

Ref. 3-30-83

3970'

LATITUDE 38° 07' 30"

LONGITUDE 81° 27' 30"

9760'

Cedar Coal Co. Co-ordinates
Loc. No. 1
N 400171.31
E 1864014.30

Shank Land Co.

R.R. Spike in
Creek Bottom
Iron pin

N 76° 28' E, 219.98'
S 25° 48' E, 471.40'

N 28° 42' E
3101.19'
S 39° 06' W
3025.07'

Shank Land Co.

Loc. No. 1

Location of Pit Grade

Coal Fork → 710' to
nearest lease line

L.M. LaFollette III et al
1003 Ac. Tract
Lease No. 15843

15'

LoFollette, Robson &
Prichard

Shank Land Co.

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 2000'
MINIMUM DEGREE OF
ACCURACY 1 in 13590
PROVEN SOURCE OF
ELEVATION Cedar Coal Co. control
point, Iron Pin, Elev 1117.89

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 REGU-
LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
MENT OF MINES.
(SIGNED) John H. Burkett
R.P.E. 1442 L.L.S. _____

PLACE SEAL HERE

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



DATE March 30, 19 83
OPERATOR'S WELL NO. 1 - Ser #094851
API WELL NO. _____
47 - 039 - 3948-Frac.
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

FRAC CANCELLED

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
LOCATION: ELEVATION 844.1 WATER SHED Laurel Fork of Coal Fork of Cabin Creek
DISTRICT Cabin Creek COUNTY Kanawha
QUADRANGLE Eskdale
SURFACE OWNER L.M. LaFollette III et al ACREAGE 1003
OIL & GAS ROYALTY OWNER L.M. LaFollette, III et al LEASE ACREAGE 1003
LEASE NO. 15843
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW
FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

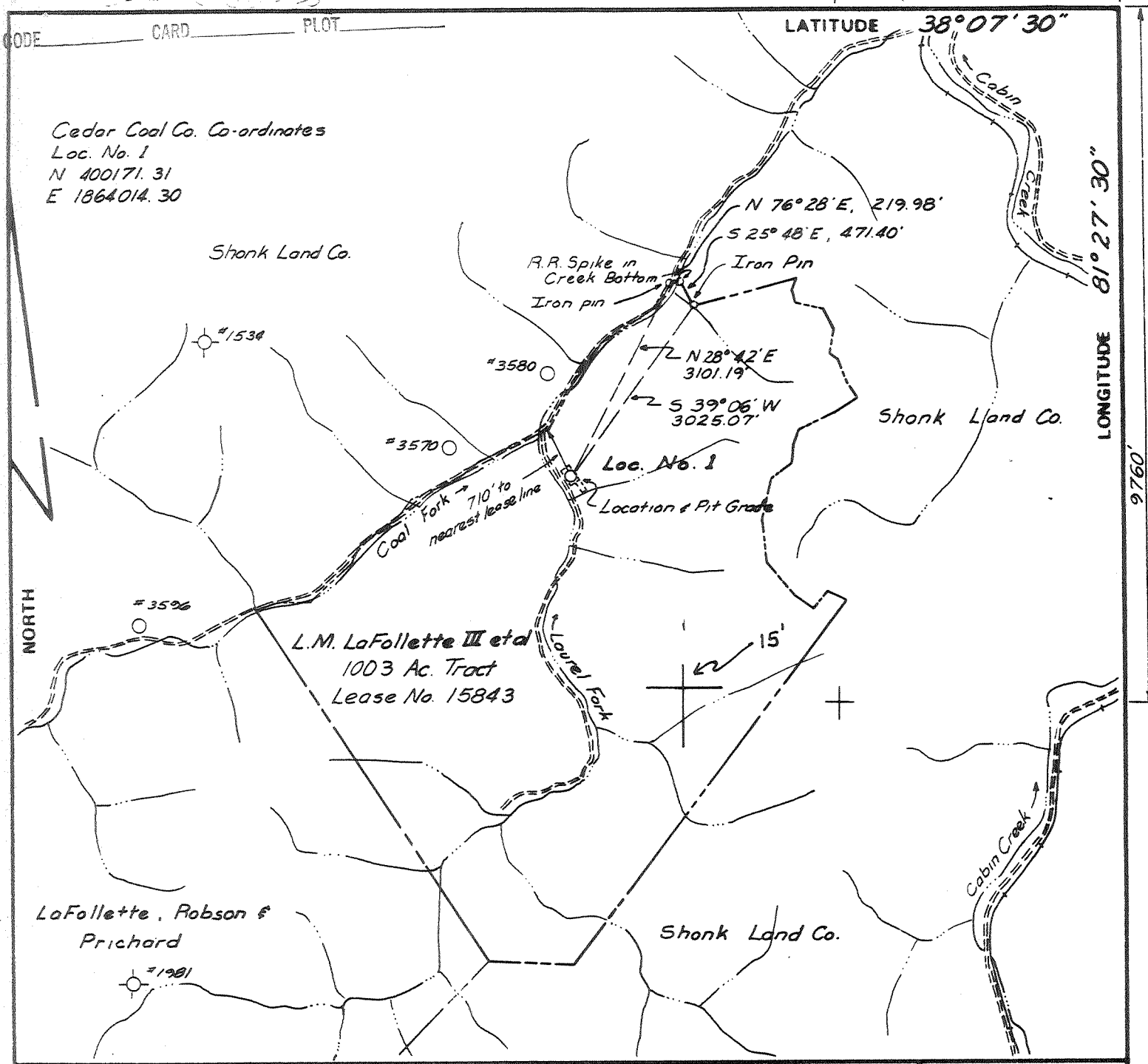
PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
TARGET FORMATION Onondaga Lime ESTIMATED DEPTH 5610
WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett
ADDRESS P.O. Box 391 Ashland Ky 41114 ADDRESS P.O. Box 156 Brenton WVa. 24818

