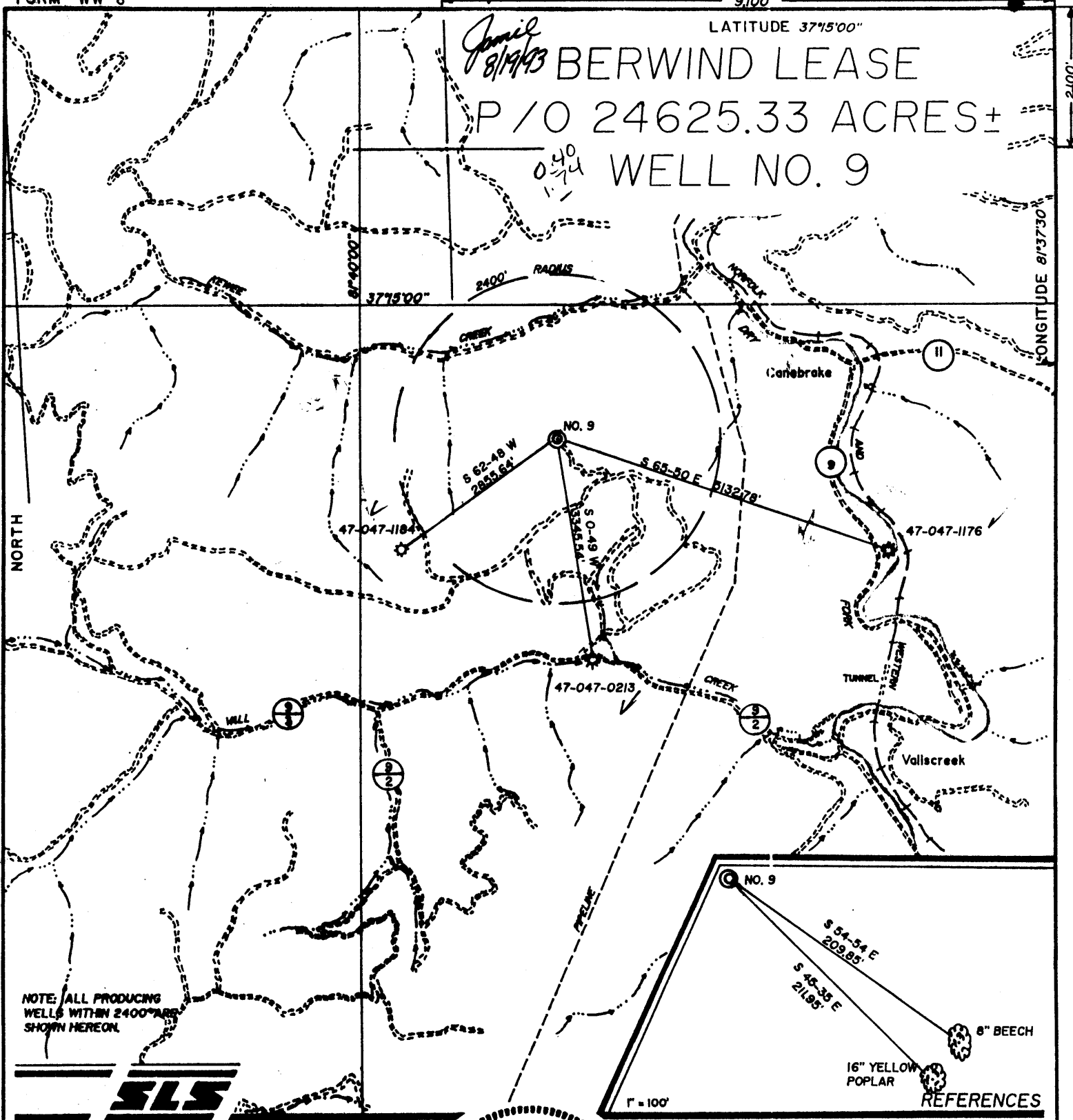


Janil 8/19/93

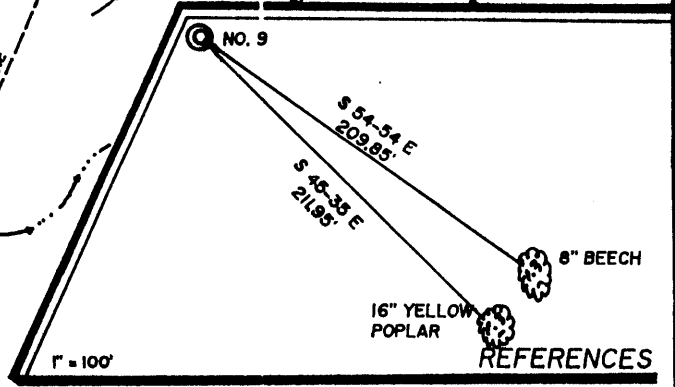
BERWIND LEASE

P/O 24625.33 ACRES ±

WELL NO. 9

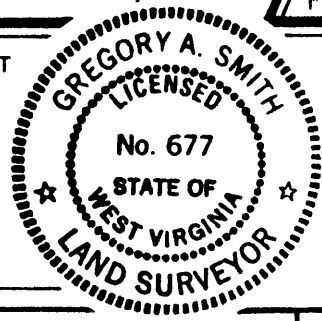


NOTE: ALL PRODUCING WELLS WITHIN 2400' RADIUS SHOWN HEREON.



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.

L.L.S. *Gregory A. Smith*
677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
 DATE JULY 30, 19 93
 OPERATORS WELL NO. BERWIND NO. 9
 API WELL NO. 47 - 047 - 1197
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 2901 (4-70)
 PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEVATION 2345' SCALE 1" = 2000'

STATE OF WEST VIRGINIA
 DEPARTMENT OF ENERGY
 OIL AND GAS DIVISION



WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE: DEEP SHALLOW
 LOCATION: ELEVATION 2140' WATERSHED KEWEE CREEK OF DRY FORK
 DISTRICT BIG CREEK 2 COUNTY MCDOWELL QUADRANGLE AMONATE 7.5' Pending
 SURFACE OWNER BERWIND LAND COMPANY ACREAGE P/O 24625.33 *mill*
 ROYALTY OWNER BERWIND LAND COMPANY LEASE ACREAGE P/O 24625.33 *NC*
 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 BEREA
 ESTIMATED DEPTH 5000' *AUG 23 1993*

WELL OPERATOR WACO OIL AND GAS COMPANY, Inc. DESIGNATED AGENT STEPHEN JOLLOWAY
 ADDRESS P.O. BOX 397 GLENVILLE, WV 26351 ADDRESS P.O. BOX 397 GLENVILLE, WV 26351

6-6 267

COUNTY NAME PERMIT

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

Well Operator's Report of Well Work

Farm name: BERWIND LAND CO. Operator Well No.: BERWIND #9

LOCATION: Elevation: 2,140.00 Quadrangle: AMONATE

District: BIG CREEK County: MCDOWELL
Latitude: 2100 Feet South of 37 Deg. 15 Min. Sec.
Longitude: 9100 Feet West of 81 Deg. 37 Min. 30 Sec.

Company: WACO OIL & GAS CO., INC.
