

DUNHAM LEASE DUNHAM 5H

**BOTTOM HOLE
DUNHAM 5H
STATE PLANE COORDINATES
NORTH ZONE (NAD 27)**

N. 308,646
E. 1,819,133

LAT=(N) 39.34565
LONG=(W) 80.13954

UTM (NAD'83)(METERS)
N. 4,355,498
E. 574,163

LATITUDE 39° 22' 30"

A	ROY R. BAUER ET AL	1 ACRE±	TM 12-72.1
B	EVA HURSEY ET AL	0.65 ACRES±	TM 12-73
C	PAUL J. TENNANT	0.33 ACRES±	TM 12-73.1
D	PAUL J. TENNANT	0.04 ACRES±	TM 12-73.2
E	MITCHELL C. DUNHAM	0.40 ACRES±	TM 15-84
F	RONALD & JENNY CARDER	6 ACRES±	TM 12-71.4
G	RICHARD N. GLASPELL	1.26 ACRES±	TM 15-66.1
H	PAUL J. TENNANT	0.447 ACRES±	TM 12-73.4
I	MARY ANN BOYLES	0.35 ACRES±	TM 12-173.5

**LANDING POINT
DUNHAM 5H
STATE PLANE COORDINATES
NORTH ZONE (NAD 27)**

N. 306,285
E. 1,822,559

LAT=(N) 39.33923
LONG=(W) 80.12736

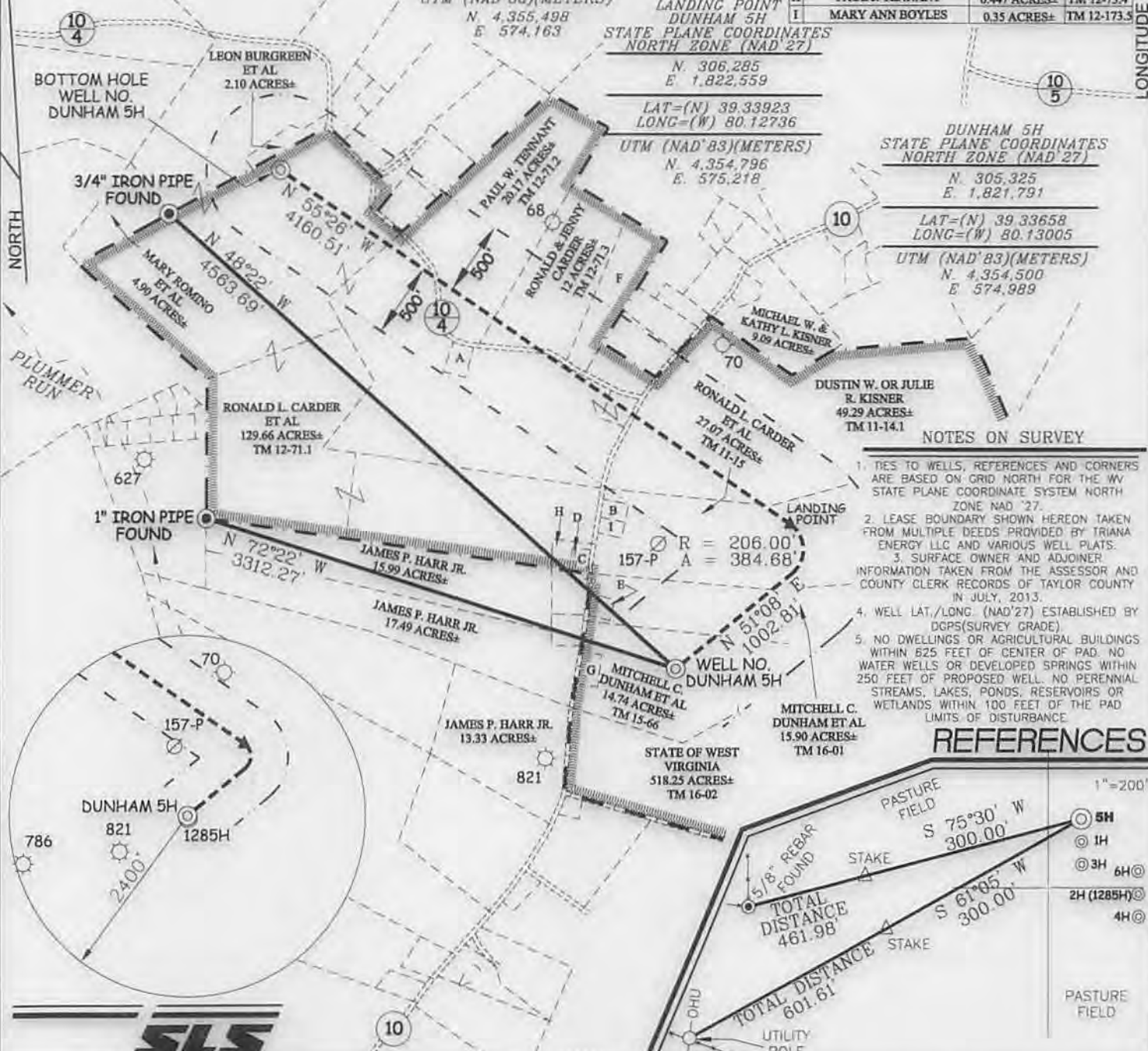
UTM (NAD'83)(METERS)
N. 4,354,796
E. 575,218

