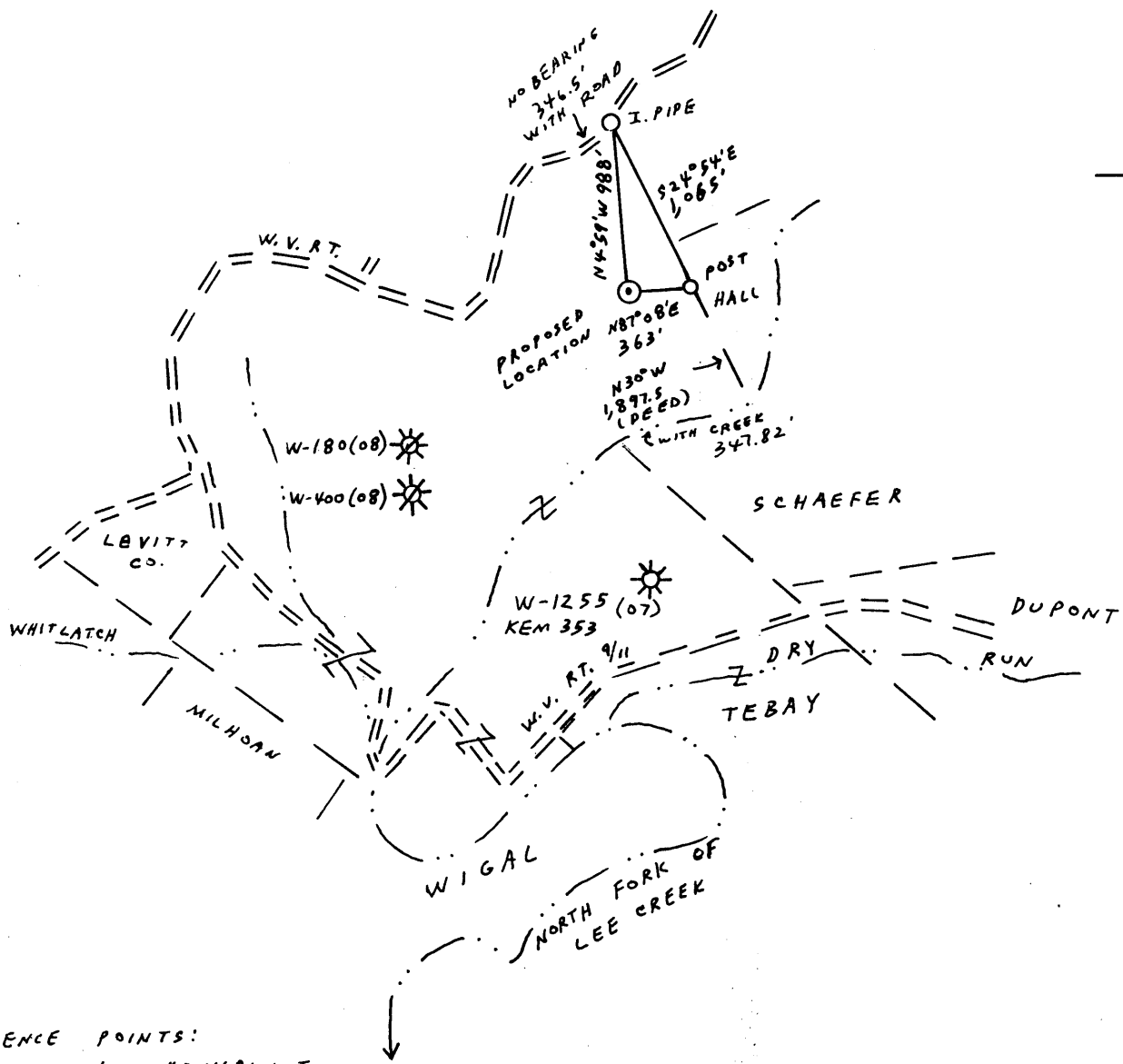


← 1,525' →

LATITUDE 39° 12' 30"

4,594'
LONGITUDE 80° 42' 30"

NORTH



REFERENCE POINTS:
 S 84° 44' W 332' TO 12" B. WALNUT
 S 28° 09' E 242' TO 10" ELM

N 19 E 6

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

FILE NO. 8-7
 DRAWING NO. _____
 SCALE 1" = 1,000'
 MINIMUM DEGREE OF ACCURACY 1:200
 PROVEN SOURCE OF ELEVATION INTER. RT. 11 AND 1/8 ELEV. = 744. 9,560'S.W. OF LOCATION

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) Vincent W. Wood
 R.P.E. _____ L.L.S. 664

PLACE SEAL HERE

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES
 OIL AND GAS DIVISION



DATE SEPTEMBER 20, 1984
 OPERATOR'S WELL NO. KEM 616
 API WELL NO. _____

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
 (IF "GAS,") PRODUCTION ___ STORAGE ___ DEEP ___ SHALLOW X
 LOCATION: ELEVATION 806 WATERSHED NORTH FORK OF LEE CREEK
 DISTRICT HARRIS COUNTY WOOD
 QUADRANGLE LUBECK
 SURFACE OWNER LYDIA TENNANT ACREAGE 181
 OIL & GAS ROYALTY OWNER LYDIA TENNANT LEASE ACREAGE 27A. PART OF 181A.
 LEASE NO. 84-02-1323

