

FILE COPY

RECEIVED
APR 23 1984



1) Date: March 8, 19 84
 2) Operator's Well No. Zinn #5A
 3) API Well No. 47 - 021 - 4179
 State County Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION
DEPT. OF MINES
APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil / Gas X /
 B (If "Gas", Production X / Underground storage / Deep / Shallow X /)
- 5) LOCATION: Elevation: 1162 Watershed: Brake Hollow
 District: Troy County: Gilmer Quadrangle: Auburn 7.5
- 6) WELL OPERATOR Waco Oil & Gas Co., Inc. 7) DESIGNATED AGENT Kenneth Greenlief
 Address 1297 N. Lewis St. Address 1297 N. Lewis St.
Glenville, WV 26351 Glenville, WV 26351
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Deo Mace Name I. L. Morris Well Service, Inc.
 Address Rt. 1, Box 5 Address 1297 N. Lewis St.
Sandridge, WV 25274 Glenville, WV 26351
- 10) PROPOSED WELL WORK: Drill X / Drill deeper / Redrill / Stimulate X /
 Plug off old formation / Perforate new formation
 Other physical change in well (specify)
- 11) GEOLOGICAL TARGET FORMATION, Elk
 12) Estimated depth of completed well, 5350 feet
 13) Approximate trata depths: Fresh, 181 feet; salt, None feet.
 14) Approximate coal seam depths: None Is coal being mined in the area? Yes / No X

15) 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									Sizes
Coal									
Intermediate	8 5/8	ERW	20	X		600	600	160 sacks	CTS Neat No Additives
Production	4 1/2	J-55	10.5	X			5350	510 sacks	Depths set
Tubing									<i>or as req. by rule 15.01</i>
Liners									Perforations: Top Bottom

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-021-4179 Date May 8, 19 84

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. **Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work.** In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires May 8, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: DUNEL	Agent: <u>OK</u>	Plat: <u>MW</u>	Casing: <u>MW</u>	Fee: <u>1051</u>
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[Signature]

Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

File

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

FORM IV-2(B)
Reverse

FILE COPY



RECEIVED

FORM IV-2(B)
(Reverse)
7-83

OFFICE USE ONLY

PERMIT MODIFICATIONS AND CONDITIONS (IF ANY) TO THE PROPOSED WELL WORK

1) WELL LOCATION: District: _____ County: _____ Township: _____

2) WELL OPERATOR: Name: _____ Address: _____

3) DRILLING CONTRACTOR: Name: _____ Address: _____

4) PROPOSED WELL WORK: Drill: Drill deeper Redrill Stimulate Plug off old formation Produce new formation Other physical change in well (specify): _____

5) GEOLOGICAL TARGET FORMATION: _____

6) ESTIMATED DEPTH OF COMPLETED WELL: _____ feet

7) APPROXIMATE STRATIGRAPHIC DEPTHS: Fresh: _____ feet, Salt: _____ feet

8) APPROXIMATE COAL SEAM DEPTHS: _____ feet

9) IS COAL BEING MINED IN THE AREA? Yes No

OFFICE USE ONLY

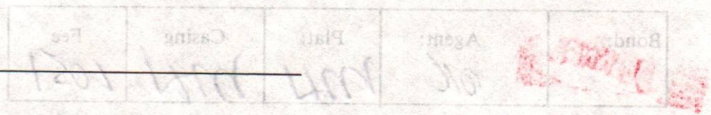
This part of Form IV-2(b) is to record the dates of certain occurrences and any follow-up inspections.

	Date	Date(s)
Application received		
Well work started		
Completion of the drilling process		
Well Record received		
Reclamation completed		

OTHER INSPECTIONS

Reason: _____

Reason: _____



NOTE: Keep one copy of this permit posted in the drilling location.



1) Date: March 8, 19 84
 2) Operator's Well No. Zinn #5A
 3) API Well No. 47 - 021 -
 State _____ County _____ Permit _____

**STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES, OIL AND GAS DIVISION
 APPLICATION FOR A WELL WORK PERMIT**

- 4) WELL TYPE: A Oil _____ / Gas X /
 B (If "Gas", Production X / Underground storage _____ / Deep _____ / Shallow X /)
- 5) LOCATION: Elevation: 1162 Watershed: Brake Hollow
 District: Troy County: Gilmer Quadrangle: Auburn 7.5
- 6) WELL OPERATOR Waco Oil & Gas Co., Inc. 7) DESIGNATED AGENT Kenneth Greenlief
 Address 1297 N. Lewis St. Address 1297 N. Lewis St.
Glenville, WV 26351 Glenville, WV 26351
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Deo Mace Name L. L. Morris Well Service, Inc.
 Address Rt. 1, Box 5 Address 1297 N. Lewis St.
Sandridge, WV 25274 Glenville, WV 26351
- 10) PROPOSED WELL WORK: Drill X / Drill deeper _____ / Redrill _____ / Stimulate X /
 Plug off old formation _____ / Perforate new formation _____ /
 Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Elk
 12) Estimated depth of completed well, 5350 feet
 13) Approximate trata depths: Fresh, 181 feet; salt, None feet.
 14) Approximate coal seam depths: None Is coal being mined in the area? Yes _____ / No X /

15) 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									Sizes
Coal									
Intermediate	<u>8 5/8</u>	<u>LRW</u>	<u>20</u>	<u>X</u>		<u>600</u>	<u>600</u>	<u>160 sacks</u>	<u>C/S Neat No Additives</u>
Production	<u>4 1/2</u>	<u>J-55</u>	<u>10.5</u>	<u>X</u>			<u>5350</u>	<u>510 sacks</u>	Depths set
Tubing									
Liners									Perforations: Top Bottom

The law requires a comment period for surface owners. However, the permit can be issued in less than 15 days from the filing of the Application if the surface owner(s) of record sign(s) the following "Voluntary Statement of No Objection" on a facsimile of this surface owner's copy of the Application.

