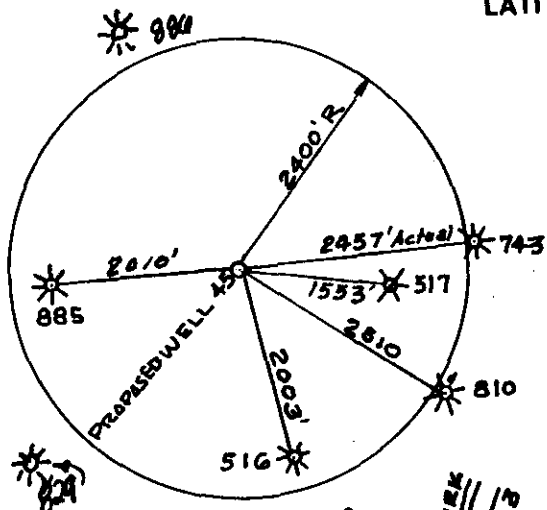
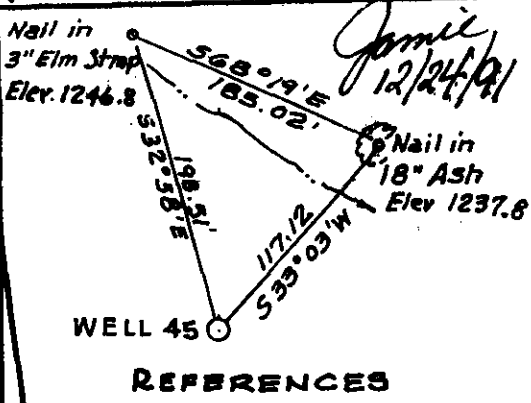


LATITUDE 37° 55'

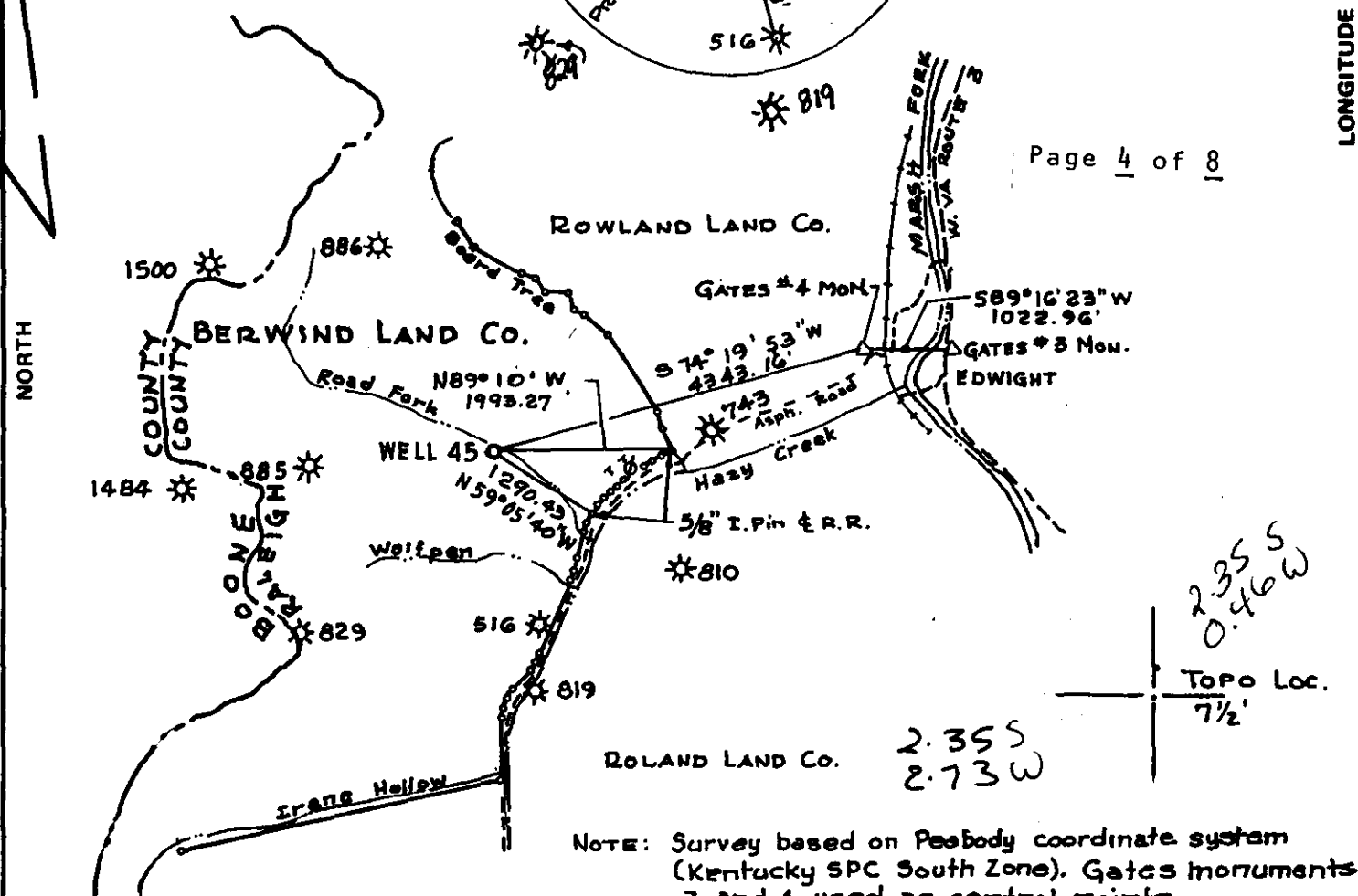
2410'



