

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS (7 1/2')

NOTES: This Map is For Well Location Only And Does Not Represent A Complete Property Survey Location Determined By Differential GPS Survey

FILE NO. \_\_\_\_\_  
 DRAWING NO. 7099  
 SCALE 1" = 400'  
 MINIMUM DEGREE OF ACCURACY 1/200  
 PROVEN SOURCE OF ELEVATION EXISTING WELL

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 ENERGY.  
 (SIGNED) [Signature]  
 R.P.E. \_\_\_\_\_ L.L.S. 798

PLACE SEAL HERE

**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENERGY  
 OIL AND GAS DIVISION

DATE MARCH 2, 2000  
 OPERATOR'S WELL NO. 7099  
 API WELL NO. 47 039 01295 F  
 STATE COUNTY PERMIT

WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL   
 (IF "GAS," ) PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 720' WATER SHED PINCH CREEK  
 DISTRICT Eik COUNTY Kanawha  
 QUADRANGLE Blue Creek WV COORDINATES LAT: 38°24'55" LONG: 81°28'11"

SURFACE OWNER James & Freda M. Morton ACREAGE 45.78  
 OIL & GAS ROYALTY OWNER E. M. Cavender, Et Al. LEASE ACREAGE 851  
 COAL OWNER E. M. Cavender, Et Al. LEASE NO. 1049098

PROPOSED WORK: DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE  PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  OTHER PHYSICAL CHANGE IN WELL (SPECIFY) Storage Recondition

PLUG AND ABANDON  CLEAN OUT AND REPLUG

TARGET FORMATION \_\_\_\_\_ ESTIMATED DEPTH \_\_\_\_\_  
 WELL OPERATOR COLUMBIA GAS TRANSMISSION CORP DESIGNATED AGENT RICHARD L COTY  
 ADDRESS PO Box 1273, Charleston, WV 25325-1273 ADDRESS PO Box 1273, Charleston, WV 25325-1273

