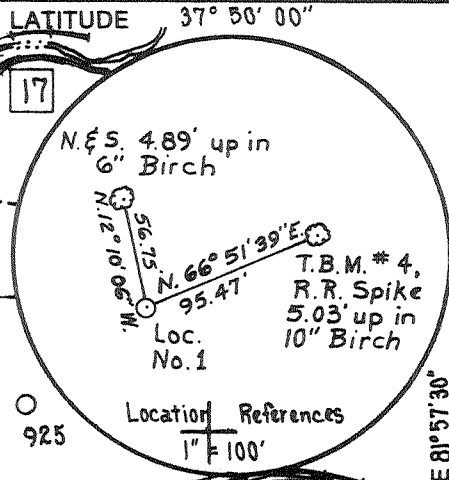
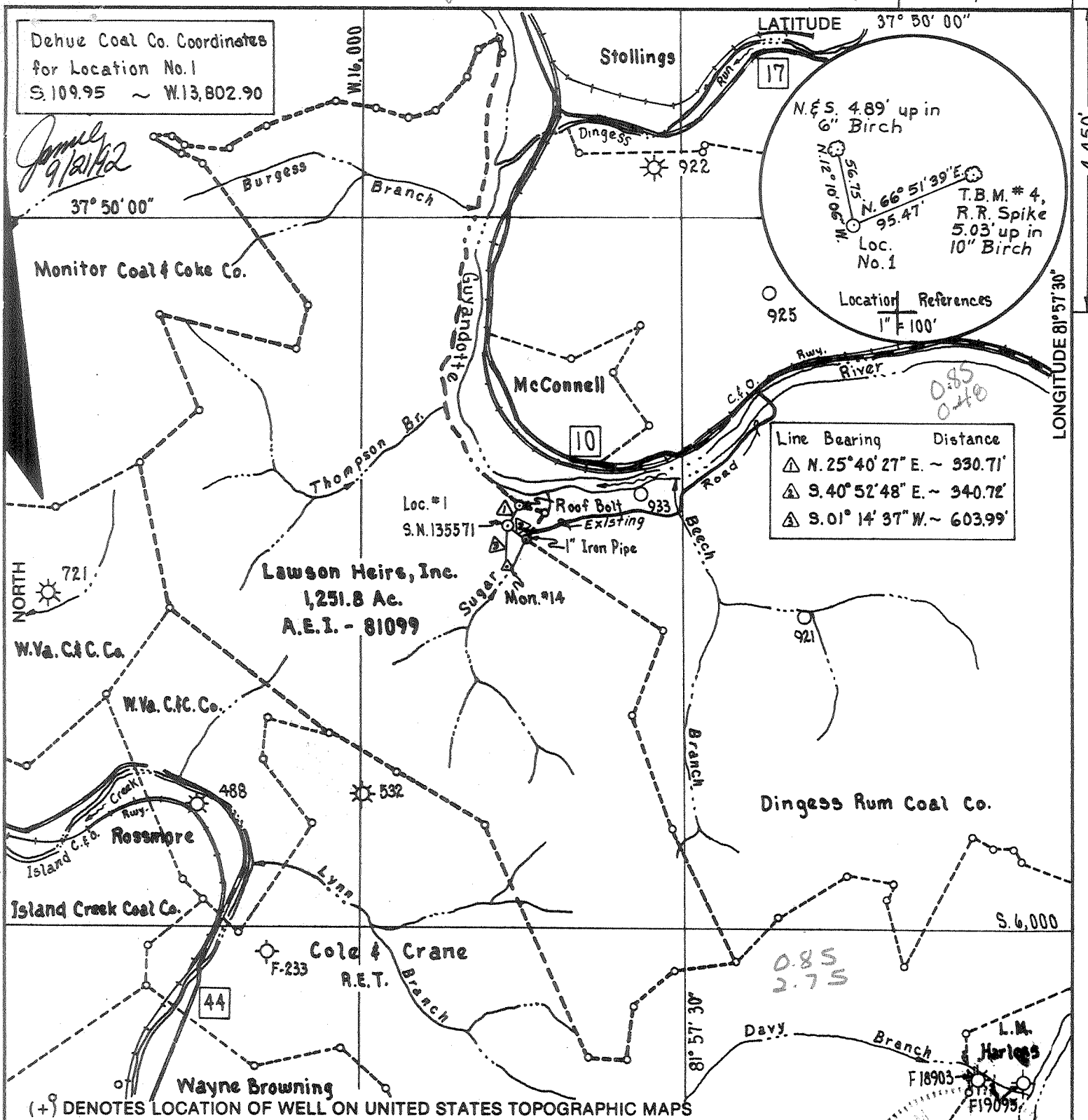


