

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

API 47 - 039 - 06402T County Kanawha District Elk  
Quad Blue Creek Pad Name Coco B Field/Pool Name Coco B  
Farm name James A. & Freda Marie Morton Well Number 12644  
Operator (as registered with the OOG) Columbia Gas Transmission LLC  
Address 1700 MacCorkle Ave SE City Charleston State WV Zip 25314

As Drilled location NAD <sup>27</sup>83/UPM Attach an as-drilled plat, profile view, and deviation survey  
Top hole Northing 515,713.14 N Easting 1,864,679.21 E  
Landing Point of Curve Northing 513,158.91 N Easting 1,864,423.25 E  
Bottom Hole Northing 512,205.53 N Easting 1,862,776.30 E

Elevation (ft) 847 GL Type of Well  New  Existing Type of Report  Interim  Final  
Permit Type  Deviated  Horizontal  Horizontal 6A  Vertical Depth Type  Deep  Shallow  
Type of Operation  Convert  Deepen  Drill  Plug Back  Redrilling  Rework  Stimulate  
Well Type  Brine Disposal  CBM  Gas  Oil  Secondary Recovery  Solution Mining  Storage  Other \_\_\_\_\_  
Type of Completion  Single  Multiple Fluids Produced  Brine  Gas  NGL  Oil  Other \_\_\_\_\_  
Drilled with  Cable  Rotary

Drilling Media Surface hole  Air  Mud  Fresh Water Intermediate hole  Air  Mud  Fresh Water  Brine  
Production hole  Air  Mud  Fresh Water  Brine

Mud Type(s) and Additive(s)

RKB-GL 19', depths reports from RKB. Surface hole - drilled on FW w/soap sweeps. Intermediate 1 - drilled on 4% KCL fluid w/ gel sweeps, soda ash, LCM (fiber, nutplug)  
Intermediate 2 and Production - drilled on air w/ 4% KCl soap sweeps, defoamer, citric acid, soda ash. Lateral - drilled w/water based fluid, NaCl, sodium bicarb, KCl, Pac R, soda ash,  
Lateral continued - citric acid, zan gum, calcium carbonate LCM.

Date permit issued 12/05/2023 Date drilling commenced 5/22/24 Date drilling ceased 7/23/24  
Date completion activities began 08/05/2024 Date completion activities ceased 08/13/24  
Verbal plugging (Y/N) N/A Date permission granted N/A Granted by N/A

Please note: Operator is required to submit a plugging application within 5 days of verbal permission to plug

Freshwater depth(s) ft none observed, drilled on fluid Open mine(s) (Y/N) depths N  
Salt water depth(s) ft none observed, drilled on fluid Void(s) encountered (Y/N) depths N  
Coal depth(s) ft none observed Cavern(s) encountered (Y/N) depths N  
Is coal being mined in area (Y/N) N

*August Milton 9/4/24*

Reviewed by: \_\_\_\_\_  
**11/15/2024**

API 47- 039 - 06402T Farm name James A. & Freda Marie Morton Well number 12644

CASING STRINGS	Hole Size	Casing Size	Depth	New or Used	Grade wt/ft	Basket Depth(s)	Did cement circulate (Y/ N) * Provide details below*
Conductor	30	24	40	new	94.71	-	Yes, grouted from surface
Surface	22	18-5/8	779	new	87.5	-	Yes, 40 bbls to surface
Coal							
Intermediate 1	17-1/2	13-3/8	2231	new	68	-	Yes, 45 bbls to surface
Intermediate 2	12-1/4	9-5/8	4451	new	47	-	2-stage, TOC in 13" csg overlap
Intermediate 3							
Production	8-1/2	7	5884	new	26	-	2-stage, TOC in 13" csg overlap, *
Tubing							*1.5 bbls to surface
Packer type and depth set							

Comment Details RKB - 19' above GL, depth reference is all RKB.

