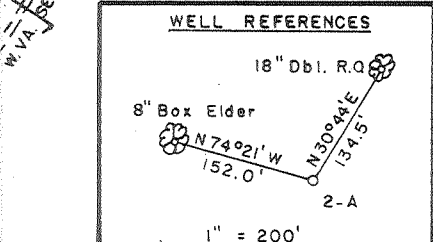
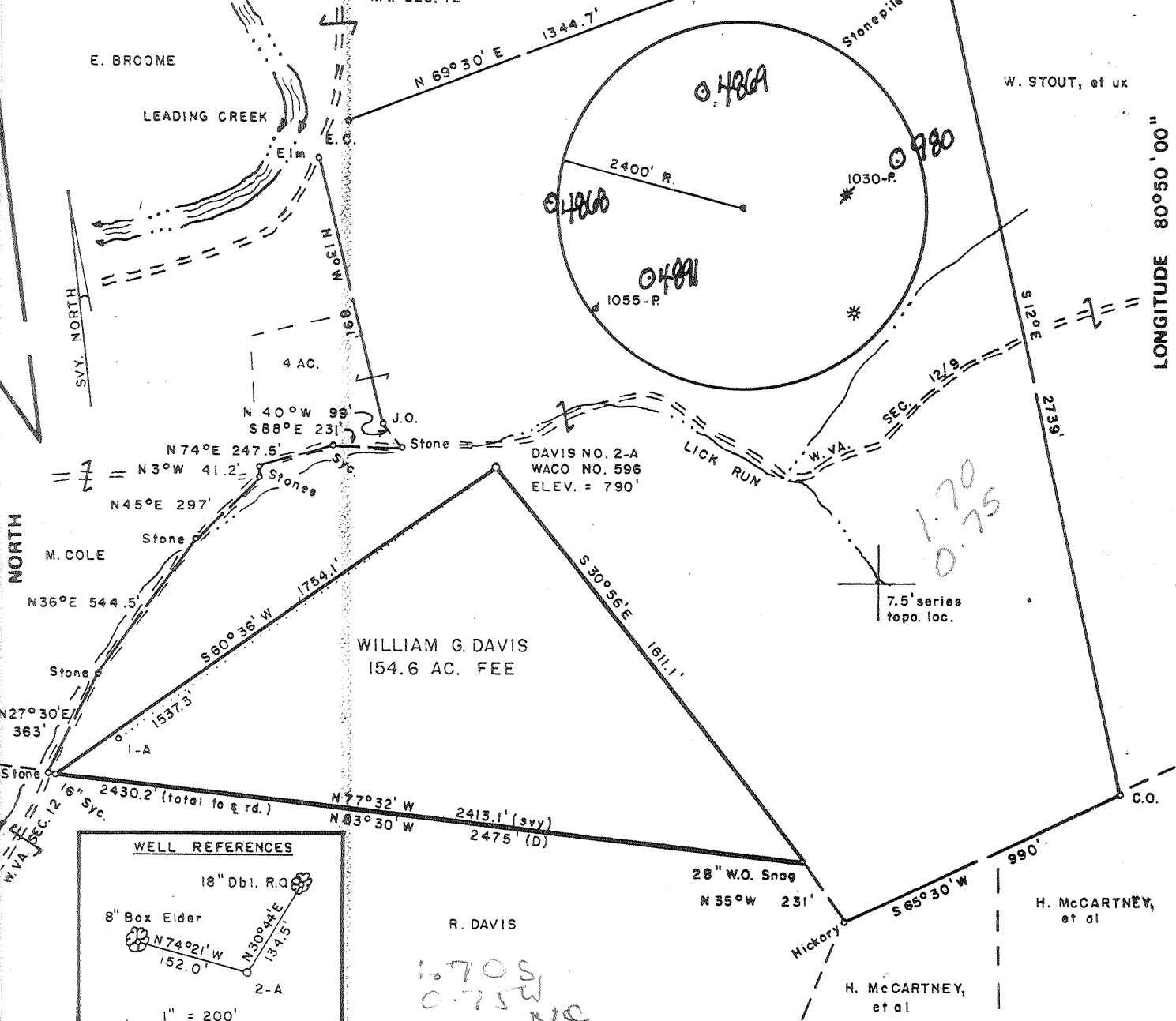


