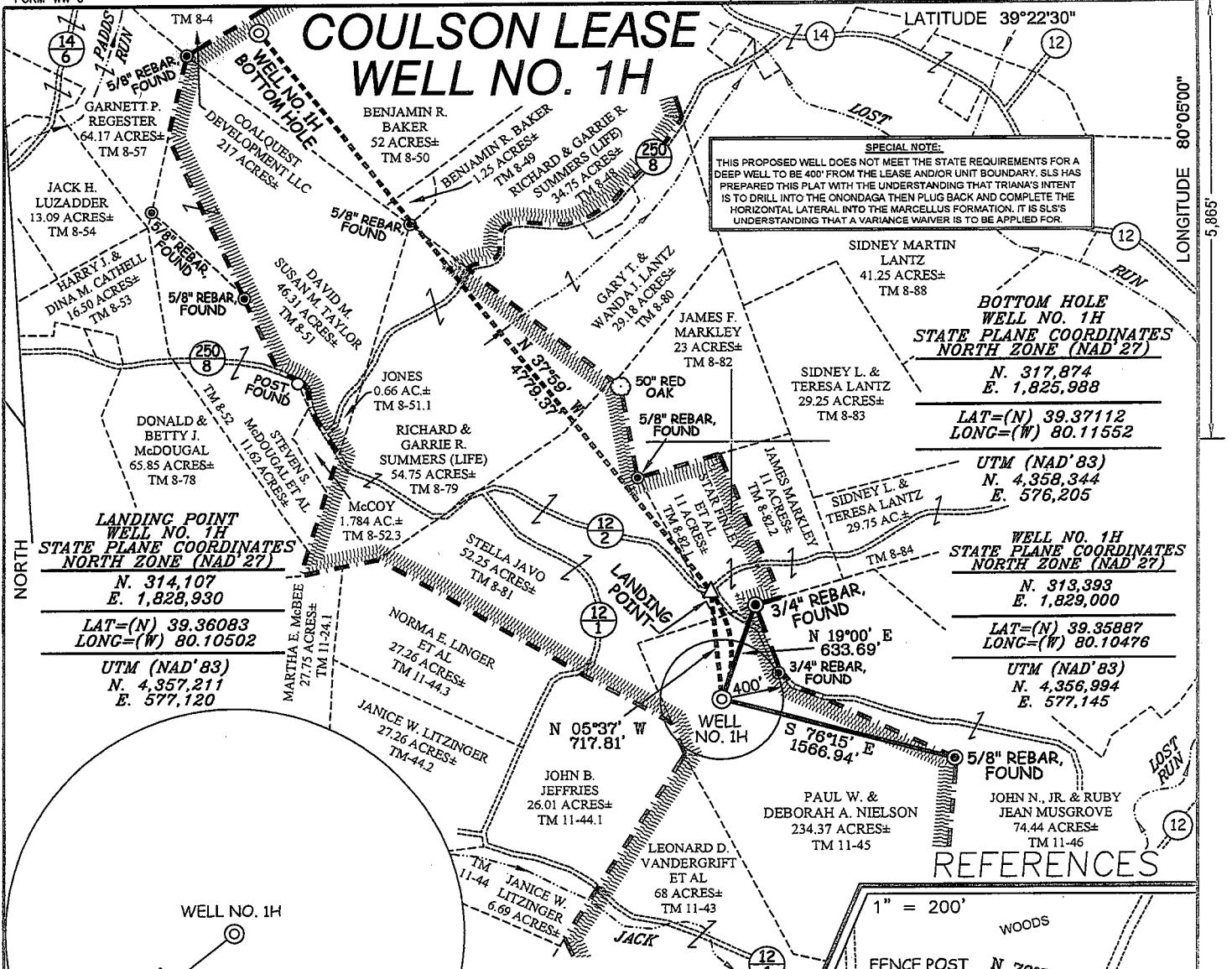


# COULSON LEASE WELL NO. 1H

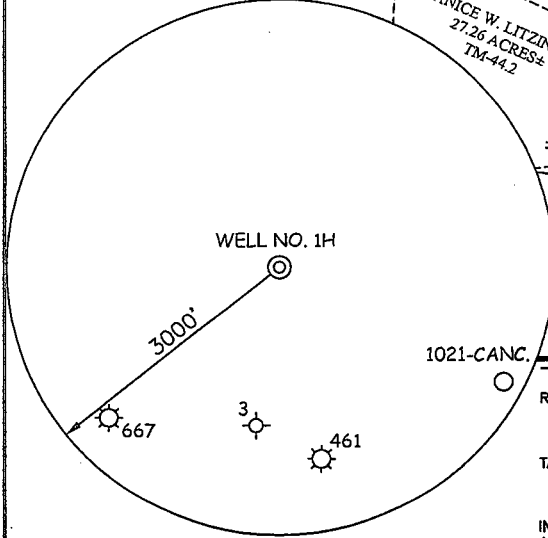
**SPECIAL NOTE:**  
THIS PROPOSED WELL DOES NOT MEET THE STATE REQUIREMENTS FOR A DEEP WELL TO BE 400' FROM THE LEASE AND/OR UNIT BOUNDARY. SLS HAS PREPARED THIS PLAT WITH THE UNDERSTANDING THAT TRIANA'S INTENT IS TO DRILL INTO THE ONONDAGA THEN PLUG BACK AND COMPLETE THE HORIZONTAL LATERAL INTO THE MARCELLUS FORMATION. IT IS SLS'S UNDERSTANDING THAT A VARIANCE WAIVER IS TO BE APPLIED FOR.



**LANDING POINT  
WELL NO. 1H  
STATE PLANE COORDINATES  
NORTH ZONE (NAD'27)**  
 N. 314,107  
 E. 1,828,930  
 LAT=(N) 39.36083  
 LONG=(W) 80.10502  
 UTM (NAD'83)  
 N. 4,357,211  
 E. 577,120

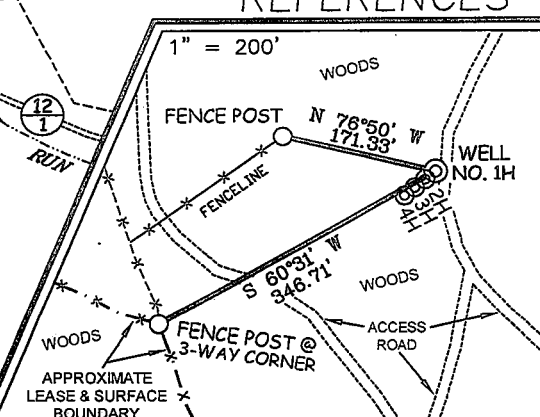
**BOTTOM HOLE  
WELL NO. 1H  
STATE PLANE COORDINATES  
NORTH ZONE (NAD'27)**  
 N. 317,874  
 E. 1,825,988  
 LAT=(N) 39.37112  
 LONG=(W) 80.11552  
 UTM (NAD'83)  
