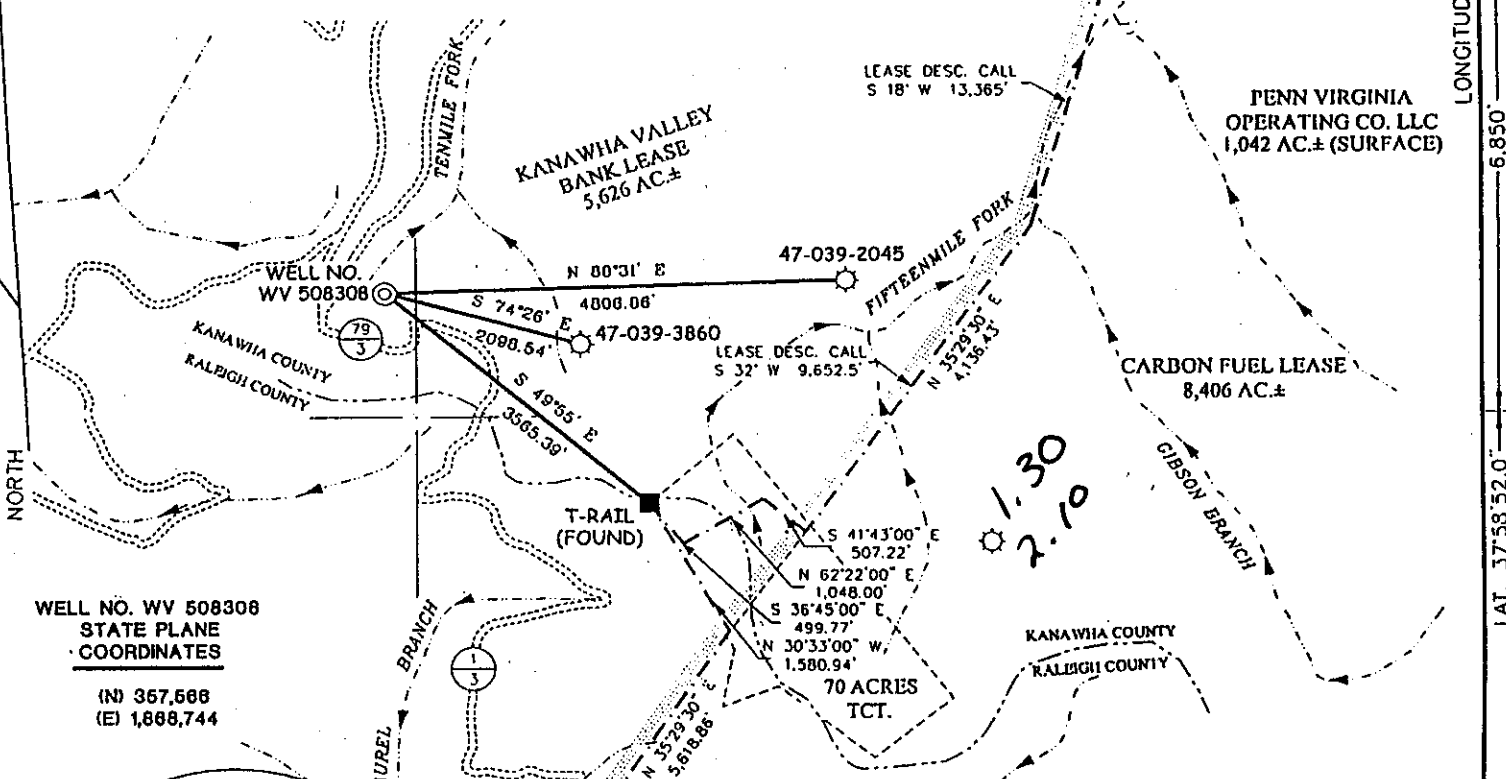


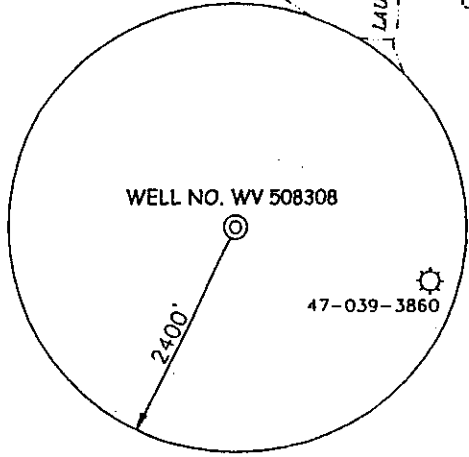
KANAWHA VALLEY BANK LEASE

5,626 ACRES ± WELL NO. WV 508308

PATRICIA A. FORD
ET AL
2,954.59 AC. ± (SURFACE)



