









STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION 13

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WELL RECORD Gas Oil or Gas Well Permit No Poca. - 26 (KIND) Atlantic Seaboard Corporation Company____ Left in Well Used in Casing and Packers Box 1273 - Charleston, W. Va. Farm U.S. Dept. of Interior Tr #34cres 1852 Location (waters) Gertrude Run of Greenbrier River Size Well No 7456 ___Elev. 3516.02 Kind of Packer_ 31' 31 8 District Green Bank County Pocahontas 13 3/8" The surface of tract is owned in fee by U.S. Dept. of ** 9 5/8" 1339° 1339 Size of.____ Address Washington, D. C. Interior жиж 7" 59381 <u>5938°</u> Mineral rights are owned by____ Depth set_ _Address. 53/16_ 12-1-65 Perf. top_. Drilling commenced___ 2 3/8" 61320 6132 Drilling completed 12-19-65 Perf. bottom_ Perf. top_____ Date Shot_ Liners Used. Perf. bottom.... /10ths Water in_ Open Flow _/10ths Merc. in_ _Inch CASING CEMENTED_ Volume See back 53,000 _Cu. Ft. Rock Pressure_ COAL WAS ENCOUNTERED AT None FEET INCHES __bbls., 1st 24 hrs. WELL ACIDIZED See back. _ FEET___INCHES___FEET__INCHES FEET INCHES FEET INCHES WELL FRACTURED_ RESULT AFTER TREATMENT. ROCK PRESSURE AFTER TREATMENT Feet. Fresh Water_ Oil, Gas or Water Hard or Depth Remarks Bottom Top Formation Color 80 Fresh 0 5387 Water Sand & Shale Fresh 142 5387 5403 Water illy Limestone 5403 5697 rcellus Shale 5697 5741 ondaga Limestone 5849 5741 nert . 5849 5885 hale 5889 1.350 MCF 5885 6115 Gas riskany Sandstone 5895-5912 Show Gas 6115 elderberg Limestone Increased 6123 5987 GAR otal Depth Increased 6035 - 41 GAR All gas gauged 11,010 MCF when RKB bove depths completed drilling.