CEMENT DATA	Class/Type of Cement	Number of Sacks	Slurry wt (ppg)	Yield (ft <sup>3</sup> /sks)	Volume (ft <sup>3</sup> )	Cement Top (MD)	WOC (hrs)
Conductor	Class A	Grouted from surface	15.6	1.18		0	24
Surface	Class A	865 (182 bbls)	15.6	1.18	1021	0	12
Coal							
Intermediate 1	Class A	1594 (335 bbls)	15.6	1.18	1881	0	12
Intermediate 2	Class A	2 stage job by DV tool *	15.6	1st - 1.19, 2nd - 1.18	1039	2260 CBL	8
Intermediate 3							
Production	1st CemFit Heal / 2nd Class A	2 stage job by DV tool **	1st 14.7 / 2nd 15.6	1st 1.32 / 2nd 1.18	628	1630 CBL	14
Tubing							

\* 9-5/8" casing 2 stage cement job - 1st stage pumped 363 sx (77 bbls + CemNET LCM), 2nd stage pumped 514 sxs (108 bbls + CemNET LCM)  
 Drillers TD (ft) 8230 MD      Loggers TD (ft) N/A  
 Deepest formation penetrated Oriskany      Plug back to (ft) 4550' MD in the 12-1/4" interval (see below)  
 Plug back procedure 12-1/4" plugged back with 95 bbls (430 sx, 1.24 ft3/sx) 15.3 ppg Class A balanced cement plug from 5144' to 4550' MD due to collapsed wellbore

\*\* 7" casing 2 stage cement job - 1st stage pumped 176 sx (41.3 bbls + CemNET LCM), 2nd stage pumped 335 sxs (70 bbls + CemNET LCM)  
 Kick off depth (ft) 2300 - 2380

Check all wireline logs run       caliper     density     deviated/directional     induction  
 neutron     resistivity     gamma ray     temperature

Well cored     Yes     No      Conventional      Sidewall      Were cuttings collected     Yes     No

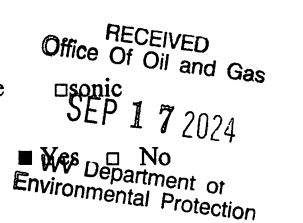
DESCRIBE THE CENTRALIZER PLACEMENT USED FOR EACH CASING STRING \_\_\_\_\_

- 18-5/8" surface - Innovex 1 welded bow per every 3rd joint (6 total ran)
- 13-3/8" intermediate 1 - Innovex slide cement basket on jnt 3 and 37, Innovex 1 welded bow centralizers per every 3rd joint (18 total ran)
- 9-5/8" intermediate 2 - Innovex CentraMax slip-on bowspring placed from csg shoe to 1730' MD at 1 per 2 joints (30 total ran)
- 7" production string - Innovex CentraMax slip-on bowspring placed 1 every 2 joints through 2100', 1 every 3 joint until 1900' (45 total ran)

WAS WELL COMPLETED AS SHOT HOLE     Yes     No      DETAILS \_\_\_\_\_

WAS WELL COMPLETED OPEN HOLE?     Yes     No      DETAILS Lateral was left as an openhole completion through the Oriskany formation and acid stimulated with 15% HCl acid.

WERE TRACERS USED     Yes     No      TYPE OF TRACER(S) USED \_\_\_\_\_





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<u>PRODUCING FORMATION(S)</u>	<u>DEPTHS</u>	
<u>Oriskany Landing Point</u>	<u>5191</u> TVD	<u>6325</u> MD
<u>Oriskany TD of Lateral - projection to bit</u>	<u>5185</u>	<u>8230</u>
_____	_____	_____
_____	_____	_____

Please insert additional pages as applicable.

GAS TEST  Build up  Drawdown  Open Flow OIL TEST  Flow  Pump

SHUT-IN PRESSURE Surface 1592 psi Bottom Hole 1593 psi DURATION OF TEST 1 hrs

OPEN FLOW Gas \_\_\_\_\_ mcfpd Oil \_\_\_\_\_ bpd NGL \_\_\_\_\_ bpd Water \_\_\_\_\_ bpd GAS MEASURED BY  Estimated  Orifice  Pilot