H. T. HALL

Deersville

MAR 09 1987

KAN. 3948



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 in 13590
 PROVEN SOURCE OF ELEVATION Cedar Coal Co. control point, Iron Pin, Elev 1117.89

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) John H. Burkett
 R.P.E. 1442 L.L.S. _____

PLACE SEAL HERE

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



DATE March 30 19 83
 OPERATOR'S WELL NO. 1 - Ser #094851
 API WELL NO. 47 - 039 - 3948 - Fra
 STATE COUNTY PERMIT

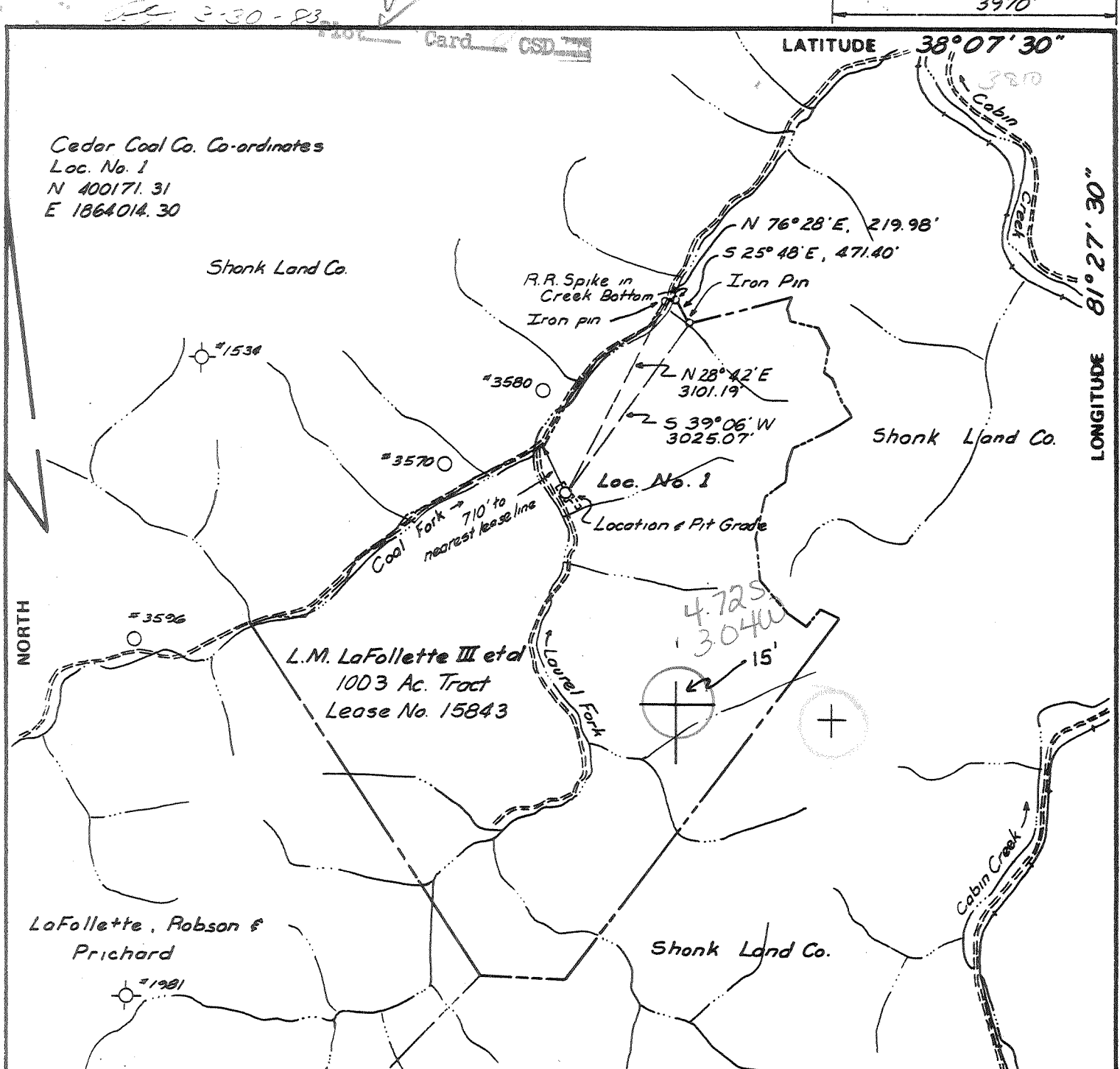
STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 844.1 WATER SHED Laurel Fork of Coal Fork of Cabin Creek
 DISTRICT Cabin Creek COUNTY Kanawha
 QUADRANGLE Eskdale
 SURFACE OWNER L.M. LaFollette III et al ACREAGE 1003
 OIL & GAS ROYALTY OWNER L.M. LaFollette, III et al LEASE ACREAGE 1003
 LEASE NO. 15843
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION Onondaga Lime ESTIMATED DEPTH 5610
 WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett
 ADDRESS P.O. Box 391 Ashland Ky 41114 ADDRESS P.O. Box 156 Brenton WVa. 24818

NOV 19 1984

KAN. 3948



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 in 13590
 PROVEN SOURCE OF ELEVATION Cedar Coal Co. control point, Iron Pin, Elev 1117.89

