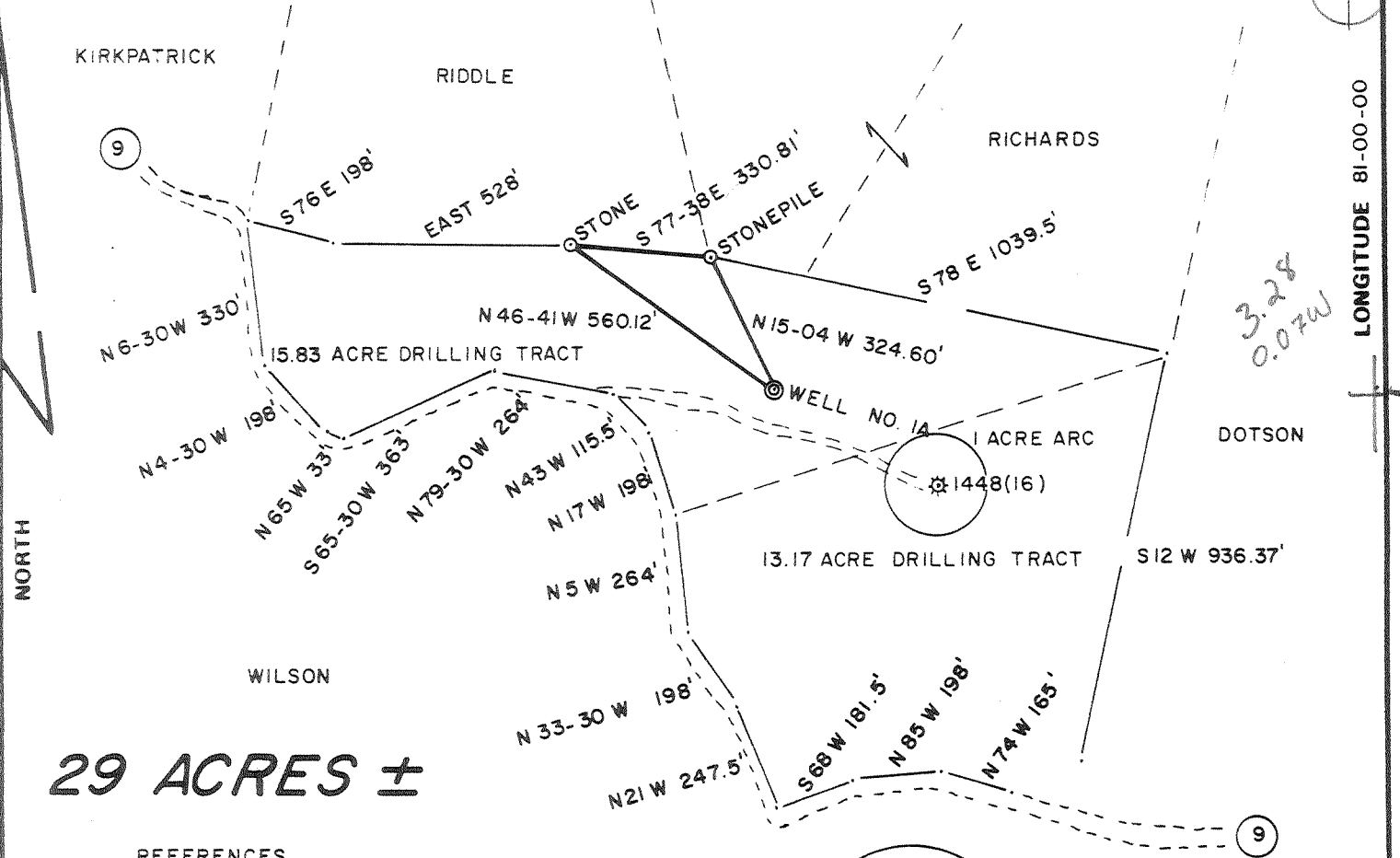


TATE LEASE

WELL NO. 1A

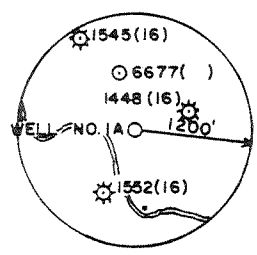
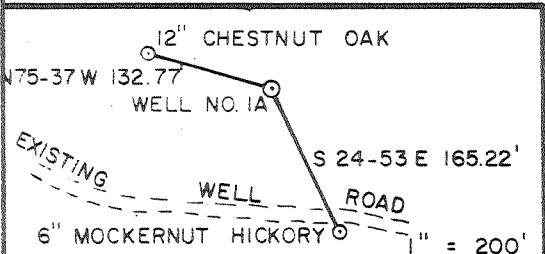
0.40S
0.07W



3.28
0.07W

29 ACRES ±

REFERENCES



FILE NO. 16-21
 DRAWING NO. _____
 SCALE 1" = 400'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION B. M. ELEV. = 1122'

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) Gregory A. Smith
 R.P.E. _____ L.L.S. 677

