

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

Austin Caperton, Cabinet Secretary www.dep.wv.gov

Monday, September 21, 2020 WELL WORK PERMIT Horizontal 6A / New Drill

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

Re: Permit approval for MCMASTERS S-16HU 47-051-02337-00-00

This well work permit is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to any additional specific conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas Inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days of completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

Per 35 CSR 4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0450.

> James A. Martin Chief

Operator's Well Number: Farm Name: ROBERT L. SHIELDS, ET AL

MCMASTERS S-16HU

U.S. WELL NUMBER: 47-051-02337-00-00

Horizontal 6A New Drill Date Issued: 9/21/2020



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

August 5, 2020

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

RE: Application for Deep Well Permit - API #47-051-02337

COMPANY: Tug Hill Operating, LLC

FARM: Robert L. Shields, et al McMasters S-16HU

COUNTY: Marshall DISTRICT: Franklin QUAD: Powhatan Point

The deep well review of the application for the above company is <u>Approved to drill to Trenton for Point Pleasant completion.</u>

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? No.
- 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

**Corley N-9HU 47-051-01983; Corley N-10HU 47-051-01998; Burch Ridge S-7HU 47-051-02194; Burch Ridge S-6HU 47-051-02193; Blake N-10HU 47-051-02204; Blake N-11HU 47-051-02205; Blake N-9HU 47-051-02203; Blake U-7H 47-051-01766; McMasters N-12HU 47-051-02316; McMasters N-13HU 47-051-02332; McMasters N-14HU 47-051-02333; McMasters N-15HU 47-051-02334; McMasters S-18HU 47-051-02339; McMasters S-19HU 47-051-02309; McMasters S-19HU 47-051-02309; McMasters S-19HU 47-051-02309; McMasters S-19HU 47-051-02309; McMasters S-12HU 47-051-02272; Hillrock S-14HU 47-051-02262; Armstrong 1N-14HU 47-051-02262; Armstrong 1N-14HU 47-051-02258; Armstrong 1N-14HU 47-051-02257; Simms U-5H 47-051-01731

API Number: 51-02337 Deep/HGA

PERMIT CONDITIONS

West Virginia Code § 22-6A-8(d) allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

CONDITIONS

- 1. This proposed activity may require permit coverage from the United States Army Corps of Engineers (USACE). Through this permit, you are hereby being advised to consult with USACE regarding this proposed activity.
- 2. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6A-5a (12), which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than one hundred (100) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
- 3. When compacting fills, each lift before compaction shall not be more than 12 inches in height, and the moisture content of the fill material shall be within limits as determined by the Standard Proctor Density test of the actual soils used in specific engineered fill, ASTM D698, Standard Test Method for Laboratory Compaction Characteristics of Soil Using Standard Effort, to achieve 95 % compaction of the optimum density. Each lift shall be tested for compaction, with a minimum of two tests per lift per acre of fill. All test results shall be maintained on site and available for review.
- 4. Operator shall install signage per § 22-6A-8g (6) (B) at all source water locations included in their approved water management plan within 24 hours of water management plan activation.
- 5. Oil and gas water supply wells will be registered with the Office of Oil and Gas and all such wells will be constructed and plugged in accordance with the standards of the Bureau for Public Health set forth in its Legislative rule entitled Water Well Regulations, 64 C.S.R. 19. Operator is to contact the Bureau of Public Health regarding permit requirements. In lieu of plugging, the operator may transfer the well to the surface owner upon agreement of the parties. All drinking water wells within fifteen hundred feet of the water supply well shall be flow tested by the operator upon request of the drinking well owner prior to operating the water supply well.
- 6. Pursuant to the requirements pertaining to the sampling of domestic water supply wells/springs the operator shall, no later than thirty (30) days after receipt of analytical data provide a written copy to the Chief and any of the users who may have requested such analyses.
- 7. 24 hours prior to the initiation of the completion process the operator shall notify the Chief or his designee.
- 8. During the completion process the operator shall monitor annular pressures and report any anomaly noticed to the chief or his designee immediately.
- 9. If any explosion or other accident causing loss of life or serious personal injury occurs in or about a well or well work on a well, the well operator or its contractor shall give notice, stating the particulars of the explosion or accident, to the oil and gas inspector and the Chief, within 24 hours of said accident.
- 10. During the casing and cementing process, in the event cement does not return to the surface, the oil and gas inspector shall be notified within 24 hours.

API Number:	

PERMIT CONDITIONS

11. The operator shall provide to the Office of Oil and Gas the dates of each of the following within 30 days of their occurrence: completion of construction of the well pad, commencement of drilling, cessation of drilling, completion of any other permitted well work, and completion of the well. Such notice shall be provided by sending an email to DEPOOGNotify@wv.gov.

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

1) Well Operato	or: Tug Hill Ope	erating, LLC	494510851	Marshall	Franklin	Powhatan Point 7
			Operator ID	County	District	Quadrangle
2) Operator's W	/ell Number: Mc	Masters S-16H	IU Well P	ad Name: Shie	elds	
3) Farm Name/S	Surface Owner:	Robert L. Shield	ls, et al Public Ro	oad Access: Bu	ırch Ridge I	Road - CR 29
4) Elevation, cu	rrent ground:	1206' I	Elevation, proposed	d post-construc	tion: 1206'	-
5) Well Type	(a) Gas X	Oil	Un	derground Stor	age	
	Other Sha	Hani	Doop	v		
	Accession to the second	llow izontal ×	Deep	X	۸	
6) Existing Pad	: Yes or No Yes		-		06/8	, /2020
7) Proposed Tar	get Formation(s)	, Depth(s), Anti	cipated Thickness			
Point Pleasant is the targe	it formation at a depth of 11,111'-	11,257' - thickness of 146' and a	inticipated pressure of approx 9500 p	98i.		-
8) Proposed Tot	tal Vertical Deptl	11,407'				
9) Formation at	Total Vertical D	epth: Trenton	, plug back to Re	edsville		
10) Proposed To	otal Measured De	epth: 22,277'				
11) Proposed H	orizontal Leg Le	ngth: 10,418.	79'			
12) Approximat	te Fresh Water St	rata Depths:	70' ; 802'			
13) Method to I	Determine Fresh	Water Depths:	Offset well reports or	noticeable flow at t	the flowline or w	hen need to start soaping
14) Approximat	te Saltwater Dept	hs: 2,167'				
15) Approximat	te Coal Seam De	oths: Sewickle	y Coal - 701' ; Pit	tsburgh Coal	- 796'	
16) Approximat	te Depth to Possi	ble Void (coal r	nine, karst, other):	none		
	sed well location ng or adjacent to			N	10 X	Office of Oil and Gas
(a) If Yes, pro	vide Mine Info:	Name:				WV Dens
		Depth:				WV Department of Environmental Protection
		Seam:				
		Owner:				

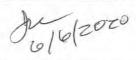
WW-6B	
(04/15)	

API NO. 47		
OPERATOR WELL	NO.	McMasters S-
Well Pad Name:	Shield	s

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	20"	NEW	J55	106.5#	900'	900' 🗸	1,463FT^3(CTS)
Coal	13 3/8"	NEW	J55	54.5#	2600'	2600'	1,842FT^3(CTS)
Intermediate	9 5/8"	NEW	HPP110	47#	10,220'	10,220'	3,330FT^3(CTS)
Production	5 1/2"	NEW	P110	23#	22,277'	22,277'	5,282'FT^3(CTS)
Tubing	2 7/8"	NEW	P110	6.5#		10,945'	1 -
Liners							



ТҮРЕ	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	1.99
Production	5 1/2"	8 1/2"	.415	16,510	10,864	SEE #24	1.18
Tubing	2 7/8"			11,385	11,624		
Liners				K	1)		

PACKERS

Kind:	N/A	Office SECVED
Sizes:	N/A	Office of Oil and Ga
Depths Set:	N/A	WV Department of Environmental Prefection

WW-6B (10/14) APINO, 47-054 7-0 5 1 0 2 3 3 7

OPERATOR WELL NO, McMasters S-16HU

Well Pad Name: Shields

6/6/2020

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 (10,445'). Drill curve and lateral per proposed well plan, run and cement production casing. Perform CBL 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 26,042,500 lb proppant and 402,636 bbl of water. Max rate = 80 bpm: $\max psi = 12.000#$.

- 21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 17.76 acres
- 22) Area to be disturbed for well pad only, less access road (acres): 5.84 acres
- 23) Describe centralizer placement for each casing string:

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

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

*See Attachment

25) Proposed borehole conditioning procedures:

Will circulate a minimum of 3 hours at TD, short trip to curve, circulate bottoms up, check for the of Oil and Gas

Environmental Protection

*Note: Attach additional sheets as needed.



20, CH 60
739, MP \ 759, AAD

13 3/8" Csg @ 2,500" MD / 2,596" TVD

95/8" Cag @ 30,220" MD / 9,998" To

OP @ 10,445' ft MC

WELL NAME: McMasters S-16HU
STATE WV COUNTY: Marshall
DSTRICT. Franklin
DF Elec: 1,206' GL Elec: 1,206'
TD: 22,277'
TALESTRICT. 33,76030273

-80.78755753 39.732127

-80.775169

TH Longitude:

BH Latitude:

BH Longitude

*	1
Formation	Depth TVD
Deepest Fresh Water	807
Sewickley Coal	701
Pirtshurgh Coul	795
Big Lime	1,395
Beren	2,433
Tully	6,390"
MarceRus	5,423
Onor-dage	5,473
Salina	7,360
Lockport	8,353
Utica	10,856
Point Pleasant	11,111
landing Depth	11,161
Trenton	11,257
Pilot Noie TO	11,407

			CASING SUMI	MARY			
Туре	Hote Size (in)	Csg Size (in)	Depth (MD)	Depth (TVD)	Weight (lb/ft)	Grade	Tap of Cemen
Conductor	36	30	120"	120'	BW	BW	Surface
Surface	26	20	900'	900'	106.5	155	Surface
Intermediate 1	17 1/2	13 3/B	2,600	2,596	54.5	155	Surface
Intermediate 2	12 1/4	9 5/8	10,220	9,998'	47	HP110	Surface
Production	8 1/2	51/2	22,277	11,343	23	P110	Surface

CEMENT SUMMARY				DRILLING DETAILS		
	Sacks	Class	Density	Fluid Type	Centralizer Notes	
Conductor	338	Α.	15.6	Air	Noae	
Surface	1,578	A	35.6	Air	3 Centralizers at equal distance	
intermediate 1	1,995	A	15	Air	1 Centralizer every other jt	
Intermediate 2	2,825	Α.	14.5	Air	1 Centralizer every other jt	
Production	4,670	Α.	15	Air/SOBM	1 every other joint in lateral; 1 per joint in curve; 1 every other it to st	

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Environmental Protection

Landing Foint @ 11,857 MD / 11,151 ThD

Landing Foint @ 11,8

Pilot Hole

PH TD (9

11,407

Lateral TD @

32,277' # MD

11,343 A TVD



Tug Hill Operating, LLC Casing and Cement Program

McMasters S-16HU

	Casing						
	String	Grade	Bit Size	Depth (Measured)	Cement Fill Up		
Conductor	30"	BW	36"	120'	CTS		
Surface	20"	J55	26"	900'	CTS		
Intermediate 1	13 3/8"	J55	17 1/2"	2,600	CTS		
Intermediate 2	9 5/8"	HP110	12 1/4"	10,220'	CTS		
Production	5 1/2"	P110	8 1/2"	22,277	CTS		

Cement

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 15.6 ppg, Y=1.99
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 BA-3 + .75 gals/100sk FP-131 — Production Cement mixed at 15 2ppg. Y = 1.18

Office of Oil and Gas

JUL 17 2020

WW Department of Environmental Protection

Area of Review

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

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

Data Sources Reviewed:

- 1. IHS 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 Devin Ducoeur 724-705-0444, dducoeur@dpslandservices.com DPS GIS (06/02/2020) to have him make maps of the wellbores with his information. DPS utilizes WVGES maps for their mapping seems it as the best publicly available. See attached map he provided.

Request maps for:

- 1. Wellbore with IHS 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
- Office of Oil and Gas Phil indicated that other Operators are providing a screenshot of the WVGES map with their 1 planned well and using that for permits

Permit well - McMasters S-16HU

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 is this well "known or reasonably expected to penetrate a depth that could be within the Producing range of Fracture propagation"? 1000' is max Perforated zones not limit I would assign to wells that might be API Number Operator Name Total Depth Fms perforated within in range of fracture propagation Comments Uknown but unlikley. The well likley represents an old shallow well that is too shallow to be effected by fracturing in the planned Point 4705170363 Unknown McIntire, J.T. Unknown State records are incomplete. Pleasant well. Proper casing and cement should further prevent migration of fluids from new wellbore to existing wellbore. No, the well is not deep enough to be within the expected fracture propagation from a Point 6509' TVD Tug Hill Operating, Producing Marcellus horizontal 4705101533 Marcellus Unknown Pleasant stimulation. Proper casing and cement 9961' MD well. should further prevent migration of fluids from new wellbore to existing wellbore. No, the well is not deep enough to be within the expected fracture propagation from a Point Pleasant stimulation. Proper casing and cement Tug Hill Operating, 6514' TVD, Producing Marcellus horizontal 4705101534 Marcellus Unknown LLC 9890' MD well. should further prevent migration of fluids from new wellbore to existing wellbore. No, the well is not deep enough to be within the expected fracture propagation from a Point Tug Hill Operating 6519' TVD Producing Marcellus horizontal 4705101535 Marcellu Unknown Pleasant stimulation. Proper casing and cement LLC 9890' MD well should further prevent migration of fluids from new wellbore to existing wellbore. No, the well is not deep enough to be within the expected fracture propagation from a Point Tug Hill Operating, 6526' TVD, Producing Marcellus horizontal 4705101536 Pleasant stimulation. Proper casing and cement should further prevent migration of fluids from Marcellus Unknown LLC 10185 MD new wellbore to existing wellbore. No, the well is not deep enough to be within the expected fracture propagation from a Point Pleasant stimulation. Proper casing and cement should further prevent migration of fluids from Tug Hill Operating 6527' TVD. 4705101537 Marcellus Unknown 10560' MD LLC new wellbore to existing wellbore. No, the well is not deep enough to be within Pleasant stimulation. Proper casing and cement should further prevent migration of fluids from the expected fracture propagation from a Point Tug Hill Operating, 5494" TVD, 4705101538 Marcellus Unknown 9541' MD should further prevent migration of fluids from new wellbore to existing wellbore. No, the well is not deep enough to be within the expected fracture propagation from a Point the expected fracture propagation from a Point Pleasant stimulation. Proper casing and cement Well. Tug Hill Operating, 5488' TVD 4705101539 Marcellus Unknown 11480' MD LLC should further prevent migration of fluids from new wellbore to existing wellbore. No, the well is not deep enough to be within the expected fracture propagation from a Point 6490' TVD, Producing Marcellus horizontal Tug Hill Operating, 4705101540 Unknown Pleasant stimulation. Proper casing and cement Marcellus LLC 12101' MD well. should further prevent migration of fluids from new wellbore to existing wellbore. No, the well is not deep enough to be within the expected fracture propagation from a Point Tug Hill Operating, 6485' TVD, Producing Marcellus horizontal Pleasant stimulation. Proper casing and cement 4705101541 Marcellus well. LLC 9612' MD should further prevent migration of fluids from new wellbore to existing wellbore No, the well is not deep enough to be within the expected fracture propagation from a Point Pleasant stimulation. Proper casing and cement Producing Marcellus horizontal Tug Hill Operating, 6487' TVD, 4705101542 Unknown Marcellus LLC 11281' MD well.

should further prevent migration of fluids from new wellbore to existing wellbore. Office of Oil and Gas

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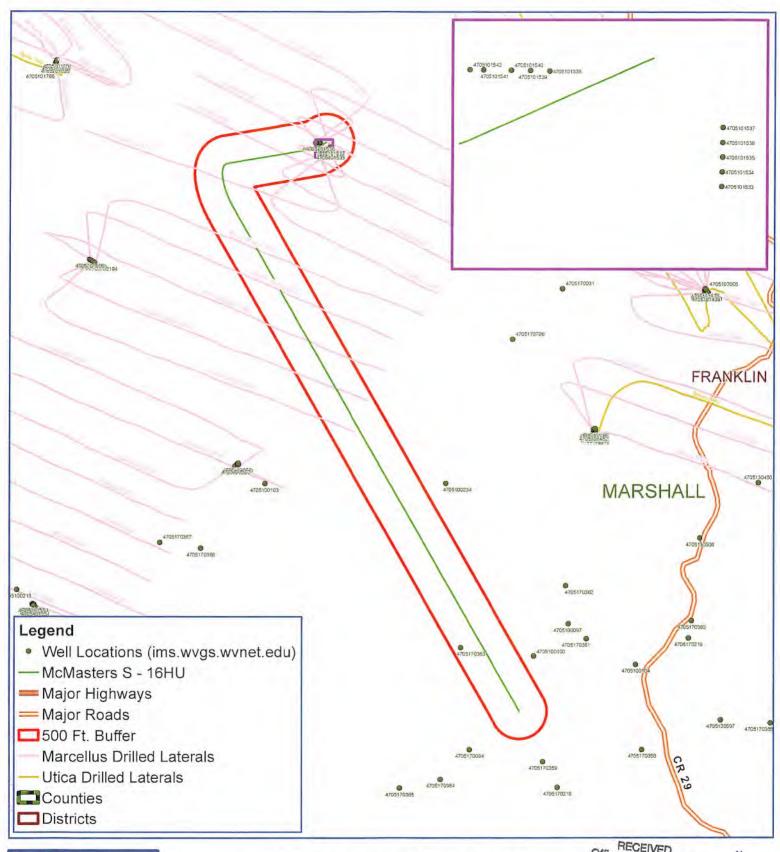
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Office of Oil and Gas

JUL 1 7 2020





McMasters S - 16HU Franklin District Marshall County, WV

0 625 1,250 2,500 Feet

Notes:
All locations are approximate and are for visualization purposes only.





Offset Operators within 500' McMasters S - 16HU

WELL	COUNTY	DISTRICT	PARCEL	OWNER	ADDRESS
McMasters				ATINUM MARCELLUS I	1 Riverway Suite 710
S-16HU	Marshall	Franklin	5-23-1	LLC	Houston, TX 77056
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-1	TH EXPLORATION II, LLC *	Fort Worth,TX 76107
McMasters				ATINUM MARCELLUS I	1 Riverway Suite 710
S-16HU	Marshall	Franklin	5-18-2	LLC	Houston, TX 77056
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-18-2	TH EXPLORATION II, LLC *	Fort Worth,TX 76107
McMasters				ATINUM MARCELLUS I	1 Riverway Suite 710
S-16HU	Marshall	Franklin	5-23-2	LLC	Houston, TX 77056
					1320 S. University Drive
McMasters				1	Suite 500
S-16HU	Marshall	Franklin	5-23-2	TH EXPLORATION II, LLC *	Fort Worth,TX 76107
McMasters				ATINUM MARCELLUS I	1 Riverway Suite 710
S-16HU	Marshall	Franklin	5-23-4	LLC	Houston, TX 77056
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-4	TH EXPLORATION II, LLC *	Fort Worth,TX 76107
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-4	TH EXPLORATION, LLC	Fort Worth,TX 76107
McMasters				ATINUM MARCELLUS I	1 Riverway Suite 710
S-16HU	Marshall	Franklin	5-23-5	LLC	Houston, TX 77056
					1320 S. University Drive
McMasters				·	Suite 500
S-16HU	Marshall	Franklin	5-23-5	TH EXPLORATION II, LLC *	Fort Worth,TX 76107
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-5	TH EXPLORATION, LLC	Fort Worth,TX 76107
McMasters				ATINUM MARCELLUS I	1 Riverway Suite 710
S-16HU	Marshall	Franklin	5-26-11	LLC	Houston, TX 77056
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-26-11	TH EXPLORATION II, LLC *	1320 S. University Drive
					Suite 500
McMasters					
S-16HU	Marshall	Franklin	5-26-11	TH EXPLORATION, LLC	Fort Worth,TX 76107
McMasters	5.4 t H	F	F 22 42	ATINUM MARCELLUS I	1 Riverway Suite 710
S-16HU	Marshall	Franklin	5-23-12	LLC	Houston, TX 77056 1320 S. University Drive
Mandastors					Suite 500
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S-16HU	Marshall	Franklin	5-23-12	IN EAPLOKATION II, LLC *	1320 S. University Drive
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S-16HU McMasters	ividi Si idil	FLAHKIIII	7-52-15	ATINUM MARCELLUS I	1 Riverway Suite 710 Office of Oil and Gas
S-16HU	Marshall	Franklin	5-23-13	LLC	Houston, TX 77056
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McMasters					Houston, TX 77056 1320 S. University Drive WV Department of Environmental Protection
S-16HU	Marshall	Franklin	5-23-13	TH EXPLORATION, LLC	Fort Worth,TX 76107
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S-16HU Marshall Franklin 5-19-17 LLC Houston, TX 77056
1320 S. University Drive
McMasters Suite 500
S-16HU Marshall Franklin 5-19-17 TH EXPLORATION II, LLC * Fort Worth,TX 76107
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1320 S. University Drive
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McMasters ATINUM MARCELLUS I 1 Riverway Suite 710
S-16HU Marshall Franklin 5-23-18 LLC Houston, TX 77056
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McMasters ATINUM MARCELLUS I 1 Riverway Suite 710
S-16HU Marshall Franklin 5-18-24 LLC Houston, TX 77056
1320 S. University Drive
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S-16HU Marshall Franklin 5-19-24 LLC Houston, TX 77056 1320 S. University Drive L 1 7 2020
McMasters Suite 500
S-16HU Marshall Franklin 5-19-24 TH EXPLORATION II, LLC * Fort Worth,TX 76 <u>107WV Denatros</u>
Environ
S-16HU Marshall Franklin 5-19-24 TH EXPLORATION II, LLC * Fort Worth,TX 76107W Department of Protection S-16HU Marshall Franklin 5-19-16.1 LLC Houston, TX 77056

Offset Operators within 500' McMasters S - 16HU

				<u> </u>	1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-19-16.1	TH EXPLORATION, LLC	Fort Worth,TX 76107
McMasters				ATINUM MARCELLUS I	1 Riverway Suite 710
S-16HU	Marshall	Franklin	5-23-16.1	LLC	Houston, TX 77056
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-16.1	TH EXPLORATION II, LLC *	Fort Worth,TX 76107
					1320 S. University Drive
McMasters				·	Suite 500
S-16HU	Marshall	Franklin	5-23-16.1	TH EXPLORATION, LLC	Fort Worth,TX 76107
McMasters				ATINUM MARCELLUS I	1 Riverway Suite 710
S-16HU	Marshali	Franklin	5-23-2.2	LLC	Houston, TX 77056
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-2.2	TH EXPLORATION II, LLC *	Fort Worth,TX 76107
McMasters				ATINUM MARCELLUS I	1 Riverway Suite 710
S-16HU	Marshall	Franklin	5-23-4.1	LLC	Houston, TX 77056
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-4.1	TH EXPLORATION II, LLC *	Fort Worth,TX 76107
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-4.1	TH EXPLORATION, LLC	Fort Worth,TX 76107
McMasters				ATINUM MARCELLUS I	1 Riverway Suite 710
S-16HU	Marshall	Franklin	5-23-4.2	LLC	Houston, TX 77056
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-4.2	TH EXPLORATION II, LLC *	Fort Worth,TX 76107
·					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-4.2	TH EXPLORATION, LLC	Fort Worth,TX 76107
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-9.1	TH EXPLORATION, LLC	Fort Worth,TX 76107
					1320 S. University Drive
McMasters	ļ				Suite 500
S-16HU	Marshall	Franklin	5-23-9.2	TH EXPLORATION, LLC	Fort Worth,TX 76107
					1320 S. University Drive
McMasters					Suite 500
S-16HU	Marshall	Franklin	5-23-9.4	TH EXPLORATION, LLC	Fort Worth,TX 76107

RECEIVED
Office of Oil and Gas

JUL 17 2020



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

February 28, 2020

TH Exploration, LLC 1320 S. University Dr Ste 500 Ft Worth TX 76107

9489 0070 0027 6201 4282 50

RE:

Intentional Deviation of New Deep Well

Tug Hill Operating, LLC - McMasters S-16HU

Dear Sir or Ma'am:

Please be advised that Tug Hill Operating, LLC, has applied to the Oil and Gas Conservation Commission for approval to intentionally deviate a new deep well. The Code of State Regulations Title 39 Section 1.4.10 requires that the Commission notify the offset operators of the applicants' intent to deviate the proposed well. You are receiving this notice because you are listed as an offset operator (unleased mineral owner is also an "offset operator") to the proposed well. Any offset operator has ten days to object to the Commissions' granting approval to the proposed deviation. If you file an objection, the Commission will schedule a hearing and you will be notified of the date and time to attend.

A copy of the location plat is enclosed for your review. If no objection(s) are received within ten 10 days from the date of delivery, the application will be processed in the normal manner.

If you have any questions please call me at (304) 414-1239.

Sincerely,

Susan Rose Administrator

encl:



April 13, 2020

Dear Susan Rose:

The following is in response to your request for proof of delivery on your item with the tracking number: 9489 0090 0027 6201 4282 50.

Item Details

Status: Delivered, Front Desk/Reception/Mail Room

Status Date / Time: March 5, 2020, 1:35 pm Location: FORT WORTH, TX 76107

Postal Product: First-Class Mail®
Extra Services: Certified Mail™

Return Receipt Electronic

Shipment Details

Weight: 20lb, 4.1oz

Recipient Signature

Signature of Recipient:

Address of Recipient:

1300 S University

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

Thank you for selecting the United States Postal Service® for your mailing needs. If you require additional assistance, please contact your local Post Office™ or a Postal representative at 1-800-222-1811.

Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004



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

February 28, 2020

Atinum Marcellus I, LLC 1 Riverway Ste 710 Houston TX 77056

7489 0090 0027 6201 4282 67

Intentional Deviation of New Deep Well RE:

Tug Hill Operating, LLC - McMasters S-16HU

Dear Sir or Ma'am:

Please be advised that Tug Hill Operating, LLC, has applied to the Oil and Gas Conservation Commission for approval to intentionally deviate a new deep well. The Code of State Regulations Title 39 Section 1.4.10 requires that the Commission notify the offset operators of the applicants' intent to deviate the proposed well. You are receiving this notice because you are listed as an offset operator (unleased mineral owner is also an "offset operator") to the proposed well. Any offset operator has ten days to object to the Commissions' granting approval to the proposed deviation. If you file an objection, the Commission will schedule a hearing and you will be notified of the date and time to attend.

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Sincerely,

Susan Rose Administrator

encl:



April 13, 2020

Dear Susan Rose:

The following is in response to your request for proof of delivery on your item with the tracking number: 9489 0090 0027 6201 4282 67.

Item Details

Status: Delivered

Status Date / Time: March 11, 2020, 3:24 pm Location: HOUSTON, TX 77057

Postal Product: First-Class Mail®
Extra Services: Certified Mail™

Return Receipt Electronic

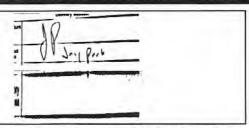
Shipment Details

Weight: 20lb, 4.1oz

Recipient Signature

Signature of Recipient:

Address of Recipient:



Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

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Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004



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

February 28, 2020

TH Exploration II, LLC 1320 S University Dr Ste 500 Fort Worth TX 76107

9489 0090 0027 6201 4282 74

Intentional Deviation of New Deep Well RE:

Tug Hill Operating, LLC - McMasters S-16HU

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If you have any questions please call me at (304) 414-1239.

Sincerely,

Susan Rose Administrator

encl:



April 13, 2020

Dear Susan Rose:

The following is in response to your request for proof of delivery on your item with the tracking number: 9489 0090 0027 6201 4282 74.

Item Details

Status: Delivered, Front Desk/Reception/Mail Room

Status Date / Time: March 5, 2020, 1:35 pm Location: FORT WORTH, TX 76107

Postal Product: First-Class Mail®

Extra Services: First-Class MailTM

Return Receipt Electronic

Shipment Details

Weight: 20lb, 4.1oz

Recipient Signature

Signature of Recipient:

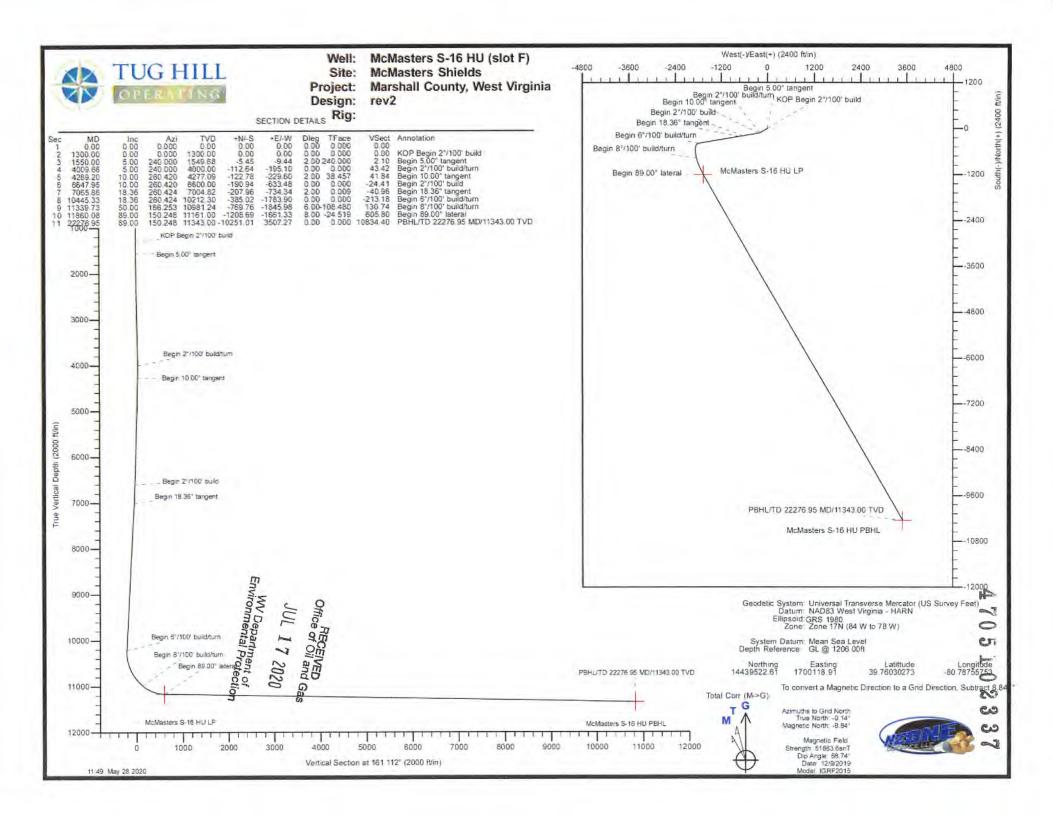
Address of Recipient:

120 > umucas (

Note: Scanned image may reflect a different destination address due to Intended Recipient's delivery instructions on file.

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Sincerely, United States Postal Service® 475 L'Enfant Plaza SW Washington, D.C. 20260-0004





Planning Report - Geographic

Database: Company: Project:

DB_Aug1919_v14 Tug Hill Operating LLC Marshall County, West Virginia

McMasters Shields

Well:

McMasters S-16 HU (slot F)

Wellbore: Original Hole Design: rev2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well McMasters S-16 HU (slot F)

GL @ 1206.00ft GL @ 1206.00ft

Grid

Minimum Curvature

Project

Site:

Marshall County, West Virginia

Map System:

Universal Transverse Mercator (US Survey Feet)

NAD83 West Virginia - HARN

McMasters Shields

System Datum:

Mean Sea Level

Geo Datum: Map Zone:

Zone 17N (84 W to 78 W)

Site

Site Position: From: Position Uncertainty:

Lat/Long

Northing: Easting: 0.00 ft Slot Radius: 14,439,441.76 usft 1,700,145.18 usft

13-3/16 " Grid Convergence:

Latitude: Longitude:

39.76008050 -80.78746471

0.136

Well

McMasters S-16 HU (slot F)

Well Position

+E/-W

0.00 ft 0.00 ft Northing: Easting:

14,439,522.62 usft 1,700,118.91 usft Latitude: Longitude:

39.76030273 -80.78755753

Position Uncertainty

0.00 ft

Wellhead Elevation:

Ground Level:

1,206.00 ft

Wellbore

Original Hole

Sample Date Declination Magnetics Model Name Dip Angle Field Strength (nT) (°) (0) IGRF2015 66,739 51,883,56494778 12/9/2019 -8.706

Design

rev2

Audit Notes:

Version: Vertical Section: Phase:

Depth From (TVD)

(ft)

0.00

PLAN

Tie On Depth: +E/-W

(ft)

0.00

0.00

Direction (°) 161.112

Plan Survey Tool Program

Date 5/28/2020

Depth From (ft)

Depth To (ft)

Survey (Wellbore)

Tool Name

Remarks

0.00

22,276.95 rev2 (Original Hole)

MWD

MWD - Standard

+N/-S

(ft)

0.00

Office of Oil and Gas

JUL 17 2020





Site:

DB_Aug1919_v14 Tug Hill Operating LLC Marshall County, West Virginia

McMasters Shields

Well: McMasters S-16 HU (slot F)

Wellbore: Original Hole
Design: rev2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well McMasters S-16 HU (slot F)

GL @ 1206.00ft GL @ 1206.00ft

Grid

Minimum Curvature

an 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	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,300.00	0.00	0.000	1,300.00	0.00	0.00	0.00	0.00	0.00	0.000	
1,550.00	5.00	240.000	1,549.68	-5.45	-9.44	2.00	2.00	0.00	240.000	
4,009.68	5.00	240.000	4,000.00	-112.64	-195.10	0.00	0.00	0.00	0.000	RECERT
4,289.20	10.00	260.420	4,277.09	-122.78	-229.60	2.00	1.79	7.31	38,457	Office of Oil and Ga
6,647.95	10.00	260.420	6,600.00	-190.94	-633.48	0.00	0.00	0.00	0.000	Add to the second
7,065.86	18.36	260,424	7,004.82	-207.96	-734.34	2.00	2.00	0.00	0.009	JUL 17 2020
10,445.33	18.36	260,424	10,212.30	-385.02	-1,783.90	0.00	0.00	0.00	0.000	
11,339.73	50.00	166.253	10,981.24	-769.76	-1,845.98	6.00	3.54	-10.53	-108.480	WV Department of
11,860,08	89.00	150.248	11,161.00	-1,208.69	-1,661.33	8.00	7,49	-3.08	-24.519	vironmental Protecti
22,276.95	89.00	150.248	11,343.00	-10,251.01	3,507.27	0.00	0.00	0.00	0.000	McMasters S-16 HU F



Site:

DB_Aug1919_v14 Tug Hill Operating LLC Marshall County, West Virginia McMasters Shields

Well: McMasters S-16 HU (slot F)

Wellbore: Original Hole Design: rev2

Local Co-ordinate Reference;

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well McMasters S-16 HU (slot F)

GL @ 1206.00ft GL @ 1206.00ft

Grid Minimum Curvature Office of Oil and Gas

JUL 17 2020

Measured			Vertical			Map	Мар		
Depth (ft)	Inclination	Azimuth	Depth	+N/-S	+E/-W	Northing	Easting		S. TT Une
((4)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)	Latitude	Longitude
0.00	0.00	0.000	0.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80.7875
100.00	0.00	0.000	100.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80.7875
200.00	0.00	0.000	200.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	80.7875
300.00	0.00	0.000	300.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80.7875
400.00	0.00	0.000	400.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80.7875
500.00	0.00	0.000	500.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80.7875
600.00	0.00	0.000	600.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80.7875
700.00	0.00	0.000	700.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80.7875
800.00	0.00	0.000	800.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80.7875
900.00	0.00	0.000	900.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80.7875
1,000.00	0.00	0.000	1,000.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80,7875
1,100.00	0.00	0.000	1,100.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	80.7875
1,200.00	0.00	0.000	1,200.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80.7875
1,300.00	0.00	0.000	1,300.00	0.00	0.00	14,439,522.62	1,700,118.91	39.76030273	-80,7875
The second second			1,000.00	0.00	0.00	14,400,022,02	1,700,110.51	33,70000275	00,1010
	in 2°/100° bui		1,399.98	0.07	1.61	14.439,521.74	1,700,117.40	39.76030035	-80.7875
1,400.00	2.00	240,000		-0.87	-1.51 -6.04	14,439,519.13	1,700,112.86	39.76029319	-80.7875
1,500.00	4.00	240.000	1,499.84	-3.49			SALL YES THE LESS OF THE	39,76028782	-80.7875
1,550.00	5.00	240.000	1,549.68	-5.45	-9.44	14,439,517.16	1,700,109.47	39,70020702	-00.7075
The state of the s	00° tangent		100000000000000000000000000000000000000		12.22	3 2 322 255 22			00 7070
1,600,00	5,00	240.000	1,599,49	-7.63	-13.21	14,439,514.99	1,700,105.69	39,76028186	-80,7876
1,700.00	5.00	240,000	1,699,11	-11.99	-20,76	14,439,510,63	1,700,098 14	39.76026995	-80,7876
1,800,00	5.00	240.000	1,798.73	-16.35	-28,31	14,439,506.27	1,700,090,60	39.76025803	-80.7876
1,900.00	5.00	240.000	1,898.35	-20.70	-35,86	14,439,501,91	1.700,083.05	39.76024611	-80.7876
2,000.00	5.00	240,000	1,997.97	-25.06	-43.41	14,439,497.55	1,700,075.50	39.76023419	-80.7877
2,100.00	5.00	240.000	2,097.59	-29.42	-50.95	14,439,493,20	1,700,067.95	39,76022227	-80.7877
2,200.00	5.00	240,000	2,197.21	-33.78	-58.50	14,439,488.84	1,700,060.41	39,76021035	80.7877
2,300.00	5.00	240,000	2,296.83	-38.13	-66.05	14,439,484,48	1,700,052.86	39,76019843	-80.7877
2,400.00	5.00	240.000	2,396.45	42.49	-73.60	14,439,480,12	1,700,045.31	39.76018652	-80.7878
2,500.00	5.00	240,000	2,496.07	-46.85	-81.15	14,439,475.77	1,700,037.76	39,76017460	80.7878
2,600.00	5,00	240.000	2,595.69	51.21	88,69	14,439,471,41	1,700,030.21	39.76016268	-80.7878
2,700.00	5.00	240.000	2,695.31	-55,57	-96,24	14,439,467,05	1,700,022.67	39.76015076	-80,7879
2,800.00	5.00	240.000	2,794,93	-59,92	-103,79	14,439,462,69	1,700,015.12	39.76013884	-80.7879
2,900.00	5.00	240 000	2,894.55	-64.28	-111.34	14,439,458.33	1,700,007.57	39,76012692	-80.7879
3,000.00	5.00	240.000	2,994.17	-68.64	-118.89	14,439,453,98	1,700,000.02	39.76011500	-80.7879
3,100.00	5.00	240.000	3,093.78	-73.00	-126.43	14,439,449.62	1,699,992.47	39.76010309	-80,7880
3,200.00	5.00	240.000	3,193.40	-77.35	-133.98	14,439,445.26	1,699,984.93	39.76009117	-80.7880
3,300.00	5.00	240.000	3,293.02	81.71	-141.53	14,439,440.90	1,699,977.38	39,76007925	-80.7880
3,400.00	5.00	240.000	3,392,64	-86,07	-149.08	14,439,436.55	1,699,969.83	39.76006733	-80.7880
3,500.00	5.00	240.000	3,492,26	-90.43	-156.63	14,439,432.19	1,699,962,28	39,76005541	-80.7881
3,600.00	5.00	240.000	3,591.88	-94.79	-164.17	14,439,427,83	1,699,954.73	39.76004349	-80.7881
3,700.00	5.00	240.000	3,691.50	-99,14	-171.72	14,439,423,47	1,699,947,19	39,76003157	-80.7881
	* **	240.000	3,791.12	-103.50	179.27	14,439,419.11	1,699,939.64	39.76001965	-80.7881
3,800.00	5.00	240.000	3,890 74	-107.86	186,82	14,439,414.76	1,699,932.09	39.76000774	-80.7882
4,000.00	5.00	240.000	3,990 36	-112.22	-194,36	14,439,410.40	1,699,924.54	39.75999582	-80.7882
			4,000.00	-112.64	-195,10	14,439,409.98	1,699,923.81	39.75999466	-80,7882
4,009.68	5,00	240.000	4,000,00	-(12.04	-130,10	14,400,400.00	11000100001	2011 2000 100	55,1506
	/100' build/tui		4 000 07	440.00	000.00	44 400 400 05	1 600 045 60	20 75009440	-80.7882
4,100.00	6.51	249.955	4,089.87	116.36	203.32	14,439,406.25	1,699,915.59	39,75998449	
4,200.00	8.32	256.571	4,189.03	-119,99	-215,68	14,439,402.63	1,699,903,22	39.75997462	-80.7883
4,289 20	10.00	260 420	4,277.09	122.78	-229.60	14,439,399,84	1,699,889.31	39.75996705	-80.7883
Begin 10	0.00° tangent						W. Lander Co.	45-2-10M0F	The second
4,300.00	10.00	260.420	4,287.72	123.09	231.45	14,439,399.53	1,699,887.46	39,75996620	-80.7883
4,400.00	10.00	260,420	4,386.20	125.98	-248.57	14,439,396.64	1,699,870,33	39,75995838	-80.7884
4,500.00	10.00	260,420	4,484.69	-128.87	-265.70	14,439,393.75	1,699,853.21	39.75995055	-80.7885
4,600.00	10.00	260,420	4,583.17	-131.76	-282,82	14,439,390.86	1,699,836.09	39.75994273	-80.7885



DB_Aug1919_v14 Tug Hill Operating LLC Marshall County, West Virginia

Site: McMasters Shields
Well: McMasters S-16 HU (slot F)

Well: McMasters S-Wellbore: Original Hole Design: rev2 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well McMasters S-16 HU (slot F)

GL @ 1206.00ft GL @ 1206.00ft

Grid

Minimum Curvature

Office of Oil and Gas

JUL 17 2020

ned Survey								Enviro	N Department of conmental Protection
Measured			Vertical			Мар	Map		Protected Protect
Depth (ft)	Inclination	Azimuth	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
	(")	(")				11			TO SECURE
4,700.00	10.00	260,420	4,681.65	-134.65	-299,94	14,439,387.97	1,699,818.97	39,75993490	-80.788625
4,800.00	10.00	260,420	4,780,13	-137.54	-317.06	14,439,385.08	1,699,801.84	39.75992707	-80.788686
4,900.00	10.00	260,420	4,878.61	-140.43	-334.19	14,439,382.19	1,699,784.72	39.75991925	-80.788747
5,000.00	10.00	260 420	4,977.09	-143.32	-351.31	14,439,379.30	1,699,767.60	39.75991142	80.788808
5,100.00	10.00	260.420	5,075.57	-146.21	368.43	14,439,376.41	1.699,750.48	39.75990360	-80.788869
5,200.00	10.00	260.420	5,174.05	-149.10	-385.56	14,439,373.52	1,699,733,35	39,75989577	-80.78893
5,300.00	10.00	260.420	5,272.53	-151.99	-402.68	14,439,370,63	1,699,716.23	39,75988795	-80.78899
5,400.00	10.00	260.420	5,371.01	-154,88	-419.80	14,439,367.74	1,699,699.11	39.75988012	-80.78905
5,500.00	10.00	260.420	5,469.49	-157.77	-436.92	14,439,364.85	1,699,681.98	39,75987229	-80.78911
5,600.00	10.00	260.420	5,567.97	-160.66	-454.05	14,439,361.96	1,699,664.86	39,75986447	-80.78917
5,700.00	10.00	260,420	5,666.45	-163.55	-471.17	14,439,359,07	1,599,647.74	39.75985664	-80.78923
5,800.00	10.00	260.420	5,764.94	-166.44	488.29	14,439,356.18	1,699,630.62	39.75984882	-80.78929
5,900.00	10.00	260.420	5,863.42	169.33	-505.41	14,439,353.29	1.699,613.49	39.75984099	-80.78935
6,000.00	10.00	260.420	5,961.90	-172.22	-522.54	14,439,350,40	1,699,596.37	39,75983316	-80.78941
6,100.00	10.00	260.420	6,060.38	-175.11	-539,66	14,439,347,51	1,699,579.25	39,75982534	-80.78947
6,200.00	10.00	260.420	6,158.86	-178.00	-556,78	14,439,344.62	1,699,562.13	39.75981751	80.78954
6,300.00	10.00	260,420	6,257.34	-180.89	-573.90	14,439,341,73	1,699,545,00	39.75980969	-80.78980
6,400.00	10.00	260 420	6,355.82	-183.78	-591.03	14,439,338.84	1,699,527.88	39.75980186	-80.78966
6,500.00	10.00	260.420	6,454,30	-186.67	608.15	14,439,335.95	1,699,510.76	39,75979403	-80.78972
6,600.00	10.00	260,420	6,552.78	-189.56	625,27	14,439,333,06	1,699,493.64	39,75978621	-80.78978
6,647,95	10.00	260,420	6,600,00	-190,94	-633,48	14,439,331,67	1,699,485.43	39.75978245	-80.78981
Begin 2°	/100' build								
6,700.00	11,04	260.421	6,651,18	-192.52	642.85	14,439,330.09	1,699,476.05	39.75977817	-80.78984
6,800.00	13.04	260.422	6,748,97	195.99	-663,42	14,439,326,62	1,699,455.49	39.75976877	-80.78991
6,900.00	15.04	260,423	6,845,98	200.03	687.35	14,439,322,58	1,699,431.56	39.75975784	-80.79000
7,000,00	17,04	260,424	6,942 08	-204.63	-714,59	14,439,317,99	1,699,404.32	39.75974539	-80.79010
7,065,86	18.36	260 424	7,004.82	207.96	-734.34	14,439,314.66	1,699,384.57	39 75973637	-80.79017
Begin 18	3.36° tangent								
7,100.00	18,36	260.424	7,037.22	-209.75	-744.94	14,439,312.87	1,699,373.97	39,75973153	-80.79021
7,200.00	18.36	260.424	7,132.14	-214.99	-776,00	14,439,307.63	1,699,342.91	39.75971734	-80.79032
7,300.00	18.36	260.424	7,227,05	-220,23	807.05	14,439,302,39	1,699,311.86	39.75970315	-80.79043
7,400.00	18,36	260 424	7,321.96	-225.47	-838.11	14,439,297.15	1,699,280.80	39.75968896	-80.79054
7,500.00	18.36	260.424	7,416.87	-230.71	-869.17	14,439,291.91	1.699,249.74	39,75967477	-80.79065
7,600.00	18.36	260.424	7,511.78	-235,94	-900.22	14,439,286.67	1,699,218,69	39,75966058	-80.79076
7,700.00	18.36	260 424	7,606.69	-241.18	-931.28	14,439,281.43	1,699,187.63	39.75964639	-80.79087
7,800.00	18.36	260 424	7,701.60	-246.42	-962.34	14,439,276.19	1,699,156,57	39,75963220	-80.79098
7,900.00	18.36	260 424	7,796.51	-251.66	993,39	14,439,270.95	1,699,125,52	39.75961801	-80.79109
8,000.00	18.36	260,424	7,891.42	-256.90	-1,024.45	14,439,265,71	1,699,094,46	39,75960382	80.79120
8,100.00	18.36	260.424	7,986.33	262,14	-1,055,51	14,439,260,47	1,699,063.40	39.75958963	-80.79131
8,200.00	18.36	260.424	8,081,24	-267.38	-1,086.56	14,439,255.23	1,699,032,35	39.75957544	-80.79142
8,300.00	18.36	260.424	8,176.15	-272.62	-1,117.62	14,439,249.99	1,699,001,29	39.75956125	-80.79153
8,400.00	18.36	260,424	8,271.06	-277.86	-1,148.68	14,439,244.76	1,698,970.23	39,75954706	-80.79164
8,500.00		260 424	8,365 97	-283.10	-1,179.74	14,439,239,52	1,698,939.17	39,75953287	-80,79175
8,600.00		260 424	8,460.88	-288.34	-1,210.79	14,439,234.28	1,698,908.12	39.75951868	-80.79186
8,700.00		260 424	8,555.79	-293,58	-1,241.85	14,439,229.04	1.698,877.06	39.75950448	-80.79197
8,800 00		260,424	8,650 70	-298.82	-1,272.91	14,439,223.80	1,698,846.00	39,75949029	-80.79208
8,900.00		260.424	8,745.61	-304.06	-1,303.96	14,439,218,56	1,698,814.95	39.75947610	-80.79219
9,000.00		260.424	8,840.53	-309,30	-1,335.02	14,439,213.32	1,698,783.89	39.75946191	-80.79231
9,100.00		260.424	8,935.44	314.54	-1,366.08	14,439,208.08	1,698,752.83	39.75944772	-80.79242
9,200.00		260,424	9,030.35	-319.78	-1,397.13	14,439,202.84	1,698,721.78	39.75943353	-80.79253
9,300.00		260.424	9,125.26	-325.02	1,428.19	14,439,197,60	1,698,690.72	39.75941934	-80.79264
9,400.00		260,424	9,220.17	330.25	1,459.25	14,439,192,36	1,698,659.66	39.75940515	-80.79275
9,500,00		260 424	9,315.08	-335.49	-1,490.30	14,439,187.12	1,698,628.61	39,75939095	-80.79286
9,600.00		260.424	9,409.99	-340.73	-1,521.36	14,439,181.88	1.698,597.55	39,75937676	-80.79297



Site:

DB_Aug1919_v14 Tug Hill Operating LLC Marshall County, West Virginia McMasters Shields

Well: McMasters S-16 HU (slot F)
Wellbore: Original Hole

Wellbore: Origin Design: rev2 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well McMasters S-16 HU (slot F)

GL @ 1206.00ft GL @ 1206.00ft

Grid

Minimum Curvature

Office of Oil and Gas

JUL 17 2020

Measured		in the same of	Vertical		200	Мар	Мар	Enviror	Department of mental Protect
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
9,700.00	18.36	260.424	9,504.90	-345.97	-1,552.42	14,439,176.64	1.698,566.49	39.75936257	-80,793084
9,800.00	18.36	260.424	9,599.81	-351.21	-1.583.48	14,439,171.40	1,698,535,44	39.75934838	-80.793194
9,900.00	18.36	260.424	9,694.72	356.45	-1,614.53	14,439,166.16	1.698,504.38	39.75933419	-80.793305
10,000.00	18.36	260.424	9,789.63	-361.69	-1,645.59	14,439,160,92	1,698,473.32	39.75931999	-80.793416
10,100.00	18.36	260.424	9,884.54	-366.93	-1.676.65	14,439,155.69	1,698,442,27	39.75930580	-80.793526
10,200.00	18.36	260.424	9,979.45	-372.17	-1.707.70	14,439,150.45	1,698,411.21	39,75929161	-80.793637
10,300.00	18,36	260,424	10,074.36	-377.41	-1.738.76	14,439,145,21	1.698,380.15	39,75927742	-80,793747
						14,439,139.97		39.75926322	-80,793858
10,400.00	18,36	260.424	10,169.27	-382.65	-1,769,82	The state of the s	1,698,349.09	1 2 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
10,445.33	18.36	260.424	10,212.30	-385.02	-1,783.90	14,439,137.59	1,698,335.02	39.75925679	-80,793908
	/100' build/tur		1000151	10 mg 247	3.555.52	12/12/10031	decourage.		72.47774
10,500.00	17.59	250.077	10,264.31	-389.27	-1,800.15	14,439,133,34	1,698,318.76	39,75924523	-80.793966
10,600.00	17.68	230.180	10,359.70	-404.16	-1,826.04	14,439,118.46	1,698,292,87	39.75920452	-80.79405
10,700.00	19.63	212.359	10,454,52	-428.09	-1,846.71	14,439,094.52	1,698,272.20	39,75913891	-80.79413
10,800.00	22.98	198.590	10,547.73	-460.82	-1,861.94	14,439,061.80	1,698,256.97	39.75904914	-80.79418
10,900.00	27.21	188.519	10,638.31	-501.97	-1,871.56	14,439,020.65	1,698,247.35	39.75893617	-80.79422
11,000.00	31.98	181.112	10,725.27	-551.11	-1,875.47	14,438,971.51	1.698,243.44	39.75880126	-80.79423
11,100.00	37.07	175.500	10,807.65	-607.68	-1.873.61	14,438,914.93	1,698,245,30	39.75864587	-80.794229
11,200.00	42.37	171.092	10,884.55	-671.08	-1,866.02	14,438,851.54	1,698,252,89	39,75847171	80,79420
11,300.00	47.81	167.507	10,955 13	-740.61	-1,852.78	14,438,782.01	1,698,266 13	39.75828070	80.79415
11,339.73	50.00	166.253	10,981.24	-769.76	-1,845,98	14,438,752.86	1,698,272.93	39,75820059	-80.79413
	/100' build/tur		1.0100.100.1			4.4.634.06.54	922 00 00 0		
11,400.00	54.41	163.795	11,018,17	-815.75	-1,833,65	14,438,706.87	1,698,285.26	39.75807422	-80.79408
11,500.00	61.83	160.256	11,070.96	-896.41	-1,807.37	14,438,626,21	1,698,311.55	39.75785253	-80,79399
11,600.00	69.33	157.181		-981.15	-1,774.28	14,438,541.46	1.698.344.63	39,75761959	-80.79387
			11.112.28		-1,735.03			39,75737994	-80.79374
11,700.00	76.87	154,398	11,141,34	-1,068,33		14,438,454.29	1,698,383.88		-80.79358
11,800.00	84.44	151,782	11,157,57	-1,156.23	-1,690.39	14,438,366,39	1,698,428.52	39,75713825	-80.79347
11,860.08		150,248	11,161.00	-1,208.69	-1,661,33	14,438,313,93	1,898,457.58	39.75699400	-00.79047
	0.00° lateral	1000			312	And There exists an	A array and	A SECULATION ASSESSMENT	26 522.2
11,900 00	89.00	150.248	11,161.70	-1.243.34	-1,641,52	14,438,279,28	1,698,477.39	39,75689872	-80,79340
12,000.00	89.00	150.248	11,163.45	-1,330.14	-1,591,90	14,438,192.48	1,698,527.01	39,75666002	-80.79323
12,100.00	89.00	150.248	11,165,20	-1,416,94	-1,542.29	14,438,105.67	1,698,576.62	39,75642131	-80.79305
12,200.00	89.00	150.248	11,166,94	-1,503.75	-1,492.67	14,438,018.87	1,698,626,24	39,75618261	-80.79288
12,300.00	89.00	150,248	11,168.69	1,590.55	1,443.05	14,437,932.06	1,698,675.86	39,75594390	80.79270
12,400.00	89.00	150.248	11,170.44	-1,677.36	-1,393,43	14,437,845.26	1,698,725.48	39.75570520	-80.79252
12,500.00	89.00	150.248	11,172.18	-1,764.16	1,343.82	14,437,758.46	1,698,775.09	39,75546649	-80.79235
12,600.00	89.00	150.248	11,173.93	-1.850.97	-1,294.20	14,437,671.65	1,698,824.71	39,75522778	-80.79217
12,700.00	89,00	150,248	11,175 68	-1,937.77	-1,244,58	14,437,584,85	1,698,874.33	39.75498908	-80,79200
12,800.00	89.00	150,248	11,177.43	-2,024.58	-1,194,96	14,437,498.04	1,698,923,95	39.75475037	-80,79182
12,900.00	89.00	150.248	11,179.17	-2.111.38	-1.145.35	14,437,411.24	1,698,973.56	39.75451166	-80.79165
13,000.00		150.248	11,180,92	-2,198,19	-1,095.73	14,437,324,43	1,699,023.18	39.75427296	-80.79147
13,100.00		150,248	11,182.67	-2,284.99	-1,046.11	14,437,237.63	1,699,072.80	39.75403425	-80.79129
13,200.00		150,248	11,184.41	2,371.80	996.49	14,437,150.82	1,699,122.42	39.75379554	-80.79112
13,300.00		150.248	11,186.16	-2,458,60	-946.88	14,437,064,02	1,699,172.03	39.75355683	-80.79094
13,400.00		150.248	11,187.91	2,545,40	-897.26	14,436,977.22	1,699,221.65	39.75331812	-80.79077
13,500.00		150.248	11,189.66	-2,632.21	-847.64	14,436,890.41	1,699,271.27	39.75307942	-80,79059
13,600.00		150.248	11,191.40	-2,719.01	-798.02	14,436,803.61	1,699,320.89	39.75284071	-80.79041
		150.248			-748.41	14,436,716,80	1,699,370,50	39.75260200	80.79024
13,700.00			11,193,15	-2,805.82				39.75236329	-80.79006
13,800.00		150 248	11,194,90	-2,892,62	-698,79	14,436,630.00	1,699,420.12		-80.78989
13,900.00		150.248	11,196.64	-2,979.43	-649.17	14,436,543.19	1,699,469.74	39.75212458	
14,000 00		150.248	11,198.39	-3,066.23	-599.55	14,436,456.39	1,699,519.36	39.75188587	-80.78971
14,100.00		150.248	11,200.14	-3,153.04	-549.94	14,436,369.58	1,699,568.97	39.75164716	-80,78954
14,200.00		150.248	11,201.89	-3,239,84	-500.32	14,436,282.78	1,699,618,59	39.75140845	-80.78936
14,300.00		150.248	11,203.63	-3,326.65	450.70	14,436,195.98	1,699,668,21	39.75116974	-80.78918
14,400.00	89,00	150.248	11,205,38	3,413.45	-401.08	14,436,109.17	1,699,717.83	39,75093102	-80.78901



Planning Report - Geographic

Database: Company: Project:

Site:

Well:

DB_Aug1919_v14 Tug Hill Operating LLC Marshall County, West Virginia

McMasters Shields McMasters S-16 HU (slot F)

Wellbore: Original Hole
Design: rev2

Local Co-ordinate Reference: TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well McMasters S-16 HU (slot F)

