

**FITZGERALD S LEASE
UTICA UNIT - 412.02 AC ±
WELL 17HU
TUG HILL OPERATING**

5,287' B.H. A.D.
4,524' T.H. A.D.

T.H. LATITUDE 39°50'00"
B.H. LATITUDE 39°47'30"

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'83 S.P.C.(FT) N. 475,953.93 E. 1,647,905.85
NAD'83 GEO. LAT-(N) 39.801145 LONG-(W) 80.641103
NAD'83 UTM (M) N. 4,405,748.24 E. 530,724.06

LANDING POINT

NAD'83 S.P.C.(FT) N. 475,210.8 E. 1,642,684.1
NAD'83 GEO. LAT-(N) 39.798921 LONG-(W) 80.659653
NAD'83 UTM (M) N. 4,405,495.2 E. 529,137.0

BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 467,484.4 E. 1,647,023.4
NAD'83 GEO. LAT-(N) 39.777864 LONG-(W) 80.643860
NAD'83 UTM (M) N. 4,403,163.5 E. 530,498.3

T.H. LONGITUDE 80°37'30"
B.H. LONGITUDE 80°37'30"

5,014' B.H. A.D.

11,726' T.H. A.D.

TAG	SURFACE OWNER	PARCEL	ACRES
A	DANNY R. & FRANCES V. KERNS ESTATE	7-8-1	27.00
B	CONSOL MINING CO., LLC	9-12-14	127.61
C	DANNY R. & FRANCES V. KERNS ESTATE	9-9-14	48.308
D	NAUVOO CEMETERY ASSOC. INC.	9-9-14.2	0.292
E	TRUSTEES OF THE REORGANIZED CHURCH OF LATTER DAY SAINTS	9-9-15	LOT
F	VIRGINIA MCILVAIN ESTATE & THE WHIPKEY TRUST	9-9-18	LOT
G	WHIPKEY TRUST	9-12-12	61.00
H	NAUVOO CEMETERY ASSOC. INC.	9-9-16.1	0.126
I	NAUVOO CEMETERY ASSOC. INC.	9-9-17	1.00
J	GARY W. MORRIS	9-9-22	0.15
K	WARREN BERYLE & ELEANOR LOU CHAMBERS - LIFE	9-12-11	91.00
L	ROBERT W. KNIGHT	9-12-10	3.00
M	TODD L. SCHERICH, ET AL	9-9-16	168.204
N	CHARLES WILLIAM DOBBS, ET AL	9-12-9	82.26
O	MARY LOU RUBINI, DAVID & ERIC KATZMEYER	9-9-4	268.39
P	CONSOL MINING CO., LLC	9-9-3	84.50
Q	LUCY MCCARDLE	9-9-1	20.89
R	LUCY MCCARDLE	9-12-8	117.85
S	DAVID PAUL CHAPMAN	9-12-21	50.00
T	RONALD EUGENE & MARY LEE DOBBS	9-12-20	91.00
U	RAYMOND D. DOBBS, ET UX	9-12-34	17.5
V	RAYMOND D. DOBBS, ET UX	9-12-19	30.00
W	ROY ROGERS WOODS, SR.	9-12-18	30.00
X	VIRGINIA MCILVAIN ESTATE & THE WHIPKEY TRUST	9-12-17	37.27
Y	ANNA E. MEYER ESTATE	9-12-35	93.64
Z	CONSOL MINING CO., LLC	9-12-36	15.30
AA	CONSOL MINING CO., LLC	9-15-6	59.00
BB	CONSOL MINING CO., LLC	7-9-1	59.00
CC	PAUL & SUSAN ASTON	7-9-2	98.95
DD	CONSOL MINING CO., LLC	7-9-22	101.36

**AS DRILLED COORDINATES
FOR WELL NO. 17HU**

(S.P.C. NORTH ZONE) (UTM(M) ZONE 17 NORTH)

NAD'83 S.P.C.(FT) N. 475,953.93 E. 1,647,905.89
NAD'83 GEO. LAT-(N) 39.801145 LONG-(W) 80.641103
NAD'83 UTM (M) N. 4,405,748.20 E. 530,724.07

