



FILE NO. P.D.C. # 4-PS 2829
 DRAWING NO.
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 IN 200
 PROVEN SOURCE OF ELEVATION B.M. = 698' ON B.E. O.R.R. BRIDGE-GOOSE CREEK

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) Paul G. Dean, Sr.
 R.P.E. 1856 L.L.S.

PLACE SEAL HERE

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



DATE JUNE 21, 19 82
 OPERATOR'S WELL NO.
 API WELL NO.
47 - 085 - 5775
 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 835' WATER SHED GOOSE CREEK
 DISTRICT GRANT COUNTY RITCHIE
 QUADRANGLE PETROLEUM 7 1/2 - FLT 15' NE
 SURFACE OWNER PHILLIP STEARNS ACREAGE 789
 OIL & GAS ROYALTY OWNER PHILLIP STEARNS LEASE ACREAGE 965
 LEASE NO. 362201
 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 ORISKANY ESTIMATED DEPTH 5800'
 WELL OPERATOR PETROLEUM DEVELOPMENT DESIGNATED AGENT JOHN R. MITCHELL
 ADDRESS P.O. BOX 26 BRIDGEPORT W.V. ADDRESS P.O. BOX 26 BRIDGEPORT W.V.

(Overlays)
(12-81)



Date: June 23, 19 82
Operator's Well No. #1
API Well No. 47 085 5775
State County Permit

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

WELL TYPE: Oil / Gas /
(If "Gas", Production / Underground storage / Deep / Shallow /)
LOCATION: Elevation: 880' Watershed: Goose Creek
District: Grant County: Ritchie Quadrangle:

WELL OPERATOR PETROLEUM DEVELOPMENT CORPORATION DESIGNATED AGENT John R. Mitchell
Address PO Box 26, 103 East Main Street Address PO Box 26, 103 East Main Street
Bridgeport, WV 26330 Bridgeport, WV 26330

OIL & GAS ROYALTY OWNER Phillip Stearns
Address 4701 Willard Street
Apartment 1626, Chevy Chase MD 20015
Acreage 965

COAL OPERATOR
Address

SURFACE OWNER same as royalty
Address
Acreage 1250

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name none
Address
Name
Address

FIELD SALE (IF MADE) TO:
Address

COAL LESSEE WITH DECLARATION ON RECORD:
Name
Address

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Deo Mace
Address Rt 1, Box 5
Sandridge, WV 25274

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 June 4, 19 82, to the undersigned well operator from Magnum Oil & Gas

(If said deed, lease, or other contract has been recorded:) sent out for recordation
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 COMMIS-
SION
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 348-3092

RECEIVED
JUL 23 1982
OIL & GAS DIVISION
DEPT. OF MINES

PETROLEUM DEVELOPMENT CORPORATION
Well Operator
By William K. Overbay Jr.
Its Chief Exploration & Production

BLANKET BOND

(12-81)

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Union Drilling
Address Drawer 60
Buckhannon, WV

GEOLOGICAL TARGET FORMATION, Oriskany

Estimated depth of completed well, 5500 feet Rotary xx / Cable tools /

Approximate water strata depths: Fresh, 170 feet; salt, 350 feet.

Approximate coal seam depths: none Is coal being mined in the area? Yes / No xx /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS	
	Size	Grade	Weight per ft	New	Used	For drilling	Left in well		Kinds	Sizes
Conductor	16	H	55#		x	30'	0'			
Fresh Water	13 3/8	--	48#	x		200'	200'	cement to surface		
Coal										
Intermediate	9 5/8	H-40	36#	x		1200'	1200'	cement to surface		
Production	7"	J-55	26#	x		4700'	4700'	500 sks		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.
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 3-26-83
BY [Signature]

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

IV-35
(Rev 8-81)



OIL & GAS DIVISION
DEPT. OF MINES

JUL 17 1983

Date January 10, 1983
Operator's
Well No. #1
Farm Stearns
API No. 47 - 085 - 5775

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 ~~XX~~ / Gas ~~XX~~ / Liquid Injection / Waste Disposal /
(If "Gas," Production ~~XX~~ / Underground Storage / Deep / Shallow ~~XX~~ /)

LOCATION: Elevation: 880' Watershed Goose Creek
District: Grant County Ritchie Quadrangle Petroleum

COMPANY Petroleum Development Corporation
ADDRESS P.O. Box 26, Bridgeport, WV 26330
DESIGNATED AGENT Michael L. Edwards
ADDRESS P.O. Box 26, Bridgeport, WV 26330
SURFACE OWNER Phillip Stearns
ADDRESS 4701 Willard # 1626, Chevy Chase, MD 20015
MINERAL RIGHTS OWNER Phillip Stearns
ADDRESS Same as above.
OIL AND GAS INSPECTOR FOR THIS WORK Samuel
Hersman ADDRESS Box 66, Smithville, WV 26178
PERMIT ISSUED July 23, 1982
DRILLING COMMENCED August 11, 1982
DRILLING COMPLETED August 19, 1982
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.			
13-3/8" 13-10"	205	205	Cement to surface.
9 5/8			
8 5/8	1420	1420	485 sks.
7			
5 1/2			
4 1/2	4536	4536	520 sks.
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Oriskany Depth 5500 feet
Depth of completed well 4621 feet Rotary XX / Cable Tools
Water strata depth: Fresh 100 feet; Salt 1281-4444 feet
Coal seam depths: 111, 202 Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 2118-4309 feet
Gas: Initial open flow 162 Mcf/d Oil: Initial open flow 0 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 200 psig (surface measurement) after 24 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)

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

	Perforations	N ₂	CO ₂	Acid
1st Stage	26 perfs (3489-4309) <i>Angola-Sonyea</i>	500,000 scf	----	6 bbls.
2nd Stage	26 perfs (2745-3330) <i>Huron-Java</i>	505,000 scf	11.5 tons	4 bbls.
3rd Stage	29 perfs (2118-2663) <i>Huron</i>	1,050,000 scf	----	6 bbls.

Huron - 2118-3106 Angola - 3489-3812
 Java - 3106-3330 Sonyea - 4196-4309
WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
K.B. - G.L.			0	10	
Sand, shale, red rock			10	111	Hole damp @ 27'
Coal			111	118	½" stream H ₂ O @ 100'
Sand, shale			118	202	
Coal			202	203	
Sand, shale			203	516	
Big Lime			516	595	
Big Injun			595	679	
Sand, shale			679	1060	
Sunbury Shale			1060	1067	
Berea			1067	1076	
Sand, shale			1076	1470	½" stream H ₂ O @ 1281'
Gordon			1470	1498	
Sand, shale			1498	2162	
Huron			2162	3106	Gas check @ 2190' - no show.
Java			3106	3482	
Angola			3482	3812	Slight odor gas @ 3499'
Rhinestreet			3812	4196	
Sonyea			4196	4278	Slight odor gas @ 4217'
Genesee			4278	4330	
Marcellus			4330	4412	1½" stream salt H ₂ O @ 4444'
Onondaga			4412	4616	
Oriskany			4616	4621 T.D.	

~~4221~~
~~412~~
~~8591~~
 4621
 4412
209' expl. Hg.

(Attach separate sheets as necessary)

Petroleum Development Corporation
 Well Operator

By: M. [Signature]

Date: July 11, 1983

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."

7/20/88

085-5775

from Allen Smith of PSC:

no pipeline was constructed
for the gas & ∴ the well
never produced gas

oil show on top of Onondaga,
but oil production is
coming from somewhere
in the Devonian shale

1st oil production:

December 1985

236 bbl in Dec.

28.6 bpd - avg -