

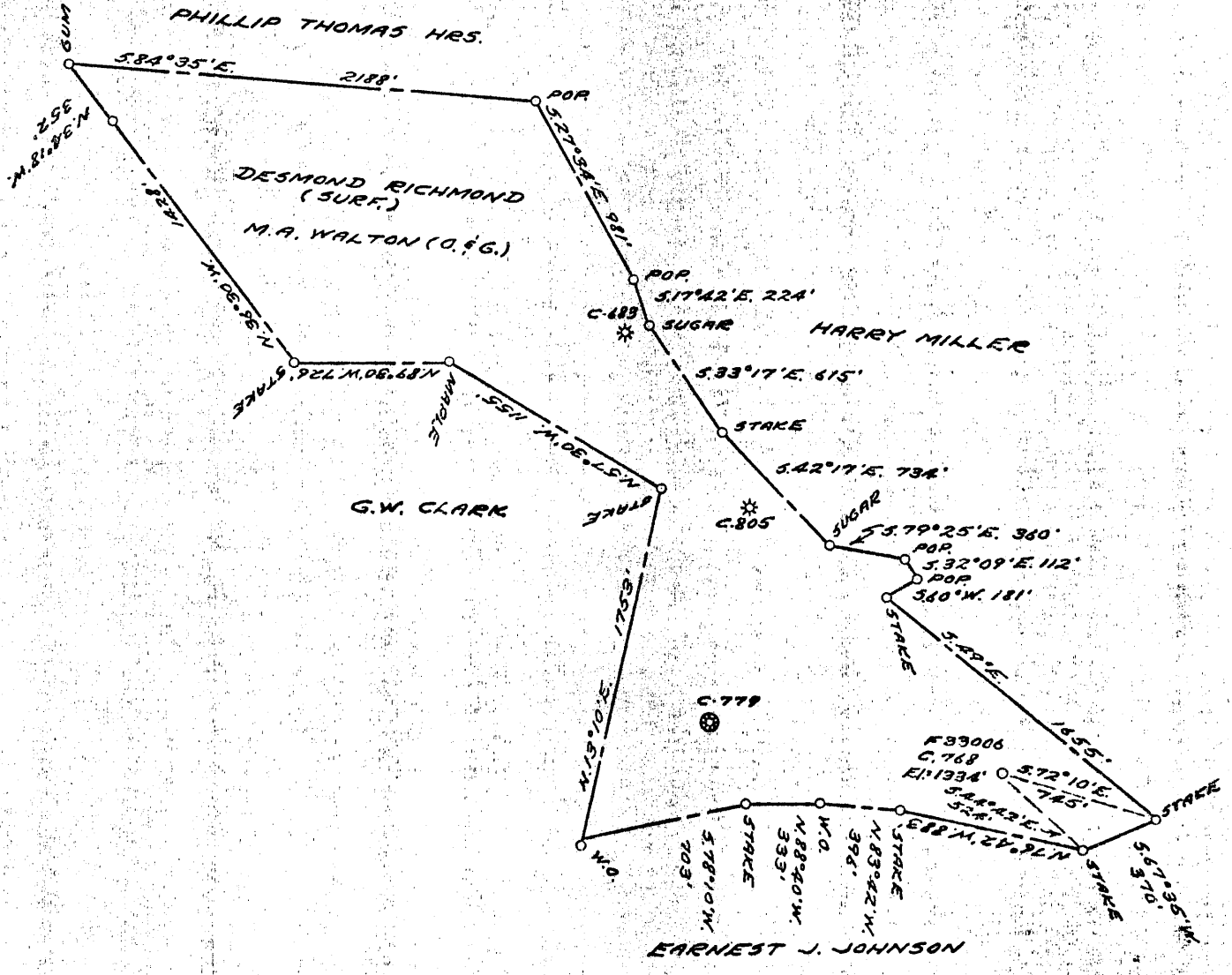
LATITUDE + 39° 0' 45"

065
152w

0.205
1.85W

0.215 ✓
1.84W

LONGITUDE 80° 0' 35"



COAL OWNED BY _____
 RECONDITION
 FOR STORAGE
 NEW LOCATION.....
 DRILL DEEPER.....
 ABANDONMENT.....