GL @ 1206.00fl GL @ 1206.00ft

Grid Minimum Curvature Office of Oil and Gas

JUL 17 2020

Planned Survey

Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Map Northing	Map Easting		
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(usft)	(usft)	Latitude	Longitude
14,500,00	89.00	150.248	11,207.13	-3,500.26	-351.46	14,436,022,37	1,699,767.44	39.75069231	-80.7888375
14,600.00	89.00	150.248	11,208,87	-3,587.06	-301.85	14,435,935.56	1,699,817.06	39,75045360	-80.7886617
14,700.00	89.00	150.248	11,210.62	3,673.86	252,23	14,435,848.76	1,699,866.68	39.75021489	-80.7884859
14,800.00	89.00	150.248	11,212.37	-3,760.67	-202.61	14,435,761.95	1.699,916.30	39.74997618	-80.788310
14,900.00	89.00	150.248	11,214.11	-3,847.47	-152.99	14,435,675.15	1,699,965.91	39.74973746	-80.7881343
15,000.00	89.00	150.248	11,215.86	-3,934.28	-103.38	14,435,588.34	1,700,015.53	39.74949875	-80.7879585
15,100.00	89.00	150.248	11,217,61	-4,021.08	-53.76	14,435,501,54	1,700,065.15	39.74926004	-80.787782
15,200.00	89.00	150.248	11,219.36	-4,107.89	-4.14	14,435,414.74	1,700,114.77	39.74902133	-80.7876069
15,300.00	89.00	150.248	11,221.10	-4,194.69	45.48	14,435,327.93	1,700,164.38	39,74878261	-80,787431
15,400,00	89.00	150.248	11,222.85	-4,281.50	95.09	14,435,241.13	1,700,214.00	39.74854390	-80.7872553
15,500.00		150,248	11,224.60	-4,368.30	144.71	14,435,154,32	1,700,263.62	39.74830518	-80.7870799
15,600.00		150.248	11,226.34	4,455.11	194.33	14,435,067.52	1,700,313.24	39.74806647	-80.7869037
15,700.00		150.248	11,228.09	-4,541.91	243.95	14,434,980.71	1,700,362,85	39.74782775	-80.7867279
15,800.00		150.248	11,229.84	-4,628.72	293,56	14,434,893,91	1,700,412.47	39,74758904	-80.786552
15,900.00		150.248	11,231.59	-4,715.52	343.18	14,434,807.10	1,700,462.09	39.74735032	-80.786376
16,000.00		150.248	11,233.33	-4,802.32	392.80	14,434,720.30	1,700,511.71	39,74711161	-80.786200
16,100.00		150.248	11,235.08	-4,889.13	442.42	14,434,633,50	1,700,561.32	39,74687289	80.786024
16,200.00		150.248	11,236.83	-4,975.93	492.03	14,434,546,69	1,700,610.94	39,74663418	-80.785849
16,300.00		150.248	11,238.57	5,062.74	541.65	14,434,459,89	1.700,660,56	39.74639546	-80,785673
16,400.00		150.248	11,240.32	-5,149.54	591.27	14,434,373,08	1,700,710.18	39.74615674	-80.785497
16,500,00		150.248	11,242.07	-5,236.35	640.89	14,434,286.28	1,700,759.79	39,74591803	80.785321
16,600.00		150,248	11,243.82	-5,323.15	690.50	14,434,199.47	1,700,809.41	39,74567931	-80.785145
16,700.00		150.248	11,245.56	-5,409.96	740.12	14,434,112.67	1,700,859.03	39.74544059	-80.784970
16,800.00		150.248	11,247.31	-5,496.76	789.74	14,434,025.86	1,700,908.65	39.74520187	-80.784794
16,900.00		150.248	11,249.06	-5,583.57	839,36	14,433,939.06	1,700,958.26	39.74496316	-80,784618
17,000.00		150.248	11,250.80	-5,670,37	888.98	14,433,852.26	1,701,007.88	39.74472444	-80.784442
17,100.00		150.248	11,252.55	-5,757.18	938.59	14,433,765.45	1,701,057.50	39.74448572	-80.784267
17,100.00		150.248	11,254.30	-5.843.98	988.21	14,433,678.65	1.701,107.12	39.74424700	-80.784091
17,300.00		150.248	11,256.05	-5,930.78	1,037.83	14,433,591.84	1,701,156.73	39.74400828	-80.783915
17,400.00		150.248	11,257.79	-6,017.59	1.087.45	14,433,505.04	1,701,206.35	39,74376956	-80.783739
17,500.00		150.248	11,259.54	6,104.39	1,137.06	14,433,418.23	1,701,255,97	39.74353084	-80.783563
			11,261.29	-6,191.20	1,186.68	14,433,331.43	1,701,305,59	39.74329212	-80.783388
17,600.00		150.248	11,263.03	-6,278,00	1,236.30	14,433,244.62	1,701,355.20	39.74305340	-80,783212
17,700,00		150,248			1,285.92	14,433,157.82	1.701,404.82	39.74281468	-80.783036
17,800,00		150,248	11,264.78	6,364,81		14,433,071.02	1.701,454 44	39.74257596	-80.782860
17,900,00		150.248	11,266,53	-6,451,61	1,335.53		1.701,504.06	39,74233724	-80.782685
18,000.00		150.248	11,268.28	6,538,42	1,385.15	14,432,984.21	1,701,553.67	39,74209852	-80.782509
18,100.00		150.248	11,270.02	-6,625.22	1,434.77	14,432,897.41	1,701,603.29	39,74185980	-80.782333
18,200.00		150.248	11,271.77	-6,712,03	1,484.39	14,432,723.80	1,701,652,91	39,74162108	-80.782157
18,300.00		150.248	11,273.52	-6,798.83	1,534.00 1,583.62	14,432,636.99	1,701,702.53	39.74138235	-80.781982
18,400.00		150.248		-6,885.64	1,633.04		1,701,752.14	39.74114363	-80.781806
18,500.00		150.248	11,277.01	-6,972.44		14,432,550.19	1,701,801.76	39.74090491	-80,781630
18,600.00		150,248	11,278.76	7,059,24	1,682.86 1,732.47	14,432,463.38 14,432,376.58	1,701,851.38	39.74066619	-80.781454
18,700,00		150,248	11,280.51	-7,146.05 -7,232,85	1,782.09	14,432,376.38	1,701,901.00	39.74042746	-80.781279
18,800.00		150.248 150.248	11,282.25	7,232,65	1,831.71	14,432,202.97	1.701,950.61	39.74018874	-80,781103
18,900.00					1,881.33	14,432,116.17	1,702,000.23	39.73995002	-80.780927
19,000 00		150.248	11,285.75	7.406.46	1,930,94	14,432,029,36	1,702,049.85	39.73971129	-80.780751
19,100.00		150,248	11,287,49	-7,493.27 -7,580.07	1,980.56	14,431,942.56	1,702,099.47	39.73947257	-80.780576
19,200.00		150.248	11,289,24	-7,580.07 -7,666.88	2,030.18	14,431,855.75	1,702,149.08	39,73923384	-80.780400
19,300.00		150,248	11,290.99	-7,666.88 7,753.69	2,030,18		1,702,149.08	39,73899512	-80.780224
19,400,00		150.248	11,292.74	-7,753.68 -7,840.49		14,431,768.95		39,73875639	-80.780048
19,500.00		150.248	11,294.48	-7,840,49	2,129,42	14,431,682.14	1,702,248.32	39,73851767	-80.779873
19,600 00		150.248	11,295.23	-7,927.29	2,179.03	14,431,595.34	1,702,297.94	39,73827894	-80.779697
19,700.00		150.248	11,297,98	-8,014,10	2,228,65	14,431,508.54	1,702,347.55	39,73804022	-80.779521
19,800.00		150,248 150,248	11,299,72	-8,100,90 -8,187,70	2,278.27	14,431,421.73	1,702,397.17	39.73780149	-80,779345

DB_Aug1919_v14 Tug Hill Operating LLC Marshall County, West Virginia

Site: McMasters Shields
Well: McMasters S-16 HU (slot F)

Wellbore: Original Hole
Design: rev2

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well McMasters S-16 HU (slot F)

GL @ 1206.00ft GL @ 1206.00ft

Grid

Minimum Curvature

RECEIVED Office of Oil and Gas

JUL 17 2020

easured Depth (ft)	Inclination	Azimuth	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Map Northing (usft)	Map Easting (usft)	Latitude	Environmental :
20,000.00	89.00	150.248	11,303.22	-8,274.51	2,377.50	14,431,248.12	1,702,496.41	39.73756276	-80,77917014
20,100.00	89.00	150.248	11,304.97	-8,361.31	2,427.12	14,431,161.32	1,702,546.02	39,73732404	-80.77899440
20,200,00	89.00	150.248	11,306.71	8,448.12	2,476.74	14,431,074.51	1,702,595.64	39.73708531	-80.77881867
20,300.00	89.00	150.248	11,308.46	-8,534.92	2,526.36	14,430,987.71	1.702,645.26	39.73684658	80.77864293
20,400.00	89.00	150.248	11,310.21	-8,621.73	2,575.97	14,430,900.90	1,702,694.88	39.73660786	-80.77846720
20,500.00	89.00	150.248	11,311.95	-8,708.53	2,625.59	14,430,814.10	1.702,744.49	39.73636913	-80.77829147
20,600.00	89.00	150,248	11,313.70	-8,795.34	2,675.21	14,430,727.30	1.702.794.11	39.73613040	-80.77811574
20,700.00	89.00	150.248	11,315.45	-8,882.14	2,724.83	14,430,640.49	1,702,843.73	39,73589167	-80.77794001
20,800.00	89.00	150.248	11,317.20	-8,968.95	2,774.44	14,430,553.69	1,702,893.35	39,73565294	-80.77776428
20,900.00	89.00	150.248	11,318.94	-9,055.75	2,824.06	14,430,466.88	1,702,942.96	39,73541421	-80,77758855
21,000.00	89.00	150.248	11,320.69	-9,142.56	2,873,68	14,430,380.08	1,702,992.58	39,73517548	-80.77741283
21,100.00	89.00	150.248	11,322,44	-9,229.36	2,923,30	14,430,293.27	1,703,042.20	39,73493676	-80.77723710
21,200.00	89.00	150,248	11,324.18	-9,316.16	2,972.91	14,430,206.47	1,703,091.82	39.73469803	-80.77706138
21,300.00	89.00	150,248	11,325.93	-9,402.97	3,022.53	14,430,119.66	1,703,141.43	39.73445930	-80.77688566
21,400.00	89.00	150.248	11,327.68	9,489.77	3,072.15	14,430,032.86	1,703,191.05	39,73422057	-80.77670994
21,500.00	89.00	150.248	11,329.43	-9,576.58	3,121.77	14,429,946,06	1,703,240.67	39.73398183	80.77653422
21,600.00	89.00	150,248	11,331.17	9,663,38	3,171.39	14,429,859.25	1,703,290.29	39,73374310	-80.77635850
21,700.00	89.00	150,248	11,332.92	-9,750.19	3,221.00	14,429,772.45	1,703,339.90	39.73350437	-80.77618278
21,800.00	89.00	150.248	11,334.67	-9,836.99	3,270.62	14,429,685.64	1,703,389.52	39.73326564	-80.77600707
21,900.00	89.00	150.248	11,336.41	-9,923.80	3,320.24	14,429,598.84	1,703,439.14	39,73302691	-80.77583135
22,000.00	89.00	150.248	11,338.16	-10,010,60	3,369,86	14,429,512.03	1,703,488.76	39.73278818	-80.77565564
22,100.00	89.00	150.248	11,339.91	-10,097.41	3,419,47	14,429,425,23	1,703,538.37	39.73254945	-80.77547993
22,200.00	89,00	150,248	11,341,66	-10,184.21	3,469,09	14,429,338.42	1,703,587.99	39.73231071	-80.77530422
22,276.95	89,00	150,248	11,343.00	-10,251.01	3,507.27	14,429,271.63	1,703,626.17	39.73212700	-80.77516900

Design Targets									
Target Name • hit/miss target • Shape	Dip Angle	Dip Dir.	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
McMasters S-16 HU LP - plan hits target cente - Point	0,00	0.000	11,161.00	-1,208.69	-1,661,33	14,438,313,93	1,698,457,59	39.75699400	-80.79347900
McMasters S-16 HU P8i - plan hits target cente - Point	0.00 er	0.000	11,343.00	-10,251,01	3,507.27	14,429,271.63	1,703,626.17	39.73212700	-80.77516900

Measured	Vertical	Local Coordinates			
Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-VV (ft)	Comment	
1,300,0	1,300.00	0.00	0.00	KOP Begin 2°/100' build	
1,550.0	1,549.68	-5.45	-9,44	Begin 5.00° tangent	
4,009.6	4,000.00	-112.64	-195.10	Begin 2°/100' build/turn	
4,289.2	4,277.09	122.78	-229.60	Begin 10,00° tangent	
6,647.9	6,600.00	-190.94	-633.48	Begin 2°/100' build	
7,065.8	7,004.82	-207.96	-734.34	Begin 18.36° tangent	
10,445.3	3 10,212,30	-385.02	-1,783.90	Begin 6°/100' build/turn	
11,339.7	3 10,981.24	-769.76	-1,845.98	Begin 8°/100' build/turn	
11,860,0	8 11,161,00	-1,208.69	-1,661.33	Begin 89.00" lateral	
22.276.9		-10,251.01	3,507.27	PBHL/TD 22276.95 MD/11343.00 TVD	

Commonwealth of Pennsylvania - Notary Seal MAUREEN A STEAD - Notary Public lic Washington County

My Commission Expires Jan 28, 2023 Commission Number 1259926

Notary Public

WW-9 (4/16)

My commission expires

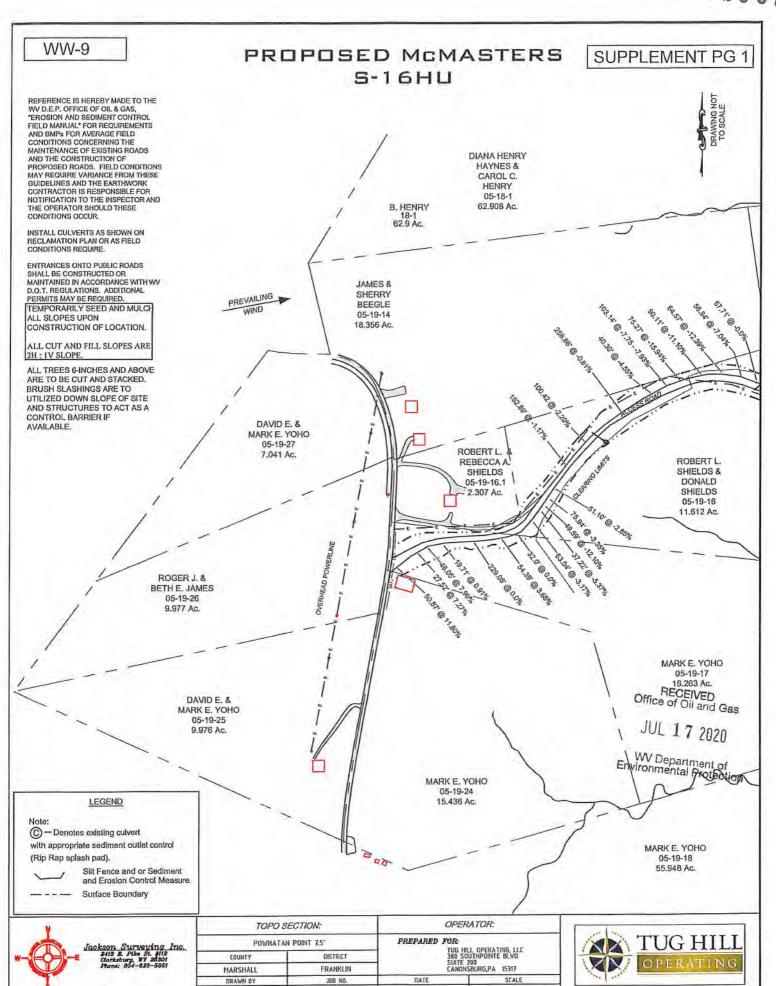
API Number 47 - 051

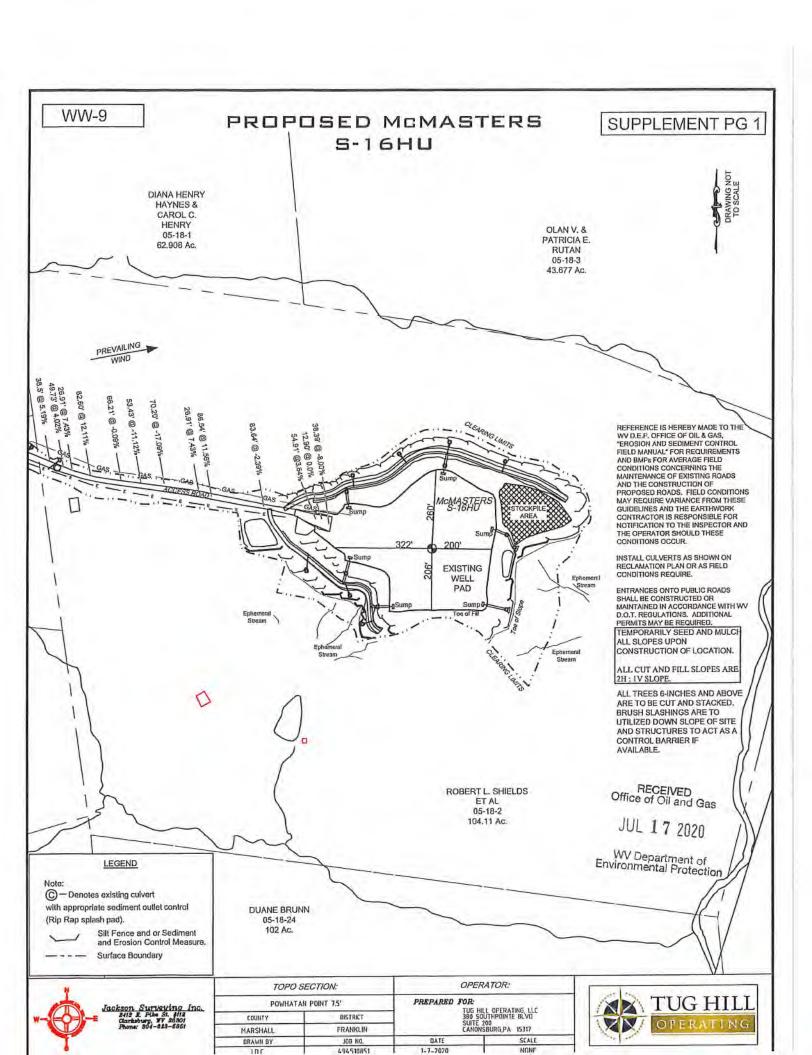
Operator's Well No. McMasters S-16HU

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

Office of Oil and Gas

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN OP Code 494510851 Operator Name Tug Hill Operating, LLC WV Department of Environmental Protection Quadrangle Powhatan Point 7.5' Watershed (HUC 10) Fish Creek Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes No Will a pit be used? Yes If so, please describe anticipated pit waste: AST Tanks with proper containment will be used for staging fresh water for frac and flow back water No V Will a synthetic liner be used in the pit? Yes If so, what ml.? AST Tanks will be used with proper Proposed Disposal Method For Treated Pit Wastes: Land Application Underground Injection (UIC Permit Number UIC 2459, UIC 965, UIC 359, UIC 2D0732540, UIC 2D0732523) Reuse (at API Number Off Site Disposal (Supply form WW-9 for disposal location) Other (Explain Will closed loop system be used? If so, describe: Yes - For Vertical and Horizontal Drilling Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwater, oil based, etc. Air for vertical / Oil for Horizontal -If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Base Additives to be used in drilling medium? Barite for weight Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. All drill cuttings to be disposed of in a Landfill -If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) N/A -Landfill or offsite name/permit number? Watzel County Sanitary Landfill (SWF-1021/WV0109185) and Wastmoreland Sanitary Landfill, LLC (SAN1405/PA DEP EC#1386426) Permittee shall provide written notice to the Office of Oil and Gas of any load of drill cuttings or associated waste rejected at any West Virginia solid waste facility. The notice shall be provided within 24 hours of rejection and the permittee shall also disclose where it was properly disposed. I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action. I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment. Company Official Signature Company Official (Typed Name) Jim Pancake Company Official Title VP Geosciences Subscribed and sworn before me this







Well Site Safety Plan

Tug Hill Operating, LLC

Well Name: McMasters S-16HU

Pad Location: Shields Pad

Marshall County, West Virginia

UTM (meters), NAD83, Zone 17:

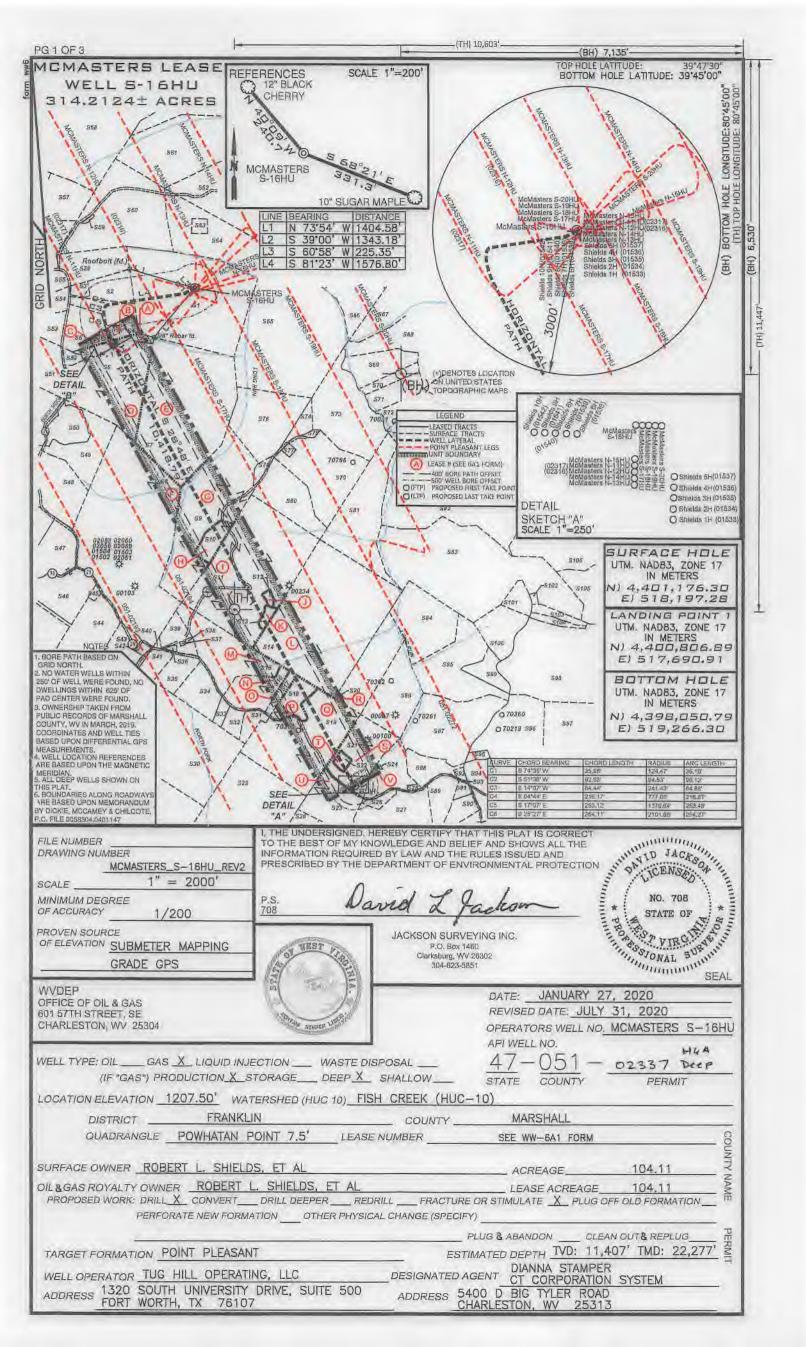
Northing: 4,401,175.30 Easting: 518,197.28

June 2020

Office of Oil and Gas

JUL 17 2020

SUPPLEMENT PG 2 WW-9 PROPOSED McMASTERS S-16HU Grace Chapel McMASTERS S-16HU NOTE: CLOSEST WATER PURVEYOR GRANDVIEW - DOOLIN PUBLIC SERVICE DISTRICT PROCTOR, WV LAT:39,7136943 LON:-60.8260157 LOCATED S 33-26W AT 20,076' FROM McMASTERS S-16HU SURFACE LOCATION 494510851 **OPERATOR** TOPO SECTION LEASE NAME TUG HILI TUG HILL OPERATING, LLC POWHATAN POINT 7.5' **McMASTERS** 380 SOUTHPOINTE BLVD SUITE 200 OPERATING SCALE: DATE: CANONSBURG, PA 15317 1" = 2000' DATE: 1-7-2020

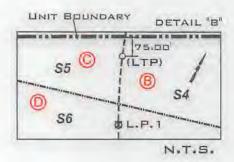


MCMASTERS LEASE WELL 5-16HU 314.2124± ACRES

Number	TAX MAP -PARCEL	ADJOINER OWNER	ACRES
\$1 A	05-18-02	Robert L. Shields. Et Al	104.11
S2	05-19-16	Robert L. Shields & Donald Shields	11.612
S3	05-19-16.1	Robert L. & Rebecca A. Shields	2.307
S4 B	05-19-17	Mark A. Yoho	15.263
S5 C	05-19-24	Mark E. Yoho	15.436
S6 D	05-19-18	Mark E. Yoho, Et Ux	55.948
S7 E	05-18-24	Duane Brunn	102.0
SB F	05-23-01	Patricia Accettolo, Et Al	145.66
S9 G	05-23-02	Danielle D. Lilley	77.636
S10 H	05-23-2.2	Jessica N. & Andrew L. Jones	7.636
S11 I	05-23-4	Abe J. Hochstefler	100.7
S12 J	05-23-4.2	XCL Midstream Operating, LLC	1.17
S13 K	05-23-4.1	XCL Midstream Operating, LLC	2.16
S14 L	05-23-5	Daniel D. Rhyand	118.5
S15 M	05-23-18	Abe J. Hochstetler	35.38
S16 N	05-23-16	Roy Friend Yoho, Sr.	12 17 27 20 20 20 20 20
S17 0	05-23-16.1		18.03
S18 P	05-23-16.1	Donald B. Henry	1.97
S19 Q		Virginia Ethel Henry Estate	15.5
S20 R	05-23-14	Dominion Transmission Inc.	59,5
-	05-23-8	Carl David & Suzanne L. Guseman	29.5
S21 S	05-23-9.2	Linda D. Greathouse	25.58
S22 T	05-23-9.4	Jackson R. Davis, Sr. & Deanna L. Davis	2.087
	05-23-9.1	John W. Van Orden Et Ux	23.376
S24 V	05-23-13	Linda D. Greathouse	14.24
S25	05-23-13.1	James R. Ferrell & Pamela J. Ferrell	0.75
S26	05-23-12	Mark A, Yoho	3.05
S27	05-26-11	Mark A. Yoho	89.25
528	05-26-22	Richard Joseph Otte	8.3
529	05-26-7	Dominion Transmission, Inc.	71.0
S30	05-26-26	Michael J. Wiley Et Al	101.57
531	05-23-17.3	William & Katherine Flewelling	5.018
S32	05-23-17	Tammy & Thomas E. Brown	4.62
533	05-23-17.4	Tammy D. Meadows	2.605
S34	05-23-17.2	Dick Rowan Jr. & Carol J. Rowan	14.920
S35	05-23-17.1	Curtis E, Hall Et Ux	10.051
S36	05-23-21	Mark A. Yoho & Mark E. Yoho	0.588
537	05-23-20	Christian Church	0.19
538	05-23-19	Doty Cemetery	1.0
S39	05-23-18.1	Mark A. Yoho	7.8
S40	05-23-29	James Wiley	0.25
S41	05-23-22	Daniel D. Rhyand & Laurel R. Greene	6.25
542	05-23-23	Michael J. Wiley Et Al	1.0
S43	05-23-28.2	Mark W. & Carolyn L. Tennant	10.8
S44	05-23-28	Gregg D. Minor	39.43
S45	05-23-28.1	Troy W. & Erin M. Thomas	1.0
546	05-22-7	Patricia Accettolo Et Al	25.02
547	05-22-7.1	T.H. Exploration II, LLC & Atinum Marcellus I, LLC	20.68
S48	05-22-6	CNX Gas Company, LLC	64.70
549	05-22-5	CNX Gas Company, LLC	134.425
S50	05-22-5.1	Willaims Ohio Valley Midstream, LLC	12.875
S51	05-19-18.2	Paul V. & Carol Neely	32.672
S52	05-22-18.1	Mark E. Yoho Et Ux	2.57

Number	TAX MAP -PARCEL	ADJOINER OWNER	ACRES
S54	05-19-26	Roger J. & Beth E. James	9.977
S55	05-19-27	David E. Yoho & Mark E. Yoho	7.041
S56	05-19-14	James & Sherry Beegle	18.356
S57	05-19-30	Ernie & Tammy Anderson	19.037
S58	05-19-13	Rona Lee Rice & Charles Franklin McCardle	94.925
S59	05-18-1.1	Charles F. & Diana L. Haynes	0.392
S60	05-18-1	Diana Henry Haynes & Carol C. Henry	62.908
S61	05-15-11	Diana Henry Haynes & Carol C. Henry	65.59
S62	05-18-4	Olan V. & Patricia E. Rutan	65.89
S63	05-18-3.1	Nikki L. & Jonathan Stevens	2.223
S64	05-18-3	Olan V. & Patricia E. Rutan	43.677
565	05-18-23	XCL Midstream Operating LLC	110
S66	05-18-7	Charles Yeater	24.22
S67	05-18-16	Charles Yeater	17.768
S68	05-18-13	Southern Country Farms, Inc.	11.054
S69	05-18-59	Southern Country Farms, Inc.	15.79
S70	05-18-30	Mary & Daniel Robinson	5.46
S71	05-18-13.10	Carl Berg	10.88
S72	05-18-29	Carl G. Berg	5.319
S73	05-18-20	Wayne E. Channing Et Al	75.60
574	05-18-21.1	Wayne E. Channing Et Al	5.47
S75	05-18-21.3	Hilda M. Gilberson-Wayt, Life	0.811
S76	05-18-22	Rodney & Rhonda Jackson	30,345
S77	05-18-21.2	David P. Lassan	1.0
S78	05-23-2.1	William L. & Janice M. Wayne	2.364
579	05-23-21	Curtis E. & Michelle J. Hall	43.119
S80	05-23-3	Abe J. Hochstetler	50.0
581	05-23-6	James A. Channing Et Al	48.0
S82	05-17-11	Kenneth N. Corley Et Ux	120.0
S83	05-23-7	Terry E. Simms Et Ux	123.09
S84	05-23-8.1	William & Virginia Roupe	34.0
S85	05-24-5.4	Thomas V. Tuttle Et Ux	38.224
S86	05-23-9.3	Linda D. Greathouse	17.5
S87	05-23-11.1	John H. & Sonya D. Holliday	46.482
S88	05-23-11.4	Kenneth L, Lemons, Trustee for Jeffrey G. Hudson	10.879
S89	05-23-11.3	Colin R. Yoho	11.29
590	05-23-11.8	Zachary R. Stevey	7.00
S91	05-23-11.5	Roy F. Yoho	2.25
S92	05-23-11.2	Evelyn L. Hudson	1.154
S93	05-23-11.6	T.H. Exploration II, LLC & Atinum Marcellus I, LLC	0.094
S94	05-23-11	Roy F. Yoho	9.745
S95	05-23-11.7	Brian L. Huggins	1.835
S96	05-23-10	Terry E. Simms Et Ux	38.95
S97	05-24-06	Terry E. Simms Et Ux	42.84
S98	05-24-05	Robert C. Francis Et Ux (Life)	145.78
599	05-24-3.1	T.H. Exploration II, LLC	5.50
S100	05-24-5.5	Sonny & Linda Lou Tage	17.194
S101	05-23-7.2	Florella Lou Weigand	6.354
S102	05-23-7.1	Florella Lou Weigand	0.549
S103	05-24-5.1	James D. Watkins Et Ux	4.60
S104	05-24-5.2	James D. Watkins Et Ux	3.151
\$105	05-24-1	Linda L. Hendrickson	175.0
S106	05-17-11.1	Randy W. Francis Et Ux	67.0
3100	00-17-11-1	Maridy VV. Francis Et UX	07.0









OPERATOR'S

WELL #: __McMasiers S-16HU

DISTRICT: Franklin

COUNTY: Marshall

STATE: WV

API#: 47-051-02337 HLA

WELL PLAT

PAGE 2 OF 3

DATE: 01/27/20

REVISED: 07/31/2020

Lease No.	Tags	Parcel	Lessor	Book	Page
10*14116	Α	5-18-2	DONALD SHIELDS	669	367
10*14295	В	5-19-17	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	655	546
10*14295	С	5-19-24	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	655	546
10*14295	D	5-19-18	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	655	546
10*14295	E	5-18-24	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	655	546
10*14129	F	5-23-1	LOUIS J ACCETTOLO & PATRICIA ACCETTOLO	703	283
10*14022	G	5-23-2	HOWARD N WAYNE SR AND DENISE D WAYNE	665	384
10*14022	Н	5-23-2.2	HOWARD N WAYNE SR AND DENISE D WAYNE	665	384
10*14849	-(5-23-4	DAVID GUSTELY	806	265
10*14849	J	5-23-4.2	DAVID GUSTELY	806	265
10*14849	К	5-23-4.1	DAVID GUSTELY	806	265
10*14847	L	5-23-5	LETHA RUCKMAN	806	270
10*14849	М	5-23-18	DAVID GUSTELY	806	265
10*14847	N	5-23-16	LETHA RUCKMAN	806	270
10*14847	0	5-23-16.1	LETHA RUCKMAN	806	270
10*14665	Р	5-23-15	DOROTHY TEDROW	781	539
10*18343	Q	5-23-14	DOMINION ENERGY TRANSMISSION INC	936	79
10*17192	R	5-23-8	ROBERT J HENRY	716	193
10*17189	S	5-23-9.2	ROBERT J HENRY	716	197
10*17189	T 5-23-9.4 ROBERT J HENRY		ROBERT J HENRY	716	197
10*17189	U	5-23-9.1	ROBERT J HENRY	716	197
10*14786	V	5-23-13	TWILA O WHIPKEY	799	61



P.S. David L Jackson



OPERATOR'S
WELL #: __McMasters S-16HU

DISTRICT: Franklin

COUNTY: Marshall

STATE: WV
API #: 47-051- 02337 Deep

WELL PLAT

PAGE 3 OF 3

DATE: 01/27/20

REVISED: 07/31/2020



July 15, 2020

WV Department of Environmental Protection Office of Oil & Gas 601 57th Street, SE Charleston, WV 25304 Attention: Susan Rose

RE: McMasters S-16HU

Subject: Proposed Voluntary Pooling and Unitization

Dear Susan:

Tug Hill Operating, LLC is authorized through, either lease or other agreement, to unitize and pool all lands falling within the boundaries of the proposed voluntary unit included with this submission.

If your office has any questions or concerns regarding the contents of this letter, please do not hesitate to contact me directly at 304-376-0111, or by email at amiller@tug-hillop.com.

Sincerely,

Amy L. Miller

Permitting Specialist - Appalachia Region

Tug Hill Operating

Office of Oil and Gas

JUL 17 2020

WV Department of Environmental Protection

Operator's Well No. McMasters S-16HU

WW-6A1 (5/13)

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

Office of Oil and Gas

JUL 17 2020

WV Department of Environmental Protection

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

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. Miller Mulystulle

Its: Permitting Specialist - Appalachia Region

4705102337

MARSHALL County 01:22:38 PM
Instrument No 1403489
Date Recorded 04/27/2016
Document Type ASN
Pages Recorded 77
Book-Page 36-9
Recording Fee \$77.00
Additional \$13.00

WHEN RECORDED RETURN TO: TH Exploration II, LLC 1320 South University Drive, Suite 500 Fort Worth, Texas 76107 Attn: David Kalish

Execution Version

ASSIGNMENT AND BILL OF SALE

STATE OF WV § KNOW ALL MEN BY THESE PRESENTS: COUNTY OF MARSHALL §

THIS ASSIGNMENT AND BILL OF SALE (this "Assignment"), dated April 7, 2016, but effective as of 7:00 A.M. Houston time on January 1, 2016 (the "Effective Time"), is between Gastar Exploration Inc., a Delaware corporation, whose address is 1331 Lamar Street, Suite 650 Houston, Texas 77010 ("Assignor"), and TH Exploration II, LLC, a Texas limited liability company, whose address is 1320 South University Drive, Suite 500, Fort Worth, Texas 76107 ("Assignee"). Assignor and Assignee are each, individually, referred to herein as a "Party" and, collectively, as the "Parties".

Capitalized terms used but not defined herein shall have the respective meanings set forth in that certain Purchase and Sale Agreement (the "Purchase Agreement"), dated as of February 19, 2016, by and between Assignor and Assignee (as successor-in-interest).

Section 1. <u>Assignment</u>. The conveyance and assignment herein shall be deemed effective as of the Effective Time.

For Ten Dollars (\$10.00) and other good and valuable consideration (the receipt and sufficiency of which are hereby acknowledged), Assignor does hereby forever GRANT, BARGAIN, SELL, CONVEY, ASSIGN, TRANSFER, SET OVER AND DELIVER unto Office of Oil and Gas Assignee, all of Assignor's right, title and interest in and to the following interests and properties (such right, title and interest described in subsections (a) through (k) of this Section 1, less and UL 17 2020 except the Excluded Assets, collectively, the "Conveyed Interests"):

WW Department of Environmental Protection

- (a) all oil, gas and/or mineral leases of Assignor, together with any and all other right, title and interest of Assignor in and to the leasehold estates created thereby, including subleases, royalties, overriding royalties, net profits interest, carried interests or similar rights or interests in such leases, and together with all rights, privileges, benefits and powers conferred upon Assignor with respect to the use and occupation of the lands covered thereby that may be necessary, convenient or incidental to the possession and enjoyment of such leases, located in Marshall, Wetzel, Doddridge, Harrison, Lewis, Marion, and Monongalia Counties, West Virginia and Greene, Butler, Fayette, Somerset, and Clearfield Counties, Pennsylvania, including those described on Exhibit A—Part 1 attached hereto (subject to any reservations, limitations or depth restrictions described on Exhibit A—Part 1), (Assignor's interest in such leases and other right, title and interest as so limited, the "Leases");
- (b) all rights and interests in, under or derived from all unitization agreements in effect with respect to any of the Leases and the units created thereby, including those described

BOOK 0 0 4 | PAGE 0 256

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 <u>Disclaimers of Warranties and Representations</u>.

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

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Office of Oil and Gas

JUL 17 2020

BOOK O O 4 O PAGE O 4 18

COLIN KING AMERICAN PETROLEUM PARTNERS OPERATING LLC 380 SOUTHPOINTE BOULEVARD, STE. 120 CANONGBURG PA 15317-8561

STATE OF WEST VIRGINIA
COUNTY OF MARSHALL

Marshall County
Jan Pest, Clerk
Instrument 1431482
10/18/2017 @ 03:32:59 PM
ASSIGNMENTS
Book 40 @ Page 418
Pages Recorded 5
Recording Cost \$ 11.00

ASSIGNMENT AND CONVEYANCE

THIS ASSIGNMENT AND CONVEYANCE (the "Assignment") is made and entered into this 16 Th day of October, 2017 (the "Effective Date"), by and between AMERICAN PETROLEUM PARTNERS OPERATING, LLC, (hereinafter "Assigner") and TH EXPLORATION, LLC (hereinafter "Assigner") pursuant to the terms of that certain Acreage Trade Agreement between the Assignor and the Assignee dated August 4, 2017 (the "Acreage Trade Agreement"). Capitalized terms used but not defined herein and defined in the Acreage Trade Agreement shall have the meanings given to such terms in the Acreage Trade Agreement.

WITNESSETH:

WHEREAS, Assignor desires to assign, set over, and transfer to Assignee all of Assignor's right, title, and interest in and to those certain Oil and Gas Leases situated in Marshall County, West Virginia, as described in Exhibit "A", attached hereto and made a part hereof (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. <u>Assignment</u>. 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 the Leases, and the lands covered thereby, together with all rights incident thereto and appurtenances thereon.

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.

 Special Warranty. Assignor represents and warrants that Assignor has not conveyed or otherwise encumbered (other than Permitted Encumbrances) its interest in the

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Office of Oil and Gas

JUL 17 2020

WY-AGIR-0008



CERTIFICATE OF CONSENT AND EASEMENT

The undersigned, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, being the owner of the surface of that certain lot, tract or parcel of land located in Franklin District, Marshall County, State of West Virginia, shown on the attached plat or survey, hereby consents and grants an easement, pursuant to West Virginia Code, Section 22C-9-7(b)(4) and Operating Rule 4.4 of the Rules and Regulations of the West Virginia Oil and Gas Conservation Commission, to TH Exploration, LLC, its successors or assigns, for the drilling and operation of a deep well for the production of oil or gas at the location shown on the attached plat or survey.

day of Detober, 2019.

Robert L. Shields

Rebecca A. Shields

Marshall County Jan Pest, Clerk Instrument 1463767 01/29/2020 @ 10:38:15 AH RIGHT OF WAY W/O CONSIDERATION Anak 1072 @ Page 252 Pages Recorded 2 11.00 Recording Cost #

STATE OF WEST VIRGINIA

COUNTY OF MARSHALL

SS:

On this, the 20th day of October, 2019, before me, a notary public, the undersigned officer, personally appeared Robert L. Shields and Rebecca A. Shields known to me (or satisfactorily proven) to be the person(s) who's name is subscribed to the within instrument, and acknowledged that he/she/they executed the same for proposed therein contained.

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

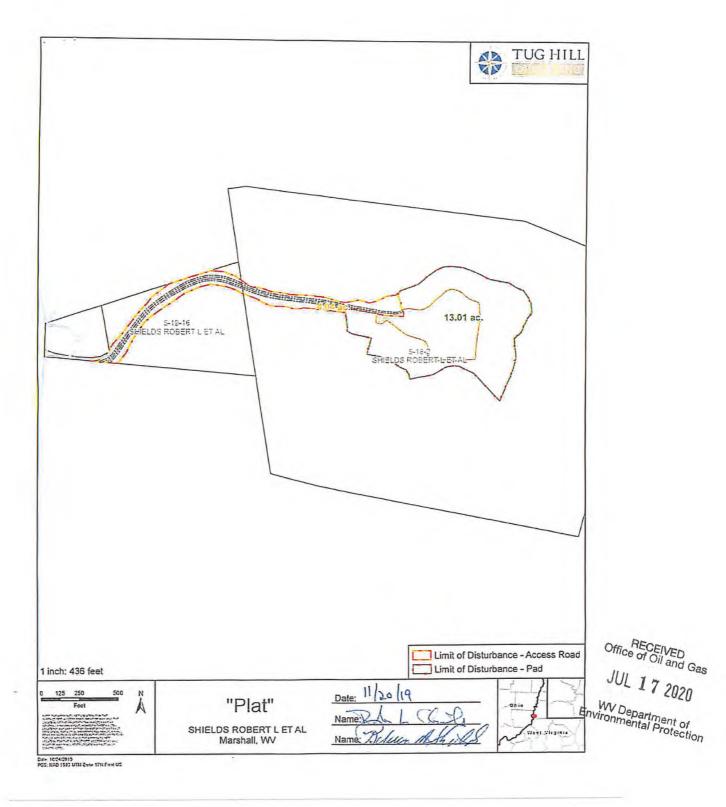
OFFICIAL SEA OFFICIAL SEAL
NOTARY PUBLIC
STATE OF WEST VIRGINIA
S DAVID WILHARM
Febris, Widem Bith 8 Rebelsy PLLC
3200 Main Stroet
Westen, West Virginia 25062
My Commission Expires Mar, 13, 2023

My Commission Expires: Signature/Notary Public: Name/Notary Public (print):

This instrument prepared by: WV Oil and Gas Conservation Commission 601 57th Street Charleston, WV 25304

4838-2618-8605v2

Office of Oil and Gas WV Department of Environmental Protection





CERTIFICATE OF CONSENT AND EASEMENT

The undersigned, for valuable consideration, the receipt and sufficiency of which is hereby acknowledged, being the owner of the surface of that certain lot, tract or parcel of land located in Franklin District, Marshall County, State of West Virginia, shown on the attached plat or survey, hereby consents and grants an easement, pursuant to West Virginia Code, Section 22C-9-7(b)(4) and Operating Rule 4.4 of the Rules and Regulations of the West Virginia Oil and Gas Conservation Commission, to TH Exploration, LLC, its successors or assigns, for the drilling and operation of a deep well for the production of oil or gas at the location shown on the attached plat or survey.

Donald Shields

Marshall County Jan Pest, Clerk Instrument 1463768 01/29/2020 @ 10:38:16 AH RIGHT OF WAY W/O CONSIDERATION Book 1072 @ Page 254 Pages Recorded 2 11.00 Recording Cost \$

STATE OF WEST VIRGINIA

COUNTY OF MARSHALL

SS:

On this, the 20th day of October, 2019, before me, a notary public, the undersigned officer, personally appeared Donald Shields known to me (or satisfactorily proven) to be the person(s) who's name is subscribed to the within instrument, and acknowledged that he/she/they executed

the same for proposed therein contained.

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

OFFICIAL SEAL
NOTATY PUBLIC
NOTATY PUBLIC
STATE OF WEST VIRGINIA
S DAVID WILHARM
Revaly Wikiner Bes Steisty PLIC
200 Main Street
Westen, West Virginia 26062
y Commission Express Mar. 13, 2023

Signature/Notary Public: 5/2 Name/Notary Public (print): _

My Commission Expires: 3/13/202

This instrument prepared by:

WV Oil and Gas Conservation Commission

601 57th Street

Charleston, WV 25304

4838-2618-8605v2



Office of Oil and Gas

JUL 17 2020

			d Cas	Lessee	Royalty	Book	· Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
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5	В	5-19-17	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	TRIENERGY, INC.	1/8+	655	546	19/623 TriEnergy Inc to AB Resources LLC	666/40 AB Resources LLC to Chief Exploration & Development LLC	21/148 TriEnergy Inc to TriEnergy Holdings LLC	21/520 Chief Exploration & Development LLC and Radler 2000 Limited Partnership to Enerplus Resources USA	720/214 TriEnergy Holdings LLC to AB Resources LLC	24/39 AB Resources, Chief Exploration & Development LLC, Radler 2000 Limited Partnership and Enerplus to Gastar Exploration USA Inc and Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gastar Explo Inc to TH Explorat
	c	5-19-24	MARK E. YOHO AND MARY YOHO, HUSBAND AND WIFE	TRIENERGY, INC.	1/8+	655	546	19/623 TriEnergy Inc to AB Resources LLC	666/40 AB Resources LLC to Chief Exploration & Development LLC	21/148 TriEnergy Inc to TriEnergy Holdings LLC	21/520 Chief Exploration & Development LLC and Radler 2000 Limited Partnership to Enerplus Resources USA	720/214 TriEnergy Holdings LLC to AB Resources LLC	24/39 AB Resources, Chief Exploration & Development LLC, Radler 2000 Limited Partnership and Enerplus to Gastar Exploration USA Inc and Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gastar Explo Inc to TH Explorat
			MARK E. YOHO AND MARY YOHO, HUSBAND AND		1/8+	655	546	19/623 TriEnergy Inc to AB Resources LLC	666/40 AB Resources LLC to Chief Exploration & Development LLC	21/148 TriEnergy Inc to TriEnergy Holdings LLC	21/520 Chief Exploration & Development LLC and Radler 2000 Limited Partnership to Enerplus Resources USA	720/214 TriEnergy Holdings LLC to AB Resources LLC	24/39 AB Resources, Chief Exploration & Development LLC, Radler 2000 Limited Partnership and Enerplus to Gastar Exploration USA Inc and Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gastar Explo Inc to TH Explora
5	D	5-19-18	MARK E. YOHO AND MARY YOHO, HUSBAND AND					19/623 TriEnergy Inc to AB	666/40 AB Resources LLC to Chief Exploration &	21/148 TriEnergy Inc to	21/520 Chief Exploration & Development LLC and Radler 2000 Limited Partnership to Enerplus	720/214 TriEnergy Holdings LLC to AB	24/39 AB Resources, Chief Exploration & Development LLC, Radler 2000 Limited Partnership and Enerplus to Gastar Exploration USA Inc and	21/41 Gastar Exploration USA Inc and Gastar	36/9 Gastar Explo
	E	5-18-24	WIFE	TRIENERGY, INC.	1/8+	655	546	Resources LLC	Development LLC	TriEnergy Holdings LLC	Resources USA	Resources LLC	Atinum Marcellus I LLC	Exploration Inc merger	Inc to TH Explora
š	E	5-18-24	DUANE BRUNN	TRIENERGY HOLDINGS, LLC	1/8+	705	484	NA .	NA	NA .	NA .	24/29 TriEnergy Holdings LLC to AB Resources LLC	24/32 AB Resources LLC to Gastar Exploration USA Inc and Atinum Marcellus I LLC	USA Inc and Gastar '	36/9 Gastar Expl Inc to TH Explora
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10*14022	G	5-23-2	HOWARD N WAYNE SR AND DENISE D WAYNE	GASTAR EXPLORATION USA INC	1/8+	665	384	NA	NA	NA	NA	NA	Marcellus I LLC	Exploration Inc merger	Inc to TH Exploration II LLC	=
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4			HOWARD N WAYNE SR	GASTAR EXPLORATION									23/353 Gastar Exploration USA Inc to Atinum	21/41 Gastar Exploration USA Inc and Gastar	36/9 Gastar Exploration	
10*14022	н	5-23-2.2	AND DENISE D WAYNE	USA INC	1/8+	665	384	NA	NA	NA	NA	NA NA	Marcellus I LLC	Exploration Inc merger	Inc to TH Exploration II LLC	4
10*14849	1	5-23-4	DAVID GUSTELY	GASTAR EXPLORATION USA INC	1/8+	806	265	NA	NA NA	NA NA	NA NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC	
			DURWOOD WRIGHT BY	GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration	
10*14853	1	5-23-4	CATHERINE HUMMEL AIF		1/8+	809	507	NA	NA NA	NA NA	NA NA	NA .	Exploration Inc merger	ис	Inc to TH Exploration II LLC	1
10*14861	1	5-23-4	NANCY WHITLATCH	GASTAR EXPLORATION USA INC	1/8+	809	526	NA	NA NA	NA	NA NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC	1.,
10*14862	1	5-23-4	ANN GUSTELY	GASTAR EXPLORATION USA INC	1/8+	809	568	NA	NA	NA NA	NA.	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration inc to Atinum Marcellus i LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC	
				GASTAR EXPLORATION								NA.	USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC		
10*14864	1	5-23-4	CAROLYN DURWAY	USA INC	1/8+	810	330	NA	NA NA	NA NA	NA NA	NA.	Exploration Inc merger		inc to TH Exploration II LLC	
10*14866	l	5-23-4	GARY CARMICHAEL	GASTAR EXPLORATION USA INC	1/8+	810	316	NA	NA	NA	NA NA	NA	USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC	<u>:</u>

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10*14868	1	5-23-4	WOODROW CAMPBELL JF	GASTAR EXPLORATION	1/8+	813	454	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
													21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration linc to Atinum Marcellus I	36/9 Gastar Exploration
10*14869	l l	5-23-4	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION USA INC	1/8+	813	561	NA	NA NA	NA	NA	NA	Exploration Inc merger	LLC	Inc to TH Exploration II LLC
10*14870		5-23-4	DAVID CARMICHAEL	GASTAR EXPLORATION	1/8+	816	16	NA	NA	NA	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14872	ı	5-23-4	DWG OIL & GAS ACQUISITIONS LLC	GASTAR EXPLORATION USA INC	1/8+	817	312	NA .	NA	NA .	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
				GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	
10*14873	I	5-23-4	RAYMOND MILLER	USA INC	1/8+	821	44	NA	NA NA	NA	NA NA	NA	Exploration Inc merger	ιιc	Inc to TH Exploration II LLC
10*14874	1	5-23-4	RICHARD MILLER	GASTAR EXPLORATION USA INC	1/8+	822	260	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
													21/41 Gastar Exploration		
10*14876		5-23-4	SHIRLEY LARGENT	GASTAR EXPLORATION USA INC	1/8+	827	228	NA	NA .	NA	NA	NA NA	USA Inc and Gastar Exploration Inc merger	Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
			GARY F OBLOY AND	GASTAR EXPLORATION) No.	No	No	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14877		5-23-4	DENISE I OBLOY	USA INC	1/8+	836	112	INA	INA	INA	INM	Lisa	Trybiolation inclineiger		,

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80 80 80				GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar		
10*14878	1	5-23-4	ARTHUR BRUCE COULTER	USA INC	1/8+	839	519	NA	NA NA	NA NA	NA	NA NA	Exploration Inc merger	rrc	Inc to TH Exploration II LLC
20 L 7		5-23-4	THERESA RINE	GASTAR EXPLORATION USA INC	1/8+	840	162	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration inc to TH Exploration II LLC
10 140/3															
10*14880		5-23-4	IRIS LUCAS	GASTAR EXPLORATION USA INC	1/8+	849	545	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
											İ				
10*14881	I	5-23-4	MARY WHITLATCH	GASTAR EXPLORATION USA INC	1/8+	849	548	NA	NA	NA .	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
								1		İ					
10°14882	1	5-23-4	GARY RINE	GASTAR EXPLORATION USA INC	1/8+	849	551	NA NA	NA	NA .	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14883	1	5-23-4	PAUL WISE	GASTAR EXPLORATION USA INC	1/8+	852	252	NA	NA	, NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14884	I	5-23-4	RENEE HAGERTY	GASTAR EXPLORATION USA INC	1/8+	852	255	NA	NA	NA	NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14885	1	5-23-4	HOWARD RINE	GASTAR EXPLORATION USA INC	1/8+	854	601	NA .	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC

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10*14886	ı	5-23-4	лорі уоно	GASTAR EXPLORATION USA INC	1/8+	854	604	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14887	ı	5-23-4	CHRISTINA ROBERTS	GASTAR EXPLORATION USA INC	1/8+	867	392	NA	NA .	NA	NA NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14888		5-23-4	DARLENE BUTLER	GASTAR EXPLORATION USA INC	1/8+	867	395	NA	NA	NA	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14889		5-23-4	HAROLD YOHO	GASTAR EXPLORATION USA INC	1/8+	870	37	NA NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
			HENRY MALONE JR	GASTAR EXPLORATION USA INC	1/8+	870	40	NA	NA	NA	NA.	NA.	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14890		5-23-4	NANCY F FYE & STEPHEN	GASTAR EXPLORATION				IVA	NA.	IVA	100		21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration
10*14891	l l	5-23-4	M FYE JAMES J. CAMPBELL BETTY	USA INC CHESAPEAKE APPALACHIA	1/8+	885	606	INA .	INA .	NA NA	NA 23/127 Chesapeake Appalachia LLC to Statoil	33/110 Chesapeake Appalachia LLC to SWN	Exploration Inc merger 33/424 Statoli USA Onshore Properties Inc to SWN Exchange Titleholder	Titleholder LLC to SWN	Inc to TH Exploration II LLC 41/256 SWN Production Company LLC to TH
10*17145		5-23-4 5-23-4	J. CAMPBELL CAROLYN CAMPBELL BRITTON ROBERT C. BRITTON	CHESAPEAKE APPALACHIA	1/8+	685 685	458 464	NA NA	NA NA	NA NA	Onshore Properties Inc 23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties inc	Production Company LLC 33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder	Production Company LLC 19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH

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10°17147	1	5-23-4	JOANN J. PARSONS GARY D. PARSONS	CHESAPEAKE APPALACHIA LLC	1/8+	685	470	NA .	NA .	NA	23/127 Chesapeake Appalachia LLC to Statoli Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoii USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
10*17148	1	5-23-4	DONALD E. CAMPBELL JUNE L. CAMPBELL	CHESAPEAKE APPALACHIA	1/8+	685	476	NA .	NA .	NA	23/127 Chesapeake Appalachia LLC to Statoli Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17149		5-23-4	WANDA M. BLAKE	CHESAPEAKE APPALACHIA	1/8+	685	482	NA	NA .	NA .	23/127 Chesapeake Appalachia LLC to Statoli Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17150	1	5-23-4	IDA L CAMPBELL	CHESAPEAKE APPALACHIA	1/8+	685	488	NA	NA	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
10*17502		5-23-4	PATRICIA E GUSTELY	TH EXPLORATION, LLC	1/8+	942	334	NA	NA	NA	NA	NA	NA	NA	NA
			DONALD S BOBOVNIK AND DOLORES J BOBOVNIK		1/8+	942	346	NA	No.	NA NA	NA	NA.	NA NA	NA NA	NA NA
10*17532		5-23-4	RONALD L MAYER AND												
10*17535	1	5-23-4	DEBRA A MAYER	TH EXPLORATION, LLC	1/8+	929	580	NA	NA NA	NA .	NA	NA .	NA .	INA .	NA .
10*17539	1	5-23-4	JOANN HAGERTY	TH EXPLORATION, LLC	1/8+	942	342	NA	NA	NA	NA	NA	NA	NA	NA

