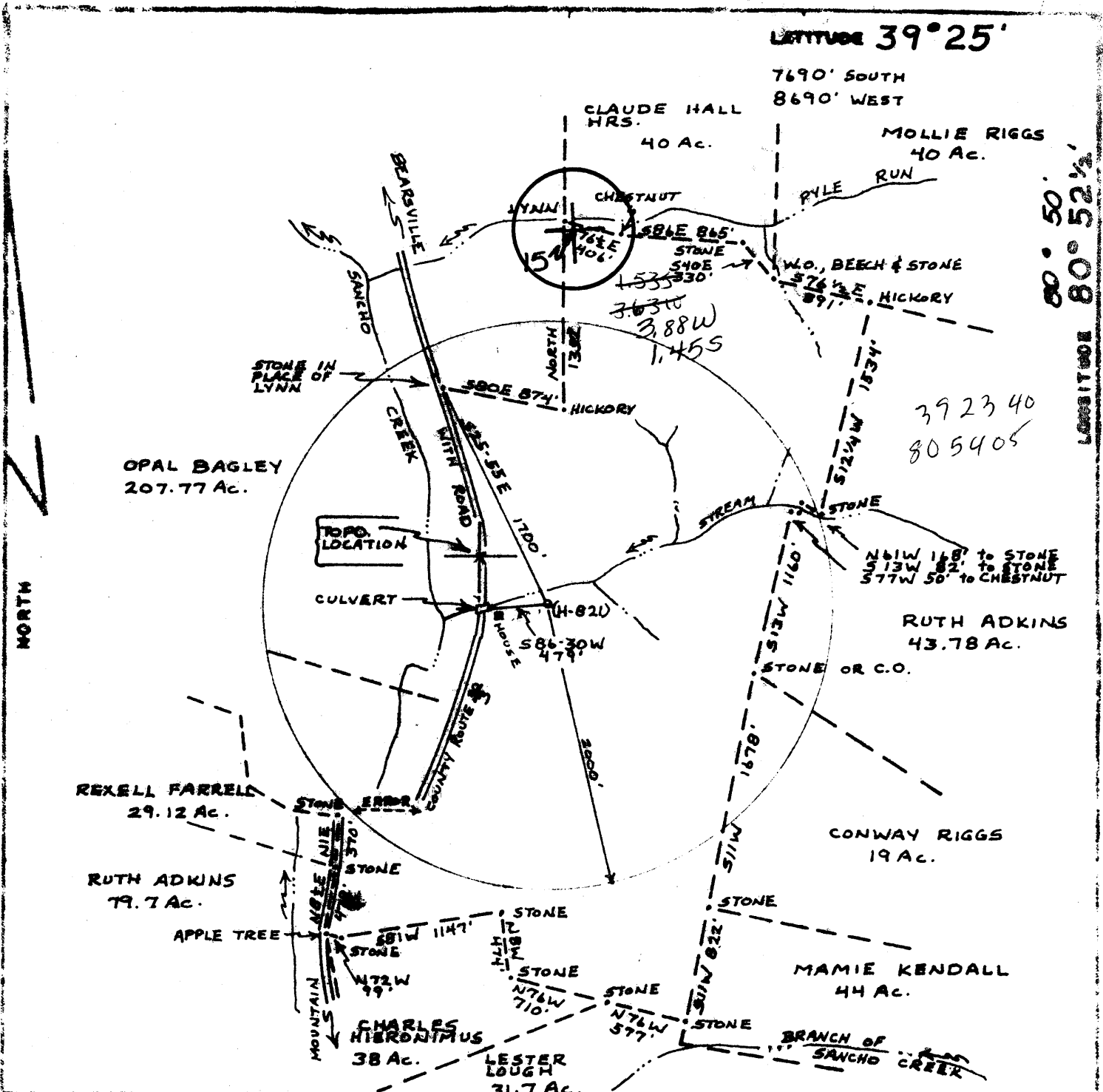


Latitude 39° 25'

7690' SOUTH
8690' WEST

Longitude 80° 52 1/2'



FILE NO. _____
DRAWING NO. _____
SCALE 1"=1000'
MINIMUM DEGREE OF ACCURACY 1:200
PROVEN SOURCE OF ELEVATION ROAD ELEV. 834'

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 R. Mossler*
R.P.E. _____ L.L.S. 557

PLACE SEAL HERE

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



DATE 15 AUGUST, 1979
OPERATOR'S WELL NO H-821
API WELL NO. 47-095-0727
STATE COUNTY PERMIT

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 844' WATER SHED SANCHO CREEK
DISTRICT CENTERVILLE COUNTY TYLER
QUADRANGLE MIDDLEBOURNE, W.VA. 7 1/2' QUAD. (WEST UNION) 5' C
SURFACE OWNER EDWARD G. BEEM ACREAGE 300
OIL & GAS ROYALTY OWNER EDWARD G. BEEM LEASE ACREAGE 317
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) _____

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION GORDON ESTIMATED DEPTH 3100'
WELL OPERATOR GLENN L. HAUGHT & SONS DESIGNATED AGENT WARREN HAUGHT
ADDRESS SMITHVILLE, W.VA. 26178 ADDRESS SMITHVILLE, W.VA. 26178
3-4 Bearsville - DPT - Bldr - SPD - Green River, Gantz
unsuccessful 26 366