LITHOLOGY/ FORMATION	TOP DEPTH IN FT NAME TVD	BOTTOM DEPTH IN FT TVD	TOP DEPTH IN FT MD	BOTTOM DEPTH IN FT MD	DESCRIBE ROCK TYPE AND RECORD QUANTITY AND TYPE OF FLUID (FRESHWATER, BRINE, OIL, GAS, H <sub>2</sub> S, ETC)
Shale / Sand / Silt	0	779	0	779	no flows observed, interval drilled with FW
Salt Sand	1031	1427	1031	1427	no flows observed, interval drilled with KCl fluid
Maxton Sand	1518	1558	1518	1558	
Little Lime	1563	1598	1563	1598	
Big Lime	1617	1656	1617	1656	
Big Injun	1666	1779	1666	1779	
Weir	1859	2032	1859	2032	
Coffee	2185	2193	2185	2193	
Berea	2193	2196	2193	2196	
Lower Huron	3371	4172	3437	4403	
Marcellus	5033	5057	5630	5678	
Onondaga	5057	5182	5678	6119	
Oriskany	5182	5225 projected	6119	-	Did not go out the bottom of formation

Please insert additional pages as applicable.


Drilling Contractor Precision Drilling Company, LP  
Address 10350 Richmond Ave, Suite 700 City Houston State TX Zip 77042

Logging Company Baker Atlas  
Address PO Box 301057 City Dallas State TX Zip 75303

Cementing Company Schlumberger Technology Corporation  
Address PO Box 732149 City Dallas State TX Zip 75214

Stimulating Company CUDD Energy Services  
Address 2828 Technology Forest Blvd City The Woodlands State TX Zip 77380

Please insert additional pages as applicable.

Completed by Maria Medvedeva Telephone 304-410-4313  
Signature  Title Senior Wells Engineer STS Date 09/03/24

RECEIVED  
Office of Oil and Gas  
SEP 17 2024  
77380  
WV Department of Environmental Protection

Submittal of Hydraulic Fracturing Chemical Disclosure Information Attach copy of FRACFOCUS Registry

11/15/2024



# Coco B well 12644

As-built as of 08/28/24

~ not to scale ~

Max surface operating pressure 1800 psig  
Max reservoir pressure 2075 psig

Minimum Casing Design Safety Factors

Internal Yield: 1.2  
Collapse: 1.2  
Tensile: 1.6

Well Pad Elevations  
Pre Construction GL: 856 ft  
Post Construction GL: 847 ft  
KB to GL: 19 ft

24" 94.71# Conductor @ 40 ft GL  
Grouted from surface

No Fresh Water Shows  
observed by Driller

18-5/8" Surface csq @ 779 ft KB  
87.5 ppf J-55 ERW R3 w/ BTC  
Internal Yield: 2250 psi  
Collapse: 630 psi  
Body Yield Strength: 1367 Klbs  
Joint Strength: 1329 Klbs  
Cemented w/ 865 sx (182 bbls) 15.6  
ppg Class A to surface, 40 bbls returned

Salt Sand 1031 - 1427' KB

Maxton Sand 1518 - 1558' KB

Little Lime 1563 - 1598' KB

Big Lime 1617 - 1656' KB

Big Injun 1666 - 1779' KB

Weir SS 1859 - 2032 ft KB

Berea SS 2193 - 2196 ft KB

Good TOC 1630' TVD / MD KB

13-3/8" Intermed1 csq @ 2231 ft TVD / MD KB

68 ppf J-55 ERW R3 w/ BTC  
Internal Yield: 3450 psi (SF = 1.9 relative to max reservoir press)  
Collapse: 1950 psi (SF = 1.9 relative to 0.46 psi/ft overburden gradient)  
Body Yield Strength: 1069 Klbs (SF = 7.0 relative to dry pipe weight)  
Joint Strength: 1140 Klbs (SF = 7.5 relative to dry pipe weight)  
Cemented w/ 1594 sx (335 bbls) 15.6 ppg Class A to surface, 45 bbls returned

KOP @ 2300 - 2380 ft  
MD KB

Dark Grey fill indicates cement  
placed during well drilling

9-5/8" Intern2 csq @ 4211 ft TVD KB (4451 ft MD KB)

47 ppf L-80 ERW R3 w/ GB CD Butt connection  
Internal Yield: 6870 psi (SF = 3.8 relative to max reservoir press)  
Collapse: 4750 psi (SF = 2.2 relative to 0.50 psi/ft overburden gradient)  
Body Yield Strength: 1086 Klbs (SF = 5.1 relative to dry pipe weight)  
Joint Strength: 1084 Klbs (SF = 5.1 relative to dry pipe weight)  
Uniaxial Bend Ratio: up to 6.25 deg/100 ft  
2 stage cemented w/ 15.6 ppg Class A cement via stage tool / ICP at 3400' MD - 1<sup>st</sup> stage 77 bbls + CemNET, 2<sup>nd</sup> stage 108 bbls  
Per CBL cement bond is good 4451 - 5513', partial to 3416', good to 2238', stringers to 1900'.

