

HODGE LEASE 140 ACRES ±

DANNIE J. MONK ET AL

NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV NORTH ZONE NAD '27.
2. TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 04/19/01.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM DEED BOOK 166 ON PAGE 371.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF RITCHEY COUNTY IN APRIL, 2001.
5. WELL LAT./LONG. ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE).

NORTH

LONGITUDE 80°52'30"

9.570

LAT. 39°08'25.2"

P. JOEL BERKHEIMER ET AL

LATITUDE 39°10'00"

SOUTH FORK SPORTSMAN ASSOC.

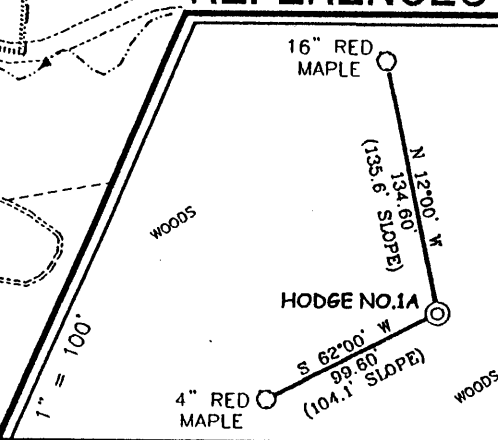
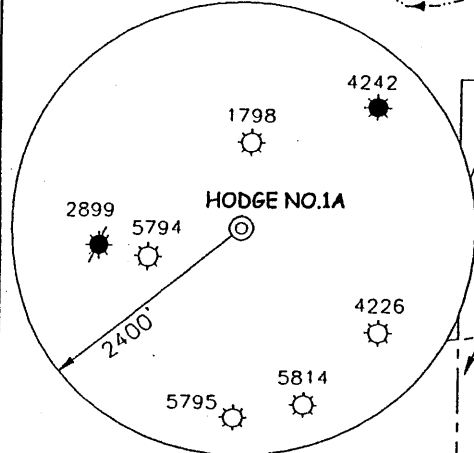
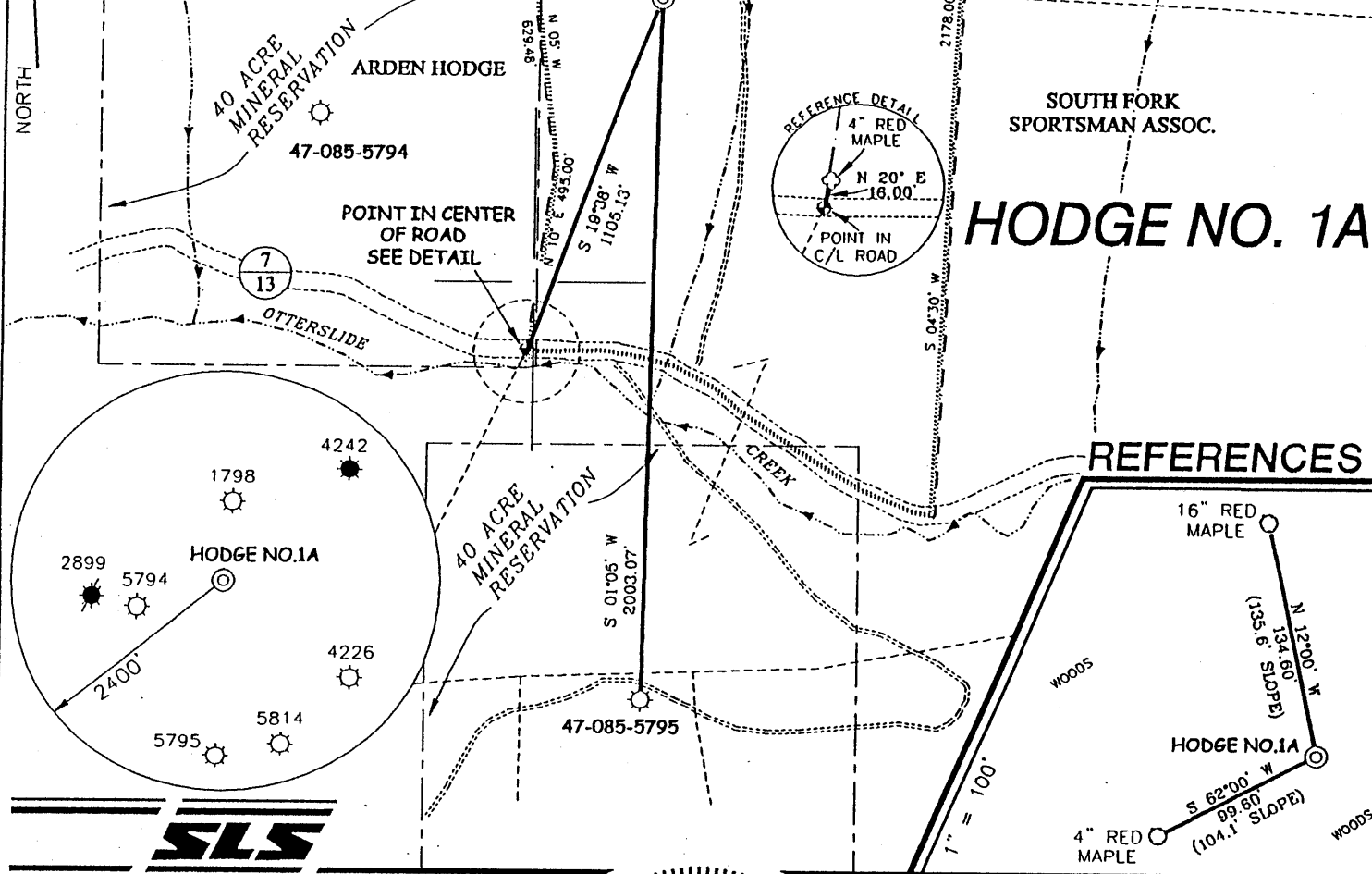
JAMES A. & OPAL HODGE
123.25 AC.±
(SURFACE)

