

New Location
 Drill Deeper
 Abandonment

Cabot Oil & Gas Corp. of WVa.
 P.O. Box 628
 Charleston, WVa. 25322
 Surface: Appalachian Power Company

Tract Bull Creek #16 Acres 4000 Lease No. 16
 Well (Farm) No. 18 Serial No. 621
 Elevation (Spirit Level) 791.4
 Quadrangle PEYTONA 5/1/1885
 County BOONE District PEYTONA
 Engineer T.S. H. Danner
 Engineer's Registration No. 269
 File No. _____ Drawing No. _____
 Date SEPT. 3, 1941 Scale 1" = 1000 FT.

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

WELL LOCATION MAP

FILE NO. B00-519-00

Corrected - Drill Deeper

+ 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.

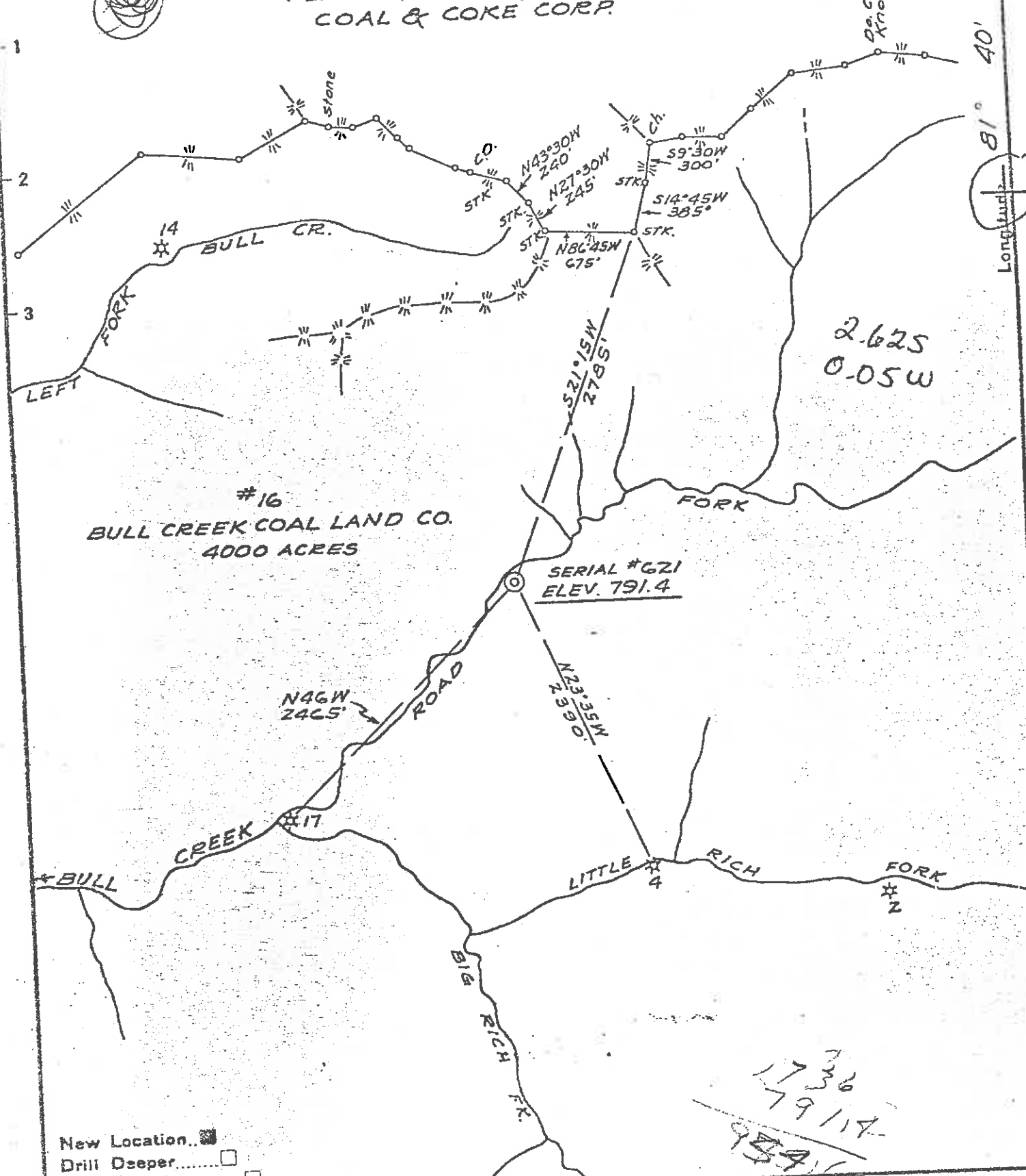
- Denotes one inch spaces on border line of original tracing.

