

THE ACCURACY OF THIS SURVEY IS WITHIN THE LIMITS PRESCRIBED BY THE OIL AND GAS DIVISION OF THE DEPARTMENT OF MINES.

New Location
 Drill Deeper
 Abandonment

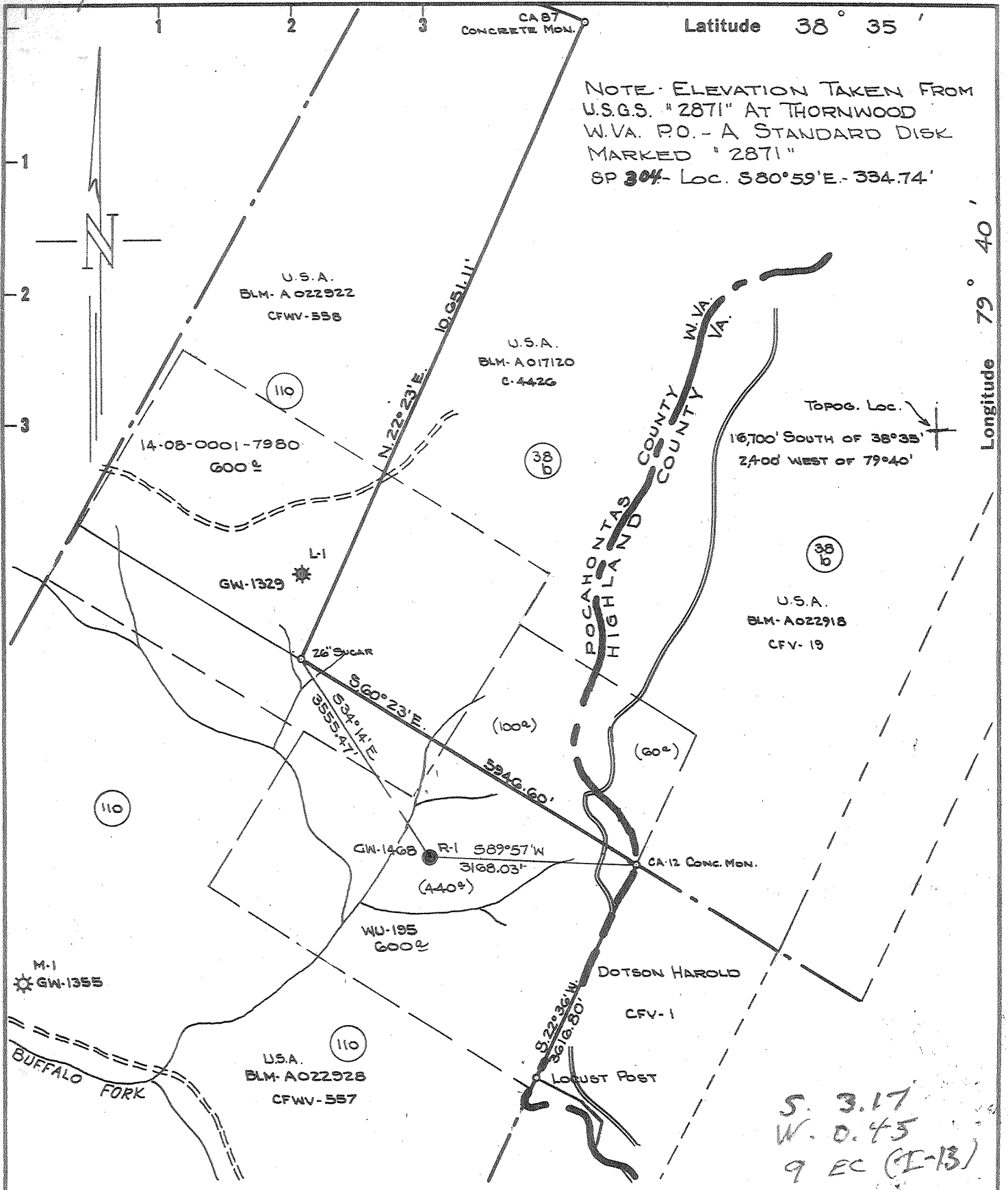
I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS MAP IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY PARAGRAPH 6 OF THE RULES AND REGULATIONS OF THE OIL AND GAS SECTION OF THE MINING LAWS OF WEST VIRGINIA.

Company CITIES SERVICE OIL COMPANY
 Address P.O. Box 873 CHARLESTON, W.VA.
 Farm UNITED STATES OF AMERICA
 (PT. OF WU-195-600² BLM-A022928)
 Tract 110 Acres 440 Lease No. CFWV-557
 Well (Farm) No. R-1 Serial No. GW-1468
 Elevation (Spirit Level) 3369.91 Thornwood 7.5'
 Quadrangle SPRUCE KNOB S 5320 W-045
 County POCAHONTAS District GREENBANK
 Engineer Wardell S. Moore
 Engineer's Registration No. 2113
 File No. _____ Drawing No. W-1-64
 Date 24 JAN. 64 Scale 1" = 2000'

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION
 CHARLESTON
WELL LOCATION MAP
 FILE NO. POCA-23

+ Denotes location of well on United States Topographic Maps, scale 1 to 62500 latitude and longitude lines being represented by border lines as shown.
 - Denotes one inch spaces of border line of original tracing.