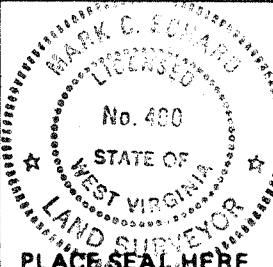
DAVIS LEASE 154.6 AC. ± *Janie 9/18/90* LATITUDE 39°00'00"

WACO NO. 596



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 500'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION Top of Knob 3850±
SW of Loc. Elev. = 999'

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. *Mark C. Echard*
 (SIGNED) MARK C. ECHARD
 R.P.E. _____ L.L.S. 490



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

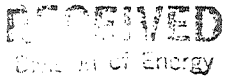


DATE MARCH 26, 1990
 OPERATOR'S WELL NO. DAVIS NO. 2-A
 API WELL NO. WACO NO. 596
47 - 021 - 4892
 STATE COUNTY PERMIT

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 790' WATER SHED LICK RUN OF LEADING CREEK
 DISTRICT DEKALB 2 COUNTY GILMER
 QUADRANGLE GLENNVILLE 7.5' N 15' NC
 SURFACE OWNER WILLIAM G. DAVIS ACREAGE 154.6
 OIL & GAS ROYALTY OWNER WILLIAM G. DAVIS LEASE ACREAGE 154.6
 LEASE NO. _____
 PROPOSED WORK: DRILL 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 MARCELLUS ESTIMATED DEPTH 5900' ±
 WELL OPERATOR WACO OIL & GAS CO. INC. DESIGNATED AGENT STEPHEN E. HOLLOWAY SEP 24 1990
 ADDRESS P.O. BOX 397 ADDRESS P.O. BOX 397
GLENNVILLE, W.V. 26351 GLENNVILLE, W.V. 26351

DEEP WELL 6-6 Reval (182) (182) (182) (182) (182)



State of West Virginia
DEPARTMENT OF ENERGY
Division of Oil and Gas

FEB 27 91

Permit:
Oil and Gas Section Well Operator's Report of Well Work

Farm name: DAVIS, WILLIAM G. Operator Well No.: DAVIS 2A 596

LOCATION: Elevation: 790.00 Quadrangle: GLENVILLE

District: DEKALB County: GILMER
Latitude: 8910 Feet South of 39 Deg. 0 Min. 0 Sec.
Longitude 3920 Feet West of 80 Deg. 50 Min. 0 Sec.

Company: WACO OIL & GAS CO., INC.
1297 N. LEWIS ST.
GLENVILLE, WV 26351-0000

Agent: STEPHEN E. HOLLOWAY

Inspector: CRAIG DUCKWORTH
Permit Issued: 09/19/90
Well work Commenced: 10/14/90
Well work Completed: 10/20/90
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 6598
Fresh water depths (ft) _____
60', 150'
Salt water depths (ft) _____
None
Is coal being mined in area (Y/N)? N
Coal Depths (ft): None

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8"	1555	1555	C. T. S.
4-1/2"		6207	735 Sks

OPEN FLOW DATA

Producing formation Shale, Elk, Alexander, Benson Pay zone depth (ft) see treatment
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow 1639 MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 1510 psig (surface pressure) after 48 Hours
Speechly

Second producing formation Riley, Balltown Pay zone depth (ft) see treatment
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 pressure) after _____ Hours

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: Daniel R. Chapman
WACO OIL & GAS CO., INC.

By: Daniel R. Chapman, Geologist
Date: January 14, 1991

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

- 1st Stage: Shale, Elk (6114-5046) 1000 gal 15% HCL, 40 ton CO₂, 776 Mcf N₂
- 2nd Stage: Alexander, Benson (4694-4385) 630 gal 15% HCL, 40 ton CO₂, 950 Mcf N₂
- 3rd Stage: Riley, Balltown (4314-3640) 630 gal 15% HCL, 40 ton CO₂, 905 Mcf N₂
- 4th Stage: Balltown, Speechly (3411-2882) 715 gal 15% HCL, 40 ton CO₂, 850 Mcf N₂

