

Company CABOT OIL & GAS CORP. OF WV
 Address P.O. Box 628, Charleston W.Va.
 Farm The Putnam Co.
 Tract _____ Acres 22000 Lease No. 3-464
 Well (Farm) No. 41 Serial No. 1211
 Elevation (Spirit Level) 942.0
 Quadrangle Kenna NW
 County Jackson District Ripley
 Engineer Roy Boston
 Engineer's Registration No. _____
 File No. _____ Drawing No. _____
 Date 6-11-46 Scale 1" = 660

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

WELL LOCATION MAP
 FILE NO. JAC-524-Frac.

+ 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.

JUL 16 1984

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

Wva Gov

Howard Hopkins



Outline of Jabel Tract

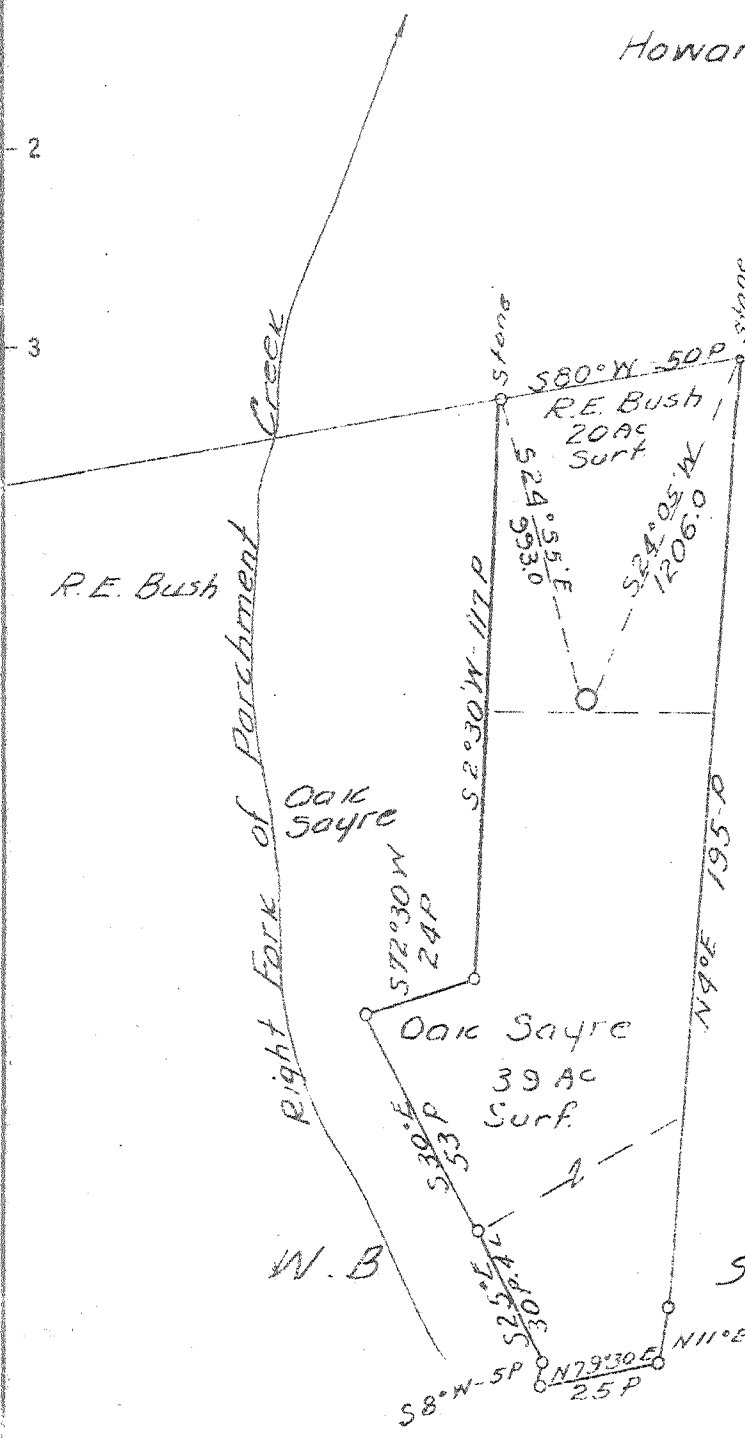
(+) Topo Location

Howard Hopkins

3.57 - S
~~3.62 - S~~
~~2.93 - W~~
 2.90 - W

Oak Sayre

Stalnaker



New Location Revised Loc.
 Drill Deeper
 Abandonment

Company Godfrey L Cabot Inc.
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Deep Well