**DUNHAM 5H
STATE PLANE COORDINATES
NORTH ZONE (NAD 27)**

N. 305,325
E. 1,821,791

LAT=(N) 39.33658
LONG=(W) 80.13005

UTM (NAD'83)(METERS)
N. 4,354,500
E. 574,989



NOTES ON SURVEY

- TIES TO WELLS, REFERENCES AND CORNERS ARE BASED ON GRID NORTH FOR THE WV STATE PLANE COORDINATE SYSTEM NORTH ZONE NAD '27.
- LEASE BOUNDARY SHOWN HEREON TAKEN FROM MULTIPLE DEEDS PROVIDED BY TRIANA ENERGY LLC AND VARIOUS WELL PLATS.
- SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF TAYLOR COUNTY IN JULY, 2013.
- WELL LAT./LONG. (NAD'27) ESTABLISHED BY DGPS(SURVEY GRADE)
- NO DWELLINGS OR AGRICULTURAL BUILDINGS WITHIN 825 FEET OF CENTER OF PAD. NO WATER WELLS OR DEVELOPED SPRINGS WITHIN 250 FEET OF PROPOSED WELL. NO PERENNIAL STREAMS, LAKES, PONDS, RESERVOIRS OR WETLANDS WITHIN 100 FEET OF THE PAD LIMITS OF DISTURBANCE.

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 DECEMBER 17, 2013
OPERATORS WELL NO. DUNHAM 5H
API WELL NO. 47-091-01292 H6A
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1/200
PROVEN SOURCE OF ELEVATION DGPS (SURVEY GRADE GPS TIES TO COORS)
FILE NO. 7754P5H (391-20)
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 1,420' WATERSHED TRIBUTARY OF LOST RUN
DISTRICT BOOTH'S CREEK COUNTY TAYLOR QUADRANGLE ROSEMONT 7.5'

SURFACE OWNER MITCHELL DUNHAM ET AL ACREAGE 14.74±

ROYALTY OWNER MITCHELL DUNHAM ET AL (14.74 & 15.90 AC.±) / RONALD L. CARDER (27.07, 0.04, 0.33, 129.66, 12 & 6 AC.±) / PAUL W. TENNANT ET AL (20.17 AC.±) / DUSTIN KISNER ET AL (49.29 AC.±) / PAUL J. TENNANT (0.447 AC.±) / MITCHELL CARL DUNHAM (0.4 AC.±)
LEASE NO. _____

