

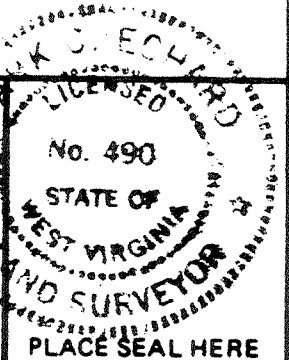
Coal Owners:

- G.M. Suttle
33550 Perry Rd.
Long Bottom, Ohio 45743
- O.C. Gilpin
39793 Success Rd.
Reedsville, Ohio 45772

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB 1200' ± S.W. OF LOCATION, ELEV. = 1049'

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) Mark C. Echard
 MARK C. ECHARD
 R.P.E. _____ L.L.S. 490



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



DATE FEBRUARY 3, 19 82
 OPERATOR'S WELL NO. ONE
 API WELL NO. 47 - 035 - 1647
 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 1008' WATER SHED BIG LICK RUN
 DISTRICT RAVENSWOOD COUNTY JACKSON
 QUADRANGLE LIVERPOOL 7.5' Ripley 15' E
 SURFACE OWNER J. UTT et al. ACREAGE 55
 OIL & GAS ROYALTY OWNER GRETA M. SUTTLE & O.C. GILPIN LEASE ACREAGE 55
 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 BROWN SHALE ESTIMATED DEPTH 5350'
 WELL OPERATOR DELTA DRILLING CO. DESIGNATED AGENT Robert E. Fox
 ADDRESS 200 FLEET ST., SUITE 4005 ADDRESS P.O. Box 129
PITTSBURGH, PA. 15220 Glennville W. Va. 26351



RECEIVED

MAY 24 1982

State of West Virginia

Department of Mines

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES **Oil and Gas Division**

Date MAY 4, 1982

Operator's Well No. 1

Farm G. M. SUTTLE

API No. 47 - 035 - 1647

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: 1,008 Watershed BIG LICK RUN
District: RAVENSWOOD County JACKSON Quadrangle LIVERPOOL 7.5

COMPANY DELTA DRILLING COMPANY
ADDRESS 200 FLEET ST. SUITE 4005 PGH., PA 15220
DESIGNATED AGENT JOHN O. KIZER
ADDRESS C/O LOVE, WISE, ROBINSON, WOODROW P. O. BOX 951 CHARLESTON, WV. 25323
SURFACE OWNER JAMES UTT, ET. AL.
ADDRESS BOX 1800 LAKELAND DR., SISSONVILLE WV 25320
MINERAL RIGHTS OWNER G. M. SUTTLE et. al.
ADDRESS 33550 PERRY ROAD, LONG BOTTOM, OH 45743
OIL AND GAS INSPECTOR FOR THIS WORK RICHARD MORRIS
ADDRESS P.O. BOX 372 GRANTSVILLE, WV. 26147
PERMIT ISSUED FEBRUARY 9, 1982
DRILLING COMMENCED MARCH 6, 1982
DRILLING COMPLETED MARCH 13, 1982

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"	290'	290'	200 sks
9 5/8			
8 5/8	2,446'	2,446'	550 sks
7			
5 1/2			
4 1/2	5,400'	5,400'	450 sks
3			
2			
Liners used			

IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON _____

GEOLOGICAL TARGET FORMATION DEVONIAN SHALE Depth 2680-5410 feet
Depth of completed well 5410 feet Rotary X / Cable Tools _____
Water strata depth: Fresh 250 feet; Salt _____ feet
Coal seam depths: NONE Is coal being mined in the area? _____

OPEN FLOW DATA
Producing formation DEVONIAN SHALE Pay zone depth 3268-5384 feet
Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
Final open flow 343 Mcf/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 24 hours
Static rock pressure 1,225 psig (surface measurement) after 72 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

JUN 2 1982

(Continue on reverse side)

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

PERFORATIONS	75 QUALITY FOAM VOLUME	SAND VOLUME	AVERAGE INJECTION RATE
5384-4730 (14)	38,000 gal	64,000#	41 BPM
4216-3268 (13)	38,000 gal	64,000#	40 BPM

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
SHALE AND RED ROCK			0	115	
SAND			115	171	1/2" flow of Fresh water @ 140'
SHALE AND SAND			171	775	
SAND			775	890	1" flow of Salt water @ 800'
SHALE			890	990	
SHALE AND RED ROCK			990	1,335	
SAND			1,335	1,490	
SHALE AND SAND			1,490	1,588	
SAND			1,588	1,660	
SHALE AND LIMESTONE			1,660	1,750	
SAND			1,750	1,850	
SHALE			1,850	1,880	
SAND			1,880	1,940	
SHALE AND SAND			1,940	1,970	
SALT SAND			1,970	2,128	
BIG LIME			2,128	2,230	
BIG INJUN			2,230	2,295	
SHALE			2,295	2,658	
COFFEE SHALE			2,658	2,680	
DEVONIAN SHALE			2,680	TD	BROWN SHALE

S410

0000@

S404-WTL

(Attach separate sheets as necessary)

DELTA DRILLING COMPANY
Well Operator

By: *[Signature]*

Date: 5/20/82

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 coal, encountered in the drilling of a well."



