

PRESTON CO. COAL & COKE CO. LEASE

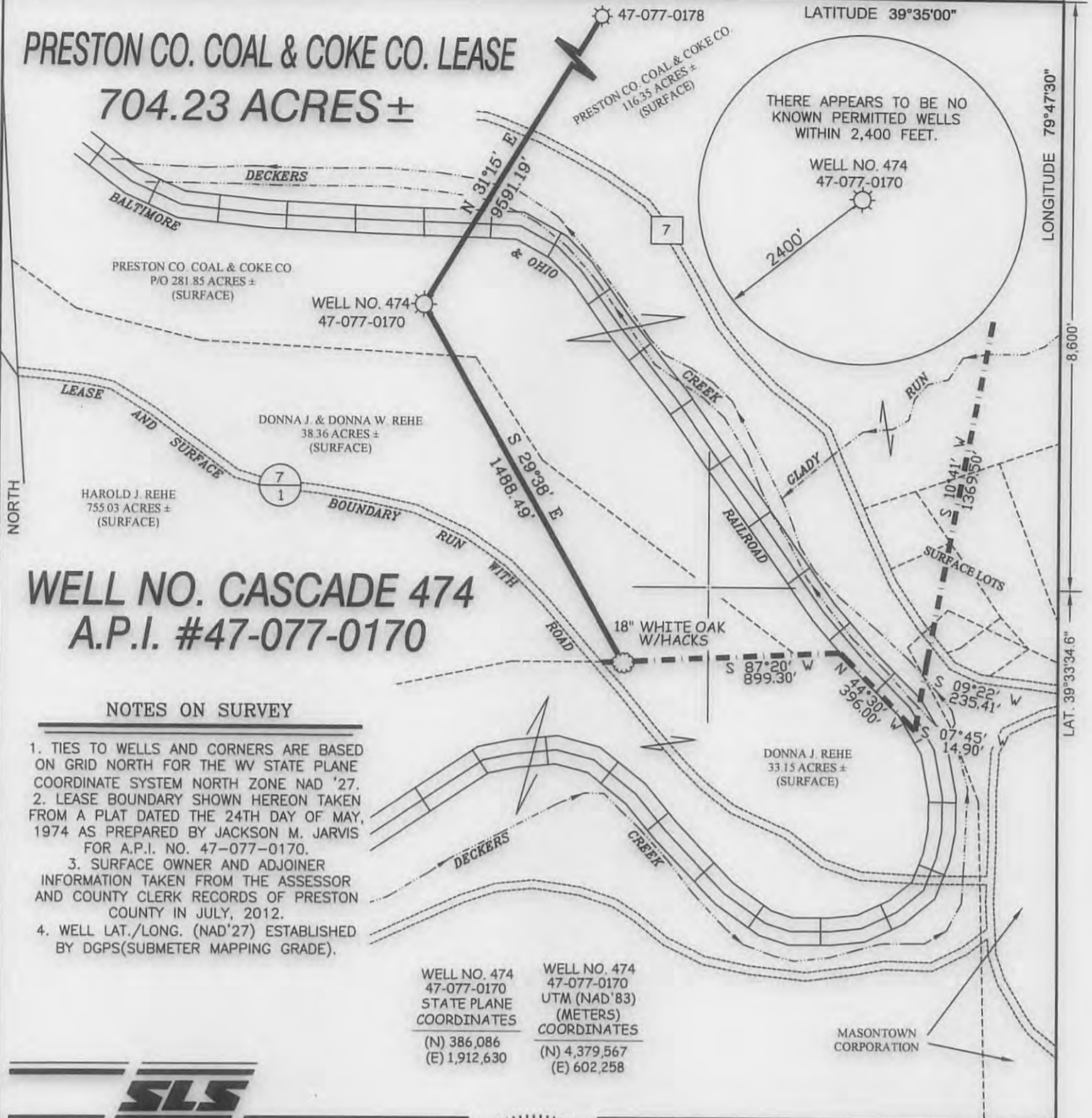
704.23 ACRES ±

NORTH

LONGITUDE 79°47'30"

8,600'

LAT. 39°33'34.6"



WELL NO. CASCADE 474

A.P.I. #47-077-0170

NOTES ON SURVEY

1. TIES TO WELLS AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '27.
2. LEASE BOUNDARY SHOWN HEREON TAKEN FROM A PLAT DATED THE 24TH DAY OF MAY, 1974 AS PREPARED BY JACKSON M. JARVIS FOR A.P.I. NO. 47-077-0170.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF PRESTON COUNTY IN JULY, 2012.
4. WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

WELL NO. 474
47-077-0170
STATE PLANE
COORDINATES
(N) 386,086
(E) 1,912,630

WELL NO. 474
47-077-0170
UTM (NAD'83)
(METERS)
COORDINATES
(N) 4,379,567
(E) 602,258



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 DIVISION OF ENVIRONMENTAL PROTECTION.

