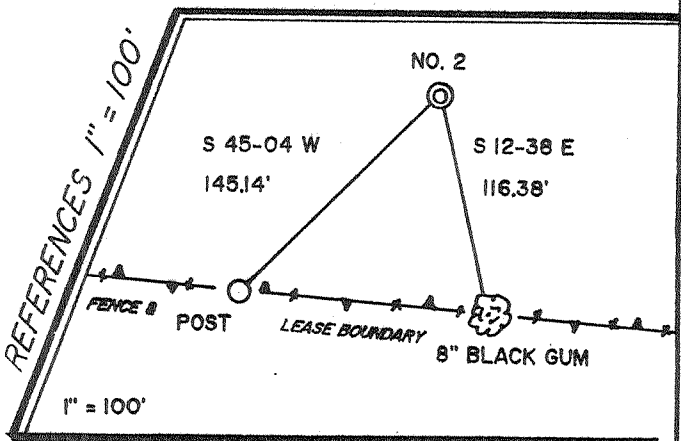
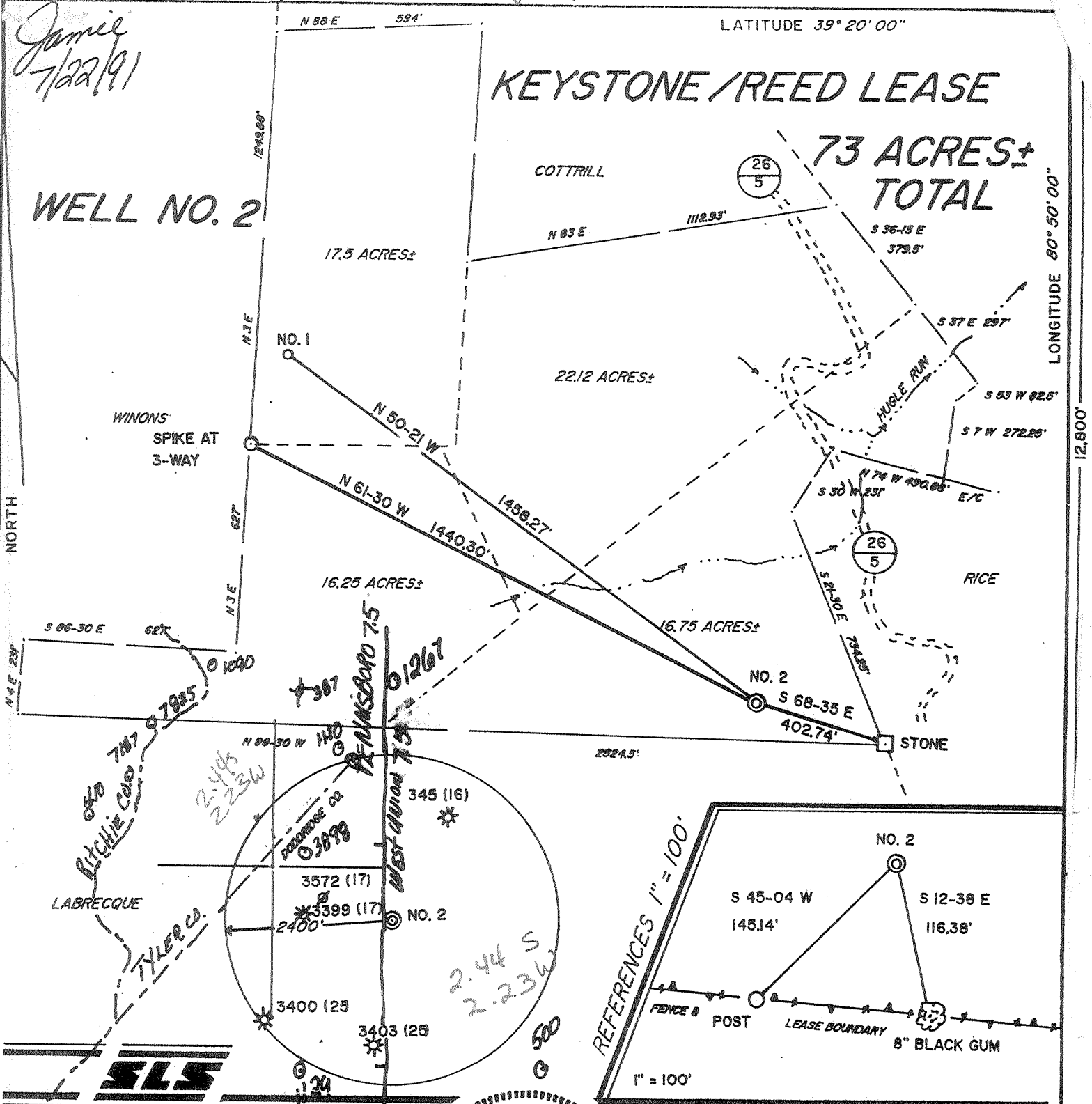