I: -35
(REV 8-01)

RECEIVED
OCT 2 - 1984
OIL & GAS DIVISION
DEPT. OF MINES

State of West Virginia
Department of Mines
Oil and Gas Division

Date September 27, 1984
Operator's Well No. 41
Farm Putnam
API No. 47 - 035 - 0524

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

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

LOCATION: Elevation: 942' Watershed Right Fork of Parchment
District: Ripley County Jackson Quadrangle Kenna

COMPANY Cabot Oil & Gas Corp. of WV
ADDRESS Box 628, Charleston, WV 25322
DESIGNATED AGENT Robert E. Horrell
ADDRESS Box 628, Charleston, WV 25322
SURFACE OWNER Joseph G. Guereschi & Mrs. Sarah Guereschi
ADDRESS 24 Glenridge Rd., Whitesboro, NY 13492
MINERAL RIGHTS OWNER Kanawha Valley Bank Frank A. Hardy, et al
ADDRESS c/o Trust Dept., P. O. Box 1793 Charleston, WV 25326
OIL AND GAS INSPECTOR FOR THIS WORK Jerry Tephabock ADDRESS Rt. 1, Box 101-A, Ripley, WV 25271
PERMIT ISSUED 7/13/84
WORKOVER
DRILLING COMMENCED 7/31/84 ✓
WORKOVER
DRILLING COMPLETED 8/19/84 ✓

Casing & Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size 20-16 Cord.			
13-10"			
9 5/8			
8 5/8			
7	squeezed	4481-3870	w/75 sks
5 1/2			
4 1/2			
3			
2-3/8	pulled	5228	
	ran	4362.90	

GEOLOGICAL TARGET FORMATION Huron Shale Depth 4200-4424 feet
Depth of completed well PBTD 4450 feet Rotary X / Cable Tools
Water strata depth: Fresh feet; Salt feet
Coal seam depths: Is coal being mined in the area?

OPEN FLOW DATA
Producing formation Huron Shale Pay zone depth 4206-4416 feet
Gas: Initial open flow Mcf/d Oil: Initial open flow Bbl/d
8 hr. Final open flow 103 Mcf/d Final open flow Bbl/d
Time of open flow between initial and final tests hours
Static rock pressure 840 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

NOV 05 1984

DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.
 MIRU Pool Well Service. Plugged back Oriskany w/cmt. plug from 5197-4997'. Gell from 4997-4497'.
 POOH w/tbg. Total 164 jts. of 11-1/2 V 2-3/8" EUE tbg. Total 5228'. Shot squeeze perfs
 from 4490-91'. Retainer would not set. Shot squeeze perfs 4480-81' Set cement retainer @
 4450'. Squeezed 7" csg. w/75 sks. 50/50 poz, 3% CaCl₂, 3/4 of 1% D-31. Perforated Huron
 Shale 4206-4252' (6 holes) 4326-4388' (9 holes) 4410-4416' (4 holes). Ran 3-1/2" tbg.
 Set RTTS @ 4165'. R/U B. J. Hughes. Pressure up on 3-1/2 x 7 annulus to 400 psi. Dumped
 500 gals. 15% HCL broke down with N₂ @ 1580#. ISIP 1410#. Treated w/1,000,000 SCF N₂.
 44,000 SCF/min. @ 2830 PSI. Pumped 100 bbls. foam pad, 7.5 bbls./min. treated H₂O,
 13,000 SCF of N₂, 75 quality foam. AIR 30 bbls./min., ATP 2900 PSI, total sand 302 sks.
 20/40. Maximum sand concentration 2-1/2#/gal. T.F. 168, S/L 102, ISIP 1600#, 15 min. 420.
 Total N₂ 1,280,000 SCF. Released thru 1/8" choke. Ran 4362.90'. Seating collar set @
 4362.90'. Ran tbg. broach. 2-3/8" EUE tbg. SICP 840 psi. SITP 840 psi. 8 hr. open flow
 thru 2" 6/10 H₂O = 103 MCFD.

