

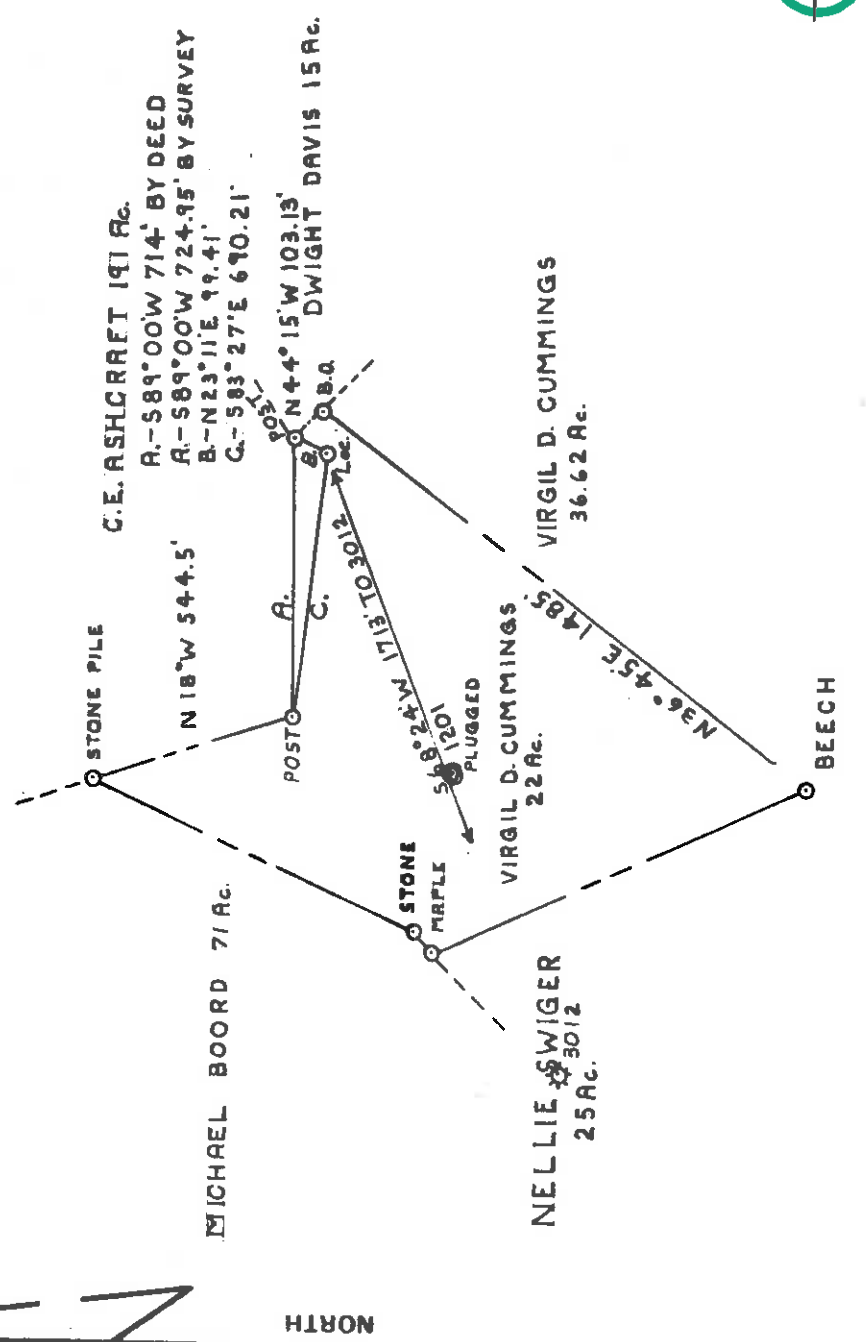


1-14-82 Plot Card CSD

LATITUDE 39° 25'

LONGITUDE 80° 35'

2.525  
0.30  
15



FILE NO. P.D.C. # 3 - P 9.64  
 DRAWING NO. 1  
 SCALE 1" = 500'  
 MINIMUM DEGREE OF ACCURACY 1 IN 200  
 PROVEN SOURCE OF ELEVATION P.D.C. WELL DODD - 3012 = 1270'

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. Deann, Jr.  
 R.P.E. 1856 L.L.S.