*Jamil*  
*7/22/91*

**WELL NO. 2**

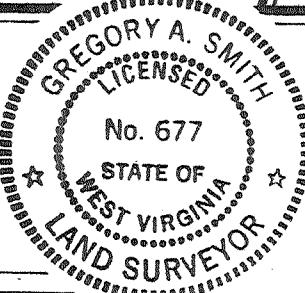
# KEYSTONE/REED LEASE

**73 ACRES±  
TOTAL**



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. 677 *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE JUNE 15, 19 91  
 OPERATORS WELL NO. KEYSTONE/REED NO. 2  
WVDODDO02802  
 API WELL NO. 47-017-3900  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 2668 (38-13)  
 PROVEN SOURCE OF ELEVATION TOP OF KNOB ELEVATION 1118' SCALE 1" = 400'

**STATE OF WEST VIRGINIA**  
 DEPARTMENT OF ENERGY  
**OIL AND GAS DIVISION**

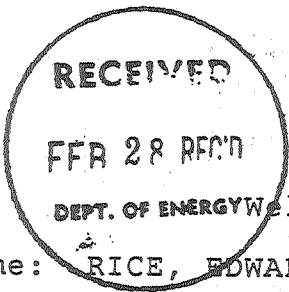


WELL TYPE: OIL  GAS  LIQUID INJECTION  WASTE DISPOSAL  IF "GAS" PRODUCTION  STORAGE  DEEP  SHALLOW

LOCATION: ELEVATION 1043' WATERSHED HUGLE RUN  
 DISTRICT CENTRAL COUNTY DODDRIDGE QUADRANGLE WEST UNION 7.5' 15'  
 SURFACE OWNER EDWARD V. RICE ACREAGE 16.75  
 ROYALTY OWNER MAXINE REED ET. AL. LEASE ACREAGE 16.75 OF 73  
 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 ALEXANDER  
 ESTIMATED DEPTH 5350'

WELL OPERATOR EASTERN AMERICAN ENERGY CORP. 259 DESIGNATED AGENT JOHN M. PALETTI  
 ADDRESS BOX N GLENVILLE, WV. 26351 ADDRESS 501 56th ST. CHARLESTON, WV. 25304

COUNTY NAME PERMIT



State of West Virginia  
DEPARTMENT OF ENERGY  
Division of Oil and Gas

Reviewed TMG  
Recorded \_\_\_\_\_

DEPT. OF ENERGY Well Operator's Report of Well Work

Farm name: RICE, EDWARD V Operator Well No.: KEYSTONE/REED 2

LOCATION: Elevation: 1043.00 Quadrangle: WEST UNION

District: CENTRAL County: DODDRIDGE  
Latitude: 12800 Feet South of 39 Deg. 20Min. 0 Sec.  
Longitude: 11730 Feet West of 80 Deg. 50 Min. 0 Sec.

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

Agent: DONALD C. SUPCOE

Inspector: MIKE UNDERWOOD  
Permit Issued: 07/29/91  
Well work Commenced: 08/27/91  
Well work Completed: 09/06/91  
Verbal Plugging \_\_\_\_\_  
Permission granted on: N/A  
Rotary X Cable \_\_\_\_\_ Rig \_\_\_\_\_  
Total Depth (feet) 5450'  
Fresh water depths (ft) 82', 450'

Salt water depths (ft) 1485'

Is coal being mined in area (Y/N)? N  
Coal Depths (ft): 95-98'

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
8-5/8"	1124	1124	CTS
4-1/2"		5267	384
1-1/2"		5099	

OPEN FLOW DATA

Producing formation Alexander/Riley Pay zone depth (ft) 5159 - 4459  
Gas: Initial open flow 421 MCF/d Oil: Initial open flow N/A Bbl/d  
Final open flow 353 MCF/d Final open flow N/A Bbl/d  
Time of open flow between initial and final tests 6 Hours  
Static rock Pressure 750 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: February 24, 1992

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

Alexander - (20 holes from 5159-5146) Fraced w/70 quality foam, 30 lbs. gel/1000 gals., 45,000 lbs. 16/30 sand, 500 gals. 15% HCl acid and 582,500 SCF of N<sub>2</sub>

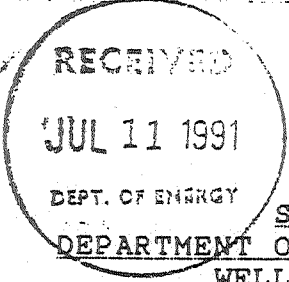
Riley - (20 holes from 4487-4459) Fraced w/70 quality foam, 30 lbs. gel/1000 gals., 33,000 lbs. 20/40 sand, 500 gals. 15% HCl acid and 513,000 SCF of N<sub>2</sub>

