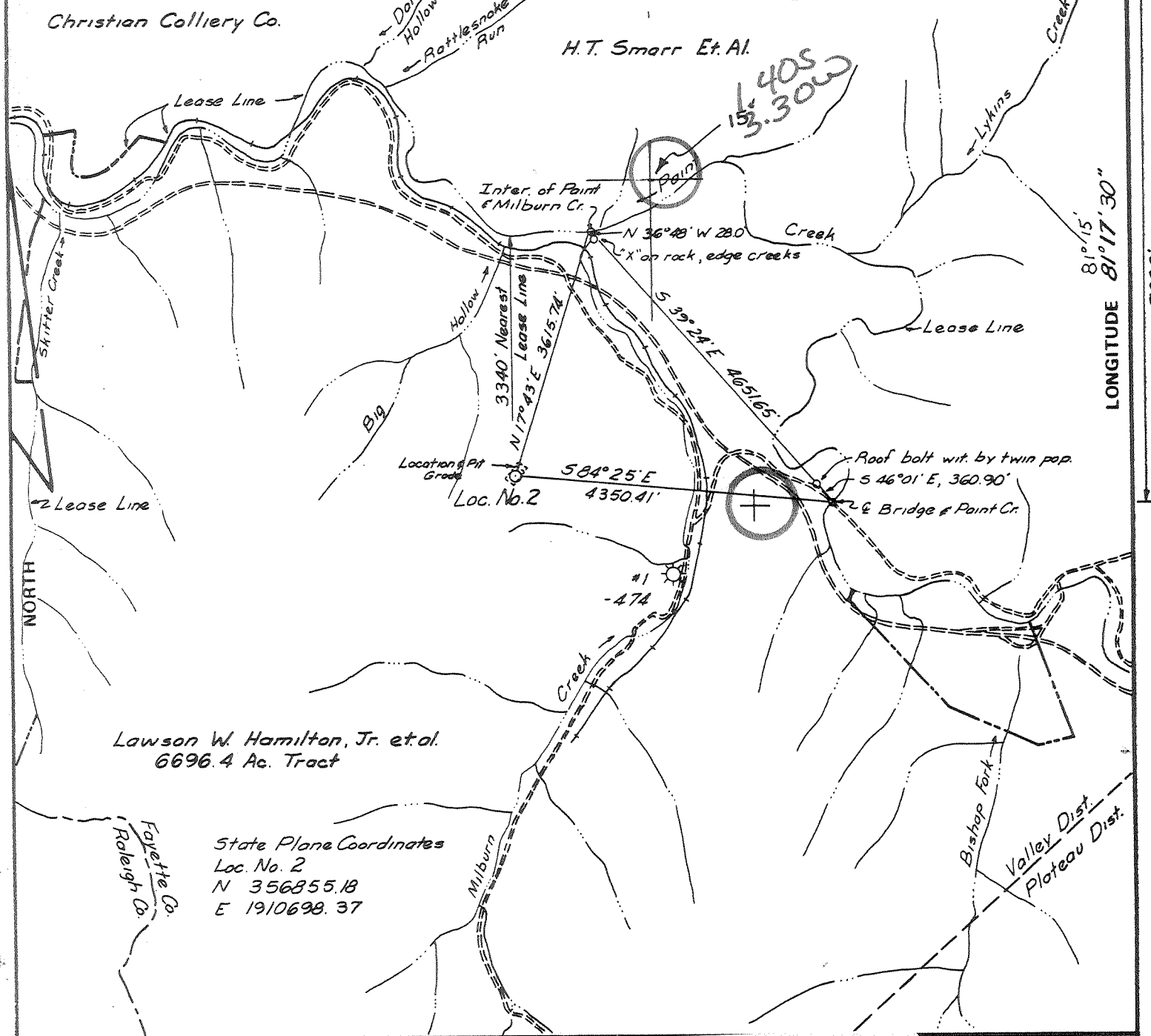


M. 7 9/8/82 Lot 1 Cardy CSD

5260'

LATITUDE 38°00'00"



LONGITUDE 81°17'30"

7390'

FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 in 6000
 PROVEN SOURCE OF ELEVATION USC & GS BM on Bridge over Turnpike Elev. 1497.50

CO: 019 PMT: 505
 T Loc Digitized from OGIS 7.5' Mylar
 K QUAD: 537 DATE: 12-JUN-90
 H LAT: 38 00.0 Miles South: 1.38
 L LONG: 81 17.5 Miles West: 1.01
 MENT OF MINES.
 (SIGNED) Stephen N. Parkes
 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 Sept 3, 19 82
 OPERATOR'S WELL NO. 2-5er #095611
 API WELL NO. 47-019-0505
 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 1983.8 WATER SHED Big Hollow & Milburn Cr of Point Cr of Kanawha River
 DISTRICT Valley COUNTY Fayette
 QUADRANGLE Fox Eccles 15' NE
 SURFACE OWNER Lawson W. Hamilton, Jr. et al. ACREAGE 6615.4
 OIL & GAS ROYALTY OWNER Lawson W. Hamilton, Jr. et al. LEASE ACREAGE 6696.4
 LEASE NO. 62824
 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 6704'
 WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett
 ADDRESS P.O. Box 391 Ashland Ky 41114 ADDRESS P.O. Box 156 Brenton W.Va. 24818