 N. 4,358,344  
 E. 576,205

**WELL NO. 1H  
STATE PLANE COORDINATES  
NORTH ZONE (NAD'27)**  
 N. 313,393  
 E. 1,829,000  
 LAT=(N) 39.35887  
 LONG=(W) 80.10476  
 UTM (NAD'83)  
 N. 4,356,994  
 E. 577,145



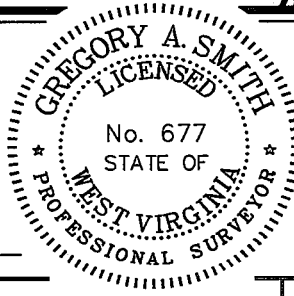
**NOTES ON SURVEY**

1. TIES TO WELLS, CORNERS, & REFERENCES 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 255 PAGE 442, DEED BOOK 103 PAGE 477 & DEED BOOK 302 PAGE 551.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF TAYLOR COUNTY IN JULY, 2010.
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. *Gregory A. Smith*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE AUGUST 02, 20 11  
 OPERATORS WELL NO. COULSON #1H  
 API WELL NO. 47 - 091 - 01253 H  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200 FILE NO. 7645P1HRD7 (360-36)  
 PROVEN SOURCE OF ELEVATION DGPS (SURVEY GRADE) 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

