4 1/2	3500'	3500'	" 3000'
3			Perf. Top
2			Perf. Bottom
Liners			Perf. Top
			Perf. Bottom

APPROXIMATE FRESH WATER DEPTHS 190 FEET SALT WATER 800 FEET
 APPROXIMATE COAL DEPTHS 540
 IS COAL BEING MINED IN THE AREA? no BY WHOM? ---

TO DRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, \$100.00 PERMIT FEE, PERFORMANCE BOND AND PERMANENT COPY OF PLAT.

TO DRILL DEEPER OR REDRILL:

SUBMIT FIVE (5) COPIES OF OG - 1, SHOWING ORIGINAL PERMIT NUMBER AND PERFORMANCE BOND. ON WELLS DRILLED PRIOR TO 1929, A PERMANENT COPY OF THE PLAT AND THE ORIGINAL WELL RECORD MUST ALSO BE SUBMITTED.

TO FRACTURE - STIMULATE:

OIL AND/OR GAS WELL ORIGINALLY DRILLED BEFORE JUNE 5, 1929, FIVE (5) COPIES OG - 1, PERFORMANCE BOND, PERMANENT PLAT AND ORIGINAL WELL RECORD.

OIL AND/OR GAS WELL ORIGINALLY DRILLED ON AND/OR AFTER JUNE 5, 1929, FIVE COPIES OG - 1, SHOWING ORIGINAL PERMIT NUMBER, AND PERFORMANCE BOND.

Required forms must be filed within ninety (90) days of completion for bond release. Inspector to be notified twenty-four (24) hours in advance.

The following waiver must be completed by the coal operator if the permit is to be issued within ten days of receipt thereof.

WAIVER: I the undersigned, Agent for _____ Coal Company, Owner or Operator of the coal under this lease have examined and place on our mine maps this proposed well location.

We the _____ Coal Company have no objections to said well being drilled at this location, providing operator has complied with all rules and regulations in Articles 4, 5, and 7, Chapter 22 of the West Virginia Code.

For Coal Company

Official Title