Lower Huron Shale  
3331 - 4172 ft TVD KB  
(3437 - 4403 MD KB)

12-1/4" hole

Marcellus Shale  
5033 - 5057 ft TVD KB (5630 - 5678 ft MD KB)

Onondaga LS  
5057 - 5182 ft TVD KB  
(5678 - 6119 ft MD KB)

VSEC 811 ft

TD 5185 - 5192 ft TVD KB  
(8,230 ft MD KB)

Lateral 2301 ft

8-1/2" hole

6-1/4" hole

Oriskany SS 5182 - 5225 projected ft TVD KB

7" Flowstring @ 5151 ft TVD KB (5884 ft MD KB)

26 ppf L-80 HC ERW R3 w/ VAM21  
Internal Yield: 7240 psi (SF = 4.0 relative to max reservoir press)  
Collapse: 5410 psi (SF = 2.1 relative to 0.50 psi/ft overburden gradient)  
Body Yield Strength: 604 Klbs (SF = 3.9 relative to dry pipe weight)  
Joint Strength: 604 Klbs (SF = 3.9 relative to dry pipe weight)  
Uniaxial Bend Ratio: up to 7 deg/100 ft  
2 stage cemented w/ 41.3 bbls 14.7 ppg CemFit Heal stage 1 and 70 bbls  
15.6 ppg Class A stage 2 via stage tool / ICP placed 4474 - 4491' MD.  
Observe 1.5 bbls back to surface. CBL shows cmt from shoe to 4914' and  
4482' - 1630', stringers to 1200'.

VSEC 3112 ft

11/15/2024

## TC Energy CoCo B 12644 Surveys 0ft to Update Survey Report

(Non-Def Survey)

Report Date: June 04, 2024 - 02:24 PM  
 Client: TC Energy  
 Field: WV Kanawha County (NAD 27)  
 Structure / Slot: TC Energy CoCo B Pad / CoCo B 12644  
 Well: CoCo B 12644  
 Borehole: Coco B 12644  
 UWI / API#: Unknown / Unknown  
 Survey Name: TC Energy CoCo B 12644 Surveys 0ft to Update  
 Survey Date: May 02, 2024  
 Tort / AHD / DDI / ERD Ratio: 143.611 ° / 1887.133 ft / 5.487 / 0.371  
 Coordinate Reference System: NAD27 West Virginia State Plane, Southern Zone, US Feet  
 Location Lat / Long: N 38° 24' 45.35228", W 81° 28' 20.19565"  
 Location Grid N/E Y/X: N 514713.164 fUS, E 1864679.236 fUS  
 CRS Grid Convergence Angle: -0.2920 °  
 Grid Scale Factor: 0.99993358  
 Version / Patch: 2.10.835.0

Survey / DLS Computation: Minimum Curvature / Lubinski  
 Vertical Section Azimuth: 225.864 ° (Grid North)  
 Vertical Section Origin: 0.000 ft, 0.000 ft  
 TVD Reference Datum: RKB  
 TVD Reference Elevation: 866.000 ft above Mean Sea Level  
 Seabed / Ground Elevation: 847.000 ft above Mean Sea Level  
 Magnetic Declination: -8.414 °  
 Total Gravity Field Strength: 999.2455mgn (9.80665 Based)  
 Gravity Model: GARM  
 Total Magnetic Field Strength: 50522.233 nT  
 Magnetic Dip Angle: 65.267 °  
 Declination Date: April 24, 2024  
 Magnetic Declination Model: HDGM 2024  
 North Reference: Grid North  
 Grid Convergence Used: -0.2920 °  
 Total Corr Mag North->Grid North: -8.1222 °  
 Local Coord Referenced To: Well Head

