

**EQT PRODUCTION COMPANY  
HART LEASE 285 ACRES±  
WELL NO. WV 514421**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)  
 NAD'27 S.P.C.(FT) N. 375,113.2 E. 1,692,015.6  
 NAD'27 GEO. LAT-(N) 39.524767 LONG-(W) 80.591835  
 NAD'83 UTM (M) N. 4,375,102.0 E. 535,096.9  
**LANDING POINT**  
 NAD'27 S.P.C.(FT) N. 373,727.3 E. 1,690,999.0  
 NAD'27 GEO. LAT-(N) 39.520929 LONG-(W) 80.595379  
 NAD'83 UTM (M) N. 4,374,674.6 E. 534,794.2  
**BOTTOM HOLE**  
 NAD'27 S.P.C.(FT) N. 370,557.6 E. 1,692,684.4  
 NAD'27 GEO. LAT-(N) 39.512283 LONG-(W) 80.589269  
 NAD'83 UTM (M) N. 4,373,717.5 E. 535,323.8

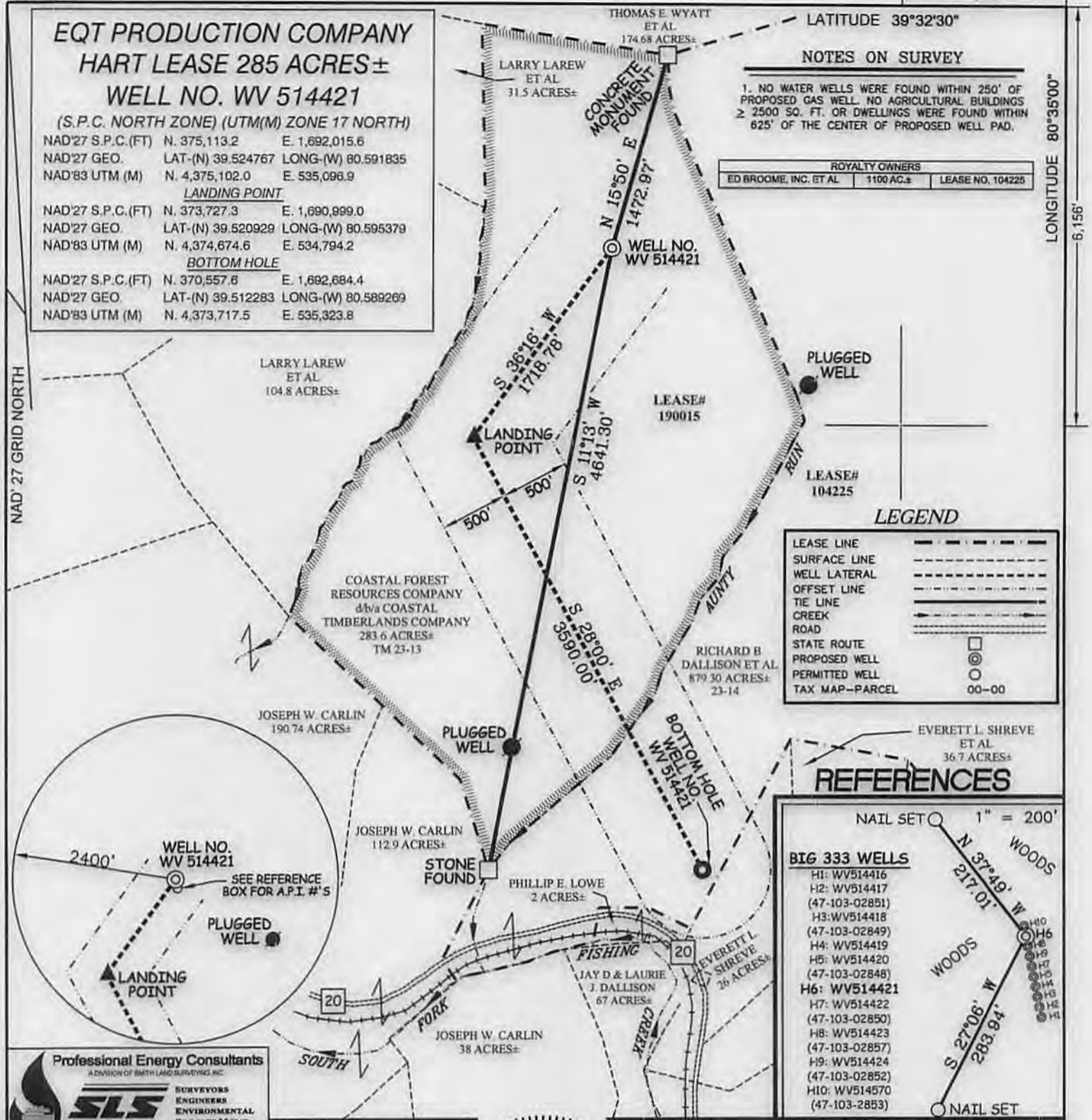
LATITUDE 39°32'30"

**NOTES ON SURVEY**

- NO WATER WELLS WERE FOUND WITHIN 250' OF PROPOSED GAS WELL. NO AGRICULTURAL BUILDINGS ≥ 2500 SQ. FT. OR DWELLINGS WERE FOUND WITHIN 625' OF THE CENTER OF PROPOSED WELL PAD.