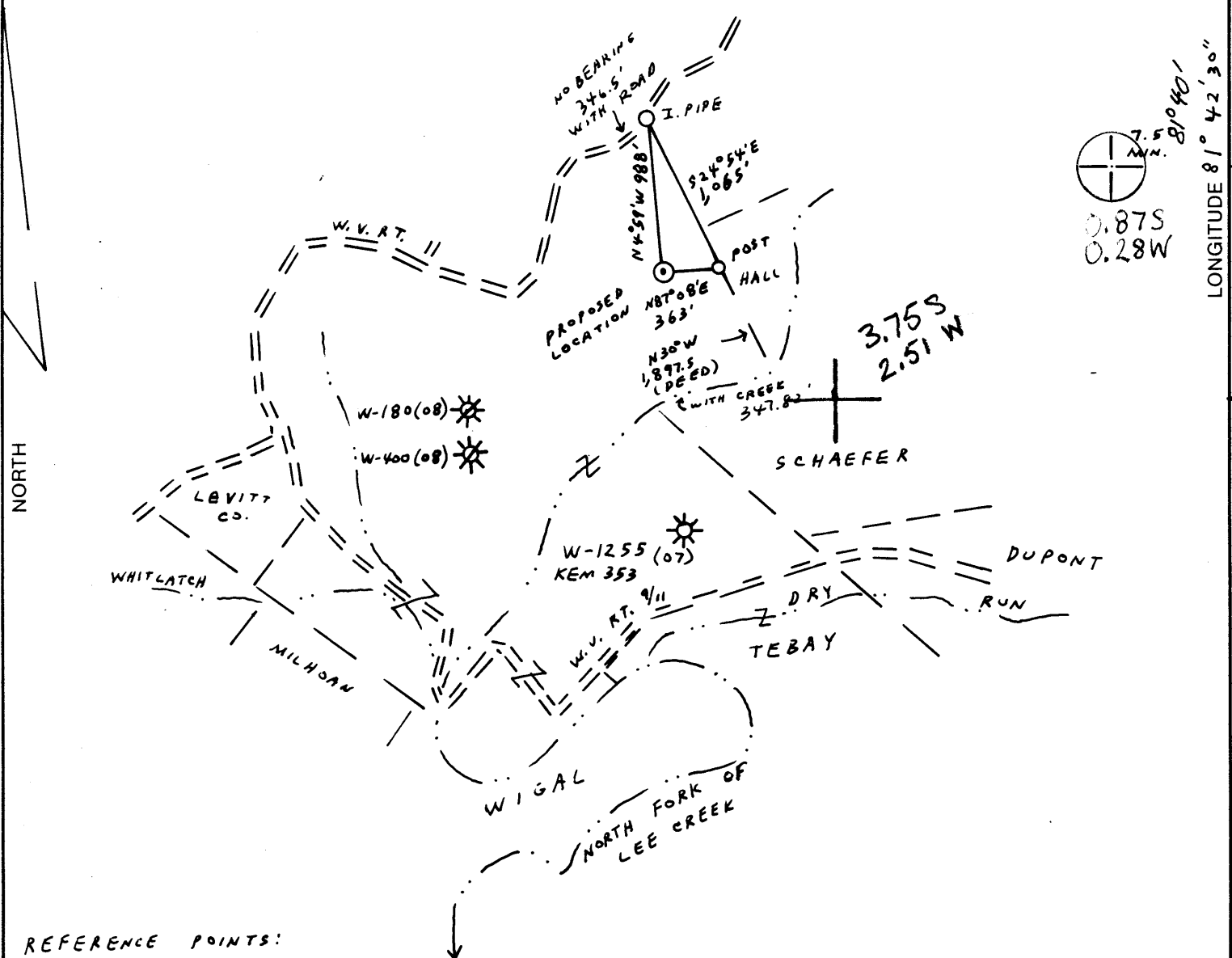
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___
 TARGET FORMATION DEVONIAN BROWN SHALE ESTIMATED DEPTH 4196
 WELL OPERATOR KAISER EXPLORATION AND MINING CO. DESIGNATED AGENT R. A. PRYCE
 ADDRESS P.O. BOX 8, RAVENSWOOD, W.V. 26164 ADDRESS P.O. BOX 8, RAVENSWOOD, W.V. 26164

DEC 21 1987

WOOD COUNTY NAME 1327 PERMIT

465



REFERENCE POINTS:
S 84° 44' W 332' TO 12" B. WALNUT
S 28° 09' E 242' TO 10" ELM

N 19 E 6

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

FILE NO. 8-7
DRAWING NO. _____
SCALE 1" = 1,000'
MINIMUM DEGREE OF ACCURACY 1:200
PROVEN SOURCE OF ELEVATION INTER. RT. II AND 1/8 ELEV. = 744. 9,560'S.W.OF LOCATION