VOLUNTARY STATEMENT OF NO OBJECTION

I hereby state that I have read the instructions to surface owners on the reverse side of this Application for a Well Work Permit, and that I have received copies of (1) a Notice of Application for a Well Work Permit on Form IV-2(A), (2) an Application for a Well Work Permit on Form IV-2(B), (3) a survey plat on Form IV-6, and (4) a Construction and Reclamation Plan on Form IV-9, all for proposed well work on my surface land as described therein.

I further state that I have no objection to the planned work described in these materials, and I have no objection to a permit being issued based on those materials.

(For execution by corporation, partnership, etc.)

NAME: _____
 By _____
 Its _____ Date _____

(For execution by natural persons)

S. Cott Zinn Date: 4-17-84
 (Signature)
May Alice Lockard Date: 4/17/84
 (Signature)

**INSTRUCTIONS TO SURFACE OWNERS
AND
EXPLANATION OF METHODS AND TIME LIMITS TO COMMENT
ON OIL AND GAS WELL WORK PERMIT**

The well operator named in the Notice and this Application and the attached materials is applying for a permit from the State to do oil or gas well drilling or other well work. You are being served with these materials because surface owners have the right to file comments before the permit is issued. (**NOTE:** If the surface tract is owned by more than three persons, in multiple heirship for example, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22, Article 4 of the W. Va. Code. Permits are valid for 24 months.

If you do not own any interest in the surface tract, please forward these materials to the true owner immediately if you know who it is. Also, please notify the well operator named in the materials and the Administrator of the Office of Oil and Gas in the West Virginia Department of Mines immediately.

NOTE: You are not required to file any comment at all.

Where to file comments and obtain additional information:

Administrator of the Office of Oil and Gas
West Virginia Department of Mines
1615 Washington Street East
Charleston, West Virginia 25311
(304) 348-2057

Who may file comments? If you wish to file comments, you must be an owner of record of (1) an interest in the surface tract on which the well already is or is about to be located, or (2) an interest in any other surface tract under the same oil or gas lease which will be utilized for roads or other land disturbances.

Time limits for comments. The law requires these materials to be delivered on or before the date the operator files his Application. You have **FIFTEEN (15) DAYS** after the filing date to file your comments as provided in **Methods for Filing Comments** below. You may call the Administrator's office at the above telephone number to be sure of the date. However, if you have been contacted by the well operator, and if you have signed a "voluntary statement of no objection" to any of the planned work described in these materials, then the permit may be issued at any time.

Comments must be in writing. Your comments must include your name, address and telephone number, the well operator's name and well number, and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Methods for filing comments. Comments must be filed in person or received in the mail at the Administrator's office by the time stated above. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling.

The Administrator for Oil and Gas has the power to deny or condition a well work permit based on your comments on the following grounds:

- “(1) The proposed well work will constitute a hazard to the safety of persons; or
- “(2) The plan for soil erosion and sediment control is not adequate or effective; or
- “(3) Damage would occur to publicly owned lands or resources; or
- “(4) The proposed well work fails to protect fresh water sources or supplies.”

If you want a copy of the permit as it is finally issued, or a copy of the order denying the permit, you should request a copy from the Administrator.

List of Water Testing Laboratories. The Administrator maintains a list of water testing laboratories which you can hire to test your water to establish water quality prior to and after drilling. Contact the Administrator's office or an Oil and Gas Inspector to obtain a copy of the list.

I N S T R U C T I O N S T O A P P L I C A N T

CONCERNING THE LINE ITEMS:

- 1) Date of Notice.
- 2) Your well name and number.
- 3) To be filled out by the Office of Oil & Gas.
- 4) & 5) Use separate sheet if necessary.
- 4) Surface owner(s) of record to be served with Notice and Application. However, see also Code § 22-4-1b(b) if "more than three tenants in common or other co-owners of interest described in subsection (a) of this section hold interests in such lands".
- 5(i) "Coal Operator" means any person, firm, partnership, partnership association or corporation that proposes to or does operate a coal mine.
- 5(ii, iii) See Code § 22-4-20.
- 6) See Code § 22-4-11(c). However, in lieu of filing the lease(s) or other continuing contract(s), the Applicant may fill out the information in the space provided below.
- 7) See Code § § 22-4-11(d, e).

CONCERNING THE REQUIRED COPIES FOR FILING AND SERVICE:

Filing. Code § 22-4-1k and Regulation 7.02 provide that the original and required copies of the Notice and Application must be filed with the Administrator, 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 § 22-4-1k(d) and the reclamation required by Code § 22-4-12b and Regulation 23, (iv) unless previously paid on the same well, the fees required by Code § 22-4-1a(c) and 22-3-12a, and (v) if applicable, the consent required by Code § 22-4-8a from the owner of any water well on dwelling within 200 feet of the proposed well.

Service. In addition, service must be made on the surface owner(s) and the person(s) with an interest in the coal. See Code § § 22-4-1m, 22-4-2, 22-4-2a, and 22-4-2b.

