



west virginia department of environmental protection

Office of Oil and Gas
601 57th Street, S.E.
Charleston, WV 25304
(304) 926-0450
fax: (304) 926-0452

Harold D. Ward, Cabinet Secretary
www.dep.wv.gov

Tuesday, October 18, 2022
PERMIT MODIFICATION APPROVAL
Horizontal 6A / New Drill

TUG HILL OPERATING, LLC
380 SOUTHPOINTE BOULEVARD, PLAZA II
SUITE 200
CANONSBURG, PA 15317

Re: Permit Modification Approval for ELMER N-15HU
47-103-03503-00-00

Extend Lateral, Horizontal Leg Length 500.02' to 16889.37', Total Measured Depth 13058' to 29152'. updated lease chain

TUG HILL OPERATING, LLC

The Office of Oil and Gas has reviewed the attached permit modification for the above referenced permit. The attached modification has been approved and well work may begin. Please be reminded that the oil and gas inspector is to be notified twenty-four (24) hours before permitted well work is commenced.

If there are any questions, please feel free to contact me at (304) 926- 0450.

A blue ink signature of James A. Martin, Chief, is written over a white background. The signature is stylized and cursive.

James A. Martin
Chief

Operator's Well Number: ELMER N-15HU
Farm Name: ELNORA TUTTLE
U.S. WELL NUMBER: 47-103-03503-00-00
Horizontal 6A New Drill
Date Modification Issued: 10/18/2022

Promoting a healthy environment.

10/21/2022



west virginia department of environmental protection

Oil and Gas Conservation Commission
601 57th Street SE, Charleston, WV 25304
304-414-1239

Randall M. Albert, Chairman
dep.wv.gov

October 12, 2022

Department of Environmental Protection
Office of Oil and Gas
Charleston, WV 25304

RE: Application for Deep Well Permit – API #47-103-03503

COMPANY: Tug Hill Operating, LLC

FARM: Elnora Tuttle Elmer N-15HU Modification


COUNTY: Wetzel DISTRICT: Proctor QUAD: Wileyville

The deep well review of the application for the above company is **Approved to drill to Trenton for Point Pleasant completion. Pooling Docket 308-312**

The applicant has complied with the provision of Chapter 22C-9, of the Code of West Virginia, nineteen hundred and thirty-one (1931), as amended, Oil and Gas Conservation Commission as follows:

1. Comments to Notice of Deviation filed? Yes, but withdrawn.
2. Provided a certified copy of duly acknowledged and recorded consent and easement form from all surface owners? Yes
3. Provided a tabulation of all deep wells within one mile of the proposed location, including the API number of all deep wells: **yes
4. Provided a plat showing that the productive interval of the well meets the requirements of the Rules of the Commission W. Va. C.S.R. § 39-1-4.2.

Sincerely,


Susan Rose
Administrator

**Elmer N-18HU 47-103-03467; Elmer N-17HU 47-103-03505; Elmer N-16HU 47-103-03504; Elmer N-14HU 47-103-03502; Burch Ridge S-6HU 47-051-02193; Burch Ridge S-7HU 47-051-02194; McMasters S-16HU 47-051-02337; McMasters S-17HU 47-051-02338; McMasters S-18HU 47-051-02339; McMasters S-19HU 47-051-02340; Hillrock S-12HU 47-051-02272; Hillrock S-13HU 47-051-02273; Hillrock S-14HU 47-051-02262; Hillrock S-15HU 47-051-02263; Simms U-5H 47-051-0731

10/21/2022

STATE OF WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS
WELL WORK PERMIT APPLICATION

1) Well Operator: Tug Hill Operating, LLC 494510851 Wetzel Proctor Wileyville 7.5'
Operator ID County District Quadrangle

2) Operator's Well Number: Elmer N-15HU Well Pad Name: Elmer

3) Farm Name/Surface Owner: Elnora Tuttle Public Road Access: Proctor Creek Road

4) Elevation, current ground: 1,308.03' Elevation, proposed post-construction: 1,276.50'

5) Well Type (a) Gas Oil Underground Storage
Other

(b) If Gas Shallow Deep
Horizontal

ch#
058359
\$2500#

6) Existing Pad: Yes or No No

7) Proposed Target Formation(s), Depth(s), Anticipated Thickness and Expected Pressure(s):
Point Pleasant is the target formation at a depth of 11,632' - 11,751', thickness of 119' and anticipated pressure of approx. 7,500 psi.

8) Proposed Total Vertical Depth: 11,901'

9) Formation at Total Vertical Depth: Trenton

10) Proposed Total Measured Depth: 29,152'

11) Proposed Horizontal Leg Length: 16,889.37'

12) Approximate Fresh Water Strata Depths: 70; 1,009' ✓

13) Method to Determine Fresh Water Depths: Based on the depth of Pittsburgh Coal seam, per WVGES mapping contours ✓

14) Approximate Saltwater Depths: 1,645' ✓

15) Approximate Coal Seam Depths: Sewickley Coal - 909' and Pittsburgh Coal - 1,003' ✓

16) Approximate Depth to Possible Void (coal mine, karst, other): None anticipated

17) Does Proposed well location contain coal seams directly overlying or adjacent to an active mine? Yes No

(a) If Yes, provide Mine Info: Name: _____

Depth: _____

Seam: _____

Owner: _____

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18) CASING AND TUBING PROGRAM

TYPE	Size (in)	New or Used	Grade	Weight per ft. (lb/ft)	FOOTAGE: For Drilling (ft)	INTERVALS: Left in Well (ft)	CEMENT: Fill-up (Cu. Ft.)/CTS
Conductor	30"	NEW	BW	BW	120'	120' ✓	259ft^3(CTS)
Fresh Water/Coal	20"	NEW	J55	106.5#	1,125'	1,125' ✓	1,802ft^3(CTS)
Intermediate 1	13 3/8"	NEW	J55	54.5#	2,950'	2,950' ✓	2,079ft^3(CTS)
Intermediate 2	9 5/8"	NEW	HPP110	47#	10,611'	10,611'	3,470ft^3(CTS)
Production	5 1/2"	NEW	P110	23#	29,152'	29,152'	6,859ft^3(CTS)
Tubing	2 7/8"	NEW	P110	6.5#		11,291'	
Liners							

Kimberly L. Reynolds 7-28-22

TYPE	Size (in)	Wellbore Diameter (in)	Wall Thickness (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	Cement Type	Cement Yield (cu. ft./k)
Conductor	30"	36"	1.0	2,333	1,866	CLASS A	1.2
Fresh Water	20"	26"	.5	2,410	1,928	SEE #24	1.2
Coal	13 3/8"	17 1/2"	.38	2,740	2,192	SEE #24	1.2
Intermediate	9 5/8"	12 1/4"	.472	10,730	6,968	SEE #24	1.33
Production	5 1/2"	8 1/2"	.415	16,510	13,208	SEE #24	1.17/1.19
Tubing	2 7/8"			14,530	11,624		
Liners							

PACKERS

Kind:	N/A			
Sizes:	N/A			
Depths Set:	N/A			

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19) Describe proposed well work, including the drilling and plugging back of any pilot hole:

Drill through the Point Pleasant and TD Pilot Hole 150' into the Trenton. Log vertical section and run a solid cement plug back to proposed KOP(10,789'). Drill curve and lateral per proposed well plan, run and cement production casing. Perform DBL from 60 deg to surface, make cleanout run, and stimulate.

20) Describe fracturing/stimulating methods in detail, including anticipated max pressure and max rate:

Well to be completed with approximately 42,300,000 lb. proppant and 760,000 bbl of water. Max rate = 80bpm; max psi = 9,000#.

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 26.11 acres

22) Area to be disturbed for well pad only, less access road (acres): 7.63 acres

23) Describe centralizer placement for each casing string:

Will run 3 centralizers on surface casing at equal distance. Intermediate strings will have 1 centralizer every other joint. Production casing will have one centralizer every other joint in lateral, one centralizer every joint through curve, one centralizer every other joint to surface.

24) Describe all cement additives associated with each cement type:

Sfc - Premium NE-1 + 2% CaCl; Int1 - Premium NE-1 + 1.5% CaCL + Flake; Int2 - Lead: Premium NE-1 + 5% BA-90 + .85% R-3 + 3% KCl + .75 gals/100sk FP-13L + 1% MPA-170 Tail: Premium NE-1 + .1% R-3 + 5% KCl + 1% CD-32 + .4% FL-52 + .2% ASA-301 + .6% Sodium Metasilicate; Kick Plug - Class H Cement + 1% CD-32 + .7% Sodium Metasilicate + .1% R-3 + .75 gal/100sk FP-13L; Prod - Lead: 50:50 (Poz:Class H) + .3% R-3 + .3% MPA-250 + .75 gal/100sk FP-13L Tail: 25:75 (Poz:Class H) + .3% R-3 + .3% MPA-250 + .375 gal/100sk FP-13L

25) Proposed borehole conditioning procedures:

Will circulate a minimum of 3 hours at TD, short trip to curve, circulate bottoms up, check for flow, POOH

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*Note: Attach additional sheets as needed.

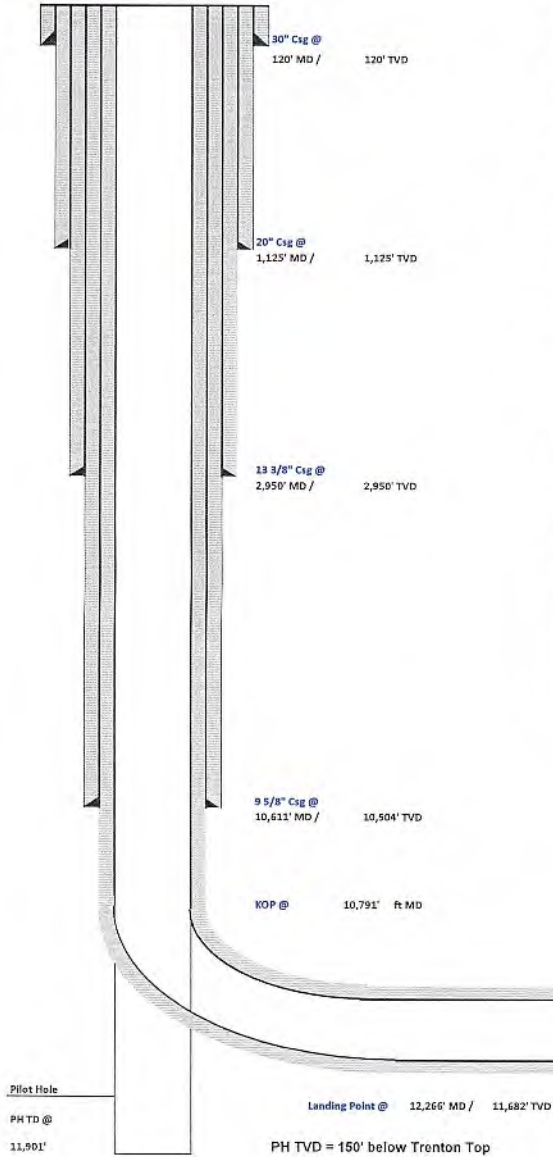


WELL NAME: Elmer N-15HU
STATE: WV **COUNTY:** Wetzel
DISTRICT: Proctor
DF Elev: 1,277' **GL Elev:** 1,277'
TD: 29,152'
TH Latitude: 39.69391799
TH Longitude: -80.73761049
BH Latitude: 39.733791
BH Longitude: -80.771272

FORMATION TOPS	
Formation	Depth TVD
Deepest Fresh Water	1,009'
Sewickley Coal	909'
Pittsburgh Coal	1,003'
Blg Lime	2,175'
Berea	2,817'
Tully	6,729'
Marcellus	6,810'
Onondaga	6,860'
Salina	7,450'
Lockport	8,590'
Utica	11,397'
Point Pleasant	11,682'
Landing Depth	11,682'
Trenton	11,751'
Pilot Hole TD	11,901'

CASING SUMMARY							
Type	Hole Size (in)	Csg Size (in)	Depth (MD)	Depth (TVD)	Weight (lb/ft)	Grade	Top of Cement
Conductor	36	30	120'	120'	BW	BW	Surface
Surface	26	20	1,125'	1,125'	106.5	J55	Surface
Intermediate 1	17 1/2	13 3/8	2,950'	2,950'	54.5	J55	Surface
Intermediate 2	12 1/4	9 5/8	10,611'	10,504'	47	HPP110	Surface
Production	8 1/2	5 1/2	29,152'	11,388'	23	HCP110	Surface

CEMENT SUMMARY				DRILLING DETAILS	
Type	Sacks	Class	Density (ppg)	Fluid Type	Centralizer Notes
Conductor	398	A	15.6	Air	None
Surface	1,943	A	15.6	Air	3 Centralizers at equal distance
Intermediate 1	2,253	A	15.6	Air	1 Centralizer every other joint
Intermediate 2	3,150	A	14.5	Air	1 Centralizer every other joint
Production	7,076	A	16.5	Air / SOBMM	1 every other joint in lateral; 1 per joint in curve; 1 every other joint to surface



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Lateral TD @ 29,152' ft MD
11,388 ft TVD



Tug Hill Operating, LLC Casing and Cement Program

Elmer N-15HU

Casing

	String	Grade	Bit Size	Depth (Measured)	Cement Fill Up
Conductor	30"	BW	36"	120'	CTS
Surface	20"	J55	26"	1,125'	CTS
Intermediate 1	13 3/8"	J55	17 1/2"	2,950'	CTS
Intermediate 2	9 5/8"	HPP110	12 1/4"	10,611'	CTS
Production	5 1/2"	HCP110	8 1/2"	29,152'	CTS

Cement

- Conductor: Premium NE-1 + 2% bwoc CaC12 + 46.5% Fresh Water – Conductor Cement mixed at 15.6 ppg, Y=1.2
- Surface: Premium NE-1 + 2% bwoc CaC12 + 46.5% Fresh Water – Surface Cement mixed at 15.6 ppg, Y=1.2
- Intermediate 1: Premium NE-1 + 1% bwoc CaC12 + 46.5% Fresh Water – Intermediate Cement mixed at 15.6 ppg, Y=1.2
- Intermediate 2: Premium NE-1 + 1% bwoc CaC12 + 46.5% Fresh Water – Intermediate Cement mixed at 14.5 ppg, Y=1.35
- Kick Off Plug: Class H Cement + 1% CD-32 + .7% Sodium Metasilicate + .1% R-3 + .75 gal/100sk FP-13L - KOP Plug
- Production: 50:50 Poz: Premium NE-1 + .1% bwoc ASA-301 + 60lb/sk ASCA-1 + .35% bwoc BA-10A + .25% bwoc MPA-170, 44 lb sack + .5% bwoc R-3 + .75 gals/100sk FP-13L – Production Cement mixed at 16.5 ppg, Y = 1.03

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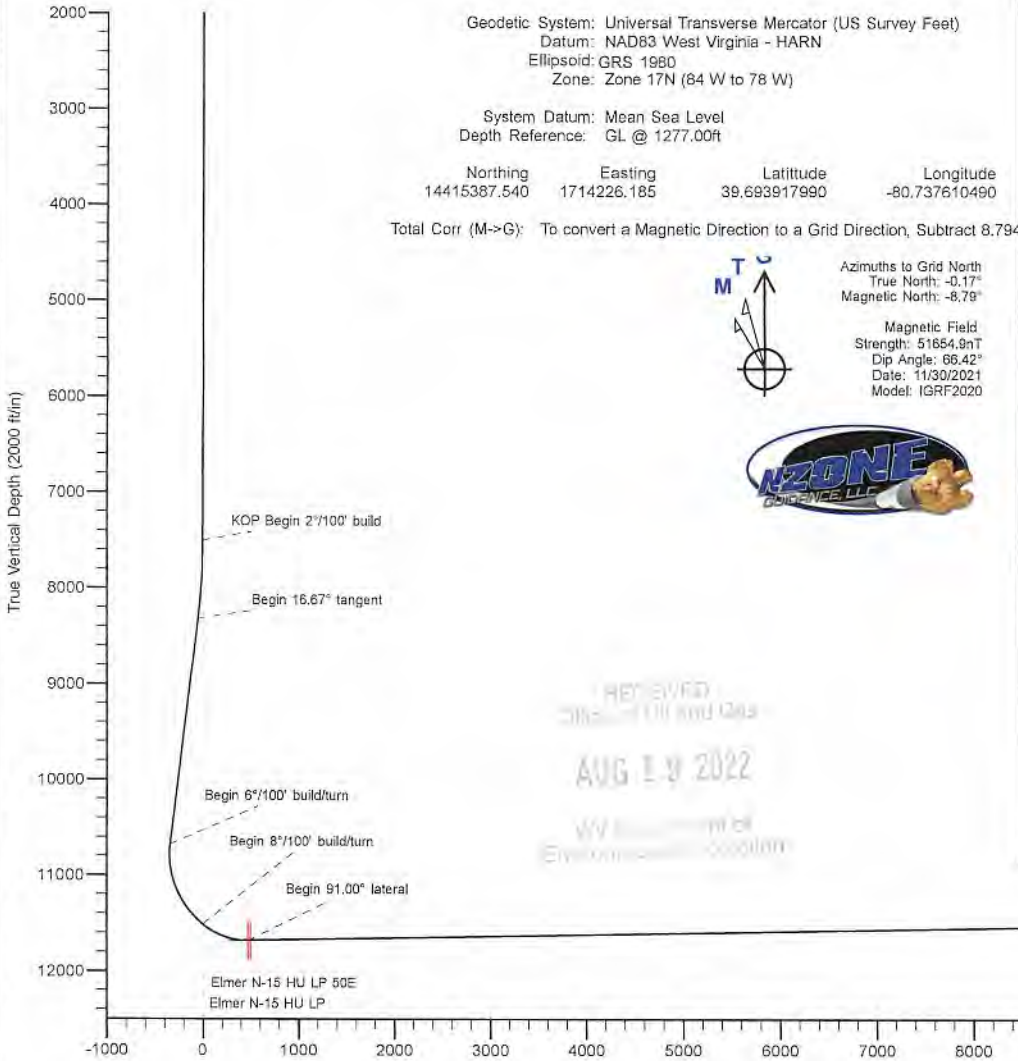
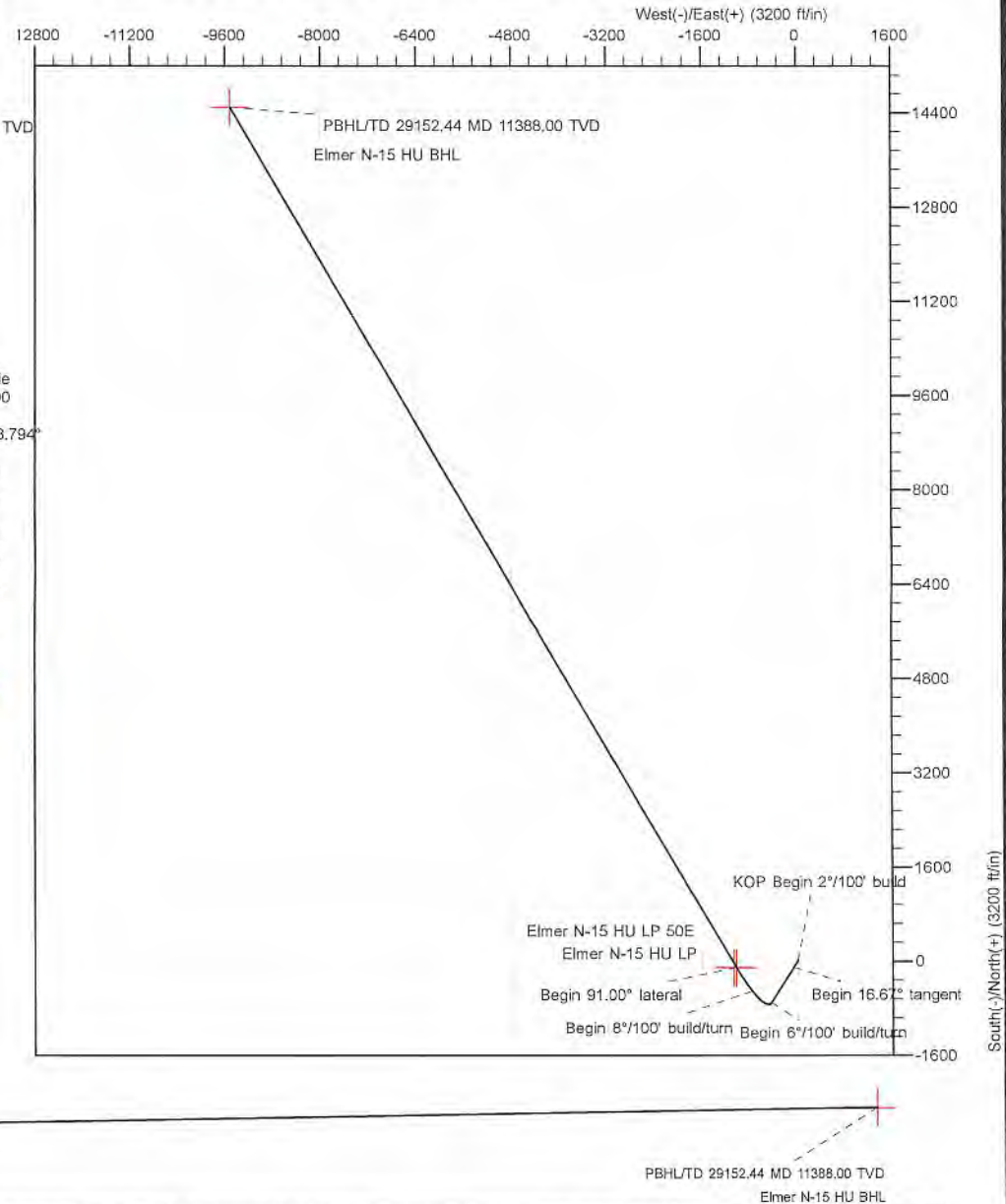
Well: Elmer N-15 HU (slot B)
 Site: Elmer
 Project: Wetzel County, West Virginia (UTM17 NAD83)
 Design: rev1

DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
Elmer N-15 HU BHL	11388.00	14492.79	-9505.96	14429880.298	1704720.242	39.733791000	-80.771272000
- plan hits target center							
Elmer N-15 HU LP	11682.00	-107.26	-1076.65	14415280.278	1713149.533	39.693632000	-80.741439000
- plan misses target center by 43.21ft at 12291.26ft MD (11681.57 TVD, -85.57 N, -1039.29 E)							
Elmer N-15 HU LP 50E	11682.00	-107.26	-1026.65	14415280.278	1713199.537	39.693631604	-80.741261242
- plan misses target center by 0.03ft at 12266.15ft MD (11682.01 TVD, -107.28 N, -1026.68 E)							

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	Vsect	Annotation
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	0.00	
2	7502.00	0.00	0.00	7502.00	0.00	0.00	0.00	0.000	0.00	KOP Begin 2°/100' build
3	8335.29	16.67	212.23	8323.58	-101.79	-64.18	2.00	212.231	-49.92	Begin 16.67° tangent
4	10791.33	16.67	212.23	10676.46	-697.62	-439.84	0.00	0.000	-342.10	Begin 6°/100' build/turn
5	11746.76	50.00	322.45	11512.08	-507.22	-763.39	6.00	121.353	-5.44	Begin 8°/100' build/turn
6	12266.16	91.00	329.85	11682.00	-107.27	-1026.69	8.00	11.200	473.40	Begin 91.00° lateral
7	29152.44	91.00	329.85	11388.00	14492.79	-9505.96	0.00	0.000	17332.17	PBHL/TD 29152.44 MD 11388.00 TVD

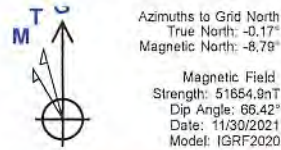


Geodetic System: Universal Transverse Mercator (US Survey Feet)
 Datum: NAD83 West Virginia - HARN
 Ellipsoid: GRS 1980
 Zone: Zone 17N (84 W to 78 W)

System Datum: Mean Sea Level
 Depth Reference: GL @ 1277.00ft

Northing: 14415387.540 Easting: 1714226.185 Latitude: 39.683917990 Longitude: -80.737610490

Total Corr (M->G): To convert a Magnetic Direction to a Grid Direction, Subtract 8.79°



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Planning Report - Geographic

Database:	DB_Dec2220_v16	Local Co-ordinate Reference:	Well Elmer N-15 HU (slot B)
Company:	Tug Hill Operating LLC	TVD Reference:	GL @ 1277.00ft
Project:	Wetzel County, West Virginia (UTM17 NAD83)	MD Reference:	GL @ 1277.00ft
Site:	Elmer	North Reference:	Grid
Well:	Elmer N-15 HU (slot B)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Project	Wetzel County, West Virginia (UTM17 NAD83)		
Map System:	Universal Transverse Mercator (US Survey Feet)	System Datum:	Mean Sea Level
Geo Datum:	NAD83 West Virginia - HARN		
Map Zone:	Zone 17N (84 W to 78 W)		

