

7 1/2'

0.04
0.43

Schwarzman
95.65 ac.

J. Leggett
120 ac.

stone
(fd. 2"
pipe)

Location
A-1985

2897
(25)

stone & pirs.

S75W 1970.1'

565-59W 778'

759.0'

N79-22W 940'

gate post

N43-30E 1291'

N15-01W 1383'

N13E

N02-20E

693.0'

lynn

N30-20E

330.0'

N20W 128.7'

R.O.

N11-30W

422'

N07-30E 874.5'

stone

N. Leggett
121 ac.

hickory
(fd. 14" dbl. C.O.
at fence corner)

284
(16)

2898
(25)

Schwarzman
90.9 ac.

persimmon

S17-30W 165.0'

stone

S38-30W

396.0'

stone

S25E 519.0'

stone

W03-30E

354.5'

stone

S55E 693.0'

stone

N77-15E 135.3'

J.O.

N74-45E

J.O. 330.0'

N49-30E 118.8'

J.O.

N39E 198.0'

J.O.

N21E 165.0'

J.O.

N20-15E 207.9'

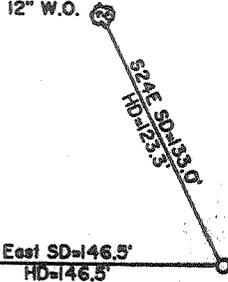
stone

Randolph
109 ac.

Osborne
56.85 ac.

292
043

REFERENCES

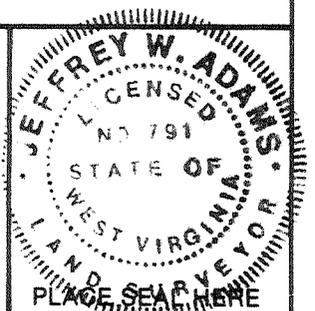


(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

FILE NO. _____
DRAWING NO. _____
SCALE 1" = 500'
MINIMUM DEGREE OF
ACCURACY 1 in 200
PROVEN SOURCE OF
ELEVATION Road junction 1800'
SE of Location: elev. 841'

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 REGU-
LATIONS ISSUED AND PRESCRIBED BY THE DEPART-
MENT OF ENERGY

(SIGNED) [Signature]
R.P.E. _____ L.L.S. 791



STATE OF WEST VIRGINIA
Division of Environmental Protection
OFFICE OF OIL AND GAS



DATE August 14, 19 93
OPERATOR'S WELL NO. A-1985
API WELL NO. _____

WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL
(IF "GAS,") PRODUCTION STORAGE DEEP SHALLOW
LOCATION: ELEVATION 878 WATER SHED South Fork of Hughes River
DISTRICT Southwest COUNTY Doddridge
QUADRANGLE Oxford 7 1/2' Halbrook NC
SURFACE OWNER Otis Leggett ACREAGE 110.5
OIL & GAS ROYALTY OWNER Otis Leggett, et al LEASE ACREAGE 110
LEASE NO. 6

PROPOSED WORK: DRILL 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 Alexander ESTIMATED DEPTH 5500
WELL OPERATOR Alamco, Inc. DESIGNATED AGENT Marty Perri
ADDRESS P.O. Box 1740, Clarksburg, WV 26302-1740 ADDRESS P.O. Box 1740, Clarksburg, WV 26302-1740

COUNTY NAME
PERMIT

66 133

REC-11
 WV Division of
 Environmental Protection
 FEB 23 94
 Permitting
 Dept. of Oil & Gas

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

Well Operator's Report of Well Work

Farm name: LEGGETT, OTIS

Operator Well No.: LEGGETT A-1985

LOCATION: Elevation: 878.00 Quadrangle: OXFORD

District: SOUTHWEST County: DODDRIDGE
 Latitude: 275 Feet South of 39 Deg. 12Min. 30 Sec.
 Longitude 2250 Feet West of 80 Deg. 50 Min. Sec.

Company: ALAMCO, INC.

200 W. MAIN ST., P.O. BOX 1740
 CLARKSBURG, WV 26302-1740

Agent: MARTY L. PERRI

Inspector: MIKE UNDERWOOD

Permit Issued: 09/27/93

Well work Commenced: 01/24/94

Well work Completed: 02/07/94

Verbal Plugging

Permission granted on:

Rotary X Cable Rig

Total Depth (feet) 5119

Fresh water depths (ft) 42'

Salt water depths (ft) None

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

Coal Depths (ft): None

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11-3/4	35'	-	
8-5/8	972'	972'	270 Sks. 319 ft. ³
4-1/2		5085.15'	220 Sks. 284 ft. ³

OPEN FLOW DATA

Producing formation Alexander Pay zone depth (ft) 4907-4952
 Gas: Initial open flow 84 MCF/d Oil: Initial open flow - Bbl/d
 Final open flow 1032* MCF/d Final open flow - Bbl/d
 Time of open flow between initial and final tests 4 Hours
 Static rock Pressure 1500* psig (surface pressure) after 91 Hours

Second producing formation Benson Pay zone depth (ft) 4643-4647
 Gas: Initial open flow 35 MCF/d Oil: Initial open flow - Bbl/d
 Final open flow See above MCF/d Final open flow - Bbl/d
 Time of open flow between initial and final tests See above Hours
 Static rock Pressure See above psig (surface pressure) after See above Hours

*Commingled.

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: ALAMCO, INC.