LANDING POINT

NAD'83 S.P.C.(FT) N. 475,315.7 E. 1,642,592.5
NAD'83 GEO. LAT-(N) 39.799208 LONG-(W) 80.659984
NAD'83 UTM (M) N. 4,405,526.7 E. 529,108.8

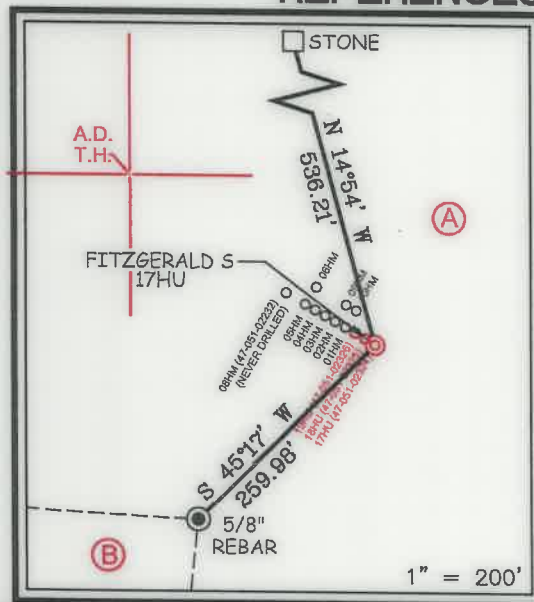
BOTTOM HOLE

NAD'83 S.P.C.(FT) N. 467,498.0 E. 1,647,037.8
NAD'83 GEO. LAT-(N) 39.777902 LONG-(W) 80.643809
NAD'83 UTM (M) N. 4,403,167.7 E. 530,502.6

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.
- WELL SPOT CIRCLE & TOPO MARK SCALE ARE 1"=2000'
- PROPOSED LATERAL OR TOP HOLE OF FITZGERALD S-17HU (47-051-02324) IS WITHIN 3000' OF THE TOP HOLES OR LATERALS OF FITZGERALD S-17HU (47-051-02325), FITZGERALD S-18HU (47-051-02326), HUDSON S-11HU (47-051-02296), HUDSON S-12HU (47-051-02292), HUDSON S-13HU (47-051-02293), HUDSON S-14HU (47-051-02327), HUDSON S-15HU (47-051-02328), HUDSON S-16HU (47-051-02329), TEN HIGH 1S-16HU (47-051-0202B) & TEN HIGH 1S-17HU (47-051-02033).
- AS-DRILLED DATA PROVIDED BY TUG HILL OPERATING, LLC.
- PLAT UPDATED TO SHOW AS-DRILLED PATH.

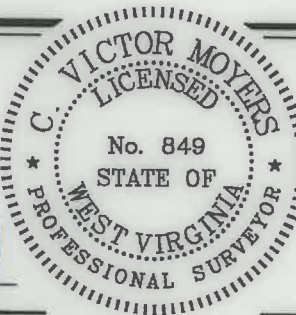
REFERENCES



12 Vashorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.9634
1412 Kanawha Boulevard, East | Charleston, WV 25301 | 304.346.3952
254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5296
slsw.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. 849 *C. Victor Moyers*



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.
DATE APRIL 11, 20 21
REVISED MAY 17, 20 21
OPERATORS WELL NO. FITZGERALD S-17HU
API WELL NO. 47 - 051 - 02324
STATE COUNTY PERMIT

MINIMUM DEGREE OF ACCURACY 1 / 2500 FILE NO. 8910P17HUADR.dwg
HORIZONTAL & VERTICAL CONTROL DETERMINED BY DGPS (SURVEY GRADE TIE TO CORS NETWORK) SCALE 1" = 2000'
FITZGERALD S-17HU REV6

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___ IF "GAS" PRODUCTION X STORAGE ___ DEEP X SHALLOW ___
LOCATION: ELEVATION 1,293.00' WATERSHED SPEAKEASY HOLLOW OF MAGGOTY RUN DISTRICT LIBERTY COUNTY MARSHALL QUADRANGLE GLEN EASTON 7.5'
SURFACE OWNER DANNY AND FRANCES KERNS ESTATE ACREAGE 27.00±
ROYALTY OWNER DANNY S. KERNS, ET AL ACREAGE 27.00±
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___ PERFORATE NEW FORMATION ___ PLUG AND ABANDON ___ CLEAN OUT AND REPLUG ___ OTHER ___
PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION POINT PLEASANT ESTIMATED DEPTH TVD: 12,064' / TMD: 23,833'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DIANNA STAMPER
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 ADDRESS 5400 D BIG TYLER ROAD
FORT WORTH, TX 76107 CHARLESTON, WV 25313