13 3/8", 488/ft., H-40 casing - 31' (threads on) set at 31' E3. Cemented to surface with 30 sacks nest cement w/3% cabl, - 12-2-65. 9 5/8", 328/ft., H-40 casing - 1339' (threads on) set at 1328 G.L. Cemented to surface surface with 460 sacks nest cement with 3% cacl Dowell - 12-6-65. 7" 234/ft., J-55 & M-80 casing - 5937,76' (threads on) set at 5895' K.B. Cemented to surface (Evo stage) with 1000 bu. ft. "hittpoo". First stage tailed in with 500 gal. "Ceslment". Second stage tailed in with 150 gal. "Cealment" Dowell - 12-16, 17-65 2 3/8", 4.78/ft., J-55, EUE bubing - 6132' (threads on) set at 5111' KB Enn as siphon string - 12-20-65 LOCCINC: Gamma Ray, temperature - 5300' to 5895' - Basin Surveys - 12-14-65 SIDULATION: 10,000 gal. 15% retarded H Ct. acid, 10,000 gal, 15% H Cl. reg. acid, 10,000 gal, 12-12-65 SIDULATION: 10,000 gal. 15% retarded H Ct. acid, 10,000 gal, 15% H Cl. reg. acid, 10,000 gal, 12-22-65 A H Cl. acid overflush, 10,000 gal. H_20 flush with 141,300 Scf N ₂ Crate of 200 Scf/bblDowell 6 Aircovell - 12-22-65 After stimulation - 53,000 Final shut-in: 12-28-65	Formation	Color		Top /3	Bottom			Remarks
13 3/8", 488/ft., H-40 casing - 31' (threads on) set at 31' E3. Cemented to surface with 30 sacks nest cement w/3% cabl, - 12-2-65. 9 5/8", 328/ft., H-40 casing - 1339' (threads on) set at 1328 G.L. Cemented to surface surface with 460 sacks nest cement with 3% cacl Dowell - 12-6-65. 7" 234/ft., J-55 & M-80 casing - 5937,76' (threads on) set at 5895' K.B. Cemented to surface (Evo stage) with 1000 bu. ft. "hittpoo". First stage tailed in with 500 gal. "Ceslment". Second stage tailed in with 150 gal. "Cealment" Dowell - 12-16, 17-65 2 3/8", 4.78/ft., J-55, EUE bubing - 6132' (threads on) set at 5111' KB Enn as siphon string - 12-20-65 LOCCINC: Gamma Ray, temperature - 5300' to 5895' - Basin Surveys - 12-14-65 SIDULATION: 10,000 gal. 15% retarded H Ct. acid, 10,000 gal, 15% H Cl. reg. acid, 10,000 gal, 12-12-65 SIDULATION: 10,000 gal. 15% retarded H Ct. acid, 10,000 gal, 15% H Cl. reg. acid, 10,000 gal, 12-22-65 A H Cl. acid overflush, 10,000 gal. H_20 flush with 141,300 Scf N ₂ Crate of 200 Scf/bblDowell 6 Aircovell - 12-22-65 After stimulation - 53,000 Final shut-in: 12-28-65		Acceptable of the second of th	WHILE THE DEVELOPMENT AND THE CONTRACT OF T	«Соложиронно Соложиций рама» и менений дого от от об не в него от	Security for the Constitution of Edd 24 of the Medical Source Age of the Constitution	economic large concept control professional and a second control contr	CONTRACTOR	
## ## ## ## ## ## ## ## ## ## ## ## ##	CASING & CE	MENT:						
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to surface (two stage) with 1060 cu, ft. "Litepor". First stage tailed in with 500 gal. "Cealwant" Dowell - 12-16, 17-65 2 3/8", 4.78/ft., J-55, EUE rubing - 6132' (threads on) set at 6111' KB Ran as siphon string - 12-20-65 LOCCING: Gamma Ray, temperature - 5300' to 5895' - Basin Surveys - 12-14-65 STIMULATION: 10,000 gal. 15% retarded H Cl. acid, 10,000 gal. 15% H Cl. reg. acid, 10,000 gal. 22-265 Z R Cl. acid overflush, 10,000 gal. E_0 flush with 141,300 Scf H_2 C rate of 200 Scf/bblDowell' & Aircowell' - 12-22-65 REDOUCTION: Before stimulation - 53,000 Winal shut-in: 12-28-65								d to
East as siphon string - 12-20-65 LOGGING: Camma Ray, temperature - 5300' to 5895' - Basin Surveys - 12-14-65 SIPHUATION: 10,000 gal. 15% retarded H Cl. acid, 10,000 gal. 15% H Cl. reg. acid, 10,000 gal. 7% H Cl. acid overflush, 10,000 gal. B ₂ 0 flush with 141,300 Scf N ₂ erate of 200 Scf/bblDowell a Aircowell - 12-22-65 PRODUCTION: Before stimulation 16# SG in After stimulation - 53,000 Final shut-in: 12-28-65	to surface	(two stage	with 1060	cu. ft. "Lit	epoz". Fira	t stage tail	ed in with 5	00 gal.
Gamma Ray, temperature - 5300° to 5895° - Basin Surveys - 12-14-65 STEMUATION: 10,000 gal. 15% retarded H Cr. acid, 10,000 gal. 15% H Cl. reg. acid, 10,000 gal. 3% H Cl. acid overflush, 10,000 gal. E20 flush with 141,300 Scf N2 e rate of 200 FRODUCTION: Before stimulation 160 SG in 4" + 11.010 MMCF @ 1500 psig - 12-19-65 Open flow is calculated maximum open flow at field pressure of 2050%.				tubing - 613	2' (threads	on) set at 6	111' KB	
STIMULATION: 10,000 gal. 15% retarded H Ct. acid, 10,000 gal. 15% H Ct. reg. acid, 10,000 gal. 15%	LOGGING:				114.	rot we more and the control of the c		• .
10,000 gal. 15% retarded H Cl. acid, 10,000 gal. 15% H Cl. reg. acid, 10,000 gal. 15% H Cl. acid overflush, 10,000 gal. B20 flush with 141,300 Scf N2 gal. rate of 200 Scf/bbl PRODUCTION: Before stimulation - 53,000 After stimulation - 53,000 Final shut-in: 12-28-65	Gamma 1	Ray, tempe	rature - 530	0° to 5895°	Basin Surv	eys - 12-14-	65	
Refore stimulation 16# SG in 4" + 11.010 MACF @ 1500 psig - 12-19-65 After stimulation - 53,000 Final shut-in: 12-28-65	STIMULATION					Kanasa oka mutuka di		
Before stimulation 16# SG in 4" * 11.010 MMCF @ 1500 psig - 12-19-65 After stimulation - 53,000 Final shut-in: 12-28-65 After stimulation - 53,000 Open flow is calculated maximum open flow at field pressure of 2050#.	10,000 3% H Cl. ac Dowell & Ai	gal. 15% Id overflu rcowell -	retarded H C sh, 10,000 g 12-22-65	1. acid, 10, al. H ₂ 0 flus	000 gal. 15%	H Cl. reg.	acid, 10,000 rate of 200	
After stimulation - 53,000 Final shut-in: 12-28-65 Open flow is calculated maximum open flow at field pressure of 2050#.	PRODUCTION:						1 (14/2) 1 (1)	i ji i ka isa isa isa isa isa isa isa isa isa is
Final shut-in: 12-28-65	Before	stimulati	n 16# SG in	4" + 11.010	MMCF @ 1500	psig - 12-1	9-65	1876, N. 1876
Final shut-in: 12-28-65	After	stimulatio	- 53,000					
	Final :	shut-in:	12-28-65		e de la companya de l	flow at fie	ld pressure	þf 2050#.
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APPROVED Alantie Seabourd Coy Owner

