



Company F. S. DEEM & J. L. SWADLEY

Address HARRISVILLE, W. VA.

Farm BOSO & RITCHIE INC.

Tract _____ Acres R39+ Lease No. _____

Well (Farm) No. 2 Serial No. _____

Elevation (Spirit Level) 1028.4

Quadrangle RIPLEY

County JACKSON District RAVENSWOOD

Engineer B. F. RINEHART

Engineer's Registration No. 648

File No. _____ Drawing No. 741-RJ

Date Apr. 2, 1949 Scale 1 in. = 600 ft.

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

WELL LOCATION MAP
 FILE NO. JAC-669

+ 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.

66-281



State of West Virginia
Department of Mines
Oil and Gas Division

Date July 15, 1985
Operator's
Well No. SIV 30
Farm Boso & Ritchie, Inc.
API No. 47 - 035 - 0669-DD

RECEIVED
JUL 29 1985

W. VA. OIL & GAS
CONSERVATION COMMISSION

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: 1028.4 Watershed Branch of Lick Run
District: Ravenswood County Jackson Quadrangle Sandyville 7.5

COMPANY Kaiser Exploration & Mining Company
ADDRESS P. O. Box 8, Ravenswood, WV 26164
DESIGNATED AGENT R. A. Pryce
ADDRESS Same
SURFACE OWNER Jeanne Ritchie Labertson
ADDRESS 118 Penwood Road, Baking Ridge, NJ 07092
MINERAL RIGHTS OWNER Same
ADDRESS _____
OIL AND GAS INSPECTOR FOR THIS WORK Jerry Tephabock
ADDRESS Rt. 1, Ripley, WV 25271

Casing Tubing	Used in Drilling	Left in Well	Cement fill up Cu. ft.
Size <u>20-16</u> Cord.	26	26	N/A
<u>13-10^{3/4}</u>	1020	820	N/A
<u>9 5/8</u>			
<u>8 1/4</u>	1580	620 (used as liners)	
<u>7</u>	2240	2240	N/A
<u>5 1/2</u>			
<u>4 1/2</u>	5476	5476	250 sks 50/50 poz 10% salt. 2 1/2#/sk Gilsonite
<u>3</u>			
<u>2</u>			
Liners used			

PERMIT ISSUED _____
DRILLING COMMENCED Deeper 7/19/84
DRILLING COMPLETED Deeper (7/23/84)
IF APPLICABLE: PLUGGING OF DRY HOLE ON CONTINUOUS PROGRESSION FROM DRILLING OR REWORKING. VERBAL PERMISSION OBTAINED ON _____

GEOLOGICAL TARGET FORMATION Berea Depth 2486-2492 feet
Depth of completed well 2505-554 feet Rotary X / Cable Tools _____
Water strata depth: Fresh N/A feet; Salt -- feet
Coal seam depths: None Is coal being mined in the area? NO
Drilled on fluid not known.

OPEN FLOW DATA
Producing formation Berea Pay zone depth 2486-2492 feet
Gas: Initial open flow -- Mcf/d Oil: Initial open flow 2 Bbl/d
Final open flow -- Mcf/d Final open flow (1) Bbl/d
Time of open flow between initial and final tests 24 hours
Static rock pressure -- psig (surface measurement) after -- hours shut in
(If applicable due to multiple completion--)
Second producing formation Devonian Br. Shale Pay zone depth 3943-4147 feet
Gas: Initial open flow -- Mcf/d Oil: Initial open flow -- Bbl/d
Final open flow (330) Mcf/d Oil: Final open flow -- Bbl/d
Time of open flow between initial and final tests 4 hours
Static rock pressure 700 psig (surface measurement) after 72 hours shut in

(REVISED)

DETAILS OF PERFORMED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC.

Between 1948-1951 feet, Berea shot 50 qts + 850# gelatin
 7/11/84 FILL shut hole - NOWSCO 75 sks 50/50 pozmix, 12#/sk Gilsonite, 10% salt
 Drill deeper to Newburg.
 9/18/84 Young's perf Brown Shale. Set permanent plug at 4220'. 19 holes (.39") dia.
 from 3943 to 4147 *Huron*
 9/19/84 NOWSCO foam frac Brown Shale. Used 60,000# 20/40 sand; total N₂: 672 mscf;
 total sand laden fluid: 199. bbl; total fluid: 279 bbl; ISIP: 1390 psig;
 5 min SIP: 1070 psig.

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 original well record for shallow horizons					
deeper drilling) started @ 2500')					
Shale	- Upr. Ben undiff		2500	3648	
Brown Shale	- Huron		3648	4152	S/G
Shale	- Young's		4152	4502	plug back @ 4220
Marcellus Shale	- Chautauq		4502	4740	
Onondaga Limestone			4740	4826	
Oriskany Sandstone			4826	4858	
Helderberg Limestone			4858	4956	
Dolomite			4956	5540	
Newburg (Williamsport) Sand			5540	5545	Salt water
TOTAL DEPTH:			5546		

(Attach separate sheets as necessary)

KAISER EXPLORATION AND MINING COMPANY
 Well Operator
 By: Z. A. P.
 Date: July 15, 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."

