



FILE NO. _____	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 AT THE DEPARTMENT OF MINES. (SIGNED) <i>William X. Maston</i> W.P.E. _____ L.L.S. 551	PLACE SEAL HERE
DRAWING NO. _____		
SCALE 1"=500'		
MINIMUM DEGREE OF ACCURACY 1:200		
PROVEN SOURCE OF ELEVATION ROAD INT. 929'		

(+) DEPARTMENT LOCATION OF WELL IN UNITED STATES TOPOGRAPHIC MAPS FORM _____ TO _____	DATE 20 FEBRUARY 1980 OPERATOR'S WELL NO H-951 API WELL NO 47 017 STATE COUNTY PERMIT 2607
STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION	
WELL TYPE OIL <input checked="" type="checkbox"/> GAS <input checked="" type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> ("P" GAS) PRODUCTION <input checked="" type="checkbox"/> STORAGE <input type="checkbox"/> DEEP <input checked="" type="checkbox"/> SHAL <input type="checkbox"/> LOCATION ELEVATION 1098' <input type="checkbox"/> RAILROAD <input type="checkbox"/> TOM'S FORK DISTRICT NEW MILTON COUNTY DODDRIDGE QUADRANGLE NEW MILTON, W.VA. 7 1/2' QUAD. VADIS 15' WC SURVEY OWNER JOHN F. ERWIN ACRES 42.1 OPERATOR AND TOYALTY JOHN CLAY KRENN PERCENTAGE 42.1	
PROPOSED WORK: DRILL <input checked="" type="checkbox"/> REFRAC <input type="checkbox"/> WELL CLEAN UP <input type="checkbox"/> REMOVAL <input type="checkbox"/> REPAIR <input type="checkbox"/> STRUCTURE OR STIMULATE <input type="checkbox"/> PLUG <input type="checkbox"/> OLD PRODUCTION <input type="checkbox"/> REPAIR <input type="checkbox"/> NEW FORMATION <input type="checkbox"/> OTHER PHYSICAL CHANGE (SEE WELL RECEIPT)	
PLUG AND ABANDON <input type="checkbox"/> CLEAN OUT AND REPLEN <input type="checkbox"/> TARGET FORMATION ALEXANDER <input type="checkbox"/> PERMITTED DEPTH 5500' WELL OPERATOR GLENN L. HAUGHT & SONS DRILLMATEL FROM WARREN HAUGHT ADDRESS SMITHVILLE, W.VA. 26178 ADDRESS SMITHVILLE, W.VA. 26178	

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 X
 LOCATION: Elevation: 1098' Watershed: Tom's Fork
 District: New Milton County: Doddridge Quadrangle: New Milton, WV 7 1/2'

WELL OPERATOR Glenn L. Haught & Sons Clay Krenn
 Address Smithville, WV 26178 DESIGNATED AGENT Warren R. Haught
 Address Smithville, WV 26178

PERMITTED WORK: Drill X Convert _____ Drill deeper _____ Redrill _____ Fracture or stimulate _____
 Plug off old formation _____ Perforate new formation _____
 Other physical change in well (specify) _____

PERMIT ISSUED ON February 25, 19 80, OIL & GAS INSPECTOR FOR THIS WORK:
 (IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Paul Garrett
 Address 321 Beech Street
Clarksburg, WV 26301

GEOLOGICAL TARGET FORMATION: Devonian Shale Depth 3938 - 5600 feet
 Depth of completed well, 5658 feet Rotary X / Cable Tools _____
 Water strata depth: Fresh, _____ feet; salt, _____ feet.
 Coal seam depths: None Is coal being mined in the area? No
 Work was commenced March 2, 1980, and completed March 12, 1980

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILLING OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor								None
Fresh water	10 3/4"			X		282'	282'	125 sacks
Coal								None
Intermediate	7"			X		2429'	2429'	85 sacks
Production	4 1/2"	J-55	10.5#	X		5596'	5596'	225 sacks
Tubing								
Liners								Perforations:
								5116
								5473

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3938 - 5600 feet
 Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
 Final open flow, 800 Mcf/d Final open flow, _____ Bbl/d
 Time of open flow between initial and final tests, 8 hours
 Static rock pressure, 1050 psig (surface measurement) after 12 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 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

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

Hydrafraced by Halliburton -- 3-19-80 -- 1250 Gal. Acid -- 1522 Bbls. Water
70,000 Lbs. 20/40 Mesh Sand -- 25,000 Lbs. 80/100 Mesh Sand.