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

PLACE SEAL HERE  
 DATE DEC. 23, 1981  
 OPERATOR'S WELL NO. 1  
 API WELL NO. 47-017-3073  
 STATE VA COUNTY BRIDGEPORT 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 1500' WATER SHED EAST RUN  
 DISTRICT McCLELLAN COUNTY DODDRIDGE  
 QUADRANGLE FOLSOM 7 1/2' Centerpoint 15' C  
 SURFACE OWNER VIRGIL D. CUMMINGS ACREAGE 58.62  
 OIL & GAS ROYALTY OWNER VIRGIL D. CUMMINGS LEASE ACREAGE 2.2

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 CE DOR CREEK ESTIMATED DEPTH 5700'  
 WELL OPERATOR PETROLEUM DEVELOPMENT DESIGNATED AGENT PETROLEUM DEVELOPMENT  
 ADDRESS P.O. BOX 26 ADDRESS P.O. BOX 26  
BRIDGEPORT W.V. BRIDGEPORT W.V.

H. T. HALL | WELL PLATTED & SURVEYED BY PAUL G. DEANN & SUPERVISED BY PAUL G. DEANN R.P.C.E. 1856

FEB 22 1982



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FEB 16 1983

IV-35  
(Rev 8-81)

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

Date Feb. 7, 1983

Operator's

State of West Virginia

Well No. #1

Department of Mines

Farm Virgil Cummings

Oil and Gas Division

API No. 47 - 017 - 3183

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 / Underground Storage / Deep / Shallow XX /)

LOCATION: Elevation: 1400 Watershed East Run

District: McClellan County Doddridge Quadrangle Folsom 7 1/2

COMPANY Salem Oil & Gas

ADDRESS Rd. 1, Box 1, Bristol, WV 26332

DESIGNATED AGENT Paul Nicholas

ADDRESS Rt. 1, Box 1, Bristol, WV 26332

SURFACE OWNER Virgil Cummings

ADDRESS Rd 1, Salem, WV

MINERAL RIGHTS OWNER Same as surface  
ADDRESS

OIL AND GAS INSPECTOR FOR THIS WORK Stephen

Casey ADDRESS Jane Lew, WV 26378

PERMIT ISSUED 11-09-82

DRILLING COMMENCED 11-24-82

DRILLING COMPLETED 12-8-82

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

GEOLOGICAL TARGET FORMATION Benson

Depth of completed well 5554 feet Rotary X / Cable Tools Depth 5400 feet

Water strata depth: Fresh 212 feet; Salt 1800 feet

Coal seam depths: 1020

Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Benson-Riley

Gas: Initial open flow Show 298 Mcf/d Oil: Initial open flow None Bbl/d

Final open flow 298 Mcf/d Final open flow Show Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1625 psig (surface measurement) after 10 hours shut in  
(If applicable due to multiple completion--)

Second producing formation Balltown-Speechly

Gas: Initial open flow show 298 Mcf/d Oil: Initial open flow None Bbl/d

Final open flow 298 Mcf/d Oil: Final open flow Show Bbl/d

Time of open flow between initial and final tests 4 hours

Static rock pressure 1625 psig (surface measurement) after 10 hours shut in

days

(Continue on reverse side)

Casing & Tubing Size	Used in Drilling	Left in Well	Cement fill up Cu. ft.
20-16 Cond.			
13-10"			
9 5/8			
8 5/8	1598	1598	To surface
7			
5 1/2			
4 1/2		5508	600 Sk.
3			(2000-5508)
2 3/8		5377	None
Liners used			

DOB. 1-31-83

FEB 28 1983

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

Frac 1-6&7-83, 2 stage Water Frac - N<sub>2</sub> Assist & Straight N<sub>2</sub>

FORMATION	PERFS	BRKD	VOLUME	SAND	ISIP	N <sub>2</sub>
Benson-Riley	<i>5358-5439</i> <i>Ben 500</i>	3800	168 BBLs	42,000	2000	499,000 cu ft
Balltown-Sp.	<i>3809-4913</i> <i>Spok. Balltown</i>	4100		Str <sub>N<sub>2</sub></sub> 2600		996,000 cu ft

