

SC-14
pen
-1667.1
86'

2079.9

FORM 16

API WELL NO. 45 - 195 - 20408
STATE COUNTY PERMIT

DATE: August 1, 1983

OPERATOR'S
WELL NO. 10007 SC-01

VIRGINIA OIL AND GAS INSPECTOR
DEPARTMENT OF LABOR AND INDUSTRY
OIL AND GAS SECTION
205 W. Main Street
Abingdon, Virginia 24210
Phone 703 628-8115



REPORT OF COMPLETION OF WELL WORK

Pursuant to Regulation 4.06 of the Regulations under the Virginia Oil and Gas Act, the undersigned well operator reports completion of the type(s) of well work specified below on the referenced well in Floyd District, Scott County, Virginia on 13th day, April month, 1983.

WELL TYPE: Oil / Gas / Enhanced Recovery / Waste Disposal
IF "GAS", Production / Underground storage
Exempt by Code § 45.1-300.B.1 from general oil and conservation law: Yes / NO

WELL WORK: Drill / Deepen / Redrill / Stimulate
Plug Off Old Formation / Perforate New Formation
Plug / Replug
Other physical change in well (specify) _____

The well work was done as shown in the Appendix(es) applicable to the type(s) of well work involved.

CONFIDENTIALITY STATUS UNDER CODE OF VIRGINIA § 45.1-332.

Ninety days from the filing of this report,

OR

Two years from April 13, 1983, the date on which the referenced well was completed, the well being an exploratory well as defined in Code of Virginia § 45.1-283.21.

APPLICANT: Wise Oil & Gas Exploration Corp.

BY: [Signature]

ITS: Vice President

ADDRESS: P.O. Box 43

Duffield, VA 24244

TELEPHONE: 703-431-4131

FORM 16
 APPENDIX TYPE A, SHEET 1 (OBVERSE)

API WELL NO. 45 - 195 - 20408
 State County Permian

DATE: August 1, 1983
 Operator's
 Well No. 10007

REPORT OF COMPLETION OF WELL WORK
 IF DRILLING, REDRILLING OR DEEPENING IS INVOLVED

DRILLING CONTRACTOR Clint Hurt & Associates
 ADDRESS Midland, Texas
 TELEPHONE 915-683-6381

DEPTH OF COMPLETED WELL 5803 FEET

DRILLING RIG Rotary / Cable Tool /

GEOLOGICAL DATA

	DEPTH		THICKNESS
	Top	Bottom	

Fresh water: 131'

Salt water: n/a

	Name	MINING IN AREA?		
		Yes	No	Mined Out
Coal seams:	264' 265'		x	
	706' 708'		x	
	985' 988'		x	
	1076' 1078'		x	
	1115' 1120'		x	
Oil and gas:	Name			
Gas	4616' 4712' Berea/Shale			

The data on depth of strata is based on the source(s) checked below:

- Applicant's own drilling experience in the area
- Information supplied by the coal operator in the area
- Information already in the possession of the Inspector
- As follows: Well Logs

OTHER GENERAL INFORMATION

An electric log survey was ___/ was not x/ conducted pursuant to Code of Virginia S 45.1-333.B.2, at the coal owner's or operator's request.

An electric log survey was x/ was not ___/ run for other purposes. This survey did ___/ did not x/ disclose the vertical location of a coal seam.

Note: If a coal seam was located, the part of the survey from the surface through the coal is attached in accordance with Code of Virginia S 45.1-333.B.3.

Deviation surveys were ___/ were not x/ required under Code of Virginia S 45.1-333.C "to the bottom of the lowest published coal seam depth".

Note: If deviation surveys were required, the survey results are attached.

A continuous survey was ___/ was not x/ required under Code of Virginia S 45.1-333.C.

Note: If a continuous directional survey was required, the survey results are attached.

CHANGES IN THE PERMITTED WELL WORK

The well operator did ___/ did not x/ make any change(s) in the permitted well work, verbally approved by the Inspector or Assistant Inspector under Regulation 4.03 of the Regulations under the Virginia Oil and Gas Act, for the purpose of insuring successful completion of the well work.