INFORMATION SUPPLIED UNDER CODE § 22-4-11(d)

IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on the obverse side of this Notice, I depose and say that I am the person who signed the Notice for the Applicant, and that--

- (1) the tract of land is the same tract described in the Application to which this Notice applies, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

<u>Grantor, lessor, etc.</u>	<u>Grantee, lessee, etc.</u>	<u>Royalty</u>	<u>Book Page</u>
Scott Zinn	Waco Oil & Gas Co., Inc.	1/8	335-503
Mary Alice Lockard	Waco Oil & Gas Co., Inc.	1/8	335-503

1) Date: March 8, 1984
2) Operator's
Well No. Zinn #5A
3) API Well No. 47 - 021 - 4179
State County Permit

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OFFICE OF OIL & GAS

NOTICE OF APPLICATION FOR A WELL WORK PERMIT

4) SURFACE OWNER(S) OF RECORD TO BE SERVED

- (i) Name Scott Zinn
Address Cox's Mills, WV 26342
- (ii) Name Mary Alice Lockard
Address Cox's Mills, WV 26342
- (iii) Name _____
Address _____

5(i) COAL OPERATOR None
Address _____

5(ii) COAL OWNER(S) WITH DECLARATION ON RECORD:
Name None
Address _____

Name None
Address _____

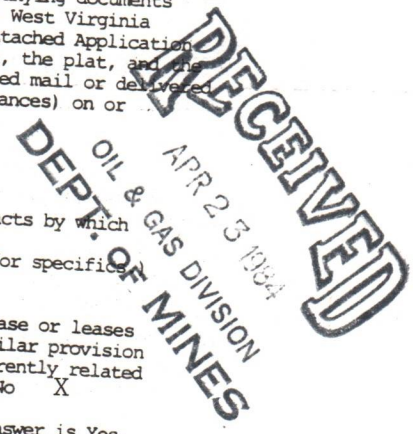
5(iii) COAL LESSEE WITH DECLARATION ON RECORD:
Name None
Address _____

TO THE PERSON(S) NAMED ABOVE: You should have received this Form and the following documents:

- (1) The Application for a Well Work Permit on Form IV-2(B) (or Form IV-4 if the well is to be plugged, which sets out the parties involved in the drilling or other work, and describes the well and its location and, if applicable, the proposed casing and cementing program;
- (2) The plat (surveyor's map) showing the well location on Form IV-6; and
- (3) The Construction and Reclamation Plan on Form IV-9 (unless the well work is only to plug a well), which sets out the plan for erosion and sediment control and for reclamation for the site and access road.

THE REASON YOU RECEIVED THESE DOCUMENTS IS THAT YOU HAVE RIGHTS REGARDING THE APPLICATION WHICH ARE SUMMARIZED IN THE "INSTRUCTIONS" ON THE REVERSE SIDE OF THE COPY OF THE APPLICATION (FORM IV-2(B) OR FORM 4, DESIGNATED FOR YOU. HOWEVER, YOU ARE NOT REQUIRED TO TAKE ANY ACTION AT ALL.

Take notice that under Chapter 22 of the West Virginia Code, the undersigned well operator proposes to file or has filed this Notice and Application and accompanying documents for a Well Work Permit with the Administrator of the Office of Oil and Gas, West Virginia Department of Mines, with respect to a well at the location described on attached Application and depicted on attached Form IV-6. Copies of this Notice, the Application, the plat, and the Construction and Reclamation Plan have been mailed by registered or certified mail or delivered by hand to the person(s) named above (or by publication in certain circumstances) on or before the day of mailing or delivery to the Administrator.



6) EXTRACTION RIGHTS
Check and provide one of the following:
 Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil or gas.
 The requirement of Code 22-4-1-(c) (1) through (4). (See reverse side for specific instructions.)

7) ROYALTY PROVISIONS
Is the right to extract, produce or market the oil or gas based upon a lease or leases or other contract or contracts providing for flat well royalty or any similar provision for compensation to the owner of the oil or gas in place which is not inherently related to the volume of oil or gas so extracted, produced or marketed? Yes No X

If the answer above is No, nothing additional is needed. If the answer is Yes, you may use Affidavit Form IV-60.

See the reverse side for line item instructions, and for instructions concerning the required copies of the Notice and Application, plat, and Construction and Reclamation Plan.

The truth of the information on the Notice and Application is verified and sworn to and the Notice is signed on behalf of the Well Operator in my County and State by
Kenneth Greenlief
this 8 day of March, 1984.
My commission expires 9-16, 1990.

M. Lynn Chapman
Notary Public, Gilmer County,
State of West Virginia

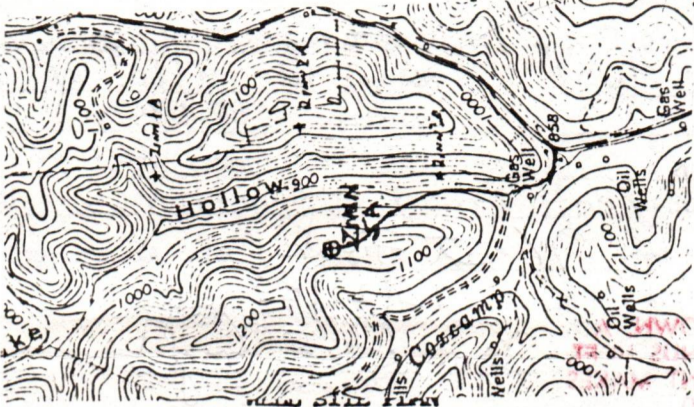
WELL
OPERATOR Waco Oil and Gas Company, Inc.
By Kenneth Greenlief
Its Agent
Address 1297 N. Lewis St.
Glenville, WV 26351
Telephone (304) 462-5347