SOUTH FORK SPORTSMAN ASSOC.

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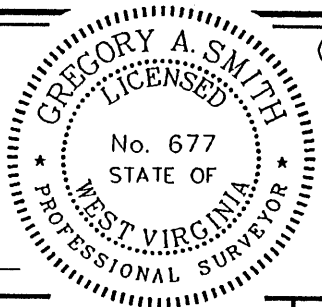
HODGE NO. 1A

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 DEPARTMENT OF ENVIRONMENTAL PROTECTION.

P.S. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE MAY 10, 20 01
OPERATORS WELL NO. HODGE NO. 1A
API WELL NO. 47-085-08783
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 4704P1A (104-13)
PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 796' SCALE 1" = 500'

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 963' WATERSHED OTTERSIDE CREEK
DISTRICT UNION COUNTY RITCHEY QUADRANGLE PULLMAN 7.5'

SURFACE OWNER JAMES A. AND OPAL HODGE ACREAGE 123.5
ROYALTY OWNER JAMES A. AND OPAL HODGE LEASE ACREAGE 140

PROPOSED WORK : LEASE NO. _____
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 5900'

WELL OPERATOR J.F. DEEM DESIGNATED AGENT FRANK DEEM **MAY 18 2001**
ADDRESS 5518 2ND AVE. VIENNA, WV 26105 ADDRESS 5518 2ND AVE. VIENNA, WV 26105

COUNTY NAME

PERMIT

RIT 8783

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

Reviewed ALB

Well Operator's Report of Well Work

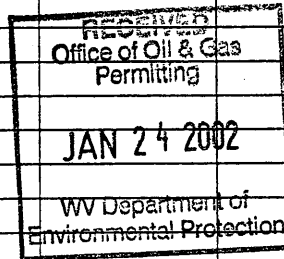
Farm name: Hodge Operator Well No.: 1-A

LOCATION: Elevation: 963' Quadrangle: Pullman 7.5'

District: Union County: Ritchie
Latitude: 9570 Feet South of 39 Deg. 10 Min. 00 Sec.
Longitude 9600 Feet West of 80 Deg. 52 Min. 30 Sec.