Note: The nature and purpose of each such change, if any, is set out below or on additional sheets if such are required:

CASING AND TUBING PROGRAM

PRELIMINARY INFORMATION

Is the subject well underlaid by the red shales? YES x / No /
 If "YES", was a coal protection string set to the red shales? YES x / NO /

PROGRAM DETAILS

SIZE	TOP	BOTTOM	LENGTH	PERFORATED		
				FROM	TO	
<u>Conductor</u>						
13-3/8"	K.B.	25'	15'	--	--	
<u>Casing circulated and cemented in to the surface:</u>						
9-5/8"	K.B.	266'	256'	--	--	
Cemented to surface with 75 sks.						
<u>Coal protection casing set under the special rule of Code of Virginia S 45.1-334.B:</u>						
7"	K.B.	2278'	2268'	--	--	
Cemented to surface with 304 sks.						
<u>Other casing and tubing left in the well:</u>						
4-1/2"	K.B.	5773'	5763'	5114'	5645'	26 holes
				4616'	4712'	28 holes

Liners left in well, under Code of Virginia S 45.1-336 or otherwise:

n/a

Other casing used in drilling but not left in the well:

n/a

<u>Packers or bridge plugs:</u>	<u>Kind</u>	<u>Size</u>	<u>Set At</u>
Bridge Plug	Cast Iron	4-1/2"	4760'

REMARKS (SHUT DOWN DEPTHS, DATES: FISHING JOB DEPTHS, DATES: CAVING: ETC.)

SAMPLES AND CUTTINGS

will xx / will not / be available for examination by a member of the
 Division of Mineral Resources
 will / will not / be furnished the Division of Mineral Resources
 upon request.
 will / will not / require sacks to be furnished by the Division of
 Mineral Resources

FORM 16
 APPENDIX TYPE A, SHEET 2 (REVERSE)

DRILLER'S LOG

COMPILED BY W. W. Kelly, Jr.

<u>Geologic Age</u>	<u>Formation</u>	<u>General Lithology</u>	<u>Color</u>	<u>Depth Ft.</u>		<u>Thickness</u>	<u>Remarks</u>
				<u>Top</u>	<u>Bottom</u>		
Pennsylvanian	Lee	Sandstone & Shale		0'	1056'	1056'	Dev. 3/4° @ 51 Dev. 3/4° @ 78
	Pocahontas	Sandstone & Shale		1056'	1716'	660'	Dev. 3/4° @ 103° Dev. 1° @ 1536'
----- Mississippian	Bluestone	Sandstone & Shale		1716'	2104'	338'	Dev. 1° @ 2098'
	Ravencliff	Sandstone		2104'	2235'	131'	
	Hinton	Sandstone & Shale		2235'	2933'	688'	
	Maxon	Sandstone		2720'	2933'	213'	
	Bluefield	Sandstone, Shale & Lime		2933'	3428'	495'	Dev. 1° @ 3305'
	(Greenbriar) Big Lime	Limestone		3428'	4037'	609'	Dev. 1° @ 3902'
	Injun	Sandstone & Shale		4037'	4068'	31'	
	Weir	Siltstone		4068'	4341'	273'	
	Sunbury	Shale		4341'	4557'	216'	
	Berea	Siltstone		4557'	4643'	86'	
----- Devonian	Devonian Shale	Shale		4643'	5750'	1107'	Dev. 1 1/4° @ 5521
	Corniferous	Limestone & Dolomite		5750'	5803'	T.D. 53'	

FORM 17

API Well No. 45 - 195 - 20408
State County Permit

APPENDIX--TYPE D

Date August 1, 1983

Operator's
Well No. 10007

APPENDIX TO REPORT OF COMPLETION OF WELL WORK
ON A WELL DRILLED IN SEARCH OF OIL OR GAS

DISCOVERY OF OIL OR INDICATIONS THEREOF

Indicated potential flow before stimulation 0 BOD
Gravity and grade N/A

DISCOVERY OF GAS OR INDICATIONS THEREOF

Indicated potential flow before stimulation Show MCFD
Rock pressure: not gauged psig hour test

RECORD OF STIMULATION

Full description of stimulation:

Zone 1: Devonian Shale Formation: 5114'-5645' 26 holes Fracture with 505 bbl
water; 36,000# 20/40 Sand; 568,000 Scf N₂
Breakdown 2900 psig; Avg. Injection 3379 psig; Avg. Injection Rate 10.4 BPM;
ISIP 2600 psig; 15-Min. Shut-In 2200 psig.

Zone 2: Berea/Shale Formation: 4616'-4712' 28 holes Fracture with 665 bbl
water; 55,700# 20/40 Sand; 350,000 Scf N₂
Breakdown 800 psig; Avg. Injection 2053 psig; Avg. Injection Rate 18.4 BPM;
ISIP 1100 psig; 15-Min. Shut-In 800 psig.