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (N/S ft)	EW (E/W ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	TF (°)
Surface	0.00	0.00	0.00	0.00	0.00	N 0.00	E 0.00	0.00	0.00	N/A	211.33M
	93.00	0.29	211.33	93.00	0.23	S 0.20	W 0.12	0.24	211.33	0.31	230.64M
	187.00	0.04	230.64	187.00	0.49	S 0.43	W 0.27	0.50	212.56	0.27	39.38M
	277.00	0.17	39.38	277.00	0.39	S 0.34	W 0.21	0.40	211.69	0.23	88.24M
	367.00	0.42	88.24	367.00	0.01	S 0.23	E 0.20	0.31	138.32	0.37	100.23M
	454.00	0.66	100.23	453.99	-0.51	S 0.31	E 1.02	1.06	106.86	0.30	113.45M
	544.00	0.81	113.45	543.99	-1.06	S 0.65	E 2.11	2.21	107.20	0.25	118.8M
	633.00	1.14	118.80	632.97	-1.56	S 1.33	E 3.46	3.71	111.01	0.38	125.27M
	722.00	1.30	125.27	721.95	-2.00	S 2.34	E 5.06	5.58	114.80	0.24	128.51M
	812.00	1.35	128.51	811.93	-2.33	S 3.59	E 6.73	7.62	118.09	0.10	147.08M
	901.00	0.58	147.08	900.92	-2.37	S 4.62	E 7.79	9.06	120.67	0.92	104.36M
	991.00	0.42	104.36	990.91	-2.46	S 5.08	E 8.36	9.78	121.31	0.44	80.69M
	1080.00	0.58	80.69	1079.91	-3.00	S 5.09	E 9.12	10.44	119.18	0.29	65.32M
	1170.00	0.78	65.32	1169.90	-3.95	S 4.76	E 10.12	11.19	115.19	0.30	52.27M
	1259.00	0.64	52.27	1258.90	-5.01	S 4.21	E 11.07	11.84	110.81	0.24	47.21M
	1348.00	0.87	47.21	1347.89	-6.18	S 3.44	E 11.96	12.44	106.06	0.27	30.12M
	1438.00	0.89	30.12	1437.88	-7.54	S 2.37	E 12.81	13.03	100.50	0.29	15.9M
	1528.00	0.92	15.90	1527.87	-8.84	S 1.07	E 13.36	13.40	94.60	0.25	353.29M
	1617.00	0.96	353.29	1616.86	-9.91	N 0.35	E 13.47	13.47	88.50	0.42	349.17M
	1707.00	1.48	349.17	1706.83	-11.01	N 2.24	E 13.16	13.35	80.32	0.59	351.92M
	1796.00	2.45	351.92	1795.78	-12.76	N 5.26	E 12.68	13.72	67.48	1.09	356M
	1885.00	2.82	356.00	1884.69	-15.29	N 9.32	E 12.26	15.40	52.74	0.47	1.23M
	1975.00	1.63	1.23	1974.62	-17.63	N 12.81	E 12.13	17.64	43.43	1.34	6.1M
	2064.00	1.07	6.10	2063.59	-19.17	N 14.90	E 12.24	19.29	39.41	0.64	7.82M
	2154.00	0.89	7.82	2153.58	-20.36	N 16.43	E 12.43	20.60	37.10	0.20	11.21M
Final Gyro	2235.00	0.70	11.21	2234.57	-21.27	N 17.54	E 12.61	21.60	35.71	0.24	84.85M
	2292.00	0.62	84.85	2291.57	-21.79	N 17.91	E 12.99	22.12	35.94	1.39	106.96M
	2380.00	3.42	106.96	2379.51	-23.43	N 17.19	E 15.97	23.46	42.90	3.24	115.94M
	2469.00	7.68	115.94	2468.07	-26.74	N 13.81	E 23.86	27.57	59.94	4.87	117.34M
	2559.00	11.44	117.34	2556.80	-31.63	N 7.08	E 37.20	37.87	79.23	4.19	22.77R
	2648.00	13.63	121.19	2643.68	-37.09	S 2.41	E 54.02	54.07	92.55	2.63	28.08R
	2737.00	15.87	125.48	2729.74	-41.94	S 14.90	E 72.90	74.41	101.55	2.80	27.64L
	2827.00	17.68	122.40	2815.91	-47.34	S 29.37	E 94.46	98.92	107.27	2.24	50.78L
	2916.00	18.94	117.85	2900.41	-54.95	S 43.36	E 118.65	126.32	110.08	2.14	62.65L