(305) 47-005

Latitude 38° 15'



PENNSYLVANIA & VIRGINIA COAL & COKE CORP.



New Location
 Drill Deeper
 Abandonment

1736
 7914
 9891

Company THE OWENS LIBBEY-OWENS GAS DEPT
 Address BOX 1375 CHARLESTON, W. VA.
 Farm BULL CREEK COAL LAND CO.
 Tract _____ Acres 4000 Lease No. 16
 Well (Farm) No. 18 Serial No. 621
 Elevation (Spirit Level) 791.4
 Quadrangle PEYTONA - NW
 County BOONE District PEYTONA
 Engineer T.S. J. Danvers
 Engineer's Registration No. 269
 File No. _____ Drawing No. _____
 Date SEPT. 8, 1941 Scale 1" = 1000 FT.

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

WELL LOCATION MAP
 FILE NO. BOO-519-01
Corrected - Drill Deeper
 + 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 tracings.

6-6 238 Deep Well (Newburg)

RECEIVED

MAY 20 1985



OIL & GAS DIVISION

DEPT. OF MINES

IV-35
(Rev 8-81)

State of West Virginia
Department of Mines
Oil and Gas Division

Date May 20, 1985
Operator's
Well No. 18
Farm Bull Creek
API No. 47 - 005 - 0519 FRAC

WELL OPERATOR'S REPORT
OF
DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE

WELL TYPE: Oil / Gas x / Liquid Injection / Waste Disposal /
(If "Gas," Production x / Underground Storage / Deep / Shallow x /)

LOCATION: Elevation: 791.4' Watershed Bull Creek
District: Peytona County Boone Quadrangle Racine

COMPANY Cabot Oil & Gas of W.V.
ADDRESS P.O. Box 454, Glasgow, W.V. 25086
DESIGNATED AGENT Robert E. Horrell
ADDRESS P.O. Box 454, Glasgow, W.V. 25086
SURFACE OWNER Appalachian Power Company
ADDRESS P.O. Box 2021, Roanoke, Va. 24022
MINERAL RIGHTS OWNER Appl. Power Co.
ADDRESS P.O. Box 2021, Roanoke, Va. 24022
OIL AND GAS INSPECTOR FOR THIS WORK Jerry
Holcomb ADDRESS Rural Rt. #1, Box 28,
Hamlin, W.V. 25523
PERMIT ISSUED 3/4/85
WORKOVER COMMENCED 4/15/85
WORKOVER COMPLETED 4/27/85
IF APPLICABLE: PLUGGING OF DRY HOLE ON
CONTINUOUS PROGRESSION FROM DRILLING OR
REWORKING. VERBAL PERMISSION OBTAINED
ON

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cond.			
13-10"			
9 5/8			
8 5/8			
7			
5 1/2			
4 1/2			TOC=4154'
3			
2 1/2		5014.40'	seating nipple @ 4988'
Liners used			

GEOLOGICAL TARGET FORMATION Oriskany Depth 4372-4388 feet
Depth of completed well 5085 feet Rotary / Cable Tools
Water strata depth: Fresh feet; Salt feet
Coal seam depths: Is coal being mined in the area?

OPEN FLOW DATA completed new zone - Oriskany
Oriskany (commingled) Oriskany - 4375-85'
Producing formation & Newburg Pay zone depth feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
4 hrs Final open flow (492) Mcf/d Final open flow Bbl/d
Time of open flow between initial and final tests hours

Static rock pressure 525 psig (surface measurement) after 72 hours shut in
(If applicable due to multiple completion--)
Second producing formation Pay zone depth feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
Final open flow Mcf/d Oil: Final open flow Bbl/d
Time of open flow between initial and final tests hours
Static rock pressure psig (surface measurement) after hours shut in

(Continue on reverse side)

