

LEEMAN MAXWELL LEASE 1000 ACRES± WELL NO. WV 514664

LATITUDE 39° 17' 30"

LONGITUDE 80° 45' 00"

WELL NO. WV 514664
STATE PLANE COORDINATES
(NORTH ZONE) NAD'27

N. 277,756.7
E. 1,642,259.1

LAT=(N) 39.255700
LONG=(W) 80.763352

UTM (NAD83)(METERS)
N. 4,345,188.6
E. 520,432.8

BOTTOM HOLE
WELL NO. WV 514664
STATE PLANE COORDINATES
(NORTH ZONE) NAD'27

N. 273,056.7
E. 1,645,813.7

LAT=(N) 39.242933
LONG=(W) 80.750569

UTM (NAD83)(METERS)
N. 4,343,774.8
E. 521,539.6

LANDING POINT
WELL NO. WV 514664
STATE PLANE COORDINATES
(NORTH ZONE) NAD'27

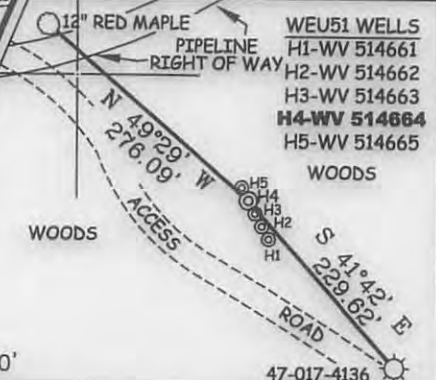
N. 277,842.0
E. 1,643,582.3

LAT=(N) 39.255985
LONG=(W) 80.758684

UTM (NAD83)(METERS)
N. 4,345,221.3
E. 520,835.4

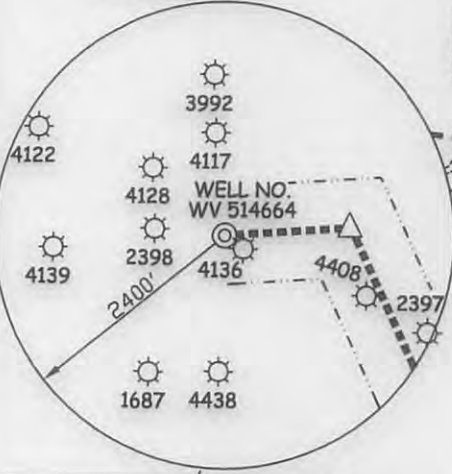
SUE ANN SPIKER
872.83 ACRES±

REFERENCES



NOTES ON SURVEY

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 133 PAGE 13.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF DODDRIDGE COUNTY IN JULY, 2013.
4. WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS(SURVEY GRADE).



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 4, 20 13
OPERATORS WELL NO. WV 514664
API WELL NO. 47-017-06384H6A
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 8051P514664
PROVEN SOURCE OF ELEVATION DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 1,000'

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 1,225'(GROUND) 1,208'(PROPOSED) WATERSHED BLUESTONE CREEK
DISTRICT WEST UNION COUNTY DODDRIDGE QUADRANGLE WEST UNION 7.5'

SURFACE OWNER JANE HARDIN (TRUSTEE) OF MARY HOLLAND TRUST ACREAGE 1557.637±
ROYALTY OWNER LEEMAN MAXWELL HEIRS LEASE ACREAGE 1000±

PROPOSED WORK: DRILL CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE PLUG OFF OLD ___
LEASE NO. 706763

FORMATION PERFORATE NEW FORMATION ___ PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ OTHER ___
PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION MARCELLUS ESTIMATED DEPTH

WELL OPERATOR EQT PRODUCTION COMPANY DESIGNATED AGENT REX C. RAY
ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330 ADDRESS 115 PROFESSIONAL PLACE P.O. BOX 280 BRIDGEPORT, WV 26330

