

RECEIVED

MAY 31 1984



1) Date: May 31, 19 84
 2) Operator's Well No. Hardin #1
 3) API Well No. 47 - 001 - 2075
 State County Permit

OIL & GAS DIVISION DEPT. OF MINES
 STATE OF WEST VIRGINIA DEPARTMENT OF MINES, OIL AND GAS DIVISION
 APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas / B (If "Gas", Production / Underground storage / Deep / Shallow /
- 5) LOCATION: Elevation: 1510 / Watershed: Raccoon Creek / District: Cove / County: Barbour / Quadrangle: Nestorville / MT-23-B
- 6) WELL OPERATOR Swift Energy Co / Address P.O. Box 2201 / Clarksburg W.V. 26301
- 7) DESIGNATED AGENT Tim Bennett / Address P.O. Box 2201 / Clarksburg W.V. 263-01
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Phil Tracey / Address Forest Festival Terrace / Elkins W.V. 26241
- 9) DRILLING CONTRACTOR: Name Unknown / Address _____
- 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate / Plug off old formation / Perforate new formation / Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Haverty
- 12) Estimated depth of completed well, 5995 feet
- 13) Approximate strata depths: Fresh, 25 feet; salt, 1200 feet.
- 14) Approximate coal seam depths: 350, 745 Is coal being mined in the area? Yes / No
- 15) 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		
Conductor	113/4	H40	42	X		40	40	Circulate	Kinds <u>by rule 15.05</u>
Fresh water	85/8	ERW	23	X		1000	1000	To Surface	
Coal	85/8	ERW	23	X		1000	1000	To Surface	Sizes
Intermediate									
Production	41/5	J55	10.5	X		5450	5450	500 sks.	Depths set
Tubing									Perforations: <u>or as req. by rule 15.01</u>
Liners									
									Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-001-2075 Date June 7, 19 84

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. **Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work.** In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires June 7, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>Blanket</u>	<u>MM</u>	<u>MM</u>	<u>MM</u>	<u>1016</u>

[Signature]
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

File



OFFICE USE ONLY

PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK

1) WELL LOCATION: District: Boone County; Elevation: 1550; Well No.: MT-23-B

2) WELL OPERATOR: Address: P.O. Box 2201; Designated Agent: [Name]

3) OIL & GAS INSPECTOR TO BE NOTIFIED: Name: Paul [Name]; Address: [Address]

4) PROPOSED WELL WORK:

- Drill: Drill
- Plug off old formation:
- Other physical change in well (specify):

5) GEOLOGICAL TARGET FORMATION:

- Estimated depth of completed well: 1500 feet
- Approximate true depth: 1500 feet
- Approximate coal seam depth: 350 feet
- Is coal being mined in the area? Yes No

Casing DE- TURNING TYPE	Casing DE- TURNING TYPE	SPECIFICATIONS		FOOTAGE INTERVALS		GENERIC MUD OR OR-ARK (Type)	PACKERS
		Weight per ft.	Grade	For drilling	Left in well		
Conductor	2 1/8"	12.5	100	1000	500	Water based	
Production	2 1/8"	12.5	100	1000	500	Water based	
Intercasing	2 1/8"	12.5	100	1000	500	Water based	

OFFICE USE ONLY

This part of Form IV-2(b) is to record the dates of certain occurrences and any follow-up inspections.

	Date	Date(s)
Application received		
Well work started		
Completion of the drilling process		
Well Record received		
Reclamation completed		

OTHER INSPECTIONS

Reason: _____

Reason: _____

Board:	Area:	Dist:	Casing:	Fee:
Blank	Area	Dist	Casing	Fee

1) Date: May 21, 1984
2) Operator's
Well No. Hardin #1
3) API Well No. 47-001-2025
State County Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OFFICE OF OIL & GAS
NOTICE OF APPLICATION FOR A WELL WORK PERMIT

4) SURFACE OWNER(S) OF RECORD TO BE SERVED
(i) Name Tom Hardin
Address Maatsville W.V.
(ii) Name _____
Address _____
(iii) Name _____
Address _____

5(i) COAL OPERATOR N/A
Address _____
5(ii) COAL OWNER(S) WITH DECLARATION ON RECORD:
Name N/A
Address _____
Name _____
Address _____
5(iii) COAL LESSEE WITH DECLARATION ON RECORD:
Name N/A
Address _____

TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:

- (1) The Application for a Well Work Permit on Form IV-2(B) (or Form IV-4 if the well is to be plugged, which sets out the parties involved in the drilling or other work, and describes the well and its location and, if applicable, the proposed casing and cementing program;
- (2) The plat (surveyor's map) showing the well location on Form IV-6; and
- (3) The Construction and Reclamation Plan on Form IV-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION (FORM IV-2(B) OR FORM 4, DESIGNATED FOR YOU. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.

Take notice that under Chapter 22 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Administrator of the Office of Oil and Gas, West Virginia Department of Mines, with respect to a well at the location described on attached Application and depicted on attached Form IV-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Administrator.

6) EXTRACTION RIGHTS

Check and provide one of the following:

- Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.
- The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specifics.)

7) ROYALTY PROVISIONS

Is the right to extract, produce or market the oil or gas based upon a lease or leases or other contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No

If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.

See the reverse side for line item instructions, and for instructions concerning the required copies of the Notice and Application, plat, and Construction and Reclamation Plan.

The truth of the information on the Notice and Application is verified and sworn to and the Notice is signed on behalf of the Well Operator in my County and State by

Tim Bennett

this 21 day of May, 1984.
My commission expires 6-15-, 1989.

James G. Swiger
Notary Public, XXXXXXXXXXXXXXXXXXXXXXX
State of W. Va.

WELL OPERATOR SWIFT ENERGY COMPANY

By Tim Bennett
Its Designated Agent
Address P. O. Box 2201
Clarksburg, WV 26301
Telephone 622-7701

DEPT. OF MINES
OIL & GAS DIVISION
MAY 21 1984
RECEIVED
MAY 23 1984
OIL & GAS DIVISION
DEPT. OF MINES

I N S T R U C T I O N S T O A P P L I C A N T

CONCERNING THE LINE ITEMS:

- 1) Date of Notice.
- 2) Your well name and number.
- 3) To be filled out by the Office of Oil & Gas.
- 4) & 5) Use separate sheet if necessary.
- 4) Surface owner(s) of record to be served with Notice and Application. However, see also Code § 22-4-1b(b) if "more than three tenants in common or other co-owners of interest described in subsection (a) of this section hold interests in such lands".
- 5(i) "Coal Operator" means any person, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine.
- 5(ii, iii) See Code § 22-4-20.
- 6) See Code § 22-4-11(c). However, in lieu of filing the lease(s) or other continuing contract(s), the Applicant may fill out the information in the space provided below.
- 7) See Code § § 22-4-11(d, e).

CONCERNING THE REQUIRED COPIES FOR FILING AND SERVICE:

Filing. Code § 22-4-1k and Regulation 7.02 provide that the original and required copies of the Notice and Application must be filed with the Administrator, 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 § 22-4-1k(d) and the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fees required by Code § 22-4-1a(c) and 22-3-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well on dwelling within 200 feet of the proposed well.

Service. In addition, service must be made on the surface owner(s) and the person(s) with an interest in the coal. See Code § § 22-4-1m, 22-4-2, 22-4-2a, and 22-4-2b.

I N F O R M A T I O N S U P P L I E D U N D E R C O D E § 22-4-11(d)

I N L I E U O F F I L I N G L E A S E (S) A N D O T H E R C O N T I N U I N G C O N T R A C T (S)

Under the oath required to make the verification on the obverse side of this Notice, I depose and say that I am the person who signed the Notice for the Applicant, and that--

- (1) the tract of land is the same tract described in the Application to which this Notice applies, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

<u>Grantor, lessor, etc.</u>	<u>Grantee, lessee, etc.</u>	<u>Royalty</u>	<u>Book</u>	<u>Page</u>
Thomas H. Hardin, et ux	Hope Gas	1/8	49	403
Hope Gas	Swift Energy Co.	1/8	Farmout Agreement date 3/1/84	



1) Date: May 21, 1984
 2) Operator's Well No. Hardin #1
 3) API Well No. 47 001
 State County Permit