Zone 3: Berea/Shale Formation: 4616'-4712' 28 holes ENWAR -H₂O Cleanup--
Pump 89 bbl 25% Methanol ; 190 bbl ENWAR/Water; 184,000 Scf N₂
Breakdown 2000 psig; Avg. Injection 1600 psig; Avg. Injection Rate 14 BPM;
ISIP 1100 psig; 15-Min. Shut-In psig.

Final production (check one) (xx) after stimulation, () natural.

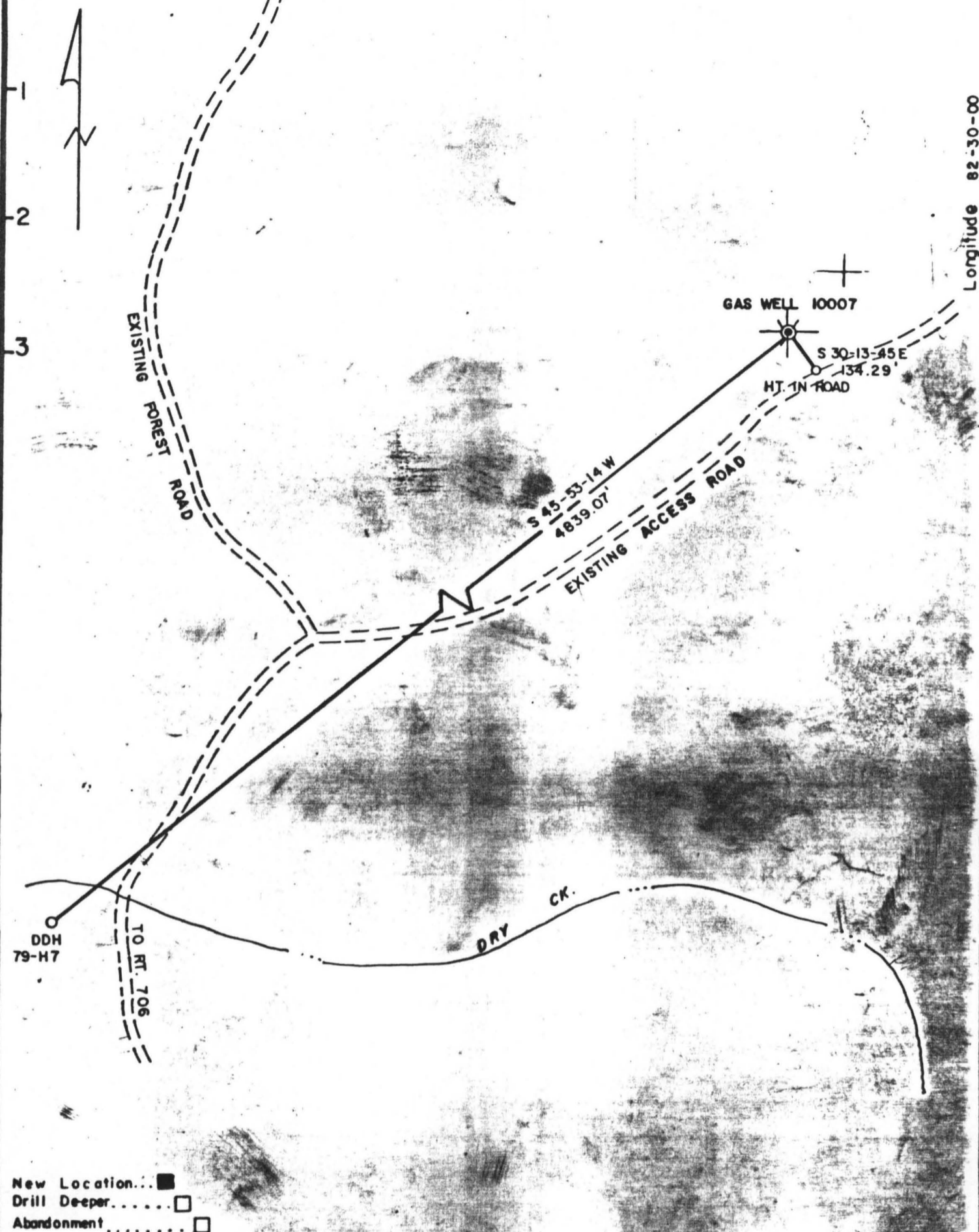
	BOD	MCFD	Hours Tested	Rock pressure psig.	Hours Tested
Zone 1	<u>0</u>	<u>0</u>	<u>--</u>	<u>--</u>	<u>--</u>
Zone 2	<u>0</u>	<u>26</u>	<u>8</u>	<u>425</u>	<u>48</u>
Zone 3	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>

Final production if gas zones are comingled: MCFD,
 hours tested; psig, hours tested.

