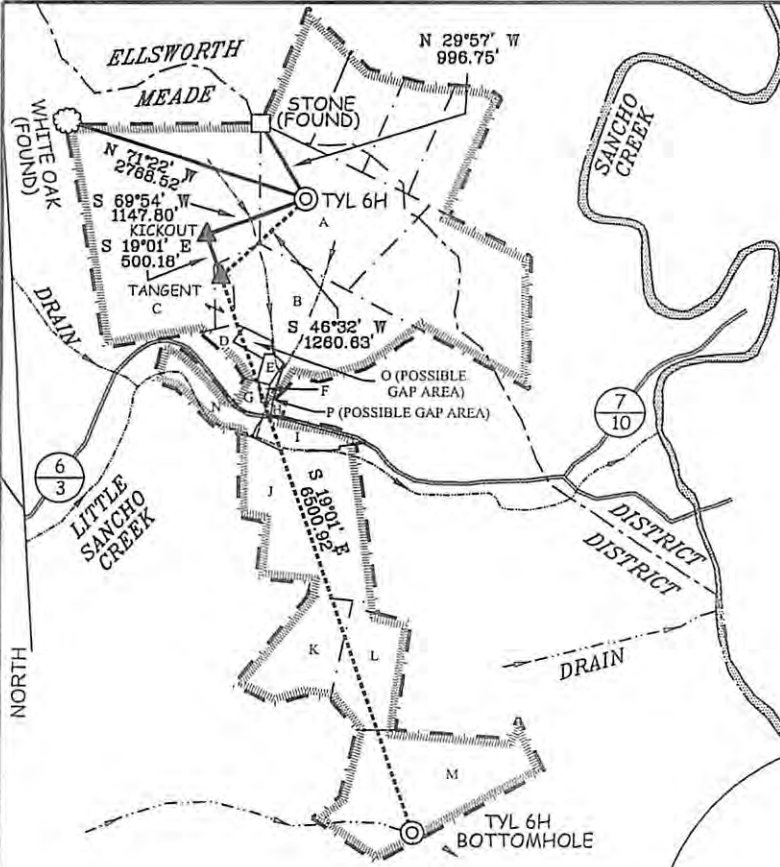


KIRK HADLEY LEASE WELL NO. TYL 6H



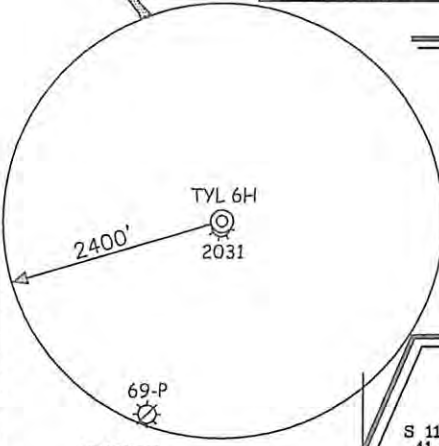
WELL NO. TYL 6H STATE PLANE COORDINATES (SOUTH ZONE NAD'27) N. 354,089 E. 1,594,829 WELL NO. TYL 6H (NAD'27) LAT=(N) 39.46327 LONG=(W) 80.93229 WELL NO. TYL 6H (NAD'27) LAT=(N) 39.2747.8 LONG=(W) 80.5556.3 WELL NO. TYL 6H (NAD'83) LAT=(N) 39.46335 LONG=(W) 80.93212 WELL NO. TYL 6H (NAD'83) LAT=(N) 39.2748.1 LONG=(W) 80.5555.6 UTM (NAD'83) N. 4,368,199 E. 505,839	WELL NO. TYL 6H "KICK OUT" POINT STATE PLANE COORDINATES (NORTH ZONE NAD'27) N. 353,673 E. 1,594,532 "KICK OUT" POINT (NAD'27) LAT=(N) 39.46214 LONG=(W) 80.93609 "KICK OUT" POINT (NAD'27) LAT=(N) 39.2743.7 LONG=(W) 80.5509.9 "KICK OUT" POINT (NAD'83) LAT=(N) 39.46222 LONG=(W) 80.93592 "KICK OUT" POINT (NAD'83) LAT=(N) 39.2744.0 LONG=(W) 80.5509.3 UTM (NAD'83) N. 4,368,074 E. 505,513
WELL NO. TYL 6H TANGENT POINT STATE PLANE COORDINATES (NORTH ZONE NAD'27) N. 353,200 E. 1,594,715 TANGENT POINT (NAD'27) LAT=(N) 39.46085 LONG=(W) 80.93548 TANGENT POINT (NAD'27) LAT=(N) 39.2739.1 LONG=(W) 80.5507.7 TANGENT POINT (NAD'83) LAT=(N) 39.46093 LONG=(W) 80.93531 TANGENT POINT (NAD'83) LAT=(N) 39.2739.4 LONG=(W) 80.5507.1 UTM (NAD'83) N. 4,367,931 E. 505,565	WELL NO. TYL 6H BOTTOM HOLE STATE PLANE COORDINATES (SOUTH ZONE NAD'27) N. 347,054 E. 1,594,832 BOTTOM HOLE (NAD'27) LAT=(N) 39.44407 LONG=(W) 80.92764 BOTTOM HOLE (NAD'27) LAT=(N) 39.2638.7 LONG=(W) 80.5539.5 BOTTOM HOLE (NAD'83) LAT=(N) 39.44415 LONG=(W) 80.92747 BOTTOM HOLE (NAD'83) LAT=(N) 39.2639.9 LONG=(W) 80.5539.9 UTM (NAD'83) N. 4,366,069 E. 506,241