RECEIVED
MAY 3 1984

**STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION
APPLICATION FOR A WELL WORK PERMIT**

OIL & GAS DIVISION
DEPT. OF MINES

- 4) WELL TYPE: A Oil / Gas
 B (If "Gas", Production / Underground storage / Deep / Shallow)
 5) LOCATION: Elevation: 1510 Watershed: Raccoon Creek
 District: Cove County: Barbour Quadrange: Nestorville
 6) WELL OPERATOR Swift Energy Co. 7) DESIGNATED AGENT Theresa Bartlett
 Address P.O. Box 2201 Address P.O. Box 2201
Clarksburg, WV 26301 Clarksburg, WV 26301
 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Phil Tracey Name Unknown/Unknown
 Address Forest Festival Terrace Address _____
Elkins, WV 26241
 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate
 Plug off old formation / Perforate new formation
 Other physical change in well (specify) _____
 11) GEOLOGICAL TARGET FORMATION, Haverty
 12) Estimated depth of completed well, 5995 feet
 13) Approximate trata depths: Fresh, 25 feet; salt, 1200 feet.
 14) Approximate coal seam depths: 350, 745 Is coal being mined in the area? Yes / No

RECEIVED
MAY 23 1984

15) 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		
Conductor	<u>17 3/4</u>	<u>4860</u>	<u>42</u>	<input checked="" type="checkbox"/>		<u>130</u>	<u>30</u>	<u>Circulate</u>	Kinds
Fresh water	<u>15/8</u>	<u>ERW</u>	<u>23</u>	<input checked="" type="checkbox"/>		<u>1000</u>	<u>1000</u>	<u>To Surface</u>	
Coal	<u>15/8</u>	<u>ERW</u>	<u>23</u>	<input checked="" type="checkbox"/>		<u>1000</u>	<u>1000</u>	<u>To Surface</u>	Sizes
Intermediate	<u>5/8</u>			<input checked="" type="checkbox"/>		<u>900</u>	<u>900</u>	<u>To Surface</u>	
Production	<u>1 1/2</u>	<u>J55</u>	<u>10.5</u>	<input checked="" type="checkbox"/>		<u>545</u>	<u>450</u>	<u>1500 Reqs.</u>	Depths set
Tubing									
Liners									Perforations:
									Top Bottom

The law requires a comment period for surface owners. However, the permit can be issued in less than 15 days from the filing of the Application if the surface owner(s) of record sign(s) the following "Voluntary Statement of No Objection" on a facsimile of this surface owner's copy of the Application.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners on the reverse side of this Application for a Well Work Permit, and that I have received copies of (1) a Notice of Application for a Well Work Permit on Form IV-2(A), (2) an Application for a Well Work Permit on Form IV-2(B), (3) a survey plan on Form IV-6, and (4) a Construction and Reclamation Plan on Form IV-9, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued based on those materials.

(For execution by corporation, partnership, etc.)

NAME: _____
 By _____
 Its _____ Date _____

(For execution by natural persons)

Theresa Bartlett Date: 5-24-84
 (Signature)
Geldie Hardin Date: 5-24-84
 (Signature)



**INSTRUCTIONS TO SURFACE OWNERS
AND
EXPLANATION OF METHODS AND TIME LIMITS TO COMMENT
ON OIL AND GAS WELL WORK PERMIT**

The well operator named in the Notice and this Application and the attached materials is applying for a permit from the State to do oil or gas well drilling or other well work. You are being served with these materials because surface owners have the right to file comments before the permit is issued. (NOTE: If the surface tract is owned by more than three persons, in multiple heirship for example, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22, Article 4 of the W. Va. Code. Permits are valid for 24 months.

If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator named in the materials and the Administrator of the Office of Oil and Gas in the West Virginia Department of Mines immediately.

NOTE: You are not required to file any comment at all.

Where to file comments and obtain additional information:

Administrator of the Office of Oil and Gas
West Virginia Department of Mines
1615 Washington Street East
Charleston, West Virginia 25311
(304) 348-2057

Who may file comments? If you wish to file comments, you must be an owner of record of (1) an interest in the surface tract on which the well already is or is about to be located, or (2) an interest in any other surface tract under the same oil or gas lease which will be utilized for roads or other land disturbances.

Time limits for comments. The law requires these materials to be delivered on or before the date the operator files his Application. You have **FIFTEEN (15) DAYS** after the filing date to file your comments as provided in **Methods for Filing Comments** below. You may call the Administrator's office at the above telephone number to be sure of the date. However, if you have been contacted by the well operator, and if you have signed a "voluntary statement of no objection" to any of the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number, and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Methods for filing comments. Comments must be filed in person or received in the mail at the Administrator's office by the time stated above. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling.

The Administrator for Oil and Gas has the power to deny or condition a well work permit based on your comments on the following grounds:

- “(1) The proposed well work will constitute a hazard to the safety of persons; or
- “(2) The plan for soil erosion and sediment control is not adequate or effective; or
- “(3) Damage would occur to publicly owned lands or resources; or
- “(4) The proposed well work fails to protect fresh water sources or supplies.”

If you want a copy of the permit as it is finally issued, or a copy of the order denying the permit, you should request a copy from the Administrator.

List of Water Testing Laboratories. The Administrator maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Administrator's office or an Oil and Gas Inspector to obtain a copy of the list.

NAME: _____
 BY: _____
 DATE: _____

NAME: _____
 BY: _____
 DATE: _____



1) Date: May 22, 1984
 2) Operator's Well No. Hardin #1
 3) API Well No. 47 State 001 County Permit

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

- 4) WELL TYPE: A Oil _____ / Gas X /
 B (If "Gas", Production X / Underground storage _____ / Deep _____ / Shallow X /)
- 5) LOCATION: Elevation: 1510 Watershed: Raccoon Creek MT-23-13
 District: Cove County: Barbour Quadrangle: Nestorville
- 6) WELL OPERATOR Swift Energy Co 7) DESIGNATED AGENT Tim Bennett
 Address P.O. Box 2201 Address P.O. Box 2201
Clarksburg W.V. 26301 Clarksburg W.V. 263-01
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Phil Tracey Name Unknown
 Address Forest Festival Terrace Address _____
Elkins W.V. 26241
- 10) PROPOSED WELL WORK: Drill X / Drill deeper _____ / Redrill _____ / Stimulate X /
 Plug off old formation _____ / Perforate new formation _____ /
 Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Haverly
- 12) Estimated depth of completed well, 5995 feet
 13) Approximate trata depths: Fresh, 25 feet; salt, 1200 feet.
 14) Approximate coal seam depths: 350, 745 Is coal being mined in the area? Yes _____ / No X /

15) 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	<u>113/4</u>	<u>H40</u>	<u>42</u>	<u>X</u>		<u>40</u>	<u>40</u>	<u>Circulate</u>		
Fresh water	<u>85/8</u>	<u>HRW</u>	<u>23</u>	<u>X</u>		<u>1000</u>	<u>1000</u>	<u>To Surface</u>		
Coal	<u>85/8</u>	<u>HRW</u>	<u>23</u>	<u>X</u>		<u>1000</u>	<u>1000</u>	<u>To Surface</u>		
Intermediate										
Production	<u>41/5</u>	<u>J55</u>	<u>10.5</u>	<u>X</u>		<u>5450</u>	<u>5450</u>	<u>300 sks.</u>		Depths set
Tubing										
Liners										Perforations:
										Top Bottom

INSTRUCTIONS TO COAL OPERATOR, OWNER, OR LESSEE

The 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 the filing of the Application.

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.