	3006.00	20.25	111.22	2985.20	-65.97	S 55.82	E 146.08	156.39	110.91	2.87	27.71L
	3095.00	21.36	109.63	3068.40	-79.55	S 66.84	E 175.71	187.99	110.83	1.40	1.46R
	3184.00	23.38	109.76	3150.70	-94.49	S 78.26	E 207.60	221.86	110.66	2.27	6.41L
	3274.00	27.93	108.67	3231.81	-111.99	S 91.05	E 244.39	260.80	110.43	5.08	1.89L
	3363.00	31.41	108.45	3309.13	-132.20	S 105.07	E 286.15	304.83	110.16	3.91	12.97R
	3452.00	35.20	109.96	3383.50	-154.09	S 121.17	E 332.28	353.68	110.94	4.36	110.52R
	3541.00	34.59	113.01	3456.50	-175.11	S 139.80	E 379.64	404.57	110.22	2.08	99.57R
	3631.00	34.20	118.34	3530.78	-192.65	S 161.80	E 425.43	455.16	110.82	3.37	92.47R
	3720.00	34.17	122.56	3604.41	-205.94	S 187.13	E 468.52	504.51	111.77	2.66	101.54R
	3810.00	33.63	128.66	3679.14	-214.88	S 216.31	E 509.29	553.33	113.01	3.83	81.05R
	3899.00	34.17	133.63	3753.02	-218.95	S 248.96	E 546.64	600.66	114.49	3.17	99.07R
	3991.00	33.72	141.61	3829.38	-217.39	S 286.82	E 581.21	648.13	116.27	4.87	91.46R
	4080.00	33.89	150.08	3903.38	-208.82	S 327.71	E 608.94	691.53	118.29	5.29	85.61R
	4170.00	34.18	154.75	3977.97	-194.48	S 372.33	E 632.25	733.74	120.99	2.92	98.86R
	4259.00	33.79	161.17	4051.79	-175.80	S 418.38	E 650.91	773.77	122.73	4.05	94.73R
	4348.00	33.66	167.20	4125.84	-152.38	S 465.87	E 664.36	811.43	125.04	3.76	93.09R
	4437.00	33.61	172.09	4199.95	-125.00	S 514.33	E 673.22	847.21	127.38	3.04	82.77R
	4527.00	33.98	176.30	4274.75	-93.96	S 564.11	E 678.27	882.20	129.75	2.63	78.31R
	4616.00	34.64	181.11	4348.28	-59.86	S 614.23	E 679.39	915.88	132.12	3.13	51.53R
	4706.00	36.36	184.65	4421.56	-21.62	S 666.40	E 676.73	949.76	134.56	2.98	66.93R
	4795.00	37.33	188.20	4492.79	19.60	S 719.41	E 670.74	983.59	137.01	2.63	34.76R
	4885.00	39.37	190.41	4563.37	64.46	S 774.51	E 661.69	1018.67	139.49	2.73	11.78R
	4977.00	42.21	191.29	4633.02	113.68	S 833.52	E 650.36	1057.23	142.04	3.15	48.27R
	5066.00	44.56	194.95	4697.70	165.11	S 893.03	E 636.45	1096.62	144.52	3.87	58.14R
	5155.00	48.07	202.05	4759.21	222.24	S 953.94	E 615.95	1135.51	147.15	6.98	44.12R
	5244.00	52.28	207.07	4816.21	285.90	S 1016.02	E 587.48	1173.64	149.96	6.41	51.1R
	5334.00	54.34	210.15	4869.99	354.81	S 1079.35	E 552.90	1212.72	152.88	3.57	60.47R
	5423.00	56.64	214.82	4920.43	426.13	S 1141.16	E 513.50	1251.37	155.77	5.04	63R
	5512.00	58.13	218.16	4968.41	500.08	S 1201.40	E 468.92	1289.67	158.68	3.58	122.06R
Last SVY	5601.00	55.61	223.23	5017.07	574.26	S 1257.91	E 420.38	1326.29	161.52	5.55	18.63R
Projection	5690.00	62.98	226.00	5062.49	650.70	S 1312.28	E 366.63	1362.54	164.39	8.70	HS
PTB	5733.00	67.60	226.00	5080.46	689.76	S 1339.41	E 338.54	1381.53	165.82	10.74	HS
Landing Point	5758.00	69.50	226.00	5089.60	713.02	S 1355.57	E 321.81	1393.25	166.65	7.60	