Date: February 5, 19 82
Operator's Well No. 1
API Well No. 47-035- 1647
State County Permit

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

WELL TYPE: Oil / Gas XXX /
(If "Gas", Production xx / Underground storage / Deep / Shallow xx /)

LOCATION: Elevation: 1008' Watershed: Big Lick Run
District: Ravenswood County: Jackson Quadrangle: Liverpool 7.5

WELL OPERATOR Delta Drilling Co.
Address 200 Fleet St. Suite 4005
Pittsburgh, Pa. 15220

DESIGNATED AGENT Robert Fox
Address P.O. Box 129
Glennville W. Va 26351
304-462-7353

OIL & GAS ROYALTY OWNER G.M. Suttle et al
Address 33550 Perry Road
Long Bottom, Ohio. 45743

COAL OPERATOR
Address

Acreage 55

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name Same as Oil & Gas

SURFACE OWNER James Utt et al
Address Box 1800 Lakeland Dr.
Sissonville. W.V. 25320

Address RECEIVED
Name FEB 9 - 1982
Address OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

Acreage 55

FIELD SALE (IF MADE) TO: Columbia Gas
Address Charleston. W.V.

COAL LESSEE WITH DECLARATION ON RECORD:
Name
Address

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Richard Morris
Address P.O. Box 372
Grantsville. W.V. 26147

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed / lease
other contract XX / dated 13 October, 19 81, to the undersigned well operator from Gretta M. Suttle et al
Not yet recorded
(If said deed, lease, or other contract has been recorded:)

Recorded on, 19, in the office of the Clerk of the County Commission of County, West Va., in Book at page. A permit is requested as follows:

PROPOSED WORK: Drill XX / Drill deeper / Redrill / Fracture or stimulate /
Plug off old formation / Perforate new formation /
Other physical change in well (specify)
—planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after the receipt of this Application by the Department.

Copies of this Permit Application and the enclosed plat and reclamation plan have been mailed by registered mail or delivered by hand to the above named coal operator, coal owner(s), and coal lessee on or before the day of the mailing or delivery of this Permit Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
1615 WASHINGTON STREET EAST CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

BLANKET BOND

Delta Drilling Co.
Well Operator
By Wallace G. Darden by WAF
Its Division Production Manager

PROPOSED WORK ORDER

THIS IS AN ESTIMATE ONLY:
ACTUAL INFORMATION MUST BE SUBMITTED ON FORM IV-35 UPON COMPLETION

DRILLING CONTRACTOR (IF KNOWN) Fox Drilling Co, Inc.
Address P.O. Box 129
Glennville, W.V. 26351

GEOLOGICAL TARGET FORMATION, Brown Shale

Estimated depth of completed well, 5350' feet Rotary XX / Cable tools _____ /

Approximate water strata depths: Fresh, 250 feet; salt, _____ feet.

Approximate coal seam depths: Unknown Is coal being mined in the area? Yes _____ / No XX /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS			New	Used	FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft			For drilling	Left in well		
Conductor	13 3/8					20'	20'		Kinds
Fresh Water	11 3/4					350'	350'	To Surface	
Coal									Sizes
Intermediate	8 5/8					2730'	2730'	To Surface	
Production	4 1/2					5350	5350	1000 SX	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code § 22-4-2, (iii) Form IV-9, "Reclamation Plan", applicable to the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fee required by Code § 22-4-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

provisions being in accordance with Chapter 22, the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 10-16-82.


Deputy Director - Oil & Gas Division

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code 22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof.

WAIVER

The undersigned coal operator _____ / owner _____ / lessee _____ / of the coal under this well location has examined this proposed well location. If a mine map exists which covers the area of the well location, the well location has been added to the mine map. The undersigned has no objection to the work proposed to be done at this location, provided, the well operator has complied with all applicable requirements of the West Virginia Code and the governing regulations.

Date: _____, 19 _____

By  _____

Its _____