COUNTY NAME PERMIT

10/21/2022

**FITZGERALD S LEASE
UTICA UNIT - 412.02 AC ±
WELL 17HU
TUG HILL OPERATING**

T.H. LATITUDE 39°50'00"
B.H. LATITUDE 39°47'30"

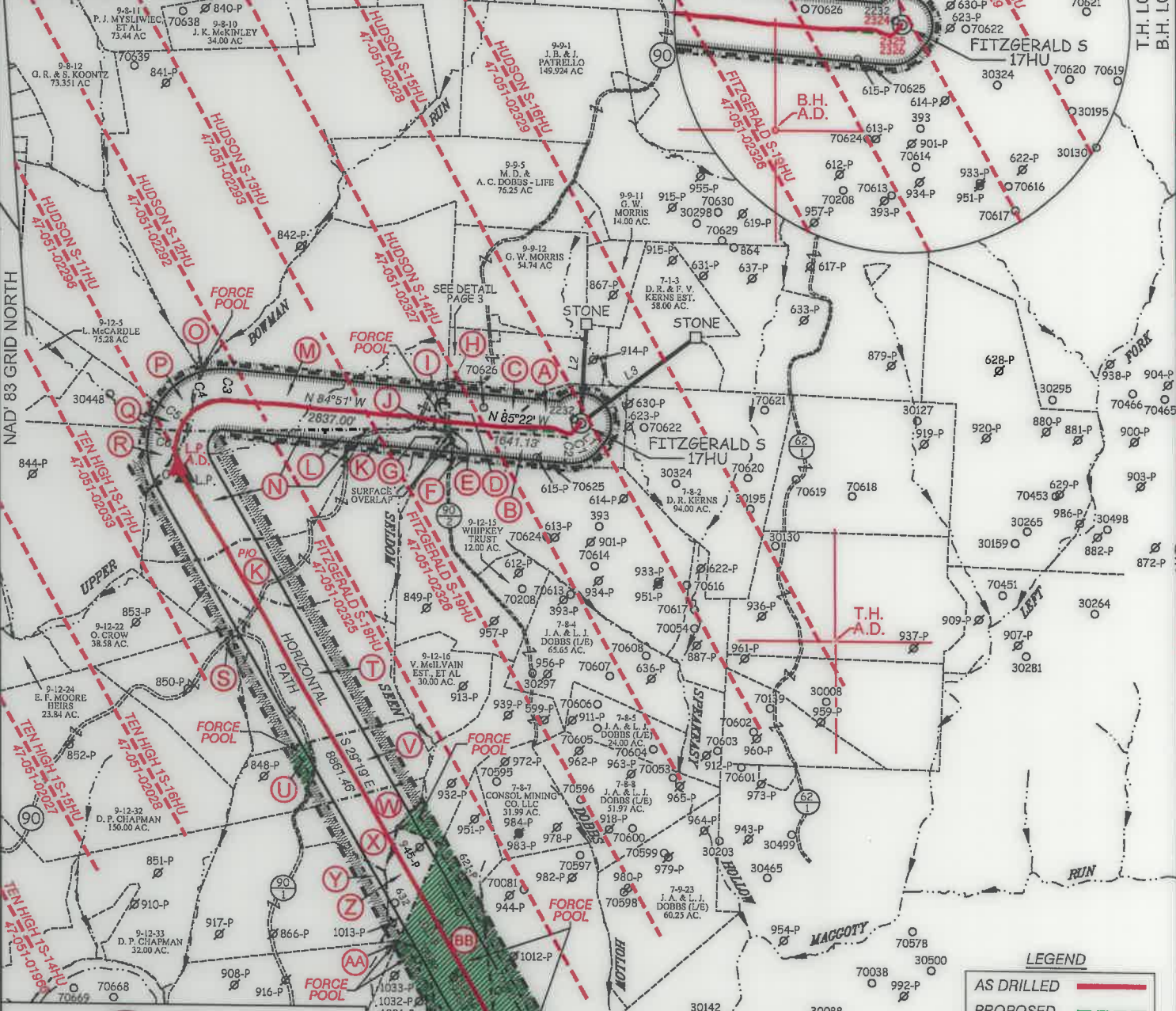
T.H. LONGITUDE 80°37'30"
B.H. LONGITUDE 80°37'30"

5,014' B.H. A.D.