Blanket. MW 1122 1016

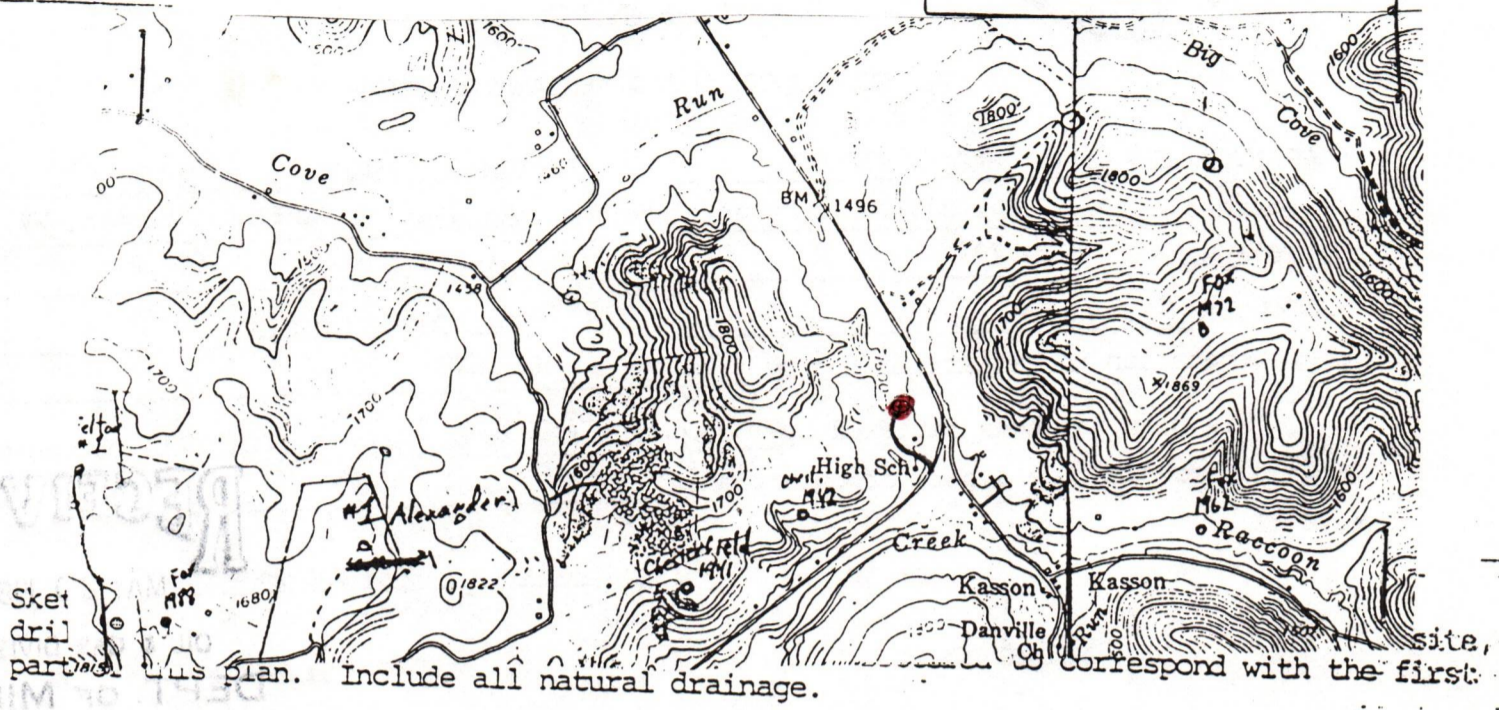
Date: _____, 19____ By: _____
 Its: _____

ATTACH OR PHOTOCOPY SECTION OF INVOLVED TOPOGRAPHIC MAP. QUADRANGLE Westville 7.5'

LEGEND

Well Site ⊕

Access Road ———

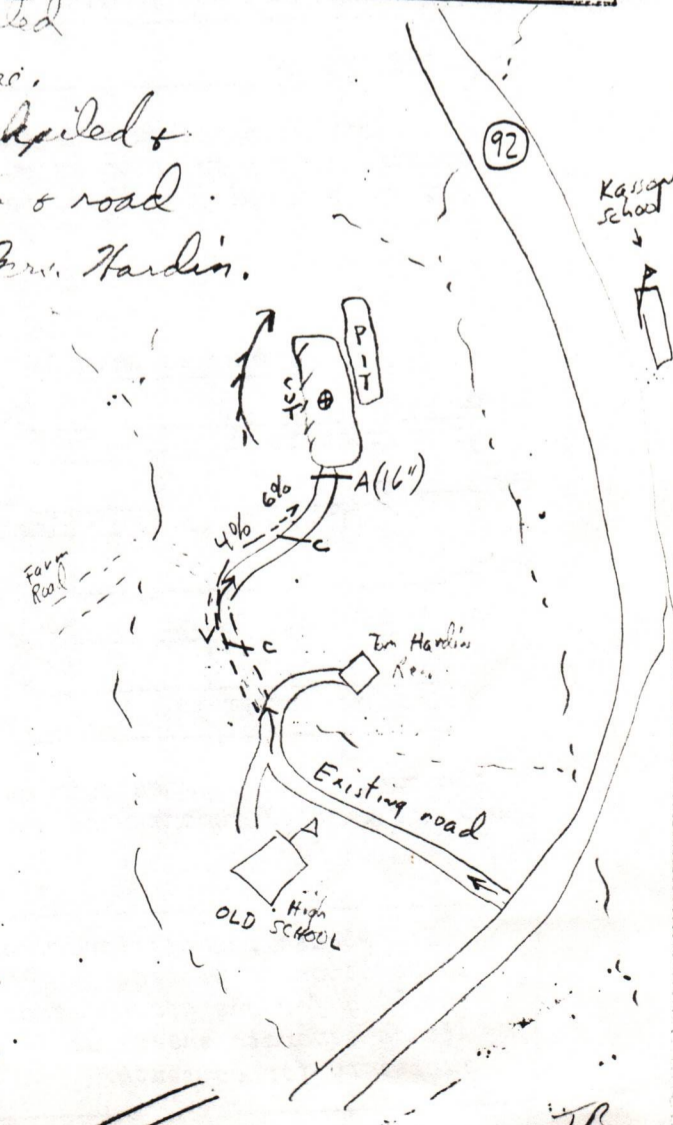


LEGEND

Property boundary ——— ——— ——— ——— ———	Diversion ——— ——— ——— ——— ———
Road = = = = =	Spring ⊕ →
Existing fence — x — x —	Wet spot ⊕
Planned fence — / — / —	Building ■
Stream ~ ~ ~ ~ ~	Drain pipe — ○ — ○ —
Open ditch — ···· — ···· — ···· —	Waterway < — = — = — = —

Swift Energy Co - Hardin #1 is located in brush over pasture. Topsoil will be stockpiled & replaced. Location & road approved by Mr & Mrs. Hardin.

All cuts 2:1 Slope or less.
Recommend pit liner 1/2" min. culverts at all natural drains.





DATE 5-19-84
WELL NO. Hardin #1
API NO. 47 -001-2075

State of West Virginia
Department of Mines
Oil and Gas Division

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Swift Energy Company
Address P. O. Box 2201, Clarksburg, WV
Telephone 622-7701

DESIGNATED AGENT Tim Bennett
Address 737 Karl St., Weston, WV 26452
Telephone 269-3215

LANDOWNER Thos. Hardin
Revegetation to be carried out by _____

SOIL CONS. DISTRICT _____
OPERATOR _____ (Agent)

This plan has been reviewed by Tygart Valley SCD. All corrections and additions become a part of this plan: 5/22/84 (Date)
Jean Greene (SCD Agent) **RECEIVED** MAY 23 1984

ACCESS ROAD

OIL & GAS DIVISION
LOCATION
DEPT. OF MINES

Structure Culverts (A)
2-5% 500'-300' 11-15% 200'-100'
Spacing 6-10% 300'-200' 16-20% 100'
Page Ref. Manual 2-7

Structure Diversion Ditch (C)
Material Soil-(2% Max. Slope)
Page Ref. Manual 2-12

Structure Drainage Ditch (B)
Spacing To Be Constructed Along Road
Page Ref. Manual 2-12

Structure Drilling Pit
Material Soil
Page Ref. Manual _____

Structure Cross Drains (C)
Spacing 2%-250' 10%-80' 5%-135' 15%-60'
Page Ref. Manual 2-4

Structure Sediment Trap
Material Soil
Page Ref. Manual _____

All structures should be inspected regularly and repaired if necessary. All commercial timber is to be cut and stacked and all brush and small timber to be cut and removed from the site before dirt work begins.

REVEGETATION

Treatment Area I

Treatment Area II (Meadowland)

Lime 3 Tons/acre
or correct to pH 6.5
Fertilizer 600 lbs/acre
(10-20-20 or equivalent)
Mulch Hay 2 Tons/acre
Seed* Ky-31 Tall Fescue 30 lbs/acre
Birdsfoot Trefoil 10 lbs/acre
Domestic Rvegrass 10 lbs/acre

Lime 3 Tons/acre
or correct to pH 6.5
Fertilizer 600 lbs/acre
(10-20-20 or equivalent)
Mulch Hay 2 Tons/acre
Seed* Ky. Bluegrass 20 lbs/acre
White Clover 2 lbs/acre
Redtop 5 lbs/acre

*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

NOTES: Please request landowners' cooperation to protect new seedling for one growing season. Attach separate sheets as necessary for comments.

PLAN PREPARED BY Tim Bennett
ADDRESS SWIFT ENERGY COMPANY
P. O. Box 2201
Clarksburg, WV 26301
PHONE NO. 622-7701

AFFIDAVIT OF PERSONAL SERVICE ON SURFACE OWNER

STATE OF W. Va.,
COUNTY OF Barbour:

The undersigned, being first duly sworn, says that the undersigned served a true and complete copy of all sides of---

- (1) Notice on Form IV2A
 - (2) Application on Form IV2B
 - (3) Plat showing well location on Form IV6
 - (4) Construction and Reclamation Plan on Form IV9--
- with respect to operator's Well No. Hardin #1 located in Cove District, Barbour County, West Virginia, upon the person or organization named--

--by delivering the same in Barbour County, State of WV on the ___ day of _____, 19__ in the manner specified below.

