

IV-35  
(Rev 8-81)



State of West Virginia  
Department of Mines  
Oil and Gas Division

Date August 1, 1985  
Operator's  
Well No. Waco #339  
Farm Lockard  
API No. 47 - 021 - 4354

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: 738 Watershed Leading Creek  
District: Troy County Gilmer Quadrangle Glenville

COMPANY WACO OIL & GAS CO., INC.  
ADDRESS Glenville, WV 26351  
DESIGNATED AGENT Stephen E. Holloway  
ADDRESS Glenville, WV 26351  
SURFACE OWNER Waco Oil & Gas Co., Inc.  
ADDRESS Glenville, WV 26351  
MINERAL RIGHTS OWNER Waco Oil & Gas Co., Inc.  
ADDRESS Glenville, WV 26351  
OIL AND GAS INSPECTOR FOR THIS WORK  
Deo Mace ADDRESS Sandridge, WV  
PERMIT ISSUED 7/12/85  
DRILLING COMMENCED 7/19/85  
DRILLING COMPLETED 7/25/85  
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 Cord.			
13-10"			
9 5/8			
8 5/8	531	531	to surface
7'			
5 1/2			
4 1/2		597 1/4	620 also
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Elk Depth 5990 feet  
Depth of completed well 5995 feet Rotary x / Cable Tools \_\_\_\_\_  
Water strata depth: Fresh 85 feet; Salt 1395 feet  
Coal seam depths: None Is coal being mined in the area? \_\_\_\_\_

OPEN FLOW DATA  
Producing formation Shale, Elk, Alexander Pay zone depth see treatment feet  
Gas: Initial open flow \_\_\_\_\_ Mcf/d Oil: Initial open flow \_\_\_\_\_ Bbl/d  
Final open flow 1221 Mcf/d Final open flow show Bbl/d  
Time of open flow between initial and final tests 4 hours  
Static rock pressure 1710 psig (surface measurement) after 48 hours shut in  
(If applicable due to multiple completion--)  
Second producing formation Benson, 3rd Riley 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

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

~~Genesee Shale~~ - 5902 to 5942 - 500 Gal 15% Hcl, 40 Ton CO<sub>2</sub>, 86 MCF N<sub>2</sub>

~~Harrell Shale~~ - 5740 to 5830 - 500 Gal 15% Hcl, 40 Ton CO<sub>2</sub>, 80 MCF N<sub>2</sub>

Lower Elk - 5210 to 5284 - 500 Gal 15% Hcl, 40 Ton CO<sub>2</sub>, 75 MCF N<sub>2</sub>

Upper Elk, Alexander - 4514 to 4760 - 500 Gal 15% Hcl, 40 Ton CO<sub>2</sub>, 75 MCF N<sub>2</sub>

Benson, 3rd riley - 4246 to 4334 - 500 Gal 15% Hcl, 40 Ton CO<sub>2</sub>, 70 MCF N<sub>2</sub>

↑  
Riley  
4246 - 4323

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Shale			0	25	
Sand			25	90	Hole Dump @ 85'
Sand, Shale, Redrock			90	310	
Sand, Shale			310	1480	Hole Dump @ 1395'
Little Lime			1480	1500	
Blue Monday			1500	1526	
Big Lime			1526	1635	
Big Injun <i>Cabr</i>			1635	1680	
Sand, Shale			1680	2792	Top Dev ≈ 1960'
Speechly Section			2792	3554	
Balltown Section			3554	3942	
Riley Section			3942	4323	
Benson			4323	4336	
Shale, Sand			4336	4610	
Alexander			4610	4718	
Shale			4718	4750	
Elk			4750	4760	
Shale			4760	5260	
Elk			5260	5270	
Shale			5270	5995	TD Brallier @ TD

(Attach separate sheets as necessary)

WOOD OIL AND GAS CO., INC.  
Well Operator

By: Noble W. Zickefoose, Geologist

Date: August 1, 1985

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."

RECEIVED  
JUN 11 1985

1) Date: June 5 19 85  
2) Operator's Well No. Waco 339  
3) API Well No. 47 021 -4354  
State County Permit

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

OIL & GAS DIVISION  
DEPT. OF MINES

- ALL TYPE: A Oil ☒ Gas ☒  
B (If Gas, Production ☒ Underground storage ☐ Deep ☐ Shallow ☒)
- 5) LOCATION: Elevation: 738' Watershed: Leading Creek  
District: Troy County: Gilmer Quadrangle: Glenville 7.5
- 6) WELL OPERATOR Waco Oil & Gas CO., Inc. 7) DESIGNATED AGENT Stephen E. Holloway  
Address P.O. Box 397 Address P.O. Box 397  
Glenville, WV 26351 57800 Glenville, WV 26351
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:  
Name Beo Mace Name L.L. Morris Well Service, Inc.  
Address Route 1 Box 5 Address P.O. Box 397  
Sandridge, WV 25274 Glenville, WV 26351
- 10) PROPOSED WELL WORK: Drill ☒ / Drill deeper ☐ / Redrill ☐ / Stimulate ☒ /  
Plug off old formation ☐ / Perforate new formation ☐ /  
Other physical change in well (specify) \_\_\_\_\_
- 11) GEOLOGICAL TARGET FORMATION, Elk
- 12) Estimated depth of completed well, 5990 feet
- 13) Approximate strata depths: Fresh, 100 feet; salt, 1340 feet.
- 14) Approximate coal seam depths: none Is coal being mined in the area? Yes ☐ / No ☒ /
- 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		Kinds	Sizes
Conductor										
Fresh water	<u>11 3/4</u>					<u>130</u>	<u>130</u>	<u>CTS by rule</u>	<u>rule 15.05</u>	
Coal										
Intermediate	<u>8 5/8</u>	<u>ERW</u>	<u>20#</u>	<input checked="" type="checkbox"/>		<u>1350</u>	<u>1350</u>	<u>250 sks to</u>	<u>surface</u>	
Production	<u>4 1/2</u>	<u>J-55</u>	<u>10.5#</u>	<input checked="" type="checkbox"/>			<u>5990</u>	<u>600sks.</u>	<u>Depths set</u>	
Tubing										
Liners									Perforations:	
									Top	Bottom

OFFICE USE ONLY  
DRILLING PERMIT

Permit number 47-021-4354Date June 12 19 85

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 June 12, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	<input checked="" type="checkbox"/> Agent:	Plat:	Casing	Fee
<u>168</u>	<u>ALB</u>	<u>MM</u>	<u>MM</u>	<u>135-1</u>

Margaret J. Lasse  
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.