Perforations: 15--5116--5254
13--5386--5473

L LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Shale			1090	1140	
Red Rock			1140	1146	
Sand			1146	1174	
Shale			1174	1198	
Red Rock			1198	1206	
Shale			1206	1341	
Sand			1341	1430	
Shale			1430	1506	
Sand			1506	1550	
Shale			1550	1580	
Sand			1580	1600	
Sand			1600	1620	
Sand			1620	2090	
L Lime			2090	2121	
B. Lime			2121	2360	
Injun			2360	2388	
Shale			2388	2436	
Sand			2436	2578	
Shale			2578	2637	
Sand			2637	2696	
Shale			2696	2998	
Sand			2998	3020	
Shale			3020	3475	
Sand			3475	3505	
Shale			2505	3650	
Sand			3650	3805	
Shale			3805	3930	
Sand			3930	3938	
Shale			3938	4212	
Sand			4212	4224	
Shale			4224	4448	
Sand			4448	4452	
Shale			4452	4656	
Sand			4656	4664	
Shale			4664	5002	
Sand			5002	5020	
Shale			5020	5104	
Sand			5104	5114	
Shale			5114	5400	
Sand ALEX			5400	5466	
Shale			5466	5658	T. D.

Glenn L. Haught & Sons

Well Operator

By

Warren R. Haught

Regulation 2.02(i) provides as follows:
"The term 'log' or 'well log' shall mean a systematic, detailed record of the operations of a well."

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION

OIL AND GAS WELL PERMIT APPLICATION

WELL TYPE: Oil / Gas
(If "Gas", Production / Underground storage _____ Deep _____ Shallow

LOCATION: Elevation: 1098' Watershed: Tom 's Fork
District: New Milton County: Doddridge Quadrangle: New Milton, WV 7 1/2'

WELL OPERATOR Glenn L. Haught & Sons
Address Smithville, WV 26178

DESIGNATED AGENT Warren R. Haught
Address Smithville, WV 26178

OIL & GAS ROYALTY OWNER Clay Krenn
Address Blandville, WV 26328

COAL OPERATOR None
Address _____

ACREAGE 42.1
SURFACE OWNER John F. Erwin

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name _____

Address New Milton, WV 26411

Address _____

ACREAGE 42.1

Name _____

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

Address _____

OIL & GAS INSPECTOR TO BE NOTIFIED
Name Paul Garrett
Address 321 Beech Street
Clarksburg, WV 26301

COAL LESSEE WITH DECLARATION ON RECORD:
Name None
Address _____
RECEIVED
FEB 22 1980

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 _____ / other contract / dated March 11, 1977, to the undersigned well operator from Zedack Pethtel

[If said deed, lease, or other contract has been recorded:]
Recorded on _____, 19____, in the office of the Clerk of the County Commission of _____ County, West Virginia, in _____ Book _____ at page _____. A permit is requested as follows:

PROPOSED WORK: Drill / Drill deeper _____ / Redrill _____ / Fracture or stimulate _____ /
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 the receipt of this Application by the Department.

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.

PLEASE SUBMIT COPIES OF ALL GEOPHYSICAL LOGS DIRECTLY TO:
WEST VIRGINIA OIL AND GAS CONSERVATION COMMISSION
1615 WASHINGTON STREET EAST
CHARLESTON, WV 25311
TELEPHONE: (304) 542-3092

Glenn L. Haught & Sons
Well Operator
By Warren R. Haught
Partner

BLANKET COVER

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Glenn L. Haught & Sons
Address Smithville, WV 26178

GEOLOGICAL TARGET FORMATION, Alexander

Estimated depth of completed well, 5500 feet Rotary X Cable tools _____
Approximate water strata depths: Fresh, 75 feet; salt, _____ feet.
Approximate coal seam depths: None 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		
Conductor								Kinds
Fresh water	8 5/8	K-55	20#	X		200'	200'	75 sacks
Coal								Sizes
Intermediate								
Production	4 1/2	J-55	10.5#	X			5500	100 sacks
Tubing								Depths set
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-3, "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 § 22-4-3a 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, of the W. Va. Code, the location is hereby approved for drilling. This permit shall expire if operations have not commenced by 10-25-80.

Robert T. [Signature]
Deputy Director - Oil & Gas Division

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 _____