Samples 140' - 5160' CORES 4900 - 5102' Deep Well 6-6 322



THE ACCURACY OF THIS SURVEY IS WITHIN THE LIMITS PRESCRIBED BY THE OIL AND GAS DIVISION OF THE DEPARTMENT OF MINES.

New Location
 Drill Deeper
 Abandonment

I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS MAP IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY PARAGRAPH 6 OF THE RULES AND REGULATIONS OF THE OIL AND GAS SECTION OF THE MINING LAWS OF WEST VIRGINIA.

Company CITIES SERVICE OIL COMPANY
 Address P.O. BOX 873 CHARLESTON, W.VA.
 Farm UNITED STATES OF AMERICA
 (PT. OF WU-195-6002 BLM-A022928)
 Tract 110 Acres 440 Lease No. CFWV-357
 Well (Farm) No. R-1 Serial No. GW-1468
 Elevation (Spirit Level) 3369.91
 Quadrangle SPRUCE KNOB 9 S.320 W.045
 County POCAHONTAS District GREENBANK
 Engineer Wardell S. Moore
 Engineer's Registration No. 2113
 File No. _____ Drawing No. W-1-64
 Date 24 JAN. 64 Scale 1"=2000'

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

WELL LOCATION MAP
 FILE NO. POCA-23

+ Denotes location of well on United States Topographic Maps, scale 1 to 62500 latitude and longitude lines being represented by border lines as shown.

- Denotes one inch spaces of border line of original tracing.

Samples 140' - 5160' CORES 4900 - 5102' Deep Well 6-6 322



STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION 16

Rotary
Spudder
Cable Tools
Storage

Quadrangle Spruce Knob 9 SW

WELL RECORD

Permit No. Poca-23

Oil or Gas Well gas
(KIND)

Company Cities Service Oil Company
Address P. O. Box 873, Charleston 23, W. Va.
Farm United States of America Acres 440
Location (waters) Buffalo Fork
Well No. R-1, GW-1468 Elev. 3369.91'
District Greenbank County Pocahontas
The surface of tract is owned in fee by Director Bureau of Land Management
Interior Building Address Washington 25, D. C.
Mineral rights are owned by same
Address _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13 3/8" 48#	32'	32'	<u>Anchor packer</u>
10 3/4" 32#	148'	148'	Size of <u>4-1/2"</u>
7-5/8" 24#	2029'	2029'	Depth set <u>4952-1/2"</u>
4-1/2" 9.5#	5002'	5002'	
3			Perf. top _____
2			Perf. bottom _____
Liners Used			Perf. top _____
			Perf. bottom _____

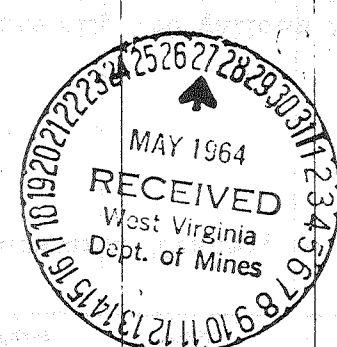
Drilling commenced 3-1-64
Drilling completed 5-8-64
Date Shot not shot From _____ To _____
With _____
Open Flow /10ths Water in _____ Inch
/10ths Merc. in _____ Inch
Volume shows Cu. Ft.
Rock Pressure _____ lbs. _____ hrs.
Oil _____ bbls., 1st 24 hrs.
WELL ACIDIZED see reverse side
WELL FRACTURED not fractured

CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____
see reverse side
COAL WAS ENCOUNTERED AT none FEET _____ INCHES
FEET _____ INCHES FEET _____ INCHES
FEET _____ INCHES FEET _____ INCHES

RESULT AFTER TREATMENT 75/10 M. 2" = 1,347 MCF (Oriskany)
ROCK PRESSURE AFTER TREATMENT 36 hours 1685#
Fresh Water 50' 170' 680' Feet Salt Water 2,650' Feet

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remarks
K-B to bottom cellar			0	15			
Sand and Shale			15	555'	F. water	50'	
Shale			555	655	F. water	170'	
Sand and Shale			655	1235	F. water	680'	
Lime			1235	1270			
Green Sand			1270	1450			
Sandy Shale			1450	2280			
Shale and Lime			2280	3640	S. water	2650'	
Shale			3640	4422	Gas	2885'	show
Fulley Lime			4422	4500			
Shale			4500	4843			
Chert			4843	4860			
Shale			4860	4949			
Oriskany Sand			4949	5110			
Lime			5110	5165			
Total depth				5165'			
Samples show:							
Oriskany Sand			4937	5120			
Cored well from 4948' to 5113'							

