

NO 7-1-80

Date: June 27, 19 80

Operator's Well No. H-1020

API Well No. 17 - 073 - 891
State County Permit

891

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: 902' Watershed: Long Run

District: McKim County: Pleasants Quadrangle: Schultz

WELL OPERATOR Haught, Inc.
Address Route 3, Box 14
Smithville, WV 26178

DESIGNATED AGENT Warren R. Haught
Address Smithville, WV 26178

OIL & GAS ROYALTY OWNER Charles J. Pethtel
Address 5451 Ashford Road
Dublin, Ohio 43017

COAL OPERATOR _____
Address _____

Acreage 128.47

COAL OWNER(S) WITH DECLARATION ON RECORD:

SURFACE OWNER same as above

Name _____

Address _____

Address _____

Acreage _____

Name _____

FIELD SALE (IF MADE) TO:

Address _____

Name _____

COAL LESSEE WITH DECLARATION ON RECORD:

Address _____

Name _____

OIL & GAS INSPECTOR TO BE NOTIFIED

Address _____

Name Phillip Lee Tracy

Address P. O. Box 173 - b Dodd Street

Middlebourne, WV 26149

The undersigned well operator is entitled to operate for oil or gas purposes at the above location under a deed ___/ lease ___/ other contract X / dated August 27, 19 79, to the undersigned well operator from Zedack Pethtel

[If said deed, lease, or other contract has been recorded:]

Recorded on April 22, 19 80, in the office of the Clerk of the County Commission of Pleasants County, West Virginia, in Deed Book 155 at page 471. 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.

BLANKET BOND

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) 349-3092

RECEIVED

JUN 30 1980

Haught, Inc.

Well Operator

Warren R. Haught

OIL & GAS DIVISION BY
DEPT. OF MINES President

PROPOSED WORK ORDER

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

DRILLING CONTRACTOR (IF KNOWN) Haight, Inc.
Address Smithville, WV 26178

GEOLOGICAL TARGET FORMATION, Devonian Shale

Estimated depth of completed well, 3500 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			3500'	100 sacks	Depths set
Casing									
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 3-14-81.

Fred W. [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 _____

STATE OF WEST VIRGINIA
OFFICE OF OIL AND GAS

Company Name Haught, Inc Designated Agent Warren R. Haught
Address Smithville, WV 26178 Address Smithville, WV 26178
Telephone 477-3333 Telephone 477-3333
Landowner Charles J. Pethtel Soil Cons. District Upper Ohio
Revegetation to be carried out by W. Haught (Agent)
This plan has been reviewed by Upper Ohio SCD. All corrections
and additions become a part of this plan. 7/3/80 Kenneth R. Plason
(Date) (SCD Agent)

Access Road	Location
Structure <u>Culvert</u> (A) Spacing <u>100'</u> Page Ref. Manual <u>1:8</u>	Structure <u>Interceptor Channell</u> (1) Material <u>Around Location</u> Page Ref. Manual <u>1:11</u>
Structure <u>N/A</u> (B) Spacing _____ Page Ref. Manual _____	Structure <u>N/A</u> (2) Material _____ Page Ref. Manual _____
Structure <u>N/A</u> (C) Spacing _____ Page Ref. Manual _____	Structure <u>N/A</u> (3) Material _____ Page Ref. Manual _____

All structures should be inspected regularly and repaired if necessary.

Revegetation

Treatment Area I	Treatment Area II
Lime _____ Tons/acre or correct to pH <u>6.5</u>	Lime _____ Tons/Acre or correct to pH _____
Fertilizer <u>500</u> lbs/acre (10-20-20 or equivalent)	Fertilizer _____ lbs/acre (10-20-20 or equivalent)
Mulch <u>Hay</u> 2 Tons/Acre	Mulch _____ Tons/Acre
Seed* <u>Orchard grass</u> 20 lbs/acre	Seed* _____ lbs/acre
<u>Red Clover</u> 15 lbs/acre	_____ lbs/acre
_____ lbs/acre	_____ lbs/acre

*Inoculate all legumes such as vetch, trefoil and clovers with the proper bacterium. Inoculate with 3X recommended amount.