Site	Elmer				
Site Position:		Northing:	14,415,313.835 usft	Latitude:	39.693715720
From:	Lat/Long	Easting:	1,714,207.744 usft	Longitude:	-80.737676810
Position Uncertainty:	0.00 ft	Slot Radius:	13-3/16 "		

Well	Elmer N-15 HU (slot B)					
Well Position	+N/-S	0.00 ft	Northing:	14,415,387.540 usft	Latitude:	39.693917990
	+E/-W	0.00 ft	Easting:	1,714,226.184 usft	Longitude:	-80.737610490
Position Uncertainty	0.00 ft	Wellhead Elevation:	ft	Ground Level:	1,277.00 ft	
Grid Convergence:						

Wellbore	Original Hole				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2020	11/30/2021	-8.626	66.424	51,654.86104830

Design	rev1			
Audit Notes:				
Version:	Phase:	PLAN	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	+E/-W (ft)	Direction (°)
	0.00	0.00	0.00	326.74

Plan Survey Tool Program	Date			
Depth From (ft)	Depth To (ft)	Survey (Wellbore)	Tool Name	Remarks
1	0.00	29,152.44 rev1 (Original Hole)		

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Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
7,502.00	0.00	0.00	7,502.00	0.00	0.00	0.00	0.00	0.00	0.000	
8,335.29	16.67	212.23	8,323.58	-101.79	-64.18	2.00	2.00	0.00	212.231	
10,791.33	16.67	212.23	10,676.46	-697.62	-439.84	0.00	0.00	0.00	0.000	
11,746.76	50.00	322.45	11,512.08	-507.22	-763.39	6.00	3.49	11.54	121.353	
12,266.16	91.00	329.85	11,682.01	-107.27	-1,026.69	8.00	7.89	1.43	11.200	
29,152.44	91.00	329.85	11,388.00	14,492.79	-9,505.96	0.00	0.00	0.00	0.000	Elmer N-15 HU BHL



Planning Report - Geographic

Database: DB_Dec2220_v16
 Company: Tug Hill Operating LLC
 Project: Wetzal County, West Virginia (UTM17 NAD83)
 Site: Elmer
 Well: Elmer N-15 HU (slot B)
 Wellbore: Original Hole
 Design: rev1

Local Co-ordinate Reference: Well Elmer N-15 HU (slot B)
 TVD Reference: GL @ 1277.00ft
 MD Reference: GL @ 1277.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

AUG 15 2022

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
0.00	0.00	0.00	0.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
100.00	0.00	0.00	100.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
200.00	0.00	0.00	200.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
300.00	0.00	0.00	300.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
400.00	0.00	0.00	400.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
500.00	0.00	0.00	500.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
600.00	0.00	0.00	600.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
700.00	0.00	0.00	700.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
800.00	0.00	0.00	800.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
900.00	0.00	0.00	900.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
1,000.00	0.00	0.00	1,000.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
1,100.00	0.00	0.00	1,100.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
1,200.00	0.00	0.00	1,200.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
1,300.00	0.00	0.00	1,300.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
1,400.00	0.00	0.00	1,400.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
1,500.00	0.00	0.00	1,500.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
1,600.00	0.00	0.00	1,600.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
1,700.00	0.00	0.00	1,700.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
1,800.00	0.00	0.00	1,800.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
1,900.00	0.00	0.00	1,900.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
2,000.00	0.00	0.00	2,000.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
2,100.00	0.00	0.00	2,100.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
2,200.00	0.00	0.00	2,200.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
2,300.00	0.00	0.00	2,300.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
2,400.00	0.00	0.00	2,400.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
2,500.00	0.00	0.00	2,500.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
2,600.00	0.00	0.00	2,600.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
2,700.00	0.00	0.00	2,700.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
2,800.00	0.00	0.00	2,800.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
2,900.00	0.00	0.00	2,900.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
3,000.00	0.00	0.00	3,000.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
3,100.00	0.00	0.00	3,100.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
3,200.00	0.00	0.00	3,200.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
3,300.00	0.00	0.00	3,300.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
3,400.00	0.00	0.00	3,400.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
3,500.00	0.00	0.00	3,500.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
3,600.00	0.00	0.00	3,600.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
3,700.00	0.00	0.00	3,700.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
3,800.00	0.00	0.00	3,800.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
3,900.00	0.00	0.00	3,900.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
4,000.00	0.00	0.00	4,000.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
4,100.00	0.00	0.00	4,100.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
4,200.00	0.00	0.00	4,200.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
4,300.00	0.00	0.00	4,300.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
4,400.00	0.00	0.00	4,400.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
4,500.00	0.00	0.00	4,500.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
4,600.00	0.00	0.00	4,600.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
4,700.00	0.00	0.00	4,700.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
4,800.00	0.00	0.00	4,800.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
4,900.00	0.00	0.00	4,900.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
5,000.00	0.00	0.00	5,000.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
5,100.00	0.00	0.00	5,100.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
5,200.00	0.00	0.00	5,200.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
5,300.00	0.00	0.00	5,300.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490
5,400.00	0.00	0.00	5,400.00	0.00	0.00	14,415,387.540	1,714,226.184	39.693917990	-80.737610490



Planning Report - Geographic

Database: DB_Dec2220_v16
Company: Tug Hill Operating LLC
Project: Watzel County, West Virginia (UTM17 NAD83)
Site: Elmer
Well: Elmer N-15 HU (slot B)
Wellbore: Original Hole
Design: rev1

Local Co-ordinate Reference: Well Elmer N-15 HU (slot B)
TVD Reference: GL @ 1277.00ft
MD Reference: GL @ 1277.00ft
North Reference: Grid
Survey Calculation Method: Minimum Curvature

RETRIEVED
AUG 10 2022

Planned Survey

Table with 11 columns: Measured Depth (ft), Inclination (°), Azimuth (°), Vertical Depth (ft), +N/-S (ft), +E/-W (ft), Map Northing (usft), Map Easting (usft), Latitude, Longitude. Rows include data for depths from 5,500.00 to 10,500.00 ft, with specific survey notes like 'KOP Begin 2°/100' build' and 'Begin 16.67° tangent'.



Planning Report - Geographic

Database: DB_Dec2220_v16
 Company: Tug Hill Operating LLC
 Project: Watzel County, West Virginia (UTM17 NAD83)
 Site: Elmer
 Well: Elmer N-15 HU (slot B)
 Wellbore: Original Hole
 Design: rev1

Local Co-ordinate Reference: Well Elmer N-15 HU (slot B)
 TVD Reference: GL @ 1277.00ft
 MD Reference: GL @ 1277.00ft
 North Reference: Grid
 Survey Calculation Method: Minimum Curvature

AUG 19 2022

Planned Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
24,900.00	91.00	329.85	11,462.04	10,816.08	-7,370.64	14,426,203.602	1,706,855.557	39.723678483	-80.763711210
25,000.00	91.00	329.85	11,460.30	10,902.55	-7,420.86	14,426,290.063	1,706,805.343	39.723916294	-80.763888984
25,100.00	91.00	329.85	11,458.56	10,989.01	-7,471.07	14,426,376.524	1,706,755.129	39.724154105	-80.764066759
25,200.00	91.00	329.85	11,456.82	11,075.47	-7,521.28	14,426,462.985	1,706,704.915	39.724391916	-80.764244535
25,300.00	91.00	329.85	11,455.07	11,161.93	-7,571.50	14,426,549.446	1,706,654.701	39.724629726	-80.764422312
25,400.00	91.00	329.85	11,453.33	11,248.39	-7,621.71	14,426,635.907	1,706,604.487	39.724867536	-80.764600091
25,500.00	91.00	329.85	11,451.59	11,334.85	-7,671.93	14,426,722.368	1,706,554.273	39.725105344	-80.764777871
25,600.00	91.00	329.85	11,449.85	11,421.31	-7,722.14	14,426,808.829	1,706,504.059	39.725343154	-80.764955652
25,700.00	91.00	329.85	11,448.11	11,507.77	-7,772.35	14,426,895.290	1,706,453.845	39.725580963	-80.765133434
25,800.00	91.00	329.85	11,446.37	11,594.23	-7,822.57	14,426,981.750	1,706,403.632	39.725818772	-80.765311218
25,900.00	91.00	329.85	11,444.63	11,680.70	-7,872.78	14,427,068.211	1,706,353.418	39.726056580	-80.765489002
26,000.00	91.00	329.85	11,442.89	11,767.16	-7,923.00	14,427,154.672	1,706,303.204	39.726294389	-80.765666788
26,100.00	91.00	329.85	11,441.15	11,853.62	-7,973.21	14,427,241.133	1,706,252.990	39.726532197	-80.765844575
26,200.00	91.00	329.85	11,439.40	11,940.08	-8,023.43	14,427,327.594	1,706,202.776	39.726770004	-80.766022364
26,300.00	91.00	329.85	11,437.66	12,026.54	-8,073.64	14,427,414.055	1,706,152.562	39.727007812	-80.766200153
26,400.00	91.00	329.85	11,435.92	12,113.00	-8,123.85	14,427,500.516	1,706,102.348	39.727245619	-80.766377944
26,500.00	91.00	329.85	11,434.18	12,199.46	-8,174.07	14,427,586.977	1,706,052.134	39.727483426	-80.766555736
26,600.00	91.00	329.85	11,432.44	12,285.92	-8,224.28	14,427,673.438	1,706,001.920	39.727721232	-80.766733529
26,700.00	91.00	329.85	11,430.70	12,372.38	-8,274.50	14,427,759.899	1,705,951.706	39.727959039	-80.766911324
26,800.00	91.00	329.85	11,428.96	12,458.85	-8,324.71	14,427,846.360	1,705,901.492	39.728196845	-80.767089119
26,900.00	91.00	329.85	11,427.22	12,545.31	-8,374.92	14,427,932.821	1,705,851.278	39.728434650	-80.767266916
27,000.00	91.00	329.85	11,425.48	12,631.77	-8,425.14	14,428,019.281	1,705,801.064	39.728672456	-80.767444714
27,100.00	91.00	329.85	11,423.73	12,718.23	-8,475.35	14,428,105.742	1,705,750.851	39.728910261	-80.767622514
27,200.00	91.00	329.85	11,421.99	12,804.69	-8,525.57	14,428,192.203	1,705,700.637	39.729148066	-80.767800314
27,300.00	91.00	329.85	11,420.25	12,891.15	-8,575.78	14,428,278.664	1,705,650.423	39.729385871	-80.767978116
27,400.00	91.00	329.85	11,418.51	12,977.61	-8,625.99	14,428,365.125	1,705,600.209	39.729623675	-80.768155919
27,500.00	91.00	329.85	11,416.77	13,064.07	-8,676.21	14,428,451.586	1,705,549.995	39.729861479	-80.768333723
27,600.00	91.00	329.85	11,415.03	13,150.53	-8,726.42	14,428,538.047	1,705,499.781	39.730099283	-80.768511528
27,700.00	91.00	329.85	11,413.29	13,237.00	-8,776.64	14,428,624.508	1,705,449.567	39.730337087	-80.768689335
27,800.00	91.00	329.85	11,411.55	13,323.46	-8,826.85	14,428,710.969	1,705,399.353	39.730574890	-80.768867143
27,900.00	91.00	329.85	11,409.81	13,409.92	-8,877.06	14,428,797.430	1,705,349.139	39.730812693	-80.769044952
28,000.00	91.00	329.85	11,408.07	13,496.38	-8,927.28	14,428,883.891	1,705,298.925	39.731050495	-80.769222762
28,100.00	91.00	329.85	11,406.32	13,582.84	-8,977.49	14,428,970.352	1,705,248.711	39.731288298	-80.769400574
28,200.00	91.00	329.85	11,404.58	13,669.30	-9,027.71	14,429,056.812	1,705,198.497	39.731526100	-80.769578386
28,300.00	91.00	329.85	11,402.84	13,755.76	-9,077.92	14,429,143.273	1,705,148.283	39.731763902	-80.769756200
28,400.00	91.00	329.85	11,401.10	13,842.22	-9,128.13	14,429,229.734	1,705,098.070	39.732001703	-80.769934016
28,500.00	91.00	329.85	11,399.36	13,928.68	-9,178.35	14,429,316.195	1,705,047.856	39.732239505	-80.770111832
28,600.00	91.00	329.85	11,397.62	14,015.14	-9,228.56	14,429,402.656	1,704,997.642	39.732477306	-80.770289650
28,700.00	91.00	329.85	11,395.88	14,101.61	-9,278.78	14,429,489.117	1,704,947.428	39.732715107	-80.770467468
28,800.00	91.00	329.85	11,394.14	14,188.07	-9,328.99	14,429,575.578	1,704,897.214	39.732952907	-80.770645288
28,900.00	91.00	329.85	11,392.40	14,274.53	-9,379.20	14,429,662.039	1,704,847.000	39.733190707	-80.770823110
29,000.00	91.00	329.85	11,390.65	14,360.99	-9,429.42	14,429,748.500	1,704,796.786	39.733428507	-80.771000932
29,100.00	91.00	329.85	11,388.91	14,447.45	-9,479.63	14,429,834.961	1,704,746.572	39.733666307	-80.771178756
29,152.44	91.00	329.85	11,388.00	14,492.79	-9,505.96	14,429,880.297	1,704,720.242	39.733791000	-80.771272000

PBHL/TD 29152.44 MD 11388.00 TVD

AUG 10 2022
 TUG HILL OPERATING
 COMPANY



Planning Report - Geographic

Database:	DB_Dec2220_v16	Local Co-ordinate Reference:	Well Elmer N-15 HU (slot B)
Company:	Tug Hill Operating LLC	TVD Reference:	GL @ 1277.00ft
Project:	Wetzel County, West Virginia (UTM17 NAD83)	MD Reference:	GL @ 1277.00ft
Site:	Elmer	North Reference:	Grid
Well:	Elmer N-15 HU (slot B)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev1		

Design Targets									
Target Name	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude
- hit/miss target	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)		
- Shape									
Elmer N-15 HU BHL - plan hits target center - Point	0.00	0.00	11,388.00	14,492.79	-9,505.96	14,429,880.297	1,704,720.242	39.733791000	-80.771272000
Elmer N-15 HU LP - plan misses target center by 43.21ft at 12291.26ft MD (11681.57 TVD, -85.57 N, -1039.29 E) - Point	0.00	0.00	11,682.00	-107.26	-1,076.65	14,415,280.278	1,713,149.533	39.693632000	-80.741439000
Elmer N-15 HU LP 50E - plan misses target center by 0.03ft at 12266.15ft MD (11682.01 TVD, -107.28 N, -1026.68 E) - Point	0.00	0.00	11,682.00	-107.26	-1,026.65	14,415,280.278	1,713,199.536	39.693631604	-80.741261241

Plan Annotations					
Measured Depth	Vertical Depth	Local Coordinates		Comment	
(ft)	(ft)	+N/-S (ft)	+E/-W (ft)		
7,502.00	7,502.00	0.00	0.00	KOP Begin 2°/100' build	
8,335.29	8,323.58	-101.79	-64.18	Begin 16.67° tangent	
10,791.33	10,676.46	-697.62	-439.84	Begin 6°/100' build/turn	
11,746.76	11,512.08	-507.22	-763.39	Begin 8°/100' build/turn	
12,266.16	11,682.01	-107.27	-1,026.69	Begin 91.00° lateral	
29,152.44	11,388.00	14,492.79	-9,505.96	PBHL/TD 29152.44 MD 11388.00 TVD	

RECEIVED
Office of Mining & Gas

AUG 19 2022

WV Department of
Environmental Protection

IPS LAND SERVICES-AMANDA
6000 TOWN CENTER BLVD
STE 145
DANDENBURG PA 15317-5841

MEMORANDUM OF SURFACE USE AGREEMENT

This Memorandum of Surface Use Agreement ("Memorandum") made this 25 day of May, 2021 by and between Charles Lee & Betty Jean Huggins, husband and wife, whose address is 5352 Palmer Ridge Road, Proctor, WV 26055, (hereinafter collectively called "Surface Owner"), and TH EXPLORATION, LLC, a Texas limited liability company, with an address of 1320 S. University Drive, Suite 500, Fort Worth, TX 76107, (hereinafter called "Company").

WITNESSETH

For and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound, Surface Owner did make and execute in favor of Company a Surface Use Agreement (the "Agreement") dated May 25, 2021 and made effective May 25, 2021 which provides for a five (5) year term ("Agreement Term") covering Surface Owner's interest in the following described lands (the "Lands"):

The Lands are located, all or part, in Proctor District, Wetzel County, State of West Virginia, and including lands identified as: 12-8-16, and described for the purposes of this Memorandum as containing 39.19 acres, and Lands located, all or part, in Proctor District, Wetzel County, State of West Virginia, and including all contiguous or appurtenant lands owned by Surface Owner, as described in that certain deed dated July 1, 1987 and recorded in the office of the County Clerk of the aforesaid County in Deed Book, 322-120.

The Company desires to use the portion of Land labeled as "Limit of Disturbance - Pad" and "Limit of Disturbance - Access Road" on the attached Exhibit A for the construction and installation of access roads, drilling pads, tanks, fences, pits and any other facilities or equipment necessary or convenient for the drilling, completion, production, operation, and maintenance of the Company's operations on or off the Land as well as to lay, maintain, excavate, construct, survey, re-construct, operate, tie into, inspect, enlarge, repair, replace, alter, clear trees and other obstructions, and remove, one or more above and/or below ground pipelines, whether permanent or temporary, with fittings and appliances, for the transportation of potable and non-potable fresh water, produced water, completion backflow water, oil, gas and other liquid or gaseous products/substances to and from wells drilled, or to be drilled, on or off the Lands and the Surface Owner is agreeable to the same on the terms and conditions set out in the Agreement.

The Agreement also grants unto Company, Surface Owner's consent to and an easement for the drilling, production, and operation of shallow and deep horizontal or vertical oil and gas wells at any legal location(s) upon the surface of the Lands pursuant to W. Va. Code §§ 22-6A and 22C-9-7(b)(4) and applicable regulations.

The Agreement, with all of its terms, covenants and other provisions, is referred to and incorporated into this Memorandum for all purposes. This Memorandum is placed of record for the purpose of giving notice of the Agreement. Nothing contained in this Memorandum will alter or amend any of the terms and provisions of the Agreement. In the event of any conflict between this Memorandum and the Agreement, the terms and conditions of the Agreement shall control.

IN WITNESS WHEREOF this Memorandum of Surface Use Agreement is executed as of the date first above written.

Surface Owner: Charles Lee Huggins
Charles Lee Huggins

Betty Jean Huggins
Betty Jean Huggins

Company: TH EXPLORATION, LLC

By: [Signature]
Name: Benjamin J. Irwin
Title: Attorney-in-Fact

RECEIVED
Oil and Gas

AUG 18 2022

RECEIVED
Oil and Gas

APR 28 2022

10/21/2022

ACKNOWLEDGEMENT

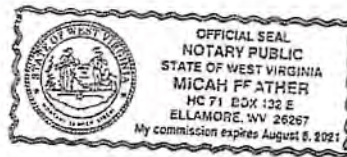
STATE OF WEST VIRGINIA)
) SS:
COUNTY OF WETZEL)

On this the 25 day of May, 2021, before me, a notary public, the undersigned authority, personally appeared Charles Lee Huggins, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he/she executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires August 8, 2021 Signature: [Signature]
Notary Public

Name/Notary Public (print): Micah Feather



ACKNOWLEDGEMENT

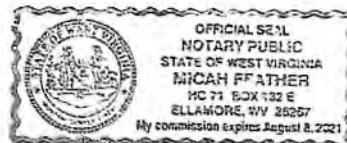
STATE OF WEST VIRGINIA)
) SS:
COUNTY OF WETZEL)

On this the 25 day of May, 2021, before me, a notary public, the undersigned authority, personally appeared Betty Jean Huggins, known to me (or satisfactorily proven) to be the person whose name is subscribed to the within instrument, and acknowledged that he/she executed the same for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

My Commission Expires August 8, 2021 Signature: [Signature]
Notary Public

Name/Notary Public (print): Micah Feather



ACKNOWLEDGEMENT

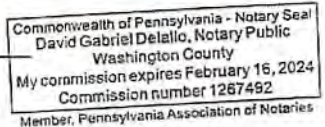
COMMONWEALTH OF PENNSYLVANIA)
) SS:
COUNTY OF WASHINGTON)

On this, the 25 day of May, 2021, before me a notary public, the undersigned authority, personally appeared Benjamin J. Irwin, who acknowledged himself to be the Attorney-In-Fact of TH EXPLORATION, LLC, a Texas limited liability company, and that he as such Attorney-In-Fact being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the limited liability company by himself as Attorney-In-Fact.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

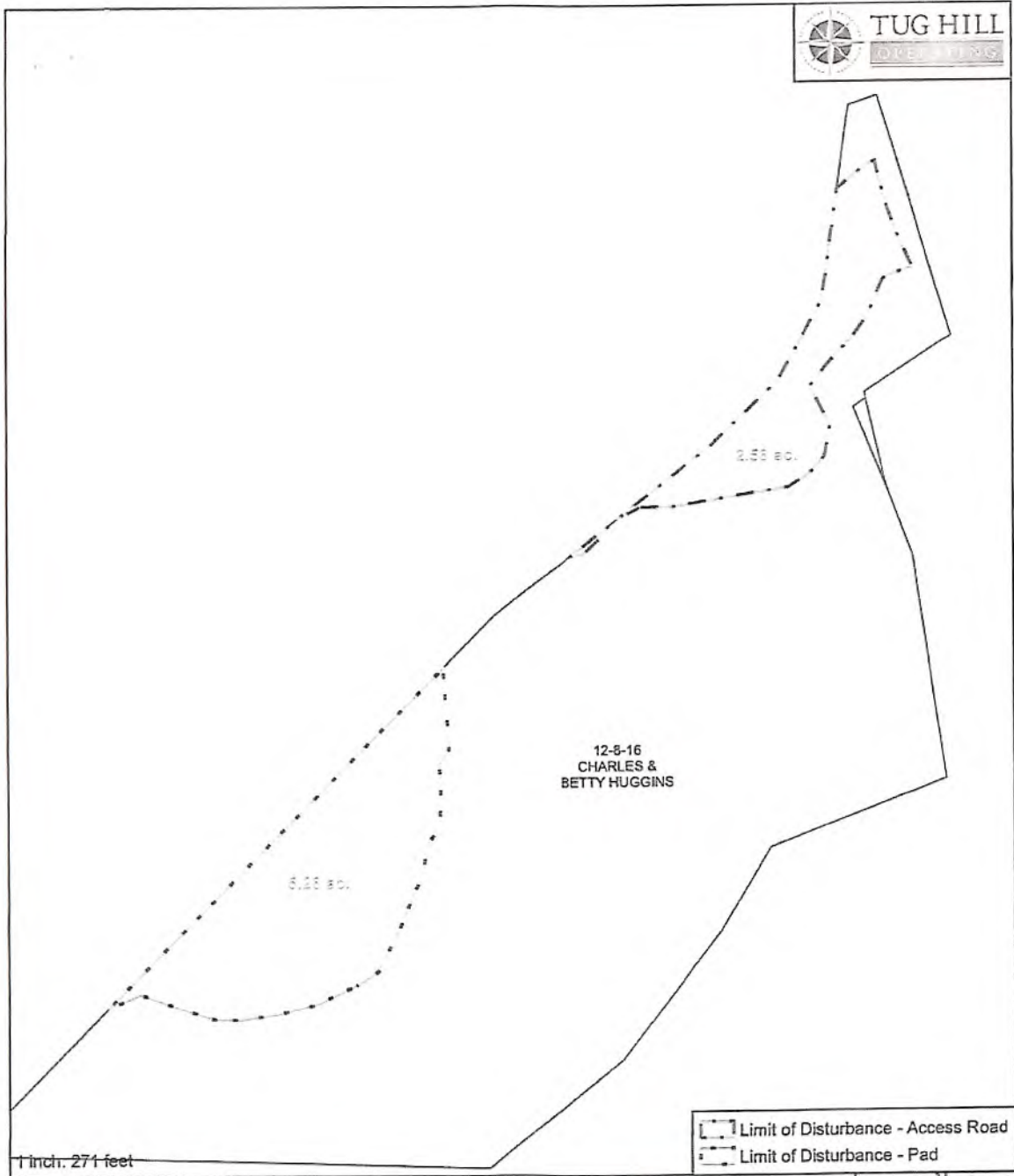
My Commission Expires: 2/16/24 Signature: [Signature]
Notary Public

Name/Notary Public (print): David G. DeLello



Prepared by and please return to:
TH Exploration, LLC
1320 S. University Drive, Suite 500
Fort Worth, TX 76107

RECEIVED
Office of Oil and Gas
AUG 19 2022
WV Department of
APR 28 2022
WV Department of
Environmental Protection



12-8-16
 CHARLES &
 BETTY HUGGINS

Limit of Disturbance - Access Road
 Limit of Disturbance - Pad

1 inch = 271 feet

0 80 160 320
 Feet

NOTE: THE APPROXIMATE LOCATION OF THE PROPERTY LINE, ACCESS ROAD, AND PAD ARE SHOWN ON THIS PLAN. THE PROPERTY LINE IS BASED ON THE RECORD DEEDS AND SURVEY DATA. THE ACCESS ROAD AND PAD ARE SHOWN AS APPROXIMATE LOCATIONS. THE ACTUAL LOCATIONS OF THE ACCESS ROAD AND PAD SHALL BE DETERMINED BY THE ENGINEER IN CHARGE OF THE PROJECT. THE ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES. THE ENGINEER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.

