

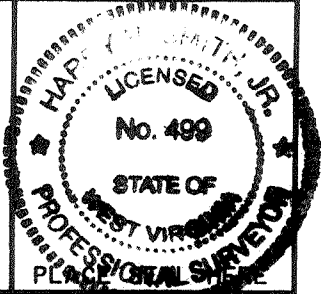
Revised 10-20-97
 CHARGE: Gen-Aux-Activ-Tr Cntr
 183-2000-W2625-2801
 Farm map # 48 50 72 - 61
 (+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS (7 1/2")

NOTES: FB 2364 PG 13 - 16
 INV MAP 4248/460
 "BM" USC & GS Standard Disk
 Set In Monument At
 NYC R/R Overpass Over
 County Road N.E. Corner
 Of Trestle & 5.5' Lower Than
 Tracks Stamped 231-SKS,
 1956 - 652'
 Elev. = 651.63'

Stake On Top Of Ridge Between
 30" White Oak & Leaning
 Hickory Marked & Facing
 Each Other

FILE NO. _____
 DRAWING NO. 7072
 SCALE 1" = 800'
 MINIMUM DEGREE OF
 ACCURACY 1/200
 PROVEN SOURCE OF
 ELEVATION "See Note Above"

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 REGU-
 LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
 MENT OF ENERGY.
 (SIGNED) Wayne P. Smith
 R.P.E. _____ L.L.S. 499



WEST VIRGINIA
 DIVISION OF ENVIRONMENTAL PROTECTION
 OFFICE OF OIL AND GAS
 #10 McJUNKIN ROAD
 NITRO, WEST VIRGINIA 25143-2506



DATE July 20, 1994
 OPERATOR'S WELL NO. 7072
 API WELL NO. 47 039 012757

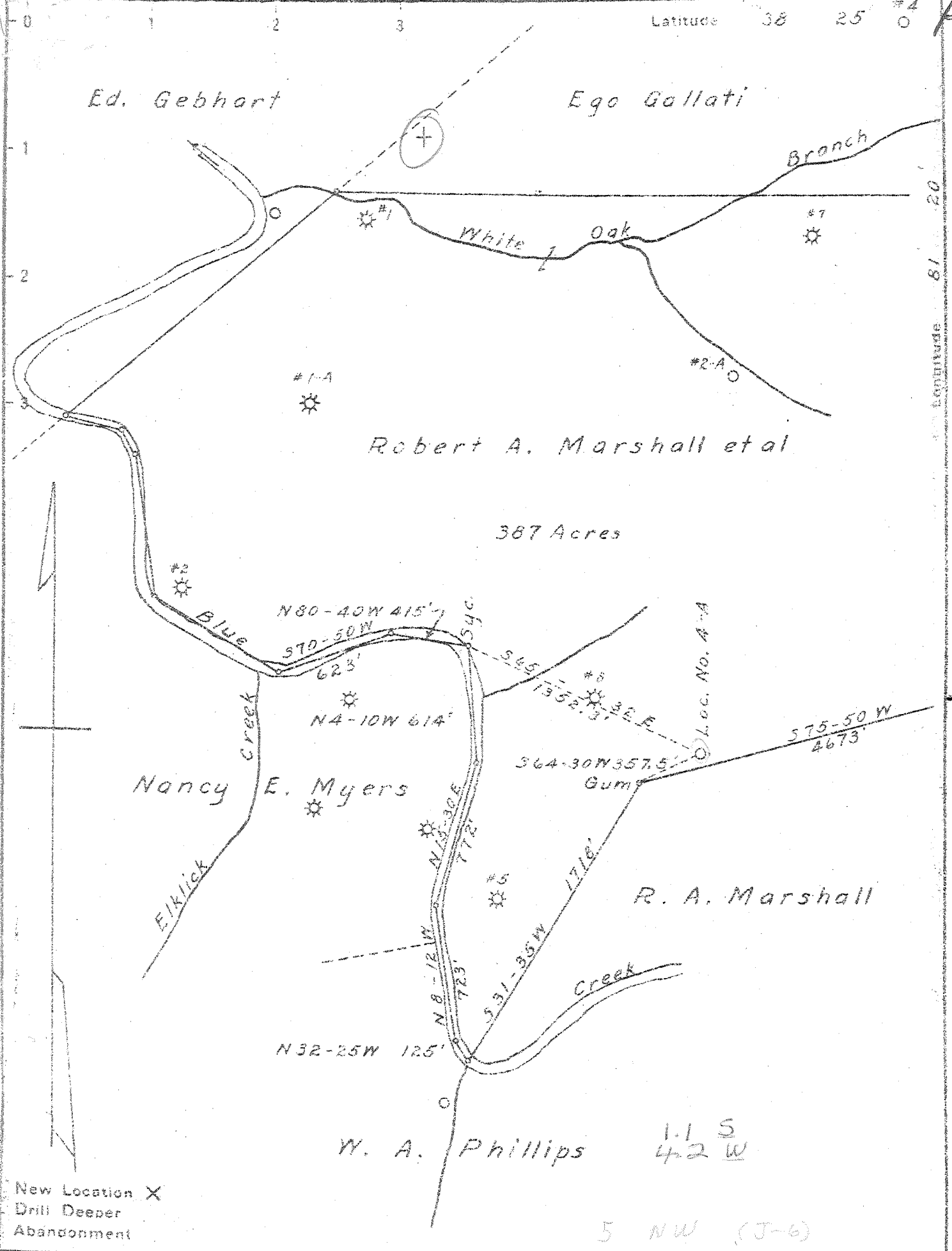
WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
 (IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
 LOCATION: ELEVATION 703.14' WATER SHED Blue Creek
 DISTRICT Eik COUNTY Kanawha
 QUADRANGLE Blue Creek, WV COORDINATES LAT: 38°23'54" LONG: 81°24'36"
 SURFACE OWNER W. F. Goshorn Heirs, Et al ACREAGE 1161
 OIL & GAS ROYALTY OWNER Same LEASE ACREAGE 787
 COAL OWNER Same LEASE NO. 48180 & 48341