Company: J. F. Deem

	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Address: <u>5518 2nd Avenue</u> <u>Vienna, WV 26105</u>	<u>11-3/4"</u>	<u>132'</u>	<u>132'</u>	<u>71</u>
Agent: <u>Frank Deem</u>	<u>8-5/8"</u>	<u>1551'</u>	<u>1551'</u>	<u>472</u>
Inspector: <u>Larry Parish</u>				
Date Permit Issued:	<u>4-1/2"</u>		<u>5097'</u>	<u>876</u>
Date Well Work Commenced: <u>06/22/2001</u>				
Date Well Work Completed: <u>06/28/2001</u>				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input checked="" type="checkbox"/>				
Total Depth (feet): <u>5110'</u>				
Fresh Water Depth (ft.): <u>80' & 417'</u>				
Salt Water Depth (ft.): <u>None</u>				
Is coal being mined in area (N/Y)? <input checked="" type="checkbox"/> No				
Coal Depths (ft.): <u>250'</u>				



OPEN FLOW DATA Riley, Balltown 3905'-4363'
Benson, 3rd Riley 4584'-4722'

Producing formation Alexander Pay zone depth (ft) 4951'-5009'

Gas: Initial open flow 80 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 1,370 MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 48 Hours

Static rock Pressure 1,645 psig (surface pressure) after 24 Hours

*All producing formations comingled.

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d

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

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.

Signed:

By: J. F. Deem
Frank Deem
Date: 7-6-2001

RIT 8783

TREATMENT:

1st Stage: Alexander (4951.5'-5009.25') 500 gal. 15% HCl; 60,000# 20/40 Sand; 565,000 SCF N₂; 327 Bbls. Water

2nd Stage: Benson & 3rd Riley (4584'-4723.25') 750 gal. 15% HCl; 40,000# 20/40 Sand; 432,000 SCF N₂; 250 Bbls. Water

3rd Stage: Riley & Upper Balltown (3905.5'-4363.5') 1,000 gal. 15% HCl; 5,000# 80/100 Sand; 35,000# 20/40 Sand; 448,000 SCF N₂; 260 Bbls. Water

FORMATIONS:

Fill	0	-	5	
RR	5	-	15	
Sd & Sh	15	-	37	
Shale	37	-	46	
Sd & Sh	46	-	80	Water @ 80' - 1/2"
Sand	80	-	123	
RR	123	-	205	
Sand	205	-	250	
Coal	250	-	254	
Sand	254	-	316	
Sd & Sh	316	-	416	
Sand	416	-	620	Water @ 417' - 1/2"
RR & Sh	620	-	970	
Sd & Sh	970	-	1020	
RR	1020	-	1094	
Sd & Sh	1094	-	1139	
Sand	1139	-	1401	
Sd & Sh	1401	-	1797	
Sand	1797	-	1880	<u>Gas Tests:</u>
L Lime	1880	-	1890	Gas Check @ 1805' - 50/10-1" W/W
Sand	1890	-	1900	" " @ 1929' - Oil Odor
B Lime	1900	-		" " @ 2021' - 10/10-2" W/W
B/Injun		-	1969	" " @ 3207' - 4/10-2" W/W
Sd & Sh	1969	-	3230	" " @ 3643' - 4/10-2" W/W
Warren	3230	-	3240	" " @ 4298' - 4/10-2" W/W
Sd & Sh	3240	-	3700	" " @ 4672' - 4/10-2" W/W
Balltown	3700	-	3720	" " @ 5014' - 4/10-2" W/W
Sd & Sh	3720	-	4360	" " @ TD - 4/10-2" W/W
Riley	4360	-	4390	" " @ DC - 6/10-2" W/W
Sd & Sh	4390	-	4650	
Brn Sand	4650	-	4670	
Sd & Sh	4670	-	4690	
Benson	4690	-	4700	
Sd & Sh	4700	-	4850	
Elk	4850	-	4860	
Sd & Sh	4860	-	4930	
Alexander	4930	-	4970	
Sd & Sh	4970	-	TD	
RTD	5110'			