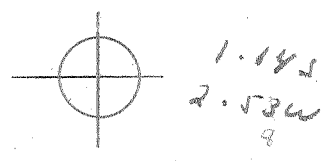


LATITUDE 39° 10'

5990' SOUTH

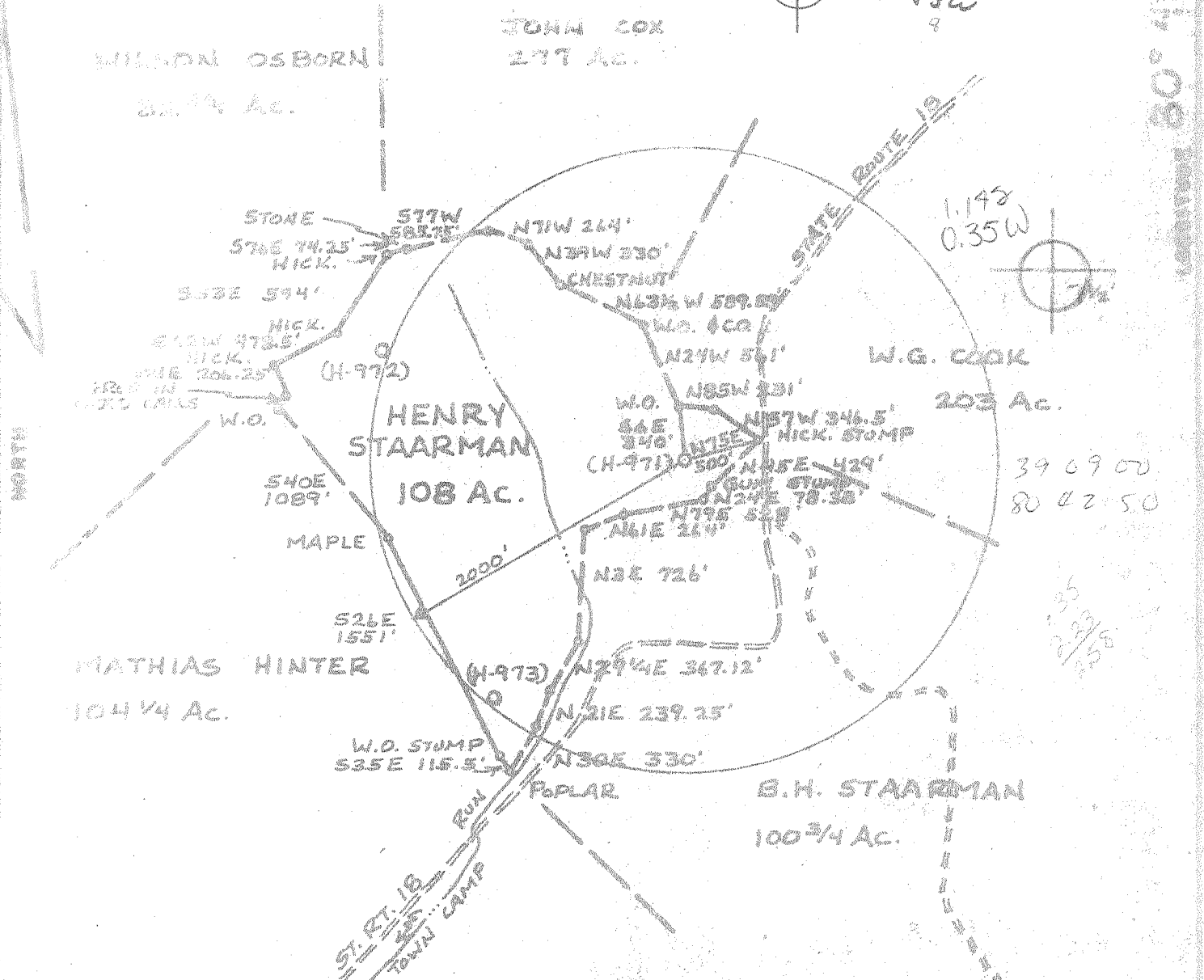
1870' WEST



JOHN COX
277 AC.

WILSON OSBORN
22 3/4 AC.

80° 42' W
90° 40'



FILE NO. _____
DRAWING NO. _____
SCALE 1" = 1000'
MINIMUM DEGREE OF ACCURACY 1:200
PROVEN SOURCE OF ELEVATION ROAD INT. 1094'

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) William P. Wood
R.P.E. _____ L.L.S. _____

PLACE SEAL HERE

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



DATE 24 MARCH 1982
OPERATOR'S WELL NO. H-971
API WELL NO. 47-017
STATE COUNTY PERMIT 2640

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL TYPE: OIL GAS LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS", PRODUCTION STORAGE _____ DEEP SHALLOW _____
LOCATION: ELEVATION 1184' WATER SHED TOWN CAMP RUN
DISTRICT COVE _____ COUNTY DODDRIDGE
QUADRANGLE NEW MILTON, W.VA. T1/4 QUAD. WC
SURFACE OWNER HENRY STAARMAN ACREAGE 108
OIL & GAS ROYALTY OWNER HENRY STAARMAN LEASE ACREAGE 108
LEASE NO. _____
PROPOSED WORK: DRILL CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE _____ PLUS OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUS AND ABANDON _____ CLEAN OUT AND REPLUS _____
TARGET FORMATION ALAXANDER ESTIMATED DEPTH 5700'
WELL OPERATOR GLENN L. HAUGHT & SONS DESIGNATED AGENT WARREN HABANT
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 2
OF
DRILLING, REWORKING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil Gas / Liquid Injection Waste Disposal
(If "Gas", Production / Underground storage / Deep / Shallow
LOCATION: Elevation: 1184' Watershed: Town Camp Run
District: Cove County: Doddridge Quadrangle: New Milton, WV 7 1/2'
WELL OPERATOR Glenn L. Haught & Sons DESIGNATED AGENT Henry Staarman H-971
Address Smithville, WV 26178 Address Smithville, WV 26178