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10*17593		5-23-4	REBECCA HAGERTY	TH EXPLORATION, LLC	1/8+	942	350	NA	NA	NA	INA	NA	NA .	NA .	NA
10*17594	,	5-23-4	MEGAN HAGERTY	TH EXPLORATION, LLC	1/8+	942	362	NA .	NA	NA	NA	NA	NA	NA	NA
10 17334															
10*17595	1	5-23-4	THOMAS E RINE AND MARY P RINE	TH EXPLORATION, LLC	1/8+	929	572	NA .	NA	NA	NA	NA	NA	NA	NA
10*17640	1	5-23-4	PATRICIA A GARCAR	TH EXPLORATION, LLC	1/8+	942	8	NA	NA	NA	NA	INA	NA	NA	NA .
												:			
10*17679	1	5-23-4	NORMA J ASH	TH EXPLORATION, LLC	1/8+	944	130	NA .	NA .	NA .	NA	NA	NA	NA	NA .
10-17679		3-23-4	HOMMASAUT	201011101111212											
10*17680		5-23-4	DAVID E CHURCH	TH EXPLORATION, LLC	1/8+	932	424	NA	NA	NA	NA	NA	NA	NA	NA
			WALTER E LOSEY AND												
10*17681	l l	5-23-4	CINDY L LOSEY	TH EXPLORATION, LLC	1/8+	942	338	NA	NA	NA .	NA	NA	NA	NA	NA
		, <i>.</i>	JAMES E GARLOCH AND MARY K GARLOCH	TH EXPLORATION, LLC	1/8+	935	68	NA .	NA.	NA NA	NA NA	NA .	NA	NA .	NA .
10*17682		5-23-4	IMAKY K GAKLUCH	IN EAPLOKATION, LLC	1/0+	333	00	lino.	iwo.	1		Atti in a			

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0			PATRICK HAGERTY AND		_						l	ļ			l _{NA}
10*17683	- '	5-23-4	DALANE HAGERTY	TH EXPLORATION, LLC	1/8+	942	358	NA .	NA .	NA	NA .	NA	NA	NA	NA .
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9															
10*17715	ı	5-23-4	ROBERT A SANDS AND JOYCE A SANDS	TH EXPLORATION, LLC	1/8+	942	354	NA	NA	NA	NA	NA	NA	NA	NA
										L	L	ļ			NA
10*17719	!	5-23-4	ROBERT R DARROW	TH EXPLORATION, LLC	1/8+	942	380	NA	NA .	NA	INA .	NA .	NA	NA .	NA .
10*17720	1	5-23-4	WILLIAM KOTSON AND DEBRA KOTSON	TH EXPLORATION, LLC	1/8+	938	507	NA	NA	NA	NA	NA	NA	NA	NA
															1
			HAROLD H HAGERTY AND												
10*17775	1	5-23-4	DEBORAH M HAGERTY	TH EXPLORATION, LLC	1/8+	942	370	NA	NA .	NA	NA	NA	NA	NA .	NA
				-											
10*17776		5-23-4	JAMES GARCAR AND MELISSA GARCAR	TH EXPLORATION, LLC	1/8+	941	627	NA .	NA .	NA	NA	NA	NA	NA	NA .
		-													
10*17824		5-23-4	SARA FULTON	TH EXPLORATION, LLC	1/8+	942	384	NA	NA	NA	NA	NA	NA	NA	NA
														1	
10#17001	.	5-23-4	ROBYN HAGERTY	TH EXPLORATION, LLC	1/8+	924	602	NA.	NA.	NA NA	NA NA	NA .	NA.	INA.	NA
10*17901	<u> </u>	J-25-4	INDELLI LAGERIT	III EAFLURATION, ELC	1/07	324	1 002	luo.	luo.	jno	J.w.	1	1		

10*17965	l l	5-23-4	ROBERT DAVID BARNES AND RHONDA BARNES	TH EXPLORATION, LLC	1/8+	942	366	NA	NA	NA	NA	NA	NA	NA	NA .
10*18042	1	5-23-4	JOSEPH J ONORE	TH EXPLORATION, LLC	1/8+	927	101	NA	NA	NA	NA	NA	NA	NA	NA
		5-23-4	JAMES M ONORE AND CINDY L ONORE	TH EXPLORATION, LLC	1/8+	927	105	NA .	NA.	NA	NA	NA	NA NA	NA	NA
10*18043	' '	5-23-4	CINDY LONORE	TH EXPLORATION, ELC	1/07	321	103	NA .	NA .						
10*18176		5-23-4	CRYSTAL M HOOKER AND JAMES HOOKER	TH EXPLORATION, LLC	1/8+	929	568	NA .	N A	NA	NA	NA	NA	NA	NA
10*18329	1	5-23-4	COLLEEN HAGERTY	TH EXPLORATION, LLC	1/8+	929	560	NA	NA	NA	NA	NA	NA	NA	NA .
10*18367		5-23-4	WALTER C SCHUBERT AND BARBARA A SCHUBERT	TH EXPLORATION, LLC	1/8+	931	377	NA	NA	NA	NA	NA	NA	NA	NA
10*18368	1	5-23-4	ROBERTA K MILLER	TH EXPLORATION, LLC	1/8+	931	457	NA	NA	NA	NA .	NA	NA	NA	NA
10*18386		5-23-4	JOSEPH R RINE AND JENNIFER M RINE	TH EXPLORATION, LLC	1/8+	932	492	NA .	NA.	NA	NA	NA	NA	NA	NA

1-1996 1											·		Т			
2-1956																
2-1956																
1 5234 WATERWINDLE TRANSPORTED 12 TO THE PRODUCTION OF THE PRODUCT	10*18598	I	5-23-4	MARK E GUSTELY	TH EXPLORATION, LLC	1/8+	935	52	NA	NA	NA	NA	NA	NA	NA	NA
1 5234 WATERWINDLE TRANSPORTED 12 TO THE PRODUCTION OF THE PRODUCT																
1	10*18795	1		GASTON FAMILY INVESTMENTS LLC	TH EXPLORATION, LLC	1/8+	959	502	NA	NA	NA	NA	NA	NA	NA	NA
1 5-23-4 ODKITHY REPRESENTANT THE ERECONSTRUCTED THE PROPOSATION, LEE 1/9+ 9+44 372 MA MA MA MA MA MA MA MA MA MA MA MA MA																
1 5-23-4 PATRICIAL SHAW RELIER AND ONE IN FOLICITE AND ONE IN TOUR STATE AND ONE IN TOUR AND O	10*18994	1	5-23-4	SHIRLEY ANN DRAKE	TH EXPLORATION, LLC	1/8+	940	137	NA	NA	NA .	NA .	NA .	NA .	INA .	NA
1 5-23-4 PATRICIAL SHAW RELIER AND ONE IN FOLICITE AND ONE IN TOUR STATE AND ONE IN TOUR AND O	10*19736		5.23.4	DOROTHY HLINKA DUKE	TH EXPLORATION, LLC	1/8+	944	571	NA.	NA NA	NA	NA	NA	NA	NA	N A
1 5-29-4 DAWN M PSCHER TH DDPLORATION, LLC 1/8+ 552 643 NA NA NA NA NA NA NA NA NA NA NA NA NA	10 19/30	'	3-23-4	DONOTTI TIZINO DONC	III dia colonion, cco											
A8E J HOCHSTETLER AND ANNA E HOCHSTETLER AND ANNA E HOCHSTETLER ORIE N YOUNG AND	10*21217	1	5-23-4	KEITH JAY FISCHER AND DAWN M FISCHER	TH EXPLORATION, LLC	1/8+	952	643	NA	NA	NA	NA	NA	NA	NA	NA .
A8E J HOCHSTETLER AND ANNA E HOCHSTETLER AND ANNA E HOCHSTETLER ORIE N YOUNG AND			E 12.4	DATBICIA I SHAW VELLED	TH EVDI OPATION 11C	1/8+	945	43	NA NA	NA.	, NA	NA.	NA	NA NA	NA.	NA NA
ORIE N YOUNG AND	10-21222	1	5-23-4	PATRICIA J SHAW RELLER	TH EXPLORATION, ELC	1/8+	540		INA.	in .	ING.	no.				
ORIE N YOUNG AND	10*21415	ı	5-23-4	ABE J HOCHSTETLER AND ANNA E HOCHSTETLER	TH EXPLORATION, LLC	1/8+	957	7	NA	NA	NA	NA	NA	NA	NA	NA
	10*21425	l l	5-23-4	ORIE N YOUNG AND BERNIE A YOUNG	TH EXPLORATION, LLC	1/8+	957	29	NA	NA	NA	NA	NA	NA	NA	NA



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			FRANCIS R SMITH AND												
10*21428	1	5-23-4	ANNA M SMITH	TH EXPLORATION, LLC	1/8+	957	37	NA .	NA .	NA	NA .	NA	NA .	NA .	NA .
10*21434	1	5-23-4	CATHERINE HUMMEL	TH EXPLORATION, LLC	1/8+	957	33	NA	NA	NA	NA .	NA	NA	NA	NA
			RICHARD RICH AND KAREN												
10*21451	1	5-23-4	RICH	TH EXPLORATION, LLC	1/8+	954	254	NA	NA	NA	NA .	NA	NA	NA	NA .
10001452		5-23-4	KIMBERLY COX	TH EXPLORATION, LLC	1/8+	954	262	NA NA	NA NA	NA.	NA NA	NA	NA	NA NA	NA
10*21452		5-23-4	KIMBERLY COX	TH EXPLORATION, LLC	1/0+	334	202			, mn	na .				
10*21457		5-23-4	WARREN L COULTER AND ROSLINA A COULTER	TH EXPLORATION, LLC	1/8+	954	249	NA	NA	NA	NA	NA	NA	NA	NA
10 21437		3 23 4													
10*21458		5-23-4	HUSTON A SMITH JR AND ANN C SMITH	TH EXPLORATION, LLC	1/8+	957	45	NA	NA	NA	NA	NA	NA	NA	NA
10*21459		5-23-4	JAMES L CHURCH	TH EXPLORATION, LLC	1/8+	957	41	NA	NA	NA	NA	NA	NA	NA	NA
20 22703	· ·	J 43-7													
10*21498		5-23-4	MABEL SHILLINGBURG AND CLIFFORD SHILLINGBURG	TH EXPLORATION, LLC	1/8+	954	258	NA	NA	NA	NA NA	NA	NA	NA	NA
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			MATTHEW COULTER AND												
10*21500	1	5-23-4	SIMONE COULTER	TH EXPLORATION, LLC	1/8+	954	245	NA	NA	NA	NA	NA	NA	NA .	NA
													NA	NA .	NA.
10*21501	I	5-23-4	EUGENIA E HOUSER	TH EXPLORATION, LLC	1/8+	954	241	NA	NA	NA	NA	NA	INA	IVA	
							237			NΔ	NA	NA.	NA.	NA	NA NA
10*21502	1	5-23-4	DEBRA MURIN	TH EXPLORATION, LLC	1/8+	954	237	NA	NA	INA	INA	INA	IVA	MA.	
			DARLENE M DAVIS	TH EXPLORATION, LLC	1/8+	954	233	NA	NA	NA	NA NA	NA NA	NA NA	N A	NA NA
10*21503	1	5-23-4	DARLENE M DAVIS	TH EXPLORATION, LLC	1/8+	954	253	NA .	INA .	INA .	NA .	INA .			
10*21626	1	5-23-4	CLARENCE RANDALL EMERY AND PAULA JEAN EMERY	TH EXPLORATION, LLC	1/8+	958	344	NA	NA	NA	NA	NA	NA .	N A	NA
10*21632		5-23-4	JOHN ARLES EMERY	TH EXPLORATION, LLC	1/8+	959	339	NA NA	NA	NA .	NA	NA .	NA	NA .	NA
10*21632		3-23-4	JOHN AILLES LINEIN	THE COLORIDA CES											
10011CEE		5-23-4	STANLEY GUSTELY	TH EXPLORATION, LLC	1/8+	965	206	NA	NA	NA	NA	NA	NA	NA .	NA
10*21655		3-23-4	STANLET GUSTELT	III EAFLOIGHION, LLC	2/01	- 555									
10*21656		5-23-4	JOHN OBLOY AND JANET L	TH EXPLORATION, LLC	1/8+	959	331	NA	NA	NA	NA	NA	NA	NA	NA

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10°21657		5-23-4	RONALD J SALKOVICK JR & SANDRA SALKOVICK	TH EXPLORATION, LLC	1/8+	958	373	NA NA	NA	NA	NA	NA	NA	NA	NA
			JOYCE KAY BURTON AND												
10*21774	1	5-23-4	SAMUEL C BURTON	TH EXPLORATION, LLC	1/8+	957	467	NA	NA	NA	NA	NA	NA	NA	NA .
10731912		· 5-23-4	STUART WHITE AND BETTY WHITE	TH EXPLORATION, LLC	1/8+	958	352	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA .
10*21813		3-23-4	White	III EXPLOIATION, ELC	1/0.	330	302	in in in in in in in in in in in in in i			177				
10*21815	1	5-23-4	JAMES NEAL EMERY AND RENEE R EMERY	TH EXPLORATION, LLC	1/8+	958	348	NA	NA	NA	NA	NA .	NA .	NA	NA .
10*21816	_	5-23-4	CINDY GREEN AND LARRY GREEN	TH EXPLORATION, LLC	1/8+	958	356	NA NA	NA NA	NA	NA	NA	NA	NA	NA .
10°21817		5-23-4	MARY LOU HLINKA AND	TH EXPLORATION, LLC	1/8+	959		NA	NA NA	NA	NA	NA	NA	NA	NA NA
10*21819	·	5-23-4	MARY CATHERINE THOMS		1/8+	958			NA	NA	NA	NA	NA	NA	NA
10*21820		5-23-4	MARION DAVID OTT &	TH EXPLORATION, LLC	1/8+	959	506	NA.	NA NA	NA NA	NA	NA NA	NA	NA	NA .
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			MARQUITA CLYBURN	TH EXPLORATION, LLC	1/8+	959	510	MA	NA NA	NA	NA .	NA NA	NA .	NA.	INA
10*21832	I	5-23-4	MARQUITA CLYBURN	TH EXPLORATION, LLC	1/8+	959	510	INA .	INA .	INA .	INA .	NA.	INA .	NA .	100
												l I			
10*21948	ı	5-23-4	BARBARA H COAKLEY	TH EXPLORATION, LLC	1/8+	960	66	NA	NA	NA .	NA	NA	NA	NA	NA
			ROBIN ADAIR GUMP AND												
10*21949	1	5-23-4	LOUIS M GUMP	TH EXPLORATION, LLC	1/8+	960	70	NA	NA	NA	NA	NA	NA	NA	NA .
					4/0	960	77		NA.	NA	NA NA	lata .		NA.	loto l
10*21951	I	5-23-4	CHARLES DOUGLAS LANE	TH EXPLORATION, LLC	1/8+	960		INA	NA	INA	INA .	NA .	INA	INA .	INO.
10*21994	I	5-23-4	MELISSA L DARROW	TH EXPLORATION, LLC	1/8+	954	328	NA	NA	NA	NA	NA	NA	NA	NA
10*22013	1	5-23-4	CHARLES J KNOX	TH EXPLORATION, LLC	1/8+	966	112	NA	NA	NA	NA	NA	NA .	NA	NA .
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10*22014	1	5-23-4	SHERMAN E KNOX JR	TH EXPLORATION, LLC	1/8+	966	108	NA	NA	NA	NA	NA	NA .	NA	NA
10*22018	1	5-23-4	KATHLEEN ROBERTSON	TH EXPLORATION, LLC	1/8+	960	539	NA	NA	NA	NA	NA	NA	NA	NA
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1 5-23-4 KEVIN D CHURCH TH EXPLORATION, LLC 1/8+ 957 49 NA NA NA NA NA NA NA NA NA	iA
1 5-23-4 KEVIN D CHURCH TH EXPLORATION, LLC 1/8+ 957 49 NA NA NA NA NA NA NA NA NA NA NA NA NA	iA
1 5-23-4 KEVIN D CHURCH TH EXPLORATION, LLC 1/8+ 957 49 NA NA NA NA NA NA NA NA NA NA NA NA	iA
	IA
1 5-23-4 CATHY J EMERY TH EXPLORATION, LLC 1/8+ 954 310 NA NA NA NA NA NA NA NA NA NA NA NA NA	IA
TODD LEARN AND KENDA 10°22093 I 5-23-4 LEARN TH EXPLORATION, LLC 1/8+ 954 314 NA NA NA NA NA NA NA NA NA NA NA	IA
10*22102 I 5-23-4 BONNIE LOU GRUBER TH EXPLORATION, LLC 1/8+ 954 302 NA NA NA NA NA NA NA NA	IA.
10*22102 I 5-23-4 BONNIE LOU GRUBER TH EXPLORATION, LLC 1/8+ 954 302 NA NA NA NA NA NA NA NA NA NA NA NA NA	
10°22128 5-23-4 BETTY PYSELL TH EXPLORATION, LLC 1/8+ 961 433 NA NA NA NA NA NA NA NA NA NA	IA
VICKY STRAUSS AND 10*22144 I 5-23-4 DENNIS A STRAUSS TH EXPLORATION, LLC 1/8+ 961 529 NA NA NA NA NA NA NA NA NA NA NA	IA
DEBRA L LYSESKI AND	
10°22165 5-23-4 GERALD A LYSESKI TH EXPLORATION, LLC 1/8+ 954 306 NA NA NA NA NA NA NA NA NA NA NA NA NA	IA
ANGELA HENTHORN AND 10°22178 I 5-23-4 WILLIAM R HENTHORN TH EXPLORATION, LLC 1/8+ 972 58 NA NA NA NA NA NA NA NA NA NA	IA

								I		T					
			DORIS WEST AND ROBERT												
10*22332	1	5-23-4	WEST	TH EXPLORATION, LLC	1/8+	962	542	NA	INA	NA .	NA	NA	NA	NA	NA
10*22339	ı	5-23-4	BETTY LEE HOWARD LOY	TH EXPLORATION, LLC	1/8+	963	392	NA .	NA	NA	NA	NA	NA	NA	NA
10*22436		5-23-4	TESSEAN FAMILY REVOCABLE LIVING TRUST	TH EXPLORATION, LLC	1/8+	963	626	NA	NA	NA	NA .	NA	NA	NA	NA
10 11430															
10*22443	1	5-23-4	GATHA CHAMBERS	TH EXPLORATION, LLC	1/8+	963	622	NA	NA	NA	NA	NA	NA	INA	NA .
10*22503	ı	5-23-4	KENNETH R SHAW AND DONNA K SHAW	TH EXPLORATION, LLC	1/8+	966	518	NA	NA	NA	NA	NA	NA	NA	NA
			JAMES D DRAKE AND	<u></u>	460	964	425	<u></u>			NA.	l l	l _{NA}	NA.	NA .
10*22505	1	5-23-4	DONNA K DRAKE	TH EXPLORATION, LLC	1/8+	964	425	NA	INA .	NA	IVA	INA.	INA	in .	100
10*22594		5-23-4	JAMES A WADE SR	TH EXPLORATION, LLC	1/8+	965	481	NA	NA .	NA	NA	NA	NA	NA	NA .
10*22609		5-23-4	KATHY JO CULLUM	TH EXPLORATION, LLC	1/8+	966	514	NA .	NA NA	NA	NA	NA	NA	NA	NA
10 22303	J	J-23-7			· · · · · · · · · · · · · · · · · · ·										

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10*22613		5-23-4	JEWEL L CAMPBELL	TH EXPLORATION, LLC	1/8+	966	510	NA	NA .	NA .	NA .	NA .	NA	NA	NA
10*22779	,	5-23-4	STEVEN WADE	TH EXPLORATION, LLC	1/8+	968	424	NA	NA .	NA .	NA	NA	NA	NA	NA
10 22//3		3234													
			MARGARET C MCMURRY &												
10*22809	ı	5-23-4	WILLIAM F MCMURRY	TH EXPLORATION, LLC	1/8+	972	54	NA	NA	NA	NA	NA	NA	NA	NA
								•							
10*22812		5-23-4	JOSEPH F GOBLOWSKY	TH EXPLORATION, LLC	1/8+	968	428	NA .	NA .	NA .	NA .	NA .	NA	NA	NA
10.22812		3-23-4	JOSEPH CODESTISA	The same same same same same same same sam	-,										
			LAURINE C CURTIS &												
10*22861		5-23-4	EDGAR A CURTIS III	TH EXPLORATION, LLC	1/8+	976	147	NA	NA .	NA	NA	NA	NA .	NA	NA .
	,	5-23-4	JAMES DAVID CRANDALL	TH EVELOPATION H.C.	1/8+	984	48	NA .	NA.	NA	NA.	NA .	NA NA	NA .	NA .
10*23166	l	5-23-4	JAMES DAVID CRANDALL	TH EXPLORATION, LLC	1/01	304		NA .	100						
10*23168	1	5-23-4	JASON WADE	TH EXPLORATION, LLC	1/8+	966	506	NA .	NA	NA .	NA	NA	NA	NA	NA
									NA.	NA.		NA.	NA.	NA .	NA.
10*23368		5-23-4	ROSE MARIE CAMPBELL	TH EXPLORATION, LLC	1/8+	988	447	INA	INA	INA	INA	Inv.	luo.	line.	

			т						·		T	T	1		
			JONNA MARPLE AND ERIK		240	988	442	NA NA	NA	NA NA	NA	NA	NA NA	NA	NA
10*23371	1	5-23-4	MARPLE	TH EXPLORATION, LLC	1/8+	988	442	INA	NA .	INA .	INA .	l l		No.	
			JON GUSTELY AND											NA NA	NA .
10*23398	<u> </u>	5-23-4	MARILYN NUE	TH EXPLORATION, LLC	1/8+	1008	12	NA	NA .	NA	NA	INA	NA .	NA .	NA .
					- 10					NA.	NA	No	MA	NA	NA.
10*23410	1	5-23-4	JENNA WADE	TH EXPLORATION, LLC	1/8+	1008	16	NA	NA	_ NA	INA .	INA .	NA .	NA .	NA .
10*23505		5-23- 4	RENEE KELLAR	TH EXPLORATION, LLC	1/8+	971	633	NA NA	NA	NA	NA	NA	NA	NA	NA
10*23505		5-23-4	RENCE KELLAR	III EXPLORATION, ELC	1,0,	3/1									
10°23647		5-23-4	MARILYN M ROBINSON	TH EXPLORATION, LLC	1/8+	1009	309	N A	NA	NA	NA	NA	NA	NA	NA
10 25047		3-23-4			-,-										
10°23648		5-23-4	PAUL D RINE JR	TH EXPLORATION, LLC	1/8+	1009	313	NA NA	NA	NA	NA	NA	NA	NA	NA
10 23040		3257	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,											
10*23727		5-23-4	LISA TUCKER AND FRANCIS TUCKER	TH EXPLORATION, LLC	1/8+	1011	525	NA	NA	NA	NA	NA	NA	NA	NA
20 20/2/					•										
10*23756		5-23-4	KAREN DRAKE AND JEFF DRAKE	TH EXPLORATION, LLC	1/8+	1012	182	NA	NA	NA	NA	NA	NA	NA	NA

10*23757	ı	5-23-4	DAVID DRAKE	TH EXPLORATION, LLC	1/8+	1012	187	NA	NA	NA	NA	NA	NA	NA	NA
10*23767	ı	5-23-4	STEVEN W SLATEN AND	TH EXPLORATION, LLC	1/8+	1014	481		NA	NA .	NA	NA NA	NA NA	NA .	NA NA
10*23792		5-23-4	RHONDA SLATEN NANCY C DWYER AND WENDEL MARTINKOVIC	TH EXPLORATION, LLC	1/8+	1014	488		NA NA	NA NA	NA NA	NΔ	NA NA	NA NA	NA NA
10*23826		5-23-4	RONALD DEAN YOHO & VICTORIA LYNN YOHO	TH EXPLORATION, LLC	1/8+	1017	1		NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
10*23883		5-23-4	VICKI ANN WILLIAMS & WILLIAMS	TH EXPLORATION, LLC	1/8+	1016	644		NA NA	NA NA	NA NA	NA NA	NA	NA	NA .
10*24208		5-23-4 5-23-4	WALTER W STREIGHT JR AND CONNIE JO STREIGHT		1/8+	1023	516		NA						
10*24208		5-23-4 5-23-4	JO ELLEN GUSTELY	TH EXPLORATION, LLC	1/8+	1023	527	NA NA	NA NA	NA	NA	NA	NA	NA	NA

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ı	5-23-4	SUSAN ALFRED AND KEVIN J ALFRED	TH EXPLORATION, LLC	1/8+	1025	401	N A	NA	NA	NA	NA	NA	NA	NA .
1	5-23-4	LEONARD LEE COULTER AND DEBRA A COULTER	TH EXPLORATION, LLC	1/8+	1025	405	N A	NA .	NA	NA .	NA	NA	NA .	NA .
		ANNE DIAME	THEY PRODUCED HE	1/9.	1028	, g5	NO.	NA.	NA.	NA.	NA NA	NA	NA NA	NA .
- 1		WALTER W STREIGHT JR												NA.
									NA NA					NA NA
									NA NA					NA NA
		DAVID C WHITE NEISWONGER AND WHITE							NA NA				NA NA	NA NA
	5-23-4 5-23-4		TH EXPLORATION, LLC	1/8+	1030	368	NA NA	NA NA	NA	NA NA	NA NA	NA	NA	NA
	,	5-23-4	I 5-23-4 LEONARD LEE COULTER AND DEBRA A COULTER AND DEBRA A COULTER AND DEBRA A COULTER I 5-23-4 ANNE DWYER I 5-23-4 WALTER W STREIGHT JR AND CONNIE JO STREIGHT I 5-23-4 ROBERT LEE MARCIANO AKA ROBERT LEE MAYER I 5-23-4 RAYMOND GUSTELY JR DAVID C WHITE NEISWONGER AND WHITE LAW OFFICES	I S-23-4 ANNE DWYER TH EXPLORATION, LLC WALTER W STREIGHT JR AND CONNIE JO STREIGHT TH EXPLORATION, LLC ROBERT LEE MARCIANO AKA ROBERT LEE MAYER TH EXPLORATION, LLC I S-23-4 RAYMOND GUSTELY JR TH EXPLORATION, LLC DAVID C WHITE NEISWONGER AND WHITE LAW OFFICES TH EXPLORATION, LLC	I 5-23-4 LEONARD LEE COULTER AND DEBRA A COULTER TH EXPLORATION, LLC 1/8+ 1 5-23-4 ANNE DWYER TH EXPLORATION, LLC 1/8+ WALTER W STREIGHT JR AND CONNIE JO STREIGHT I S-23-4 ROBERT LEE MARCAND AKA ROBERT LEE MARCAND AKA ROBERT LEE MAYER I S-23-4 RAYMOND GUSTELY JR TH EXPLORATION, LLC 1/8+ DAVID C WHITE NESWONGER AND WHITE LAW OFFICES TH EXPLORATION, LLC 1/8+	1 5-23-4 IAURED THE EXPLORATION, LLC 1/8+ 1025	1 5-23-4 ALFRED THE EPICORATION, LLC 1/8+ 1025 405	1 5-23-4 ALFRED THE DPFORATION, LLC 1/8+ 1035 405 MA	1 5-23-4 JAJFRED THEOPEOMATON, LLC 1/8+ 1025 405 MA MA	1 5-23-4 JAURIED THE EPHOMATION, LIC 1/29- 1025 409 NA NA NA NA NA NA NA N	1 5-23-4 IANNO THE PRICHATION, LC 1/8+ 1625 463 MA MA MA MA MA MA MA MA MA MA MA MA MA	1 23-4 JANES THE PROPERTY ILE 1/4" 1055 695 80. 90. 90. 90. 90.	1 1-2-4 AARD THE CHANGE OF THE PRODUCTION LICE 1/24 1000 400 40. 4	1 5-24 PART COUNTS IN SUPPLIES AND SET OF COUNTS IN SUPPLIES AND S

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10*25479	ı	5-23-4	ROBERT LEE MARCIANO AKA ROBERT LEE MAYER	TH EXPLORATION, LLC	1/8+	1030	416	NA	NA	NA NA	NA NA	NA .	NA	NA	NA
			STONE HILL MINERAL												
10*27715	1	5-23-4	HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1057	332	NA	NA	NA NA	NA NA	NA NA	NA	NA	NA .
10*27959		5-23-4	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1063	594	NA	NA NA	NA NA	NA.	NA NA	NA	NA	NA
10*2/959		5-23-4	HOLDINGS LLC	TH EXPLORATION, LLC	1/07	1003	354	INA	INA.	- INA	IVA		IN .	1100	
10*14849	J	5-23-4.2	DAVID GUSTELY	GASTAR EXPLORATION USA INC	1/8+	806	265	NA I	NA NA	NA	NA NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14853	J	5-23-4.2	DURWOOD WRIGHT BY CATHERINE HUMMEL AIF	GASTAR EXPLORATION USA INC	1/8+	809	507	NA	NA	NA NA	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14861	J	5-23-4.2	NANCY WHITLATCH	GASTAR EXPLORATION USA INC	1/8+	809	526	NA	NA .	NA	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14862		5-23-4,2	ANN GUSTELY	GASTAR EXPLORATION USA INC	1/8+	809	568	NA	NA	NA	NA	NA.	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration lnc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14864	J	5-23-4.2	CAROLYN DURWAY	GASTAR EXPLORATION USA INC	1/8+	810	330	NA	NA	NA	NA NA	NA .	21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	

10*14866	J	5-23-4.2	GARY CARMICHAEL	GASTAR EXPLORATION USA INC	1/8+	810	316	NA	NA NA	NA NA	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atlnum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10°14868	J	5-23-4.2	WOODROW CAMPBELL JR	GASTAR EXPLORATION USA INC	1/8+	813	454	NA	NA NA	NA.	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14869		5-23-4.2	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION USA INC	1/8+	813	561	NA	NA	NA	NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
				GASTAR EXPLORATION USA INC		816	16		Na	NA.	NA.	NA.	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atlnum Marcellus I ILLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14870	,	5-23-4.2	DAVID CARMICHAEL DWG OIL & GAS	GASTAR EXPLORATION	1/8+			INA	IVA	IVA			21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	
10*14872	J	5-23-4.2	ACQUISITIONS LLC	USA INC	1/8+	817	312	NA	NA NA	NA NA	NA .	NA	Exploration Inc merger 21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration	
10*14873	J	5-23-4.2	RAYMOND MILLER	GASTAR EXPLORATION USA INC	1/8+	821	44	NA	NA	NA	NA .	NA NA	Exploration Inc merger 21/41 Gastar Exploration	LLC 31/184 Gastar Exploration	Inc to TH Exploration II LLC
10°14874	J	5-23-4.2	RICHARD MILLER	GASTAR EXPLORATION USA INC	1/8+	822	260	NA	NA	NA	NA	NA	21/41 (astar exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14876	Į.	5-23-4.2	SHIRLEY LARGENT	GASTAR EXPLORATION USA INC	1/8+	827	228	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC

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.0*14877	J	5-23-4.2	GARY F OBLOY AND DENISE I OBLOY	GASTAR EXPLORATION USA INC	1/8+	836	112	NA .	NA NA	NA	NA NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10°14878		5-23-4.2	ARTHUR BRUCE COULTER	GASTAR EXPLORATION USA INC	1/8+	839	519	NA	NA	NA	NA NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10 140/0				GASTAR EXPLORATION									USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	
10*14879	1	5-23-4.2	THERESA RINE	USA INC	1/8+	840	162	NA .	NA	NA.	NA NA	NA NA	Exploration Inc merger 21/41 Gastar Exploration	LLC 31/184 Gastar Exploration	Inc to TH Exploration II LLC
10*14880	J	5-23-4.2	IRIS LUCAS	GASTAR EXPLORATION USA INC	1/8+	849	545	NA .	NA	NA NA	NA.	NA .	USA Inc and Gastar Exploration Inc merger	Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14881	J	5-23-4.2	MARY WHITLATCH	GASTAR EXPLORATION USA INC	1/8+	849	548	NA .	NA.	NA	NA NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14882	1	5-23-4.2	GARY RINE	GASTAR EXPLORATION USA INC	1/8+	849	551	NA .	NA	NA	NA NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14883	ı	5-23-4.2	PAUL WISE	GASTAR EXPLORATION USA INC	1/8+	852	252	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14884		5-23-4.2	RENEE HAGERTY	GASTAR EXPLORATION USA INC	1/8+	852	255	NA NA	NA.	NA.	NA	NA.	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC

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10*14885	,	5-23-4.2	HOWARD RINE	GASTAR EXPLORATION USA INC	1/8+	854	601	NA	NA	NA .	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14886		5-23-4.2	JODI YOHO	GASTAR EXPLORATION USA INC	1/8+	854	604	NA NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
			CHRISTINA ROBERTS	GASTAR EXPLORATION USA INC	1/8+	867	392	NA	NA.	NA.	NA.	NA .	21/41 Gastar Exploration USA inc and Gastar Exploration inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14887	J	5-23-4.2		GASTAR EXPLORATION				NA .	NA .	NA NA	NA NA	NA	21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration
10*14888	J	5-23-4.2	DARLENE BUTLER	USA INC	1/8+	867	395	NA	NA .	NA NA	NA	NA	Exploration Inc merger 21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atlnum Marcellus I	Inc to TH Exploration II LLC
10*14889	J	5-23-4.2	HAROLD YOHO	USA INC	1/8+	870	37	NA	NA .	NA	NA	NA	Exploration Inc merger 21/41 Gastar Exploration	LLC 31/184 Gastar Exploration	Inc to TH Exploration II LLC
10*14890		5-23-4.2	HENRY MALONE JR	GASTAR EXPLORATION USA INC	1/8+	870	40	NA	NA	NA	NA NA	NA	USA Inc and Gastar Exploration Inc merger	Inc to Atinum Marcellus I	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14891	J	5-23-4.2	NANCY F FYE & STEPHEN M FYE	GASTAR EXPLORATION USA INC	1/8+	885	606	NA .	NA .	NA	NA	NA	USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*17145	J	5-23-4.2	JAMES J. CAMPBELL BETTY J. CAMPBELL	CHESAPEAKE APPALACHIA	1/8+	685	458	NA	NA	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC

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10*17146	J	5-23-4.2		CHESAPEAKE APPALACHIA LLC	1/8+	685	464	NA .	NA	NA	23/127 Chesapeake Appalachia LLC to Statoli Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17147		5-23-4.2	JOANN J. PARSONS GARY D. PARSONS	CHESAPEAKE APPALACHIA	1/8+	685	470	NA .	NA .	NA .	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
10*17148		5-23-4.2		CHESAPEAKE APPALACHIA	1/8+	685	476	NA.	NA NA	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
		5-23-4.2		CHESAPEAKE APPALACHIA	1/8+	685	482	NA.	NA NA	NA.	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoii USA Onshore Properties Inc to SWN Exchange Titleholder	19/624 SWN Exchange	41/256 SWN Production Company LLC to TH
10*17149				CHESAPEAKE APPALACHIA	1/8+	685	488	NA.	NA NA	NA NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder	19/624 SWN Exchange	41/256 SWN Production Company LLC to TH
10*17150	J	5-23-4.2	IDA L CAMPBELL												
10*17502	J	5-23-4.2	DONALD S BOBOVNIK AND	TH EXPLORATION, LLC	1/8+	942	334	NA	NA .	INA .	NA NA	INA	IN/A	JVA	IVA
10*17532	J	5-23-4.2	DOLORES J BOBOVNIK	TH EXPLORATION, LLC	1/8+	942	346	NA .	NA	NA	NA .	NA.	NA .	NA	NA .
10*17535	j	5-23-4.2	RONALD L MAYER AND DEBRA A MAYER	TH EXPLORATION, LLC	1/8+	929	580	NA	NA	NA	NA	NA	NA	NA	NA

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1				THE TWO I OR 1 TO 1 I I I	1/0.	942	342	NA .	NA	NA .	NA.	NA	NA .	NA.	NA
10*17539	1	5-23-4.2	JOANN HAGERTY	TH EXPLORATION, LLC	1/8+	942	342	INA .	INA .	INA.	INA	INA	l l l		lia .
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4															
10*17593	J	5-23-4.2	REBECCA HAGERTY	TH EXPLORATION, LLC	1/8+	942	350	NA	NA	NA	NA	NA	NA	NA .	NA .
								1							
								1							
10*17594	J	5-23-4.2	MEGAN HAGERTY	TH EXPLORATION, LLC	1/8+	942	362	NA	NA	NA	NA	NA	NA	NA	NA
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														:	
10*17595	ا ر	5-23-4.2	THOMAS E RINE AND MARY P RINE	TH EXPLORATION, LLC	1/8+	929	572	NA	NA	NA	NA	NA	NA	NA	NA
10 17333															
			PATRICIA A GARCAR	TH EXPLORATION, LLC	1/8+	942	8	NA .	NA NA	NA .	NA.	NA NA	NA	NA	NA I
10*17640	J	5-23-4.2	PATRICIA A GARCAR	TH EXPLORATION, LLC	1/6+	342		INA.	NA.	INA.	ine.	in .	lina .	line.	
10*17679	J	5-23-4.2	NORMA J ASH	TH EXPLORATION, LLC	1/8+	944	130	NA	NA .	NA	NA .	NA	NA	NA	NA
10°17680	ı	5-23-4.2	DAVID E CHURCH	TH EXPLORATION, LLC	1/8+	932	424	NA	NA	NA	NA	NA	NA	NA	NA
						1									
		1													
		F 22 4 2	WALTER E LOSEY AND CINDY L LOSEY	TH EXPLORATION, LLC	1/8+	942	338	NA	NA	NA .	NA NA	NA .	NA .	NA NA	_{NA}
10*17681	J	5-23-4.2	CHAP1 F FORE1	III EAFLOWATION, LLC	- Not			1.01	1:	1::-	1:	177	1	•	

				I			r	1		T	Γ				
10*17682		5-23-4.2	JAMES E GARLOCH AND MARY K GARLOCH	TH EXPLORATION, LLC	1/8+	935	68	NA	NA	NA	NA	NA	NA	NA	NA
			PATRICK HAGERTY AND												
10*17683	J	5-23-4.2	DALANE HAGERTY	TH EXPLORATION, LLC	1/8+	942	358	NA .	NA	NA .	NA	NA	NA	NA	NA
10°17715		5-23-4,2	ROBERT A SANDS AND JOYCE A SANDS	TH EXPLORATION, LLC	1/8+	942	354	NA	NA	.NA	NA	NA	NA	NA	, NA
10-17/15		3 23 412			•										
10*17719		5-23-4.2	ROBERT R DARROW	TH EXPLORATION, LLC	1/8+	942	380	NA	NA	NA	NA	NA	NA	NA	NA .
10-1//19	,	3-23-4.2	NODERI II DAIMOV	III Dii Loistiidiy Lo											
10*17720	ı	5-23-4.2	WILLIAM KOTSON AND DEBRA KOTSON	TH EXPLORATION, LLC	1/8+	938	507	NA	NA	NA	NA	NA	NA	NA	NA
10 17720															
10*17775		5-23-4.2	HAROLD H HAGERTY AND DEBORAH M HAGERTY	TH EXPLORATION, LLC	1/8+	942	370	NA	NA	NA	NA	NA	NA	NA	N A
10-1///5	· · · · · · · · · · · · · · · · · · ·	3-23-4.2	DESCRIPTION OF THE PROPERTY OF												
10*17776		5-23-4.2	JAMES GARCAR AND MELISSA GARCAR	TH EXPLORATION, LLC	1/8+	941	627	NA	NA	NA	NA	NA	NA	NA	NA
10.1///0	,	3-23-4.2													
		5-23-4.2	SARA FULTON	TH EXPLORATION, LLC	1/8+	942	384	NA	NA	NA	NA	NA	.NA	NA	NA .
10*17824		3-23-4.2		1	·		•								

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10*17901	J	5-23-4.2	ROBYN HAGERTY	TH EXPLORATION, LLC	1/8+	924	602	NA	NA	NA	NA	NA	NA	NA	NA
			ROBERT DAVID BARNES												
10*17965	J	5-23-4.2	AND RHONDA BARNES	TH EXPLORATION, LLC	1/8+	942	366	NA	NA	NA	NA	NA	NA	NA .	NA
10*18042	J	5-23-4.2	JOSEPH J ONORE	TH EXPLORATION, LLC	1/8+	927	101	NA	NA	NA	NA	NA	NA .	NA	NA .
10*18043		5-23-4.2	JAMES M ONORE AND CINDY L ONORE	TH EXPLORATION, LLC	1/8+	927	105	NA.	NA.	NA	NA	NA NA	NA NA	NA	NA NA
10*18176		5-23-4.2	CRYSTAL M HOOKER AND JAMES HOOKER		1/8+	929		NA .	NA.	NA	NA NA	NA NA	NA	NA	NA NA
10*18176	,	5-23-4.2 5-23-4.2	COLLEEN HAGERTY	TH EXPLORATION, LLC	1/8+	929	560			NA NA	NA NA	NA			NA
			WALTER C SCHUBERT AND BARBARA A SCHUBERT		1/8+	931		NA .	NA NA	NA NA	NA NA	NA	NΔ	NA NA	NA NA
10*18367	1	5-23-4.2													
10*18368	J	5-23-4.2	ROBERTA K MILLER	TH EXPLORATION, LLC	1/8+	931	457	NA	INA	INA	INA	INA	INA	INA	IVA

10*18386	1	5-23-4.2	JOSEPH R RINE AND JENNIFER M RINE	TH EXPLORATION, LLC	1/8+	932	492	NA .	.NA	NA	NA	NA	NA	NA .	NA
10-18386		J-13-4.1			•										
10*18598	J	5-23-4.2	MARK E GUSTELY	TH EXPLORATION, LLC	1/8+	935	52	NA .	NA	NA	NA	NA	NA	NA	NA
10*18795	J	5-23-4.2	GASTON FAMILY INVESTMENTS LLC	TH EXPLORATION, LLC	1/8+	959	502	NA	NA	NA	NA	NA	NA	NA	NA
10*18994	J	5-23-4.2	SHIRLEY ANN DRAKE	TH EXPLORATION, LLC	1/8+	940	137	NA	NA	NA	NA	NA	NA	NA	NA
10*19736	ı	5-23-4.2	DOROTHY HLINKA DUKE	TH EXPLORATION, LLC	1/8+	944	571	NA	NA	NA	NA	NA	NA	NA	NA
				:											
10*21217		5-23-4.2	KEITH JAY FISCHER AND DAWN M FISCHER	TH EXPLORATION, LLC	1/8+	952	643	NA	NA	NA .	NA	NA	NA	NA .	NA
10 2121						·									
10*21222	ı	5-23-4.2	PATRICIA J SHAW KELLER	TH EXPLORATION, LLC	1/8+	946	43	NA	NA	NA	NA	NA	NA	NA	NA
10*21425		5-23-4.2	ORIE N YOUNG AND BERNIE A YOUNG	TH EXPLORATION, LLC	1/8+	957	29	NA	NA	NA	NA	NA .	NA	NA .	NA

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27-234-4 J	10*21429		5.22.4.2	FRANCIS R SMITH AND	TH EXPLORATION LLC	1/8+	957	37	NA NA	NA NA	NA NA	NA NA	NA	NA .	INA	NA .
1	10 21428		3-23-4.2	and manning		40:										
1072445 1															:	
1972463 3 5,23,4.2 MINERITATION THEOPHOMOTORI, LIC 1/26 954 254 MA MA MA MA MA MA MA M	10*21434	J	5-23-4.2	CATHERINE HUMMEL	TH EXPLORATION, LLC	1/8+	957	33	NA	NA	NA	NA	NA	NA	NA	NA
29*21652 J \$23-4.2 GOMERY COX. THE PROBATION, LIC 1/8- 254 252 84 8A 8A 8A 8A 8A 8A 8A 8A 8A 8A 8A 8A 8A				RICHARD RICH AND KAREN		46	-	77.					No.		NA.	NA.
10°71457 J 5-23-4-2 MARIS LICHISCH TH EPPLORATION, LIC 1/8+ 954 249 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*21451	J	5-23-4.2	RICH	TH EXPLORATION, LLC	1/8+	954	254	NA	NA .	NA	NA	INA	NA .	INA	INA
10°21457 J 5-23-4.2 WARREN LCOURTER AND ROSLENA A COURTER THE EPICARATION, LLC 1/8+ 954 249 NA NA NA NA NA NA NA NA NA NA NA NA NA						1/0	274	25					NA.	No.	MA	NA .
10°21457 J 5-23-4.2 ROSINA A COULTER TH EXPLORATION, LIC 1/8+ 954 249 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*21452	J	5-23-4.2	KIMBERLY COX	TH EXPLORATION, LLC	1/8+	954	262	NA .	NA .	NA .	NA .	NA .	NA .	INA .	INA
10*21458 J 5-23-4.2 ANN C SMITH TH EXPLORATION, LLC 1/8+ 957 45 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*21457	J	5-23-4.2	WARREN L COULTER AND ROSLINA A COULTER	TH EXPLORATION, LLC	1/8+	954	249	NA	NA	NA	NA	NA .	NA	NA	NA .
10*21459 J 5-23-4.2 JAMES L CHURCH TH EXPLORATION, LLC 1/8+ 957 41 NA NA NA NA NA NA NA NA NA NA NA NA NA				HUSTON A SMITH JR AND		46							NA.		NA.	No.
MABEL SHILLINGBURG AND CUFFORD	10*21458	J	5-23-4.2	ANN C SMITH	TH EXPLORATION, LLC	1/8+	957	45	NA .	INA	INA	INA	INA	NA .	INA.	NA .
MABEL SHILLINGBURG AND CLIFFORD	10*21459		5-23-4.2	JAMES L CHURCH	TH EXPLORATION, LLC	1/8+	957	41	NA NA	NA	NA	NA	NA	NA	NA	NA .
AND CLIFFORD	20 21703	, , , , , , , , , , , , , , , , , , ,	3-23-4.2		zaranion, cao	-7.5-		,-								
10*21498 J 5-23-4.2 SHILLINGBURG TH EXPLORATION, LLC 1/8+ 954 258 NA NA NA NA NA NA NA NA NA NA	10*21498	ı	5-23-4.2	AND CLIFFORD	TH EXPLORATION, LLC	1/8+	954	258	NA .	NA	NA	NA	NA	, NA	NA	NA

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10*21500		5-23-4.2	MATTHEW COULTER AND SIMONE COULTER	TH EXPLORATION, LLC	1/8+	954	245	NA	NA.	NA NA	NA	NA	NA	NA	NA
4 0 7 3 3	,	3*23*4.2													
10*21501	J	5-23-4.2	EUGENIA E HOUSER	TH EXPLORATION, LLC	1/8+	954		NA .	NA .	NA	NA .	NA.	NA	NA .	NA
10*21502	J	5-23-4.2	DEBRA MURIN	TH EXPLORATION, LLC	1/8+	954	237	NA .	NA	NA	NA	NA	NA	NA	NA
												NA NA			
10*21503	J	5-23-4.2	DARLENE M DAVIS	TH EXPLORATION, LLC	1/8+	954	233	NA	NA	NA	NA	NA	NA	INA	NA
10*21626		5-23-4.2	CLARENCE RANDALL EMERY AND PAULA JEAN EMERY	TH EXPLORATION, LLC	1/8+	958	344	NA NA	NA	NA	NA	NA .	NA	NA	NA
				TH EXPLORATION, LLC	1/8+	959		NA NA	NA.	NA NA	NA	NA	NA.	NA .	NA .
10*21632	J	5-23-4.2													
10*21655	J	5-23-4.2	STANLEY GUSTELY	TH EXPLORATION, LLC	1/8+	965	206	NA	NA	NA	NA	NA	NA	NA	NA .
			JOHN OBLOY AND JANET L											No.	MA
10*21656	1	5-23-4.2	OBLOY	TH EXPLORATION, LLC	1/8+	959	331	NA	INA	INA	INA	INA	INA	Inv	liaci

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			RONALD J SALKOVICK JR & SANDRA SALKOVICK	TH EXPLORATION, LLC	1/8+	958	373	NA NA	NA NA	NA NA	NA	NA.	NA.	NA.	NA .
10*21657	J	5-23-4.2	SANDRA SALKOVICK	TH EXPLORATION, LLC	1/6+	336	3/3	INA	INA	ina .	iw.	line .	lus.		
		5-23-4.2	JOYCE KAY BURTON AND SAMUEL C BURTON	TH EXPLORATION, LLC	1/8+	957	467	NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	I NA
10*21774	, , , , , , , , , , , , , , , , , , ,	5-23-4.2	SAMUEL C BURTON	TH EXPLORATION, LLC	1/6+	337	407	INA .	NA .	INA .	NA.				
10*21813		5-23-4.2	STUART WHITE AND BETTY WHITE	TH EXPLORATION, LLC	1/8+	958	352	NA	NA NA	NA NA	NA NA	NA	NA NA	NA NA	NA NA
10-21813	J	3-23-4.2	Willie	III EXPLOIGNION, EEC	2/0.		332	l l							
10*21815	ı	5-23-4.2	JAMES NEAL EMERY AND RENEE R EMERY	TH EXPLORATION, LLC	1/8+	958	348	NA	NA	NA	NA	NA	NA	NA	NA .
10 21013		0 20 112			-										
10*21816	J	5-23-4.2	CINDY GREEN AND LARRY GREEN	TH EXPLORATION, LLC	1/8+	958	356	NA .	NA	NA	NA	NA	NA	NA	NA .
10*21817		5-23-4.2	MARY LOU HLINKA AND RICHARD G HLINKA SR	TH EXPLORATION, LLC	1/8+	959	514	NA NA	NA	NA	NA	NA	NA .	NA	NA .
				,											
10*21819	L L	5-23-4.2	MARY CATHERINE THOMS	TH EXPLORATION, LLC	1/8+	958	360	NA .	NA	NA	NA	NA	NA NA	NA	NA
10*21820	ı	5-23-4.2	MARION DAVID OTT & JANICE L OTT	TH EXPLORATION, LLC	1/8+	959	506	NA	NA	NA	NA	NA	NA .	NA	NA
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10*21832	J	5-23-4.2	MARQUITA CLYBURN	TH EXPLORATION, LLC	1/8+	959	510	NA .	NA	NA .	NA .	NA	NA	NA .	INA
10*21948	l l	5-23-4.2	BARBARA H COAKLEY	TH EXPLORATION, LLC	1/8+	960	66	NA	NA	NA	NA	NA	NA	NA	NA
						1									
10*21949	J	5-23-4.2	ROBIN ADAIR GUMP AND LOUIS M GUMP	TH EXPLORATION, LLC	1/8+	960	70	NA	NA	NA	NA	NA	NA	NA	NA
												NA		NΔ	
10*21951	J	5-23-4.2	CHARLES DOUGLAS LANE	TH EXPLORATION, LLC	1/8+	960	77	NA	NA	NA .	NA	INA .	INA .	NA .	NA .
10*21994	, ,	5-23-4.2	MELISSA L DARROW	TH EXPLORATION, LLC	1/8+	954	328	NA	NA	NA	NA	NA	NA	NA	NA
					-										
10*22013	J	5-23-4.2	CHARLES J KNOX	TH EXPLORATION, LLC	1/8+	966	112	NA	NA	NA	NA	NA	NA	NA	NA
					- (-	955	100	<u></u>	NA .	NA NA	NA	NA	NA .	NA .	NA .
10*22014	J	5-23-4.2	SHERMAN E KNOX JR	TH EXPLORATION, LLC	1/8+	966	108	NA	INA	IVA	INM	11/4	lio.	luc.	
10*22018	J	5-23-4.2	KATHLEEN ROBERTSON	TH EXPLORATION, LLC	1/8+	960	539	NA	NA	NA	NA	NA	NA	NA	NA
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10*22026	, ,	5-23-4.2	KEVIN D CHURCH	TH EXPLORATION, LLC	1/8+	957	49	NA	NA	NA	NA	NA	NA	NA	NA
4															
10*22027	,	5-23-4.2	STEPHEN C EMERY AND CATHY J EMERY	TH EXPLORATION, LLC	1/8+	954	310	NA .	NA .	NA	NA	NA	NA	NA	NA
10*22030	,	5-23-4.2	JAMES S HALL AND JEANNE B HALL	TH EXPLORATION, LLC	1/8+	961	463	NA	NA	NA	NA	NA	NA	NA	NA
10*22093	J	5-23-4.2	TODD LEARN AND KENDA LEARN	TH EXPLORATION, LLC	1/8+	954	314	NA	NA	NA	NA	NA	NA	NA	NA
10*22102	J	5-23-4.2	BONNIE LOU GRUBER	TH EXPLORATION, LLC	1/8+	954	302	NA	NA	NA	NA	NA	NA	NA	NA
10*22128	l ,	5-23-4.2	BETTY PYSELL	TH EXPLORATION, LLC	1/8+	961	433	NA	NA	NA	NA	NA	NA	NA	NA
10*22144	ı	5-23-4.2	VICKY STRAUSS AND DENNIS A STRAUSS	TH EXPLORATION, LLC	1/8+	961	529	NA .	NA	NA	NA	NA	NA	NA	NA
10*22165	,	5-23-4.2	DEBRA L LYSESKI AND GERALD A LYSESKI	TH EXPLORATION, LLC	1/8+	954	306	NA	NA	NA	NA	NA	NA	NA	NA
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			ANGELA HENTHORN AND		_					l			NA.	l _{NA}	NA I
10*22178]	5-23-4.2	WILLIAM R HENTHORN	TH EXPLORATION, LLC	1/8+	972	58	NA	NA .	NA	NA	NA	NA .	IVA	
10*22332	ı.	5-23-4.2	DORIS WEST AND ROBERT WEST	TH EXPLORATION, LLC	1/8+	962	542	NA	NA	NA	NA	NA	NA	NA	NA
10*22339	J	5-23-4.2	BETTY LEE HOWARD LOY	TH EXPLORATION, LLC	1/8+	963	392	NA	NA	NA	NA	NA	NA	NA	NA
10*22436		5-23-4,2	TESSEAN FAMILY REVOCABLE LIVING TRUST	TH EXPLORATION LLC	1/8+	963	626	NA	NA	NA	NA NA	NA	NA	NA	NA
				TH EXPLORATION, LLC	1/8+	963	622	NA	NA	NA	No	NA	NA	NA NA	NA NA
10*22443		5-23-4.2 5-23-4.2	KENNETH R SHAW AND DONNA K SHAW	TH EXPLORATION, LLC	1/8+	966	518	NA	NA NA	NA	NA	NA	NA	NA	NA
			JAMES D DRAKE AND										Ma	NA	NΔ
10*22505	J	5-23-4.2	DONNA K DRAKE	TH EXPLORATION, LLC	1/8+	964	425	NA	NA .	NA	NA	NA	NA	Jus	
10*22594		5-23-4.2	JAMES A WADE SR	TH EXPLORATION, LLC	1/8+	965	481	NA	NA	NA	NA	NA	NA	NA	NA

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10*22609	1	5-23-4.2	KATHY JO CULLUM	TH EXPLORATION, LLC	1/8+	966	514	NA	NA	NA	NA	NA	NA	NA	NA
														ļ	NA
10*22613	J	5-23-4.2	JEWEL L CAMPBELL	TH EXPLORATION, LLC	1/8+	966	510	NA	NA	NA	NA	NA	NA	NA	NA
10*22779	ı	5-23-4.2	STEVEN WADE	TH EXPLORATION, LLC	1/8+	968	424	NA	NA	NA	NA	NA	NA	NA	NA
,			MARGARET C MCMURRY &												
10*22809	J	5-23-4.2	WILLIAM F MCMURRY	TH EXPLORATION, LLC	1/8+	972	54	NA	NA	NA	NA	NA	NA	NA .	NA
10*22812	ا ا	5-23-4.2	JOSEPH F GOBLOWSKY	TH EXPLORATION, LLC	1/8+	968	428	NA	NA	NA	NA	NA	NA	NA	NA .
20 11011															
10*22861	J	5-23-4.2	LAURINE C CURTIS & EDGAR A CURTIS III	TH EXPLORATION, LLC	1/8+	976	147	NA .	NA	NA	NA	NA	NA	NA	NA
40\$33455	,	5 22 5 2	JAMES DAVID CRANDALL	TH EVELOPATION 116	1/8+	984	48	NA	NA .	NA .	NA NA	NA .	NA .	NA	NA
10*23166	J	5-23-4.2	JAIVIES DAVID CKANDALL	IN EAPLURATION, LLC	1/0+	704	40	110	100						
10*23168	J	5-23-4.2	JASON WADE	TH EXPLORATION, LLC	1/8+	966	506	NA	NA	NA	NA	NA	NA	NA	NA

10723505 J 5-23-4.2 RENEE CELLAR THE EXPLORATION, LLC 1/8+ 973 633 NA NA NA NA NA NA NA NA NA NA NA NA NA																
271257. J. 1-24-12 COMMAND TO STORY																
271257. J. 1-24-12 COMMAND TO STORY	40*2226			DOCE MARIE CAMADDELL	THEY DO DATION HE	1/0.	000	447	NA.	NA.	NA.	NA.	NA .	NA .	l _{NA}	NA
1973334 3 52342 SERIORING MEDICINARY TETROPORTICAL CE 3/4- 3508 13 No. No. No. No. No. No. No. No. No. No.				JONNA MARPLE AND ERIK												
107-254-10 J 5-22-4.2 DEMAN MADE TREPORTING LIC 1/0- 1008 15 MA MA MA MA MA MA MA MA MA MA MA MA MA	10*23371	J	5-23-4.2	MARPLE	TH EXPLORATION, LLC	1/8+	988	442	NA	NA	NA	NA .	NA .	NA	INA	INA
10°236420 J \$-23-4.2 RONG WALE THEOREMS TO THEOREMS IN THE PRODUCTION, LLC 1/2+ 1009 3009 NA NA NA NA NA NA NA NA NA NA NA NA NA	10°23398		5-23-4-2	JON GUSTELY AND	TH FXPLORATION, LLC	1/8+	1008	12	NA NA	.NA	NA	NA NA	NA .	NA	NA	NA
10°23565 J 5-23-4.2 RENEE RELIAR THE EPROBATION, LLC 1/8+ 971 633 NA NA NA NA NA NA NA NA NA NA NA NA NA	10 23336		3-23-4.2	WAREININE	THE EXPEDITATION, LLC	2/0.	2000									
10°23647 J 5-23-4.2 MARILYN M ROBINSON TH EXPLORATION, LLC 1/8+ 1009 309 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*23410	J	5-23-4.2	JENNA WADE	TH EXPLORATION, LLC	1/8+	1008	16	NA	NA	NA	NA	NA	NA	NA	NA
10°23647 J 5-23-4.2 MARILYN M ROBINSON TH EXPLORATION, LLC 1/8+ 1009 309 NA NA NA NA NA NA NA NA NA NA NA NA NA					,											
10°23648 J 5-23-4.2 PAUL D RINE JR TH EXPLORATION, LLC 1/8+ 1009 313 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*23505	J	5-23-4.2	RENEE KELLAR	TH EXPLORATION, LLC	1/8+	971	633	NA	NA	NA	NA	NA	NA	NA	NA
10*23648 J 5-23-4.2 PAUL D RINE JR TH EXPLORATION, LLC 1/8+ 1009 313 NA NA NA NA NA NA NA NA NA NA NA NA NA	100135647		52242	MADILIVII M PODINICON	TH EXPLORATION LLC	1/9.	1009	309	NA	NA	NA NA	NA	NA NA	NA NA	NA NA	NA
1 5-23-4.2 PAUL D RINE IR IT EXPLORATION, ELC. 1/67 1009 333 IN IN IN IN IN IN IN IN IN IN IN IN IN	10-23047	, ,	D-23-4.2	IMARILTIN IN KOBINSON	IN EAPLORATION, LLC	1/8+	1003	303	100	100		1				
LISA THUKER AND EDANUS	10*23648	ı	5-23-4.2	PAUL D RINE JR	TH EXPLORATION, LLC	1/8+	1009	313	NA	NA	NA	NA	NA	NA	NA	NA
10°23727 J 5-23-4.2 TUCKER TH EXPLORATION, LLC 1/8+ 1011 525 NA NA NA NA NA NA NA NA NA NA		-														
	10*23727	J. J	5-23-4.2	TUCKER	TH EXPLORATION, LLC	1/8+	1011	525	NA	NA	NA	NA	NA	NA	NA	NA