MAY 20 1985

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.
 4/15/85 - MIRU Pool Well Service. R/U McCullough, ran G/R & CBL. TOC 4154'. Perf Oriskany 4375-4385' (10 holes). Ran 3-2 3/8" Dotco drl collars, 157 jts 2 3/8" tbg & 4 1/2" csg scraper down to 5010' & cleaned out 4 1/2" csg. Ran 138 jts (4351.30'), 2 3/8" upset tbg & 4 1/2" RPTS pkr. R/U Howco. Pumped 500 gals 15% HCL. B/D Oriskany @ 3700 psi. Pumped N₂ @ 4000 Scf/min. Total N₂ 58,000 Scf. for injection test. R/U Howco, pumped 41,000 Scf N₂. ISIP 2900 psi. Oriskany B/D @ 3700 psi. Pumped 240 bbls foam pad. Treated w/10 sks 20/40 sand @ 1/4#/gal, 20 sks 20/40 sand @ 1/2#/gal, 40 sks 20/40 sand @ 1.0#/gal, & 130 sks 20/40 sand @ 1.5#/gal. Total 200 sks. Pumped 3 BPM 30#/1000 gal gel system & 10,200 Scf/min N₂ for .75 Q foam. Air - 12 BPM. ATP - 5150 psi. T/F 203 bbls. S/L - 130 bbls. Total N₂ - 679,000 Scf. ISIP - 3200 psi, 15 min 2900 psi. Released thru 1/4" choke. Shut down when pressure reached 6400 psi. Job was 2/3 completed. Ran 155 jts 1 1/2" tbg (5014.40'), set @ 5017.95'. Seating nipple @ 4988.05'.
 5/03/85 - Final test 5/02/85 - SIP 525 psi. 4 hr open flow, 10/10 Hg thru 2", 492 Mcf/d.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
See attached original well record.					

(Attach separate sheets as necessary)

Cabot Oil & Gas of W.V.

Well Operator

By: Robert E. Hanel

Date: May 20, 1985

Note: Regulation 2.02(i) provides as follows:
 "The term 'log' or 'well log' shall mean a systematic detailed geological record of all formations, including those encountered in the drilling of a well."

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

WELL RECORD

Quadrangle Peytona
Permit No. Boo-519 D.D.

Oil or Gas Well Gas
(KIND)

Company OWENS, LIBBEY-OWENS GAS DEPARTMENT
Address P. O. Box 4168, Charleston, W. Va. 25304
Farm Bull Creek Coal Land Co. Acres 4,000
Location (waters) Bull Creek
Well No. 18 (621) Elev. 791.4
District Peytona County Boone
The surface of tract is owned in fee by _____
Address _____
Mineral rights are owned by Bull Creek Coal Land Co.
44 Lyman Road Address Buffalo 26, N.Y.
Drilling commenced 2-15-67
Drilling completed 3-30-67
Date Shot _____ From _____ To _____
With _____
Open Flow 52/10ths Water in _____ Inch
_____ /10ths Merc. in _____ Inch
Volume _____ M Cu. Ft.
Rock Pressure Not taken lbs. _____ hrs.
Oil _____ bbla., 1st 24 hrs.
WELL ACIDIZED _____

Casing and Tubing	Used in Drilling	Left in Well	Packers
Size			Kind of Packer
16			
13			Size of
10			Depth set
8 1/4			
6 3/4			
5 3/16	5,025'8"	Pulled	Perf. top 5,04
3			Perf. bottom
2-3/8	4,408'9"	Pulled	Perf. top
1 1/2" siphon	5,077'	Pulled	Perf. bottom

CASING CEMENTED 4-1/2" SIZE 5077' No. Ft. 5-9-67
Well Service cemented with 100 bags cement,
88 bags cement.
COAL WAS ENCOUNTERED AT _____ FEET _____ IN
_____ FEET _____ INCHES _____ FEET _____ IN
_____ FEET _____ INCHES _____ FEET _____ IN

WELL FRACTURED Dowell fraced Newberg Sand 5-18-67 --- See remarks

RESULT AFTER TREATMENT 612 MCF Newberg Sand

ROCK PRESSURE AFTER TREATMENT 1,630# in 7 days
Fresh Water _____ Feet Salt Water 4,907 - 4,919 Feet Hole filled

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth	Remark
As completed	<u>8-30-41</u>			<u>4,413</u>	<u>2-2-67</u>		
							Dowell pumped in 85 bbla. water + free packer. Pulled 4408'9" of 2-3/8" tubing.
Line	Dark	Hard	4413	4454	Test	4454	9.6
Gritty Lime (Austinburg Section)	Light	Hard	4454	4505	Gas	4500-4505	19.3
Lime	Dark	Hard	4505	4512			
Lime	Pink	Hard	4512	4520			
Lime	Light	Hard	4520	4580			
Lime	Dark	Hard	4580	4601	Test	4588	16.7
					Gas	4595	19.3
Line	Brown	Hard	4601	4619	SIM 4619 = Sand IM 4619		
Gritty Lime	Dark	Hard	4619	4679	Test	4625	16.7
					Gas	4631	18.3
					Gas	4673	19.8
					Test	4869	18.8
Lime	Dark	Hard	4679	4907			
Settling Lime	Dark	Hard	4907	4919	Sulphur water	4907-4919,	hole fl
					Gas	4913	23.3
Lime	Dark	Hard	4919	4966	Gas	4960-4963	23.7
Gritty Lime	Dark	Hard	4966	5028			
Lime	Dark	Hard	5028	5044			
Newberg Sand	Light	Hard	5044	5063			
							At 5028', top of water at 2,700
							No gas at 5028 ft.
							SIM 5044 = Sand IM 5044
							Gas 5051-5053 (thru HFW)
Gritty Lime	Dark	Hard	5063	5068			4.3
Lime	Dark	Hard	5068	5085			At 5063' top of water at 1300 ft
							SIM 5085 = Sand IM 5085
							Depth
							5085