FRACTURE IV 8-29-69

COMPANY THE MANUFACTURERS LIGHT & HEAT
 ADDRESS 800 UNION TRUST BLDG, PCH. PA.
 FARM M. A. WALTON
 TRACT _____ ACRES 140 LEASE NO. E 9827-48
 WELL (FARM) NO. _____ SERIAL NO. C 768
 ELEVATION (SPIRIT LEVEL) 1334
 QUADRANGLE LITTLETON NC
 COUNTY MARSHALL DISTRICT LIBERTY
 ENGINEER Thomas E. Virgin - J.M.
 ENGINEER'S REGISTRATION NO. 1503
 FILE NO. _____ DRAWING NO. Y-15-436
 DATE 3 AUG. 1956 SCALE 1" = 800'

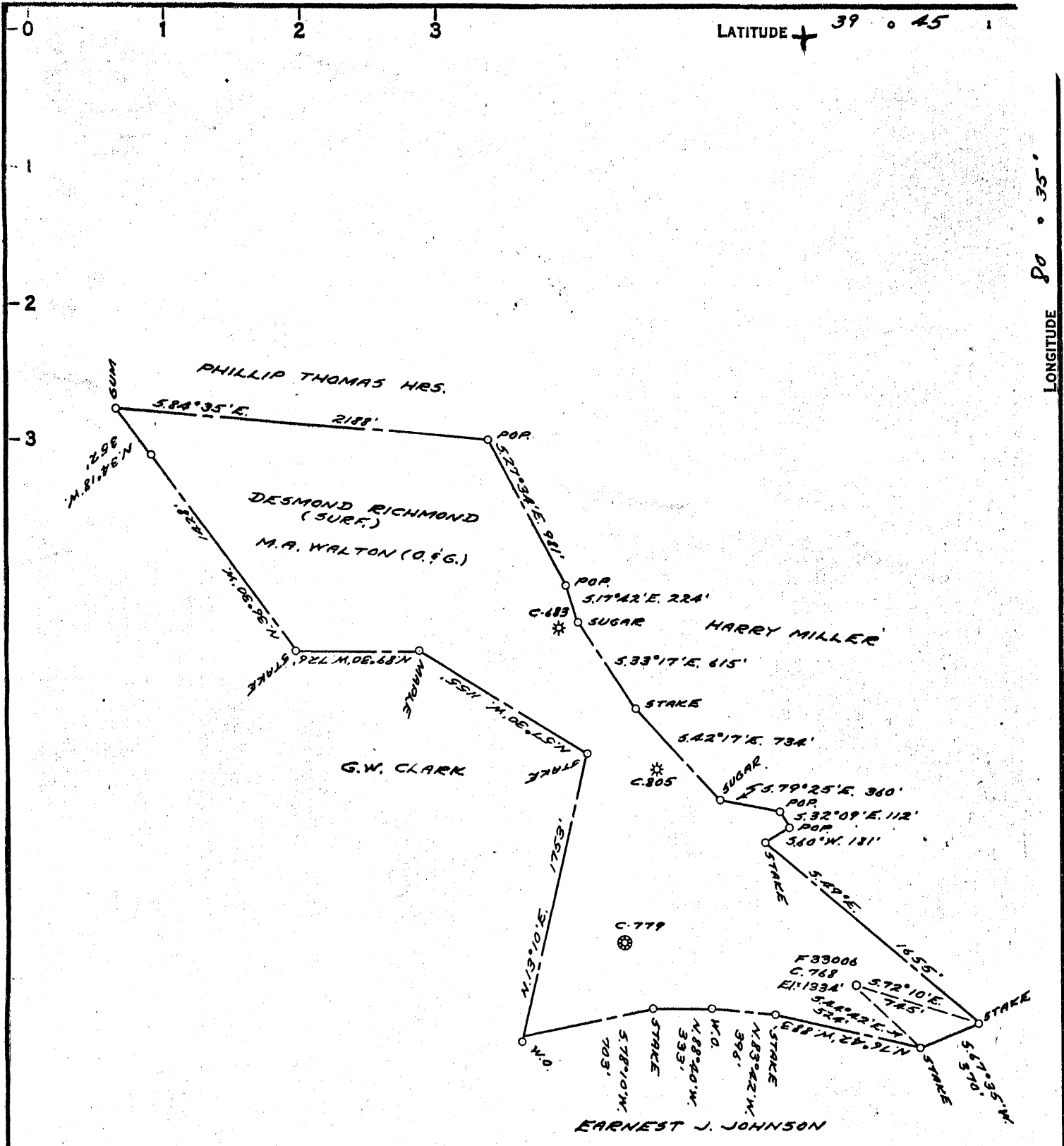
STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON

WELL LOCATION MAP

File No. MARS-297-REDRILL-FAC

+ 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.



