

STATE OF MARYLAND  
**MARYLAND GEOLOGICAL SURVEY**  
 The Johns Hopkins University  
 BALTIMORE, MARYLAND 21218

Permit Number 116  
 Well Number 1  
 Company Texas Eastern  
 County Garrett

**COMPLETION REPORT**  
 (oil or gas well)

*This report must be submitted within 30 days after completion of the well*

WELL DESCRIPTION - KIND OF WELL: Gas Storage

(Oil, Gas, Other)

NAME & WELL NO.	Size of Casting and Tubing	Used in Drilling	Left in Well	Packers: Type, Size and Depth
<u>R. C. Bender #1</u>				
ELEVATION: <u>2329'</u> LEASE: <u>Bender</u>	<u>20" OD</u>		<u>12'</u>	
DRILLING COMMENCED: <u>9/24/78</u> DRILLING COMPLETED: <u>11/18/78</u>	<u>13 3/8" OD</u>		<u>281'</u>	
PRODUCTION: <u>Natural 10820 MCFGD</u>	<u>9 5/8" OD</u>		<u>2975'</u>	
<u>After frac 6700 MCFGD</u>	<u>7"</u>		<u>7464'</u>	
RESERVOIR PRESSURE <u>Not taken</u> sig _____ hrs.				
WELL TREATMENT: ( <del>Shooting</del> , Acidizing, Fracturing, Etc.)				
<u>Open Hole Oriskany 7464-7558' acid frac with spearhead 3000 gals 7 1/2% MCA followed with 40,000 gals 3% HCl &amp; 52,000# 80-100 mesh sand</u>				PERFORATIONS AT:
	CEMENTING DATA: (Size Pipe, Depth, No. Bags, Date)			
	<u>20" Conductor Csg. 20 sx 2% CaCl</u>			
	<u>13 3/8" Surface Csg. 100 sx Thixotropic &amp; 100 sx Chem Comp Cmt, 100 sx Cl "H" w/2% CaCl</u>			
RESERVOIR PRESSURE AFTER TREATMENT: <u>Not taken</u>	<u>9 5/8" Protection Csg. 665 sx Halliburton Lite cmt 391 sx Chem Comp cmt, 100 sx Cl H w/2% CaCl</u>			
<u>24 hr surface SI press 3025 psig</u>	<u>7" Production Csg. Thru shoe w/300 sx 25-75 Poz &amp; tail in w/100 sx Latex. Thru perms 5400', 815 sx 25-75 Poz cmt and 100 sx Latex cmt.</u>			
RESULTS AFTER TREATMENT: <u>Flow ar rate of 6700 MCFGD</u>				
REMARKS: <u>7" casing at 7464', DV Pkr at 6419': Unable to cement thru DV tool - no circ when open. Perf 7" 5400' cmt to surf., then squeeze perms at 5400', then place Csg patch over 5400' perms and over DV tool at 6419'.</u>	GEOPHYSICAL LOGS (Type of Geophysical Logs Run on Well) <u>Comp Form Density 100-7550' Cement Bond 0-7436'</u> <u>Gamma Ray 0-7442'</u> <u>Continuous Directional 290-7456'</u> <u>Induction 290-2990'</u> <u>Temp 2700-7558'</u>			

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GEOLOGICAL LOG

FORMATION	TOP	BOTTOM	GAS AT	OIL AT	WATER AT (Fresh or Salt Water)	REMARKS
Tully Lm	6532	6549				
Onondaga Lm	7305	7320				
Chert	7320	7436				
Needmore Sh	7436	7466				
Oriskany Sd	7466	7555				

This completion report is accurate to the best of my knowledge.

Date Dec 20, 1978

APPROVED *D. J. Lunde*  
D. J. Lunde

By Sr. Engineer  
(Title)

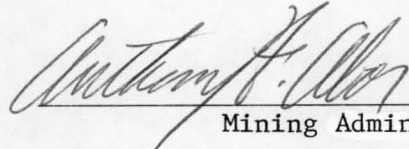

COMPANY Texas Eastern Corporation

STATE OF MARYLAND  
 DEPARTMENT OF NATURAL RESOURCES  
 ENERGY & COASTAL ZONE ADMIN.  
 TAWES STATE OFFICE BUILDING  
 ANNAPOLIS, MARYLAND 21401

**APPLICATION FOR PERMIT TO DRILL OIL OR GAS WELL**

(Applications must be submitted in triplicate)