AUG 23 1967

(over)

Formation	Color	Hard or Soft	Top /	Bottom	Oil, Gas or Water	Depth Found	Remarks
					4-27-67 Installed 5-1/2" casing with a hookw packer set at 5023 ft. Used 5025'8" of 14 lb. 5-1/2" casing.		
					4-28-67 Test 2:30 P.M.		56.5 MCF
					5-1-67 McCullough ran Gamma-Ray, Density and Temperature logs from 5022 to 5085 ft.		
					5-2-67 Pulled 5025'8" of 5-1/2" casing.		
					5-9-67 Installed 4-1/2" casing on a shoe at 5077 ft. Used 5077 ft. of 11.6# 4-1/2" casing.		
					Well Service cemented in the 4-1/2" casing from 5077 to 4077 ft. with 10 sacks cement and 15 sacks of resinment		
					5-10-67 McCullough perforated the 4-1/2" casing at 5,043' using one frac notch.		
					5-11-67 Test after hole bailed dry		12.25 MCF
					5-18-67 Dowell fraced the Newberg Sand using 28,000 lbs. of 20-40 sand, 500 gals. mud acid and 732 bbls. water.		
					Formation breakdown pressure 3400# Maximum treating pressure 6000# Maximum injection rate 23 bbl. minute		
					Opened well and started to swab fluid		
					5-20-67 53 hour test		273 MCF
					Well shut in.		
					5-22-67 39 hour rock pressure		1605#
					Blew well to expel fluid.		
					3 hr. test		411 MCF
					Well shut in.		
					5-25-67 21 hour rock pressure		1475#
					Installed 1-1/2" siphon to 5057 ft.		
					8 hr. test		333 MCF
					Well shut in.		
					6-2-67 45 hour rock pressure		1700#
					Blew well. Six hour test		411 MCF
					Well shut in.		
					6-9-67 45 hour rock pressure		1700#
					Blew well. Six hour test		441 MCF
					Well shut in.		
					6-16-67 45 hour rock pressure		1700#
					Blew well. Six hour test		491 MCF
					Well shut in.		
					6-27-67 68 hour rock pressure		1680#
					Blew well. Pulled 5057' of 1-1/2" siphon. 10 hr. test		491 MCF
					Well shut in.		
					7-10-67 11 day rock pressure		1660#
					Blew well. Six hour test		623 MCF
					Well shut in.		
					7-19-67 9 day rock pressure		1700#
					Blew well. Six hour test		623 MCF
					Well shut in.		
					8-9-67 7 day rock pressure		1630#
					Blew well. Six hour test		612 MCF
					Well shut in.		

Date August 14, 1967

APPROVED OWENS, LIBBEY-OWENS GAS DEPARTMENT, Owens

By A. H. Smith, Mgr. (Title) Land, Engrg. & C

WEST VIRGINIA DEPARTMENT OF MINES
OIL & GAS DIVISION
WELL RECORD

Permit No. 500-519	The Owens, Libbey-Owens Gas Dept.	Gas Well
Company	P.O. Box 1375, Charleston, W. Va.	Casing & Tubing
Address	Bull Creek Coal Land Co. Acres 4000	10 56 56
Farm	Bull Creek	8 1/2 1125 1125
Location	621 Elev. 791.4 Gr	6 5/8 4304 4304
Well No	Poytona Doona County	3 4409 4409
District	Bull Cr. Coal Ld. Co., 806 Elliott Sq.	
Surface	Buffalo, New York	Packer
Mineral	Same	Spang Gas Anchor-
Commenced	Sept. 24, 1941	Step Expanding
Completed	Jan. 8, 1942	6 5/8x2-3/8x3x30
Flow	18/10ths W in 2"	Depth 4359'
Volume	179,000 G.F.	Perf. top bottom
Rock Pressure	1000 # 24 hrs.	4394 4399
Fresh Water	83" hole full	4359 4409

Coal at 40' - 24"