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) John H. Burkett
 R.P.E. 1442 L.L.S. _____

PLACE SEAL HERE

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



DATE March 30 19 83
 OPERATOR'S WELL NO. I-Ser #094851
 API WELL NO. 47 - 039 - 3948
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 844.1 WATER SHED Laurel Fork of Cool Fork of Cabin Creek
 DISTRICT Cabin Creek COUNTY Kanawha
 QUADRANGLE Eskdale Montgomery 15 WC
 SURFACE OWNER L. M. LaFollette III et al ACREAGE 1003
 OIL & GAS ROYALTY OWNER L. M. LaFollette, III et al LEASE ACREAGE 1003
 LEASE NO. 15843
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION Onondaga Lime ESTIMATED DEPTH 5610
 WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett APR 18 1983
 ADDRESS P.O. Box 391 Ashland Ky 41114 ADDRESS P.O. Box 156 Brenton W.Va. 24818

KAN. 3948



IV-35
(Rev 8-81)

Date 5/27/83
Operator's
Well No. 1
Fam L. M. LaFollette
API No. 47 - 039 - 3948

State of West Virginia
Department of Mines
Oil and Gas Division

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

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

LOCATION: Elevation: 844.1' Watershed Laurel Fork of Coal Fork of Cabin Creek
District: Cabin Creek County Kanawha Quadrangle Eskdale

COMPANY Ashland Exploration, Inc.