Exhibit "A"
 CHARLES & BETTY HUGGINS
 Wetzel County, WV

Date: 5-25-21
 Name: CLH
 Name: Betty Sue Huggins



Date: 4/14/2021
 PCS: NAD 1983 UTM Zone 17N Feet US

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Wetzel County
 Carol S. Haight, Clerk
 Instrument 308767
 06/11/2021 @ 03:59:56 PM
 AGREEMENT
 Book 138 @ Page 216
 Pages Recorded 3
 Recording Cost \$ 11.00

10/21/2022

RANDI WOSKO
NPS LAND SERVICES
3000 TOWN CENTER BLVD
STE 145
DALLAMSBURG PA 15317-5844

MEMORANDUM OF SURFACE USE AGREEMENT

This Memorandum of Surface Use Agreement ("Memorandum") made this 14 day of MAY 2021 by and between Elnora Tuttle, by her Power-of-Attorney whose address is 6768 Proctor Creek Road, Proctor, WV 26055, (hereinafter collectively called "Surface Owner"), and TH EXPLORATION, LLC, a Texas limited liability company, with an address of 1320 S. University Drive, Suite 500, Fort Worth, TX 76107, (hereinafter called "Company").

WITNESSETH

For and in consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound, Surface Owner did make and execute in favor of Company a Surface Use Agreement (the "Agreement") dated May 14, 2021 and made effective May 24, 2021 which provides for a ten (10) year term ("Agreement Term") covering Surface Owner's interest in the following described lands (the "Lands"):

The Lands are located, all or part, in Proctor District, Wetzel County, State of West Virginia, and including lands identified as: 12-8-15, and described for the purposes of this Memorandum as containing 39.2 acres, and Lands located, all or part, in Proctor District, Wetzel County, State of West Virginia, and including all contiguous or appurtenant lands owned by Surface Owner, as described in that certain deed dated July 25, 1985 and recorded in the office of the County Clerk of the aforesaid County in Deed Book, 315-62.

The Company desires to use the portion of Land labeled as "Limit of Disturbance - Pad" and "Limit of Disturbance - Access Road" on the attached Exhibit A for the construction and installation of access roads, drilling pads, tanks, fences, pits and any other facilities or equipment necessary or convenient for the drilling, completion, production, operation, and maintenance of the Company's operations on or off the Land as well as to lay, maintain, excavate, construct, survey, re-construct, operate, tie into, inspect, enlarge, repair, replace, alter, clear trees and other obstructions, and remove, one or more above and/or below ground pipelines, whether permanent or temporary, with fittings and appliances, for the transportation of potable and non-potable fresh water, produced water, completion backflow water, oil, gas and other liquid or gaseous products/substances to and from wells drilled, or to be drilled, on or off the Lands and the Surface Owner is agreeable to the same on the terms and conditions set out in the Agreement.

The Agreement also grants unto Company, Surface Owner's consent to and an easement for the drilling, production, and operation of shallow and deep horizontal or vertical oil and gas wells at any legal location(s) upon the surface of the Lands pursuant to W. Va. Code §§ 22-6A and 22C-9-7(b)(4) and applicable regulations.

The Agreement, with all of its terms, covenants and other provisions, is referred to and incorporated into this Memorandum for all purposes. This Memorandum is placed of record for the purpose of giving notice of the Agreement. Nothing contained in this Memorandum will alter or amend any of the terms and provisions of the Agreement. In the event of any conflict between this Memorandum and the Agreement, the terms and conditions of the Agreement shall control.

IN WITNESS WHEREOF this Memorandum of Surface Use Agreement is executed as of the date first above written.

Surface Owner: Sandra Murriner
Sandra Murriner
Power-of-Attorney

Company: TH EXPLORATION, LLC

By: Benjamin J. Irwin
Name: Benjamin J. Irwin
Title: Attorney-in-Fact

TH/WV MEMO SUA 2.1

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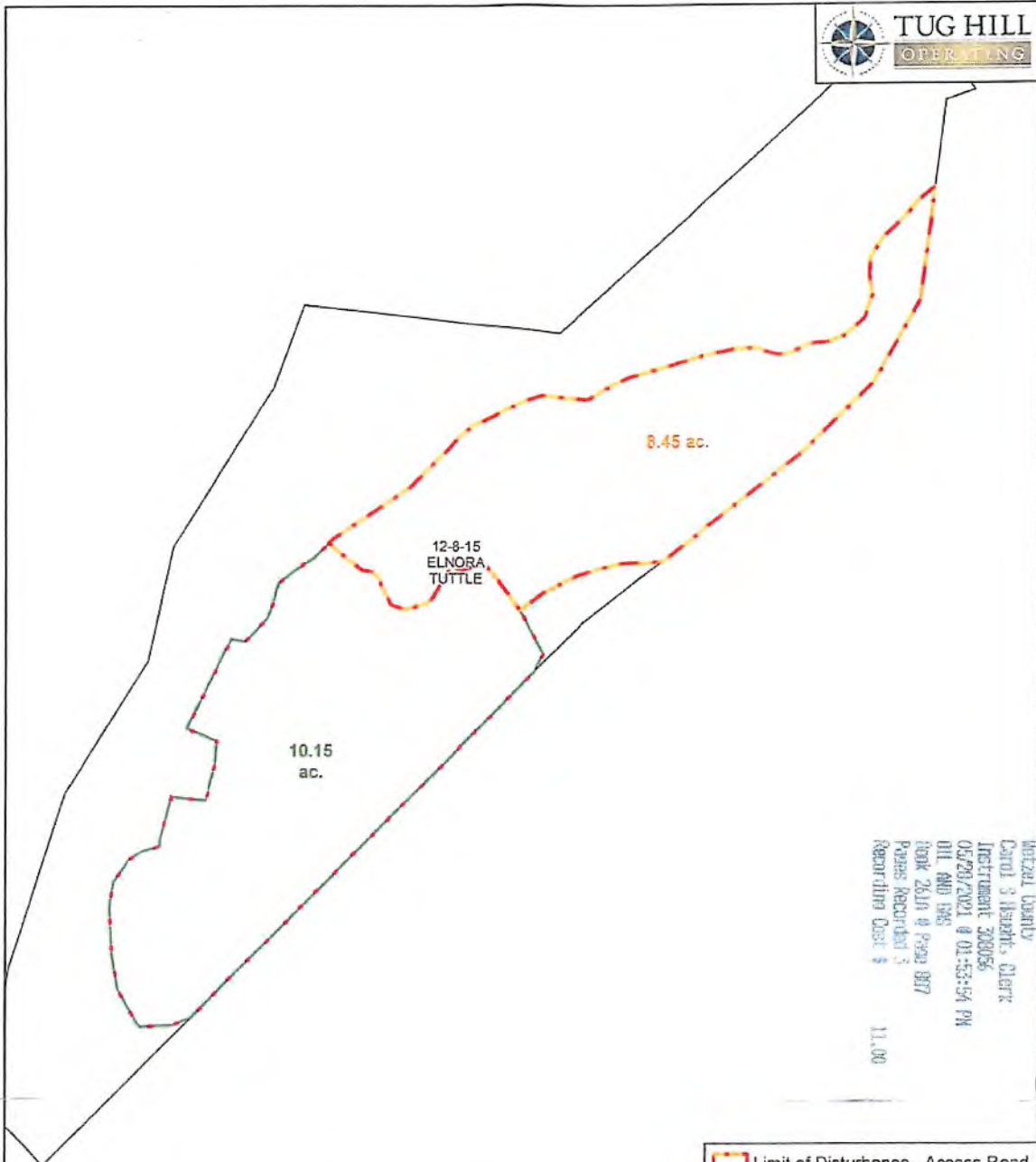
APR 28 2022

Environmental Protection

AUG 19 2022

WV Department of

10/21/2022



WETZEL COUNTY
 Carol S. Neerth, Clerk
 Instrument 308056
 05/29/2021 @ 01:53:54 PM
 Oil AND GAS
 Book 2617 @ Page 087
 Pages Recorded 3
 Recording Cost \$ 11.00

1 inch: 273 feet

0 80 160 320 Feet

NOTE: THE APPROVED SITE LOCATION ON THE SURFACE SITE, PADDED ROAD, RIGHT OF WAY AND THE LOCATION OF THE PROPOSED PAD AND ACCESS ROAD ARE SUBJECT TO THE RESULTS OF THE SURFACE LOCATION MAP WHICH IS FILED WITH THE STATE OF WEST VIRGINIA. THE LOCATION OF THE PADDED ROAD SHALL BE AS SHOWN AND LOCATED WITHIN THE DEED AS FILED IN THE COUNTY RECORDS AND THE APPROVED SITE LOCATION ON THE SURFACE SITE SHALL BE AS SHOWN ON THE SURFACE SITE MAP AS FILED IN THE COUNTY RECORDS.

Date: 4/14/2021
 PCS, NAD 1983 UTM Zone 17N Feet US

Exhibit "A"
 ELNORA TUTTLE
 Wetzel County, WV

Date: _____
 Name: *Samuel D. Turres*
 Name: _____



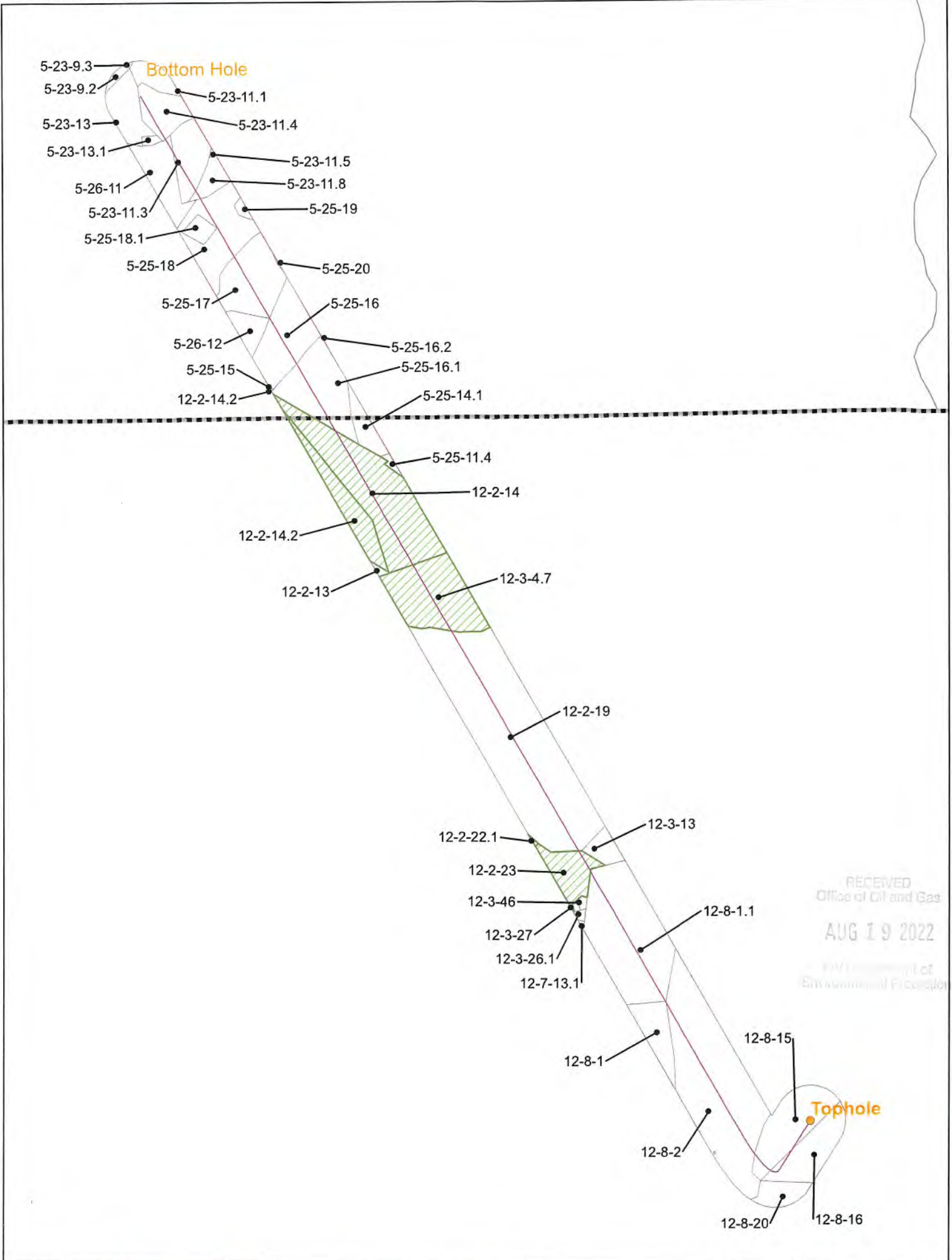
Limit of Disturbance - Access Road
 Limit of Disturbance - Pad

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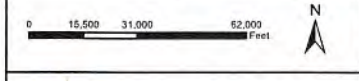
Elmer N-15HU



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Coordinate System: NAD 1983 UTM Zone 17N
Projection: Transverse Mercator
Datum: North American 1983
False Easting: 500000.0000
False Northing: 0.0000
Central Meridian: -81.0000
Scale Factor: 0.9996
False Origin: 0.0000
Units: Feet US

CONFIDENTIAL



- Utica Well
- Force Pool
- 500' Buffer

Elmer N-15HU
Operators within 500 Feet of Well Borehole



Operators within 500' of Well Borehole
Elmer N-15HU

COUNTY	DISTRICT	TMP	MINERAL OWNER OR LESSEE	ADDRESS
WETZEL	PROCTOR	12-2-13	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-2-13	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-2-13	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-2-14	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-2-14.2	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-2-19	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-2-22.1	EQT PRODUCTION COMPANY	625 Liberty Avenue Suite 1700 Pittsburgh, PA 15222
WETZEL	PROCTOR	12-2-23	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-3-4.7	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-3-13	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-3-26.1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-3-27	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-3-46	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-7-13.1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-8-1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-8-1.1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-8-2	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-8-15	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-8-16	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
WETZEL	PROCTOR	12-8-20	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107

10/21/2022

Operators within 500' of Well Borehole
Elmer N-15HU

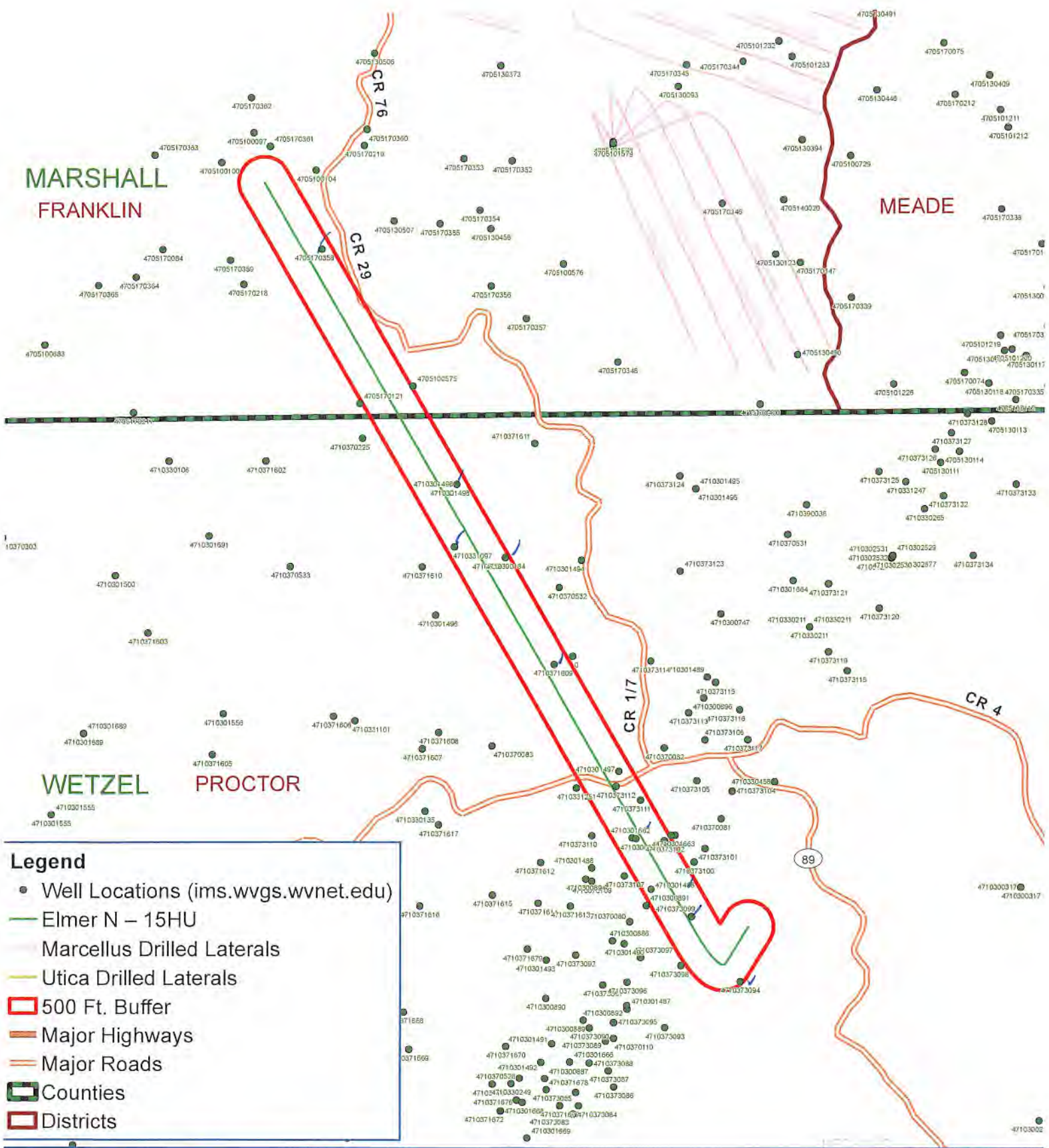
WETZEL	PROCTOR	12-8-20	EQUINOR USA ONSHORE PROPERTIES INC	6300 Bridge Point Pkwy Building 2, Ste 100 Austin, TX 78730
MARSHALL	FRANKLIN	5-23-9.2	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-9.3	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-11.1	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-11.1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-11.3	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-11.3	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-11.4	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-11.4	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-11.5	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-11.5	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-11.8	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-11.8	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-13	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-13	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-13.1	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-23-13.1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-11.4	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-11.4	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-14.1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107

10/21/2022

Operators within 500' of Well Borehole
Elmer N-15HU

MARSHALL	FRANKLIN	5-25-15	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-16	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-16.1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-16.2	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-17	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-17	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-18	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-18	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-18.1	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-18.1	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-19	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-19	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-20	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-25-20	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-26-11	TH EXPLORATION LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-26-11	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107
MARSHALL	FRANKLIN	5-26-12	TH EXPLORATION II LLC	1320 S. University Blvd Suite 500 Fort Worth, TX 76107

10/21/2022



Legend

- Well Locations (ims.wvgs.wvnet.edu)
- Elmer N – 15HU
- Marcellus Drilled Laterals
- Utica Drilled Laterals
- 500 Ft. Buffer
- Major Highways
- Major Roads
- ▭ Counties
- ▭ Districts



Elmer N – 15HU Proctor District Wetzel County, WV



AUG 20 2022



Map Prepared by:
DPS
LAND SERVICES

10/21/2022

Area of Review

Sources of information to Support 35CSR8 - 5.11: 9.3 et seq.

Description of process to identify potential pathways for well communication during hydraulic fracturing activities.

Data Sources Reviewed:

1. Enverus and RS Energy Group Well Data service: Public nationwide data service that pulls directly from State agency Oil and Gas databases
2. Farm Maps
3. Topo Maps: Recent and older (contact WVGES)
4. Check with DPS

Contacted Adam Picard 724-485-9331, apicard@dpslandservices.com, DPS GIS (10/15/2021) to have him make maps of the wellbores with his information. DPS utilizes WVGES maps for their mapping seems it is the best publicly available. See attached map he provided.

Request maps for:

1. Wellbore with Enverus All Wells Layer
2. Map with Farm lines overlain and any well spots identified on Farm Maps
3. More recent (1970s vintage) topos and older topos

Discussion with Phil Dinterman WVGES GIS Department (7/15/2016)

- WVGES has plotted every well spot they have access to and are aware of with that contains a coordinate. 30000, 70000, and 90000 series wells are available via the WVGES online map. Some locations aren't great due to vintage and manipulation of maps through time
- 30000 series – any well drilled prior to 1929 – APIs were not assigned to original wells
- 70000 series – Well spots pulled from old Farm line maps that the WVGES has access to
- 90000 series – Any sources that the WVGES has access that shows a well spot but has no additional supporting information. DEP does not have 90000 series on their maps.
- There can be duplication between wells in the 3 series
- Phil indicated that other Operators are providing a screenshot of the WVGES map with their planned well and using that for permits

Stamp: AUG 11 2022

Wells within 500' Buffer

Note: Well spots depicted on Area of Review map are derived from State held coordinates. The spots may differ from those depicted on the Well Plat because the Plat locations represent actual field surveyed locations. Please refer to the Plat for surveyed well spots.

API Number	Operator Name	Total Depth	Perforated Fms	Producing zones not perforated	Is this well "known or reasonably expected to penetrate a depth that could be within the range of Fracture propagation"? 1000' is max limit I would assign to wells that might be within in range of fracture propagation	Comments
4710373094	unknown	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.
4710373099	unknown	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.
4710301486	Perkins Oil and Gas, Inc.	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.
4710301662	Perkins Oil and Gas, Inc.	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.

AUG 19 2022

API Number	Operator Name	Total Depth	Perforated Fms	Producing zones not perforated	Is this well "known or reasonably expected to penetrate a depth that could be within the range of Fracture propagation"? 1000' is max limit I would assign to wells that might be within in range of fracture propagation	Comments
4710373102	unknown	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.
4710300895	Perkins Oil and Gas, Inc.	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.
4710301497	Perkins Oil and Gas, Inc.	2984' TVD	Gordon	unknown	No, the well is not deep enough to be within the expected fracture propagation from a Point Pleasant stimulation.	
4710373111	unknown	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.
4710373112	Hope Natural Gas Company	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.

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Environmental Protection

API Number	Operator Name	Total Depth	Perforated Fms	Producing zones not perforated	Is this well "known or reasonably expected to penetrate a depth that could be within the range of Fracture propagation"? 1000' is max limit I would assign to wells that might be within in range of fracture propagation	Comments
4710371609	Hope Natural Gas Company	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.
4710300184	Manufacturers Light & Heat Co.	2107' TVD	Maxton	unknown	No, the well is not deep enough to be within the expected fracture propagation from a Point Pleasant stimulation. Well is plugged.	Well was plugged 9/12/1938.
4710301498	Perkins Oil and Gas, Inc.	unknown	Gordon	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	
4710331097	Hope Natural Gas Company	unknown	Gordon	unknown	No, the well is not deep enough to be within the expected fracture propagation from a Point Pleasant stimulation. Well is plugged.	Well was plugged 10/7/1959.
4705170358	unknown	unknown	unknown	unknown	Unknown but unlikely. The well likely represents an old shallow well that is too shallow to be affected by fracturing in the planned Point Pleasant well.	State records are incomplete.