Surface	Y	S	O	15	Shale	Br	S	3502	3524
Sand	Lt	S	13	40	Slate	Wh	S	3524	3588
Coal	Bk	S	40	42	Slate&Shells	Dk	S&H	3586	3616
Sand&Slate	Lt&Wh	S&H	42	346	Slate	Lt	S	3616	3762
Slate&Shells	Dk	S	346	368	Shell	Dk	H	3762	3766
Sand&Slate		S&H	368	781	Slate-Shell	Wh	S&H	3766	3977
Sand Shell	Wh	H	781	815	Shale	Br	S	3977	4290
Red Rock		S	786	823	Poriferous	Lt	H	4290	4379
Slate	Dk	S	815	948	Priskany	Lt	H	4379	4390
Sand Slate	Wh	H&S	823	957	Big Lime - M	Lt	H	4390	4409
Red Rock		S	948	1025	TOTAL DEPTH				4409
Slate&Shell	Lt	H&S	957	1033	Gas 4384-4387'			179,000 G.F.	
Shell	Dk	H	1025	1034					
Slate	Lt	S	1033	1098	Gas 1289-1298			39,000 G.F.	
Big Lime	Dk	H	1034	1100					
Big Lime	Wh	S	1098	1125					
Big Lime	Gr	H	1100	1273					
Big Lime	Wh	H	1125	1311					
Big Injun	Red	H	1273	1320					
Slate	Wh	S	1311	1386					
Slate&Shells	Dk	S	1320	1636					
Slate&Shells	Lt	H&S	1386	1675					
Slate&Shells	Dk	H&S	1636	1726					
Shells-Slate	Lt	H&S	1675	1736					
Shale	Br	S	1726	1742					
Berea	Gr	H	1736	1771					
Slate&Shells	Dk	S	1742	1892					
Shell-Slate	Lt	H&S	1771	1949					
Slate&Shells	Wh	S	1892	1959					
Shell	Dk	H	1949	2002					
Slate-Shell	Wh	H&S	1959	2027					
Shell	Dk	H	2002	2031					
Slate	Lt	S	2027	2046					
Shell	Dk	H	2031	2662					
Slate-Shell	Wh	S	2046	2846					
Slate	Dk	S	2624	2856					
Slate&Shells	Wh	S&H	2662	2975					
Shells	Dk	H	2846	3005					
Slate&Shells	Wh	S&H	2856	3025					
Shale - AAA	Br	M	2975	3096					
Shells	Br	H	3005	3119					
Slate&Shells	Dk	S&H	3025	3153					
Shell-Slate	Wh	H&S	3096	3178					
Slate	Dk	S	3119	3244					
Slate&Shells	Dk	S	3153	3274					
Slate&Shells	Wh	S	3178	3299					
Shale - AAA	Br	S	3244	3329					
Slate&Shells	Dk	M	3274	3489					
Slate	Lt	S	3299	3502					
Shale	Br	S	3329						
Shell&Shale	Dk	H&S	3489						



1) Date: March 4, 19 85
 2) Operator's Well No. Bull Creek #18
 3) API Well No. 47 - 005 - 0519-FRAC
 State County Permit

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES, OIL AND GAS DIVISION
 APPLICATION FOR A WELL WORK PERMIT

4) WELL TYPE: A Oil / Gas
 B (If "Gas", Production / Underground storage / Deep / Shallow)
 5) LOCATION: Elevation: 791.4' Watershed: Bull Creek
 District: Peytona County: Boone Quadrange: Racine
 6) WELL OPERATOR Cabot Oil & Gas Corporation of WV DESIGNATED AGENT Robert E. Horrell
 Address P.O. Box 628 8150 Address P.O. Box 628
Charleston, WV 25322 Charleston, WV 25322
 8) OIL & GAS INSPECTOR TO BE NOTIFIED Name Jerry Holcomb
 Address Rural Rt. #1, Box 28
Hamlin, WV 25523 824-3337
 9) DRILLING CONTRACTOR: Name UNKNOWN
 Address _____
 10) PROPOSED WELL WORK: Drill / Drill deeper / Redrill / Stimulate
 Plug off old formation / Perforate new formation
 Other physical change in well (specify) _____

11) GEOLOGICAL TARGET FORMATION, ORISKANY
 12) Estimated depth of completed well, 5085 feet
 13) Approximate trata depths: Fresh, 83 feet; salt, _____
 14) Approximate coal seam depths: 40-42 Is coal being mined in the area?

