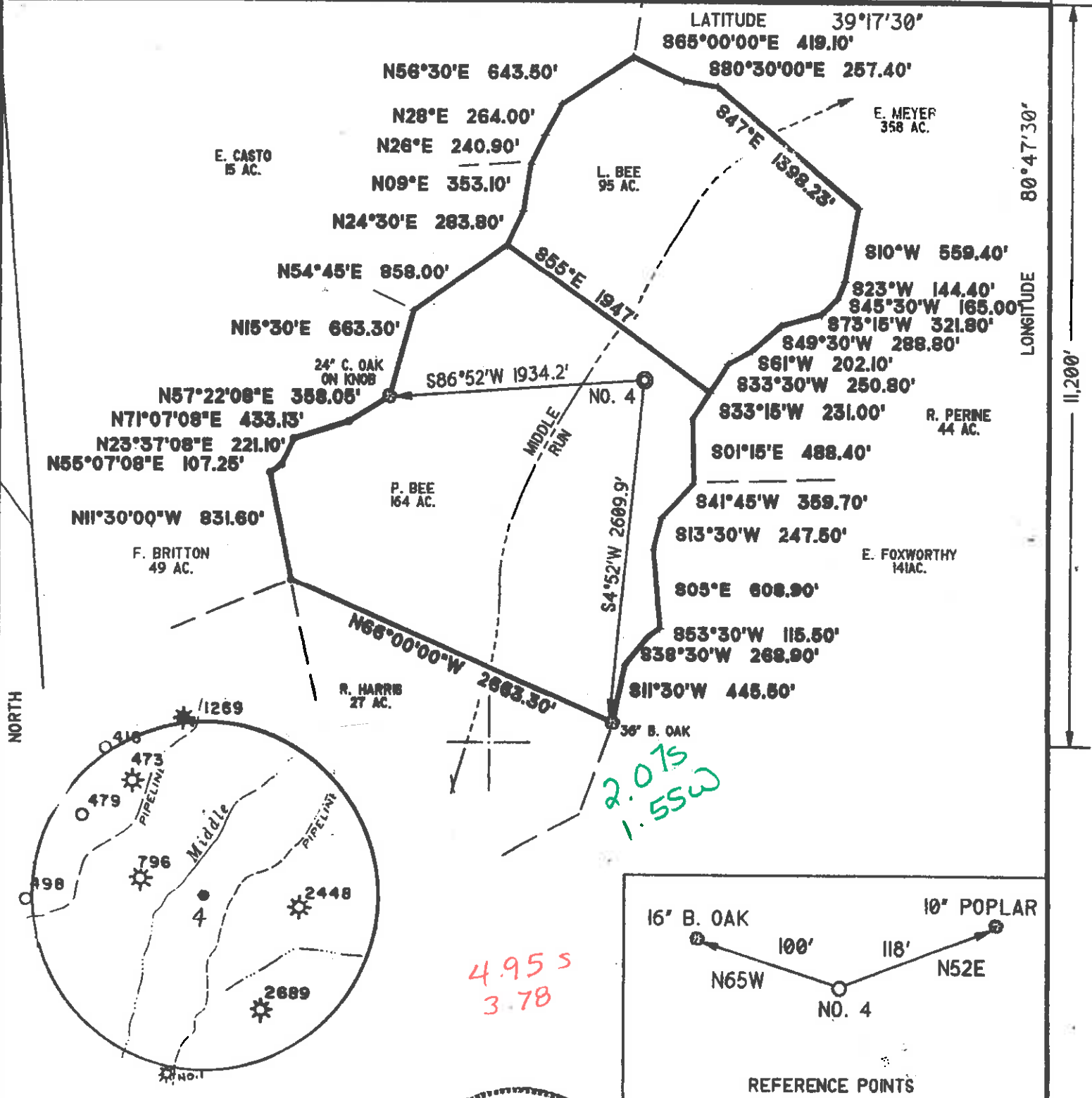


8,375'

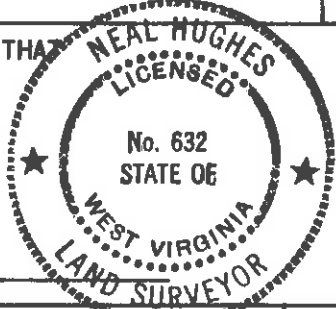


NORTH

LONGITUDE

11,200'

I THE UNDERSIGNED, DO 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. 632 *Neal Hughes*

(*) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 DATE DEC. 23, 19 94
 OPERATORS WELL NO. BEE 4
 API WELL NO. 47 - 017 - 4179
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 94-74
 PROVEN SOURCE OF ELEVATION KNOB 1145' SCALE 1"=1000'

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 995' WATERSHED MIDDLE RUN
 DISTRICT WEST UNION COUNTY DODDRIDGE QUADRANGLE WEST UNION *SE*
 SURFACE OWNER LEWIS PAUL BEE ACREAGE 94
 ROYALTY OWNER LIVINGSTON BEE, ET AL LEASE ACREAGE 356.5
 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 5400'