ATTACH OR PHOTOCOPY SECTION OF INVOLVED TOPOGRAPHIC MAP. QUADRANGLE AUBURN 7.5

LEGEND

Well Site ⊕

Access Road ———

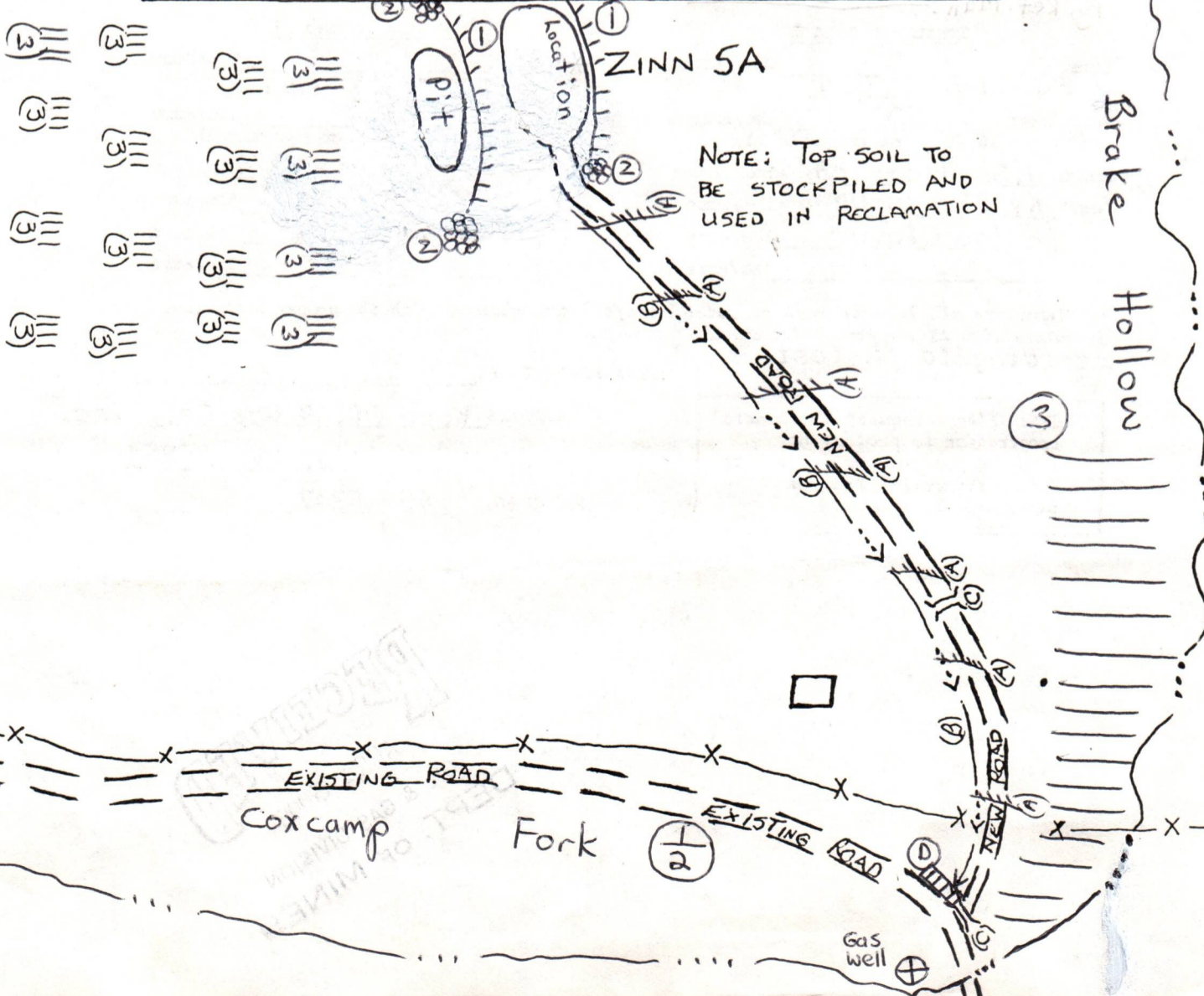


Sketch to include well location, existing access road, roads to be constructed, length and slope of road, wellsite, drilling pits and necessary structures numbered or lettered to correspond with the first part of this plan. Include all natural drainage.

Land Uses: Pasture Hayland ___ Cropland ___ Woodland ___

LEGEND

Property boundary ———	North Arrow ↗
Road = = = = =	Diversion // / / /
Existing fence — X — X —	Spring ⊙ →
Planned fence — / — / —	Wet Spot ⊙
Stream ~ ~ ~ ~ ~	Building []
Open Ditch —>—>—>—>—>	Drain pipe —○—○—○—○—>
Waterway (—>—>—>—>—>)	





DATE DEC 9 1983
WELL NO. ZINN 5A
API NO. 47 - 021 - 4179

State of West Virginia
Department of Mines
Oil and Gas Division

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Waco Oil & Gas Co., DESIGNATED AGENT Kenneth Greenlief
Address Glennville, WV 26351 Address Glennville, WV 26351
Telephone 462-5347 Telephone 462-5347
LANDOWNER Scott Zinn SOIL CONS. DISTRICT West Fork
Revegetation to be carried out by Main Line Construction Co. (Agent)

This plan has been reviewed by West Fork SCD. All corrections and additions become a part of this plan: 12/21/83 (Date)

THIS REVIEW IS MADE FOR SITE AS SHOWN. A CHANGE OF ELEVATION OF PLUS OR MINUS 10 FT. OR SLOPE OF PLUS OR MINUS 3 PERCENT MAKES THIS PLAN NOT ACCEPTABLE TO WFCSD.