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
Sand & Shale	g bl	s s	0	1020	Coal at 1020'
Coal	g	s s	1020	1030	Water at 212', 1800'
Sand & Shale	g	s s	1030	2109	
Sand	w	h s	2109	2242	
Shale	rd	s s	2242	2306	
Big Lime	br	h s	2306	2370	Smell oil ~ 2315
Big Limestone	w	h s	2370	2475	Show gas ~ 2400
Shale	g	s s	2475	3050	
and shale	w	h s	3050	3185	
Shale	g	s s	3185	5325	
Siltstone	g br	s m	5323	5355	
Shale	g	s s	5355	5405	
Siltstone	g br	s m	5405	5440	
Shale	g	s s	5405	5554	Benson show gas at 5410'
Total Depth	g	s s	5440	<u>5554</u>	

*T.D. Benson @ T.D.*

(Attach separate sheets as necessary)

*Salem Hill Oil Co.*  
Well Operator  
By: *Corelyn Thielke*  
Date: *7/21/83*

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 strata, encountered in the drilling of a well."



Well No. One (1)  
Owner Virgil D. Cummings  
County Putnam / 017 - 3073  
Date December 7, 1982

OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

WELL AND GAS WELL PERMIT APPLICATION

WV PERMIT NO. 7-9017 X

County Putnam / 017 - 3073 X

Well No. 1400' Well Depth: East Run  
County: McClellan County: Doddridge Leaseholder: Foilsom 7 1/2'

Applicant: Petroleum Development Corp Designated Address: Petroleum Development Corp  
P. O. Box 26 Address: P. O. Box 26  
Bridgeport, WV 26330 Bridgeport, WV 26330

Well Owner: Virgil Cummings COAL OPERATOR  
Route 2 Address:  
Salem, West Virginia 26426

Permit No. 22

Coal Owner: Virgil Cummings COAL OWNER(S) WITH DECLARATION ON RECORD  
Route 2 NAME Willis G. Tetrick, Jr.  
Salem, West Virginia 26426 Address: Union Building  
58.62 Clarksburg, WV 26301

Coal Lessee: Unknown NAME Maxwell Y. Sutton  
Address: County Club Addition  
Clarksburg, WV 26301  
Address: Union National Bank-Clarksburg,  
Clarksburg, WV 26301

Other Parties: None COAL LESSEE WITH DECLARATION ON RECORD  
NAME  
Address:

Witness: Stephen Casey  
Route 2 Box 232-D  
Jane Lew, WV 26378  
884-7470

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JAN 13 1982

OIL AND GAS DIVISION  
WV DEPARTMENT OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes  
above location under a deed / lease X / other contract / dated June 10 1981  
for the underlined well operator from Virgil Cummings

On June 15, 1981, in the office of the Clerk of County Commission  
Doddridge County, West Virginia, in 121 East of page 5

Witnesses: Drill X / Drill Deeper / Redrill / Fracture  
Plug off old formation / Perforate new formation  
Other physical change in well (specify)

As planned as shown on the work order on the reverse side hereof  
I, above named coal operator, coal owner(s), and coal lessee are hereby notified  
that I must wish to make or are required to make by code S22-4-3 must be filed  
with the Permit Application and the enclosed plat and reclamation plan have  
been approved by the Department of Mines at Charleston, West Virginia  
and delivered by hand to the above named coal operator  
on or before the day of the month of delivery of the

PLEASE RETURN COPIES OF ALL  
COPYRIGHTS DIRECTLY TO:

WEST VIRGINIA OIL AND GAS  
SERVICES CORPORATION  
1014 WASHINGTON ST., E.  
CHARLESTON, WV 25311  
Telephone - 304/348-3092

PETROLEUM DEVELOPMENT CORPORATION  
Well Operator

BLANKET BOND: Frank Mitchell

ITS: Area Manager



PROPOSED WORK ORDER

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

THE MINE CONTRACTOR (IF KNOWN) Unknown

Address: \_\_\_\_\_

GEOLOGICAL TARGET FORMATION Cedar Creek  
 Estimated depth of completed well 5700 feet. Rotary  / Cable tools   
 Estimated water strata depths: Fresh, \_\_\_\_\_ feet; salt, 1800 feet.  
 Estimated coal seam depths: 800  
 Is coal being mined in this area: Yes  / No  /

