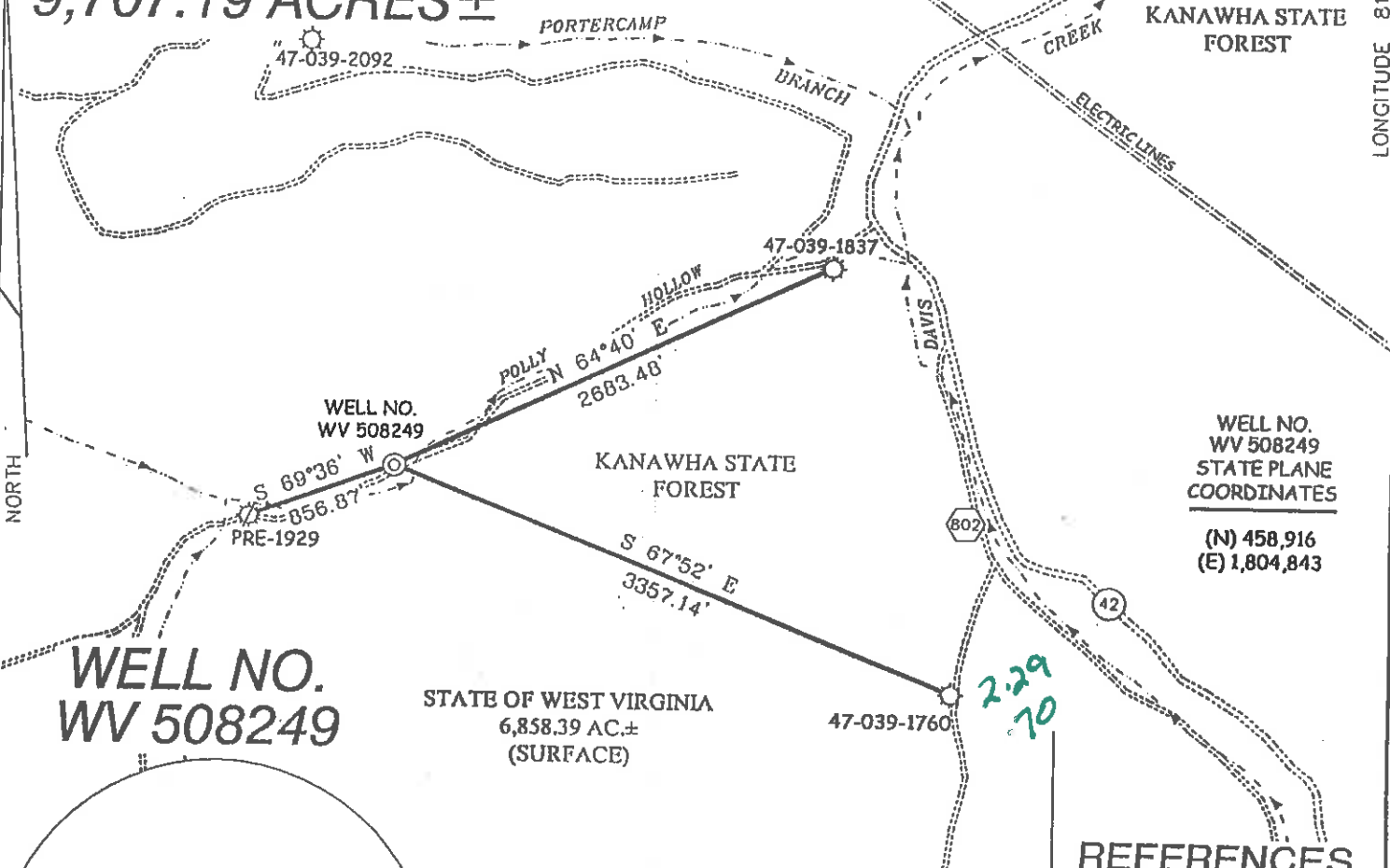


MB V

LONG. 81°40'46.8" 3.720"

47-039-1824 LATITUDE 38°17'30"

HARDY LEASE 3,500 ACRES± OF 9,707.19 ACRES±



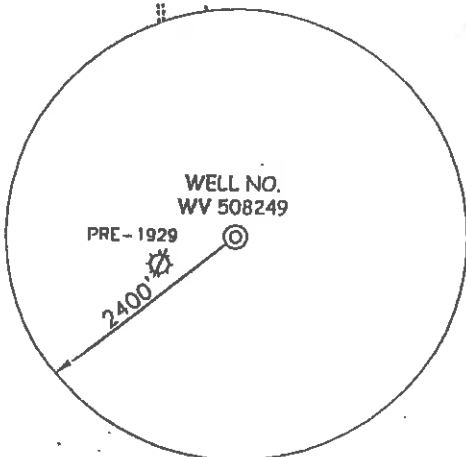
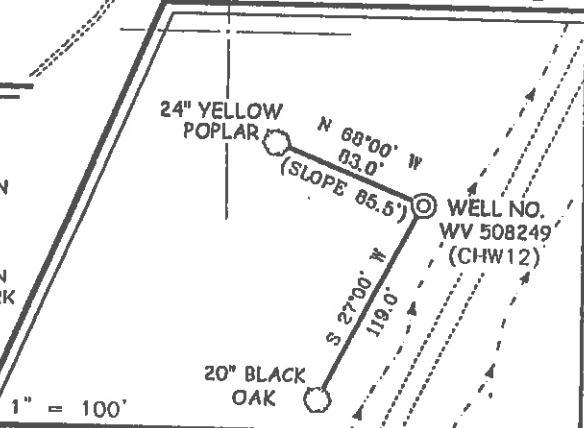
WELL NO. WV 508249