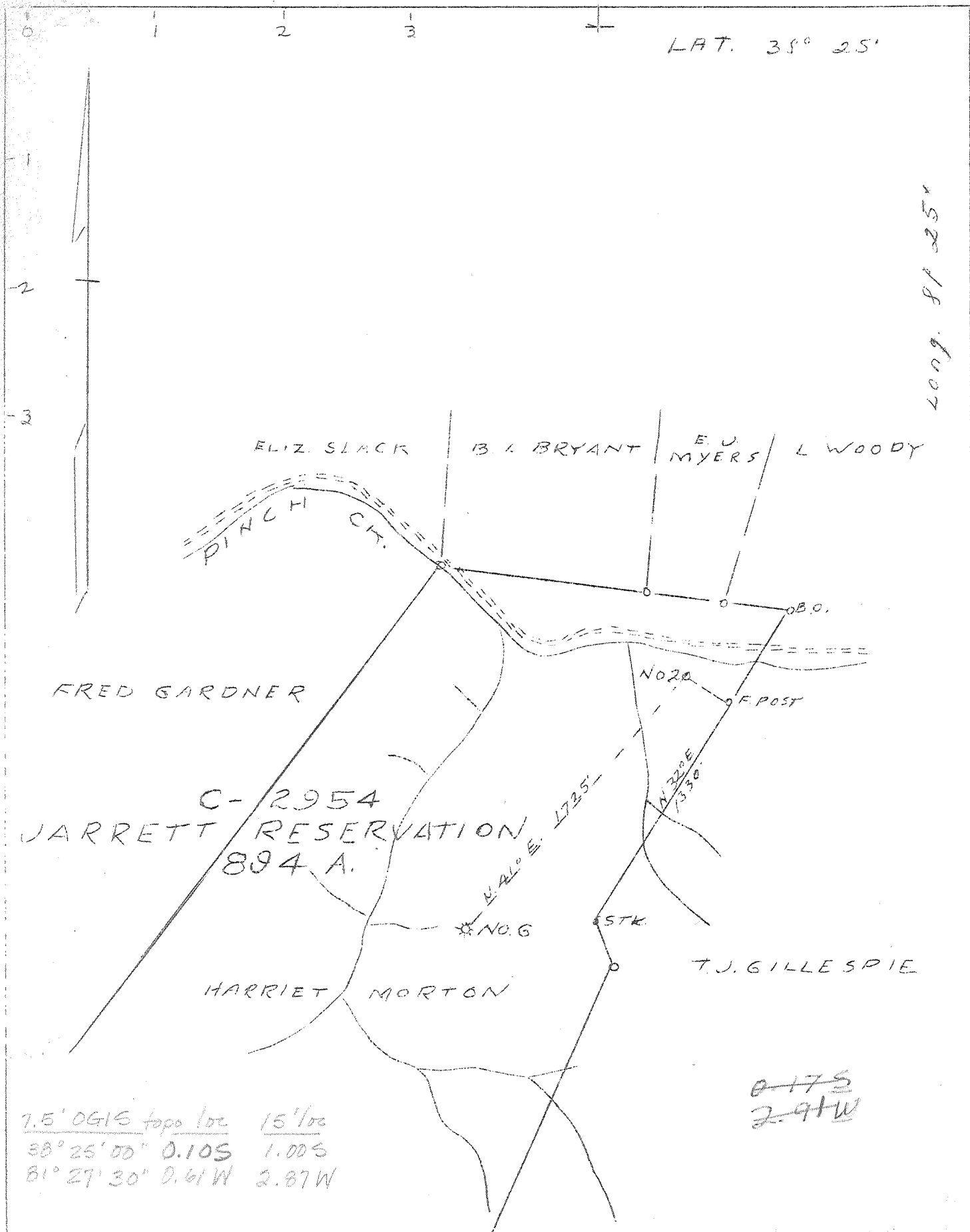
KANAHA COUNTY NAME PERMIT 01295 F

AUG 11 2000

P

LAT. 38° 25'

Long. 81° 25'



7.5' OGIS topo loc 15' loc  
 38° 25' 00" 0.10S 1.00S  
 81° 29' 30" 0.61W 2.87W

~~0-175~~  
 2.91W

H N/C (J-6)

DRILL DEEPER X

COMPANY	COLUMBIAN CARBON COMPANY
ADDRESS	CHARLESTON, W. VA.
FARM	JARRETT RESERVATION
TRACT	ACRES 894 LEASE NO. C-2954
	HARRIETT MORTON
WELL (FARM) NO.	2 SERIAL NO. GW-863
ELEVATION (SPIRIT LEVEL)	FLOOR 724.5 GROUND 721.5
QUADRANGLE	CLENDENIN 4-012-291-110
COUNTY	KANAWHA DIST. ELK
ENGINEER	J. N. SELL
ENGR. REGISTRATION NO.	772
FILE NO.	DRAWING NO. 388
DATE	JULY 18, 46 SCALE 1" = 660'

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

WELL LOCATION MAP  
 FILE NO. KAN-1295 D

+ DENOTES LOCATION OF WELL ON U.S. 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.

DeepWell ✓

WEST VIRGINIA DEPARTMENT OF MINES  
OIL & GAS DIVISION  
W E L L R E C O R D

Permit No. Kan 1295		Gas Well
Clendenin Quad.		casing & tubing
Company	Columbian Carbon Company	
Address	Box 873, Charleston 23, W.Va.	13 note: old 5½" and
Farm	Jarriet Morton ( Jarrett Reser) A-394	2" tubing pulled
Location	Pinch Creek	before deepening
Well No.	2-GW-863 Elev. 724.5 DF	
District	Elk Kanawha County	5 3/16 15.5# 4984'4
Surface	J.H. McClintic, Rec. Chas. Nat. Bldg.	Same
	Charleston, 1, W.Va.	2 3/8 4# 5094'5 "
Mineral	Same	Packer
Commenced Deeper	8-12-46	Midget Bottom Hole
Completed "	10-11-46	Size 5½
Not shot		Depth 4941' SLM
Open flow	24/10ths M in 7" 22#	
Volume	7,797,000 C.F.	
Rock Pressure	990 lbs. 4 das.	

DRILLED DEEPER

Old total depth ( Slate & Shells)	1888	1894
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Drilled Deeper Record:

Slate & Shells	1894	3250	
Shale	3250	3290	
Slate & Shells	3290	3750	
Shale	3750	3900	
Slate & Shells	3900	3950	
Shale	3950	3990	
Slate & Shells	3990	4600	
Shale	4600	4927 SLM	
4925 DIM-4927 SLM			
Corniferous Lime	4927 SLM	5040 SLM	
5043 DIM-5043 SLM			
Oriskany Sand	5040 SLM	5062	Gas Pays: 5057-5062 12/10 M 7" 22#
			4412 MCF increased to 24/10 M
			7" 22# 7,797,000 C.F.
Total Depth		5062	

CEMENT RECORD:

9-28-46 5½" casing- ran 75 bags aquagel and 1 bale fibertex. No circulation.  
G.C.Co. Crew



STATE OF WEST VIRGINIA  
DEPARTMENT OF MINES  
OIL AND GAS DIVISION

WELL RECORD

Permit No. 1295

Oil or Gas Well  
(Kind)

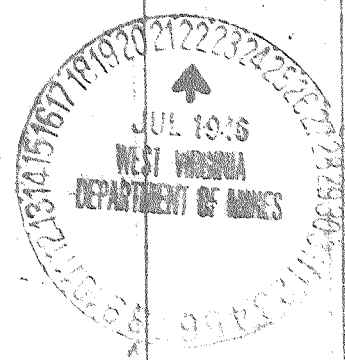
Company Columbian Carbon Company  
Address Box 873, Charleston 23, W. Va.  
Farm Harriet Morton (Jarrett Res\* Acres 89)  
Location (waters) Pinch Creek  
Well No. 2- GW-863 Elev 724.5 DF  
District Elk County Kanawha  
The surface of tract is owned in fee by J. Hunter McClintic, Rec  
Chas. Nat'l Bldg. Address Charleston, W. Va.  
Mineral rights are owned by same Address \_\_\_\_\_

