

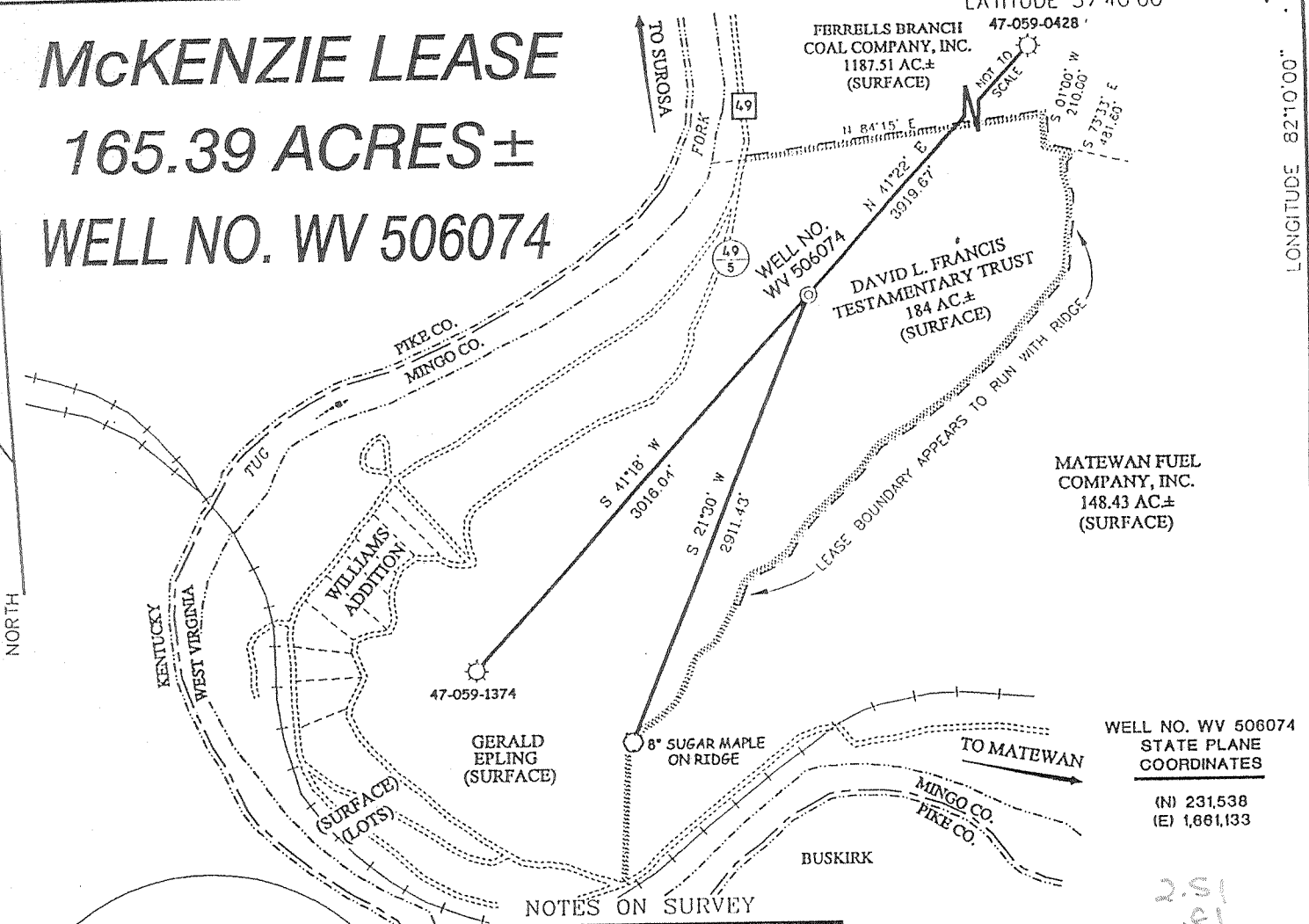
# McKENZIE LEASE

## 165.39 ACRES ±

### WELL NO. WV 506074

LATITUDE 37°40'00"