Kenneth E Knight
(SCD Agent)

ACCESS ROAD

LOCATION

Structure Cross Drains (A)
Spacing .45' APART & 60' APART
Page Ref. Manual 2-4

Structure Diversion Ditch (1)
Material Earthen
Page Ref. Manual 2-12

Structure DRAINAGE DITCH (B)
(INSIDE ROAD CUTS)
Spacing EARTHEN - ALONG SIDE OF ROAD
Page Ref. Manual 2-12

Structure SEDIMENT BARRIER (2)
Material BRUSH & STONE
Page Ref. Manual 2-16

Structure CULVERTS (18" MIN ID) (C)
(at natural drains)
Spacing ACCORDING TO OIL & GAS MANUAL
Page Ref. Manual 2-8

Structure FILTER STRIP (3)
Material UNDISTURBED NATURAL VEGETATION
Page Ref. Manual 2-16

All structures should be inspected regularly and repaired if necessary. All commercial timber is to be cut and stacked and all brush and small timber to be cut and removed from the site before dirt work begins.

Structure sediment Barrier (D)
Material Hay or straw bales
Pg. Ref. Man. 2-16

REVEGETATION

Treatment Area I

Treatment Area II

* Lime _____ Tons/acre
or correct to pH 0.5
Fertilizer 500 lbs/acre
(10-20-20 or equivalent)
Mulch H. Seed-paper 3/4 Tons/acre
Seed* Ky 31 Fescue 35 lbs/acre
Ladino Clover 5 lbs/acre
_____ lbs/acre

*Lime _____ Tons/acre
or correct to pH 6.5
Fertilizer 500 lbs/acre
(10-20-20 or equivalent)
Mulch H. Seed-paper 3/4 Tons/acre
Seed* Ky 31 Fescue 35 lbs/acre
Ladino Clover 5 lbs/acre
_____ lbs/acre

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

*According to pH test

PLAN PREPARED BY Bill Gilly

ADDRESS Waco Oil & Gas Co., Inc.
Glennville, WV 26351

PHONE NO. 462-5347

NOTES: Please request landowners' cooperation to protect new seedling for one growing season. Attach separate sheets as necessary for comments.