Completion Date: 4-13-83

Latitude 36-52-30

Longitude 82-30-00



- New Location...
- Drill Deeper.....
- Abandonment.....

Company WISE OIL AND GAS EXPLORATION, INC.

Address P.O. BOX 206, ABINGDON, VA. 24201

Farm THE HAGAN ESTATES, INC.

Tract 101 Acres 178.80 Lease No. _____

Well (Farm) No. 10007 Serial No. _____

Elevation (Spirit Level) 2889.97

Quadrangle FT. BLACKMORE

County SCOTT District FLOYD

Engineer *Jack P. Gombek Jr.*

Engineer's Registration No. 11439

File No. _____ Drawing No. _____

Date 4-3-81 Scale 1" = 400'

**COMMONWEALTH OF VIRGINIA
DIVISION OF MINES
BIG STONE GAP, VIRGINIA
WELL LOCATION MAP**

FILE NO. 10-50-11

+ Denotes location of well on United States Topographic Maps, scale 1 to 24,000 latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces on border line of original tracing.

Nise Oil & Gas Exploration
Well Completion Information

Well No.	10007	10010	10012
Commit No.	408	476	480
File No.	SC-11	LE-78	WS-54
County Code	109	105	195
District	Floyd	Yokum	Richmond
Quadrangle	Fort Blackmore	Appalachian	Appalachian
Latitude Loc.	5300' S. 36°52'30"	12,800 S. 36°55'00"	7300' S. 36°57'30"
Longitude Loc.	2300' W. 82°30'00"	11,300 W. 82°50'00"	2500' W. 82°45'00"
Well Class.	Extension Test	New Field Wildcat	Development
Form Name	Hagan Estate	Penn Virginia Resources	Penn Va. Resources
Drilling Comm.	10-27-81	5-18-82	6-15-82
Drilling Complete	11-8-81	6-12-82	7-9-82
Date Completed	12-22-82	10-1-82	12-23-82
T.D.	5803'	5836'	5526'
Form. at T.D.	Corniferous	Corniferous	Corniferous
Pay Zones	1. Shale / Berea	Weir	Shale
	2.	Biglime	Weir
	3.		Biglime
Final Oper. flow	1. 103 Mcf R.P. 500# 72hrs.	1. 103 Mcf R.P. 60hrs.	1. 103 Mcf R.P. 900# 60hrs.
	2.	5 BOPD, 30 Mcf/d	2. 103 Mcf R.P. 825# 60hrs.
	3.		

Commonwealth of Virginia
DEPARTMENT OF LABOR AND INDUSTRY
Division of Mines
Big Stone Gap, Virginia

XXXXXXXX
NOTICE OF INTENTION TO DRILL OIL OR GAS WELL
XXXXXXXX

(One copy of this report and three identical copies of a plat or map, on a scale not smaller than 400 feet to the inch, and showing information required by Section 45-114, Code of Virginia, 1950, must be submitted to the Division of Mines, and copies sent by registered mail to all persons defined in above law, prior to obtaining a permit to drill.)

TO: DIVISION OF MINES
BIG STONE GAP, VIRGINIA

ABINGDON, VIRGINIA
Place

April 9, 19 81
Date

Gentlemen:

The undersigned proposes to begin as soon as a permit therefor is obtained from the Division of Mines, to drill, ~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~ a well for oil or gas on the Hagan Est. (Tr. 101) Farm, comprising 178.8 acres, in the Floyd District of Scott County, Virginia, having the fee title thereto, or as the case may be, under grant or lease dated July 1, 1973, made by The Hagan Estates, Inc. to Col. Gas Trans. Corp. and recorded on the 27th day of September, 19 73 in the office of the County Clerk for said County in Book 278, page 734.

The proposed location of the well, as shown on the attached plat or map, is about 5300 feet SOUTH of 36°52'30" and about 2300 feet WEST of 82°30'00".

It is proposed to drill this well to a depth of about 5557 feet. Samples or cuttings therefrom ~~XXXXXXXX~~ will be available for examination by a member of the staff of the Virginia Geological Survey. Cuttings ~~XXXXXXXX~~ will be furnished the Survey.