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 Corporation of West Virginia
 Well Operator

By: Robert E. Herrell

Date: September 27, 1984

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

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

Permit No. Jac 524

Gas Well
CASING & TUBING

Kenna Quad.

Company Godfrey L. Cabot, Inc.

Address Charleston, W.Va. 13 3/8 48# 401 401 *

Farm The Putnam Company A 10 3/4 35.75 1105 1105 *-

Location 8 5/8 24 2325 2325

Well No. 41-serial 1211 Elev. 942.8 7 22& 24 5098 5098

District Ripley Jackson County

Surface * Half coupling casing shoe

Mineral *- Half Coupling casing shoe

Commenced Aug. 7, 1946 B.H. Packer

Completed Dec. 20, 1946 8 5/8 x 10 x 16"

Date shot Dec. 30, 1946-40 qts. Depth 5185 to 5205 7" x 8 5/8 x 15

B. S. 158 M A.S. 40 min. after 1,715 M Lead Spang B.H.

Open flow 381 MCF gas Packer # 20960

Rock Pressure 1650 lbs. in 17 hrs. Oriskany Tubed and shut in 12-30-46

1696 lbs. in 60 hrs. Perf. top 5204 bot 5210

Fresh Water 75' 2 blrs. per hr. " top 5224 bot 5230

Salt Water 1045 not enough to drill with

1860 H.F.

Red Clay 0 200 Sand- *381 MCF* 2270 2310

Slate 200 233 Lime Bk 2310 2340

Red Rock 233 275 Safety and Shells 2340 2500

Shale 275 305 Slate 2500 2660

Red Rock 305 395 Berea Sand 2660 2675

Slate 395 410 Slate & Shells 2675 3400

Red Rock 410 425 Slate Wh 3400 3905

Slate 425 455 Brown Shale 3905 4070

Red Rock 455 505 Slate 4070 4120

Sand 505 530 Brown Shale 4120 4260

Red Rock 530 540 Slate 4260 4300

Sand 540 550 Brown Shale 4300 4420

Red Rock 550 560 Slate 4420 4840

Slate 560 590 Brown Shale 4840 5044

Red Rock 590 620 Shale Bk - *MARCELLUS* 5044 5084

Sand 620 640 Corniferous - *463* 5084 5178

Slate & Shell 640 660 Oriskany 5178 5215

Red Rock 660 670 Lime - *held* 5215 5228

Slate 670 690

Red Rock 690 710 Total Depth *485* SLM 5215

Slate 710 740 *5228*

Slate 740 760 *5230*

Red Rock 760 810 Gauges in Oriskany

Lime Shells 810 815 Gas 5186-52 MCF 5197-99 207 MCF

Red Rock 815 870 5199-5203, 381 MCF

Sand Gr 870 900

Red Rock 900 920 PRODUCING SAND RECORD

Slate 920 945 Oriskany Depth 5186 to 5205 B.S. 381 MCF

Red Rock 945 955

Slate 955 1040

Sand Gr 1040 1055

Slate 1055 1062

Lime Bl 1062 1075

Red Rock 1075 1095

Slate & Shells 1095 1230

Lime Pink 1230 1250

Slate 1250 1265

Sand Gr 1265 1325

Slate & Shell 1325 1415

Sand Gr 1415 1450

Slate Bk 1450 1485

Sand 1485 1545

Slate & Shell 1545 1720

Sand 1720 1745

Slate & Shell 1745 1830

Sand - *Salt Sand* 1830 2020

Lime 2020 2040

Big Lime 2040 2195

Sand - *Injun* 2195 2260

Slate 2260 2270

WELL RECORD

Map Square
Lot No.
Warrant No. 48-32

RIAL NO. 1211 OPERATING DISTRICT PN. No. 41 LEASE NO. 3-164

FORM The Putnam Company TAX DISTRICT STATE West Virginia

COUNTY Jackson TOWNSHIP Ripley

DRILLING COMMENCED August 7, 1946 DRILLING COMPLETED December 20, 1946

DRILLER D. E. Williamson & Son ADDRESS 818 Orchard St., Charleston, W. Va.