[COMPLETE THE APPROPRIATE SECTION]

For an individual:

[X] Handing it to him / her / or, because he / she / refused to take it when I offered it, by leaving it in his / her / presence.

[] Handing it to a member of his or her family above the age of 16 years named _____ who resides at the usual place of abode of the person to be served, and asking the family member to give it to the person to be served as soon as possible.

For a partnership:

[] Handing it to _____, a partner of the partnership or, because the partner refused to take it when I handed it over, by leaving it in the presence of the partner.

For a limited partnership:

[] Handing it to the general partner, named _____, or, because the general partner refused to take it when I tried to hand it over, by leaving it in the presence of the general partner.

For a corporation:

[] Handing it to the corporation's employee / officer / director / attorney in fact / named _____.

Tim Beavis

(Signature of person executing service)

Taken, subscribed and sworn before me this 24 day of May, 1984.
My commission expires 6/15/89.

Diane G. Swiger

Notary Public
Diane G. Swiger

(AFFIX SEAL IF NOTARIZED IF OUTSIDE THE STATE)

10-17-1941
C. C. G. Co. - 71
10-17-1941
C. C. G. Co. - 71

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

Haverty - 5264'-5280', 20,000 SCF N₂, 10,000# 80-100 SD, 32,500# 20-40 SD, 500 GA, 463BGW
2nd/3rd Elk 4436'-4440', 4644'-4648', 20,000 SCF N₂, 10,000# 80-100 SD, 32,500# 20-40 SD,
 500 GA, 454 BGW.
Benson & Alexander - 4027'-4030': 4222'-4235', 20,000 SCF N₂, 10,000# 80-100 SD, 32,500#
 20-40 SD, 500 GA, 447 BGW.

DEPT. OF MINES
 DIVISION

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Clay			0	15	
Sand & Shale			15	43	
Coal			43	49	
Sand & Shale			49	411	
Coal			411	416	
Sand & Shale			416	840	
Sand and Shale and Red Rock			840	1277	
Little Lime			1277	1283	
Percil Cave			1283	1292	
Big Lime			1292	1391	
Sand & Shale			1391	1550	
Shale w/Sand Stages			1550	1680	
Sand w/Shale Stages			1680	1840	
Shale w/Sand Stages			1840	2350	
Sand w/Shale Stages			2350	2610	
Shale w/Sand Stages			2610	2870	
Sand w/Shale Stages			2870	3180	
Shale w/Sand Stages			3180	4020	
Sand w/Shale Stages			4020	4120	
Shale w/Sand Stages			4120	5999'	
				T.D.	

(Attach separate sheets as necessary)

SWIFT ENERGY COMPANY
 Well Operator
 By: James M. Kitterman James M. Kitterman,
 V.P.-Drilling & Production
 Date: September 5, 1984

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."



IV-35
(Rev 8-81)

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OIL & GAS DIVISION
DEPT. OF MINES

State of West Virginia
Department of Mines
Oil and Gas Division

Date September 5, 1984
Operator's
Well No. T. Hardin No. 1
Farm _____
API No. 47 - 001 - 2075

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

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

LOCATION: Elevation: 1510' Watershed Raccoon Creek
District: Cove County Barbour Quadrangle Nestorville 7.5 min.

COMPANY Swift Energy Company
ADDRESS P.O. Box 2201, Clarksburg, WV 26301
DESIGNATED AGENT Tim Bennett
ADDRESS P.O. Box 2201, Clarksburg, WV 26301
SURFACE OWNER Thomas H. Hardin
ADDRESS Kasson, WV 26380
MINERAL RIGHTS OWNER same
ADDRESS _____
OIL AND GAS INSPECTOR FOR THIS WORK Phillip Tracy
Forest Fest. # 24 ADDRESS Elkins, WV 26241
PERMIT ISSUED 05-31-84
DRILLING COMMENCED 06-12-84
DRILLING COMPLETED 06-17-84
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"			
9 5/8			
8 5/8		858'	240 sx
7			
5 1/2			
4 1/2		5400'	640 sx
3			
2 3/8"		5214'	
Liners used			

GEOLOGICAL TARGET FORMATION Haverty Depth 5950 feet
Depth of completed well 5995 feet Rotary XX / Cable Tools _____
Water strata depth: Fresh 110 feet; Salt _____ feet
Coal seam depths: 43-49'; 411-416' Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation *Haverty/2nd Elk/3rd Elk Pay zone depth 4800' feet
Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
Final open flow 103* Mcf/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure 1275 psig (surface measurement) after 12 hours shut in
(If applicable due to multiple completion--)
Second producing formation *Benson/Alexander Pay zone depth 4100' 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

*Gas comingled from formations.

(Continue on reverse side)

BAR 2075

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION

RECEIVED
JUN 13 1984

INSPECTOR'S WELL REPORT
OIL & GAS DIVISION
DEPT. OF MINES

2075
Permit No. 0012075

Oil or Gas Well _____
(KIND)

Company	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Swift Energy				
Address				
Farm Tom Hardin	16			Kind of Packer
Well No. #1	13			
District _____ County _____	10			Size of
Drilling commenced	8 1/4			
Drilling completed _____ Total depth _____	6 5/8			Depth set
Date shot _____ Depth of shot _____	5 3/16			
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. top
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. bottom
Volume _____ Cu. Ft.	Liners Used			Perf. top
Rock pressure _____ lbs. _____ hrs.				Perf. bottom
Oil _____ bbls., 1st 24 hrs.				
Fresh water _____ feet _____ feet				
Salt water _____ feet _____ feet				

CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____

NAME OF SERVICE COMPANY _____

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

Drillers' Names Century Petroleum Rig #1 Rigging up

Remarks: Suggested they hold up till "walk in" permit got on location. -

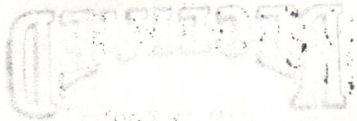
6/11/84

DATE

Quell H. Bell - 501

DISTRICT WELL INSPECTOR

Form 26
2/16/82



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION
INSPECTOR'S PLUGGING REPORT

Permit No. _____ Well No. _____

COMPANY _____ ADDRESS _____

FARM _____ DISTRICT _____ COUNTY _____

Filling Material Used _____

Liner			Amount			Packer			Location		
PLUGS USED AND DEPTH PLACED			BRIDGES			CASING AND TUBING					
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION			RECOVERED	SIZE	LOST			

Drillers' Names _____

Remarks: *Good on bottom. Put in packer up 9' and set it. Then back up the hole with cement. Put in packer.*

_____ I hereby certify I visited the above well on this date.

DATE _____

DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION

RECEIVED

JUN 13 1984

INSPECTOR'S WELL REPORT OIL & GAS DIVISION
DEPT. OF MINES

Permit No. 001-2075

Oil or Gas Well _____
(KIND)

Company Address Farm Well No. District County Drilling commenced Drilling completed Date shot Initial open flow Open flow after tubing Volume Rock pressure Oil Fresh water Salt water	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
	Size			Kind of Packer Size of Depth set Perf. top Perf. bottom Perf. top Perf. bottom
<u>Swift</u>				
	16			
<u>HARDEN</u>	13			
<u>#1</u>	10			
<u>001</u>	8 1/4			
	6 5/8			
	5 3/16			
	3			
	2			
	Liners Used			
	CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____			
	NAME OF SERVICE COMPANY _____			
	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names Century P - Rig #1

Remarks: Drilling in progress

6/13/84
DATE

Beall - 501
DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION
INSPECTOR'S PLUGGING REPORT

Permit No. _____ Well No. _____

COMPANY _____ ADDRESS _____

FARM _____ DISTRICT _____ COUNTY _____

Filling Material Used _____

Liner		Location		Amount	Packer	Location		
PLUGS USED AND DEPTH PLACED			BRIDGES		CASING AND TUBING			
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION		RECOVERED	SIZE	LOST	

Drillers' Names _____

Remarks: _____

_____ I hereby certify I visited the above well on this date.
DATE

DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION

RECEIVED
JUN 18 1984

INSPECTOR'S WELL REPORT DEPT. OF MINES

Permit No. 001-2075

Oil or Gas Well _____
(KIND)

Company	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
<u>Swift -</u>				
Address _____				
Farm <u>Hardin</u>				
Well No. <u>#1</u>				
District _____ County <u>BARB</u>	<u>8 5/8</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Drilling commenced _____	6 5/8			Depth set _____
Drilling completed _____ Total depth _____	5 3/16			Perf. top _____
Date shot _____ Depth of shot _____	3			Perf. bottom _____
Initial open flow _____ /10ths Water in _____ Inch	2			Perf. top _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	Liners Used _____			Perf. bottom _____
Volume _____ Cu. Ft.	CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____			
Rock pressure _____ lbs. _____ hrs.	NAME OF SERVICE COMPANY _____			
Oil _____ bbls., 1st 24 hrs.	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
Fresh water _____ feet _____ feet	_____ FEET _____ INCHES _____ FEET _____ INCHES			
Salt water _____ feet _____ feet	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names Century #1 Roy

Remarks: Deg @ 1230 -

6/14/84
DATE

Beall-501
DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION
INSPECTOR'S PLUGGING REPORT

Permit No. _____

Well No. _____

COMPANY _____ ADDRESS _____

FARM _____ DISTRICT _____ COUNTY _____

Filling Material Used _____

Liner			Location	Amount	Packer	Location		
PLUGS USED AND DEPTH PLACED			BRIDGES		CASING AND TUBING			
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION		RECOVERED	SIZE	LOST	

Drillers' Names _____

Remarks: _____

DATE I hereby certify I visited the above well on this date.