15) CASING AND TUBING PROGRAM WORKOVER

CASING OR TUBING TYPE	SPECIFICATIONS				FOOTAGE INTERVALS		CEMENT FILL OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling			Left in well
Conductor	10					EXISTING	56	
Fresh water								
Coal	8					EXISTING	1125	
Intermediate	7					EXISTING	4304	
Production	4-1/2					EXISTING	5077	100 sks.
Tubing	1-1/2		2.75	X		PROPOSED	5060	
Liners								

RECEIVED
 MAR 13 1985

OIL & GAS DIVISION
 DEPT. OF MINES

Depths set
 By Rule 15.01
 Perforations:
 Top Bottom

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-005-0519-FRAC Date April 1, 19 85

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires April 1, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>30</u>	<u>SW</u>	<u>gnt</u>	<u>16814</u>	

Jerry M. Tephah
 Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

File

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Page one

WELL RECORD

Permit No. BCO-519

Oil or Gas Well. Gas
(KIND)

Company. <u>The Owens, Libbey-Owens Gas Department</u>	Casing and Tubing	Used in Drilling	Left in Well	Packers
Address <u>P. O. Box 1375, Charleston, W. Va.</u>	Size			
Farm <u>Bull Creek Coal Land Co.</u> Acres. <u>4000</u>	16.			Kind of Packer <u>Spang</u>
Location (waters) <u>Bull Creek</u>	13.			<u>Gas Anchor-Step</u>
Weil No. <u>621</u> Elev. <u>791.4 Gr.</u>	10.	<u>56'</u>	<u>56'</u>	<u>Expanding</u>
District <u>Peytona</u> County <u>Boone</u>	8 1/4.	<u>1,125'</u>	<u>1,125'</u>	Size of <u>6-5/8" x 2-3/8" x 3" x 30</u>
The surface of tract is owned in fee by <u>Bull Ck. Coal Ld. Co.</u>	6 3/16.	<u>4,304'</u>	<u>4,304'</u>	Depth sec. <u>4359'</u>
<u>805 Elliott Square</u> Address <u>Buffalo, N. Y.</u>	3.	<u>4,409'</u>	<u>4,409'</u>	Perf. top <u>4394'</u>
Mineral rights are owned by <u>Same</u>	2.			Perf. bottom <u>4399'</u>
Address _____	Liners Used _____			Perf. top <u>4359'</u>
Drilling commenced <u>September 21th, 1941</u>				Perf. bottom <u>4409'</u>
Drilling completed <u>January 8th, 1942</u>				
Date Shot <u>No</u> From _____ To _____				
With _____				
Open Flow <u>18</u> /10ths Water in _____ <u>2</u> Inch				
_____ /10ths Merc. in _____ Inch	CASING CEMENTED _____ SIZE _____ No. Ft. _____ Date _____			
Volume <u>179,000</u> Cu. Ft.				
Rock Pressure <u>1000</u> lbs. <u>24</u> hrs.				
Oil _____ bbls., 1st 24 hrs.	COAL WAS ENCOUNTERED AT <u>40</u> FEET <u>21</u> INCHES			
Fresh water <u>83'</u> feet _____ feet	_____ FEET _____ INCHES _____ FEET _____ INCHES			
Salt water _____ feet _____ feet	_____ FEET _____ INCHES _____ FEET _____ INCHES			

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Surface	yellow	soft	0	13			
Sand	light	soft	13	40			
Coal	black	soft	40	42			
Sand	white	soft	42	56			
Slate	white	soft	56	61			
Sand	white	hard	61	80			
Slate	light	soft	80	85	Fresh Water	83'	Hole Full
Sand	white	hard	85	139			
Slate	white	soft	139	146			
Sand	white	hard	146	233			
Slate	black	soft	233	276			
Sand	white	hard	276	346			
Slate & Shells	dark	soft	346	368			
Sand	white	hard	368	448			
Slate	dark	soft	448	453			
Sand	white	hard	453	495			
Slate	dark	soft	495	501			
Sand	white	hard	501	580			
Slate	dark	soft	580	584			
Sand	light	hard	584	626			
Slate	dark	soft	626	673			
Sand	white	hard	673	688			
Slate	white	soft	688	690			
Sand	white	hard	690	714			
Slate	dark	soft	714	720			
Sand	light	hard	720	730			
Slate	white	soft	730	735			
Sand	white	hard	735	775			
Slate	dark	soft	775	781			
Sand Shell	white	hard	781	786			
Red Rock	red	soft	786	815			
Slate	dark	soft	815	823			
Sand	white	hard	823	937			
Slate	white	soft	937	948			
Red Rock	red	soft	948	957			
Slate	light	soft	957	973			
Lime Shells	white	soft	973	982			
Shell	white	hard	982	986			
Slate	light	soft	986	1025			
Shell	dark	hard	1025	1033			
Slate	light	soft	1033	1034			
Lime	dark	hard	1034	1098			