ADDRESS P. O. Box 391, Ashland, Ky. 41114

DESIGNATED AGENT Forrest Burkett

ADDRESS P. O. Box 156, Brenton, WV 24818

SURFACE OWNER L. M. LaFollette III etal

ADDRESS P. O. Box 2068, Charleston, WV 25327

MINERAL RIGHTS OWNER L. M. LaFollette III, etal

ADDRESS P. O. Box 2068, Charleston, WV 25327

OIL AND GAS INSPECTOR FOR THIS WORK Craig

Duckworth ADDRESS Box 454, Mt. Lookout, WV

PERMIT ISSUED 4/4/83 26678

DRILLING COMMENCED 4/27/83

DRILLING COMPLETED 5/17/83

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 Cord.	49'	49'	20sks
13-10"	295'	295'	200sks
9 5/8			
8 5/8			
7	2983'	2983'	210sks
5 1/2			
4 1/2			
3			
2			
Inners used			

GEOLOGICAL TARGET FORMATION Onondaga Lime Depth 5610 feet

Depth of completed well 5550 feet Rotary X / Cable Tools

Water strata depth: Fresh 425 feet; Salt 827 feet

Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 4289-5427 feet

Gas: Initial open flow 119 Mcf/d Oil: Initial open flow Bbl/d

Final open flow 60 Mcf/d Final open flow Bbl/d

Time of open flow between initial and final tests 3 hours

Static rock pressure psig (surface measurement) after 168 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)

JUNE 6, 1983

KAN - 3948

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

Plug back to 5427 w/pea gravel. Load hole w/11,600# 80% Glycerine shot.
Bottom bomb set @ 0411 hrs. 5/17/83. Top bomb set @ 1454 hrs. 5/16/83
Tamp w/400' pea gravel - Shot off @ 1454 hrs.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Sand & Shale			0	317	
Shale			317	468	Fresh wtr @ 425'
Shale & Sand			468	635	
Lower Salt Sand			635	1263	Salt wtr @ 827'
Shale			1263	1414	
Avis Limestone			1414	1447	
Shale			1447	1487	
Upper Maxton			1487	1539	
Shale & Sand			1539	1858	
Little Lime			1858	1912	
Pencil Cave			1912	1922	
Big Lime			1922	2208	
Shale			2208	2210	
Injun			2210	2259	
Shale			2259	2318	
Upper Weir			2318	2333	
Shale			2333	2453	
Lower Weir			2453	2462	
Shale			2462	2638	
Coffee Shale			2638	2653	
Berea			2653	2660	
Devonian Shale			2660	2899	
Gordon			2899	2909	
Devonian Shale			2909	5502	
Onondaga LS			5502	TD	

DTD 5548
LTD 5547

4289
4660
4289
Huron 3800-4500
Java 9500-4700
Angola 4700-5000
Rhinecl. 5000-5300
Songjean 5300-5502

Pays: Huron - 4289 - 4500 ✓
Java - 4500 - 4700 ✓
Angola - 4700 - 5000 ✓
Rhinecl. - 5000 - 5300 ✓
Songjean - 5300 - 5427 ✓

(Attach separate sheets as necessary)

ASHLAND EXPLORATION, INC.

Well Operator

By: *Steve A. Wina*

Date: May 27, 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."

FILE COPY
RECEIVED

SEP 28 1984



- 1) Date: September 27, 1984
 2) Operator: L. M. LaFollette, III
 Well No. 1, Serial No. 094851
 3) API Well No. 47 - 039 - 3948 - FRAC
 State County Permit

