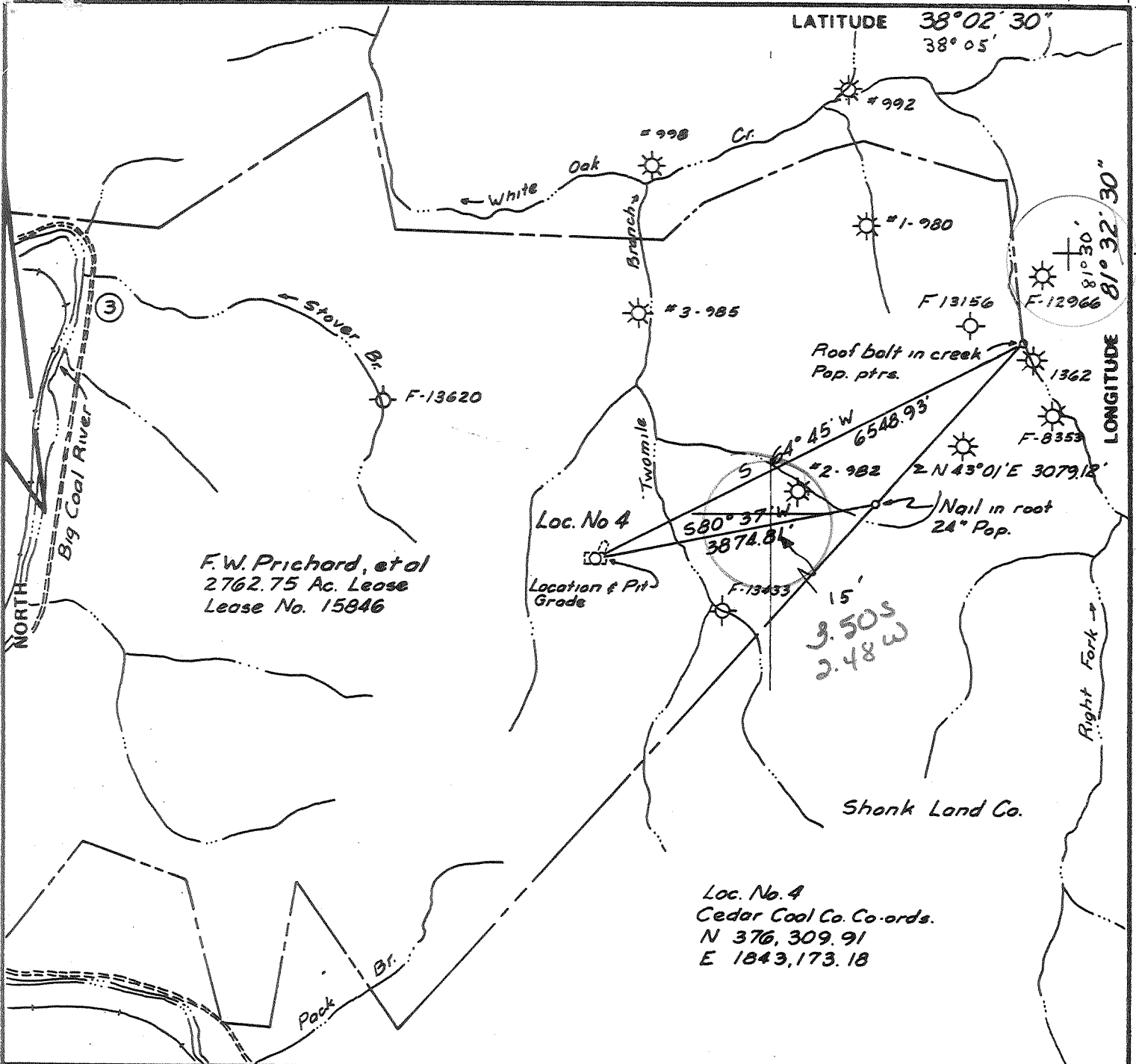


MZ 7/1/82

Plot Card GSD

810



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 2000'
 MINIMUM DEGREE OF ACCURACY 1 in 5190
 PROVEN SOURCE OF ELEVATION Cedar Coal Co. control point MZ-1 Elev. 1828.84

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 REGULATIONS ISSUED AND PRESCRIBED BY THE DEPARTMENT OF MINES

(SIGNED) John H. Burkett
 R.P.E. 1442 L.L.S. _____

PLACE SEAL HERE

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 FORM IV-6 (8-78)



DATE June 28, 19 82
 OPERATOR'S WELL NO. 4-Ser 095011
 API WELL NO. 47-005-1397
 STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
 LOCATION: ELEVATION 1675.3 WATER SHED Twomile Branch of White Oak Cr. of Big Coal River
 DISTRICT Sherman COUNTY Boone
 QUADRANGLE Sylvester Peptonia 151 SE
 SURFACE OWNER F.W. Prichard, et al ACREAGE 2762.75
 OIL & GAS ROYALTY OWNER F.W. Prichard, et al LEASE ACREAGE 2762.75
 LEASE NO. 15846
 PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION Onondaga Lime ESTIMATED DEPTH 6280' JUL 26 1982
 WELL OPERATOR Ashland Exploration, Inc. DESIGNATED AGENT Forrest Burkett
 ADDRESS P.O. Box 391 Ashland Ky 41114 ADDRESS P.O. Box 156 Brenton WV 24818