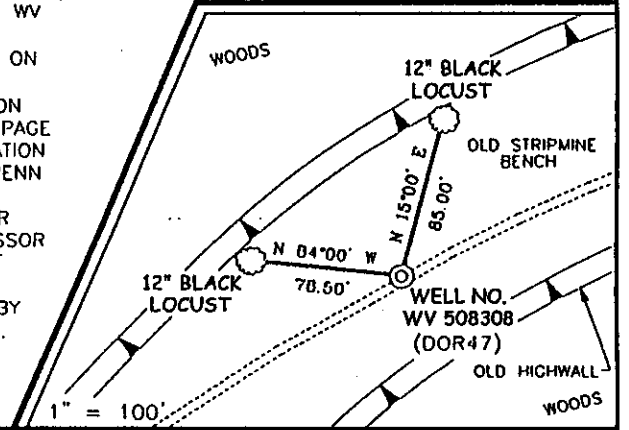
WELL NO. WV 508308
STATE PLANE
COORDINATES
(N) 367,668
(E) 1,868,744



NOTES ON SURVEY

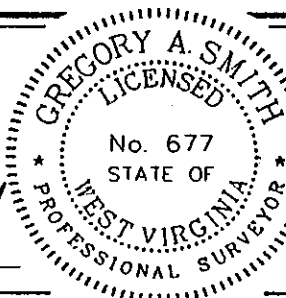
1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 5/24/02.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A LEASE BOOK 140 AT PAGE 465 ALONG WITH MAPS AND INFORMATION PROVIDED BY GARY PERSINGER OF PENN VIRGINIA OPERATING CO.,LLC.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF KANAWHA IN APRIL 2001.
5. WELL LAT./LONG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

REFERENCES



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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

DATE JUNE 11, 20 02
 OPERATORS WELL NO. WV 508308
 API WELL NO. 47-39-05502
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 4677P508308 (21-73)
 PROVEN SOURCE OF ELEVATION CARBON FUEL CONTROL POINT #8483 ELEVATION = 1,493.6'
 SCALE 1" = 2000'

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



WELL TYPE : OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION :
 ELEVATION 2,050' WATERSHED TENMILE FORK OF CABIN CREEK
 DISTRICT CABIN CREEK COUNTY KANAWHA QUADRANGLE DOROTHY 7.5'

SURFACE OWNER PATRICIA A. FORD, ET AL ACREAGE 2,954.59
 ROYALTY OWNER PATRICIA A. FORD, ET AL LEASE ACREAGE 5,626

PROPOSED WORK :
 DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER

PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION DEVONIAN SHALE
 ESTIMATED DEPTH 6,780'

WELL OPERATOR EQUITABLE PRODUCTION COMPANY DESIGNATED AGENT STEPHEN G. PERDUE
 ADDRESS P.O. BOX 2347, CHARLESTON, WV 25328 ADDRESS P.O. BOX 2347, CHARLESTON, WV 25328

6-6 262

COUNTY NAME KAN PERMIT 5502

State of West Virginia
Division of Environmental Protection
Section of Oil and Gas

Reviewed AGB

Well Operator's Report of Well Work

Farm Name: Ford, Patricia A., ETAL

Operator Well No.: 508308

LOCATION: Elevation: 2050'

Quadrangle: Dorothy

District: Cabin Creek

County: Kanawha

Latitude: 6850 Feet South of
Longitude: 11,100 Feet West of

38 Deg.
81 Deg.

Minutes 0
Seconds 0
25 0

Company: Equitable Production Company
P.O. Box 2347, 1710 Pennsylvania Avenue
Charleston, WV 25328

Agent: Stephen G. Perdue

Inspector: Carlos Hively

Permit issued: 7/1/2002

Well work commenced: 07/16/02

Well work completed: 08/07/02

Verbal Plugging

Permission granted on:

Rotary Rig X Cable Rig

Total Depth 5855 feet

Fresh water depths (ft) 80'

Salt water depths (ft) 1252', 1510'

Is coal being mined in area?