1297 N. LEWIS ST.
GLENNVILLE, WV 26351-0000

Agent: STEPHEN E. HOLLOWAY

INSPECTOR: OFIE HELMICK

Permit Issued: 08/16/93

Well work commenced: 08/25/93

Well Work completed: 09/03/93

Verbal Plugging

Permission granted on:

Rotary Cable Rig

Total Depth (feet) 4958'

Fresh water depths (ft) 85'

Salt water depths (ft) 1117'

Is coal being mined in area (Y/N)? N

Coal Depths (ft): 148-150, 307-309, 345-348, 420-425, 509-511, 519-521

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11-3/4"	569	569	C.T.S.
8-5/8"	1457	1457	C.T.S.
4-1/2"		4909	128 Sks.

OPEN FLOW DATA

Producing formation Berea, Gordon Pay zone depth (ft) See Treatment

Gas: Initial open flow 382 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 1237 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 4 Hours
Static Rock pressure 480 psig (surface pressure) after 48 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 _____ 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 STIMULATION, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.


For: WACO OIL AND GAS COMPANY, INC.

By: Daniel R. Chapman, Geologist

Date: October 15, 1993

10-15-93

1st Stage: Gordon (4802-4777) 750 gal 15% HCL, 40,630# 20/40 Sand, 598 Bbl. S.L.F.

2nd Stage: Berea (4704-4700) 750 gal 15% HCL, 8000# 80/100 Sand, 48,950# 20/40 Sand, 798 Bbl. S.L.F.

Sand, Shale	0	148	Damp @ 85'
Coal	148	150	Damp @ 1117'
Sand, Shale	150	307	
Coal	307	309	
Sand	309	345	
Coal	345	348	
Sand, Shale	348	420	
Coal	420	425	
Sand, Shale	425	509	
Coal	509	511	
Sand	511	519	
Coal	519	521	
Sand, Shale	521	3360	
Big Lime	3360	4059	
Sand, Shale	4059	4672	
Berea	4672	4714	
Shale	4714	4764	
Gordon	4764	4818	
Shale	4818	4958	T. D.