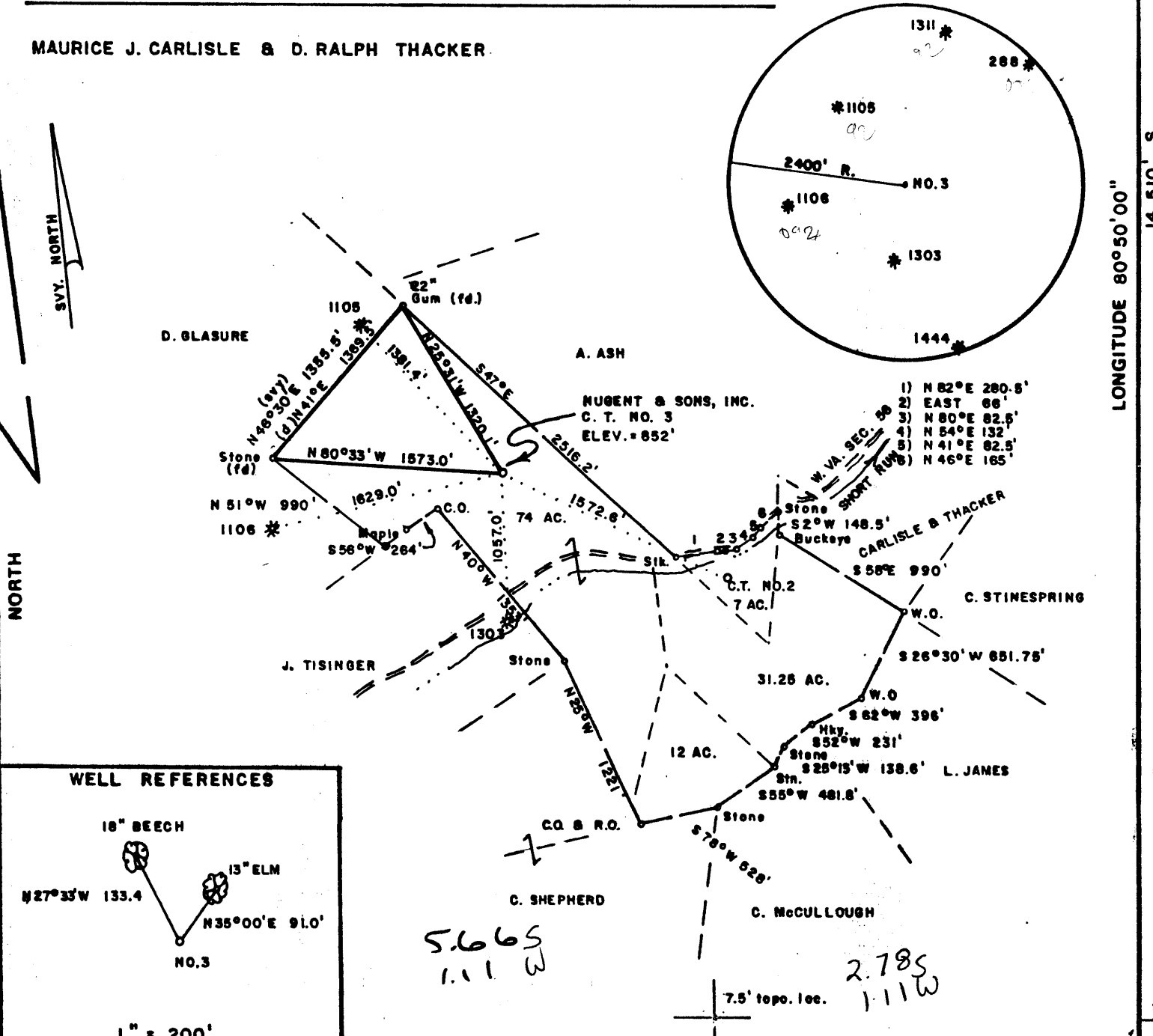


CARLISLE - THACKER LEASE 125.24 AC ±

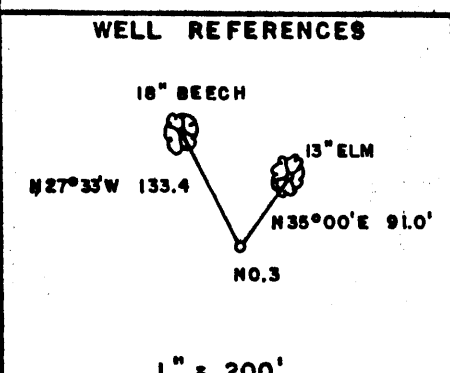
5830' W

LATITUDE 39°22'30"

MAURICE J. CARLISLE & D. RALPH THACKER



- 1) N 82°E 280.5'
- 2) EAST 86'
- 3) N 80°E 82.5'
- 4) N 54°E 132'
- 5) N 41°E 82.5'
- 6) N 46°E 165'



FILE NO. _____
 DRAWING NO. _____
 SCALE 1" = 1000'
 MINIMUM DEGREE OF ACCURACY 1/200
 PROVEN SOURCE OF ELEVATION SPOT ELEV. EAST SIDE OF LEASE ELEV. = 807'

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.

