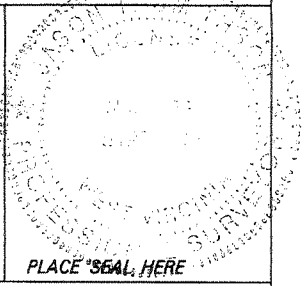


NOTES:
 THIS MAP IS FOR WELL LOCATION PURPOSES ONLY & DOES NOT REPRESENT A COMPLETE BOUNDARY SURVEY. NO WATER WELLS OR HOUSES WITHIN 200'.

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

FILE NO. _____
 DRAWING NO. 7312
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1/2500
 PROVEN SOURCE OF ELEVATION USGS BM DISK SET
IN TOP NE END OF SE HEADWALL 22' SE OF CENTERLINE OF RT. 21 STAMPED T-103

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 DIVISION OF ENVIRONMENTAL PROTECTION.
 (SIGNED) *Paul Amick*
 R.P.E. _____ L.L.S. 2153



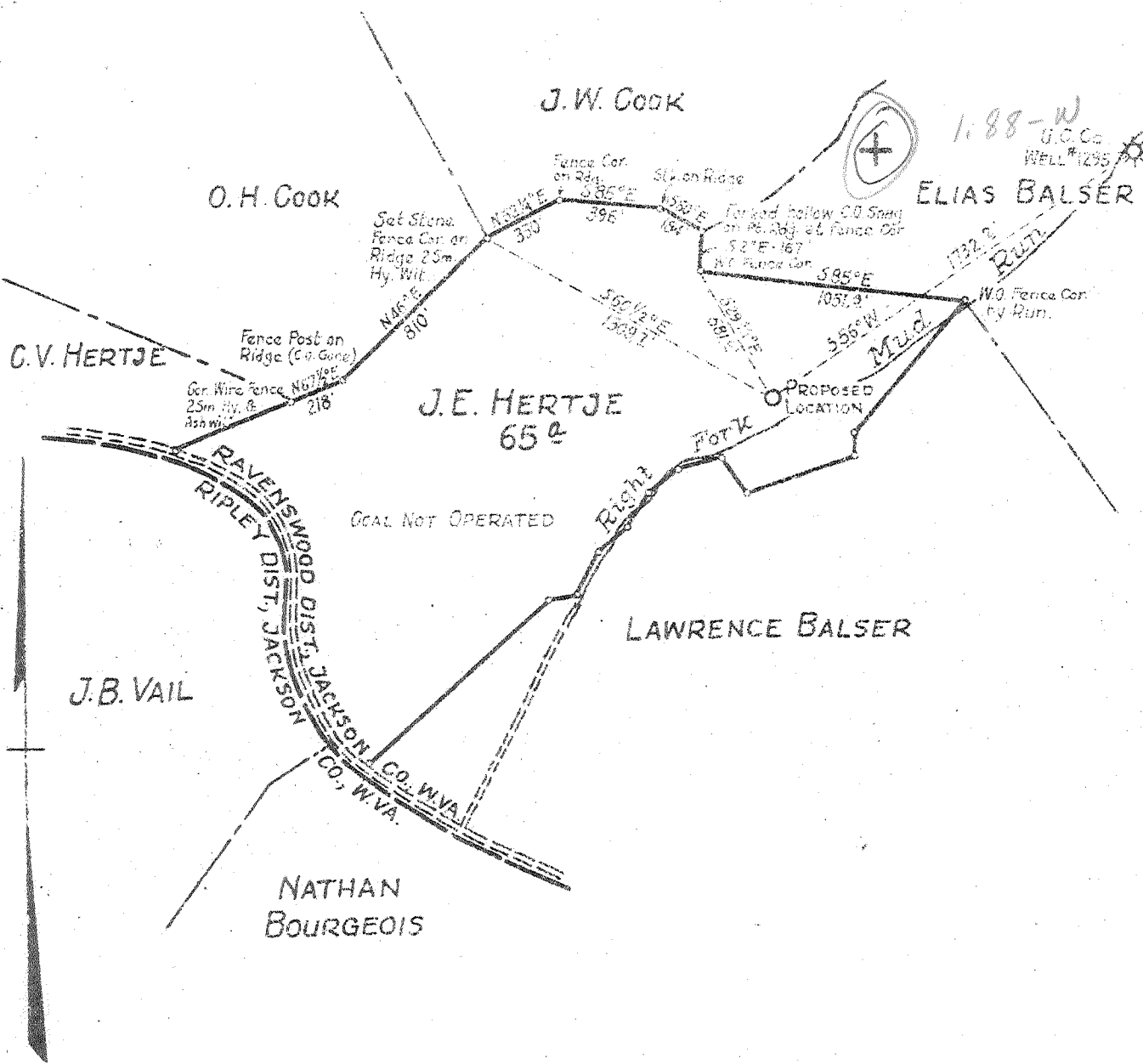
STATE OF WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION SECTION OF OIL & GAS		DATE <u>MAY 11</u> , 20 <u>09</u> OPERATOR'S WELL NO. <u>7312</u> API WELL NO. <u>47 035 000507 W</u> STATE COUNTY PERMIT	
WELL TYPE: OIL GAS <input checked="" type="checkbox"/> LIQUID INJECTION WASTE DISPOSAL _____ (IF "GAS,") PRODUCTION STORAGE <input checked="" type="checkbox"/> DEEP SHALLOW _____		LOCATION: ELEVATION <u>701.99</u> WATER SHED <u>LEFT FORK OF SYCAMORE CREEK</u> DISTRICT <u>RAVENSWOOD</u> COUNTY <u>JACKSON</u> QUADRANGLE <u>SANDYVILLE</u> COORDINATES LAT: <u>38°52'45"</u> LONG: <u>81°42'10"</u>	
SURFACE OWNER <u>MARK & JOAN TERRONE</u> ACREAGE <u>65.00</u> ORIGINAL OIL & GAS ROYALTY OWNER <u>IDA M. CLARK, ET. AL.</u> LEASE ACREAGE <u>65.00</u> COAL OWNER _____ LEASE NO. <u>1051141</u>		COUNTY NAME <u>JACKSON</u> PERMIT <u>507</u>	
PROPOSED WORK: DRILL <input type="checkbox"/> CONVERT <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/> OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____ STORAGE RECONDITION _____			
PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____ TARGET FORMATION _____ ESTIMATED DEPTH _____		SEP 25 2009	
WELL OPERATOR <u>COLUMBIA GAS TRANSMISSION CORP</u> DESIGNATED AGENT <u>PAUL AMICK</u> ADDRESS <u>PO BOX 1273, CHARLESTON, WV 25325-1273</u> ADDRESS <u>PO BOX 1273, CHARLESTON, WV 25325-1273</u>			

