

7725 7/2/84

8550'

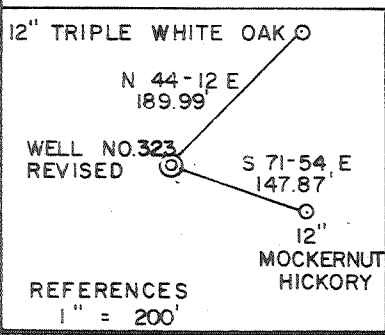
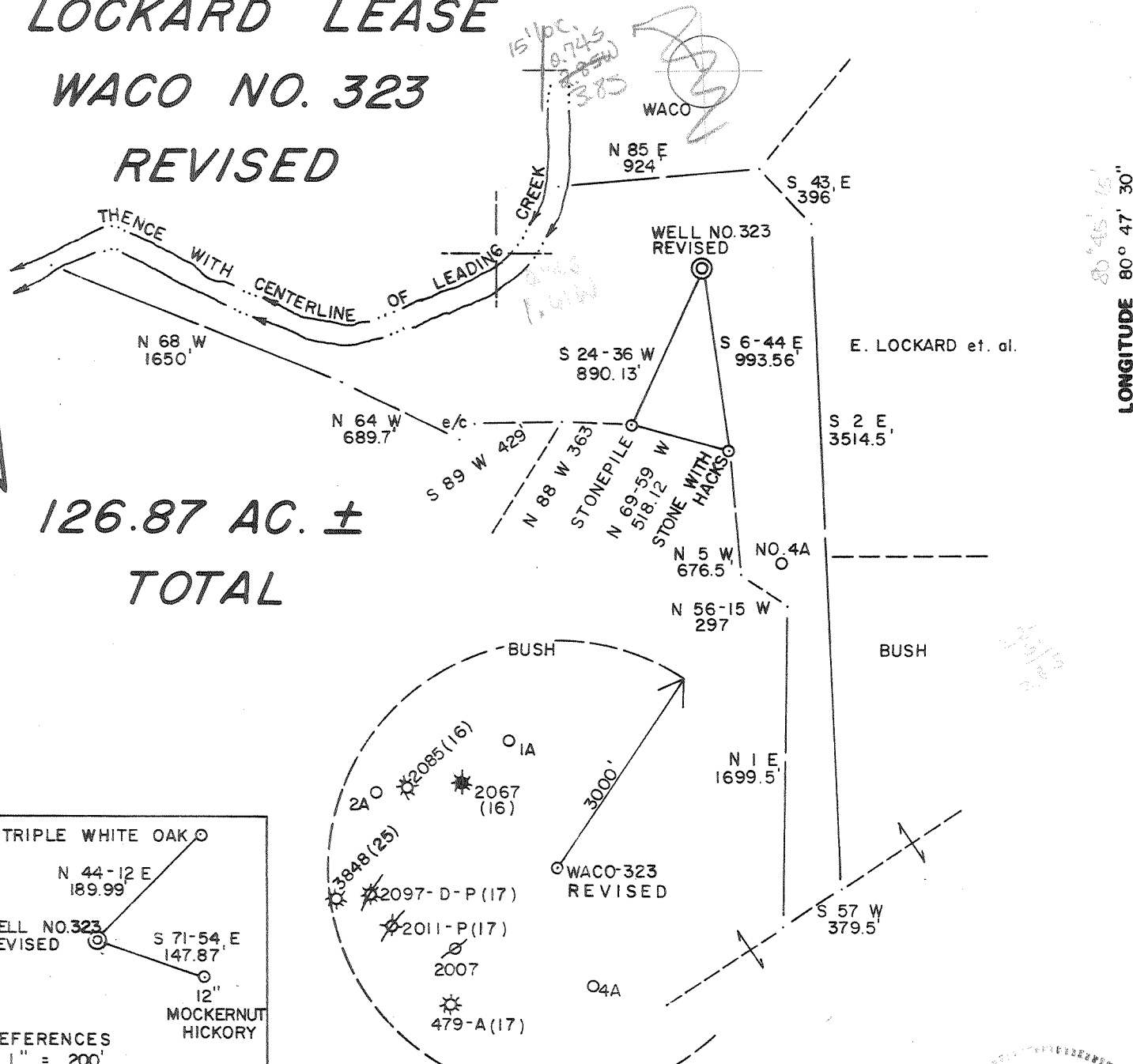
LATITUDE 39° 00' 00"