DISTRICT WELL INSPECTOR

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION

RECEIVED

JUL 19 1984

OIL & GAS DIVISION
DEPT. OF MINES

INSPECTOR'S WELL REPORT

Permit No. 001-2075

Oil or Gas Well _____
(KIND)

Company <u>Swift</u>	CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Address _____	Size			
Farm <u>TOM HARDIN</u>	16			Kind of Packer _____
Well No. <u>#1</u>	13			
District _____ County <u>001</u>	10			Size of _____
Drilling commenced <u>6/11/84</u>	8 ⁵ / ₈	858'	858'	
Drilling completed <u>6/18</u> Total depth <u>5999</u>	6%			Depth set _____
Date shot _____ Depth of shot _____	5 3/16			
Initial open flow _____ /10ths Water in _____ Inch	3			Perf. top _____
Open flow after tubing _____ /10ths Merc. in _____ Inch	2			Perf. bottom _____
Volume _____ Cu. Ft.	Liners Used			Perf. top _____
Rock pressure _____ lbs. _____ hrs.				Perf. bottom _____
Oil _____ bbls., 1st 24 hrs.	CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____			
Fresh water _____ feet _____ feet	NAME OF SERVICE COMPANY _____			
Salt water _____ feet _____ feet	COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			
	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Drillers' Names _____

Remarks: Checked Complaint on Road to Farmer's House

7/17/84
DATE

R.G. Best (501)
DISTRICT WELL INSPECTOR

Form 26
2/16/82

**STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION
INSPECTOR'S PLUGGING REPORT**

Permit No. _____

Well No. _____

COMPANY _____ ADDRESS _____

FARM _____ DISTRICT _____ COUNTY _____

Filling Material Used _____

Liner		Location		Amount	Packer	Location		
PLUGS USED AND DEPTH PLACED				BRIDGES		CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD		CONSTRUCTION-LOCATION		RECOVERED	SIZE	LOST

Drillers' Names _____

Remarks: _____

_____ I hereby certify I visited the above well on this date.
DATE

DISTRICT WELL INSPECTOR

**APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL
PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA)**

RECEIVED
DEC 28 1984

OIL & GAS DIV.
DEPT. OF MINES
037373
Serial Code

1.0 API well number (If not assigned, leave blank. 14 digits.)	47 - 001 - 2075 -				
2.0 Type of determination being sought (Use the codes found on the front of this form.)	107 Section of NGPA	3 Category			
3.0 Depth of the deepest completion location. (Only needed if sections 103 or 107 in 2.0 above.)	5280 feet				
4.0 Name, address and code number of applicant. (35 letters per line maximum. If code number not available, leave blank.)	Swift Energy Company Name 652 E. North Belt, #200 Street Houston TX 77060 City State Zip Code				
5.0 Location of this well. (Complete (a) or (b)) (a) For oil and gas wells (35 letters maximum for field name.) (b) For OCS wells	Cove District Field Name Barbour WV County State				
	Area Name		Block Number		
	Date of Lease Mo. Day Yr.		OCS Lease Number		
(a) Name and identification number of this well. (35 letters and digits maximum.)	T. Hardin No. 1				
(b) If code 4 or 5 in 2.0 above, name of the reservoir. (35 letters maximum.)					
6.0 (a) Name and code number of the purchaser. (35 letters and digits maximum. If code number not available, leave blank.)	Tennessee Gas Pipeline Company Name Buyer Code				
(b) Date of the contract	0 9 0 6 8 4 Mo. Day Yr.				
(c) Estimated total annual production from the well	25 Million Cubic Feet				
		(a) Base Price	(b) Tax	(c) All Other Prices (Indicate (+) or (-).)	(d) Total of (a), (b) and (c)
7.0 Contract price. (As of filing date. Complete to 3 decimal places.)	S/MMBTU	5 . 9 0 2	- 0 . 4 7 2	+ 0 . 4 7 2	5 . 9 0 2
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU	5 . 9 0 2	- 0 . 4 7 2	+ 0 . 4 7 2	5 . 9 0 2
9.0 Person responsible for this application:	Name: <u>Virgil N. Swift</u> Title: <u>Executive V.P.</u> Signature: <u><i>Virgil N. Swift</i></u> Date Application is Completed: <u>12-12-84</u> Phone Number: <u>713/445-0844</u>				

Agency Use Only
Date Received by Juris. Agency
DEC 28 1984
Date Received by FERC

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES OIL AND GAS DIVISION

DATE 12-12-84

OPERATOR'S
WELL NO. T. Hardin No

API WELL NO.
47 - 001 - 207
STATE COUNTY PERM

WELL CLASSIFICATION FORM

HIGH COST GAS WELL - DEVONIAN SHALE

NGPA SECTION 107

WELL OPERATOR Swift Energy Company
ADDRESS 652 E. North Belt, #200
Houston, TX 77060

DESIGNATED AGENT Tim Bennett
ADDRESS P.O. Box 2201
Clarksburg, WV 26301

GAS PURCHASER Tennessee Gas Pipeline Co.
ADDRESS 5646 U.S. Steel Bldg., 600 Grant St.
Pittsburgh, PA 15219

LOCATION Elevation 1510'
Watershed Raccoon Creek
Dist. Cove County Barbour Quad Nesville 7.5

Date of Contract 09-06-84

Gas Purchase Contract No. 1540
Meter Chart Code _____

Date Surface Drilling Began: 6-12-84

* * * * *

Indicate the bottom hole pressure of the well and explain how this was calculated:

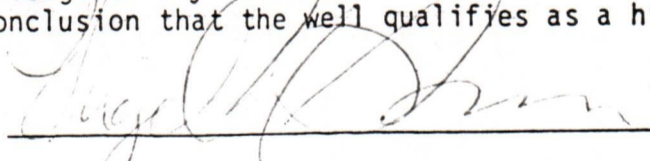
$$BHP = P_1 + P_1 (e^{(GL/53.34T)} - 1)$$

G = .7
L = 5280'
T = 583°R
P₁ = 1290 psia

BHP = 1453 psia

AFFIDAVIT

I, Virgil N. Swift, having been first sworn according to law, state that I have calculated the percentage of footage of the producing interval which is not Devonian Shale as indicated by a Gamma Ray index of less than 0.7 if Gamma Ray log described in subparagraph (3)(i) of (3)(ii)(A) has been filed, or as indicated by report in subparagraph (3)(ii)(B); I have demonstrated that the percentage of potentially disqualifying non-shale footage is equal to or less than five(5) percent of the gross Devonian age interval; and I have no knowledge of any information not described in the application which is consistant with a conclusion that the well qualifies as a high-cast natural gas well.

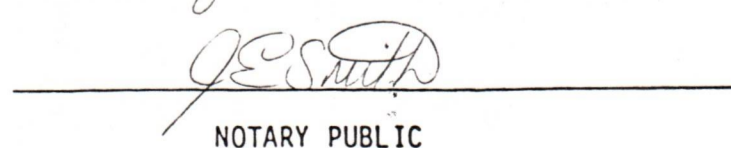


STATE OF WEST VIRGINIA TEXAS

COUNTY OF HARRIS, TO-WIT:

I, Virgil N. Swift, a Notary Public in and for the state and county aforesaid do certify that Virgil N. Swift, whose name is signed to writing above, bearing date the 12th day of December, 19, 84, has acknowledged the same before me in my county aforesaid.

Given under my hand and official seal this 12th day of December, 19, 84.
My term of office expires on the 14th day of August, 19, 88.


