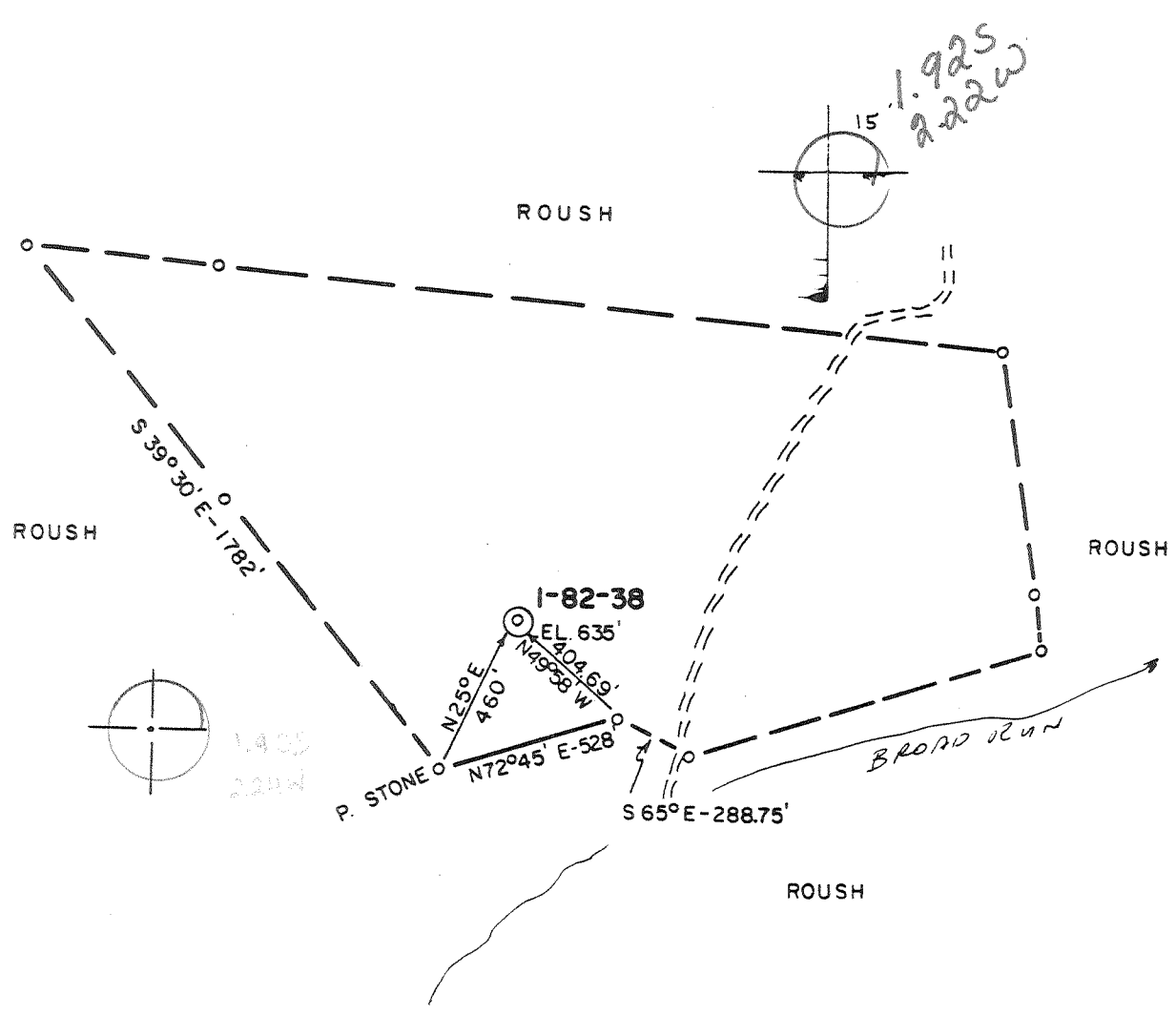
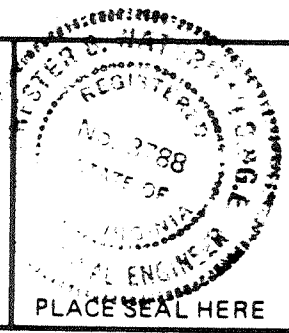


NORTH



FILE NO. 82-81
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200'
 PROVEN SOURCE OF ELEVATION NOB (817')

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) Chet Waterman
 R.P.E. 3788 L.L.S. _____



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



DATE 3/12, 1982
 OPERATOR'S WELL NO. I-82-38
 API WELL NO. 47-053-0291
 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 ___ SHALLOW ___
 LOCATION: ELEVATION 635' WATER SHED BROAD RUN
 DISTRICT GRAHAM COUNTY MASON
 QUADRANGLE NEW HAVEN 7.5 Riverswood 15' NW
 SURFACE OWNER F. B. LITCHFIELD ACREAGE 55
 OIL & GAS ROYALTY OWNER F. B. LITCHFIELD LEASE ACREAGE 55
 LEASE NO. _____