PLACE SEAL HERE

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



DATE SEPTEMBER 21, 19 84
 OPERATOR'S WELL NO. 1A
 API WELL NO. _____
47 - 085 - 7296
 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 ___ SHALLOW X
 LOCATION: ELEVATION 1120' WATER SHED ROCKCAMP RUN
 DISTRICT UNION 4 COUNTY RITCHIE
 QUADRANGLE HARRISVILLE 7.5 NE3
 SURFACE OWNER DENVER O. TATE, et. al. ACREAGE 29
 OIL & GAS ROYALTY OWNER DENVER O. TATE, et. al. LEASE ACREAGE 15.83 OF 29
 LEASE NO. _____
 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 MARCELLUS ESTIMATED DEPTH 5300'
 WELL OPERATOR GENE STALNAKER, INC. DESIGNATED AGENT GENE STALNAKER
 ADDRESS P.O. BOX 178 ADDRESS P.O. BOX 178
833 GLENVILLE, WV 26351 GLENVILLE, WV 26351

JAN 14 1985

(see McKean Smithville 1724)

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

Stage 1	^{Huron → Angola} 4700-5196	18 Holes	1,000,000 Cu. Ft. N ₂	300 Gal. 15% HCl
Stage 2	3900-4700 ^{Huron}	28 Holes	1,000,000 Cu. Ft. N ₂	300 Gal. 15% HCl
Stage 3	3479-3900	18 Holes	1,000,000 Cu. Ft. N ₂	300 Gal. 15% HCl

^{Up Dev → Huron}

WELL LOG

FORMATION COLOR HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS Including indication of all fresh and salt water, coal, oil and gas
Soil	0	10	
Sandstone & Shale	10	100	
Sandstone & Shale	100	500	
Sandstone & Shale	500	1000	
Sandstone & Shale	1000	1700	
Shale	1700	1762	
Sandstone	1762	1840	
Shale	1840	1875	
Maxon	1875	1904	
Siltstone	1904	2013	
Big Lime	2013	2118	
Big Injun	2118	2161	
Siltstone	2161	2426	
Wier	2426	2487	
Siltstone	2487	2911	
Gordon	2911	2928	
Shale	2928	3478	
Warren	3478	3546	
Shale	3546	3935	
Speechly	3935	3992	
Shale	3992	4063	
Balltown	4063	4118	
Shale	4118	4387	
First Riley	4387	4447	
Shale	4447	4540	
Second Riley	4540	4600	
Shale	4600	4903	
Benson	4903	4912	
Shale	4912	5163	
Alexander	5163	5200	
Shale	5200	5367	
		Angola	
		⊙ TD.	
			5367 1120
			4247
			3740
			587
			3740
			1120
			4860

(Attach separate sheets as necessary)

Gene Stalnaker, Inc.
Well Operator
By: Russell Crane Consultant
Date: 2/25/85

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 coal, encountered in the drilling of a well."

RECEIVED

JAN 10 1985



1) Date: January 8, 19 85
2) Operator's Well No. Tate 1A
3) API Well No. 47 - 085 - 7296
State County Permit

OIL & GAS DIV.
DEPT. OF MINES

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES, OIL AND GAS DIVISION
APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil _____ / Gas X /
B (If "Gas", Production _____ / Underground storage _____ / Deep _____ / Shallow X /)
- 5) LOCATION: Elevation: 1120 Watershed: Rock Camp Run
District: Union County: Ritchie Quadrangle: Harrisville 7.5
- 6) WELL OPERATOR Gene Stalnaker, Inc. 7) DESIGNATED AGENT Gene Stalnaker
Address P.O. Box 178 Address P.O. Box 178
Glenville, WV 26351 Glenville, WV 26351
- 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
Name Sam Hersman Name Gene Stalnaker, Inc.
Address Box 66 Smithville, WV Address P.O. Box 178
477-3597 Glenville, WV 26351
- 10) PROPOSED WELL WORK: Drill X / Drill deeper _____ / Redrill _____ / Stimulate X /
Plug off old formation _____ / Perforate new formation _____
Other physical change in well (specify) _____
- 11) GEOLOGICAL TARGET FORMATION, Marcellus
- 12) Estimated depth of completed well, 5300 feet
- 13) Approximate trata depths: Fresh, _____ feet; salt, _____ feet.
- 14) Approximate coal seam depths: n/a Is coal being mined in the area? Yes _____ / No X /

15) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor	11 3/4			X		40'			Kinds
Fresh water									
Coal									Sizes
Intermediate	8 5/8	CW	20	X		1220'	1220'	To Surface	by rule 15.05
Production	4 1/2	ERW	10.5	X			5300'	2000' Fill	Depths set
Tubing									Up or as required
Liners									Perforations: Top <u>by rule 15.01</u>

OFFICE USE ONLY
DRILLING PERMIT

Permit number 47-085-7296

January 10, 19 85
Date

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.

Permit expires January 10, 1987 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond:	Agent:	Plat:	Casing	Fee
<u>147</u>	<u>MH</u>	<u>MH</u>	<u>MH</u>	<u>749</u>

Margaret J. Hesse
Administrator, Office of Oil and Gas

NOTE: Keep one copy of this permit posted at the drilling location.

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.

File