(Over)

1-2-20-2

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Slate	white	soft	1098	1100			
Big Lime	gray	hard	1100	1125			
Big Lime	white	hard	1125	1273			
Big Injun	red	hard	1273	1311	Gas	1289-1298'	39,000 Cu. Ft.
Slate	white	soft	1311	1320			
Slate & Shells	dark	soft	1320	1355			
Shells	dark	hard	1355	1365			
Slate	dark	soft	1365	1375			
Shells	dark	hard	1375	1386			
Shells	gray	hard	1386	1404			
Slate	white	soft	1404	1407			
Slate	dark	soft	1407	1414			
Shells	gray	hard	1414	1429			
Slate & Shells	gray	soft	1429	1524			
Shells	white	hard	1524	1544			
Slate	light	soft	1544	1554			
Slate & Shells	gray	soft	1554	1636			
Slate	dark	soft	1636	1646			
Shells	dark	hard	1646	1666			
Slate	dark	soft	1666	1675			
Shells	gray	hard	1675	1691			
Slate	white	soft	1691	1726			
Shale	brown	soft	1726	1736			
Berea	gray	hard	1736	1742			
Slate & Shells	dark	hard	1742	1761			
Slate	dark	soft	1761	1771			
Shell	white	hard	1771	1812			
Slate	light	soft	1812	1819			
Shell	black	hard	1819	1832			
Shale	gray	hard	1832	1842			
Slate	light	soft	1842	1847			
Shell	gray	hard	1847	1862			
Slate	light	soft	1862	1892			
Slate & Shells	white	soft	1892	1949			
Shell	black	hard	1949	1959			
Slate	white	soft	1959	1981			
Shell	white	hard	1981	1987			
Slate	white	soft	1987	2002			
Shell	dark	hard	2002	2027			
Slate	light	soft	2027	2031			
Shell	dark	hard	2031	2046			
Slate	light	soft	2046	2097			
Slate & Shells	white	soft	2097	2171			
Slate	white	soft	2171	2231			
Shell	gray	hard	2231	2240			
Slate	white	soft	2240	2245			
Slate & Shells	white	soft	2245	2297			
Slate	white	soft	2297	2470			
Slate Shells	white	soft	2470	2509			
Slate	white	soft	2509	2624			
Slate	dark	soft	2624	2662			
Slate	white	soft	2662	2727			
Shells	white	hard	2727	2742			
Slate	white	soft	2742	2846			
Shells	dark	hard	2846	2856			
Slate	white	soft	2856	2875			
Shells	white	hard	2875	2886			
Slate	white	soft	2886	2945			
Shell	white	hard	2945	2960			
Slate & Shells	light	medium	2960	2975			
Shale	brown	medium	2975	3005			
Shells	brown	hard	3005	3025			
Slate & Shells	dark	hard	3025	3065			
Slate	dark	soft	3065	3075			
Shell	dark	hard	3075	3080			
Slate	dark	soft	3080	3096			
Shell	white	hard	3096	3104			
Slate	white	soft	3104	3119			
Slate	dark	soft	3119	3153			

Date _____, 194

APPROVED _____, Owner

By _____ (Title)

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION

Page three

800-519

WELL RECORD

Permit No.

Oil or Gas Well (KEDD)

Company.....	Casing and Tubing	Used in Drilling	Left in Well	Packers
Address.....	Size			
Farm..... Acres.....	16.....			Kind of Packer.....
Location (waters).....	13.....			
Well No..... Elev.....	10.....			Size of.....
District..... County.....	8 1/4.....			Depth set.....
The surface of tract is owned in fee by.....	6%.....			
Address.....	5 3/16.....			Perf. top.....
Mineral rights are owned by.....	3.....			Perf. bottom.....
Address.....	2.....			Perf. top.....
Drilling commenced.....	Liners Used.....			Perf. bottom.....
Drilling completed.....				
Date Shot..... From..... To.....				
With.....				
Open Flow /10ths Water in..... Inch	CASING CEMENTED.....	SIZE.....	No. Ft.....	Date.....
/10ths Merc. in..... Inch				
Volume..... Cu. Ft.	COAL WAS ENCOUNTERED AT.....	FEET.....	INCHES.....	
Rock Pressure..... lbs..... hrs.	.....	FEET.....	INCHES.....	
Oil..... bbls., 1st 24 hrs.	.....	FEET.....	INCHES.....	
Fresh water..... feet..... feet	.....	FEET.....	INCHES.....	
Salt water..... feet..... feet	.....	FEET.....	INCHES.....	