PROPOSED WORK: DRILL X 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 3800'
 WELL OPERATOR ANCHOR HOCKING CORP. DESIGNATED AGENT TOM SANDERS
 ADDRESS P. O. BOX 768 ADDRESS RIPLEY, WV

APR 26 1982

RECEIVED
AUG 27 1982



State of West Virginia

Department of Mines
Oil and Gas Division

Date 8-25-82
Operator's
Well No. 1-82-038
Farm F. B. Litchfield
API No. 47 - 053 - 0291

OIL & GAS DIVISION
DEPT. OF MINES

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 x /)

LOCATION: Elevation: 635' Watershed Broad Run
District: Graham County Mason Quadrangle New Haven 7.5'

COMPANY Anchor Hocking Corporation
ADDRESS P. O. Box 768, Ripley, WV 25271
DESIGNATED AGENT Thomas P. Sanders
ADDRESS P. O. Box 768, Ripley, WV 25271
SURFACE OWNER F. B. Litchfield
ADDRESS Route 1, Letart, WV 25253
MINERAL RIGHTS OWNER Same
ADDRESS
OIL AND GAS INSPECTOR FOR THIS WORK Kenneth
Butcher ADDRESS Rt. 1, Barboursville, WV
PERMIT ISSUED 4-12-82
DRILLING COMMENCED 5-3-82
DRILLING COMPLETED 5-7-82 Clint Hurt Drilling
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.			
13-10"			
9 5/8	347	347	225 Sx
8 5/8			
7	1980	680	60 Sx
5 1/2			
4 1/2	3506	3506	135 Sx
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Devonian Brown Shale Depth 3552 feet
Depth of completed well 3506 feet Rotary x / Cable Tools
Water strata depth: Fresh 200 feet; Salt 1726 feet
Coal seam depths: None noted Is coal being mined in the area? No

OPEN FLOW DATA
Producing formation Devonian Brown Shale Pay zone depth 2503-3434 feet
Gas: Initial open flow NETG Mcf/d Oil: Initial open flow 0 Bbl/d
Final open flow 351 Mcf/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 24 hours
Static rock pressure 800 psig (surface measurement) after 72 hours shut in
(If applicable due to multiple completion--)
Second producing formation HURON 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)

SEP 7 1982

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

NL McCullough cement bond perforate 2503-3434 w/26 holes 3.56" dia. frac baffle @2984

BJ-Hughes N₂ frac on 5-14-82 2/1,275,000 SCF N₂ & 500 gal. 15% HCl
1st Stage - BD 2400# ATP 1600# ATR 22,500 SCF N₂/min ISICP 1090# Tot N₂ 562,500 SCF
2nd Stage - BD 1500# ATP 1800# ATR 22,500 SCF N₂/min ISICP 1100# Tot N₂ 712,500 SCF
Between 1st and 2nd Stages dropped 3 3/4" dia. frac ball w/600 gal. 15% HCl

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	1700	Electric Log Tops
Sunbury Shale (Coffee Shale)	Black		1716	1726	
Berea Sand	White	Soft	1726	1751	SW <i>645' KB</i>
Bedford Shale	Gray-green		1751	1806	
Devonian Shale			1806	3552	
Upper Devonian undivided			1806	2806	
Lower Huron mbr.			2806	3164	Ssg 3090
Java Fm			3164	3280	
West Falls Fm			3280	3470	
Rhinstreet Shale			3470	3522	
Marcellas			3522	3544	
Onondaga Lm			3544	3552	
Total Depth Logger				3552	
Total Depth Driller				3535	

*GR log - 645' KB
H 2742
J 3160
A 3278
Rh 3434
On?*

(Attach separate sheets as necessary)

Anchor Hocking Corporation

Well Operator

Thomas P. Sanders, Manager, Gas/Oil Production

By: *Thomas P. Sanders*

Date: August 25, 1982

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."

PROPOSED WORK ORDER

(12-81)

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

DRILLING CONTRACTOR (IF KNOWN) Clint Hurt & Associates, Inc.

Address P.O. Box 1973

Midland, Texas 79702

GEOLOGICAL TARGET FORMATION, Devonian Brown Shale (Hamilton)

Estimated depth of completed well, 3600 feet Rotary X / Cable tools /

Approximate water strata depths: Fresh, 350 feet; salt, 1700 feet.

Approximate coal seam depths None expected Is coal being mined in the area? Yes / No X /

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	Kind
Conductor									
Fresh Water	9 5/8	K-55	36#	X		350	350	200sx	
Coal									
Intermediate	7	ERW	20#	X		1900	600	60sx	
Production	4 1/2	ERW	9.5#	X		3600	3600	110sx	Depths set
Tubing	1 1/2	J-55	2.75	X			3500		
Liners									Perforations:
									Top Bottom
									2400 3500

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 § 22-4-12b 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 § 22-4-8a from the owner of any water well or dwelling within 200 feet of the proposed well.

A separate 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 12-21-82
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.

WAIVER

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