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
Well drilled in 1947 by United Carbon T.D. 5365' Columbia Terms will Recondition
 PLUG AND ABANDON CLEAN OUT AND REPLUG
 TARGET FORMATION Oriskany ESTIMATED DEPTH 5556' Same formation
 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

DEEP WELL

KANAWHA COUNTY NAME PERMIT

FEB 20 1998



Company United Carbon Company
 Address Charleston, W. Va.
 Farm Robert A. Marshall et al
 Tract _____ Acres 1800 Lease No. 2450
 Well (Farm) No. 4-A Serial No. 1380
 Elevation (Spirit Level) 1052' Ground
 Quadrangle Clendenin ~~Map~~ C
 County Kanawha District Elk
 Engineer E. G. Withrow
 Engineer's Registration No. _____
 File No. _____ Drawing No. _____
 Date April 16, 1946 Scale 1" = 660'

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

WELL LOCATION MAP
 FILE NO. KAN-1275

+ 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

Deep Well

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

Permit No. Kan 1275
Clendenin Quad.
Company
Address
Farm
Location
Well No.
District
Surface
Mineral

Gas Well
CASING & TUBING

United Carbon Company
Box 1913, Charleston 27, W.Va. 13 3/8 798 798
Robt. A. Marshall et al Acres 1800 10 1671 1671
Blue Creek 7 OD 2217 2217
4-A (1380) Elev. 1075.88' 5 1/2 OD 5242 5242
Elk Kanawha County
Goshorn Hrs.
Hester N. Brown et al, 127 Alderson St.
Charleston, 1, W.Va.
June 3, 1946
April 9, 1947
5-12-47 Depth 5341 to 5365'
35 quarts glycerine.
4/10ths M in 7" OD 22#
3,181,000 C.F.
1685' H.F.