NOTARY PUBLIC

DEVONIAN SHALE GAMMA RAY LOG ANALYSIS
APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL
PRICE UNDER THE NATURAL GAS POLICY ACT

Operator: Swift Energy Co. Agent: Tim Bennett

Type Determination being sought - 107 (Devonian Shale)

API Well No.: 47-001-2075 Well Name: T. Hardin No. 1

West Virginia Office of Oil and Gas County: Barbour
References: SJA File No.

Vol. Page Line

I. NOTE: A Gamma Ray Log has been marked with the (a) Shale Base Line, (b) a line representing 0.7 x (Shale Base Line), (c) intervals with Gamma Ray units less than 0.7 x (Shale Base Line) and that log is included with this analysis.

II. Gamma Ray elevation indices:

A. Shale Base Line (API Units)

1. GR Value at Base Line = 135 * API Units

2. Remarks:

Aug. Shale Base Line based on shale values across upper 130' of Devonian Section. Shale values range from minimum of 85 API @ 1827' to 170 API @ 1756'. Nine Shale stringers are less than 135 API and 7 Shale stringers exceed 135 API.

B. Gamma Ray Log Value at 0.7 x Value at Base Line

1. GR Value = 135 * API Units

2. Calculation: $\frac{0.7 \text{ (GR Value at Base Line)}}{0.7 \text{ (} \underline{135} \text{ *)} = \underline{94.5} \text{ API Units}$

III. Intervals with GR index less than 0.7 x (Value at Base Line):

Interval		Thickness of Interval	Feet of less than* 0.7 (Shale Base Line)
From**	To***	Feet	Feet
1706	2200	494	63
2200	3200	1000	78
3200	4200	1000	1
4200	5200	1000	10
5200	5974	774	0

Total Devonian Interval 4268

Total Less Than 0.7 (Shale Base) 152

% Less Than 0.7 (Shale Base Line) = $\frac{152}{4268} \times 100 = \underline{3.56\%}$

*Marked on log included with analysis.
**Top of Devonian Section Recorded on First Interval in this Column.
***Lesser of TD or Bottom of Devonian Section Recorded as last Interval in this Column.

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES, OIL AND GAS DIVISION **JAN 15 1985**

COVER SHEET, STATE APPLICATION FOR WELL CLASSIFICATION

Date: 12-12, 19 84
Applicant's Name: Swift Energy Company
Address: 652 E. North Belt, #200
Houston, TX 77060
Gas Purchaser Contract No. 1540
Date of Contract 09-06-84
(Month, day and year)

AGENCY USE ONLY *Der*
WELL DETERMINATION FILE NUMBER
841228 -107-001-2075
Use Above File Number on all
Communications Relating to This Well

First Purchaser: Tennessee Gas Pipeline Company
Address: 5646 U.S. Steel Bldg., 600 Grant Street
(Street or P.O. Box)
Pittsburgh PA 15219
(City) (State) (Zip Code)
FERC Seller Code 037373

Designated Agent: Tim Bennett
Address: P.O. Box 2201
Clarksburg, WV 26301

NAME AND TITLE OF PERSON TO WHOM QUESTIONS CONCERNING THIS APPLICATION SHALL BE ADDRESSED:

Name: Virgil N. Swift Executive V.P.
(Print) (Title)
Signature: *Virgil N. Swift*
Address: 652 E. North Belt, #200
(Street or P.O. Box)
Houston TX 77060
(City) (State) (Zip Code)
Telephone: (713) 445-0844
(Area Code) (Phone Number)

(Certificate of Proof of Service to Purchaser)

NGPA Category Applied For

NGPA SECTION/SUBSECTION

- 102 New Natural Gas
 - 102-2 2.5 Mile Test
 - 102-3 1000 Foot Deeper Test
 - 102-4 New Onshore Reservoir
- 103 New Onshore Production Well
 - 103 New Onshore Production Well
- 107 High Cost Natural Gas
 - 107-0 Deep (more than 15,000 feet)
 - 107-1 Geopressured Brine
 - 107-2 Coal Seams
 - XX 107-3 Devonian Shale
 - 107-5 Production enhancement
 - 107-6 New Tight Formation
 - 107-7 Recompletion Tight Formation

- 108 Stripper Well Natural Gas
 - 108- Stripper Well
 - 108-1 Seasonally Affected
 - 108-2 Enhanced Recovery
 - 108-3 Temporary Pressure Buildup

AGENCY USE ONLY
QUALIFIED

RECEIVED

DEC 28 1984

OIL & GAS DIV.
DEPT. OF MINES

Date Received

Determination Date

**APPLICATION FOR DETERMINATION OF THE MAXIMUM LAWFUL
PRICE UNDER THE NATURAL GAS POLICY ACT (NGPA)**

1.0 API well number (If not assigned, leave blank. 14 digits.)	47- 001 - 2075 -																					
2.0 Type of determination being sought (Use the codes found on the front of this form.)	102 <small>Section of NGPA</small>	2 <small>Category</small>	<div style="font-size: 2em; font-weight: bold; transform: rotate(-5deg); display: inline-block;">RECEIVED</div> DEC 28 1984 OIL & GAS DIV DEPT. OF MINES 037373 <small>Station Code</small>																			
3.0 Depth of the deepest completion location (Only needed if sections 103 or 107 in 2.0 above.)	5280 feet																					
4.0 Name, address and code number of applicant (35 letters per line maximum. If code number not available, leave blank.)	Swift Energy Company <small>Name</small> 652 E. North Belt, #200 <small>Street</small> Houston TX 77060 <small>City State Zip Code</small>																					
5.0 Location of this well (Complete (a) or (b).) (a) For onshore wells (35 letters maximum for field name) (b) For OCS wells	Cove District <small>Field Name</small> Barbour WV <small>County State</small> <small>Area Name</small> _____ <small>Block Number</small> _____ <div style="text-align: center;"> <small>Date of Lease</small> <table style="margin: auto;"> <tr> <td style="border: 1px solid black; width: 20px; height: 15px;"></td> <td style="border: 1px solid black; width: 20px; height: 15px;"></td> <td style="border: 1px solid black; width: 20px; height: 15px;"></td> <td style="border: 1px solid black; width: 20px; height: 15px;"></td> </tr> <tr> <td align="center"><small>Mo.</small></td> <td align="center"><small>Day</small></td> <td align="center"><small>Yr.</small></td> <td></td> </tr> </table> <small>OCS Lease Number</small> _____ </div>								<small>Mo.</small>	<small>Day</small>	<small>Yr.</small>											
<small>Mo.</small>	<small>Day</small>	<small>Yr.</small>																				
(a) Name and identification number of this well (35 letters and digits maximum)	T. Hardin No. 1																					
(b) If code 4 or 5 in 2.0 above, name of the reservoir (35 letters maximum)																						
6.0 (a) Name and code number of the purchaser (35 letters and digits maximum. If code number not available, leave blank.) (b) Date of the contract	Tennessee Gas Pipeline Company <small>Name</small> _____ <small>Buyer Code</small> _____ <div style="text-align: center;"> <table style="margin: auto;"> <tr> <td style="border: 1px solid black; width: 20px; height: 15px;"></td> <td style="border: 1px solid black; width: 20px; height: 15px;"></td> <td style="border: 1px solid black; width: 20px; height: 15px;"></td> <td style="border: 1px solid black; width: 20px; height: 15px;"></td> <td style="border: 1px solid black; width: 20px; height: 15px;"></td> <td style="border: 1px solid black; width: 20px; height: 15px;"></td> </tr> <tr> <td align="center">0</td> <td align="center">9</td> <td align="center">0</td> <td align="center">6</td> <td align="center">8</td> <td align="center">4</td> </tr> <tr> <td align="center"><small>Mo.</small></td> <td align="center"><small>Day</small></td> <td align="center"><small>Yr.</small></td> <td></td> <td></td> <td></td> </tr> </table> </div>										0	9	0	6	8	4	<small>Mo.</small>	<small>Day</small>	<small>Yr.</small>			
0	9	0	6	8	4																	
<small>Mo.</small>	<small>Day</small>	<small>Yr.</small>																				
(a) Estimated total annual production from the well	25 Million Cubic Feet																					
	(a) Base Price	(b) Tax	(c) All Other Prices (Indicate (+) or (-).)	(d) Total of (a), (b) and (c)																		
7.0 Contract price (As of filing date. Complete to 3 decimal places.)	S/MMBTU 3.845	- 0.307	+ 0.307	3.845																		
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	S/MMBTU 3.845	- 0.307	+ 0.307	3.845																		
9.0 Person responsible for this application:	Virgil N. Swift <small>Name</small> _____ <small>Title</small> Executive V.P. <small>Signature</small> _____ 12-12-84 <small>Date Application is Completed</small> _____ 713/445-0844 <small>Phone Number</small>																					

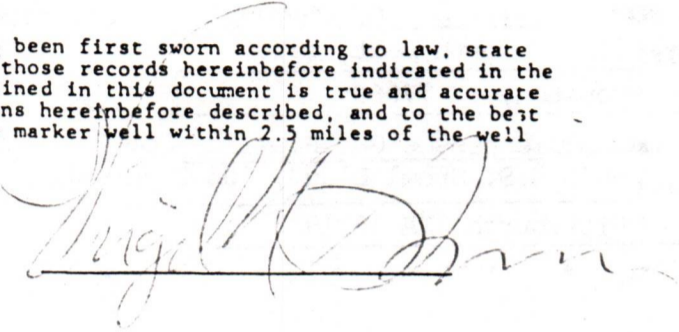
FERC-121 (8-82)

<small>Agency Use Only</small>
Date Received by Juris. Agency <div style="font-size: 1.5em; font-weight: bold;">DEC 28 1984</div> Date Received by FERC

Are you aware of any other information which would tend to be inconsistent with the information specified above? Yes _____ No XX. If yes, indicate the type and source of the information.