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Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	VSEC (ft)	NS (N/S ft)	EW (E/W ft)	Closure (ft)	Closure Azimuth (°)	DLS (°/100ft)	TF (°)
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Survey Type: Non-Def Survey

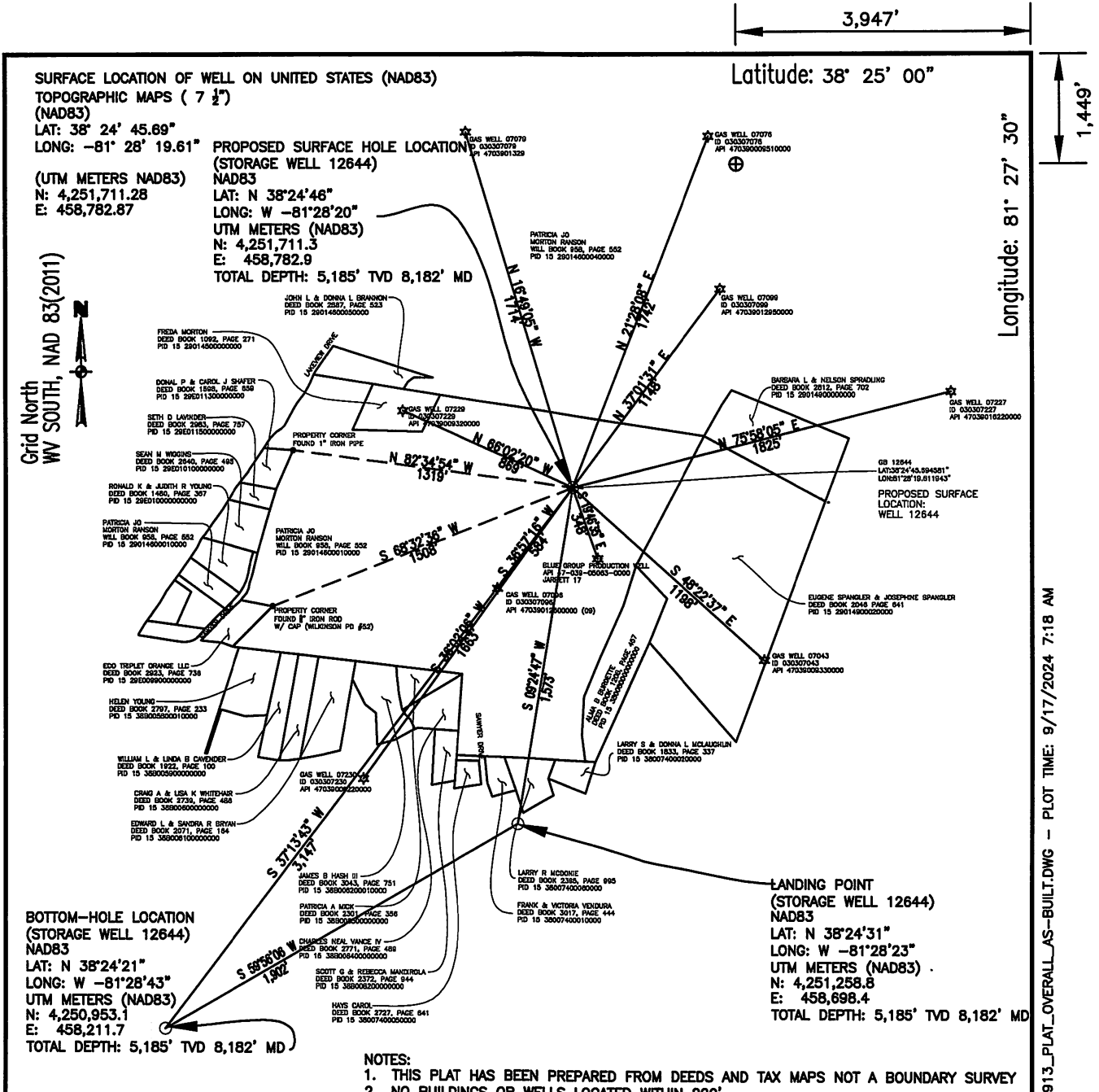
Survey Error Model: ISCWSA Rev 3 \*\*\* 3-D 95.000% Confidence 2.7955 sigma  
 Survey Program:

