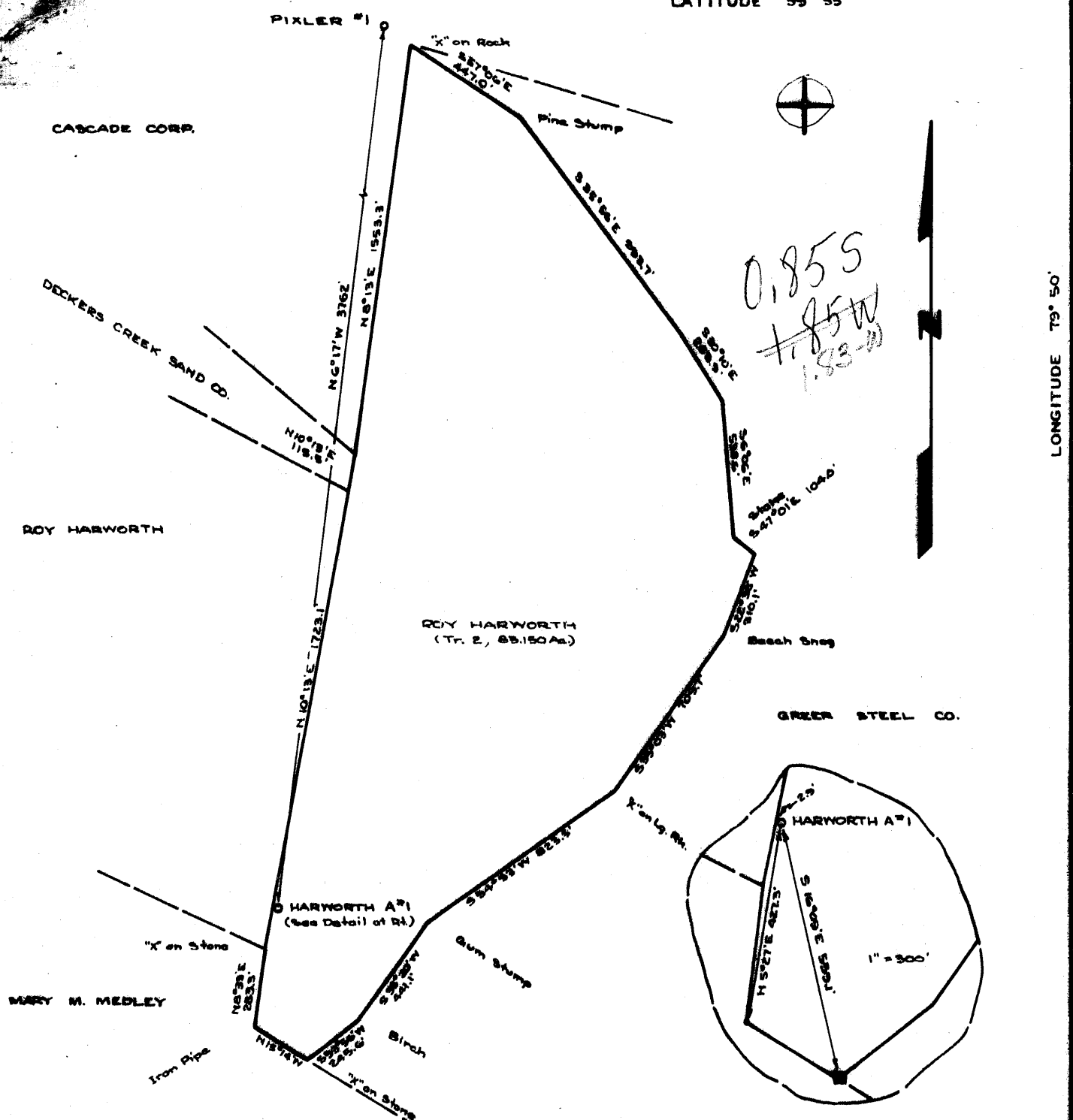


LATITUDE 39° 55'

LONGITUDE 79° 50'



- NEW LOCATION.....
- DRILL DEEPER.....
- ABANDONMENT.....

"I, the undersigned, hereby certify that this map is correct to the best of my knowledge and belief and shows all of the information required by Paragraph 5 of the rules and regulations of the Oil and Gas Section of the mining laws of West Virginia."

*Edward C. Caswell*  
 EDWARD C. CASWELL  
 TEXAS REG. NO. 5998

COMPANY PHILLIPS PETROLEUM COMPANY  
 ADDRESS BARTLESVILLE, OKLAHOMA  
 FARM ROY HARWORTH  
 TRACT 2 ACRES 89.190 LEASE NO. 11297B  
 WELL (FARM) NO. A-1 SERIAL NO. \_\_\_\_\_  
 ELEVATION (SPIRIT LEVEL) 1801.1'  
 QUADRANGLE MORGANTOWN SC  
 COUNTY MONONGALIA DISTRICT MORGAN  
 ENGINEER Edward C. Caswell  
 ENGINEER'S REGISTRATION NO. 5998 - TEXAS  
 FILE NO. \_\_\_\_\_ DRAWING NO. \_\_\_\_\_  
 DATE NOV. 1967 SCALE 1" = 500'

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

WELL LOCATION MAP  
 FILE NO. MON-311

+ DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS, SCALE 1 TO 62,500. LATITUDE AND LONGITUDE LINES BEING REPRESENTED BY BORDER LINES AS SHOWN  
 - DENOTES ONE INCH SPACES ON BORDER LINE OF ORIGINAL TRACING.