State of West Virginia

Department of Mines
Oil and Gas Division

Date 2/8/83
Operator's
Well No. 4
Farm F. W. Pritchard
API No. 47 - 005 - 1397

FEB 21 1983

RECEIVED

WELL OPERATOR'S REPORT
OF

DRILLING, FRACTURING AND/OR STIMULATING, OR PHYSICAL CHANGE FEB 10 1983

OIL AND GAS DIVISION
WV DEPARTMENT OF MINES

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

LOCATION: Elevation: 1675.3 Watershed Two mile branch of White Oak Creek of Big
District: Sherman County Boone Quadrangle Sylvester Coal River

COMPANY ASHLAND EXPLORATION, INC.
ADDRESS P.O. Box 391 Ashland, KY 41114
DESIGNATED AGENT Forrest Burkett
ADDRESS Box 156 Brenton, WV 24818
SURFACE OWNER F.W. Pritchard et al
ADDRESS P.O. Box 393 Charleston, WV 25392
MINERAL RIGHTS OWNER F. W. Pritchard et al
ADDRESS P.O. Box 393 Charleston, WV 24818
OIL AND GAS INSPECTOR FOR THIS WORK Aurther
St. Clair ADDRESS Box 157 Brenton, WV 24818
PERMIT ISSUED 7-14-83 82
DRILLING COMMENCED 8-14-83 82
DRILLING COMPLETED 8-24-83 82
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"	30'	30'	20 sks
9 5/8			
8 5/8	2170'	2170'	445 sks
7			
5 1/2			
4 1/2	6294'	6294'	260 sks
3			
2			
Liners used			

GEOLOGICAL TARGET FORMATION Onondaga Lime Depth 6280 feet
Depth of completed well 6305' feet Rotary X / Cable Tools
Water strata depth: Fresh 267' feet; Salt 1721' feet
Coal seam depths: Is coal being mined in the area? Yes

OPEN FLOW DATA

Producing formation Rhinestreet Devonian Shale Pay zone depth 5853 - 6141 feet
Gas: Initial open flow 726 Mcf/d Oil: Initial open flow Bbl/d
Final open flow 363 Mcf/d Oil: Final open flow Bbl/d
Time of open flow between initial and final tests 3 hours

Static rock pressure 1150 psig (surface measurement) after 384 hours shut in
(If applicable due to multiple completion--)
Second producing formation Weir/Big Lime Pay zone depth 2855 feet
Gas: Initial open flow 789 Mcf/d Oil: Initial open flow Bbl/d
Final open flow 430 Mcf/d Oil: Final open flow Bbl/d
Time of open flow between initial and final tests 3 hours
Static rock pressure 610 psig (surface measurement) after 384 hours shut in

(Continue on reverse side)

363
430
793
MCP
FOR

3L-2850-3007
Weir-3204-332/

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

Perf Devonian Shale 40H/5853-6141-Foam Frac w/75 quality foam 50,000# 20/40 sd & 848 mcf N₂ @ 40 B/M BD @ 3500#, ATP 3482#, MTP 3800#, ISIP 1575#

Perf Weir 50H/3204-3321-Foam Frac w/75 quality foam 50 M# 20/40 sd & 442 mcf N₂ @ 45 B/M BD @ 2200#, ATP 2418#, ISIP 1400#

Perf Big Lime 20H/2850-3007 - Acidize w/3000 gal 15% HCl BD @ 1200#, ATP 2000# @ 13 B/M ISIP 1600#

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sandy Shale			0	450	Fresh water @ 267
Sand			450	500	
Shale & Sand			500	890	
Sand			890	1095	
Shale			1095	1155	
Sand & Shale			1155	1315	
Shale			1315	1365	
Sand & Shale			1365	1520	
Sand			1520	1675	
Shale			1675	1721	
Salt Sand			1721	2110	Salt water @ 1721
Shale & Sand			2110	2203	
Upper Maxton			2203	2289	
Shale			2289	2303	
Middle Maxton			2303	2359	
Shale			2359	2460	
Stray Sand			2460	2600	
Shale & Sand			2600	2652	Sale water @ 2587
Lower Maxton			2652	2680	
Shale			2680	2700	
Little Lime			2700	2772	
Pencil Cave			2772	2776	
Big Lime			2776	3038	
Injun			3038	3077	
Shale			3077	3135	
Weir			3135	3337	
Shale			3337	3476	
Coffee Shale			3476	3498	
Berea			3498	3525	
Devonian Shale			3525	3734	
Gordon			3734	3738	
Devonian Shale			3738	6277	
Onondaga L.S.			6277	TD	

6332
3525
2807 expl. flg.

DTD 6332
LTD 6305

(Attach separate sheets as necessary)

ASHLAND EXPLORATION, INC.

Well Operator

By: Derek S. Hina

Derek S. Hina, Engineering Technician

Date: 2/8/83

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 ... encountered in the drilling of a well."