Mark C. Echard
 (SIGNED) MARK C. ECHARD

R.P.E. _____ L.L.S. 490



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



DATE APRIL 13, 1992
 OPERATOR'S WELL NO. NO. 3
 API WELL NO. _____
 STATE 47 COUNTY 095 PERMIT 1496

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

WELL TYPE: OIL ___ GAS LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION STORAGE ___ DEEP ___ SHALLOW
 LOCATION: ELEVATION 852 WATER SHED SHORT RUN
 DISTRICT CENTERVILLE COUNTY TYLER
 QUADRANGLE WEST UNION
 SURFACE OWNER MAURICE J. CARLISLE & D. RALPH THACKER ACREAGE 74 of 125.24
 OIL & GAS ROYALTY OWNER DAC et al LEASE ACREAGE 125.24
 LEASE NO. _____
 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 ___ 6-6 Wilbur (092)
 TARGET FORMATION BENSON-RILEY ESTIMATED DEPTH 5500'
 WELL OPERATOR NUGENT & SONS, INC. DESIGNATED AGENT MICHAEL NUGENT
 ADDRESS 901 W. MAIN ST. SUITE 201 5079 ADDRESS 901 W. MAIN ST. SUITE 201
 BRIDGEPORT, W. VA. 26330 BRIDGEPORT, W. VA. 26330

MAY 18 1992

RECEIVED
WV Division of
Environmental Protection

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

15-May-92
API # 47-95-01496

JUL 07 1992

Reviewed TMG

Recorded _____

Well Operator's Report of Well Work

Farm name: CARLISLE, MARICE/ THACKER Operator Well No.: THACKER #3

LOCATION: Elevation: ~~807.00~~ ^{852 CK'D TOPO} Quadrangle: WEST UNION

District: CENTERVILLE County: TYLER
Latitude: 170 Feet South of 39 Deg. 20Min. 0 Sec.
Longitude 4420 Feet West of 80 Deg. 50 Min. 0 Sec.

Company: NUGENT & SONS, INC.
901 W. MAIN ST, SUITE 201
BRIDGEPORT, WV 00002-6330

Agent: MICHAEL W. NUGENT, PRES.

Inspector: MIKE UNDERWOOD
Permit Issued: 05/15/92
Well work Commenced: 5-29-92
Well work Completed: 6-4-92
Verbal Plugging _____
Permission granted on: N/A
Rotary Cable _____ Rig _____
Total Depth (feet) 5300
Fresh water depths (ft) 60', 90'
650'
Salt water depths (ft) None

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft
11 3/4	160	130	CTS 65
8 5/8	1532	1487	CTS 355
4 1/2	5300	5181	

Is coal being mined in area (Y/N)? N
Coal Depths (ft): _____

OPEN FLOW DATA

Producing formation Alexander, Benson, Riley Pay zone depth (ft) 4086-509
Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 840 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests 4 Hours
Static rock Pressure 1600 psig (surface pressure) after 48 Hours

Second producing formation Comingled Pay zone depth (ft) N/A
Gas: Initial open flow N/A MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow N/A MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure N/A psig (surface pressure) after N/A 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.

Nugent & Sons, Inc.
For: NUGENT & SONS, INC.

By: Michael W. Nugent
Date: 7/6/92

JUL 13 1992

Treatment Information

Perf Alexander 5004-5051 with 10 shots Frac with 150 sks sand
75Q foam - Avg psi 2958 Avg rate 661

Perf Benson 4732-4734 with 13 holes Frac with 300 sks sand
75Q foam - Avg rate 7.5 Avg psi 3083