	COORDINATES	
	N	E
Gates #2	572,246.23	3,217,036.92
Gates #4	572,293.95	3216016.05
T Nail 3679	590 977.93	3213335.44
T Nail 3680	590 858.52	3219118.28
Nail 743	591325.38	3214276.94
Nail 517	590894.83	3213378.78
Nail 516	589 117.78	3212318.54
*45	591060.99	3211834.29

LONGITUDE 81° 32' 50"

Page 4 of 8



2.35 S  
0.46 W

Topo Loc.  
7 1/2'

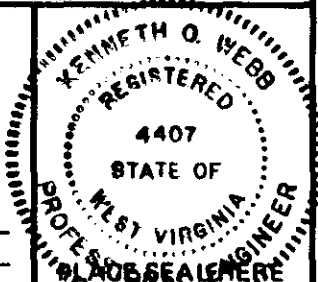
2.35 S  
2.73 W

NOTE: Survey based on Peabody coordinate system (Kentucky SPC South Zone). Gates monuments 3 and 4 used as control points.

FILE NO. \_\_\_\_\_  
 DRAWING NO. \_\_\_\_\_  
 SCALE 1" = 2000  
 MINIMUM DEGREE OF ACCURACY 1:5000  
 PROVEN SOURCE OF ELEVATION USGS B.M N40X  
 ELEV. 984.66

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) Kenneth O. Webb  
 R.P.E. 4407 L.L.S. \_\_\_\_\_



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



DATE DEC. 12 19 91  
 OPERATOR'S WELL NO. BERWIND LAND #45  
 API WELL NO. WVRAL 000145  
47 - 081 - 0930  
 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 1232.0 WATER SHED HAZY CREEK OF MARSH FORK  
 DISTRICT MARSH FORK 2 COUNTY RALEIGH  
 QUADRANGLE WHITESVILLE 7 1/2' Bald Knob EC  
 SURFACE OWNER BERWIND LAND CO. ACREAGE 434.31 OF 8044  
 OIL & GAS ROYALTY OWNER BERWIND LAND Co LEASE ACREAGE 8044  
 LEASE NO. \_\_\_\_\_

PROPOSED WORK: DRILL X CONVERT \_\_\_ DRILL DEEPER \_\_\_ REDRILL \_\_\_ FRACTURE OR STIMULATE \_\_\_ PLUG OFF OLD FORMATION \_\_\_ PERFORATE NEW FORMATION \_\_\_ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) \_\_\_\_\_

PLUG AND ABANDON \_\_\_ CLEAN OUT AND REPLUG \_\_\_  
 TARGET FORMATION LOWER WEIR ESTIMATED DEPTH 3022'  
 WELL OPERATOR EASTERN AMERICAN ENERGY CORP. DESIGNATED AGENT JOHN M PALETTI  
 ADDRESS Box N 259 ADDRESS 501 56TH STREET  
GLENVILLE, W. VA 26351 CHARLESTON, W. VA 25304



JAN 1 93

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

Well Operator's Report of Well Work

Farm name: BERWIND LAND COMPANY Operator Well No.: BERWIND LAND#45

LOCATION: Elevation: 1232.60 Quadrangle: WHITESVILLE

District: MARSH FORK County: RALEIGH  
Latitude: 12310 Feet South of 37 Deg. 55Min. 0 Sec.  
Longitude 2410 Feet West of 81 Deg. 32 Min. 30 Sec.