Temperature Log showed gas:
4946'
4956'
5025'



Formation	Color	Hard or Soft	Top 16'	Bottom	Oil, Gas or Water	Depth Found	Remarks
Birdwell Ran Logs: Gamma Ray, Guard, Density, 3-D, Temperature, Tracer, Nuclear and Velocity							
ACIDIZED ORISKANY SAND 5-13-64							
Before acidizing gas gauged 29/10 M. 1" = 209MCF. Ran 1 drum oil, 750 gallons MCA, 5,000 gallons retarded acid, 5,000 gallons regular acid, 8,400 gallons water (5,000 gallons overflush). Used 85,000 SCF Nitrogen with acid and water. Averaged 190 SCF/bbl. at 1900# injection pressure. Well cleaned self.							
Final open flow 1,347 MCF - 36 hour rock pressure 1685#.							
CASING RECORD							
13-3/8" Drive pipe ran at 32' - cemented with 35 sacks.							
10-3/4" ran with casing shoe at 148 - cemented with 80 sacks.							
7-5/8" ran at 2005' with casing shoe, packer on bottom and 4 centralizers. Cemented with 200 sacks - plug to 1905'.							
4-1/2" ran at 4982' - anchor packer set at 4952-1/2'. Cemented above packer with 100 sacks.							
Wm. Perry G-R picks:							
		Tioga	4710				
		W. Woodmore	4755				
		Hanksville	4812				
		Shale	4843				
		Hanksville	4853				
		Beaver Dam	4884				
		Oriskany	4938				

Date May 26, 19 64

APPROVED Cities Service Oil Company, Owner

By W. S. Moore, Division Sup't
(Title)

WR-38
DATE: September 29, 2009

API # 47-075-00023

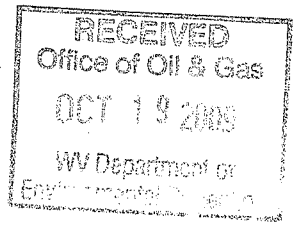
STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

AFFIDAVIT OF PLUGGING AND FILLING WELL

AFFIDAVIT SHOULD BE IN TRIPLICATE, one copy mailed to the Division, one copy to be retained by the Well Operator and the third copy (and extra copies if required) should be mailed to each coal operator at their respective addresses.

Farm name: USA Operator Well No.: R-1

LOCATION: Elevation: _____ Quadrangle: Spruce Knob SW
District: Green Bank County: Pocahontas
Latitude: 13,750 N Feet South of 38 Deg. 30 Min. 0 Sec.
Longitude: 3,600 W Feet West of 78 Deg. 40 Min. 0 Sec.



Well Type: OIL _____ GAS x

Company: Chesapeake Appalachia, LLC Coal Operator US Forest Service/ Mon Nat'l Forest
PO Box 18496 or Owner 200 Sycamore Street
Oklahoma City, OK 73154 Elkins, WV 26241
Agent: Tal Oden Coal Operator US Dept of the Interior BLM
or Owner 626 E. Wisconsin Ave., Suite 200
Milwaukee, WI 53202

Permit Issued Date: 08/14/2009

AFFIDAVIT

STATE OF WEST VIRGINIA,
County of Upshur ss:

Alvin Sorcan and Phillip Pulliam being first duly sworn according to law depose and say that they are experienced in the work of plugging and filling oil and gas wells and were employed by the above named well operator, and participated in the work of plugging and filling the above well, and Dave Gilbert Oil and Gas Inspector representing the Director, say that said work was commenced on the 17th day of September 2009, and that the well was plugged and filled in the following manner:

TYPE	FROM	TO	PIPE REMOVED	LEFT
Gel	TD	surface		
Bridge Plug	4880'	4878'		
Cement	4880'	4450'		
Cement	2985'	2515'	4 1/2" 2810'	2142'
Cement	2128'	1886'	7 5/8" 0'	2029'
Cement	250'	0'	10 3/4" 0'	148'

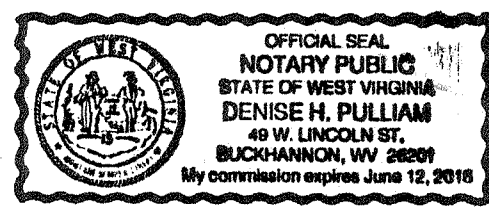
Description of monument: Underground 6"x6" aluminum plate with API # and that the work of plugging and filling said well was completed on the 30th day of September, 2009.

And further deponents saith not
Alvin Sorcan
Phillip O. Pulliam

Sworn and subscribe before me this 30th day of September, 2009
My commission expires: June 12, 2016

Denise H. Pulliam
Notary Public

Oil and Gas Inspector: [Signature]



OCT 29 2009