01/31/2014

460' ± @ 15-20% GRADE ±

100' ± @ 5-10% GRADE ±

720' ± @ 15-20% GRADE ±

400' ± @ 0-5% GRADE ±

70' ± @ 10-15% GRADE ±

90' ± @ 15-20% GRADE ±

360' ± @ 0-5% GRADE ±

590' ± @ 0-5% GRADE ±

280' ± @ 10-15% GRADE ±

440' ± @ 5-10% GRADE ±

290' ± @ 0-5% GRADE ±

200' ± @ 15-20% GRADE ±

100' ± @ 0-5% GRADE ±

250' ± @ 15-20% GRADE ±

150' ± @ 5-10% GRADE ±

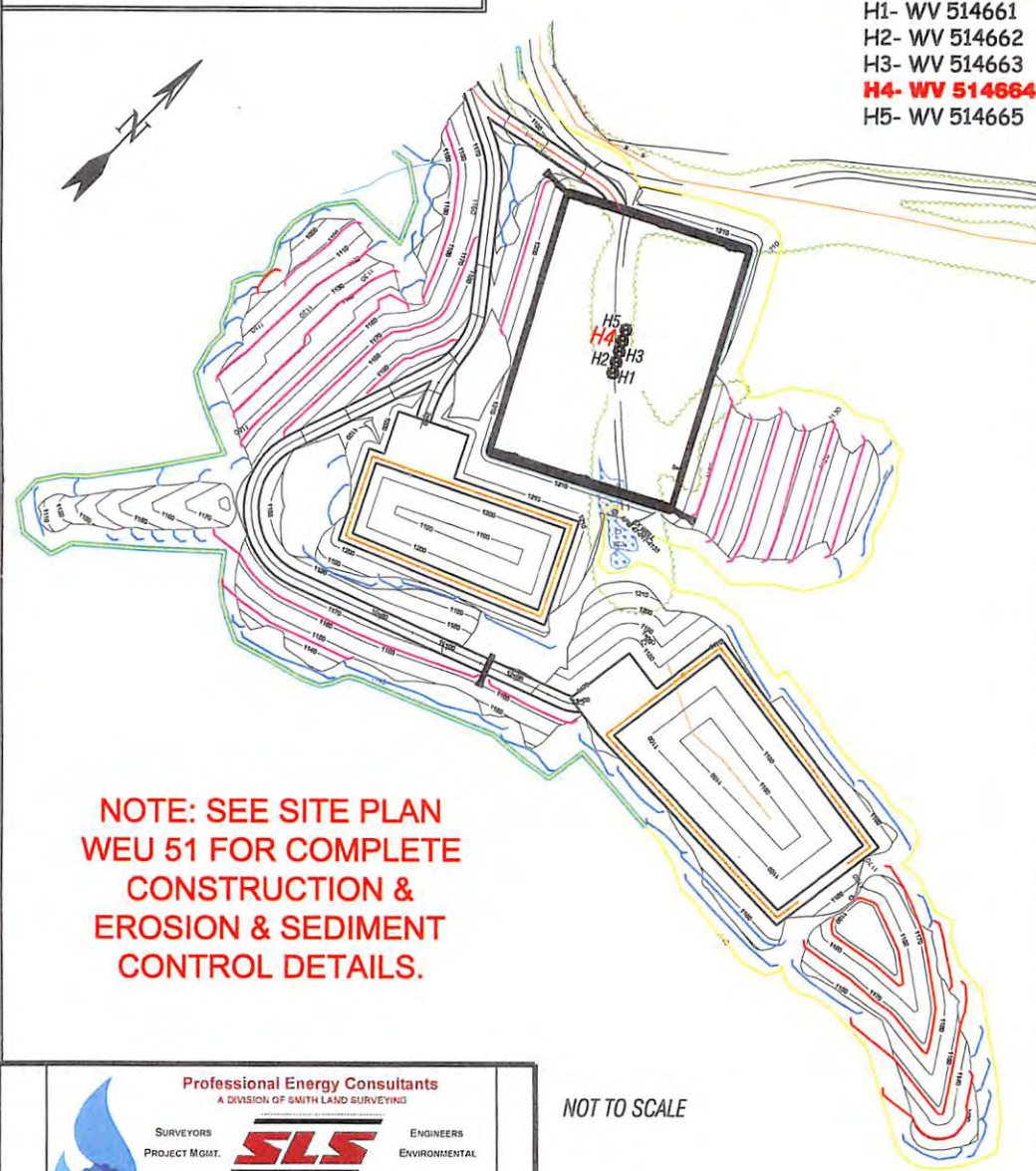
370' ± @ 0-5% GRADE ±

240' ± @ 5-10% GRADE ±

WEST UNION 7.5' QUAD
OXFORD 7.5' QUAD

LEEMAN MAXWELL LEASE WELL NO. WV 514664

Detail Sketch for Proposed Well WV 514664



WEU51 WELLS

- H1- WV 514661
- H2- WV 514662
- H3- WV 514663
- H4- WV 514664**
- H5- WV 514665

	DISTANCE	GRADE ±
A	170' ±	0-5%
B	160' ±	15-20%
C	100' ±	0-5%
D	210' ±	15-20%

SCALE: 1"=500'



NOTE: SEE SITE PLAN WEU 51 FOR COMPLETE CONSTRUCTION & EROSION & SEDIMENT CONTROL DETAILS.

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).

Environmental Protection
 (C) = PROPOSED CULVERT 12' MIN. UNLESS OTHERWISE NOTED

(X) = PROPOSED STREAM CROSSING

APPROXIMATE LIMITS OF 2017 PLAN 4
 01/31/2014

NOT TO SCALE

TOPO SECTION OF USGS
WEST UNION 7.5' QUADRANGLE

Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING

SURVEYORS PROJECT MGMT. **SLS** ENGINEERS ENVIRONMENTAL

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Honesty. Integrity. Quality.

DRAWN BY: K.D.W. FILE NO.: 8051 DATE: 09/12/13 CADD FILE: 8051REC\WV514664.DWG