COAL OWNED BY _____
 RECONDITION FOR STORAGE
 NEW LOCATION.....
 DRILL DEEPER.....
 ABANDONMENT.....

COMPANY THE MANUFACTURERS LIGHT & HEAT
 ADDRESS 800 UNION TRUST BLDG. PCH. PA.
 FARM M. A. WALTON
 TRACT _____ ACRES 140 LEASE NO. E 9827-48
 WELL (FARM) No. _____ SERIAL No. C 768
 ELEVATION (SPIRIT LEVEL) 1334
 QUADRANGLE LITTLETON
 COUNTY MARSHALL DISTRICT LIBERTY
 ENGINEER Thomas E. Virgin - J.M.
 ENGINEER'S REGISTRATION No. 1503
 FILE No. _____ DRAWING No. Y-15-A36
 DATE 3 AUG. 1956 SCALE 1" = 800'

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

WELL LOCATION MAP

FILE No. MARS-297-REDRILL

+ 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.



RECEIVED

JAN 11 1972

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

- Rotary
- Spudder
- Cable Tools
- Storage

WELL RECORD

Quadrangle Littleton
Permit No. MARS-297-RED-FRAC.

Oil or Gas Well Gas (KIND)

Company Columbia Gas Transmission Corp.
Address 800 Union Trust Building, Pgh., Pa.
Farm M. A. Walton Acres 1.40
Location (waters) _____
Well No. L-4443 Elev. 1334
District Liberty County Marshall
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10-3/4"	977'	977'	
8 1/4"			Depth set
7"	2100'	2100'	
5 3/16"			
4 1/2"			Perf. top 2155' <i>Big Injun</i>
3"			Perf. bottom 2167' <i>Injun</i>
2"			
Liners Used 4-1/2"	369'	369'	Perf. top _____
			Perf. bottom _____

Reconditioning 6-23-69
Drilling commenced _____
Reconditioning 8-8-69
Drilling completed _____

Date Shot _____ From _____ To _____
With Before fracturing 4" pitot
Open Flow 24/10ths Water in _____ Inch
/10ths Merc. in _____ Inch
Volume 809 MCF/day Cu. Ft.
Rock Pressure 500 psig lbs. 17 days hrs.
Oil _____ bbls., 1st 24 hrs.

Attach copy of cementing record. See below
CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
Amount of cement used (bags) _____ See below
Name of Service Co. _____ See below
COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES
_____ FEET _____ INCHES _____ FEET _____ INCHES

WELL ACIDIZED (DETAILS) _____

WELL FRACTURED (DETAILS) Treatment-20,000#sand; 16,200 gal. water; 500 gal. acid; Max. Pres.--
2500 psig; Aug. Pres.--2336 psig; Injection Rate--35.5 bbls/min

RESULT AFTER TREATMENT (Initial open Flow or bbls.) 6,090 MCF/day 6,090,000

ROCK PRESSURE AFTER TREATMENT 730 psig HOURS 72 hours

Fresh Water _____ Feet _____ Salt Water _____ Feet _____
Producing Sand Big Injun Depth 2155-2167

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
Pittsburgh Coal			1010	1016			
Maxton Sand			2003	2037			
Big Injun			2100	T.D.			
Cleaned Out to				2829			
Plugged back to				2392			Plugged back with 80 sks. cement.
Total Depth				2392			
Above is record of well after being redrilled 3-15-57 on Permit No. MARS-297-RED. Liner was installed from 2023' to 2392' on 7-10-69. New Total Depth 8-1-69 Perforated and fractured the well							10-3/4" cemented with 325 sks. 7" Cemented with 400 sks. Work done by Well Service, Inc., in years 1956 & 1957. 4-1/2" Liner cemented by Halliburton 7-10-69 with 70 sks. Latex Cement.