Bender #1

OWNER <u>Texas Eastern Transmission Corporation</u> STREET or R.F.D. <u>P. O. Box 2521</u> POST OFFICE <u>Houston, Texas 77001</u> Attn: Mr. D. Garner Rm. 3923 1HC	LOCATION OF WELL COUNTY <u>Garrett</u> NEAREST POST OFFICE <u>Accident, Md.</u> Distance from Post Office <u>16,064.69'</u> Direction from Post Office <u>N.03°06'37"E.</u>															
<p style="text-align: center;"><b>PERMIT TO DRILL WELL</b></p> <p style="text-align: center;">NOT TO BE FILLED IN BY APPLICANT</p> PERMIT NO. <u>116</u> The permit is herewith granted subject to the conditions stipulated.  Mining Administrator Date <u>June 6, 1978</u>	APPROXIMATE DEPTH OF WELL (feet) <u>7400'</u> METHOD OF DRILLING <u>Rotary</u> DEEPEST GEOLOGIC FORMATION WELL WILL BE DRILLED <u>Heldeberg Lm.</u> DISTANCE OF WELL LOCATION TO NEAREST BUILDING (feet) <u>222' Remains of House</u>															
Special conditions that may apply:  <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Approved as to legal form and sufficiency this <u>11</u> day of <u>May</u>, 19<u>78</u>            Assistant Attorney General</p> </div>	NUMBER OF SHIFTS PER DAY _____ LICENSED DRILLER IN CREW OF EACH SHIFT <table border="1"> <thead> <tr> <th>NAME</th> <th>Permit #</th> <th>ADDRESS</th> </tr> </thead> <tbody> <tr> <td>Clifford Haines</td> <td>139</td> <td>Box 591 Buchannon, W. Va.</td> </tr> <tr> <td>Melvin England</td> <td>138</td> <td>Box 214 Grantsville, Md.</td> </tr> <tr> <td>John Nestor</td> <td>140</td> <td>Box 205 Humbleton, W. Va.</td> </tr> <tr> <td>Daniel Jenkins</td> <td>142</td> <td>Box 506 Jane Low, W. Va.</td> </tr> </tbody> </table> <p>These names may be supplied later but before drilling begins</p>	NAME	Permit #	ADDRESS	Clifford Haines	139	Box 591 Buchannon, W. Va.	Melvin England	138	Box 214 Grantsville, Md.	John Nestor	140	Box 205 Humbleton, W. Va.	Daniel Jenkins	142	Box 506 Jane Low, W. Va.
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John Nestor	140	Box 205 Humbleton, W. Va.														
Daniel Jenkins	142	Box 506 Jane Low, W. Va.														

The names and post office addresses of the owners of the tracts of land included on the plat or map accompanying the application are to be given below.

**NOTE**

A BOND FOR \$2,500 PAYABLE TO THE STATE OF MARYLAND MUST ACCOMPANY THE APPLICATION THIS APPLICATION FORM MUST BE FILLED OUT WITH TYPEWRITER OR IN BLOCK LETTERS



5310  
184 Ac.  
9-30-84

25 Ac.  
1-31-78

Ralph  
(Cinda) Kolbfleisch

Ralph Kolbfleisch &  
Sherman Fr

Anna Georg, et al.  
(George Henry)

T.E.T.Co.  
5312  
202 Ac.  
10-30-74  
Perp.-G.S.

EXP.  
5258  
3.125 Ac.  
2-11-88

Henry R. Glass

(59.92 Ac.)

T.E.T.Co.  
5062  
245 Ac.  
Perp.-G.S.

T.E.T.Co.  
(August Harmon)

(206.19 Ac.)

Texas Eastern  
(Rob Roy Paugh, et ux)

(38.81 Ac.)

Oscar G. Harmon, et ux

T.E.T.Co.  
5322  
325 Ac.  
Perp.-G.S.

T.E.T.Co. 5308  
189.89 Ac.  
Perp.-G.S.

5063  
T.E.T.Co.  
12.75 Ac.  
T.E.  
(Robt. R)

5061  
(50 Ac.)

T.E.T.Co.  
(Fred J. Bentz)

T.E.T.Co.  
5282  
100.25 Ac.  
Perp.-G.S.

1-Bender

T.E.T.Co.  
5300  
79 Ac.  
Perp.-G.S.

T.E.T.Co.  
5064  
172.25 Ac.  
Perp.-G.S.

T.E.T.Co.  
(William G. Beitzel)

T.E.T.Co. 5302  
9 Ac.  
Perp.-G.S. (C.C. Thomas)

T.E.T.Co.  
5343  
109 Ac.  
Perp.-M.I.

T.E.T.Co.  
5301  
3 Ac.  
Perp.-G.S.  
(Uphold)

T.E.T.Co.  
5281  
200 Ac.  
Perp.-G.S.

3-Everly  
7228'

Texas Eastern  
(Accident Ld. Co.)

T.E.T.Co.  
(Warren R. Jensen, et al)

T.E.T.Co.  
(Walter Richter, et ux)

T.E.T.Co. - Full  
Pt. - M.I.  
Pt. - G.S.  
4950  
562.38 Ac.  
Perp.

Mar-  
groff

T.E.T.Co.  
5427  
5 Ac.  
9-3-77

2-McCullough  
T.D. 7369'

1-Everly  
Everly-2 Elizabeth Everly 7505'

T.E.T.Co.  
4951  
16.62 Ac.  
Perp.-G.S.

T.E.T.Co.  
(Harman)

FORD C. McCULLOUGH

T.E.T.Co.  
S.ih 193.39 Ac.  
W.I. in 2.21 Ac.

T.E.T.Co.

1-McCullough