A plat or map, in triplicate, on a scale not smaller than 400 feet to the inch, showing the proposed location of the well and other information, required in Section 45-114, Code of Virginia, 1950, is attached hereto. Copies of the plat and notice of intention to drill, redrill or deepen the aforementioned well have been sent to all interested persons as required by Section 45-114, above cited, as follows (List names and mail address of each. Use back of sheet if additional space is required):

- 1. Consolidation Coal Company, P.O. Box 1811, Meridian, MS 39301
- 2. _____
- 3. _____
- 4. _____
- 5. _____
- 6. _____

Very truly yours,

Signature of officer or certifying party:

[Signature]
Name
Vice President
Title

WISE OIL & GAS EXPLORATION, INC.
Drilling Company or Operator
P.O. BOX 206
Street Address
ABINGDON, VIRGINIA 24210
City or Town, and State

File 5C-11 Date Received April 13, 1981 Well No. 10007

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF LABOR AND INDUSTRY
DIVISION OF MINES AND QUARRIES
BIG STONE GAP, VIRGINIA 24219
PHONE 703-523-0335

APPLICATION FOR PERMIT TO (DRILL) ~~(REDRILL) (DEEPEN)~~ OIL OR GAS WELL

(Required by Section 45.1-115, Code of Virginia, 1950, 1954 and the 1966 Cumulative Supplement. To be accompanied by Permit fee of twenty-five dollars and bond and surety therefor, as specified by Section cited. To be submitted in duplicate, one copy to be returned to applicant after action by Division of Mines and Quarries.

TO: Division of Mines and Quarries
Drawer V
Big Stone Gap, Virginia 24219

Abingdon, Virginia

Place

April 9 1981

Date

Gentlemen:

The undersigned hereby makes application for a Permit to drill, ~~redrill, redevelop (strike out five)~~ a well for oil or gas on the Hagan Est. (Tr. 1015) farm, comprising 178.8 acres, in the Floyd District of Scott County, Virginia, having the fee title thereto, or as the case may be, under grant or lease dated July 1, 1973 made by The Hagan Estates, Inc.

to Columbia Gas Transmission Corporation and recorded on the 27th day of September, 1973 in the office of the County Clerk for the said County in Book 278 page 734.

The proposed location of the well is shown on a location plat or map submitted to the Division of Mines and Quarries, by the undersigned, together with Notice of Intention to Drill, ~~XXXXXX~~ a Well for Oil or Gas on the 9th day of April 1981.

The proposed well will be known as Well No. 10007 of Wise Oil & Gas Exploration, Inc. (company, etc.) It is proposed to drill this well to a depth of about 5557 feet.

The proposed location is about 6000 feet distant from the nearest property or lease line, ~~XXXXX~~ and/or about 8200 feet distant from the nearest ~~drilling, redevelop, producing, XXXXX~~ gas ~~(strike out words not applicable)~~ well.

There is enclosed herewith a certified check or U.S. Postal Money Order, in the amount of twenty-five (\$25.), payable to the Treasurer of Virginia, covering fee for a Permit to Drill a Well for Oil or Gas, as required by Section 45.1-115, Code of Virginia, 1950, 1954 and the 1966 Cumulative Supplement. Bond and Surety therefor to insure compliance with the provisions of Chapter 8, Title 45, Code of Virginia, 1950 and the 1966 Supplement, for this well, in the amount of \$28,000.00 is submitted herewith of (give status of) Surety Blanket Bond for twenty-eight (28) wells

Bond #661-460 May 13, 1980

Correspondence regarding this well should be addressed to Wise Oil & Gas Exploration, Inc. P. O. Box 206, Abingdon, Virginia 24210

Very truly yours,

Signature of officer or certifying party:

Name

Vice President

Title

Wise Oil & Gas Exploration, Inc.

Drilling Company or Operator

P.O. Box 206

Street

Abingdon,

City or Town

Virginia 24210

State

Space below this line is for the use of the Board only.

ACTION OF DIVISION OF MINES AND QUARRIES

Received on April 13, 1981.

Approved and Permit (no. 408) granted on April 14, 1981

Denied

Reasons for denial

DIVISION OF MINES AND QUARRIES

By B. J. Gaffney State Oil and Gas Insp.