Dehue Coal Co. Coordinates
for Location No. 1
S. 109.95 ~ W. 13,802.90

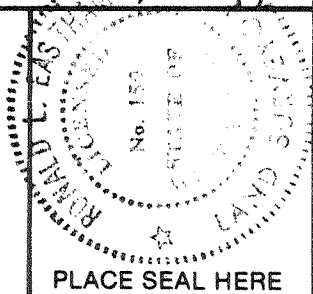
Jan 9/21/92



Line Bearing	Distance
△ N. 25° 40' 27" E.	~ 930.71'
△ S. 40° 52' 48" E.	~ 340.72'
△ S. 01° 14' 37" W.	~ 603.99'

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 2,000'
MINIMUM DEGREE OF ACCURACY 1:26,186
PROVEN SOURCE OF ELEVATION U.S.C. & G.S. B.M. "M45X"
Elev. = 675.474

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 ENERGY.
(SIGNED) Ronald L. East
R.P.E. _____ L.L.S. 150



STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
OIL AND GAS DIVISION



DATE July 17, 19 92
OPERATOR'S WELL NO. Lawson Heirs No. 1
API WELL NO. S.N. 135571

47 - 045 - 1193
STATE COUNTY PERMIT

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS,") PRODUCTION X STORAGE ___ DEEP ___ SHALLOW X
LOCATION: ELEVATION 700.70 WATERSHED Sugar Branch of Guyandotte River
DISTRICT Logan 2 COUNTY Logan
QUADRANGLE Logan 218 SW

SURFACE OWNER Lawson Heirs, Inc. ACREAGE 1251.8
OIL & GAS ROYALTY OWNER Lawson Heirs, Inc. LEASE ACREAGE 1251.8
LEASE NO. 81099

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 Devonian Shale ESTIMATED DEPTH 4620. KB
WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Bobby E. Widener
ADDRESS P.O. Box 391 ADDRESS P.O. Box 379
DEEP WELL 6-6 Ashland, Ky. 41114 4619 Logan-Holston-Dingess (274) Brenton, W.V. 24818

COUNTY NAME
PERMIT

M.T. HALL 48673 FORM WW-6

SEP 23 1992

07
State of West Virginia
Division of Environmental Protection
Section of Oil & Gas

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm Name: GADDY ENGINEERING CO.

Operator Well No.: 1-S-135571

Location: Elevation: 700.70

Quadrangle: LOGAN

District: LOGAN County: LOGAN
Latitude: 4450 Feet South of 37 Deg. 50 Min. 0 Sec.
Longitude: 2560 Feet West of 81 Deg. 57 Min. 30 Sec.

Company: ASHLAND EXPLORATION, INC.
P.O. BOX 391, AT-6
ASHLAND, KY 41114-0391

Agent: B. E. Widener

Inspector: OFIE HELMICK
Permit Issued: 09-24-92
Well Work Commenced: 03-25-93
Well Work Completed: 05-11-93
Verbal Plugging _____
Permission granted on: _____
Rotary X Cable _____ Rig _____
Total Depth (feet) 4698
Fresh water depths (ft) 1/2" @ 42'
1-1/2" @ 64'
Salt water depths (ft) 1/2" stream
1068'
Is coal being mined in area (Y/N)? N
Coal Depths (ft): 54-55, 71-75, 91-93

Casing & Tubing	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
Size 16"	41'	41'	11.8
11 3/4"	398'	398'	260.8
8 5/8"	1924'	1924'	614
5 1/2"	4659'	4659'	570
1.9" @ 4534' KB w/R-4 @ 2808'			
1.9" @ 2737' KB			

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth (ft) 2879-4601
 Gas: Initial open flow 0 MCF/d Oil: Initial open flow --- Bbl/d
 Final open flow 637 MCF/d Final open flow --- Bbl/d
 Time of open flow between initial and final tests 3 Hours
 Static Rock Pressure 670# psig (surface pressure) after 72 Hours
2720-2730
 Second producing formation Berea/U. Weir Pay zone depth (ft) 2232-2238
 Gas: Initial open flow 0 MCF/d Oil: Initial open flow --- Bbl/d
 Final open flow 552 MCF/d Final open flow --- Bbl/d
 Time of open flow between initial and final tests 3 Hours
 Static Rock Pressure 620# psig (surface pressure) after 72 Hours

37
552
189
MCF
Bbl
for well

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Reviewed TMG
Recorded _____

For: Ashland Exploration, Inc.
By: James L. Stephens James L. Stephens, Eng. Tech.
Date: 6-2-93

JUN 21 1993

<u>Formation or Rock Type</u>	<u>Top</u>	<u>Base</u>
Sand and Shale (base Lee Sand)	0	1363
Pennington	1363	1890
Maxton	1704	1752
Little Lime	1890	1952
Big Lime	1952	2163
Borden	2163	2687
U. Weir	2230	2270
Sunbury Shale	2687	2714
Berea	2714	2733
Devonian Shale	2733	4671
Onondaga lime	4671	T.D.

Drillers TD 4698

Loggers TD 4681

113/4 Did not cmt to surface on primary job. Top off on 8 5/8 job.
8 5/8 cmt'd to surface on primary job.