AFFIDAVIT

I, Virgil N. Swift, having been first sworn according to law, state that I have caused to be made a diligent search of those records hereinbefore indicated in the manner herein described, that the information contained in this document is true and accurate and that on the basis of the records and examinations hereinbefore described, and to the best of my information, knowledge and belief there is no marker well within 2.5 miles of the well for which this determination is sought.



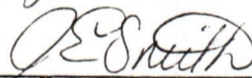
STATE OF ~~WEST VIRGINIA~~, Texas
COUNTY OF Harris, TO WIT:

I, J. E. Smith, a Notary Public in and for the state and county aforesaid, do certify that Virgil N. Swift, whose name is signed to the writing above, bearing date the 12th day of December, 1984 has acknowledged the same before me, in my county aforesaid.

Given under my hand and official seal this 12th day of December, 1984.

My term of office expires on the 14th day of August, 1988

[NOTARIAL SEAL]


Notary Public

* * * * *

BOTTOM HOLE PRESSURE DATA

Indicate the bottom hole pressure of the well and explain how this was calculated.

$$BHP = P_1 + P_1 (e^{(GL/53.34T)} - 1)$$

G = .7
L = 5280'
T = 583°R
P₁ = 1290 psia

BHP = 1453 psia

Date 12-12, 1984

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION

Operator's Well No. T. Hardin No. 1

API Well No. 47 - 001 - 2075
State County Permit

WELL CLASSIFICATION FORM

WELLS DRILLED MORE THAN 2.5 MILES FROM A MARKER WELL
NGPA Section 102(c)(1)(B)(i) Category 2

DESIGNATED AGENT Tim Bennett

ADDRESS P.O. Box 2201
Clarksburg, WV 26301

WELL OPERATOR Swift Energy Company
ADDRESS 652 E. North Belt, #200
Houston, TX 77060

LOCATION: Elevation 1510'

Watershed Raccoon Creek

GAS PURCHASER Tennessee Gas Pipeline Co.
ADDRESS 5646 U.S. Steel Bldg., 600 Grant St.
Pittsburgh, PA 15219

Dist. Cove County Barbour Quad. Nestorville 7.5 min.

Gas Purchase Contract No. 1540

Meter Chart Code _____

Date of Contract 09-06-84

* * * * *

List all records reasonably available to you which contain information relevant to a determination of eligibility (including production records, B&O Tax Records and royalty payment records) and indicate the location of such records:

Inquiry made to pipeline company to determine no pipeline available prior to 4/20/77.

Describe the search made of any records listed above:

- Dates well drilled
- Depth of wells
- Location of wells
- Production or best information

Are there any records not reasonably available to you which may contain information relevant to a determination of eligibility? Yes _____ No XX. If yes, identify such records and indicate their location, if known:

STATE OF WEST VIRGINIA

DEPARTMENT OF MINES, OIL AND GAS DIVISION

JAN 15 1985

COVER SHEET, STATE APPLICATION FOR WELL CLASSIFICATION

Date: 12-12, 19 84

Applicant's Name: Swift Energy Company

Address: 652 E. North Belt, #200
Houston, TX 77060

Gas Purchaser Contract No. 1540

Date of Contract 09-06-84
(Month, day and year)

First Purchaser: Tennessee Gas Pipeline Co.

Address: 5646 U.S. Steel Bldg., 600 Grant Street
(Street or P.O. Box)
Pittsburgh PA 15219
(City) (State) (Zip Code)

FERC Seller Code 037373

NAME AND TITLE OF PERSON TO WHOM QUESTIONS CONCERNING THIS APPLICATION SHALL BE ADDRESSED:

Name: Virgil N. Swift Executive V.P.
(Print) (Title)

Signature: *Virgil N. Swift*

Address: 652 E. North Belt, #200
(Street or P.O. Box)
Houston TX 77060
(City) (State) (Zip Code)

Telephone: { 713 } 445-0844
(Area Code) (Phone Number)

(Certificate of Proof of Service to Purchaser)

NGPA Category Applied For

NGPA SECTION/SUBSECTION

- 102 New Natural Gas
 - 102-2 2.5 Mile Test
 - 102-3 1000 Foot Deeper Test
 - 102-4 New Onshore Reservoir
- 103 New Onshore Production Well
 - 103 New Onshore Production Well
- 107 High Cost Natural Gas
 - 107-0 Deep (more than 15,000 feet)
 - 107-1 Geopressured Brine
 - 107-2 Coal Seams
 - 107-3 Devonian Shale
 - 107-5 Production enhancement
 - 107-6 New Tight Formation
 - 107-7 Recompletion Tight Formation

- 108 Stripper Well Natural Gas
 - 108- Stripper Well
 - 108-1 Seasonally Affected
 - 108-2 Enhanced Recovery
 - 108-3 Temporary Pressure Buildup

AGENCY USE ONLY

WELL DETERMINATION FILE NUMBER

841228-102-001-2075

Use Above File Number on all
Communications Relating to This Well

Designated Agent: Tim Bennett

Address: P.O. Box 2201

Clarksburg, WV 26301

FERC Buyer Code _____

AGENCY USE ONLY

QUALIFIED

RECEIVED

DEC 28 1984

OIL & GAS DIV.
DEPT. OF MINES

Date Received _____

Determination Date _____



Hardin (2075)

SWIFT ENERGY COMPANY

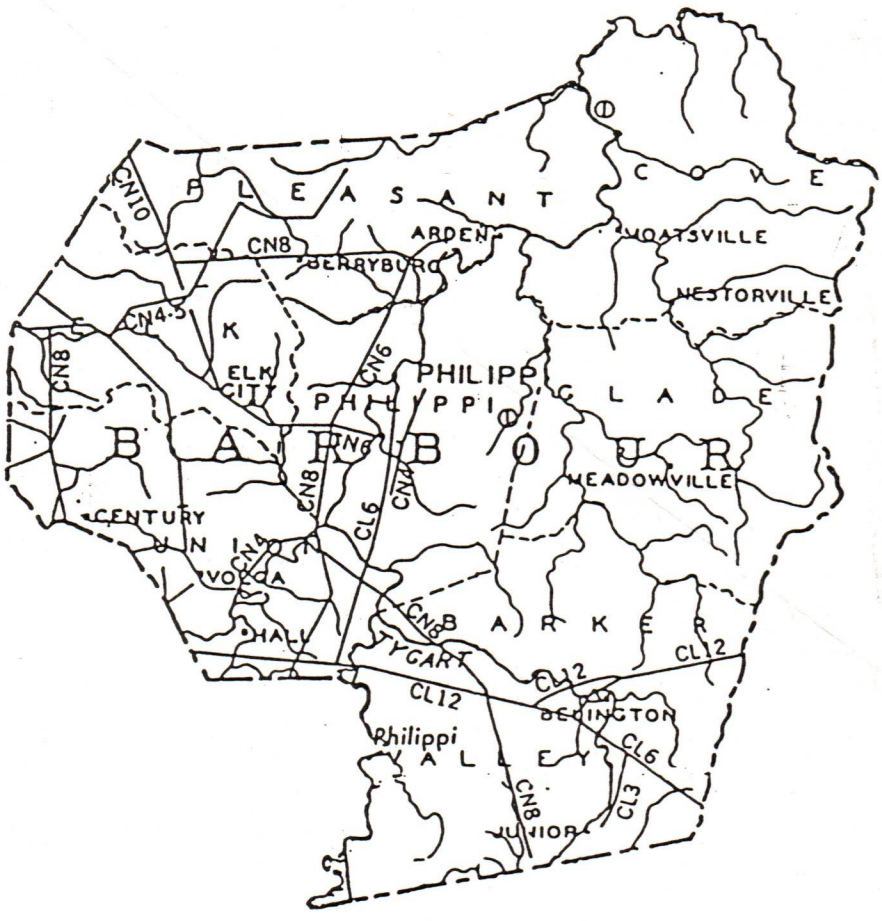
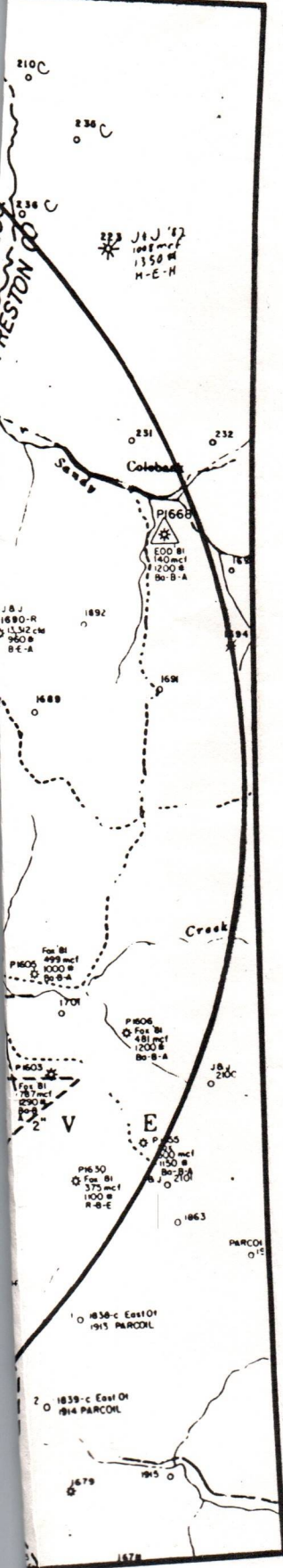
SECTION 102, WEST VIRGINIA