SEP 28 1982

deep well



IV-35
(Rev 8-81)

Date 3/24/83
Operator's
Well No. 2
Farm Lawson Hamilton
API No. 47 - 019 - 0505

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: 1983.8' Watershed Big Hollow of Milburn Creek of Paint Creek
District: Valley County Fayette Quadrangle Pax

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 Lawson W. Hamilton, Jr. etal

ADDRESS P. O. Box 175, Hansford, WV 24103

MINERAL RIGHTS OWNER Lawson W. Hamilton, Jr. etal

ADDRESS P. O. Box 175, Hansford, WV 24103

OIL AND GAS INSPECTOR FOR THIS WORK Craig

Duckworth ADDRESS Box 454, Mt. Lookout, WV
26673

PERMIT ISSUED 7/22/82

DRILLING COMMENCED 10/5/82

DRILLING COMPLETED 10/17/82

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

Casing & Tubing	Used	RECEIVED in Well MAR 28 1983 OIL AND GAS DIVISION WV DEPARTMENT OF MINES		Cement
	Drilling			Cu. Ft.
Size				
20-16				
Cond.				
13-10"	15'	15'	20sks	
9 5/8	1919'	1919'	400 sks	
8 5/8				
7				
5 1/2				
4 1/2	6704'	6704'	507 sks	
3				
2		5309'		
Liners used				

GEOLOGICAL TARGET FORMATION Onondaga Lime Depth 6704 feet

Depth of completed well 6648 feet Rotary X / Cable Tools _____

Water strata depth: Fresh None feet; Salt 1357 feet

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

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 5073 feet

Gas: Initial open flow 1100 Mcf/d Oil: Initial open flow _____ Bbl/d

Final open flow 696 Mcf/d Final open flow _____ Bbl/d

Time of open flow between initial and final tests 3 hours

Static rock pressure 500 psig (surface measurement) after 1464 hours shut in

(If applicable due to multiple completion--)

Second producing formation Gordon, Weir & Maxton Pay zone depth 2132 feet

Gas: Initial open flow 1100 Mcf/d Oil: Initial open flow _____ Bbl/d

Final open flow 696 Mcf/d Oil: Final open flow _____ Bbl/d

Time of open flow between initial and final tests 3 hours

Static rock pressure 500 psig (surface measurement) after 1464 hours shut in

APR 4 1983
(Continue on reverse side)

PAV. 0505

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.
 Perf Dev. Shale 42H/5073-5285 - Foam frac w/75 quality w/1000 gal 15% HCl w/12,500# 20/40 sd. BD @ 3500#, ATP 3200# @ 32 B/M, screenout @ 6#/gal.
 Perf Gordon 16H/3454-65 - foam frac w/75 quality, 30,000# 20/50 sd & 271,500 SCF N₂ @ 20 B/M (foam) BD @ 1400#, ATP 1400#, MTP 1500#. TSLF 104bbl, TL&FW 164 bbl.
 Perf Weir 19H/2948-70 - water frac w/500 gal HCl, 30,000# 20/40 sd & 20#/1000 gal gel system. BD @ 200#, ATP 2600#, ATR 18 B/M, MTP 3300#. TL&FW 465 bbl.
 Perf Maxton 30H/2132-62 - Water frac w/20#/1000 gal gel system & 37,000# 20/40 sd. BD @ 2300#, ATP 1700# @ 30 B/M, MTP 2650#, TL&FW 618 bbl.

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	285	
Shale			285	340	
Sand			340	375	
Shale			375	400	
Sand			400	450	
Shale			450	485	
Sand			485	530	
Shale			530	570	
Sand			570	735	
Shale			735	770	
Sand			770	860	
Lower Salt Sand			860	1520	
Shale			1520	1715	
Ravencliff			1715	1880	
Sand & Shale			1880	1943	
Middle Maxton			1943	1968	
Shale			1968	2115	
Maxton Stray			2115	2165	
Shale & Lime			2165	2203	
Lower Maxton			2203	2296	
Shale			2296	2300	
Little Lime			2300	2362	
Pencil Cave			2362	2396	
Big Lime			2396	2694	
Shale & Sand			2694	2832	
Upper Weir			2832	2870	
Shale			2870	2947	
Lower Weir			2947	2980	
Shale			2980	3220	
Coffee Shale			3220	3244	
Berea			3244	3276	
Devonian Shale			3276	TD	
DTD 6755					
LTD 6648					

Bottom of gamma ray log in Sonyca (?) TD in Onondaga (?) Joseph Schmitz

*6755
3276
3479*

(Attach separate sheets as necessary)

ASHLAND EXPLORATION, INC.

Well Operator

By: *Clark S. Rhina*

Date: 3/24/83

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 ... encountered in the drilling of a well."