By Alantie Seabourd Coy Owner

Page 1 of

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

680 WELL WORK PERMIT APPLICATION 1) Well Operator: COLUMBIA GAS TRANSMISSION CORPORATION 10450 2) Operator's Well Number: Glady Stg # 7456 API 47-075-00026) 3) Elevation: 3516.02 feet Well type: (a) Oil__/ Gas_X_/ OF Experse 01/13/99 (b) If Gas: Production _/ Underground Storage X / Deep X / Proposed Target Formation (s): Oriskany 475 Proposed Total Depth: 6153 (drill deeper 30 feet) feet Approximate fresh water strata depths: 80', 142' Approximate salt water strata depths: none recorded Approximate coal seam depths: 10) Does land contain coal seams tributary to active mine? Yes __/ No X / 11) Proposed Well Work: Columbia proposes to kill the well with a freshwater polymer based mud system. Remove the tubing and reconfigure the wellhead. The well will be drilled an additional 30 feet as needed to facilitate open hole logging. The well will be logged with cased and open hole logs. The well will be acidized or fractured across the Oriskany section as determined by the well logs. The well will then be cleaned up, flow tested and placed back in service. 12) CASING AND TUBING PROGRAM **TYPE** SPECIFICATIONS FOOTAGE INTERVALS **CEMENT** Weight For Left in Fill - up Size Grade per ft. drilling well (cu. ft.) To surf. 13-3/8" conductor H-40 48# 31' 31'KB 30 sks neat To Surf. Fresh Water 9-5/8" H-40 32# 1,339° 1.328' GL 460 sacks neat Coal Intermediate 060 cu ft litepoz 5.895'KB Production 23# 5,937.76 J-55 & N-80 50 gals cealment J-55 132 6,111'KB Tubing 2-3/8" 4.7# (TO BE RETIRED) 6132' Liners PACKERS : Kind___ None Sizes Depths set For Division of Oil and Gas Use Only | Well Work Permit | Reclamation Fund ee (s) paid / WPCP Agent

Page 1 of__ Form WW2 - A (6/94) File Copy

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	1)	Date:		10/24	/96		
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GLADY WELL 7456