P.S. 677

Gregory A. Smith



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

DATE AUGUST 2, 20 13

OPERATORS WELL NO. CASCADE 474

API WELL NO. 47-077-00170R
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 8041P170R (206-15)

PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 500'

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



WELL TYPE: OIL GAS LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

LOCATION: ELEVATION 1,717' WATERSHED DECKERS CREEK

DISTRICT VALLEY COUNTY PRESTON QUADRANGLE MASONTOWN 7.5'

SURFACE OWNER PRESTON CO. COAL & COKE CO. ACREAGE 281.85±

ROYALTY OWNER PRESTON CO. COAL & COKE CO. OR ASSIGNS LEASE ACREAGE 704.23±

PROPOSED WORK: LEASE NO. _____

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 MARCELLUS
ESTIMATED DEPTH 7,460' - 7,535'

WELL OPERATOR ENERGY CORPORATION OF AMERICA
ADDRESS 501 56TH STREET S.E. CHARLESTON, WV 25304

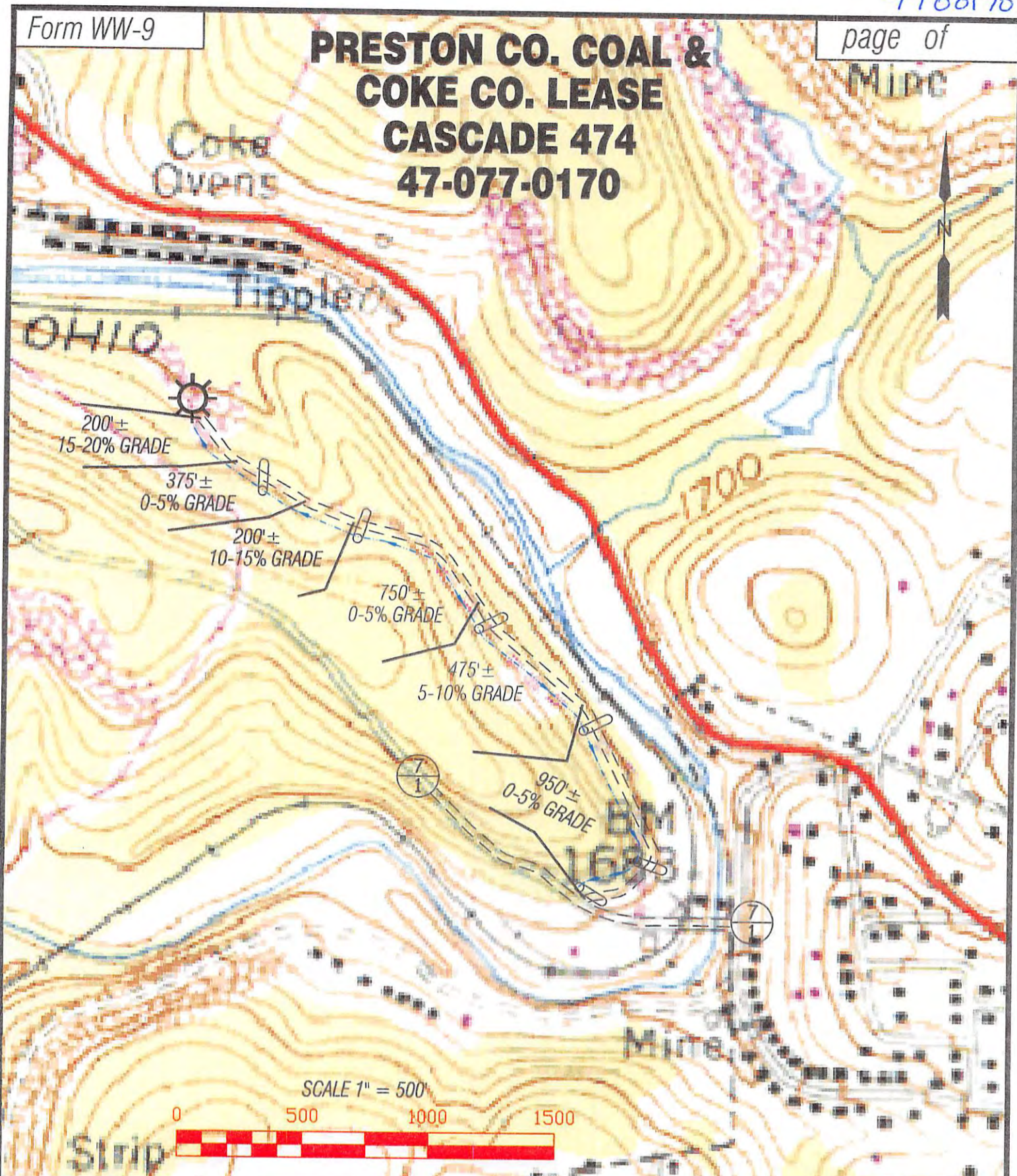
DESIGNATED AGENT RODNEY A. WINTERS
ADDRESS 501 56TH STREET S.E. CHARLESTON, WV 25304