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

OIL & GAS DIVISION APPLICATION FOR A WELL WORK PERMIT

DEPT. OF MINES

- 4) WELL TYPE: A Oil / Gas / Other
 B (If "Gas", Production / Underground storage / Deep / Shallow)
 5) LOCATION: Elevation: 844.1' Watershed: Laurel Fork of Coal Fork of Cabin Creek
 District: Cabin Creek County: Kanawha Quadrangle: Eskdale
 6) WELL OPERATOR Ashland Exploration, Inc. 7) DESIGNATED AGENT Forrest Burkett
 Address P. O. Box 391 Address Box 156
Ashland, KY 41114 Brenton, WV 24818
 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Rodney G. Dillon Name Tri-State Well Service
 Address P.O. Box 30, Scarbro, WV 25917 Address Box 299, 1 Berea Plaza
304/469-2015 Bridgeport, WV 26330
 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, Devonian Shale, Gordon, Weir
 12) ~~Estimated~~ depth of completed well, 5550 feet
 13) Approximate trata depths: Fresh, 425 feet; salt, 827 feet.
 14) Approximate coal seam depths: _____ 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	16	H-40	65	X		39	39	20 sks.	Kinds
Fresh water	10 3/4	H-40	40.5	X		295	295	200 sks.	Sizes
Coal									
Intermediate	7	K-55	20	X		2093	2093	200 sks.	Depths set
Production									
Tubing									
Liners									Perforations: Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-039-3948-FRAC Date November 14 1984

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 November 14, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
10	TS	TS	TS	506201

[Signature]
Administrator, Office of Oil and Gas

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

File

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



1) Date: March 30, 1983
 2) Operator's Well No. 1, Serial No. 094851
 3) API Well No. 47 State 039 County 3948 Permit

DRILLING CONTRACTOR:
Drilling, Co.
2101 Washington St., East
Charleston, WV 25311

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

OIL AND GAS WELL PERMIT APPLICATION

- 4) WELL TYPE: A Oil _____ / Gas X /
 B (If "Gas", Production _____ / Underground storage _____ / Deep X / Shallow _____)
- 5) LOCATION: Elevation: 844.1 Watershed: Laurel Fork of Coal Fork of Cabin Creek
 District: Cabin Creek County: Kanawha Quadrangle: Eskdale
- 6) WELL OPERATOR Ashland Exploration, Inc. 11) DESIGNATED AGENT Forrest Burkett
 Address P.O. Box 391 Address Box 136
Ashland, KY 41114 Brenton, WV 24818
- 7) OIL & GAS ROYALTY OWNER L. M. LaFollette, III et al 12) COAL OPERATOR None
 Address P.O. Box 2068 Address _____
Charleston, WV 25327 1003
- 8) SURFACE OWNER L. M. LaFollette, III et al 13) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Address P.O. Box 2068 Name L. M. LaFollette, III et al
Charleston, WV 25327 Address P.O. Box 2068
1003 Charleston, WV 25327
- 9) FIELD SALE (IF MADE) TO:
 Address _____
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name D. Craig Duckworth
 Address P.O. Box 434
Mt. Lookout, WV 26678
- 14) COAL LESSEE WITH DECLARATION ON RECORD:
 Name Cedar Coal Company
 Address Box 348
Cabin Creek, WV 25035
- 15) PROPOSED WORK: Drill X / Drill deeper _____ / Redrill _____ / Fracture or stimulate _____
 Plug off old formation _____ / Perforate new formation _____
 Other physical change in well (specify) _____
- 16) GEOLOGICAL TARGET FORMATION, Onondaga Limestone
 17) Estimated depth of completed well, 3610 feet top of salt sand
 18) Approximate water strata depths: Fresh, _____ feet; salt, _____ feet.
 19) Approximate coal seam depths: 200 Is coal being mined in the area? Yes _____ / No X

20) 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	13 3/8	N-40	48	X		30	30	15 SRS	Kinds
Fresh water	9 5/8	N-40	32	X		300	300	circulate	
Coal									Sizes
Intermediate	7	K-33	20	X		2009	2009	circulate	
Production									Depths set
Tubing									
Liners									Perforations:
									Top Bottom

- 21) 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.)
- 22) ROYALTY PROVISIONS
 Is the right to extract, produce or market the oil or gas based upon a lease or other continuing 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.
- 23) Required Copies (See reverse side.)
- 24) 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.

Notary: Charles W. Donta
 My Commission Expires November 23, 1986

Signed: Stephen M. Parks
 Its: Stephen M. Parks, P.E.
Civil Engineer

OFFICE USE ONLY
DRILLING PERMIT

Permit number _____ Date _____

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. 10) 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.)

Permit expires _____ unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
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 Administrator, Office of Oil and Gas