

ESTHER CLARK LEASE MON 1H

LATITUDE 39°40'00"
NOTES ON SURVEY

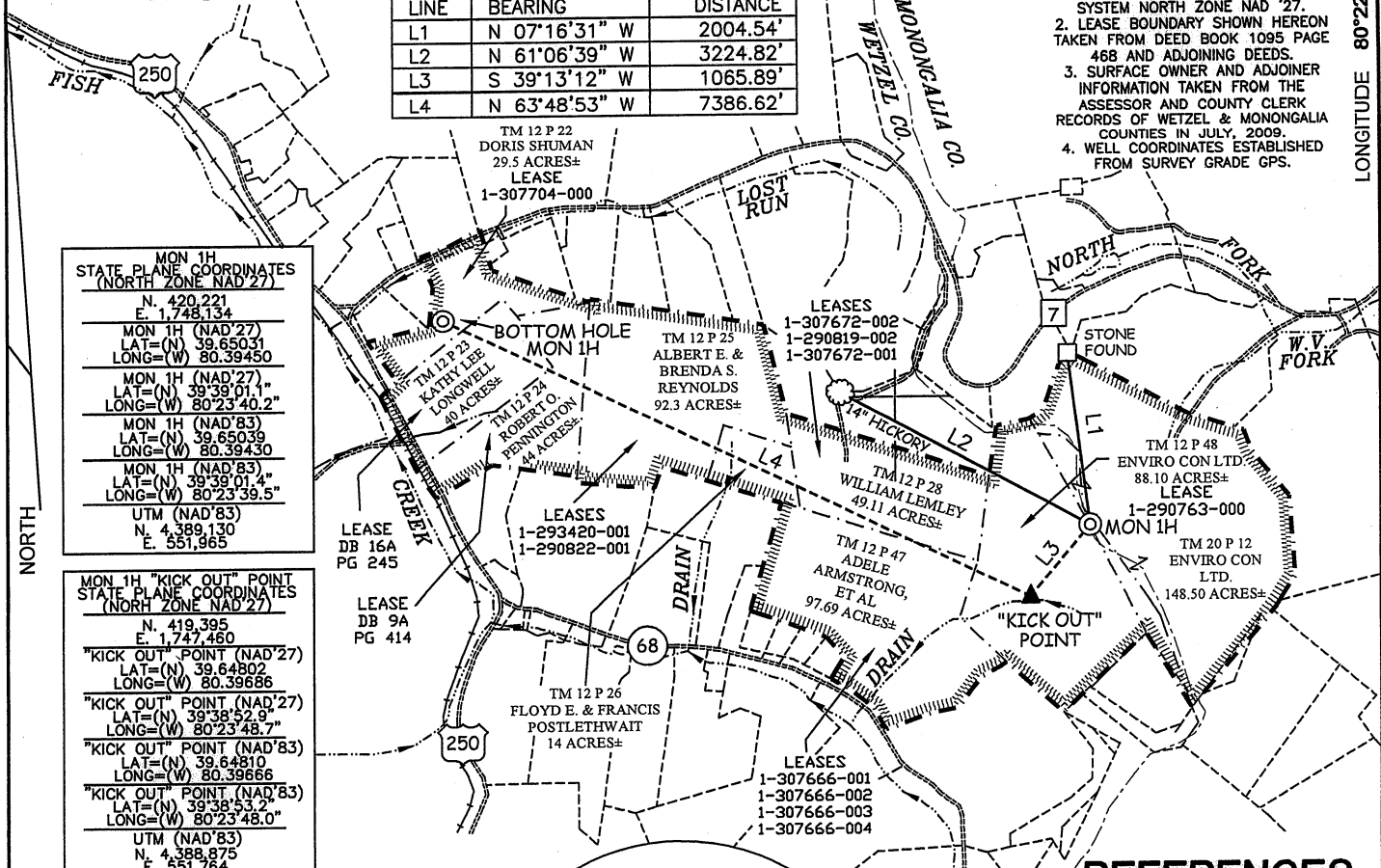
MON 1H TIES

LINE	BEARING	DISTANCE
L1	N 07°16'31" W	2004.54'
L2	N 61°06'39" W	3224.82'
L3	S 39°13'12" W	1065.89'
L4	N 63°48'53" W	7386.62'

1. TIES TO WELLS, REFERENCES, 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 DEED BOOK 1095 PAGE 468 AND ADJOINING DEEDS.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF WETZEL & MONONGALIA COUNTIES IN JULY, 2009.
4. WELL COORDINATES ESTABLISHED FROM SURVEY GRADE GPS.