DEEPEST COMPLETION LOCATION / MARKER WELLS

COUNTY	PERMIT NO.	DRILLING DATE	PRODUCING FORMATION / TD
Barb Co.	Covey Pleasant D (c) 1137	'79	Sp / 5239'
	(c) 1547	'81	Ba, B, E / 5472'
	(c) 1548	'81	Ba, B, E / 5410'
	(c) 1550	'81	5 th , B, Sp, Ba, B, R, E / 5511'
	(c) 1551	'81	Ba, R, B / 5676'
	(c) 1564	'81	A / 4609'
	(c) P1603	'81	Ba, B, A / 5596'
	(c) P1604	'81	Ba, B, A / 5560'
	(c) P1605	'81	Ba, B, A / 5709'
	(c) P1606	'81	Ba, B, A / 5564'
	(c) P1630	'81	R, B, E / 5775'
	(c) P1655	'82	Ba, B, A / 5756'
	(c) 1663	'82	B, A / 5776'
	(c) P1668	'81	Ba, B, A / 5550'
	(c) 1674-P	'82	B, E / 5709'
	(c) 1676	'82	5 th , B / 5531'
	(c) 1690-R.	'83	B, E, A / 5981'
	(c) 1694	'82	Plugged & Abandoned /
	(c) 1700	'82	B, R, Ba, E / 5751'
	(c) 1771	'82	Ba, R, B, E / 5724'
	(c) 1772	'83	Ba, B, E / 5739'
	(c) 1784	'83	B, R, E / 5753'
	(c) 1786	'84	Ba, R, B, E / 5862'
	(c) 1792	'83	Ba, R, B, E / 5920'
	(c) 1793	'82	Ba, B, E / 5560'
	(c) 1795	'82	Ba, R, B, E / 5707'
	(c) 1796	'83	Ba, B, E / 5710'
	(c) 1802		Ba, R, B, E /
	(c) 1803		Ba, R, B, E /
	(c) 1805	'83	Ba, R, B, A / 5824'
	(c) 1940		/
	(c) 1941	'83	Sp, B, A / 4505'
	(c) 1942	'83	Sp, Ba, B, A / 4400'
	(c) 1955	'83	Sp, Ba, A / 4503'
	(c) 1956	'83	Sp, Ba, R, B / 4550'
	(c) 1962	'83	Ba, R, B, A / 5625'
	(c) 1972	'84	B, E / 5995'
	(c) 1988	'83	Ba, R, B, E / 5692'
	(c) 2092		4 th /

SANDS

- A - Alexander
- B - Benson
- E - Elk
- H - Haverty
- R - Riley
- Ba - Balltown
- By - Bayard
- B.I. - Big Injun
- Sp - Speechley



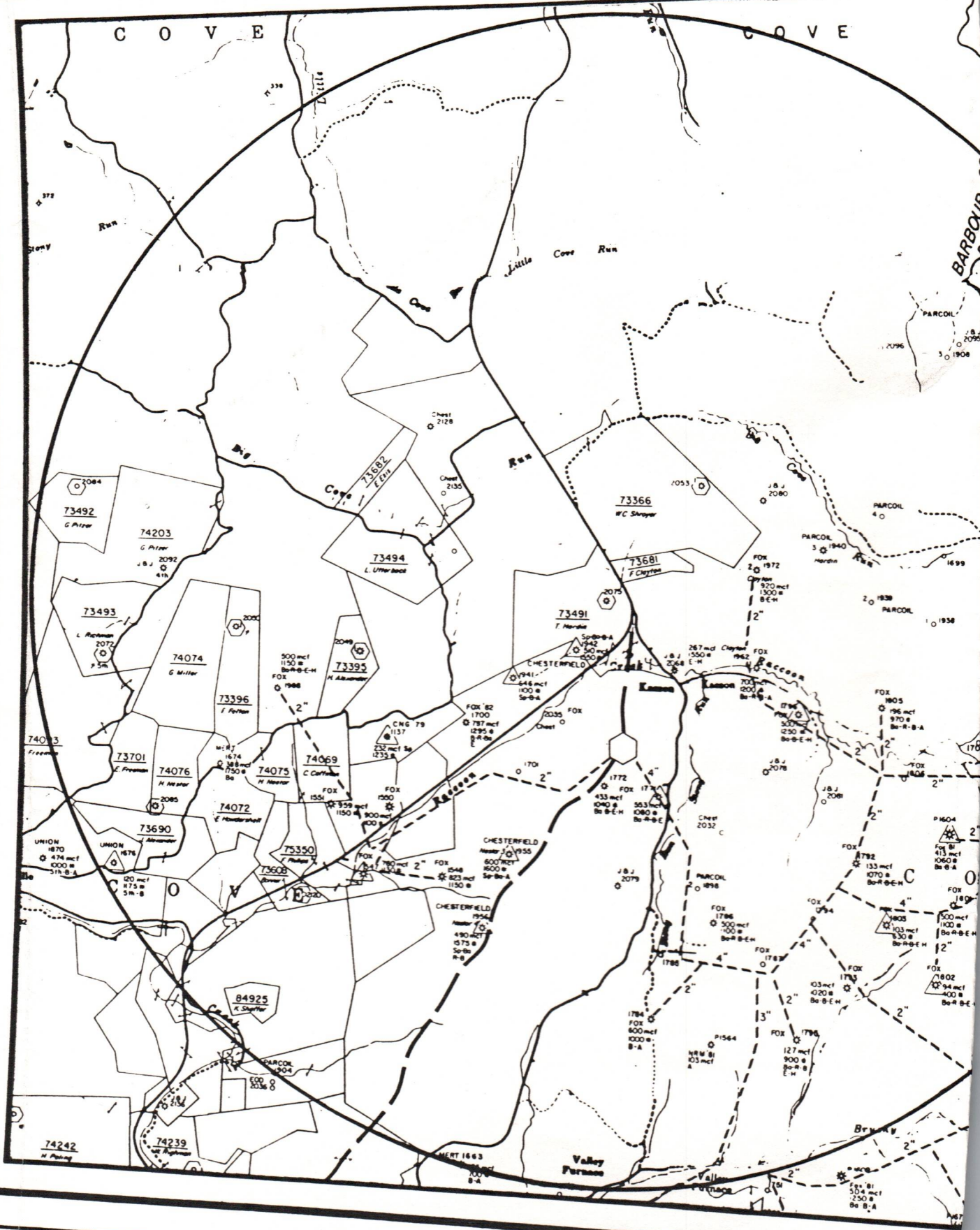
 **SWIFT ENERGY COMPANY**

SECTION 102 FILING
 COVE DISTRICT, BARBOUR CO., W.VA.

HARDIN
 (47-001-2075)

0 3000 6000
 FEET

C O V E C O V E



74242
H. P. King

74239
H. P. King

Valley Forge

BARBOUR