RECEIVED
APR 23 1984
OIL & GAS DIVISION
DEPT. OF MINES

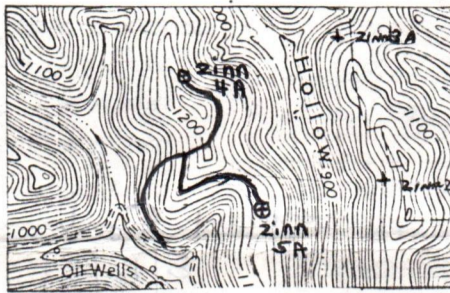
IV-9 REVERSE
 Revised 11-81

ATTACH OR PHOTOCOPY SECTION OF
 INVOLVED TOPOGRAPHIC MAP.
 QUADRANGLE Auburn 7.5

LEGEND

Well Site ⊕

Access Road ———



WELL SITE PLAN

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

Land Use: Pasture Hayland Cropland Woodland

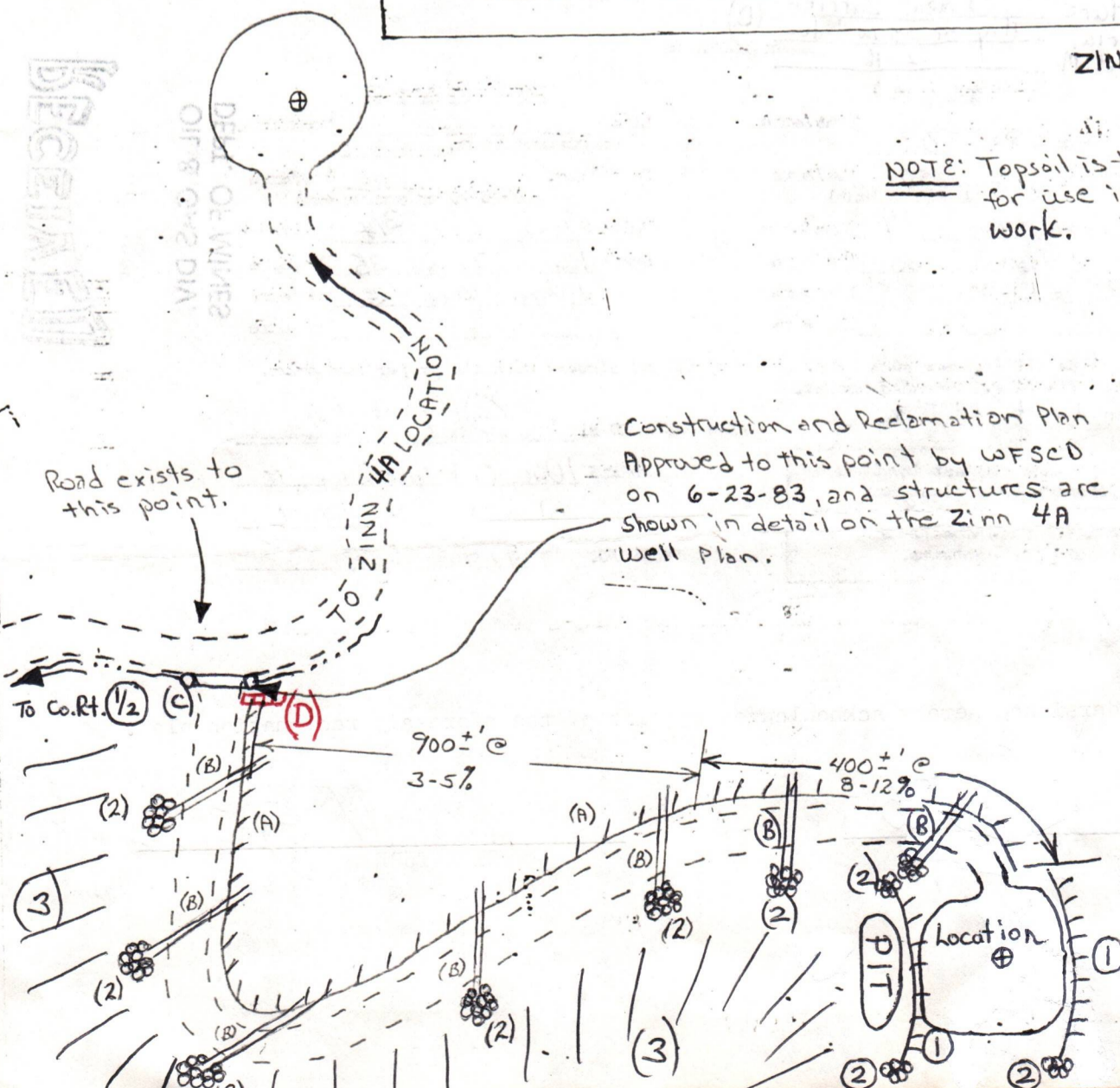
LEGEND

Property boundary ———▲———	North Arrow ↗
Road = = = = =	Diversion // // // //
Existing fence — X — X —	Spring ○ →
Planned fence — / — / —	Wet Spot ☼
Stream ~ ~ ~ ~ ~	Building ■
Open Ditch —> —> —> —>	Drain pipe —○—> —○—>
Waterway (—> —> —> —>)	



ZINN SURFACE

NOTE: Topsoil is to be stockpiled for use in reclamation work.



Construction and Reclamation Plan
 Approved to this point by WFSO
 on 6-23-83, and structures are
 shown in detail on the Zinn 4A
 Well Plan.





IV-9
Revised 11-81

Rec'd. (WFSCD)
AUG 2 1984

State of West Virginia
Department of Mines
Oil and Gas Division

DATE July 31, 1984
WELL NO. Zinn SA
API NO. 47-021-4179
Notes: This is a revised plan showing a road change.

CONSTRUCTION AND RECLAMATION PLAN

COMPANY NAME Waco Oil & Gas Co., Inc.
Address Glenville, WV 26351
Telephone (304) 462-5347
LANDOWNER Scott Zinn

DESIGNATED AGENT Kenneth Corcoran
Address Glenville, WV 26351
Telephone (304) 462-5347
SOIL CONS. DISTRICT West Fork

Revegetation to be carried out by Main Line Construction Co. (Agent)

This plan has been reviewed by West Fork SCD. All corrections and additions become a part of this plan: 8/13/84

THIS REVIEW IS MADE FOR SITE AS SHOWN. A CHANGE OF ELEVATION OF PLUS OR MINUS 10 FEET OR SLOPE OF PLUS OR MINUS 3 PERCENT MAKES THIS PLAN NOT ACCEPTABLE TO WFSCD.

Kenneth E. Knight
(SCD Agent)

ACCESS ROAD

Structure DRAINAGE DITCH (A)
(Inside road cuts)
Spacing As shown on sketch
Page Ref. Manual 2-12

Structure Diversion Ditch (1)
Material Earthen
Page Ref. Manual 2-12

Structure CROSS DRAIN (B)
57'-135' Apart, 8% - 10% Apart,
Spacing As shown on sketch. 12% - 72' Apart
with riprapped outlet
Page Ref. Manual 2-11

Structure SEDIMENT BARRIER (2)
Material Brush & Stone
Page Ref. Manual 2-16

Structure Culvert (15" min. I.D.) (C)
Spacing (According to O&G Manual) (at natural drains)
with riprapped outlet
Page Ref. Manual 2-7

Structure Filter Strip (3)
Material undisturbed nat. vegetation
Page Ref. Manual 2-16

All structures should be inspected regularly and repaired if necessary. All commercial timber is to be cut and stacked and all brush and small timber to be cut and removed from the site before dirt work begins.

Structure Sediment Barrier (D)
Material Hay or straw bales
Pg. Ref. Man. 2-16

REVEGETATION

Treatment Area I

* Lime or correct to pH 6.5 Tons/acre
Fertilizer 500 lbs/acre
(10-20-20 or equivalent)
Mulch H. Seed-paper 3/4 Tons/acre
Seed* Ky 31 Fescue 35 lbs/acre
Ladino Clover 5 lbs/acre
lbs/acre

Treatment Area II

* Lime or correct to pH 6.5 Tons/acre
Fertilizer 500 lbs/acre
(10-20-20 or equivalent)
Mulch H. Seed-paper 3/4 Tons/acre
Seed* Ky 31 Fescue 35 lbs/acre
Ladino Clover 5 lbs/acre
lbs/acre

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

NOTES: Please request landowners' cooperation to protect new seedling for one growing season. Attach separate sheets as necessary for comments.

PLAN PREPARED BY S. E. Holl
ADDRESS Waco Oil & Gas Co., Inc.
Glenville, WV 26351
PHONE NO. (304) 462-5347

OIL & GAS DIV.
DEPT. OF MINES

JUL 1 1985

RECEIVED

The undersigned hereby acknowledges receipt of the aforesaid reclamation plan.