LONGITUDE 80°22'30"

5,965'



MON 1H STATE PLANE COORDINATES (NORTH ZONE NAD'27)

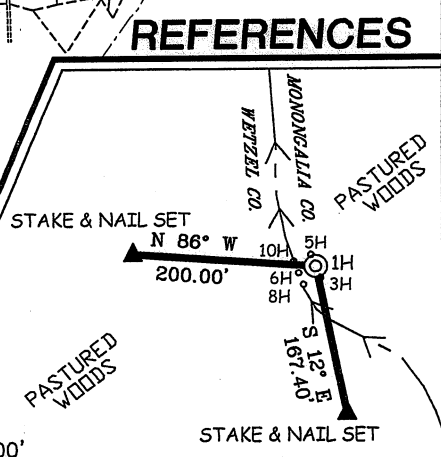
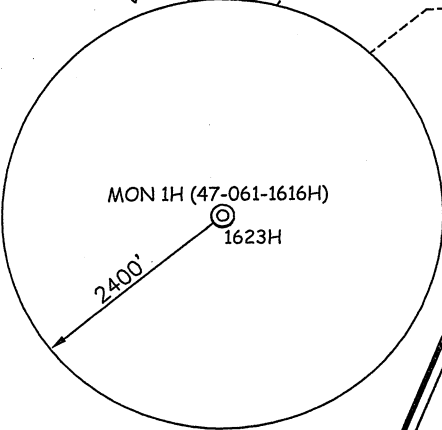
N	420,221
E	1,748,134
MON 1H (NAD'27)	
LAT=(N)	39.65031
LONG=(W)	80.39450
MON 1H (NAD'27)	
LAT=(N)	39.39.01.4"
LONG=(W)	80.23.40.2"
MON 1H (NAD'83)	
LAT=(N)	39.65039
LONG=(W)	80.39430
MON 1H (NAD'83)	
LAT=(N)	39.39.01.4"
LONG=(W)	80.23.39.5"
UTM (NAD'83)	
N	4,389,130
E	551,965

MON 1H "KICK OUT" POINT STATE PLANE COORDINATES (NORTH ZONE NAD'27)

N	419,395
E	1,747,460
"KICK OUT" POINT (NAD'27)	
LAT=(N)	39.64802
LONG=(W)	80.39666
"KICK OUT" POINT (NAD'27)	
LAT=(N)	39.38.52.9"
LONG=(W)	80.23.48.7"
"KICK OUT" POINT (NAD'83)	
LAT=(N)	39.64810
LONG=(W)	80.39666
"KICK OUT" POINT (NAD'83)	
LAT=(N)	39.38.53.2"
LONG=(W)	80.23.48.0"
UTM (NAD'83)	
N	4,388,875
E	551,764

MON 1H BOTTOM HOLE STATE PLANE COORDINATES (NORTH ZONE NAD'27)

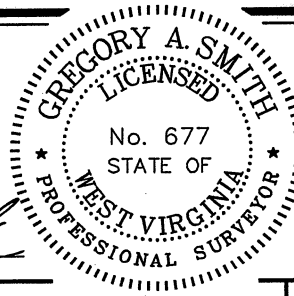
N	422,654
E	1,740,832
BOTTOM HOLE (NAD'27)	
LAT=(N)	39.65678
LONG=(W)	80.42032
BOTTOM HOLE (NAD'27)	
LAT=(N)	39.39.24.4"
LONG=(W)	80.25.13.9"
BOTTOM HOLE (NAD'83)	
LAT=(N)	39.65687
LONG=(W)	80.42032
BOTTOM HOLE (NAD'83)	
LAT=(N)	39.39.24.4"
LONG=(W)	80.25.13.2"
UTM (NAD'83)	
N	4,389,834
E	549,728



REFERENCES



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 SEPTEMBER 1, 20 11
 OPERATORS WELL NO. ESTHER CLARK 1H
 API WELL NO. 47-061-01616H
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 7436P1HR9 (308-50)
 PROVEN SOURCE OF ELEVATION DGPS (SUBMETER MAPPING GRADE) SCALE 1" = 2,000'

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



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

LOCATION: ELEVATION 1,424' WATERSHED NORTH FORK & WEST VIRGINIA CREEK
 DISTRICT BATTELLE COUNTY MONONGALIA QUADRANGLE HUNDRED 7.5'