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION 2

Rotary   
Spudder   
Cable Tools   
Storage

Quadrangle Morgantown

WELL RECORD

Oil or Gas Well Gas  
(KIND)

Permit No. MON-311

Company Phillips Petroleum  
Address Bartlesville, Oklahoma  
Farm Harworth "A" Acres 83.150  
Location (waters) \*See reverse side.  
Well No. 1 Elev. 1801.1'  
District Morgan County Monongalia  
The surface of tract is owned in fee by \*\*See reverse side.  
Address  
Mineral rights are owned by \*\*See reverse side.  
Address

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			
16	Set @		Kind of Packer
13 13 3/8"	49'	32.70'	(60 Sax) by Halli.
10 9 5/8"	997.78'	982.58'	(350 Sax) by Halli.
8 1/4"			Size of
6 1/4"			Depth set
5 3/16"			
4 1/2 1/2"	7705'	7711.03'	(200 Sax) by Halli.
3			Perf. top
2			Perf. bottom
Liners Used			Perf. top
			Perf. bottom

Drilling commenced November 25, 1967  
Drilling completed December 17, 1967  
Date Shot None From To  
With  
Open Flow /10ths Water in Inch  
/10ths Merc. in Inch  
Volume 18,940 MCF/day (CAOFP) Cu. Ft.  
Rock Pressure 3480 (SICP) lbs. 299 hrs.  
Oil None bbls., 1st 24 hrs.  
WELL ACIDIZED (DETAILS) See reverse side.  
WELL FRACTURED (DETAILS) See reverse side.

Attach copy of cementing record. 7705'  
CASING CEMENTED 4 1/2" SIZE No. Ft. 12/13/67 Date  
Amount of cement used (bags) 200 sax  
Name of Service Co. Halliburton  
COAL WAS ENCOUNTERED AT FEET INCHES  
FEET INCHES FEET INCHES  
FEET INCHES FEET INCHES

RESULT AFTER TREATMENT (Initial open Flow or bbls.) - 18,940 MCF  
ROCK PRESSURE AFTER TREATMENT 3480 HOURS 299  
Fresh Water 20' & 70' Feet Salt Water Feet  
Producing Sand Chert & Oriskany Depth 7705' - PBTD 7668.23'

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Surface Soil	Sand & Shale		0'	49'	PERFORATION RECORD:		
Sand & Shale			49'	215'	ORISKANY SAND:		
Shale			215'	1007'	7509'-11'	2 .42" dia. holes	
Sand & Shale			1007'	1270'	7538'-39'	1 Do	
Red Rock, Sand & Shale			1270'	2215'	7595'-97'	2 Do	
Shale			2215'	6878'	7626'-28'	2 Do	
Tully Lime			6878'	7000'	7653'-55'	2 Do	
Shale			7000'	7199'			
Marcellus Shale			7199'	7298'	CHERT ZONE:		
Onondaga Lime			7298'	7313'	7319'-20'	1 .42" dia. hole	
Chert			7313'	7503'	7325'-26'	1 Do	
Oriskany Sand			7503'	7558'	7332'-33'	1 Do	
Helderberg Lime			7558'	7590'	7338'-39'	1 Do	
Chert			7590'	7620'	7365'-67'	Do	
Oriskany Sand			7620'	7669'	7373'-75'	2 Do	
Helderberg Lime			7669'	7705'	7380'-83'	3 Do	
			PBTD	7668.23'	7389'-91'	2 Do	
					7395'-97'	2 Do	
					7411'-12'	1 Do	
					7415'-16'	1 Do	
					7418'-19'	1 Do	
					7436'-33'	2 Do	
					7446'-48'	2 Do	
					7455'-57'	2 Do	



Formation	Color	Hard or Soft	Top 21	Bottom	Oil, Gas or Water	Depth (feet)	Remarks
<b>*LOCATION F/ REVERSE SIDE:</b>							
9450' W of 79 Deg. 50 Min., 4000' S of 39 Deg. 35 Min., Morgan District, Monongalia Cnty, W. Va.							
<b>**COAL OPERATOR OR COAL OWNER:</b>							
Owned by the State of West Virginia due to non-payment of taxes - redemption rights by heirs-at-law of Henry H. Davis.							
<b>**OWNER OF MINERAL RIGHTS:</b>							
Roy Harworth (Sur. - Oil - Gas & Min. except Coal & Lime stone) 337 Rotary St., Morgantown, W. Va., 26504.							
<b>ACID TREATMENT:</b>							
12/14/68: Halliburton pump'd 5 Bbls of acid down 4 1/2" csg thru Oriskany perforations f/ 7509'-7655'.							
<b>FRAC TREATMENT:</b>							
12/16/67: Sand fraced perf. in 4 1/2" csg opposite Chert & Oriskany formations f/ 7319' to 7655' w/ 57,600 gal. of 3% gelled acid; 51,500# of 20-40 sand & allied additives - instant shut-in press. 3400#; five-min. SIP 3000#; 10-min. SIP 2850# - max. treat. press. 4755#; min. treat. press. 4510#; avg inj. rate 38.7 Bbls/min.							

Date February 7, 1968

APPROVED E. S. Miles Owner

By \_\_\_\_\_ Dist. Prod. Supt. (Title)