

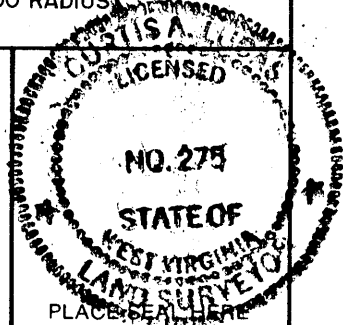
LOCATION REFERENCES
 S12°33'E 165.9' (H.D.=165.9') 12" POP.
 S24°28'W 157.8' (H.D.=153.8') 16" POP.
 N79°28'W 155.1' (H.D.=151.7') 16" POP.

NOTE: NO WATER SUPPLY WITHIN 1000' RADIUS

FILE NO. 1752
 MAP N47 SQS NI W4
 SCALE 1"=800'
 MINIMUM DEGREE OF ACCURACY 1 IN 200'
 PROVEN SOURCE OF ELEVATION F.R.BALL WELL NO.18
 ELEV. = 1093'

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.

(SIGNED) Curtis A. Lucas
 CURTIS A. LUCAS LLS 275



STATE OF WEST VIRGINIA DEPARTMENT OF MINES OIL AND GAS DIVISION

DATE MAY 29, 19 86
 FARM J.B.GORRELL NO. 5
 API WELL NO. 47 - 095 - 1140-LI
 STATE _____ COUNTY _____ PERMIT _____

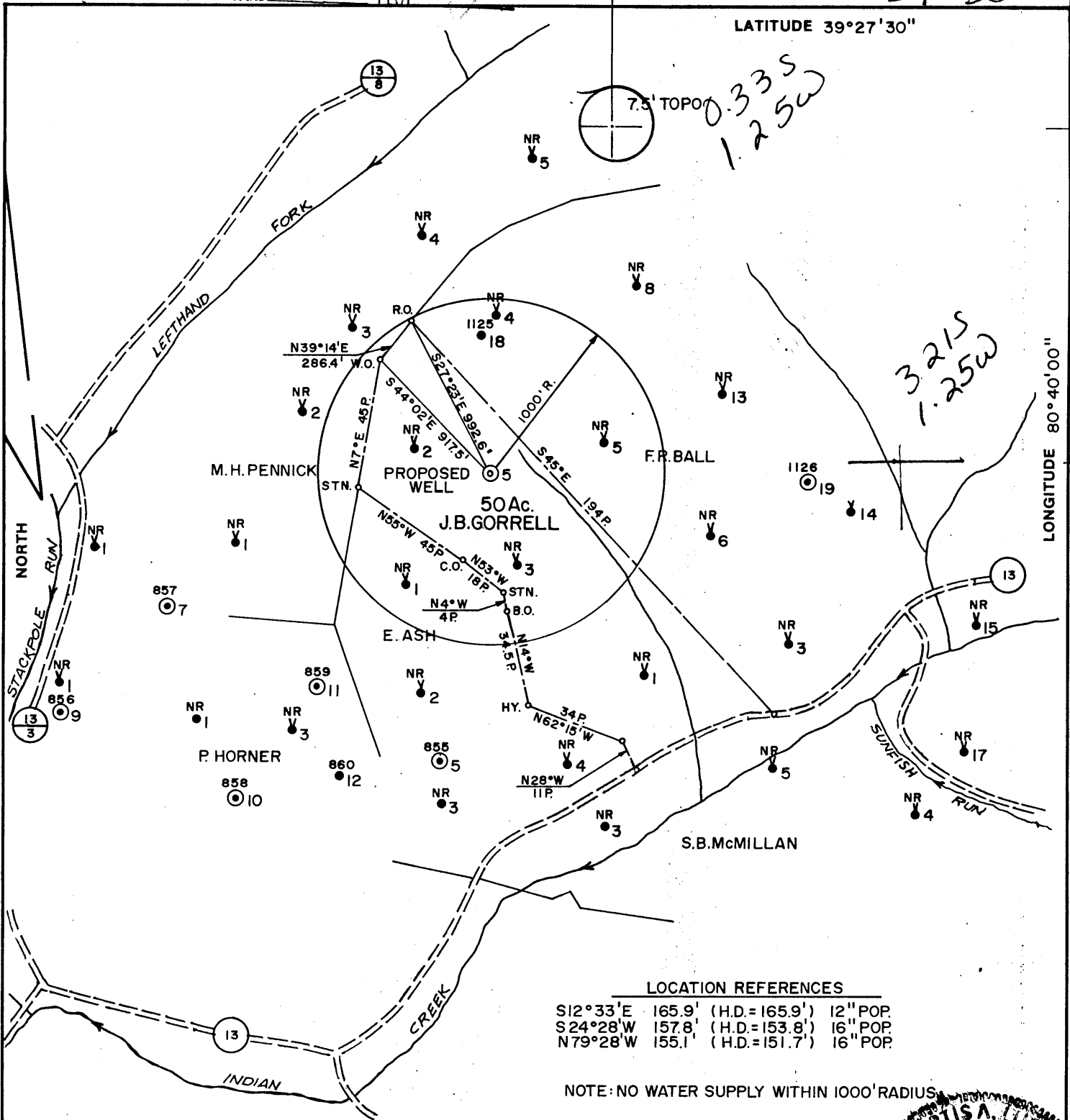
CANCELLED

(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS
 WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1110' WATER SHED INDIAN CREEK
 DISTRICT McELROY COUNTY TYLER
 QUADRANGLE CENTER POINT 7.5'
 SURFACE OWNER JOHN JONES ACREAGE 107.61 AC.
 OIL & GAS ROYALTY OWNER PENNZOIL COMPANY LEASE ACREAGE 50AC.
 LEASE NO. RG 2171-00
 PROPOSED WORK: DRILL X 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 GORDON ESTIMATED DEPTH 3070'
 WELL OPERATOR PENNZOIL COMPANY DESIGNATED AGENT JAMES A. CREWS
 ADDRESS P.O. BOX 1588 ADDRESS P.O. BOX 1588
673 ADDRESS P.O. BOX 1588
1418 ADDRESS PARKERSBURG, W.V. 26101