Company: EASTERN AMERICAN ENERGY C  
P. O. BOX N  
GLENNVILLE, WV 26351-0000

Agent: DONALD C. SUPCOE

Inspector: RODNEY G. DILLON  
Permit Issued: 01/22/92  
Well work Commenced: 08/05/92  
Well work Completed: 09/03/92

Verbal Plugging  
Permission granted on: \_\_\_\_\_  
Rotary XX Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 3151'  
Fresh water depths (ft) 71'

Salt water depths (ft) 1974'

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 445' - 446'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
9-5/8"	359.05'	359.05'	120 sxs CTS
4-1/2"	----	2864.10	220 sxs
1-1/2"	----	2682.15	----

OPEN FLOW DATA

Producing formation Upper Weir Pay zone depth (ft) 2732'  
Gas: Initial open flow 581 MCF/d Oil: Initial open flow N/A Bbl/d  
Final open flow 474 MCF/d Final open flow N/A Bbl/d  
Time of open flow between initial and final tests 15 Hours  
Static rock Pressure 800 psig (surface pressure) after 24 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 STIMULATING, PHYSICAL CHANGE, ETC. 2) THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE.

For: Ronald L. Rech  
EASTERN AMERICAN ENERGY CORP.

By: Ronald L. Rech, Regional Drilling Manager  
Date: December 31, 1992

Reviewed TM6  
Recorded \_\_\_\_\_

93

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

Upper Weir: 20 Holes (2758'-2732'), fraced with water, 35 lbs gel/1000 gals, 65,000 lbs of 20/40 sand and 500 gals of 15% HCl acid.

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Sand			0	80	Fresh water @ 71'
Sand and Shale			80	150	Water @ 1974'
Sand			150	189	
Sand and Shale			189	445	
Coal (dirty)			445	446	
Shale			446	456	<u>Gas Checks:</u>
Sand			456	492	630' - no show
Shale			492	534	1250' - no show
Sand			534	598	1707' - no show
Shale			598	620	2400' - no show
1st Salt Sand			620	766	2815' - no show
Shale			766	812	2908' - no show
2nd Salt Sand			812	1062	DC's - 2/10 thru 2" w/w (60 mcf)
Shale			1062	1096	
3rd Salt Sand			1096	1200	
Shale			1200	1256	
4th Salt Sand			1256	1295	
Sand and Shale			1295	1476	
Ravencliff Interval			1476	1666	
Avis Limestone			1666	1702	
Maxton Interval			1702	2218	
Little Lime			2218	2278	
Big Lime			2278	2642	
Big Injun			2642	2684	
Shale			2684	2732	
Upper Weir			2732	2805	
Shale			2805	2846	
Lower Weir			2846	2896	
Shale			2896	3151	
TD				3151	

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENERGY, DIVISION OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

081 0930

14990, (2), 670

- 1) Well Operator: Eastern American Energy Corporation
- 2) Operator's Well Number: Berwind Land #45 3) Elevation: 1232.6'  
WVRAL000145
- 4) Well type: (a) Oil\_\_\_/ or GasXX/  
(b) If Gas: ProductionXX/ Underground Storage\_\_\_/  
Deep\_\_\_/ ShallowXX/
- 5) Proposed Target Formation(s): Lower Weir
- 6) Proposed Total Depth: 3022 feet
- 7) Approximate fresh water strata depths: 14', 48', 226'
- 8) Approximate salt water depths: 808', 1720'
- 9) Approximate coal seam depths: 6'-8', 48'-51', 61'-63', 70'-75',  
101'-104', 266'-271', 281'-284'
- 10) Does land contain coal seams tributary to active mine? Yes\_\_\_/ No XX/
- 11) Proposed Well Work: Drill and complete new well.
- 12) Red Rock - none listed.
- 13) Reference wells: Ral-905; Ral-886; Ral-885; Ral-810; Ral-743

Issued 1/22/92  
Expires 1/22/94

CASING AND TUBING PROGRAM

13064

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor	13-3/8" 11-3/4"	F-25 F-25	37.0 32.0	40		
Fresh Water	8-5/8"	F-25	20.0			C.T.S. 38CSR18-11.3 38CSR18-11.2.2
Coal	9-5/8"	F-25	26.0	350	350	C.T.S.
Intermediate	*7"	H-40	17.0	1750'	1750'	C.T. 9-5/8"
Production	4-1/2"	J-55	10.5	2937	2937	38CSR18-11.1
Tubing						
Liners						

\* OPTIONAL: Based upon coal or water being encountered below the 9-5/8" casing.

PACKERS: Kind \_\_\_\_\_  
Sizes \_\_\_\_\_  
Depths set \_\_\_\_\_

24603  
2  
7

For Division of Oil and Gas Use Only

Fee(s) paid:  Well Work Permit  Reclamation Fund  WPCP  
 Plat  WW-9  WW-2B  Bond Security Blanket Agent  
(Type)