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) Vincent W. Wood
R.P.E. _____ L.L.S. 664

PLACE SEAL HERE

STATE OF WEST VIRGINIA
DEPARTMENT OF MINES
OIL AND GAS DIVISION



DATE SEPTEMBER 20, 1984
OPERATOR'S WELL NO. KEM 616
API WELL NO. _____

WELL TYPE: OIL _____ GAS X LIQUID INJECTION _____ WASTE DISPOSAL _____
(IF "GAS,") PRODUCTION X STORAGE _____ DEEP _____ SHALLOW X
LOCATION: ELEVATION 806 WATERSHED NORTH FORK OF LEE CREEK
DISTRICT HARRIS 2 COUNTY WOOD
QUADRANGLE LUBECK 449 BELLEVILLE 010 NW 1
SURFACE OWNER LYDIA TENNANT ACREAGE 181
OIL & GAS ROYALTY OWNER LYDIA TENNANT LEASE ACREAGE 27Ac. PART OF 181Ac.
LEASE NO. 84-02-1323
PROPOSED WORK: DRILL X CONVERT _____ DRILL DEEPER _____ REDRILL _____ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION _____ PERFORATE NEW FORMATION _____ OTHER PHYSICAL CHANGE IN WELL (SPECIFY) _____

COUNTY NAME
PERMIT

PLUG AND ABANDON _____ CLEAN OUT AND REPLUG _____
TARGET FORMATION DEVONIAN BROWN SHALE ESTIMATED DEPTH 4196
WELL OPERATOR KAISER EXPLORATION AND MINING CO. DESIGNATED AGENT R.A. PRYCE
ADDRESS P.O. BOX 8, RAVENSWOOD, W.V. 26164 ADDRESS P.O. BOX 8, RAVENSWOOD, W.V. 26164
465

NOV 26 1984



1) Date: October 1, 19 84
 2) Operator's Well No. KEM #616
 3) API Well No. 47 - 107 - 1327
 State _____ County _____ Permit _____

STATE OF WEST VIRGINIA
 DEPARTMENT OF MINES, OIL AND GAS DIVISION
 APPLICATION FOR A WELL WORK PERMIT

- 4) WELL TYPE: A Oil _____ / Gas X
 B (If "Gas", Production X / Underground storage _____ / Deep _____ / Shallow X)
 5) LOCATION: Elevation: 806' Watershed: North Fork of Lee Creek 0443
 District: Harris County: Wood Quadrangle: Lubeck
 6) WELL OPERATOR Kaiser Exploration and Mining Co. 7) DESIGNATED AGENT R. A. Price
 Address P. O. Box 8 Address Same
Ravenswood, WV 26164
 8) OIL & GAS INSPECTOR TO BE NOTIFIED 9) DRILLING CONTRACTOR:
 Name JERRY TEPHANN GLEN P. ROBINSON Name Clint Hurt
 Address Rt 1, Box 101A ROUTE 1, #6 Address P. O. Box 388
489-9162 Ripley, WV 26150 MINERAWELLS, WV 26150 Elkview, WV
 10) PROPOSED WELL WORK: Drill X / Drill deeper _____ / Redrill _____ / Stimulate _____
 Plug off old formation _____ / Perforate new formation _____
 Other physical change in well (specify) _____
 11) GEOLOGICAL TARGET FORMATION, Devonian Brown Shale
 12) Estimated depth of completed well, 4196 feet
 13) Approximate trata depths: Fresh, _____ feet; salt, _____ feet.
 14) Approximate coal seam depths: _____ Is coal being mined in the area? Yes _____ / No _____
 15) CASING AND TUBING PROGRAM

RECEIVED
 NOV 12 1984
 DEPT. OF MINES
 OIL & GAS DIVISION

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	10 3/4"			X		400250	400250	325 sks class A	to surface
Coal								65 sks 50/50	Size Pozmix
Intermediate	7"			X		1766	1766	100 sks class A	
Production	4 1/2"			X		4196	4196	225 sks 50/50	Depozmix
Tubing									
Liners									Perforations: Top _____ Bottom _____

OFFICE USE ONLY
 DRILLING PERMIT

Permit number 47-107-1327 November 13, 19 84
 Date

This permit covering the well operator and well location shown below is evidence of permission granted to drill in accordance with the pertinent legal requirements subject to the conditions contained herein and on the reverse hereof. Notification must be given to the District Oil and Gas Inspector, (Refer to No. 8) Prior to the construction of roads, locations and pits for any permitted work. In addition, the well operator or his contractor shall notify the proper district oil and gas inspector 24 hours before actual permitted work has commenced.)

The permitted work is as described in the Notice and Application, plat, and reclamation plan, subject to any modifications and conditions specified on the reverse hereof.
 Permit expires November 13, 1986 unless well work is commenced prior to that date and prosecuted with due diligence.

Bond: <u>86</u>	Agent: <u>MX</u>	Plat: <u>TS</u>	Casing: <u>TS</u>	Fee: <u>258-968</u> <u>388-389</u>
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Margaret J. Hass
 Administrator, Office of Oil and Gas