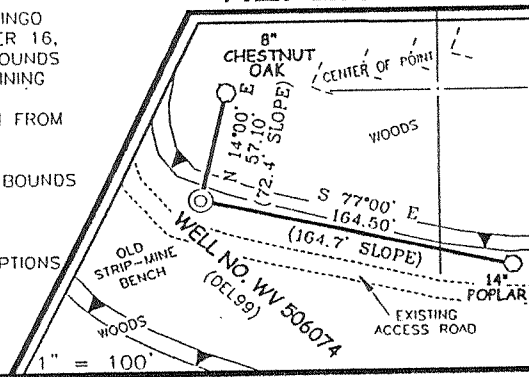
LONGITUDE 82°10'00"



#### 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 02/21/01.
3. LEASE BOUNDARY SHOWN HEREON TAKEN FROM MINGO COUNTY LEASE BOOK 89 ON PAGE 146 DATED OCTOBER 16, 1995. LEASE DESCRIPTION CONTAINS NO METES AND BOUNDS CALLS. CALLS AS SHOWN HEREON TAKEN FROM ADJOINING DESCRIPTION IN DEED BOOK 298 PAGE 498.
4. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF MINGO COUNTY IN MAY, 2000. SURFACE TRACT DESCRIPTION CONTAINS NO METES AND BOUNDS CALLS AND CANNOT BE MAPPED.
5. WELL LAT./LONG. ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE).
6. DUE TO VAGUE LEASE AND SURFACE TRACT DESCRIPTIONS SLS MAKES NO CERTIFICATION AS TO THE LOCATION OF EITHER BOUNDARIES. SURFACE OWNERSHIP BASED ON CLAIM PURPORTED BY LANDOWNER.

#### REFERENCES

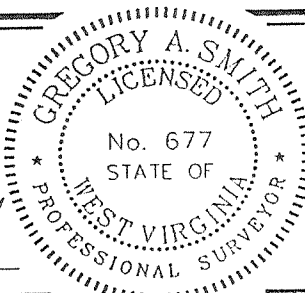


WELL NO. WV 506074



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 ENERGY.

P.S. 677 *Gregory A. Smith*



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

DATE FEBRUARY 26, 20 01  
 OPERATORS WELL NO. WV 506074  
 API WELL NO. 47-059-01417  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 4194P506074 (103-26)  
 PROVEN SOURCE OF ELEVATION JUNCTION OF ROADS ELEVATION 697' 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 1068' WATERSHED TUG FORK  
 DISTRICT MAGNOLIA COUNTY MINGO QUADRANGLE DELBARTON 7.5'  
 SURFACE OWNER DAVID L. FRANCIS TESTAMENTARY TRUST ACREAGE 184±  
 ROYALTY OWNER BONDOLYN McKENZIE PAGE et al LEASE ACREAGE 165.39±  
 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 4770'

WELL OPERATOR EQUITABLE PRODUCTION - EASTERN STATES, INC. DESIGNATED AGENT STEPHEN G. PERDUE  
 ADDRESS P.O. BOX 2347 CHARLESTON, WV 25328 ADDRESS P.O. BOX 2347 CHARLESTON, WV 25328

DEEP WELL

6-6 265

MAR 26 2001

MINGO COUNTY NAME PERMIT 1417

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

Reviewed AEB

Well Operator's Report of Well Work

Farm Name: David Francis Trust Operator Well No.: WV-506074

LOCATION: Elevation: 1,068.00 Quadrangle: Delbarton  
District: Magnolia County: Mingo

Latitude: 13300 Feet South of Deg. 37 Minutes 40 Seconds 0  
Longitude: 1000 Feet West of Deg. 81 Minutes 10 Seconds 0

Company: EQUITABLE PRODUCTION COMPANY  
P.O. Box 2347, 1710 Pennsylvania Avenue  
Charleston, WV 25328

Agent: Steve Perdue

Inspector: Ofie Helmick

Permit Issued: 03/28/2001  
Well work commenced: 05/09/01  
Well work completed: 06/04/01