Perf Riley 4086-4355 with 10 holes Frac with 100sks sand

Formation	Top/Bottom
Fill	0 - 10
Sand/Shale	10 - 20
Redrock/Sand	20 - 60
Redrock/Sand/Shale	60 - 160
Sand	160 - 170
Sand/Redrock/Shale	170 - 380
Sand/Shale	380 - 590
Sand	590 - 601
Sand/Shale	601 - 620
Redrock/Shale	620 - 725
Sand	725 - 730
Redrock/Shale	730 - 777
Sand/Shale	777 - 810
Redrock/Shale	810 - 844
Sand	844 - 870
Sand/Shale	870 - 926
Sand	926 - 990
Sand/Shale	990 - 1071
Sand	1071 - 1123
Sand/Shale	1123 - 1280
Sand	1280 - 1365
Sand/Shale	1365 - 1442
Sand	1442 - 1462
Sand/Shale	1462 - 1670
Little Lime	1670 - 1683
Shale	1683 - 1705
Big Lime	1705 -
Injun	- 1837
Sand/Shale	1837 - 2220
Sand	2220 - 2235
Sand/Shale	2235 - 3647
Shale	3647 - 5300

TD 5236
1" stream 60'
1 1/2" stream 90'
gas w/at TD - no show

E Log Tops
Big Lime 1724
Berea 2251
Benson 4738

131931

095 1496

Issued 5/15/92

Page of

Expires 5/15/94

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

- 1) Well Operator: Nugent & Sons, Inc. 34715' (1) 670
- 2) Operator's Well Number: Thacker #3 3) Elevation: 852
- 4) Well type: (a) Oil or Gas
(b) If Gas: Production / Underground Storage
Deep / Shallow
- 5) Proposed Target Formation(s): Benson 535
- 6) Proposed Total Depth: 5235 feet
- 7) Approximate fresh water strata depths: 85
- 8) Approximate salt water depths: 1450
- 9) Approximate coal seam depths: None
- 10) Does land contain coal seams tributary to active mine? Yes / No
- 11) Proposed Well Work: Drill and stimulate
- 12)

CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE INTERVALS		CEMENT
	Size	Grade	Weight per ft.	For drilling	Left in well	Fill-up (cu. ft.)
Conductor						
Fresh Water	11 3/4		32#	135	120	As Per Rule 38CSRQ11.2
Coal						As Per Rule 38CSRQ11.2
Intermediate	8 5/8		23#	1500	1485	As Per Rule 38CSRQ11.2
Production	4 1/2		10.5#	5235	5235	As Per Rule 38CSRQ11.1
Tubing						
Liners						

PACKERS : Kind _____
 Sizes _____
 Depths set _____

For Division of Oil and Gas Use Only

9/20
 Fee(s) paid: Well Work Permit Reclamation Fund WPCP
 Plat WW-9 WW-2B Bond Cashier CR. 56804 Agent
 (Type)

Surface Owner Copy

- 1) Date: 04-16-92
- 2) Operator's well number Thacker #3
- 3) API Well No: 47 - 095 - 1496
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 Marice Carlisle
Address 19700 Barnesville Rd.
Dickerson, Md 20642
 - (b) Name Ralph Thacker
Address 2838 Canada Hill Rd.
Myersville, Md 21773
 - (c) Name _____
Address _____
- 5) (a) Coal Operator:
 - Name N/A
Address _____
 - (b) Coal Owner(s) with Declaration
 - Name _____
Address _____
 - Name _____
Address _____
 - (c) Coal Lessee with Declaration
 - Name _____
Address _____
- 6) Inspector Mike Underwood
Address Route 2, Box 135
Salem WV 26426
Telephone (304)- 782-1043

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

 Included is the information required by Chapter 22B, Article 1, Section 8(d) of the Code of West Virginia (see page 2)

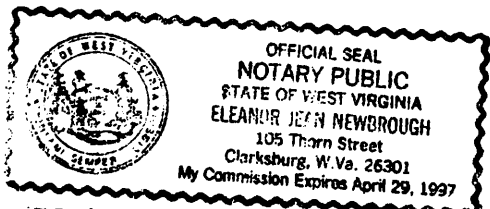
I certify that as required under Chapter 22B of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through on the above named parties, by:

- Personal Service (Affidavit attached)
- Certified Mail (Postmarked postal receipt attached)
- Publication (Notice of Publication attached)

INSTRUCTIONS TO SURFACE OWNERS NAMED ABOVE

(Continued on Reverse)

The well operator named below is applying for a permit from the State to do oil or gas well work. (Note: If the surface tract is owned by more than three persons, then these materials were served on you because your name appeared on the Sheriff's tax ticket on the land or because you actually occupy the surface tract. In either case, you may be the only owner who will actually receive these materials.) See Chapter 22B of the West Virginia Code. Well work permits are valid for 24 months.



Well Operator Nugent & Sons, Inc.
By: Michael W. Nugent
Its: President
Address 901 W. Main St.
Bridgeport, WV 26330
Telephone (304) 842-5699

Subscribed and sworn before me this 14th day of May, 1992

Eleanor Jean Newbrough Notary Public
My commission expires April 29, 1997