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 213 PAGE 74, DEED BOOK 88 PAGE 159, AND ADJOINING DEEDS.
3. SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF TYLER COUNTY IN JULY, 2011.
4. WELL COORDINATES ESTABLISHED BY SURVEY GRADE GPS.

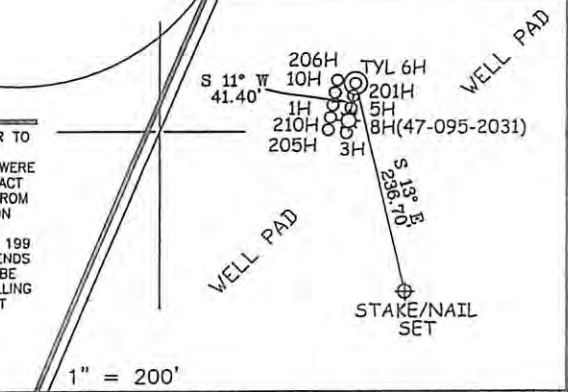
REFERENCES

LOT	OWNER	ACERS ±	TAX MAP / PARCEL	DEED BOOK/PG	LEASE NUMBER
A	KIRK HADLEY	45 OF 162	26/12	213/74	1-291161-000
B	WILLIAM SNYDER ET AL	41.258	3/1.2	309/598	1-355080-001, 1-358869-000, 1-357174-001, 1-355079-001, 1-355082-001, 1-355084-001
C	JAMES & ANGELA LONG	100 (97 & 3)	2/15	333/188	1-309109-000
D	BRIAN REYNOLDS, ETAL	4	2/17	343/794	1-324941-001
E	RANDALL & KATHERYN WISE	1.39	2/17.3	303/19	1-324906-001
F	RANDALL & KATHERYN WISE	.469	2/17.2	303/19	1-324906-001
G	BRIAN REYNOLDS, ETAL	2.12	2/17.1	307/236	1-324941-001
H	VIRGINIA FRAZIER	.48	3/2	215/506	1-324899-001
I	WILLIAM MINGER	7.3	3/8	298/7	1-309164-001, 1-355080-001, 1-324907-001, 1-355082-001, 1-355084-001
J	TERRY & NANCY BAXTER	53.22	2/18	300/622	1-324936-001
K	FREDRICK McMULLEN	17 OF 85.57	3/3	140/138	1-309170-001, THROUGH 1-309170-007, 1-344616-001
L	FREDRICK McMULLEN	18.5 OF 85.57	3/3	140/138	1-309170-001, THROUGH 1-309170-007, 1-344616-001
M	ELMER SHERFEY ETAL	52.32	6/4	320/282	1-324933-001 THROUGH 1-324933-013
N	TIMOTHY PATTERSON	10.8	6/16.1	287/24	1-324907-001
O	N/F BRADY PATTERSON (POSSIBLE RESIDUE AREA)			P/O 199/404	
P	N/F BRADY PATTERSON (POSSIBLE RESIDUE AREA)			P/O 199/404	



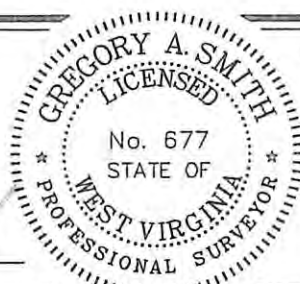
NOTES

TRACTS "O" & "P" APPEAR TO BE POSSIBLE DEED GAP/RESIDUE AREAS THAT WERE PART OF A 125 ACRE TRACT CONVEYED TO MAN ASH FROM SYLVIA MASTERS ETAL ON SEPTEMBER 14, 1973 RECORDED IN DEED BOOK 199 PAGE 404. SLS RECOMMENDS ADDITIONAL TITLE WORK BE COMPLETED PRIOR TO DRILLING TO DETERMINE CURRENT MINERAL OWNERSHIP.