08/30/2013

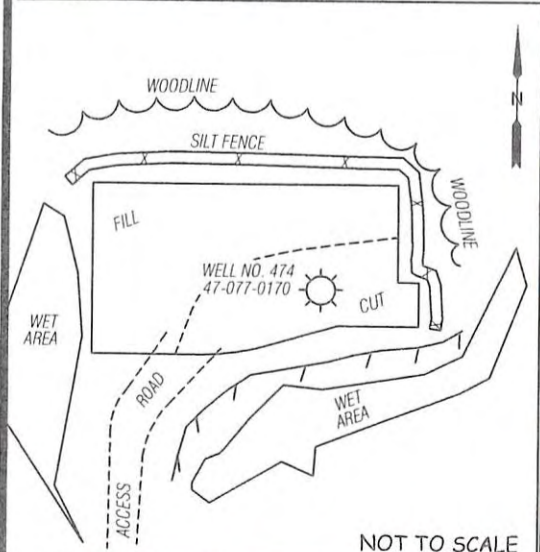
COUNTY NAME

PERMIT

PRESTON CO. COAL & COKE CO. LEASE CASCADE 474 47-077-0170



Detail Sketch for Well No. 474



ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.E.P. OIL AND GAS BMP MANUAL ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH WV D.O.T. REGULATION SEPARATE PERMITS MAY BE REQUIRED BY THE D.O.T.

SEDIMENT BASINS (TRAPS) AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE WV D.E.P. OIL AND GAS BMP MANUAL. FIELD CONDITIONS (ROCK OUTCROPS AND BEDROCK) MAY PROHIBIT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED AS NEEDED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR NOTIFICATION TO THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

TEMPORARY SEED & MULCH ALL SLOPES AFTER CONSTRUCTION OF LOCATION.

CUT & STACK ALL MARKETABLE TIMBER.

STACKED BRUSH MAY BE USED FOR SEDIMENT CONTROL.

APPLICATIONS FOR SEPARATE PLC PERMITS ON THE ACCESS ROAD STREAM CROSSINGS HAVE BEEN PREPARED (IF APPLIES).

EXISTING CULVERT PROPOSED CULVERT
 12" MIN UNLESS OTHERWISE NOTED
 PROPOSED STREAM CROSSING APPROXIMATE LIMITS OF DISTURBANCE

Office of Oil and Gas

08/30/2013

TOPO SECTION OF USGS
MASONTOWN 7.5' QUADRANGLE

Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING

SURVEYORS PROJECT MGMT. **SLS** ENGINEERS ENVIRONMENTAL

225 West Main St P.O. Box 150 Glenville, WV 26031 (304) 462-2824 58005 Diles Bottom Road Skyline, OH 42387 (740) 671-9911

HONESTY, INTEGRITY, QUALITY

DRAWN BY K.D.W.	FILE NO. 8041	DATE 06-03-13	CADD FILE: 8056REC1.DWG
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