10*23756	ا	5-23-4.2	KAREN DRAKE AND JEFF DRAKE	TH EXPLORATION, LLC	1/8+	1012	182	NA	NA	NA	NA .	NA	NA	NA	NA
10*23757	J	5-23-4.2	DAVID DRAKE	TH EXPLORATION, LLC	1/8+	1012	187	NA	NA	NA	NA	NA	NA	NA	NA
10*23767	J	5-23-4.2	MARK ALAN SLATEN	TH EXPLORATION, LLC	1/8+	1014	481	NA	NA	NA	NA	NA .	NA	NA	NA
10*23792	J	5-23-4.2	STEVEN W SLATEN AND RHONDA SLATEN	TH EXPLORATION, LLC	1/8+	1014	488	NA	NA	NA	NA .	NA	NA .	NA	NA
10*23826	J		NANCY C DWYER AND WENDEL MARTINKOVIC	TH EXPLORATION, LLC	1/8+	1017	6	NA	NA .	NA	NA	NA .	NA	NA	NA
10*23838	J	5-23-4.2	RONALD DEAN YOHO & VICTORIA LYNN YOHO	TH EXPLORATION, LLC	1/8+	1017	1	NA	NA	NA	NA	NA	NA	NA	NA .
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10*23883	J	5-23-4.2	VICKI ANN WILLIAMS & WILLIAM J WILLIAMS	TH EXPLORATION, LLC	1/8+	1016	644	NA	NA	NA	NA	NA	NA	NA	NA
10*24208	1	5-23-4.2	WALTER W STREIGHT JR AND CONNIE JO STREIGHT	TH EXPLORATION, LLC	1/8+	1023	516	NA	NA	NA	NA	NA	NA	NA	NA

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10*24274	J.	5-23-4.2	JO ELLEN GUSTELY	TH EXPLORATION, LLC	1/8+	1023	527	NA	NA	NA	NA	NA	NA	NA	NA
			SUSAN ALFRED AND KEVIN												
10*24483	,	5-23-4.2	J ALFRED	TH EXPLORATION, LLC	1/8+	1025	401	NA .	NA	NA	NA	NA .	NA	NA .	NA
10*24551	J	5-23-4.2	LEONARD LEE COULTER AND DEBRA A COULTER	TH EXPLORATION, LLC	1/8+	1025	405	NA	NA	NA	NA	NA	NA	NA	NA
10*24868	J	5-23-4.2	ANNE DWYER	TH EXPLORATION, LLC	1/8+	1028	95	NA	NA	NA	NA .	NA	NA	NA	NA
10*24917	J	5-23-4.2	WALTER W STREIGHT JR AND CONNIE JO STREIGHT	TH EXPLORATION, LLC	1/8+	1027	281	NA	NA	NA	NA .	NA	NA	NA	NA
			ROBERT LEE MARCIANO												
10*25268	J	5-23-4.2	AKA ROBERT LEE MAYER	TH EXPLORATION, LLC	1/8+	1030	416	NA	NA	NA	NA	NA	NA	NA	NA
10*25269	j ,	5-23-4.2	RAYMOND GUSTELY JR	TH EXPLORATION, LLC	1/8+	1030	373	NA	NA	NA	NA	NA	NA	NA	NA
					· · · · · · · · · · · · · · · · · · ·										
			DAVID C WHITE NEISWONGER AND WHITE												
10*25455	J.	5-23-4.2		TH EXPLORATION, LLC	1/8+	1031	476	NA	NA	NA	NA	NA	NA	NA	NA

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10\$35.463	,		JERRY HUGGINS ET AL	TH EVELOPATION IIIC	1/8+	1030	368	NA .	NA.	NA	NA .	NA .	NA .	INA	NA
10*25462		5-23-4.2	JERRY HUGGINS ET AL	TH EXPLORATION, LLC	1/8+	1030	300	IVA	INA						
10*25479	J	5-23-4.2	ROBERT LEE MARCIANO AKA ROBERT LEE MAYER	TH EXPLORATION, LLC	1/8+	1030	416	NA	NA	NA	NA	NA	NA	NA	NA
					, ,										
			STONE HILL MINERAL												
10*27715	J	5-23-4.2	HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1057	332	NA .	NA	NA	NA	NA	NA	NA	NA
							,								
10*27959		5-23-4.2	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1063	594	INA	NA .	NA	NA	NA	NA	NA	NA
20 27505		3 23 412	TO LOW TO LEG		-,-:										
													21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration	36/9 Gastar Exploration
10*14849	К	5-23-4.1	DAVID GUSTELY	GASTAR EXPLORATION USA INC	1/8+	806	265	NA	NA	NA	NA	NA	Exploration Inc merger		Inc to TH Exploration II LLC
				GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14853	K	5-23-4.1	CATHERINE HUMMEL AIF	USA INC	1/8+	809	507	NA	NA	NA	NA	NA	Exploration Inc merger	itte	ine to TH Exploration in Ecc
													21/41 Gastar Exploration	31/184 Gastar Exploration	
10*14861	к	5-23-4.1	NANCY WHITLATCH	GASTAR EXPLORATION USA INC	1/8+	809	526	NA	NA	NA	NA	NA	USA Inc and Gastar Exploration Inc merger	Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
				CASTAR EVELOPATION									21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration
10*14862	к	5-23-4.1	ANN GUSTELY	GASTAR EXPLORATION USA INC	1/8+	809	568	NA	NA	NA	NA	NA	Exploration Inc merger	uc	Inc to TH Exploration II LLC

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10*14864	к	5-23-4.1	CAROLYN DURWAY	GASTAR EXPLORATION USA INC	1/8+	810	330	NA	NA .	NA	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14866	к	5-23-4.1	GARY CARMICHAEL	GASTAR EXPLORATION USA INC	1/8+	810	316	NA	, NA	NA	NA NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14868	K	5-23-4.1	WOODROW CAMPBELL JR	GASTAR EXPLORATION	1/8+	813	454	NA	NA NA	NA NA	NA NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	s 36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14869				GASTAR EXPLORATION			561		NA.	NA.	NA.	NA.	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I	
		5-23-4.1	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION	1/8+	813		NA.	NA		NA NA	NA.	21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	
10*14870	K	5-23-4.1	DAVID CARMICHAEL DWG OIL & GAS	GASTAR EXPLORATION	1/8+	816	16	NA NA	NA	NA NA	NA.	NA NA	Exploration Inc merger 21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration	n 36/9 Gastar Exploration
10*14872	K	5-23-4.1	ACQUISITIONS LLC	USA INC	1/8+	817	312	NA	NA	NA	NA NA	NA.	Exploration Inc merger 21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration	36/9 Gastar Exploration
10*14873	к	5-23-4.1	RAYMOND MILLER	USA INC	1/8+	821	44	NA	NA .	NA NA	NA NA	NA NA	Exploration Inc merger 21/41 Gastar Exploration	LLC 31/184 Gastar Exploration	Inc to TH Exploration II LLC
10*14874	K	5-23-4.1	RICHARD MILLER	GASTAR EXPLORATION USA INC	1/8+	822	260	NA	NA	NA	NA	NA	USA Inc and Gastar Exploration Inc merger	Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC

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к	5-23-4.1	SHIRLEY LARGENT	GASTAR EXPLORATION USA INC	1/8+	827	228	NA .	NA .	NA .	NA.	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
		GARY F OBLOY AND	GASTAR EXPLORATION									USA Inc and Gastar	Inc to Atinum Marcellus I	36/9 Gastar Exploration
K	5-23-4.1	DENISE I OBLOY	USA INC	1/8+	836	112	NA	NA NA	NA	NA	NA	Exploration Inc merger	luc	Inc to TH Exploration II LLC
к	5-23-4.1	ARTHUR BRUCE COULTER	GASTAR EXPLORATION USA INC	1/8+	839	519	NA .	NA .	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
к	5-23-4.1	THERESA RINE	GASTAR EXPLORATION USA INC	1/8+	840	162	NA	NA .	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
к	5-23-4.1	IRIS LUCAS	GASTAR EXPLORATION USA INC	1/8+	849	545	NA .	NA	NA .	NA.	NA NA	21/41 Gastar Exploration USA inc and Gastar Exploration inc merger	31/184 Gastar Exploration inc to Atinum Marcellus I LLC	
			GASTAR EXPLORATION				NA	NA.	NA.	NA.	NA NA	USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
			GASTAR EXPLORATION					100	100			21/41 Gastar Exploration USA Inc and Gastar	Inc to Atinum Marcellus I	
к	5-23-4.1		GASTAR EXPLORATION	1/8+	849		NA NA	NA NA	NA NA	NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration	
	K K	K 5-23-4.1 K 5-23-4.1 K 5-23-4.1 K 5-23-4.1	K 5-23-4.1 GARY F OBLOY AND DENISE I OBLOY K 5-23-4.1 THERESA RINE K 5-23-4.1 IRIS LUCAS K 5-23-4.1 GARY WHITLATCH	K 5-23-4.1 SHIRLEY LARGENT USA INC GARY F OBLOY AND GASTAR EXPLORATION USA INC K 5-23-4.1 ARTHUR BRUCE COULTER USA INC K 5-23-4.1 THERESA RINE GASTAR EXPLORATION USA INC K 5-23-4.1 IRIS LUCAS GASTAR EXPLORATION USA INC K 5-23-4.1 GARY WHITLATCH USA INC K 5-23-4.1 GARY RINE GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	K S-23-4.1 SHIRLEY LARGENT USA INC 1/8+	K S-29-4.1 SHRILEY LARGENT USA INC 1/8+ 827	K 5-23-4.1 SHRIEFY LARGENT USA INC 1/8+ 927 228	K 5-23-4.1 SHIRLY LANGERT USA INC 1/2+ 8.77 2.28 MA	K 5-23-4.1 SIGNLY LANGENT USA. INC 1/8+ 827 228 NA NA NA	K 5-22-4.1 SHERI DESCRIPTION USA REC 178- 127- 122 DA DA DA DA DA DA DA DA DA DA DA DA DA	K 5-23-4.1 SHIBHEY MARRIEDT MA MA MA MA MA MA MA MA	## 1-29-4.1 SHIRET-LANGEST VALUE 1/4* \$77 778 MA	C 524-1	Commonwealth Comm

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10*14884	K	5-23-4.1	RENEE HAGERTY	GASTAR EXPLORATION USA INC	1/8+	852	255	NA NA	NA	NA	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10 14004		3-23-4.1	RENEE HAGERTI	USA INC	1/0.	- 552									
10*14885		5-23-4.1	HOWARD RINE	GASTAR EXPLORATION USA INC	1/8+	854	601	NA NA	NA NA	NA NA	NA NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10-14885		5-23-4.1	HOWARD RINE	USA INC	1/8+	634	601	INA.							
10*14886	к	5-23-4.1	ЈОДІ ҮОНО	GASTAR EXPLORATION USA INC	1/8+	854	604	NA	NA	NA	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10°14887	к	5-23-4.1	CHRISTINA ROBERTS	GASTAR EXPLORATION USA INC	1/8+	867	392	NA	NA	NA	NA.	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14888	к	5-23-4.1	DARLENE BUTLER	GASTAR EXPLORATION USA INC	1/8+	867	395	NA .	NA .	NA .	NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14889	ĸ	5-23-4.1	HAROLD YOHO	GASTAR EXPLORATION USA INC	1/8+	870	37	NA .	NA NA	NA	NA.	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	n 36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14890	к	5-23-4.1	HENRY MALONE JR	GASTAR EXPLORATION USA INC	1/8+	870	40	NA	NA	NA .	NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration
10*14891	к	5-23-4.1	NANCY F FYE & STEPHEN M FYE	GASTAR EXPLORATION USA INC	1/8+	885	606	NA	NA .	NA NA	NA NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	n 36/9 Gastar Exploration Inc to TH Exploration II LLC

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10*17145	к	5-23-4.1	JAMES J. CAMPBELL BETTY J. CAMPBELL	CHESAPEAKE APPALACHIA LLC	1/8+	685	458	NA	NA .	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoli USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
10*17146	к	5-23-4.1	CAROLYN CAMPBELL BRITTON ROBERT C. BRITTON	CHESAPEAKE APPALACHIA	1/8+	685	464	NA	NA	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17147	ĸ	5-23-4.1	JOANN J. PARSONS GARY D. PARSONS	CHESAPEAKE APPALACHIA LLC	1/8+	685	470	NA	NA.	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17148	K	5-23-4.1	DONALD E. CAMPBELL JUNE L. CAMPBELL	CHESAPEAKE APPALACHIA LLC	1/8+	685	476	NA	NA	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17149	к	5-23-4.1		CHESAPEAKE APPALACHIA	1/8+	685	482	NA NA	NA	NA.	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
				CHESAPEAKE APPALACHIA			488	NA.	NA	NA.	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
10*17150	K	5-23-4.1		цс	1/8+	685								NA.	NA .
10*17502	K	5-23-4.1	PATRICIA E GUSTELY DONALD S BOBOVNIK AND	TH EXPLORATION, LLC	1/8+	942	334	NA .	NA NA	NA	NA NA	ĮNA	INA	INA	JAPA
10*17532	к	5-23-4.1		TH EXPLORATION, LLC	1/8+	942	346	NA	NA	NA	NA	NA	INA	JNA	JNA

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10*17535	к	5-23-4.1	RONALD L MAYER AND DEBRA A MAYER	TH EXPLORATION, LLC	1/8+	929	580	NA	NA	NA	NA	NA	NA	NA	NA
					-									NA .	NA .
10*17539	K	5-23-4.1	JOANN HAGERTY	TH EXPLORATION, LLC	1/8+	942	342	NA	NA	NA	NA	INA	NA .	NA .	, and
10*17593	к	5-23-4.1	REBECCA HAGERTY	TH EXPLORATION, LLC	1/8+	942	350	NA	NA	NA	NA	NA	NA	NA .	NA
10*17594	К	5-23-4.1	MEGAN HAGERTY	TH EXPLORATION, LLC	1/8+	942	362	NA	NA	NA	NA	NA	NA	NA	NA
			THOMAS E RINE AND		_								NA.	NA NA	NA
10*17595	K	5-23-4.1	MARY P RINE	TH EXPLORATION, LLC	1/8+	929	572	NA	NA	NA	NA .	NA	NA .	NA	No.
10*17640	К	5-23-4.1	PATRICIA A GARCAR	TH EXPLORATION, LLC	1/8+	942	8	NA	NA	NA	NA	NA .	NA	NA .	NA
10*17679	к	5-23-4.1	NORMA J ASH	TH EXPLORATION, LLC	1/8+	944	130	NA	NA	NA	NA	NA	NA	NA .	NA
											NA.	NA.	NΔ	NA	NA.
10*17680	K	5-23-4.1	DAVID E CHURCH	TH EXPLORATION, LLC	1/8+	932	424	INA	INA .	INA	INA	lino	ļino .	1	1177

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10*17681	к	5-23-4.1	WALTER E LOSEY AND CINDY L LOSEY	TH EXPLORATION, LLC	1/8+	942	338	NA	NA	NA	NA	NA NA	NA	NA .	NA
			JAMES E GARLOCH AND											NA.	NA NA
10*17682	К	5-23-4.1	MARY K GARLOCH	TH EXPLORATION, LLC	1/8+	935	68	NA	NA	NA	NA	NA	NA .	INA .	NA .
10*17683	к	5-23-4.1	PATRICK HAGERTY AND DALANE HAGERTY	TH EXPLORATION, LLC	1/8+	942	358	NA NA	NA	NA	NA	NA	NA	NA	NA
		0 20 412		The discontinuity and	2,00										
10*17715	к	5-23-4.1	ROBERT A SANDS AND JOYCE A SANDS	TH EXPLORATION, LLC	1/8+	942	354	NA	NA	NA	NA	NA	NA	NA .	NA .
10*17719	K		ROBERT R DARROW	TH EXPLORATION, LLC	1/8+	942	380	NA NA	NA	NA	NA NA	NA.	NA.	NA NA	NA
10 1//19		5-23-4.1	ROBERT R DARROW	In EXPLORATION, LLC	1/8+	342	300	INA.	THE STATE OF THE S						
10*17720	к	5-23-4.1	WILLIAM KOTSON AND DEBRA KOTSON	TH EXPLORATION, LLC	1/8+	938	507	NA	NA .	NA	NA	NA	NA	NA	NA
10*17775			HAROLD H HAGERTY AND						NA	NA	NA	NA NA	NΔ	NA.	NA.
<u>10-1///5</u>	K	5-23-4.1	DEBORAH M HAGERTY	TH EXPLORATION, LLC	1/8+	942	370	NA .	INA	INA	JUA	130			
10*17776	,	5-23-4.1	JAMES GARCAR AND MELISSA GARCAR	TH EXPLORATION, LLC	1/8+	941	627	NA.	NA .	NA	NA	NA	NA	NA	NA
20 2///0	<u> </u>	J-25-4.1	INIELISSM GARCAR	I III EAFLUNATION, LLC	7/9+	241	027	luo	line)	1	11				

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10*17824	к	5-23-4.1	SARA FULTON	TH EXPLORATION, LLC	1/8+	942	384	NA	NA	NA	NA	NA	NA	NA	NA
4 7 0 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5															
10*17901	к	5-23-4.1	ROBYN HAGERTY	TH EXPLORATION, LLC	1/8+	924	602	NA	NA	NA	NA	NA	NA	NA	NA
			ROBERT DAVID BARNES										No	NA.	NA.
10*17965	K	5-23-4.1	AND RHONDA BARNES	TH EXPLORATION, LLC	1/8+	942	366	NA	NA	NA	NA	NA	NA .	INA .	No.
										NA.	NA	NA	NA	NA NA	NA NA
10*18042	K	5-23-4.1	JOSEPH J ONORE	TH EXPLORATION, LLC	1/8+	927	101	NA	NA	NA .	NA	INA	INA .	NA	NS
10*18043	к	5-23-4.1	JAMES M ONORE AND CINDY L ONORE	TH EXPLORATION, LLC	1/8+	927	105	NA	NA	NA	NA	NA	NA	NA	NA
10*18176	к		CRYSTAL M HOOKER AND JAMES HOOKER	TH EXPLORATION, LLC	1/8+	929	568	NA	NA.	NA.	NA.	NA	NA NA	NA	NA
10.191/0	К.	5-23-4.1	JANIES HOUKEK	IN EXPLORATION, LLC	1/8+	273	300	INO.							
10*18329		5-23-4.1	COLLEEN HAGERTY	TH EXPLORATION, LLC	1/8+	929	560	NA	NA	NA	NA	NA	NA	NA	NA
20 20025		3-23-4.1	COLLEGE INCLISE	all continuity and	2,0.										
10*18367	к	5-23-4.1	WALTER C SCHUBERT AND BARBARA A SCHUBERT	TH EXPLORATION, LLC	1/8+	931	377	NA	NA	NA	NA	NA	NA	NA	NA

10*18368	K	5-23-4.1	ROBERTA K MILLER	TH EXPLORATION, LLC	1/8+	931	457	NA	NA	NA	NA	NA .	NA	NA	NA
10*18386	κ	5-23-4.1	JOSEPH R RINE AND JENNIFER M RINE	TH EXPLORATION, LLC	1/8+	932	492	NA.	NA.	NA.	NA	NA .	NA	NA	NA
													NA	NA	NA
10*18598	K	5-23-4.1	MARK E GUSTELY	TH EXPLORATION, LLC	1/8+	935	52	NA	NA .	NA	NA .	NA	INA .	INA.	, and
10*18795	K	5-23-4.1	GASTON FAMILY	TH EXPLORATION, LLC	1/8+	959	502	NA NA	NA .	NA	NA .	NA	NA	NA	NA
							137		NA.	NA .	NA .	NA.	, NA	NA NA	NA
10*18994 10*19736	K		SHIRLEY ANN DRAKE	TH EXPLORATION, LLC	1/8+	940	571	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA .	NA
			KEITH JAY FISCHER AND						NA NA	NA NA	NA NA	NA.	NA NA	NA NA	NA
10*21217	K		DAWN M FISCHER PATRICIA J SHAW KELLER	TH EXPLORATION, LLC	1/8+	952 946	643	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA

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			ORIE N YOUNG AND							ļ		lna .	NA.	NA.	NA .
10*21425	К	5-23-4.1	BERNIE A YOUNG	TH EXPLORATION, LLC	1/8+	957	29	NA	NA	NA .	NA .	NA .	NA .	NA .	No.
			FRANCIS R SMITH AND												
10*21428	к	5-23-4.1	ANNA M SMITH	TH EXPLORATION, LLC	1/8+	957	37	NA	NA	NA	NA	NA	NA	NA	NA
													NA.	No	NA NA
10*21434	K	5-23-4.1	CATHERINE HUMMEL	TH EXPLORATION, LLC	1/8+	957	33	NA	NA	NA	NA	NA	NA	NA	NA .
			RICHARD RICH AND KAREN		4/0	or a	254		NA	NA	NA	NA	NA	NA	NA
10*21451	K	5-23-4.1	RICH	TH EXPLORATION, LLC	1/8+	954	254	NA	NA .	NA .	INA		,		
10*21452	к	5-23-4.1	KIMBERLY COX	TH EXPLORATION, LLC	1/8+	954	262	NA	NA	NA	NA	NA	NA	NA	NA
10-21452	K .	5-23-4.1	KIMBERLY COX	TH EXPLORATION, LLC	1/8+	954	202	NA.	, and a second	No.					
10*21457	K	5-23-4.1	WARREN L COULTER AND ROSLINA A COULTER	TH EXPLORATION, LLC	1/8+	954	249	NA	NA	NA	NA	NA	NA	NA	NA
20 22437	N .	3-23-4.1	NOSENIA COCETEN	THE BUILDING LEG	2/0:										
10*21458	K		HUSTON A SMITH JR AND ANN C SMITH	TH EXPLORATION, LLC	1/8+	957	45	NA	NA	NA	NA	NA	NA	NA	NA
10-21458	K	5-23-4.1	ANN CSMITH	ITT EAPLUKATION, LLC	1/8+	75/	43	INA	100	1,11,1	1				
20124470					4/6-	957	41	l l	NA	NA.	NA.	NA	NA NA	NA	NA
10*21459	K	5-23-4.1	JAMES L CHURCH	TH EXPLORATION, LLC	1/8+	33/	+1	lian	Too	11.0	1				

8 8 8			MABEL SHILLINGBURG												
10*21498	к	5-23-4.1	AND CLIFFORD SHILLINGBURG	TH EXPLORATION, LLC	1/8+	954	258	NA	NA .	NA	NA NA	NA.	NA .	NA .	NA
4 0 0		5-25-4.1	MATTHEW COULTER AND		Hor	334	236								
10*21500	К	5-23-4.1		TH EXPLORATION, LLC	1/8+	954	245	NA	NA .	NA	NA	NA	NA	NA .	NA
1000170									NA.	NA NA	NA.	NA NA	NA.	NA	NA
10*21501	K	5-23-4.1	EUGENIA E HOUSER	TH EXPLORATION, LLC	1/8+	954	241	NA	NA	INA	NA .	NA .	NA .		
10*21502	к	5-23-4.1	DEBRA MURIN	TH EXPLORATION, LLC	1/8+	954	237	·NA	NA NA	NA NA	NA	NA NA	NA	NA	NA
10.51205		5-23-4.1	DEBKA MUKIN	TH EXPLORATION, LLC	1/8+	954	237	INA	NA .	INA.	INA.				
10*21503		57744	DANIENTALDANIE	TICKNONICAL	1/0	054	122	NA	NA NA	NA NA	NA	NA NA	NA NA	NA	NA
10*21503	К	5-23-4.1	DARLENE M DAVIS	TH EXPLORATION, LLC	1/8+	954	233	INA .	INA I	NA	NA	NA .	in a		
10*21626	к	5-23-4.1	CLARENCE RANDALL EMERY AND PAULA JEAN EMERY	TH EXPLORATION, LLC	1/8+	958	344	NA	NA	NA	NA	NA	NA	NA	NA
10°21632	ĸ	5-23-4.1	JOHN ARLES EMERY	TH EXPLORATION, LLC	1/8+	959	339	NA	NA	NA	NA	NA	NA	NA	NA
	<u> </u>	J-23-4,1	DOLLIN CINES ENIERI	on Lowellon, LLC	A) OT	2,3		T							
10921655	ĸ		STANLEY GUSTELY	TH EXPLORATION, LLC	1/0	965	206	NA	NA	NA.	NA NA	NA NA	NA	NA	NA
10*21655	Κ	5-23-4.1	STANLET GUSTELY	IN EAPLORATION, LLC	1/8+	303	200	130	100	1100	1	1			

	γ												1	1	
10*21656	к	5-23-4.1	JOHN OBLOY AND JANET L	TH EXPLORATION, LLC	1/8+	959	331	NA	NA	NA	NA	NA	NA .	NA	NA
10*21657	К	5-23-4.1	RONALD J SALKOVICK JR & SANDRA SALKOVICK	TH EXPLORATION, LLC	1/8+	958	373	NA .	l _{NA}	NA	NA .	NA .	NA	NA .	NA .
10 21037	K	5-23-4.1	SANDRA SALKOVICK	TH EXPLORATION, ELC	1/8+	938	373	INA .	INA .	180					
			JOYCE KAY BURTON AND											l	NA
10*21774	K	5-23-4.1	SAMUEL C BURTON	TH EXPLORATION, LLC	1/8+	957	467	NA .	NA .	NA	NA	NA	NA .	NA .	INA I
			STUART WHITE AND BETTY												
10*21813	к	5-23-4.1	WHITE	TH EXPLORATION, LLC	1/8+	958	352	NA	NA	NA	NA	NA	NA	NA	NA
10*21815	ĸ	5-23-4.1	JAMES NEAL EMERY AND RENEE R EMERY	TH EXPLORATION, LLC	1/8+	958	348	NA .	NA .	NA .	NA	NA	NA	NA	NA
			CINDY GREEN AND LARRY							NA		NA.	NA NA	.NA	NA .
10*21816	К	5-23-4.1	GREEN	TH EXPLORATION, LLC	1/8+	958	356	NA	NA	NA .	NA	NA .	NA		No.
			MARY LOU HLINKA AND												
10*21817	. к	5-23-4.1	RICHARD G HLINKA SR	TH EXPLORATION, LLC	1/8+	959	514	NA	NA	NA	NA	NA	NA	NA	NA
			MARY CATHERINE THOMS												
10*21819	К	5-23-4.1	оп	TH EXPLORATION, LLC	1/8+	958	360	NA .	NA	NA	NA	NA	NA	NA	NA

к	5-23-4.1	JANICE LOTT	TH EXPLORATION, LLC	1/8+	959	506	NA .	NA	NA	NA	NA	NA .	NA	NA .
к	5-23-4.1	MARQUITA CLYBURN	TH EXPLORATION, LLC	1/8+	959	510	NA .	NA	NA	NA	NA	NA	NA	NA
к	5-23-4.1	BARBARA H COAKLEY	TH EXPLORATION, LLC	1/8+	960	66	NA	NA	NA	NA	NA	NA	NA	NA
ĸ	5-23-4.1	ROBIN ADAIR GUMP AND LOUIS M GUMP	TH EXPLORATION, LLC	1/8+	960	70	NA .	NA	NA	NA	NA	NA .	NA	NA
К	5-23-4.1	CHARLES DOUGLAS LANE	TH EXPLORATION, LLC	1/8+	960	77	NA	NA	NA	NA	NA	NA	NA	INA
К	5-23-4.1	MELISSA L DARROW	TH EXPLORATION, LLC	1/8+	954	328	NA	NA	NA	NA	NA	NA	NA	NA
													NA.	NA .
K	5-23-4.1	CHARLES J KNOX	TH EXPLORATION, LLC	1/8+	966	112	NA .	INA .	NA .	NA .	INA	INA	INA	INO
к	5-23-4.1	SHERMAN E KNOX JR	TH EXPLORATION, LLC	1/8+	966	108	NA	NA	NA	NA	NA	NA	NA	NA
	K K	K 5-23-4.1 K 5-23-4.1 K 5-23-4.1 K 5-23-4.1	K 5-23-4.1 MARQUITA CLYBURN K 5-23-4.1 BARBARA H COAKLEY ROBIN ADAIR GUMP AND LOUIS M GUMP K 5-23-4.1 CHARLES DOUGLAS LANE K 5-23-4.1 MELISSA L DARROW	K 5-23-4.1 MARQUITA CLYBURN TH EXPLORATION, LLC K 5-23-4.1 BARBARA H COAKLEY TH EXPLORATION, LLC K 5-23-4.1 ROBIN ADAIR GUMP AND LOUIS M GUMP TH EXPLORATION, LLC K 5-23-4.1 CHARLES DOUGLAS LANE TH EXPLORATION, LLC K 5-23-4.1 CHARLES J KNOX TH EXPLORATION, LLC	K 5-23-4.1 JANICE L OTT TH EXPLORATION, LLC 1/8+ K 5-23-4.1 MARQUITA CLYBURN TH EXPLORATION, LLC 1/8+ K 5-23-4.1 BARBARA H COAKLEY TH EXPLORATION, LLC 1/8+ K 5-23-4.1 ROBIN ADAIR GUMP AND IOUIS M GUMP TH EXPLORATION, LLC 1/8+ K 5-23-4.1 CHARLES DOUGLAS LANE TH EXPLORATION, LLC 1/8+ K 5-23-4.1 MELISSA L DARROW TH EXPLORATION, LLC 1/8+ K 5-23-4.1 CHARLES J KNOX TH EXPLORATION, LLC 1/8+	K 5-23-4.1 MARQUITA CLYBURN TH EXPLORATION, LLC 1/8+ 959	K 5-23-4.1 MARGUITA CLYBURN TH EXPLORATION, LLC 1/8+ 959 510 K 5-23-4.1 MARGUITA CLYBURN TH EXPLORATION, LLC 1/8+ 959 510 K 5-23-4.1 MARGUITA CLYBURN TH EXPLORATION, LLC 1/8+ 960 66 K 5-23-4.1 CHARLES DOUGLAS LANE TH EXPLORATION, LLC 1/8+ 960 77 K 5-23-4.1 CHARLES DOUGLAS LANE TH EXPLORATION, LLC 1/8+ 960 77 K 5-23-4.1 MELISSA L DARROW TH EXPLORATION, LLC 1/8+ 960 77	X 5-29-4.1 DARRES DOUGLAS LANE TH EDPLORATION, LLC 1/8+ 959 506 NA	K 5-23-4.1 MARQUITA CCHRURNI TH EDPLORATION, LLC 1/8- 959 506 NA NA NA K 5-23-4.1 MARQUITA CCHRURNI TH EDPLORATION, LLC 1/8- 959 66 NA NA NA K 5-23-4.1 SOURN ADMIT CLARETY TH EDPLORATION, LLC 1/8- 969 70 NA NA K 5-23-4.1 COURS NO GUMP AND COUR	K 5-23-4.1 MANGELITA CUNUUN THEOPERINTON, LLC 1/8+ 959 510 NA NA NA NA NA NA NA NA NA NA NA NA NA	E 5-23-4.1 MANGUITA CLYBURN THE EPILOPATION, LIC 1/9- 979 550 NA NA NA NA NA NA NA NA NA NA NA NA NA	# 1-22-4.2 JAMES COTTA CHRUMN THEOREMATICAL LIC 1/4- 999 106 NA NA NA NA NA NA NA NA NA NA NA NA NA	## 1-23-4.1 AMACH CITY THEORY AND COLOR OF THE PROPERTIES LIC. 1	## 1-52-41 PART CONTINUE PRODUCTION OF THE PRODU

27335		1	<u> </u>		T				Γ	Ι		l				
272222																
272222																
172522	10*22018	к	5-23-4.1	KATHLEEN ROBERTSON	TH EXPLORATION, LLC	1/8+	960	539	NA	NA	NA	NA	NA	NA	NA .	NA
172522						:										
772527 K 5-29-1 STITE COMMINS OF THE PROPERTY																
772527 K 5-29-1 STITE COMMINS OF THE PROPERTY																
Y22227 K 5-23-4.1 GATHY PARTY TREEL TO THE PROPERTY OF LECT 1789 961 463 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*22026	K	5-23-4.1	KEVIN D CHURCH	TH EXPLORATION, LLC	1/8+	957	49	NA	NA	NA	NA	NA .	NA	NA .	NA
Y22227 K 5-23-4.1 GATHY PARTY TREEL TO THE PROPERTY OF LECT 1789 961 463 NA NA NA NA NA NA NA NA NA NA NA NA NA				CTEDIEN C FAMERY AND												
P*22073 K 5-23-4.1 (SANRE SHALL) THE DRICHATON, LLC 1/8+ 961 467 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*22027	к	5-23-4.1	CATHY J EMERY	TH EXPLORATION, LLC	1/8+	954	310	NA	NA	NA	NA	NA	NA	NA	NA
P*22073 K 5-23-4.1 (SANRE SHALL) THE DRICHATON, LLC 1/8+ 961 467 NA NA NA NA NA NA NA NA NA NA NA NA NA				JAMES S HALL AND												
P722102 K 5-23-4.1 BONNIE LOU GRUBER TH EXPLORATION, LLC 1/8+ 954 314 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*22030	К	5-23-4.1	JEANNE B HALL	TH EXPLORATION, LLC	1/8+	961	463	NA	NA	NA	NA	NA	NA	NA	NA .
P22102 K 5-23-4.1 BOHNIE LOU GRUBER TH EXPLORATION, LLC 1/8+ 954 302 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*22093	K	5-23-4.1	TODD LEARN AND KENDA	TH EXPLORATION, LLC	1/8+	954	314	NA NA	NA NA	NA	NA NA	NA	NA	NA	NA
P 22128 K 5-23-4.1 BETTY PYSELL TH EXPLORATION, LLC 1/8+ 961 433 NA NA NA NA NA NA NA NA NA NA NA NA NA			3-23-4.1	LUNINA	THE EXPLORATION, ELC	2/01	334	324		, in						
P22128 K 5-23-4.1 BETTY PYSELL TH EXPLORATION, LLC 1/8+ 961 433 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*22102	,	522.41	PONNIE LOU GRUDER	TH EVELOPATION LLC	1/04	OKA.	202	NA.	, NA	NA NA	NΔ	NA	NA	NA	NA
VICKY STRAUSS AND	10 22102		3-23-4.1	BONNIE LOU GROBER	TH EXPLORATION, LLC	1/6+	954	302	NA .	NA .	INA.	The .				
VICKY STRAUSS AND	10*22128	ĸ	5-23-4.1	BETTY PYSELL	TH FXPLORATION LLC	1/8+	961	433	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA
VICKY STRAUSS AND VICKY STRAUSS AND VICKY STRAUSS AND T22144 K 5-23-4.1 DENNIS A STRAUSS TH EXPLORATION, LLC 1/8+ 961 529 NA NA NA NA NA NA NA NA NA		*	3 23-4.1		Sir Lorenton, LLC	401	331									
VICKY STRAUSS AND *22144 K 5-23-4.1 DENNIS A STRAUSS TH EXPLORATION, LLC 1/8+ 961 529 NA NA NA NA NA NA NA NA NA NA NA NA																
	10*22144	к к	5-23-4.1	VICKY STRAUSS AND DENNIS A STRAUSS	TH EXPLORATION, LLC	1/8+	961	529	NA	NA	NA	NA	NA	NA	NA	NA

10*22165	К	5-23-4.1	DEBRA L LYSESKI AND GERALD A LYSESKI	TH EXPLORATION, LLC	1/8+	954	306	NA	NA	NA	NA .	NA .	NA .	NA	NA
10*22178	к	57744	ANGELA HENTHORN AND	THE PROPERTY OF THE PROPERTY O	40.	673	-		L.,	NA NA	NA NA	NA.	NA.	NA.	NA NA
10*22332	K	5-23-4.1 5-23-4.1	WILLIAM R HENTHORN DORIS WEST AND ROBERT WEST		1/8+	972 962	58	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA
10*22339	K	5-23-4.1 5-23-4.1	BETTY LEE HOWARD LOY		1/8+	963	392	NA NA	NA NA	NA.	NA NA	NA NA	NA NA	NA NA	NA NA
10*22436	ĸ	5-23-4.1	TESSEAN FAMILY REVOCABLE LIVING TRUST		1/6*	963	626	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA
10*22443	к	5-23-4.1		TH EXPLORATION, LLC	1/8+	963	622	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA
10*22503	ĸ	5-23-4.1	KENNETH R SHAW AND DONNA K SHAW	TH EXPLORATION, LLC	1/8+	966	518		NA						
10*22505	к		JAMES D DRAKE AND	TH EXPLORATION, LLC	1/8+	964	425	NA	NA	NA	NA	NA	NA	NA	NA

20*22594 K \$-23-4.1 JAMES A WADE SR TH EPHOMATION, LLC 2/8* 965 481 NA NA NA NA NA NA NA NA NA NA NA NA NA
10*22509 K 5-23-4.1 KATHY JO CULLUM TH EXPLORATION, LLC 1/8+ 966 514 NA NA NA NA NA NA NA NA NA NA NA NA NA
10*22509 K 5-23-4.1 KATHY JO CULLUM TH EXPLORATION, LLC 1/8+ 966 514 NA NA NA NA NA NA NA NA NA NA NA NA NA
10*22509 K 5-23-4.1 KATHY JO CULLUM TH EXPLORATION, LLC 1/8+ 966 514 NA NA NA NA NA NA NA NA NA NA NA NA NA
10°22613 K 5-23-4.1 JEWEL I CAMPBELL TH EXPLORATION, LLC 1/8+ 966 510 NA NA NA NA NA NA NA NA NA NA NA NA NA
10°22613 K 5-23-4.1 JEWEL I CAMPBELL TH EXPLORATION, LLC 1/8+ 966 510 NA NA NA NA NA NA NA NA NA NA NA NA NA
10°22613 K 5-23-4.1 JEWEL I CAMPBELL TH EXPLORATION, LLC 1/8+ 966 510 NA NA NA NA NA NA NA NA NA NA NA NA NA
10°22613 K 5-23-4.1 JEWEL I CAMPBELL TH EXPLORATION, LLC 1/8+ 966 510 NA NA NA NA NA NA NA NA NA NA NA NA NA
10 Z2615 K 5-Z3-4,1 PEWELL CAMPBELL THEAPLURATION, LLC 1/8+ 950 31.0 RA INA INA INA INA INA INA INA INA INA IN
10 Z2615 K 5-Z3-4,1 PEWELL CAMPBELL THEAPLURATION, LLC 1/8+ 950 31.0 RA INA INA INA INA INA INA INA INA INA IN
10 Z2615 K 5-Z3-4,1 PEWELL CAMPBELL THEAPLURATION, LLC 1/8+ 950 31.0 RA INA INA INA INA INA INA INA INA INA IN
10 Z2615 K 5-Z3-4,1 PEWELL CAMPBELL THEAPLURATION, LLC 1/8+ 950 31.0 RA INA INA INA INA INA INA INA INA INA IN
10*22779 K 5-23-4.1 STEVEN WADE TH EXPLORATION, LLC 1/8+ 968 424 NA NA NA NA NA NA NA NA NA NA NA
The state of the s
MARGARET C MCMURRY & 10*22809 K 5-23-4.1 WILLIAM F MCMURRY TH EXPLORATION, LLC 1/8+ 972 54 NA NA NA NA NA NA NA NA NA NA NA NA NA
10*22812 K 5-23-4.1 JOSEPH F GOBLOWSKY TH EXPLORATION, LLC 1/8+ 968 428 NA NA NA NA NA NA NA NA NA
LAURINE C CURTIS & 10°22861 K 5-23-4.1 EDGAR A CURTIS III TH EXPLORATION, LLC 1/8+ 976 147 NA NA NA NA NA NA NA NA NA NA NA
10°23166 K 5-23-4.1 JAMES DAVID CRANDALL TH EXPLORATION, LLC 1/8+ 984 48 NA NA NA NA NA NA NA NA NA NA NA

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10*23168	К	5-23-4.1	JASON WADE	TH EXPLORATION, LLC	1/8+	966	506	NA.	NA	INA	NA .	NA	INA .	NA.	100
10*23368	K	5-23-4.1	ROSE MARIE CAMPBELL	TH EXPLORATION, LLC	1/8+	988	447	NA	NA	NA	NA	NA	NA .	NA	NA
			JONNA MARPLE AND ERIK												<u> </u>
10*23371	К	5-23-4.1	MARPLE	TH EXPLORATION, LLC	1/8+	988	442	NA .	NA	NA	NA	NA .	NA	NA	NA
						:			•	1					
10*23398	к	500.44	JON GUSTELY AND MARILYN NIJE	TH EXPLORATION, LLC	1/8+	1008	12	NA .	NA .	NA.	NA .	NA .	NA .	NA .	NA .
10 23336		5-23-4.1	MARILYN NDE	TH EXPLORATION, LLC	1/8+	1008	12	NA .	INA .	INO.					
10*23410	К	5-23-4.1	JENNA WADE	TH EXPLORATION, LLC	1/8+	1008	16	NA	NA	NA	NA	NA	NA	NA	NA
10*23505	К	5-23-4.1	RENEE KELLAR	TH EXPLORATION, LLC	1/8+	971	633	NA	NA	NA	NA	NA	NA .	NA	NA
10*23647	ĸ	5-23-4.1	MARILYN M ROBINSON	TH EXPLORATION, LLC	1/8+	1009	309	NA .	.NA	NA .	NA	NA	NA	NA	NA
		V nd 718													
10*23648	к	5-23-4.1	PAUL D RINE JR	TH EXPLORATION, LLC	1/8+	1009	313	NA	NA	NA	NA	NA	NA	NA	NA

	:														
10*23727	К	5-23-4.1	LISA TUCKER AND FRANCIS TUCKER	TH EXPLORATION, LLC	1/8+	1011	525	NA .	NA	NA	NA .	NA	NA	NA	NA
10*23756	к	5-23-4.1	KAREN DRAKE AND JEFF DRAKE	TH EXPLORATION, LLC	1/8+	1012	182	NA	NA	NA	NA	NA	NA	NA	NA
10*23757	к	5-23-4.1	DAVID DRAKE	TH EXPLORATION, LLC	1/8+	1012	187	NA	NA	NA	NA	NA	NA	NA	NA
										•					
10*23767	к	5-23-4.1	MARK ALAN SLATEN	TH EXPLORATION, LLC	1/8+	1014	481	NA	NA	NA	NA	NA	NA	NA	NA
10*23792	к	5-23-4.1	STEVEN W SLATEN AND RHONDA SLATEN	TH EXPLORATION, LLC	1/8+	1014	488	NA	NA	NA	NA	NA	NA	NA	NA
10*23826	ĸ	5-23-4.1	NANCY C DWYER AND WENDEL MARTINKOVIC	TH EXPLORATION, LLC	1/8+	1017	6	NA	NA	NA	NA	NA	NA	NA	NA
10*23838	к	5-23-4.1	RONALD DEAN YOHO & VICTORIA LYNN YOHO	TH EXPLORATION, LLC	1/8+	1017	1	NA	NA	NA	NA	NA	NA	NA	NA
10*23883	к	5-23-4.1	VICKI ANN WILLIAMS & WILLIAM J WILLIAMS	TH EXPLORATION, LLC	1/8+	1016	644	NA .	NA	NA	NA	NA	NA	NA	NA
									J						

10*24208	к	5-23-4.1	WALTER W STREIGHT JR AND CONNIE JO STREIGHT	TH EXPLORATION, LLC	1/8+	1023	516	NA	NA .	NA	NA	NA .	NA	NA	NA
10*24274	к	5-23-4.1	JO ELLEN GUSTELY	TH EXPLORATION, LLC	1/8+	1023	527	NA	NA	NA .	NA	NA	NA	NA	NA
10*24483	к	5-23-4.1	SUSAN ALFRED AND KEVIN JJ ALFRED	TH EXPLORATION, LLC	1/8+	1025	401	NA NA	NA NA	NA NA	NA	NA NA	NA	NA	NA
10 24403		5-23-4.1	JALFRED	TH EXPLORATION, LLC	1/8+	1025	401	INA	NA	NA .		, and a second			
10*24551	к	5-23-4.1	LEONARD LEE COULTER AND DEBRA A COULTER	TH EXPLORATION, LLC	1/8+	1025	405	NA	NA	NA	NA	NA	NA	NA	NA
10*24868	K	5-23-4.1		TH EXPLORATION, LLC	1/8+	1028		NA NA	NA	NA	NA	NA	NA	NA	NA
10*24917	K	5-23-4.1	WALTER W STREIGHT JR AND CONNIE JO STREIGHT		1/8+	1027		NA.	NA NA	NA NA	NA NA	NA	NA	NA	NA
10*25268	к		ROBERT LEE MARCIANO						NA NA	NA NA	NA	NA	NA	NA	NA NA
	K.	5-23-4.1	AKA ROBERT LEE MAYER	IH EAPLORATION, LLC	1/8+	1030	416	NA	INA .	INA	1925	IVO	1.00		
10*25269	к	5-23-4.1	RAYMOND GUSTELY JR	TH EXPLORATION, LLC	1/8+	1030	373	NA	NA	NA	NA	NA	NA	NA	NA

WW-6A1 Supplement
Operator's Well No. McMasters S-16HU

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10*25455	к	5-23-4.1	DAVID C WHITE NEISWONGER AND WHITE LAW OFFICES	TH EXPLORATION, LLC	1/8+	1031	476	NA	NA	NA	NA	NA	NA	NA	NA .
10*25462	K	5-23-4.1	JERRY HUGGINS ET AL	TH EXPLORATION, LLC	1/8+	1030	368	NA	NA	NA	NA	NA .	NA	NA	NA
10*25479	к	5-23-4,1	ROBERT LEE MARCIANO AKA ROBERT LEE MAYER	TH EXPLORATION, LLC	1/8+	1030	416	NA	NA	NA	NA	NA	NA	NA	NA .
10*27715	к	5-23-4.1	STONE HILL MINERAL HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1057	332	NA	NA NA	NA	NA	NA	NA	NA	NA
10*27959	к	5-23-4.1	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1063	594	NA .	NA	NA	NA	NA	NA	NA	NA
10*14847		5-23-5	LETHA RUCKMAN	GASTAR EXPLORATION USA INC	1/8+	806	270	NA	NA	NA NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14849		5-23-5	DAVID GUSTELY	GASTAR EXPLORATION USA INC	1/8+	806	265	NA NA	NA NA	NA NA	NA	NA		31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14853	L	5-23-5 5-23-5		GASTAR EXPLORATION	1/8+	809	507	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	Inc to Atinum Marcellus I	

8 8 0				GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration
10*14861	L	5-23-5	NANCY WHITLATCH	USA INC	1/8+	809	526	NA	NA	NA NA	NA	NA NA	Exploration Inc merger	шс	Inc to TH Exploration II LLC
10*14862	L	5-23-5	ANN GUSTELY	GASTAR EXPLORATION USA INC	1/8+	809	568	NA	NA .	NA	, NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atlnum Marcellus I LLC	36/9 Gastar Exploration inc to TH Exploration II LLC
				GASTAR EXPLORATION								NA.	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14864	L	5-23-5	CAROLYN DURWAY	USA INC	1/8+	810	330	NA	NA .	NA NA	NA NA	NA NA	Exploration inc merger		THE CONTROL OF THE CO
10*14866	L	5-23-5	GARY CARMICHAEL	GASTAR EXPLORATION USA INC	1/8+	810	316	NA .	NA	NA NA	NA .	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14868	ı	5-23-5	WOODROW CAMPBELL JR	GASTAR EXPLORATION USA INC	1/8+	813	454	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA inc and Gastar Exploration inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14869		5-23-5	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION	1/8+	813	561	NA NA	NA NA	NA	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
	-			GASTAR EXPLORATION								NA.	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marceilus I ILIC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14870	L	5-23-5 5-23-5	DWG OIL & GAS	GASTAR EXPLORATION USA INC	1/8+	816	312	NA NA	NA NA	NA NA	NA NA	NA NA	Exploration inc merger 21/41 Gastar Exploration USA inc and Gastar Exploration inc merger		

		Γ		Т				T							
10*14873	L	5-23-5	RAYMOND MILLER	GASTAR EXPLORATION USA INC	1/8+	821	44	NA	NA	NA .	NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
				GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I ILIC	36/9 Gastar Exploration
10*14874	L	5-23-5	RICHARD MILLER	USA INC	1/8+	822	250	NA	NA NA	, NA	NA NA	, NA		31/184 Gastar Exploration	incto in Exploration in EE
10*14876	L	5-23-5	SHIRLEY LARGENT	GASTAR EXPLORATION USA INC	1/8+	827	228	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	Inc to Atinum Marcellus I	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14877	ι	5-23-5	GARY F OBLOY AND DENISE I OBLOY	GASTAR EXPLORATION USA INC	1/8+	836	112	NA	NA.	NA	NA NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14878	ι	5-23-5	ARTHUR BRUCE COULTER	GASTAR EXPLORATION USA INC	1/8+	839	519	NA	NA.	NA	, NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14879	L	5-23-5	THERESA RINE	GASTAR EXPLORATION USA INC	1/8+	840	162	NA	NA NA	NA .	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
1011400		5-23-5	Inc. Lucas	GASTAR EXPLORATION USA INC	1/8+	849	545	NA.	NA.	NA.	NA	NA.	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration linc to TH Exploration II LLC
10*14880 10*14881		5-23-5 5-23-5	IRIS LUCAS MARY WHITLATCH	GASTAR EXPLORATION USA INC	1/8+	849	545	NA NA	NA NA	NA NA	NA NA	NA NA		31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration

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10*14882	L	5-23-5	GARY RINE	GASTAR EXPLORATION USA INC	1/8+	849	551	NA	NA NA	NA .	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14883		5-23-5	PAUL WISE	GASTAR EXPLORATION USA INC	1/8+	852	252	NA	NA .	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
		0.333		GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar	Inc to Atinum Marcellus I	36/9 Gastar Exploration
10*14884	L.	5-23-5	RENEE HAGERTY	USA INC	1/8+	852	255	NA	NA NA	NA	NA .	NA .	Exploration Inc merger	luc .	Inc to TH Exploration II LLC
10*14885	L	5-23-5	HOWARD RINE	GASTAR EXPLORATION USA INC	1/8+	854	601	NA .	NA	NA	NA NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14886	L	5-23-5	ЈОВІ ҮОНО	GASTAR EXPLORATION USA INC	1/8+	854	604	NA .	NA	NA	NA .	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10°14887	L	5-23-5	CHRISTINA ROBERTS	GASTAR EXPLORATION USA INC	1/8+	867	392	NA	NA .	NA	NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14888	ı	5-23-5	DARLENE BUTLER	GASTAR EXPLORATION USA INC	1/8+	867	395	NA	NA	NA .	NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14889	L	5-23-5	HAROLD YOHO	GASTAR EXPLORATION USA INC	1/8+	870	37	NA .	NA	NA	NA NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	1 36/9 Gastar Exploration Inc to TH Exploration II LLC

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10*14890	ι	5-23-5	HENRY MALONE JR	GASTAR EXPLORATION USA INC	1/8+	870	40	NA	NA.	NA	NA NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14891			NANCY F FYE & STEPHEN M FYE	GASTAR EXPLORATION USA INC	1/8+	885	606	, NA	, NA	NA.	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration linc to TH Exploration II LLC
		5-23-5	JAMES J. CAMPBELL BETTY	CHESAPEAKE APPALACHIA			458	NA NA	NA NA	NA NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoll USA Onshore Properties Inc to SWN Exchange Titleholder		41/256 SWN Production Company LLC to TH Exploration LLC
10*17145	L	5-23-5 5-23-5	J. CAMPBELL CAROLYN CAMPBELL BRITTON ROBERT C. BRITTON	CHESAPEAKE APPALACHIA	1/8+	685 685	458 464	NA NA	NA NA	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder	19/624 SWN Exchange	41/256 SWN Production Company LLC to TH
10*17147	L	5-23-5		CHESAPEAKE APPALACHIA	1/8+	685	470	NA	NA .	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
10*17148	L	5-23-5	DONALD E. CAMPBELL JUNE L. CAMPBELL	CHESAPEAKE APPALACHIA	1/8+	685	476	NA	NA .	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17149		5-23-5	WANDA M. BLAKE	CHESAPEAKE APPALACHIA LLC	1/8+	685	482	NA	NA .	NA	23/127 Chesapeake Appalachia LLC to Statoli Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10 * 17150	L	5-23-5	IDA L. CAMPBELL	CHESAPEAKE APPALACHIA LLC	1/8+	685	488	NA .	NA	NA	23/127 Chesapeake Appalachia LLC to Statoii Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC

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10*17502	L	5-23-5	PATRICIA E GUSTELY	TH EXPLORATION, LLC	1/8+	942	334	NA	NA	NA	NA	NA	NA	NA .	NA
						:									
10*17532	L	5-23-5	DONALD S BOBOVNIK AND DOLORES J BOBOVNIK	TH FXPLORATION, LLC	1/8+	942	346	INA	NA .	NA	NA	NA	NA	NA	NA
		3 23 3	BOLOKES 3 BOSOVIAIK	THE DIVERSITY OF THE PARTY OF T	2/0:	312									
			RONALD L MAYER AND												<u> </u>
10*17535	L	5-23-5	DEBRA A MAYER	TH EXPLORATION, LLC	1/8+	929	580	NA .	NA .	NA .	NA	NA	NA	INA.	INA
10*17539	ι	5-23-5	JOANN HAGERTY	TH EXPLORATION, LLC	1/8+	942	342	NA	NA	NA	NA	NA	NA	NA	NA
10*17540								<u></u>		NA NA	NA NA	NA.	NA.	NA NA	NA .
10-1/540	L	5-23-5	MONTY ESTEL	TH EXPLORATION, LLC	1/8+	941	624	NA	NA	INA	NA .	INA.	NA .	100	
			ROBERT D STRAWN AND												
10*17541	L	5-23-5	TAMMY J STRAWN	TH EXPLORATION, LLC	1/8+	942	21	NA	NA	NA	NA	NA	NA	NA	NA
10*17542		5-23-5	JEFFREY G HAZEL AND SHEILA M HAZEL	TH EXPLORATION, LLC	1/8+	942	12	NA	NA NA	NA .	NA	NA	NA	NA	NA
	-				.93	- 									
			CARL EDWARD MCCOY												
10*17543	L	5-23-5	AND CAROLYN SUE MCCOY	TH EXPLORATION, LLC	1/8+	942	15	NA	NA	NA	NA	NA	NA	NA	ĮNA

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10*17544	L	5-23-5	DEBORAH LYNN SCHWING	TH EXPLORATION, LLC	1/8+	942	377	NA	NA	NA.	NA	NA	NA	INA	NA .
							-								
												ļ	 	NA.	NA
10*17545	L .	5-23-5	LINDA SWOPE	TH EXPLORATION, LLC	1/8+	942	24	NA	NA	NA	NA	NA .	NA	NA .	No.
			SAMUEL EARL FRANCIS										NA	NA	NA
10*17546	L	5-23-5	AND ALICE L FRANCIS	TH EXPLORATION, LLC	1/8+	942	374	NA	NA	NA	NA	NA	NA .	NA .	MC.
												NΔ	NA	NA	NA
10*17593	L	5-23-5	REBECCA HAGERTY	TH EXPLORATION, LLC	1/8+	942	350	NA	NA	NA .	NA	NA .	INA	INA	INA
10117504		5-23-5	MEGAN HAGERTY	TH EXPLORATION, LLC	1/8+	942	362	NA	NA	NA	NA	NA	NA	NA	NA
10*17594	L	5-23-5	MEGAN HAGERTY	TH EXPLORATION, LLC	1/8+	942	362	NA .		100					
			THOMAS E RINE AND						NA	NA	NA	NA	NA	NA	NA
10*17595	L	5-23-5	MARY P RINE	TH EXPLORATION, LLC	1/8+	929	572	NA	INA	110	11/3				
					a (a.	202	8	and the state of t	NA	NA	NA	NA	NA	NA	NA
10*17640	L	5-23-5	PATRICIA A GARCAR	TH EXPLORATION, LLC	1/8+	942	8	NA	NA .	144	····	1			
10*17679	L	5-23-5	NORMA J ASH	TH EXPLORATION, LLC	1/8+	944	130	NA	NA	NA	NA	NA	NA	NA	NA