RECEIVED

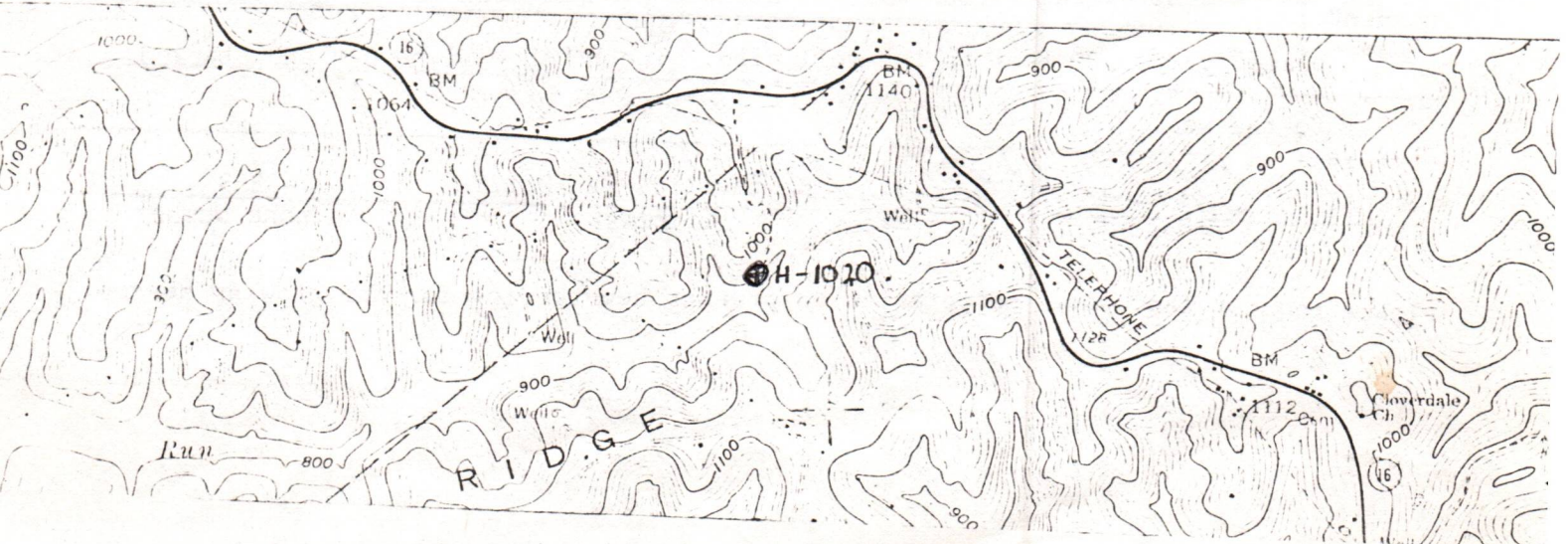
JUL 11 1980

Attach or photocopy section of involved Topographic map. Quadrangle Schultz







Legend:  Well Site
 Access Road







OIL & GAS DIVISION
DEPT. OF MINES

BLANKET BOND

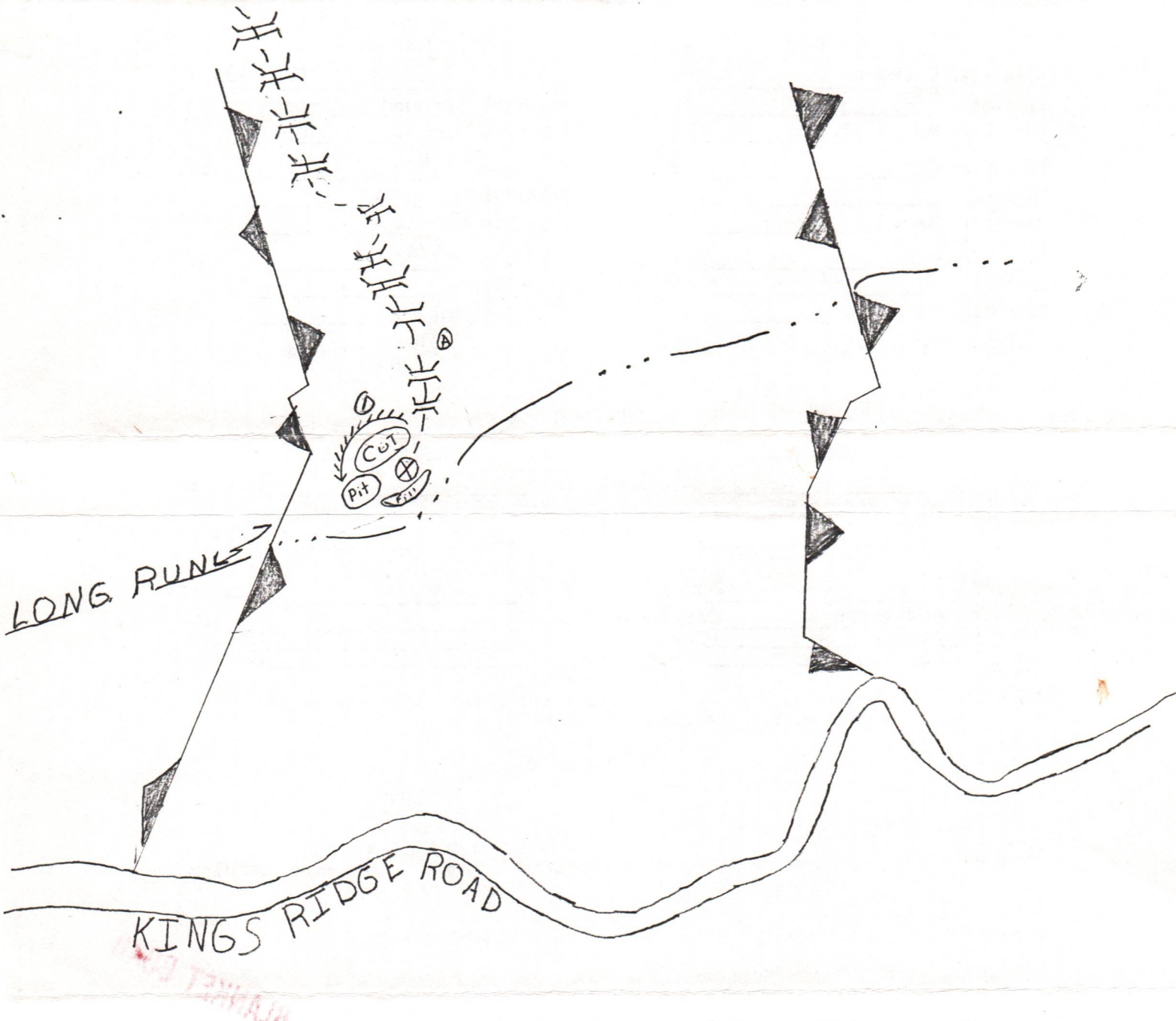


Well Site Plan

Legend: Property Boundry 
 Road 
 Existing Fence 
 Planned Fence 
 Stream 
 Open Ditch 

Diversion 
 Spring 
 Wet Spot 
 Building 
 Drain Pipe 
 Waterway 

Sketch to include well location, existing access road, roads to be constructed, wellsite, drilling pits and necessary structures numbered or lettered to correspond with first part of this plan. Include all natural drainage.



Comments: The average slope was 11% because of the slope there shall be culverts
placed every 100 feet to the well site. The brush will be cut and stacked
to the well.

Signature: Warren R. Haugh Smithville, WV 26178 477-3333
 Agent Address Phone Number

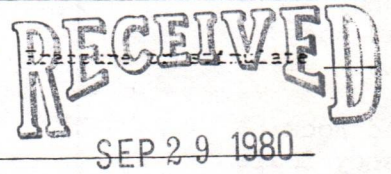
Please request landowners cooperation to protect new seeding for one growing season.

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

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

WELL TYPE: Oil X / Gas X / Liquid Injection _____ Waste Disposal _____
(If "Gas", Production _____ / Underground storage _____ / Deep _____ / Shallow X /)
LOCATION: Elevation: 902' Watershed: Long Run
District: McKim County: Pleasants Quadrangle: Schultz
Charles Pethel H-1020
WELL OPERATOR Haught, Inc. DESIGNATED AGENT Warren R. Haught
Address Rt. 3 Box 14 Address Smithville, WV 26178
Smithville, WV 26178

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



PERMIT ISSUED ON July 14, 1980, OIL & GAS INSPECTOR FOR THIS AREA: Phillip Lee Tracy
(IF APPLICABLE: PLUGGING OF DRY HOLE OR CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED) Name _____ Address P.O. Box 173-Dodd Street
_____, 19_____ Middlebourn, WV 26149

GEOLOGICAL TARGET FORMATION: Devonian Shale Depth 3550 to 4010 feet
Depth of completed well, 4010 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 July 3, 1980, 19_____, and completed August 13, 1980