1-9-85
DATE

Scott Zinn
SIGNATURE

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

1st Stage: Alexander (5100' to 5164) - 500 Gal. 15% Hcl. (40,000 lb 20-40)
40 MCF N₂

2nd Stage: Benson, 3rd Riley (4702 to 4848) - 500 Gal. 15% Hcl.
(10,000 lb. 80-100), (30,000 lb 20-40) 40 MCF N₂

3rd Stage: 2nd Riley (4460 to 4484) - 500 Gal. 15% Hcl.
(10,000 lb 80-100), (30,000 lb 20-40) 40 MCF N₂

RECEIVED
DPT. OF MINES

WELL 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	15	
Sand, Shale			15	480	1/2" Stream water @ 60'
Sand, Shale, Red Rock			480	995	
Sand, Shale			955	1950	
Little Lime			1950	1980	
Shale			1980	1994	
Big Lime			1994	2075	
Big Injun.			2075	2128	
Sand, Shale			2128	2430	
Berea			2430	2462	
Sand, Shale			2462	3302	
Speechly Section			3302	4030	
Balltown Section			4030	4460	
Riley Section			4460	4840	
Benson			4840	4850	
Shale			4850	5096	
Alexander			5096	5162	
Shale, Sand			5162	5687	- TD

(Attach separate sheets as necessary)

Waco Oil and Gas Co., Inc.
Well Operator

By: Kenneth Greenlief *Kenneth Greenlief*

Date: 2-15-85

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."



IV-35
(Rev 8-81)

Date 2-15-85
Operator's
Well No. 5A
Farm Zinn
API No. 47 - 021 - 4179

RECEIVED
FEB 20 1985

State of West Virginia
Department of Mines
Oil and Gas Division

OIL & GAS DIVISION
DEPT. OF MINES 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: 1162 Watershed Brake Hallow
District: Troy County Gilmer Quadrangle Auburn 7.5

COMPANY Waco Oil and Gas Co., Inc.
ADDRESS Glenville, WV
DESIGNATED AGENT Kenneth Greenlief
ADDRESS Glenville, WV
SURFACE OWNER Scott Zinn
ADDRESS Cox's Mill, WV
MINERAL RIGHTS OWNER Scott Zinn
ADDRESS Cox's Mill, WV
OIL AND GAS INSPECTOR FOR THIS WORK
Deo Mace ADDRESS Sandridge, WV
PERMIT ISSUED 5-08-83 5-08-84
DRILLING COMMENCED 11-29-84
DRILLING COMPLETED 12-03-84
IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON _____

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8	841	841	to surface
7'			
5 1/2			
4 1/2		5250	700 SKS
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Benson Depth 5350 feet
Depth of completed well 5687 feet Rotary x / Cable Tools _____
Water strata depth: Fresh 60 feet; Salt None feet
Coal seam depths: None Is coal being mined in the area? No

OPEN FLOW DATA

Producing formation Alexander, Benson, Riley Pay zone depth See treatment feet
Gas: Initial open flow _____ Mcf/d Oil: Initial open flow _____ Bbl/d
Final open flow 984 Mcf/d Final open flow Show Bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure 1450 psig (surface measurement) after 48 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 Oil: 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

(Continue on reverse side)

GIL- 4179

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

RECEIVED

DEC 4 - 1984

OIL & GAS DIVISION
DEPT. OF MINES

INSPECTOR'S WELL REPORT

Permit No. 21-4179

Oil or Gas Well _____
(KIND)

Company Waco

Address _____

Farm 2 inn

Well No. 5A

District Troy County Gil.

Drilling commenced 11.27.84

Drilling completed _____ Total depth _____

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 1/2" ~~test~~ 60 feet

Salt water _____ feet _____ feet

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

CASING CEMENTED _____ SIZE _____ No. FT. _____ Date _____

NAME OF SERVICE COMPANY _____

COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

_____ FEET _____ INCHES _____ FEET _____ INCHES

Drillers' Names Morris &

Remarks:

841' of 8 5/8" casing, 2505K5 cement, Powell, 11-28-84

11-29-84

DATE

D. Mace

DISTRICT WELL INSPECTOR

2/16/82

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS WELLS DIVISION
INSPECTOR'S PLUGGING REPORT

Permit No. _____

Well No. _____

COMPANY _____ ADDRESS _____

FARM _____ DISTRICT _____ COUNTY _____

Filling Material Used _____

Liner			Location	Amount	Packer	Location		
PLUGS USED AND DEPTH PLACED			BRIDGES			CASING AND TUBING		
CEMENT-THICKNESS	WOOD-SIZE	LEAD	CONSTRUCTION-LOCATION		RECOVERED	SIZE	LOST	

Drillers' Names _____

Remarks: _____

DATE _____ I hereby certify I visited the above well on this date.

DISTRICT WELL INSPECTOR _____



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

RECEIVED
OCT 25 1985

DIVISION OF OIL & GAS
DEPARTMENT OF ENERGY

FINAL INSPECTION REPORT
INSPECTORS COMPLIANCE REPORT
February 26, 1985

COMPANY Waco Oil & Gas Co., Inc.

PERMIT NO 021-4179 (5-08-84)

1297 N. Lewis Street

FARM & WELL NO Scott Zinn 5A

Glenville, West Virginia 26351

DIST. & COUNTY Troy/Gilmer

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 Wellsite	_____	_____
15.03	Adequate Fresh Water Casing	_____	_____
15.02	Adequate Coal Casing	_____	_____
15.01	Adequate Production Casing	_____	_____
15.04	Adequate Cement Strenght	_____	_____
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 *Des Mace*

DATE 10-16-85

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.