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand, Shale			0	208	1/4" Stream @ 60'
Sand, Shale Red Rock			208	523	3/4" Stream @ 150'
Sand, Shale			523	1546	
Little Lime			1546	1568	
Blue Monday			1568	1602	
Big Lime			1602	1648	
Big Injun			1648	1740	
Sand, Shale			1740	2865	
Speechly Section			2865	3138	
Shale			3138	3199	
Balltown Section			3199	3851	
Riley Section			3851	4333	
Shale			4333	4384	
Benson			4384	4399	
Shale			4399	4626	
Alexander			4626	4700	
Shale			4700	4792	
Elk Section			4792	5052	
Shale			5052	6095	
Marcellus Shale			6095	6140	
Onondaga Limestone			6140	6183	
Huntersville Chert			6183	6366	
Oriskany Sandstone			6366	6454	
Helderberg Limestone			6454	6598	T. D.

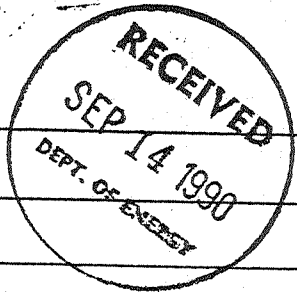
~~6140~~
~~6598~~

021-4892

Page ___ of ___
Issued 9/19/90
Expires 9/19/92

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS
WELL WORK PERMIT APPLICATION

- 1) Well Operator: Waco Oil and Gas Company, Inc. 51800 (2) 372
- 2) Operator's Well Number: Waco 596-Davis 2A 3) Elevation: 790'
- 4) Well type: (a) Oil ___ / or Gas X /
(b) If Gas: Production X / Underground Storage ___ /
Deep ___ / Shallow X /
- 5) Proposed Target Formation(s): Marcellus
- 6) Proposed Total Depth: 5900 feet 384'
- 7) Approximate fresh water strata depths: 84' 97'
- 8) Approximate salt water depths: None
- 9) Approximate coal seam depths: None
- 10) Does land contain coal seams tributary to active mine? Yes ___ / No X /
- 1) Proposed Well Work: Drill and stimulate. New well



CASING AND TUBING PROGRAM

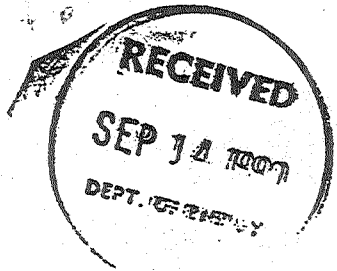
TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						
Fresh Water						
Coal						
Intermediate	8-5/8"	A P I	20.#	700'	700'	C. T. S.
Production	4-1/2"	A P I	10.5#		5,900'	525 Sk.
Tubing						
Liners						

Handwritten notes:
384' 11.3
384' 11.2.2
384' 11.1

PACKERS : Kind _____
Sizes _____
Depths set _____

For Division of Oil and Gas Use Only

Fee(s) paid: Well Work Permit Reclamation Fund WPCP
Plat WW-9 WW-2B Bond Blanket One Agent



1) Date: September 4, 1990
2) Operator's well number
WACO 596-Davis 2A
3) API Well No: 47 - 021 - 4892
State - County - Permit

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

4) Surface Owner(s) to be served:
(a) Name William G. Davis
Address Rt. 2, Box 152
Lost Creek, WV 26385
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Craig Duckworth
Address Box 107, Davisson Route
Gassaway, WV 26624
Telephone (304)- 364-5942

5) (a) Coal Operator:
Name N/A
Address _____
(b) Coal Owner(s) with Declaration
Name N/A
Address _____
(c) Coal Lessee with Declaration
Name N/A
Address _____

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

_____ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR
X Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 7 on the above named parties, by:
X Personal Service (Affidavit attached)
_____ Certified Mail (Postmarked postal receipt attached)
_____ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.
I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator Waco Oil and Gas Company, Inc.
By: Stephen E. Holloway Stephen E. Holloway
Its: Agent
Address P. O. Box 397
Glenville, WV 26351
Telephone (304) 462-5347

Subscribed and sworn before me this 4th day of September, 1990

[Signature] Notary Public
My commission expires 5 May 1996