AUG 01 1988

FORM IV-6 (8-78) R. T. HALL

TYLER 1140-LI

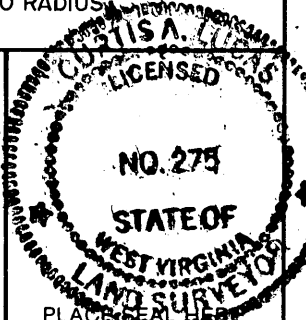


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 (SIGNED) Curtis A. Lucas
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STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE MAY 29, 19 86
 FARM J.B.GORRELL NO. 5
 API WELL NO.

47 - 095 - 1140-LI
 STATE COUNTY PERMIT

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 WELL TYPE: OIL ___ GAS ___ LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW ___
 LOCATION: ELEVATION 1110' WATER SHED INDIAN CREEK

DISTRICT McELROY 5 COUNTY TYLER
 QUADRANGLE CENTER POINT 7.5' 286 022 NW,
 SURFACE OWNER JOHN JONES ACREAGE 107.61 AC.
 OIL & GAS ROYALTY OWNER PENNZOIL COMPANY LEASE ACREAGE 50AC.
 LEASE NO. RG 2171-00

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PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION GORDON ESTIMATED DEPTH 3070'
 WELL OPERATOR PENNZOIL COMPANY DESIGNATED AGENT JAMES A. CREWS
 ADDRESS P.O. BOX 1588 ADDRESS P.O. BOX 1588
673

JUL 14 1986



- 1) Date: May 29, 1986
- 2) Operator's Well No. J. B. Gorrell #5
- 3) SIC Code _____
- 4) API Well NO. 47 - 095 - 1140-LI
State County Permit
- 5) UIC Permit No. _____

RECEIVED
JUN 2 1986

STATE OF WEST VIRGINIA
NOTICE OF LIQUID INJECTION OR WASTE DISPOSAL WELL WORK PERMIT APPLICATION
for the

DEPARTMENT OF ENERGY, OIL AND GAS DIVISION

DIVISION OF OIL AND GAS
DEPARTMENT OF ENERGY

- 6) WELL TYPE: Liquid injection / Gas injection (not storage) _____ / Waste disposal _____
- 7) LOCATION: Elevation: 1110 Watershed: _____
District: McElroy County: Tyler Quadrangle: Centerpoint 7.5'
- 8) WELL OPERATOR Pennzoil Company 9) DESIGNATED AGENT James A. Crews
Address P.O. Box 1588 Address P.O. Box 1588
Parkersburg, WV 26102 Parkersburg, WV
- 10) OIL & GAS INSPECTOR TO BE NOTIFIED
Name _____ Address _____
- 11) DRILLING CONTRACTOR:
Name _____ Address _____
- 12) PROPOSED WELL WORK: Drill / Drill deeper _____ / Redrill _____ / Stimulate _____
Plug off old formation _____ / Perforate new formation _____ / Convert _____
Other physical change in well (specify) _____
- 13) GEOLOGICAL TARGET FORMATION, Gordon Depth 2995 feet(top) to 3015 feet(bottom)
- 14) Estimated depth of completed well, (or actual depth of existing well) 3070 ft.
- 15) Approximate water strata depths; Fresh, 100 feet; salt, 1710 feet.
- 16) Approximate coal seam depths: 910
- 17) Is coal being mined in the area? Yes _____ / No /
- 18) Virgin reservoir pressure in target formation 1260 psig. Source estimated
- 19) Estimated reservoir fracture pressure 3500 psi (BHFP)
- 20) MAXIMUM PROPOSED INJECTION OPERATIONS: Volume per hour: 25 bbl/hr Bottom hole pressure 2332 psi
- 21) DETAILED IDENTIFICATION OF MATERIALS TO BE INJECTED, INCLUDING ADDITIVES: Fresh/produced water treated with bactericides and other chemicals as is necessary to maintain water quality
- 22) FILTERS (IF ANY): cartridge and/or coal bed filters
- 23) SPECIFICATIONS FOR CATHODIC PROTECTION AND OTHER CORROSION CONTROL: _____

24) CASING AND TUBING PROGRAM

CASING OR TUBING TYPE	SPECIFICATIONS					FOOTAGE INTERVALS		CEMENT FILL-UP OR SACKS (Cubic feet)	PACKERS
	Size	Grade	Weight per ft.	New	Used	For drilling	Left in well		
Conductor									Kinds
Fresh water	7	H-40	20#	X		960	960	Cement to surface	Sizes
Coal									
Intermediate									
Production	4-1/2	K55	9.5	X		3070	3070	250 sks. 50/50 posmix	Depths set
Tubing									Perforations:
Liners									Top Bottom

25) APPLICANT'S OPERATING RIGHTS were acquired from Emeline Gorrell
by deed _____ / lease / other contract _____ / dated March 23, ~~19~~1897, of record in the
County Clerk's office in Book 33 at page 61

See the reverse side of the APPLICANT'S COPY for instructions to the well operator.