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		20'	20'	20sacks	Kinds
Fresh water	10-3/4			X		311'	311'	150 sacks	
Coal									Sizes
Intermediate									
Production	4 1/2	J-55	10.5	X			3898'	315 sacks	Beams set
Tubing									
Liners									Perforations:
									Top Bottom
								3564	3887

OPEN FLOW DATA

Producing formation Devonian Shale Pay zone depth 3550 to 4010 feet
Gas: Initial open flow, _____ Mcf/d Oil: Initial open flow, _____ Bbl/d
Final open flow, 175 Mcf/d Final open flow, _____ Bbl/d
Time of open flow between initial and final tests, 8 hours
Static rock pressure, 850 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

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

Nitrogen fraced by B.J. Hughes--8-22-80--810,000 SCF.
750 Gal. Acid

Perforations: 23--3564--3887

LL LOG

FORMATION	Color	Hard or Soft	Top Feet	Bottom Feet	Remarks Including indication of all fresh and salt water, coal, oil and gas
Clay			0	10	
Red Rock/Sand			10	723	
Sand/Shale			723	870	
Shale			870	915	
Red Rock			915	923	
Sandy Shale			923	949	
Red Rock			949	962	
Shale			962	974	
Sand			974	994	
Red Rock			994	1002	
Sandy Shale			1002	1055	
Shale			1055	1080	
Sand			1080	1145	
Shale			1145	1220	
Sand			1220	1265	
Shale			1265	1420	
Sand			1420	1460	
Shale			1460	1480	
Sand			1480	1503	
Shale			1503	1666	
Sand			1666	1782	
Shale			1782	1820	
B. Lime			1820	1869	
Sand			1869	1989	
Shale/Sand			1989	2683	
Shale			2683	2740	
Sand			2740	2804	
Shale			2804	3018	
Sand			3018	3030	
Shale			3030	3091	
Sand			3091	3120	
Shale			3120	3210	
Sand			3210	3254	
Shale			3254	3508	
Sand			3508	3550	
Shale			3550	3695	
Sand			3695	3750	
Shale			3750	3790	
Sand			3790	3810	
Shale			3810	3880	
Sand			3880	4010	T.D.

GTE: 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 well."

Haught, Inc.
Well Operator

By Warren R. Haught
Its President

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

INSPECTOR'S WELL REPORT

Permit No. 13-891

Oil or Gas Well _____
(KIND)

Company Hought Inc.
 Address Smithville W Va
 Farm Pethlet
 Well No. H-1020
 District McKin County Lincoln
 Drilling commenced _____
 Drilling completed _____ Total depth 311
 Date shot _____ Depth of shot _____
 Initial open flow _____ /10ths Water in _____ Inch
 Open flow after tubing _____ /10ths Merc. in _____ Inch
 Volume _____ Cu. Ft.
 Rock pressure _____ lbs. _____ hrs.
 Oil _____ bbls., 1st 24 hrs.
 Fresh water _____ feet _____ feet
 Salt water _____ feet _____ feet

CASING AND TUBING	USED IN DRILLING	LEFT IN WELL	PACKERS
Size			
16			Kind of Packer _____
13			
10	<u>311</u>	<u>311</u>	Size of _____
8 1/4			
6 5/8			Depth set _____
5 3/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED 10 3/4 SIZE 511 No. FT 2880 Date _____
 NAME OF SERVICE COMPANY Hought
150 lb.
 COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
 _____ FEET _____ INCHES _____ FEET _____ INCHES
 _____ FEET _____ INCHES _____ FEET _____ INCHES

Drillers' Names _____

Remarks: _____

RECEIVED

AUG 13 1980

OIL & GAS DIVISION
DEPT. OF MINES

Aug 8, 80
DATE

Phil Long 512
DISTRICT WELL INSPECTOR



RECEIVED
AUG 23 1984

OIL & GAS DIVISION
DEPT. OF MINES

State of West Virginia
Department of Mines
Oil and Gas Division
Charleston 25305

FINAL INSPECTION REPORT
INSPECTORS COMPLIANCE REPORT
August 1, 1984

COMPANY Haight, Inc.
Route 3, Box 14
Smithville, West Virginia 26178

PERMIT NO 073-0891 (7/14/80)
FARM & WELL NO Charles Pethtel #H-1020
DIST. & COUNTY McKim/Pleasants