Coal Depths (ft): none noted

Open Mine 163' - 165'

OPEN FLOW DATA

Producing formation Lower Shale; Upper Shale / Gordon / Berea; Weir; Big Lime

Pay Zone Depth (ft): for details

Gas: Initial open flow 13 MCF/d
Final open flow: 803 MCF/d

Oil: Initial open flow
Final open flow:

Time of open flow between initial and final tests

Hours

Static rock pressure 680 psig (surface pressure) after

Hours

Second producing formation

Pay Zone Depth (ft):

Gas: Initial open flow MCF/d
Final open flow: MCF/d

Oil: Initial open flow Bb/d
Final open flow:

Time of open flow between initial and final tests

Hours

Static rock pressure psig (surface pressure) after

Hours

Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu. Ft.
13 3/8"	32'	32'	grouted
9 5/8"	1082'	1082'	423.95 ft³
7"	2554'	2554'	586.05 ft³
4 1/2"	5844.71'	5844.71'	508.4 ft³
2 3/8"		5188'	

RECEIVED
Oil & Gas
Permitting
OCT 09 2002
WV Department of
Environmental Protection
See Attach

NOTE: ON BACK OF THIS FORM PUT THE FOLLOWING: 1) DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

Kathy L. Conway
For: Equitable Production Company

By: Shank A. King
Date: 10/7/02

OCT 25 2002

KAN 5502

**EQUITABLE PRODUCTION COMPANY
WR-35 COMPLETION REPORT - Attachment
Well Treatment Summary**

Well: WV-508308-KVB

API# 47-039-05502

Date	07/31/02	07/31/02	07/31/02	07/31/02		
Type Frac:	N ₂	N ₂	Variable O	Acid w/N ₂		
Acid, N ₂ , Foam, Water			Foam	Displacement		
Zone Treated	Lower Shale	Upper Shale Gordon Berea	Weir	Big Lime		
# Perfs From - To:	50 4900' - 5815'	50 3788' - 4665'	28 3444' - 3534'	20 3054' - 3263'		
BD Pressure @ psi	3030	2630	140	1210		
ATP psi	3050	2250	2390	2311		
Avg. Rate, B=B/M, S= SCF/M	47,600 S	49,000 S	43.3 B (foam)	20 B		
Max. Treat Press psi	3190	2410	2720	2720		
ISIP psi	2400	1620	0	750		
Frac Gradient	.54	.45	.43	.67		
10 min S-I Pressure	1990	1340		2090		
Material Volume:						
Sand-sks			700			
Water-bbl			299			
SCF N ₂	996,280	782,577	801,064	172,138		
Acid-gal	750 gal 7 1/2%	750 gal 7 1/2%	1750 gal 15%	2500 gal 15%		
NOTES:						

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08/09/2002
WV Department of
Environmental Protection

TOP	BOTTOM	FORMATION	REMARKS
		Coal	None reported Open Mine 163' - 165' Water @ 80', 1252' & 1510'
		LOWER	GT @ 2520', 2704' = NS
2860'	2875'	MAXTON:	
2914'	2985'	LITTLE LIME:	GT @ 2984' = NS
3002'	3312'	BIG LIME:	GT @ 3231' = NS
3329'	3356'	BIG INJUN:	GT @ 3386' = 3.8 mcf/d
3436'	3457'	UPPER WEIR:	GT @ 3634' = odor
3502'	3550'	LOWER WEIR:	
3777'	3794'	SUNBURY:	
3794'	3838'	BEREA:	GT @ 3819' = 2.7 mcf/d
4012'	4025'	GORDON:	GT @ 4035', 4211' & 4553' = 2.7 mcf/d
5386'	5676'	LOWER HURON:	GT @ 4801', 4894' & 5143' = 2.7 mcf/d
5676'	5855'	JAVA:	GT @ 5420' = 2.7; 5700' = 4.7 mcf/d
	5855'	TD:	GT @ TD = 13 mcf/d.