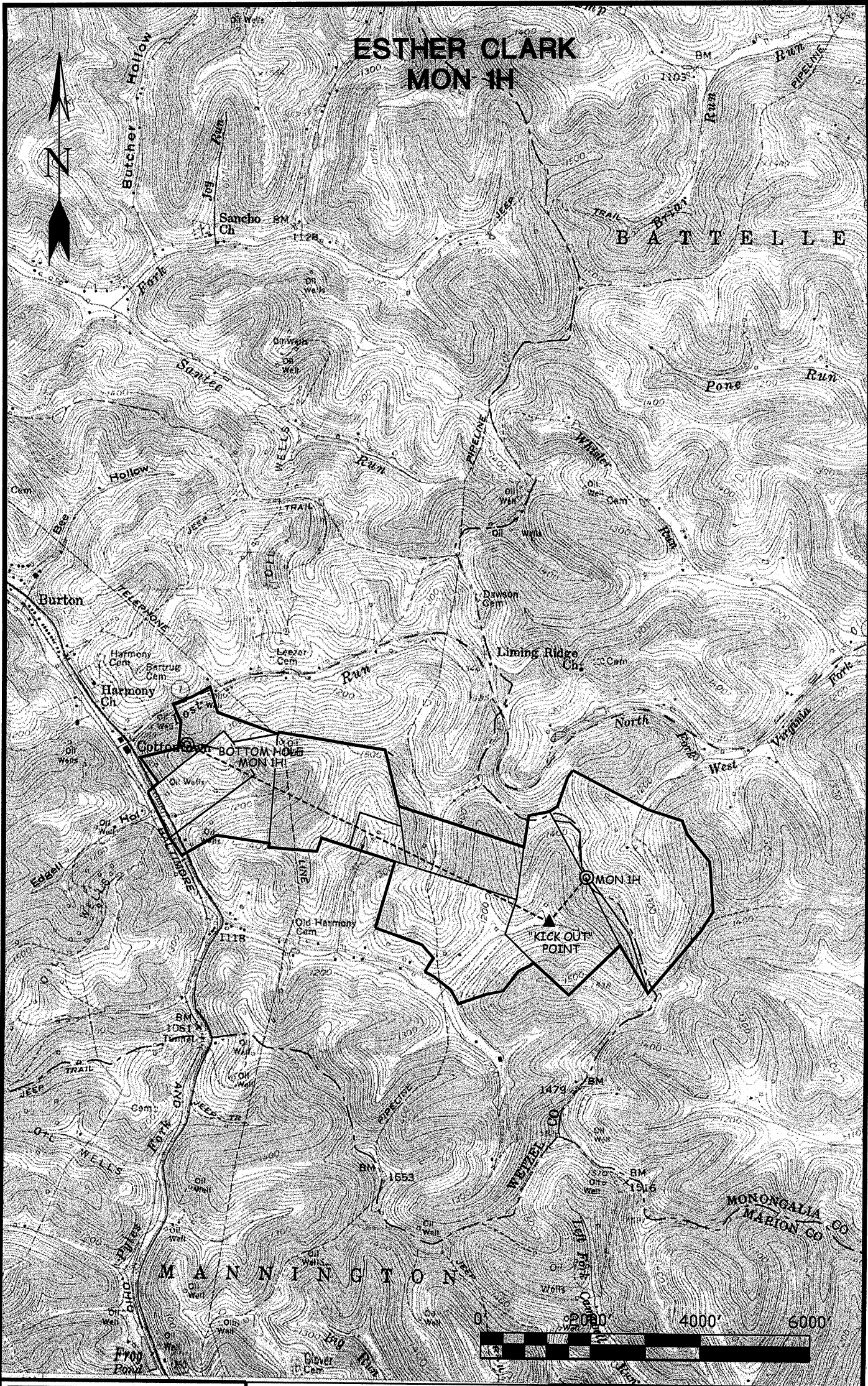
SURFACE OWNER ENVIRO CON LTD. ACREAGE 88.10 & 148.50±
 ROYALTY OWNER ESTHER H. CLARK, ET AL
92.3 & 14 ACRES± OF LEASE 1-293420-001 & 1-290822-001(106.25 ACRES) 88.10 & 148.50 ACRES± OF LEASE 1-290763-000(200.20 & 104.40 ACRES)
 97.69 OF LEASE 1-307666-001 - 1-307666-004 (107.50 ACRES±) 49.11 ACRES± LEASE 1-307672.002, 1-290819-002, & 1-307672.001
 40 ACRES LEASE(DB 16A PG 245) 44 ACRES LEASE(DB 9A PG 414) 29.5 ACRES± LEASE 1-307704-000

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 MARCELLUS
 ESTIMATED DEPTH 7,890' TVD 16,343 TMD

WELL OPERATOR CHESAPEAKE APPALACHIA, LLC. DESIGNATED AGENT ERIC B. GILLESPIE
 ADDRESS P.O. BOX 18496 ADDRESS P.O. BOX 6070
OKLAHOMA CITY, OK 73154-0496 CHARLESTON, WV 25362

COUNTY NAME PERMIT

61-016666 MOD.



SLS
 SMITH LAND SURVEYING, INC.
 P.O. BOX 150 GLENVILLE, WV 26351
 PH: (304) 462-5634 FAX: (304) 462-5656 E-MAIL: sls@slsurveys.com

WETZEL/MON. COUNTIES
 HUNDRED, WV 7.5' QUAD
 DRAWN BY C.P.M. FILE NO. 7436PH11TPO.DWG DATE 08-30-11

OPERATOR:
CHESAPEAKE APPALACHIA, LLC.
 P.O. BOX 18496
 CHARLESTON, WV 25301