ROYALTY OWNERS		
ED BROOME, INC. ET AL	1100 AC±	LEASE NO. 104225

NAD'27 GRID NORTH



**LEGEND**

LEASE LINE	---
SURFACE LINE	----
WELL LATERAL	-----
OFFSET LINE	- - - - -
TIE LINE	=====
CREEK	~~~~~
ROAD	=====
STATE ROUTE	=====
PROPOSED WELL	⊙
PERMITTED WELL	○
TAX MAP--PARCEL	00--00



**REFERENCES**

NAIL SET ○ 1" = 200'

**BIG 333 WELLS**

- H1: WV514416
- H2: WV514417 (47-103-02851)
- H3: WV514418 (47-103-02849)
- H4: WV514419
- H5: WV514420 (47-103-02848)
- H6: WV514421
- H7: WV514422 (47-103-02850)
- H8: WV514423 (47-103-02857)
- H9: WV514424 (47-103-02852)
- H10: WV514570 (47-103-2853)

WOODS

N 37°49' W 217.01'

S 27°06' W 283.94'

NAIL SET ○

**Professional Energy Consultants**  
 A DIVISION OF SMITH LAND SURVEYING, INC.  
  
 SURVEYORS  
 ENGINEERS  
 ENVIRONMENTAL  
 PROJECT MGMT.  
 (204) 882-6834 WWW.SLSURVEYS.COM

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*  
 677



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.  
 DATE OCTOBER 21, 20 13  
 REVISED JUNE 17, 20 14  
 OPERATORS WELL NO. WV 514421  
 API WELL NO. 47 - 103 - 03025  
 STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 7856P514421R  
 HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 1000'

**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 1452'(PAD ELEVATION) WATERSHED AUNTY RUN OF SOUTH FORK FISHING CREEK  
 DISTRICT GRANT COUNTY WETZEL QUADRANGLE BIG RUN 7.5'

SURFACE OWNER COASTAL FOREST RESOURCES CO. d/b/a COASTAL TIMBERLANDS CO. ACREAGE 283.6±  
 ROYALTY OWNER ALEX HART ET AL ACREAGE 285±  
 PROPOSED WORK: LEASE NO. 190015

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 GENESEO  
 ESTIMATED DEPTH TVD 7478'

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

10/03/2014

COUNTY NAME PERMIT



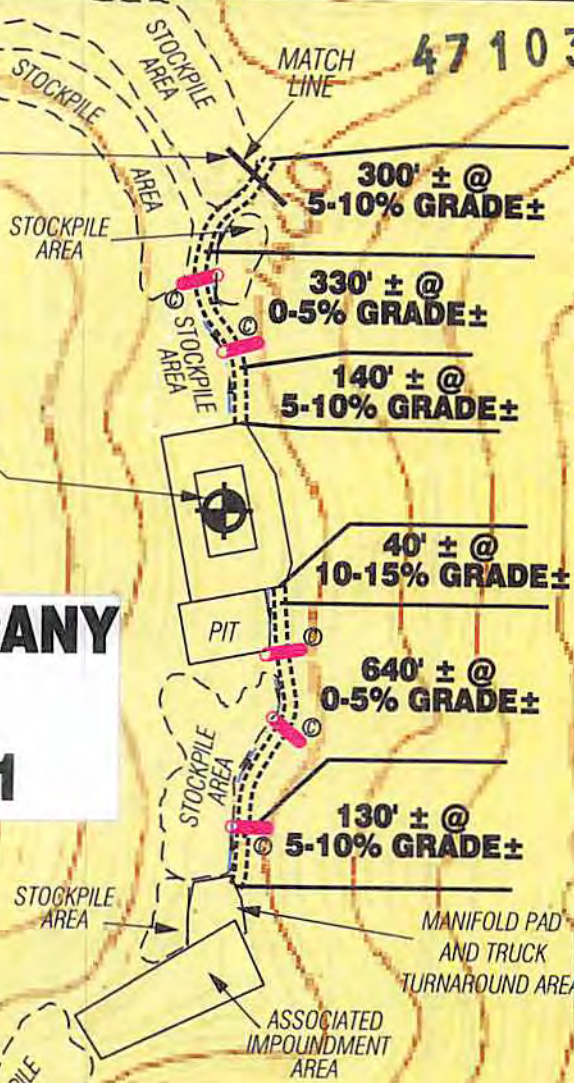
4710303025

NOTE: SEE ATTACHED RECLAMATION PLAN FOR WELL NO. WV 513534 FOR INFO FROM HERE TO COUNTY ROAD.