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10*17680	L	5-23-5	DAVID E CHURCH	TH EXPLORATION, LLC	1/8+	932	424	NA	NA	NA	NA	NA	NA .	NA	NA
			WALTER E LOSEY AND											ļ	NA
10*17681	L .	5-23-5	CINDY L LOSEY	TH EXPLORATION, LLC	1/8+	942	338	NA	NA	NA	NA	NA .	NA .	NA	NA
			JAMES E GARLOCH AND					1			l				NA
10*17682	l L	5-23-5	MARY K GARLOCH	TH EXPLORATION, LLC	1/8+	935	68	NA .	NA	NA	NA	NA	NA	NA .	NA .
			PATRICK HAGERTY AND					l		l	I _{NA}	NA.	NA	NA.	NA
10*17683	L	5-23-5	DALANE HAGERTY	TH EXPLORATION, LLC	1/8+	942	358	NA .	NA	NA	INA	NA .	INA .	100	
	1														
			DAVID MCCOY AND LORI		4 (0)		10	NA .	NA	NA	NA	NA	NA NA	NA.	NA .
10*17684	<u> </u>	5-23-5	MCCOY	TH EXPLORATION, LLC	1/8+	942	18	NA	INA	NA .	NA .	ina	100		
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				1											
10*17715	[.]	5-23-5	ROBERT A SANDS AND JOYCE A SANDS	TH EXPLORATION, LLC	1/8+	942	354	NA .	NA	NA	NA NA	NA .	NA NA	NA	NA
10-17/15	L	5-23-5	JOYCE A SANDS	TH EXPLORATION, LLC	1/0+	342	334	NA .	100	100					
10*17719		5-23-5	ROBERT R DARROW	TH EXPLORATION, LLC	1/8+	942	380	NA .	NA	NA	NA.	NA	NA	NA	NA
10.17/15	-	3-23-3	INOBERT & DAKKOW	III EAFLORATION, LLC	1/0+	342	380								
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10\$17720		F 22 F	WILLIAM KOTSON AND DEBRA KOTSON	TH EXPLORATION, LLC	1/8+	938	507	NA.	NA.	NA .	NA	NA .	NA NA	NA	NA
10*17720	<u> </u>	5-23-5	DERKY KOIZON	TITI EXPLORATION, LLC	1/8+	938	30/	NA	JIMA	liav	Į ins		1		

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10*17775		5-23-5	HAROLD H HAGERTY AND DEBORAH M HAGERTY	TH EXPLORATION, LLC	1/8+	942	370	NA .	NA	NA .	NA	NA	NA	NA	NA
10 17773	L	3-23-3	DEBOTALI MITAGENT	THE EAST CONTINUE, ELC	40.	312									
			JAMES GARCAR AND		-15		627		NA	NA	NA .	NA	NA NA	NA	NA
10*17776	L	5-23-5	MELISSA GARCAR	TH EXPLORATION, LLC	1/8+	941	627	NA .	NA	NA .	INA	100			
10*17824	L	5-23-5	SARA FULTON	TH EXPLORATION, LLC	1/8+	942	384	NA	NA	NA .	NA	NA .	NA	NA	NA
10*17901	L	5-23-5	ROBYN HAGERTY	TH EXPLORATION, LLC	1/8+	924	602	NA	NA	NA	NA	NA	NA	NA .	NA
10*17965		5-23-5	ROBERT DAVID BARNES AND RHONDA BARNES	TH EXPLORATION, LLC	1/8+	942	366	NA NA	NA NA	NA	NA	NA	NA	NA	N A
	L											NA NA	No.	NA.	NA NA
10*18042	L	5-23-5	JOSEPH J ONORE	TH EXPLORATION, LLC	1/8+	927	101	NA .	NA .	NA	INA	NA .	INA	INA .	100
			JAMES M ONORE AND						NA NA	NA	NA	NA NA	NA	NA	NA
10*18043	L	5-23-5	CINDY L ONORE	TH EXPLORATION, LLC	1/8+	927	105	NA	INA	NA	INA	list.			
														NA.	NA
10*18044	L	5-23-5	TRACEY ESTEL	TH EXPLORATION, LLC	1/8+	927	109	NA	NA	NA	NA	INA	INA	INA	lino

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10*18994	L	5-23-5	SHIRLEY ANN DRAKE	TH EXPLORATION, LLC	1/8+	940	137	NA .	NA	NA	NA	NA	NA	NA	NA .
									}						
	1														
10*19656	L	5-23-5	DEBRA ROUDEBUSH	TH EXPLORATION, LLC	1/8+	944	105	NA	NA	NA	NA	NA	NA	NA	NA
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10*19736	L	5-23-5	DOROTHY HLINKA DUKE	TH EXPLORATION, LLC	1/8+	944	571	NA	NA	NA	NA	NA	NA	NA	NA
			MELISSA ANN BRAUN AND												İ
10*19999	L	5-23-5	RAYMOND BRAUN	TH EXPLORATION, LLC	1/8+	951	627	NA	NA	NA	NA	NA	NA	NA	NA
										ļ					
			RANDALL C ROGERSON &												
10*21084	L	5-23-5	TRACY LYNN ROGERSON	TH EXPLORATION, LLC	1/8+	949	368	NA	NA	NA	NA	NA	NA	NA	NA
			İ									}			
	1														
10*21217	ι .	5-23-5	KEITH JAY FISCHER AND DAWN M FISCHER	TH EXPLORATION, LLC	1/8+	952	643	NA	NA	NA	NA	NA	NA	NA	NA
					İ										
10*21222	L	5-23-5	PATRICIA J SHAW KELLER	TH EXPLORATION, LLC	1/8+	946	43	NA	NA	NA	NA	NA	NA	NA	NA
									1						
10*21425	,	5-23-5	ORIE N YOUNG AND BERNIE A YOUNG	TH EXPLORATION, LLC	1/8+	957	29	NA	NA .	NA NA	NA	NA NA	NA	NA	NA
10 21420		J-23-J	1-2111127 1-0110	2 25.0	-, -,			1000	1		•	•		•	

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			FRANCIS R SMITH AND												
10*21428	L	5-23-5	ANNA M SMITH	TH EXPLORATION, LLC	1/8+	957	37	NA	NA	NA	NA	NA	NA .	NA	NA .
10*21434	L	5-23-5	CATHERINE HUMMEL	TH EXPLORATION, LLC	1/8+	957	33	NA	NA	NA	NA	NA	NA	NA	NA
			RICHARD RICH AND KAREN										NA.	NA NA	NA.
10*21451	L	5-23-5	RICH	TH EXPLORATION, LLC	1/8+	954	254	NA .	NA	NA	NA	NA .	NA .	NA	NA .
														NA	NA NA
10*21452	L	5-23-5	KIMBERLY COX	TH EXPLORATION, LLC	1/8+	954	262	NA	NA .	NA .	NA	NA .	NA	NA .	NA .
10*21457		5-23-5	WARREN L COULTER AND ROSLINA A COULTER	TH EXPLORATION, LLC	1/8+	954	249	NA	NA	NA	NA	NA	NA	NA	NA
			HUSTON A SMITH JR AND		·				NA.	NA	NA.	NA	NA	NA	NA NA
10*21458	L	5-23-5	ANN C SMITH	TH EXPLORATION, LLC	1/8+	957	45	NA	NA	NA .	INA	NA.	No.	N-	
										No.	NA	NA	NA	NA	NA
10*21459	<u>ــــــــــــــــــــــــــــــــــــ</u>	5-23-5	JAMES L CHURCH	TH EXPLORATION, LLC	1/8+	957	41	NA	NA .	NA	INA .	INA	lio.	, inc	
10*21498		5-23-5	MABEL SHILLINGBURG AND CLIFFORD SHILLINGBURG	TH EXPLORATION, LLC	1/8+	954	258	NA	NA	NA	NA	NA	NA	NA	NA
			1		-,-			1							

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10#21500	1	5-23-5	MATTHEW COULTER AND SIMONE COULTER	TH EXPLORATION, LLC	1/8+	954	245	NA .	NA	NA .	NA	NA .	NA	NA .	NA
10*21500	L	3-23-3	SINIONE COULTER	In Extendition, Ecc	1/0*	334	243								
10*21501	,	5-23-5	EUGENIA E HOUSER	TH EXPLORATION, LLC	1/8+	954	241	NA .	NA NA	NA .	NA .	NA .	NA	NA	NA .
10 21301		3233													
10*21502		5-23-5	DEBRA MURIN	TH EXPLORATION, LLC	1/8+	954	237	NA .	NA .	NA	NA .	NA	NA	NA	NA
20 22002	-														
10*21503		5-23-5	DARLENE M DAVIS	TH EXPLORATION, LLC	1/8+	954	233	NA	NA .	NA	NA	NA	NA	NA	NA
	-														
10*21562	ι	5-23-5	MARY ETTA TAYLOR AND GARY W TAYLOR	TH EXPLORATION, LLC	1/8+	958	414	NA	NA	NA	NA	NA	NA	NA	NA
10*21563	ι	5-23-5	DAVID R TAYLOR AND MARIA TAYLOR	TH EXPLORATION, LLC	1/8+	958	422	NA	NA	NA	NA	NA	NA	NA	NA
10*21565	Ĺ	5-23-5	KORENE SUE LANTZ	TH EXPLORATION, LLC	1/8+	957	462	NA	NA	NA	NA	NA	NA	NA	NA
10*21566	L	5-23-5	HERBERT M TAYLOR AND LENORA E TAYLOR	TH EXPLORATION, LLC	1/8+	958	418	NA	NA	NA	NA	NA	NA	NA	NA

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10*21615	L	5-23-5	GARY PARSONS AND JOANN J PARSONS	TH EXPLORATION, LLC	1/8+	959	347	NA	NA	NA	NA	NA	NA	NA	NA
			CLARENCE RANDALL EMERY AND PAULA JEAN												
10*21626	L L	5-23-5	EMERY	TH EXPLORATION, LLC	1/8+	958	344	NA	NA	NA .	NA	NA	NA	NA	NA
															NA.
10*21632	LL	5-23-5	JOHN ARLES EMERY	TH EXPLORATION, LLC	1/8+	959	339	NA	NA	NA .	NA	NA	NA	NA	NA .
10*21655		5-23-5	STANLEY GUSTELY	TH EXPLORATION, LLC	1/8+	965	206	NA	NA NA	NA	NA	NA	NA	NA	NA .
10-21655		3-23-3	STANLET GOSTELT	TH EXPLORATION, ELC	1/8+	303	200		ina .	No.					
10*21656	L	5-23-5	JOHN OBLOY AND JANET I	L TH EXPLORATION, LLC	1/8+	959	331	NA	NA	NA	NA	NA	NA	NA	NA
10*21657		5-23-5	RONALD J SALKOVICK JR 8 SANDRA SALKOVICK		1/8+	958	373	NA	NA NA	NA	, NA	NA	NA	NA	NA .
		- A													
10*21774	L	5-23-5	JOYCE KAY BURTON AND SAMUEL C BURTON	TH EXPLORATION, LLC	1/8+	957	467	NA	NA	NA	NA	NA	NA .	NA	NA .
10*21813	L	5-23-5	STUART WHITE AND BETT	Y TH EXPLORATION, LLC	1/8+	958	352	NA	NA	NA	NA	NA	NA	NA	NA

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			JAMES NEAL EMERY AND								NA NA	NA	NA NA	NA .	NA.
10*21815	L	5-23-5	RENEE R EMERY	TH EXPLORATION, LLC	1/8+	958	348	NA	NA	NA	NA .	NA .	NA .		
10*21816	L	5-23-5	CINDY GREEN AND LARRY GREEN	TH EXPLORATION, LLC	1/8+	958	356	NA	NA .	NA	NA	NA	NA	NA	NA
		•													
10*21817	L	5-23-5	MARY LOU HLINKA AND RICHARD G HLINKA SR	TH EXPLORATION, LLC	1/8+	959	514	NA .	NA .	NA	NA	NA	NA	NA	NA
10*21819	L	5-23-5	MARY CATHERINE THOMS	TH EXPLORATION, LLC	1/8+	958	360	NA	NA	NA	NA	NA	NA .	NA	NA
10*21820	L.	5-23-5	MARION DAVID OTT & JANICE L OTT	TH EXPLORATION, LLC	1/8+	959	506	NA	NA	NA	NA	NA	NA .	NA .	NA
10*21832	L	5-23-5	MARQUITA CLYBURN	TH EXPLORATION, LLC	1/8+	959	510	NA .	NA	NA	NA	NA	NA	NA	NA
														į	
10*21948	ι	5-23-5	BARBARA H COAKLEY	TH EXPLORATION, LLC	1/8+	960	66	NA	NA	NA	NA	NA	NA	NA	NA
10*21949	L	5-23-5	ROBIN ADAIR GUMP AND LOUIS M GUMP	TH EXPLORATION, LLC	1/8+	960	70	NA	NA	NA	NA	NA	NA	NA	NA

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10*21950	L	5-23-5	JUDITH A TAYLOR	TH EXPLORATION, LLC	1/8+	960	74	NA	NA	NA	NA	NA	NA	NA.	NA .
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10*21951	L	5-23-5	CHARLES DOUGLAS LANE	TH EXPLORATION, LLC	1/8+	960	77	NA	NA	NA	NA	NA	NA	NA	NA
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10*21994	L	5-23-5	MELISSA L DARROW	TH EXPLORATION, LLC	1/8+	954	328	NA	NA	NA	NA	NA	NA	NA	NA .
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10*22013	L	5-23-5	CHARLES J KNOX	TH EXPLORATION, LLC	1/8+	966	112	NA	NA	NA	NA	NA .	NA	NA	NA
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10*22014	L	5-23-5	SHERMAN E KNOX JR	TH EXPLORATION, LLC	1/8+	966	108	NA	NA	NA	NA	NA	NA	NA	NA
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10*22018	L	5-23-5	KATHLEEN ROBERTSON	TH EXPLORATION, LLC	1/8+	960	539	NA	NA	NA	NA	NA	NA	NA	NA
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10*22026	L	5-23-5	KEVIN D CHURCH	TH EXPLORATION, LLC	1/8+	957	49	NA	NA	NA	NA	NA	NA	NA	NA
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										1					
			STERUSAN C SAASON AND							1					
10*22027	ا ر	5-23-5	STEPHEN C EMERY AND CATHY J EMERY	TH EXPLORATION, LLC	1/8+	954	310	NA	NA	NA	NA	NA	NA	NA	NA
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10°22093	L	5-23-5	TODD LEARN AND KENDA LEARN	TH EXPLORATION, LLC	1/8+	954	314	NA	NA	NA	NA	NA	NA	NA	NA
10*22102	L	5-23-5		TH EXPLORATION, LLC	1/8+	954	302	NA .	NA	NA .	NA .	NA .	NA	NA	NA
10*22128	L	5-23-5		TH EXPLORATION, LLC	1/8+	961	433	NA .	NA NA	NA .	NA .	NA .	NA .	NA NA	NA NA
10*22142		5-23-5	WANDA J RIDING AND	TH EXPLORATION, LLC TH EXPLORATION, LLC	1/8+	961	423	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
10*22143		5-23-5 5-23-5	VICKY STRAUSS AND	TH EXPLORATION, LLC	1/8+	961	529	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA
10*22144		5-23-5 5-23-5	DEBRA L LYSESKI AND	TH EXPLORATION, LLC	1/8+	954	329	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA
10*22178	·		ANGELA HENTHORN AND WILLIAM R HENTHORN		1/8+	972	58	NA	NA	NA	NA	NA	NA	NA	NA

			MISSY JONES AND												NA
10*22287	L	5-23-5	MICHAEL JONES	TH EXPLORATION, LLC	1/8+	962	195	NA	NA	NA	NA	NA	NA .	NA	NA .
			DON'S WEST AND DON'S			į									
10*22332	ι .	5-23-5	DORIS WEST AND ROBERT WEST	TH EXPLORATION, LLC	1/8+	962	542	NA	NA	NA	NA	NA	NA	NA	NA
											NA	NA NA	NA NA	NA	NA.
10*22339	L	5-23-5	BETTY LEE HOWARD LOY	TH EXPLORATION, LLC	1/8+	963	392	NA .	NA	NA	INA .	NA	INA	INA	INA .
10*22354	ı,	5-23-5	LORETTA M DOUGHERTY	TH EXPLORATION, LLC	1/8+	964	516	NA	NA	NA	NA	NA	NA	NA	NA
10-22334		3-23-3	AND DAVID DOGGIERT	III DA LOIGATION, LLC	2,01	501									
10*22436	L	5-23-5	TESSEAN FAMILY REVOCABLE LIVING TRUST	TH EXPLORATION, LLC	1/8+	963	626	NA	NA	NA	NA	NA	NA	NA	NA
		5-23-5	SHERRY L IMRIE AND DANIEL IMRIE JR	TH EXPLORATION, LLC	1/8+	963	631	NA	NA NA	NA	NA	NA	NA	NA	NA
10*22437	L.	5-23-5	DANIEL IMINIE JK	TH EXPLORATION, ELC	1/61	303			, No.						
10°22440	ı	5-23-5	EUGENE FANKHAUSER	TH EXPLORATION, LLC	1/8+	963	153	NA	NA	NA	NA	NA	NA	NA	NA
10* 22440	L	3-23-3	COURT PARTITIONS	The solution, see	A)V·	300									
10*22443] ,]	5-23-5	GATHA CHAMBERS	TH EXPLORATION, LLC	1/8+	963	622	NA	NA NA	NA	NA	NA	NA	NA	NA
10 22445	L	3-23-3	TOWNING CHAMBERS	1 2.1 2010111011, 220	~/			4:::		1					

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			JUDY ANN MERCER	TH EXPLORATION, LLC	1/8+	963	634	NA .	NA .	NA	NA	INA	NA .	NA	NA .
10*22450	L	5-23-5	JUDY ANN MERCER	TH EXPLORATION, LLC	1/8+	363	034	NA .	NA .						
antaaraa	,	5-23-5	KENNETH R SHAW AND DONNA K SHAW	TH EXPLORATION, LLC	1/8+	966	518	NA	NA .	NA .	NA .	NA	NA .	NA	NA
10*22503		5-25-5	DOMNA KSHAW	THE EXPEDITION, ECC	40.										
				:											
10*22504	L	5-23-5	MELVIN FANKHAUSER	TH EXPLORATION, LLC	1/8+	974	351	NA	NA	NA	NA	NA	NA	NA	NA
10*22505	L	5-23-5	JAMES D DRAKE AND DONNA K DRAKE	TH EXPLORATION, LLC	1/8+	964	425	NA	NA	NA	NA	NA	NA	NA	NA .
10*22509	Ĺ	5-23-5	RANDY BERISFORD AND LINDA JO BERISFORD	TH EXPLORATION, LLC	1/8+	964	429	NA	NA .	NA	NA	NA .	NA	NA .	NA
10*22560	L	5-23-5	RONALD JOE KELLER	TH EXPLORATION, LLC	1/8+	965	485	NA	NA	NA	NA	NA	NA	NA	NA .
10*22592	L	5-23-5	RUSSELL W ROGERSON AND SUSAN ROGERSON	TH EXPLORATION, LLC	1/8+	966	119	NA .	NA	NA	NA	NA .	NA	NA	NA
10*22593	L	5-23-5	RONALD E ROGERSON	TH EXPLORATION, LLC	1/8+	966	116	NA	NA	NA	NA	NA	NA	NA	NA

10*22594	L	5-23-5	JAMES A WADE SR	TH EXPLORATION, LLC	1/8+	965	481	NA	NA	NA	NA .	NA	NA .	NA	NA .
10*22609		5-23-5	KATHY JO CULLUM	TH EXPLORATION, LLC	1/8+	966	514	NA .	NA .	NΔ	NA .	INA	NA .	NA	NA .
10 22609		3-23-3	MINI JO COLLOW	TH EXPLORATION, ELC	1/0+	300	314	INA.	line.	, no					
10*22613	L.	5-23-5	JEWEL L CAMPBELL	TH EXPLORATION, LLC	1/8+	966	510	NA .	NA	NA	NA	NA	NA	NA	NA
	:														
10*22644	L	5-23-5	RICHARD EUGENE KELLER	TH EXPLORATION, LLC	1/8+	968	214	NA	NA	NA	NA .	NA	NA	NA	NA .
										ļ		NA .	NA	NA	NA
10*22779	L	5-23-5	STEVEN WADE	TH EXPLORATION, LLC	1/8+	968	424	NA	NA .	NA	NA	NA .	INA .	NA .	No.
10*22809	L	5-23-5	MARGARET C MCMURRY & WILLIAM F MCMURRY	TH EXPLORATION, LLC	1/8+	972	54	NA	NA	NA	NA	NA	NA	NA	NA
															1
10*22811	L	5-23-5	ROBERT E ROGERSON	TH EXPLORATION, LLC	1/8+	972	64	NA	NA	NA	NA .	NA	NA	NA	NA
10*22812	L	5-23-5	JOSEPH F GOBLOWSKY	TH EXPLORATION, LLC	1/8+	968	428	NA	NA	NA	NA	NA	NA	NA	NA .

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272345 1 2-22-2 0000 0000 1 10 10 10 10 10 10 10 10 10	10*22861	,	5-23-5	LAURINE C CURTIS &	TH FXPI ORATION, LLC	1/8+	976	147	NA.	NA	NA	NA	NA	NA	NA	NA
2073342																
107-23149 1 5-23.5 INCHE MADE CAMPRELL THE EXPONENTION, LIC 1/2+ 988 447 MA MA MA MA MA MA MA MA MA MA MA MA MA	10*23166	L	5-23-5	JAMES DAVID CRANDALL	TH EXPLORATION, LLC	1/8+	984	48	NA	NA	NA	NA	NA	NA	NA	NA
107-23149 1 5-23.5 INCHE MADE CAMPRELL THE EXPONENTION, LIC 1/2+ 988 447 MA MA MA MA MA MA MA MA MA MA MA MA MA															NA	NA.
10°23369 L 5-23-5 STEARIC CIRLU AND THE EPICORATION, LLC 1/8+ 588 451 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*23168	L	5-23-5	JASON WADE	TH EXPLORATION, LLC	1/8+	966	506	NA	NA	NA	NA	NA	NA	NA	NA
10°23369 L 5-23-5 STEARIC CIRLU AND THE EPICORATION, LLC 1/8+ 588 451 NA NA NA NA NA NA NA NA NA NA NA NA NA								45			No	MA	NA NA	NA NA	NA.	NA.
10*23370 L 5-23-5 MATHEW CIRILU TH EXPLORATION, LIC 1/8+ 988 451 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*23368	L.	5-23-5	ROSE MARIE CAMPBELL	TH EXPLORATION, LLC	1/8+	988	447	NA	INA .	INA	INA	NA .	INA .		
10°23371 L 5-23-5 MARPLE TH EXPLORATION, LLC 1/8+ 988 442 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*23369	Į.	5-23-5	STEFANIE CIRILLI AND MATTHEW CIRILLI	TH EXPLORATION, LLC	1/8+	988	451	NA	NA	NA	NA	NA	NA	NA	NA.
10°23371 L 5-23-5 MARPLE TH EXPLORATION, LLC 1/8+ 988 442 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*23270		5.72.5	DENVER LTAYLOR	TH FYPIORATION LIC	1/8+	988	454	NA NA	NA NA	NA NA	NA	NA	NA	NA .	NA .
10*23371 L 5-23-5 MARPLE TH EXPLORATION, LLC 1/8+ 988 442 NA NA NA NA NA NA NA NA NA NA NA NA NA	10 255/0	L	5-23-3	DEHVER J INTLOR	III EXPLORATION, LLC	1/0+	300	157	ne.		1					
JON GUSTELY AND	10*23371	L	5-23-5	JONNA MARPLE AND ERIK MARPLE	TH EXPLORATION, LLC	1/8+	988	442	NA	NA	NA	NA	NA	NA	NA .	NA .
10*23398 L 5-23-5 MARILYN NUE TH EXPLORATION, LLC 1/8+ 1008 12 NA NA NA NA NA NA NA NA NA NA																
	10*23398	L	5-23-5	MARILYN NUE	TH EXPLORATION, LLC	1/8+	1008	12	NA	NA	NA	NA	NA	NA	NA	NA

10*23410		5-23-5		TH EXPLORATION, LLC	1/8+	1008		NA	NA	NA	NA	NA .	NA .	NA	NA
10*23428	l.	5-23-5 5-23-5	DAVID L SNYDER JENNIFER CUICHTA AND KEVIN CUICHTA	TH EXPLORATION, LLC TH EXPLORATION, LLC	1/8+	1008	313	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
10*23444		5-23-5 5-23-5		TH EXPLORATION, LLC	1/8+	971		NA NA	NA NA	NA NA	NA	NA NA	NA	NA	NA .
10*23647		5-23-5	MARILYN M ROBINSON		1/8+	1009	309	NA	NA	NA	NA	NA	NA	NA	NA .
10*23648		5-23-5		TH EXPLORATION, LLC	1/8+	1009	313	NA	NA	NA	NA .	NA	NA	NA	NA
10*23672		5-23-5	CHAD FRANCIS AND LISA	TH EXPLORATION, LLC	1/8+	1010		NA	NA	NA	NA	NA	NA	NA	NA
10*23727	L	5-23-5	LISA TUCKER AND FRANCIS		1/8+	1011	525	NA	NA	NA.	NA	NA	NA	NA	NA

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10*23756	L	5-23-5	KAREN DRAKE AND JEFF DRAKE	TH EXPLORATION, LLC	1/8+	1012	182	NA	NA	NA	NA	NA	NA	NA	NA
10*23757	L	5-23-5	DAVID DRAKE	TH EXPLORATION, LLC	1/8+	1012	187	NA .	NA	NA	NA	NA	NA	NA .	NA
		5-23-5	MARK ALAN SLATEN	TH EXPLORATION, LLC	1/8+	1014	481	lna	NA.	NA	NA	NA .	NA	NA .	NA .
10*23767	L .	3-23-3	WARK ALAN SLATEN	TH EXPLORATION, ELC	1/6+	1014	401	INA	ino.						
10*23771	L	5-23-5	ROBIN ROSE	TH EXPLORATION, LLC	1/8+	1014	485	NA	NA	NA	NA	NA	NA	NA	NA .
			STEVEN W SLATEN AND												
10*23792	L .	5-23-5	RHONDA SLATEN	TH EXPLORATION, LLC	1/8+	1014	488	NA	NA	NA	NA	NA	NA	NA	NA .
10*23793	L	5-23-5	ELIZABETH BENNETT AND DONNIE BENNETT	TH EXPLORATION, LLC	1/8+	1014	492	NA	NA	NA	NA	NA	NA	NA	NA
10*23794	L	5-23-5	PATTY JEAN LANTZ	TH EXPLORATION, LLC	1/8+	1014	495	NA	NA	NA	NA	NA	NA	NA	NA .
10#23826		5-23-5	NANCY C DWYER AND WENDEL MARTINKOVIC	TH EYPLOPATION LLC	1/8+	1017	6	NA NA	NΔ	NA.	NA .	NA.	NA	NA	NA
10*23826	<u> </u>	3-25-3	TANTIADET MAKLIMKOAIC	THE EXPEDIMENTON, LLC	1/07	101/	l	Inc	Ti-sec	1		· · · · · · · · · · · · · · · · · · ·			

10*23838	ι	5-23-5	RONALD DEAN YOHO & VICTORIA LYNN YOHO	TH EXPLORATION, LLC	1/8+	1017	1	NA	NA	NA	NA	NA	NA	NA	NA .
10*23883	L	5-23-5	VICKI ANN WILLIAMS & WILLIAM J WILLIAMS	TH EXPLORATION, LLC	1/8+	1016	644	NA	NA	NA	NA	NA	NA	NA .	NA
10*24208	,	5-23-5	WALTER W STREIGHT JR AND CONNIE JO STREIGHT	TH EVELOPATION LLC	1/8+	1023	516	NA	NA NA	NA	NA _	NA	NA	NA	NA
10-24206	L	5-25-5	AND CONNIE 20 STREIGHT	The Eventual Section 1	2,00										
10*24274	L	5-23-5	JO ELLEN GUSTELY	TH EXPLORATION, LLC	1/8+	1023	527	NA	NA	NA	NA	NA	NA	NA	NA
10*24483		5-23-5	SUSAN ALFRED AND KEVIN J ALFRED	TH EXPLORATION, LLC	1/8+	1025	401	NA NA	NA	NA	N A	NA	NA	NA	NA
			LEONARD LEE COULTER						NA	NA NA	NA .	NA	NA	NA	NA
10*24551	L	5-23-5	WILLIAM D TAYLOR AND	TH EXPLORATION, LLC	1/8+	1025	405	NA			NA	NA NA	NA NA	NA	NA NA
10*24751	L	5-23-5	KIM TAYLOR	TH EXPLORATION, LLC	1/8+	1027	315	NA	NA	NA	NA .	1945	1975	1975	
10*24752	L	5-23-5	PATTI KENNEDY	TH EXPLORATION, LLC	1/8+	1027	312	NA	NA	NA	NA	NA	NA	NA	INA

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10*24860	L L	5-23-5	DORA TAYLOR	TH EXPLORATION, LLC	1/8+	1028	92	NA	NA NA	NA .	NA	NA	NA .	NA .	NA
									l				NA NA	NA	NA
10*24868	L	5-23-5	ANNE DWYER	TH EXPLORATION, LLC	1/8+	1028	95	NA	NA .	NA	NA .	NA .	INA	NA .	NA .
10*24917		5-23-5	WALTER W STREIGHT JR AND CONNIE JO STREIGHT	TH EVELOPATION IIIC	1/8+	1027	281	NA	NA.	NA NA	NA NA	NA.	NA .	NA .	NA
10 24317		3-25-3	AND COMME TO STREIGHT	TH EXPLORATION, ELC	1/6+	1027	281	NA .							
			İ							}					
10*25268	L	5-23-5	ROBERT LEE MARCIANO AKA ROBERT LEE MAYER	TH EXPLORATION, LLC	1/8+	1030	416	NA	NA	NA	NA	NA	NA	NA	NA
10*25269	L L	5-23-5	RAYMOND GUSTELY JR	TH EXPLORATION, LLC	1/8+	1030	373	NA	NA	NA	NA	NA	NA	NA	NA
			DAVID C WHITE NEISWONGER AND WHITE												
10*25455	L	5-23-5	LAW OFFICES	TH EXPLORATION, LLC	1/8+	1031	476	NA	NA	NA	NA	NA	NA	NA	NA
					·										
10*25462	L	5-23-5	JERRY HUGGINS ET AL	TH EXPLORATION, LLC	1/8+	1030	368	NA	NA	NA	NA	NA	NA .	NA	NA
			ROBERT LEE MARCIANO												
10*25479	L	5-23-5	AKA ROBERT LEE MAYER	TH EXPLORATION, LLC	1/8+	1030	416	NA	NA	NA	NA NA	NA .]NA	NA	NA

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			STONE HILL MINERAL											NA	NA NA
10*27715	L L	5-23-5	HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1057	332	NA	NA .	NA	NA	NA	NA	INA	INA
10*27959		5-23-5	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1063	594	NA.	NA NA	NA NA	NA	NA	NA	NA	NA
10 27333	 	3-23-3	TIOLDINGS ELC	THE EXPLORATION, LLC	1/61	1003	334	NA.	lina .	1					
10*14849	м	5-23-18	DAVID GUSTELY	GASTAR EXPLORATION USA INC	1/8+	806	265	NA	NA	NA	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
													21/41 Gastar Exploration	31/184 Gastar Exploration	
			DURWOOD WRIGHT BY	GASTAR EXPLORATION						!			USA Inc and Gastar	Inc to Atinum Marcellus I	36/9 Gastar Exploration
10*14853	M	5-23-18	CATHERINE HUMMEL AIF	USA INC	1/8+	809	507	NA	NA	NA	NA .	NA	Exploration Inc merger	LLC	Inc to TH Exploration II LLC
10*14861	м	5-23-18	NANCY WHITLATCH	GASTAR EXPLORATION USA INC	1/8+	809	526	NA .	NA.	NA .	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14862	м	5-23-18	ANN GUSTELY	GASTAR EXPLORATION USA INC	1/8+	809	568	NA.	NΔ	NA NA	NA NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10 14002	M	5-25-18	ANN GUSTELY	USA INC	1/8+	909	368	ind.	140	10					
10°14864	М	5-23-18	CAROLYN DURWAY	GASTAR EXPLORATION USA INC	1/8+	810	330	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14866	M	5-2 3-1 8	GARY CARMICHAEL	GASTAR EXPLORATION USA INC	1/8+	810	316	NA NA	, NA	NA NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration inc to Atinum Marcellus I LLC	
AU A-1300		3-73-10	TOWN CARINICHAEL	TODA INC	1/07	010	310	11303	1.6.						

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10*14868	м	5-23-18	WOODROW CAMPBELL JR	GASTAR EXPLORATION USA INC	1/8+	813	454	NA	NA	NA	NA NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
				GASTAR EXPLORATION	4/0				NA.) 	, No.	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14869	М	5-23-18	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION	1/8+	813	561	NA .	NA .	NA	NA NA	, NA	21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	
10*14870	М	5-23-18	DAVID CARMICHAEL	USA INC	1/8+	816	16	NA	NA	NA	NA.	NA .	Exploration Inc merger	uc	Inc to TH Exploration II LLC
10*14872	м	5-23-18	DWG OIL & GAS ACQUISITIONS LLC	GASTAR EXPLORATION USA INC	1/8+	817_	312	NA .	NA	NA	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14873	м	5-23-18	RAYMOND MILLER	GASTAR EXPLORATION USA INC	1/8+	821	44	NA	NA	NA	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
													21/41 Gastar Exploration		
10*14874	м	5-23-18	RICHARD MILLER	GASTAR EXPLORATION USA INC	1/8+	822	260	NA	NA	NA	NA	NA NA	USA Inc and Gastar Exploration Inc merger	Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14876	м	5-23-18	SHIRLEY LARGENT	GASTAR EXPLORATION USA INC	1/8+	827	228	NA	NA	NA	NA NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
			GARY F OBLOY AND	GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	
10*14877	м	5-23-18	DENISE I OBLOY	USA INC	1/8+	836	112	NA	NA	NA	NA	NA	Exploration Inc merger	rrc	Inc to TH Exploration II LLC

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10*14878	м	5-23-18	ARTHUR BRUCE COULTE	GASTAR EXPLORATION R USA INC	1/8+	839	519	NA	NA .	NA .	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
				GASTAR EXPLORATION									USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration
10*14879	М	5-23-18	THERESA RINE	USA INC	1/8+	840	162	NA	NA	NA .	NA .	NA .	Exploration Inc merger	uc	Inc to TH Exploration II LLC
10*14880	м	5-23-18	IRIS LUCAS	GASTAR EXPLORATION USA INC	1/8+	849	545	NA NA	NA .	NA NA	NA NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14881	м	5-23-18	MARYWHITLATCH	GASTAR EXPLORATION USA INC	1/8+	849	548	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14882	м	5-23-18	GARY RINE	GASTAR EXPLORATION USA INC	1/8+	849	551	NA NA	NA	NA	NA	NA	21/41 Gastar Exploration USA inc and Gastar Exploration inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14883	м	5-23-18	PAULWISE	GASTAR EXPLORATION USA INC	1/8+	852	252	NA.	NA.	NA NA	NA NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
	M	5-23-18	RENEE HAGERTY	GASTAR EXPLORATION USA INC		852	255	NA.	NA NA	NΔ	NA NA	NA NA		31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14884 10*14885	M M	5-23-18 5-23-18	RENEE HAGERTY HOWARD RINE	GASTAR EXPLORATION USA INC	1/8+	852 854	601	NA NA	NA NA	NA	NA NA	NA NA		31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	

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.0*14886	м	5-23-18	јорі үоно	GASTAR EXPLORATION USA INC	1/8+	854	604	NA .	NA	NA	NA .	NA		31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
				GASTAR EXPLORATION									USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration
LO*14887	м	5-23-18	CHRISTINA ROBERTS	USA INC	1/8+	867	392	NA	NA	NA .	NA	NA	Exploration Inc merger	LLC	Inc to TH Exploration II LLC
10*14888	м	5-23-18	DARLENE BUTLER	GASTAR EXPLORATION USA INC	1/8+	867	395	NA	NA NA	NA .	NA NA	NA NA		31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
				GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration
10*14889	м	5-23-18	HAROLD YOHO	USA INC	1/8+	870	37	NA	NA .	NA	NA	NA	Exploration Inc merger	ис	Inc to TH Exploration II LLC
10*14890	М	5-23-18	HENRY MALONE JR	GASTAR EXPLORATION USA INC	1/8+	870	40	NA	NA .	NA.	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
			NANCY F FYE & STEPHEN	GASTAR EXPLORATION									USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration
10*14891	М	5-23-18	M FYE	USA INC	1/8+	885	606	NA	NA	NA.	NA	NA	Exploration Inc merger	Luc	Inc to TH Exploration II LLC
10*17145	м	5-23-18	JAMES J. CAMPBELL BETTY J. CAMPBELL	Y CHESAPEAKE APPALACHIA LLC	1/8+	685	458	NA	NA	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17146	м	5-23-18	CAROLYN CAMPBELL BRITTON ROBERT C. BRITTON	CHESAPEAKE APPALACHIA LLC	1/8+	685	464	NA	NA	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC

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10*17147	м	5-23-18	JOANN J. PARSONS GARY D. PARSONS	CHESAPEAKE APPALACHIA	1/8+	685	470	NA	NA	NA	Appalachia LLC to Statoil	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
10*17148	м	5-23-18	DONALD E. CAMPBELL JUNE L. CAMPBELL	CHESAPEAKE APPALACHIA	1/8+	685	476	NA .	NA .	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
10*17149	м	5-23-18	WANDA M. BLAKE	CHESAPEAKE APPALACHIA	1/8+	685	482	NA	NA	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
10°17150	м	5-23-18	IDA L. CAMPBELL	CHESAPEAKE APPALACHIA LLC	1/8+	685	488	NA.	NA.	NA NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
												NA.			NA
10*17502	м	5-23-18	DONALD S BOBOVNIK AND	TH EXPLORATION, LLC	1/8+	942	334	NA	NA .	NA	NA NA	NA .	NA	NA NA	NA NA
10*17532	м	5-23-18	DOLORES J BOBOVNIK RONALD L MAYER AND	TH EXPLORATION, LLC	1/8+	942	346	INA .	INA	NA .	NA .	I PAA	1344		IV.
10*17535	М	5-23-18		TH EXPLORATION, LLC	1/8+	929	580	NA	NA	NA	NA	NA	NA	NA	NA
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10*17539	м	5-23-18	JOANN HAGERTY	TH EXPLORATION, LLC	1/8+	942	342	NA	NA	NA	NA	NA	NA	NA	NA

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10*17593	м	5-23-18	REBECCA HAGERTY	TH EXPLORATION, LLC	1/8+	942	350	NA.	NA .	NA	NA.	NA	NA	NA .	NA .
10 1/333		3-23-10	nedecon moent	THE CONTINUITY CLC	2,0.	372		, and a second							
10*17594	М	5-23-18	MEGAN HAGERTY	TH EXPLORATION, LLC	1/8+	942	362	NA	NA	NA	NA	NA	NA	NA	NA
			THOMAS E RINE AND MARY P RINE	TH EXPLORATION, LLC		929				NA		NΔ	200	NA .	NA
10*17595	М	5-23-18	MARY P RINE	TH EXPLORATION, LLC	1/8+	929	572	NA .	NA .	NA .	INA .	NA.	INA	NA .	INC.
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10*17640	М	5-23-18	PATRICIA A GARCAR	TH EXPLORATION, LLC	1/8+	942		NA	NA	NA	NA	NA	NA	NA	NA
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						,									l _{NA}
10*17679	M	5-23-18	NORMA J ASH	TH EXPLORATION, LLC	1/8+	944	130	NA	NA	NA	NA	NA .	NA .	NA	NA .
10*17680	м	5-23-18	DAVID E CHURCH	TH EXPLORATION, LLC	1/8+	932	424	NA	NA	NA	NA	NA	NA	NA	NA
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			WALTER E LOSEY AND												
10*17681	М	5-23-18	CINDY L LOSEY	TH EXPLORATION, LLC	1/8+	942	338	NA	NA	NA	NA	NA	NA	NA	NA
10*17682	м	5-23-18	JAMES E GARLOCH AND MARY K GARLOCH	TH EXPLORATION, LLC	1/8+	935	68	NA	NA	NA .	NA .	NA	NA	NA	NA
10 1,002	(4)	3-23-10	In an Kontrock	1 2 101511019 110	1/0.	333		1,	1:":	1	1				

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10*17683	м	5-23-18	PATRICK HAGERTY AND DALANE HAGERTY	TH EXPLORATION, LLC	1/8+	942	358	NA	NA .	NA	NA	NA	NA	NA	NA
10*17715	м	5-23-18	ROBERT A SANDS AND JOYCE A SANDS	TH EXPLORATION, LLC	1/8+	942	354	NA	NA	NA	NA	NA	NA	NA	NA .
10*17719	М	5-23-18	ROBERT R DARROW	TH EXPLORATION, LLC	1/8+	942	380	NA	NA	NA	NA	NA .	NA	NA	NA
			WILLIAM KOTSON AND		1/0	222	507		NA	NΔ	NA	NΔ	NA.	NA	NA NA
10*17720	м	5-23-18	DEBRA KOTSON	TH EXPLORATION, LLC	1/8+	938	507	NA	NA	NA .	NA .	NA	NA .		
10*17775	м	5-23-18	HAROLD H HAGERTY AND DEBORAH M HAGERTY	TH EXPLORATION, LLC	1/8+	942	370	NA	NA	NA	NA	NA	NA	NA	NA
	м	5-23-18	JAMES GARCAR AND MELISSA GARCAR	TH EXPLORATION, LLC	1/8+	941	627	NA.	NA NA	NA	NA	NA	NA	NA	NA
10*17776	IVI	3-23-18	WELISM GARCAR	III EATEORATION, LLC	1/07	247	- V21								
10*17824	м	5-23-18	SARA FULTON	TH EXPLORATION, LLC	1/8+	942	384	NA	NA	NA	NA	NA	NA	NA	NA NA
		2.20.40				-									
10*17901	м	5-23-18	ROBYN HAGERTY	TH EXPLORATION, LLC	1/8+	924	602	NA	NA .	NA	NA	NA	NA	NA	NA

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10*17965	M	5-23-18	ROBERT DAVID BARNES AND RHONDA BARNES	TH EXPLORATION, LLC	1/8+	942	366	NA	NA	NA.	NA	NA	NA .	NA	NA
10 17363	IVI	2-23-18	AND KNOWDA BAKINES	TH EXPLORATION, LLC	1/0+	342	300	NA .	No.	No.					
10*18042	М	5-23-18	JOSEPH J ONORE	TH EXPLORATION, LLC	1/8+	927	101	NA	NA	NA	NA	NA	NA	NA .	NA
10*18043	м	5-23-18	JAMES M ONORE AND CINDY L ONORE	TH EXPLORATION, LLC	1/8+	927	105	NA	NA	NA	NA	NA	NA	NA	NA
			CRYSTAL M HOOKER AND												
10*18176	М	5-23-18	JAMES HOOKER	TH EXPLORATION, LLC	1/8+	929	568	NA	NA	NA	NA	NA	NA	NA	NA
10*18329	м	5-23-18	COLLEEN HAGERTY	TH EXPLORATION, LLC	1/8+	929	560	NA	NA	NA	NA	NA	NA	NA	NA
10*18367	м	5-23-18	WALTER C SCHUBERT AND BARBARA A SCHUBERT	TH EXPLORATION, LLC	1/8+	931	377	NA	NA	NA	NA	NA	NA	NA	NA
10*18368	м	5-23-18	ROBERTA K MILLER	TH EXPLORATION, LLC	1/8+	931	457	NA	NA	NA	NA	NA	NA	NA	NA
10*19296		F 22 42	JOSEPH R RINE AND	TH EVELOPATION 115	1/0	022	402	l _{MA}	l _{MA}	NA.	NΔ	NA	NA.	NA	NA
10*18386	М	5-23-18	JENNIFER M RINE	TH EXPLORATION, LLC	1/8+	932	492	NA	IIVA	JINA	1130		1	1	

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10*18598	М	5-23-18	MARK E GUSTELY	TH EXPLORATION, LLC	1/8+	935	52	NA	NA	NA	NA	NA	NA	NA .	NA .
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10*18795	M	5-23-18	GASTON FAMILY INVESTMENTS LLC	TH EXPLORATION, LLC	1/8+	959	502	NA .	NA	NA	NA .	NA .	NA .	NA	NA
30.00	.,,	3-23-10	INVESTIVENTS EEC	IN EAR COIGHION, EEC	1/0*	- 333		130	No.						
10*18994	M	5-23-18	SHIRLEY ANN DRAKE	TH EXPLORATION, LLC	1/8+	940	137	NA	NA	NA	NA	NA	NA .	NA	INA
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10*19736	м	5-23-18	DOROTHY HLINKA DUKE	TH EXPLORATION, LLC	1/8+	944	571	NA	NA	NA	NA	NA	NA	NA .	NA
10*21217	м	5-23-18	KEITH JAY FISCHER AND DAWN M FISCHER	TH EXPLORATION, LLC	1/8+	952	643	NA .	NA	NA	NA	NA .	NA	NA	NA
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														NA	INA
10*21222	М	5-23-18	PATRICIA J SHAW KELLER	TH EXPLORATION, LLC	1/8+	946	43	NA	NA	NA	NA	NA .	NA	NA	NA .
							l								
10*21415	м	5-23-18	ABE J HOCHSTETLER AND ANNA E HOCHSTETLER	TH EXPLORATION, LLC	1/8+	957	7	NA	NA	NA	NA .	NA	NA	NA	NA
10*21425	м	5-23-18	ORIE N YOUNG AND BERNIE A YOUNG	TH EXPLORATION, LLC	1/8+	9 57	29	NA	NA	NA .	NA	NA	NA	NA	NA .

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10*21428	м	5-23-18	FRANCIS R SMITH AND ANNA M SMITH	TH EXPLORATION, LLC	1/8+	957	37	NA	NA	NA	NA	NA	NA	NA	NA
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10*04.40.4					4.60	057	33		NΔ	NA NA	NA	NA	NA .	NA	NA
10*21434	М	5-23-18	CATHERINE HUMMEL	TH EXPLORATION, LLC	1/8+	957	33	NA	NA	INA .	NA.	No.			
			RICHARD RICH AND KAREN	,											
10*21451	М	5-23-18	RICH	TH EXPLORATION, LLC	1/8+	954	254	NA	NA	NA	NA	NA	NA	NA	NA
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10*21452	м	5-23-18	KIMBERLY COX	TH EXPLORATION, LLC	1/8+	954	262	NA	NA	NA	NA	NA	NA	NA	NA
10*21457	м	5-23-18	WARREN L COULTER AND ROSLINA A COULTER	TH EXPLORATION, LLC	1/8+	954	249	NA	NA	NA	NA.	NA	NA .	NA .	NA
10-21457	M	5-23-18	ROSLINA A COULTER	TH EXPLORATION, LLC	1/8+	954	249	INA.	NA .	IVA					
			HUSTON A SMITH JR AND												
10*21458	М	5-23-18	ANN C SMITH	TH EXPLORATION, LLC	1/8+	957	45	NA	NA	NA	NA	NA	NA	NA	NA
10*21459	м	5-23-18	JAMES L CHURCH	TH EXPLORATION, LLC	1/8+	957	41	NA	NA	NA	NA	NA	NA	NA	NA
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10221400		5 00 40	MABEL SHILLINGBURG AND CLIFFORD	THE THE PARTIES AND A TOTAL AN	4/0	054	258		NA.	l _{NA}	NA.	NA.	NA	NA .	NA .
10*21498	M	5-23-18	SHILLINGBURG	TH EXPLORATION, LLC	1/8+	954	258	INA	INA	INA	Inv	Jim .	1		

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€38			MATTHEW COULTER AND									l _{NA}		NA.	NA NA
10*21500	М	5-23-18	SIMONE COULTER	TH EXPLORATION, LLC	1/8+	954	245	NA .	NA	NA	NA	NA	INA .	INA .	NA .
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10831501	M	5-23-18	EUGENIA E HOUSER	TH EXPLORATION, LLC	1/8+	954	241	NA	NA	NA	NA	NA	NA	NA	NA
10-21301															
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				1 1											
10*21502	М	5-23-18	DEBRA MURIN	TH EXPLORATION, LLC	1/8+	954	237	NA	NA	NA .	NA	NA	NA	NA	NA .
10*21503	м	5-23-18	DARLENE M DAVIS	TH EXPLORATION, LLC	1/8+	954	233	NA .	NA NA	NA	NA	NA	NA .	NA NA	NA
10 21303	IVI	3-23-18	DARLENE IVI DAVIS	TH EXPLORATION, LLC	1/8+	334	255	INA	INA .	NA					
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			CLARENCE RANDALL EMERY AND PAULA JEAN												
10*21626	М	5-23-18	EMERY	TH EXPLORATION, LLC	1/8+	958	344	NA	NA	NA	NA	NA	NA	NA	NA
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10*21632	М	5-23-18	JOHN ARLES EMERY	TH EXPLORATION, LLC	1/8+	959	339	NA	NA NA	NA	NA	NA	NA	NA .	NA
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10*21655	м	5-23-18	STANLEY GUSTELY	TH EXPLORATION, LLC	1/8+	965	206	NA	NA NA	NA	NA NA	NA	NA	NA	NA
	iVI	3-23-10	JANLET GOSTELT	III EAFLOIMINON, LLC	1/0+	203	200	100	100						
	1														
			1												
10*21656	М	5-23-18	JOHN OBLOY AND JANET L OBLOY	TH EXPLORATION, LLC	1/8+	959	331	NA	NA	NA	NA	NA	NA	NA	NA
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			RONALD J SALKOVICK JR &											NA.	No.
10*21657	M	5-23-18	SANDRA SALKOVICK	TH EXPLORATION, LLC	1/8+	958	373	NA	NA NA	NA NA	NA	NA NA	NA .	INA	INA .
10*21774	м	5-23-18	JOYCE KAY BURTON AND SAMUEL C BURTON	TH EXPLORATION, LLC	1/8+	957	467	NA	NA NA	NA	NA	NA	NA	NA	NA
10*21813	М	5-23-18	STUART WHITE AND BETTY WHITE	TH EXPLORATION, LLC	1/8+	958	352	NA	NA	NA	NA.	NA NA	NA	NA	NA
			JAMES NEAL EMERY AND												
10*21815	M	5-23-18	RENEE R EMERY	TH EXPLORATION, LLC	1/8+	958	348	NA	NA .	NA	NA.	NA	NA	NA	NA.
10*21816	м	5-23-18	CINDY GREEN AND LARRY GREEN	TH EXPLORATION, LLC	1/8+	958	356	NA	NA NA	NA	NA NA	NA NA	NA	NA	NA
		<u> </u>		THE EAST CONTROL OF THE CONTROL OF T	2/0-	230									
10*21817	М	5-23-18	MARY LOU HLINKA AND RICHARD G HLINKA SR	TH EXPLORATION, LLC	1/8+	959	514	NA	NA	NA	NA	NA	NA	NA	NA
			MARY CATHERINE THOMS												
10*21819	М	5-23-18	отт	TH EXPLORATION, LLC	1/8+	958	360	NA .	NA NA	NA .	NA	NA	NA	NA	NA
10*21820	M	E 22 10	MARION DAVID OTT &	TH EVELOPATION I.I.C.	1/0	050	E06	210	NA.	NA.	NA.	NA	NA NA	NA	NA
10 21820	I M	5-23-18	JANICE L OTT	TH EXPLORATION, LLC	1/8+	959	506	NA	INA	INA	INA	liso	1,40		- Pro-

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														NΔ	NA.
10*21832	M	5-23-18	MARQUITA CLYBURN	TH EXPLORATION, LLC	1/8+	959	510	NA	NA	NA	NA	NA	NA	NA .	INA .
10*21948	м	5-23-18	BARBARA H COAKLEY	TH EXPLORATION, LLC	1/8+	960	66	NA .	NA.	NA .	NA	NA .	NA .	NA	NA .
10 21340		32310	DANDARY II COMELI	THE EXICON TON, ELC	1/0.										
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10*21949	м	5-23-18	ROBIN ADAIR GUMP AND LOUIS M GUMP	TH EXPLORATION, LLC	1/8+	960	70	NA	NA	NA	NA .	NA	NA	NA	NA .
10*21951	М	5-23-18	CHARLES DOUGLAS LANE	TH EXPLORATION, LLC	1/8+	960	77	NA	NA	NA	NA	NA	NA	NA	NA
10*21994	M	5-23-18	MELISSA L DARROW	TH EXPLORATION, LLC	1/8+	954	328	NA	NA	NA	NA	NA	NA .	NA .	NA
10*22013	M	5-23-18	CHARLES J KNOX	TH EXPLORATION, LLC	1/8+	966	112	NA.	NA.	NΔ	NA	NA .	NA .	NA	NA
10 22015	IV:	2-72-10	CHARLES J KNOX	TH EXPLORATION, LLC	1/01	500	112	INA.	100						
10*22014	м	5-23-18	SHERMAN E KNOX JR	TH EXPLORATION, LLC	1/8+	966	108	NA	NA	NA	NA .	NA	NA	NA	NA
10*22018	м	5-23-18	KATHLEEN ROBERTSON	TH EXPLORATION, LLC	1/8+	960	539	NA	NA	NA	NA	NA	NA	NA	NA

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			DORIS WEST AND ROBERT						NA NA	NA	NA NA	NA.	NA NA	NA.	NA .
10*22332	M	5-23-18	WEST	TH EXPLORATION, LLC	1/8+	962	542	NA	INA .	NA .	l l	100			
											NA	NA.	NA.	NA	NA .
10*22339	M	5-23-18	BETTY LEE HOWARD LOY	TH EXPLORATION, LLC	1/8+	963	392	NA	NA .	NA .	NA	INA .	lina .		
10*22436		57749	TESSEAN FAMILY	THEY PLOOP THEY	1/0	953	676	NA NA	NA NA	NA	NA	NA NA	NA NA	NA	NA
10-22436	М	5-23-18	REVOCABLE LIVING TRUST	TH EXPLORATION, LLC	1/8+	963	626	NA .	NA	INA .	NA .	INA.			
10*22443	м	5-23-18	GATHA CHAMBERS	TH EXPLORATION, LLC	1/8+	963	622	NA	NA NA	NA NA	NA	NA NA	NA NA	NA	NA
10-22443	M	5-23-18	GATHA CHAMBERS	TH EXPLORATION, LLC	1/8+	963	622	NA	NA .	NA.	ina .	inc.			
10*22503	м	5-23-18	KENNETH R SHAW AND DONNA K SHAW	TH EXPLORATION, LLC	1/8+	966	518	NA	NA	NA	NA	NA	NA	NA	NA .
			JAMES D DRAKE AND												
10*22505	М	5-23-18	DONNA K DRAKE	TH EXPLORATION, LLC	1/8+	964	425	NA .	NA	NA	NA .	NA	NA	NA	INA
10*22594	м	5-23-18	JAMES A WADE SR	TH EXPLORATION, LLC	1/8+	965	481	NA	NA	NA	NA	NA NA	NA	NA	NA
	101	3-23-10	PONIES A WADE SK	III CAFLORATION, LLC	дот	303	401	ino.							
													No	NA	NA
10*22609	M	5-23-18	KATHY JO CULLUM	TH EXPLORATION, LLC	1/8+	966	514	NA .	NA	INA	NA	INA	INA	Jun	1

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10*22613	м	5-23-18	JEWEL L CAMPBELL	TH EXPLORATION, LLC	1/8+	966	510	NA	NA	NA	NA	NA	NA	NA .	NA
10*22779	М	5-23-18	STEVEN WADE	TH EXPLORATION, LLC	1/8+	968	424	NA	NA	NA	NA	NA	NA	NA	NA
			MARGARET C MCMURRY &												
10*22809	M	5-23-18	WILLIAM F MCMURRY	TH EXPLORATION, LLC	1/8+	972	54	NA	NA .	NA	NA	NA	NA	NA .	INA
10*22812	м	5-23-18	JOSEPH F GOBLOWSKY	TH EVEL OPATION LLC	1/8+	968	428	NA	NA NA	NA	NA	NA	, NA	NA	NA
10 22812	M M	5-23-18	JOSEPH F GOBLOWSKY	TH EXPLORATION, ELC	1/8+	968	428	INA	NA .	NA .	100	100			
10*22861	м	5-23-18	LAURINE C CURTIS & EDGAR A CURTIS III	TH EXPLORATION, LLC	1/8+	976	147	NA	NA	NA	NA	NA	NA	NA	NA
												NA NA	NA NA	NA.	NA
10*23166	M	5-23-18	JAMES DAVID CRANDALL	TH EXPLORATION, LLC	1/8+	984	48	NA	NA	NA	NA	NA	NA .	INA	INA .
10*23168	м	5-23-18	JASON WADE	TH EXPLORATION, LLC	1/8+	966	506	NA	NA	NA	NA	NA	NA	NA	NA
					77.0										
10*23368	M	5-23-18	ROSE MARIE CAMPBELL	TH EXPLORATION, LLC	1/8+	988	447	NA	NA	NA	NA	NA	NA	NA	INA

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10*23371	м	5-23-18	JONNA MARPLE AND ERIK MARPLE	TH EXPLORATION, LLC	1/0.	988	442	la c	NA	NA	NA	INA	l _{NA}	NA .	NA
10-233/1	М	5-23-18	MARPLE	TH EXPLORATION, LLC	1/8+	988	442	NA .	INA	NA	NA .	NA .			
10*23398	м	5-23-18	JON GUSTELY AND MARILYN NUE	TH EXPLORATION, LLC	1/8+	1008	12	NA	NA	NA	NA	NA	NA	NA	NA
10*23410	м	5-23-18	JENNA WADE	TH EXPLORATION, LLC	1/8+	1008	16	NA	NA	NA	NA	NA	NA	NA	NA
10*23505	м	5-23-18	RENEE KELLAR	TH EXPLORATION, LLC	1/8+	971	633	NA	NA	NA	NA	NA	NA	NA	NA .
10*23647	м	5-23-18	MARILYN M ROBINSON	TH EXPLORATION, LLC	1/8+	1009	309	NA	NA	NA	NA	NA	NA	NA	NA
10*23648	М.	5-23-18	PAUL D RINE JR	TH EXPLORATION, LLC	1/8+	1009	313	NA	NA	NA	NA	NA	NA	NA	NA
			LISA TUCKER AND FRANCIS												
10*23727	М	5-23-18	TUCKER	TH EXPLORATION, LLC	1/8+	1011	525	NA	NA	NA	NA	NA	NA	NA	NA .
			KAREN DRAKE AND JEFF												
10*23756	М	5-23-18	DRAKE	TH EXPLORATION, LLC	1/8+	1012	182	NA	NA	NA	NA	NA	NA	NA	NA