Title

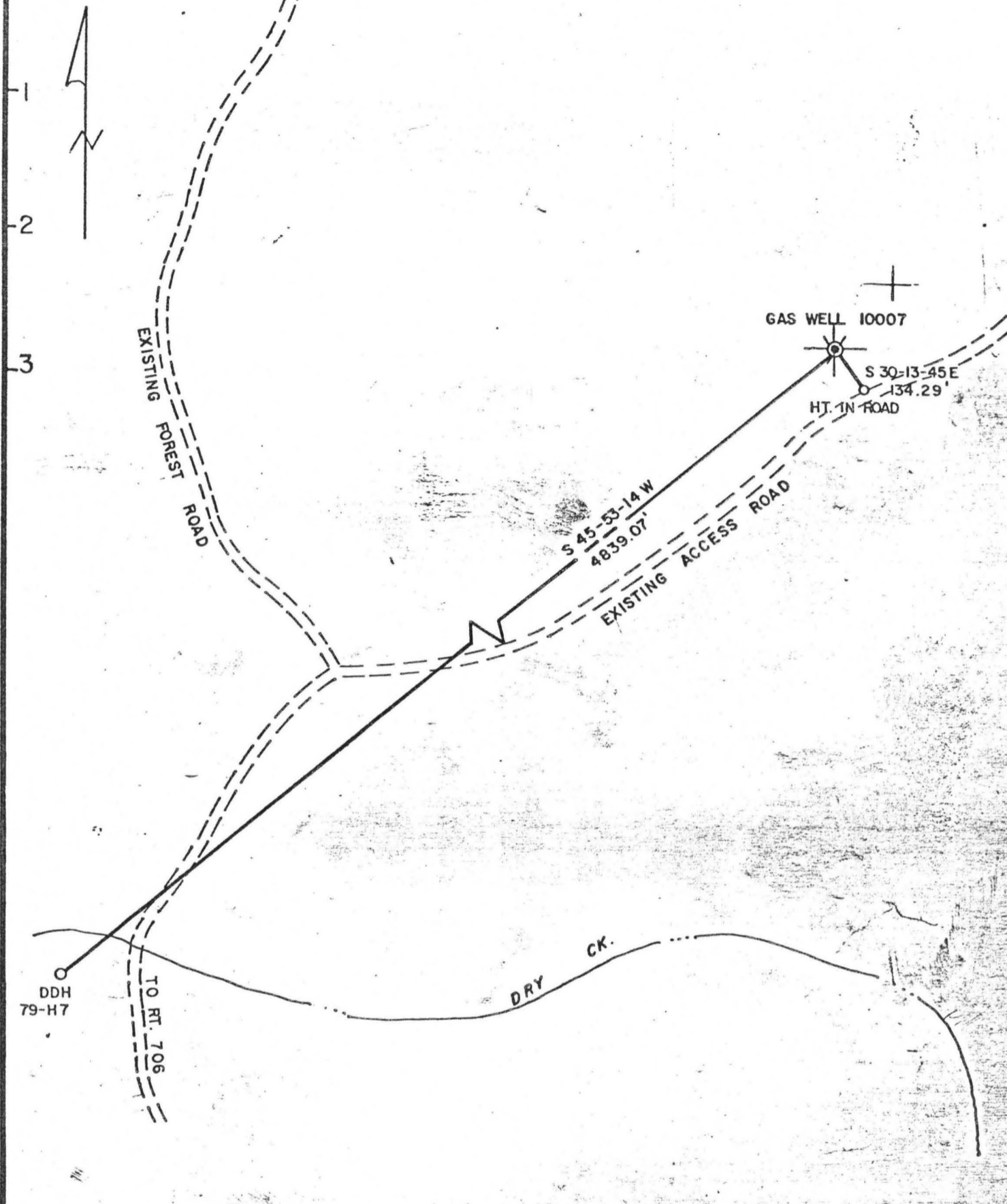
File No. 50-11

Well No. 10007

Permit No. 408

Latitude 36-52-30

Longitude 82-30-00



- New Location...
- Drill Deeper.....
- Abandonment.....

Company WISE OIL AND GAS EXPLORATION, INC.
 Address P.O. BOX 206, ABINGDON, VA. 24201
 Farm THE HAGAN ESTATES, INC.
 Tract 101 Acres 178.80 Lease No. _____
 Well (Farm) No. 10007 Serial No. _____
 Elevation (Spirit Level) 2889.97
 Quadrangle FT. BLACKMORE
 County SCOTT District FLOYD
 Engineer *Jack Pemberton Jr*
 Engineer's Registration No. 11439
 File No. _____ Drawing No. _____
 Date 4-3-81 Scale 1" = 400'

COMMONWEALTH OF VIRGINIA
DIVISION OF MINES
BIG STONE GAP, VIRGINIA
WELL LOCATION MAP
 FILE NO. 50-116

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 - Denotes one inch spaces on border line of original tracing.