RULE	DESCRIPTION	IN COMPLIANCE	
		YES	NO
23.06	Notification Prior to Starting Work	✓	
25.04	Prepared before Drilling to Prevent Waste	✓	
25.03	High-Pressure Drilling	✓	
16.01	Required Permits at Well-site	✓	
15.03	Adequate Fresh Water Casing	✓	
15.02	Adequate Coal Casing	✓	
15.01	Adequate Production Casing	✓	
15.04	Adequate Cement Strength	✓	
15.05	Cement Type	✓	
23.02	Maintained Access Roads	✓	
25.01	Necessary Equipment to Prevent Waste	✓	
23.04	Reclaimed Drilling Pits	✓	
23.05	No Surface or Underground Pollution	✓	
23.07	Requirements for Production & Gathering Pipelines	✓	
16.01	Well Records on Site	✓	
16.02	Well Records Filed	✓	
7.05	Identification Markings	✓	

I HAVE INSPECTED THE ABOVE CAPTIONED WELL AND RECOMMEND THAT IT BE RELEASED:

SIGNED R. A. Lowther
DATE Aug 24, 1984

Your well record was received and reclamation requirements approved. In accordance with Chapter 22, Article 4, Section 2, the above well will remain under bond coverage for the life of the well.

T. H. v. B.
Administrator-Oil & Gas Division
September 13, 1984

TMS/chm

DATE

RECEIVED

SEP 26 1980

OIL & GAS DIVISION
DEPT. OF MINES

1.0 API well number: (If not available, leave blank, 14 digits.)	47-073-0-891-0000			
2.0 Type of determination being sought: (Use the codes found on the front of this form.)	103 Section of NGPA	Category Code		
3.0 Depth of the deepest completion location: (Only needed if sections 103 or 107 in 2.0 above.)	4010 feet			
4.0 Name, address and code number of applicant: (35 letters per line maximum. If code number not available, leave blank.)	Glenn L. Haught & Sons Name c/o Warren R. Haught		Seller Code	
	Street Smithville,	WV	26178	
	City	State	Zip Code	
5.0 Location of this well: [Complete (a) or (b).] (a) For onshore wells (35 letters maximum for field name.)	McKim District Field Name Pleasants		WV State	
(b) For OCS wells:	N/A Area Name		Block Number	
	Date of Lease: Mo. Day Yr.		OCS Lease Number	
(c) Name and identification number of this well: (35 letters and digits maximum.)	Charles Pethtel H-1020			
(d) If code 4 or 5 in 2.0 above, name of the reservoir: (35 letters maximum.)	Devonian Shale			
6.0 (a) Name and code number of the purchaser: (35 letters and digits maximum. If code number not available, leave blank.)	Columbia Gas Transmission - from Mr. Haught Consolidated Gas Supply Corporation		Buyer Code 004228	
(b) Date of the contract:	Contract Applied For			
	Mo. Day Yr.			
(c) Estimated annual production:	15 MMcf.			
	(a) Base Price (\$/MMBTU)	(b) Tax	(c) All Other Prices [Indicate (+) or (-).]	(d) Total of (a), (b) and (c)
7.0 Contract price: (As of filing date. Complete to 3 decimal places.)	---	---	---	---
8.0 Maximum lawful rate: (As of filing date. Complete to 3 decimal places.)	2.293	.277	.01	2.580
9.0 Person responsible for this application:	Warren R. Haught Name Agent & Co-Owner Title			
Agency Use Only	Signature <i>Warren R. Haught</i>			
Date Received by Juris. Agency SEP 26 1980	Date Application is Completed Sept. 22, 1980			
Date Received by FERC	Phone Number 477-3333			

PARTICIPANTS:

WELL OPERATOR:

FIRST PURCHASER:

OTHER:

DATE: Feb 19 1981

Glenn L. Haught & Sons
Columbia Gas Transmission Corp.

BUYER-SELLER CO

008265

004228

W. Va. Department of Mines, Oil & Gas Division
WELL DETERMINATION FILE NUMBER

300926 - 103-073-0891

Use Above File Number on all Communications
Relating to Determination of this Well

Computer OK.