ACTING GR. ENGINEER'S TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		CEMENT FILL FOR DRILL-LEFT IN WELL	UP OR SACKS	PACKERS
	Weight	per ft	ft	ft			
Conductor	11 3/4	X	20	20	Circulate		
Production	8 5/8	J-55	23#	X	1600	1600	Circulate
	4 1/2	J-55	9.5	X	5700	5700	570 sks
							Depths set
							Perforations:
							Top
							Bottom

Section 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 Form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 18, or in lieu thereof the other security allowed by Code §§2-4-5, (iii) Form IV-6, "Regulation Plan" applicable to the regulation required by Code §§2-4-1(b) and Regulation 85, (iv) unless previously paid on the same well, the fee as provided by Code §§2-4-1(a), and (v) if applicable, the consent required by Code §§2-4-8a from the owner of any other well or drilling within 200 feet of the proposed well.  
 A separate Form IV-2 shall not be required for fracturing or stimulating a well when fracturing or stimulating is to be part of the work for which a permit is issued and required as such on the Form IV-2 filed in connection therewith.  
**THIS PERMIT MUST BE POSTED AT THE WELL SITE**

All operations being in accordance with Chapter 22, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 9-28-82.

Deputy Director - Chas Gof Dviston

\_\_\_\_\_ hereby certifies that the information furnished herein is true and correct to the best of his knowledge and belief, and that he has read and understands the provisions of the West Virginia Code and the regulations thereunder, and that he has complied with all applicable requirements of the West Virginia Code and the regulations thereunder.

W A I L V E R

I, \_\_\_\_\_, owner / lessee / of the coal under this well location, have examined this proposed well location. If a mine map exists which covers 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 operator has complied with all applicable requirements of the West Virginia Code and the regulations thereunder.

By: \_\_\_\_\_, 19\_\_\_\_  
 Its: \_\_\_\_\_





Line Item Explanation

- 1) Date of Application
- 2) Your well name and number
- 3) To be filled out by office of oil & gas
- 4A) "Oil" means natural crude oil or petroleum and other hydrocarbons, regardless of gravity, which are produced at the well in liquid form by ordinary production methods and which are not the result of condensation of gas after it leaves underground reservoirs; "Gas" means all natural gas and all other fluid hydrocarbons not defined as oil.
- 4B) "Shallow well" means any well drilled and completed in a formation above the top of the uppermost member of the "Onondaga Group" or a depth less than six thousand feet, whichever is shallower.  
"Deep well" means any well drilled and completed in a formation at or below the top of the uppermost member of the "Onondaga Group" or at a depth less than six thousand feet, whatever is shallower.
- 5) Where well is located
- 6) Before a permit can be issued in a corporation, company partnership, or fictitious name, the name must be registered with the Secretary of State Office
- 7) Use separate sheet if necessary
- 8) Present surface owner at time application is filed.
- 9) Optional
- 11) See Reg. 7.01 relating to code §22-4-1k
- 12) "Coal Operator" means any persons, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine. See Note 24
- 13 & 14) As per §22-4-20; See Note 24
- 15) Work that will be attempted--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.
- 16) Anticipated formation for which well will be completed
- 17) Self explanatory
- 18) Depth to deepest freshwater, and shallowest salt water, taken from nearby wells corrected for differences in elevation
- 19) All coal seam depths
- 20) Proposed casing program and cementing refer to Code 22-4-5, 22-4-6, 22-4-7, 22-4-8, 22-4-8a Reg 9.01, 15.01, 15.02, 15.03, 15.04, 25.01, 25.02, 25.03, 25.04
- 21) Code 22-4-1(c) - In lieu of filing the lease or leases or other continuing contract or contracts, the applicant for a permit described herein may file the following:  
(1) A brief description of the tract of land including the district and county wherein the tract is located;  
(2) The identification of all parties to all leases or other continuing contractual agreements by which the right to extract, produce or market the oil or gas is claimed;  
(3) The book and page number wherein each such lease or contract by which the right to extract, produce or market the oil or gas is recorded;  
(4) A brief description of the topography provisions of each such lease or contract.
- 22) Code 22-4-1(d) and 22-4-1(e).
- 23) 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.
- 24) 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.

.....  
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.

W A I V E R

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 \_\_\_\_\_