10*23757	М	5-23-18	DAVID DRAKE	TH EXPLORATION, LLC	1/8+	1012	187	NA	NA	NA	NA	NA	NA	NA	NA
															NA.
10*23767	М	5-23-18	MARK ALAN SLATEN	TH EXPLORATION, LLC	1/8+	1014	481	NA	NA	NA	NA	NA	NA	NA	NA
10432763	м	5-23-18	STEVEN W SLATEN AND RHONDA SLATEN	TH EXPLORATION, LLC	1/8+	1014	488	NA.	NA NA	NA	NA	NA	NA	NA	NA
10*23792	M	5-23-18	RHONDA SLATEN	TH EXPLORATION, LLC	1/8+	1014	400	INA .	TRA .	110					
10*23826	м	5-23-18	NANCY C DWYER AND WENDEL MARTINKOVIC	TH FYPI OPATION LIC	1/8+	1017	6	NA	NA NA	NA	NA	NA	NA	NA	NA
10.23826	I IVI	5-23-18	WENDEL WARTINKOVIC	TH EXPLORATION, LLC	1/0+	1017									
10*23838	м	5-23-18	RONALD DEAN YOHO & VICTORIA LYNN YOHO	TH EXPLORATION, LLC	1/8+	1017	1	NA	NA	NA	NA	NA	NA	NA	NA
10*23883	м	5-23-18	VICKI ANN WILLIAMS & WILLIAM J WILLIAMS	TH EXPLORATION, LLC	1/8+	1016	644	NA	NA	NA	.NA	NA	NA	NA	NA
	.41	3-23-10		Di colvilloit, ccc	a) a1										
10*24208	м	5-23-18	WALTER W STREIGHT JR AND CONNIE JO STREIGHT	TH EXPLORATION, LLC	1/8+	1023	516	NA	NA	NA	NA	NA	NA .	NA	NA
														NA.	NA.
10*24274	М	5-23-18	JO ELLEN GUSTELY	TH EXPLORATION, LLC	1/8+	1023	527	NA	NA	NA .	NA	NA	INA	INA	INA

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10°24483) (3 3 M	5-23-18	SUSAN ALFRED AND KEVIN J ALFRED	TH EXPLORATION, LLC	1/8+	1025	401	NA	NA	NA	NA	NA .	NA	<u>NA</u>	<u>NA</u>
10*24551	*	5-23-18	LEONARD LEE COULTER AND DEBRA A COULTER	TH EXPLORATION, LLC	1/8+	1025	405	NA	NA	NA	NA	NA	NA	NA	NA
10*24868	м	5-23-18	ANNE DWYER	TH EXPLORATION, LLC	1/8+	1028	95	NA	NA NA	NA.	NA	NA.	NA	NA	NA NA
10 24000	199	5-25-18	WALTER W STREIGHT JR	TH EAPLORATION, ILC	1/8+	1028	35	NA	NA.	NA .	TVA				
10*24917	M	5-23-18	AND CONNIE JO STREIGHT	TH EXPLORATION, LLC	1/8+	1027	281	NA	NA	NA	NA	NA	NA	NA	NA
10*25268	M	5-23-18	AKA ROBERT LEE MAYER	TH EXPLORATION, LLC	1/8+	1030	416	NA .	NA	NA	NA .	NA .	NA	NA .	NA .
10*25269	М	5-23-18	RAYMOND GUSTELY JR DAVID C WHITE REISWONGER AND WHITE	TH EXPLORATION, LLC	1/8+	1030	373	NA	NA .	NA	NA	NA	NA	NA	NA .
10*25455	М	5-23-18		TH EXPLORATION, LLC	1/8+	1031	476	NA	NA	NA	NA	NA	NA	NA	NA
10*25462	м	5-23-18	JERRY HUGGINS ET AL	TH EXPLORATION, LLC	1/8+	1030	368	NA	NA	NA	NA	NA	NA	NA	NA

10**14457 N 5-23-16 (LTHA RUDMANN USA NC 1/8*) 805 270 NA NA NA NA NA NA NA NA NA NA NA NA NA	257 M																
27-1773 W 3-23 W 5-23 W 5-20 W	2733 W 9-39-18 HOMERS LIVE THE PROMOTION LIVE 1/2* 1657 337 MA MA MA MA MA MA MA MA MA MA MA MA MA	10*25479	м	5-23-18	ROBERT LEE MARCIANO AKA ROBERT LEE MAYER	TH EXPLORATION, LLC	1/8+	1030	416	NA NA	NA	NA	NA	NA	NA	NA	NA
102-727-5 M	7775 M 5-29-34 MOUNTS LEL MINERAL TO PROPORATION LIC 1/3* 1657 32 40 40 40 40 40 40 40 40 40 40 40 40 40																
10 TOTAL NATIONAL STATE OF THE MANAGEMENT OF THE STATE OF	7959 M 5-23-24 PTOPE NELL AMPROVES M 5-23-24 POSCHORES LEC THE EPROGRATION LLC 1/2+ 1/2-15-25 M 5-23-25 OURS RECOMMENDED M 6-24-25 OURS RECOMMENDED M 7-2	10*27715	м	5-23-18	HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1057	332	NA	NA	NA	NA	NA	NA NA	NA	NA
2.1/4 Caster Epidemies (2.1/4 Caster Epidemies) (2.1/4 Caster Epidemies	AMATY N 5-23-16 LETHA RUCCIAAN GATTAR ESPECIATION UIA NC 1/8+ 805 270 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*27959	M		STONE HILL MINERALS					NA	NA NA	NA.	NA NA	NA NA	NA NA	NA	NA
ACTIVITY N 5-23-16 LETTA RUCCIOAN 1/8- 806 270 NA NA NA NA NA NA NA Ruccional his merger LC NA NA NA Ruccional his merger LC NA NA Ruccional his mercional his m	947 N 5-23-16 ETHA RUCMAN USA RC PUPARTION 1/8+ 806 270 NA NA NA NA NA NA NA NA NA NA NA NA NA	10 27333	IVI	3-23-10	HOLDINGS ELC	TH EXPLORATION, LLC	1/0+	1003	334	INA	INA .	110	190				
10714849 N 5-23-16 DANID GUSTELY USA INC and Gastrat Inc to Altimum Marcellus I 36/9 Gastrat Inc to THI Epi	GASTAR EXPLORATION 1/8+ 806 265 NA NA NA NA NA NA NA N	10*14847	N	5-23-16	LETHA RUCKMAN	GASTAR EXPLORATION USA INC	1/8+	806	270	NA	NA	NA	NA	NA	USA Inc and Gastar	Inc to Atinum Marcellus I	36/9 Gastar Exploration
DURWOOD WRIGHT BY GASTAR EXPLORATION USA INC USA	DURWOOD WRIGHT BY CATHERINE HUMMEL AIF USA INC 1/8+ 809 507 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*14849	N	5-23-16	DAVID GUSTELY	GASTAR EXPLORATION USA INC	1/8+	806	265	NA	NA	NA	NA	NA .	USA Inc and Gastar	Inc to Atinum Marcellus I	36/9 Gastar Exploration
GASTAR EXPLORATION GASTAR EXPLORATION GASTAR EXPLORATION GASTAR EXPLORATION GASTAR EXPLORATION GASTAR EXPLORATION GASTAR EXPLORATION GASTAR EXPLORATION GASTAR EXPLORATION 31/184 Gastar Exploration Inc to Atlnum Marcellus 1 Inc to THE Exploration Inc to Atlnum Marcellus 1 Inc to THE Exploration Inc to THE Exploration Inc to THE Exploration Inc to THE Exploration Inc to THE Exploration Inc to Atlnum Marcellus 1 Inc to THE Exploration Inc to Atlnum Marcellus 1 Inc to THE Exploration Inc to Atlnum Marcellus 1 Inc to THE Exploration Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to Atlnum Marcellus 1 Inc to THE Exploration Inc to THE Exploration Inc to THE Exploration Inc to THE Exploration Inc to THE Explora	21/41 Gastar Exploration 31/184 Gastar Exploration USA Inc and Gastar Inc to Atinum Marcellus 1 36/9 Gastar Exploration	10*14853	N	5-23-16			1/8+	809	507	NA	, NA	NA	NA	NA .	USA Inc and Gastar	Inc to Atinum Marcellus I	36/9 Gastar Exploration
21/41 Gastar Exploration GASTAR EXPLORATION 31/184 Gastar Exploration USA Inc and Gastar Inc to Atinum Marcellus I 36/9 Gastar		10°14861	N	5-22-16	NANCY WHITE ATCH	GASTAR EXPLORATION		gna	526	NA	NA NA	NA NA	NA NA	NA	USA Inc and Gastar	Inc to Atinum Marcellus I	36/9 Gastar Exploration
I IN JUSTICIA IN GUSTICIA IN GUSTICIA IN GUSTICIA IN GUSTICIA IN GUSTICIA IN GUSTICIA IN GUSTICIA IN GUSTICIA IN GUSTICIA IN IN IN IN IN IN IN IN IN IN IN IN IN	GASTAR EXPLORATION USA Inc and Gastar Inc to Atinum Marcellus I 36/9 Gastar Exploration	10*14862	N N			GASTAR EXPLORATION				NA NA	NA NA	NA NA	NA_	NA NA	21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration

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10*14864	N	5-23-16	CAROLYN DURWAY	GASTAR EXPLORATION USA INC	1/8+	810	330	NA	NA .	NA.	NA NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
				GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar	Inc to Atinum Marcellus I	36/9 Gastar Exploration
10*14866	N	5-23-16	GARY CARMICHAEL	USA INC	1/8+	810	316	NA	NA	NA .	NA	NA NA	Exploration Inc merger	шс	Inc to TH Exploration II LLC
10*14868	N	5-23-16	WOODROW CAMPBELL JR	GASTAR EXPLORATION USA INC	1/8+	813	454	NA	NA	NA	NA.	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10°14869	N	5-23-16	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION USA INC	1/8+	813	561	NA	NA .	NA .	NA NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14870	N	5-23-16	DAVID CARMICHAEL	GASTAR EXPLORATION USA INC	1/8+	816	16	NA	NA .	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration
			DWG OIL & GAS	GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar	Inc to Atinum Marcellus I	36/9 Gastar Exploration Inc to TH Exploration II LU
10*14872	N	5-23-16	ACQUISITIONS LLC	USA INC	1/8+	817	312	NA	NA	NA NA	NA NA	INA.	Exploration Inc merger	ис	inc to TH Exploration if LD
10*14873	N	5-23-16	RAYMOND MILLER	GASTAR EXPLORATION USA INC	1/8+	821	44	NA	NA.	NA .	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploratior Inc to Atinum Marcellus I LLC	
10*14874	N	5-23-16	RICHARD MILLER	GASTAR EXPLORATION USA INC	1/8+	822	260	NA	NA .	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	

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10*14876	N	5-23-16	SHIRLEY LARGENT	GASTAR EXPLORATION USA INC	1/8+	827	228	NA	NA	NA	NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
			GARY F OBLOY AND	GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14877	N N	5-23-16	DENISE I OBLOY	USA INC	1/8+	836	112	NA .	NA NA	NA NA	NA	NA.	Exploration Inc merger	шс	ine to Th exploration il LCC
<u>10*14878</u>	N	5-23-16	ARTHUR BRUCE COULTER	GASTAR EXPLORATION USA INC	1/8+	839	519	NA	NA	NA	NA NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14879	N	5-23-16	THERESA RINE	GASTAR EXPLORATION USA INC	1/8+	840	162	NA	NA.	NA.	NA NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration
10*14880	N	5-23-16	IRIS LUCAS	GASTAR EXPLORATION USA INC	1/8+	849	545	NA	NA	NA	NA NA	NA.	21/41 Gastar Exploration USA inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
20 21300		3-23-10	INSTITUTE		1/6*	043	343						21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration	36/9 Gastar Exploration
10*14881	N	5-23-16	MARY WHITLATCH	GASTAR EXPLORATION USA INC	1/8+	849	548	NA	NA	NA NA	NA	NA NA	Exploration Inc merger	LLC	Inc to TH Exploration II LLG
10*14882	N	5-23-16	GARY RINE	GASTAR EXPLORATION USA INC	1/8+	849	551	NA	NA .	NA	NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploratior Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LU
10*14883	N	5-23-16	PAUL WISE	GASTAR EXPLORATION USA INC	1/8+	852	252	NA	NA NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	

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10*14884	N	5-23-16	RENEE HAGERTY	GASTAR EXPLORATION USA INC	1/8+	852	255	NA NA	NA NA	NA	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration
10*14885	N	5-23-16	HOWARD RINE	GASTAR EXPLORATION USA INC	1/8+	854	601	NA NA	NA	NA .	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14886	N	5-23-16	JODI YOHO	GASTAR EXPLORATION USA INC	1/8+	854	604	NA	NA NA	NA	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
<u>10*14887</u>	N	5-23-16	CHRISTINA ROBERTS	GASTAR EXPLORATION USA INC	1/8+	867	392	NA	NA	NA .	NA .	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14888	N	5-23-16	DARLENE BUTLER	GASTAR EXPLORATION USA INC	1/8+	867	395	NA	NA	NA .	NA .	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14889	N	5-23-16	HAROLD YOHO	GASTAR EXPLORATION USA INC	1/8+	870	37	NA	NA NA	NA NA	NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14890	N	5-23-16	HENRY MALONE JR	GASTAR EXPLORATION USA INC	1/8+	870	40	NA	NA NA	NA	NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14891	N	5-23-16	NANCY F FYE & STEPHEN M FYE	GASTAR EXPLORATION USA INC	1/8+	885	606	NA	NA	NA	NA NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	n 36/9 Gastar Exploration Inc to TH Exploration II LLC

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10*17145	N	5-23-16	JAMES J. CAMPBELL BETTY J. CAMPBELL	CHESAPEAKE APPALACHIA LLC	1/8+	685	458	NA	NA .	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
<u>10*17146</u>	N	5-23-16	CAROLYN CAMPBELL BRITTON ROBERT C. BRITTON	CHESAPEAKE APPALACHIA	1/8+	685	464	NA	NA	NA	23/127 Chesapeake Appalachia LLC to Statoli Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	SWN Exchange Titleholder	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17147	N	5-23-16	JOANN J. PARSONS GARY D. PARSONS	CHESAPEAKE APPALACHIA LLC	1/8+	685	470	NA	NA .	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoii USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17148	N	5-23-16	DONALD E. CAMPBELL JUNE L. CAMPBELL	CHESAPEAKE APPALACHIA LLC	1/8+	685	476	NA	NA	NA .	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
<u>10*17149</u>	N	5-23-16	WANDA M. BLAKE	CHESAPEAKE APPALACHIA	1/8+	685	482	NA	NA .	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoii USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17150	N	5-23-16	IDA L. CAMPBELL	CHESAPEAKE APPALACHIA	1/8+	685	488	NA	NA NA	NA .	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
												No.	NA	NA.	NA.
10*17502	N	5-23-16	PATRICIA E GUSTELY DONALD S BOBOVNIK AND	TH EXPLORATION, LLC	1/8+	942	334	INA I	NA NA	NA .	, NA	INO.	1905		
10*17532	l N	5-23-16	DOLORES J BOBOVNIK AND		1/8+	942	346	NA	NA	NA	NA	NA	NA	NA	NA



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			RONALD L MAYER AND												
10*17535	N	5-23-16	DEBRA A MAYER	TH EXPLORATION, LLC	1/8+	929	580	NA	NA	NA	NA NA	NA	NA	NA	INA.
10*17539	N	5-23-16	JOANN HAGERTY	TH EXPLORATION, LLC	1/8+	942	342	NA	NA	NA	NA	NA .	NA	NA	NA
10-17539		5-23-16	JOANN HAGERTY	TH EXPLORATION, LLC	1/6+	542	342	INA.	110	NA.					
10*17540	N	5-23-16	MONTY ESTEL	TH EXPLORATION, LLC	1/8+	941	624	NA	NA	NA	NA	NA	NA	NA	NA
10*17541	N	5-23-16	ROBERT D STRAWN AND TAMMY J STRAWN	TH EXPLORATION, LLC	1/8+	942	21	NA	NA	NA	NA	NA	NA	NA	NA
10*17542	N	5-23-16	JEFFREY G HAZEL AND SHEILA M HAZEL	TH EXPLORATION, LLC	1/8+	942	12	NA	NA	NA	NA	NA	NA	NA	NA .
10*17543	N	5-23-16	CARL EDWARD MCCOY AND CAROLYN SUE MCCOY	TH EXPLORATION, LLC	1/8+	942	15	NA	NA	NA .	NA	NA NA	NA	NA	NA
10*17544	N N	5-23-16	DEBORAH LYNN SCHWING	TH EXPLORATION, LLC	1/8+	942	377	NA	NA	NA .	NA	NA	NA	NA	NA
10*17545	N	5-23-16	LINDA SWOPE	TH EXPLORATION, LLC	1/8+	942	24	NA	NA	NA .	NA	NA	NA	NA	NA

Operator's Well No. McMasters S-16HU

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10*17546	N	5-23-16	SAMUEL EARL FRANCIS AND ALICE L FRANCIS	TH EXPLORATION, LLC	1/8+	942	374	NA	NA	NA	NA	NA	NA	NA	NA
									!						
															NA NA
10*17593	N.	5-23-16	REBECCA HAGERTY	TH EXPLORATION, LLC	1/8+	942	350	NA	NA	NA	NA	NA	NA .	NA .	NA
10*17594	N	5-23-16	MEGAN HAGERTY	TH EXPLORATION, LLC	1/8+	942	362	NA	NA	NA	NA	NA	NA	NA	NA .
10*17595	N	5-23-16	THOMAS E RINE AND MARY P RINE	TH EXPLORATION, LLC	1/8+	929	572	NA .	NA .	NA	NA .	NA	NA NA	NA	NA
20 27333		3-23-10	INANT MAL	THE EXILENCE OF THE EXILENCE O	40.										
10*17640	N	5-23-16	PATRICIA A GARCAR	TH EXPLORATION, LLC	1/8+	942	8	NA	NA	NA	NA	NA	NA	NA	NA
10*17679	N	5-23-16	NORMA J ASH	TH EXPLORATION, LLC	1/8+	944	130	NA	NA	NA	NA	NA .	NA	NA	NA
													NA.	NA	NA NA
10*17680	N	5-23-16	DAVID E CHURCH	TH EXPLORATION, LLC	1/8+	932	424	NA	NA .	NA	NA	NA	IVA	IVA	JRA.
10*17681	l N	5-23-16	WALTER E LOSEY AND CINDY L LOSEY	TH EXPLORATION, LLC	1/8+	942	338	NA .	NA .	NA	NA	NA	NA	NA	NA



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10*17682	N	5-23-16	JAMES E GARLOCH AND MARY K GARLOCH	TH EXPLORATION, LLC	1/8+	935	68	NA	NA	NA	NA	NA	NA	NA	NA
10*17683	N	5-23-16	PATRICK HAGERTY AND DALANE HAGERTY	TH EXPLORATION, LLC	1/8+	942	358	NA .	NA .	NA	NA	NA	NA .	NA	NA
2.000		7.25.25			7-										
			DAVID MCCOY AND LORI MCCOY				18	l	NA	NA	NA .	INA	NA.	.NA	NA .
10*17684	N	5-23-16	МССОУ	TH EXPLORATION, LLC	1/8+	942	18	NA	NA .	IVA					
			ROBERT A SANDS AND												
10*17715	N	5-23-16	JOYCE A SANDS	TH EXPLORATION, LLC	1/8+	942	354	NA	NA	NA	NA .	NA	NA	NA	NA .
10*17719	N	5-23-16	ROBERT R DARROW	TH EXPLORATION, LLC	1/8+	942	380	NA	NA	NA	NA	NA	NA	NA	NA
10*17720	N	5-23-16	WILLIAM KOTSON AND DEBRA KOTSON	TH EXPLORATION, LLC	1/8+	938	507	NA	NA	NA	NA	NA	NA	NA	NA
40847777			HAROLD H HAGERTY AND	THE SAME OF THE SA	1/0-	042	370	NA	NA	NA	! NA	NA	NA	NA	NA NA
10*17775	N	5-23-16	DEBORAH M HAGERTY	I'H EXPLORATION, LLC	1/8+	942	3/0	INA	100	int.					
10*17776	N	5-23-16	JAMES GARCAR AND MELISSA GARCAR	TH EXPLORATION, LLC	1/8+	941	627	NA	NA	NA	NA	NA	NA	NA	NA



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10*17824	N	5-23-16	SARA FULTON	TH EXPLORATION, LLC	1/8+	942	384	NA	NA NA	NA	NA	NA	NA	NA	NA .	\exists
li l																
10*17901	N	5-23-16	ROBYN HAGERTY	TH EXPLORATION, LLC	1/8+	924	602	NA	NA.	NA NA	NA	NA	NA	NA	NA	
10-17901	N N	3-23-16	ROBIN HAGERII	TH EXPLORATION, ELC	1/0+	324		IN.								
																i
10*17965	N	5-23-16	ROBERT DAVID BARNES AND RHONDA BARNES	TH EXPLORATION, LLC	1/8+	942	366	NA	NA	NA	NA	NA	NA	NA .	NA	_
10*18042	N	5-23-16	JOSEPH J ONORE	TH EXPLORATION, LLC	1/8+	927	101	NA	NA NA	NA .	NA NA	NA	NA .	NA .	NA NA	\dashv
			:													
			JAMES M ONORE AND													
10*18043	N	5-23-16	CINDY L ONORE	TH EXPLORATION, LLC	1/8+	927	105	NA	NA	NA	NA NA	NA	NA	NA NA	NA	\neg
10*18044	N	5-23-16	TRACEY ESTEL	TH EXPLORATION, LLC	1/8+	927	109	NA	NA .	NA NA	NA NA	NA NA	NA	NA	NA	
10 18044		3-23-16	THACET ESTEE	THE EXPEDITION, EEC	1/0	327										
						i										
10*18176	N	5-23-16	CRYSTAL M HOOKER AND JAMES HOOKER	TH EXPLORATION, LLC	1/8+	929	568	NA	NA	NA	NA	NA	NA	NA .	NA	4
10*18329	N	5-23-16	COLLEEN HAGERTY	TH EXPLORATION, LLC	1/8+	929	560	NA	NA	NA	NA .	NA	NA	NA	NA	



10*18367	N	5-23-16	WALTER C SCHUBERT AND BARBARA A SCHUBERT	TH EXPLORATION, LLC	1/8+	931	377	NA .	NA	NA	NA .	NA	NA	NA	NA
10*18368	N	5-23-16	ROBERTA K MILLER	TH EXPLORATION, LLC	1/8+	931	457	NA .	NA NA	NA NA	NA .	NA .	NA .	NA	NA .
10 10300															
10*18371	N	5-23-16	HERMAN D ESTEL	TH EXPLORATION, LLC	1/8+	931	461	NA	NA .	NA .	NA .	NA	NA	NA .	NA .
10 103/1		31310													
10*18386	N	5-23-16	JOSEPH R RINE AND JENNIFER M RINE	TH EXPLORATION, LLC	1/8+	932	492	NA	NA .	NA .	NA .	INA .	NA	NA .	NA .
10 18380		3-23-10	PERMIT EN IN MALE	in Sur continon, cas	3.5										
10*18598	N	5-23-16	MARK E GUSTELY	TH EXPLORATION, LLC	1/8+	935	52	NA .	NA .	NA .	NA .	NA NA	NA	NA .	NA .
10 18396	N.	3-23-10	MAIN E GOSTEET	THE BUT CONTINUES	40.										
10*18795	N	5-23-16	GASTON FAMILY INVESTMENTS LLC	TH EXPLORATION, LLC	1/8+	959	502	NA .	NA.	NA .	NA .	NA	NA	NA .	NA .
10 10/33		32310			7-1										
10*18994	N	5-23-16	SHIRLEY ANN DRAKE	TH EXPLORATION, LLC	1/8+	940	137	NA NA	NA .	NA .	NA .	NA .	NA	NA .	NA
10 10334	IN .	3-23-10	Dimeet Ann Phase	and constrony acc	-1/0-	-									
10*19656		E 22.46	DEBRA ROUDEBUSH	TH EXPLORATION, LLC	1/8+	944	105	l NA	NA.	NA.	NΔ	NA.	NA	NA NA	NA
110,13020	N .	5-23-16	INEBKY KOODEROOM	III EAPLORATION, LLC	1/6+	744	103	Ino	Ino	100	1111	1	11.77	1555	I'''.

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				i											
10*19736	N	5-23-16	DOROTHY HLINKA DUKE	TH EXPLORATION, LLC	1/8+	944	571	NA	NA	NA	NA	NA	NA .	NA	NA .
			MELISSA ANN BRAUN AND												
10*19999	N	5-23-16		TH EXPLORATION, LLC	1/8+	951	627	NA	NA	NA	NA	NA	NA	NA	NA.
									 -						
			RANDALL C ROGERSON &									İ			
10*21084	N N	5-23-16	TRACY LYNN ROGERSON	TH EXPLORATION, LLC	1/8+	949	368	NA	NA	NA	NA	NA .	NA	NA	NA .
			KEITH JAY FISCHER AND	İ											
10*21217	N N	5-23-16	DAWN M FISCHER	TH EXPLORATION, LLC	1/8+	952	643	NA	NA	NA	NA	NA	NA	NA .	NA
												L	<u></u>	NA .	NA .
10*21222	N	5-23-16	PATRICIA J SHAW KELLER	TH EXPLORATION, LLC	1/8+	946	43	NA	NA	NA	NA	INA	INA	NA .	NA .
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ļ !			ORIE N YOUNG AND		4/0	057		<u></u>	NA NA	NA.	NA	NA.	NA.	 NA	NA .
10*21425	N N	5-23-16	BERNIE A YOUNG	TH EXPLORATION, LLC	1/8+	957	29	NA	NA	NA .	NA .	INA .	NA .	No.	l l
										:					
10*21428	N	5-23-16	FRANCIS R SMITH AND ANNA M SMITH	TH EXPLORATION, LLC	1/8+	957	37	NA.	NA .	NA	NA.	NA.	NA	NA .	NA I
10-21428	N N	5-25-16	MINIC IVI ANIII	IN EXPLORATION, LLC	1/01	33/	3/	INA.	in.	110	1373				
10*21434	N	5-23-16	CATHERINE HUMMEL	TH EXPLORATION, LLC	1/8+	957	33	NA .	NA NA	NA .	NA	NA	NA	NA	NA

			,								r		r		T.
10*21451	N	5-23-16	RICHARD RICH AND KAREN RICH	TH EXPLORATION, LLC	1/8+	954	254	N A	NA	, NA	NA	NA	NA	NA	NA
10*21452	N	5-23-16	WARREN L COULTER AND	TH EXPLORATION, LLC	1/8+	954	262	NA	NA	NA .	NA NA	NA NA	NA NA	NA NA	NA.
10*21457	N	5-23-16	HUSTON A SMITH JR AND	TH EXPLORATION, LLC	1/8+	954	249	NA .	NA NA	NA NA	NA.	NA NA	NA NA	NA NA	NA NA
10*21458	N N	5-23-16 5-23-16		TH EXPLORATION, LLC	1/8+	957			NA NA		NA NA	NA NA	NA NA	NA NA	NA NA
10*21459	N	5-23-16 5-23-16	MABEL SHILLINGBURG AND CLIFFORD	TH EXPLORATION, LLC	1/8+	954	258		NA NA		NA NA	NA NA	NA NA	NA	NA
		5-23-16	MATTHEW COULTER AND		1/8+	954			NA.	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
10*21500	N											1144			
10*21501	N	5-23-16	EUGENIA E HOUSER	TH EXPLORATION, LLC	1/8+	954	241	NA	NA	INA	INA	INA	INA	INA	IIMA

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10*21502	N	5-23-16	DEBRA MURIN	TH EXPLORATION, LLC	1/8+	954	237	NA	NA	NA	NA	NA	NA	NA	NA
								i							
10*21503	N	5-23-16	DARLENE M DAVIS	TH EXPLORATION, LLC	1/8+	954	233	NA	NA	NA	NA	NA.	NA	NA	NA
			MADY STATAVIOR AND												
10*21562	N	5-23-16	MARY ETTA TAYLOR AND GARY W TAYLOR	TH EXPLORATION, LLC	1/8+	958	414	NA	NA	NA	NA .	NA	NA	NA	NA
			DAVID R TAYLOR AND												
10*21563	N	5-23-16		TH EXPLORATION, LLC	1/8+	958	422	NA	NA	NA	NA .	NA	NA	NA	NA
10*21565	N	5-23-16	KORENE SUE LANTZ	TH EXPLORATION, LLC	1/8+	957	462	NA NA	NA.	NA	NA NA	NA	NA	NA	NA
			HERBERT M TAYLOR AND		2,00	337									
10*21566	N	5-23-16		TH EXPLORATION, LLC	1/8+	958	418	NA	NA	NA	NA .	NA	NA	NA	NA
10*21615	N	5-23-16	GARY PARSONS AND JOANN J PARSONS	TH EXPLORATION, LLC	1/8+	959	347	NA	NA .	NA	NA	NA	NA NA	NA	NA
		3-23-20	JOHN FAIGURS	THE EXPLORATION, LEC	1/0*	333	347	NO.							
10*21626	N	5-23-16	CLARENCE RANDALL EMERY AND PAULA JEAN EMERY	TH EXPLORATION, LLC	1/8+	958	344	NA	NA	NA	NA	NA	NA	NA	NA

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10*21632	N N	5-23-16	JOHN ARLES EMERY	TH EXPLORATION, LLC	1/8+	959	339	NA NA	NA	NA	NA	NA	NA	NA	NA
					-,-										
								1							
10*21655	N	5-23-16	STANLEY GUSTELY	TH EXPLORATION, LLC	1/8+	965	206	NA	NA.	NA .	NA	NA	NA	NA	NA
10 21033		3-23-10	JIANEET GOSTEET	THE EXPLORATION, ELC	2/0.										
								!							
			JOHN OBLOY AND JANET L		4.0		331	NA	NA	NA	NA .	NA.	NA.	NA .	NA .
10*21656	N	5-23-16	OBLOY	TH EXPLORATION, LLC	1/8+	959	331	INA.	NA.	INA .					
			RONALD J SALKOVICK JR &									l	NA	NA .	NA
10*21657	N	5-23-16	SANDRA SALKOVICK	TH EXPLORATION, LLC	1/8+	958	373	NA	NA	NA	NA	NA	NA	NA	Mn.
			JOYCE KAY BURTON AND												l
10*21774	N	5-23-16	SAMUEL C BURTON	TH EXPLORATION, LLC	1/8+	957	467	NA	NA	NA	NA	NA	NA	NA	NA .
			STUART WHITE AND BETTY	,											
10*21813	N	5-23-16	WHITE	TH EXPLORATION, LLC	1/8+	958	352	NA	NA	NA	NA	NA	NA	NA	NA
10*21815	N	5-23-16	JAMES NEAL EMERY AND RENEE R EMERY	TH EXPLORATION, LLC	1/8+	958	348	NA	NA	NA	NA	NA	NA	NA	NA
										1					
10*21816	N	5-23-16	CINDY GREEN AND LARRY GREEN	TH EXPLORATION, LLC	1/8+	958	356	NA	NA	NA	NA	NA	NA	NA	NA

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				}											
10*21817	N	5-23-16	MARY LOU HLINKA AND RICHARD G HLINKA SR	TH EXPLORATION, LLC	1/8+	959	514	NA	NA	NA	NA	NA	NA	NA	NA
			MARY CATHERINE THOMS												
10*21819	N	5-23-16	отт	TH EXPLORATION, LLC	1/8+	958	360	NA	NA	NA	NA	NA	NA	NA	NA
										İ					
			MARION DAVID OTT &	1											
10*21820	N	5-23-16	JANICE L OTT	TH EXPLORATION, LLC	1/8+	959	506	NA	NA .	NA	NA	NA	NA	NA	NA
									l	ļ					NA
10*21832	N	5-23-16	MARQUITA CLYBURN	TH EXPLORATION, LLC	1/8+	959	510	NA	NA	NA .	NA	NA	NA	NA	NA .
				1											
10#21049	N	5-23-16	BARBARA H COAKLEY	TH EXPLORATION, LLC	1/8+	960	66	NA .	NA .	NA .	NA .	NA	NA	NA .	NA .
10*21948	N	5-23-16	BARBARA FI COARLET	III EXPLORATION, LEC	1/01	300		ING.	l l l						
10*21949	N	5-23-16	ROBIN ADAIR GUMP AND LOUIS M GUMP	TH EXPLORATION, LLC	1/8+	960	70	NA .	NA .	NA	NA	NA	NA	NA	NA
20 22545															
										}					
10*21950	N	5-23-16	JUDITH A TAYLOR	TH EXPLORATION, LLC	1/8+	960	74	NA	NA	NA	NA	NA	NA	NA	NA
10*21951	N	5-23-16	CHARLES DOUGLAS LANE	TH EXPLORATION, LLC	1/8+	960	77	NA	NA	NA	NA	NA	NA	NA	NA

10*21994 N 5-23-16 MELISSA L DARROW TH EXPLORATION, LLC 1/8+ 954 328 NA NA NA NA NA NA NA NA NA NA NA NA	
10*22013 N 5-23-16 CHARLES J KNOX TH EXPLORATION, LLC 1/8+ 966 112 NA NA NA NA NA NA NA NA NA NA NA NA NA	
10*22014 N 5-23-16 SHERMAN E KNOX JR TH EXPLORATION, LLC 1/8+ 966 108 NA NA NA NA NA NA NA NA NA	
10*22014 N 5-23-16 SHERMAN E KNOX JR TH EXPLORATION, LLC 1/8+ 966 108 NA NA NA NA NA NA NA NA NA NA NA NA NA	
10*22018 N 5-23-16 KATHLEEN ROBERTSON TH EXPLORATION, LLC 1/8+ 960 539 NA NA NA NA NA NA NA NA NA	
10-22016 N 5-25-16 NATHLEEN ROBERTSON THE EXPLORATION, LLC 1/6* 360 333 INA INA INA	
10*22026 N 5-23-16 KEVIN D CHURCH TH EXPLORATION, LLC 1/8+ 957 49 NA NA NA NA NA NA NA NA NA NA NA	
10*22027 N 5-23-16 CATHY J EMERY TH EXPLORATION, LLC 1/8+ 954 310 NA NA NA NA NA NA NA NA NA NA NA	
1 3 2 4 Million Millio	
10°22093 N 5-23-16 LEARN AND KENDA 11 EXPLORATION, LLC 1/8+ 954 314 NA NA NA NA NA NA NA NA NA NA NA NA NA	
10*22102 N 5-23-16 BONNIE LOU GRUBER TH EXPLORATION, LLC 1/8+ 954 302 NA NA NA NA NA NA NA NA NA NA NA NA NA	

9727344 N 5-23-15 WINGEL PROPERTY OF BUYER AND THE DEPOSATION, LIC 1/8+ 961 S20 NA. NA. NA. NA. NA. NA. NA. NA. NA. NA.																
1973142	10*22120		63346	DETTY DVEST	THE VINCOLATION HIS	1/0	051	422		NA NA	No	NA	NA	NA.	NA NA	NA NA
272151 N 5-25-26 SHALL DESCRIPTION TO THE PROPERTY OF THE PROP		,				Иот			TVA							
9°22242 N 522-36 GRALD REGION THEORY CITY OF THE STATE OF	10*22142	N	5-23-16	CHERYL L HILL	TH EXPLORATION, LLC	1/8+	961	423	NA	NA	NA	NA	NA	NA .	NA	NA
17-72144 N 5-22-16 ODMINI ATTAMES AND ODMINI ATTAME				WANDA J RIDING AND												
0*22145 N 5-23-16 ORNING ASTRALUS THE EPICONATION, LIC 1/8+ 961 529 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*22143	N	5-23-16	GERALD R RIDING	TH EXPLORATION, LLC	1/8+	961	426	NA	NA	NA	NA	NA	NA	NA	NA .
9722255 N 5-22-16 OEBIA LUSESSI AND OEBIA LUSESSI AND OEBIA LUSESSI AND OEBIA LUSESSI AND OEBIA CLUSESSI AND	10*22144	N	5-23-16	VICKY STRAUSS AND DENNIS A STRAUSS	TH EXPLORATION, LLC	1/8+	961	529	NA	NA	NA	NA	NA	NA	NA	NA
0°22178 N 5-23-16 GENALD A LYSESIQ THE DEPLOPATION, LIC 1/8+ 954 305 NA NA NA NA NA NA NA NA NA NA NA NA NA	20 22277		3-23-10	DENNIS A STRAOSS	III EXPLORATION, LLC	1/6+	301	323	146		TWO TO THE PARTY OF THE PARTY O					
DOES WEST AND BORERY 1	10*22165	N	5-23-16	DEBRA L LYSESKI AND GERALD A LYSESKI	TH EXPLORATION, LLC	1/8+	954	306	NA	NA	NA	NA	NA	NA	NA	NA
D'22287 N 5-23-16 MICHAEL JONES TH EXPLORATION, LLC 1/8+ 962 195 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*22178	N	5-23-16	ANGELA HENTHORN AND	TH EXPLORATION, LLC	1/8+	972	58	NA.	NA .	NA	NA	NA	NA	NA	NA
DORIS WEST AND ROBERT			5 25 20	The state of the s	25. 25. 1. 1511, EEC	2,5.										
DORIS WEST AND ROBERT THE EXPLORATION, LLC 1/8+ 962 542 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*22287	N	5-23-16	MISSY JONES AND MICHAEL JONES	TH EXPLORATION, LLC	1/8+	962	195	NA	NA	NA	NA	NA	NA	NA	NA
*22332 N 5-23-16 WEST TH EXPLORATION, LLC 1/8+ 962 542 NA NA NA NA NA NA NA NA NA NA NA NA NA				DORIS WEST AND ROBERT												
	10*22332	N	5-23-16	WEST	TH EXPLORATION, LLC	1/8+	962	542	NA	NA .	INA	NA	INA	NA	INA	INA

N	5-23-16	BETTY LEE HOWARD LOY	TH EXPLORATION, LLC	1/8+	963	392	NA.	NA .	NA	NA	NA	NA	NA .	NA .
	5.73.16	LORETTA M DOUGHERTY	TH EVDICIDATION LLC	1/8+	964	516	NA.	NA.	NA NA	NA NA	NA NA	NA NA	NA	NA .
		TESSEAN FAMILY								NA.		NA	NA NA	NA
		SHERRY L IMRIE AND												NA .
													NA NA	NA .
·												NA	NA NA	NA
													NA	NA NA
N		KENNETH R SHAW AND DONNA K SHAW	TH EXPLORATION, LLC	1/8+	966	518	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA
	N N	N 5-23-16 N 5-23-16 N 5-23-16 N 5-23-16	N 5-23-16 LORETTA M DOUGHERTY N 5-23-16 TESSEAN FAMILY REVOCABLE LIVING TRUST N 5-23-16 SHERRY L IMRIE AND DANIEL IMRIE JR N 5-23-16 EUGENE FANKHAUSER N 5-23-16 JUDY ANN MERCER KENNETH R SHAW AND	N 5-23-16 TESSEAN FAMILY N 5-23-16 TESSEAN FAMILY N 5-23-16 SHERRY LIMRIE AND DANIEL IMPRIE JR N 5-23-16 EUGENE FANKHAUSER TH EXPLORATION, LLC N 5-23-16 FANKHAUSER TH EXPLORATION, LLC N 5-23-16 GATHA CHAMBERS TH EXPLORATION, LLC N 5-23-16 GATHA CHAMBERS TH EXPLORATION, LLC N 5-23-16 FANKHAUSER TH EXPLORATION, LLC	N 5-23-16 LORETTA M DOUGHERTY AND DAVID DOUGHERTY THE EXPLORATION, LLC 1/8+ TESSEAN FAMILY REVOCABLE LIVING TRUST THE EXPLORATION, LLC 1/8+ N 5-23-16 SHERRY LIMBIE AND DANIEL IMBIE JR THE EXPLORATION, LLC 1/8+ N 5-23-16 EUGENE FANKHAUSER THE EXPLORATION, LLC 1/8+ N 5-23-16 GATHA CHAMBERS THE EXPLORATION, LLC 1/8+ N 5-23-16 JUDY ANN MERCER THE EXPLORATION, LLC 1/8+	N 5-23-16 AND DAVID DOUGHERTY N 5-23-16 AND DAVID DOUGHERTY THE EXPLORATION, LLC 1/8+ 964 N 5-23-16 REVOCABLE LIVING TRUST THE EXPLORATION, LLC 1/8+ 963 N 5-23-16 SHERRY LIMINE AND DAVIEL MARKE AND DAVIEL MARKE AND DAVIEL MARKE AND DAVIEL MARKE AND THE EXPLORATION, LLC 1/8+ 963 N 5-23-16 GATHA CHAMBERS THE EXPLORATION, LLC 1/8+ 963 N 5-23-16 GATHA CHAMBERS THE EXPLORATION, LLC 1/8+ 963 N 5-23-16 GATHA CHAMBERS THE EXPLORATION, LLC 1/8+ 963 N 5-23-16 GATHA CHAMBERS THE EXPLORATION, LLC 1/8+ 963	N 5-23-16 CONTROL OF THE EMPLORATION, LLC 1/8+ 963 631 N 5-23-16 SHERRY LIMBIE AND DANIEL BASIE IN EMPLORATION, LLC 1/8+ 963 631 N 5-23-16 SHERRY LIMBIE AND DANIEL BASIE IR THE EMPLORATION, LLC 1/8+ 963 631 N 5-23-16 GATHA CHAMBERS THE EMPLORATION, LLC 1/8+ 963 632 N 5-23-16 GATHA CHAMBERS THE EMPLORATION, LLC 1/8+ 963 632 N 5-23-16 GATHA CHAMBERS THE EMPLORATION, LLC 1/8+ 963 632 N 5-23-16 GATHA CHAMBERS THE EMPLORATION, LLC 1/8+ 963 632 N 5-23-16 GATHA CHAMBERS THE EMPLORATION, LLC 1/8+ 963 634	N 5-23-16 AND DAVID DOUGHERTY TH EXPLORATION, LLC 1/4+ 964 516 NA. TESSAN FAMILY REPOGRATION, LLC 1/4+ 963 626 NA. S-23-16 SHERRY LIMITE AND DAVIEL IMPRE RW. TH DEPLORATION, LLC 1/4+ 963 631 NA. N 5-23-16 CUGGINE FANORAUSER TH DEPLORATION, LLC 1/4+ 963 631 NA. N 5-23-16 CUGGINE FANORAUSER TH DEPLORATION, LLC 1/4+ 963 632 NA. N 5-23-16 CUGGINE FANORAUSER TH DEPLORATION, LLC 1/4+ 963 632 NA. N 5-23-16 CUGGINE FANORAUSER TH DEPLORATION, LLC 1/4+ 963 632 NA.	N 5-23-16 AND DAVID DOUGHERTY THE EPICORATION, LLC 1/8+ 964 536 NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 635 NA NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 631 NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 631 NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 631 NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 631 NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 631 NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 631 NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 631 NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 631 NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 631 NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 631 NA NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 634 NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 634 NA NA STATE OF THE EPICORATION, LLC 1/8+ 963 634 NA NA STA	N 5-23-16 REPOCABLE LYNING TRUST THE EPPLOMATION, LLC 1/8+ 963 633 MA NA NA NA NA NA NA NA NA NA NA NA NA NA	N 5-23-26 MASS DESCRIPTION OF THE PROPERTY OF	N 5-23-36 AND SAVE DOCUMENT OF EXPONENTION, LLC 3/8+ 564 515 AA 5A 5A 5A 5A 5A 5A 5A 5A 5A 5A 5A 5A	3 5-23-16 AMERICAN DOUGLESTEY THE CONCANDED LICE 1/24- 962 G22 MA. NA. NA. NA. NA. NA. NA. NA. NA. NA. N	1

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N	5-23-16	JASON WADE	TH EXPLORATION, LLC	1/8+	966	506	NA	NA	NA	NA	NA	NA	NA	NA
												No.	Na	NA.
		STEFANIE CIRILLI AND							NA			NA NA	NA NA	NA NA
N												NA NA	NA NA	NA NA
		JONNA MARPLE AND ERIK										NA NA	NA NA	NA NA
		JON GUSTELY AND									NA	NA NA	NA	NA
											NA	NA NA	NA	NA
N			TH EXPLORATION, LLC	1/8+	1008	313	NA NA	NA NA	NA.	NA NA	NA	NA NA	NA	NA NA
	N	N 5-23-16 N 5-23-16 N 5-23-16 N 5-23-16	N 5-23-16 ROSE MARIE CAMPBELL N 5-23-16 STEFANIE CIRILII AND MATTHEW CIRILII N 5-23-16 DENVER J TAYLOR N 5-23-16 JONNA MARPLE AND ERIK MARPLE N 5-23-16 JON GUSTELY AND MARILYN NIJE	N 5-23-16 ROSE MARIE CAMPBELL TH EXPLORATION, LLC STEFANIE CIRILLI AND MATTHEW CIRILLI N 5-23-16 DERIVER J TAYLOR TH EXPLORATION, LLC N 5-23-16 JOHNA MARPLE AND ERIX MARPLE N 5-23-16 JOHNA MARPLE TH EXPLORATION, LLC N 5-23-16 JOHNA MARRLYN NUE TH EXPLORATION, LLC N 5-23-16 JOHNA WADE TH EXPLORATION, LLC	N 5-23-16 ROSE MARIE CAMPBELL TH EXPLORATION, LLC 1/8+ N 5-23-16 STEFANIE CIRILLI AND MATTHEW CIRILLI N 5-23-16 DENVER J TAYLOR TH EXPLORATION, LLC 1/8+ N 5-23-16 JONNA MARPLE AND ERIK TH EXPLORATION, LLC 1/8+ N 5-23-16 MARPLE TH EXPLORATION, LLC 1/8+ N 5-23-16 JON GUSTELY AND MARILYN NUE TH EXPLORATION, LLC 1/8+	N 5-23-16 ROSE MARIE CAMPBELL TH EXPLORATION, LLC 1/8+ 988 N 5-23-16 STEFANIE CIRILLI AND MATTHEW CIRILLI N 5-23-16 DENVER J TAYLOR TH EXPLORATION, LLC 1/8+ 988 N 5-23-16 JONNIA MARPLE AND ERIK MARRIE TH EXPLORATION, LLC 1/8+ 988 N 5-23-16 JON GUSTELY AND MARKIEN TH EXPLORATION, LLC 1/8+ 1008 N 5-23-16 JENNA WADE TH EXPLORATION, LLC 1/8+ 1008	N 5-23-16 ROSE MARIE CAMPBELL TH EXPLORATION, LLC 1/8+ 388 447 N 5-23-16 STEFANIE CIRLU AND MATTHEW CIRLU TH EXPLORATION, LLC 1/8+ 988 451 N 5-23-16 DEINVER J TAYLOR TH EXPLORATION, LLC 1/8+ 988 451 N 5-23-16 JONNA MARPLE AND ERIX MARPLE AND ERIX MARPLE AND ERIX MARPLE TH EXPLORATION, LLC 1/8+ 988 442 N 5-23-16 JON GUSTELY AND MARRLYN NUE TH EXPLORATION, LLC 1/8+ 1008 12	N 5-28-36 ROSE MARIE CAMPREL THE EPICORATION, LLC 1/8+ 988 447 NA STEFANIC CRILLI AND MATTHEW CRILLI N 5-28-36 DERIVER J TAYLOR THE EPICORATION, LLC 1/8+ 988 451 NA N 5-28-36 DERIVER J TAYLOR THE EPICORATION, LLC 1/8+ 988 454 NA N 5-28-36 JOHNA MARRIE AND ERIK THE EPICORATION, LLC 1/8+ 988 442 NA N 5-28-36 JOHNA MARRIE AND ERIK THE EPICORATION, LLC 1/8+ 988 442 NA N 5-28-36 JOHNA MARRIE AND ERIK THE EPICORATION, LLC 1/8+ 1008 12 NA N 5-28-36 JOHNA MARRIE AND ERIK THE EPICORATION, LLC 1/8+ 1008 12 NA	N 5-23-16 RIGGE MARIE CAMPBELL TH EUROGRATION, LLC 1/8+ 988 447 NA NA NA NA NA NA NA NA NA NA NA NA NA	N 5-22-25 NOSE MARIE CAMPRELL THE EPICONATION, LLC 1/20- 988 447 MA MA MA N 5-23-25 NOSE MARIE CAMPRELL THE EPICONATION, LLC 1/20- 988 451 MA MA MA N 5-23-26 NOSE MARIE CAMPRELL THE EPICONATION, LLC 1/20- 988 454 MA MA MA N 5-23-26 NOSE MARIE CAMPRELL THE EPICONATION, LLC 1/20- 988 454 MA MA MA N 5-23-26 NOSE MARIE CAMPRELL THE EPICONATION, LLC 1/20- 988 454 MA MA MA N 5-23-26 NOSE MARIE CAMPRELL THE EPICONATION, LLC 1/20- 988 452 MA MA MA N 5-23-26 NOSE MARIE CAMPRELL THE EPICONATION, LLC 1/20- 988 452 MA MA MA N 5-23-26 NOSE MARIE CAMPRELL THE EPICONATION, LLC 1/20- 988 MA MA MA N 5-23-26 NOSE MARIE CAMPRELL THE EPICONATION, LLC 1/20- 988 MA MA MA MA N 5-23-26 NOSE MARIE CAMPRELL THE EPICONATION, LLC 1/20- 988 MA MA MA MA N 5-23-26 NOSE MARIE CAMPRELL THE EPICONATION, LLC 1/20- 988 MA MA MA MA MA MA MA MA MA MA MA MA MA	N 5-23-16 - ROSH MARK CAMPREL TH EXPLORATION, LLC 1/8+ 988 - 447 MA NA NA NA NA NA NA NA NA NA NA NA NA NA	14 5-23-15 WOM MARKE CAMPBELL TH EXPLORATION, LLC 1/8- 588 467 RA RA RA RA RA RA RA RA RA RA RA RA RA	8 5-23-28 SOURCE COMPRESS THE EXPONENTION, LIC 1/29- 888 455 NA. NA. NA. NA. NA. NA. NA. NA. NA. NA.	N 5-2-3-5 VECK MARK CAMPRES. PRISONERING LIC 1/20- 948 407 NA NA NA NA NA NA NA NA NA NA NA NA NA

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10*23444	N	5-23-16	JENNIFER CUICHTA AND KEVIN CUICHTA	TH EXPLORATION, LLC	1/8+	1008	310	NA	NA	NA	NA	NA	NA	NA .	NA .
											NA NA	NA.	No.	NA.	NA NA
10*23505	N	5-23-16		TH EXPLORATION, LLC	1/8+	971	633	NA	NA .	NA			IVA		
10*23647	N	5-23-16	MARILYN M ROBINSON	TH EXPLORATION, LLC	1/8+	1009	309	NA	NA	NA .	NA	NA	NA .	NA	NA .
10*23648	N	5-23-16	PAUL D RINE JR	TH EXPLORATION, LLC	1/8+	1009	313	NA	NA	NA	NA	NA	NA	NA .	NA
			CHAD FRANCIS AND LISA								NA	NA.	NA NA	NA	NA.
10*23672	N	5-23-16	LISA TUCKER AND FRANCIS	TH EXPLORATION, LLC	1/8+	1010	356	NA NA	NA NA	NA NA	NA NA	NA NA	NA.	NA NA	NA.
10*23727	N	5-23-16	KAREN DRAKE AND JEFF	TH EXPLORATION, LLC TH EXPLORATION, LLC	1/8+	1011	525	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA
10*23756	N N			TH EXPLORATION, LLC TH EXPLORATION, LLC	1/8+	1012	187	NA NA	NA NA	NA NA	NA	NA NA	NA	NA NA	NA
10 23/3/	14	3-23-10	I DULLE DIVING	III CALLONATION, LLC	4,0.	1012		1	J						

10*23767	l n	5-23-16	MARK ALAN SLATEN	TH EXPLORATION, LLC	1/8+	1014	481	INA	NA	NA	NA	NA	NA	NA	NA .
	ï														
10*23771	N	5-23-16	ROBIN ROSE	TH EXPLORATION, LLC	1/8+	1014	485	NA	NA	NA	NA	NA	NA	NA	NA
			STEVEN W SLATEN AND		10		488		NA	NA NA	NA	NA	NA NA	NA.	NA.
10*23792	N	5-23-16	RHONDA SLATEN	TH EXPLORATION, LLC	1/8+	1014	488	NA	INA	NA	INA	NA .	l l		
10*23793	N	5-23-16	ELIZABETH BENNETT AND DONNIE BENNETT	TH EXPLORATION, LLC	1/8+	1014	492	NA.	NA NA	NA NA	NA	NA	NA	NA	NA
10.521,93	N	5-25-16	DONNIE BENNETT	TH EXPLORATION, LLC	1/8+	1014	432	NA .	INA	100	NA .				
10*23794	N	5-23-16	PATTY JEAN LANTZ	TH EXPLORATION, LLC	1/8+	1014	495	NA	NA	NA NA	NA	NA	NA	NA	NA
10 23/54	N	5-25-16	PATTY JEAN LANTZ	TH EXPLORATION, LLC	1/8+	1014	493	NA .	III.	, m	1				
10*23826	N	5-23-16	NANCY C DWYER AND WENDEL MARTINKOVIC	TH EXPLORATION, LLC	1/8+	1017	6	NA	NA	NA	NA	NA	NA	NA	NA
10*23838	N	5-23-16	RONALD DEAN YOHO & VICTORIA LYNN YOHO	TH EXPLORATION, LLC	1/8+	1017	1	NA	NA NA	NA	NA	NA	NA	NA	NA
10 13030	N N	3-23-10	VICTORIA ETININ TORIO	III EXPLORATION, LLC	1/07	1017	*	DAIL .	1.0.						
			VICKI ANN WILLIAMS &												
10*23883	N	5-23-16	WILLIAM J WILLIAMS	TH EXPLORATION, LLC	1/8+	1016	644	NA	NA	NA	NA	NA	NA	INA	NA

			WALTER W STREIGHT JR												
10*24208	N N	5-23-16	AND CONNIE JO STREIGHT	TH EXPLORATION, LLC	1/8+	1023	516	NA .	NA .	NA	NA	NA	NA	NA	NA
											NA NA	NA NA	NA	NA	NA NA
10*24274	N	5-23-16	JO ELLEN GUSTELY	TH EXPLORATION, LLC	1/8+	1023	527	NA	NA	NA	INA	INA .	NA .	NA .	NA .
			SUSAN ALFRED AND KEVIN												
10*24483	N	5-23-16	J ALFRED	TH EXPLORATION, LLC	1/8+	1025	401	NA	NA	NA	NA	NA	NA	NA	NA
10*24551	N	5-23-16	LEONARD LEE COULTER AND DEBRA A COULTER	TH EXPLORATION, LLC	1/8+	1025	405	NA	NA .	NA .	NA	NA	NA	NA	NA
10 14331	<u> </u>	3-23-10	AND DEBINA A COOLIER	III EXPEDITATION, EEC	2/01	1023	403	lisa							
10*24751	N	5-23-16	WILLIAM D TAYLOR AND KIM TAYLOR	TH EXPLORATION, LLC	1/8+	1027	315	NA	NA	NA	NA	NA	NA	NA	NA
10*24752	N	5-23-16	PATTI KENNEDY	TH EXPLORATION, LLC	1/8+	1027	312	NA	NA	NA	NA NA	NA	NA NA	NA	NA
24/32	14	2-72-10	FOLKI KEININEDI	III EXPLORATION, ELC	1/01	1027	312	110							
10*24860	N	5-23-16	DORA TAYLOR	TH EXPLORATION, LLC	1/8+	1028	92	NA	NA	NA	NA	NA	NA	NA	NA
		V 60 AV		and Edition and	40.										
10*24868	N	5.22.46	ANNE DWYER	TH EXPLORATION, LLC	1/0+	1028	95	NA	NA .	NA	NA .	NA	NA .	NA	NA
10 24808	N	5-23-16	JAMME DWYEK	I'M EAPLORATION, LLC	1/8+	1028	33	INA	INA	List	Tiau	lian.	1	1	<u> </u>

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			WALTER W STREIGHT JR												
10*24917	N	5-23-16	AND CONNIE JO STREIGHT	TH EXPLORATION, LLC	1/8+	1027	281	NA .	NA	NA	NA .	NA .	NA	NA	NA
			ROBERT LEE MARCIANO							NA NA		NA NA	NA	NA .	NA.
10*25268	N N	5-23-16	AKA ROBERT LEE MAYER	TH EXPLORATION, LLC	1/8+	1030	416	NA	NA	INA	NA	NA .	INA .		
										NA		NA NA	NA	NA NA	NA.
10*25269	N	5-23-16	RAYMOND GUSTELY JR	TH EXPLORATION, LLC	1/8+	1030	373	NA	NA	NA	INA	NA .	INA.	INA .	
10*25455	N	5-23-16	DAVID C WHITE NEISWONGER AND WHITE LAW OFFICES	TH EXPLORATION, LLC	1/8+	1031	476	NA NA	NA NA	NA	NA	NA	NA	NA	NA
10 25455	l R	5-25-16	DAW OFFICES	III EXPLORATION, LLC	1/6+	1031	4,0								
10*25462	N	5-23-16	JERRY HUGGINS ET AL	TH EXPLORATION, LLC	1/8+	1030	368	NA	NA	NA	NA	NA	NA	NA	NA
10°25479	N	5-23-16	ROBERT LEE MARCIANO AKA ROBERT LEE MAYER		1/8+	1030		NA NA	NA	NA	NA	NA	NA	NA	NA .
10 23479	N	5-23-16	ANA ROBERT LEE WATER	TH EXPLORATION, LLC	1/01	1030	410	NA .		100					
10*27715	N	5-23-16	STONE HILL MINERAL HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1057	332	NA	NA NA	NA	NA	NA	NA	NA	NA .
		J-63*40		an servicing the	4,01										
10\$27050			STONE HILL MINERALS	THE EVEN COLUMN	1/2:	1053	594		NA.	NA.	NA.	NA.	NA NA	NA NA	NA
10*27959	N	5-23-16	HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1063	594	NA	IMA	Tuny	lino	Inc	1,,	1	