1015
571 - F.D. 2120

Qualified J. H. Muzzy

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

- 1. FERC -121 Items not completed - Line No. _____
- 2. IV-1 Agent Warren R. Haught
- 3. IV-2 Well Permit _____
- 4. IV-6 Well Plat
- 5. IV-35 Well Record Drilling Deepening _____
- 6. IV-36 Gas-Oil Test: Gas Only _____ Was Oil Produced? _____ Ratio _____
- 7. IV-39 Annual Production _____ years
- 8. IV-40 90 day Production _____ Days off line: _____
- 9. IV-48 Application for certification. Complete?
- 17. IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? Affidavit Signed
- 28. Other: Survey _____ Logs _____ Geological Charts _____
Structure Map _____ 1: 4000 Map _____ Well Tabulations _____
Gas Analyses _____
- 5) Date commenced: 7-3-80 Date completed 8-13-80 Deepened _____
- 5) Production Depth: 3550-4010
- 5) Production Formation: Devonian Shale
- 5) Final Open Flow: 175 m.
- 5) After Frac. R. P. 850
- 6) Other Gas Test: _____
- 7) Avg. Daily Gas from Annual Production: _____
- 8) Avg. Daily Gas from 90-day ending w/1-120 days _____
- 8) Line Pressure: _____ PSIG from Daily Rep _____
- 5) Oil Production: No From Completion Report _____
- 7. Does lease inventory indicate enhanced recovery being done _____
- 7. Is affidavit signed? Notarized?
- official well record with the Department confirm the submitted information?
- Additional information _____ Does computer program confirm? _____
- Determination Objected to _____ By Whom? SB.

Date September 22 1980

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

Operator's Well No. H-1020
API Well No. 47 - 073 - 891
State County Permit

WELL CLASSIFICATION FORM
NEW ONSHORE PRODUCTION WELL

WGA Section 103

DESIGNATED AGENT Warren R. Haught
ADDRESS Smithville, WV 26178

WELL OPERATOR Glenn L. Haught & Sons
ADDRESS c/o Warren R. Haught, Agent
Smithville, WV 26178

LOCATION: Elevation 902'
Watershed Long Run
Dist. McKim County Pleasants Quad. Schultz WV 7 1/2

AS PURCHASER Consolidated Gas Supply Corp.
ADDRESS 445 West Main Street
Clarksburg, WV 26304

Columbia Gas Trans.
Contract No. Applied For
Meter Chart Code _____
Date of Contract _____

Date surface drilling was begun: July 3, 1980

Indicate the bottom hole pressure of the well and explain how this was calculated:

Bottom Hole Pressure - 850 Lbs.

Bottom Hole Pressure was assumed to be equal to the maximum Rock Pressure of the well after hydraulic fracturing was completed and well was cleaned up.

AFFIDAVIT

I, Warren R. Haught, having been first sworn according to law state that surface drilling of the well for which this determination is sought was begun on or after February 19, 1977; the well satisfies applicable state or federal well spacing requirements and the well is not within a proration unit, in existence at the time surface drilling began, which was applicable to the reservoir from which gas is or will be produced and which applied to any other well producing gas in commercial quantities or on which surface drilling began on or after February 19, 1977, and which was capable of producing gas in commercial quantities. I state, further, that I have concluded, to the best of my information, knowledge and belief, that the well for which this determination is sought is a new onshore production well and that I am not aware of any information not described in the application which is inconsistent with this conclusion.

Warren R. Haught

STATE OF WEST VIRGINIA,
COUNTY OF Ritchie TO WIT:

I, Lenna G. Haught, a Notary Public in and for the state and county aforesaid, do certify that Warren R. Haught, whose name is signed to the writing above, bearing date the 22 day of September, 1980 has acknowledged the same before me, in my county aforesaid. Given under my hand and official seal this 22 day of September, 1980. My term of office expires on the 18th day of May, 1986



Lenna G. Haught
Notary Public

PARTICIPANTS:

DATE: JUN 9 1981

BUYER-SELLER CODE

WELL OPERATOR: Haught, Inc. % Warren R. Haught

008270

FIRST PURCHASER: Columbia Gas Trans. Corp.

004030

OTHER:

3.8%

W. Va. Department of Mines, Oil & Gas Division
 WELL DETERMINATION FILE NUMBER
81-2-04-107-073 = 0891
 Use Above File Number on all Communications
 Relating to Determination of this Well

Hold for tight formation definition
Qualifies J. H. Huzzey

CHECK EACH ITEM AS COMPLETE OR NOTE WHAT IS MISSING

ITEM NO.