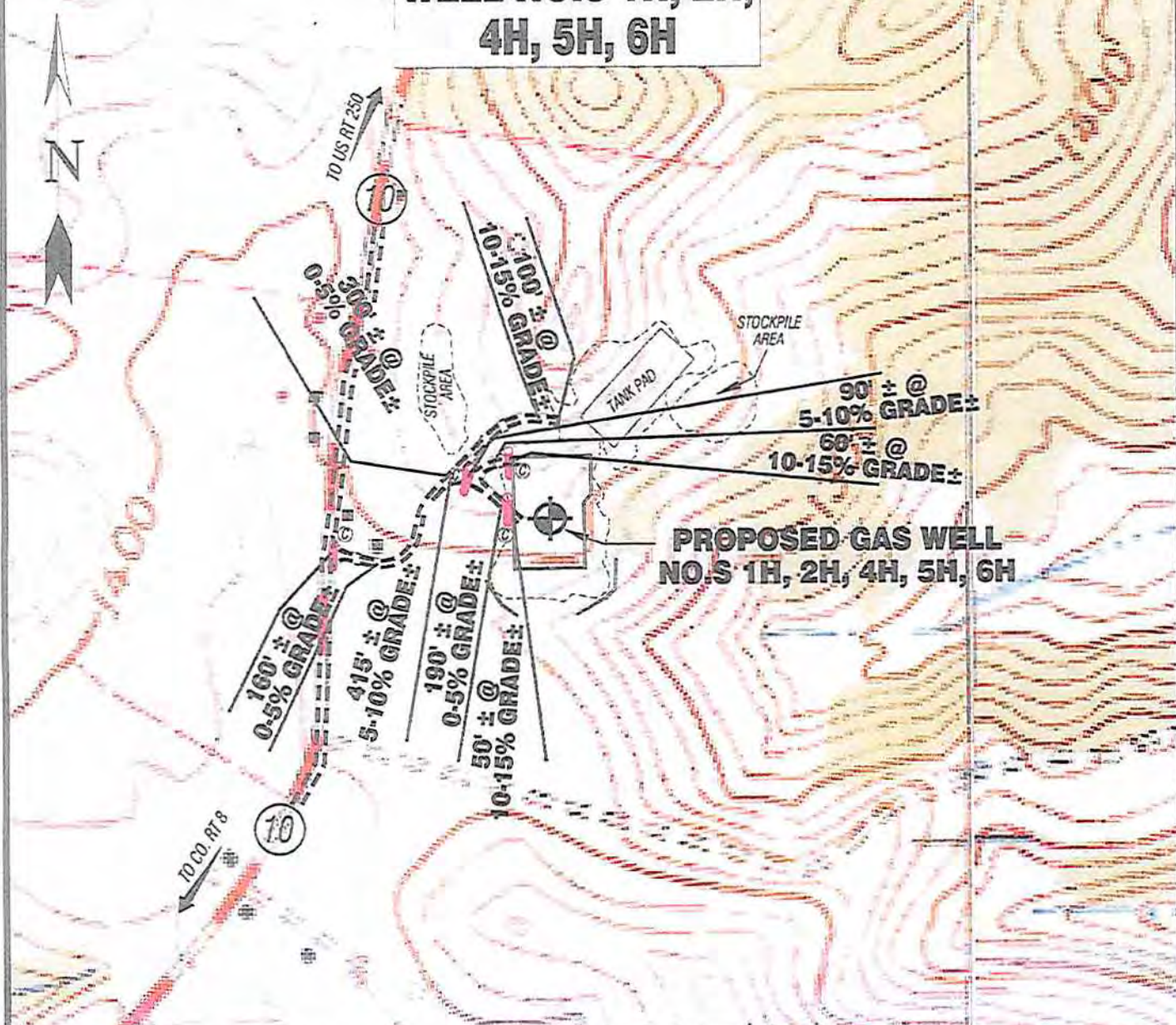
PROPOSED WORK:
DRILL CONVERT DRILL DEEPER REDRILL FRACTURE OR STIMULATE PLUG OFF OLD
FORMATION PERFORATE NEW FORMATION PLUG AND ABANDON CLEAN OUT AND REPLUG OTHER
PHYSICAL CHANGE IN WELL (SPECIFY) _____ TARGET FORMATION MARCELLUS
ESTIMATED DEPTH TVD 7,800' / TMD