															
10*14847	o	5-23-16.1	LETHA RUCKMAN	GASTAR EXPLORATION USA INC	1/8+	806	270	NA	NA	NA .	NA NA	NA	21/41 Gastar Exploration USA inc and Gastar Exploration inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14849	0	5-23-16.1	DAVID GUSTELY	GASTAR EXPLORATION USA INC	1/8+	806	265	NA .	NA NA	N A	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	n 36/9 Gastar Exploration Inc to TH Exploration II LLC
			DURWOOD WRIGHT BY	GASTAR EXPLORATION		809	507	NA NA	NA.	NA.	NA NA	NA.	21/41 Gastar Exploration USA inc and Gastar Exploration inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	n 36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14853	0	5-23-16.1 5-23-16.1	NANCY WHITLATCH	GASTAR EXPLORATION USA INC	1/8+	809	526	NA NA	NA NA	NA NA	NA NA	NA NA		31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14862	0	5-23-16.1 5-23-16.1	ANN GUSTELY	GASTAR EXPLORATION USA INC	1/6+	809	568	NA NA	NA NA	NA NA	NA NA	NA .	21/41 Gastar Exploration USA inc and Gastar Exploration inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	n 36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14864	0	5-23-16.1	CAROLYN DURWAY	GASTAR EXPLORATION USA INC	1/8+	810	330	NA NA	NA .	NA	, NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	n 36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14866	0	5-23-16.1	GARY CARMICHAEL	GASTAR EXPLORATION USA INC	1/8+	810	316	NA .	, NA	NA	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	n 36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14868	0	5-23-16.1	WOODROW CAMPBELL JR	GASTAR EXPLORATION	1/8+	813	454	NA .	, NA	NA	NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	n 36/9 Gastar Exploration Inc to TH Exploration II LLC

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10*14869	0	5-23-16.1	RALPH VAUGHN TAYLOR	GASTAR EXPLORATION USA INC	1/8+	813	561	NA .	NA	NA	NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14870	0	5-23-16.1	DAVID CARMICHAEL	GASTAR EXPLORATION USA INC	1/8+	816	16	NA	NA	NA	NA	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
			DWG OIL & GAS	GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14872	0	5-23-16.1	ACQUISITIONS LLC	USA INC	1/8+	817	312	NA	NA	NA	NA	NA	Exploration Inc merger		ine to the exploration if the
10*14873	0	5-23-16.1	RAYMOND MILLER	GASTAR EXPLORATION USA INC	1/8+	821	44	NA .	NA .	NA	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14874	0	5-23-16.1	RICHARD MILLER	GASTAR EXPLORATION USA INC	1/8+	822	260	NA NA	NA NA	NA	NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
		V 25 25/2			2/2										
10°14876	0	5-23-16.1	SHIRLEY LARGENT	GASTAR EXPLORATION USA INC	1/8+	827	228	NA	NA	NA .	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
										:					
10*14877	0	5-23-16.1	GARY F OBLOY AND DENISE I OBLOY	GASTAR EXPLORATION USA INC	1/8+	836	112	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	
10*14878	o	5-23-16.1	ARTHUR BRUCE COULTER	GASTAR EXPLORATION	1/2+	839	519	NA NA	NA NA	NA	NA .	NA NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	

10*14879	0	5-23-16.1	THERESA RINE	GASTAR EXPLORATION USA INC	1/8+	840	162	NA NA	NA NA	NA	NA NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14880	o	5-23-16.1	IRIS LUCAS	GASTAR EXPLORATION USA INC	1/8+	849	545	NA	NA .	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration inc to TH Exploration II LLC
				GASTAR EXPLORATION	1/8+	849	548	NA.		NA.	NA	, NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14881	0	5-23-16.1	MARY WHITLATCH	USA INC	1/8+	849	548	NA .	NA	NA	TUA	, NA	21/41 Gastar Exploration	31/184 Gastar Exploration	
10*14882	o	5-23-16.1	GARY RINE	GASTAR EXPLORATION USA INC	1/8+	849	551	NA	NA	NA	NA	NA	USA Inc and Gastar Exploration Inc merger	Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
<u>10*14883</u>	o	5-23-16.1	PAUL WISE	GASTAR EXPLORATION USA INC	1/8+	852	252	NA .	NA	NA NA	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
				GASTAR EXPLORATION									21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14884	0	5-23-16.1	RENEE HAGERTY	USA INC	1/8+	852	255	NA .	NA NA	NA .	NA .	NA NA			
10*14885	0	5-23-16.1	HOWARD RINE	GASTAR EXPLORATION USA INC	1/8+	854	601	NA	NA	NA	NA NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14886	o	5-23-16.1	јорі үоно	GASTAR EXPLORATION USA INC	1/8+	854	604	NA	NA NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC

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10*14887	0	5-23-16.1	CHRISTINA ROBERTS	GASTAR EXPLORATION USA INC	1/8+	867	392	NA .	NA .	NA.	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14888	0	5-23-16.1	DARLENE BUTLER	GASTAR EXPLORATION USA INC	1/8+	867	395	NA .	NA.	NA NA	NA .	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14889	o	5-23-16.1	HAROLD YOHO	GASTAR EXPLORATION USA INC	1/8+	870	37	NA .	NA .	NA	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14890	o	5-23-16.1	HENRY MALONE JR	GASTAR EXPLORATION USA INC	1/8+	870	.40	NA .	NA .	NA .	NA .	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14891	o	5-23-16.1	NANCY F FYE & STEPHEN M FYE	GASTAR EXPLORATION USA INC	1/8+	885	606	NA	NA .	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	31/184 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*17145	0	5-23-16.1	JAMES J. CAMPBELL BETTY J. CAMPBELL	CHESAPEAKE APPALACHIA	1/8+	685	458	NΔ	NA.	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
			CAROLYN CAMPBELL BRITTON ROBERT C.	CHESAPEAKE APPALACHIA		685	464	NA NA	NA.	NA.	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LIC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17146	0	5-23-16.1 5-23-16.1	JOANN J. PARSONS GARY D. PARSONS	CHESAPEAKE APPALACHIA	1/8+	685	454	NA NA	NA NA	NA NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange	41/256 SWN Production Company LLC to TH

10*17148	o	5-23-16.1	DONALD E. CAMPBELL JUNE L. CAMPBELL	CHESAPEAKE APPALACHIA	1/8+	685	476	NA	NA .	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17149	0	5-23-16.1	WANDA M. BLAKE	CHESAPEAKE APPALACHIA	1/8+	685	482	NA .	NA NA	NA NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC		41/256 SWN Production Company LLC to TH Exploration LLC
10°17150	0	5-23-16.1	IDA L. CAMPBELL	CHESAPEAKE APPALACHIA LLC	1/8+	685	488	NA	. NA	NA	23/127 Chesapeake Appalachia LLC to Statoil Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	33/424 Statoil USA Onshore Properties Inc to SWN Exchange Titleholder LLC	19/624 SWN Exchange Titleholder LLC to SWN Production Company LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*17502	0	5-23-16.1	PATRICIA E GUSTELY	TH EXPLORATION, LLC	1/8+	942	334	NA	NA	NA	NA NA	NA .	NA	NA NA	NA
10*17532	0	5-23-16.1	DONALD S BOBOVNIK AND DOLORES J BOBOVNIK	TH EXPLORATION, LLC	1/8+	942	346	NA	NA	NA	NA .	,NA	NA .	NA .	NA.
10*17535	o	5-23-16.1	RONALD L MAYER AND DEBRA A MAYER	TH EXPLORATION, LLC	1/8+	929	580	NA	NA	NA	NA	NA .	NA	NA NA	NA
10*17539	o	5-23-16.1	JOANN HAGERTY	TH EXPLORATION, LLC	1/8+	942	342	NA	NA	NA .	NA	NA	NA	NA	NA
10*17540	o	5-23-16.1	MONTY ESTEL	TH EXPLORATION, LLC	1/8+	941	624	NA	NA	NA	NA	NA	NA	NA	NA

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			ROBERT D STRAWN AND												
10*17541	0	5-23-16.1	TAMMY J STRAWN	TH EXPLORATION, LLC	1/8+	942	21	NA	NA	NA	NA	NA	NA	NA	NA
			JEFFREY G HAZEL AND												
10*17542	0	5-23-16.1	SHEILA M HAZEL	TH EXPLORATION, LLC	1/8+	942	12	NA	NA	NA	NA .	NA	NA	NA .	NA
		53364	CARL EDWARD MCCOY	THE VILLE OF THE VILLE	1/0.	942	15	l No	NA.	NA	NA NA	NA NA	NA	NA	NA
10*17543	0	5-23-16.1	AND CAROLYN SUE MCCOY	TH EXPLORATION, LLC	1/8+	942	15	NA	INA	INA	NA .			T	
10*17544	o	5-23-16.1	DEBORAH LYNN SCHWING	TH FXPLORATION LLC	1/8+	942	377	NA	NA	NA	NA	NA	NA NA	NA	NA
10 17344		3-23-10.1	DEBOIGHT ETHIN SCHWING	THE EXPLOIDATION, ELC	2/0.	342	3,,								
10*17545	o	5-23-16.1	LINDA SWOPE	TH EXPLORATION, LLC	1/8+	942	24	NA	NA	NA	NA	NA	NA	NA	NA
20 27040		5 25 20.2		25. 25.0											
10*17546	o	5-23-16.1	SAMUEL EARL FRANCIS AND ALICE L FRANCIS	TH EXPLORATION, LLC	1/8+	942	374	NA	NA	NA	NA	NA	NA	NA	NA
10.000		0.25.25.2													
10*17593	o	5-23-16.1	REBECCA HAGERTY	TH EXPLORATION, LLC	1/8+	942	350	NA	NA	.NA	NA	NA	NA	NA	NA
20 27333		J-2J-10.1		Die Lorention, LLC	-/ -/	- **	-50	1							
					46		255		NA	No.	NA	NA	NA	NA	NA .
10*17594	0	5-23-16.1	MEGAN HAGERTY	TH EXPLORATION, LLC	1/8+	942	362	INA	INA	INA	INA	IIIA	liso .	list.	

1021700		F 22 46 4	THOMAS E RINE AND	TH EXPLORATION, LLC	1/8+	929	572	NA	NA	NA	NA	NA	l NA	NA	NA
10*17595	0	5-23-16.1	MARY PRINE	TH EXPLORATION, LLC	1/8+	929	572	NA .	NA	NA .	No.				
10*17640	0	5-23-16.1	PATRICIA A GARCAR	TH EXPLORATION, LLC	1/8+	942	8	NA	NA	NA	NA	NA	NA	NA	NA
10*17679	0	5-23-16.1	NORMA J ASH	TH EXPLORATION, LLC	1/8+	944	130	NA	NA	NA	NA	NA	NA	NA	NA .
												NA	NA	NA NA	NA
10*17680	0	5-23-16.1	DAVID E CHURCH	TH EXPLORATION, LLC	1/8+	932	424	NA	NA	NA	NA	NA	INA .	NA .	NA
1041769			WALTER E LOSEY AND	THE EXPLODATION INC.	1/0.	942	338	NA	NA	NA	NA.	NA	NA	NA	NA
10*17681	0	5-23-16.1	CINDY L LOSEY	TH EXPLORATION, LLC	1/8+	942	338	INA	NA .	NA .	INA .	NA .			
1011760	o		JAMES E GARLOCH AND MARY K GARLOCH	TH EXPLORATION, LLC	1/8+	935	68	NA	NA NA	NA.	, ,	NA	NA NA	NA	NA
10*17682	0	5-23-16.1	MARY K GARLOCH	TH EXPLORATION, LLC	1/07	333	- 08	NA .	INO.	No.					
10*17683	0	5-23-16.1	PATRICK HAGERTY AND DALANE HAGERTY	TH EXPLORATION, LLC	1/8+	942	358	NA	NA	NA	NA NA	NA	NA	NA	NA
10 1/683	U	5-23-16.1	DALANE HAGERIT	IN EXPLORATION, LLC	1/07	344	330	100	III.						
10*17684	o	5-23-16.1	DAVID MCCOY AND LORI MCCOY	TH EXPLORATION, LLC	1/8+	942	18	NA	NA	NA .	NA	NA	NA	NA	NA
10 1/004	<u> </u>	3-23-16.1	INCCOT	IN EXPLORATION, LLC	1/01	342	10	Ino	pro	1,	1:	1			

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10*17715	О	5-23-16.1	ROBERT A SANDS AND JOYCE A SANDS	TH EXPLORATION, LLC	1/8+	942	354	NA	NA	NA	NA	NA	NA	NA .	NA
												NA.		NA .	NA
10*17719	0	5-23-16.1	ROBERT R DARROW	TH EXPLORATION, LLC	1/8+	942	380	NA	NA .	NA .	NA	NA .	INA .	INA .	NA
			WILLIAM KOTSON AND												
10*17720	О	5-23-16.1	DEBRA KOTSON AND	TH EXPLORATION, LLC	1/8+	938	507	NA	NA	NA	NA	NA	NA	NA	NA
10*17775	o	5-23-16.1	HAROLD H HAGERTY AND DEBORAH M HAGERTY	TH EXPLORATION, LLC	1/8+	942	370	NA	NA	NA	NA	NA	NA	NA	NA
			JAMES GARCAR AND									NA		NA NA	NA.
10*17776	0	5-23-16.1	MELISSA GARCAR	TH EXPLORATION, LLC	1/8+	941	627	NA	NA .	NA .	NA	NA .	NA .	NA.	NA
10*17824	0	5-23-16.1	SARA FULTON	TH EXPLORATION, LLC	1/8+	942	384	NA	NA.	NA.	NA	NA	NA NA	NA	NA .
10 17824		5-25-10.1	JANA FOLION	TH EXPLORATION, EEC	1/0+	342	304	140	186						
10117001	0		ROBYN HAGERTY	TH EXPLORATION, LLC	1/8+	924	602	NA	NA NA	NA NA	, NA	NA	NA NA	NA NA	NA .
10*17901	U	5-23-16.1	NOBIN FINGERIT	IN EXPLORATION, LLC	1/6+	5 24	602	ino.	ino.	100		ļ			
10*17965	o	5-23-16.1	ROBERT DAVID BARNES AND RHONDA BARNES	TH EXPLORATION, LLC	1/8+	942	366	NA	NA	NA	NA	NA	NA	NA	NA
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10*18042	o	5 22 464	JOSEPH J ONORE	TH EXPLORATION, LLC	1/8+	927	101	NA	NA .	NA	NA	NA	NA	NA	NA
10*18042	0	5-23-16.1	JOSEPH J ONORE	TH EXPLORATION, LLC	1/8+	927	101	INA	IVA	No.					
10*18043	О	5-23-16.1	JAMES M ONORE AND CINDY L ONORE	TH EXPLORATION, LLC	1/8+	927	105	NA .	NA	NA	NA	NA	NA	NA	NA
10*18044	o	5-23-16.1	TRACEY ESTEL	TH EXPLORATION, LLC	1/8+	927	109	NA	NA	NA	NA	NA	NA	NA	NA
10*18176	0	5-23-16.1	CRYSTAL M HOOKER AND JAMES HOOKER	TH EXPLORATION, LLC	1/8+	929	568	NA	NA	NA	NA	NA	NA	NA	NA
10*18329	0	5-23-16.1	COLLEEN HAGERTY	TH EXPLORATION, LLC	1/8+	929	560	NA	NA	NA	NA	NA	NA	NA	NA
10*18367	0	5-23-16.1	WALTER C SCHUBERT AND BARBARA A SCHUBERT	TH EXPLORATION, LLC	1/8+	931	377	NA	NA	NA	NA	NA	NA	NA	NA
10*18368	о о	5-23-16.1	ROBERTA K MILLER	TH EXPLORATION, LLC	1/8+	931	457	NA	NA	NA	NA	NA	NA	NA	NA
10*18371	o	5-23-16.1	HERMAN D ESTEL	TH EXPLORATION, LLC	1/8+	931	461	NA	NA	NA	NA	NA	NA	NA	NA

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			JOSEPH R RINE AND												
10*18386	0	5-23-16.1	JENNIFER M RINE	TH EXPLORATION, LLC	1/8+	932	492	NA	NA	NA	NA	NA	NA	NA .	NA
10*18598	0	5-23-16.1	MARK E GUSTELY	TH EXPLORATION, LLC	1/8+	935	52	NA	NA	NA	NA	NA	NA	NA	NA
10*18795	0	5-23-16.1	GASTON FAMILY	TH EXPLORATION, LLC	1/8+	959	502	NA	NA .	NA	NA	NA	NA	NA	NA
		0 10 10.1			-,-										
					-40		137		NA NA	NA NA	NA	NA NA	NA NA	NA	NA
10*18994	0	5-23-16.1	SHIRLEY ANN DRAKE	TH EXPLORATION, LLC	1/8+	940	137	NA	NA .	NA .	INA	NA .			
10*19656	o	5-23-16.1	DEBRA ROUDEBUSH	TH EXPLORATION, LLC	1/8+	944	105	NA	NA.	NA	NA NA	NA	NA	NA	NA
10.19626	0	5-23-16.1	DEBKA KOODEBOSH	TH EXPLORATION, LLC	1/8+	944	103	INA .	NA .	lino.	Ho.				
10*19736	o	5-23-16.1	DOROTHY HLINKA DUKE	THEY POST ON THE	1/8+	944	571	NA NA	NA NA	NA	NA NA	NA	NA	NA	NA
10-19/36	0	5-23-16.1	DOROTHY HLINKA DUKE	TH EXPLORATION, LLC	1/8+	944	3/1	INA	NA.	INA.	NA.				
10*19999	0	5-23-16.1	MELISSA ANN BRAUN AND RAYMOND BRAUN	TH EXPLORATION, LLC	1/8+	951	627	NA	NA	NA	NA .	NA	NA	,NA	NA
	<u> </u>	3-23-10.1	INTINIONE BRACIN	THE CAPTORNATION, LLC	1/01	231									
			DANIDALI C DOCEDSON 9		:										
10*21084	o	5-23-16.1	RANDALL C ROGERSON & TRACY LYNN ROGERSON	TH EXPLORATION, LLC	1/8+	949	368	NA	NA	NA	NA	NA	NA	NA	NA

10*21217	o	5-23-16.1	KEITH JAY FISCHER AND DAWN M FISCHER	TH EXPLORATION, LLC	1/8+	952	643	NA.	NA .	NA .	NA .	NA	NA	NA	NA
															NA.
10*21222	0	5-23-16.1	PATRICIA J SHAW KELLER	TH EXPLORATION, LLC	1/8+	946	43	NA .	NA .	NA	NA	NA	NA .	NA	INA
10*21425	0	5-23-16.1	ORIE N YOUNG AND BERNIE A YOUNG	TH EXPLORATION, LLC	1/8+	957	29	NA NA	NA NA	NA	NA	NA	NA	NA	NA
10*21428	o	5-23-16.1	FRANCIS R SMITH AND ANNA M SMITH	TH EXPLORATION, LLC	1/8+	957	37	NA	NA	NA	NA	NA	NA	NA	NA .
10*21434	0	5-23-16.1	CATHERINE HUMMEL	TH EXPLORATION, LLC	1/8+	957	33	NA .	NA	NA	NA .	NA	NA	NA	NA
10*21451	0	5-23-16.1	RICHARD RICH AND KAREN RICH	TH EXPLORATION, LLC	1/8+	954	254	NA NA	NA	NA	NA	NA	NA	NA	NA
														NA NA	NA
10*21452	0	5-23-16.1	KIMBERLY COX	TH EXPLORATION, LLC	1/8+	954	262	NA	NA .	NA	NA	NA .	INA	NO.	100
10*21457	o	5-23-16.1	WARREN L COULTER AND ROSLINA A COULTER	TH EXPLORATION, LLC	1/8+	954	249	NA	NA	NA	NA	NA	NA	NA	NA

10*21458		5-23-16.1	HUSTON A SMITH JR AND ANN C SMITH	TH EXPLORATION, LLC	1/8+	957	45	NA	NA.	NA	NA	NA	NA	NA	NA
		0 20 2012													
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							1	l		NA	NA NA	l _{NIA}	NA.	NA NA	NA
10*21459	0	5-23-16.1	JAMES L CHURCH	TH EXPLORATION, LLC	1/8+	957	41	NA	NA	NA NA	NA	INA .	NA .	NA .	I NA
			MABEL SHILLINGBURG AND CLIFFORD												
10*21498	0	5-23-16.1	SHILLINGBURG	TH EXPLORATION, LLC	1/8+	954	258	NA	NA NA	NA .	NA .	NA NA	NA	NA	NA
				1								1			
10*21500	0	5-23-16.1	MATTHEW COULTER AND SIMONE COULTER	TH EXPLORATION, LLC	1/8+	954	245	NA	NA	NA	NA	NA	NA	NA	NA
10*21501	o	5-23-16.1	EUGENIA E HOUSER	TH EXPLORATION, LLC	1/8+	954	241	NA	NA NA	NA.	NA	NA	NA	NA	NA
		3-23-20.2	EGGENIA E NOGSEK	THE ESTATION, EEC	2,0:	354									
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												NA.	NA	NA	NA.
10*21502	0	5-23-16.1	DEBRA MURIN	TH EXPLORATION, LLC	1/8+	954	237	NA	NA	NA	NA	INA	INA	130	
10*21503	0	5-23-16.1	DARLENE M DAVIS	TH EXPLORATION, LLC	1/8+	954	233	NA	NA NA	NA	NA	NA NA	NA .	NA	NA
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10*21562	0	5-23-16.1	MARY ETTA TAYLOR AND GARY W TAYLOR	TH EXPLORATION, LLC	1/8+	958	414	NA	NA	NA	NA	NA	NA	NA	NA
				-19,555											

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10*21563	o	5-23-16.1	DAVID R TAYLOR AND MARIA TAYLOR	TH EXPLORATION, LLC	1/8+	958	422	NA	NA	NA	NA	NA	NA	NA	NA
10*21565	0	5-23-16.1	KORENE SUE LANTZ	TH EXPLORATION, LLC	1/8+	957	462	NA	NA	NA	NA	NA	NA	NA	NA .
10*21566	0	5-23-16.1	HERBERT M TAYLOR AND LENORA E TAYLOR	TH EXPLORATION, LLC	1/8+	958	418	NA .	NA .	NA.	NA .	NA .	NA .	NA	NA
10 2200		3-23-10.1	ELNOISE TATLOR	THE EXPEDITION, LEC	2/0.	330	725								
10*21615	0	5-23-16.1	GARY PARSONS AND JOANN J PARSONS	TH EXPLORATION, LLC	1/8+	959	347	NA .	NA	NA .	NA	NA	NA	NA .	NA
			CLARENCE RANDALL												
10*21626	0	5-23-16.1	EMERY AND PAULA JEAN EMERY	TH EXPLORATION, LLC	1/8+	958	344	NA	NA	NA	NA	NA	NA	NA	NA
10*21632	0	5-23-16.1	JOHN ARLES EMERY	TH EXPLORATION, LLC	1/8+	959	339	NA	NA	NA	NA	NA	NA	NA	NA .
10*21655	0	5-23-16.1	STANLEY GUSTELY	TH EXPLORATION, LLC	1/8+	965	206	NA	NA	NA	NA	NA	NA	NA	NA .
			JOHN OBLOY AND JANET L								NA.	NA.	NA AM	NA.	NA .
10*21656	0	5-23-16.1	OBLOY	TH EXPLORATION, LLC	1/8+	959	331	NA	INA	INA	INA	INA	Inv	Inc	j.w.

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10*21657	0	5-23-16.1	RONALD J SALKOVICK JR & SANDRA SALKOVICK	TH EXPLORATION, LLC	1/8+	958	373	NA	NA	NA	NA	NA	NA	NA	NA
10*21774	o	5-23-16.1	JOYCE KAY BURTON AND SAMUEL C BURTON	TH EXPLORATION, LLC	1/8+	957	467	NA	NA	NA	NA	NA	NA	NA	NA
	-														
10*21813	o	5-23-16.1	STUART WHITE AND BETTY	TH EXPLORATION, LLC	1/8+	958	352	NA .	NA	NA	NA .	NA .	NA	NA	NA .
10 21613	0	5-23-16.1	WHITE	TH EXPLORATION, LLC	1/6+	336	332								
	_		JAMES NEAL EMERY AND							NA.		NA.	NA	NA	INA
10*21815	0	5-23-16.1	RENEE R EMERY	TH EXPLORATION, LLC	1/8+	958	348	NA .	NA	NA .	NA .				
			CINDY GREEN AND LARRY												NA
10*21816	0	5-23-16.1	GREEN	TH EXPLORATION, LLC	1/8+	958	356	NA .	NA	NA	NA	NA .	NA .	NA	NA .
			MARY LOU HLINKA AND												
10*21817	0	5-23-16.1	RICHARD G HLINKA SR	TH EXPLORATION, LLC	1/8+	959	514	NA	NA	NA	NA	NA	NA	NA	NA
10*21819	o	5-23-16.1	MARY CATHERINE THOMS	TH EXPLORATION, LLC	1/8+	958	360	NA	NA	NA	NA	NA	NA	NA .	NA
10*21820	0	5-23-16.1	MARION DAVID OTT & JANICE L OTT	TH EXPLORATION, LLC	1/8+	959	506	NA	NA	NA	NA	NA	NA	NA	NA

			1	1				T	1		T	1		<u> </u>	
10*21832	0	5-23-16.1	MARQUITA CLYBURN	TH EXPLORATION, LLC	1/8+	959	510	NA	NA	NA	NA	NA	NA	NA	NA .
10*21948	0	5-23-16.1	BARBARA H COAKLEY	TH EXPLORATION, LLC	1/8+	960	66	NA	NA	NA .	NA	NA .	NA	NA	NA
10*21949	o	5-23-16.1	ROBIN ADAIR GUMP AND LOUIS M GUMP	TH EXPLORATION, LLC	1/8+	960	70	NA	NA	NA	NA	NA	NA	NA	NA
10*21950	o	5-23-16.1	JUDITH A TAYLOR	TH EXPLORATION, LLC	1/8+	960	74	NA NA	NA .	NA	NA .	NA	NA	NA	NA
					~										
10*21951	o	5-23-16.1	CHARLES DOUGLAS LANE	TH EVID OBATION I.C.	1/8+	960	77	NA .	NA .	NA	NA .	NA .	NA.	NA	NA
10 21931		5-23-16.1	CHARLES DOUGLAS LANE	TH EXPLORATION, LLC	1/8+	960	"	INA.	NA .	1190					
													NA.	NA .	NA .
10*21994	0	5-23-16.1	MELISSA L DARROW	TH EXPLORATION, LLC	1/8+	954	328	NA .	NA .	NA	NA	NA	INA	INA	no.
10*22013	0	5-23-16.1	CHARLES J KNOX	TH EXPLORATION, LLC	1/8+	966	112	NA	NA	NA	NA	NA	NA	NA .	NA
10*22014	0	5-23-16.1	SHERMAN E KNOX JR	TH EXPLORATION, LLC	1/8+	966	108	NA	NA	NA	NA	NA	NA	NA	NA

10*22018	О	5-23-16.1	KATHLEEN ROBERTSON	TH EXPLORATION, LLC	1/8+	960	539	NA	NA	NA	NA	NA	NA	NA	NA
10*22026	0	5-23-16.1	KEVIN D CHURCH	TH EXPLORATION, LLC	1/8+	957	49	NA .	NA .	NA	NA	NA	NA	NA .	NA
			STEPHEN C EMERY AND								NA	NA NA	NA.	NA NA	NA NA
10*22027	0	5-23-16.1	CATHY J EMERY	TH EXPLORATION, LLC	1/8+	954	310	NA .	NA	INA .	INA	INA	INA.	100	
10*22093	o	5-23-16.1	TODD LEARN AND KENDA LEARN	TH EXPLORATION, LLC	1/8+	954	314	NA	NA	NA	NA	NA	NA	NA	NA
										NA	NA NA	NA NA	NA	NA NA	NA.
10*22102	0	5-23-16.1		TH EXPLORATION, LLC	1/8+	954	302	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
10*22128	0	5-23-16.1	BETTY PYSELL	TH EXPLORATION, LLC	1/8+	961	433	NA .	NA	NA	NA .	NA .	1100	100	
10*22142	o	5-23-16.1	CHERYL L HILL	TH EXPLORATION, LLC	1/8+	961	423	NA	NA .	NA	NA	NA	NA	NA	NA
	-		WANDA J RIDING AND												
10*22143	o	5-23-16.1		TH EXPLORATION, LLC	1/8+	961	426	NA .	NA	NA	NA	NA	NA	NA	NA

VICKY STRAUSS AND 10*22144 O 5-23-16.1 DENNIS A STRAUSS TH EXPLORATION, LLC 1/8+ 961 529 NA NA NA NA NA NA NA NA NA NA NA NA NA	IA.
DEBRA L LYSESKI AND	
10*22165 O 5-23-16.1 GERALD A LYSESKI TH EXPLORATION, LLC 1/8+ 954 306 NA NA NA NA NA NA NA NA NA NA NA NA NA	IA .
10*22178 O 5-23-16.1 WILLIAM R HENTHORN AND WA 972 58 NA NA NA NA NA NA NA NA NA NA NA NA NA	IA
MISSY JONES AND	
10*22287 O 5-23-16.1 MICHAEL JONES TH EXPLORATION, LLC 1/8+ 962 195 NA NA NA NA NA NA NA NA NA NA NA NA NA	IA
DORIS WEST AND ROBERT 10*22332 O 5-23-16.1 WEST TH EXPLORATION, LLC 1/8+ 962 542 NA NA NA NA NA NA NA NA NA NA NA	NA.
10*22339 O 5-23-16.1 BETTY LEE HOWARD LOY TH EXPLORATION, LLC 1/8+ 963 392 NA NA NA NA NA NA NA NA NA NA	NA.
LOREITA M DOUGHERTY	
10°22354 O 5-23-16.1 AND DAVID DOUGHERTY TH EXPLORATION, LLC 1/8+ 964 516 NA NA NA NA NA NA NA NA NA NA NA NA NA	ų,
10°22436 O 5-23-16.1 REVOCABLE LIVING TRUST TH EXPLORATION, LLC 1/8+ 963 626 NA NA NA NA NA NA NA NA NA NA NA	NA .

0	5-23-16.1	SHERRY L IMRIE AND DANIEL IMRIE JR	TH EXPLORATION, LLC	1/8+	963	631	NA	NA	NA	NA .	NA	NA	NA .	NA
0	5-23-16.1	EUGENE FANKHAUSER	TH EXPLORATION, LLC	1/8+	963	153	NA .	NA	NA	NA	NA	NA	NA	NA
0	5-23-16.1	GATHA CHAMBERS	TH EXPLORATION, LLC	1/8+	963	622	NA	NA .	NA	NA .	NA .	NA	NA .	NA .
	5-23-16-1	IIJDY ANN MERCER	TH FXPI ORATION LLC	1/84	963	634	NA.	NA NA	NA NA	NA NA	NA.	NA	NA	NA
"	3-23-10.1	JODY ANN WERCER	TH EXPLORATION, LLC	1/8+	963	634	NA	NA .	INA .	INA .	INO.	NG.		
o	5-23-16.1	KENNETH R SHAW AND DONNA K SHAW	TH EXPLORATION, LLC	1/8+	966	518	NA	NA	NA	NA	NA	NA	NA	NA
	5-23-16-1	MEI VIN FANKHAI ISER	TH EXPLORATION LLC	1/84	974	251	NA NA	NA NA	NA.	NA NA	NA NA	NA.	NA NA	NA
3	3-23-10.1	INICLY IN FAINKHAUSER	THE EAST CONTRACTOR, LLC	1/0+	3/4	201	IVA	100		in in				
o	5-23-16.1	JAMES D DRAKE AND DONNA K DRAKE	TH EXPLORATION, LLC	1/8+	964	425	NA	NA NA	NA NA	NA	NA	NA	NA	NA
		RANDY BERISFORD AND										NA.	NA.	MA
	0	O 5-23-16.1 O 5-23-16.1 O 5-23-16.1 O 5-23-16.1	O 5-23-16.1 EUGENE FANKHAUSER O 5-23-16.1 JUDY ANN MERCER O 5-23-16.1 JUDY ANN MERCER O 5-23-16.1 MELVIN FANKHAUSER O 5-23-16.1 JAMES D DRAKE AND DONNA K DRAKE RANDY BERISFORD AND	O 5-23-16.1 DANIEL IMRIE IR TH EXPLORATION, LLC O 5-23-16.1 EUGENE FANKHAUSER TH EXPLORATION, LLC O 5-23-16.1 GATHA CHAMBERS TH EXPLORATION, LLC O 5-23-16.1 JUDY ANN MERCER TH EXPLORATION, LLC KENNETH R SHAW AND DONNA K SHAW TH EXPLORATION, LLC O 5-23-16.1 MELVIN FANKHAUSER TH EXPLORATION, LLC O 5-23-16.1 MELVIN FANKHAUSER TH EXPLORATION, LLC O 5-23-16.1 JAMES D DRAKE AND DONNA K DRAKE O 5-23-16.1 DONNA K DRAKE AND DONNA K DRAKE	O 5-23-16.1 EUGENE FANISHAUSER TH EXPLORATION, LLC 1/8+ O 5-23-16.1 EUGENE FANISHAUSER TH EXPLORATION, LLC 1/8+ O 5-23-16.1 JUDY ANN MERCER TH EXPLORATION, LLC 1/8+ O 5-23-16.1 XENNETH R SHAW AND DONNA K SHAW TH EXPLORATION, LLC 1/8+ O 5-23-16.1 MELVIN FANISHAUSER TH EXPLORATION, LLC 1/8+ O 5-23-16.1 MELVIN FANISHAUSER TH EXPLORATION, LLC 1/8+ O 5-23-16.1 MELVIN FANISHAUSER TH EXPLORATION, LLC 1/8+	O 5-23-16.1 EUGENE FANIOHAUSER TH EXPLORATION, LLC 1/8+ 963 O 5-23-16.1 GATHA CHAMBERS TH EXPLORATION, LLC 1/8+ 963 O 5-23-16.1 JUDY ANN MERCER TH EXPLORATION, LLC 1/8+ 963 O 5-23-16.1 MELVIN FANISHAUSER TH EXPLORATION, LLC 1/8+ 966 O 5-23-16.1 MELVIN FANISHAUSER TH EXPLORATION, LLC 1/8+ 966 O 5-23-16.1 MELVIN FANISHAUSER TH EXPLORATION, LLC 1/8+ 974 O 5-23-16.1 MELVIN FANISHAUSER TH EXPLORATION, LLC 1/8+ 974	O 5-23-16.1 DANIEL IMBREER THE DEPLOPATION, LLC 1/8+ 963 631 O 5-23-16.1 EUGENE FANKHAUSER THE DEPLOPATION, LLC 1/8+ 963 622 O 5-23-16.1 JUDY ANN MERCER THE DEPLOPATION, LLC 1/8+ 963 634 O 5-23-16.1 REINNETH R SHAW AND DONNA K SHAW THE DEPLOPATION, LLC 1/8+ 966 518 O 5-23-16.1 MELVIN FANKHAUSER THE DEPLOPATION, LLC 1/8+ 974 331 O 5-23-16.1 MELVIN FANKHAUSER THE DEPLOPATION, LLC 1/8+ 974 331	O 5-23-16.1 DANES IMME IR THE EPICORATION, LIC 1/8+ 963 631 NA O 5-23-16.1 EUGENE FANIONAUSER THE EPICORATION, LIC 1/8+ 963 133 NA O 5-23-16.1 GATHA CHAMBERS THE EPICORATION, LIC 1/8+ 963 632 NA O 5-23-16.1 JUDY ANN MERCER THE EPICORATION, LIC 1/8+ 963 634 NA O 5-23-16.1 JUDY ANN MERCER THE EPICORATION, LIC 1/8+ 963 634 NA O 5-23-16.1 JUDY ANN MERCER THE EPICORATION, LIC 1/8+ 963 634 NA O 5-23-16.1 JUDY ANN MERCER THE EPICORATION, LIC 1/8+ 963 538 NA O 5-23-16.1 JUDY ANN MERCER THE EPICORATION, LIC 1/8+ 964 445 NA	O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 963 133 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 963 133 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 963 622 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 963 622 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 963 622 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 963 622 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 963 634 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 965 538 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 966 538 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 966 538 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 966 338 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 966 338 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 964 425 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 964 425 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 964 425 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 964 425 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 964 425 MA NA O 5-23-16.1 OUGGRE FANDHAUSER TH EDPLOBATION, LLC 1/8+ 964 425 MA NA	O 5-23-36.1 GATINA DIAMBERS THE EPICORATON, LLC 1/8+ 963 631 NA NA NA NA NA NA NA NA NA NA NA NA NA	O \$-2-2-16-1 COURT FANDAUSER THEORY COUNTY IN CONTRACTOR, LIC 1/8+ 963 611 MA MA MA MA MA MA MA MA MA MA MA MA MA	O 5-23-563 OMERIANCE TRESCOVADO O 5-23-563 OMERIANCE TRESCOVAD	0 5-23-54.	O 5-23-26.1 DISCRIPTION OF THE PROPERTIES, LICE 1/20 963 931 NA NA NA NA NA NA NA NA NA NA NA NA NA

10*22560	0	5-23-16.1	RONALD JOE KELLER	TH EXPLORATION, LLC	1/8+	965	485	NA	NA .	NA	NA	NA .	NA	NA .	NA
			RUSSELL W ROGERSON												
10*22592	0	5-23-16.1	AND SUSAN ROGERSON	TH EXPLORATION, LLC	1/8+	966	119	NA	NA	NA	NA	NA	NA .	NA	NA
10*22593	0	5-23-16.1	RONALD E ROGERSON	TH EXPLORATION, LLC	1/8+	966	116	NA	NA	NA	NA	NA	NA	NA	NA
10*22594	0	5-23-16.1	JAMES A WADE SR	TH EXPLORATION, LLC	1/8+	965	481	NA	NA .	NA	NA	NA	NA .	NA	NA
10*22609	0	5-23-16.1	KATHY JO CULLUM	TH EXPLORATION, LLC	1/8+	966	514	NA	NA	NA NA	NA	NA	NA NA	NA NA	NA
10*22613	0								NA	NA	NA .	NA	NA NA	NA .	NA
10*22613	0	5-23-16.1	JEWEL L CAMPBELL	TH EXPLORATION, LLC	1/8+	966	510	NA .	NA	NA .	, NA	NA .	INA	, ma	
10*22644	0	5-23-16.1	RICHARD EUGENE KELLER	TH EXPLORATION, LLC	1/8+	968	214	NA	NA	NA	NA	NA	NA	NA	NA
															NA
10*22779	0	5-23-16.1	STEVEN WADE	TH EXPLORATION, LLC	1/8+	968	424	NA	INA	INA	NA	INA	INA	NA	INA

10*22809	o	5-23-16.1	MARGARET C MCMURRY & WILLIAM F MCMURRY	TH EXPLORATION, LLC	1/8+	972	54	NA.	NA	NA	NA	NA NA	NA .	NA	NA .
10 22809		3-23-10.1	WILLIAM FINCHORY	TH EXPLORATION, LLC	1/0+	312		NA .	NA .						
	i														l NA
10*22811	0	5-23-16.1	ROBERT E ROGERSON	TH EXPLORATION, LLC	1/8+	972	64	NA	NA	NA	NA .	NA	NA	NA	NA .
10*22812	0	5-23-16.1	JOSEPH F GOBLOWSKY	TH EXPLORATION, LLC	1/8+	968	428	NA	NA	NA	NA	NA	NA	NA	NA
			LAURINE C CURTIS &												
10*22861	0	5-23-16.1	EDGAR A CURTIS III	TH EXPLORATION, LLC	1/8+	976	147	NA	NA .	NA	NA	NA	NA	NA .	NA
10*23166	o	5-23-16.1	JAMES DAVID CRANDALL	TH EXPLORATION, LLC	1/8+	984	48	NA.	NA	NA	NA	NA	NA	NA	NA
10*23168	0	5-23-16.1	JASON WADE	TH EXPLORATION, LLC	1/8+	966	506	NA	NA	NA	NA	NA	NA	NA	NA
10*23368	o	5-23-16.1	ROSE MARIE CAMPBELL	TH EXPLODATION LIC	1/8+	988	447	NA .	NA	NA	NA	NA	NA	NA	NA
10. 25368		5-23-16.1	ROSE MARIE CAMPBELL	TH EXPLORATION, LLC	1/8+	886	447	INA	INA	IN	NA.	J. C. C. C. C. C. C. C. C. C. C. C. C. C.			
			STEFANIE CIRILLI AND												
10*23369	0	5-23-16.1	MATTHEW CIRILLI	TH EXPLORATION, LLC	1/8+	988	451	NA	NA	INA	JNA	INA	INA	JNA	INA

					I		T	1						T
O	5-23-16.1	DENVER J TAYLOR	TH EXPLORATION, LLC	1/8+	988	454	NA	NA	NA	NA	NA	NA	NA	NA
		IONNA MARPI F AND FRIK												
0	5-23-16.1	MARPLE	TH EXPLORATION, LLC	1/8+	988	442	NA	NA	NA	NA	NA	NA	NA	NA
		JON GUSTELY AND												l _{NA}
0	5-23-16.1	MARILYN NIJE	TH EXPLORATION, LLC	1/8+	1008	12	NA	NA .	INA	INA	INA	NA .	NA	NA .
o	5-23-16.1	JENNA WADE	TH EXPLORATION, LLC	1/8+	1008	16	NA	NA	NA	NA	NA	NA	NA	NA .
0	5-23-16.1	DAVID L SNYDER	TH EXPLORATION, LLC	1/8+	1008	313	NA	NA	NA	NA	NA	NA	NA	NA
		JENNIFER CUICHTA AND												
0	5-23-16.1		TH EXPLORATION, LLC	1/8+	1008	310	NA	NA	NA	NA	NA	NA	NA	NA
	E 22 46 4	DENIES NELLAS	TH EVOLODATION 110	1/0:	074	622			NA.	NA.	NA.	NA.	NA	NA NA
U	5-23-16.1	NEINEE KELLAK	TH EXPLORATION, LLC	1/8+	9/1	633	INA	INA	INA	INA	INA	140		0.5
o	5-23-16.1	MARILYN M ROBINSON	TH EXPLORATION, LLC	1/8+	1009	309	NA	NA	NA	NA	NA	NA	NA	NA
	0	O 5-23-16.1 O 5-23-16.1 O 5-23-16.1 O 5-23-16.1	O 5-23-16.1 JONNA MARPLE AND ERIK MARPLE O 5-23-16.1 JON GUSTELY AND MARILYN NIJE O 5-23-16.1 JENNA WADE O 5-23-16.1 DAVID L SNYDER O 5-23-16.1 RENEE KELLAR	O 5-23-16.1 JONNA MARPLE AND ERIK TH EXPLORATION, LLC O 5-23-16.1 JON GUSTELY AND MARRILYN NIJE TH EXPLORATION, LLC O 5-23-16.1 JENNA WADE TH EXPLORATION, LLC O 5-23-16.1 DAVID L SNYDER TH EXPLORATION, LLC O 5-23-16.1 JENNIFER CUICHTA AND KEVIN CUICHTA O 5-23-16.1 RENEE KELLAR TH EXPLORATION, LLC	O 5-23-16.1 JONNA MARPLE AND ERIK TH EXPLORATION, LLC 1/8+ O 5-23-16.1 JENNA WADE TH EXPLORATION, LLC 1/8+ O 5-23-16.1 DAVID L SNYDER TH EXPLORATION, LLC 1/8+ O 5-23-16.1 DAVID L SNYDER TH EXPLORATION, LLC 1/8+ O 5-23-16.1 RENEE KELLAR TH EXPLORATION, LLC 1/8+	O 5-23-16.1 JONNA MARPLE AND ERIK MARPLE AND ERIK MARPLE TH EXPLORATION, LLC 1/8+ 988 O 5-23-16.1 JONNA MARPLE TH EXPLORATION, LLC 1/8+ 1008 O 5-23-16.1 JENNA WADE TH EXPLORATION, LLC 1/8+ 1008 O 5-23-16.1 DAVID L SNYDER TH EXPLORATION, LLC 1/8+ 1008 O 5-23-16.1 JENNA WADE TH EXPLORATION, LLC 1/8+ 1008	O 5-23-16.1 JONNA MARPLE AND ERIK THEOPLORATION, LLC 1/8+ 988 442 O 5-23-16.1 JONNA MARPLE AND ERIK THEOPLORATION, LLC 1/8+ 1008 12 O 5-23-16.1 JENNA WADE THEOPLORATION, LLC 1/8+ 1008 16 O 5-23-16.1 DAVID L SHYDER THEOPLORATION, LLC 1/8+ 1008 313 O 5-23-16.1 RENEER CUICHTA AND REVIN CUICHTA THEOPLORATION, LLC 1/8+ 1008 310 O 5-23-16.1 RENEER CUICHTA AND REVIN CUICHTA THEOPLORATION, LLC 1/8+ 1008 310	O 5-23-16.1 JONNA MARPLE AND ERRE THE DEPLOPMENTION, LLC 1/8+ 988 442 MA O 5-23-16.1 JONN GUSTELY AND MARRYN NUE THE DEPLOPMENTION, LLC 1/8+ 1008 12 MA O 5-23-16.1 JERNA WADE THE DEPLOPMENTION, LLC 1/8+ 1008 16 NA O 5-23-16.1 DAVID LISHTDER THE DEPLOPMENTION, LLC 1/8+ 1008 333 NA O 5-23-16.1 JERNAFE CUICHTA AND REPLOPMENTION, LLC 1/8+ 1008 330 NA O 5-23-16.1 JERNAFE CUICHTA AND REPLOPMENTION, LLC 1/8+ 1008 310 NA O 5-23-16.1 JERNAFE CUICHTA AND REPLOPMENTION, LLC 1/8+ 1008 310 NA	O 5-23-16.1 JOHNS MARKE AND ERK HI DRIOMATION, LLC 1/8+ 388 442 NA NA O 5-23-16.1 JOHN GUSTRLY AND HI DRIOMATION, LLC 1/8+ 1008 12 NA NA O 5-23-16.1 JERNA WADE TH EXPLORATION, LLC 1/8+ 1008 16 NA NA O 5-23-16.1 JERNA WADE TH EXPLORATION, LLC 1/8+ 1008 33 NA NA O 5-23-16.1 JERNA WADE TH EXPLORATION, LLC 1/8+ 1008 33 NA NA O 5-23-16.1 JERNATE CUICHTA AND TH EXPLORATION, LLC 1/8+ 1008 310 NA NA	O 5-23-26.1 OANGEL SAVIGER O 5-23-26.1 SIGN GUSTEN AND MARKEN RUE TH DEPLORATION, LLC 1/8+ 1008 12 NA NA NA NA NA NA NA NA NA NA	O 5-23-56.1 AMERICAN AND ERRO PRESCRIPTION LLC 3/03+ 988 442 MA MA MA MA MA MA MA MA MA MA MA MA MA	O 5-23-56.1 DIMENS SPECIES THE SPECIATION, LLC 1/4+ 1/4+ 1/403 313 NA NA NA NA NA NA NA NA NA NA NA NA NA	O 5-22-36.1 GRANDER PRODUCTION TO THE SPECIAL TOOL 1/20- 1/2	5 2-3-3-4.5 DIRECTION AND THE PRODUCTION AND THE PRODUCTION ALL TO

		r													
10*23648	0	5-23-16.1	PAUL D RINE JR	TH EXPLORATION, LLC	1/8+	1009	313	NA	NA	NA	NA	NA	NA	NA	NA .
														İ	
10*23672	o	5-23-16.1	CHAD FRANCIS AND LISA FRANCIS	TH EXPLORATION, LLC	1/8+	1010	356	NA	NA .	NA	NA	NA	NA	NA	NA
			LISA TUCKER AND FRANCIS												
10*23727	0	5-23-16.1	TUCKER	TH EXPLORATION, LLC	1/8+	1011	525	NA .	NA .	NA	NA	NA	NA	NA	NA
10*23756	o	5-23-16.1	KAREN DRAKE AND JEFF DRAKE	TH EXPLORATION, LLC	1/8+	1012	182	NA NA	NA .	NA.	NA	NA NA	NA	NA .	l _{NA}
10 23/30	0	3-23-10.1	DIVARE	TH EXPLORATION, ELC	1/0+	1012	102	INA	INA	INA.	100	100			
10*23757	o	5-23-16.1	DAVID DRAKE	TH EXPLORATION, LLC	1/8+	1012	187	NA	NA	NA	NA	NA	NA	NA	NA .
															NA
10*23767	0	5-23-16.1	MARK ALAN SLATEN	TH EXPLORATION, LLC	1/8+	1014	481	NA	NA	NA	NA .	NA	NA	NA	INA
10*23771	0	5-23-16.1	ROBIN ROSE	TH EXPLORATION, LLC	1/8+	1014	485	NA	NA	NA	NA	NA	NA	NA	NA
							-								
			STEVEN W SLATEN AND												
10*23792	0	5-23-16.1	RHONDA SLATEN	TH EXPLORATION, LLC	1/8+	1014	488	NA	NA	NA	NA	NA	NA	NA	NA

10*23793	o	5-23-16.1	ELIZABETH BENNETT AND	TH EXPLORATION, LLC	1/8+	1014	492	NA .	NA NA	NA	NA .	NA	NA	NA	NA
				,	7.										
10*23794	0	5-23-16.1	PATTY JEAN LANTZ	TH EXPLORATION, LLC	1/8+	1014	495	INA	NA.	NA NA	NA	NA	NA	, NA	NA
20 25/34	J	3-23-10:1	TATT JEAN CANTE	THE EXPLORATION, EEC	1/6+	1014	433	INA.							
10*23826	o		NANCY C DWYER AND	THE PROPERTY AND	4/0		_			.NA	NA	la la	NA	NA.	NA
10 23020		5-23-16.1	WENDEL MARTINKOVIC	ITT EAPLOWATION, LLC	1/8+	1017	6	NA	NA .	INA	INA .				
10*23838	0	5-23-16.1	RONALD DEAN YOHO & VICTORIA LYNN YOHO	TH EXPLORATION, LLC	1/8+	1017	1		NA.		NA.			NA	NA .
10-23636		5-23-16.1	VICTORIA LYNN YORO	TH EXPLORATION, LLC	1/8+	1017	1	NA	NA	NA .	INA	NA .			
10*23883	o	5-23-16.1	VICKI ANN WILLIAMS & WILLIAM J WILLIAMS	TH EXPLORATION, LLC	4/0	4045						NA.	NA	NA.	NA
10-23083		5-23-16.1	WILLIAM J WILLIAMS	TH EXPLORATION, LLC	1/8+	1016	644	NA .	NA .	NA	NA	NA.	NA .	NA .	
10*24208		5.22.45.4	WALTER W STREIGHT JR	TH 500 00 TO 110	46	4000					NA .	NA.	NA	NA.	NA NA
10-24208	0	5-23-16.1	AND CONNIE JO STREIGHT	TH EXPLORATION, LLC	1/8+	1023	516	NA	NA .	NA	NA .	INA	INA	NA .	No.
															NA
10*24274	0	5-23-16.1	JO ELLEN GUSTELY	TH EXPLORATION, LLC	1/8+	1023	527	NA	NA	NA	NA .	NA	NA	NA .	INA
			SUSAN ALFRED AND KEVIN												
10*24483	0	5-23-16.1	J ALFRED	TH EXPLORATION, LLC	1/8+	1025	401	NA	NA	NA	NA	NA	INA	INA	[NA

197-2072 0 5-25-14.1 PART INVESTORY THE CRITICAL LICE 1/0- 1927 322 MA SA SA SA SA SA SA SA SA SA SA SA SA SA											T		Γ	1	T	
197-101 0 1-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 10-2-103 1												:				
07-1523 0 1-22-253 MEDICONO ME	10*24551	o	5-23-16.1	LEONARD LEE COULTER	TH EXPLORATION, I.C.	1/8+	1025	405	NA NA	NA NA	NA	NA	NA .	NA	NA	NA
197-2672						7.5										
107-2672 Q 5-25-26.2 POTTER STREET, THE ST				WILLIAM D TAYLOR AND												
107-21610 O \$-3-3-5.5. GOOD THEORY THE SPECIAL COLUMN THE SPECIAL COLU	10*24751	0	5-23-16.1	KIM TAYLOR	TH EXPLORATION, LLC	1/8+	1027	315	NA	NA	NA	NA	NA	NA	NA	NA .
107-21610 O \$-3-3-5.5. GOOD THEORY THE SPECIAL COLUMN THE SPECIAL COLU																
107-24668 O 5-23-16.1 ARINE DWYER THE DPROBATION, LLC 1/8+ 1028 95 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*24752	0	5-23-16.1	PATTI KENNEDY	TH EXPLORATION, LLC	1/8+	1027	312	NA	NA	NA	NA .	NA	NA .	NA .	NA
10724868 O 5-23-36.1 AINSCONVER THE DEPLOBATION, LLC 1/8+ 2028 95 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*24860	a	5-23-16.1	DORA TAYLOR	TH EXPLORATION, I.I.C.	1/8+	1028	92	NA NA	NA NA	NA NA	NA	NA NA	NA	NA	NA
10°24917 O 5-23-16.1 AND CONNIE /O STREIGHT /R 10°24917 AND CONNIE /O STREIGHT /R 10°24917 AND CONNIE /O STREIGHT /R 10°24917 AND CONNIE /O STREIGHT /R 10°24917 AND CONNIE /O STREIGHT /R 10°25188 O 5-23-16.1 AND CONNIE /O STREIGHT /R 10°25188 AND AND CONNIE /O STREIGHT /R 10°25188 AND AND AND AND AND AND AND AND AND AND	10 24860		3-23-16.1	DONA TATLOR	TH EXPLORATION, EEC	1/67	1028	32	INA.	NA.	100					
10*24937 O \$-23-16.1 WALTER W STREIGHT JR AND COMME JO STREIGHT TH EXPLORATION, LLC 1/8+ 1027 281 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*24868	0	5-23-16.1	ANNE DWYER	TH EXPLORATION, LLC	1/8+	1028	95	NA NA	NA	NA .	NA .	NA	NA	NA	NA .
10°25268 O 5-23-16.1 AND CONNIE JO STREIGHT THE EXPLORATION, LLC 1/8+ 1027 281 NA NA NA NA NA NA NA NA NA NA NA NA NA	10 24000		3-23-10.1	ANNE DWIER	THE EXPLORATION, LLC	1/6+	1025		INA .	No.						
10°25268 O 5-23-16.1 ROBERT LEE MARCIANO AKA ROBERT LEE MAYER TH EXPLORATION, LLC 1/8+ 1030 415 NA NA NA NA NA NA NA NA NA NA NA NA NA	10*24917	0	5-23-16.1	WALTER W STREIGHT JR AND CONNIE JO STREIGHT	TH EXPLORATION, LLC	1/8+	1027	281	NA	NA NA	NA NA	NA NA	NA	NA	NA	NA
10*25268 O 5-23-16.1 AKA ROBERT LEE MAYER TH EXPLORATION, LLC 1/8+ 1030 416 NA NA NA NA NA NA NA NA NA NA NA NA NA		-														
	10*25268	0	5-23-16.1		TH EXPLORATION, LLC	1/8+	1030	415	NA NA	NA	NA	NA	NA	NA	NA	NA
10°25269 O 5-23-16.1 RAYMOND GUSTELY JR TH EXPLORATION, LLC 1/8+ 1030 373 NA NA NA NA NA NA NA NA NA NA		,	3 23 20.2		an constitution, each	2/0.	2050	7,50	1							
10*25269 O 5-23-16.1 RAYMOND GUSTELY JR TH EXPLORATION, LLC 1/8+ 1030 373 NA NA NA NA NA NA NA NA NA NA																
	10*25269	0	5-23-16.1	RAYMOND GUSTELY JR	TH EXPLORATION, LLC	1/8+	1030	373	NA	NA	NA	NA	NA	NA	NA	NA

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10*25455	0	5-23-16.1	DAVID C WHITE NEISWONGER AND WHITE LAW OFFICES	TH EXPLORATION, LLC	1/8+	1031	476	NA	NA	NA	NA	NA	NA	NA .	NA
10*25462	0	5-23-16.1	JERRY HUGGINS ET AL	TH EXPLORATION, LLC	1/8+	1030	368	NA	NA	NA	NA	NA .	NA	NA	NA
10°25479	o	5-23-16.1	ROBERT LEE MARCIANO AKA ROBERT LEE MAYER	TH EXPLORATION, LLC	1/8+	1030	416	NA	NA	NA	NA	NA	NA	NA	NA .
10*27715	0	5-23-16.1	STONE HILL MINERAL HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1057	332	NA	NA	NA	NA	NA	NA	NA	NA
10°27959	0	5-23-16.1	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	1/8+	1063	594	NA	NA	NA	NA	NA	NA	NA	NA
	P	E 22.15	DOROTHY TEDROW	GASTAR EXPLORATION USA INC	1/8+	781	539	NA	NA	NA.	NA	NA NA	28/499 Gastar Exploration USA Inc to Atinum Marcellus I LLC	USA Inc and Gastar	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14665	Р	5-23-15	DOKUTHT TEDKOW	USA INC	1/07	/01	333	luo.	100			T		T	
10°14673	P	5-23-15	CAROL CLEMENS	GASTAR EXPLORATION USA INC	1/8+	787	615	NA .	NA	NA	NA	NA	29/157 Gastar Exploration USA Inc to Atinum Marcellus I LLC	USA Inc and Gastar	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14675	P	5-23-15	CHRISTOPHER HENRY	GASTAR EXPLORATION USA INC	1/8+	787	592	NA	NA	NA	NA .	NA	29/157 Gastar Exploration USA Inc to Atinum Marcellus I LLC	USA Inc and Gastar	36/9 Gastar Exploration Inc to TH Exploration II LLC