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WV Geological & Economic Survey:

Well: County = 103 Permit = 73094

Report Time: Tuesday, October 19, 2021 1:56:42 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710373094	Wetzel	73094	Proctor	Wileyville	Littleton	39.690995	-80.738175	522449.7	4393494.4

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710373094	-/-		unknown	Prpty Map Rachel M Vealer	1					----- unknown -----			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AFT	NGL	
4710373094	-/-	-/-						unclassified	unclassified	not available	unknown	unknown										

WV Geological & Economic Survey:

Well: County = 103 Permit = 73099

Report Time: Tuesday, October 19, 2021 1:57:02 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710373099	Wetzel	73099	Proctor	Wileyville	Littleton	39.694479	-80.741554	522158.9	4393880.2

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710373099	-/-		unknown	Prpty Map Nancy J Garner	10					----- unknown -----			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AFT	NGL	
4710373099	-/-	-/-						unclassified	unclassified	not available	unknown	unknown										

WV Geological & Economic Survey:

Well: County = 103 Permit = 01486

Report Time: Tuesday, October 19, 2021 1:57:18 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710301486	Wetzel	1486	Proctor	Wileyville	Littleton	39.695941	-80.744374	521916.6	4394041.8

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710301486	-/-		Original Loc	Completed Garner Hrs	1					Perkins Oil and Gas, Inc.			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AFT	NGL	
4710301486	-/-	-/-						unclassified	unclassified	not available	unknown	unknown										

AUG 10 2021

WV Geological & Economic Survey:

Well: County = 103 Permit = 01662

Report Time: Tuesday, October 19, 2021 1:57:30 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710301662	Wetzel	1662	Proctor	Wileyville	Littleton	39.698696	-80.745689	521803	4394347.2

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710301662	--		Original Loc	Completed	Al & Henry Garner	12				Perkins Oil and Gas, Inc.			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AF
4710301662	--	--	1210	Topo	Estimation			unclassified	unclassified	not available	unknown	unknown								

WV Geological & Economic Survey:

Well: County = 103 Permit = 73102

Report Time: Tuesday, October 19, 2021 1:58:39 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710373102	Wetzel	73102	Proctor	Wileyville	Littleton	39.698542	-80.74343	521996.7	4394330.7

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710373102	--		unknown	Prpty Map	Nancy J Garner	8				----- unknown -----			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AFT	NGL
4710373102	--	--						unclassified	unclassified	not available	unknown	unknown									

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 AUG 29 2022
 WV Department of
 Environmental Protection

WV Geological & Economic Survey:

Well: County = 103 Permit = 00895

Report Time: Tuesday, October 19, 2021 1:58:50 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710300895	Wetzel	895	unknown	unknown	unknown				

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710300895	-/-	Original Loc	Completed	Albert & Henry Garner	5					Perkins Oil and Gas, Inc.			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AF
4710300895	-/-	-/-			Unnamed			unclassified	unclassified	not available	unknown	unknown			0		0	0	0	0

There is no Pay data for this well

Production Gas Information: (Volumes in Mcf)

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_GAS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4710300895	Perkins Oil and Gas, Inc.	1996	186	0	0	0	0	0	0	0	0	0	0	0	186
4710300895	Perkins Oil and Gas, Inc.	1997	978	178	259	0	0	251	50	0	0	0	59	181	0
4710300895	Perkins Oil and Gas, Inc.	1998	1,436	0	0	0	0	27	205	112	220	222	220	204	226
4710300895	Perkins Oil and Gas, Inc.	1999	2,382	319	188	280	200	187	47	123	215	219	186	220	198
4710300895	Perkins Oil and Gas, Inc.	2001	2,200	189	160	199	178	194	153	203	204	182	169	226	143
4710300895	Perkins Oil and Gas, Inc.	2002	1,819	155	119	201	159	143	158	184	162	132	159	84	163
4710300895	Perkins Oil and Gas, Inc.	2003	1,651	122	109	163	162	159	155	175	166	177	159	2	102
4710300895	Perkins Oil and Gas, Inc.	2004	1,827	149	142	169	170	142	154	171	131	150	154	156	139
4710300895	Perkins Oil and Gas, Inc.	2005	1,589	141	118	107	137	140	139	83	147	143	135	159	140
4710300895	Perkins Oil and Gas, Inc.	2006	1,518	123	90	141	113	136	113	141	143	135	138	125	120
4710300895	Perkins Oil and Gas, Inc.	2007	1,535	128	98	122	126	137	133	117	140	136	143	132	123
4710300895	Perkins Oil and Gas, Inc.	2008	1,441	124	111	113	87	95	135	140	140	105	139	129	123
4710300895	Perkins Oil and Gas, Inc.	2009	1,366	107	107	117	107	127	129	128	136	4	133	146	125
4710300895	Perkins Oil and Gas, Inc.	2010	6	1	1	1	0	1	0	0	1	0	0	0	1
4710300895	Perkins Oil and Gas, Inc.	2011	6	1	1	1	0	0	1	0	0	1	0	0	1
4710300895	Perkins Oil and Gas, Inc.	2012	5	1	0	0	1	0	0	1	0	0	0	1	1
4710300895	Perkins Oil and Gas, Inc.	2013	7	1	1	1	0	1	0	1	0	0	0	1	1
4710300895	Perkins Oil and Gas, Inc.	2014	2	0	1	0	1	0	0	1	0	0	0	0	0
4710300895	Perkins Oil and Gas, Inc.	2015	4	0	0	0	1	0	0	0	0	1	0	1	1
4710300895	Perkins Oil and Gas, Inc.	2016	2	0	0	0	1	0	0	0	1	0	0	0	0
4710300895	Perkins Oil and Gas, Inc.	2017	2	0	0	0	0	2	0	0	0	0	0	0	0
4710300895	Perkins Oil and Gas, Inc.	2018	2	0	0	0	0	0	0	1	0	0	1	0	0
4710300895	Perkins Oil and Gas, Inc.	2019	12	0	2	0	0	0	0	0	0	1	0	0	9
4710300895	Perkins Oil and Gas, Inc.	2020	1,295	98	92	113	108	111	114	119	122	112	112	95	99

AUG 28 2022

WV Geological & Economic Survey:

Well: County = 103 Permit = 01497

Report Time: Tuesday, October 19, 2021 1:59:23 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710301497	Wetzel	1497	Proctor	Wileyville	Littleton	39.703626	-80.746443	521736.9	4394894.2

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710301497	9/7/1900	Original Loc	Completed	Henry Garner		87		681		Hope Natural Gas Company			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AFT
4710301497	9/7/1900	-/-	1286	Spirit Level	Lynn Camp	Gordon	Gordon	Development Well	Development Well	Gas	Cable Tool	Nat/Open H	2984		2984		6249	0	0	0

Pay/Show/Water Information:

API	CMP_DT	ACTIVITY	PRODUCT	SECTION	DEPTH_TOP	FM_TOP	DEPTH_BOT	FM_BOT	G_BEF	G_AFT	O_BEF	O_AFT	WATER_QNTY
4710301497	9/7/1900	Pay	Gas	Vertical		Gordon		0	Gordon	0	0		

Production Gas Information: (Volumes in Mcf)

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_GAS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4710301497	Perkins Oil and Gas, Inc.	1990	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301497	Perkins Oil and Gas, Inc.	1991													
4710301497	Perkins Oil and Gas, Inc.	1996	186	0	0	0	0	0	0	0	0	0	0	0	186
4710301497	Perkins Oil and Gas, Inc.	1997	978	178	259	0	0	251	50	0	0	0	59	181	0
4710301497	Perkins Oil and Gas, Inc.	1998	1,436	0	0	0	0	27	205	112	220	222	220	204	226
4710301497	Perkins Oil and Gas, Inc.	1999	2,382	319	188	280	200	187	47	123	215	219	186	220	198
4710301497	Perkins Oil and Gas, Inc.	2001	2,200	189	160	199	178	194	153	203	204	182	169	226	143
4710301497	Perkins Oil and Gas, Inc.	2002	1,819	155	119	201	159	143	153	184	162	132	159	84	163
4710301497	Perkins Oil and Gas, Inc.	2003	1,651	122	109	163	162	159	155	175	166	177	159	2	102
4710301497	Perkins Oil and Gas, Inc.	2004	1,827	149	142	169	170	142	154	171	131	150	154	156	139
4710301497	Perkins Oil and Gas, Inc.	2005	1,589	141	118	107	137	140	139	83	147	143	135	159	140
4710301497	Perkins Oil and Gas, Inc.	2006	1,538	123	90	141	113	136	133	141	143	135	138	125	120
4710301497	Perkins Oil and Gas, Inc.	2007	1,535	128	98	122	126	137	133	117	140	136	143	132	123
4710301497	Perkins Oil and Gas, Inc.	2008	1,441	124	111	113	87	95	135	140	140	105	139	129	123
4710301497	Perkins Oil and Gas, Inc.	2009	1,366	107	107	117	107	127	129	128	136	4	133	146	125
4710301497	Perkins Oil and Gas, Inc.	2010	1,485	143	127	169	61	77	77	66	64	44	269	275	113
4710301497	Perkins Oil and Gas, Inc.	2011	1,453	59	76	209	131	40	14	9	7	17	306	291	294
4710301497	Perkins Oil and Gas, Inc.	2012	3,060	230	105	1	149	292	252	337	317	326	375	346	330
4710301497	Perkins Oil and Gas, Inc.	2013	3,248	233	0	0	247	363	289	366	366	330	397	343	314
4710301497	Perkins Oil and Gas, Inc.	2014	35	35	0	0	0	0	0	0	0	0	0	0	0
4710301497	Perkins Oil and Gas, Inc.	2015	1,215	0	0	41	277	0	0	0	0	282	310	0	305
4710301497	Perkins Oil and Gas, Inc.	2016	4,863	311	298	306	288	286	318	297	310	486	338	707	916
4710301497	Perkins Oil and Gas, Inc.	2017	9,690	960	674	598	800	800	708	808	794	810	704	1,164	870
4710301497	Perkins Oil and Gas, Inc.	2018	3,515	247	220	398	191	225	287	285	260	291	242	404	465
4710301497	Perkins Oil and Gas, Inc.	2019	2,587	295	0	0	0	415	347	340	325	344	337	184	0
4710301497	Perkins Oil and Gas, Inc.	2020	1,295	98	92	113	108	111	114	119	122	112	112	95	99

WV Geological & Economic Survey:

Well: County = 103 Permit = 73111

Report Time: Tuesday, October 19, 2021 1:59:52 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710373111	Wetzel	73111	Proctor	Wileyville	Littleton	39.700719	-80.745119	521851.2	4394571.9

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710373111	-/-		unknown	Prpty Map Henry Garner	20					----- unknown -----			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AFT	NGL	
4710373111	-/-	-/-						unclassified	unclassified	not available	unknown	unknown										

WV Geological & Economic Survey:

Well: County = 103 Permit = 73112

Report Time: Tuesday, October 19, 2021 2:00:09 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710373112	Wetzel	73112	Proctor	Wileyville	Littleton	39.701445	-80.746809	521706.1	4394652

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710373112	-/-		unknown	Prpty Map Henry Garner	258					Hope Natural Gas Company			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AFT	NGL	
4710373112	-/-	-/-						unclassified	unclassified	not available	unknown	unknown										

WV Geological & Economic Survey:

Well: County = 103 Permit = 71609

Report Time: Tuesday, October 19, 2021 2:00:21 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710371609	Wetzel	71609	Proctor	New Martinsville	New Martinsville	39.707976	-80.751128	521333.9	4395375.9

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710371609	-/-		unknown	Prpty Map T J Cooper	299					Hope Natural Gas Company			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AFT	NGL	
4710371609	-/-	-/-						unclassified	unclassified	not available	unknown	unknown										

WV Geological & Economic Survey:

Well: County = 103 Permit = 00184

Report Time: Tuesday, October 19, 2021 2:00:34 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710300184	Wetzel	184	Proctor	New Martinsville	New Martinsville	39.713681	-80.754508	521042.4	4396008.2

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_ES
4710300184	8/29/1938	Original Loc	Completed	Barbara Ebert	1				Op = Miller & Lewis	Oper in Min. owner fid, no code assign (Orphan well proj)			
4710300184	3/17/1954	Worked Over	Completed	J Ebert		4262				Manufacturers Light & Heat Co.			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF
4710300184	8/29/1938	7/20/1938	1230	Ground Level	Cameron-Garner	Maxton	Maxton	Development Well	Unsuccessful	Dry	unknown	Nat/Open H	2107		2107		0	0	0
4710300184	3/17/1954	9/3/1953	1230	Ground Level	Cameron-Garner	Maxton	Maxton	Miscellaneous Well	Unsuccessful	Storage	unknown	Nat/Open H			0		0	0	0

There is no Pay data for this well

There is no Production Gas data for this well

There is no Production Oil data for this well ** some operators may have reported NGL under Oil

There is no Production NGL data for this well ** some operators may have reported NGL under Oil

There is no Production Water data for this well

Stratigraphy Information:

API	SUFFIX	FM	FM_QUALITY	DEPTH_TOP	DEPTH_QUALITY	THICKNESS	THICKNESS_QUALITY	ELEV	DATUM
4710300184	Original Loc	Sewickley coal	Well Record	965	Reasonable	4	Reasonable	1230	Ground Level
4710300184	Original Loc	Pittsburgh coal	Well Record	1074	Reasonable	5	Reasonable	1230	Ground Level
4710300184	Original Loc	Conemaugh Group	Well Record	1080	Reasonable	0	Qstnble Pick	1230	Ground Level
4710300184	Original Loc	Morgantown Ss/Murphy	Past WVGES Staff Geologist	1130	Reasonable	15	Reasonable	1230	Ground Level
4710300184	Original Loc	1st Cow Rn/Moundsvle	Well Record	1415	Reasonable	50	Reasonable	1230	Ground Level
4710300184	Original Loc	Lo Frprt Ss/Frprt Ss	Past WVGES Staff Geologist	1610	Reasonable	30	Reasonable	1230	Ground Level
4710300184	Original Loc	1st Salt Sand	Well Record	1880	Reasonable	30	Reasonable	1230	Ground Level
4710300184	Original Loc	3rd Salt Sand	Past WVGES Staff Geologist	2020	Reasonable	20	Reasonable	1230	Ground Level
4710300184	Original Loc	Maxton	Past WVGES Staff Geologist	2065	Reasonable	19	Qstnble Pick	1230	Ground Level

There is no Wireline (E-Log) data for this well

Plugging Information:

API	PLG_DT	DEPTH_PBT
4710300184	9/12/1938	0

WV Geological & Economic Survey:

Well: County = 103 Permit = 01498

Report Time: Tuesday, October 19, 2021 2:00:46 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710301498	Wetzel	1498	Proctor	New Martinsville	New Martinsville	39.717596	-80.757888	520751.5	4396441.9

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710301498	12/2/1902	Original Loc	Completed	J M Parsons		281		1908		Hope Natural Gas Company			
4710301498	4/21/1911	Drilled Deeper	Completed	J M Parsons		281		1908		Hope Natural Gas Company			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_B
4710301498	12/2/1902	--	1290	Spirit Level	Cameron-Garner		Gordon	Development Well	Development Well	Gas	Cable Tool	unknown			0		9891	0	
4710301498	4/21/1911	--	1290	Spirit Level	Cameron-Garner		Gordon	Development Well	Development Well	Gas	unknown	unknown			0		0	0	

Pay/Show/Water Information:

API	CMP_DT	ACTIVITY	PRODUCT	SECTION	DEPTH_TOP	FM_TOP	DEPTH_BOT	FM_BOT	G_BEF	G_AFT	O_BEF	O_AFT	WATER_QNTY
4710301498	12/2/1902	Pay	Gas	Vertical	2870	Gordon	2895	Gordon	9891	0			

Production Gas Information: (Volumes in Mcf)

API	PRODUCING_OPERATOR	PRD_YEAR	ANN_GAS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DCM
4710301498	Perkins Oil and Gas, Inc.	1990	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301498	Perkins Oil and Gas, Inc.	1991													
4710301498	Perkins Oil and Gas, Inc.	1997	0	0	0	0	0	0	0	0	0	0	0	0	0
4710301498	Perkins Oil and Gas, Inc.	2002	1,819	155	119	201	159	143	158	184	162	132	159	84	163
4710301498	Perkins Oil and Gas, Inc.	2003	1,651	122	109	163	162	159	155	175	166	177	159	2	102
4710301498	Perkins Oil and Gas, Inc.	2004	1,827	149	142	169	170	142	154	171	131	150	154	156	139
4710301498	Perkins Oil and Gas, Inc.	2005	1,589	141	118	107	137	140	139	83	147	143	135	159	140
4710301498	Perkins Oil and Gas, Inc.	2006	1,538	123	90	141	113	136	133	141	143	135	138	125	120
4710301498	Perkins Oil and Gas, Inc.	2007	1,535	128	98	122	126	137	133	117	140	136	143	132	123
4710301498	Perkins Oil and Gas, Inc.	2008	1,441	124	111	113	87	95	135	140	140	105	139	129	123
4710301498	Perkins Oil and Gas, Inc.	2009	1,366	107	107	117	107	127	129	128	136	4	133	146	125
4710301498	Perkins Oil and Gas, Inc.	2010	3,248	237	269	258	253	318	303	323	318	183	328	260	198
4710301498	Perkins Oil and Gas, Inc.	2011	3,017	123	188	34	10	105	419	445	416	394	337	279	267
4710301498	Perkins Oil and Gas, Inc.	2012	3,316	279	238	284	233	270	266	312	348	309	333	226	218
4710301498	Perkins Oil and Gas, Inc.	2013	3,087	215	117	209	211	284	294	309	323	332	310	258	225
4710301498	Perkins Oil and Gas, Inc.	2014	3,786	211	240	246	296	325	374	406	352	371	344	275	346
4710301498	Perkins Oil and Gas, Inc.	2015	3,201	206	133	189	166	246	242	342	511	265	293	299	309
4710301498	Perkins Oil and Gas, Inc.	2016	2,130	150	244	256	136	0	0	0	0	0	576	477	290
4710301498	Perkins Oil and Gas, Inc.	2017	4,108	656	204	222	0	266	454	466	432	426	364	618	0
4710301498	Perkins Oil and Gas, Inc.	2018	342	90	34	154	38	26	0	0	0	0	0	0	0
4710301498	Perkins Oil and Gas, Inc.	2019	2,740	441	554	327	336	233	174	211	103	139	108	74	40
4710301498	Perkins Oil and Gas, Inc.	2020	1,295	98	92	113	108	111	114	119	122	112	112	95	99

WV Geological & Economic Survey:

Well: County = 103 Permit = 31097

Report Time: Tuesday, October 19, 2021 2:01:22 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4710331097	Wetzel	31097	Proctor	New Martinsville	New Martinsville	39.714261	-80.758075	520736.5	4396071.7

There is no Bottom Hole Location data for this well

Owner Information:

API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4710331097	5/15/1902	Original Loc	Completed	Joseph P Cooper	47			1909	Op=A M Snider	Hope Natural Gas Company			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AFT	NGL
4710331097	5/15/1902	-/-	1090	Ground Level	Unnamed		Gordon	Development Well	unclassified	Gas	unknown	unknown			0		5291	0	0	0	0

There is no Pay data for this well

There is no Production Gas data for this well

There is no Production Oil data for this well ** some operators may have reported NGL under Oil

There is no Production NGL data for this well ** some operators may have reported NGL under Oil

There is no Production Water data for this well

Stratigraphy Information:

API	SUFFIX	FM	FM_QUALITY	DEPTH_TOP	DEPTH_QUALITY	THICKNESS	THICKNESS_QUALITY	ELEV	DATUM
4710331097	Original Loc	Gordon	Well Record	2681	Reasonable	19	Reasonable	1090	Ground Level

There is no Wireline (E-Log) data for this well

Plugging Information:

API	PLG_DT	DEPTH_PBT
4710331097	10/7/1959	0

Handwritten notes: OIL, AUG 18, W, Enviro

WV Geological & Economic Survey:

Well: County = 51 Permit = 70358

Report Time: Tuesday, October 19, 2021 2:02:33 PM

Location Information: [View Map](#)

API	COUNTY	PERMIT	TAX_DISTRICT	QUAD_75	QUAD_15	LAT_DD	LON_DD	UTME	UTMN
4705170358	Marshall	70358	Franklin	New Martinsville	New Martinsville	39.730194	-80.767268	519943.9	4397838

There is no Bottom Hole Location data for this well

Owner Information:

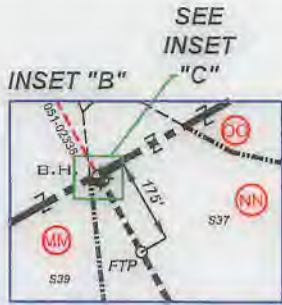
API	CMP_DT	SUFFIX	STATUS	SURFACE_OWNER	WELL_NUM	CO_NUM	LEASE	LEASE_NUM	MINERAL_OWN	OPERATOR_AT_COMPLETION	PROP_VD	PROP_TRGT_FM	TFM_EST_PR
4705170358	-/-	unknown	Prpty Map	Timothy Yohe	5	1292				----- unknown -----			

Completion Information:

API	CMP_DT	SPUD_DT	ELEV	DATUM	FIELD	DEEPEST_FM	DEEPEST_FMT	INITIAL_CLASS	FINAL_CLASS	TYPE	RIG	CMP_MTHD	TVD	TMD	NEW_FTG	KOD	G_BEF	G_AFT	O_BEF	O_AFT	NGL
4705170358	-/-	-/-						unclassified	unclassified	not available	unknown	unknown									

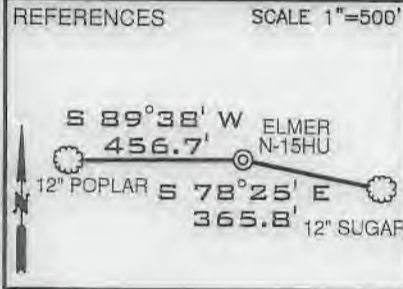
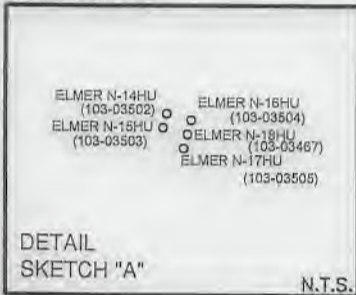
FORM: WVB

**ELMER LEASE
WELL N-15HU
513.0901± ACRES**



NOTE: L.P.1 and LTP are same point.

(+) DENOTES LOCATION ON UNITED STATES TOPOGRAPHIC MAPS



Deep Wells Within 2400' of Proposed Well's Surface Location and/or 500' of Well Lateral

API	OPERATOR
47-051-02338	Tug Hill Operating, LLC
47-103-03467	Tug Hill Operating, LLC
47-103-03502	Tug Hill Operating, LLC
47-103-03504	Tug Hill Operating, LLC
47-103-03505	Tug Hill Operating, LLC

- NOTES
1. BORE PATH BASED ON GRID NORTH.
 2. NO WATER WELLS WITHIN 250' OF WELL WERE FOUND, NO DWELLINGS WITHIN 625' OF PAD CENTER WERE FOUND.
 3. OWNERSHIP TAKEN FROM PUBLIC RECORDS OF WETZEL COUNTY, WV IN JULY, 2022.
 4. COORDINATES AND WELL TIES BASED UPON DIFFERENTIAL GPS MEASUREMENTS.
 5. WELL LOCATION REFERENCES ARE BASED UPON THE MAGNETIC MERIDIAN.
 6. ALL DEEP WELLS WITHIN 1,000' ARE SHOWN ON THIS PLAT.
 7. BOUNDARIES ALONG ROADWAYS ARE BASED UPON MEMORANDUM BY DICKIE, MCCAMEY & CHILCOTE, P.C. FILE 0058304.0401147

LEGEND

- LEASED TRACTS
- SURFACE TRACTS
- WELL LATERAL
- POINT PLEASANT LEGS
- UNIT BOUNDARY
- LEASE # (SEE 6A1 FORM)
- 400' BORE PATH OFFSET
- 500' WELL BORE OFFSET
- (FTP) PROPOSED FIRST TAKE POINT
- (LTP) PROPOSED LAST TAKE POINT
- FORCED POOL TRACT

SURFACE HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,393,818.91
E) 522,497.19

LANDING POINT 1
UTM. NAD83, ZONE 17
IN METERS
N) 4,393,786.21
E) 522,184.25

BOTTOM HOLE
UTM. NAD83, ZONE 17
IN METERS
N) 4,398,236.31
E) 519,599.77

LINE	BEARING	DISTANCE
L1	N 42°22' E	1853.68'
L2	N 67°31' E	1415.65'
L3	S 33°11' W	824.98'

CURVE	CHORD BEARING	CHORD LENGTH	RADIUS	ARC LENGTH
C1	S 61°28' W	63.82'	62.24'	67.02'
C2	N 71°32' W	65.03'	135.04'	65.67'
C3	N 40°17' W	153.84'	482.43'	154.30'
C4	N 37°51' W	221.43'	1530.32'	221.62'
C5	N 31°48' W	379.77'	4103.42'	379.91'

FILE NUMBER _____

DRAWING NUMBER ELMER_N-15HU_REV1

SCALE 1" = 2000'

MINIMUM DEGREE OF ACCURACY 1/200

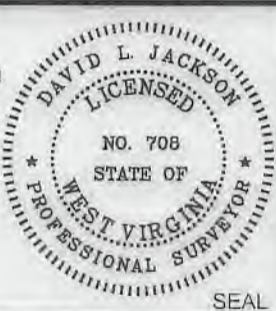
PROVEN SOURCE OF ELEVATION SUBMETER MAPPING
GRADE GPS

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 RULES ISSUED AND PRESCRIBED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

P.S. 708 *David L Jackson*



JACKSON SURVEYING INC.
P.O. Box 1460
Clarksburg, WV 26302
304-623-5851



WVDEP
OFFICE OF OIL & GAS
601 57TH STREET, SE
CHARLESTON, WV 25304

DATE: JULY 28, 2022
REVISED DATE: SEPTEMBER 28, 2022
OPERATORS WELL NO. ELMER N-15HU
API WELL NO. 47-103-03503
STATE MoD COUNTY WETZEL PERMIT SEE WW-6A1 FORM