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 NOVEMBER 16, 20 12
 OPERATORS WELL NO. KIRK HADLEY TYL 6H
 API WELL NO. 47-95-02090 H6A
 STATE 47 COUNTY 95 PERMIT 02090 H6A

MINIMUM DEGREE OF ACCURACY 1 / 200 FILE NO. 7422P6HR2 (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 LIQUID INJECTION WASTE DISPOSAL IF "GAS" PRODUCTION STORAGE DEEP SHALLOW

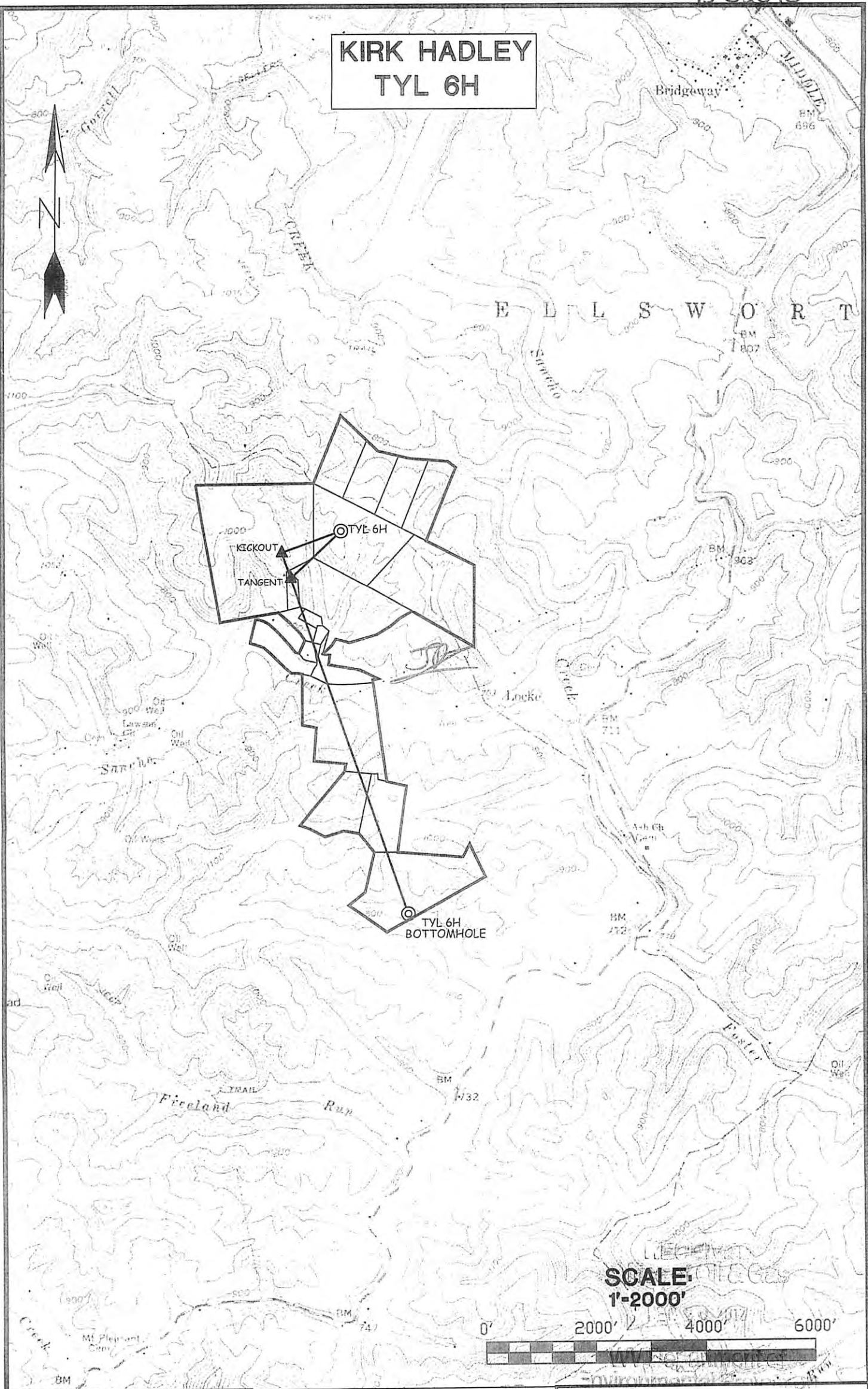
LOCATION: ELEVATION 911' WATERSHED LITTLE SANCHO CREEK
 DISTRICT MEADE COUNTY TYLER QUADRANGLE MIDDLEBOURNE 7.5'

SURFACE OWNER KIRK HADLEY ACREAGE 162±
 ROYALTY OWNER KIRK HADLEY, ET AL (45 OF 162, 41.258, 100(97 & 3), 4, 1.39, .469, 2.12, .48, 7.3, 53.22, 17 & 18 OF 85.57, 52.32, & 10.8 ACRES±)

PROPOSED WORK: LEASE NO. _____
 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 6173' / TMD 13,208'

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

KIRK HADLEY TYL 6H



SCALE:
1"=2000'



95-SLS-02090
SMITH LAND SURVEYING, INC.
P.O. BOX 150 GLENVILLE, WV. 26351
PH: (304) 462-5634 FAX: (304) 462-5656 E-MAIL: sls@slsurveys.com

TYLER COUNTY
MIDDLEBOURNE, WV 7.5' QUAD
DRAWN BY K.D.W. FILE NO. 7422PHR2TOPO.DWG DATE 11-16-12

OPERATOR:
CHESAPEAKE APPALACHIA, LLC.
P.O. BOX 6070
CHARLESTON, WV 25362