- 1. FERC -121 Items not completed - Line No. All 7.0
- 2. IV-1 Agent Warren R. Haught
- 3. IV-2 Well Permit
- 4. IV-6 Well Plat
- 5. IV-35 Well Record Drilling Deepening
- 6. IV-36 Gas-Oil Test: Gas Only Was Oil Produced? Ratio
- 7. IV-39 Annual Production years
- 8. IV-40 90 day Production Days off line:
- 9. IV-48 Application for certification. Complete?
- 10-17. IV Form 51 - 52 - 53 - 54 - 55 - 56 - 57 - 58 Complete? Affidavit Signed
- 18-28. Other: Survey Logs Geological Charts _____
 Structure Map _____ 1: 4000 Map _____ Well Tabulations _____
 Gas Analyses _____

- (5) Date commenced: 7-3-80 Date completed 8-13-80 Deepened
- (5) Production Depth: 3550-4010
- (5) Production Formation: Devonian Shale
- (5) Final Open Flow: 175 MCF
- (5) After Frac. R. P. 850 # 12 hrs.
- (6) Other Gas Test: _____
- (7) Avg. Daily Gas from Annual Production: _____
- (8) Avg. Daily Gas from 90-day ending w/1-120 days _____
- (8) Line Pressure: _____ PSIG from Daily Re
- (5) Oil Production: _____ From Completion Report _____

- 0-17. Does lease inventory indicate enhanced recovery being done NO
- 0-17. Is affidavit signed? Notarized?
- es official well record with the Department confirm the submitted information? yes
- ditional information _____ Does computer program confirm? _____
- s Determination Objected to _____ By Whom? _____

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

Date July 2 1981

Operator's Well No H-1020

API Well No 7 - 073 - 0891
State _____ County _____

WELL CLASSIFICATION FORM
HIGH COST GAS WELL - DEVONIAN SHALE

MGPA Section 107

DESIGNATED AGENT Warren R. Haught

ADDRESS Rt. 3 Box 14
Smithville, WV 26178

WELL OPERATOR Glenn L. Haught & Sons
ADDRESS c/o Warren R. Haught
Smithville, WV 26178

LOCATION Elevation 902'
Watershed Long Run
Dist McKim County Pleasants Loc Schultz

GAS PURCHASER Columbia Gas Trans. Corp.
ADDRESS P. O. Box 1273
Charleston, WV 25325

Gas Purchase Contract No. AP-25283
Meter Chart Code _____
Date of Contract March 3, 1981

* * * * *

Date surface drilling began July 3, 1980

Indicate the bottom hole pressure of the well and explain how this was calculated.

Bottom Hole Pressure = 941 psig Pwh=850psig
SG = .7
D = 3725
Z = .86
T = 557

$$Pws = Pws e \frac{.01875 SG D}{Z T}$$

AFFIDAVIT

I, Warren R. Haught, having been first sworn according to law, state that, I have calculated the percentage of footage of the producing interval which is not Devonian shale as indicated by a Gamma Ray index of less than 0.7 if a Gamma Ray log described subparagraph (3)(i) or (3)(ii)(A) has been filed, or as indicated by the report described in subparagraph (3)(ii)(B); I have demonstrated that the percentage of potentially disqualifying non-shale footage is equal to or less than five (5) percent of the gross Devonian age interval; and I have no knowledge of any information not described in the application which is inconsistent with a conclusion that the well qualifies as a high cost natural gas well.

Warren R. Haught

STATE OF WEST VIRGINIA.
COUNTY OF Ritchie TO WIT

I, Lenna G. Haught, a Notary Public in and for the state and county aforesaid do certify that Warren R. Haught whose name is signed to the writing above, bearing date the 2nd day of July, 1981, has acknowledged the same before me, in my county aforesaid.

Given under my hand and official seal this 2nd day of July, 1981.

My term of office expires on the 18th day of May, 1986.

Lenna G. Haught
Notary Public

[NOTARIAL SEAL]