WELL TYPE: OIL ___ GAS X LIQUID INJECTION ___ WASTE DISPOSAL ___
(IF "GAS") PRODUCTION X STORAGE ___ DEEP X SHALLOW ___

LOCATION ELEVATION 1276.50' WATERSHED (HUC 10) PROCTOR CREEK OF FRENCH CREEK - OHIO RIVER (HUC-10)
DISTRICT PROCTOR COUNTY WETZEL
QUADRANGLE WILEYVILLE 7.5' LEASE NUMBER _____ SEE WW-6A1 FORM

SURFACE OWNER ELNORA TUTTLE HRS ACREAGE 39.19
OIL & GAS ROYALTY OWNER HENRY & NANCY GARNER - SEE WW-6A1 LEASE ACREAGE 39.19
PROPOSED WORK: DRILL X CONVERT ___ DRILL DEEPER ___ REDRILL ___ FRACTURE OR STIMULATE X PLUG OFF OLD FORMATION ___
PERFORATE NEW FORMATION ___ OTHER PHYSICAL CHANGE (SPECIFY) _____

TARGET FORMATION POINT PLEASANT ESTIMATED DEPTH TVD: 11,901' TMD: 29,152'

WELL OPERATOR TUG HILL OPERATING, LLC DESIGNATED AGENT DARREN BROWN, CT CORP
ADDRESS 1320 SOUTH UNIVERSITY DRIVE, SUITE 500 FORT WORTH, TX 76107 ADDRESS 5098 WASHINGTON STREET WEST, SUITE 407 CHARLESTON, WV 25313-1561

10/21/2022

COUNTY NAME PERMIT

form: WVG

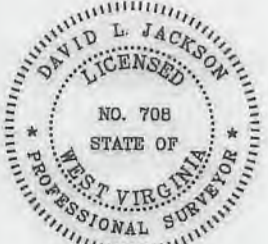
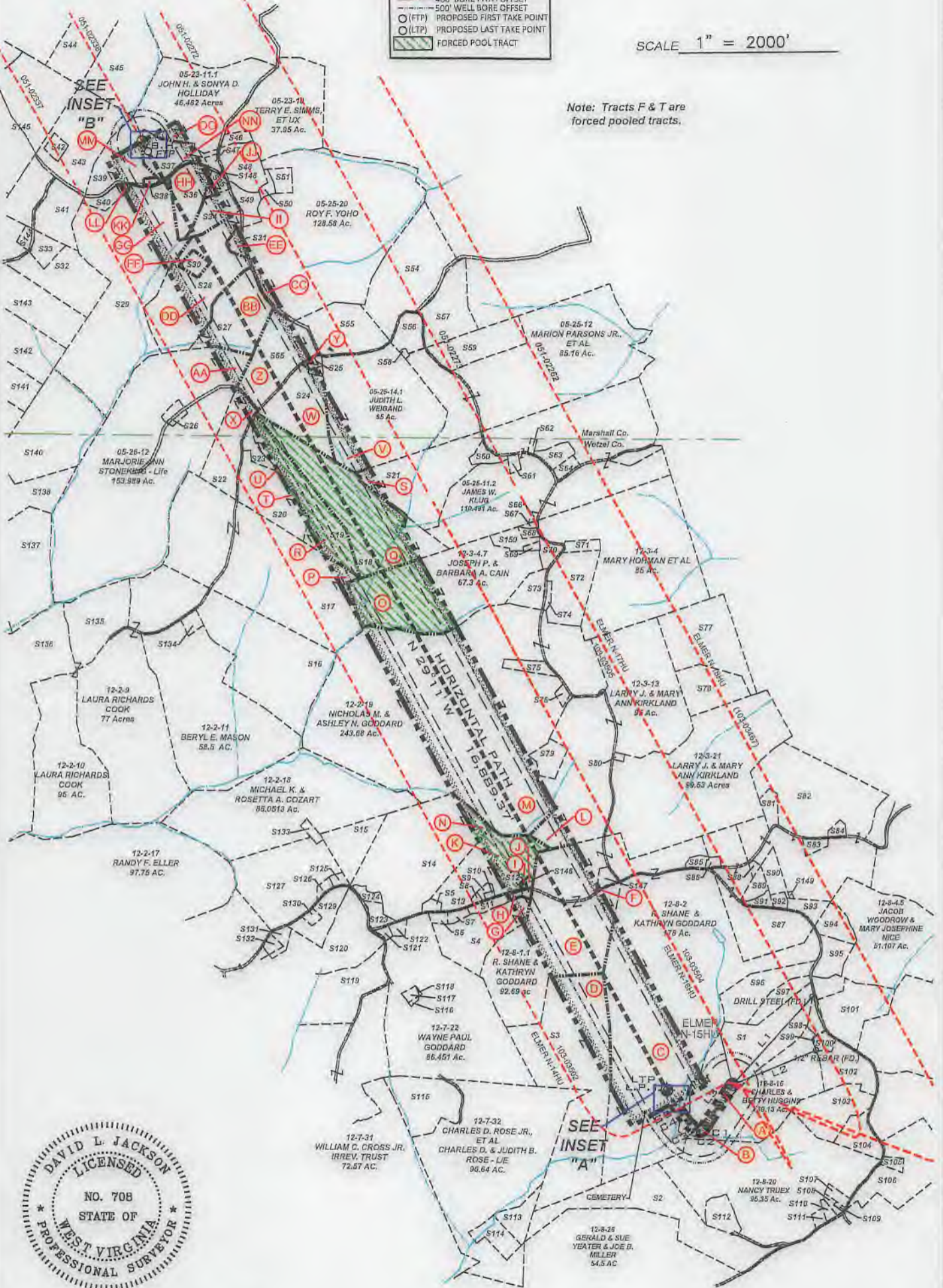
**ELMER LEASE
WELL N-15HU
513.0901 ± ACRES**

LEGEND

- LEASED TRACTS
- - - SURFACE TRACTS
- - - WELL LATERAL
- - - POINT PLEASANT LEGS
- - - UNIT BOUNDARY
- (A) LEASE # (SEE 6A1 FORM)
- 400' BORE PATH OFFSET
- 500' WELL BORE OFFSET
- (FTP) PROPOSED FIRST TAKE POINT
- (LTP) PROPOSED LAST TAKE POINT
- ▨ FORCED POOL TRACT

SCALE 1" = 2000'

Note: Tracts F & T are forced pooled tracts.



P.S. 708 *David L Jackson*

10/21/2022

	OPERATOR'S	WELL PLAT	
	WELL #:	ELMER N-15HU	PAGE 2 OF 4
	DISTRICT:	Proctor	DATE: 07/28/2022
	COUNTY:	Wetzel	REVISED DATE: 9/28/2022
	STATE:	WV	
API #:	47-103-03503	MOD	

**ELMER LEASE
WELL N-15HU
513.0901 ± ACRES**

Lease ID	TMP	Tag	Grantor, Lessor, Etc.	Deed Book/Page	
10*31435	12-8-15	A	HENRY AND NANCY GARNER	55	394
10*31435	12-8-16	B	HENRY AND NANCY GARNER	55	394
10*31435	12-8-2	C	HENRY AND NANCY GARNER	55	394
10*31435	12-8-1	D	HENRY AND NANCY GARNER	55	394
10*31435	12-8-1.1	E	HENRY AND NANCY GARNER	55	394
10*31435	12-8-1.2	F	HENRY AND NANCY GARNER	55	394
10*31435	12-7-13.1	G	HENRY AND NANCY GARNER	55	394
10*31435	12-3-26.1	H	HENRY AND NANCY GARNER	55	394
10*31435	12-3-27	I	HENRY AND NANCY GARNER	55	394
10*31435	12-3-46	J	HENRY AND NANCY GARNER	55	394
10*21035	12-2-23	K	THOMAS E GARNER AND BILLIE J GARNER, ET AL	200A	385
10*21643	12-2-23	K	LARRY D GARNER	200A	393
10*31435	12-2-23	K	HENRY AND NANCY GARNER	55	394
10*22229	12-3-13	L	MURIEL A MILLER, ET AL	204A	150
10*21681	12-2-19	M	DOROTHY J HAAS, ET AL	214A	358
FORCE POOL	12-2-22.1	N	THOMAS E GARNER, ET AL	166A	436
10*39463	12-3-4.7	O	J P COOPER ET AL	56	245
10*40304	12-2-13	P	DANIEL T BOOTH, ET AL	292A	309
10*18205	12-2-14	Q	MELISSA PAINTER AND SHAUN PAINTER, ET AL	927 205A	639 891
10*18205	12-2-14.2	R	MELISSA PAINTER AND SHAUN PAINTER, ET AL	927 205A	639 891
10*22494	5-25-11.4	S	EDWARD W KLUG & DIANNA KLUG JTWROS	920	109
10*27897	12-2-14.1	T	CAROL VASS, ET AL	1063 232A	605 346
10*39461	12-2-14.3	U	JAMES M PARSONS	73	195
10*19727	5-25-14.1	V	S RICHARD MELLON, ET AL	944	465
10*18205	5-25-16.1	W	MELISSA PAINTER AND SHAUN PAINTER, ET AL	927 205A	639 891
10*18205	5-25-15	X	MELISSA PAINTER AND SHAUN PAINTER, ET AL	927 205A	639 891
10*18205	5-25-16.2	Y	MELISSA PAINTER AND SHAUN PAINTER, ET AL	927 205A	639 891
10*18205	5-25-16	Z	MELISSA PAINTER AND SHAUN PAINTER, ET AL	927 205A	639 891
10*31441	5-26-12	AA	JASON AND S M PARSONS	59	3
10*14786	5-25-17	BB	TWILA O WHIPKEY, ET AL	799	61
10*14786	5-25-20	CC	TWILA O WHIPKEY, ET AL	799	61
10*14786	5-25-18	DD	TWILA O WHIPKEY, ET AL	799	61
10*14786	5-25-19	EE	TWILA O WHIPKEY, ET AL	799	61
10*14786	5-25-18.1	FF	TWILA O WHIPKEY, ET AL	799	61
10*14786	5-26-11	GG	TWILA O WHIPKEY, ET AL	799	61
10*14786	5-23-11.3	HH	TWILA O WHIPKEY, ET AL	799	61
10*14786	5-23-11.5	II	TWILA O WHIPKEY, ET AL	799	61
10*14786	5-23-11.8	JJ	TWILA O WHIPKEY, ET AL	799	61
10*14786	5-23-13.1	KK	TWILA O WHIPKEY, ET AL	799	61
10*14969	5-23-12	LL	REBECCA S WORD, ET AL	872	219
10*14786	5-23-13	MM	TWILA O WHIPKEY, ET AL	799	61
10*14786	5-23-11.4	NN	TWILA O WHIPKEY, ET AL	799	61
10*14786	5-23-11.1	OO	TWILA O WHIPKEY, ET AL	799	61



P.S. 708

David L Jackson

10/21/2022



**TUG HILL
OPERATING**

OPERATOR'S
WELL #: ELMER N-15HU
DISTRICT: Proctor
COUNTY: Wetzel
STATE: WV
API #: 47-103-03503

WELL PLAT
PAGE 4 OF 4
DATE: 07/28/2022
REVISED DATE:
9/28/2022

INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE
Chapter 22, Article 6A, Section 5(a)(5)
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that –

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Lease Name or Number	Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
-------------------------	-----------------------	-----------------------	---------	-----------

*See attached pages

Acknowledgement of Possible Permitting/Approval
In Addition to the Office of Oil and Gas

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

AUG 10 2022

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: Tug Hill Operating, LLC
 By: Amy L. Morris *Amy L. Morris*
 Its: Permitting Specialist - Appalachia Region

Lease ID	TMP	Tag	Grantor, Lessor, Etc.	Grantee, Lessee, Etc.	Royalty	Deed Book/Page		Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	
10*31435	12-8-15	A	HENRY AND NANCY GARNER	J A PHILLIPS	1/8+	55	394	J A Phillips to South Penn Oil Company: 56/284	South Penn Oil Company to South Penn Natural Gas Company: 33A/455	South Penn Natural Gas Company to Dallis Snyder & Sam Beren & Beren: 39A/33	Dallis Snyder & Muriel C Snyder, Sam Beren & Sarah Beren, dba Snyder and Beren to John H Robinson & George F Eagon: 39A/38	John H Robinson, Blanche Eagon, Est of George F Eagon, decd, Mildred M Lartigue, Carl L Eagon, Elva Robinson, Est of John H Robinson, decd, & Mary Ellen Davis to Elva Robinson & Mary Ellen Davis: 43A/440	Elva Robinson & Mary Ellen Davis to Andrew L Henry, Charles E Reed & Harry R Cronin: 44A/92	Katherine A & Harry R Cronin Jr to Charles E & Kathryn C Reed: 51A/241	Kathryn C Reed to Carl Perkins: 55A/54	Carl & Dorothy Louise Perkins to Perkins Oil and Gas Inc: 84A/9	Perkins Oil & Gas Inc to TH Exploration LLC: 251A/463
10*31435	12-8-16	B	HENRY AND NANCY GARNER	J A PHILLIPS	1/8+	55	394	J A Phillips to South Penn Oil Company: 56/284	South Penn Oil Company to South Penn Natural Gas Company: 33A/455	South Penn Natural Gas Company to Dallis Snyder & Sam Beren & Beren: 39A/33	Dallis Snyder & Muriel C Snyder, Sam Beren & Sarah Beren, dba Snyder and Beren to John H Robinson & George F Eagon: 39A/38	John H Robinson, Blanche Eagon, Est of George F Eagon, decd, Mildred M Lartigue, Carl L Eagon, Elva Robinson, Est of John H Robinson, decd, & Mary Ellen Davis to Elva Robinson & Mary Ellen Davis: 43A/440	Elva Robinson & Mary Ellen Davis to Andrew L Henry, Charles E Reed & Harry R Cronin: 44A/92	Katherine A & Harry R Cronin Jr to Charles E & Kathryn C Reed: 51A/241	Kathryn C Reed to Carl Perkins: 55A/54	Carl & Dorothy Louise Perkins to Perkins Oil and Gas Inc: 84A/9	Perkins Oil & Gas Inc to TH Exploration LLC: 251A/463
10*31435	12-8-2	C	HENRY AND NANCY GARNER	J A PHILLIPS	1/8+	55	394	J A Phillips to South Penn Oil Company: 56/284	South Penn Oil Company to South Penn Natural Gas Company: 33A/455	South Penn Natural Gas Company to Dallis Snyder & Sam Beren & Beren: 39A/33	Dallis Snyder & Muriel C Snyder, Sam Beren & Sarah Beren, dba Snyder and Beren to John H Robinson & George F Eagon: 39A/38	John H Robinson, Blanche Eagon, Est of George F Eagon, decd, Mildred M Lartigue, Carl L Eagon, Elva Robinson, Est of John H Robinson, decd, & Mary Ellen Davis to Elva Robinson & Mary Ellen Davis: 43A/440	Elva Robinson & Mary Ellen Davis to Andrew L Henry, Charles E Reed & Harry R Cronin: 44A/92	Katherine A & Harry R Cronin Jr to Charles E & Kathryn C Reed: 51A/241	Kathryn C Reed to Carl Perkins: 55A/54	Carl & Dorothy Louise Perkins to Perkins Oil and Gas Inc: 84A/9	Perkins Oil & Gas Inc to TH Exploration LLC: 251A/463
10*31435	12-8-1	D	HENRY AND NANCY GARNER	J A PHILLIPS	1/8+	55	394	J A Phillips to South Penn Oil Company: 56/284	South Penn Oil Company to South Penn Natural Gas Company: 33A/455	South Penn Natural Gas Company to Dallis Snyder & Sam Beren & Beren: 39A/33	Dallis Snyder & Muriel C Snyder, Sam Beren & Sarah Beren, dba Snyder and Beren to John H Robinson & George F Eagon: 39A/38	John H Robinson, Blanche Eagon, Est of George F Eagon, decd, Mildred M Lartigue, Carl L Eagon, Elva Robinson, Est of John H Robinson, decd, & Mary Ellen Davis to Elva Robinson & Mary Ellen Davis: 43A/440	Elva Robinson & Mary Ellen Davis to Andrew L Henry, Charles E Reed & Harry R Cronin: 44A/92	Katherine A & Harry R Cronin Jr to Charles E & Kathryn C Reed: 51A/241	Kathryn C Reed to Carl Perkins: 55A/54	Carl & Dorothy Louise Perkins to Perkins Oil and Gas Inc: 84A/9	Perkins Oil & Gas Inc to TH Exploration LLC: 251A/463

