



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 in 29000
 PROVEN SOURCE OF ELEVATION USGS BM Metal Disc in Conc on Brush 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) Stephen N. Parks
 R.P.E. 8982 L.L.S. _____

PLACE SEAL HERE

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



DATE June 1, 1983
 OPERATOR'S WELL NO. 1-Ser 097211
 API WELL NO. 47-005-1419
 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 ___ STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 785.4 WATER SHED Honeycamp Fork of Brush Creek of Big Cool River
 DISTRICT Peytona COUNTY Boone
 QUADRANGLE Racine Peytona 15'W
 SURFACE OWNER Appalachian Power Company ACREAGE 2156.72
 OIL & GAS ROYALTY OWNER Tasa Corporation LEASE ACREAGE 8215.4
 LEASE NO. 48001

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 4231'
 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

JUN 21 1983



IV-35
(Rev 8-81)

Date 11/30/83
Operator's
Well No. 1
Firm Tasa Coal Co.
API No. 47-005-1419

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 / Shallow /)

LOCATION: Elevation: 785.4' Watershed Honeycomb Fork of Brush Creek
District: Peytona County Boone Quadrangle Racine

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 Appalachian Power Co.

ADDRESS Box 1986, Charleston, WV 25327

MINERAL RIGHTS OWNER Tasa Corporation

ADDRESS Suite 2701 Gateway Tower, Gateway Ctr.
Pittsburgh, PA 15222

OIL AND GAS INSPECTOR FOR THIS WORK Arthur St. Clair

ADDRESS P. O. Box 157, Brenton, WV

PERMIT ISSUED 6/16/83

DRILLING COMMENCED 7/27/83

DRILLING COMPLETED 8/9/83

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 Cond.	45'	45'	70 sks
13-10"	218'	218'	140 sks
9 5/8			
8 5/8	1063'	1063'	240 sks
7			
5 1/2			
4 1/2	3206'	3206'	90 sks
3			
2		3160	
Liners used			

GEOLOGICAL TARGET FORMATION Onondaga Limestone Depth 4231 feet

Depth of completed well 4250 feet Rotary X / Cable Tools

Water strata depth: Fresh 68 feet; Salt 420 feet

Coal seam depths: Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Devonian Shale, Injun Pay zone depth 3206-4250 feet

Gas: Initial open flow 23 Mcf/d Oil: Initial open flow Bbl/d

Final open flow 340 Mcf/d Final open flow Bbl/d

Time of open flow between initial and final tests 3 hours

Static rock pressure 610 psig (surface measurement) after 192 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

DEC 12 1983

(Continue on reverse side)

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.
 Open Hole Nitrogen frac Devonian Shale ~~3206-4250~~ BD @ 1800#, ATP 1840#, ISIP 1460#. 15 min 1420#. Pumped 1,464,000 SCF/N₂ @ 48,000 SCF/min ATR.

Perforate Injun - 20H/1294-1308 - dump 500 gal 15%, load hole w/foam - would not break. Swab - dump 500 gal 28% HCl. Foam frac Injun w/75 Quality foam @ 20 BPM (foam) ATP 2243#, ISIP 1490#, 15 min 1380#. TL&FW 266 bbl, TSLF 137 bbl. Pumped 434,000 SCF N₂ & 30,000# 20/40 sand.

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			0	75	5" stream wtr
Shale			75	122	
Sand & Shale			122	270	
Sand			270	545	Salt wtr @ 420'
Shale			545	604	
Lower Salt Sand			604	777	
Shale			777	904	
Lower Maxton			904	1003	
Shale			1003	1005	
Little Lime			1005	1077	
Pencil Cave			1077	1081	
Big Lime			1081	1276	
Shale			1276	1291	
Injun			1291	1308	
Shale			1308	1723	
Coffee Shale			1723	1739	
Berea			1739	1748	
Devonian Shale			1748	1930	
Gordon			1930	2007	
Devonian Shale			2007	4138	
Marcellus Shale			4138	4194	
Onondaga Ls.			4194	TD	
DTD			4250'		
LTD			4223'		

3206
1748
1458

4194
1799
2395

1748
2100
3848

4250
3848
402' expl.
17g

(Attach separate sheets as necessary)

ASHLAND EXPLORATION, INC.

Well Operator

By: Joseph A. Wina

Date: November 30, 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 ..., encountered in the drilling of a well."



1) Date: June 1, 1983
 2) Operator's Well No. 1, Serial No. 097211
 3) API Well No. 47-005-1419
 State County Permit

DRILLING CONTRACTOR:
Ray Resources 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 X / Underground storage / Deep X / Shallow)
- 5) LOCATION: Elevation: 755.4 Watershed: Honeycamp Fork of Brush Creek
 District: Paytona County: Boone Quadrangle: Racine
- 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 Tasa Corporation 12) COAL OPERATOR None
 Address Suite 2701, Gateway Tower Address
Gateway Ctr., Pittsburgh, PA 15222
 Acreage 8215.4
- 8) SURFACE OWNER Appalachian Power Company 13) COAL OWNER(S) WITH DECLARATION ON RECORD:
 Address P. O. Box 1986 Name None
Charleston, WV 25327 Address
 Acreage 2156.72 Name
 Address
- 9) FIELD SALE (IF MADE) TO:
 Address
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
 Name Arthur St. Clair
 Address P. O. Box 157
Brenton, WV 24818
- 14) COAL LESSEE WITH DECLARATION ON RECORD:
 Name None
 Address
- 15) PROPOSED WORK: Drill X / Drill deeper / Redrill / Fracture or stimulate X /
 Plug off old formation / Perforate new formation /
 Other physical change in well (specify)
- 16) GEOLOGICAL TARGET FORMATION, Onondaga Lime
- 17) Estimated depth of completed well, 4231 feet Top of
Salt Sand
- 18) Approximate water strata depths: Fresh, feet; salt, feet.
- 19) Approximate coal seam depths: None 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	3 3/8	K-40	48	X		30	30	15 sks	Kinds	
Fresh water	9 5/8	K-55	32	X		200	200	Circulate		
Coal									Sizes	
Intermediate	7	K-55	20.0	X		925	925	50 sks		
Production	4 1/2	K-55	10.5	X		4231	4231	As Required	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: Signed: John H. Burnett
 My Commission Expires EVELYN KAY STEWART Its: John H. Burnett
My commission expires December 8, 1986 Regional Civil Engineer

OFFICE USE ONLY
DRILLING PERMIT
 Permit number 47-005-1419 Date June 17 1983

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 February 17, 1984 unless drilling is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing:	Fee:

Administrator, Office of Oil and Gas