(over)



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Quadrangle Lisleton
Permit No. Mass-297-Redill

WELL RECORD

Oil or Gas Well Storage Gas
(KIND)

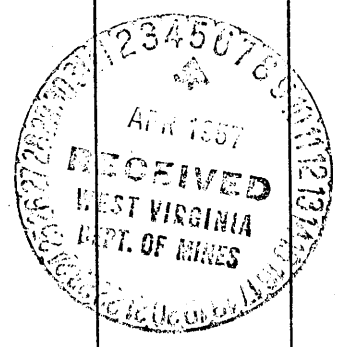
Company THE MANUFACTURERS LIGHT AND HEAT COMPANY
Address 800 UNION TRUST BUILDING, PITTSBURGH, PA.
Farm M. A. Walton Acres 140
Location (waters) _____
Well No. (F-33006) L-4443 Elev. _____
District Liberty County Marshall
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by _____
Address _____
Drilling commenced September 11, 1956
Drilling completed March 15, 1957
Date Shot _____ From _____ To _____
With _____
Open Flow _____ /10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume _____ Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
Fresh water _____ feet
Salt water _____ feet

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			All pipe cemented in.
16			Kind of Packer _____
13			
10		985'	Size of _____
10-3/4" 7"		2112'	
6%			Depth set _____
5 3/16			
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

CASING CEMENTED	SIZE	No. Ft.	Date
COAL WAS ENCOUNTERED AT _____ FEET _____ INCHES			

Formation	Color	Hard or Soft / THICKNESS	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Schlumberger Well Survey					All casing measured with threads on. Ran 985' of 10-3/4" Casing S. M. Gr. H. 32#		
Pittsburgh Coal		6	1010	1016	on steel shoe set at 977' Cemented with 2-Gags		
Maxton Sand		34	2003	2037	Aquagel and 325 bags of cement. No return of cement to surface.		
Big Injun Sand (See Schlumberger Survey)				2100	Ran 2112' of 7" Casing, 350' Gr. H. S. M. 20#		
7" Casing Set At				2390	and 1762' of Gr. J-55 S. M. 20# on steel shoe set at 2100' cemented with 2 bags of Aquagel and 400 bags of cement, no return of cement to surface. Used 185 bags of cement to fill between 10-3/4 and 7" casing. Hole filled back from 2829 to 2390' by pumping 80 bags of cement through 2" tubing.		
Total Depth					Used 50 gal. mud acid to wash Big Injun Sand.		
					Well to be used for gas storage in Big Injun sand.		

Reconditioned for storage on Work Order No. 1651-L-1025-4



M. A. WALTON NO. 3 (768) WELL.

Liberty District, Marshall County, W. Va.
 By Carnegie Natural Gas Co.
 Map, Cameron SE,
 On 140 acres.

Drilling commenced Sept. 10, 1917; completed, Oct. 10, 1917.
 Deepened from 1926', March 15, 1918.
 Plugged March 11, 1929.
 Open flow, 7,000,000 cu. ft. (Salt Sand).
 300,000 cu. ft. gas (Big Injun); 275 lbs. R. P. (Deepening).
 Record from Wilcox Sept. 27, 1939.

MARS-2974

	Top.	Bottom.
✓ Mapletown (Sewickley) Coal (show gas in coal)	915	918
✓ Pittsburgh Coal (show gas and water in coal)	1012	1016
✓ Murphy Sand	1128	1143
✓ 1st Gas Sand	1550	1590
✓ 1st Salt Sand	1815	1849
✓ 2nd Salt Sand (gas, 1921-25', 7,000 M.) DEEPENED (started) March 15, 1918, at 1926'	1921	1930
✓ Maxton Sand	1998	2040
✓ Big Lime	2096	2155
✓ Big Injun Sand (gas at 2155'; 300 M. cu. ft.; 275# R. P.)	2155	2405
✓ Gordon Stray Sand	2953	2970
✓ Gordon Sand	3000	3020
Total depth		3220

4A

2096
 1324
 3420