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10*31435	12-8-1.1	E	HENRY AND NANCY GARNER	J A PHILLIPS	1/8+	55	394	J A Phillips to South Penn Oil Company: 56/284	South Penn Oil Company to South Penn Natural Gas Company: 33A/455	South Penn Natural Gas Company to Dallis Snyder & Sam Beren & Beren: 39A/33	Dallis Snyder & Muriel C Snyder, Sam Beren & Sarah Beren, dba Snyder and Beren to John H Robinson & George F Eagon: 39A/38	John H Robinson, Blanche Eagon, Est of George F Eagon, decd, Mildred M Lartigue, Carl L Eagon, Elva Robinson, Est of John H Robinson, decd, & Mary Ellen Davis to Elva Robinson & Mary Ellen Davis: 43A/440	Elva Robinson & Mary Ellen Davis to Andrew L Henry, Charles E Reed & Harry R Cronin: 44A/92	Katherine A & Harry R Cronin Jr to Charles E & Kathryn C Reed: 51A/241	Kathryn C Reed to Carl Perkins: 55A/54	Carl & Dorothy Louise Perkins to Perkins Oil and Gas Inc: 84A/9	Perkins Oil & Gas Inc to TH Exploration LLC: 251A/463	
FORCE POOL	12-2-23	K	THOMAS F GARNER AND BILLIE J GARNER	STONE ENERGY CORPORATION	1/8+	168A	800	Stone Energy Corp to EQT Production Company: 183A/305	**FORCE POOL**									
FORCE POOL	12-2-23	K	LARRY D GARNER	STONE ENERGY CORPORATION	1/8+	168A	782	Stone Energy Corp to EQT Production Company: 183A/305	**FORCE POOL**									
10*31435	12-2-23	K	HENRY AND NANCY GARNER	J A PHILLIPS	1/8+	55	394	J A Phillips to South Penn Oil Company: 56/284	South Penn Oil Company to South Penn Natural Gas Company: 33A/455	South Penn Natural Gas Company to Dallis Snyder & Sam Beren dba Snyder & Beren: 39A/33	Dallis Snyder & Muriel C Snyder, Sam Beren & Sarah Beren, dba Snyder and Beren to John H Robinson & George F Eagon: 39A/38	John H Robinson, Blanche Eagon, Est of George F Eagon, decd, Mildred M Lartigue, Carl L Eagon, Elva Robinson, Est of John H Robinson, decd, & Mary Ellen Davis to Elva Robinson & Mary Ellen Davis: 43A/440	Elva Robinson & Mary Ellen Davis to Andrew L Henry, Charles E Reed & Harry R Cronin: 44A/92	Katherine A & Harry R Cronin Jr to Charles E & Kathryn C Reed: 51A/241	Kathryn C Reed to Carl Perkins: 55A/54	Carl & Dorothy Louise Perkins to Perkins Oil and Gas Inc: 84A/9	Perkins Oil & Gas Inc to TH Exploration LLC: 251A/463	
10*21681	12-2-19	M	DOROTHY J HAAS	TH EXPLORATION LLC	1/8+	214A	358	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*22229	12-2-19	M	MURIEL A MILLER	TH EXPLORATION LLC	1/8+	204A	150	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*22230	12-2-19	M	JOHN P SNYDER	TH EXPLORATION LLC	1/8+	204A	146	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*22692	12-2-19	M	HERBERT L MILLER AND BRENDA S MILLER	TH EXPLORATION LLC	1/8+	209A	295	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*23007	12-2-19	M	JOHN M PARSONS & ANTOINETTE L COSTANTINO	TH EXPLORATION LLC	1/8+	209A	287	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*23029	12-2-19	M	HAMMETT LAND & MINERALS LLC SAMUEL C HAMMETT MANAGING MEMBER	TH EXPLORATION LLC	1/8+	209A	285	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*23512	12-2-19	M	VIVIAN A PARSONS	TH EXPLORATION LLC	1/8+	212A	59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*23697	12-2-19	M	RICHARD ALLEN FONNER AND LINDA M FONNER	TH EXPLORATION LLC	1/8+	212A	521	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*23719	12-2-19	M	BRENDA S FONNER	TH EXPLORATION LLC	1/8+	213A	410	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*23797	12-2-19	M	FREDERICK R FONNER AND PENELOPE G FONNER	TH EXPLORATION LLC	1/8+	213A	703	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*23824	12-2-19	M	JAMES H PARSONS JR	TH EXPLORATION LLC	1/8+	215A	262	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*24004	12-2-19	M	JOHN E FONNER AND MICHELE D FONNER	TH EXPLORATION LLC	1/8+	215A	437	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*24148	12-2-19	M	ROY C PARSONS	TH EXPLORATION LLC	1/8+	212A	517	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Lease ID	TMP	Tag	Grantor, Lessor, Etc.	Grantee, Lessee, Etc.	Royalty	Deed Book/Page		Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
10*24175	12-2-19	M	THOMAS L FONNER	TH EXPLORATION LLC	1/8+	214A	71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			2011 WILLIAM F ROWLAND & CONNIE J ROWLAND IRREVOCABLE TRUST DATED OCTOBER 28, 2011														
10*24775	12-2-19	M	THOMAS L FONNER	TH EXPLORATION LLC	1/8+	220A	289	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25009	12-2-19	M	FRANCES E ALLOWAY	TH EXPLORATION LLC	1/8+	220A	887	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*26923	12-2-19	M	CHRISTOPHER TILLMAN AND KELLY L TILLMAN	TH EXPLORATION LLC	1/8+	225A	771	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*26986	12-2-19	M	ROBERT FRANKLIN II FONNER AND KARYN FONNER	TH EXPLORATION LLC	1/8+	226A	407	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27309	12-2-19	M	JOHN IHNATOLYA AND CHARLOTTE IHNATOLYA	TH EXPLORATION LLC	1/8+	229A	590	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27548	12-2-19	M	BECKY LANE LLC	TH EXPLORATION LLC	1/8+	232A	716	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27549	12-2-19	M	BETTY JANE RICHARDSON FONNER	TH EXPLORATION LLC	1/8+	232A	720	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27963	12-2-19	M	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION LLC	1/8+	232A	339	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*28038	12-2-19	M	CHRISTINE C CONNOR AND WILLIAM KYLE CONNOR	TH EXPLORATION LLC	1/8+	234A	623	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*31435	12-2-19	M	HENRY AND NANCY GARNER	J A PHILLIPS	1/8+	55	394	J A Phillips to South Penn Oil Company: 56/284	South Penn Oil Company to South Penn Natural Gas Company: 33A/455	South Penn Natural Gas Company to Dallis Snyder & Sam Beren dba Snyder & Beren: 39A/33	Dallis Snyder & Muriel C Snyder, Sam Beren & Sarah Beren, dba Snyder and Beren to John H Robinson & George F Eagon: 39A/38	John H Robinson, Blanche Eagon, Est of George F Eagon, decd, Mildred M Lartigue, Carl L Eagon, Elva Robinson, Est of John H Robinson, decd, & Mary Ellen Davis to Elva Robinson & Mary Ellen Davis: 43A/440	Elva Robinson & Mary Ellen Davis to Andrew L Henry, Charles E Reed & Harry R Cronin: 44A/92	Katherine A & Harry R Cronin Jr to Charles E & Kathryn C Reed: 51A/241	Kathryn C Reed to Carl Perkins: 55A/54	Carl & Dorothy Louise Perkins to Perkins Oil and Gas Inc: 84A/9	Perkins Oil & Gas Inc to TH Exploration LLC: 251A/463
10*39464	12-2-19	M	ROBERT AND SARAH J COFFIELD	J A PHILLIPS	1/8+	55	216	J A Phillips to South Penn Oil Company: 55/235	South Penn Oil Company to Hope Natural Gas Company: 9A/227	Hope Natural Gas Company to Consolidated Gas Supply Corp: 233/387	Consolidated Gas Supply Corp to Consolidated Gas Transmission Corp: 66A/69	Consolidated Gas Transmission Corp to CNG Development Company: 67A/452	merger - CNG Development Company merged with and into CNG Producing Company Eff. 1/1/1991	name change - CNG Producing Company changed name into Dominion Exploration & Producing Inc. - 5/10/2000	Merger - Dominion Exploration & Production Inc merged with and into Consol Gas Company: CB 13/108	Merger - Consol Gas Company merged with and into CNX Gas Company LLC: MB 96/307	CNX Gas Company LLC to TH Exploration LLC: 270A/479
10*39465	12-2-19	M	ROBERT AND SARAH J COFFIELD	J A PHILLIPS	1/8+	55	212	J A Phillips to South Penn Oil Company: 55/235	South Penn Oil Company to Hope Natural Gas Company: 9A/227	Hope Natural Gas Company to Consolidated Gas Supply Corp: 233/387	Consolidated Gas Supply Corp to Consolidated Gas Transmission Corp: 66A/69	Consolidated Gas Transmission Corp to CNG Development Company: 67A/452	merger - CNG Development Company merged with and into CNG Producing Company Eff. 1/1/1991	name change - CNG Producing Company changed name into Dominion Exploration & Producing Inc. - 5/10/2000	Merger - Dominion Exploration & Production Inc merged with and into Consol Gas Company: CB 13/108	Merger - Consol Gas Company merged with and into CNX Gas Company LLC: MB 96/307	CNX Gas Company LLC to TH Exploration LLC: 270A/479
10*39463	12-3-4.7	O	J P COOPER ET AL	SOUTH PENN OIL COMPANY	1/8+	56	245	N/A	South Penn Oil Company to Hope Natural Gas Company: 9A/227	Hope Natural Gas Company to Consolidated Gas Supply Corp: 233/387	Consolidated Gas Supply Corp to Consolidated Gas Transmission Corp: 66A/69	Consolidated Gas Transmission Corp to CNG Development Company: 67A/452	merger - CNG Development Company merged with and into CNG Producing Company Eff. 1/1/1991	name change - CNG Producing Company changed name into Dominion Exploration & Producing Inc. - 5/10/2000	Merger - Dominion Exploration & Production Inc merged with and into Consol Gas Company: CB 13/108	Merger - Consol Gas Company merged with and into CNX Gas Company LLC: MB 96/307	CNX Gas Company LLC to TH Exploration LLC: 270A/479
10*18205	12-2-14	Q	MELISSA PAINTER AND SHAUN PAINTER	TH EXPLORATION LLC	1/8+	205A	891	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Lease ID	TMP	Tag	Grantor, Lessor, Etc.	Grantee, Lessee, Etc.	Royalty	Deed Book/Page		Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
10*18216	12-2-14	Q	BRUCE EDWARD BAILEY JR AND DARA BAILEY	TH EXPLORATION LLC	1/8+	929	99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						941	235										
10*19484	12-2-14	Q	FREDRIC & BETTY RICHTER	TH EXPLORATION LLC	1/8+	195A	166	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19485	12-2-14	Q	ELIZABETH A HARTLE	TH EXPLORATION LLC	1/8+	941	233	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						944	101										
10*19643	12-2-14	Q	PATRICIA LOUISE CROW AND HOY GLENN CROW	TH EXPLORATION LLC	1/8+	205A	877	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						988	439										
10*23349	12-2-14	Q	LYNN ELLEN BARCUS AND PAUL E BARCUS JR	TH EXPLORATION LLC	1/8+	211A	335	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						988	436										
10*23403	12-2-14	Q	JAN LEA O'DONNELL AND KELLY O'DONNELL	TH EXPLORATION LLC	1/8+	211A	338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						212A	32										
10*23426	12-2-14	Q	STEVEN L & CAROL J NEWMAN	TH EXPLORATION LLC	1/8+	988	433	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23702	12-2-14	Q	BRAD EYNON	TH EXPLORATION LLC	1/8+	1015	152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23836	12-2-14	Q	JON NEWMAN & SUSAN NEWMAN	TH EXPLORATION LLC	1/8+	214A	315	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						1057	339										
10*27186	12-2-14	Q	LAURA J MAY AND ROGER A MAY	TH EXPLORATION LLC	1/8+	230A	662	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						230A	664										
10*27298	12-2-14	Q	ROBERT M MCCARDLE & NANCY R MCCARDLE	TH EXPLORATION LLC	1/8+	1057	337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						1058	568										
10*27435	12-2-14	Q	ROHN J BOWERS MARTIN	TH EXPLORATION LLC	1/8+	230A	656	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						230A	660										
10*27439	12-2-14	Q	GERALD H COOPER	TH EXPLORATION LLC	1/8+	1058	570	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						230A	658										
10*27444	12-2-14	Q	GREGORY T COOPER AND SUSAN COOPER	TH EXPLORATION LLC	1/8+	1058	572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27521	12-2-14	Q	GASPARE A INGRASSELINO	TH EXPLORATION LLC	1/8+	234A	472	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27569	12-2-14	Q	ROBERT LOHR	TH EXPLORATION LLC	1/8+	1060	484	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						1063	605										
10*27897	12-2-14	Q	CAROL VASS	TH EXPLORATION LLC	1/8+	232A	346	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						1064	145										
10*27898	12-2-14	Q	PAUL G FOX AND CYNTHIA G FOX	TH EXPLORATION LLC	1/8+	233A	522	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27959	12-2-14	Q	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION LLC	1/8+	1063	594	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39461	12-2-14	Q	JAMES M PARSONS	SOUTH PENN OIL COMPANY	1/8+	73	195	N/A	N/A	South Penn oil Company to Hope Natural Gas Company: 9A/227	Hope Natural Gas Company to Consolidated Gas Supply Corp: 233/387	Consolidated Gas Supply Corp to Consolidated Gas Transmission Corp: 66A/69	Consolidated Gas Transmission Corp to CNG Development Company: 67A/453	Name Change - CNG Producing Company changed name into Dominion Exploration & Producing Inc. - 5/10/2000	Merger - Dominion Exploration & Production Inc merger with and into Consol Gas Company: CB 13/108	Merger - Consol Gas Company merged with and into CNX Gas Company LLC: MB 96/307	CNX Gas Company LLC to TH Exploration LLC: 270A/479
10*18205	5-25-16.1	W	MELISSA PAINTER AND SHAUN PAINTER	TH EXPLORATION LLC	1/8+	205A	891	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18216	5-25-16.1	W	BRUCE EDWARD BAILEY JR AND DARA BAILEY	TH EXPLORATION LLC	1/8+	929	99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						941	235										
10*19484	5-25-16.1	W	FREDRIC & BETTY RICHTER	TH EXPLORATION LLC	1/8+	195A	166	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19485	5-25-16.1	W	ELIZABETH A HARTLE	TH EXPLORATION LLC	1/8+	941	233	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						944	101										
10*19643	5-25-16.1	W	PATRICIA LOUISE CROW AND HOY GLENN CROW	TH EXPLORATION LLC	1/8+	205A	877	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						988	439										
10*23349	5-25-16.1	W	LYNN ELLEN BARCUS AND PAUL E BARCUS JR	TH EXPLORATION LLC	1/8+	211A	335	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						988	436										
10*23403	5-25-16.1	W	JAN LEA O'DONNELL AND KELLY O'DONNELL	TH EXPLORATION LLC	1/8+	211A	338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
						212A	32										
10*23426	5-25-16.1	W	STEVEN L & CAROL J NEWMAN	TH EXPLORATION LLC	1/8+	988	433	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Lease ID	TMP	Tag	Grantor, Lessor, Etc.	Grantee, Lessee, Etc.	Royalty	Deed Book/Page		Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
10*23702	5-25-16.1	W	BRAD EYNON	TH EXPLORATION LLC	1/8+	1015	152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23836	5-25-16.1	W	JON NEWMAN & SUSAN NEWMAN	TH EXPLORATION LLC	1/8+	214A	315	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27186	5-25-16.1	W	LAURA J MAY AND ROGER A MAY	TH EXPLORATION LLC	1/8+	1057	339	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27298	5-25-16.1	W	ROBERT M MCCARDLE & NANCY R MCCARDLE	TH EXPLORATION LLC	1/8+	230A	662	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27435	5-25-16.1	W	ROHN J BOWERS MARTIN	TH EXPLORATION LLC	1/8+	230A	664	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27439	5-25-16.1	W	GERALD H COOPER	TH EXPLORATION LLC	1/8+	1057	337	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27444	5-25-16.1	W	GREGORY T COOPER AND SUSAN COOPER	TH EXPLORATION LLC	1/8+	1058	568	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27521	5-25-16.1	W	GASPARE A INGRASSELINO	TH EXPLORATION LLC	1/8+	230A	660	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27569	5-25-16.1	W	ROBERT LOHR	TH EXPLORATION LLC	1/8+	1058	570	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27897	5-25-16.1	W	CAROL VASS	TH EXPLORATION LLC	1/8+	230A	658	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27898	5-25-16.1	W	PAUL G FOX AND CYNTHIA G FOX	TH EXPLORATION LLC	1/8+	1058	572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27959	5-25-16.1	W	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION LLC	1/8+	234A	472	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27963	5-25-16.1	W	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION LLC	1/8+	1060	484	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*39461	5-25-16.1	W	JAMES M PARSONS	SOUTH PENN OIL COMPANY	1/8+	73	195	N/A	N/A	South Penn oil Company to Hope Natural Gas Company: 9A/227	Hope Natural Gas Company to Consolidated Gas Supply Corp: 233/387	Consolidated Gas Supply Corp to Consolidated Gas Transmission Corp: 66A/69	Consolidated Gas Transmission Corp to CNG Development Company: 67A/453	name change - CNG Producing Company changed name into Dominion Exploration & Producing Inc. - 5/10/2000	Merger - Dominion Exploration & Production Inc merger with and into Consol Gas Company: CB 13/108	Merger - Consol Gas Company merged with and into CNX Gas Company LLC: MB 96/307	CNX Gas Company LLC to TH Exploration LLC: 270A/479
10*18205	5-25-16	Z	MELISSA PAINTER AND SHAUN PAINTER	TH EXPLORATION LLC	1/8+	927	639	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18216	5-25-16	Z	BRUCE EDWARD BAILEY JR AND DARA BAILEY	TH EXPLORATION LLC	1/8+	205A	891	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19484	5-25-16	Z	FREDRIC & BETTY RICHTER	TH EXPLORATION LLC	1/8+	929	99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19485	5-25-16	Z	ELIZABETH A HARTLE	TH EXPLORATION LLC	1/8+	941	235	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19643	5-25-16	Z	PATRICIA LOUISE CROW AND HOY GLENN CROW	TH EXPLORATION LLC	1/8+	195A	166	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23349	5-25-16	Z	LYNN ELLEN BARCUS AND PAUL E BARCUS JR	TH EXPLORATION LLC	1/8+	941	233	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23403	5-25-16	Z	JAN LEA O'DONNELL AND KELLY O'DONNELL	TH EXPLORATION LLC	1/8+	944	101	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23426	5-25-16	Z	STEVEN L & CAROL J NEWMAN	TH EXPLORATION LLC	1/8+	205A	877	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23702	5-25-16	Z	BRAD EYNON	TH EXPLORATION LLC	1/8+	988	439	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23836	5-25-16	Z	JON NEWMAN & SUSAN NEWMAN	TH EXPLORATION LLC	1/8+	211A	335	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27186	5-25-16	Z	LAURA J MAY AND ROGER A MAY	TH EXPLORATION LLC	1/8+	211A	338	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27298	5-25-16	Z	ROBERT M MCCARDLE & NANCY R MCCARDLE	TH EXPLORATION LLC	1/8+	212A	32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27435	5-25-16	Z	ROHN J BOWERS MARTIN	TH EXPLORATION LLC	1/8+	988	433	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27439	5-25-16	Z	GERALD H COOPER	TH EXPLORATION LLC	1/8+	1015	152	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*27444	5-25-16	Z	GREGORY T COOPER AND SUSAN COOPER	TH EXPLORATION LLC	1/8+	230A	658	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*27521	5-25-16	Z	GASPARE A INGRASSELINO	TH EXPLORATION LLC	1/8+	1058	572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*27569	5-25-16	Z	ROBERT LOHR	TH EXPLORATION LLC	1/8+	234A	472	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*27897	5-25-16	Z	CAROL VASS	TH EXPLORATION LLC	1/8+	1060	484	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*27898	5-25-16	Z	PAUL G FOX AND CYNTHIA G FOX	TH EXPLORATION LLC	1/8+	1063	605	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*27959	5-25-16	Z	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION LLC	1/8+	232A	346	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*27963	5-25-16	Z	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION LLC	1/8+	1064	145	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*14786	5-25-17	BB	TWILA O WHIPKEY	GASTAR EXPLORATION USA INC	1/8+	233A	522	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*14797	5-25-17	BB	ORVILLE YOUNG	GASTAR EXPLORATION USA INC	1/8+	233A	522	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*14822	5-25-17	BB	ONWARD E BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	1063	594	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*14823	5-25-17	BB	SARAH L BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	232A	339	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*17195	5-25-17	BB	PATRICIA HARTMAN	GASTAR EXPLORATION USA INC	1/8+	799	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*17196	5-25-17	BB	DELBERT R. MONTGOMERY	GASTAR EXPLORATION USA INC	1/8+	800	598	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
													Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563		
													Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563		
													Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/144	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563		
													Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/144	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563		
													Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
													Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17197	5-25-17	BB	GLORIA J. SIMMONS HAROLD SIMMONS	GASTAR EXPLORATION USA INC	1/8+	695	313	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17199	5-25-17	BB	PAMELA L DRAZIC AND JEFFREY DRAZIC	GASTAR EXPLORATION USA INC	1/8+	695	315	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17200	5-25-17	BB	STEPHANIE L BATES	GASTAR EXPLORATION USA INC	1/8+	697	156	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17201	5-25-17	BB	DENISE A GALE	GASTAR EXPLORATION USA INC	1/8+	697	395	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17202	5-25-17	BB	JANE GALE	GASTAR EXPLORATION USA INC	1/8+	697	385	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17203	5-25-17	BB	BARRY RAY MOORE	GASTAR EXPLORATION USA INC	1/8+	697	387	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17204	5-25-17	BB	CLARENCE RICHARD ZESIGER & MARY ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697	391	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17206	5-25-17	BB	M VIRGINIA & EDWARD C MARSH	GASTAR EXPLORATION USA INC	1/8+	697	399	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17207	5-25-17	BB	DEBORAH K. KLIMASZEWSKI FRANK KLIMASZEWSKI, SR.	GASTAR EXPLORATION USA INC	1/8+	697	389	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17210	5-25-17	BB	MARILYN NOEL	GASTAR EXPLORATION USA INC	1/8+	697	393	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17211	5-25-17	BB	GARY WAYNE ZESIGER & VITORINA ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697	397	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17212	5-25-17	BB	DARRELL NEWLAND LYDIA NEWLAND	GASTAR EXPLORATION USA INC	1/8+	697	158	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17213	5-25-17	BB	CAROL DEEN GARDNER	GASTAR EXPLORATION USA INC	1/8+	697	154	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256	
10*18275	5-25-17	BB	BETTY JEAN NEELY	TH EXPLORATION LLC	1/8+	929	60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*18366	5-25-17	BB	MARY LOU WILSON AND STANLEY D WILSON	TH EXPLORATION LLC	1/8+	931	311	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*18369	5-25-17	BB	MICHAEL WILSON AIF	TH EXPLORATION LLC	1/8+	931	303	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*18370	5-25-17	BB	CRAIG ALAN YOHO AND DONNA M YOHO	TH EXPLORATION LLC	1/8+	931	300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*18379	5-25-17	BB	SAMUEL D YOHO	TH EXPLORATION LLC	1/8+	932	439	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*19540	5-25-17	BB	DAVID N DEVICK TRUSTEE OF THE TONI JO MASON LIVING TRUST	TH EXPLORATION LLC	1/8+	942	53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*19652	5-25-17	BB	ERICA M MASON	TH EXPLORATION LLC	1/8+	944	108	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*19903	5-25-17	BB	JACK R HAMMERS	TH EXPLORATION LLC	1/8+	948	236	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*22008	5-25-17	BB	PAUL F HAMMERS	TH EXPLORATION LLC	1/8+	953	304	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*22025	5-25-17	BB	COLIN R YOHO AND NORMA L YOHO	TH EXPLORATION LLC	1/8+	960	544	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*22129	5-25-17	BB	MARK EUGENE YOHO & MARY YOHO	TH EXPLORATION LLC	1/8+	961	459	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*22441	5-25-17	BB	JANICE N HAUDENSCHILT	TH EXPLORATION LLC	1/8+	963	646	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*22510	5-25-17	BB	APRIL ROSE POSTLETHWAIT	TH EXPLORATION LLC	1/8+	964	432	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*23372	5-25-17	BB	DONNA V YOHO	TH EXPLORATION LLC	1/8+	1008	320	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*23373	5-25-17	BB	DEWEY A MILICIA	TH EXPLORATION LLC	1/8+	988	429	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*23446	5-25-17	BB	DANA MILICIA HUMPHREYS	TH EXPLORATION LLC	1/8+	1008	316	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*25627	5-25-17	BB	NICOLETTA MILICIA BLOODWORTH	TH EXPLORATION LLC	1/8+	1034	548	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
10*27078	5-25-17	BB	CHESTNUT HOLDINGS INC	GASTAR EXPLORATION USA INC	1/8+	697	381	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chaned its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147
10*27085	5-25-17	BB	CECILIA D NEWLAND	GASTAR EXPLORATION USA INC	1/8+	697	383	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chaned its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147

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10*27086	5-25-17	BB	DONALD R NEWLAND AND SUZANNE NEWLAND	GASTAR EXPLORATION USA INC	1/8+	698 639	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chanded its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147
10*27714	5-25-17	BB	PIKEWOOD ENERGY CORPORATION AN OHIO CORPORATION	TH EXPLORATION LLC	1/8+	1060 572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*14786	5-25-18	DD	TWILA O WHIPKEY	GASTAR EXPLORATION USA INC	1/8+	799 61	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc to TH Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14797	5-25-18	DD	ORVILLE YOUNG	GASTAR EXPLORATION USA INC	1/8+	800 598	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc to TH Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14822	5-25-18	DD	ONWARD E BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	876 463	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/144	Merger - Gastar Exploration USA Inc to TH Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14823	5-25-18	DD	SARAH L BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	876 459	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/144	Merger - Gastar Exploration USA Inc to TH Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*17195	5-25-18	DD	PATRICIA HARTMAN	GASTAR EXPLORATION USA INC	1/8+	695 317	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17196	5-25-18	DD	DELBERT R. MONTGOMERY	GASTAR EXPLORATION USA INC	1/8+	695 311	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17197	5-25-18	DD	GLORIA J. SIMMONS HAROLD SIMMONS	GASTAR EXPLORATION USA INC	1/8+	695	313	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17199	5-25-18	DD	PAMELA L DRAZIC AND JEFFREY DRAZIC	GASTAR EXPLORATION USA INC	1/8+	695	315	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17200	5-25-18	DD	STEPHANIE L BATES	GASTAR EXPLORATION USA INC	1/8+	697	156	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17201	5-25-18	DD	DENISE A GALE	GASTAR EXPLORATION USA INC	1/8+	697	395	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17202	5-25-18	DD	JANE GALE	GASTAR EXPLORATION USA INC	1/8+	697	385	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17203	5-25-18	DD	BARRY RAY MOORE	GASTAR EXPLORATION USA INC	1/8+	697	387	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17204	5-25-18	DD	CLARENCE RICHARD ZESIGER & MARY ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697	391	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17206	5-25-18	DD	M VIRGINIA & EDWARD C MARSH	GASTAR EXPLORATION USA INC	1/8+	697	399	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17207	5-25-18	DD	DEBORAH K. KLIMASZEWSKI FRANK KLIMASZEWSKI, SR.	GASTAR EXPLORATION USA INC	1/8+	697	389	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17210	5-25-18	DD	MARILYN NOEL	GASTAR EXPLORATION USA INC	1/8+	697	393	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17211	5-25-18	DD	GARY WAYNE ZESIGER & VITORINA ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697	397	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17212	5-25-18	DD	DARRELL NEWLAND LYDIA NEWLAND	GASTAR EXPLORATION USA INC	1/8+	697	158	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17213	5-25-18	DD	CAROL DEEN GARDNER	GASTAR EXPLORATION USA INC	1/8+	697 154	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*18275	5-25-18	DD	BETTY JEAN NEELY	TH EXPLORATION LLC	1/8+	929 60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18366	5-25-18	DD	MARY LOU WILSON AND STANLEY D WILSON	TH EXPLORATION LLC	1/8+	931 311	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18369	5-25-18	DD	MICHAEL WILSON AIF	TH EXPLORATION LLC	1/8+	931 303	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18370	5-25-18	DD	CRAIG ALAN YOHO AND DONNA M YOHO	TH EXPLORATION LLC	1/8+	931 300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18379	5-25-18	DD	SAMUEL D YOHO	TH EXPLORATION LLC	1/8+	932 439	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19540	5-25-18	DD	DAVID N DEVICK TRUSTEE OF THE TONI JO MASON LIVING TRUST	TH EXPLORATION LLC	1/8+	942 53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19652	5-25-18	DD	ERICA M MASON	TH EXPLORATION LLC	1/8+	944 108	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19903	5-25-18	DD	JACK R HAMMERS	TH EXPLORATION LLC	1/8+	948 236	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22008	5-25-18	DD	PAUL F HAMMERS	TH EXPLORATION LLC	1/8+	953 304	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22025	5-25-18	DD	COLIN R YOHO AND NORMA L YOHO	TH EXPLORATION LLC	1/8+	960 544	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22129	5-25-18	DD	MARK EUGENE YOHO & MARY YOHO	TH EXPLORATION LLC	1/8+	961 459	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22441	5-25-18	DD	JANICE N HAUDENSCHILT	TH EXPLORATION LLC	1/8+	963 646	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22510	5-25-18	DD	APRIL ROSE POSTLETHWAIT	TH EXPLORATION LLC	1/8+	964 432	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23372	5-25-18	DD	DONNA V YOHO	TH EXPLORATION LLC	1/8+	1008 320	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23373	5-25-18	DD	DEWEY A MILICIA	TH EXPLORATION LLC	1/8+	988 429	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23446	5-25-18	DD	DANA MILICIA HUMPHREYS	TH EXPLORATION LLC	1/8+	1008 316	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25627	5-25-18	DD	NICOLETTA MILICIA BLOODWORTH	TH EXPLORATION LLC	1/8+	1034 548	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27078	5-25-18	DD	CHESTNUT HOLDINGS INC	GASTAR EXPLORATION USA INC	1/8+	697 381	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chened its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147
10*27085	5-25-18	DD	CECILIA D NEWLAND	GASTAR EXPLORATION USA INC	1/8+	697 383	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chened its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147

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10*27086	5-25-18	DD	DONALD R NEWLAND AND SUZANNE NEWLAND	GASTAR EXPLORATION USA INC	1/8+	698 639	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chanced its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147
10*27714	5-25-18	DD	PIKEWOOD ENERGY CORPORATION AN OHIO CORPORATION	TH EXPLORATION LLC	1/8+	1060 572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*14786	5-26-11	GG	TWILA O WHIPKEY	GASTAR EXPLORATION USA INC	1/8+	799 61	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14792	5-26-11	GG	TIMOTHY YOHO	GASTAR EXPLORATION USA INC	1/8+	799 536	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14797	5-26-11	GG	ORVILLE YOUNG	GASTAR EXPLORATION USA INC	1/8+	800 598	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14822	5-26-11	GG	ONWARD E BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	876 463	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/144	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14823	5-26-11	GG	SARAH L BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	876 459	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/144	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14969	5-26-11	GG	REBECCA S WORD	GASTAR EXPLORATION USA INC	1/8+	872 219	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/119	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14970	5-26-11	GG	GRACE EXLINE	GASTAR EXPLORATION USA INC	1/8+	872 623	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/119	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563

