



FILE NO. 85042 F.B. 40
 DRAWING NO. 85042
 SCALE 1" = 600'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION U.S.G.S. B.M. 1045' NEAR RUBLE CHURCH

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) _____ R. P. E. 3698 L. L. S. _____

PLACE SEAL HERE

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



Department of Mines
 Oil & Gas Division

DATE 6-9, 1985
 OPERATOR'S WELL NO. SMITH No. 1
 API WELL NO. _____
47 - 105 - 1180
 STATE COUNTY PERMIT

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
 (IF "GAS", PRODUCTION _____ STORAGE _____ DEEP _____ SHALLOW
 LOCATION: ELEVATION 869.5' WATER SHED TWO RUN & BURNING SPRINGS RUN
 DISTRICT BURNING SPRINGS COUNTY WEST
 QUADRANGLE GIRTA 17.5' 36' Elizabeth 038 SW 7
 SURFACE OWNER Stan Curtis ACREAGE 84
 OIL & GAS ROYALTY OWNER GLEN W. ROBERTS ESTATE LEASE ACREAGE 138
 LEASE NO. _____
 PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ 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 5100' 4675'
 WELL OPERATOR CLINT HURT & ASSOCIATES DESIGNATED AGENT I. DAVID BARTRAM
 ADDRESS ELKVIEW, W.V. 25071 389 ADDRESS ELKVIEW, W.V. 25071
 PHONE 344-2401 PHONE 344-2401



IV-35
(Rev 8-81)

State of West Virginia
Department of Mines
Oil and Gas Division

Date July 26, 1985
Operator's
Well No. Smith #1
Farm Glen Roberts Est.
API No. 47 - 105 - 1180

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

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

LOCATION: Elevation: 864.5' Watershed Two Run of Little Kanawha River
District: Burning Spring County Wirt Quadrangle Girta 7.5'

COMPANY Clint Hurt & Associates, Inc.
ADDRESS P. O. Box 388, Elkview, WV 25071
DESIGNATED AGENT I. David Bartram
ADDRESS P. O. Box 388, Elkview, WV 25071
SURFACE OWNER Stan Curtis
ADDRESS 2975 Dorchester, North Olmstead, OH 44070
MINERAL RIGHTS OWNER Glen W. Roberts Estate
ADDRESS P. O. Box 92, Elizabeth, WV 26143
OIL AND GAS INSPECTOR FOR THIS WORK Homer Dougherty
ADDRESS Linden Rt. , Box 3-A
Looneyville- WV 25259
PERMIT ISSUED 6/28/85
DRILLING COMMENCED 7/9/85
DRILLING COMPLETED 7/16/85

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8	315	315	125 sx.
8 5/8			
7	1731	1731	180 sx.
5 1/2			
4 1/2		4685	210 sx.
3			
2			
Liners used			

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

GEOLOGICAL TARGET FORMATION Devonian Shale Depth 4675 feet
Depth of completed well 4713' KB feet Rotary X / Cable Tools
Water strata depth: Fresh 60' feet; Salt 1056' feet
Coal seam depths: None Is coal being mined in the area? NO

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 2302-4564 feet
Gas: Initial open flow 30 Mcf/d Oil: Initial open flow 8 Bbl/d
Final open flow (300) Mcf/d Final open flow (27) Bbl/d
Time of open flow between initial and final tests 8 hours

Static rock pressure 375 psig (surface measurement) after 27 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

AUG 11 1986

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

Perforations: Stage One - 33 holes 3914'-4564' H → J R
 Stage Two - 35 holes 3194'-3858' H → UD
 Stage Three - 32 holes 2302'-3080' Up Dev.

Treatment: Stage One - 90% Intensified Foam: 105 BOW 500G HCL 500G Methanol
 35,000# 20/40 683 MSCF N₂ B. D. 2500# A.T.P. 2473#, Max. 2970#
 AIR 40BPM 15 Perf balls I.S.I. 2000# 5 min. 1830#
 Stage Two - 500 gal. 15% HCL 500 gal. methanol 150 BOW 35,000#
 20/40 sand. 716 MSCFN₂ B.D. 2150# A.T.P. 2349# Max. 3300# I.S.I.
 1800# 5 min. 1600#
 Stage Three - 500 gal. 15% HCL 500 gal. methanol 130 BOW 35,000#
 20/40 sand, 558 MSCFN₂ B.D. 1780# A.T.P. 2030# Max. 2530# I.S.I.
 1500# 5 min. 1400# 10² Perf Balls
 WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
					All log tops - 8' KB
Sandstone and Shale			0	1023	
Salt Sand			1023	1080	
Sandy Shale			1080	1236	
Upper Maxon			1236	1283	
Shale			1283	1312	
Lower Maxon			1312	1402	
Big Lime			1402	1516	
Big Injun			1516	1602	
Siltstone and Shale			1602	1990	Gas show @ 1936'
Sunbury Shale			1990	2008	
Sandy Siltstones and Shale			2008	2387	
Grey Silty Shale and Shale			2387	4713	TD - 4713' KB Gas Shows: 2395' 2480' Oil Show: 3700' Gas at TD: 7/10 "W1"
			404	1250	
			728	760	
			408	170	
			402	270	
			442		

(Attach separate sheets as necessary)

Clint Hurt & Associates, Inc.
Well Operator

By: Christopher A. Farmer
Date: 7/31/85

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

RECEIVED

JUN 17 1985



1) Date: June 12, 19 85
2) Operator's Well No. Smith #1
3) API Well No. 47 - 105 - 1180
State County Permit

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

OIL & GAS DIVISION

DEPT. OF MINES / Gas

- 5) LOCATION: B (If "Gas", Production / Underground storage _____ / Deep _____ / Shallow /
Elevation: 864.50 / Watershed: Two Run & Burning Springs Run
District: Burning Springs / County: Wirt / Quadrangle: Girta (7.5') 366
- 6) WELL OPERATOR Clint Hurt & Associates (389) / 7) DESIGNATED AGENT I. David Bartram
Address P. O. Box 388 / Address P. O. Box 388
Elkview, WV 25071 23450 / Elkview, WV 25071
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED / 9) DRILLING CONTRACTOR:
Name Homer Dougherty / Name Clint Hurt & Associates
Address Linden Rt., Box 3-A / Address P. O. Box 388
Looneyville, WV 25259 / Elkview, WV 25071
- 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 (401)
- 12) Estimated depth of completed well, 4675 feet
- 13) Approximate trata depths: Fresh, 150 feet; salt, 1050 feet.
- 14) Approximate coal seam depths: None / 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		Top	Bottom
Conductor	9 5/8	IS	36.0#	X		300	300	To Surface	NEAT	
Fresh water									Sizes	
Coal										
Intermediate	7	IS	20.0#	X		1725	1725	125 Sks.		
Production	4 1/2	K-55	11.6#	X		4675	4675	225 Sks. or AS required by rule 15.01		
Tubing									Perforations:	
Liners									Top	Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47 - 105 - 1180 / Date June 28, 1985

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 28, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
77	AB	MW	MW	1023

Margaret J. Haise
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