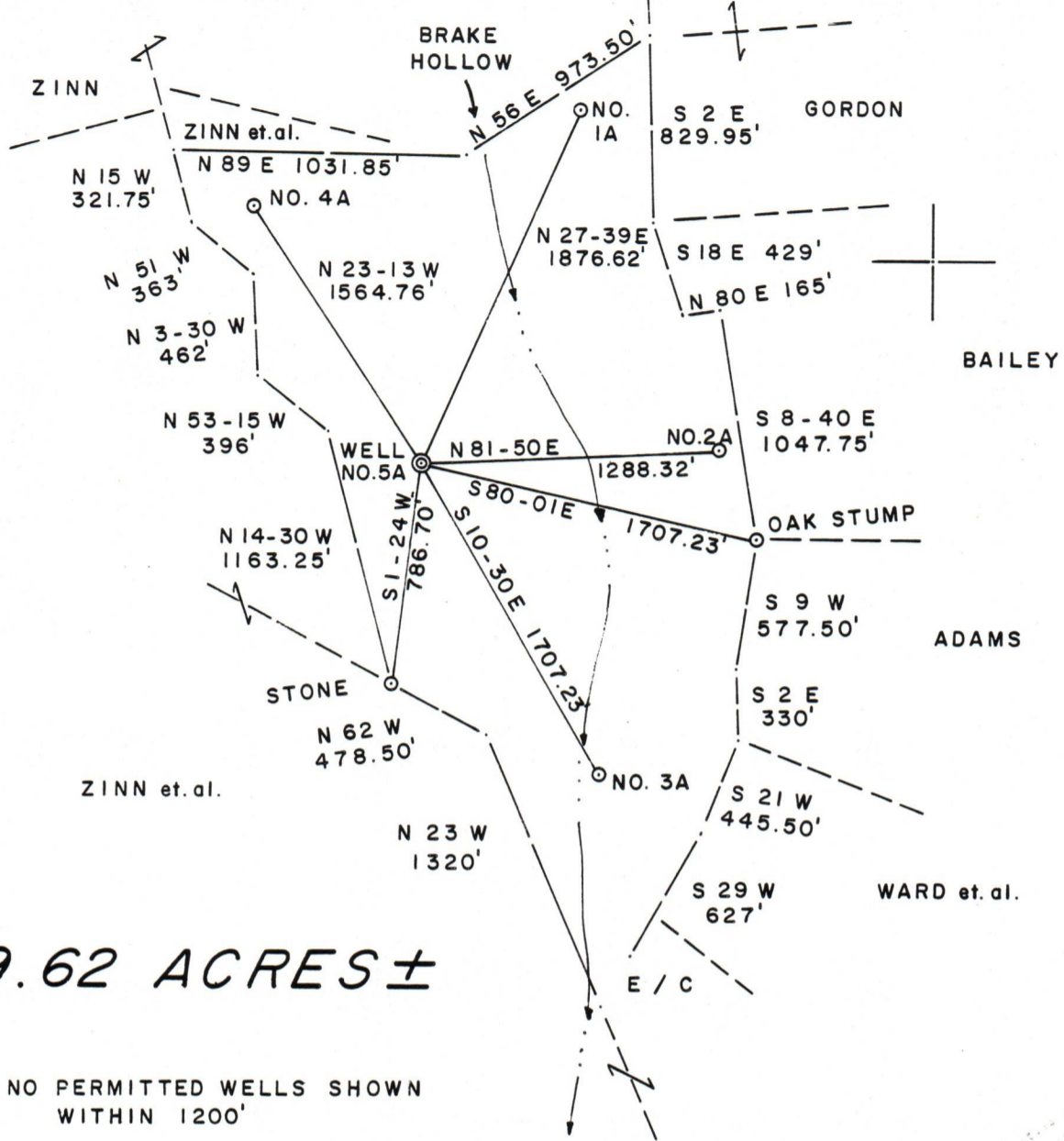
T. H. ...
Administrator-Oil & Gas Division

October 29, 1985
DATE

3,270'

LATITUDE 39° 05' 00"

ZINN LEASE WELL NO. 5A



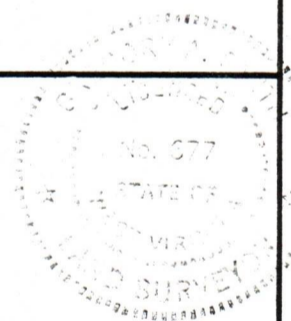
LONGITUDE 80° 50' 00"

109.62 ACRES ±

NOTE: NO PERMITTED WELLS SHOWN WITHIN 1200'

FILE NO. 11-13
 DRAWING NO. _____
 SCALE 1" = 800'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION JUNCT. OF ROADS ELEV. 858'

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) Gregory A. Smith
 R.P.E. _____ L.L.S. 677



PLACE SEAL HERE

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



DATE OCTOBER 26, 19 83
 OPERATOR'S WELL NO. 5A
 API WELL NO. 47-021-4179
 STATE 47 COUNTY 021 PERMIT 4179

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS.") PRODUCTION ___ STORAGE X DEEP ___ SHALLOW X
 LOCATION: ELEVATION 1162' WATER SHED BRAKE HOLLOW
 DISTRICT TROY COUNTY GILMER
 QUADRANGLE AUBURN 7.5'
 SURFACE OWNER SCOTT ZINN, et. al. ACREAGE 109.62
 OIL & GAS ROYALTY OWNER SCOTT ZINN, et. al. LEASE ACREAGE 109.62
 LEASE NO. _____
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE ___ PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____
 PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION BENSON ESTIMATED DEPTH 5350'
 WELL OPERATOR WACO OIL & GAS CO., INC. DESIGNATED AGENT KENNY GREENLIEF
 ADDRESS P.O. BOX 4 ADDRESS P.O. BOX 4
GLENVILLE, WV 26351 GLENVILLE, WV 26351