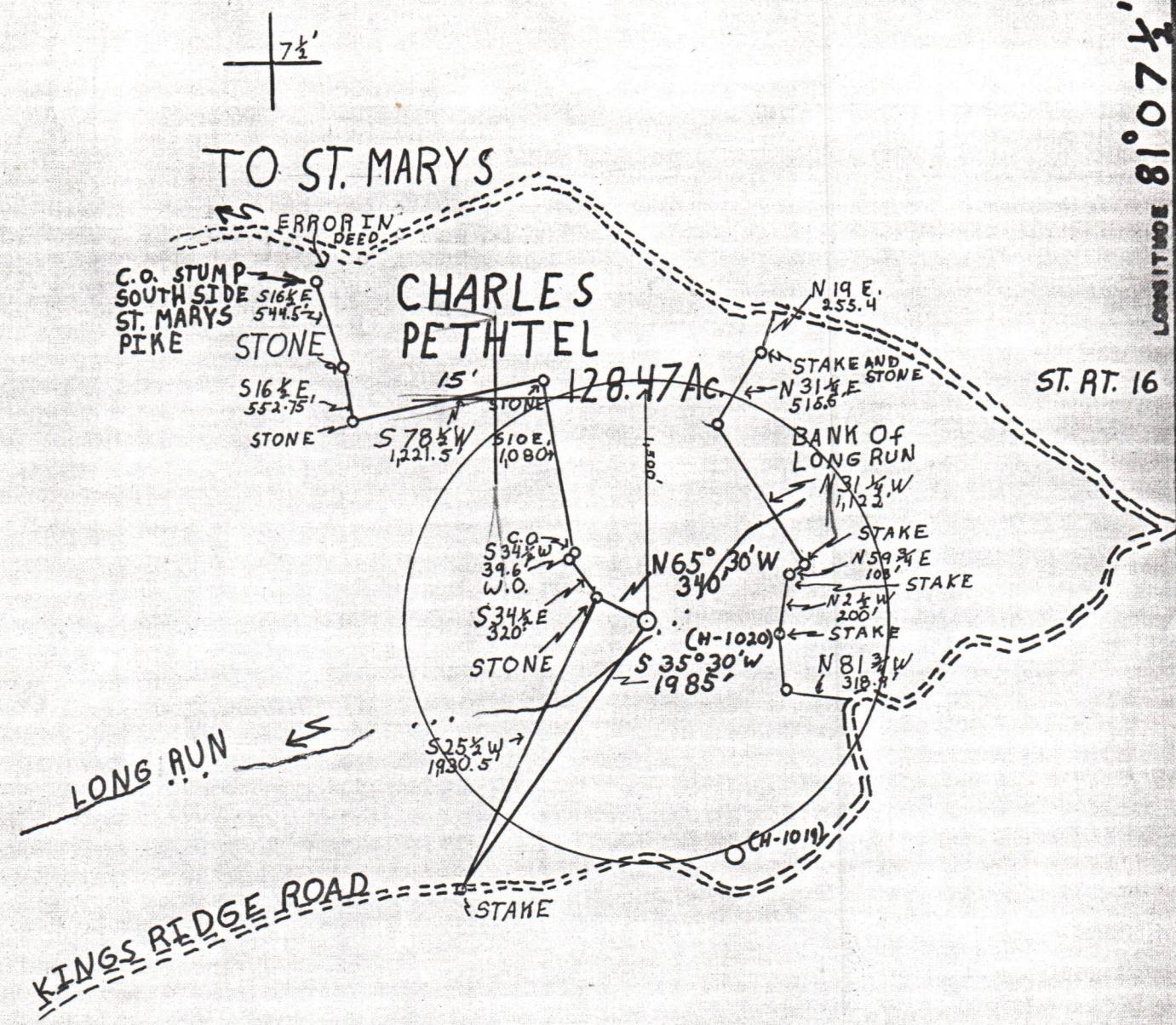


31 7-1-80 (15) 39° 25'

LATITUDE 39° 22 1/2'
2,620' SOUTH
11,090' WEST

LONGITUDE 81° 07 1/2'
 (15) 81° 05'

TO ST. MARYS



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION B.M. 1140'

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. Ross
 R.P.E. _____ L.L.S. _____

PLACE SEAL HERE

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



DATE 19 JUNE, 19 80
 OPERATOR'S WELL NO H-1020
 API WELL NO. 47-073-0891
 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 902' WATER SHED LONG RUN
 DISTRICT McKIM COUNTY PLEASANTS
 QUADRANGLE SCHULTZ, W.VA. 7 1/2' QUAD ST. MARYS 15'
 SURFACE OWNER CHARLES J. PETHTEL ACREAGE 128.47
 OIL & GAS ROYALTY OWNER CHARLES J. PETHTEL LEASE ACREAGE 128.47
 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 DEVONIAN SHALE ESTIMATED DEPTH 3,500'
 WELL OPERATOR HAUGHT INC. DESIGNATED AGENT WARREN HAUGHT
 ADDRESS SMITHVILLE WEST VIRGINA 26178 ADDRESS SMITHVILLE W. VA. 26178