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10*14676	P	5-23-15	FLOYD ARNOLD HENRY	GASTAR EXPLORATION USA INC	1/8+	787	625	NA	NA NA	NA NA	NA .	NA .	29/157 Gastar Exploration USA Inc to Atinum Marcelius I LLC	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gastar Exploration Inc to TH Exploration II LLC
10°14678	P	5-23-15	TIMOTHY HENRY	GASTAR EXPLORATION USA INC	1/8+	787	568	NA	NA	NA	NA	NA NA	29/157 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14681	P	5-23-15	ELZIE HENRY	GASTAR EXPLORATION USA INC	1/8+	789	573	NA	NA	NA .	NA .	NA NA	29/157 Gastar Exploratior USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gastar Exploration Inc to TH Exploration II LLC
			LAWRENCE EDGAR HENRY	GASTAR EXPLORATION									USA Inc to Atinum	21/41 Gastar Exploration USA Inc and Gastar	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14683	P	5-23-15	JR	USA INC	1/8+	792	106	NA .	NA .	NA NA	NA .	, NA	Marcellus I LLC	Exploration Inc merger	inc to TH Exploration II LLC
10*17642	P	5-23-15	MERCEDES HENRY	TH EXPLORATION, LLC	1/8+	941	231	NA	NA	NA .	NA .	NA NA	NA .	NA	NA .
10*18343	P	5-23-15	DOMINION ENERGY TRANSMISSION INC	TH EXPLORATION, LLC	1/8+	936	79	NA	NA	NA	NA	NA	NA .	NA	NA
10*18682	P	5-23-15	EUGENE RICHARD HENRY SR	TH EXPLORATION, LLC	1/8+	936	131	NA .	NA	NA .	NA	NA	NA	NA	NA.
10*18948	P	5-23-15	ALICIA A HENRY	TH EXPLORATION, LLC	1/8+	940	127	NA	NA	NA	NA .	NA	NA .	NA	NA

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10*18949	P	5-23-15	CAROLYN WHITE	TH EXPLORATION, LLC	1/8+	940	119	NA	NA	NA	NA .	NA .	NA .	NA .	INA .
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10*19427	Р	5-23-15	BOBBY SUE BEDWAY	TH EXPLORATION, LLC	1/8+	940	260	NA	NA	NA	NA	NA	NA	NA .	INA .
					- 4-			ļ		NA .	NA .	NA .	NA	NA .	NA
10*19495	P	5-23-15	DAVID HENRY	TH EXPLORATION, LLC	1/8+	941	643	NA	NA .	NA .	NA .	NA.	NA.		No
	, p		TAMMY HENRY	TH EXPLORATION, LLC	1/8+	941	641	NA NA	NA	NA.	NA	NA .	NA	NA .	NA .
10*19496	P	5-23-15	TAMMY HENRY	TH EXPLORATION, LLC	1/8+	941	641	INA	INA .	INO.	No.				
10*19497	, p	5-23-15	RONALD HENRY	TH EXPLORATION, LLC	1/8+	941	637	NA	NA	NA .	NA	NA NA	NA.	NA NA	NA I
10.19497	P	5-23-15	RONALD HENRY	TH EXPLORATION, ELC	1/0+	341		100	100						
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10*19498	,	5-23-15	DONALD HENRY AND EVA HENRY	TH EXPLORATION, LLC	1/8+	941	639	NA NA	NA	NA	l _{NA}	NA .	NA	NA .	NA .
10-19498	P	5-25-15	HENNI	TH EXPLORATION, LLC	1/6+	341	- 033	, m	ina .						
			ALEXIS HENRY, GUARDIAN	.											
10*19644	P	5-23-15	AD LITEM DAVID C WHITE	TH EXPLORATION, LLC	1/8+	944	114	NA	NA	NA .	NA.	NA	INA.	NA .	NA .
10 17044	r	5-25-15	124	III EAFLOIGHION, ELC	7/0+	344		1	1						
10*19552		5-23-15	LAWRENCE MICHAEL HENRY	TH EXPLORATION, LLC	1/8+	944	97	NA.	NA .	NA .	NA.	NA .	NA	NA NA	NA I
10*19663	IP	3-23-15	LUENK1	I III EAPLORATION, LLC	1/5+	J 744	J 31	Juo	Inst	1,	1	1121	1::		•

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10*19920	Р	5-23-15	KENNETH HENRY	TH EXPLORATION, LLC	1/8+	945	438	NA	NA NA	NA NA	NA	NA .	NA	NA	NA	-
10*21996	Ρ	5-23-15	VERNA HALL	TH EXPLORATION, LLC	1/8+	953	538	NA	NA	NA	NA	NA	NA	NA	NA	
10*24964	P	5-23-15	GARNET GAS CORP	TH EXPLORATION, LLC	1/8+	1029	492	NA	NA	NA.	NA	NA	NA	NA .	NA	
10 21301	·															
			DOMINION ENERGY													
10*18343	Q	5-23-14	TRANSMISSION INC	TH EXPLORATION, LLC	1/8+	936	79	NA	NA .	NA NA	NA NA	NA	NA	NA	NA .	1
												29/325 Chesapeake Appalachia LLC to Statoil	33/110 Chesapeake	41/238 Statoil Onshore	41/256 SWN Production	
10*17192	R	5-23-8	ROBERT J HENRY	CHESAPEAKE APPALACHIA	1/8+	716	193	NA	NA NA	NA	NA	USA Onshore Properties Inc	Appalachia LLC to SWN Production Company LLC	Properties Inc to TH Exploration LLC	Company LLC to TH Exploration LLC	_
														40/408 American	40/418 American Petroleum Partners	
10*19722	R	5-23-8	MASTER MINERAL HOLDINGS I LP	AMERICAN PETROLEUM PARTNERS LLC	1/8+	912	105	NA	NA NA	NA	NA	NA	NA	Petroleum Partners Operating LLC to TH Exploration LLC	Operating LLC to TH Exploration LLC	
												29/325 Chesapeake				
				CHESAPEAKE APPALACHIA								Appalachia LLC to Statoil USA Onshore Properties	Appalachia LLC to SWN	41/238 Statoil Onshore Properties Inc to TH	41/256 SWN Production Company LLC to TH	
10*17189	\$	5-23-9.2	ROBERT J HENRY	ITC	1/8+	716	197	NA	NA .	NA .	NA	Inc	Production Company LLC	Exploration LLC	Exploration LLC	1
												29/325 Chesapeake Appalachia LLC to Statoil	33/110 Chesapeake	41/238 Statoil Onshore	41/256 SWN Production	
10*17189	т	5-23-9.4	ROBERT J HENRY	CHESAPEAKE APPALACHIA	1/8+	716	197	NA .	NA	NA	NA NA	USA Onshore Properties Inc	Appalachia LLC to SWN Production Company LLC	Properties Inc to TH Exploration LLC	Company LLC to TH Exploration LLC	

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10*17189	U	5-23-9.1	ROBERT J HENRY	CHESAPEAKE APPALACHIA LLC	1/8+	716	197	NA	NA .	NA	NA .	29/325 Chesapeake Appalachia LLC to Statoil USA Onshore Properties Inc	33/110 Chesapeake Appalachia LLC to SWN Production Company LLC	41/238 Statoil Onshore Properties Inc to TH Exploration LLC	41/256 SWN Production Company LLC to TH Exploration LLC
10*14786	v	5-23-13	TWILA O WHIPKEY	GASTAR EXPLORATION USA INC	1/8+	799	61	NA	NA	NA	NA	NA .	806/1 Gastar Exploration USA Inc to Atinum Marcellus LLC	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14792	v	5-23-13	тімотну уоно	GASTAR EXPLORATION USA INC	1/8+	799	536	NA	NA	NA	NA	NA	806/1 Gastar Exploration USA Inc to Atinum Marcellus I LLC	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14822	v	5-23-13	ONWARD E BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	876	463	NA	NA	NA	NA	NA	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	35/144 Gastar Exploration Inc to Atinum Marcellus I LLC	36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14823	V	5-23-13	SARAH L BURGE TRUST STEPHEN W BURGE AS TRUSTEE	GASTAR EXPLORATION USA INC	1/8+	876	459	NA	NA	NA	NA	NA .	21/41 Gastar Exploration USA Inc and Gastar Exploration Inc merger	35/144 Gastar Exploration Inc to Atinum Marcellus I ILC	36/9 Gastar Exploration Inc to TH Exploration II LLC
															36/9 Gastar Exploration Inc to TH Exploration II LLC
10*14969	V	5-23-13	REBECCA 5 WORD	GASTAR EXPLORATION INC	1/8+	872	219	NA	NA .	IVA	1975	190		, wa	36/9 Gastar Exploration
10*14970	v	5-23-13	GRACE EXLINE	GASTAR EXPLORATION INC	1/8+	872	623	NA	NA NA	NA	NA	NA .	NA	NA	Inc to TH Exploration II LLC
10*17822	v	5-23-13	ANTOINE E GERAUD	TH EXPLORATION, LLC	1/8+	943	560	NA	NA	NA	NA	NA	NA	NA	NA

10*18114	v	5-23-13	DARRELL NEWLAND	TH EXPLORATION, LLC	1/8+	927	66	NA	NA	NA	NA	NA	NA NA	NA	NA
			DONALD R NEWLAND AND												NA.
10*18115	V.	5-23-13	CRAIG ALAN YOHO AND	TH EXPLORATION, LLC	1/8+	927	73	NA .	NA .	NA NA	NA NA	NA	NA NA	NA NA	NA NA
10*18369	v	5-23-13	DONNA M YOHO SAMUEL D YOHO	TH EXPLORATION, LLC TH EXPLORATION, LLC	1/8+	931	303	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA
10*18379	v	5-23-13	DAVID N DEVICK TRUSTEE OF THE TON! JO MASON LIVING TRUST		1/8+	932	439	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA.	NA NA
						933	439	NA	NA	NΔ	NA NA	NA	NA	NA NA	NA
10*18541	v	5-23-13	PATRICK P MCHENRY	TH EXPLORATION, LLC	1/8+		624	I I I	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
10*18818	V	5-23-13	LUCILLE R MCHENRY	TH EXPLORATION, LLC	1/8+	937	624	NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA

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10*19540	v	5-23-13	ERICA M MASON	TH EXPLORATION, LLC	1/8+	942	53	NA	NA	NA	NA	NA .	NA	NA	NA
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10*19543	V	5-23-13	ROBERT I BONAR SR	TH EXPLORATION, LLC	1/8+	942	61	NA	NA .	NA.	NA	NA .	NA	NA	NA
10.13343		3-23-13	ROBERT FBONAR SR	THE ESTATION, EEC	2/0.	3-72	<u> </u>	NA.							
10*19640	v	5-23-13	MARGARET F RICHMOND	TH EXPLORATION, LLC	1/8+	944	120	NA	NA	NA	NA	NA	NA	NA	NA
			1												
			BRADFORD D LOWERY &					l	INA .	NA .	NA	NA .	NA.	NA.	NA
10*19641	V	5-23-13	DEBORAH BRADFORD	TH EXPLORATION, LLC	1/8+	944	122	NA .	INA	INA .	NA .	NA .	INA	NA .	100
10*19650	v	5-23-13	CLAUDIA LOWERY MALLOY	TH EXPLORATION, LLC	1/8+	944	99	NA	NA	NA	NA	NA	NA	NA .	NA
						İ									
10*19652	V	5-23-13	JACK R HAMMERS	TH EXPLORATION, LLC	1/8+	944	108	NA	NA	NA	NA .	NA	NA	NA	NA
10*19657	v	5-23-13	JANET LEE SPARKS	TH EXPLORATION, LLC	1/8+	964	440	NA	NA .	NA	NA	NA	NA	NA	NA
		- 35 85													
			CARL M MCHENRY AND												
10*19732	v	5-23-13	PAMELA MCHENRY	TH EXPLORATION, LLC	1/8+	944	469	NA	NA	NA	NA	NA	NA	NA	NA



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10*19858	V	5-23-13	JAMES MICHAEL YOHO	TH EXPLORATION, LLC	1/8+	960	188	NA .	NA	NA .	NA .	NA	NA	NA	NA .
														1	
10*19903	v	5-23-13	PAUL F HAMMERS	TH EXPLORATION, LLC	1/8+	948	236	NA NA	NA.	NA	NA	NA .	NA	NA	NA
10 13303	, , , , , , , , , , , , , , , , , , , ,	3-23-23	TAGET HAMMEN	THE COUNTY LEG	270	5,0									
10*19996	v	5-23-13	CHARLES D WOOD	TH EXPLORATION, LLC	1/8+	947	589	NA	NA	NA	NA	NA .	NA	NA	NA
			ARDITH R ROSE AND												
10*21073	v	5-23-13	TOMMY E ROSE	TH EXPLORATION, LLC	1/8+	951	608	NA	NA	NA	NA	NA	NA	NA .	NA
														1	
														1	
			MALCOLM E WOOD AND											l	
10*21074	V	5-23-13	JOAN J WOOD	TH EXPLORATION, LLC	1/8+	951	610	NA	NA	NA .	NA	NA	NA	NA .	NA
10*21174	v	5-23-13	SHAWN M WOOD	TH EXPLORATION, LLC	1/8+	952	190	NA.	NA .	NA NA	NA.	NA.	NA.	NA.	NA .
10-21174	V	5-23-13	SHAWN W WOOD	TH EXPLORATION, LLC	1/0+	532	190	NA .		100	no.				
10*21419	v	5-23-13	DAPHNE HUFFMAN AND CHARLES HUFFMAN	TH EXPLORATION, LLC	1/8+	957	59	NA	NA	NA	NA	NA	NA	NA	NA
			GARY WAYNE ZESIGER &												
10*21431	v	5-23-13	VICKIE ZESIGER	TH EXPLORATION, LLC	1/8+	957	57	NA	NA	NA	NA	NA	NA	NA	NA

														Υ	
												:			
10*21436	v	5-23-13	CECILIA D NEWLAND	TH EXPLORATION, LLC	1/8+	957	55	NA	NA	NA	NA	NA	NA	NA	NA
10*21439		5-23-13	M VIRGINIA & EDWARD C MARSH	TH EXPLORATION, LLC	1/8+	957	53	NA	NA NA	NA .	NA	NA	NA	NA	NA
													}		
10*21469	v	5-23-13	KIMBERLY S DENNY AND JAMES E DENNY	TH EXPLORATION, LLC	1/8+	957	244	NA.	NA .	NA .	NA .	NA .	NA.	NA .	l _{NA}
10-21469	V	5-23-13	JAMES E DENNY	TH EXPLORATION, LLC	1/8+	93/	244	NA	NA.	la constant de la con					
													l	NA .	l _{NA}
10*21471	v	5-23-13	RICHARD ROSS WILSON	TH EXPLORATION, LLC	1/8+	960	190	NA	NA	NA	INA	NA	NA	NA .	NA
			ROBERT CRAIG MONTGOMERY AND												
10*21620	V	5-23-13	CYNTHIA R MONTGOMERY	TH EXPLORATION, LLC	1/8+	959	496	NA	NA	NA	NA	NA	NA	NA	NA
10*21621	v	5-23-13	MARILYN NOEL	TH EXPLORATION, LLC	1/8+	959	494	NA	NA	NA	NA	NA	NA	NA	NA
10*21658	v	5-23-13	CLARENCE RICHARD ZESIGER & MARY ZESIGER	TH EXPLORATION, LLC	1/8+	959	490	NA	NA	NA	NA	NA	NA	NA	NA
10*21659		5-23-13	DEBORAH BLOUGH	TH EXPLORATION, LLC	1/8+	958	392	NA .	NA	NA .	NA .	NA	NA	NA	NA
		4	1				· · · · · · · · · · · · · · · · · · ·			•	•				

															1
10*21660	v	5-23-13	PAMELA L DRAZIC AND JEFFREY DRAZIC	TH EXPLORATION, LLC	1/8+	958	390	NA .	NA .	NA .	.NA	NA .	NA NA	NA .	INA
10 21660		3-23-13	JEFFRET DIVIZIO	In Executation, Ecc	Дот	330	330	no.							
10*21830	v	5-23-13	MARISSA MASON	TH EXPLORATION, LLC	1/8+	960	200	NA	NA	NA	NA	NA	NA	NA	NA
											:				
10*21831	v	5-23-13	MATTHEW MASON	TH EXPLORATION, LLC	1/8+	966	122	NA	NA .	NA	NA .	NA	NA	NA	NA
20 2202				,											
10*21834	v	5-23-13	GEORGE DANIEL KRUGER	TH EXPLORATION, LLC	1/8+	960	204	NA	NA	NA	NA	NA	NA	NA	NA
										ļ		NA NA	NA.	NA .	l _{MA}
10*21944	V	5-23-13	JILL A BECK	TH EXPLORATION, LLC	1/8+	960	101	NA	NA .	NA	NA	NA .	INA	NA .	NA.
10*21947	v	5-23-13	WALLACE LYNN WENDEL	TH EXPLORATION, LLC	1/8+	965	59	NA	NA	NA	NA	NA	NA	NA	NA
			DEBORAH K KLIMASZEWSI AND FRANK												
10*22007	v	5-23-13	KLIMASZEWSKI	TH EXPLORATION, LLC	1/8+	959	492	NA	NA.	NA	NA	NA	NA	NA	NA
			COLIN R YOHO AND											N/A	NA
10*22008	i v	5-23-13	NORMA L YOHO	TH EXPLORATION, LLC	1/8+	953	304	NA	NA	NA	NA	INA	INA	INA	INA

								r		1					
	!						!								
			MARK EUGENE YOHO &												
10*22025	V	5-23-13	MARY YOHO	TH EXPLORATION, LLC	1/8+	960	544	NA	NA	NA	NA	NA	NA	NA	NA
			PHILLIP YOHO AND						l _{NA}	NA	NA .	NA.	NA	NA	NA .
10*22031	V	5-23-13	PATRICIA YOHO	TH EXPLORATION, LLC	1/8+	960	535	NA	INA	NA	INA .				
10#22072	v	5-23-13	JOANNE E RAY	TH EXPLORATION, LLC	1/8+	960	537	NA	NA	NA	NA	NA .	NA	NA	NA
10*22032	· · ·	3-23-23		, , ,											
10*22106	V	5-23-13	BARRY RAY MOORE	TH EXPLORATION, LLC	1/8+	954	643	NA	NA	NA	NA	NA	NA	NA	NA
10*22129	v	5-23-13	JANICE N HAUDENSCHILT	TH EXPLORATION, LLC	1/8+	961	459	NA	NA	NA .	NA	NA	NA	NA	NA
					1/0.	961	466	NΔ	NA .	NA .	NA .	NA	NA	NA	NA
10*22137	V	5-23-13	CONNIE L NEELY	TH EXPLORATION, LLC	1/8+	961	400	NA .	DO.						
10*22285	v	5-23-13	DONALD JAMES WILSON AND SANDY L WILSON	TH EXPLORATION, LLC	1/8+	962	193	NA	NA	NA	NA	NA	NA	NA	NA
10*22334	v	5-23-13	JOHN BRYANT	TH EXPLORATION, LLC	1/8+	962	540	NA	NA	NA	NA	NA	NA	NA	NA

										- 1		T	1	T	
10*22434	\ v	5-23-13	EDWIN NELSON WOOD	TH EXPLORATION 11C	1/8+	963	637	NA	NA .	NA	NA NA	NA	NA.	NA	NA
10 22454	·	3-23-13	EDWIN NELDON WOOD	The Editorion, and	2,0	3.3									
10*22510	V	5-23-13	DONNA V YOHO	TH EXPLORATION, LLC	1/8+	964	432	NA	NA	NA .	NA	NA	NA	NA	NA
10*22561	v	5-23-13	MARY ROSE YOHO	TH EXPLORATION, LLC	1/8+	968	200	NA	NA	NA	NA	NA	NA	NA	NA
				1											
									1						
									<u> </u>		NA .	l	NA	NA	NA
10*22562	V	5-23-13	HAROLD C SIMMONS	TH EXPLORATION, LLC	1/8+	966	100	NA .	NA	NA	INA	INA	INA .	INA .	INA
10*22563	v	5-23-13	KIMBERLY D STRAUCH	TH EXPLORATION, LLC	1/8+	966	522	NA	NA	NA NA	NA	NA	NA	NA	NA
10*22585	v	5-23-13	CYNTHIA L CHICK	TH EXPLORATION, LLC	1/8+	966	102	NA	NA .	NA NA	NA	NA	NA NA	NA	NA
10 22585	· ·	5-23-15	CINTRIALCHICK	THEATEONATION, EEC	1/0+	300	102	100	no.						
			WILLIAM R RICHMOND												
10*22718	.v.	5-23-13	AND CONNIE S RICHMOND	TH EXPLORATION, LLC	1/8+	963	389	NA	NA	NA	NA	NA	NA	NA	NA
10*23372	\ v	5-23-13	DEWEY A MILICIA AND ROBIN MILICIA	TH EXPLORATION, LLC	1/8+	1008	320	NA	NA NA	NA	l _{NA}	NA .	NA	NA	NA .

			T	1			ı	1			T	Т	T		1
					:										
			DANA MILICIA												
10*23373	v	5-23-13	HUMPHREYS	TH EXPLORATION, LLC	1/8+	988	429	NA	NA	NA	NA	NA	NA	NA .	NA
			NICOLETTA MILICIA												
10*23446	v	5-23-13	BLOODWORTH	TH EXPLORATION, LLC	1/8+	1008	316	NA	NA	NA	NA	NA	NA	NA	NA
			LINDA K TOTTEN AND												
10*23669	v	5-23-13	JERRY STEPHEN TOTTEN	TH EXPLORATION, LLC	1/8+	1010	358	NA	NA	NA	NA	NA	NA	NA	NA
			CHARLES SIBURT AND												
10*24003	V	5-23-13	PAULA SIBURT	TH EXPLORATION, LLC	1/8+	1020	193	NA	NA	NA	NA	NA	NA	NA	NA
			MARY MARTHA BELLE												
10*24291	V	5-23-13	DOYLE	TH EXPLORATION, LLC	1/8+	1024	285	NA	NA	NA .	NA	NA .	NA	NA	NA
														1	
10*24491	v	5-23-13	DENISE A GALE	TH EXPLORATION, LLC	1/8+	1008	324	NA	NA	NA	NA	NA	NA	NA	NA
10*24890	V	5-23-13	DEBRA JANE GALE	TH EXPLORATION, LLC	1/8+	1021	122	NA	NA	NA	NA	NA	NA	NA	NA
10*25065	v	5-23-13	COLBY G WOOD	TH EXPLORATION, LLC	1/8+	1027	103	NA	NA	NA	NA	INA	NA	NA	NA

10*25066		5-23-13	RODGER A HENDERSON JR	TH EVELOPATION LLC	1/8+	1027	97	NA.	NA.	NA NA	NA .	NA .	NA .	NA	NA
10-25066	V	3-23-23	RODGEN A HENDERSON IN	TH EXPLORATION, ECC	1,01	1027		ins.							
10*27959	\ \ \	5-23-13	STONE HILL MINERALS HOLDINGS LLC	TH EXPLORATION, LLC	1/8÷	1063	594	NA NA	NA.	NA	NA	NA	NA	NA	NA



July 15, 2020

WV Department of Environmental Protection Office of Oil & Gas 601 57th Street, SE Charleston, WV 25304 Attention: Laura Adkins

RE: McMasters S-16HU

Subject: Marshall County Route 21/9 and 29 Road Crossing Letter

Dear Laura:

Tug Hill Operating, LLC (THO) hereby submits this letter as confirmation that THO has obtained the right to drill, extract and produce the minerals under Marshall County Route 21/9 and 29 in the area reflected on the McMasters S-16HU well plat. THO has conducted a full title search in the relevant Court House to confirm its ownership under said County Routes and is not currently aware of any recorded document that would suggest an ownership other than THO.

If your office has any questions or concerns regarding the contents of this letter, please do not hesitate to contact me directly at 304-376-0111, or by email at amiller@tug-hillop.com.

Sincerely,

Amy Miller

Permit Specialist – Appalachia Region

Cell 304-376-0111

Email: amiller@tug-hillop.com

Office of Oil and Gas

JUL 17 2020

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE CERTIFICATION

Date of Hoth	ce Certification: 07/15/2020		API No. 47- 061 -				
				Well No. McMa	esters S-16HU		
		-73	Well Pad N	lame: Shields			
Notice has l	een given:	eccion v el la company	24.4.5	w X			
Pursuant to th	e provisions in West Virginia Code	§ 22-6A, the Operator has prov	ided the req	juired parties v	ith the Notice Forms listed		
State:	tract of land as follows: West Virginia		Easting:	518,197,28			
County:	Marshall		Northing:	4,401,175.30			
District:	Franklin	Public Road Acce		Burch Ridge Roa	d (CR 29)		
Quadrangle:	Powhatan Point 7.5	Generally used far		Robert L. Shields			
Watershed:	Lower Fish Creek	Generally used the	an manie.	TIDESTEE, CANADA	- 50- 50		
prescribed by it has provid- information r of giving the requirements Virginia Code of this article	West Virginia Code § 22-6A-7(b), the secretary, shall be verified and set the owners of the surface description (b) and (c), se surface owner notice of entry to surface owner notice of subsection (b), section sixteen of subsection (b), the applicant shall thave been completed by the applicant	thall contain the following infor bed in subdivisions (1), (2) an ection sixteen of this article; (ii) arvey pursuant to subsection (a of this article were waived in va- tender proof of and certify to that.	rmation: (14 ad (4), subs) that the red a), section to writing by e secretary	 A certification (b), see quirement was ten of this artitle surface over that the notice 	on from the operator that (i) tion ten of this article, the deemed satisfied as a result cle six-a; or (iii) the notice oner; and Pursuant to West		
that the Ope	West Virginia Code § 22-6A, the Operator has properly served the require		is Notice C	ertification	OOG OFFICE USE		
*PLEASE CHI	CK ALL THAT APPLY				ONLY		
□ 1, NO*	TICE OF SEISMIC ACTIVITY or	■ NOTICE NOT REQUIR SEISMIC ACTIVITY WAS		JSE NO	ET BEGGETTER		
		SEISMIC ACTIVITY WAS	CONDUC	TED	RECEIVED/ NOT REQUIRED		
■ 2. NO	TICE OF ENTRY FOR PLAT SURV			and the second	The State of the S		
	FICE OF ENTRY FOR PLAT SURV		Y WAS CO	ONDUCTED USE	NOT REQUIRED RECEIVED RECEIVED NOT REQUIRE/FO		
		EY or □ NO PLAT SURVE NOTICE NOT REQUIR NOTICE OF ENTRY FOR P	Y WAS CO ED BECAU LAT SURV	ONDUCTED JSE /EY	NOT REQUIRED RECEIVED RECEIVED NOT REQUIRED JUL 17		
□ 3. No		EY or ☐ NO PLAT SURVE NOTICE NOT REQUIR NOTICE OF ENTRY FOR P WAS CONDUCTED or WRITTEN WAIVER B	Y WAS CO ED BECAU LAT SURV	ONDUCTED JSE /EY	NOT REQUIRED RECEIVED RECEIVED NOT REQUIRE/FO		
□ 3. NO	FICE OF INTENT TO DRILL. or	EY or ☐ NO PLAT SURVE NOTICE NOT REQUIR NOTICE OF ENTRY FOR P WAS CONDUCTED or WRITTEN WAIVER B	Y WAS CO ED BECAU LAT SURV	ONDUCTED JSE /EY	NOT REQUIRED RECEIVED RECEIVED NOT REQUIRED JUL 17		

Required Attachments:

The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that have been provided to the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class II Legal Advertisement with publication date verification or the associated Affidavit of Publication. The attached Notice Forms and Certifications of Notice shall serve as proof that the required parties have been noticed as required under West Virginia Code § 22-6A. Pursuant to West Virginia Code § 22-6A-11(b), the Certification of Notice to the person may be made by affidavit of personal service, the return receipt card or other postal receipt for certified mailing.

Certification of Notice is hereby given:

THEREFORE, I Amy L. Miller , have read and understand the notice requirements within West Virginia Code § 22-6A. I certify that as required under West Virginia Code § 22-6A, I have served the attached copies of the Notice Forms, identified above, to the required parties through personal service, by registered mail or by any method of delivery that requires a receipt or signature confirmation. I certify under penalty of law that I have personally examined and am familiar with the information submitted in this Notice Certification and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

 Well Operator:
 Tug Hill Operating, LLC
 Address:
 380 Southpointe Boulevard, Plaza II, Suite 200

 By:
 Amy L. Miller
 Canonsburg, PA 15317

 Its:
 Permitting Specialist Appalachia Region
 Facsimile:
 724-338-2030

 Telephone:
 724-749-8388
 Email:
 amiller@tug-hillop.com

NOTARY SEAL

Commonwealth of Pennsylvania - Notary Seal

MAUREEN A STEAD - Notary Public

Washington County

My Commission Expires Jan 28, 2023

Commission Number 1259926

Subscribed and sworn before me this 15 day of JVLN 1 2020.

Notary Public

My Commission Expires 1/28/

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at deprivacyofficer@wv.gov.

RECEIVED
Office of Oil and Gas

JUL 17 2020

API NO. 47-0514 7 0 5 1 0 2 3 3 7
OPERATOR WELL NO. McMasters S-16HU
Well Pad Name: Shields

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF APPLICATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 7/13/2020 Date Permit Application Filed: 7/16/2020 Notice of: PERMIT FOR ANY CERTIFICATE OF APPROVAL FOR THE WELL WORK CONSTRUCTION OF AN IMPOUNDMENT OR PIT Delivery method pursuant to West Virginia Code § 22-6A-10(b) **PERSONAL** REGISTERED ☑ METHOD OF DELIVERY THAT REQUIRES A **SERVICE** MAIL. RECEIPT OR SIGNATURE CONFIRMATION Pursuant to W. Va. Code § 22-6A-10(b) no later than the filing date of the application, the applicant for a permit for any well work or for a certificate of approval for the construction of an impoundment or pit as required by this article shall deliver, by personal service or by registered mail or by any method of delivery that requires a receipt or signature confirmation, copies of the application, the erosion and sediment control plan required by section seven of this article, and the well plat to each of the following persons: (1) The owners of record of the surface of the tract on which the well is or is proposed to be located; (2) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for roads or other land disturbance as described in the erosion and sediment control plan submitted pursuant to subsection (c), section seven of this article; (3) The coal owner, operator or lessee, in the event the tract of land on which the well proposed to be drilled is located [sic] is known to be underlain by one or more coal seams; (4) The owners of record of the surface tract or tracts overlying the oil and gas leasehold being developed by the proposed well work, if the surface tract is to be used for the placement, construction, enlargement, alteration, repair, removal or abandonment of any impoundment or pit as described in section nine of this article; (5) Any surface owner or water purveyor who is known to the applicant to have a water well, spring or water supply source located within one thousand five hundred feet of the center of the well pad which is used to provide water for consumption by humans or domestic animals; and (6) The operator of any natural gas storage field within which the proposed well work activity is to take place. (c)(1) If more than three tenants in common or other co-owners of interests described in subsection (b) of this section hold interests in the lands, the applicant may serve the documents required upon the person described in the records of the sheriff required to be maintained pursuant to section eight, article one, chapter eleven-a of this code. (2) Notwithstanding any provision of this article to the contrary, notice to a lien holder is not notice to a landowner, unless the lien holder is the landowner. W. Va. Code R. § 35-8-5.7.a requires, in part, that the operator shall also provide the Well Site Safety Plan ("WSSP") to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule. ☐ Application Notice ☐ WSSP Notice ☐ E&S Plan Notice ☐ Well Plat Notice is hereby provided to: ☐ SURFACE OWNER(s) COAL OWNER OR LESSEE Name: Donald Shields (Pad and Access Road) Name: CONSOL Energy Address: 1000 Consol Drive Address: 231 Lonesome Ln. Proctor, WV 26055 Canonsburg, PA 15317 COAL OPERATOR Name: Robert and Rebecca Shields (Pad and Access Road) Name: CONSOL Energy Address: 2756 Burch Ridge Road Proctor, WV 26055 Address: 1000 Consol Drive JUL 17 2020 Canonsburg, PA 15317 ☑ SURFACE OWNER(s) (Road and/or Other Disturbance) Name: Mark A. Yoho ☑ SURFACE OWNER OF WATER WELL WV Department of Address: 6701 Burch Ridge Road AND/OR WATER PURVEYOR(s) **Environmental Protection** Name: Nikki L. & Jonathan Stevens Proctor, WV 26055 Address: 757 Weeping Willow Lane Name: Mark E. Yoho Proctor, WV 26055 Address: 3998 Burch Ridge Road **TOPERATOR OF ANY NATURAL GAS STORAGE FIELD** Proctor, WV 26055 ☐ SURFACE OWNER(s) (Impoundments or Pits) Name: n/a Address: Name: n/a Address: *Please attach additional forms if necessary



Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(b), notice is hereby given that the undersigned well operator has applied for a permit for well work or for a certificate of approval for the construction of an impoundment or pit.

This Notice Shall Include:

Pursuant to W. Va. Code § 22-6A-10(b), this notice shall include: (1) copies of the application; (2) the erosion and sediment control plan required by section seven of this article; and (3) the well plat.

Pursuant to W. Va. Code § 22-6A-10(f), this notice shall include: (1) a statement of the time limits for filing written comments; (2) who may file written comments; (3) the name and address of the secretary for the purpose of filing the comments and obtaining additional information; and (4) a statement that the persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Pursuant to W. Va, Code R. § 35-8-5.7,a, the operator shall provide the Well Site Safety Plan to the surface owner and any water purveyor or surface owner subject to notice and water testing as provided in section 15 of this rule.

Pursuant to W. Va. Code R. § 35-8-15.2.c, this notice shall: (1) contain a statement of the surface owner's and water purveyor's right to request sampling and analysis; (2) advise the surface owner and water purveyor of the rebuttable presumption for contamination or deprivation of a fresh water source or supply; advise the surface owner and water purveyor that refusal to allow the operator to conduct a pre-drilling water well test constitutes a method to rebut the presumption of liability; (3) advise the surface owner and water purveyor of his or her independent right to sample and analyze any water supply at his or her own expense; advise the surface owner and water purveyor whether or not the operator will utilize an independent laboratory to analyze any sample; and (4) advise the surface owner and or water purveyor that he or she can obtain from the Chief a list of water testing laboratories in the subject area capable of and qualified to test water supplies in accordance with standard acceptable methods.

Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environment JUL 17 2020 and-gas/pages/default.aspx.

Well Location Restrictions

WV Department of Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any example of the second section. water well or developed spring used for human or domestic animal consumption. The center of well pads may not be located within six hundred twenty-five feet of an occupied dwelling structure, or a building two thousand five hundred square feet or larger used to house or shelter dairy cattle or poultry husbandry. This limitation is applicable to those wells, developed springs, dwellings or agricultural buildings that existed on the date a notice to the surface owner of planned entry for surveying or staking as provided in section ten of this article or a notice of intent to drill a horizontal well as provided in subsection (b), section sixteen of this article was provided, whichever occurs first, and to any dwelling under construction prior to that date. This limitation may be waived by written consent of the surface owner transmitted to the department and recorded in the real property records maintained by the clerk of the county commission for the county in which such property is located. Furthermore, the well operator may be granted a variance by the secretary from these distance restrictions upon submission of a plan which identifies the sufficient measures, facilities or practices to be employed during well site construction, drilling and operations. The variance, if granted, shall include terms and conditions the department requires to ensure the safety and protection of affected persons and property. The terms and conditions may include insurance, bonding and indemnification, as well as technical requirements. (b) No well pad may be prepared or well drilled within one hundred feet measured horizontally from any perennial stream, natural or artificial lake, pond or reservoir, or a wetland, or within three hundred feet of a naturally reproducing trout stream. No well pad may be located within one thousand feet of a surface or ground water intake of a public water supply. The distance from the public water supply as identified by the department shall be measured as follows: (1) For a surface water intake on a lake or reservoir, the distance shall be measured from the boundary of the lake or reservoir. (2) For a surface water intake on a flowing stream, the distance shall be measured from a semicircular radius extending upstream of the surface water intake. (3) For a groundwater source, the distance shall be measured from the wellhead or spring. The department may, in its discretion, waive these distance restrictions upon submission of a plan identifying sufficient measures, facilities or practices to be employed during well site construction, drilling and operations to protect the waters of the state. A waiver, if granted, shall impose any permit conditions as the secretary considers necessary. (c) Notwithstanding the foregoing provisions of this section, nothing contained in this section prevents an operator from conducting the activities permitted or authorized by a Clean Water Act Section 404 permit or other approval from the United States Army Corps of Engineers within any waters of the state or within the restricted areas referenced in this section. (d) The well location restrictions set forth in this section shall not apply to any well on a multiple well pad if at least one of the wells was permitted prior to the effective date of this article. (e) The secretary shall, by December 31, 2012, report to the Legislature on the noise, light, dust and volatile organic compounds generated by the drilling of horizontal wells as they relate to the well location restrictions regarding occupied dwelling structures pursuant to this section. Upon a finding, if any, by the secretary that the well location restrictions regarding occupied dwelling structures are inadequate or otherwise require alteration to address the items

W	W-6A	
(8-	-13)	

API NO. 47-051 OPERATOR WELL NO. McMasters S-16HU
Well Pad Name: Spinol 1 0 2 3 3

Well Pad Name: Psinds 1 0 2 3 3 examined in the study required by this subsection, the secretary shall have the authority to propose for promulgation legislative rules establishing guidelines and procedures regarding reasonable levels of noise, light, dust and volatile organic compounds relating to drilling horizontal wells, including reasonable means of mitigating such factors, if necessary.

Water Well Testing:

Pursuant to West Virginia Code § 22-6A-10(d), notification shall be made, with respect to surface landowners identified in subsection (b) or water purveyors identified in subdivision (5), subsection (b) of this section, of the opportunity for testing their water well. The operator shall provide an analysis to such surface landowner or water purveyor at their request.

Water Testing Laboratories:

Pursuant to West Virginia Code § 22-6A-10(i), persons entitled to notice pursuant to subsection (b) of this section may contact the department to ascertain the names and locations of water testing laboratories in the subject area capable and qualified to test water supplies in accordance with standard accepted methods. In compiling that list of names the department shall consult with the state Bureau for Public Health and local health departments. A surface owner and water purveyor has an independent right to sample and analyze any water supply at his or her own expense. The laboratory utilized by the operator shall be approved by the agency as being certified and capable of performing sample analyses in accordance with this section.

Rebuttable Presumption for Contamination or Deprivation of a Fresh Water Source or Supply:

W. Va. Code § 22-6A-18 requires that (b) unless rebutted by one of the defenses established in subsection (c) of this section, in any action for contamination or deprivation of a fresh water source or supply within one thousand five hundred feet of the center of the well pad for horizontal well, there is a rebuttable presumption that the drilling and the oil or gas well or either was the proximate cause of the contamination or deprivation of the fresh water source or supply. (c) In order to rebut the presumption of liability established in subsection (b) of this section, the operator must prove by a preponderance of the evidence one of the following defenses: (1) The pollution existed prior to the drilling or alteration activity as determined by a predrilling or prealteration water well test. (2) The landowner or water purveyor refused to allow the operator access to the property to conduct a predrilling or prealteration water well test. (3) The water supply is not within one thousand five hundred feet of the well. (4) The pollution occurred more than six months after completion of drilling or alteration activities. (5) The pollution occurred as the result of some cause other than the drilling or alteration activity. (d) Any operator electing to preserve its defenses under subdivision (1), subsection (c) of this section shall retain the services of an independent certified laboratory to conduct the predrilling or prealteration water well test. A copy of the results of the test shall be submitted to the department and the surface owner or water purveyor in a manner prescribed by the secretary. (e) Any operator shall replace the water supply of an owner of interest in real property who obtains all or part of that owner's supply of water for domestic, agricultural, industrial or other legitimate use from an underground or surface source with a comparable water supply where the secretary determines that the water supply has been affected by contamination, diminution or interruption proximately caused by the oil or gas operation, unless waived in writing by that owner. (f) The secretary may order the operator conducting the oil or gas operation to: (1) Provide an emergency drinking water supply within twenty-four hours; (2) Provide temporary water supply within seventy-two hours; (3) Within thirty days begin activities to establish a permanent water supply or submit a proposal to the secretary outlining the measures and timetables to be used in establishing a permanent supply. The total time in providing a permanent water supply may not exceed two years. If the operator demonstrates that providing a permanent replacement water supply cannot be completed within two years, the secretary may extend the time frame on case-by-case basis; and (4) Pay all reasonable costs incurred by the real property owner in securing a water supply. (g) A person as described in subsection (b) of this section aggrieved under the provisions of subsections (b), (e) or (f) of this section may seek relief in court... (i) Notwithstanding the denial of the operator of responsibility for the damage to the real property owner's water supply or the status of any appeal on determination of liability for the damage to the real property owner's water supply, the operator may not discontinue providing the required water service until authorized to do so by the secretary or a court of competent jurisdiction.

Written Comment:

Pursuant to West Virginia Code § 22-6A-11(a), all persons described in subsection (b), section ten of this article may file written comments with the secretary as to the location or construction of the applicant's proposed well work within thirty days a proposed well work to the Secretary at:

Chief, Office of Oil and Gas Department of Environmental Protection 601 57th St. SE Charleston, WV 25304 (304) 926-0450 WV Department of Environmental Protection

Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water. NOTE: YOU ARE NOT REQUIRED TO FILE ANY COMMENT.

Time Limits and Methods for Filing Comments.

The law requires these materials to be served on or before the date the operator files its Application. You have THIRTY (30) DAYS after the filing date to file your comments. Comments must be filed in person or received in the mail by the Chief's office by the time stated above. You may call the Chief's office to be sure of the date. Check with your postmaster to ensure adequate delivery time or to arrange special expedited handling. If you have been contacted by the well operator and you have signed a "voluntary statement of no objection" to the planned work described in these materials, then the permit may be issued at any time.

Pursuant to West Virginia Code § 22-6A-11(c)(2), Any objections of the affected coal operators and coal seam owners and lessees shall be addressed through the processes and procedures that exist under sections fifteen, seventeen and forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article. The written comments filed by the parties entitled to notice under subdivisions (1), (2), (4), (5) and (6), subsection (b), section ten of this article shall be considered by the secretary in the permit issuance process, but the parties are not entitled to participate in the processes and proceedings that exist under sections fifteen, seventeen or forty, article six of this chapter, as applicable and as incorporated into this article by section five of this article.

Comment Requirements

Your comments must be in writing and include your name, address and telephone number, the well operator's name and well number and the approximate location of the proposed well site including district and county from the application. You may add other documents, such as sketches, maps or photographs to support your comments.

Disclaimer: All comments received will be placed on our web site http://www.dep.wv.gov/oil-and-gas/Horizontal-Permits/Pages/default.aspx and the applicant will automatically be forwarded an email notice that such comments have been submitted. The applicant will be expected to provide a response to comments submitted by any surface owner, water purveyor or natural gas storage operator noticed within the application.

Permit Denial or Condition

The Chief has the power to deny or condition a well work permit. Pursuant to West Virginia Code § 22-6A-8(d), the permit may not be issued or be conditioned, including conditions with respect to the location of the well and access roads prior to issuance if the director determines that:

- (1) The proposed well work will constitute a hazard to the safety of persons;
- (2) The plan for soil erosion and sediment control is not adequate or effective;
- (3) Damage would occur to publicly owned lands or resources; or
- (4) The proposed well work fails to protect fresh water sources or supplies.

A permit may also be denied under West Virginia Code § 22-6A-7(k), the secretary shall deny the issuance of a permit if the secretary determines that the applicant has committed a substantial violation of a previously issued permit for a horizontal well, including the applicable erosion and sediment control plan associated with the previously issued permit, or a substantial violation of one or more of the rules promulgated under this article, and in each instance has failed to abate or seek review of the violation within the time prescribed by the secretary pursuant to the provisions of subdivisions (1) and (2), subsection (a), section five of this article and the rules promulgated hereunder, which time may not be unreasonable.

Pursuant to West Virginia Code § 22-6A-10(g), any person entitled to submit written comments to the secretary pursuant to subsection (a), section eleven of this article, shall also be entitled to receive from the secretary a copy of the permit as issued or a copy of the order modifying or denying the permit if the person requests receipt of them as a part of the written comments submitted concerning the permit application. Such persons may request, at the time of submitting written comments, notice of the permit decision and a list of persons qualified to test water.

Office of Oil and Gas

JUL 17 2020

WW-6A	
(8-13)	

API NO. 47-051 OPERATOR WELL NO ME Well Pad Name, Shelds

MY I						*
Not	ce	IS	here	DV	given	DV:

Well Operator: Tug Hill Operating, LLC

Telephone: 724-749-8388

Email: amiller@tug-hillop.com

Address: 380 Southpointe Boulevard, Plaza II, Suite 200

Canonsburg, PA 15317

Facsimile: 724-338-2030

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.

Commonwealth of Pennsylvania - Notary Seal Chester Arthur West IV, Notary Public Washington County My commission expires February 10, 2024 Commission number 1267179

Member, Pennsylvania Association of Netaries

day of July, 2020 Subscribed and sworn before me this 13 Notary Public

My Commission Expires

RECEIVED Office of Oil and Gas

JUL 17 2020

WW-6A

Supplement Pg. 1A

Tug Hill Operating, LLC 380 Southpointe BLVD, Suite 200 Canonsburg, PA 15317

WATER WELL REPORT

Well: MCMASTERS S-16HU

District: Franklin County: Marshall State: WV

There appears to be One (1) possible water source within 2,000 feet of the above referenced well location.

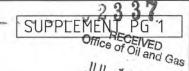
Topo Spot # 1	T	
(House/Cabin)		
TM 5-18-3.1		
Nikki L. & Jonathan Stevens		
757 Weeping Willow Ln.		
Proctor, WV 26055		
304-771-0630 ©		
740-255-3620 ©		
336-239-2605 ©		

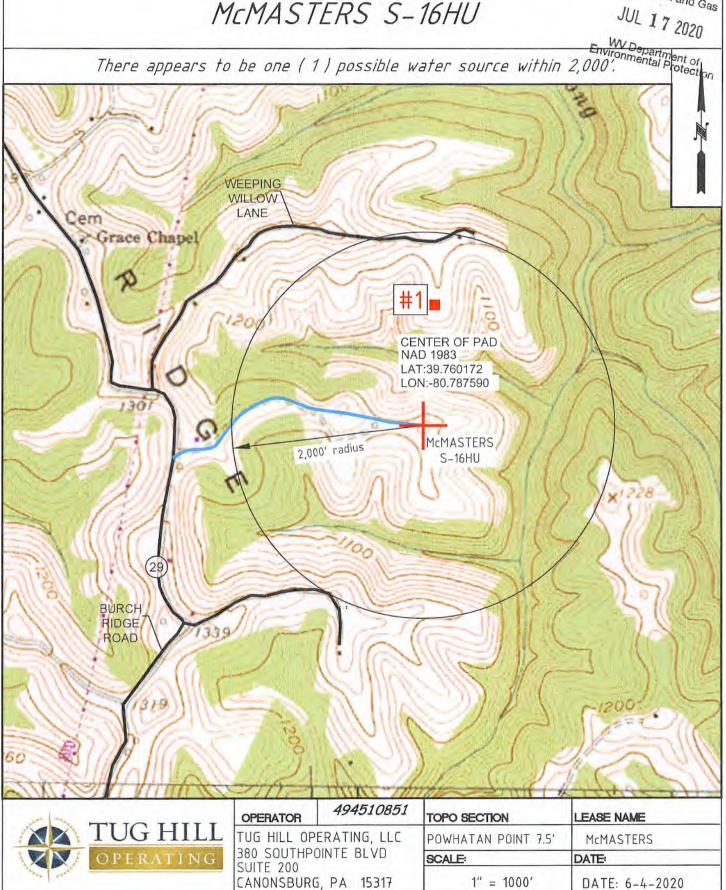
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WW-6A

PROPOSED McMASTERS S-16HU





WW-6A

Supplement Pg. 1A

Tug Hill Operating, LLC 380 Southpointe BLVD, Suite 200 Canonsburg, PA 15317

WATER WELL REPORT

Well: MCMASTERS S-17HU

District: Franklin County: Marshall State: WV

There appears to be One (1) possible water source within 2,000 feet of the above referenced well location.

Topo Spot # 1		
(House/Cabin)		
TM 5-18-3.1		
Nikki L. & Jonathan Stevens		
757 Weeping Willow Ln.		
Proctor, WV 26055		
304-771-0630 ©		
740-255-3620 ©		
336-239-2605 ©		
	·	

RECEIVED
Office of Oil and Gas

JUL 17 2820

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF ENTRY FOR PLAT SURVEY

	Requirement:	Notice shall be prov	ided at I	east SEVEN (7) day	ys but no more that	n FORTY-FIVE (45) days prior to		
entry Date of Notic	e: 6/23/2020	Date of Plan	nned En	try: 6/30/2020				
Dalivary mat	had nursuant t	to West Virginia C	ode 8 22	_6A_10a				
Delivery met	nou pursuant i	to west virginia C	ode g 22	-UA-1UA				
☐ PERSON	NAL 🗆	REGISTERED	11	METHOD OF DEL	IVERY THAT RE	EQUIRES A		
SERVIC	E	MAIL		RECEIPT OR SIGN	NATURE CONFIR	MATION		
on to the surfa but no more the beneath such to owner of mine and Sediment Secretary, who enable the sur	nce tract to conc nan forty-five d tract that has fil erals underlying Control Manua ich statement si face owner to o	fuct any plat survey ays prior to such enter ed a declaration pure such tract in the could and the statutes and all include contact btain copies from the	s require try to: (1 suant to ounty tax id rules r informat	d pursuant to this ar) The surface owner section thirty-six, ar records. The notice elated to oil and gas ion, including the ac	ticle. Such notice s r of such tract; (2) t rticle six, chapter to e shall include a sta s exploration and p	shall provide notice of planned entry shall be provided at least seven days to any owner or lessee of coal seams wenty-two of this code; and (3) any attement that copies of the state Erosion roduction may be obtained from the age on the Secretary's web site, to		
	eby provided to	0:		—				
	E OWNER(s)	7		L COA	L OWNER OR LE	SSEE		
Name: Mark A.				Name: CO				
Address: 6701	Burch Ridge Rd.				Address: 1000 Consol Dr.			
Proctor, WV 26055				Canonsburg, F	PA 15317			
Name: Mark E.	Yaho							
Address: 3998	Burch Ridge Rd.				RAL OWNER(s)			
Proctor, WV 26055		1		Name: Rok	ert & Rebecca Shields			
Name: Donald S			_	Address:	2756 Burch Ridge Rd.			
Address: 231 L	onesome Ln.			Proctor, WV 26				
Proctor, WV 26055			_	*please attac	h additional forms if ne	cessary		
	reby given: lest Virginia Co on the tract of la West Virginia		notice is		e undersigned wel	l operator is planning entry to conduct		
County:	Marshall			Public Road A	Access:	Burch Ridge Road (County Route 29)		
District:	Franklin			Watershed:		Lower Fish Creek		
Quadrangle:	Powhatan Point 7.5			Generally use	d farm name:	Robert L. Shields, et al		
Charleston, W obtained from	V 25304 (304	-926-0450). Copies by visiting <u>www.der</u>	of such	documents or addit /oil-and-gas/pages/o	ional information r	il and gas complete Man production uarters, located at 601390 Sact, SE, related to hopportal drilling may be WW Department of Environmental Profection		
Well Operator				Address:	380 Southpointe Boulev			
Telephone:	724-749-8388				Canonsburg, PA 15317	7		
Email:			Facsimile:	724-338-2030				
Januari.	animer@ing-fillio	hveo(i)						

Oil and Gas Privacy Notice:

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at deepprivacyofficer@wv.gov.

ADDITIONAL PARTIES TO NOTICE McMasters Pad WW-6A3

Additional Surface Owner:

Robert and Rebecca Shields 2756 Burch Ridge Road Proctor, WV 26055

Additional Mineral Owner: Donald Shields 231 Lonesome Ln. Proctor, WV 26055

Office of Oil and Gas

JUL 17 2020

WW Department of Environmental Protection

STATE OF WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF PLANNED OPERATION 2 7 0 5 2 3 3 7

	ime Requirement Notice: 07/14/2020	notice shall be provi		than the filing tion Filed: 07/		application.	
Delivery	method pursuan	t to West Virginia Co	ode § 22-6A-	-16(c)			
■ CEI	RTIFIED MAIL		☐ HAN	D			
	TURN RECEIPT	REQUESTED		IVERY			
return rec the plann required t drilling o damages	eipt requested or led operation. The obe provided by far horizontal we to the surface affe	nand delivery, give the e notice required by subsection (b), section I; and (3) A proposed eted by oil and gas ope	e surface own this subsecting ten of this and surface use erations to the	ner whose land on shall inclu rticle to a surf e and compens e extent the da	d will be used for de: (1) A copy ace owner whose sation agreemer amages are com	or the drilling of a h of this code section se land will be used at containing an offi- pensable under artic	shall, by certified mail orizontal well notice of n; (2) The information in conjunction with the er of compensation for le six-b of this chapter. If the sheriff at the time
	dress listed in the	to the SURFACE OV records of the sheriff a			Robert and Rebecca	Shields	
	231 Lonesome Ln.			Address	S: 2756 Burch Ridge		
Proctor, WV	26055			Proctor,	NV 26055		
	on the surface ov West Virginia Marshall Franklin	Code § 22-6A-16(c), no oner's land for the purp		ng a horizonta UTM NAD 8 Public Road	I well on the tra Easting: Northing:		5:
Watershee	: Fish Creek (HUC	10)					
Pursuant to be pro- horizontal surface af information	wided by W. Va. well; and (3) A prefected by oil and on related to horize	Code § 22-6A-16(c), the Code § 22-6A-10(b) proposed surface use a gas operations to the contal drilling may be	to a surface and compensate extent the description of the extent the description of the surface obtained fr	owner whose ation agreeme amages are co om the Secret	e land will be unt containing arompensable und ary, at the WV	ased in conjunction a offer of compensate ler article six-b of the Department of En- or by visiting www.	with the drilling of a tion for damages to the his chapter. Additional vironmental Protection w.dep.wv.gov/oil-and-
Well Ope	rator: Tug Hill Opera	ting LLC		Address:	380 Southeente Pa	ulevard, Plaza II, Suite 200	Office of Oil and Gas
Telephone		mig, cco		, tudi obb.	Canonsburg, PA 15		JUL 1 7 2020
Email:	amiller@tug-hi	lop.com		Facsimile:	724-338-2030		NAV.
Oil and C	as Privacy Notic	e:	ıl information				WV Department of vironmental Protection s part of our regulatory

The Office of Oil and Gas processes your personal information, such as name, address and telephone number, as part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use or your personal information, please contact DEP's Chief Privacy Officer at depprivacyofficer@wv.gov.



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION Division of Highways

1900 Kanawha Boulevard East • Building Five • Room 110 Charleston, West Virginia 25305-0430 • (304) 558-3505

January 28, 2020

Byrd E. White, III Secretary of Transportation/ Commissioner of Highways

> Jimmy Wriston, P. E. Deputy Secretary/ Deputy Commissioner

James A. Martin, Chief Office of Oil and Gas Department of Environmental Protection 601 57th Street, SE Charleston, WV 25304

Subject: DOH Permit for the Shields Pad, Marshall County

McMasters N-11HUMcMasters N-12HUMcMasters N-13HUMcMasters N-14HUMcMasters N-15HUMcMasters S-16HUMcMasters S-17HUMcMasters S-18HUMcMasters S-19HU

McMasters S-20HU

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2012-0250 which has been transferred to Tug Hill Operating for access to the State Road for a well site located off Marshall County Route 29 SLS.

This operator is in compliance with §22-6A-20 of the WV Code. Operator has signed a DISTRICT WIDE OIL AND GAS ROAD MAINTENANCE BONDING AGREEMENT and provided the required Bond. This operator is currently in compliance with the DOH OIL AND GAS POLICY dated October 1, 2018.

Very Truly Yours,

Gary K. Clayton, P.E.

Regional Maintenance Engineer Central Office O&G Coordinator Office of Oil and Gas

JUL 17 2020

WV Department of Environmental Protection

Cc: Amy Miller

Tug Hill Operating

CH, OM, D-6

File



PLANNED ADDITIVES TO BE USED IN FRACTURING OR STIMULATION

Well No. McMasters S-16HU

PRODUCT NAME:	CHEMICAL DESCRIPTION:	PRODUCT USE:	HAZARDOUS COMPONENT:
GBW-20C	Hemicellulase Breaker	Breaker - Water	None
ALPHA 1427		Biocide	Glutaraldehyde – CAS#000111-30-8 Quatemary ammonium chloride CAS# 007173-51-5 Alky dimethyl benzyl ammonium Chloride (C12-16) – CAS#068424-85-1 Ethanol – CAS# 000064-17-5 Water – CAS# 007732-18-5
FRAC SAND	Silica Sand (various Mesh sizes)	Proppant	Crystalline silica (quartz) CAS# 14808-60-7
S-8C, Sand	Silica Sand (100 mesh)	Sand	Silica – CAS# 14808-60-7
GW-3LDF		Gellant - Water	Petroleum Distillate Blend – Proprietary, (Not Associated with Diesel Fuel) Guar gum – CAS# 009000-30-0
FRW-18		Friction Reducer	Hydrotreated light distillate CAS# 064742-47-8
Scaletrol		Scale Inhibitor	Ethylene glycol – CAS# 000107-21-1 Diethylene glycol – CAS# 000111-46-6

Office of Oil and Gas

JUL 1 7 2020

WW Department of Environmental Protection