(Elk for Sandyville - 192) 8-0

1
2
3

Longitude 81 40

273-5



New Location (REVISED - See Jac. 496)
 Drill Deeper
 Abandonment

Company SPARTAN GAS COMPANY
 Address 518 KAN. VALLEY BLDG. CHARLESTON, W.VA.
 Farm J.E. HERTJE
 Tract _____ Acres 65 Lease No. _____
 Well (Farm) No. 1 Serial No. _____
 Elevation (Spirit Level) 711.9'
 Quadrangle RIPLEY N.W. - WC
 County JACKSON District RAVENSWOOD
 Engineer W.S. GRAVELY
 Engineer's Registration No. _____
 File No. _____ Drawing No. _____
 Date DEC. 29, 1945 Scale 1" = 660'

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

WELL LOCATION MAP
 FILE NO. JAC-507

+ 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.

6-6-42

WR-35
Rev (5-01)

DATE: 1/11/10
API #: 47-035-00507 W

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

Well Operator's Report of Well Work

Farm name: Terrone, Mark Operator Well No.: 7312

LOCATION: Elevation: 702 ft Quadrangle: Ripley

District: Ravenswood County: Jackson
Latitude: 13,600 Feet South of 38 Deg. 55 Min. 30 Sec.
Longitude 10,300 Feet West of 81 Deg. 40 Min. 00 Sec.

Company: Columbia Gas Transmission, LLC

	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: Jamie Stevens	This is an existing storage well - no casing/tubing pulled or ran during permitted rework. Below is a record of current tubulars in well.			
Date Permit Issued: 9/21/09	16	60	60	none
Date Well Work Commenced: 11/3/2009	13-3/8	574	0	none
Date Well Work Completed: 12/17/2009	10-3/4	798	0	none
Verbal Plugging:	8-5/8 28#	2041	0 - 2041	unknown
Date Permission granted on:	7 22#	4758	0 - 4758	unknown
Rotary X Cable Rig	3-1/2 9.2#	4887	0 - 4887	old well records indicate "cemented to surface"
Total Depth (feet): 4887				
Fresh Water Depth (ft.): not applicable - rework				
Salt Water Depth (ft.): not applicable - rework				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): none reported ft				