ROCK PRESSURE RECORD PRODUCING SAND RECORD

Sand 1650 lbs. in 17 hrs. Oriskany Sand, from 5185 to 5205 Init. Prod. Before Shot C. F. Gas 331

Sand 1696 lbs. in 60 hrs. Sand, from to Init. Prod. M. C. F. Gas

Sand lbs. in hrs. Sand, from to Init. Prod. M. C. F. Gas

CASING RECORD

OPEN FLOW	Flow Condition:	inch opening	SIZE	WEIGHT	USED IN DRILLING	LEFT IN WELL	HOW CASING SET
Water	Mercury in		13-3/8	48	401	401	Half coupling casing shoe
24 HOUR PRODUCTION TEST AFTER TUBING	M. C. F.		10-3/4	35.75	1105	1105	" " " "
Line Pressure			8-5/8	24	2325	2325	8-5/8" x 10" x 16" B.H. Packer # 20478
Bbls. Oil in 24 Hours			7"	22 & 24	5098	5098	7" x 8-5/8 x 15 Lead Spang B.H. packer # 20960

DATE AND SHUT IN Date 12-30-46

Size None Kind

Depth Size Anchor

SHOOTING RECORD

Top 5204 Bottom 5210 Acid Shot with 40 Quarts from 5185 to 5205 Date December 30, 1946

Top 5224 Bottom 5230 Gauge Before Shot 158M Gauge 40 Min. After Shot 1,715M

ELEVATION: 942.8

FORMATION	COLOR	TOP	BOTTOM	STEEL LINE MEASUREMENTS	HARD OR SOFT	OIL, GAS OR WATER	DEPTH FOUND	REMARKS
Clay		0	200			Water	75	2 Bailers per Hour
ate		200	233					
d Rock		233	275					
ale		275	305					
d Rock		305	395					
ate		395	410					
edrock		410	425					
late		425	455					
edrock		455	505					
and		505	530					
edrock		530	540					
and		540	550					
edrock		550	560					
late		560	590					
edrock		590	620					
and		620	640					
late and Shell		640	660					
edrock		660	670					
late		670	690					
edrock		690	710					
late		710	740					
late	Wh.	740	760					
edrock		760	810					
o Shells		810	815					
edrock		815	870					

RECEIVED
OCT 2 - 1984
OIL & GAS DIVISION
DEPT. OF MINES

NOV 05 1984

FORMATION	COLOR	TOP	BOTTOM	STEEL LINE MEASUREMENTS	HARD OR SOFT	OIL, GAS OR WATER	DEPTH FOUND	REMARKS
nd	Gr.	870	900					
drock		900	920					
ate		920	945					
drock		945	955					
ate		955	1040					
nd	Gr.	1040	1055			Water	1045	Not enough to drill with
ate		1055	1062					
ime	Blue	1062	1075					
drock		1075	1095					
ate and Shells		1095	1230					
ime	Pink	1230	1250					
ate		1250	1265					
nd	Gr.	1265	1325					
ate and Shell		1325	1415					
and	Gr.	1415	1450					
ate	Black	1450	1485					
and		1485	1545					
ate and Shell		1545	1720					
and		1720	1745					
ate and Shell		1745	1830					
and		1830	2020			Water	1860	Hole Full
ime		2020	2040					
ig Lime		2040	2195					
and		2195	2260					
ate		2260	2270					
and		2270	2310					
ime	Black	2310	2340					
afety and Shells		2340	2500					
ate		2500	2660				2660	508.4
area Sand	-1717	2660	2675				543	943
ate and Shells		2675	3400				1717	4141
ate	White	3400	3905					
rown Shale		3905	4070	165				
ate		4070	4120				4420	
rown Shale		4120	4260	140			3705	
ate		4260	4300				515	
rown Shale		4300	4420	170				
ate		4420	4840					
rown Shale		4840	5044					
hale	Black	5044	5084	277				
orniferous	-4141	5084	5178					Gauges in Oriskany.
Oriskany		5178	5215			Gas	5186	52MCF 5197-99 = 207 MCF.
ime		5215	5228	5215				5199-5203 = 381 MCF.

TOTAL DEPTH 5228

DATE

APPROVED

FORE