11,726' T.H. A.D.

LINE TABLE

LINE	BEARING	DISTANCE
L1	S 40°58' W	153.14'
L2	N 03°07' E	1310.39'
L3	N 52°50' E	1905.72'



LEGEND

AS DRILLED	
PROPOSED	

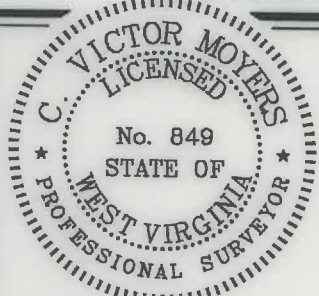
CURVE TABLE

CURVE	ARC LENGTH	RADIUS	CHORD BEARING	CHORD LENGTH
C1	19.05'	33.83'	S 61°10' W	18.80'
C2	28.43'	102.99'	S 86°47' W	28.34'
C3	139.64'	989.05'	N 87°22' W	139.53'
C4	408.91'	599.07'	S 67°38' W	401.02'
C5	322.40'	631.18'	S 32°33' W	318.91'
C6	337.71'	681.85'	S 03°59' W	334.27'
C7	271.73'	801.26'	S 19°24' E	270.43'



12 Vanhorn Drive | P.O. Box 150 | Glenville, WV 26351 | 304.462.5634
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254 East Beckley Bypass | Beckley, WV 25801 | 304.255.5286
slsww.com

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(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS.

LEGEND

UNIT BOUNDARY	
LEASED TRACTS INSIDE	
UNIT BOUNDARY	
SURFACE LINE	
PROPOSED UTICA	
WELL LATERAL	
400' OFFSET LINE	
500' OFFSET LINE	
TIE LINE	
CREEK	
ROAD	
FORCE POOL TRACT	
COUNTY ROUTE	
PROPOSED WELL	
EXISTING WELL	
PERMITTED WELL	
SURFACE OWNER (SEE TABLE)	
LEASE # (SEE ADDITIONAL SHEETS)	

SCALE 1" = 2000' FILE NO. 8910P17HUADR.dwg
FITZGERALD S-17HU REV6
DATE APRIL 11, 20 21
REVISED MAY 17, 20 21
OPERATORS WELL NO. FITZGERALD S-17HU
API WELL NO. 47 - 051 - 02324
STATE COUNTY PERMIT

STATE OF WEST VIRGINIA
DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF OIL AND GAS



WELL OPERATOR TUG HILL OPERATING, LLC
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500
FORT WORTH, TX 76107

DESIGNATED AGENT DIANNA STAMPER
ADDRESS 5400 D BIG TYLER ROAD
CHARLESTON, WV 25313

10/21/2022

COUNTY NAME PERMIT

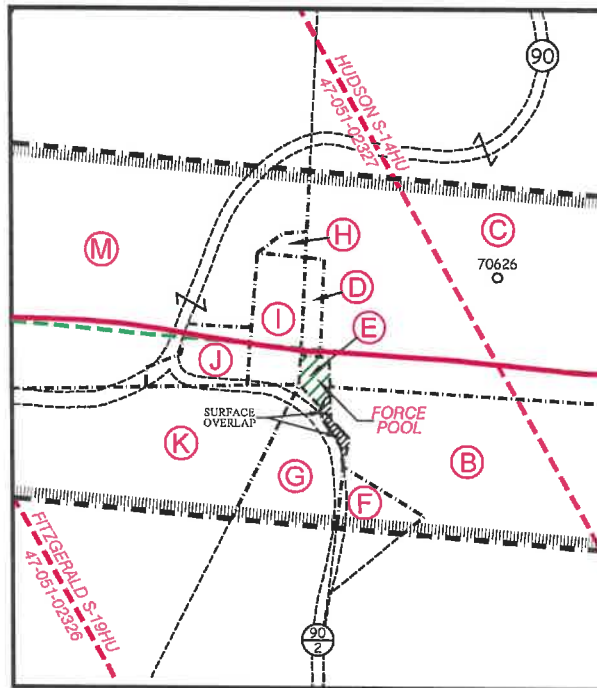
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sllwv.com