LOCKARD LEASE WACO NO. 323 REVISED

126.87 AC. ± TOTAL

NORTH

LONGITUDE 80° 47' 30"



FILE NO. 12 - 62
 DRAWING NO. _____
 SCALE 1" = 800'
 MINIMUM DEGREE OF ACCURACY 1 / 200
 PROVEN SOURCE OF ELEVATION TOP OF KNOB
ELEV. 1237'

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



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



DATE JUNE 25, 1984
 OPERATOR'S WELL NO. WACO-323 REV
 API WELL NO. _____
47 - 021 - 4222
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 856' WATER SHED LEADING CREEK
 DISTRICT TROY COUNTY GILMER
 QUADRANGLE GLENVILLE 7.5' NE
 SURFACE OWNER WACO OIL & GAS CO., INC. ACREAGE 66.75
 OIL & GAS ROYALTY OWNER WACO OIL & GAS CO., INC. LEASE ACREAGE 126.87
 LEASE NO. _____
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR
 STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW
 FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION ORISKANY ESTIMATED DEPTH 6500' OCT 14 1986
 WELL OPERATOR WACO OIL & GAS CO., INC. DESIGNATED AGENT KENNY GREENLIEF
 ADDRESS R.O. BOX 4 ADDRESS P.O. BOX 4
GLENVILLE, WV 26351 GLENVILLE, WV 26351

DEEP WELL 3-6 Glenville North (182) DPT-Tusc.

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

Oriskany -(6416 - 6429) 250 gal 15% Hcl, 183 bbl H₂O, 15000# 20/40, 130 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	163	
Sand, Shale, Redrock			163	387	
Sand & Shale			387	1538	Damp @ 1447'
Little Lime			1538	1555	
Sand & Shale			1555	1586	
Big Lime			1586	1705	
Big Injun			1705	1746	
Sand & Shale			1746	2867	
Speechly Section			2867	3126	
Balltown Sectoin			3126	3701	
Riley Section			3701	4401	
Benson			4401	4418	
Shale			4413	4641	
Alexander			4641	4777	
Elk Section			4777	5366	
Shale			5366	6133	
Marcellus Shale			6133	6187	
Onondaga Lime			6187	6228	
Huntersville Chert			6228	6413	
Oriskany Sand			6413	6502	
Helderberg			6502	6960	
Tonoloway			6960	7192	
Salina			7192	8014	
Newberg			8014	8033	
McKenzie			8033	8276	
Keefer			8276	8290	
Rose Hill			8290	8830	
Tuscarora			8830	9040	
Juniata			9040	9111	TD

9111
6502

2609 - expl. ftg

(Attach separate sheets as necessary)

WACO OIL & GAS CO., INC.

Well Operator

By: Daniel R. Chapman, Geologist

Date: July 25, 1986

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."



1) Date: June 28, 19 84
 2) Operator's Well No. Waco #323
 3) API Well No. 47 State 021 County 4222 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 X / Shallow)
 5) LOCATION: Elevation: 856' Watershed: Leading Creek (LK 75)
 District: Troy County: Gilmer Quadrangle: Glenville 7.5'
 6) WELL OPERATOR Waco Oil & Gas Co., Inc. 7) DESIGNATED AGENT Kenneth Greenlief
 Address 1297 N. Lewis Street Address 1297 N. Lewis Street
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 Route 1, Box 5 Address 1297 N. Lewis Street
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 RECEIVED
JUL - 6 1984
 12) Estimated depth of completed well, 6500' feet
 13) Approximate trata depths: Fresh, 110' feet; salt, none feet.
 14) Approximate coal seam depths: none Is coal being mined in the area? Yes

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									
Coal									Sizes
Intermediate	8 5/8		20	X		600	600		CTS-Neat No Additives
Production	4 1/2		10.5	X			6500	650 sacks	Depths set
Tubing								or as req. by rule 15.01	Perforations:
Liners									Top Bottom

OIL & GAS DIVISION
 DEPT. OF MINES

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-021-4222 July 16, 19 84
 Date

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 July 16, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
BLANKET	lp	mw	mw	1099

Margaret J. Hassel
 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.