PROPOSED GAS WELL NO. WV 514420

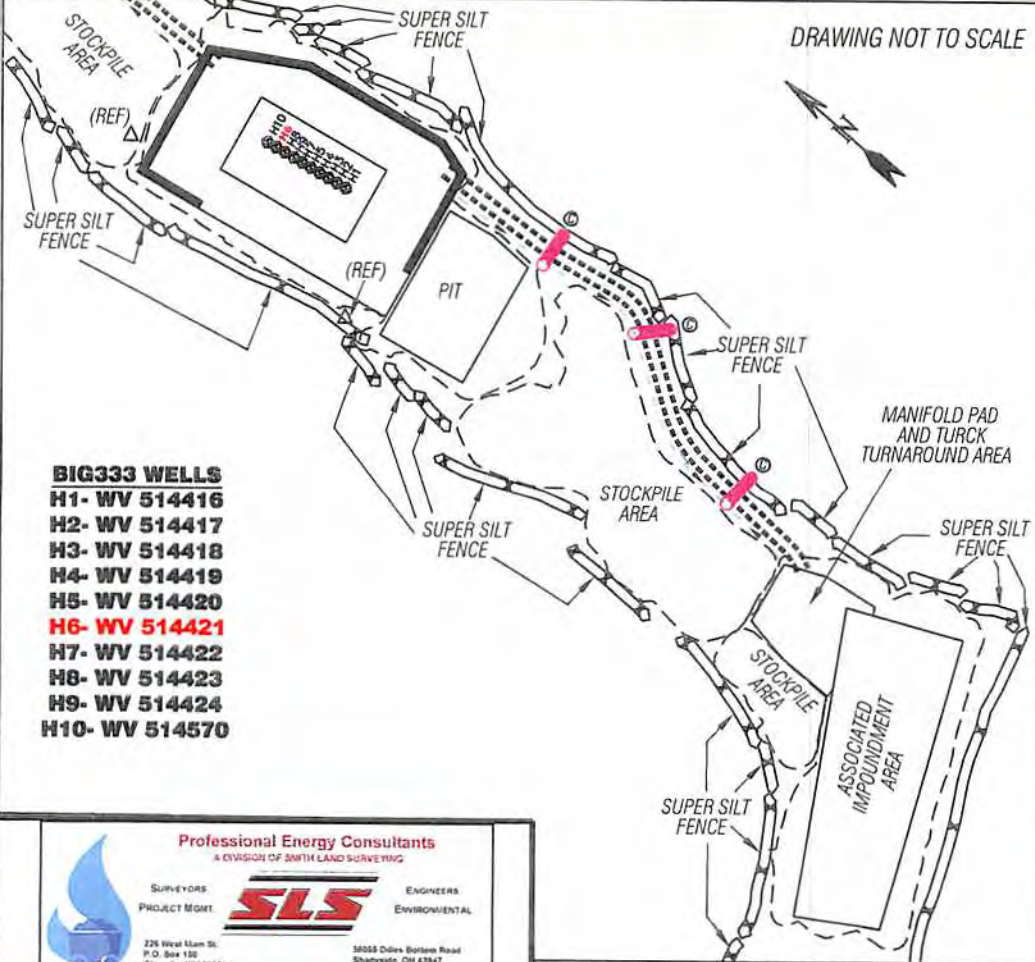
EQT PRODUCTION COMPANY HART LEASE WELL NO. WV 514421



SCALE: 1"=500'



Detail Sketch for Proposed Well No. WV 514421



- BIG333 WELLS
- H1- WV 514416
- H2- WV 514417
- H3- WV 514418
- H4- WV 514419
- H5- WV 514420
- H6- WV 514421**
- H7- WV 514422
- H8- WV 514423
- H9- WV 514424
- H10- WV 514570

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)

JUL 28 2014

RECEIVED WV Department of Environmental Protection

Legend: (X) = EXISTING CULVERT, (O) = PROPOSED CULVERT 15' MIN UNLESS OTHERWISE NOTED, (X) = PROPOSED STREAM CROSSING, (---) = APPROXIMATE LIMIT OF DISTURBANCE

Professional Energy Consultants  
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38033 Collins Bottom Road Shady Side, OH 43047 (740) 671-9911

DRAWN BY K.D.W.	FILE NO. 7856	DATE 10/18/13	CADD FILE: 7856RECVW514421.DWG
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TOPO SECTION OF BIG RUN 7.5' USGS TOPO QUADRANGLE

10/03/2014