By: [Signature] Richard R. Hoffman

Date: 2/18/94

FEB 23 1994

Formations: 0' to 1026' from Drillers Log, 1026' - TD from Gamma Ray Log

<u>Top</u>	<u>Bottom</u>	<u>Type</u>	<u>Water, Coal, Gas</u>	
0	5	Clay	<u>Water:</u> Damp @ 42'	
5	275	SD & SH	<u>Coal:</u> None	
275	300	SD	<u>Oil:</u> None	
300	1026	SD & SH	<u>Gas Checks:</u>	
1026	1170	SD	1815'	158 Mcf/d
1170	1478	SD & SH	2004'	119 Mcf/d
1478	1535	Maxton	2129'	119 Mcf/d
1535	1684	SH	3065'	119 Mcf/d
1684	1814	B.L./Injun	3312'	119 Mcf/d
1814	1979	SH	3687'	119 Mcf/d
1979	2105	Weir	3965'	119 Mcf/d
2105	4633	SH	4182'	84 Mcf/d
4633	4665	Benson	4309'	84 Mcf/d
4665	4877	SH	4557'	103 Mcf/d
4877	4953	Alexander	4651'	119 Mcf/d
4953	5117	SH	4869'	84 Mcf/d
	5117	Log TD	4994'	84 Mcf/d
	5119	Drig. TD	5119'	84 Mcf/d

Stimulation:

Alexander: (2-7-94)

Perfs: (4907' to 4952') 14 holes
 WF-20 W/N2, 40,000 #20/40 SD,
 787 BBLs, ISIP 1108#

Benson: (2-7-94)

Perfs: (4643' to 4647') 9 holes
 WF-20 W/N2, 40,000 #20/40 SD,
 720 BBLs, ISIP 1335#

18008

RECEIVED
WV Division of
Environmental Protection

017-4048
Issued 9/27/93
Expires 9/27/95

FORM WW-2B

24
Permitting
Office of Oil & Gas

Page 3 of 10

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

Well Operator: ALAMCO, INC. (975) (7) 526
Operator's Well Number A-1985 (LEGGETT) 3) Elevation: 878
Well type: (a) OIL ___/ or GAS XX /
(b) If Gas: Production XX / Underground Storage ___ /
Deep ___ / Shallow XX /
Proposed Target Formation(s): Alexander 439
Proposed Total Depth: 5500 feet
Approximate fresh water strata depths: Damp @ 120'
Approximate salt water depths: NONE
Approximate coal seam depths: 1,270' - 1,176' @
Does land contain coal seams tributary to active mine? Yes ___ / No XX /
Proposed Well Work: SEE ATTACHED
CASING AND TUBING PROGRAM

TYPE SPECIFICATIONS FOOTAGE INTERVALS CEMENT

	SIZE	GRADE	WEIGHT PER FT.	FOR DRILLING	LEFT IN WELL	FILL-UP (Cu. Ft.)
Conductor	11-3/4"	LS	32#	40'	40'	NONE
Fresh Water						
Coal						
Intermediate	8-5/8"	J-55	24#	878'	<i>dfs</i> 878'	As required by 38 CSR 18-11-33
Production	4-1/2"	M-75	11.60	5,500'	5,500'	As required by 38 CSR 38-11-1
Tubing						
Liners						

ACKERS: Kind NONE
Sizes ---
Depths Set ---

For Division of Oil and Gas Use Only

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

18005

RECEIVED

WV Division of
Environmental Protection

SEP 24 93

Permitting
Office of Oil & Gas

ATTACHMENT TO:
FORM WW-2B

Page 4 of 10

WELL OPERATOR ALAMCO, INC.
OPERATOR WELL NO: A-1985 (LEGGETT)
FILE NUMBER 47-017- 4048

11. Proposed Well Work:

Well A-1986 will be drilled to approximately 1,137' KB. The 8-5/8" casing will be set at approximately 1,137' KB and then cemented to surface. The well will then be drilled to 5,500' KB and the 4-1/2" casing set at approximately 5,500' KB. The 4-1/2" casing will be cemented to 3,000' KB. The well will then be hydraulically fractured in the Alexander Sand Formation.

12. Plan for partial abandonment:

2 4 00
Permitting
of Oil & Gas

1) Date: 08/27/93
2) Operator's well number
A-1985 (LEGGETT)
3) API Well No: 47 - 017 - 4048
State - County - Permit

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS

NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:
(a) Name Otis Leggett
Address 1002 Stadium Drive
St. Mary's, WV 26170
(b) Name _____
Address _____
(c) Name _____
Address _____
6) Inspector Mike Underwood
Address Route 2, Box 135
Salem, WV 26426
Telephone (304)-782-1043

5) (a) Coal Operator:
Name NONE OF DECLARATION
Address _____
(b) Coal Owner(s) with Declaration
Name Otis Leggett
Address 1002 Stadium Drive
St. Mary's, WV 26170
Name _____
Address _____
(c) Coal Lessee with Declaration
Name NONE OF DECLARATION
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

XX 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 _____ on the above named parties, by:

- _____ Personal Service (Affidavit attached)
- XX 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 ALAMCO, INC.
By: Marty Perry
Its: _____ Manager, Land
Address P. O. Box 1740
Clarksburg, WV 26301
Telephone (304) 623-6671

Subscribed and sworn before me this 27th day of August, 1993

Rhonda Brown Goss (commissioned as Rhonda Brown) Notary Public
My commission expires July 25, 1995