3) API Well No: 47 - 075 - 00026
State - County - Permit

STATE OF WEST VIRGINIA - BUREAU OF ENVIRONMENT DIVISION OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner (s) to be served:	5) (a) Coal Operator:
a) Name <u>United States Forest Service</u>	Name
Address Monongahela National Forest	Address
P. O. Box 1548, Elkins, WV 26241	
b) Name	(b) Coal Owner (s) with Declaration
Address	Name United States Dept. Of Interior, Bureau Of Land Mgt.
	Address P.O. Box 631
c) Name	Milwaukee, WI 53201-0631 Attn: Tim Abing
Address	Name
	Address
6) Inspector Phillip Tracy Address Route 2, Box 37-A	(c) Coal Lessee with Declaration
Address Route 2, Box 37-A	Name
Montrose, WV 26283	Address
Telephone (304) - 636-8798	
TO THE PERSON (S) NAMED ABOVE TAK	KE NOTICE THAT:
Included is the lease or leases or other	er continuing contract or
contracts by which I hold the right to extr	act oil and gas OR
X Included is the information required by	Chapter 22. Article 6 Section
8 (d) of the Code of West Virginia (see pag	ie 2)
I certify that as required under Chapte	r 22 of the West Virginia Codo
have served copies of this notice and ap	unlication a location plat and
accompanying documents pages 1 through or	n the shows named nortice but
Personal Service (Affidavit atttached)	n ule above flamed parties, by:
X Certified Mail (Postmarked postal re	and the short
Dublination (Notice of Bublination of	eceipt attached)
Publication (Notice of Publication at	racned)
hove rood and understand Objects CO.O.	
I have read and understand Chapter 22-6	and 38 CSR 11-18, and I agree
to the terms and conditions of any permit	issued under this application.
I certify under penalty of law that I hav	e personally examined and am
ramiliar with the information submitted on this	s application form and all
attachments, and that based on my inquiry	of those individuals immediately
responsible for obtaining the information, I be	lieve that the information
is true, accurate, and complete.	
I am aware that there are significant p	enalties for submitting false
information, including the possibility of fine all well Operator A NOTARY PUBLIC By: WHEN A PATRICIA A TURKETT	nd imprisonment.
CEF CALSEAL Well Operator 1	COLUMBIA GAS TRANSMISSION CORP.
NOTARY PUBLIC By: WHEN AR	2
STATE OF WEST VIRGINIA Its: Senior Stor	age Engineer / Well Services
PATRICIA A. TURKETT Address Rou	ite 3, Box 216
CHARLESTON, MEST VIRGINIA 25325-1273	ns, WV 26241
My Johnnesson Express August 12 1997 Telephone 3/4/	636-8129
Cultura miles and	day of Mouleuble, 1996
Tatima a. Turkelo	Notary Public
My commision expires (lugust	12,149/

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08-Jan-97 API # 47- 075-00026-F

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State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Well Operator's Report of Well Work

Farm name:	U. S. FOREST	SERVICE	Oper	ator Well No	GLADY	7456	
LOCATION:	Elevation:	3,516.00	Quad	drangle: \	WILDELL .	٠,	
	District: GREEN Latitude: Longitude:	NBANK 1075 Feet So 3900 Feet W	outh of	nty: POCAHO 38 Deg. 79 Deg.	40 Min. 0	Sec.	
P.C CH	UMBIA GAS TRAI D. BOX 1273 ARLESTON, W	V 25325-1273		& 11p	Used in Drilling	Left in Well	Cement Fil
Inspector: C Permit Issue Well work	Commenced: Completed: _	RTH 01/13/97 06-27-97 09-08-97		Size	RETIRED 6,132	-	
Permission Rotary	granted on: _ Cable (feet) r depths (ft)	Rig 6,123' See Original Rec See Previ	cords	STIMULAT	TON; SEE BACK	FOR DETAILS	
Is coal be Coal Depth	eing mined li s (ft):	n area (Y/N)?_ See Previous	N				
Prod Gas	Final open	n ORISKANY 1 flow 31,309 flow 20,186 ppen flow between	MCF/U	I III oi	open now	438 [sono
Second pro Gas	oducing format : Initial ope Final open	ion n flow flow open flow betwo _psig	MCF/d MCF/d een initia	_Pay zone Oil : Init Fina I and fin	depth (ft)_ ial open flo I open flow al tests	W	Bbl/d Bbl/d Hours
INTERVALS, LOG WHICH	FRACTURING IS A SYSTEM	S FORM PUT TH OR STIMULATING ATIC DETAILED (NTERED BY THE	G, PHYSIC GEOLOGIC WELLBOF	AL CHANGE AL RECORD RE.	e, ETC. 2). T OF ALL FORT	MATIONS,	el annumbra elle
		For: COLUMI	BIA GAŞ	TRANSMIS	SSION CORP.	MAY 22	1999

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08-Jan-97 API # 47- 075-00026-F

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State of West Virginia Division of Environmental Protection Section of Oil and Gas