STATE OF WEST VIRGINIA
6,858.39 AC.±
(SURFACE)

NOTES ON SURVEY

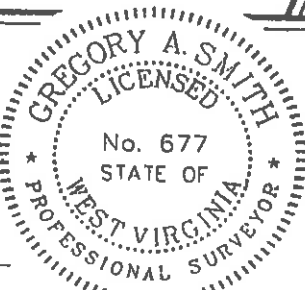
1. TIES TO WELLS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 5/10/02.
3. LEASE BOUNDARY DOES NOT FALL WITHIN THE SCOPE OF THIS PLAT.
4. SURFACE OWNER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF KANAWHA COUNTY IN FEBRUARY, 1999.
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 MAY 30, 20 02
 OPERATORS WELL NO. WV 508249
 API WELL NO. 47 - 39 - 05500
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 4102P508249 (121-68)
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 807' SCALE 1" = 1000'

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 888' WATERSHED POLLY HOLLOW OF DAVIS CREEK
 DISTRICT LOUDON COUNTY KANAWHA QUADRANGLE CHARLESTON WEST 7.5'
 SURFACE OWNER STATE OF WEST VIRGINIA (KANAWHA STATE FOREST) ACREAGE 3500 OF 6858.39
 ROYALTY OWNER WALLER C. HARDY, JR. ET AL LEASE ACREAGE 3500 OF 9707.19
 PROPOSED WORK: LEASE NO. 080598
 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 5,630'

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

COUNTY NAME **KAN**
PERMIT **5500**

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

Reviewed AP

Well Operator's Report of Well Work

Farm Name: WVDNR Operator Well No.: 508249

LOCATION: Elevation: 888' Quadrangle: Charleston West

District: Loudon County: Kanawha

Latitude: 12,100 Feet South of 38 Deg. Minutes 17 Seconds 30
Longitude: 3720 Feet West of 81 Deg. Minutes 40 Seconds 0

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

Agent: Stephen G. Perdue

Inspector: Carlos Hively

Permit Issued: 6/24/2002

Well work commenced: 07/08/02

Well work completed: 07/26/02

Verbal Plugging

Permission granted on:

Rotary Rig X Cable Rig

Total Depth 1700 feet

Fresh water depths (ft) 42'

Salt water depths (ft) 472'; 860'

Is coal being mined in area?

Coal Depths (ft): 382' - 401'

Casing & Tubing Size	Used In Drilling	Left In Well	Cement Fill Up Cu. Ft.
13 3/8"	60	60	64.9 ft ³
9 5/8"	318'	318'	145.95 ft ³
7"	1346'	1346'	276.9 ft ³
4 1/2"	1683'	1683'	132.3 ft ³

OPEN FLOW DATA

Producing formation Big Injun; Big Lime

Gas: Initial open flow 59 MCF/d Oil: Initial open flow Pay Zone Depth (ft):
Final open flow: 223 MCF/d Final open flow: Bbl/d
Time of open flow between initial and final tests Hours
Static rock pressure 216 psig (surface pressure) after Hours

Second producing formation.
Gas: Initial open flow MCF/d Oil: Initial open flow Pay Zone Depth (ft):
Final open flow: MCF/d Final open flow: Bbl/d
Time of open flow between initial and final tests Hours
Static rock pressure psig (surface pressure) after Hours

See Attach for details

RECEIVED
Office of Oil & Gas
Permitting
SEP 27 2002
WV Department of
Environmental Protection

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. Lowrey
For: Equitable Production Company

By: [Signature]
Date: 9/26/02

OCT 25 2002

KAN 5500

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

API#47-039-05500

Well: WV-508249-Hardy

Date	07/19/02	07/19/02			
Type: Frac	Variable Q	Acid w/ N ₂			
Acid, N ₂ , Foam, Water	Foam	Displacement			
Zone Treated	Big Injun	Big Lime			
# Perfs	20	20			
From - To:	1536' - 1555'	1418' - 1518'			
BD Pressure @ psi	2240	3740			
ATP psi	1995	2450			
Avg. Rate, B=B/M, S= SCF/M	12 B (foam)	10 B			
Max. Treat Press psi	2160	2760			
ISIP psi	1350	1610			
Frac Gradient	1.3	1.53			
10 min S-I Pressure		1790			
Material Volume					
Sand-sks	450				
Water-bbl	158				
SCF N ₂	307,123	209,363			
Acid-gal	250 gal 15%	3000 gal 15%			

NOTES:

TOP	BOTTOM	FORMATION
1536'	1520'	Coal
	1580'	BIG LIME:
		BIG INJUN:
		UPPER WEIR:
	1700'	TD

REMARKS

382' - 401' Water @ 42', 472'; 866' & 990'
 GT @ 895' = 84 mcf @ 1350' = odor
 GT @ 1400' & 1600' = NS
 GT @ 1512' = NS
 GT @ TD 1700' = 59 mcf

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 Office of Oil & Gas
 Permitting
SEP 27 2002
 WV Department of
 Environmental Protection