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10*17195	5-26-11	GG	PATRICIA HARTMAN	GASTAR EXPLORATION USA INC	1/8+	695	317	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17196	5-26-11	GG	DELBERT R. MONTGOMERY	GASTAR EXPLORATION USA INC	1/8+	695	311	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17197	5-26-11	GG	GLORIA J. SIMMONS HAROLD SIMMONS	GASTAR EXPLORATION USA INC	1/8+	695	313	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17199	5-26-11	GG	PAMELA L DRAZIC AND JEFFREY DRAZIC	GASTAR EXPLORATION USA INC	1/8+	695	315	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17200	5-26-11	GG	STEPHANIE L BATES	GASTAR EXPLORATION USA INC	1/8+	697	156	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17201	5-26-11	GG	DENISE A GALE	GASTAR EXPLORATION USA INC	1/8+	697	395	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17202	5-26-11	GG	JANE GALE	GASTAR EXPLORATION USA INC	1/8+	697	385	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17203	5-26-11	GG	BARRY RAY MOORE	GASTAR EXPLORATION USA INC	1/8+	697	387	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17204	5-26-11	GG	CLARENCE RICHARD ZESIGER & MARY ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697	391	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17206	5-26-11	GG	M VIRGINIA & EDWARD C MARSH	GASTAR EXPLORATION USA INC	1/8+	697	399	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17207	5-26-11	GG	DEBORAH K. KLIMASZEWSKI FRANK KLIMASZEWSKI, SR.	GASTAR EXPLORATION USA INC	1/8+	697	389	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17210	5-26-11	GG	MARILYN NOEL	GASTAR EXPLORATION USA INC	1/8+	697	393	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17211	5-26-11	GG	GARY WAYNE ZESIGER & VITORINA ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697 397	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17212	5-26-11	GG	DARRELL NEWLAND LYDIA NEWLAND	GASTAR EXPLORATION USA INC	1/8+	697 158	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17213	5-26-11	GG	CAROL DEEN GARDNER	GASTAR EXPLORATION USA INC	1/8+	697 154	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17822	5-26-11	GG	ANTOINE E GERAUD	TH EXPLORATION LLC	1/8+	943 560	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18114	5-26-11	GG	DARRELL NEWLAND	TH EXPLORATION LLC	1/8+	927 66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18115	5-26-11	GG	DONALD R NEWLAND AND SUZANNE NEWLAND	TH EXPLORATION LLC	1/8+	927 73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18275	5-26-11	GG	BETTY JEAN NEELY	TH EXPLORATION LLC	1/8+	929 60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18366	5-26-11	GG	MARY LOU WILSON AND STANLEY D WILSON MICHAEL WILSON AIF	TH EXPLORATION LLC	1/8+	931 311	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18369	5-26-11	GG	CRAIG ALAN YOHO AND DONNA M YOHO	TH EXPLORATION LLC	1/8+	931 303	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18370	5-26-11	GG	SAMUEL D YOHO	TH EXPLORATION LLC	1/8+	931 300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18379	5-26-11	GG	DAVID N DEVICK TRUSTEE OF THE TONI JO MASON LIVING TRUST	TH EXPLORATION LLC	1/8+	932 439	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18541	5-26-11	GG	PATRICK P MCHENRY	TH EXPLORATION LLC	1/8+	933 649	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18818	5-26-11	GG	LUCILLE R MCHENRY	TH EXPLORATION LLC	1/8+	937 624	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19486	5-26-11	GG	BARBARA ANN MAYNARD	TH EXPLORATION LLC	1/8+	941 229	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19540	5-26-11	GG	ERICA M MASON	TH EXPLORATION LLC	1/8+	942 53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19543	5-26-11	GG	ROBERT I BONAR SR	TH EXPLORATION LLC	1/8+	942 61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19640	5-26-11	GG	MARGARET F RICHMOND DEBORAH FEDOR POA	TH EXPLORATION LLC	1/8+	944 120	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19641	5-26-11	GG	BRADFORD D LOWERY & DEBORAH LOWERY	TH EXPLORATION LLC	1/8+	944 122	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19650	5-26-11	GG	CLAUDIA LOWERY MALLOY	TH EXPLORATION LLC	1/8+	944 99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19652	5-26-11	GG	JACK R HAMMERS	TH EXPLORATION LLC	1/8+	944 108	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19657	5-26-11	GG	JANET LEE SPARKS	TH EXPLORATION LLC	1/8+	964 440	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19732	5-26-11	GG	CARL M MCHENRY AND PAMELA MCHENRY	TH EXPLORATION LLC	1/8+	944 469	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19858	5-26-11	GG	JAMES MICHAEL YOHO	TH EXPLORATION LLC	1/8+	945 442	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19903	5-26-11	GG	PAUL F HAMMERS	TH EXPLORATION LLC	1/8+	948 236	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19996	5-26-11	GG	CHARLES D WOOD	TH EXPLORATION LLC	1/8+	947 589	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21073	5-26-11	GG	ARDITH R ROSE AND TOMMY E ROSE	TH EXPLORATION LLC	1/8+	951 608	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21074	5-26-11	GG	MALCOLM E WOOD AND JOAN J WOOD	TH EXPLORATION LLC	1/8+	951 610	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21174	5-26-11	GG	SHAWN M WOOD	TH EXPLORATION LLC	1/8+	952 190	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*21419	5-26-11	GG	DAPHNE HUFFMAN AND CHARLES HUFFMAN	TH EXPLORATION LLC	1/8+	957 59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21431	5-26-11	GG	GARY WAYNE ZESIGER & VITORINA ZESIGER	TH EXPLORATION LLC	1/8+	957 57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21436	5-26-11	GG	CECILIA D NEULAND	TH EXPLORATION LLC	1/8+	957 55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21439	5-26-11	GG	M VIRGINIA & EDWARD C MARSH	TH EXPLORATION LLC	1/8+	957 53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21469	5-26-11	GG	KIMBERLY S DENNY AND JAMES E DENNY	TH EXPLORATION LLC	1/8+	957 244	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21471	5-26-11	GG	RICHARD ROSS WILSON	TH EXPLORATION LLC	1/8+	960 190	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21620	5-26-11	GG	ROBERT CRAIG MONTGOMERY AND CYNTHIA R MONTGOMERY	TH EXPLORATION LLC	1/8+	959 496	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21621	5-26-11	GG	MARILYN NOEL	TH EXPLORATION LLC	1/8+	959 494	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21658	5-26-11	GG	CLARENCE RICHARD ZESIGER & MARY ZESIGER	TH EXPLORATION LLC	1/8+	959 490	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21659	5-26-11	GG	DEBORAH BLOUGH	TH EXPLORATION LLC	1/8+	958 392	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21660	5-26-11	GG	PAMELA L DRAZIC AND JEFFREY DRAZIC	TH EXPLORATION LLC	1/8+	958 390	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21830	5-26-11	GG	MARISSA MASON	TH EXPLORATION LLC	1/8+	960 200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21831	5-26-11	GG	MATTHEW MASON	TH EXPLORATION LLC	1/8+	966 122	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21834	5-26-11	GG	GEORGE DANIEL KRUGER	TH EXPLORATION LLC	1/8+	960 204	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21944	5-26-11	GG	JILL A BECK	TH EXPLORATION LLC	1/8+	960 101	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21947	5-26-11	GG	WALLACE LYNN WENDEL	TH EXPLORATION LLC	1/8+	965 59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22007	5-26-11	GG	DEBORAH K KLIMASZEWSKI AND FRANK KLIMASZEWSKI	TH EXPLORATION LLC	1/8+	959 492	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22008	5-26-11	GG	COLIN R YOHO AND NORMA L YOHO	TH EXPLORATION LLC	1/8+	953 304	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22025	5-26-11	GG	MARK EUGENE YOHO & MARY YOHO	TH EXPLORATION LLC	1/8+	960 544	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22031	5-26-11	GG	PHILLIP YOHO AND PATRICIA YOHO	TH EXPLORATION LLC	1/8+	960 535	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22032	5-26-11	GG	JOANNE E RAY	TH EXPLORATION LLC	1/8+	960 537	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22106	5-26-11	GG	BARRY RAY MOORE	TH EXPLORATION LLC	1/8+	954 643	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22129	5-26-11	GG	JANICE N HAUDENSCHILT	TH EXPLORATION LLC	1/8+	961 459	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22137	5-26-11	GG	CONNIE L NEELY	TH EXPLORATION LLC	1/8+	961 466	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22285	5-26-11	GG	DONALD JAMES WILSON AND SANDY L WILSON	TH EXPLORATION LLC	1/8+	962 193	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22334	5-26-11	GG	JOHN BRYANT	TH EXPLORATION LLC	1/8+	962 540	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22434	5-26-11	GG	EDWIN NELSON WOOD	TH EXPLORATION LLC	1/8+	963 637	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22441	5-26-11	GG	APRIL ROSE POSTLETHWAIT	TH EXPLORATION LLC	1/8+	963 646	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22510	5-26-11	GG	DONNA V YOHO	TH EXPLORATION LLC	1/8+	964 432	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22561	5-26-11	GG	MARY ROSE YOHO	TH EXPLORATION LLC	1/8+	968 200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22562	5-26-11	GG	HAROLD C SIMMONS	TH EXPLORATION LLC	1/8+	966 100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22563	5-26-11	GG	KIMBERLY D STRAUCH	TH EXPLORATION LLC	1/8+	966 522	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22585	5-26-11	GG	CYNTHIA L CHICK	TH EXPLORATION LLC	1/8+	966 102	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22718	5-26-11	GG	WILLIAM R RICHMOND AND CONNIE S RICHMOND	TH EXPLORATION LLC	1/8+	963 389	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23042	5-26-11	GG	MARK A YOHO	TH EXPLORATION LLC	1/8+	1012 191	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23372	5-26-11	GG	DEWEY A MILICIA	TH EXPLORATION LLC	1/8+	1008 320	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23373	5-26-11	GG	DANA MILICIA HUMPHREYS	TH EXPLORATION LLC	1/8+	988 429	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23446	5-26-11	GG	NICOLETTA MILICIA BLOODWORTH	TH EXPLORATION LLC	1/8+	1008 316	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23669	5-26-11	GG	LINDA K TOTTEN AND JERRY STEPHEN TOTTEN	TH EXPLORATION LLC	1/8+	1010 358	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24003	5-26-11	GG	CHARLES SIBURT AND PAULA SIBURT	TH EXPLORATION LLC	1/8+	1020 193	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24291	5-26-11	GG	MARY MARTHA BELLE DOYLE	TH EXPLORATION LLC	1/8+	1024 285	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24491	5-26-11	GG	DENISE A GALE	TH EXPLORATION LLC	1/8+	1008 324	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24890	5-26-11	GG	DEBRA JANE GALE	TH EXPLORATION LLC	1/8+	1021 122	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25065	5-26-11	GG	COLBY G WOOD	TH EXPLORATION LLC	1/8+	1027 103	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25066	5-26-11	GG	RODGER A HENDERSON JR	TH EXPLORATION LLC	1/8+	1027 97	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25627	5-26-11	GG	CHESTNUT HOLDINGS INC	TH EXPLORATION LLC	1/8+	1034 548	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*27078	5-26-11	GG	CECILIA D NEWLAND	GASTAR EXPLORATION USA INC	1/8+	697	381	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chanded its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147
10*27085	5-26-11	GG	DAPHNE HUFFMAN AND CHARLES HUFFMAN	GASTAR EXPLORATION USA INC	1/8+	697	383	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chanded its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147
10*27086	5-26-11	GG	DONALD R NEWLAND AND SUZANNE NEWLAND PIKEWOOD ENERGY CORPORATION AN OHIO CORPORATION	GASTAR EXPLORATION USA INC	1/8+	698	639	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chanded its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147
10*27714	5-26-11	GG	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION LLC	1/8+	1060	572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27959	5-26-11	GG	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION LLC	1/8+	1063	594	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*14786	5-23-11.3	HH	TWILA O WHIPKEY	GASTAR EXPLORATION USA INC	1/8+	799	61	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14797	5-23-11.3	HH	ORVILLE YOUNG	GASTAR EXPLORATION USA INC	1/8+	800	598	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14822	5-23-11.3	HH	ONWARD E BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	876	463	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/144	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14823	5-23-11.3	HH	SARAH L BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	876	459	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/144	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563

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10*17195	5-23-11.3	HH	PATRICIA HARTMAN	GASTAR EXPLORATION USA INC	1/8+	695	317	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17196	5-23-11.3	HH	DELBERT R. MONTGOMERY	GASTAR EXPLORATION USA INC	1/8+	695	311	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17197	5-23-11.3	HH	GLORIA J. SIMMONS HAROLD SIMMONS	GASTAR EXPLORATION USA INC	1/8+	695	313	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17199	5-23-11.3	HH	PAMELA L DRAZIC AND JEFFREY DRAZIC	GASTAR EXPLORATION USA INC	1/8+	695	315	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17200	5-23-11.3	HH	STEPHANIE L BATES	GASTAR EXPLORATION USA INC	1/8+	697	156	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17201	5-23-11.3	HH	DENISE A GALE	GASTAR EXPLORATION USA INC	1/8+	697	395	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17202	5-23-11.3	HH	JANE GALE	GASTAR EXPLORATION USA INC	1/8+	697	385	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17203	5-23-11.3	HH	BARRY RAY MOORE	GASTAR EXPLORATION USA INC	1/8+	697	387	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17204	5-23-11.3	HH	CLARENCE RICHARD ZESIGER & MARY ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697	391	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17206	5-23-11.3	HH	M VIRGINIA & EDWARD C MARSH	GASTAR EXPLORATION USA INC	1/8+	697	399	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17207	5-23-11.3	HH	DEBORAH K. KLIMASZEWSKI FRANK KLIMASZEWSKI, SR.	GASTAR EXPLORATION USA INC	1/8+	697	389	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17210	5-23-11.3	HH	MARILYN NOEL	GASTAR EXPLORATION USA INC	1/8+	697	393	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17211	5-23-11.3	HH	GARY WAYNE ZESIGER & VITORINA ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697	397	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17212	5-23-11.3	HH	DARRELL NEWLAND LYDIA NEWLAND	GASTAR EXPLORATION USA INC	1/8+	697	158	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17213	5-23-11.3	HH	CAROL DEEN GARDNER	GASTAR EXPLORATION USA INC	1/8+	697	154	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*18275	5-23-11.3	HH	BETTY JEAN NEELY	TH EXPLORATION LLC	1/8+	929	60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18366	5-23-11.3	HH	MARY LOU WILSON AND STANLEY D WILSON MICHAEL WILSON AIF	TH EXPLORATION LLC	1/8+	931	311	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18369	5-23-11.3	HH	CRAIG ALAN YOHO AND DONNA M YOHO	TH EXPLORATION LLC	1/8+	931	303	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18370	5-23-11.3	HH	SAMUEL D YOHO	TH EXPLORATION LLC	1/8+	931	300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18379	5-23-11.3	HH	DAVID N DEVICK TRUSTEE OF THE TONI JO MASON LIVING TRUST	TH EXPLORATION LLC	1/8+	932	439	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19540	5-23-11.3	HH	ERICA M MASON	TH EXPLORATION LLC	1/8+	942	53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19652	5-23-11.3	HH	JACK R HAMMERS	TH EXPLORATION LLC	1/8+	944	108	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19903	5-23-11.3	HH	PAUL F HAMMERS	TH EXPLORATION LLC	1/8+	948	236	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22008	5-23-11.3	HH	COLIN R YOHO AND NORMA L YOHO	TH EXPLORATION LLC	1/8+	953	304	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22025	5-23-11.3	HH	MARK EUGENE YOHO & MARY YOHO	TH EXPLORATION LLC	1/8+	960	544	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22129	5-23-11.3	HH	JANICE N HAUDENSCHILT	TH EXPLORATION LLC	1/8+	961	459	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22441	5-23-11.3	HH	APRIL ROSE POSTLETHWAIT	TH EXPLORATION LLC	1/8+	963	646	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22510	5-23-11.3	HH	DONNA V YOHO	TH EXPLORATION LLC	1/8+	964	432	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23372	5-23-11.3	HH	DEWEY A MILICIA	TH EXPLORATION LLC	1/8+	1008	320	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23373	5-23-11.3	HH	DANA MILICIA HUMPHREYS	TH EXPLORATION LLC	1/8+	988	429	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23446	5-23-11.3	HH	NICOLETTA MILICIA BLOODWORTH	TH EXPLORATION LLC	1/8+	1008	316	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25627	5-23-11.3	HH	CHESTNUT HOLDINGS INC	TH EXPLORATION LLC	1/8+	1034	548	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27078	5-23-11.3	HH	CECILIA D NEWLAND	GASTAR EXPLORATION USA INC	1/8+	697	381	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chanced its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147

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10*27085	5-23-11.3	HH	DAPHNE HUFFMAN AND CHARLES HUFFMAN	GASTAR EXPLORATION USA INC	1/8+	697	383	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chanded its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147
10*27086	5-23-11.3	HH	DONALD R NEWLAND AND SUZANNE NEWLAND PIKEWOOD ENERGY CORPORATION AN OHIO CORPORATION	GASTAR EXPLORATION USA INC	1/8+	698	639	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chanded its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147
10*27714	5-23-11.3	HH		TH EXPLORATION LLC	1/8+	1060	572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*14786	5-23-11.8	JJ	TWILA O WHIPKEY	GASTAR EXPLORATION USA INC	1/8+	799	61	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*17195	5-23-11.8	JJ	PATRICIA HARTMAN	GASTAR EXPLORATION USA INC	1/8+	695	317	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17196	5-23-11.8	JJ	DELBERT R. MONTGOMERY	GASTAR EXPLORATION USA INC	1/8+	695	311	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17197	5-23-11.8	JJ	GLORIA J. SIMMONS HAROLD SIMMONS	GASTAR EXPLORATION USA INC	1/8+	695	313	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17199	5-23-11.8	JJ	PAMELA L DRAZIC AND JEFFREY DRAZIC	GASTAR EXPLORATION USA INC	1/8+	695	315	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17200	5-23-11.8	JJ	STEPHANIE L BATES	GASTAR EXPLORATION USA INC	1/8+	697	156	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17201	5-23-11.8	JJ	DENISE A GALE	GASTAR EXPLORATION USA INC	1/8+	697	395	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17202	5-23-11.8	JJ	JANE GALE	GASTAR EXPLORATION USA INC	1/8+	697	385	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17203	5-23-11.8	JJ	BARRY RAY MOORE	GASTAR EXPLORATION USA INC	1/8+	697	387	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17204	5-23-11.8	JJ	CLARENCE RICHARD ZESIGER & MARY ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697	391	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17206	5-23-11.8	JJ	M VIRGINIA & EDWARD C MARSH	GASTAR EXPLORATION USA INC	1/8+	697 399	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17207	5-23-11.8	JJ	DEBORAH K. KLIMASZEWSKI FRANK KLIMASZEWSKI, SR.	GASTAR EXPLORATION USA INC	1/8+	697 389	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17210	5-23-11.8	JJ	MARILYN NOEL	GASTAR EXPLORATION USA INC	1/8+	697 393	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17211	5-23-11.8	JJ	GARY WAYNE ZESIGER & VITORINA ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697 397	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17212	5-23-11.8	JJ	DARRELL NEWLAND LYDIA NEWLAND	GASTAR EXPLORATION USA INC	1/8+	697 158	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17213	5-23-11.8	JJ	CAROL DEEN GARDNER	GASTAR EXPLORATION USA INC	1/8+	697 154	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*19652	5-23-11.8	JJ	JACK R HAMMERS	TH EXPLORATION LLC	1/8+	944 108	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19903	5-23-11.8	JJ	PAUL F HAMMERS	TH EXPLORATION LLC	1/8+	948 236	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22025	5-23-11.8	JJ	MARK EUGENE YOHO & MARY YOHO	TH EXPLORATION LLC	1/8+	960 544	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22129	5-23-11.8	JJ	JANICE N HAUDENSCHILT	TH EXPLORATION LLC	1/8+	961 459	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22441	5-23-11.8	JJ	APRIL ROSE POSTLETHWAIT	TH EXPLORATION LLC	1/8+	963 646	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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10*22510	5-23-11.8	JJ	DONNA V YOHO	TH EXPLORATION LLC	1/8+	964	432	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*23372	5-23-11.8	JJ	DEWEY A MILICIA	TH EXPLORATION LLC	1/8+	1008	320	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*23373	5-23-11.8	JJ	DANA MILICIA HUMPHREYS	TH EXPLORATION LLC	1/8+	988	429	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*23446	5-23-11.8	JJ	NICOLETTA MILICIA BLOODWORTH	TH EXPLORATION LLC	1/8+	1008	316	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*27714	5-23-11.8	JJ	PIKEWOOD ENERGY CORPORATION AN OHIO CORPORATION	TH EXPLORATION LLC	1/8+	1060	572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		
10*14786	5-23-11.4	NN	TWILA O WHIPKEY	GASTAR EXPLORATION USA INC	1/8+	799	61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14792	5-23-11.4	NN	TIMOTHY YOHO	GASTAR EXPLORATION USA INC	1/8+	799	536	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14797	5-23-11.4	NN	ORVILLE YOUNG	GASTAR EXPLORATION USA INC	1/8+	800	598	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 806/1	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14822	5-23-11.4	NN	ONWARD E BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	876	463	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/144	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14823	5-23-11.4	NN	SARAH L BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	876	459	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/144	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14969	5-23-11.4	NN	REBECCA S WORD	GASTAR EXPLORATION USA INC	1/8+	872	219	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/119	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*14970	5-23-11.4	NN	GRACE EXLINE	GASTAR EXPLORATION USA INC	1/8+	872	623	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 35/119	Merger - Gastar Exploration USA Inc into Gastar Exploration, Inc: 21/41	Gastar Exploration Inc to TH Exploration II LLC: 36/9	Atinum Marcellus I LLC to TH Exploration II LLC: 43/563
10*17195	5-23-11.4	NN	PATRICIA HARTMAN	GASTAR EXPLORATION USA INC	1/8+	695	317	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256	

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10*17196	5-23-11.4	NN	DELBERT R. MONTGOMERY	GASTAR EXPLORATION USA INC	1/8+	695	311	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17197	5-23-11.4	NN	GLORIA J. SIMMONS HAROLD SIMMONS	GASTAR EXPLORATION USA INC	1/8+	695	313	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17199	5-23-11.4	NN	PAMELA L DRAZIC AND JEFFREY DRAZIC	GASTAR EXPLORATION USA INC	1/8+	695	315	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17200	5-23-11.4	NN	STEPHANIE L BATES	GASTAR EXPLORATION USA INC	1/8+	697	156	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17201	5-23-11.4	NN	DENISE A GALE	GASTAR EXPLORATION USA INC	1/8+	697	395	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17202	5-23-11.4	NN	JANE GALE	GASTAR EXPLORATION USA INC	1/8+	697	385	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17203	5-23-11.4	NN	BARRY RAY MOORE	GASTAR EXPLORATION USA INC	1/8+	697	387	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17204	5-23-11.4	NN	CLARENCE RICHARD ZESIGER & MARY ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697	391	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17206	5-23-11.4	NN	M VIRGINIA & EDWARD C MARSH	GASTAR EXPLORATION USA INC	1/8+	697	399	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17207	5-23-11.4	NN	DEBORAH K. KLIMASZEWSKI FRANK KLIMASZEWSKI, SR.	GASTAR EXPLORATION USA INC	1/8+	697	389	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17210	5-23-11.4	NN	MARILYN NOEL	GASTAR EXPLORATION USA INC	1/8+	697	393	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17211	5-23-11.4	NN	GARY WAYNE ZESIGER & VITORINA ZESIGER	GASTAR EXPLORATION USA INC	1/8+	697	397	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256