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

02/28/2014

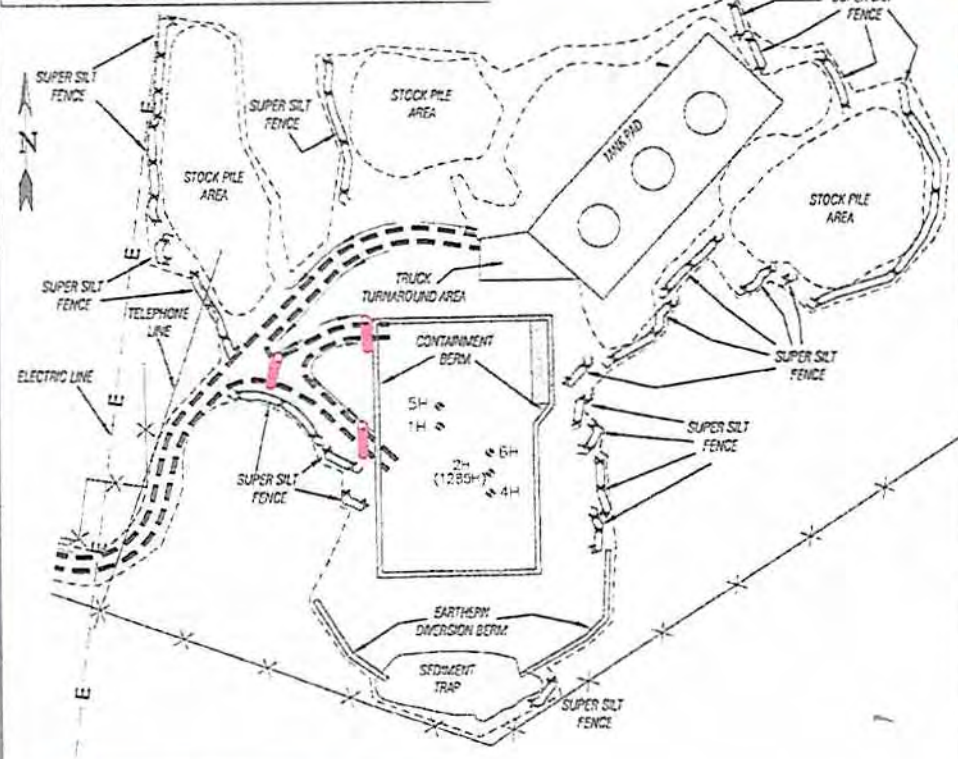
Form WW-9

DUNHAM LEASE WELL NO.S 1H, 2H, 4H, 5H, 6H



Detail Sketch for Proposed Dunham Wells

SCALE: 1"=500'



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 APPLIED).

KCC-1-17-14

- EXISTING CULVERT
- PROPOSED CULVERT 15' MIN. UNLESS OTHERWISE NOTED
- PROPOSED STREAM CROSSING
- APPROXIMATE LIMITS OF DISTURBANCE

Not To Scale

TOPO SECTION OF ROSEMONT 7.5' USGS TOPO QUADRANGLE

Professional Energy Consultants
A DIVISION OF SMITH LAND SURVEYING, INC.

SLS
SURVEYORS
ENGINEERS
ENVIRONMENTAL
PROJECT MGMT.

DRAWN BY K.D.W.	FILE NO. 7754	DATE 01/14/14	CADD FILE: 7754-RC-CP-JANS.dwg
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