Well Operator's Report of Well Work

STIMULATION

- Acidized on 09-11-97
- Halliburton Foamed Acid Job.
- Pre-flushed with 5,964 gals equivalent 15% Halliburton 75 Quality FE Foamed Acid followed by 9,702 gals 75 Quality foamed H2O
- Treat with 7,980 gals equivalent 28% Halliburton 75 Quality FE Foamed Acid followed by 7,980 gals equivalent 20% Halliburton 75 Quality FE Foamed Acid followed by 7,980 gals 15% Halliburton 75 Quality FE Foamed Acid. Flushed with 14,994 gals equivalent 75 quality foam
- Avg Rate Approx. 16 BPM @ 2100 PSIG

And the second

- Total acid 4,875 gallons 28% Halliburton FE acid (uncut).
- Total nitrogen 860,000 scf.
- Additives:;15 gals-HAI-81; 5 gals-SCA-130; 50 gals FE-1A; 3 gals-FE5A; 24 gals-HC2; 6 gals



WR-35 Rev (9-11)

State of West Virginia Department of Environmental Protection Office of Oil and Gas Well Operator's Report of Well Work

DATE:	7/7/14
API#:	47-7500026

TION: Elevation: 3525 ft	Quadrangle: _V	Vildell	2	
District: Green Bank	County: Pocal	ontas		
Latitude: 1048 Feet South of 38 Deg.		oo Sec.		
Longitude 3995 Feet West of 79 Deg.	45 Min.	00 Sec.		
Company: Columbia Gas Transmission, LLC				
Address: 1700 MacCorkle Ave SE	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Charleston, WV 25325-1273	* no existing	casing altered	"	
Agent: Paul Amick				
Inspector: Bryan Harris				
Date Permit Issued: 6/27/14				
Date Well Work Commenced: 6/30/14				
Date Well Work Completed: 7/3/14	udori stantino di Norte di Managara della sino		Maria III e M	RECEIVED
Verbal Plugging: NA			Offic	e of Oil and
Date Permission granted on:				
Rotary Cable Rig				JUL 0 8 2014
Total Vertical Depth (ft):		O O O O O O O O O O O O O O O O O O O		
Total Measured Depth (ft): 6123 (existing)			€	Department
Fresh Water Depth (ft.): 80' & 142' rpt'd by driller in 1965			Enviro	nmental Pr ote
Salt Water Depth (ft.): none rpt'd by driller in 1985				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): none rpt'd by driller in 1965				
Void(s) encountered (N/Y) Depth(s) none rpt'd				
EN FLOW DATA (If more than two producing formatic Producing formation Oriskany (natural gas storage) Pay 2 Gas: Initial open flow MCF/d Oil: Initial open flow MCF/d Final open flow	zone depth (ft)_ owB	5987 - 6035 bl/d	ata on separate si	neci)
Time of open flow between initial and final tests Static rock Pressure psig (surface pressure) af	Hours			WECEIVED WV DEP
Second producing formation Pay zo		WARRANT AND THE STATE OF THE ST		_0.1
Gas: Initial open flow MCF/d Oil: Initial open fl				Many:
Final open flow MCF/d Final open flow Time of open flow between initial and final tests				Office of Oil and Gos
Static rock Pressure psig (surface pressure) af			E-manufacturization of the contract of the con	Control of the same of the sam

all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe

Glady (261) 9-0

that the information is true, accurate, and complete.

08/15/2014

Were core samples taken? YesNo_X WesNo_X	ere cuttings caught during drilling? YesNo_N/A	
Were Electrical, Mechanical or Geophysical logs recorded on this well	? If yes, please list No	
NOTE: IN THE AREA BELOW PUT THE FOLLOWING FRACTURING OR STIMULATING, PHYSICAL CHANGE, ET DETAILED GEOLOGICAL RECORD OF THE TOPS AND COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE Perforated Intervals, Fracturing, or Stimulating:	C. 2). THE WELL LOG WHICH IS A SYSTEMAT BOTTOMS OF ALL FORMATIONS, INCLUDIN	IC
Performed coil tubing hydro-blast mechanical wash and a	cid treatment.	-
Acid treatment: 4000 gal HCl acid, 300 bbls fresh water,	Avg rate = 4 bpm, ATP = 0 psig	

Plug Back Details Including Plug Type and Depth(s):		
Formations Encountered: Top Depth Surface:	/ Bottom Depth	
N/A - no new borehole drilled		
		
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	RECEIVED Office of Oil and Gas	

JUL 0 8 2014

WV Department of Environmental Protection 08/15/2014