WELL LOG

FORMATION	COLOR	HARD OR SOFT	TOP FEET	BOTTOM FEET	REMARKS
					Including indication of all fresh and salt water, coal, oil and gas
Redrock and Clay			0	42	
Sand and Shale			42	59	
Sand			59	95	Damp @ 82'
Coal			95	98	Coal
Sand and Shale			98	125	1/4" stream water @ 95'
Redrock			125	130	
Sand and Shale			130	204	
Sand, Shale and Redrock			204	700	1/2" stream water @ 450'
Redrock and Shale			700	897	
Sand			897	923	
Sand and Shale			923	1370	
Sand			1370	1440	
Sand and Shale			1440	1770	Damp @ 1485'
Maxton			1770	1832	Oil odor @ 1834'
Shale			1832	1840	
Little Lime			1840	1860	
Pencil Cave			1860	1882	
Big Lime			1882	1940	
Big Injun			1940	2020	
Shale			2020	2200	
Weir			2200	2312	
Shale			2312	2388	
Berea			2388	2392	
Sand and Shale			2392	3300	
Warren			3300	3351	
Sand and Shale			3351	4452	3725' - no show
Riley			4452	4490	3916' - 10/10 - 1" w/w (33mcf)
Sand and Shale			4490	4860	4234' - 10/10 - 1" w/w (33mcf)
Benson			4860	4864	4773' - 10/10 - 1" w/w (33mcf)
Sand and Shale			4864	5100	4899' - 10/10 - 1" w/w (33mcf)
Alexander			5100	5182	5245' - 10/10 - 1" w/w (33mcf)
Shale			5182	5450	TD - 10/10 - 1" w/w (33mcf)
TD				5450	DC - 10/10 - 1" w/w (33mcf)

26-SC1  
 2489  
 M.F. at 2005

(Attach separate sheets as necessary)



FORM WW-2B

DEPT. OF ENERGY

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

017-3900 Issued 07/29/91 Page 3 of 8 Expires 07/29/93

- 1) Well Operator: Eastern American Energy Corporation 14980 (1) 670
2) Operator's Well Number: Keystone/Reed #2 WVDOD002802 3) Elevation: 1043'
4) Well type: (a) Oil \_\_\_/ or Gas XX/
(b) If Gas: Production XX/ Underground Storage \_\_\_/ Deep \_\_\_/ Shallow XX/
5) Proposed Target Formation(s): Alexander
6) Proposed Total Depth: 5350' feet
7) Approximate fresh water strata depths: 123', 383', 978'
8) Approximate salt water depths: 1463'
9) Approximate coal seam depths: 79'-82'
10) Does land contain coal seams tributary to active mine? Yes \_\_\_/ No XX/
11) Proposed Well Work: Drill and complete new well.
12)

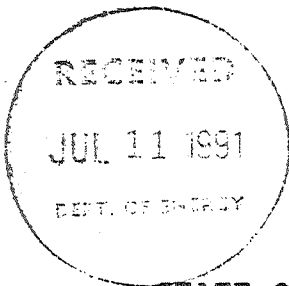
CASING AND TUBING PROGRAM

Table with 4 main columns: TYPE, SPECIFICATIONS, FOOTAGE INTERVALS, CEMENT. Rows include Conductor, Fresh Water, Coal, Intermediate, Production, Tubing, and Liners.

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

For Division of Oil and Gas Use Only

Fee(s) paid: [initials] Well Work Permit [initials] Reclamation Fund [initials] WPCP [initials]



1) Date: July 9, 1991  
2) Operator's well number  
Keystone/Reed #2 WVDOD002802  
3) API Well No: 47 - 017-3900  
State - County - Permit

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

4) Surface Owner(s) to be served:  
(a) Name Edward V. Rice  
Address 1264 Harriets Bluff  
Woodbine, GA 31569  
(b) Name \_\_\_\_\_  
Address \_\_\_\_\_  
(c) Name \_\_\_\_\_  
Address \_\_\_\_\_  
5) (a) Coal Operator:  
Name None  
Address \_\_\_\_\_  
(b) Coal Owner(s) with Declaration  
Name None  
Address \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
6) Inspector Mike Underwood  
Address Rt. 2, Box 135  
Salem, WV 26426  
Telephone (304)- 782-1043  
(c) Coal Lessee with Declaration  
Name None  
Address \_\_\_\_\_

TO THE PERSON(S) NAMED ABOVE TAKE NOTICE THAT:

\_\_\_\_\_ Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas OR  
XXX Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)  
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through 8 on the above named parties, by:  
\_\_\_\_\_ Personal Service (Affidavit attached)  
XXX Certified Mail (Postmarked postal receipt attached)  
\_\_\_\_\_ Publication (Notice of Publication attached)

I have read and understand Chapter 22B and 38 CSR 11-18, and I agree to the terms and conditions of any permit issued under this application.  
I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete.  
I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Well Operator EASTERN AMERICAN ENERGY CORPORATION  
By: John M. Paletti John M. Paletti  
Its: Designated Agent  
Address 501 56th Street  
Charleston, WV 25304  
Telephone (304) 925-6100

Subscribed and sworn before me this 9th day of July, 19 91  
Edna Marie Hoff Notary Public  
My commission expires August 2, 1993