⁸³⁶
Perforate Rhinestreet 4601', 4588, 4579, 4575, 4574, 4568, 4561, 4546, 4542, 4536, 4520, 4517, 4510, 4495, 4487, 4476, 4461, pumped 200 gals 8% HCl-Fe acid. N₂ frac Rhinestreet Shale w/802,000 scf N₂ @ 94,669 scf/min. BD - 4204, MTP - 4276, ATP - 4199, ISIP - 3030.

⁸¹³
Perf L. Huron 4101, 4092, 4065, 4062, 4056, 4052, 4035, 4027, 4013, 4009, 3985, 3982, 3980, 3969, 3929, 3873, 3870, 3828, 3813, 3803, 3801, 3798, 3767, pump 1 bbl wtr & 350 gal 7½% HCl-Fe acid. N₂ frac L. Huron w/828,000 sf N₂ @ 105,305 scf/min. BD - 3467, MTP - 3467, ATP - 3024, ISIP - 1617.

⁴⁰⁴
Perf U. Devonian Shale 3272, 3263, 3252, 3249, 3219, 3211, 3202, 3194, 3184, 3173, 3163, 3159, 3122, 3051, 2980, 2930, 2916, 2896, 2892, 2879, pump 500 gal 7½% HCl-Fe acid. N₂ frac U. Dev. Shale w/804,000 scf N₂ @ 105,558 scf/Min. BD - 3126, MTP - 3299, ATP - 3217, ISIP - 1604.

³⁹⁵
Perf Berea 2 spf, 2720-2730 (22 total shots) pump 500 gal 15% HCl-Fe acid & ramp frac Berea 4-20 ppg using 45,165# 20/40 sand 168,200 scf N₂ @ 6300 scf/min, 75Q foam @ 20 BPM rate. BD 1342, MTP 1367, ATP - 1100, ISIP - 1130.

Perf U. Weir 14H/2232-2238 75Q foam frac the U. Weir using 500 gal 15% HCl, 36,400# 20/40 sand & 190,000 scf N₂ @ 4200 scf/m. BD @ 1367#, ATP - 1300# @ 10 B/M foam, MTP - 1394#, ISIP - 1394#, 15 min, 1304# TF 119 Bbl.

DF-461

DFT-830

045-1193

SEP 0 8

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

Issued 9/24/92
Expires 9/24/94
Page 1 of 1

- 1) Well Operator: Ashland Exploration, Inc. ⁰⁴³ 2750 (2) 442
- 2) Operator's Well Number: 1, Serial No. 135571 3) Elevation: 700.7
Lawson Heirs No. 1
- 4) Well type: (a) Oil___/ or Gas_X/
(b) If Gas: Production_X/ Underground Storage___/
Deep___/ Shallow_X/
- 5) Proposed Target Formation(s): Devonian Shale
- 6) Proposed Total Depth: 4620'KB feet
- 7) Approximate fresh water strata depths: 200'
- 8) Approximate salt water depths: 1680'
- 9) Approximate coal seam depths: Solid - No Seams Operated
- 10) Does land contain coal seams tributary to active mine? Yes___/ No_X/
- 11) Proposed Well Work: Drill and Stimulate New Well
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu.ft.)
Conductor	16	LS	42	30	30	CTS
Fresh Water	11 3/4	H-40	42	385	385	CTS
Coal						38 CTS 1811.3 30 CTS 112.2
Intermediate	8 5/8	J-55	24	1890	1890	CTS
Production	5 1/2	J-55	24	4620	4620	AS NEEDED
Tubing	2 3/8	J-55	4.7	-	4500	SIPHON
Liners						30 CTS 1811.1

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

006694

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Surety Company Agent
(Type)

SEP 02 1992

Date: September 3, 1992
Operator's well number
Lawson Heirs No. 1, Serial No. 135571
3) API Well No: 47 - 045 - 1193
State - County - Permit

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

- 4) Surface Owner(s) to be served:
- (a) Name Gaddy Engineering Co., Agent Address Lawson Heirs, Inc.
945 Fourth Ave, Suite 300, Huntington, WV
 - (b) Name _____ 25701 Address _____
 - (c) Name _____ Address _____
- 5) (a) Coal Operator: Name N/A Address _____
- (b) Coal Owner(s) with Declaration Name Same as 4(a) Address _____
- (c) Coal Lessee with Declaration Name Rawl Sales & Processing Co. Address P.O. Box 722
Matewan, WV 25678
- 6) Inspector Ofie Helmick Address P.O. Box 218
Fanrock, WV 24834 Telephone (304)-732-9135

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR

Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 2 on the above named parties, by:

- Personal Service (Affidavit attached)
- Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Ashland Exploration, Inc.
By: W. Mark Parks
Its: Operations Manager
Address P.O. Box 391
Ashland, KY 41114
Telephone 606-329-5989

Subscribed and sworn before me this 3rd day of September, 1992

Richard W. Smith Notary Public
My commission expires November 23, 1994