Formation	Color	Hard or Soft	Top	Bottom	Oil, Gas or Water	Depth Found	Remarks
Slate & Shells	dark	soft	3153	3178			
Slate & Shells	white	soft	3178	3236			
Slate	white	soft	3236	3244			
Shale	brown	soft	3244	3274			
Slate & Shells	dark	medium	3274	3299			
Slate	light	soft	3299	3329			
Shale	brown	soft	3329	3489			
Shell	dark	hard	3489	3496			
Shale	dark	soft	3496	3502			
Shale	brown	soft	3502	3524			
Slate	white	soft	3524	3586			
Slate & Shells	dark	soft	3586	3610			
Shell	dark	hard	3610	3616			
Slate	light	soft	3616	3762			
Shell	dark	hard	3762	3766			
Slate	white	soft	3766	3957			
Shell	white	hard	3957	3972			
Slate	white	soft	3972	3977			
Shale	brown	soft	3977	4290			
Corniferous	light	hard	4290	4379			
Oriskany	light	hard	4379	4390	Gas	4384-4387'	179,000
Lime	light	hard	4390	4409			
Total Depth				4409			

3

IV-39-WC

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

ANNUAL REPORT OF MONTHLY PRODUCTION-1977
GAS VOLUMES IN MFC @ 14.73
OIL IN DARRELLS @ 60 DEGREES
OPERATOR : Industrial Gas Corporation

REPORT NO. CCA151P1 PG 0002
CURRENT DATE - 2/28/79
REPORT DATE - 2/28/79

47-005-00519

API	FARM	Bull Creek	18-621	COUNTY	Boone	AVG. FLOW PRESSURE				SHUT-IN PRESSURE				TOTALS
GAS MFC	1650	1233	1219	1540	632	0	0	214	1214	1495	1346	1860	GAS	11605
OIL BBL	J-	F-	M-	A-	M-	J-	J-	A-	S-	O-	H-	D-	OIL	
DAYS ONLINE	35	29	22	35	16	0	0	5	35	28	28	28		261

1977

						AVG. FLOW PRESSURE				SHUT-IN PRESSURE				TOTALS
GAS MFC	1362	1031	744	1219	1015	1205	944	920	1210	1292	1161	1538	GAS	13,641
OIL BBL	J-	F-	M-	A-	M-	J-	J-	A-	S-	O-	H-	D-	OIL	
DAYS ONLINE	35	29	21	35	28	35	28	28	35	28	28	30		366

1978

SUMMARIZATION SCHEDULE
Section 271. 804 (b)

In accordance with Section 271.804(b) please list all other wells which are to be used in determining this well classification under Part 271 Subpart H.

API NUMBERS 47-005-0446; 47-005-0162; 47-005-0499; 47-005-0519; 47-005-0537; 47-005-0555; 47-005-0567
47-005-0602; 47-005-0640; 47-005-0710; 47-005-0936; 47-005-1010



STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
Charleston, West Virginia 25311

ARCH A. MOORE, JR.
Governor

Commissioner

This is to acknowledge that the wells listed on the reverse of this form are hereby transferred from Cabot Oil & Gas Corporation of West Virginia (the transferor) to Cabot Oil & Gas Corporation (the transferee).

The transferee by this document is accepting all responsibility for compliance with the provisions of Chapter 22B, Article 1 of the West Virginia Code and all rules and regulations promulgated thereunder, for the listed wells.

The transferee's designated agent (name) Dave McCluskey, Cabot Oil & Gas Corp., (address) P. O. Box 1473, Charleston, WV 25325

is on file with the Division of Oil and Gas.

The transferee has bonded the said wells by securities, cash, or surety (circle one) bond identified below by amount, effective date, issuing authority, and any identifying number. Blanket Bond - \$50,000 - Number Ko305008-18 Effective Date: June 6-1988

Insurance Company of North America

(Transferee) Cabot Oil & Gas Corporation, successor
By [Signature] in interest to Cabot Oil & Gas Corp. of WV
Its Vice President

Taken, subscribed and sworn to before me this 19th day of June, 1991

Notary Public [Signature]

My commission expires March 28 1995

(Transferor) Cabot Oil & Gas Corporation of West Virginia

By See Attached

Its _____

Taken, subscribed and sworn to before me this _____ day of _____, 19____

Notary Public _____

My commission expires _____ 19____

Computer
copy
Copies

JUN 25 91

ACCEPTED THIS 26 DAY OF June, 1991

BY: [Signature]
Director - Division of Oil and Gas