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

Permit No. Jac 669

Oil Well
CASING & TUBING

Ripley Quad.				
Company	F.S. Deem & L.J. Swadley			
Address	Harrisville, W.Va.	16	26	26
Farm	Boso and Ritchie, Inc. A 239	10	1020	820
Location		8 1/2	1500	620
Well No.	2 Elev. 1028.4	6 5/8	2240	2240
District	Ravenswood Jackson County	2		2497
Surface	Boso and Ritchie, Ravenswood			PACKER
Mineral	Same			Comb. Wall and Anchor
Commenced				Size 6 5/8 x 2
Completed	-- 5/5/1948 O&G Div. An. Rept.			Depth 2254
Date shot	-- Depth 2486 to 2496			
Oil	with 50 qts. glycerine 850# gelatin			
Water	2 bbls. 1st 24 hrs.			Perf. top 2470
	590' blr. per hr.; 790'; 940'			bot 2497
	1350'; 1410'			

Red Rock	0	235
Dark Slate	235	245
Red Rock	245	274
Sand	274	297
Red Rock	297	332
Lime	332	340
Red Rock	340	351
Slate & Shells	351	356
Red Rock	356	381
Slate & Shells	381	426
Sand	426	432
Red Rock	432	446
White Slate	446	461
Red Rock	461	526
Sand	526	596
Slate & Shells	596	784
Sand	784	829
Black Slate	829	850
White Slate	850	907
Sand	907	970
Slate	970	1000
Red Rock	1000	1065
Lime	1065	1074
Red Rock	1074	1084
Slate & Shells	1084	1125
Pink Rock	1125	1165
White Slate	1165	1206
Slate & Shells	1206	1222
Slate Lime	1222	1242
Black Slate	1242	1267
White Slate	1267	1298
Sand	1298	1424
White Slate	1424	1485
Sand	1485	1527
Slate & Shells	1527	1557
Sand	1557	1581
Slate	1581	1605
Sand	1605	1630
Black Slate	1630	1750
Sand	1750	1780
Black Slate	1780	1838
Sand	1838	1882
Black Slate	1882	1897
Sand	1897	1904
Little Lime	1904	1914
Break - P. 1914	1914	1915
Big Lime	1915	2045
Slate & Shells	2045	2223
Gritty Lime	2223	2277
Slate & Shells	2277	2465
Slate	2465	2486
Sand	2486	2492
Total Depth		2505

A10



RECEIVED
FILE COPY

JUN 23 1984



1) Date: May 25, 19 84
 2) Operator's Well No. SIV - 30
 3) API Well No. 47 - 035 - 0669 DD
 State County Permit

Original permit filed by:
 F. S. Deem & J. L. Swadley
 Harrisville, WV

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

- 4) WELL TYPE: A Oil / Gas X /
 B (If "Gas", Production X / Underground storage / Deep X / Shallow)
 5) LOCATION: Elevation: 1028.4' Watershed: BIG RUN Branch of Lick Run (036B)
 District: Ravenswood County: Jackson Quadrangle: Sandyville 7.5'
 6) WELL OPERATOR KAISER EXPLORATION & Mining Co. 7) DESIGNATED AGENT R. A. Pryce
 Address P.O. Box 8 Address P.O. Box 8
Ravenswood, WV 26164 Ravenswood, WV 26164
 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name Jerry Tephabock Name Clint Hurt and Assoc.
 Address Rt. 1, Box 101-A Address P.O. Box 388
Ripley, WV 25271 Elkview, WV
 10) PROPOSED WELL WORK: Drill / Drill deeper X / Redrill / Stimulate X /
 Plug off old formation / Perforate new formation /
 Other physical change in well (specify) To case off Berea and drill to Newburg
 11) GEOLOGICAL TARGET FORMATION, Silurian Newburg Sandstone (Williamsport)
 12) Estimated depth of completed well, 5530 feet
 13) Approximate strata depths: Fresh, 120 feet; salt, 1350 feet.
 14) Approximate coal seam depths: None recognized Is coal being mined in the area? Yes / No X /

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	* Best	For drilling	Left in well		
Conductor	16"				X	26	26	*	see original well record Kinds <u>comb. wall & anchor</u>
Fresh water	10"				X	1020	820	*	
Coal	8 1/2"				X	1580	620	*	Sizes <u>6 5/8" x 2</u>
Intermediate	6 5/8"				X	2240	2240	*	
Production	4 1/2" N	-80	11.60	X			5510	350 sk poz	Depths set <u>2254</u>
Tubing								100 sk Class A	
Liners									Perforations: <u>Berea</u> Top <u>2470</u> Bottom <u>2497</u> <u>To be cased off</u>

* Casing presently in place from drilling of Berea Sandstone

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-035-0669DD June 29 19 84
 Date

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 June 29, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>BLANKET</u>	Agent: <u>LD</u>	Plat: <u>MH TS</u>	Casing	Fee
				<u>967-693</u>

T. L. Deem
 Administrator, Office of Oil and Gas

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