WELL OPERATOR KEY OIL CO. *475* DESIGNATED AGENT JAN CHAPMAN
 ADDRESS 22 GARTON PLAZA ADDRESS 22 GARTON PLAZA
WESTON, WV 26452 WESTON, WV 26452

COUNTY NAME PERMIT

6-6 133

RECEIVED
Environmental Protection

FEB 19 1995

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

Permitting
Office of Oil & Gas

Well Operator's Report of Well Work

Farm name: Lewis Paul Bee Operator Well No.: Bee #4

LOCATION: Elevation: 995.00 Quadrangle: WEST UNION

District: WEST UNION County: DODDRIDGE
Latitude: 11200 Feet South of 39 Deg. 17Min. 30 Sec.
Longitude 8375 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: KEY OIL COMPANY
22 GARTON PLAZA
WESTON, WV 26452-0000

Agent: JAN E. CHAPMAN

Inspector: MIKE UNDERWOOD
Permit Issued: 12/30/94
Well work Commenced: 1/19/95
Well work Completed: 1/24/95
Verbal Plugging
Permission granted on: _____
Rotary X Cable _____ Rig
Total Depth (feet) 5370'
Fresh water depths (ft) 50', 232'
Salt water depths (ft) -0-
Is coal being mined in area (Y/N)? N
Coal Depths (ft): -0-

Casing & Tubing Size	Used in Drilling	Left in Well	Cement Fill Up Cu. Ft.
11 3/4	132	132	70 sks. to surface
8 5/8	1588	1588	420 sks. to surface
4 1/2		5325	450 sks.
1.5		5184	

OPEN FLOW DATA

Balltown 3854-3892
Riley 4470-4561
Benson 4902-4912
Alexander 5160-5244

Producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow 15 MCF/d Oil: Initial open flow 0 Bbl/d
Final open flow 1,555+ MCF/d Final open flow SHOW Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 1600 psig (surface pressure) after 72 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: KEY OIL COMPANY
By: J. Chapman President
Date: February 7, 1995

BEE #4 47-017-4179
4 STAGE FOAM FRAC - HALLIBURTON

STAGE: ALEXANDER (14 HOLES) (5192'-5240.75') 60 QUALITY FOAM, 500 GAL. HCL, 60,000 LBS. 20-40 SAND, 490,000 SCF N₂, 810 BBLs. FOAM

STAGE: BENSON (10 HOLES) (4905'-4907.25') 75 QUALITY FOAM, 750 GAL. 15% HCL, 30,000 LBS. 20-40 SAND, 423,000 SCF N₂, 520 BBLs. FOAM

STAGE: RILEY (10 HOLES) (4476.5'-4509') 60 QUALITY FOAM, 750 GAL. 15% HCL, 10,000 LBS. 80-100 SAND, 30,000 LBS. 20-40 SAND, 508,000 SCF N₂, 612 BBLs. FOAM

STAGE: BALLTOWN (11 HOLES) (3856.25'-3879.75') 60 QUALITY FOAM, 10,000 LBS. 80-100 SAND, 30,000 LBS. 20-40 SAND, 445,000 SCF N₂, 602 BBLs. FOAM

WELL LOG

FORMATION	TOP FEET	BOTTOM FEET	REMARKS
WELL	0	15	1/4" STREAM H ₂ O @ 50'
SHALE	15	40	1/4" STREAM H ₂ O @ 232'
RED ROCK	40	50	
SHALE	50	60	
RED ROCK	60	65	
SHALE	65	80	
RED ROCK	80	85	
SHALE & RED ROCK	85	500	1760' N/S
SAND	500	514	1915' N/S
SHALE AND RED ROCK	514	639	2102' N/S
SAND AND SHALE	639	670	2508' N/S
SHALE AND RED ROCK	670	764	3004' N/S
SAND	764	795	3499' N/S
SHALE AND RED ROCK	795	889	4027' N/S
SAND AND SHALE	889	930	4590' N/S
SHALE AND RED ROCK	930	1060	4995' 2/10 THRU 1" W/WATER
SAND AND SHALE	1060	1385	5370' 2/10 THRU 1" W/WATER
SHALE AND RED ROCK	1385	1420	
SAND AND SHALE	1420	1860	
LITTLE LIME	1860	1914	
ENCIL CAVE	1914	1930	
BIG LIME	1930	2000	
BIG INJUN	2000	2070	
SAND AND SHALE	2070	2220	
WEIR	2220	2340	
SAND AND SHALE	2340	3286	
WARREN	3286	3350	
SAND AND SHALE	3350	3453	
SPEECHLEY	3453	3466	
SAND AND SHALE	3466	3854	
BALLTOWN	3854	3892	
SAND AND SHALE	3892	4470	
RILEY	4470	4561	
SAND AND SHALE	4561	4902	
BENSON	4902	4912	
SAND AND SHALE	4912	5160	
ALEXANDER	5160	5244	
SHALE	5244	5370 T.D.	