Casing and Tubing	Used in Drilling	Left in Well	Kind of
Size			
16"			Kind of
18" conductor			
10	20'	20'	Size of
8 1/2"	455'	pulled	
6 3/4"	1180'	1180'	Depth of
5 3/16"	1510'	1510'	
3"			Perf. to
2"	1908'	1908'	Perf. to
Liners Used			Perf. to
			Perf. to

Drilling commenced 9-17-17  
Drilling completed 11-17-17  
Date Shot 11-14-17 From 1798 To 1888  
With 160 quarts  
Open Flow /10ths Water in Inch  
/10ths Merc. in Inch  
Volume \_\_\_\_\_ Cu. Ft.  
Rock Pressure \_\_\_\_\_ lbs. \_\_\_\_\_ hrs.  
Oil \_\_\_\_\_ after shot 10 bbls. \_\_\_\_\_ bbls., 1st 24 hrs.  
Fresh water \_\_\_\_\_ feet \_\_\_\_\_ feet  
Salt water \_\_\_\_\_ feet \_\_\_\_\_ feet

CASING CEMENTED \_\_\_\_\_ SIZE \_\_\_\_\_ No. Ft. \_\_\_\_\_  
COAL WAS ENCOUNTERED AT \_\_\_\_\_ FEET \_\_\_\_\_  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES \_\_\_\_\_ FEET \_\_\_\_\_  
\_\_\_\_\_ FEET \_\_\_\_\_ INCHES \_\_\_\_\_ FEET \_\_\_\_\_

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found
Gravel			0	18		
Sand			18	70		
Slate			70	80		
Sand			80	125		
Slate			125	150		
Coal			150	154		
Sand			154	215		
Slate			215	235		
Lime Shells			235	240		
Sand			240	265		
Slate			265	300		
Sand			300	375		
Slate			375	410		
Sand			410	440		
Slate			440	500		
Lime Shell			500	505		
Sand			505	550		
Slate & Shells			550	625		
Coal			625	628		
Lime Shells			628	635		
Sand			635	655		
Slate			655	680		
Sand			680	720		
Slate			720	765		
Salt Sand			765	1280		
Slate			1280	1300		
Sand			1300	1325		
Slate			1325	1330		
Lime Shells			1330	1340		
Slate & Shells			1340	1388		
Maxon Sand			1388	1425		
Little Lime			1425	1456		
Break			1456	1460		
Lime Shell			1460	1471		
Pencil Cave			1471	1474		
Big Lime			1474	1630		
Big Injun			1630	1670		
Slate & Shells			1670	1720		
Weir Sand			1720	1888		
			1888	1894		



Gas & show black oil 18  
Show of green oil 18  
2nd green oil 18  
3rd pay 18

(Over) Red from chlstn 11/87

State of West Virginia  
Department of Environmental Protection  
Office of Oil and Gas

Well Operator's Report of Well Work

Farm name: Morton, James & Freda Operator Well No: Coco B 7099

LOCATION: Elevation: 720 ft Quadrangle: Blue Creek

District: Elk County: Kanawha  
Latitude: 38° 24' 55" ft South of 38 Deg. 25 Min. 00 Sec.  
Longitude: 81° 28' 11" ft West of 81 Deg. 27 Min. 30 Sec.

Company: Columbia Gas Transmission

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: 1700 MacCorkle Ave SE Charleston, WV 25325-1273				
Agent: Paul Amick				
Inspector: Carlos Hively				
Date Permit Issued: 8/09/2000				
Date Well Work Commenced: 10/27/2000				
Date Well Work Completed: 12/6/2000				
Verbal Plugging:				
Date Permission granted on:				
Rotary Cable Rig				
Total Depth (feet): 5062				
Fresh Water Depth (ft.): none reported				
Salt Water Depth (ft.): none reported				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.):				

OPEN FLOW DATA

Producing formation Oriskany Sandstone Pay zone depth (ft) 5057 - 5062  
Gas: Initial open flow N/A - gas storage MCF/d Oil: Initial open flow N/A Bbl/d  
Final open flow N/A - gas storage MCF/d Final open flow N/A Bbl/d  
Time of open flow between initial and final tests N/A Hours  
Static rock Pressure N/A - gas storage psig (surface pressure) after \_\_\_\_\_ Hours

Second producing formation none Pay zone depth (ft) \_\_\_\_\_  
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.

Signed: James E. Amos  
By: James E. Amos - Senior Storage Engineer  
Date: 4/19/06

APR 28 2006  
RECEIVED  
Office of Oil & Gas  
Office of Chief  
APR 24 2006  
WV Department of  
Environmental Protection

KAN 1295 L

Details of Rework Operation

Killed well

Ran Cement Bond log, MicroVertilog, GR-Neut-CCL

Installed new 5M API wellhead

Performed fracture stimulation:   400 bbls fluid  
  Break: 1758 psig  
  ATP: 4200 psig  
  ATR: 16 BPM  
  ISIP: 3756 psig

Reclaimed road and well location

APR 28 2006