NO.	Lease ID	Tag	Parcel	Grantor, Lessor, Etc.	Deed Book/Page
1	10*25518	A	7-8-1	DANNYS KERNS, MARRIED MAN DEALING WITH HIS SOLE AND SEPARATE PROPERTY et al	1010 532
2	10*18339	B	9-12-14	RESOURCE MINERALS HEADWATER I LP et al	940 448
3	PENDING	C	9-9-14	REGINA DANETTE FIGUEROA et al	1075 137
4	10*27299	D	9-9-14.2	NAUVOO CEMETERY ASSOCIATION	1057 357
5	**	E	9-9-15	REORGANIZED CHURCH OF LATER DAY SAINTS	UNLEASED
6	10*22524	F	9-9-18	ALYCE LYNN MCGUFFIE et al	1027 293
7	10*19557	G	9-12-12	TERRY L BLAKE et al	944 649
8	10*19987	H	9-9-16.1	LESLEY D BALLA et al	955 103
9	10*27299	I	9-9-17	NAUVOO CEMETERY ASSOCIATION	1057 357
10	10*24535	J	9-9-22	BOARD OF EDUCATION OF MARSHALL COUNTY	1026 64
11	10*15494	K	9-12-11	CHRISTOPHER SINGER AND SHEREA SINGER et al	898 433
12	10*23656	L	9-12-10	ROBERT W KNIGHT AND BARBARA J KNIGHT	1011 504
13	10*19987	M	9-9-16	LESLEY D BALLA et al	955 103
14	10*15999	N	9-12-9	CHARLES W DOBBS AND JUDITH M DOBBS et al	702 171
15	**	O	9-9-4	MARY LOU RUBINI AKA MARY LOU MILLER et al	793 287
16	10*47051.304.0	P	9-9-3	UNITED BANK INC	905 5
17	10*23386	Q	9-9-1	EDITH CARMICHAEL HEIRS BY HERMAN LANTZ, ESQ AS SPEC COMMISSIONER et al	1008 68
18	10*47051.289.1	R	9-12-8	JANICE M HIXSON AND HARRY C HIXSON et al	898 461
19	10*47051.140.1	S	9-12-21	DAVID P CHAPMAN & DEBORAH BORCK-CHAPMAN et al	866 318
20	10*24679	T	9-12-20	PIKEWOOD ENERGY CORPORATION AN OHIO CORPORATION et al	1026 149
21	10*21449	U	9-12-34	GARY WAYNE MORRIS et al	957 262
22	10*19748	V	9-12-19	ELIZABETH JANE KELLEY et al	957 335
23	10*18073	W	9-12-18	ROY R WOODS	927 22
24	10*21532	X	9-12-17	CHARLES E RICHARDSON AND SHIRLEY S RICHARDSON et al	957 327
25	10*19706	Y	9-12-35	BARBARA JO BEVERIDGE et al	944 627
26	PENDING	Z	9-12-36	OCTO OIL COMPANY LLC	1076 17
27	PENDING	AA	9-15-6	OCTO OIL COMPANY LLC et al	1076 17
28	10*22631	BB	7-9-1	FREDA ELIZABETH BLAKE et al	966 632
29	**	CC	7-9-2	AUSTIE CARNEY ET AL	363 15
30	10*17930	DD	7-9-22	BOUNTY MINERALS LLC et al	928 396

DETAIL
SCALE: 1" = 500'



FILE NO. 8910P17HUADR.dwg
FITZGERALD S-17HU REV6

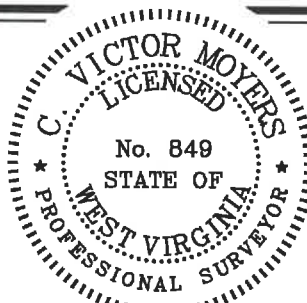
DATE APRIL 9, 20 21

REVISED MAY 17, 20 21

OPERATORS WELL NO. FITZGERALD S-17HU

API WELL NO. 47 — 051 — 02324

STATE COUNTY PERMIT



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