Casing cemented:
7" to 1690' 1-24-47
5 1/2" 10 bags 3-24-47
Coal at 190' 48"
331' 48"

Conductor		1	16	Slate Gr	2730	2780
Shale Br		16	92	Lime Bl H	2780	2900
Slate Wh		92	135	Slate & Shells	2900	3250
Sand Wh		135	183	Lime Bl H	3250	3354
Slate Bk		183	190	Shale Br	3354	3424
-Coal Bk		190	194	Lime Wh	3424	3650
Slate Bk		194	215	Slate & Shells	3650	3822
Sand Wh		215	265	Brown Shale	3822	4038
Shale Gr		265	331	Lime Shells	4038	4147
-Coal Bk		331	335	Slate Wh	4147	4685
Slate Bk		335	355	Shale Br	4685	5075
Sand Wh		355	370	Slate Wh	5075	5105
Slate Bk		370	400	Shale Br	5105	5168
Sand Wh		400	455	-Shale Bk	5188	5220
Shale Gr		455	615	-Corniferous Lime	5220	5336
Sand Wh		615	635	-Oriskany Sand	5336	5358
Slate & Shells		635	720	Lime	5358	
Sand Wh		720	777	Total depth		5365
Slate Gr		777	791			
Lime Wh		791	814			
Slate Bk		814	832			
Sand Wh		832	892			
Slate Bk		892	897			
-Gas Sand Wh		897	998			
-Sand Wh	Salt	998	1405	Gas 924'		
Slate Gr		1405	1418			
Red Rock		1418	1430			
Slate & Shells		1430	1484			
Red Rock		1484	1489			
Slate Gr		1489	1508			
-Sand Br		1508	1530			
Slate Bk		1530	1548			
-Lime Bk		1548	1577			
Slate Gr		1577	1590			
-Pencil Black		1590	1595			
-Big Lime Wh	H	1595	1785			
-Injun Red		1785	1825			
-Squaw Bl	H	1825	1910			
-Weir Gr	H	1910	2015			
Slate Gr	S	2015	2080			
Lime Bl	H	2080	2108			
Slate Gr	S	2108	2140			
Lime Bl	H	2140	2145			
Slate Gr	S	2145	2175			
-Shale Br		2175	2180			
-Grit Dk	H	2180 ?	2202			
Lime Bk	H	2175 ?	2180			
Lime Shell Bk	H	2180 ?	2223			
Slate Gr		2223	2330			
Lime Bk	H	2330	2500			
Slate & Shells	H	2500	2620			
Lime Bk	H	2620	2650			
Slate & Shells		2650	2730			

WR-35

12-Feb-98
API # 47- 39-01275 F

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

Reviewed: PS

Well Operator's Report of Well Work

RECEIVED
Section of Oil & Gas
Permitting

Farm name: GOSHORN, W. F. & JOHN H. Operator Well No.: 7072

MAR 01 1999

LOCATION: Elevation: 703.14 Quadrangle: BLUE CREEK

Division of
Environmental Protection

District: ELK County: KANAWHA
Latitude: 5450 Feet South of 38 Deg. 25Min. 0 Sec.
Longitude 10130 Feet West of 81 Deg. 22 Min. 30 Sec.

Company: COLUMBIA GAS TRANSMISSION
P. O. BOX 1273
CHARLESTON, WV 25325-1273

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13-3/8"		798'	
10-3/4"		1671'	
7"		2217'	To 1690'
5-1/2"		5242'	10 sx
3-1/2"		5277'	35 sx

Agent: RICHARD L. COTY

Inspector: CARLOS HIVELY
Permit Issued: 02/16/98
Well work Commenced: 06/05/98
Well work Completed: 08/05/98
Verbal Plugging
Permission granted on: _____
Rotary Cable Rig
Total Depth (feet) 5363'
Fresh water depths (ft) N/A
Salt water depths (ft) 1685'

Is coal being mined in area (Y/N)? N
Coal Depths (ft): 190' - 194', 331' - 335'

OPEN FLOW DATA

5336' - 5363'

Producing formation Oriskany Storage Pay zone depth (ft) _____

Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d
 Final open flow N/A 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 psig (surface pressure) after N/A Hours

Second producing formation _____ 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.

For: COLUMBIA GAS TRANSMISSION CORP.

By: [Signature]
Date: 2/22/99

MAR 16 1999

KAN 1275F

Replaced top joint of 3-1/2" and installed new API 5M 7" x 3-1/2" wellhead. Stimulated Oriskany with N2-Assist Deltafrac using 392 bbls of water, 77 MSCF N2, and 25,000 lbs of 20/40 sand at 1 - 4 PPG.