Verbal Plugging Permission granted on: \_\_\_\_\_

Rotary Rig X Cable Rig \_\_\_\_\_

Total Depth 4710 feet

Fresh water depths (ft) 380', 920'

Salt water depths (ft) 2095'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
13-3/8	183'	183'	177 FT <sup>3</sup>
9-5/8"	856'	856'	348 FT <sup>3</sup>
7"	2272'	2272'	415 FT <sup>3</sup>
4-1/2"	4710'	4710'	384 FT <sup>3</sup>

Is coal being mined in area?  
Coal Depths (ft): 110', 125'-130' Open Mine, 297', 329', 477'

OPEN FLOW DATA

Producing formation L. Shale/U. Shale/Gordon/ Berea/ Big Lime/Injun Pay Zone Depth (ft): See Attach for details

Gas: Initial open flow Odor Bbl/d  
Final open flow 1430 Final open flow: \_\_\_\_\_  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock pressure 750 psig (surface pressure) after \_\_\_\_\_ Hours

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: \_\_\_\_\_  
Time of open flow between initial and final tests \_\_\_\_\_ Hours  
Static rock pressure \_\_\_\_\_ psig (surface pressure) after \_\_\_\_\_ Hours

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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

Barbara A. Hubbard  
For: BLAZER ENERGY CORPORATION

By: Dorothy Williams  
Date: 8-21-01

AUG 31 2001  
AUG 31 2001

MINGO 1417

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

Well: WV-506074-McKenzie

API# 47-059-01417

Date	5/30/2001	5/30/2001	5/30/2001	5/30/2001		
Type Frac Acid, N <sub>2</sub> , Foam, Water	N <sup>2</sup>	N <sup>2</sup>	N <sup>2</sup>	Acid/N <sup>2</sup>		
Zone Treated	L. Shale	U. Shale/ Gordon	Berea	Big Lime/ Injun		
# Perfs From - To:	40 4005.5-4656	20 3309-3615	15 3167-3220	20 2364-2551		
BD Pressure @ psi	2629	2678	2496	421		
ATP psi	2547	2922	3317	2330		
Avg. Rate, B=B/M, S= SCF/M	55206 S	54661 S	55033 S	54850 S		
Max. Treat Press psi	2724	3710	4339	3182		
ISIP psi	1804 Final	1987 Final	2500 Final	69		
Frac Gradient	.48	.65	.88	.49		
10 min S-I Pressure	1344	1139	1077	1106		
Material Volume						
Sand-sks						
Water-bbl	24	6	1-1/2	2		
SCF N <sub>2</sub>	857,713	598,426	464,155	442,468		
Acid-gal	672 gal 7.5%	400 gal 7.5%	250 gal 15.2%	2500 gal 15.5%		
NOTES:						

TOP	BASE	FORMATION	REMARKS*
0	5	Fill	
5	10	Fill	
10	20	Shale	
20	30	Sand	
30	50	Sandy Shale	
50	110	Sand	
110	120	Coal	
120	125	Sand	
125	130	Open Mine	Open Mine
130	182	Sand	
182	210	Shale	
210	223	Sand	
223	230	Shale	
230	297	Sand	
297	307	Coal	
307	308	Shale	
308	320	Sand	
320	329	Shale	
329	335	Coal	
335	350	Shale	
350	477	Sand	Damp 380-390'
477	482	Coal	
482	530	Sandy Shale	
530	565	Sand	
565	612	Black Shale	
612	617	Sandy Shale	
617	683	Sand	
683	712	Sandy Shale	
712	760	Sand	
760	765	Sandy Shale	
765	783	Shale	

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783	1680	Salt Sand
2020	2107	Maxton
2234	2293	L Lime
2293	2488	Big Lime
2493	2556	Big Injun
2697	2750	L Weir
3132	3166	Sunbury
3166	3232	Berea
3316	3328	Gordon
4026	4301	L Huron
4301	4417	Java
4417	4594	Angola
4594	4719	Rhinestreet
4719		Onondaga
4732		TD

Damp @ 920'

GT @ 2400'=NS

GT @ 2600', 3000'=NS  
 GT @ 3135'=odor

GT @ 3960' & 4110'=odor

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