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

PERMIT ISSUED ON April 2, 1980, 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
Clarksborg, WV 26301

GEOLOGICAL TARGET FORMATION: Devonian Shale Depth 4768 - 5685 feet
Depth of completed well, 5733 feet Rotary / Cable Tools
Water strata depth: Fresh, _____ feet; salt, _____ feet.
Coal seam depths: None Is coal being mined in the area? No
Work was commenced April 7, 1980, and completed April 21, 1980

CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS	
	Size	Grade	Weight per foot	New	Used	For drilling			Left in well
Conductor	16"			X		17'	17'	20 sacks	Rinds
Fresh water	10 3/4"			X		392'	392'	200sacks	
Coal									Sizes
Intermediate	7"			X		2300'	2300'	60 sacks	
Production	4 1/2"	J-55	10.5#	X			5654'	210 sacks	Cement set
Tubing									
Liners									Perforations:
									Top Bottom
									4776 5547

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 4768 - 5685 feet
 Test: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Mcf/d
 Final open flow, 1,300 Mcf/d Final open flow, _____ Mcf/d
 Time of open flow between initial and final tests, 8 hours
 Static rock pressure, 1860 psig (surface measurement) after 12 hours shut in
 [If applicable due to multiple completions--]
 Second producing formation _____ Pay zone depth _____ feet
 Test: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Mcf/d
 Final open flow, _____ Mcf/d Final open flow, _____ Mcf/d
 Time of open flow between initial and final tests, _____ hours
 Static rock pressure, _____ psig (surface measurement) after _____ hours shut in

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

Hydrafraced by Halliburton - 4-25-80 - 1500 Gal. Acid -- 1847 Bbls. Water
75,000 Lbs. 20/40 Mesh Sand -- 23,500 Lbs. 80/100 Mesh Sand

Perforations: 12--5489--5547 *Bbls*
10-5224 --5362 *Bbls*
10--4776--5131 *Bbls*

L LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Sand			1734	1870	
Sandy Shale			1870	1900	
Shale			1900	1942	
Sand			1942	1962	
Shale			1962	1993	
Sand			1993	2001	
Sandy Shale			2001	2060	
Shale			2060	2094	
Sand			2094	2180	
Red Rock			2180	2200	
Sand			2200	2240	
Lime			2240	2299	
P. Cave			2299	2304	
S. Lime			2304	2350	
Sand			2350	2360	
Shale			2360	2410	
Sand			2410	2430	Base Imp. - 2370
Shale			2530	2600	
Sand			2600	2674	
Sandy Shale			2674	2693	
Shale			2693	2740	
Sand & Shale			2740	3144	
Shale			3144	3190	
Sand			3190	3240	
Shale			3240	3310	
Sand			3310	3380	
Shale			3380	3500	
Sand			3500	3551	
Shale			3551	3775	
Sand			3775	4145	
Sandy Shale			4145	4320	
Shale			4320	4385	
Sand			4385	4436	
Shale			4436	4460	
Sand			4460	4512	
Shale			4512	4590	
Sand			4590	4620	
Shale			4620	4660	
Sand			4660	4741	
Shale			4741	4757	
Sand			4757	4768	
Shale			4768	4790	
Sand			4790	4800	
Shale			4800	4890	
Sand			4890	4922	
Shale			4922	5122	
Sand			5122	5191	
Shale			5191	5227	
Sand			5227	5258	
Sandy Shale			5258	5303	
Shale			5303	5379	
Sand			5379	5389	
Sandy Shale			5389	5618	
Sand			5618	5685	
Shale DEV SA			5685	5733	T. D.

5733
5389

344

Glenn L. Haught & Sons

Well Operator

Regulation 1.02(i) provides as follows:

Handwritten signature/initials

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

OIL AND GAS WELL PERMIT APPLICATION

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

LOCATION: Elevation: 1184' Watershed: Town Camp Run
District: Cove 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 Henry Staarman
Address Route 1, Box 78
New Milton, WV
Acreage .108

COAL OPERATOR None
Address _____

SURFACE OWNER same as above
Address _____
Acreage _____

COAL OWNER(S) WITH DECLARATION ON RECORD:
Name _____
Address _____
Name _____
Address OIL & GAS DIVISION
DEPT. OF MINES
MAR 28 1980

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

COAL LESSEE WITH DECLARATION ON RECORD:
Name None
Address _____

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

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 January 12, 1980, to the undersigned well operator from Henry Staarman

[If said deed, lease, or other contract has been recorded:]
Recorded on Feb. 20, 1980, in the office of the Clerk of the County Commission of Doddridge County, West Virginia, in Lease Book 113 at page 523. A permit is requested as follows:

PROPOSED WORK: Drill X / 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 plan 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 BOND

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, Alaxander

Estimated depth of completed well, 5700 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 (Table feet)	PACKERS
	Size	Grade	Weight per ft	New	Used	For drilling		
Conductor								Kinds
Fresh water	10 3/4"			X		300'	300'	75 sacks
Coal								Stops
Intermediate	7"			X		2000'	2000'	50 sacks
Production	4 1/2"	J-55	10.5#	X			5700	100 sacks
Tubing								
Miners								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 plan 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 § 22-4-12k 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 § 22-4-3c from the owner of any water well or drilling 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 12-2-80.


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 _____

UNOFFICIAL