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10*17212	5-23-11.4	NN	DARRELL NEWLAND LYDIA NEWLAND	GASTAR EXPLORATION USA INC	1/8+	697 158	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17213	5-23-11.4	NN	CAROL DEEN GARDNER	GASTAR EXPLORATION USA INC	1/8+	697 154	N/A	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Statoil USA Onshore Properties Inc to TH Exploration LLC: 41/238	SWN Production Company LLC to TH Exploration LLC: 41/256
10*17822	5-23-11.4	NN	ANTOINE E GERAUD	TH EXPLORATION LLC	1/8+	943 560	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18114	5-23-11.4	NN	DARRELL NEWLAND	TH EXPLORATION LLC	1/8+	927 66	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18115	5-23-11.4	NN	DONALD R NEWLAND AND SUZANNE NEWLAND	TH EXPLORATION LLC	1/8+	927 73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18275	5-23-11.4	NN	BETTY JEAN NEELY	TH EXPLORATION LLC	1/8+	929 60	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18366	5-23-11.4	NN	MARY LOU WILSON AND STANLEY D WILSON	TH EXPLORATION LLC	1/8+	931 311	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18369	5-23-11.4	NN	MICHAEL WILSON AIF	TH EXPLORATION LLC	1/8+	931 303	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18370	5-23-11.4	NN	CRAIG ALAN YOHO AND DONNA M YOHO	TH EXPLORATION LLC	1/8+	931 300	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18379	5-23-11.4	NN	SAMUEL D YOHO	TH EXPLORATION LLC	1/8+	932 439	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18541	5-23-11.4	NN	DAVID N DEVICK TRUSTEE OF THE TONI JO MASON LIVING TRUST	TH EXPLORATION LLC	1/8+	933 649	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18818	5-23-11.4	NN	PATRICK P MCHENRY	TH EXPLORATION LLC	1/8+	937 624	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19486	5-23-11.4	NN	LUCILLE R MCHENRY	TH EXPLORATION LLC	1/8+	941 229	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19540	5-23-11.4	NN	BARBARA ANN MAYNARD	TH EXPLORATION LLC	1/8+	942 53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19543	5-23-11.4	NN	ERICA M MASON	TH EXPLORATION LLC	1/8+	942 61	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19640	5-23-11.4	NN	ROBERT I BONAR SR	TH EXPLORATION LLC	1/8+	944 120	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19641	5-23-11.4	NN	MARGARET F RICHMOND DEBORAH FEDOR POA	TH EXPLORATION LLC	1/8+	944 122	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19650	5-23-11.4	NN	BRADFORD D LOWERY & DEBORAH LOWERY	TH EXPLORATION LLC	1/8+	944 99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19652	5-23-11.4	NN	CLAUDIA LOWERY MALLOY	TH EXPLORATION LLC	1/8+	944 108	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19657	5-23-11.4	NN	JACK R HAMMERS	TH EXPLORATION LLC	1/8+	964 440	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19732	5-23-11.4	NN	JANET LEE SPARKS	TH EXPLORATION LLC	1/8+	944 469	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19858	5-23-11.4	NN	CARL M MCHENRY AND PAMELA MCHENRY	TH EXPLORATION LLC	1/8+	960 188	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19903	5-23-11.4	NN	JAMES MICHAEL YOHO	TH EXPLORATION LLC	1/8+	945 442	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19996	5-23-11.4	NN	PAUL F HAMMERS	TH EXPLORATION LLC	1/8+	948 236	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21073	5-23-11.4	NN	CHARLES D WOOD	TH EXPLORATION LLC	1/8+	947 589	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21074	5-23-11.4	NN	ARDITH R ROSE AND TOMMY E ROSE	TH EXPLORATION LLC	1/8+	951 608	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21174	5-23-11.4	NN	MALCOLM E WOOD AND JOAN J WOOD	TH EXPLORATION LLC	1/8+	951 610	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21419	5-23-11.4	NN	SHAWN M WOOD	TH EXPLORATION LLC	1/8+	952 190	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21431	5-23-11.4	NN	DAPHNE HUFFMAN AND CHARLES HUFFMAN	TH EXPLORATION LLC	1/8+	957 59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21436	5-23-11.4	NN	GARY WAYNE ZESIGER & VITORINA ZESIGER	TH EXPLORATION LLC	1/8+	957 57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21439	5-23-11.4	NN	CECILIA D NEWLAND	TH EXPLORATION LLC	1/8+	957 55	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21469	5-23-11.4	NN	M VIRGINIA & EDWARD C MARSH	TH EXPLORATION LLC	1/8+	957 53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21471	5-23-11.4	NN	KIMBERLY S DENNY AND JAMES E DENNY	TH EXPLORATION LLC	1/8+	957 244	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21620	5-23-11.4	NN	RICHARD ROSS WILSON	TH EXPLORATION LLC	1/8+	960 190	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			ROBERT CRAIG MONTGOMERY AND CYNTHIA R MONTGOMERY	TH EXPLORATION LLC	1/8+	959 496	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Lease ID	TMP	Tag	Grantor, Lessor, Etc.	Grantee, Lessee, Etc.	Royalty	Deed Book/Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
10*21621	5-23-11.4	NN	MARILYN NOEL	TH EXPLORATION LLC	1/8+	959 494	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21658	5-23-11.4	NN	CLARENCE RICHARD ZESIGER & MARY ZESIGER	TH EXPLORATION LLC	1/8+	959 490	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21659	5-23-11.4	NN	DEBORAH BLOUGH	TH EXPLORATION LLC	1/8+	958 392	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21660	5-23-11.4	NN	PAMELA L DRASIC AND JEFFREY DRASIC	TH EXPLORATION LLC	1/8+	958 390	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21830	5-23-11.4	NN	MARISSA MASON	TH EXPLORATION LLC	1/8+	960 200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21831	5-23-11.4	NN	MATTHEW MASON	TH EXPLORATION LLC	1/8+	966 122	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21834	5-23-11.4	NN	GEORGE DANIEL KRUGER	TH EXPLORATION LLC	1/8+	960 204	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21944	5-23-11.4	NN	JILL A BECK	TH EXPLORATION LLC	1/8+	960 101	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21947	5-23-11.4	NN	WALLACE LYNN WENDEL	TH EXPLORATION LLC	1/8+	965 59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22007	5-23-11.4	NN	DEBORAH K KLIMASZEWSI AND FRANK KLIMASZEWSKI	TH EXPLORATION LLC	1/8+	959 492	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22008	5-23-11.4	NN	COLIN R YOHO AND NORMA L YOHO	TH EXPLORATION LLC	1/8+	953 304	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22025	5-23-11.4	NN	MARK EUGENE YOHO & MARY YOHO	TH EXPLORATION LLC	1/8+	960 544	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22031	5-23-11.4	NN	PHILLIP YOHO AND PATRICIA YOHO	TH EXPLORATION LLC	1/8+	960 535	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22032	5-23-11.4	NN	JOANNE E RAY	TH EXPLORATION LLC	1/8+	960 537	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22106	5-23-11.4	NN	BARRY RAY MOORE	TH EXPLORATION LLC	1/8+	954 643	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22129	5-23-11.4	NN	JANICE N HAUDENSCHILT	TH EXPLORATION LLC	1/8+	961 459	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22137	5-23-11.4	NN	CONNIE L NEELY	TH EXPLORATION LLC	1/8+	961 466	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22285	5-23-11.4	NN	DONALD JAMES WILSON AND SANDY L WILSON	TH EXPLORATION LLC	1/8+	962 193	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22334	5-23-11.4	NN	JOHN BRYANT	TH EXPLORATION LLC	1/8+	962 540	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22434	5-23-11.4	NN	EDWIN NELSON WOOD	TH EXPLORATION LLC	1/8+	963 637	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22441	5-23-11.4	NN	APRIL ROSE POSTLETHWAIT	TH EXPLORATION LLC	1/8+	963 646	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22510	5-23-11.4	NN	DONNA V YOHO	TH EXPLORATION LLC	1/8+	964 432	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22561	5-23-11.4	NN	MARY ROSE YOHO	TH EXPLORATION LLC	1/8+	968 200	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22562	5-23-11.4	NN	HAROLD C SIMMONS	TH EXPLORATION LLC	1/8+	966 100	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22563	5-23-11.4	NN	KIMBERLY D STRAUCH	TH EXPLORATION LLC	1/8+	966 522	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22585	5-23-11.4	NN	CYNTHIA L CHICK	TH EXPLORATION LLC	1/8+	966 102	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*22718	5-23-11.4	NN	WILLIAM R RICHMOND AND CONNIE S RICHMOND	TH EXPLORATION LLC	1/8+	963 389	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23372	5-23-11.4	NN	DEWEY A MILICIA	TH EXPLORATION LLC	1/8+	1008 320	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23373	5-23-11.4	NN	DANA MILICIA HUMPHREYS	TH EXPLORATION LLC	1/8+	988 429	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23446	5-23-11.4	NN	NICOLETTA MILICIA BLOODWORTH	TH EXPLORATION LLC	1/8+	1008 316	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*23669	5-23-11.4	NN	LINDA K TOTTEN AND JERRY STEPHEN TOTTEN	TH EXPLORATION LLC	1/8+	1010 358	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24003	5-23-11.4	NN	CHARLES SIBURT AND PAULA SIBURT	TH EXPLORATION LLC	1/8+	1020 193	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24291	5-23-11.4	NN	MARY MARTHA BELLE DOYLE	TH EXPLORATION LLC	1/8+	1024 285	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24491	5-23-11.4	NN	DENISE A GALE	TH EXPLORATION LLC	1/8+	1008 324	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*24890	5-23-11.4	NN	DEBRA JANE GALE	TH EXPLORATION LLC	1/8+	1021 122	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25065	5-23-11.4	NN	COLBY G WOOD	TH EXPLORATION LLC	1/8+	1027 103	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25066	5-23-11.4	NN	RODGER A HENDERSON JR	TH EXPLORATION LLC	1/8+	1027 97	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*25627	5-23-11.4	NN	CHESTNUT HOLDINGS INC	TH EXPLORATION LLC	1/8+	1034 548	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27078	5-23-11.4	NN	CECILIA D NEWLAND	GASTAR EXPLORATION USA INC	1/8+	697 381	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC merged with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147

Lease ID	TMP	Tag	Grantor, Lessor, Etc.	Grantee, Lessee, Etc.	Royalty	Deed Book/Page		Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	
10*27085	5-23-11.4	NN	DAPHNE HUFFMAN AND CHARLES HUFFMAN	GASTAR EXPLORATION USA INC	1/8+	697	383	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chaned its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147
10*27086	5-23-11.4	NN	DONALD R NEWLAND AND SUZANNE NEWLAND	GASTAR EXPLORATION USA INC	1/8+	698	639	N/A	N/A	Gastar Exploration USA Inc to Atinum Marcellus I LLC: 23/353	Gastar Exploration USA Inc and Atinum Marcellus I LLC to Chesapeake Appalachia LLC and Statoil USA Onshore Properties Inc: 27/311	Chesapeake Appalachia LLC to SWN Production Company LLC: 33/110	Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC: 33/424	Merger - SWN Exchange Titleholder LLC mered with and into SWN Production Company LLC: CB 19/624	Name Chane - Statoil USA Onshore Properties Inc chaned its name to Equinor USA Onshore Properties Inc: 2/427	SWN Production Company LLC to TH Exploration LLC: 44/141	Equinor USA Onshore Properties Inc to TH Exploration LLC: 44/147
10*27714	5-23-11.4	NN	PIKEWOOD ENERGY CORPORATION AN OHIO CORPORATION	TH EXPLORATION LLC	1/8+	1060	572	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*27959	5-23-11.4	NN	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION LLC	1/8+	1063	594	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

RECEIVED
 Chesapeake Appalachia Gas
 AUG 19 2012
 STATE OF OHIO
 ENERGY DEVELOPMENT

MEMORANDUM OF PARTIAL ASSIGNMENT OF OIL AND GAS LEASES

STATE OF WEST VIRGINIA §
 §
COUNTY OF WETZEL §

This **MEMORANDUM OF PARTIAL ASSIGNMENT OF OIL AND GAS LEASES** (hereinafter, the "Memorandum") has been executed by and between **PERKINS OIL & GAS, INC.**, a West Virginia corporation, whose address is 2966 Northwest Turnpike, Pennsboro, West Virginia 26415 (hereinafter the "Assignor"), and **TH EXPLORATION, LLC**, a Texas limited liability company (hereinafter the "Assignee") whose address is 1320 South University Drive, Suite 500, Fort Worth, Texas 76107. Assignor and Assignee are sometimes referred to herein, collectively, as the "Parties" and, individually, as a "Party." This Memorandum is being executed for the purpose of providing notice to third parties of the execution of a certain Partial Assignment of Oil and Gas Leases (hereinafter, the "Assignment"), by and between the Parties.

WHEREAS, Assignor is the current owner and lessee of certain oil and gas leases located in Wetzel County, West Virginia, covering specific parcels and being more particularly described on **Exhibit "A"** attached hereto and made a part hereof (collectively, the "Oil and Gas Leases").

In the Assignment dated effective as of the 15th day of October, 2020 (hereinafter, the "Effective Date") and this Memorandum, Assignor does hereby **GRANT, BARGAIN, SELL, CONVEY, TRANSFER and ASSIGN** unto Assignee, all right, title and interest in and to the Oil and Gas Leases **INSOFAR AND ONLY INSOFAR** as each lease and parcel covers those formations lying between two hundred (200) feet above and two hundred (200) feet below the formations commonly known to as the Utica/Point Pleasant Shale formations, or the stratigraphic equivalent thereof (such depths and formations being referred to as the "Assigned Formations"). The Assigned Formations are included with and part of the Assigned Rights as defined in the Assignment.

EXCLUDING THEREFROM AND EXCEPTING AND RESERVING UNTO THE ASSIGNOR, ITS SUCCESSORS AND ASSIGNS, THE OVERRIDING ROYALTY INTEREST, as defined in the Assignment.

The Assignment contains various other terms, provisions and conditions, all of which are incorporated herein by reference, and made a part hereof in all respects as though the same were fully set forth herein. To the extent that there are any inconsistencies between this Memorandum and the Assignment, the terms and provisions of the Assignment shall prevail.

Assignor does hereby bind itself and its successors and assigns to warrant and forever defend all and singular title to the Assigned Formations unto Assignee and Assignee's successors and assigns, against every person whomsoever lawfully claiming or to claim the same or any part thereof, by through, or under Assignor, but not otherwise.

This Memorandum is made expressly subject to the terms and conditions of the Purchase and Sale Agreement dated June, 24, 2020, by and between the Parties, all of which are fully incorporated herein by reference (the "Purchase Agreement").

This Memorandum may be executed in multiple counterparts, each of which shall be deemed an original instrument, but all such counterparts together shall constitute but one agreement.

[TWO SIGNATURE PAGES TO FOLLOW]

CP

10/21/2022

DPS LAND SERVICES-AMANDA
6000 TOWN CENTER BLVD
STE 145
CANONSBURG PA 15317-5841

ASSIGNMENT OF OIL AND GAS LEASES

This ASSIGNMENT OF OIL AND GAS LEASES (hereinafter, "**Assignment**"), made the 7th day of October, 2021 (hereinafter, "**Effective Date**"), is by and between CNX GAS COMPANY LLC, a Virginia limited liability company, whose address is 1000 CONSOL Energy Drive, Suite 400, Canonsburg, Pennsylvania 15317 (hereinafter "**Assignor**") and TH EXPLORATION, LLC, a Texas limited liability company, whose address is 1320 S. University Drive, Suite 500, Fort Worth, Texas 76107 (hereinafter "**Assignee**"). All references in this Assignment to "**Party**" shall be deemed at all times to mean Assignor or Assignee and to "**Parties**" shall be deemed to mean both Assignor and Assignee. Capitalized terms used but not defined herein shall have the meaning given such terms in the Acreage Trade Agreement, by and between Assignor and Assignee dated May 26, 2021 (the "**Trade Agreement**").

WHEREAS, Assignor desires to assign all of Assignor's right, title and interest in and to the Assigned Rights (as defined below), as more particularly described in this Assignment.

NOW, THEREFORE, for and in consideration of TEN AND NO/100 DOLLARS (\$10.00) and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor does hereby **GRANT, BARGAIN, ASSIGN, TRANSFER, AND CONVEY** unto Assignee the following "**Assigned Rights**" expressly excluding the Retained Rights (as defined below):

- (a) All of Assignor's right, title, and interest in and to the oil and gas leases described on Exhibit A attached hereto and made a part hereof located in Wetzel County, West Virginia ("**Leases**") TO THE EXTENT AND ONLY TO THE EXTENT of the Utica/Point Pleasant Formation (as defined below) (the Leases limited to the Utica/Point Pleasant Formation are the "**Leasehold Rights**");
- (b) all rights expressly granted under the Leases including rights related to, or necessary in connection with, the ownership, exploration, drilling, development, or operation of the Leasehold Rights, including, without limitation, any pooling or unitization, any ability to shut-in a well(s), and the non-exclusive access rights to conduct seismic, geophysical, and other investigations, install pipelines, roadways, surface locations, water and/or power lines, impoundments, structures, tanks, gas gathering and/or metering facilities, and all other related facilities; and
- (c) to the extent the formations shallower than the Utica/Point Pleasant Formation are owned or controlled by Assignor, the non-exclusive right to penetrate and drill through, but not stimulate, perforate or produce, the formations shallower than the Utica/Point Pleasant Formation in order to drill and produce from the Utica/Point Pleasant Formation.

TO HAVE AND TO HOLD the Assigned Rights unto Assignee, its respective successors and assigns, subject to the terms of this Assignment.

"**Retained Rights**" means: (i) any and all existing oil and/or gas wells currently in, on, or pertaining to the Leases ("**Retained Wells**"), (ii) all depths and formations for each Lease described on Exhibit A other than the Utica/Point Pleasant Formation ("**Retained Formations**"), (iii) all rights relating to, or necessary in connection with, the ownership, exploration, drilling, development, or operation of the Retained Wells and Retained Formations, including, without limitation, any pooling or unitization, any ability to shut-in any Retained Wells, and the non-exclusive access rights to conduct seismic, geophysical, and other investigations, install pipelines, roadways, surface locations, water and/or power lines,

STATE OF WEST VIRGINIA §
COUNTIES OF MARSHALL AND WETZEL §

ASSIGNMENT AND CONVEYANCE

THIS ASSIGNMENT AND CONVEYANCE (the "Assignment") is made and entered into this 30th day of April, 2019 (the "Effective Date"), by and between Atinum Marcellus I, LLC (hereinafter "Assignor") and TH Exploration II, LLC, (hereinafter "Assignee") and, together with Assignor, the "Parties"). Capitalized terms used but not defined herein shall have the meanings commonly given to such terms in the industry.

WITNESSETH:

WHEREAS, Assignor desires to assign, set over, and transfer to Assignee all of Assignor's right, title, and interest in and to one hundred feet (100 ft.) above the formation commonly referred to as the Marcellus Shale formation down to one hundred feet (100 ft.) below the same, in those certain Oil and Gas Leases, or the portions of those certain Oil and Gas Leases, situated in Marshall and Wetzel Counties, West Virginia, as described in Exhibit "A-1" and limited and described in Exhibit "A-2", attached hereto and made a part hereof. It being the Parties intention to assign all of Assignor's interest in each unit as described in Exhibit "A-1", including any changes, revisions, or amendments to the same, now or at any time in the future. (hereinafter the "Leases"); and

WHEREAS, Assignor desires to assign, set over, and transfer to Assignee all of Assignor's right, title, and interest in and to the Leases as described below.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, and subject to the limited warranties, restrictions and conditions hereinafter mentioned, the parties hereto, intending to be legally bound, do covenant and agree as follows:

1. Assignment. Assignor does hereby grant, bargain, sell, convey, deliver, assign, set over and transfer, as of the Effective Date, to Assignee, its respective successors and assigns, forever, all of Assignor's right, title, and interest in and to one hundred feet (100 ft.) above the formation commonly referred to as the Marcellus Shale formation down to one hundred feet (100 ft.) below the same, in the Leases, and the lands covered thereby, together with all rights incident thereto and appurtenances thereon. It being the Parties intention to assign all of Assignor's interest in each unit as described in Exhibit "A-1", including any changes, revisions, or amendments to the same, now or at any time in the future.

TO HAVE AND TO HOLD such right, title and interest in and to the Leases unto Assignee or its designee, and their respective successors and assigns, forever, in accordance with the provisions of this Assignment.

2. Special Warranty. Assignor represents and warrants that Assignor has not conveyed or otherwise encumbered (other than permits or easements, rights of way, surface leases and other rights with respect to surface operations that do not materially interfere with, impair or prohibit the operation of the affected Leases, hereinafter "Permitted Encumbrances") its interest in the Leases since the time that Assignor obtained its interests in the Leases. Assignor does covenant, promise and agree, to and with the

ASSIGNMENT AND CONVEYANCE

This Assignment and Conveyance (this "*Assignment*") is from SWN PRODUCTION COMPANY, LLC, a Texas limited liability company ("*Assignor*"), to TH Exploration, LLC, a Texas limited liability company ("*Assignee*"), and is executed on December 18, 2017 (the "*Effective Date*"). Assignor and Assignee may be referred to herein collectively as the "*Parties*," or individually as a "*Party*." Capitalized terms used herein but not otherwise defined herein (including in Section 3.7) shall have the meanings given such terms in that certain Acreage Trade Agreement between the Assignor and the Assignee dated August 24, 2017 (the "*Acreage Trade Agreement*").

**ARTICLE 1
ASSIGNMENT OF ASSETS**

Section 1.1 Assignment. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby GRANTS, BARGAINS, ASSIGNS, CONVEYS AND TRANSFERS unto Assignee all of Assignor's right, title and interest in and to (i) the oil and gas leases described in more detail on Exhibit A attached hereto (the "*Leases*") INsofar AND ONLY INsofar as they cover those lands described on Exhibit A (the "*Leasehold Rights*") and (ii) any surface use agreements that relate to such Leasehold Rights (collectively with the Leasehold Rights, the "*Conveyed Assets*").

TO HAVE AND TO HOLD the Conveyed Assets, together with all and singular the rights, privileges, contracts and appurtenances, in any way appertaining or belonging thereto, unto Assignee, its successors and assigns, forever, subject, to the terms and conditions of this Assignment.

Section 1.2 Assignment Subject to Acreage Trade Agreement. This Assignment is made in accordance with and is subject to the terms, covenants and conditions contained in that certain Acreage Trade Agreement. In the event of a conflict between the provisions of the Acreage Trade Agreement and this Assignment, the provisions of the Acreage Trade Agreement shall control. The execution and delivery of this Assignment by Assignor, and the execution and acceptance of this Assignment by Assignee, shall not operate to release or impair any surviving rights or obligations of either Party with respect to the other under the Acreage Trade Agreement.

**ARTICLE 2
SPECIAL WARRANTY OF TITLE AND DISCLAIMERS**

Section 2.1 Special Warranty of Title. Assignor hereby agrees to warrant and defend Defensible Title to the Leases unto Assignee, its successors and assigns, against every Person whomsoever lawfully claiming or to claim the same or any part thereof by, through or under Assignor or any of its Affiliates, but not otherwise.

Section 2.2 Disclaimers of Warranties and Representations.

(a) EXCEPT AS EXPRESSLY REPRESENTED OTHERWISE IN SECTION VI OF THE ACREAGE TRADE AGREEMENT OR THIS ASSIGNMENT, ASSIGNOR MAKES NO, AND HEREBY EXPRESSLY DISCLAIMS, ANY REPRESENTATION OR

ASSIGNMENT AND CONVEYANCE

This Assignment and Conveyance (this "*Assignment*") is from EQUINOR USA ONSHORE PROPERTIES, INC., a Delaware corporation ("*Assignor*"), to TH Exploration, LLC, a Texas limited liability company ("*Assignee*"), and is executed on June 18, 2019 (the "*Effective Date*"). Assignor and Assignee may be referred to herein collectively as the "*Parties*," or individually as a "*Party*." Capitalized terms used herein but not otherwise defined herein (including in Section 3.7) shall have the meanings given such terms in that certain Acreage Trade Agreement between the Assignor and the Assignee dated December 1, 2018 (the "*Acreage Trade Agreement*").

ARTICLE 1 ASSIGNMENT OF ASSETS

Section 1.1 Assignment. For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby GRANTS, BARGAINS, ASSIGNS, CONVEYS AND TRANSFERS unto Assignee all of Assignor's right, title and interest in and to (i) the oil and gas leases described in more detail on Exhibit A attached hereto (the "*Leases*") INSOFAR AND ONLY INSOFAR as they cover those lands described on Exhibit A (the "*Leasehold Rights*") and (ii) any surface use agreements that relate to such Leasehold Rights (collectively with the Leasehold Rights, the "*Conveyed Assets*").

TO HAVE AND TO HOLD the Conveyed Assets, together with all and singular the rights, privileges, contracts and appurtenances, in any way appertaining or belonging thereto, unto Assignee, its successors and assigns, forever, subject, to the terms and conditions of this Assignment.

Section 1.2 Assignment Subject to Acreage Trade Agreement. This Assignment is made in accordance with and is subject to the terms, covenants and conditions contained in that certain Acreage Trade Agreement. In the event of a conflict between the provisions of the Acreage Trade Agreement and this Assignment, the provisions of the Acreage Trade Agreement shall control. The execution and delivery of this Assignment by Assignor, and the execution and acceptance of this Assignment by Assignee, shall not operate to release or impair any surviving rights or obligations of either Party with respect to the other under the Acreage Trade Agreement.

ARTICLE 2 SPECIAL WARRANTY OF TITLE AND DISCLAIMERS

Section 2.1 Special Warranty of Title. Assignor hereby agrees to warrant and defend Defensible Title to the Leases unto Assignee, its successors and assigns, against every Person whomsoever lawfully claiming or to claim the same or any part thereof by, through or under Assignor or any of its Affiliates, but not otherwise.

Section 2.2 Disclaimers of Warranties and Representations.

(a) EXCEPT AS EXPRESSLY REPRESENTED OTHERWISE IN SECTION VI OF THE ACREAGE TRADE AGREEMENT OR THIS ASSIGNMENT, ASSIGNOR MAKES NO, AND HEREBY EXPRESSLY DISCLAIMS, ANY REPRESENTATION OR WARRANTY, EXPRESS, IMPLIED OR STATUTORY, INCLUDING AS TO (I) TITLE TO THE LEASEHOLD RIGHTS, (II) THE CONTENTS, CHARACTER OR NATURE OF ANY DESCRIPTIVE MEMORANDUM, OR ANY REPORT OF ANY OF ITS PETROLEUM ENGINEERING CONSULTANTS, OR ANY GEOLOGICAL OR SEISMIC DATA OR INTERPRETATION, RELATING TO THE LEASEHOLD RIGHTS, (III) THE QUANTITY, QUALITY OR RECOVERABILITY OF PETROLEUM SUBSTANCES IN OR FROM THE LEASEHOLD RIGHTS, (IV) THE EXISTENCE OF ANY PROSPECT, OR ANY RECOMPLETION, INFILL OR STEP-OUT DRILLING OPPORTUNITIES, (V) ANY ESTIMATES OF THE VALUE OF THE LEASEHOLD RIGHTS, (VI) THE PRODUCTION OF PETROLEUM SUBSTANCES FROM THE LEASEHOLD RIGHTS, OR ANY PRODUCTION OR DECLINE RATES, (VII) THE MAINTENANCE, REPAIR, CONDITION, QUALITY, SUITABILITY, DESIGN OR MARKETABILITY OF THE LEASEHOLD RIGHTS, (VIII) INFRINGEMENT OF ANY INTELLECTUAL PROPERTY RIGHT, AND (IX) ANY OTHER MATERIALS OR INFORMATION THAT MAY HAVE BEEN MADE AVAILABLE OR COMMUNICATED TO ASSIGNEE OR ITS AFFILIATES, OR ITS OR THEIR RESPECTIVE