AUG 24 1979

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

WELL OPERATOR'S REPORT 46
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil Gas Liquid Injection Waste Disposal
 (If "Gas", Production Underground storage Deep Shallow
 LOCATION: Elevation: 844' Watershed: Sancho Creek
 District: Centerville County: Tyler Quadrangle: Middlebourne, WV 71'
 E. G. Beam
 WELL OPERATOR Glenn L. Haught & Sons DESIGNATED AGENT Warren R. Haught
 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 August 20, 19 79, OIL & GAS INSPECTOR FOR THIS WORK:
 (IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name Phillip Tracey
 Address Middlebourne, WV 26149
 Phone: 758-4573

GEOLOGICAL TARGET FORMATION: Weir, Berea, Gantz, 5th Sand Depth 2119 - 3300 feet
 Depth of completed well, 5305 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 September 4, 19 79, and completed September 13, 19 79

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
Conductor	16"			X		30'	30'	10 sacks	Rinds
Fresh water	10 3/4"			X		351'	351'	135 sacks	
Coal									Sizes
Intermediate									
Production	4 1/2"	J-55	10.5#	X			4910'	570 sacks	Depos set
Tubing									
Liners									Perforations:
									Size
									2120
									3254

OIL & GAS DIVISION
DEPT. OF MINES
2119/2195
2220/2250
2700/2735
3220/3300

OPEN FLOW DATA

Producing formation Weir, Berea, Gantz, 5th Sand Pay zone depth _____ feet
 Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
 Final open flow, 510 Mcf/d Final open flow, _____ Bbl/d
 Time of open flow between initial and final tests, 8 hours
 Static rock pressure, 875 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

(Continued on reverse side)

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

Hydrafraced by Halliburton 10-4-79 -- 1762 Bbls. Water -- 2750 Gal. Acid
 80,000 Lbs. 20/40 Mesh Sand -- 23,500 Lbs. 80/100 Mesh Sand.

Perforations: 9--3254--~~3236~~ 10--2232--2248 *Berea*
 9--2718--2709 4--2126--2120 *Wen*
 2--2192--2195

WELL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Red Rock			125	190	
Sand			190	220	
Red Rock			220	330	
Sand			330	398	
Shale			398	413	
Red Rock			413	420	
Shale			420	502	
Sand			502	564	
Shale			564	608	
Sand			608	663	
Shale			663	711	
Red Rock			711	717	
Sand			717	756	
Shale			756	843	
Sand			843	860	
Red Rock			860	872	
Sand			872	890	
Shale			890	1150	
Sand			1150	1200	
Shale			1200	1260	
Sand			1260	1340	
Shale			1340	1420	
Sand			1420	1550	
Shale			1550	1620	
Sand			1620	1660	
L. Lime			1660	1714	
B. Lime			1714	1810	
Sand			1810	1900	
Sandy Shale			1900	1940	
Shale			1940	2070	
Sand			2070	2095	
Shale			2095	2119	
Sand			2119	2195	
Shale			2195	2220	
Sand <i>Berea</i>			2220	2250	
Shale			2250	2400	
Sand & Shale			2400	2550	
Sand			2550	2575	
Shale			2575	2700	
Sand			2700	2735	
Shale			2735	3220	
Sand			3220	3300	
Shale			3300	3440	
Sand			3440	3445	
Shale			3445	3660	
Broken Sand & Shale			3660	3950	
Shale			3950	4150	
Sand			4150	4175	
Shale			4175	4390	
Sand			4390	4430	
Shale			4430	4595	
Sand			4595	4680	
Shale			4680	4780	
Sand			4780	4830	
Shale			4830	5020	
Sand			5020	5070	
Shale <i>DEV SA</i>			5070	5305	

5305
 2250
 3055

3254
 3250
 1004

~~5305~~
~~3254~~
~~2250~~ - *expl. ftg.*

T. D.

98' deeper (subsea) than 728'

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."

Glenn L. Haught & Sons
 Well Operator

By *Warren R. Haught*
 Partner

[08-78]

OIL AND GAS WELL PERMIT APPLICATION

Operator's Well No. H-821 API Well No. 47-095-07 State County Per

WELL TYPE: Oil X / Gas X / (If "Gas", Production X / Underground storage / Deep / Shallow X /) LOCATION: Elevation: 844' Watershed: Sancho Creek District: Centerville County: Tyler Quadrangle: Middlebournier, 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 Edward G. Beem Address 106 41st Street Vienna, WV 26105 Acreage 317

COAL OPERATOR None Address

SURFACE OWNER Edward G. Beem Address 106 41st Street Vienna, WV 26105 Acreage 300

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

FIELD SALE (IF MADE) TO: Name Address

COAL LESSEE WITH DECLARATION ON RECORD: Name None Address

OIL & GAS INSPECTOR TO BE NOTIFIED Name Phil Tracey Address Middlebourne, WV 26149 Phone: 758-4573

RECEIVED AUG 20 1979

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 X / other contract / dated August 29, 1977, to the undersigned well operator from E. G. Beem (single)

[If said deed, lease, or other contract has been recorded:] Recorded on October 11, 1977, in the office of the Clerk of the County Commission of Tyler County, West Virginia, in Deed Book 213 at page 662. 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 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) 348-3092

BLANKET BOND

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

[08-78]

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. Haight & Sons
Address Smithville, WV 26178

GEOLOGICAL TARGET FORMATION, Gordon Sands

Estimated depth of completed well, 3100' feet Rotary / Cable tools /
Approximate water strata depths: Fresh, 50 feet; salt, feet.
Approximate coal seam depths: None Is coal being mined in the area? Yes / No

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		
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			3100'	150 sacks	Depths set
Tubing									
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-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. **THIS PERMIT MUST BE POSTED AT THE WELL SITE** in connection therewith.

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 4-20-80.

[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