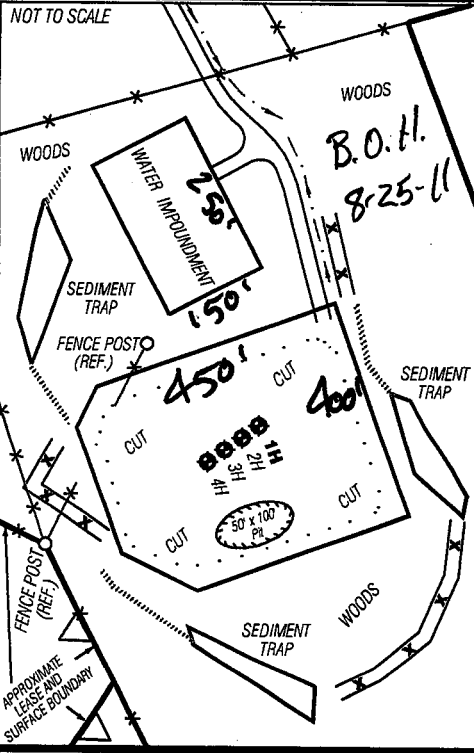
LOCATION:  
 ELEVATION 1,505' (GROUND) 1,498' (PROPOSED) WATERSHED JACK RUN AND LOST RUN  
 DISTRICT BOOTH'S CREEK COUNTY TAYLOR QUADRANGLE GRAFTON 7.5'  
 SURFACE OWNER PAUL W. & DEBORAH A. NIELSON ACREAGE 234.37±  
 ROYALTY OWNER ANN COULSON ET AL LEASE ACREAGE 234.37±  
 PROPOSED WORK:  
 DRILL  CONVERT  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 ONONDAGA / MARCELLUS  
 ESTIMATED DEPTH TD 7,700' TMD 12,480'

WELL OPERATOR TRIANA ENERGY, LLC. DESIGNATED AGENT RACHELLE A. KING  
 ADDRESS 900 VIRGINIA ST. EAST SUITE 400 ADDRESS 900 VIRGINIA ST. EAST SUITE 400  
CHARLESTON, WV 25301 CHARLESTON, WV 25301

**COULSON LEASE  
WELL NO. 1H**



Detail Sketch for Proposed Well Coulson 1H



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 DUTLETS 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).

**TOPO SECTION OF USGS  
GRAFTON 7.5' QUADRANGLE**

**PROPOSED CULVERT INVENTORY  
(FOR BID PURPOSES ONLY)**

15" (MINIMUM) CULVERT	1 CUL.
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ADDITIONAL CULVERTS AND/OR OTHER DRAINAGE STRUCTURES & SEDIMENT CONTROL DEVICES MAY BE REQUIRED BY THE WV D.E.P. DIL & GAS INSPECTOR. OPERATOR IS RESPONSIBLE FOR COORDINATION WITH CONTRACTOR AND SLS REGARDING ANY CHANGES OR ADDITIONS THE STATE MAY REQUIRE.

**Projected Earthen Disturbance Area**

Well & Pit Location Sites	10.76 ac. +/-
Access Road	1.21 ac. +/-
Approximate Total Disturbance	11.97 ac. +/-

= EXISTING CULVERT

= PROPOSED CULVERT 12" MIN. UNLESS OTHERWISE NOTED



**SMITH LAND SURVEYING, INC.**  
P.O. BOX 150 GLENVILLE, WV. 26351  
PH: (304) 462-5634 FAX: (304) 462-5636 E-MAIL: sls@sls-surveys.com  
DRAWN BY: K.E.S. FILE NO: 7645 DATE: 08/03/11 CADD FILE: 7645 Rev HIR.dwg