OPEN FLOW DATA

Producing formation Oriskany Sand Pay zone depth (ft) 4849 - 4887
Gas: Initial open flow not applicable MCF/d Oil: Initial open flow none Bbl/d
Final open flow 700 MCF/d Final open flow none Bbl/d
Time of open flow between initial and final tests not applicable Hours
Static rock pressure 1445 psig (surface pressure) after 24 Hours

Second Producing formation N/A 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 - Columbia Gas Transmission, LLC
Date: 1/11/10

RECEIVED
Office of Oil & Gas
JAN 19 2010
WV Department of Environmental Protection

Ripley storage well 7312 (035 - 00507)

This is an existing storage well. Below is a summary of work performed.

Well was killed, pipe inspection and cement bond logs ran, installed new wellhead, and fracture stimulated.

Fracture stimulation: BJ Services
1000 gals 20% HCl acid
353 bbls gel
126 MSCF nitrogen
17,100 lbs 20/40 Ottawa sand
1,600 lbs 14/30 FlexSand ran in last sand stage
Avg bottomhole rate: 12 BPM
Break: 4325 psig
ATP: 3900 psig
ISIP: 3680 psig
* job screened off during flush

* Note that no earthen pit was utilized. All fluids recovered via steel tanks and transported off site to waste water treatment facility.

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

Permit No. Jac 507
Ripley Quad.

Gas Well
CASING & TUBING

Company	Spartan Gas Company			
Address	518 Kan. Valley Bldg., Charleston, L	16		60'8
Farm	J.E. Hertje #1 Acres 65A	13	573'11	Pld
Location	Right Fork of Mud Run	10. 1/2	798'4	Pld.
Well No.	One (1) Elev. 711.0	8 5/8	28#	2041
District	Ravenswood Jackson County	7 22#		4758
Surface	J. E. Hertje, et al, Dundalk, Maryland	2 3/8	4.6#	4907
Mineral	Same			
Commenced	2-11-46			Perf. top 4878
Completed	5-27-46			Perf. bot 4884
Open flow	120/10ths W in 4"			
Volume	1, 838,000 G.F.			Casing cemented:
Rock Pressure	1070# 48 hrs.			20 bags Jel circulated
Fresh Water	262'; 530 HFW			behind 8 5/8" casing.
Salt Water	1396'; 1690' HFW			15 bags cement behind
				7" casing.

Red Mud	0	16	White Slate	2788	3262
Sand	16	24	Lime Shells	2362	3268
Red Rock	24	48	Brown Shale	3268	4000
Blue Mud	48	95	Gray Shale	4000	4475
Red Rock	95	252	Brown Shale	4475	4743
Lime	252	262	Cornif. Lime - 463	4743	4849
Sand	262	302	Oriskany Sand	4849	4887
Red Rock	302	330	TOTAL DEPTH		4887
White Slate	330	340			
Red Rock	340	360	Gas at 3850' not enough to gauge		
Lime	360	390			
Red Rock	390	425			
Lime	425	442			
Red Rock	442	500			
Sand - 1 1/2 Pits. Sand - ?	500	562			
Slate	562	590			
Lime	590	600			
White Slate	600	665			
Sand	665	702			
Slate	702	715			
Sand	715	730			
Slate	730	760			
Red Rock S	760	768			
Slate	768	780			
Sand	780	793			
Red Rock	793	825			
Lime	825	910			
White Slate	910	923			
Red Rock	923	941			
White Slate	941	961			
Sand	961	971			
Slate & Shells S	971	1001			
Black Slate	1001	1014			
White Slate	1014	1154			
Sand	1154	1207			
Slate S	1207	1240			
Lime	1240	1285			
Black Slate	1285	1308			
White Slate	1308	1318			
✓ Salt Sand	1318	1402			
Lime	1402	1483			
Sand	1483	1551			
Lime	1551	1680			
✓ Sand - Salt Sand - ?	1680	1767			
✓ Lime	1767	1804 B. Lime			
Sand } 340	1804	1848			
Lime	1848	1886			
✓ Sand - Injun	1886	2014			
Slate	2014	2020			
Lime Gray	2020	2047			
Slate & shells	2047	2367	Gas at 2367 Est. 100 M soon blew down		
✓ Sand - Berea	2367	2375 Berea			
Slate & Shells	2375	2788			