Description	Part	MD From (ft)	MD To (ft)	EOU Freq (ft)	Hole Size (in)	Casing Diameter (in)	Survey Tool Type	Borehole / Survey
	1	0.000	19.000	1/98.425	22.000	18.625	A020Ga_GYRO-NS-Depth Only	Coco B 12644 / TC Energy CoCo B 12644 Surveys 0ft to Update
	1	19.000	19.000	Act Stns	22.000	18.625	A020Ga_GYRO-NS-Depth Only	Coco B 12644 / TC Energy CoCo B 12644 Surveys 0ft to Update
	1	19.000	812.000	Act Stns	22.000	18.625	A020Ga_GYRO-NS	Coco B 12644 / TC Energy CoCo B 12644 Surveys 0ft to Update
	1	812.000	2235.000	Act Stns	17.500	13.375	A020Ga_GYRO-NS	Coco B 12644 / TC Energy CoCo B 12644 Surveys 0ft to Update
	1	2235.000	5758.000	Act Stns	12.250	12.250	B006Ma_MWD+IGRF	Coco B 12644 / TC Energy CoCo B 12644 Surveys 0ft to Update

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 Environmental Protection

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FILE # \_\_\_\_\_  
 DRAWING # 12644  
 SCALE: 1" = 700'  
 MINIMUM DEGREE OF ACCURACY: 1:2,500'  
 PROVEN SOURCE OF ELEVATION: STATIC GPS SURVEY WITH TIES TO NGS DATA

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 ENVIRONMENTAL PROTECTION.

Signed: \_\_\_\_\_  
 R.P.E.: \_\_\_\_\_ L.L.S.: 2252

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 PLACE SEAL HERE  
 Department of Environmental Protection

+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS WVDEP  
 OFFICE OF OIL & GAS  
 601 57TH STREET  
 CHARLESTON, WV 25304



DATE: 09-16-24  
 OPERATOR'S WELL #: 12644  
 API WELL #: 47 STATE 039 COUNTY 06402 PERMIT

Well Type:  Oil  Waste Disposal  Production  Deep  
 Gas  Liquid Injection  Storage  Shallow

WATERSHED: COOPERS CREEK-ELK RIVER (050500070908) ELEVATION: 856'  
 COUNTY/DISTRICT: 039-KANAWHA / 4-ELK QUADRANGLE: 258-BLUE CREEK

SURFACE OWNER: PATRICIA JO MORTON RANSON ACREAGE: 57 1/2  
 OIL & GAS ROYALTY OWNER: MATT AMOS, ET AL GAS ROYALTY OWNER  
LEASE NO. (SURFACE) 1049098-0000 (BOTTOM HOLE) REFER TO FORM WW-2A1 ACREAGE: 851.5

DRILL  CONVERT  DRILL DEEPER  REDRILL  FRACTURE OR STIMULATE   
 PLUG OFF OLD FORMATION  PERFORATE NEW FORMATION  PLUG & ABANDON   
 CLEAN OUT & REPLUG  OTHER CHANGE  SPECIFY: \_\_\_\_\_

TARGET FORMATION: ORISKANY SANDSTONE (STORAGE RESERVOIR) ESTIMATED DEPTH: 5,185 FT. TVD  
8,182 FT. MD

WELL OPERATOR COLUMBIA GAS TRANSMISSION DESIGNATED AGENT MARIA MEDVEDEVA  
 Address 1700 MACCORKLE AVE. SE PO BOX 1273 Address 1700 MACCORKLE AVE. SE PO BOX 1273  
 City CHARLESTON State WV Zip Code 25325-1273 City CHARLESTON State WV Zip Code 25325-1273

G:\TRANSCANADA\50104926\_COCO\_B\_NEW\_WELLS\PIPELINE\DRAWING\LANDPLATS\NEW PLATS\_20230605\20240913\_PLAT\_OVERALL\_AS-BUILT.DWG - PLOT TIME: 9/17/2024 7:18 AM