STATE OF WEST VIRGINIA
OFFICE OF OIL AND GAS - DEPARTMENT OF MINES

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil ___ / Gas x /

(If "Gas", Production x / Underground storage ___ / Deep x / Shallow ___ /

LOCATION: Elevation: 1983.8 Watershed: Big Hollow and Milburn Creek of Paint Creek
District: Valley County: Fayette Quadrangle: Pax

WELL OPERATOR Ashland Exploration, Inc.
Address P. O. Box 391
Ashland, KY 41114

DESIGNATED AGENT Forrest Burkett
Address P. O. Box 156
Brenton, WV 24818

OIL AND GAS
ROYALTY OWNER Lawson W. Hamilton, Jr. et al
Address P. O. Box 175
Hansford, WV 24103
Acreage 6966.4

COAL OPERATOR None
Address _____

SURFACE OWNER Lawson W. Hamilton, Jr. et al
Address P. O. Box 175
Hansford, WV 24103
Acreage 6615.4

COAL OWNER(S) WITH DECLARATION ON RECORD:
NAME Hansford Coal Company
Address P. O. Box 175
Hansford, WV 24103
NAME _____
Address _____

FIELD SALE (IF MADE) TO:
NAME _____
Address _____

COAL LESSEE WITH DECLARATION ON RECORD:
NAME _____
Address _____

OIL AND GAS INSPECTOR TO BE NOTIFIED:
NAME D. Craig Duckworth
Address P. O. Box 454
Mt. Lookout, WV 26678
Telephone 304-872-6165

RECEIVED
SEP 07 1982
OIL & GAS DIVISION
DEPT. OF MINES

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed ___ / lease x / other contract ___ / dated May 1, 1981, to the undersigned well operator from Lawson W. Hamilton, Jr. et al.

(If said deed, lease, or other contract has been recorded:)

Recorded on November 4, 1981, in the office of the Clerk of County Commission of Fayette County, West Virginia, in Deed 404 Book^ at page 16. A permit is requested as follows:

PROPOSED WORK: Drill x / Drill Deeper ___ / Redrill ___ / Fracture or stimulate x / Plug off old formation ___ / Perforate new formation ___ / Other physical change in well (specify) _____

--planned as shown on the work order on the reverse side hereof.

The above named coal operator, coal owner(s), and coal lessee are hereby notified that any objection they wish to make or are required to make by Code §22-4-3 must be filed with the Department of Mines within fifteen (15) days after receipt of this Application by the Dept. 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 lessees on or before the day of the mailing or delivery of this Application to the Department of Mines at Charleston, West Virginia.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
1613 WASHINGTON ST., E.
CHARLESTON, WV 25311
Telephone - 304/348-3092

Ashland Exploration, Inc.
Well Operator
By: John H. Burkett
John H. Burkett
Regional Civil Engineer

BLANKET BOND

(Revised 3-81)

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Ray Resources Drilling Company

Address 2101 Washington Street, East

Charleston, WV 25311

GEOLOGICAL TARGET FORMATION Onondaga Lime

Estimated depth of completed well 6704 feet. Rotary X / Cable tools /
Approximate water strata depths: Fresh, feet; salt, top of feet.
Approximate coal seam depths: 180' & 300', No open mines salt sand
Is coal being mined in this area: Yes / No X /

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL UP OR SACKS Cubic ft.	PACKERS
	Size	Grade	Weight per ft	New	Used	For Drilling	Left in Well		
Conductor	13 3/8	H-40	48	X		30	30	15 sks	Kinds
Fresh water									
Coal									Sizes
Intermed.	8 5/8	K-55	24	X		1940	1940	Circulate	
Production	4 1/2	K-55	10.5	X		6704	6704	As Required	Depths set
Tubing									
Liners									Perforations: - Top Bottom

NOTE: Regulation 7.02 of the Department of Mines provides that the original and four copies of Form IV-2 must be filed with the Department, accompanied by (i) a plat in the form prescribed by Regulation 11, (ii) a bond in one of the forms prescribed by Regulation 12, or in lieu thereof the other security allowed by Code §22-4-2, (iii) Form IV-9, "Reclamation Plan" applicable to the reclamation required by Code §22-4-11b 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 §22-4-5a from the owner of any water well or drilling within 200 feet of the proposed well.

Form IV-2 shall not be required for fracturing or stimulating a well where fracturing or stimulating is to be part of the work for which a permit is sought and is noted as such on the Form IV-2 filed in connection therewith.

THIS PERMIT MUST BE POSTED AT THE WELL SITE

ALL PROVISIONS BEING IN ACCORDANCE WITH CHAPTER 22,

ARTICLE 4 OF THE W. VA. CODE, THE LOCATION IS HEREBY

APPROVED FOR drilling. THIS PERMIT SHALL EXPIRE

IF OPERATIONS HAVE NOT COMMENCED BY 5-22-83

BY [Signature]

The following waiver must be completed by the coal operator and by any coal owner or coal lessee who has recorded a declaration under Code §22-4-20, if the permit is to be issued within fifteen (15) days of receipt thereof:

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: