

west virginia department of environmental protection

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

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

Tuesday, September 11, 2018 WELL WORK PERMIT Horizontal 6A / New Drill

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

## Re: Permit approval for BRYAN N-5HM 47-051-02077-00-00

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: BRYAN N-5HM Farm Name: CNX LAND RESOURCES U.S. WELL NUMBER: 47-051-02077-00-00 Horizontal 6A New Drill Date Issued: 9/11/2018

Promoting a healthy environment.

### **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. <u>Failure to adhere to the specified permit</u> 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.

,

# **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, sending an email to DEPOOGNotify@wv.gov.

a

API NO. 47-051 -

OPERATOR WELL NO. Bryan N-5HM Well Pad Name: Bryan

STATE OF WEST VIRGINIA4705 \* 02077DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS<br/>WELL WORK PERMIT APPLICATION

1) Well Operator: Tug Hill Op	erating, LLC	494510851	Marshall	Franklin	Powhatan Point
· · · · ·		Operator ID	County	District	Quadrangle
2) Operator's Well Number: Bry	yan N-5HM	Well P	ad Name: Bry	an	
3) Farm Name/Surface Owner:	CNX Land Resour	ces, Inc. Public R	bad Access: Ri	ines Ridge F	Rd
4) Elevation, current ground:	1191' 1	Elevation, propose	d post-construc	tion: 1191'	
5) Well Type (a) Gas X Other	Oil _	Ur.	derground Stor	age	
(b)If Gas Sha	llow x	Deep	A		
Hor	rizontal X			Jula	dix
6) Existing Pad: Yes or No Yes	6		-	0 6/2	ALC.
7) Proposed Target Formation(s)					
Marcellus is the target formation	at a depth of 644	3' - 6497', thickness	of 54' and antici	pated pressure	e of approx. 3800 psi
8) Proposed Total Vertical Dept	h: 6,596'				
9) Formation at Total Vertical D		ga			
10) Proposed Total Measured D	epth: 17,557'	1			
11) Proposed Horizontal Leg Le	ngth: 10,398'	1 wlplax			
12) Approximate Fresh Water S	trata Depths:	70'; 803' 🗸		_	
13) Method to Determine Fresh	Water Depths:	Offset well reports or	noticeable flow at	the flowline or w	when need to start soaping
14) Approximate Saltwater Dep	ths: 2040' 🗸				
15) Approximate Coal Seam De		Coal - 701' and	Pittsburgh Coa	al - 796'	
16) Approximate Depth to Possi	ble Void (coal r	nine, karst, other)	None anticip	ated	
<ol> <li>Does Proposed well location directly overlying or adjacent to</li> </ol>	contain coal se	ams		IO X	Office Of Oil and JUL 1120
(a) If Yes, provide Mine Info:	Name:				Environmentment
	Depth:				WV Department Environmental Protect
	Seam:				
	Owner:				

API NO. 47- 051 -OPERATOR WELL NO. Bryan N-5HM Well Bad Names Bryan 0 2 0 7 7

WW-6B (04/15)

### 18)

### CASING AND TUBING PROGRAM

ТҮРЕ	Size (in)	<u>New</u> <u>or</u> <u>Used</u>	Grade	<u>Weight per ft.</u> (lb/ft)	<u>FOOTAGE: For</u> <u>Drilling (ft)</u>	INTERVALS: Left in Well (ft)	<u>CEMENT:</u> <u>Fill-up</u> (Cu. Ft.)/CTS
Conductor	30"	NEW	BW	BW	120'	120'	259FT^3(CTS)
Fresh Water	13 3/8"	NEW	J55	54.5#	953'	953' 🗸	1012ft^3(CTS)
Coal	13 3/8"	NEW	J55	54.5#	953'	953'	1012ft^3(CTS)
Intermediate	9 5/8"	NEW	J55	36#	2,600'	2,600' V	862ft^3(CTS)
Production	5 1/2"	NEW	P110	20#	17,557'	17,557'	4479ft^3(CTS)
Tubing	2 3/8"	NEW	N80	4.7#		6,663'	_
Liners	N/A	-					

0 6/48/1K

ТҮРЕ	Size (in)	<u>Wellbore</u> Diameter (in)	<u>Wall</u> <u>Thickness</u> (in)	Burst Pressure (psi)	Anticipated Max. Internal Pressure (psi)	<u>Cement</u> <u>Type</u>	<u>Cement</u> <u>Yield</u> (cu. ft./k)
Conductor	30"	36"	1.0	2,333	1,866	CLASS A	1.2
Fresh Water	13 3/8"	17 1/2"	.33	2,740	2,192	SEE #24	1.2
Coal	13 3/8"	17 1/2"	.33	2,740	2,192	SEE#24	1.2
Intermediate	9 5/8"	12 1/4"	.352	3,520	2,816	SEE#24	1.19
Production	5 1/2"	8 7/8_8 3/4	.361	12,640	8,000	SEE#24	1.17/1.19
Tubing	2 3/8"		.19	11,200	8,960		
Liners	N/A						

### PACKERS

Kind:	N/A	Office of Oil and Gas
Sizes:	N/A	Envir Denzy
Depths Set:	N/A	Environmental Protection

WW-6B (10/14)

OPERATOR WELL	NO. Bryan N-5HM
4 TelPag Name	2-077
	no l
	J2/28/10

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

Drill through the Marcellus and TD Pilot Hole 100' into the Onondaga. Log vertical section and run a solid cement plug back to proposed KOP. 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 25,030,000 lb proppant and 386,982 bbl of water. Max rate = 80 bpm; max psi = 9,000#. V

21) Total Area to be disturbed, including roads, stockpile area, pits, etc., (acres): 16.14

22) Area to be disturbed for well pad only, less access road (acres): 5.98

23) Describe centralizer placement for each casing string:

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

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

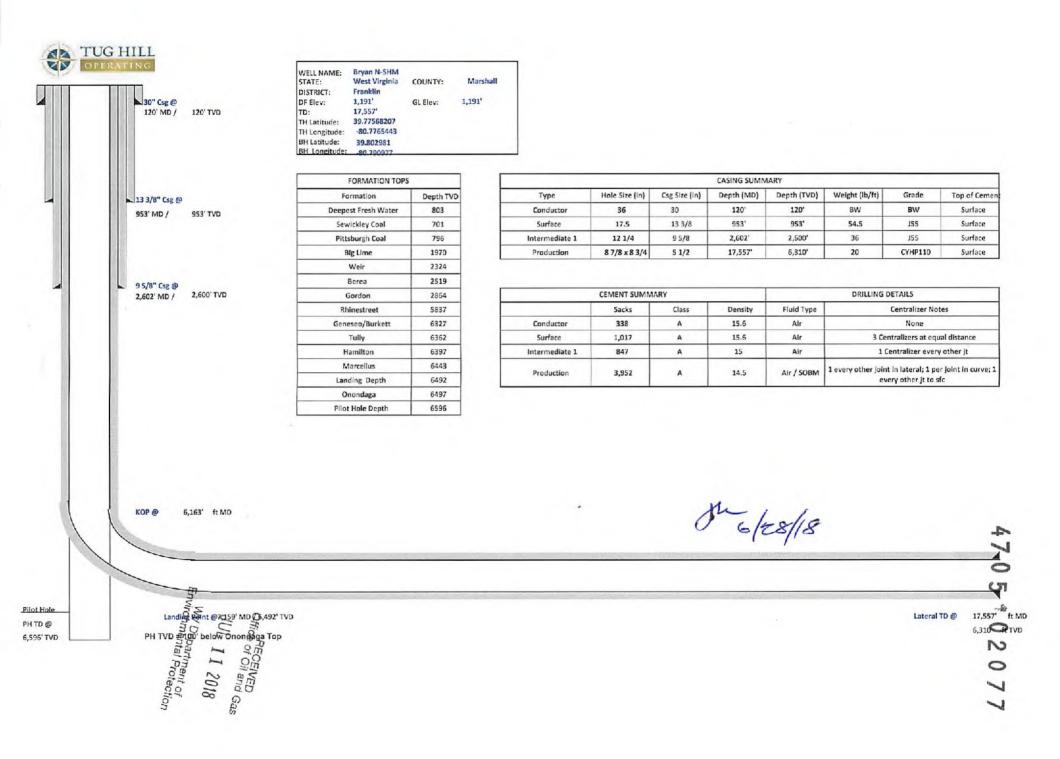
\*See Attached

25) Proposed borehole conditioning procedures:

RECEIVED Office ( Will circulate a minimum of 3 hours at TD, short trip to curve, circulate bottoms up, check for flow, and Gas JUL 11 2018 POOH

WV Department of Environmental Protection

\*Note: Attach additional sheets as needed.





### Tug Hill Operating, LLC Casing and Cement Program

### Bryan N-5HM

		Ca	ising		
	String	Grade	Bit Size	Depth (Measured)	Cement Fill Up
Conductor	30"	BW	36"	120'	CTS
Surface	13 3/8"	J55	17 1/2"	953'	CTS
Intermediate	9 5/8"	J55	12 1/4"	2,602'	CTS
Production	5 1/2"	CYHP110	8 7/8 x 8 3/4	17,557	CTS

### Cement

Conductor:	Premium NE-1 + 2% bwoc CaC12 + 46.5% Fresh Water – Conductor Cement mixed at 15.6 ppg, Y=1.2
Surface:	Premium NE-1 + 2% bwoc CaC12 + 46.5% Fresh Water – Surface Cement mixed at 15.6 ppg, Y=1.2
Intermediate:	Premium NE-1 + 1% bwoc CaC12 + 46.5% Fresh Water – Intermediate Cement mixed at 15.6 ppg, Y=1.19
Kick Off Plug:	Class H Cement + 1% CD-32 + .7% Sodium Metasilicate + .1% R-3 + .75 gal/100sk FP-13L - KOP Plug
Production:	50:50 Poz: Premium NE-1 + .1% bwoc ASA-301 + 60lb/sk ASCA-1 + .35% bwoc BA-10A + .25% bwoc MPA- 170, 44 lb sack + .5% bwoc R-3 + .75 gals/100sk FP-13L - Production Cement mixed at 15.2ppg, Y = 1.19

RECEIVED Office of Oil and Gas JUL 1 1 2018 WV Department of Environmental Protection

### 4705102077 Operator's Well No. Bryan N-5HM

### Area of Review

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

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

Data Sources Reviewed:

1. 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 (4/26/2018) 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.
- additional supporting intervention between wells in the 3 series
   There can be duplication between wells in the 3 series
   Phil indicated that other Operators are providing a screenshot of the WVGES map with their Office or Oil and Gas
   JUI and Using that for permits

JUL 1 1 2018 Environmental Protection

#### Permit well - Bryan N-5HM

Wells within 500' Buffer

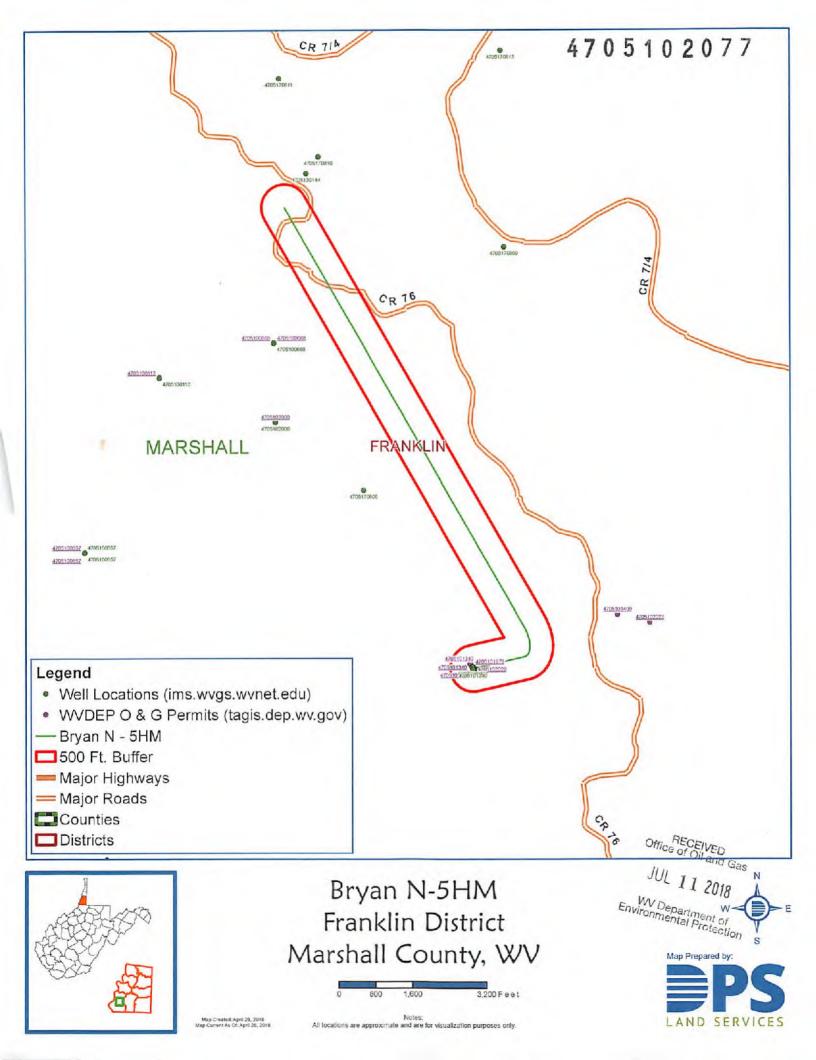
Note: Well spots depicted on Area of Review map (page 3) are derived from State held coordinates. The spots may differ from those depicted on the Well Plat because the Plat locations represent actual field surveyed locations. Please refer to the Plat for surveyed well spots

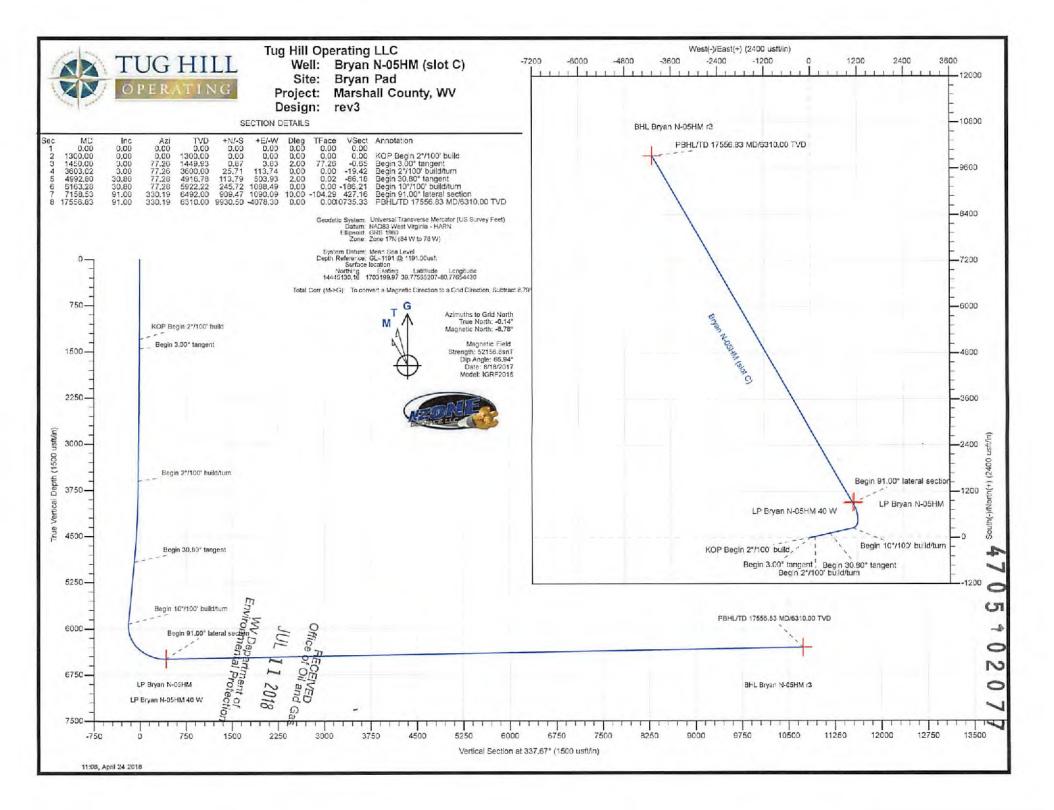
API Number	Operator Name	Total Depth	Perforated Fms	Producing zones not perforated	Is this well "known or reasonably expected to penetrate a depth that could be within the range of Fracture propagation"? 1000' is max limit I would assign to wells that might be within in range of fracture propagation	Comments
4705101340	Tug Hill Operating (formerly operated by Chevron and AB Resources)	6450' TVD 10601' MD	Marcellus	Unknown	Yes, existing Marcellus producer. Proper casing and cement should prevent migration of fluids from new wellbore to existing wellbore	Producing Marcellus horizontal well. A field survey was conducted to locate this well and it was found producing at the location shown on the well plat.
4705101977	Tug Hill Operating	6596' TVD, planned	None	None	No, Permit submitted Marcellus well	Permit submitted Marcellus well. Not yet drilled
	Tug Hill Operating	6596' TVD, planned	None	None	No, Permit submitted Marcellus well	Permit submitted Marcellus well. Not yet drilled
	Tug Hill Operating	6596' TVD, planned	None	None	Nø, Permit submitted Marcellus well	Permit submitted Marcellus well. Not yet drilled
	Tug Hill Operating	6596' TVD, planned	None	None	No, Permit submitted Marcellus well	Permit submitted Marcellus well. Not yet drilled

"Pipeline"	Select County, (1051) Marsholl M         Select distoyee:         (Check Add)           Even mercine (13140)         Millionem         Minoches         Minoches           Get Date         Reserver, (1000)         Minoches         Minoches         Minoches           Get Date         Reserver, (1000)         Minoches         Minoches         Minoches         Minoches	
WV Destopre & Rossovie		Aspert Time Prid
Location Information: API COUNTY PE 4705101240 Marginal 12	FERIAT TAX DISTRICT GUAD TS GUAD IS LAT DO LON DO UTINE UTINH	
Bottom Hale Location   API EP FLAG 4705101340 1 As Press	Information URBM URBM LOW CO LATOD AND THE ADDRESS ADDRESS DETECTION	
Damer Information.	NUMBER ETATUE SUMPACE COMER WELL-NUM CO_NUM LEASE LEASE NUM MINIFICAL OWN COMPLETION FROM VID PROMISED FROM THE SET PRI Num Constant Company Co	
Completion Information APa CMP_DT_SP 4704101540 A11(2010 1) Comment_4/1/2010 1	AND OT BLEV DATUM FIELD DELPETTAL DELPETTATI MITAL CAASE FIRAL CLASE TYPE RIG CMARATINE TVD THO SHOP STO AREA (AFT 0, BEF 0, AFT HAL, BE 1770711 1171 AREA BANDY DURANNE MCARATE DI DELPETTATI MITAL CAASE FIRAL CLASE TYPE RIG CMARATINE TVD THO SHOP 110 AREA (AFT 0, AFT HAL, BE 1770711 1171 AREA BANDY DURANNE MCARATE DI DELPETTATION AND AREA FIRAL CLASE TYPE RIG CMARATINE TVD THO SHOP 10 AREA (AFT 0, AFT HAL, BE	F NOL, NE F, MEF T
Pa, Show/Water Infon API CMP CT AC 4705101240 410210 W 4705101240 410210 W 4705101240 410210 P	CETTUTY PRODUCT SECTION DEFIN_TOP FR_TOP DEFIN_BOT FRANCISCO QUEST	
Peocluction Dies Inform API PRODUCING 4705 017340 AB Resource 4705 01540 Chevron App 4705 01540 Chevron App 4705 01540 Chevron Ap 4705 01340 Chevron Ap 4705 01340 Chevron Ap	anderska LLC 2014 387-35 0 0 0 0 2446701362 73.15 52.17 51.06 0 0 0 meterska LLC 2014 387-35 0 0 0 0 2446701362 73.15 52.17 51.04 50 0 Meterska LLC 2014 32.74 52.97 51.25 0 0 0 1.96 25 25 25 26 1.00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Production Dia Informa API PRODUCISO 4705703240 AB Resource 4705703240 Charmen App 4705103240 Charmen App 4705103240 Charmen App 4705103240 Charmen App 4705103240 Charmen App 4705103240 Charmen App	pakarmakuLC 2001 3L076 0 0 0 0 0 0 14103 4109 4108 4.00 1 6.03 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
Production NGL Inform API PRODUCING 4705101240 Chavron App 4705101240 Chavron App 4705101240 Chavron App 4705101240 Chavron App	peterine, LLC 2014 0 2 0 5 0 8 0 2 0 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	omission (Advances in Gallond) 2 Compactor PROVINCE ANALYTE JAN FEE MAR APR MAY JUN JUL AND SEP OCT HOV DOM Memory N.C. 2004 0	
Stratgraphy Informatic APr SUPPO 4705101540 Dist Dron G 4705101340 Dist Dron G 4705101340 Dist Dron G 4705113140 Dist Dron G 4705113140 Dist Dron G	Fill Fill GRADITY DEPTH TOP SETH COULTRY THICKNESS INICKNESS COULTY BLUE CATUM Loo Burket Wei Readord 534 Responde 48 Resonable 1217 Karb Burking Loo Truy Li Wei Readord 547 Responde 32 Resonable 1217 Karb Burking	
Wireline (E-Log) Intern		DP LOOMD FLEY_KR

Page 2 of 3

Office of Oil and Gas JUL 11 2018 WV Department of Environmental Protection







Database: Company: Project: Site: Vell: Vellbore: Design:	DB_Jul2216dt_v14 Tug Hill Operating LLC Marshall County, West Virginia Bryan Pad Bryan N-05HM (slot C) Original Hole rev3				Local Co-ordinate Reference:       Well Bryan N-05HM (slot C)         TVD Reference:       GL=1191 @ 1191.00usft         MD Reference:       GL=1191 @ 1191.00usft         North Reference:       Grid         Survey Calculation Method:       Minimum Curvature					
Project	Marshall	County, Wes	st Virginia			_				
Map System: Geo Datum: Map Zone:	Universal Transverse Mercator (US Survey Feet) NAD83 West Virginia - HARN Zone 17N (84 W to 78 W)				System Dat	um:	Me	an Sea Level		
Site	Bryan Pa	d			unit mittile	-11.11		Hung de la		
Site Position: From: Position Uncertainty:	Lat/Lo		East	hing: ing: Radius:		181.57 usft	Latitude: Longitude: Grid Converg	ence:		39.77562900 -80.77660992 0.14 °
Well	Bryan N-0	05HM (slot C	.)							
Well Position Position Uncertainty	+N/-S +E/-W	0	.00 usft	Northing: Easting: Wellhead Elevat		14,445,130.17 1,703,199.96	usft Lon	tude: gitude: und Level:		39.77568207 -80.77654430 1,191.00 usft
Wellbore	Original	Hole					THE PARTY OF	a ayar sana tana adamesia	and the shifthmanner, fire	
Magnetics	Mod	el Name	Sam	ple Date	Declinat (°)	tion	Dip A			trength T)
	_	IGRF2015	2	8/18/2017		-8.64		66.94	52,1	56.81357722
Design	rev3	IGRF2015		8/18/2017		-8.64			52,1	56.81357722
Design Audit Notes: Version:	rev3	IGRF2015	Pha		PLAN		On Depth:	66.94	52,1	56.81357722
Audit Notes:	rev3			ise: F		Tie +E. (us	On Depth:	66.94 ( Dire (		56.81357722
Audit Notes: Version: Vertical Section:			Pha Depth From ( (usft)	ise: F	PLAN +N/-S (usft)	Tie +E. (us	On Depth: /-W sft)	66.94 ( Dire (	0.00 ection (*) 7.67	
Audit Notes: Version:		Date	Pha Depth From ( (usft) 0.00	ise: F	PLAN +N/-S (usft)	Tie +E. (us	On Depth: /-W sft)	66.94 ( Dire (	0.00 ection (*) 7.67	Office of Cil And
Audit Notes: Version: Vertical Section: Plan Survey Tool Pro Depth From	ogram Depth (usft)	Date To ) Survey	Pha Depth From ( (usft) 0,00 4/24/2018	ise: F	PLAN +N/-S (usft) 0.00	Tie +E/ (us 0.1	On Depth: /-W sft) 00	66.94 ( Dire (	0.00 ection *) 7.67	Office of Oil and C
Audit Notes: Version: Vertical Section: Plan Survey Tool Pro Depth From (usft)	ogram Depth (usft)	Date To ) Survey	Pha Depth From ( (usft) 0,00 4/24/2018 v (Wellbore)	ise: F	PLAN +N/-S (usft) 0.00 Tool Name MWD	Tie +E/ (us 0.1	On Depth: /-W sft) 00	66.94 ( Dire (	0.00 ection *) 7.67	Office of Oil and G
Audit Notes: Version: Vertical Section: Plan Survey Tool Pro Depth From (usft) 1 0.00 Plan Sections Measured Depth Inclin	ogram Depth (usft) 17,55	Date To ) Survey	Pha Depth From ( (usft) 0,00 4/24/2018 v (Wellbore)	ise: F	PLAN +N/-S (usft) 0.00 Tool Name MWD	Tie +E/ (us 0.1	On Depth: /-W sft) 00	66.94 ( Dire (	0.00 ection *) 7.67	Office of Oil and C
Audit Notes: Version: Vertical Section: Plan Survey Tool Pro Depth From (usft) 1 0.00 Plan Sections Measured Depth Inclin (usft) ( 0.00	ogram Depth (usft) 17,55 nation ")	Date To ) Survey 66.83 rev3 (C Azimuth (°) 0.00	Pha Depth From ( (usft) 0.00 4/24/2018 (Wellbore) Original Hole) Vertical Depth (usft) 0.00	tse: F TVD) +N/-S (usft) 0.00	PLAN +N/-S (usft) 0.00 Tool Name MWD MWD - Standa +E/-W (usft) 0.00	Tie +E/ (us 0.1 and Dogleg Rate (*/100usft) 0.00	On Depth: /-W sft) 00 Remarks Build Rate ("/100usft) 0.00	66.94 ( Dire ( ( 33) 33) 33) 33) 700 83) 700 83) 700 83) 700 83) 700 83) 700 83) 700 700 700 700 700 700 700 700 700 70	0.00 ection (*) 7.67 <i>Envi</i>	Office of Oil and o JUL 1.1 2018 W Department of Connental Protectio
Audit Notes: Version: Vertical Section: Plan Survey Tool Pro Depth From (usft) 1 0.00 Plan Sections Measured Depth Inclin (usft) ( 0.00 1,300.00	ogram Depth (usft) 17,55 nation ") 0.00 0,00	Date To ) Survey 66.83 rev3 (C Azimuth (°) 0.00 0.00	Pha Depth From ( (usft) 0.00 4/24/2018 r (Wellbore) Original Hole) Vertical Depth (usft) 0.00 1,300.00	tse: F TVD) +N/-S (usft) 0.00 0.00	PLAN +N/-S (usft) 0.00 Tool Name MWD MWD - Standa +E/-W (usft) 0.00 0.00	Tie +E/ (us 0.1 0.1 ard Dogleg Rate (*/100usft) 0.00 0.00	On Depth: /-W sft) 00 Remarks Build Rate (*/100usft) 0.00 0.00	66.94 ( Dire ( ( 33) 33) 33) 33) 33) 33) 33) 33) 33)	0.00 ection (*) 7.67 <i>Envin</i> TFO (*) 0.00 0.00	Office of Oil and C JUL 1.1 2018 W Department of Connental Protecti
Audit Notes: Version: Vertical Section: Plan Survey Tool Pro Depth From (usft) 1 0.00 Plan Sections Measured Depth Inclin (usft) ( 0.00 1,300.00 1,450.00	ogram Depth (usft) 17,55 17,55	Date To ) Survey 66.83 rev3 (C Azimuth (°) 0.00 0.00 77.26	Pha Depth From ( (usft) 0,00 4/24/2018 r (Wellbore) Original Hole) Vertical Depth (usft) 0.00 1,300.00 1,449.93	tse: F TVD) +N/-S (usft) 0.00 0.00 0.67	PLAN +N/-S (usft) 0.00 Tool Name MWD MWD - Standa +E/-W (usft) 0.00 0.00 0.00 3.83	Tie +E/ (us 0.1 0.1 ard Dogleg Rate (*/100usft) 0.00 0.00 2.00	On Depth: /-W sft) 00 Remarks Build Rate (*/100usft) 0.00 0.00 2.00	66.94 Dire ( 333 Turn Rate (*/100usft) 0.00 0.00 0.00	0.00 ection (*) 7.67 TFO (*) 0.00 0.00 77.26	Office of Oil and C JUL 1.1 2018 W Department of Connental Protecti
Audit Notes: Version: Vertical Section: Plan Survey Tool Pro Depth From (usft) 1 0.00 Plan Sections Measured Depth Inclin (usft) ( 0.00 1,300.00 1,450.00 3,603.02	ogram Depth (usft) 17,55 nation ") 0.00 0.00 3.00 3.00	Date To ) Survey 66.83 rev3 (C Azimuth (°) 0.00 0.00 77.26 77.26	Pha Depth From ( (usft) 0,00 4/24/2018 r (Wellbore) Original Hole) Vertical Depth (usft) 0.00 1,300,00 1,449,93 3,600,00	tse: F TVD) +N/-S (usft) 0.00 0.87 25.71	PLAN +N/-S (usft) 0.00 Tool Name MWD MWD - Standa +E/-W (usft) 0.00 0.00 0.00 3.83 113.74	Tie +E, (us 0.1 0.1 and Dogleg Rate (*/100usft) 0.00 0.00 2.00 0.00	On Depth: /-W sft) 00 Remarks Build Rate (*/100usft) 0.00 0.00 2.00 0.00	66.94 Dire ( 333 Turn Rate (*/100usft) 0.00 0.00 0.00 0.00 0.00	0.00 ection (*) 7.67 TFO (*) 0.00 0.00 77.26 0.00	Office of Oil and C JUL 1.1 2018 W Department of Connental Protecti
Audit Notes: Version: Vertical Section: Plan Survey Tool Pro Depth From (usft) 1 0.00 Plan Sections Measured Depth Inclin (usft) ( 0.00 1,300.00 1,450.00 3,603.02 4,992.80	ogram Depth (usft) 17,55 nation ") 0.00 0.00 3.00 3.00 3.00 3.00 3.00	Date To ) Survey 66.83 rev3 (C Azimuth (°) 0.00 0.00 77.26 77.26 77.28	Pha Depth From ( (usft) 0,00 4/24/2018 r (Wellbore) Original Hole) Vertical Depth (usft) 0.00 1,300.00 1,449.93 3,600.00 4,916.78	tse: F TVD) +N/-S (usft) 0.00 0.87 25.71 113.79	PLAN +N/-S (usft) 0.00 Tool Name MWD MWD - Standa +E/-W (usft) 0.00 0.00 0.00 3.83 113.74 503.93	Tie +E, (us 0.1 0.1 and Dogleg Rate (*/100usft) 0.00 0.00 2.00 0.00 2.00	On Depth: /-W sft) 00 Remarks Build Rate (*/100usft) 0.00 0.00 2.00 0.00 2.00	66.94 Dire ( 333 Turn Rate (*/100usft) 0.00 0.00 0.00 0.00 0.00 0.00	0.00 ection (*) 7.67 TFO (*) 0.00 0.00 77.26 0.00 0.02	Office of Oil and C JUL 1.1 2018 W Department of Connental Protection
Audit Notes: Version: Vertical Section: Plan Survey Tool Pro Depth From (usft) 1 0.00 Plan Sections Measured Depth Inclin (usft) ( 0.00 1,300.00 1,450.00 3,603.02	ogram Depth (usft) 17,55 nation ") 0.00 0.00 3.00 3.00	Date To ) Survey 66.83 rev3 (C Azimuth (°) 0.00 0.00 77.26 77.26	Pha Depth From ( (usft) 0,00 4/24/2018 r (Wellbore) Original Hole) Vertical Depth (usft) 0.00 1,300,00 1,449,93 3,600,00	tse: F TVD) +N/-S (usft) 0.00 0.87 25.71 113.79 245.72	PLAN +N/-S (usft) 0.00 Tool Name MWD MWD - Standa +E/-W (usft) 0.00 0.00 0.00 3.83 113.74	Tie +E, (us 0.1 0.1 and Dogleg Rate (*/100usft) 0.00 0.00 2.00 0.00	On Depth: /-W sft) 00 Remarks Build Rate (*/100usft) 0.00 0.00 2.00 0.00	66.94 Dire ( 333 Turn Rate (*/100usft) 0.00 0.00 0.00 0.00 0.00	0.00 ection (*) 7.67 TFO (*) 0.00 0.00 77.26 0.00 0.02 0.00	Office of Oil and C JUL 1.1 2018 W Department of Connental Protecti



4705102077

RECEIVED

Planning Report - Geographic

DB Jul2216dt v14 Local Co-ordinate Reference: Well Bryan N-05HM (slot C) Database: Tug Hill Operating LLC Company TVD Reference GL=1191 @ 1191.00usft Office of Oil and Gas Marshall County, West Virginia Project: **MD** Reference: GL=1191 @ 1191.00usft Bryan Pad Site: Grid North Reference: JUL 11 2018 Well Brvan N-05HM (slot C) Minimum Curvature Survey Calculation Method: Wellbore: **Original Hole** WV Department of Environmental Protection rev3 Design:

#### Planned Survey

Vertical Map Map Measured Depth +N/-5 +F/-W Northing Easting Denth Inclination Azimuth (usft) (usft) (usft) Longitude (usft) (usft) (usft) Latitude (°) (" 0.00 0.00 14 445 130 17 1.703,199,95 39,77568207 -80 77854430 0.00 0.00 0.00 0.00 100.00 0.00 0.00 100.00 0.00 0.00 14,445,130,17 1,703,199,98 39,77568207 -80,77654430 39,77568207 -80,77654430 0.00 1,703,199,96 200.00 0.00 0.00 200 00 0.00 14,445,130.17 39 77568207 -80 77654430 0.00 0.00 300.00 0.00 0.00 14,445,130.17 1,703,199,96 300.00 39.77568207 -80,77654430 0.00 0.00 400.00 0.00 0 00 14,445,130,17 1.703.199.96 400.00 39.77568207 -80.77654430 500.00 0.00 0.00 14,445,130.17 1,703,199.96 500.00 0.00 0.00 -80 77654430 0.00 600.00 0.00 0 00 14,445,130.17 1,703,199.96 39.77568207 600.00 0.00 -80.77654430 1,703,199,96 39,77568207 700.00 0.00 0.00 700.00 0.00 0.00 14,445,130,17 -80 77654430 800.00 0.00 14,445,130.17 1,703,199.96 39,77568207 800.00 0.00 0.00 0.00 39.77568207 -80,77854430 900.00 0.00 0.00 900.00 0.00 0.00 14 445 130 17 1,703,199,96 39,77568207 -80.77654430 1.000.00 0.00 0.00 1.000.00 0.00 0.00 14,445,130,17 1,703,199,98 -80.77854430 39,77568207 1,100.00 0.00 0.00 1,100.00 0.00 0.00 14,445,130,17 1.703.199.96 39.77568207 -80,77654430 0.00 0.00 1,200.00 0.00 0.00 14,445,130.17 1 703 199.98 1,200.00 -80,77654430 1.300.00 0.00 0.00 1 300.00 0.00 0.00 14,445,130.17 1,703,199,96 39,77568207 KOP Begin 2°/100' build 1,399.98 0.38 1.70 14,445,130.55 1,703,201.67 39,77568312 -80.77653824 77.26 2.00 1,400.00 1,449.93 0.87 3.83 14,445,131.03 1,703,203.79 39 77568442 -80,77653066 1,450,00 3.00 77.26 Begin 3.00° tangent 1,499,86 6.38 14,445,131,61 1,703,206,35 39,77568599 -80,77652157 77.26 1,500.00 3.00 1.44 2.60 14,445,132.76 1,703,211.45 39,77568913 -80 77650340 1.600.00 3.00 77.26 1.599.72 11.49 1,703,216,55 39.77569226 -80.77648522 1,700.00 3.00 77.26 1,699,59 3.75 16.59 14,445,133,92 39.77569539 -80.77646704 1,800.00 3.00 77.26 1.799.45 4.91 21.70 14,445,135.07 1.703.221.66 1,900.00 39 77569853 -80.77644886 3.00 77.26 1.899.31 6.06 26.80 14,445,136,23 1,703,226,76 -80.77643068 2,000.00 3.00 77.26 1.999.17 7.21 31.91 14,445,137.38 1.703.231.87 39,77570166 -80,77641250 2,100.00 3.00 77.26 2.099.04 8.37 37.01 14,445,138,54 1.703.236.97 39 77570480 3.00 77.26 2,198.90 9.52 42.11 14,445,139.69 1,703,242.08 39,77570793 -80.77639432 2 200 00 2.300.00 3.00 77.26 2,298.76 10.68 47.22 14,445,140.84 1,703,247,18 39.77571107 -80 77637615 2,398,62 39.77571420 -80,77635797 14 445 142 00 1,703,252,29 2 400 00 3 00 77.26 11.83 52.32 2,498.49 12.98 1,703,257.39 39,77571734 -80 77633979 2,500.00 3.00 77.26 57.43 14,445,143,15 -80.77632161 39.77572047 2 599 99 3.00 77.26 2 598 35 14.14 62 53 14 445 144 31 1,703 262.50 39.77572361 -80.77630343 2,699,99 3.00 77.26 2.698.21 15.29 67.64 14,445,145,46 1.703.267.60 -80,77628525 39 77572674 2 799 99 3 00 77.26 2 798 08 16 45 72.74 14,445,146,61 1,703,272,71 -80.77626707 2,899,99 3.00 77.26 2.897.94 17.60 77.85 14,445,147.77 1.703,277.81 39.77572987 -80,77624889 2.999.99 3.00 77.26 2 997.80 18.76 82 95 14,445,148,92 1,703,282,92 39 77573301 3.00 77.26 3,097.66 19.91 88.06 14,445,150.08 1,703,288.02 39.77573614 -80.77623072 3 099 99 3,199,99 3.00 77.26 3,197.53 21.06 93.16 14,445,151.23 1.703,293.13 39.77573928 -80.77621254 39.77574241 -80.77619436 3.297.39 98.27 3.00 77.26 22.22 14 445 152 39 1 703 298.23 3 299 99 3,397.25 39.77574555 -80.77617618 3.399.99 3.00 77.26 23.37 103.37 14,445,153,54 1.703.303.34 39,77574868 -80.77615800 3.00 24.53 108.48 3 499 99 77.26 3,497,12 14 445 154 69 1 703 308.44 39.77575182 -80.77613982 3.599.99 3.00 77.26 3.596.98 25.68 113.58 14,445,155.85 1.703.313.54 3 00 3 600 00 39,77575191 -80.77613927 3 803 02 77 26 25.71 113 74 14,445,155,88 1,703,313,70 Begin 2º/100' build/turn -80.77611595 3.699.99 4.94 77.27 3.696.74 27.19 120.28 14,445,157.36 1.703.320.25 39.77575593 6 94 3 796 19 130 38 39 77576212 -80.77608001 3 799 99 77 27 29.47 14 445 159 64 1,703,330,34 39.77577038 -80.77603203 3,899,99 8.94 77.28 3,895.23 32.52 143.85 14,445,162,68 1.703,343.81 10.94 39,77578071 -80,77597208 3 999 99 77.28 3 993 72 36 32 160 69 14,445,166,49 1,703,380,65 -80.77590022 4.099.99 12.94 77.28 4.091.56 40.87 180.86 14,445,171.04 1,703,380.83 39.77579308 -80,77581654 4 199 99 14.94 77.28 4.188.61 46.18 204.36 14,445,176,35 1,703,404,32 39,77580749 4,299.99 16.94 77.28 4.284.76 52.22 231.15 14,445,182.39 1,703,431.11 39,77582391 -80.77572115 4 399 99 18.94 77.28 4.379.89 59.01 261.19 14,445,189,17 1,703,461,16 39,77584233 -80.77561416 4,499,99 20.94 77.28 4.473.89 66.51 294.46 14,445,196.68 1,703,494,42 39,77586272 -80.77549570 4 599 99 22 94 77.28 4.566.64 74.74 330.90 14,445,204,91 1,703,530.86 39,77588506 -80.77536592 4,699.99 24.94 77.28 4,658.04 83.67 370.48 14,445,213.84 1,703,570,44 39.77590932 -80.77522497 4,799.99 26.94 77.28 4,747.96 93.30 413.15 14,445,223.47 1,703,613.11 39,77593547 -80.77507303

COMPASS 5000.14 Build 85



Planned Survey

Measured

Planning Report - Geographic

## 4705102077

Latitude

39.77596348

39,77599111

39.77599331

39,77602392

39.77605453

39.77608514

39.77611575

39.77614636

39 77617696

39.77620757

Longitude

-80.77491028

-80.77474973

-80.77473694

-80,77455909

-80.77438124

-80.77420339

-80.77402554

-80.77384769 -80.77366984

-80.77349199

......

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Bryan N-05HM (slot C) RECEIVED GL=1191 @ 1191.00usft
Company:	Tug Hill Operating LLC	TVD Reference:	GL=1191 @ 1191.00usft Gas
Project:	Marshall County, West Virginia	MD Reference:	
Site:	Bryan Pad	North Reference:	Grid JUL 11 2018
Well:	Bryan N-05HM (slot C)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		Envire WV Department -
Design:	rev3		WV Department of Environmental Protection

Map

Map

#### Depth Depth Northing Easting +N/-S +E/-W Inclination Azimuth (usft) (usft) (usft) (usft) (°) (°) (usft) (usft) 4,836.30 458.85 14,445,233.79 1,703,658.81 4,899,99 28.94 77.28 103.62 1,703,703.89 4,992.80 30.80 77.28 4,916.78 113.79 503.93 14,445,243.96 Begin 30.80° tangent 30.80 77.28 4,922.95 114.60 507.52 14,445,244.77 1,703,707.48 4,999.99 5,099,99 30.80 77.28 5,008.85 125.87 557.46 14,445,256.04 1,703,757.43 1,703,807,37 5,199,99 30.80 77.28 5.094.75 137.15 607.40 14,445,267.31 30.80 77.28 5,180.65 148.42 657.35 14,445,278.58 1.703,857.31 5,299,99 5,266,55 5,399.99 30,80 77.28 159.69 707.29 14,445,289.86 1,703,907.25 5,499.99 30,80 77.28 5,352.45 170.96 757.23 14,445,301.13 1,703,957.19 5,599.99 30.80 77.28 5,438.35 182.23 807.17 14,445,312.40 1,704,007.13 1,704,057.08 5,699.99 30.80 5,524.25 193.50 857.11 14,445,323.67 77.28

Vertical

	5,799.99	30.80	77.28	5,610.15	204.77	907.05	14,445,334.94	1,704,107.02	39.77623818	-80.77331413
	5,899.99	30.80	77.28	5,696.05	216.05	956.99	14,445,346.21	1,704,156.96	39.77626878	-80.77313628
	5,999.99	30.80	77.28	5,781.95	227.32	1,006.94	14,445,357.48	1,704,206.90	39.77629939	-80.77295843
	6,099.99	30.80	77.28	5,867.85	238.59	1,056,88	14,445,368.76	1,704,256.84	39.77633000	-80.77278058
	6,163.28	30.80	77.28	5,922.22	245.72	1,088.49	14,445,375.89	1,704,288.45	39.77634937	-80.77266801
	Begin 10°/1	00' build/tur	п							
	6,199.99	30.08	70.17	5,953.87	250,91	1,106.31	14,445,381.08	1,704,306.28	39.77636350	-80.77260452
	6,299,99	30.17	50.17	6,040.59	275.57	1,149.29	14,445,405.74	1,704,349.26	39.77643092	-80.77245132
	6,399.99	33.13	31.89	6,125.90	314.96	1,183.11	14,445,445.13	1,704,383.08	39.77653887	-80.77233060
	6,499.99	38.28	17.15	6,207.23	367.90	1,206.74	14,445,498.07	1,704,406.71	39.77668408	-80.77224602
	6,599.99	44.88	5.78	6,282.10	432.76	1,219.46	14,445,562.93	1,704,419.43	39.77686212	-80.77220016
	6,699.99	52.36	356.91	6,348.24	507.59	1,220.89	14,445,637,76	1,704,420.85	39.77708761	-80.77219440
	6,799.99	60.38	349.72	6,403.63	590.10	1,210.98	14,445,720.27	1,704,410.94	39.77729428	-80.77222894
	6,899,99	68.73	343.62	6,446.59	677.79	1,190.03	14,445,807.96	1,704,389.99	39.77753525	-80.77230270
	6,999.99	77.27	338.18	6,475.82	768.00	1,158.68	14,445,898.17	1,704,358.64	39.77778321	-80.77241347
	7,099.99	85.92	333.10	6,490.43	857.98	1,117.88	14,445,988,15	1,704,317.84	39.77803061	-80.77255786
	7,158,53	91.00	330.19	6,492.00	909.46	1,090.10	14,446,039.63	1,704,290.06	39.77817217	-80.77265629
	Begin 91.00	" lateral sec	tion							
	7,199.99	91.00	330.19	6,491.27	945.43	1,069.49	14,446,075.59	1,704,269.45	39.77827109	-80.77272930
	7,299.99	91.00	330.19	6,489.52	1,032.18	1,019.79	14,446,162.35	1,704,219.75	39,77850968	-80.77290543
	7,399.99	91.00	330.19	6,487.77	1,118.94	970.08	14,446,249.10	1,704,170.05	39.77874828	-80.77308156
	7,499.99	91.00	330.19	6,486.02	1,205.69	920.38	14,446,335.86	1,704,120.34	39.77898688	-80.77325769
	7,599,98	91.00	330,19	6,484.27	1,292.45	870,67	14,446,422.61	1,704,070.64	39.77922548	-80.77343382
	7,699.98	91.00	330.19	6,482.52	1,379.20	820.97	14,446,509.37	1,704,020.93	39.77946408	-80.77360995
	7,799.98	91.00	330,19	6,480.77	1,465.96	771.27	14,446,596.12	1,703,971.23	39.77970268	-80.77378608
	7,899.98	91.00	330.19	6,479.02	1,552.71	721.56	14,446,682.86	1,703,921.53	39,77994127	-80.77396222
	7,999,98	91.00	330,19	6,477.27	1,639.47	671.86	14,446,769,63	1,703,871.82	39,78017987	-80.77413835
	8,099.98	91.00	330.19	6,475.52	1,726.22	622.15	14,446,856.39	1,703,822.12	39.78041847	-80.77431449
	8,199.98	91.00	330.19	6,473.77	1,812.98	572.45	14,446,943.14	1,703,772.41	39.78065706	-80.77449063
	8,299.98	91.00	330.19	6,472.02	1,899.73	522.75	14,447,029.90	1,703,722.71	39.78089566	-80.77466677
	8,399.98	91.00	330.19	6,470.27	1,986.48	473.04	14,447,116.65	1,703,673.00	39.78113426	-80.77484291
	8,499.98	91.00	330.19	6,468.52	2,073.24	423.34	14,447,203.41	1,703,623.30	39.78137285	-80.77501905
	8,599.98	91.00	330.19	6,466.77	2,159.99	373.63	14,447,290,16	1,703,573.60	39.78161145	-80.77519519
	8,699.98	91.00	330.19	6,465.02	2,246.75	323.93	14,447,376.92	1,703,523.89	39.78185004	-80.77537134
	8,799.98	91.00	330.19	6,463.27	2,333.50	274.22	14,447,463.67	1,703,474.19	39.78208864	-80.77554748
	8,899.98	91.00	330.19	6,461.52	2,420.26	224.52	14,447,550.43	1,703,424.48	39.78232723	-80.77572363
	8,999.98	91.00	330.19	6,459.77	2,507.01	174.82	14,447,637,18	1,703,374.78	39.78256583	-80.77589978
	9,099,98	91.00	330.19	6,458.02	2,593.77	125,11	14,447,723,94	1,703,325.08	39.78280442	-80,77607593
	9,199.98	91.00	330.19	6,456.27	2,680.52	75.41	14,447,810.69	1,703,275.37	39.78304301	-80.77625208
	9,299.98	91.00	330.19	6,454.52	2,767.28	25.70	14,447,897.45	1,703,225.67	39.78328161	-80,77842823
	9,399.98	91.00	330.19	6,452.77	2,854.03	-24.00	14,447,984.20	1,703,175.96	39.78352020	-80.77660438
	9,499.98	91.00	330.19	6,451.02	2,940,79	-73,70	14,448,070,96	1,703,126.26	39.78375879	-80.77678053
_	9,599.98	91.00	330.19	6,449.27	3,027.54	-123.41	14,448,157.71	1,703,076.56	39.78399739	-80,77695669

COMPASS 5000.14 Build 85



Planning Report - Geographic

## 4705102077

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Bryan N-05HM (slot C)
Company:	Tug Hill Operating LLC	TVD Reference:	GL=1191 @ 1191.00usft
Project:	Marshall County, West Virginia	MD Reference:	GL=1191 @ 1191.00usft Office of EIVED
Site:	Bryan Pad	North Reference:	GL=1191 @ 1191.00usft GL=1191 @ 1191.00usft Office of Oil and Gas Grid
Well:	Bryan N-05HM (slot C)	Survey Calculation Method:	
Wellbore:	Original Hole		Minimum Curvature JUL 11 2018
Design:	rev3		- W Depart

2018

ned Survey									Department of nental Protection
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
9,699,98	91.00	330.19	6,447.52	3,114.30	-173.11	14,448,244.46	1,703,026.85	39,78423598	-80.777132
9,799.98	91.00	330.19	6,445.77	3,201.05	-222.82	14,448,331.22	1,702,977.15	39.78447457	-80.777309
9,899,98	91.00	330.19	6,444.02	3,287.81	-272.52	14,448,417.97	1,702,927.44	39.78471316	-80.777485
9,999,98	91.00	330.19	6,442.27	3,374.56	-322.23	14,448,504.73	1,702,877.74	39,78495175	-80.777661
10.099.98	91.00	330.19	6,440.52	3,461.32	-371.93	14,448,591.48	1,702,828.03	39.78519035	-80.77783
10,199.98	91.00	330.19	6,438.77	3,548.07	-421.63	14,448,678.24	1,702,778,33	39,78542894	-80.77801
10,299,98	91.00	330.19	6,437.02	3,634.83	-471.34	14,448,764.99	1,702,728.63	39.78566753	-80.77818
10.399.98	91.00	330.19	6,435.27	3,721.58	-521.04	14,448,851.75	1,702,678,92	39,78590612	-80,77836
10,499.98	91.00	330.19	6,433.52	3,808.34	-570.75	14,448,938,50	1,702,629.22	39.78614471	-80.77854
10,599.98	91.00	330.19	6,431.76	3,895.09	-620.45	14,449,025.26	1,702,579.51	39,78638330	-80.77871
10,699.98	91.00	330.19	6,430.01	3,981.85	-670.15	14,449,112.01	1,702,529.81	39,78662189	-80.77889
10,799.98	91.00	330.19	6,428.26	4,068.60	-719.86	14,449,198.77	1,702,480.11	39,78686048	-80.77907
10,899.98	91.00	330.19	6,426.51	4,155.35	-769.56	14,449,285.52	1,702,430.40	39,78709907	-80.77924
10,999.98	91.00	330.19	6,424.76	4,242.11	-819.27	14,449,372.28	1,702,380.70	39.78733766	-80.77942
11,099,98	91.00	330.19	6,423.01	4,328.86	-868,97	14,449,459.03	1,702,330,99	39,78757624	-80,77959
11.199.98	91.00	330.19	6,421.26	4,415.62	-918.67	14,449,545,79	1,702,281.29	39.78781483	-80.77977
11,299,98	91.00	330.19	6,419.51	4,502.37	-968.38	14,449,632,54	1,702,231.58	39,78805342	-80,77995
11,399.98	91.00	330.19	6,417.76	4,589.13	-1,018.08	14.449.719.30	1,702,181.88	39.78829201	-80,78012
11,499.98	91.00	330.19	6,416.01	4,675.88	-1,067.79	14,449,806.05	1,702,132.18	39,78853060	-80,78030
11,599.98	91.00	330.19	6,414.26	4,762,64	-1.117.49	14,449,892,81	1,702,082.47	39.78876918	-80.78048
11,699.98	91.00	330.19	6,412.51	4,849.39	-1,167.20	14,449,979.56	1,702,032.77	39.78900777	-80.78065
11,799.98	91.00	330.19	6,410.76	4,936.15	-1,216.90	14,450,066,32	1,701,983.06	39,78924636	-80.78083
11,899.98	91.00	330.19	6,409.01	5,022.90	-1,266.60	14,450,153.07	1,701,933.36	39.78948494	-80.78100
11,999.98	91.00	330.19	6,407.26	5,109.66	-1,316.31	14,450,239.83	1,701,883.66	39.78972353	-80.78118
2		330.19	6,405.51	5,196.41	-1,366.01	14,450,326.58	1,701,833.95	39.78996212	-80.78138
12,099.98	91.00	330.19	6,403.76	5,283.17	-1,415.72	14,450,413.33	1,701,784.25	39.79020070	-80.78153
12,199.98	91.00	330.19	6,402.01	5,369,92	-1,415.42	14,450,500.09	1,701,734.54	39.79043929	-80.78171
12,299.98	91.00	330.19	6,400.26	5,456.68	-1,515.12	14,450,586.84	1,701,684.84	39.79067787	-80.78188
12,399.98	91.00	330.19	6,398.51	5,543.43	-1,564.83	14,450,673.60	1,701,635.13	39.79091646	-80.78208
12,499.98		330.19				and the second se	the second se	39.79115504	-80.78224
12,599.98	91.00		6,396.76	5,630.19	-1,614.53	14.450,760.35	1,701,585.43	39.79139362	-80.78241
12,699.97	91.00	330.19	6,395.01	5,716.94	-1,664.24	14,450,847.11	1,701,535.73	39.79163221	-80.78259
12,799.97	91.00	330.19	6,393.26	5,803.70	-1,713.94	14,450,933.86	1,701,486.02		-80.78277
12,899.97	91.00	330,19	6,391.51	5,890,45	-1,763.65	14,451,020.62	1,701,436.32	39.79187079	
12,999.97	91.00	330.19	6,389.76	5,977.21	-1,813.35	14,451,107.37	1,701,386.61	39.79210938	-80.78294
13,099.97	91.00	330.19	6,388.01	6,063.96	-1,863.05	14,451,194.13	1,701,336.91	39.79234796	-80,78312
13,199.97	91.00	330,19	6,386.26	6,150.71	-1,912.76	14,451,280.88	1,701,287.21	39.79258654	-80.78347
13,299.97	91.00	330.19	6,384.51	6,237.47	-1,962.46	14,451,367.64	1,701,237.50	39.79282512	
13,399.97	91.00	330.19	6,382.76	6,324.22	-2,012.17	14,451,454.39	1,701,187.80	39.79306371	-80.78365
13,499.97	91.00	330.19	6,381.01	6,410.98	-2,061.87	14,451,541.15	1,701,138.09	39.79330229	-80.78382
13,599.97	91.00	330.19	6,379.26	6,497.73	-2.111.57	14,451,627.90	1,701,088.39	39.79354087	-80.78400
13,699.97	91.00	330.19	6,377.51	6,584.49	-2,161.28	14,451,714.66	1,701,038.69	39.79377945	0.000
13,799.97	91.00	330.19	6,375.76	6,671.24	-2,210.98	14,451,801.41	1,700,988.98	39.79401803	-80.78435
13,899.97	91.00	330.19	6,374.01	6,758.00	-2,250.69	14,451,888.17	1,700,939.28	39.79425661	-80.78453
13,999.97	91.00	330.19	6,372.26	6,844.75	-2,310.39	14,451,974.92	1,700,889.57	39.79449519	
14,099.97	91.00	330.19	6,370.51	6,931.51	-2,360.10	14,452,061.68	1,700,839.87	39.79473377	-80.78488
14,199.97	91.00	330.19	6,368.75	7,018.26	-2,409.80	14,452,148.43	1,700,790.16	39.79497235	-80.78506
14,299.97	91.00	330.19	6,367.00	7,105.02	-2,459.50	14,452,235.19	1,700,740.46	39,79521093	-80.78523
14,399.97	91.00	330.19	6,365.25	7,191.77	-2,509.21	14,452,321,94	1,700,690.76	39.79544951	-80.78541
14,499.97	91.00	330.19	6,363.50	7,278.53	-2,558.91	14,452,408.69	1,700,641.05	39.79568809	-80.78558
14,599.97	91.00	330.19	6,361.75	7,365.28	-2,608.62	14,452,495,45	1,700,591.35	39.79592667	-80.78576
14,699.97	91.00	330.19	6,360.00	7,452.04	-2,658.32	14,452,582.20	1,700,541.64	39,79616525	-80.78594
14,799.97	91.00	330.19	6,358.25	7,538.79	-2,708.02	14,452,668.96	1,700,491.94	39.79640383	-80.78611
14,899.97	91.00	330,19	6,356.50	7,625.55	-2,757.73	14,452,755.71	1,700,442.24	39.79664241	-80.78629
14,999.97	91.00	330.19	6,354.75	7,712.30	-2,807.43	14,452,842.47	1,700,392.53	39.79688099	-80.78647
15,099.97	91.00	330.19	6,353.00	7,799.06	-2,857.14	14,452,929.22	1,700,342.83	39.79711956	-80.78664

COMPASS 5000.14 Build 85



Planning Report - Geographic

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Bryan N-05HM (slot C)
Company:	Tug Hill Operating LLC	TVD Reference:	GL=1191 @ 1191.00usft
Project:	Marshall County, West Virginia	MD Reference:	GL=1191 @ 1191.00usft
Site:	Bryan Pad	North Reference:	Grid
Well:	Bryan N-05HM (slot C)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev3		

#### Planned Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Map Northing (usft)	Map Easting (usft)	Latitude	Longitude
15,199,97	91.00	330.19	6,351.25	7,885.81	-2,906.84	14,453,015.98	1,700,293,12	39,79735814	-80.78682331
15,299.97	91.00	330.19	6,349.50	7,972.57	-2,956.54	14,453,102.73	1,700,243.42	39,79759672	-80.78699954
15,399,97	91.00	330.19	6,347.75	8,059.32	-3,006.25	14,453,189,49	1,700,193,71	39,79783529	-80.78717576
15,499.97	91.00	330.19	6,346.00	8,146.08	-3.055.95	14,453,276.24	1,700,144.01	39,79807387	-80.78735199
15,599,97	91.00	330.19	6,344.25	8,232.83	-3,105.66	14,453,363.00	1,700,094.31	39,79831245	-80.78752822
15,699.97	91.00	330,19	6,342.50	8,319,58	-3,155,36	14,453,449,75	1,700,044.60	39,79855102	-80.78770445
15,799,97	91.00	330.19	6,340.75	8,406.34	-3,205.07	14,453,536,51	1,699,994,90	39.79878960	-80.78788068
15.899.97	91.00	330.19	6.339.00	8,493.09	-3.254.77	14,453,623,26	1,699,945,19	39.79902817	-80.78805691
15,999.97	91.00	330,19	6,337.25	8,579.85	-3,304.47	14,453,710.02	1,699,895,49	39.79926675	-80,78823314
16.099.97	91.00	330.19	6.335.50	8,666.60	-3,354.18	14,453,796.77	1,699,845.79	39.79950532	-80.78840938
16,199,97	91.00	330.19	6,333.75	8,753.36	-3,403.88	14,453,883,53	1,699,796.08	39.79974390	-80.78858561
16,299.97	91.00	330.19	6,332.00	8,840.11	-3,453.59	14,453,970.28	1,699,746.38	39.79998247	-80.78876185
16,399.97	91.00	330.19	6,330.25	8,926.87	-3,503.29	14,454,057.04	1,699,696.67	39.80022105	-80.78893808
16,499.97	91.00	330.19	6,328.50	9,013.62	-3,552.99	14,454,143,79	1,699,646.97	39.80045982	-80.78911432
16.599.97	91.00	330,19	6,326.75	9,100.38	-3,602.70	14,454,230,55	1,699,597.26	39.80069820	-80,78929056
16,699,97	91.00	330,19	6,325.00	9,187.13	-3,652,40	14,454,317.30	1,699,547,56	39.80093677	-80.78946680
16,799,97	91.00	330,19	6,323,25	9,273,89	-3,702.11	14,454,404.06	1,699,497.86	39.80117534	-80,78964305
16.899.97	91.00	330.19	6,321,50	9,360.64	-3.751.81	14.454,490.81	1,699,448.15	39.80141391	-80,78981929
16,999.97	91.00	330,19	6,319.75	9,447,40	-3.801.52	14.454.577.56	1,699,398.45	39.80165249	-80,78999554
17.099.97	91.00	330,19	6,318.00	9,534.15	-3,851.22	14,454,664,32	1,699,348.74	39.80189106	-80,79017178
17,199.97	91.00	330,19	6,316.25	9,620.91	-3,900.92	14,454,751.07	1,699,299.04	39.80212963	-80,79034803
17.299.97	91.00	330,19	6,314.50	9,707.66	-3,950.63	14,454,837.83	1,699,249.34	39,80236820	-80,79052428
17.399.97	91.00	330,19	6,312.75	9,794.42	-4.000.33	14,454,924.58	1,699,199.63	39,80260677	-80.79070053
17,499.97	91.00	330.19	6,311.00	9.881.17	-4.050.04	14,455,011.34	1,699,149.93	39.80284534	-80.79087678
17,556.83	91.00	330.19	6,310.00	9,930.50	-4,078.30	14,455,060.67	1,699,121.66	39.80298100	-80.79097700
PBHL/T	17556.83 ME	0/6310.00 TVI	0						

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
BHL Bryan N-05HM r3 - plan hits target cen - Point	0.00	0.00	6,310.00	9,930.50	-4,078.30	14,455,060.67	1,699,121.66	39,80298100	-80.79097700
LP Bryan N-05HM - plan misses target - Point	0.00 center by 40.0	0.00 00usft at 715	6,492.00 8.66usft MD	929.46 (6492.00 TVE	1,124.73 0, 909.58 N, 1	14,446,059.63 090.03 E)	1,704,324.70	39.77822685	-80.77253282
LP Bryan N-05HM 40 W - plan hits target cen - Point		0.00	6,492.00	909.47	1,090.09	14,446,039.63	1,704,290.06	39.77817218	-80.77265629

RECEIVED Office of Oil and Gas

JUL 11 2018

WV Department of Environmental Protection



Plan Annotations

### Planning Report - Geographic

## 4705102077

Database:	DB_Jul2216dt_v14	Local Co-ordinate Reference:	Well Bryan N-05HM (slot C)
Company:	Tug Hill Operating LLC	TVD Reference:	GL=1191 @ 1191.00usft
Project:	Marshall County, West Virginia	MD Reference:	GL=1191 @ 1191.00usft
Site:	Bryan Pad	North Reference:	Grid
Well:	Bryan N-05HM (slot C)	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Hole		
Design:	rev3		

Measured	Vertical	Local Coor	dinates	
Depth (usft)	Depth (usft)	+N/-S (usft)	+E/-W (usft)	Comment
1,300.00	1,300.00	0.00	0.00	KOP Begin 2°/100' build
1,450.00	1,449.93	0.87	3.83	Begin 3.00° tangent
3,603.02	3,600,00	25.71	113.74	Begin 2°/100' build/turn
4,992.80	4,916.78	113,79	503.93	Begin 30.80° tangent
6,163.28	5,922.22	245.72	1,088.49	Begin 10°/100' build/turn
7,158.53	6,492.00	909.46	1,090,10	Begin 91.00° lateral section
17,556.83	6.310.00	9,930.50	-4.078.30	PBHL/TD 17556.83 MD/6310.00 TVD

RECEIVED Office of Oil and Gas

JUL 11 2018

WV Department of Environmental Protection

WW-9	
STATE OF WEST VIRGIN	the second se
DEPARTMENT OF ENVIRONMENTAL OFFICE OF OIL AND GA	
FLUIDS/ CUTTINGS DISPOSAL & RECLA	AMATION PLAN
Operator Name Tug Hill Operating, LLC	OP Code
Watershed (HUC 10) Fish Creek - Ohio River (Undefined) Quadrangle	e Powhatan Point 7.5'
Do you anticipate using more than 5,000 bbls of water to complete the proposed Will a pit be used? Yes No	
If so, please describe anticipated pit waste:AST Tanks with proper containment	t will be used for staging fresh water for frac and flow back water
Will a synthetic liner be used in the pit? Yes No	If so, what ml.? AGT Tanka will be used with proper contained.
Proposed Disposal Method For Treated Pit Wastes:	1
Land Application Underground Injection (UIC Permit Number_UIC 24 Reuse (at API Number Off Site Disposal (Supply form WW-9 for disposal I Other (Explain_	)
Will closed loop system be used? If so, describe: Yes - For Vertical and Horizor	V V
Drilling medium anticipated for this well (vertical and horizontal)? Air, freshwa	ater, oil based, etc. <u>Air for vertical / Oil for Horizontal</u>
-If oil based, what type? Synthetic, petroleum, etc. Synthetic Oil Base $^{\prime\prime}$	
Additives to be used in drilling medium? Barite for weight	
Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. All c	drill cuttings to be disposed of in Wetzel County Sanitary Landiill
-If left in pit and plan to solidify what medium will be used? (cement,	lime, sawdust) N/A
-Landfill or offsite name/permit number? Wetzel County Sanitary Landfil (	SWF-1021 / WV0109185)
Permittee shall provide written notice to the Office of Oil and Gas of any load o West Virginia solid waste facility. The notice shall be provided within 24 hours 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 panelting for submitting folgs information including the passibility of fine

Company Official Signature	ment.	RECEIVED Office of Oil and Gas
Company Official (Typed Name) Jim Pancake		JUL 11 2018
Company Official Title_Vice President GeoScience		WV Department of Environmental Protection
Subscribed and sworn before me this 20 day of JUNE	, 20_ <i>18</i>	COMMONWEALTH OF PENNSYLVANI
Manneur A Stead	Notary Public	NOTARIAL SEAL MAUREEN A STEAD

1/28/19

My commission expires

Notary Public

A NOTARIAL SEAL

MAUREEN A STEAD Notary Public **CECIL TWP, WASHINGTON COUNTY** m Expires Jan 26, 2019 My Gan

### Form WW-9

Proposed Revegetation Tre	atment: Acres Disturbed 1	7.78	Prevegetation pl	I 6.0
	Tons/acre or to correc			
Fertilizer type 10	-20-20			
Fertilizer amount_	500	lbs/acre		
0.5				
Mulch 2.5		_Tons/acre		
	ſemporary	_Tons/acre Seed Mixtures	Perma	inent
	Cemporary Ibs/acre	-	<b>Perma</b> Seed Type	inent Ibs/acre
Т		<u>Seed Mixtures</u>		

#### Attach:

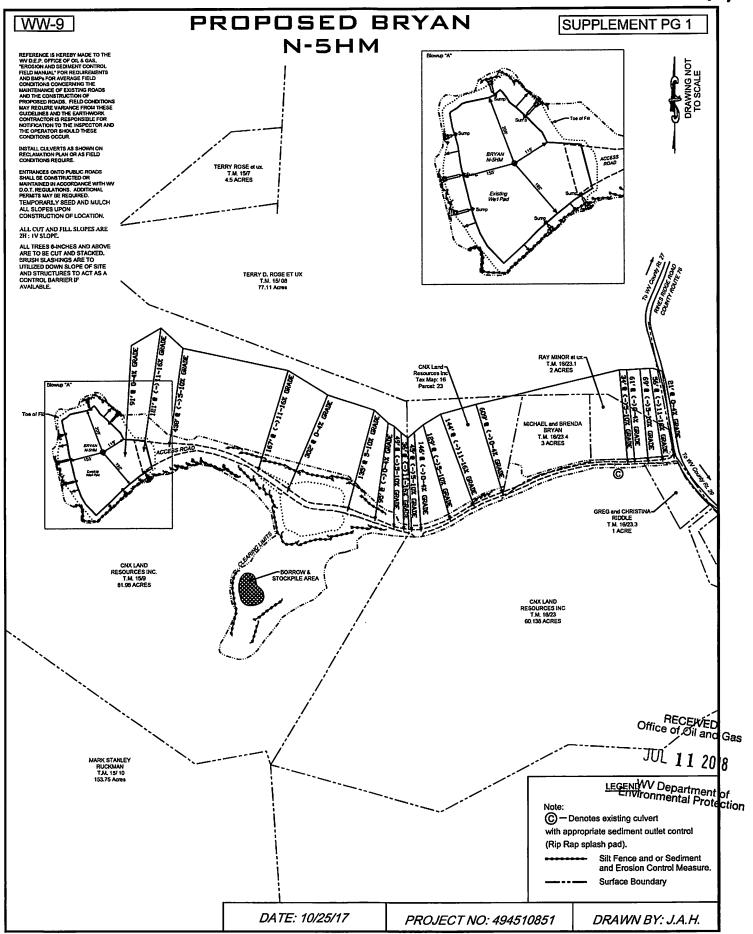
Maps(s) of road, location, pit and proposed area for land application (unless engineered plans including this info have been provided). If water from the pit will be land applied, include dimensions (L x W x D) of the pit, and dimensions (L x W), and area in acreage, of the land application area.

Photocopied section of involved 7.5' topographic sheet.

an Approved by: Juin Unbolos	
omments: V	
eld Reviewed? ( )Yes ( )No	Office of Oil and G
eld Reviewed? ( )Yes ( )No	JUL 11 201

WV Department of Environmental Protection

# 4705 \* 02077





# Well Site Safety Plan Tug Hill Operating, LLC

6/28/18

Well Name:Bryan N-5HM

Pad Location: Bryan Pad

Marshall County, West Virginia

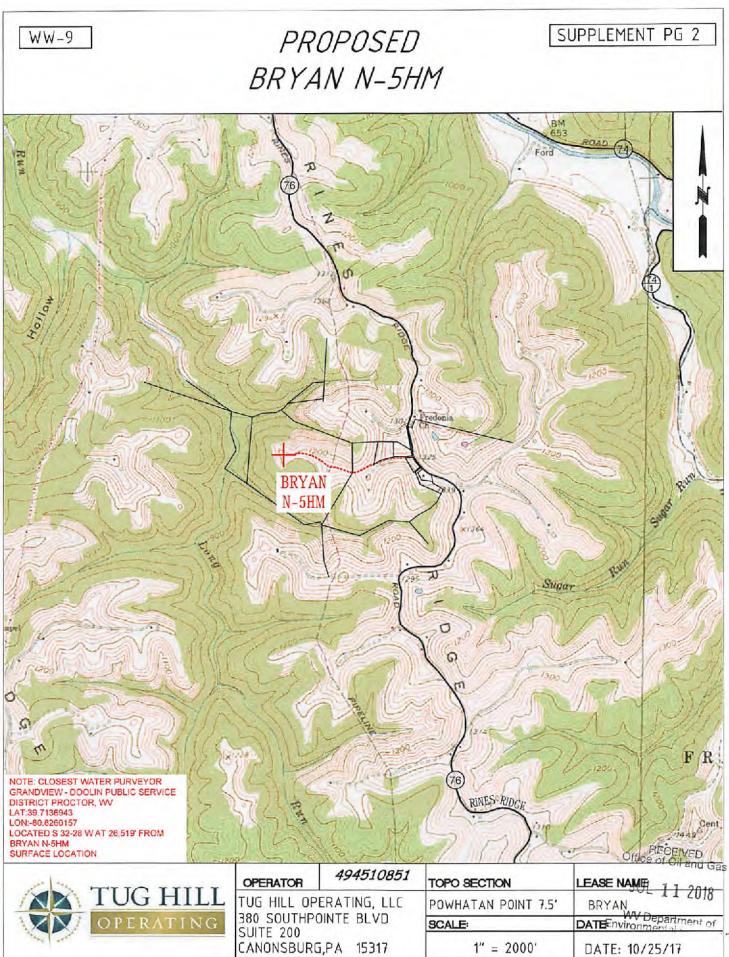
UTM (meters), NAD83, Zone 17: Northing: 4,402,884.48 Easting: 519,136.39

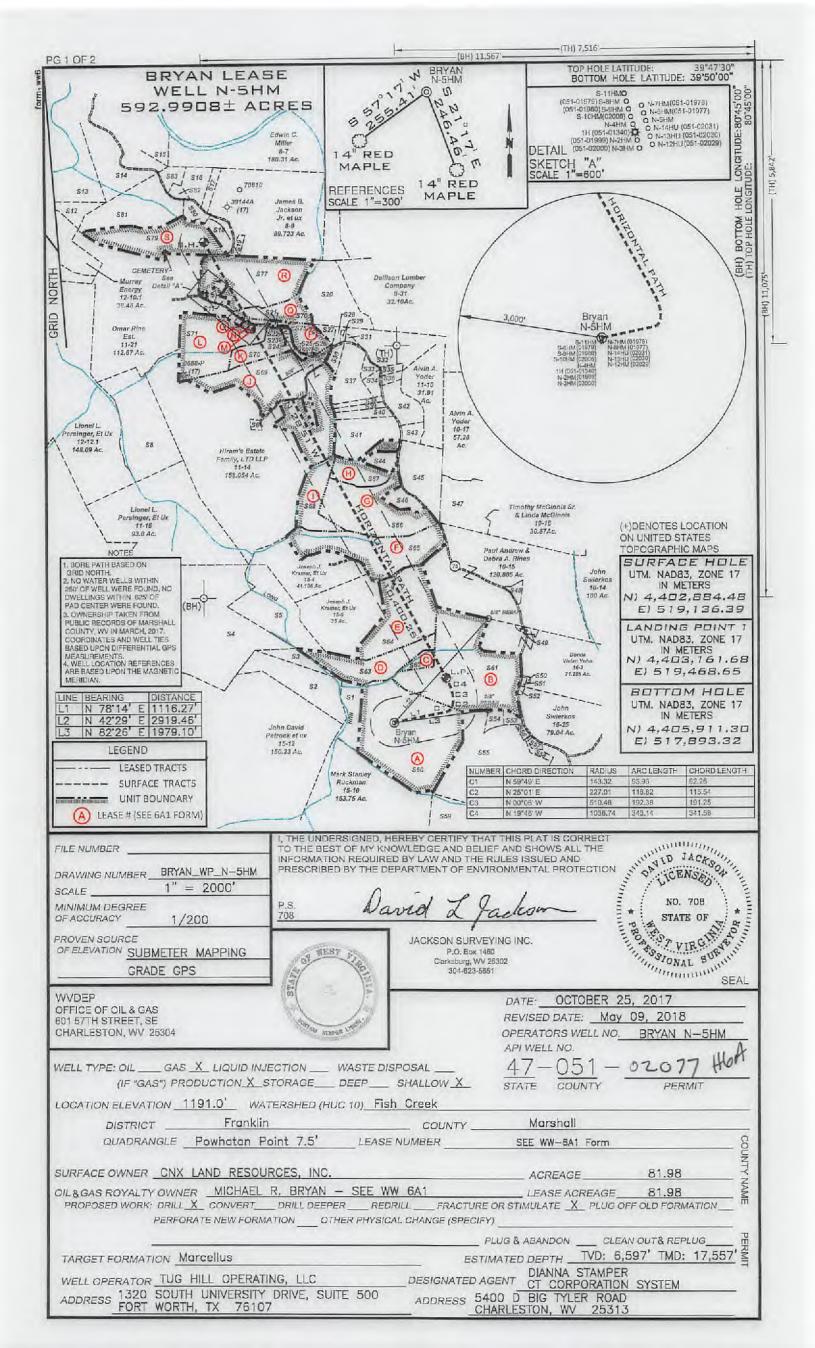
June 2018

RECEIVED Office of Oil and Gas

JUL 11 2018

WV Department of Environmental Protection





PG2OF2 BRYAN LEASE WELL N-5HM 592.9908± ACRES

wwB

un n

S6         11-16.2         Dennis F. Macre et ux         1.056           S7         11-16.2         Joseph Haught         2.181           S8         12-11         Wealay Bryan & Wealay Bryan II         52.47           S9         11-19         Divid E. Gray         0.552           S10         11-20         David E. Gray         0.553           S12         12-9         Lionel A. Mary Lee Perainger         10.15           S13         7-39         Lionel A. Mary Lee Perainger         10.15           S14         7-31         William N. Roupe         24.60           S16         11-1.7         William S. & Mary K. Adams         8.0           S17         11-1.2         Jay A. Cenner, atux         5.824           S20         11-4         David H. Arrick, atux         3.15           S21         11-5.2         Rickey Lynn & Victoria Rose Cross         1.0           S22         11-5.2         Rickey Lynn & Weath Rose Cross         1.0           S24         11-25         Owant Michael Bar         0.635           S25         11-16.1         Samar Michael Haught-Life         0.275           S26         11-5.1         James R. Andersen, et ux         0.205           S27 <th>Number</th> <th>TAX MAP -PARCEL</th> <th>ADJOINER OWNER</th> <th>ACRES</th>	Number	TAX MAP -PARCEL	ADJOINER OWNER	ACRES
S3         15-2         John David Petroc Bitk         S0           S4         15-1         Mercus Shore B bard Schlabach         121.0           S5         11-14.1         Dannie, F. Moora et ux         1.036           S7         11-14.2         Joseph J. Kramar et ux         36.10           S8         12-11         Weisiy Bryan & Weisey Bryan II         2.145           S8         12-11         Weisiy Bryan & Weisey Bryan II         52.47           S9         11-20         David E, Gray         0.552           S11         11-2.2         Jobiah A. Myres         2.193           S12         12-9         Lionel & Mery Lee Perainger         10.15           S13         7-33         Williom N. Rouga         43.14           S15         7-31         Williom N. Rouga         43.14           S16         11-1.7         Williom S. & Mary K. Adams         8.0           S17         11-1.5         Paul A. Sundy Whill         3.367           S21         11-2.2         Rickey Lung A. Victoria Rose Cross         1.0           S22         11-2.5         Owan Michael Barr         0.483           S23         11-2.5         Owan Michael Barr         0.598           S24				
S4         15-1         Mercus Shorp, S Devid Schubach         121.0           S5         15-3         Jaceph, Karama et u.x         36.10           S6         11-14.1         Dannis, F. Macen et u.x         1.056           S7         11-19.2         Jobeph Hagyh         2.181           S8         12-11         Weisby Synan K. Weisby Synan K.         5.32           S10         11-20         David E. Gray         0.532           S11         11-2.2         Jobnia A. Myres         2.193           S12         12-9         Uonel A. Myres         2.193           S13         739         Uonel A. Myres         2.193           S14         731         William N. Roupe         43.14           S15         731         William N. Roupe         43.14           S16         11-1.7         William S. A. Mary K. Adams         8.0           S17         11-1.5         Paul A. Stordy Wrill         3.507           S20         11-4         Dovid H. Arrick, dinx         3.1.5           S21         11-1.5         Stord Stords Fubas ELU         0.003           S22         11-2.4         Dovid H. Arrick, dinx         3.0.25           S21         11-4.5				
S5         15-3         Joseph J, Kamara et us.         35.10           S6         11-14.1         Dennis F. Moore et us.         1.056           S7         11-19.2         Joseph Haught         2.181           S8         12-11         Wesley Bryan & Wesley Bryan II         52.47           S9         11-20         David E, Gray         0.532           S10         11-20         David E, Gray         0.532           S11         11-2.2         Joseph Haught         57.0           S13         7-39         Uloral L, Parsinger et us.         57.0           S14         7-33         William N, Roupe         43.14           S16         7-31         William N, Roupe         5.824           S17         11-1.2         Jay A, Cenner, et us.         5.824           S24         11-25         Owen Michael Bar         0.4358           S251         11-5.1         Banet A, More, et us.				
S6         11-16.2         Dennis E. Macre et ux         1.056           S7         11-16.2         Joseph Haught         2.181           S8         12-11         Weslay Bryan & Weslay Bryan II         52.47           S9         11-19         Dinid E. Gray         0.552           S10         11-20         David E. Gray         0.553           S12         12-9         Lional Mary Lee Persinger 10.15         513           S14         7-39         Lional Mary Lee Persinger 10.15         513           S14         7-31         William N. Roupe         24.60           S16         11-1.7         William S. & Mary K. Adams         8.0           S17         11-1.5         Paul A. Sandy Whit         5.207           S20         11-4         Devid H. Arrick, et at         31.5           S21         11-5.2         Rickey Lynn & Victofia Rose Cross         1.0           S22         11-24         Churdes Edward Fuchae Blar         0.463           S24         11-25         Owen Michael Bar         0.598           S25         11-5.1         Staam Marie El Mar         0.603           S26         11-5.1         Staam Marie El Mar         0.259           S25         1			Marcus Sharp & David Schlabach	121.0
S7         11-16.2         Joseph Haught         2.161           S8         12-11         Weslay Bryan & Weslay Bryan II         52.47           S10         11-20         David E, Gray         0.532           S11         11-20         David E, Gray         0.532           S12         12-9         Lional A, Mayeria         2.193           S11         11-2.2         Journal A, Mayeria         2.193           S13         7-39         Lional L, Persingar et ux         57.0           S14         7-33         William N, Roupe         43.14           S16         11-1.2         Jay A Cenner, et ux         5.824           S17         11-1.5         Part A, Santiy Whith         3.507           S18         11-1.2         Jay A, Cenner, et ux         5.824           S21         11-5.2         Ricke Junn A Victoria Rose Cross         1.0           S22         11-24         Ournam Kinte Bar         0.835           S23         11-25         Owarn Michael Bar         0.835           S24         11-25         Owarn Michael Bar         0.205           S25         11-5.1         James R. Anderson, et ux         3.025           S26         11-5.1         Jame		15-3	Joseph J. Kramar et ux	36.10
SB         12-11         Westery Eryan & Westery Eryan 1         52.4           SP         11-19         David E. Gray         0.552           S10         11-2.2         Jostnua A. Myare         2.193           S12         12-9         Lional A. Myare         2.193           S13         7-39         Lional L. Persinger et ux         57.0           S14         7-33         William N. Roupe         24.60           S15         7-31         William N. Roupe         45.14           S16         11-1.7         William N. Roupe         45.14           S17         11-1.5         Paul A. Sandy Whill         3.507           S20         11-4         Devid H. Arrick, et ux         31.5           S21         11-5.2         Rickey Lynn & Victoria Rose Cross         1.0           S22         11-24         Churdhe Stard Fuchae Bar         0.603           S23         11-25         Owen Michael Bar         0.635           S24         11-25         Owen Michael Bar         0.637           S25         11-15.1         Jammes R. Anderson, et ux         0.205           S26         11-5.1         James R. Anderson, et ux         0.205           S30         11-15.3	S6		Dennis F. Moore et ux	1.056
SB         12-11         Westery Eryan & Westery Eryan 1         52.4           SP         11-19         David E. Gray         0.552           S10         11-2.2         Jostnua A. Myare         2.193           S12         12-9         Lional A. Myare         2.193           S13         7-39         Lional L. Persinger et ux         57.0           S14         7-33         William N. Roupe         24.60           S15         7-31         William N. Roupe         45.14           S16         11-1.7         William N. Roupe         45.14           S17         11-1.5         Paul A. Sandy Whill         3.507           S20         11-4         Devid H. Arrick, et ux         31.5           S21         11-5.2         Rickey Lynn & Victoria Rose Cross         1.0           S22         11-24         Churdhe Stard Fuchae Bar         0.603           S23         11-25         Owen Michael Bar         0.635           S24         11-25         Owen Michael Bar         0.637           S25         11-15.1         Jammes R. Anderson, et ux         0.205           S26         11-5.1         James R. Anderson, et ux         0.205           S30         11-15.3	S7	11-16.2	Joseph Haught	2.181
SP         11-19         Dwid E. Gray         0.552           S10         11-20         Daxtua A. Myris         2.193           S12         12-9         Lional A. Mary Lee Persinger tux         57.0           S13         7-33         William N. Roupa         24.50           S14         7-33         William N. Roupa         45.14           S15         7-31         William N. Roupa         45.14           S16         11-1.7         William N. Roupa         45.14           S17         11-1.5         Paul A. Sandy Whit:         3.507           S18         11-1.2         Jay A. Cenner, stux         5.824           S19         8-9.1         Sect E. Jackson, Tammy S. South         1.937           S20         11-4         David H. Arrick, stux         31.0           S21         11-5.2         Ricks Urm A. Watcrin Rose Cross         1.0           S22         11-2.4         Clurches Edward Purbae E1Ux         0.603           S24         11-2.5         Owarn Michael Barr         0.828           S25         11-6.1         Stasan Marks, Antex, stux         3.0           S229         11-7         Daptid Church         0.8           S229         11-7	S8		Wesley Bryan & Wesley Bryan II	52.478
S10         11-20         David E, Gray         0.569           S11         11-2.2         Juena A, Myers         2.193           S12         12-9         Lionel A, Mary Lee Persinger         10.15           S13         7-39         Lionel A, Mary Lee Persinger et ux         57.0           S14         7-33         William N, Roupe         24.60           S15         7-31         William N, Roupe         43.14           S16         11-1.7         William N, Roupe         43.14           S16         11-1.2         Jay A, Cenner, dux         5.824           S19         8-9.1         Scott E, Jackson, Tammy G, South         1.957           S20         11-4         David H, Arrick, et ux         31.5           S21         11-5.2         Rickey Lynn & Victoria Rose Cross         1.06           S22         11-24         Churdes Edward Fuchae BLtb         0.603           S23         11-25         Owarn Michael Bar         0.498           S24         11-25         Owarn Michael Bar         0.598           S25         11-5.3         Kagan Michael Haugh-Life         0.257           S26         11-6.1         James A, Andery, Edward Michael Laward M, Antick, and A, Antick, and A, Antick, and A, Antick,	S9	11-19		
Si1         11=2.2         Jestua A. Myers         2.103 5           Si2         12=9         Llonel & Mery Lee Persinger         10.15           Si3         7-39         Llonel & Persinger etux         57.0           Si4         7-33         William N. Roupe         43.14           Si6         11-1.5         Paul A. Sandy Will         3.507           Si7         11-1.5         Paul A. Sandy Will         3.507           Si8         11-1.2         Jay A. Cenner, etux         5.824           Si9         8-9.1         Scott E. Jeckson, Tammy G. South         1.957           Si20         11-4         Devid H. Artick, et u.         31.5           Si21         11-5.2         Rickey Law Michael Barr         0.595           Si23         11-23         Owen Michael Barr         0.635           Si24         11-25         Owen Michael Barr         0.205           Si25         11-5.1         James Andreson, etux         0.205           Si24         11-25         Owen Michael Barr         0.205           Si25         11-5.1         James Andreson, etux         0.205           Si26         11-5.3         Robert Hartis Anck, etux         3.0           Si29 <td< td=""><td></td><td></td><td></td><td></td></td<>				
S12         12–9         Uonel & Mery Lee Persinger         10.16           S13         7–39         Lioral L, Persinger et Lx         57.0           S14         7–33         William N, Roupe         24.60           S15         7–31         William N, Roupe         24.60           S16         11–1.7         William N, Roupe         24.60           S17         11–1.2         Jay A, Cenner, dtw         5.824           S18         8–9.1         Scott E, Jackson, Tammy G, South         5.824           S20         11–4         David H, Artick, et at         31.5           S21         11–5.2         Rickey Lym & Victoria Rose Cross         1.0           S22         11–24         Churdes Edward Fuchae Blatx         0.603           S23         11–25.         Owan Michael Bar         0.635           S24         11–25.         Owan Michael Bar         0.635           S27         11–5.3         Rogan Michael Hang's Life         3.0           S30         11–16.3         Kagan Michael Hang's Life         3.285           S31         11–9         Edwire V, Allifer         41.77           S33         11–9.10         John A & Janet L. Broucke         2.348           S34 <td></td> <td>the second se</td> <td></td> <td></td>		the second se		
S13         7-39         Long L., Persinger et ux         57.0           S14         7-33         William N. Roupe         24.60           S15         7-31         William N. Roupe         43.14           S16         11-1.7         William N. Roupe         43.14           S17         11-1.5         Paul A. Sandy Will         3.507           S19         B-9.1         Scott E. Jackson, Tammy G. South         5.824           S20         11-4         Devid H. Artick, at uz         31.5           S21         11-25         Owen Michael Barr         0.845           S24         11-25         Owen Michael Barr         0.845           S24         11-25         Owen Michael Barr         0.852           S25         11-5.1         James R. Andenar, et ux         0.205           S27         11-5.3         Robert Hartie Arrick, et ux         3.0           S30         11-7         Beptist Connetry         1.0           S31         11-8         Bargist Church         0.8           S32         11-9         Edwin C. & Kimberky A. Miller         41.77           S33         11-9.1         Joach M. Hanght A. Stowark         2.468           S34         11-9.2				
Sti         7-33         William N. Roupe         24.60           Sti         7-31         William N. Roupe         43.14           Sti         11-1.2         William N. Roupe         43.14           Sti         11-1.2         Jay A. Cenner, et ux         5.824           Sti         8-9.1         Scott E. Jackson, Tammy S. South         5.824           Sti         11-2.1         Jay A. Cenner, et ux         5.824           Sti         11-5.2         Rickey Lynn & Victoria Rose Cross         1.0           Sti         11-2.5         Overn Michael Bar         0.863           Sti         11-2.5         Overn Michael Bar         0.458           Sti         11-5.1         James R. Anderson, et us         0.205           Sti         11-5.3         Robert Harris Anderson, et us         0.205           Sti         11-6         Robert A Roberce Arrick         1.29           Sti         11-7         Baptist Centerbary         1.0           Sti         11-9.2         Michent Reyne         3.143           Sti         11-9.2         Michent Reyne         3.143           Sti         11-9.2         Michent Reyne         3.143           Sti         10.91				
S15         7-31         William N. Roupe         43.14           S16         11-1.7         William S. & Mary K. Adams         8.0           S17         11-1.5         Paul & Sandy Whit         5.507           S18         8-9.1         Scott E. Jackson, Tamny S. South         5.824           S20         11-4         Devid H. Arris, dri x.         5.824           S21         11-5.2         Rickey Lynn & Victoria Rose Cross         1.0           S22         11-24         Charles Edward Furbae El V.         0.603           S23         11-25.         Overn Michael Bar         0.582           S24         11-25.         Overn Michael Bar         0.592           S25         11-6.1         Stamme Mark Smith-Life         0.603           S28         11-6.3         Kegan Michael Haught-Life         3.285           S30         11-6.3         Kegan Michael Haught-Life         3.285           S33         11-9.0         John A. & Janet L. Beukize         2.348           S34         11-9.2         Michael R. Bryan         3.143           S35         11-9.3         Joseph H. Arteight A. Miller         41.77           S34         11-9.2         Michael R. Bryan         3.143				
S16         11-1.7         William S. & Mary K. Adams         8.0           S17         11-1.5         Paul & Bandy Whit         3.507           S18         11-1.2         Jay A. Cenner, at ux         5.824           S19         8-9.1         Scott E. Jackson, Tammy S. South         8.524           S20         11-4         David H. Antiol, et ux         31.5           S21         11-5.2         Rikely Lynn & Victafa Rose Cross         1.0           S22         11-24         Owen Michael Bar         0.463           S24         11-25.3         Robert Michael Bar         0.295           S26         11-5.1         Jamea R. Andreson, et ux         0.205           S27         11-5.3         Robert Harris Arrick, et ux         3.0           S28         11-6         Robert A. Roberts, et ux         3.0           S29         11-7         Baptist Centrekry         1.0           S30         11-19.3         Kegan Michael Haught Life         3.257           S31         11-9.2         Michael R. Royn         3.143           S35         11-9.10         John A. & Janet L. Brocke         2.349           S33         11-9.2         Michael R. Royn         3.143           S35<				
S17         11-1.5         Paul & Sundy Whit         3.502           S18         11-1.2         Jay A. Conner, at ux         5.824           S19         8-9.1         Scott E. Jackson, Tammy S. South & Mainen Jackson         1.957           S20         11-4         Deuld H. Arid, of ux         31.5           S21         11-5.2         Rickey Lynn & Victoria Rose Cross         1.0           S22         11-24         Charles Edward Furbas Bt UX         0.603           S24         11-25         Owen Michael Barr         0.845           S25         11-16.1         Susan Maria Smith-Life         0.876           S26         11-5.3         Robert Harris Arick, et ux         3.0           S28         11-6         Robert Harris Arick, et ux         3.0           S30         11-16.3         Kegan Michael Haught - Lfe         3.225           S31         11-8         Baptist Cemetery         1.0           S33         11-9.10         John A. & Janet L. Broude         2.348           S34         11-9.2         Michael R. Bryan         3.143           S35         11-9.3         Southarn Country Farms, Inc         2.458           S34         11-9.1         Joseph M. Haught Slorown Haught         16				
ST8         11-1.2         Jay A. Cenner, et us         5.824           S19         B-9.1         Seott E. Jackson, Tammy S. South         1.957           S20         11-4         Devid H. Arrick, et us         31.5           S21         11-5.2         Rickey Lynn & Viotein Rose Cross         1.0           S22         11-24         Charles Edward Furbas El Ux         0.603           S23         11-23         Owen Michael Barr         0.598           S24         11-25         Owen Michael Barr         0.205           S27         11-5.3         Robert Harris Arrick, et ux         3.0           S28         11-6         Robert Alarris Arrick, et ux         3.0           S28         11-7         Baptist Contextery         1.0           S30         11-16.3         Kegan Michael Haught - Life         3.225           S31         11-9         Edwin C. & Kimberly A. Miller         41.77           S33         11-9.10         John A. & Janet L. Brouke         2.342           S34         11-9.2         Micheel R. Bryan         2.026           S37         11-9.3         Joaeph M. Hought S Steven Haught         16.3           S38         11-9.7         Sean F. Moore         2.026	510			
S19         8-9.1         Scott E. Jackson, Tammy S. South Manon Jackson         1.957           S20         11-4         Devid H. Arrick, et ux         31.5           S21         11-5.2         Rickey Lynn & Victofa Rose Cross         1.0           S22         11-24         Charles Edward Funches EU W         0.603           S23         11-25         Owen Michael Barr         0.635           S24         11-25         Owen Michael Barr         0.595           S25         11-5.1         James R. Anderson, et ux         0.205           S27         11-5.3         Robert Harris Arrick, et ux         3.0           S28         11-6         Robert A Reboard Arrick         1.29           S30         11-16.3         Kegan Michael Haught Life         3.225           S31         11-9         Edwin C. & Kimberly A. Miller         41.77           S33         11-9.1         Joneph K. Brown         3.143           S33         11-9.2         Michael R. Bryan         3.143           S33         11-9.3         Joseph M. Haught & Stoven Haught I         18.3           S35         11-9.3         Joseph M. Haught & Stoven Haught I         18.3           S36         11-9.1         Edwin C. & Kinchary A. Millec <td></td> <td></td> <td></td> <td></td>				
& Mañon Jackson           S20         11-4         David H, Artick, et ux         31.5           S21         11-5.2         Rickey Lynn & Victoria Rose Cross         1.0           S22         11-24         Charles Edward Furbae EU k         0.603           S23         11-25         Owen Michael Barr         0.845           S24         11-25         Owen Michael Barr         0.205           S25         11-16.1         Stream Mirie Smith-Life         0.205           S26         11-5.3         Robert 8 Robecca Artick         1.29           S29         11-6         Beplat Centery         1.0           S30         11-16.3         Kegan Michael Haught Life         3.265           S31         11-9         Edwin C. & Kimberly A. Miller         41.77           S33         11-9.2         Michael Regnan         3.143           S35         11-9.3         Joseph M. Haught & Borot         2.020           S33         11-9.3         Joseph M. Haught & Slowen Haught         16.3           S34         11-9.3         Joseph M. Haught & Slowen Haught         16.3           S35         11-9.3         Joseph M. Haught & Slowen Haught         16.3           S36         11-9.1         Jose				
S20         11-4         Devid H. Arrick, et us         31.5           S21         11-5.2.         Rickey Lynn & Victoria Rose Cross         1.0           S22         11-24         Charles Edward Purbace BLVX         0.603           S23         11-25.         Oven Michael Barr         0.835           S24         11-25.         Oven Michael Barr         0.836           S25         11-5.1         James R. Anderson, et us         0.205           S27         11-5.3.         Robert Harris Anderson, et us         0.205           S27         11-5.3.         Robert Harris Anderson, et us         0.225           S30         11-9.7         Baptist Cemetery         1.0           S30         11-9.1         John A. & Janet L. Brouke         2.325           S31         11-9.2         Michael R. Bryan         3.143           S33         11-9.7.         Sean F. Moore         2.020           S36         11-9.7.         Sean F. Moore         2.026           S37         11-9.8.         Southern County Farms, Inc         2.458           S40         11-9.7         Sean F. Moore         2.026           S38         11-9.6.         Southern County Farms, Inc         2.458 <t< td=""><td>519</td><td>8-9.1</td><td></td><td>1.957</td></t<>	519	8-9.1		1.957
S21         11-5.2         Rickey Lynn & Victoria Rose Cross         1.0           S22         11-24         Charles Edward Furbae ELUx         0.603           S23         11-25         Overn Michael Barr         0.598           S25         11-16.1         Stream Marke Smith-Life         0.875           S26         11-5.1         James R. Anderson, et ux         0.205           S27         11-5.3         Robert Harris Arrick, et ux         3.0           S28         11-6         Robert Harris Arrick, et ux         3.0           S28         11-7         Baptist Cemetery         1.0           S30         11-15.3         Kegan Michael Haught-Life         3.265           S31         11-9.2         Michael R. Bryan         3.143           S35         11-9.10         John A. & Janet L. Brucke         2.348           S35         11-9.2         Michael R. Bryan         3.143           S35         11-9.3         Joseph M. Haught & Steven Haught         16.3           S38         11-9.5         Southarn Country Farms, Ino         2.458           S40         11-9.9         Learand L. Parkers, Rule         41.77           S41         11-9         Edwin C. & Kimberty A. Miler         41.77				
S22         11-24         Charles Edward Furbae Et Ux         0.603           S23         11-23         Overn Michael Barr         0.845           S24         11-25         Overn Michael Barr         0.845           S25         11-16.1         Stean Marie Smith-Life         0.876           S26         11-5.1         James R. Anderson, et ux         0.205           S27         11-5.3         Robert Farrie Arrick, et ux         3.0           S28         11-6         Robert S. Robert Farrie Arrick, et ux         3.0           S29         11-7         Baptist Centery         1.0           S30         11-16.3         Kegan Michael Haught - Life         3.265           S31         11-9.10         John A. Janet L. Broucke         2.348           S34         11-9.2         Michael R. Bryan         3.143           S35         11-9.7         Sean F. Moora         2.026           S37         11-9.5         Southern Country Farms, Inc         2.488           S40         11-9.5         Southern Country Farms, Inc         2.488           S41         11-9         Edwin C. & Kimbery A. Miller         41.77           S42         11-9.1         Jack Shepard Huggins Jr, et al         4.129 </td <td></td> <td></td> <td></td> <td></td>				
S23         11-23         Owen Michael Barr         0.845           S24         11-25         Owen Michael Barr         0.598           S25         11-15.1         Susan Mark Smith: Life         0.875           S26         11-5.1         James R. Andersen, et ux         0.205           S27         11-5.3         Robert Harik Artick, et ux         3.0           S28         11-6         Robert Harik Artick, et ux         3.0           S30         11-18.3         Kegan Michael Haught: Life         3.285           S31         11-9         Edvin C, & Kimberly A. Miller         41.77           S33         11-9.1         John A. & Jamel L. Beucket         2.348           S34         11-9.2         Michael R. Bryan         3.143           S35         11-9.3         Joseph M. Haught & Steven Haught         15.3           S38         11-9.5         Southern Country Farms, Inc         2.458           S40         11-9.9         Edvin C, & Kimbardy A. Miller         41.77           S41         11-9         Edvin C, & Kimbardy A. Miller         41.29           S41         11-9.3         Southern Country Farms, Inc         2.458           S41         11-9.1         Jack Shepard Hughs Jr, Let M. 10.92				and a state of the second s
S24         11-25         Owen Michael Barr         0.598           S25         11-5.1         Jaman Marle Smith-Life         0.875           S27         11-5.3         Robert Barrison, et us         0.205           S27         11-6.3         Robert R Rebeces Anick         1.29           S28         11-6         Robert R Rebeces Anick         1.29           S30         11-16.3         Kegan Michael Haugh-Life         3.285           S31         11-9         Edwin C. & Kimberly A. Miller         41.77           S33         11-9.10         John A. & Janet L. Beucke         2.348           S34         11-9.2         Michael R. Bryan         2.143           S35         11-9.3         Sean F. Moora         2.070           S36         11-9.7         Sean F. Moora         2.026           S37         11-9.5         Scuthern Country Farms, Inc         2.458           S40         11-9.5         Scuthern Country Farms, Inc         2.458           S41         11-9         Edwin C. & Kimbarly A. Miller         41.77           S42         11-9.1         Jack Schegard Huggins Jr, et at         4.129           S43         11-1.1         Nelle Maré & Robardt W. Spence         5.01		11-24		
S25         11-16.1         Stean Marie Smith-Life         0.876           S26         11-5.1         James R. Andersen, et ux         0.205           S27         11-5.3         Robert Haris Anrick, et ux         3.0           S28         11-6         Rebert & Rebecca Arrick         1.29           S29         11-7         Baptist Censtery         1.0           S30         11-18.3         Kegan Michael Haught - Life         3.265           S31         11-9         Baptist Censtery         0.8           S32         11-9.10         John A. & Janett Leucke         2.344           S33         11-9.2         Michael R. Bryan         3.143           S35         11-9.7         Sean F. Moore         2.026           S37         11-9.3         Joseph M. Haught & Steven Haught         16.3           S48         11-9.5         Southern Country Farms, Inc         2.458           S40         11-9.9         Leenard L. Parsona, et ux         5.09           S41         11-9.1         Jack Shepard Huggins Jr, et al         4.129           S42         11-9.1         Jack Shepard Huggins Jr, et al         4.129           S44         10-15.1         Doneid T. Millee         4.09		11-23	Owen Michael Barr	
S26         11-5.1         Jemes R. Anderson, et ux         0.205           S27         11-5.3         Robert Harris Arrick, et ux         3.0           S28         11-6         Robert A Rebecra Arrick, et ux         3.0           S29         11-7         Baptist Cemetery         1.0           S30         11-16.3         Kegan Michaal Haught-Life         3.285           S31         11-9         Edwin C, & Kimberly A. Niller         41.77           S33         11-9.10         John A & Janet L Beucke         2.348           S34         11-9.2         Micheel R. Bryan         3.143           S35         11-9.7         Sean F. Moora         2.070           S38         11-9.5         Southern Country Farms, Inc         2.458           S41         11-9.5         Southern Country Farms, Inc         2.458           S41         11-9.9         Leonard L Parsons, et ux         5.89           S42         11-9.1         Jack Shepard Hughins Jr., et al         10.92           S43         11-9.4         Jack Shepard Hughins Jr., et al         10.92           S43         11-9.4         Jack Shepard Hughins Jr., et al         10.92           S44         11-11.         Wealey B. Bryan II         25.0			Owen Michael Barr	
S26         11-5.1         Jemes R. Anderson, et ux         0.205           S27         11-5.3         Robert Harris Arrick, et ux         3.0           S28         11-6         Robert A Rebecra Arrick, et ux         3.0           S29         11-7         Baptist Cemetery         1.0           S30         11-16.3         Kegan Michaal Haught-Life         3.285           S31         11-9         Edwin C, & Kimberly A. Niller         41.77           S33         11-9.10         John A & Janet L Beucke         2.348           S34         11-9.2         Micheel R. Bryan         3.143           S35         11-9.7         Sean F. Moora         2.070           S38         11-9.5         Southern Country Farms, Inc         2.458           S41         11-9.5         Southern Country Farms, Inc         2.458           S41         11-9.9         Leonard L Parsons, et ux         5.89           S42         11-9.1         Jack Shepard Hughins Jr., et al         10.92           S43         11-9.4         Jack Shepard Hughins Jr., et al         10.92           S43         11-9.4         Jack Shepard Hughins Jr., et al         10.92           S44         11-11.         Wealey B. Bryan II         25.0	S25	11-16.1	Susan Marie Smith-Life	0.875
S27         11–5.3         Robert Harris Arrick, et ux         3.0           S28         11–6         Robert & Roberts Arrick         1.29           S29         11–7         Baptist Cenderty         1.0           S30         11–16.3         Kegan Michael Haught - Life         3.285           S31         11–8         Baptist Cenderly         0.8           S32         11–9.         Edwin C, & Kimberky A. Miller         41.77           S33         11–9.10         John A. & Janet L. Beucke         2.348           S34         11–9.2         Micheel R. Bryan         3.143           S35         11–9.7         Sean F. Moora         2.026           S33         11–9.5         Southam Country Farms, Inc         2.488           S40         11–9.5         Southam Country Farms, Inc         2.488           S41         11–9.9         Edwin C. & Kimberky A. Miller         41.77           S42         11–9.1         Jack Shepard Huggins Jr., et al         10.92           S43         11–9.4         Jack Shepard Huggins Jr., et al         10.92           S44         11–11.         Brack M. & Aranda J. Black         5.00           S45         11–11.1         Nalle Alexit Ara Sheanei Jynn         1.045 </td <td>S26</td> <td></td> <td>James R. Anderson, et ux</td> <td>0.205</td>	S26		James R. Anderson, et ux	0.205
S28         11-6         Robert & Rebects Arrick         1.29           S29         11-7         Baptist Cemetery         1.0           S30         11-16.3         Kegan Michael Haugh Life         3.265           S31         11-9         Edwin C, & Kimberly A, Miller         41.77           S33         11-9.10         John A, & Janet L, Brudke         2.348           S34         11-9.2         Michael R, Bryan         3.143           S35         11-9.10         John A, & Janet L, Brudke         2.348           S34         11-9.2         Sean F, Moora         2.026           S37         11-9.5         Southern Country Farms, Inc         2.488           S40         11-9.5         Southern Country Farms, Inc         2.488           S41         11-9.9         Leonard L, Parsona, et ux         5.89           S41         11-9.1         Jack Shepard Huggins Jr, et al         41.29           S43         11-9.4         Jack Shepard Huggins Jr, et al         41.29           S44         11-11         Braid M, & Armanda J, Blake         5.0           S45         11-11.2         Weslay R, Bryan B         25.03           S46         11-11.1         Nelie Marie & Robert W, Spencer         5.817 <td></td> <td>11-5.3</td> <td></td> <td></td>		11-5.3		
329         11-7         Baptist Cemetery         1.0           S30         11-76.3         Kegan Michael Haught - Life         3.285           S31         11-9         Edwin C, & Kimberly A, Miller         41.77           S33         11-9.10         John A, & Janet L, Beucke         2.348           S34         11-9.2         Michael R, Bryan         3.143           S35         11-9.2         Michael R, Bryan         3.143           S35         11-9.3         Joseph M, Haught & Slavon Haught         16.3           S37         11-9.5         Southern Country Farms, Inc         2.559           S39         11-9.5         Southern Country Farms, Inc         2.686           S40         11-9.9         Leenard L, Parson, et ux         5.68           S41         11-9.4         Jack S, Huggins, et al         4.129           S43         11-11.1         Brad M, & Amanda J, Blake         5.0           S44         11-11.1         Nellie Maria & Robert W, Spenner         3.813           S47         10-16.4         Metvin E, Ferguson Jr. & Elizabet Ferguson         30.87           S48         10-15.1         Donald T, Miller         2.095           S49         16-3.2         Jimmy Lee Ostrander J, Sheenal				
S30         11-16.3         Kegan Michael Haught-Life         3.265           S31         11-8         Baptiet Church         0.8           S32         11-9.10         John A. & Janet L. Beucke         2.348           S34         11-9.2         Michael R. Bryan         3.143           S35         11-9.8         Sean F. Moore         2.026           S37         11-9.7         Sean F. Moore         2.026           S37         11-9.5         Southern Country Farms, Inc         2.488           S40         11-9.5         Southern Country Farms, Inc         2.488           S40         11-9.9         Leonard L. Parsons, et ux         5.89           S41         11-9         Edwin C. & Kimbarly A. Mille:         41.77           S42         11-9.1         Jack S. Huggins, et al         4.129           S43         11-9.4         Jack S. Huggins, et al         4.129           S44         11-11.         Welve R. Bryan & Weeky R. Bryan II         25.03           S45         11-11.2         Weeky R. Bryan II         25.03           S44         10-15.1         Donald T. Miller         2.095           S48         10-15.1         Donale J. Ackson, et ux         2.0 <td< td=""><td>and the second se</td><td></td><td>and the second se</td><td></td></td<>	and the second se		and the second se	
S31         11—8         Baptist Church         0.8           S32         11—9         Edwin C, & Kimberly A, Miller         41.77           S33         11—9.10         John A, & Janet L, Brucke         2.348           S34         11—9.2         Micheel R, Bryan         3.143           S35         11—9.7         Sean F, Moore         2.026           S37         11—9.5         Southern Country Farms, Inc         2.488           S38         11—9.5         Southern Country Farms, Inc         2.488           S40         11—9.5         Southern Country Farms, Inc         2.488           S41         11—9.6         Southern Country Farms, Inc         2.488           S41         11—9.1         Jack Shepard Hughns Jr., et al         10.92           S43         11—9.4         Jack Shepard Hughns Jr., et al         10.92           S43         11—11.2         Wealey R. Bryan JL         25.03           S45         11—11.1         Nalle Marie & Robert W. Spencer         5.813           S47         10—16.4         Melvin E. Forguson Jr. & Bizabath Farguson         3.0.877           S48         10—15.1         Donald T. Miller         2.095           S50         16—3.1         Donald T. Miller				
S32         11-9         Edwin C, & Kimberly A, Miller         41.77           S33         11-9.10         John A, & Janet L, Brucke         2.348           S34         11-9.2         Micheel R, Bryan         3.143           S35         11-9.7         Sean F, Moore         2.070           S36         11-9.7         Sean F, Moore         2.026           S37         11-9.3         Joseph M, Haught & Sleven Haught         16.3           S38         11-9.5         Southam Country Farms, Inc         2.458           S40         11-9.9         Leenard L, Parsons, et ux         5.89           S41         11-9.1         Jack Shepard Huggins Jr., et al         10.92           S43         11-9.4         Jack S. Huggins, et al         4.127           S44         11-11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S45         11-11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S47         10-16.4         Melvin E. Fergueon A: & Elizabeth Fergueon 30.87           S48         10-15.1         Donald T. Miller         2.095           S49         16-3.2         Jimmy Lee Ostrander Jr., Sheana Lynn         1.435           S50         16-2.3.1         Ray E. Minor et ux<				
S33         11-9.10         John A. & Janet L. Beucks         2.348           S34         11-9.2         Michael R. Bryan         3.143           S35         11-9.8         Sean F. Moore         2.070           S36         11-9.7         Sean F. Moore         2.026           S37         11-9.5         Southern Country Farms, Inc         2.458           S40         11-9.6         Southern Country Farms, Inc         2.458           S41         11-9.1         Jack S. Repard Huggins Jr., et al         10.92           S43         11-9.4         Jack S. Huggins, et al         4.129           S44         11-11         Bredwin C. & Kimberly A. Miller         4.129           S44         11-11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S45         11-11.2         Wesley R. Bryan & Wesley R. Bryan II         2.095           S46         10-15.1         Donal T. Miller         2.095           S47         10-16.4         Metvin E. Forguson Jr. & Bizabath Farguson         3.0.87           S54         16-3.1         Densi E. Jackson, et w         0.27           S55         16-2.2         Unrisitian Church         0.19           S55         16-23.3         Grag & Christian Riddle<				
S34         11-9.2         Michael R. Bryan         3.143           S35         11-9.7         Sean F. Moore         2.070           S36         11-9.7         Sean F. Moore         2.026           S37         11-9.5         Southern Country Farms, Inc         2.658           S38         11-9.6         Southern Country Farms, Inc         2.488           S40         11-9.9         Leenard L. Parsons, et ux         5.69           S41         11-9.1         Jack Schepard Huggins Jr., et al         10.92           S43         11-9.4         Jack Schuggins, et al         4.129           S44         11-11         Brad M. & Amanda J. Blake         5.0           S45         11-11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S46         10-15.1         Donald T. Miller         2.095           S49         16-3.2         Jimmy Lee Ostrander Jr., Sheana Lynn         1.435           Ostrander & Brody Ray Ostrander         0.19         552         1.435           S55         1.6-2         Christian Church         0.19           S55         1.6-2.3         CNX Land Resources, Inc         60.13           S55         1.6-2.3         GNX Land Resources, Inc         60.13 <td></td> <td></td> <td></td> <td></td>				
S35         11-9.8         Sean F. Moore         2.020           S36         11-9.7         Sean F. Moore         2.022           S37         11-9.3         Joseph M. Haught & Steve Haught         16.3           S38         11-9.5         Southern County Farms, Inc         2.458           S40         11-9.9         Lecnard L. Parsona, et ux         5.89           S41         11-9.1         Jack Shepard Huggins Jr., et al         10.92           S42         11-9.4         Jack Shepard Huggins Jr., et al         10.92           S44         11-11         Brad M. & Amanda J. Blake         5.0           S45         11-11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S46         11-11.1         Nellie Maria & Robert W. Spencer         5.813           S47         10-16.4         Melvin E. Ferguson Jr. & Elizabeth Farguson Jr.         30.87           S48         10-15.1         Donald T. Milec         2.095           S49         16-3.2         Jimmy Lee Ostrander Jr., Sheana Lynn         1.435           S50         16-2.1         Christian Church         0.19           S51         16-2.2         Christian Church         0.50           S53         16-23.3         Grag & Chris				
S36         11–9.7         Sean F. Moore         2.026           S37         11–9.5         Joseph M. Haught & Steven Haught         16.3           S38         11–9.5         Southarn Country Farms, Inc         2.458           S40         11–9.6         Southern Country Farms, Inc         2.488           S40         11–9.1         Jack Schepard Huggins Jr., et al         10.92           S41         11–9.1         Jack Schepard Huggins Jr., et al         41.27           S42         11–9.1         Jack Schepard Huggins Jr., et al         4.129           S44         11–11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S45         11–11.1         Nellie Maria & Robert W. Spencer         5.813           S47         10–16.4         Melvin E. Ferguson Jr. & Elizabeth Farguson         30.87           S48         10–15.1         Donald T. Miller         2.095           S50         16–3.2         Jimmy Lee Ostrander Jr., Sheana Lynn         1.435           S51         16–2.2         Christian Church         0.50           S53         16–2.3.3         Grag & Christian Church         0.50           S55         16–2.3.2         CNX Land Resources Inc         60.13           S56         16–				
S37         11–9.3         Joseph M. Haught & Steven Haught         16.3           S38         11–9.5         Southern Country Farms, Inc         2.659           S39         11–9.6         Southern Country Farms, Inc         2.488           S40         11–9.9         Leenard L. Parsons, et ux         5.89           S41         11–9.1         Jack Schepard Huggins Jr., et al         10.92           S43         11–9.4         Jack Schepard Huggins Jr., et al         4.129           S44         11–11         Brad M. & Amanda J. Blake         5.0           S45         11–11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S46         11–11.1         Nellie Marie & Robert W. Spencer         5.813           S47         10–16.4         Melvin E. Forgueon Jr. & Elizabath Fargueon 30.87         548           10–15.1         Doneld T. Miller         2.095         549         16–3.2         Jimmy Lee Ostrander Jr., Sheena Lynn         0.17           S50         16–3.1         Dennis E. Jackson, et ux         0.27         551         16–23         Christian Church         0.50           S53         16–23.1         Ray E. Minor at ux         2.0         S55         16–23.2         GNA Land Resources, Inc         60.13				
S38         11-9.5         Southern Country Farms, Inc         2.458           S40         11-9.9         Leonard L. Parsons, et ux         5.89           S41         11-9.9         Edvin C. & Kirnbarky A. Miller         41.77           S42         11-9.1         Jack Shepard Huggins Jr., et al         10.92           S44         11-11         Brad M. & Amanda J. Blake         5.0           S45         11-11.2         Weslay R. Bryan & Weslay R. Bryan II         25.03           S46         11-11.1         Nellie Marie & Robert W. Spencer         5.813           S47         10-16.4         Mdvin E. Ferguson Jr. & Elizabeth Ferguson 30.87         14.35           S48         10-15.1         Doneld T. Miller         2.095           S49         16-3.2         Jimmy Lee Ostrander Jr., Sheena Lynn         1.435           S50         16-3.1         Doneld T. Miller         2.095           S51         16-2         Christian Church         0.19           S52         16-1         Christian Church         0.50           S53         16-23.1         Ray E. Minor at ux         2.0           S54         16-23.2         GNX Land Resources, Inc         60.13           S55         16-23.2         Alan M. Bayse				
S39         11–9.6         Southern Country Farms, Inc.         2.488           S40         11–9.9         Leenard L. Parsons, et ux         5.89           S41         11–9.1         Jack S. Huggins, et al         41.77           S42         11–9.1         Jack S. Huggins, et al         4.129           S44         11–11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S45         11–11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S46         11–11.1         Nellie Mark & Amanda J. Blake         5.0           S47         10–16.4         Melvin E. Ferguson Jr. & Elizabeth Farguson         30.87           S48         10–15.1         Doneld T. Miller         2.095           S49         16–3.2         Jimmy Lee Ostrander Jr., Sheena Lynn         0.47           S50         16–3.1         Dennis E. Jackson, et ux         0.27           S51         16–2         Christian Church         0.19           S52         16–1         Christian Church         0.50           S55         16–23.3         Greg & Christian Riddle         1.0           S55         16–23.2         Alan M. Beyser, et ux         1.083           S56         16–23.2         Alan M. Beyser,	S37	11-9.3	Joseph M. Haught & Steven Haught	
S40         11-9.9         Leenard L. Parsons, et ux         5.89           S41         11-9.1         Jack Shepard Huggins Jr., et al         10.92           S42         11-9.4         Jack Shepard Huggins Jr., et al         10.92           S44         11-11         Brad M. & Amanda J. Blake         5.0           S45         11-11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S46         11-11.1         Nellie Marie & Robert W. Spencer         5.813           S47         10-16.4         Melvin E. Forguson Jr. & Elizabelti Forguson J.0.87         548           10-15.1         Donald T. Miller         2.095         549         16-3.2           Jimmy Lee Ostrander Jr., Sheena Lynn         1.435         0.435         1.435           S50         16-3.1         Dennis E. Jackson, et ux         0.27           S51         16-2         Christian Church         0.50           S53         16-23.1         Ray E. Minor et ux         2.0           S54         18-23.4         Michael R. & Bronda K. Eryan         3.0           S55         16-23         CNX Land Resources, Inc         60.13           S56         18-23.2         James M. Ruckman, et ux         1.028           S56	S38	11-9.5	Southern Country Farms, Inc	
Still         11-9         Edwin C. & Kimberty A. Miller         41.77           S42         11-9.1         Jack Shepard Huggins Jr., et al         10.92           S43         11-9.4         Jack S. Huggins, et al         4.129           S44         11-11         Brad M. & Amanda J. Blake         5.0           S45         11-11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S46         11-11.1         Nellie Marie & Robert W. Spencer         5.813           S47         10-16.4         Melvin E. Ferguson Jr. & Elizabeth Ferguson J.         1.435           S48         10-15.1         Doneld T. Miller         2.095           S49         16-3.2         Jimmy Lee Ostrander Jr., Sheena Lynn         1.435           S50         16-3.1         Dennis E. Jackson, et ux         0.27           S51         16-2         Christian Church         0.19           S52         16-1         Christian Church         0.50           S53         16-23.1         Ray E. Minor et ux         2.0           S54         18-23.4         Michael R. & Branda K. Eryan         3.0           S55         16-23.3         Grag & Christian Riddle         1.0           S58         16-23.4         Alan M. Baysa	S39	11-9.6	Southern Country Farms, Inc	2.488
S41         11-9         Edwin C. & Kimberly A. Miller.         41.77.           S42         11-9.1         Jack Shepard Huggins Jr., et al         10.92           S43         11-9.4         Jack S. Huggins, et al         4.129           S44         11-11         Brad M. & Amanda J. Blake         5.0           S45         11-11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S46         11-11.1         Nellie Marie & Robert W. Spencer         5.813           S47         10-16.4         Molvin E. Ferguson Jr. & Elizabeth Ferguson         30.87           S48         10-15.1         Doneld T. Miller         2.095           S49         16-3.2         Jimmy Lee Ostrander Jr., Sheena Lynn Ostrander & Brody Ray Ostrander         0.27           S51         16-2         Christian Church         0.19         9           S52         16-1         Christian Church         0.50           S53         16-23.1         Ray E. Minor et ux         2.0           S54         18-23.4         Michael R. & Branda K. Bryan         3.0           S55         16-23.3         Grag & Christian Ridde         1.0           S57         16-24         Alan M. Beyser, et ux         1.083           S58	S40	11-9.9	Leonard L. Parsons, et ux	5.89
S42         11–9.1         Jack Shepard Huggins Jr., et al         10.92           S43         11–9.4         Jack S. Huggins, et al         4.129           S44         11–11         Brad M. & Amanda J. Blake         5.0           S45         11–11.2         Weslay R. Bryan & Wesley R. Bryan III         25.03           S46         11–11.1         Nellie Marie & Robert W. Spencer         5.813           S47         10–16.4         Melvin E. Ferguson Jr. & Elizabeth Ferguson         30.87           S48         10–15.1         Donald T. Miller         2.095           S49         16–3.2         Jimmy Lee Ostrander Jr., Sheena Lynn         1.435           S50         16–3.1         Dennis E. Jackson, et ux         0.27           S51         16–2         Christian Church         0.19           S52         16–1         Christian Church         0.50           S54         16–23.4         Michael R. & Branda K. Eryan         3.0           S55         16–23.3         Greg & Christian Riddle         1.0           S57         16–24         Alan M. Beyser, et ux         1.726           S58         16–23.2         James M. Ruckman, et ux         54.60           S60         15–9         CNX Land Resources I			Edwin C, & Kimberly A. Miller	41.773
S43         11–9,4         Jack S. Huggins, et al         4.129           S44         11–11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S46         11–11.1         Nellie Marie & Robert W. Spencer         5.813           S47         10–16.4         Metvin E. Ferguson Jr. & Elizabeth Ferguson         30.87           S48         10–15.1         Donald T. Miller         2.095           S49         16–3.2         Jimmy Lee Ostrander Jr., Sheena Lynn         1.435           Ostrander & Brody Ray Ostrander         0.27         S51         16–2         Christian Church         0.19           S52         16–1         Christian Church         0.50         S53         16–23.1         Ray E. Minor et ux         2.0           S54         16–23.1         Ray E. Minor et ux         2.0         S54         16–23.3         Gray & Christian Riddle         1.0           S55         16–23.2         CNX Land Resources, Inc         60.13         S56         16–23.2         James M. Ruchman, et ux         1.083           S58         16–23.2         Alam M. Bayser, et ux         1.083         S58         16–23.2         James M. Ruchman, et ux         54.60           S60         15–9         CNX Land Resources Inc.         81.9	the second se			10.92
S44         11-11         Brad M. & Amanda J. Blake         5.0           S45         11-11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S46         11-11.1         Nellie Marie & Robert W. Spencer         5.813           S47         10-16.4         Melvin E. Ferguson Jr. & Elizabeth Ferguson         30.87           S48         10-15.1         Donald T. Miller         2.095           S49         16-3.2         Jimmy Lee Ostrander Jr., Sheena Lynn Ostrander & Brody Ray Ostrander         1.435           S50         16-3.1         Densit E. Jackson, et ux         0.27           S51         16-2         Christian Church         0.50           S53         16-23.1         Ray E. Minor et ux         2.0           S54         16-23.4         Michael R. & Branda K. Bryan         3.0           S55         16-23.3         Grag & Christina Riddle         1.0           S57         16-24         Alan M. Beyser, et ux         1.083           S58         16-23.2         Alan M. Beyser, et ux         1.726           S59         16-24         Alan M. Beyser, et ux         1.726           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8 <td< td=""><td></td><td></td><td></td><td></td></td<>				
S45         11–11.2         Wesley R. Bryan & Wesley R. Bryan II         25.03           S46         11–11.1         Nellie Marie & Robert W. Spencer         5.813           S47         10–16.4         Melvin E. Ferguson Jr. & Elizabeth Ferguson         30.87           S48         10–15.1         Donald T. Miller         2.095           S49         16–3.2         Jimmy Lee Ostrander Jr., Sheena Lynn Ostrander & Brody Ray Ostrander         1.435           S50         16–3.1         Dennis E. Jackson, et ux         0.27           S51         16–2         Christian Church         0.19           S52         16–1         Christian Church         0.50           S54         16–23.4         Michael R. & Branda K. Bryan         3.0           S55         16–23.3         Grag & Christina Riddle         1.0           S57         16–24         Alan M. Beyser, et ux         1.083           S58         16–23.2         Alarn M. Beyser, et ux         1.7266           S59         18–22         James M. Ruckman, et ux         54.60           S60         15–9         CNX Land Resources Inc.         81.98           S61         15–8         Terry D. Rose et ux         45.60           S66         11–11.3         J				Contraction of the other
S46         11–11.1         Nellie Marie & Robert W. Spencer         5.813           S47         10–16.4         Melvin E. Ferguson Jr. & Elizabeth Ferguson         30.87           S48         10–15.1         Donald T. Miller         2.095           S49         16–3.2         Jimmy Lee Ostrander Jr., Sheena Lynn Ostrander & Brody Ray Ostrander         1.435           S50         16–3.1         Dennis E. Jackson, et ux         0.27           S51         16–2         Christian Church         0.19           S52         16–1         Christian Church         0.50           S53         16–23.1         Ray E. Minor et ux         2.0           S54         16–23.4         Michael R. & Branda K. Bryan         3.0           S55         16–23.2         CNX Land Resources, Inc         60.13           S56         16–23.2         Alarn M. Beyser, et ux         1.083           S58         16–23.2         Alarn M. Beyser, et ux         1.083           S58         16–23.2         Alarn M. Beyser, et ux         1.083           S60         15–9         CNX Land Resources Inc.         81.98           S61         15–8         Terry D. Rose et ux         47.11           S62         15–7         Terry D. Rose et ux	OIF	44 44 5		
S47         10-16.4         Melvin E. Ferguson Jr. & Elizabeth Farguson         30.87           S48         10-15.1         Donald T. Miller         2.095           S49         16-3.2         Jimmy Lee Ostrander Jr., Sheena Lynn         1.435           Ostrander & Brody Ray Ostrander         1.435           S50         16-3.1         Dennis E. Jackson, et ux         0.27           S51         16-2         Christian Church         0.19           S52         16-1         Christian Church         0.50           S53         16-23.1         Ray E. Minor et ux         2.0           S54         16-23.3         Grag & Christina Riddle         1.0           S55         16-23.3         Grag & Christina Riddle         1.0           S56         16-23.2         Alan M. Beyser, et ux         1.083           S58         16-22.2         James M. Ruckman, et ux         1.726           S59         16-22         James M. Ruckman, et ux         1.726           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-7         Terry D. Rose et ux         45.00           S65         11-12         Joseph J. Kramer et ux         39.40           S64         15				
S48         10-15.1         Donald T. Miller         2.095           S49         16-3.2         Jimmy Lee Ostrander Jr., Sheena Lynn Ostrander & Brody Ray Ostrander         1.435           S50         16-3.1         Dennis E. Jackson, et ux         0.27           S51         16-2         Christian Church         0.19           S52         16-1         Christian Church         0.50           S53         16-23.4         Michael R. & Brenda K. Bryan         3.0           S55         16-23.2         CNX Land Resources, Inc         60.13           S56         16-23.2         Alan M. Beyser, et ux         1.083           S58         16-22.2         James M. Ruckman, et ux         1.726           S59         16-22         James M. Ruckman, et ux         1.726           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D. Rose et ux         47.11           S62         15-7         Terry D. Rose et ux         47.50           S65         11-12         Joseph J. Kramer et ux         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.96           S70         11-17.2         Brenda & Michael Bryan         11.5				
S49         16-3.2         Jimmy Lee Ostrander Jr., Sheena Lynn Ostrander & Brody Ray Ostrander         1.435           S50         16-3.1         Dennis E. Jackson, et ux         0.27           S51         16-2         Christian Church         0.19           S52         16-1         Christian Church         0.50           S53         16-23.1         Ray E. Minor et ux         2.0           S54         16-23.4         Michael R. & Branda K. Bryan         3.0           S55         16-23.3         Greg & Christina Riddle         1.0           S56         16-23.3         Greg & Christina Riddle         1.0           S57         16-24         Alan M. Beyser, et ux         1.083           S58         16-22.2         James M. Ruckman, et ux         1.726           S59         16-22         James M. Ruckman, et ux         54.60           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-6         Joseph J. Kramer et ux         45.00           S63         15-6.1         Joseph J. Kramer et ux         43.218           S66         11-12         Joseph J. Kramer et ux         43.218           S66         11-13         Jey D. Gartman & Afilin Catts				
Ostrander & Brody Ray Ostrander           S50         16-3.1         Dennis E. Jackson, et ux         0.27           S51         16-2         Christian Church         0.19           S52         16-1         Christian Church         0.50           S53         16-23.1         Ray E. Minor et ux         2.0           S54         16-23.4         Michael R. & Branda K. Bryan         3.0           S55         16-23.3         Grag & Christian Riddle         1.0           S57         16-24         Alan M. Beyser, et ux         1.083           S58         16-23.2         Alan M. Beyser, et ux         1.083           S58         16-24         Alan M. Beyser, et ux         1.083           S58         16-27.2         James M. Ruckman, et ux         54.60           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D. Rose et ux         45.50           S63         15-6.1         Joseph J. Kramer et ux         39.40           S64         15-6         Joseph J. Kramer et ux         43.216           S65         11-12         Joseph J. Kramer et ux         43.216           S66         11-11.3         Herman D. & Herman J. Lantz <td></td> <td></td> <td></td> <td></td>				
S51         16-2         Christian Church         0.19           S52         16-1         Christian Church         0.50           S53         16-23.1         Ray E, Minor et ux         2.0           S54         16-23.4         Michael R, & Branda K, Bryan         3.0           S55         16-23         CNX Land Resources, Inc         60.13           S56         16-23.3         Greg & Christina Riddle         1.0           S57         16-24         Alan M, Beyser, et ux         1.083           S58         16-23.2         Alan M, Beyser, et ux         1.083           S58         16-24         Alan M, Beyser, et ux         1.726           S59         16-22         James M, Ruckman, et ux         54.60           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D, Rose et ux         47.50           S63         15-6.1         Joseph J, Kramer et ux         39.40           S64         15-6         Joseph J, Kramer et ux         43.218           S66         11-11.3         Herman D, & Herman J, Lantz         43.96           S67         11-12         Joseph J, Kramer et ux         36.13           S70	0.10	10 0.2		
S51         16-2         Christian Church         0.19           S52         16-1         Christian Church         0.50           S53         16-23.1         Ray E, Minor et ux         2.0           S54         16-23.4         Michael R, & Branda K, Bryan         3.0           S55         16-23         CNX Land Resources, Inc         60.13           S56         16-23.3         Greg & Christina Riddle         1.0           S57         16-24         Alan M, Beyser, et ux         1.083           S58         16-23.2         Alan M, Beyser, et ux         1.083           S58         16-24         Alan M, Beyser, et ux         1.726           S59         16-22         James M, Ruckman, et ux         54.60           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D, Rose et ux         47.50           S63         15-6.1         Joseph J, Kramer et ux         39.40           S64         15-6         Joseph J, Kramer et ux         43.218           S66         11-11.3         Herman D, & Herman J, Lantz         43.96           S67         11-12         Joseph J, Kramer et ux         36.13           S70	S50	16-3.1	Dennis E. Jackson, et ux	0.27
S52         16-1         Christian Church         0.50           S53         16-23.1         Ray E. Minor et ux         2.0           S54         16-23.4         Michael R. & Brenda K. Bryan         3.0           S55         16-23         CNX Land Resources, Inc         60.13           S56         16-23.3         Greg & Christina Riddle         1.0           S57         16-24         Alan M. Beyser, et ux         1.083           S58         16-23.2         Alan M. Beyser, et ux         1.083           S59         16-22         James M. Ruckman, et ux         54.60           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D. Rose et ux         77.11           S62         15-7         Terry D. Rose et ux         450           S63         15-6.1         Joseph J. Kramer et ux         43.218           S66         11-12         Joseph J. Kramer et ux         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.96           S67         11-11.4         Brad M. & Armanda J. Blake         15.19           S68         11-12         Joseph J. Kramer et ux         43.67           S70<				
S53         16-23.1         Ray E. Minor et ux         2.0           S54         16-23.4         Michael R. & Brenda K. Bryan         3.0           S55         16-23.3         Greg & Christina Riddle         1.0           S57         16-24.         Alan M. Beyser, et ux         1.083           S58         16-23.2         Alan M. Beyser, et ux         1.083           S58         16-23.2         Alan M. Beyser, et ux         1.726           S59         18-22         James M. Ruckmen, et ux         54.60           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D. Rose et ux         4.50           S63         15-6.1         Joseph J. Kramer et ux         45.20           S64         15-6         Joseph J. Kramer et ux         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.218           S69         11-16         Keith E. Haught et al         83.67           S70         11-17.2         Brenda & Michael Bryan         11.50           S71         11-17.1         David Gray         0.297 <t< td=""><td></td><td></td><td></td><td></td></t<>				
S54         16-23.4         Michael R. & Brenda K. Bryan         3.0           S55         16-23         CNX Land Resources, Inc         60.13           S56         16-23.3         Greg & Christina Riddla         1.0           S57         16-24         Alan M. Beyser, et ux         1.083           S58         16-23.2         Alan M. Beyser, et ux         1.083           S59         16-22         James M. Ruckman, et ux         54.60           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D. Rose et ux         77.11           S62         15-7         Terry D. Rose et ux         4.50           S63         15-6.1         Joseph J. Kramer et ux         39.40           S64         15-6         Joseph J. Kramer et ux         43.218           S66         11-11.3         Harman D. & Herman J. Lantz         43.218           S66         11-11.3         Harman D. & Herman J. Lantz         43.67           S69         11-16         Keith E. Haught et al         83.67           S70         11-17.2         Brenda & Michael Bryan         11.50           S71         11-22         David Gray         0.297           S7				
S55         16-23         CNX Land Resources, Inc         60.13           S56         16-23.3         Greg & Christina Riddle         1.0           S57         16-24         Alan M. Beyser, et ux         1.083           S58         16-23.2         Alan M. Beyser, et ux         1.083           S58         16-23.2         Alan M. Beyser, et ux         1.726           S59         15-22         James M. Ruckman, et ux         54.60           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D. Rose et ux         77.11           S62         15-7         Tarry D. Rose et ux         45.50           S63         15-6.1         Joseph J. Kramer et ux         43.218           S66         11-12         Joseph J. Kramer et ux         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.96           S67         11-11.4         Brad M. & Amenda J. Blake         15.19           S68         11-13         Joy D. Gartman & Arlin Catts         12.29           S69         11-17.2         Brenda & Michael Bryan         11.50           S71         11-17.2         Brenda & Michael Bryan         11.50 <tr< td=""><td></td><td></td><td></td><td></td></tr<>				
S56         16-23.3         Greg & Christina Riddle         1.0           S57         16-24         Alan M. Beyser, et ux         1.083           S58         16-23.2         Alan M. Beyser, et ux         1.726           S59         16-22         James M. Ruckmen, et ux         54.60           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D. Rose et ux         77.11           S62         15-7         Tarry D. Rose et ux         450           S63         15-6.1         Joseph J. Kramer et ux         39.40           S64         15-6         Joseph J. Kramer et ux         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.96           S67         11-11.4         Brad M. & Amanda J. Blake         15.19           S68         11-13         Jey D. Gartmen & Adin Catts         12.29           S69         11-17.2         Branda & Michael Bryan         11.50           S70         11-17.2         Branda & Michael Bryan         11.50           S71         11-22         David Gray         0.297           S73         11-22         David Gray         0.297           S74				
S57         16-24         Alan M. Beyser, et ux         1.083           S58         16-23.2         Alan M. Beyser, et ux         1.726           S59         16-22         James M. Ruckmen, et ux         1.726           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D. Rose et ux         77.11           S62         15-7         Terry D. Rose et ux         4.50           S63         15-6.1         Joseph J. Kramer et ux         39.40           S64         15-6         Joseph J. Kramer et ux         43.218           S65         11-12         Joseph J. Kramer et ux         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.96           S67         11-11.4         Brad M. & Amanda J. Blake         15.19           S68         11-13         Jey D. Gartmen & Arlin Catts         12.29           S69         11-17         Brenda & Michael Bryan         11.50           S70         11-17.2         Brenda & Michael Bryan         11.50           S71         11-17         Kevin R. Corley et ux         36.13           S72         11-17.1         David Gray         0.297           S73<	S55			
S58         16-23.2         Alan M. Beysar, et ux         1.726           S59         16-22         James M. Ruckman, et ux         54.60           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D. Rose et ux         77.11           S62         15-7         Terry D. Rose et ux         4.50           S63         15-6.1         Joseph J. Kramer et ux         39.40           S64         15-6         Joseph J. Kramer et ux         42.50           S65         11-12         Joseph J. Kramer et ux         43.216           S66         11-11.3         Herman D. & Herman J. Lantz         43.96           S67         11-11.4         Brad M. & Amanda J. Blake         15.19           S68         11-13         Jey D. Gartmen & Arlin Catts         12.29           S69         11-17.2         Brenda & Michael Bryan         11.50           S70         11-17.2         Brenda & Michael Bryan         11.50           S71         11-17.1         David Gray         0.297           S73         11-22         David Gray         0.297           S74         11-18         David Gray         0.589           S75         11-5	S56	16-23.3		
S59         16-22         James M. Ruckmen, et ux         54.60           S60         15-9         CNX Land Resources Inc.         81.98           S61         15-8         Terry D. Rose et ux         77.11           S62         15-7         Terry D. Rose et ux         4.50           S63         15-6.1         Joseph J. Kramer et ux         39.40           S64         15-6         Joseph J. Kramer et ux         42.50           S65         11-12         Joseph J. Kramer et ux         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.218           S66         11-11.4         Brad M. & Amende J. Blake         15.19           S68         11-12         Joseph J. Kramer et ux         43.218           S69         11-11.4         Brad M. & Amende J. Blake         15.19           S68         11-17         Keith E. Haught et al         83.67           S70         11-17.2         Brenda & Michael Bryan         11.50           S71         11-17.1         David Gray         0.297           S73         11-22         David Gray         0.353           S74         11-18         David Gray         0.3569           S75         11-5 </td <td>S57</td> <td>16-24</td> <td>Alan M. Beyser, et ux</td> <td>1.083</td>	S57	16-24	Alan M. Beyser, et ux	1.083
S60         15–9         CNX Land Resources Inc.         81.98           S61         15–8         Terry D. Rose et ux         77.11           S62         15–7         Terry D. Rose et ux         4.50           S63         15–6.1         Joseph J. Kramer et ux         39.40           S64         15–6         Joseph J. Kramer et ux         42.50           S65         11–12         Joseph J. Kramer et ux         43.218           S66         11–11.3         Herman D. & Herman J. Lantz         43.96           S67         11–11.4         Brad M. & Arnanda J. Blake         15.19           S68         11–13         Jey D. Gartman & Adin Catts         12.29           S69         11–16         Keith E. Haught et al         83.67           S70         11–17.2         Brenda & Michael Bryan         11.50           S71         11–17         Kevin R. Corley et ux         36.13           S72         11–17.1         David Gray         0.297           S73         11–22         David Gray         0.353           S74         11–18         David Gray         0.368           S76         11–3         Kevin R. Corley et ux         10.36           S76         11–2	S58	16-23.2	Alan M. Beyser, et ux	1.726
S61         15–8         Terry D. Rose et ux         77.11           S62         15–7         Terry D. Rose et ux         4.50           S63         15–6.1         Joseph J. Kramer et ux         39.40           S64         15–6         Joseph J. Kramer et ux         42.50           S65         11–12         Joseph J. Kramer et ux         43.218           S66         11–11.3         Harman D. & Herman J. Lantz         43.96           S67         11–11.4         Brad M. & Armande J. Blake         15.19           S68         11–13         Jey D. Gartman & Adin Catts         12.29           S69         11–17.2         Brenda & Michael Bryan         11.50           S70         11–17.2         Brenda & Michael Bryan         11.50           S71         11–17.1         David Gray         0.297           S73         11–22         David Gray         0.353           S74         11–18         David Gray         0.569           S75         11–5         Kevin R. Corley et ux         10.36           S76         11–3         Kevin R. Corley et ux         10.36           S76         11–3         Kevin R. Corley et ux         13.18           S77         11–2	S59	16-22	James M. Ruckman, et ux	54.60
S62         15-7         Terry D. Rose et ux         4.50           S63         15-6.1         Joseph J. Kramer et ux         39.40           S64         15-6         Joseph J. Kramer et ux         42.50           S65         11-12         Joseph J. Kramer et ux         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.96           S67         11-11.4         Brad M. & Amende J. Blake         15.19           S68         11-13         Jey D. Gartman & Adin Catts         12.29           S69         11-16         Keith E. Haught et al         83.67           S70         11-17.2         Brenda & Michael Bryan         11.50           S71         11-17         Kevin R. Corley et ux         36.13           S72         11-17.1         David Gray         0.297           S73         11-22         David Gray         0.353           S74         11-18         David Gray         0.569           S75         11-3         Kevin R. Corley et ux         10.36           S76         11-3         Kevin R. Corley et ux         10.31           S78         11-2.1         Walter C. & Cheryl A. Rine         1.19           S79         11-1.1<	S60	15-9	CNX Land Resources Inc.	81.98
S62         15-7         Terry D. Rose et ux         4.50           S63         15-6.1         Joseph J. Kramer et ux         39.40           S64         15-6         Joseph J. Kramer et ux         42.50           S65         11-12         Joseph J. Kramer et ux         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.96           S67         11-11.4         Brad M. & Amende J. Blake         15.19           S68         11-13         Jey D. Gartman & Adin Catts         12.29           S69         11-16         Keith E. Haught et al         83.67           S70         11-17.2         Brenda & Michael Bryan         11.50           S71         11-17         Kevin R. Corley et ux         36.13           S72         11-17.1         David Gray         0.297           S73         11-22         David Gray         0.353           S74         11-18         David Gray         0.569           S75         11-3         Kevin R. Corley et ux         10.36           S76         11-3         Kevin R. Corley et ux         10.31           S78         11-2.1         Walter C. & Cheryl A. Rine         1.19           S79         11-1.1<	S61	15-8	Terry D. Rose et ux	77.11
S63         15-6.1         Joseph J. Kramer et ux         39.40           S64         15-6         Joseph J. Kramer et ux         42.50           S65         11-12         Joseph J. Kramer et ux         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.96           S67         11-11.4         Brad M. & Amanda J. Blake         15.19           S68         11-13         Joy D. Gartman & Adin Catts         12.29           S69         11-16         Keith E. Haught et al         83.67           S70         11-17.2         Brenda & Michael Bryan         11.50           S71         11-17         Kevin R. Corley et ux         36.13           S72         11-17.1         David Gray         0.297           S73         11-22         David Gray         0.353           S74         11-18         David Gray         0.589           S75         11-5         Kevin R. Corley et ux         10.36           S76         11-3         Kevin R. Corley et ux         10.36           S78         11-2.1         Walter C. & Cheryl A. Rine         1.19           S79         11-1.1         Larry W. Dunlap et al         34.40           S80         11				
S64         15–6         Joseph J. Kramer et ux         42.50           S65         11–12         Joseph J. Kramer et ux         43.218           S66         11–11.3         Harman D. & Harman J. Lantz         43.96           S67         11–11.4         Brad M. & Amende J. Blake         15.19           S68         11–13         Jey D. Gartman & Adin Gatts         12.29           S69         11–16         Keith E. Haught et al         83.67           S70         11–17.2         Brenda & Michael Bryan         11.50           S71         11–17         Kevin R. Corley et ux         36.13           S72         11–17.1         David Gray         0.297           S73         11–22         David Gray         0.297           S74         11–18         David Gray         0.589           S75         11–5         Kevin R. Corley et ux         10.36           S76         11–3         Kevin R. Corley et ux         10.31           S77         11–2         Walter C. & Cheryl A. Rine         42.36           S78         11–2.1         Walter C. & Cheryl A. Rine         1.19           S79         11–1.1         Larry W. Dunlap et al         34.40           S80				
S65         11-12         Joseph J. Kramer et ux         43.218           S66         11-11.3         Herman D. & Herman J. Lantz         43.96           S67         11-11.4         Brad M. & Amanda J. Blake         15.19           S68         11-13         Jey D. Gartmen & Arlin Catts         12.29           S69         11-16         Keith E. Haught et al         83.67           S70         11-17.2         Branda & Michael Bryan         11.50           S71         11-17         Kevin R. Cortey et ux         36.13           S72         11-17.1         David Gray         0.297           S73         11-22         David Gray         0.353           S74         11-18         David Gray         0.589           S75         11-5         Kevin R. Corley et ux         10.36           S76         11-3         Kevin R. Corley et ux         10.36           S76         11-2         Walter C. & Cheryl A. Rine         1.19           S79         11-1.1         Larry W. Dunlap et al         34.40           S80         11-1.3         Joy A. Conner et ux         44.256           S81         11-1.4         Larry W. Dunlap et al         32.49           S82         11-1				
S66         11–11.3         Harman D, & Harman J, Lantz         43.96           S67         11–11.4         Brad M, & Amanda J, Blake         15.19           S68         11–13         Jey D, Gartman & Arlin Catts         12.29           S69         11–16         Keith E, Haught et al         83.67           S70         11–17.2         Branda & Michael Bryan         11.50           S71         11–17.2         Branda & Michael Bryan         11.50           S71         11–17.1         David Gray         0.297           S73         11–22         David Gray         0.353           S74         11–18         David Gray         0.353           S75         11–5         Kevin R, Corley et ux         10.36           S76         11–3         Kevin R, Corley et ux         10.36           S76         11–2         Walter C, & Cheryl A, Rine         42.36           S78         11–2.1         Walter C, & Cheryl A, Rine         1.19           S79         11–1.1         Larry W. Dunlap et al         34.40           S80         11–1.3         Joy A. Conner et ux         4.256           S81         11–1.4         Larry W. Dunlap et al         32.49           S82 <t< td=""><td>the second s</td><td></td><td></td><td></td></t<>	the second s			
S67         11–11.4         Brad M. & Amanda J. Blake         15.19           S68         11–13         Jey D. Gartman & Adin Catts         12.29           S69         11–16         Keith E. Haught et al         83.67           S70         11–17.2         Branda & Michael Bryan         11.50           S71         11–17.1         Branda & Michael Bryan         11.50           S71         11–17.1         David Gray         0.297           S73         11–22         David Gray         0.353           S74         11–18         David Gray         0.3569           S75         11–5         Kevin R. Corley et ux         10.36           S76         11–2         Walter C. & Cheryl A. Rine         42.36           S78         11–2.1         Walter C. & Cheryl A. Rine         1.19           S79         11–1.1         Larry W. Dunlap et al         34.40           S80         11–1.3         Joy A. Conner et ux         4.256           S81         11–1.4         Larry W. Dunlap et al         32.49           S82         11–1.6         Deborah Morris         2.093	the second se			
S68         11–13         Joy D. Gartman & Adin Catts         12.29           S69         11–16         Keith E. Haught et al         83.67           S70         11–17.2         Branda & Michael Bryan         11.50           S71         11–17.2         Branda & Michael Bryan         11.50           S71         11–17.1         David Gray         0.297           S73         11–22         David Gray         0.353           S74         11–18         David Gray         0.569           S75         11–5         Kevin R. Corley et ux         10.36           S76         11–3         Kevin R. Corley et ux         10.36           S76         11–2         Walter C. & Cheryl A. Rine         42.36           S78         11–2.1         Walter C. & Cheryl A. Rine         1.19           S79         11–1.1         Larry W. Dunlap et al         34.40           S80         11–1.3         Joy A. Conner et ux         4.256           S81         11–1.4         Larry W. Dunlap et al         32.49           S82         11–1.6         Deborah Morris         2.093				
S69         11–16         Keith E. Haught et al         83.67           S70         11–17.2         Brenda & Michael Bryan         11.50           S71         11–17.2         Brenda & Michael Bryan         11.50           S71         11–17.1         Bavid Gray         0.297           S73         11–22         David Gray         0.353           S74         11–18         David Gray         0.369           S75         11–5         Kevin R. Corley et ux         10.36           S76         11–3         Kevin R. Corley et ux         10.36           S76         11–2         Walter C. & Cheryl A. Rine         42.36           S78         11–2.1         Walter C. & Cheryl A. Rine         1.19           S79         11–1.1         Larry W. Dunlap et al         34.40           S80         11–1.3         Joy A. Conner et ux         4.256           S81         11–1.4         Larry W. Dunlap et al         32.49           S82         11–1.6         Deborah Morris         2.093				
S70         11–17.2         Brenda & Michael Bryan         11.50           S71         11–17         Kevin R. Corley et ux         36.13           S72         11–17.1         David Gray         0.297           S73         11–22         David Gray         0.353           S74         11–18         David Gray         0.569           S75         11–5         Kevin R. Corley et ux         10.36           S76         11–3         Kevin R. Corley et ux         10.36           S76         11–2         Walter C. & Cheryl A. Rine         42.36           S78         11–2.1         Walter C. & Cheryl A. Rine         1.19           S79         11–1.1         Larry W. Dunlap et al         34.40           S80         11–1.3         Joy A. Conner et ux         4.256           S81         11–1.4         Larry W. Dunlap et al         32.49           S82         11–1.6         Deborah Morris         2.093				
S71         11–17         Kevin R. Corley et ux         36.13           S72         11–17.1         David Gray         0.297           S73         11–22         David Gray         0.353           S74         11–18         David Gray         0.569           S75         11–5         Kevin R. Corley et ux         10.36           S76         11–3         Kevin R. Corley et ux         10.36           S77         11–2         Walter C. & Cheryl A. Rine         42.36           S78         11–2.1         Walter C. & Cheryl A. Rine         1.19           S79         11–1.1         Larry W. Dunlap et al         34.40           S80         11–1.4         Larry W. Dunlap et al         32.49           S82         11–1.6         Deborah Morris         2.093				
S72         11–17.1         David Gray         0.297           S73         11–22         David Gray         0.353           S74         11–18         David Gray         0.569           S75         11–5         Kevin R. Corley et ux         10.36           S76         11–3         Kevin R. Corley et ux         13.18           S77         11–2         Walter C. & Cheryl A. Rine         42.36           S78         11–2.1         Walter C. & Cheryl A. Rine         1.19           S79         11–1.1         Larry W. Dunlap et al         34.40           S80         11–1.3         Joy A. Conner et ux         4.256           S81         11–1.4         Larry W. Dunlap et al         32.49           S82         11–1.6         Deborah Morris         2.093				
S73         11-22         David Gray         0.353           S74         11-18         David Gray         0.569           S75         11-5         Kevin R. Corley et ux         10.36           S76         11-3         Kevin R. Corley et ux         13.18           S77         11-2         Walter C. & Cheryl A. Rine         42.36           S78         11-2.1         Walter C. & Cheryl A. Rine         1.19           S79         11-1.1         Larry W. Dunlap et al         34.40           S80         11-1.3         Joy A. Conner et ux         4.256           S81         11-1.4         Larry W. Dunlap et al         32.49           S82         11-1.6         Deborah Morris         2.093			Kevin R. Corley et ux	
S74         11–18         David Gray         0.569           S75         11–5         Kevin R. Corley et ux         10.36           S76         11–3         Kevin R. Corley et ux         13.18           S77         11–2         Walter C. & Cheryl A. Rine         42.36           S78         11–2.1         Walter C. & Cheryl A. Rine         1.19           S79         11–1.1         Larry W. Dunlap et al         34.40           S80         11–1.4         Larry W. Dunlap et al         32.49           S82         11–1.6         Deborah Morris         2.093			David Gray	0.297
S74         11–18         David Gray         0.569           S75         11–5         Kevin R. Corley et ux         10.36           S76         11–3         Kevin R. Corley et ux         13.18           S77         11–2         Walter C. & Cheryl A. Rine         42.36           S78         11–2.1         Walter C. & Cheryl A. Rine         1.19           S79         11–1.1         Larry W. Dunlap et al         34.40           S80         11–1.4         Larry W. Dunlap et al         32.49           S82         11–1.6         Deborah Morris         2.093	\$73		David Gray	0.353
S75         11-5         Kevin R. Corlay et ux         10.36           S76         11-3         Kevin R. Corley et ux         13.18           S77         11-2         Walter C. & Cheryl A. Rine         42.36           S78         11-2.1         Walter C. & Cheryl A. Rine         1.19           S79         11-1.1         Larry W. Dunlap et al         34.40           S80         11-1.3         Joy A. Conner et ux         4.256           S81         11-1.4         Larry W. Dunlap et al         32.49           S82         11-1.6         Deborah Morris         2.093				0.569
S76         11-3         Kevin R. Corley et ux         13.18           S77         11-2         Walter C. & Cheryl A. Rine         42.36           S78         11-2.1         Walter C. & Cheryl A. Rine         1.19           S79         11-1.1         Larry W. Dunlap et al         34.40           S80         11-1.3         Joy A. Conner et ux         4.256           S81         11-1.4         Larry W. Dunlap et al         32.49           S82         11-1.6         Deborah Morris         2.093				10.36
S77         11-2         Walter C. & Cheryl A. Rine         42.36           S78         11-2.1         Walter C. & Cheryl A. Rine         1.19           S79         11-1.1         Larry W. Dunlap et al         34.40           S80         11-1.3         Joy A. Conner et ux         4.256           S81         11-1.4         Larry W. Dunlap et al         32.49           S82         11-1.6         Deborah Morris         2.093				13.18
S78         11-2.1         Walter C. & Cheryl A. Rine         1.19           S79         11-1.1         Larry W. Dunlap et al         34.40           S80         11-1.3         Joy A. Conner et ux         4.256           S81         11-1.4         Larry W. Dunlap et al         32.49           S82         11-1.6         Deborah Morris         2.093				
S79         11-1.1         Larry W. Dunlap et al         34.40           S80         11-1.3         Joy A. Conner et ux         4.256           S81         11-1.4         Larry W. Dunlap et al         32.49           S82         11-1.6         Deborah Morris         2.093	and the second s	the second s	and the second se	
S80         11–1.3         Joy A. Conner et ux         4.256           S81         11–1.4         Larry W. Dunlap et al         32.49           S82         11–1.6         Deborah Morris         2.093				
S81         11–1.4         Larry W. Dunlap et al         32.49           S82         11–1.6         Deborah Morris         2.093				
S82 11-1.6 Deborah Morris 2.093		11-1.5		
562         11–1.6         Deborah Morris         2.093           \$83         11–1         William N. & Virginia A. Roupe         4.527				
S63 11-1 William N. & Virginia A. Roupe 4.527				2.093
		1 11-1	William N. & Virginia A. Roupe	4.527

47051 02077



P.S. 708

> PAGE 2 OF 2 DATE: 10/25/2017

DISTRICT: Franklin

COUNTY: Marshall

STATE: WV

David I Jackson



*REVISED DATE:* 05/09/2018

WW-6A1 (5/13) Operator's Well No. Bryan N-5HM

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

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

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

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

\*See attached pages

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

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

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

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:	
By:	Amy L. Miller UNUJ & Ull
Its:	Permitting Specialist

Page 1 of

### WW-6A1 Supplement

Operator's Well No.	<u>Bryan N - 5HM</u>
---------------------	----------------------

Lease No.	Tags	Parcel	Lessor	Lessee	Royalty	Book	Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
									20/348 TriEnergy Inc to AB	21/491 AB Resources LLC to Chief Exploration & Development LLC and Radler 2000 Limited	665/643 Chief Exploration & Deviopment LLC and Radier 2000 Umited Partnership to Enerplus Resources (USA)	25/I Chief Exploration & Development, LLC, Chief OB and Gas, LLC, Radier 2000 Limited Partnerhsip and Enerphys	25/105 Chief Exploration & Development, ELC, Chief Oil & Gas, LLC, Radier 2003 Umited Partnership and Enerplus Resources (USA) Corporation to Chevron		40/57 Chevron USA inc to TH
10*19294	A	5-15-9	BRYAN MICHAEL ET UX	TRIENERGY, INC.	1/8+	665	289	N/A	Resources LLC	Partnership	Corporation	Resources to Chevron USA Inc		Chevron USA inc	Exploration LLC
10*19340	в	5-15-8	YOHO DONNA VIVIAN	GASTAR EXPLORATION USA, INC.	1/8+	665	407	23/353 Gastar Exploration USA Inc. to Attnum Marcellus I U.C	23/617 Gester Exploration USA inc and Atinum Marceliks I LLC to AB Resources LLC	23/633 AB Resources LLC to TriEnergy Holdings LLC	24/319 AB Resources LLC to Chief Exploration & Development LLC and Radier 2000 Limited Partnership	25/1 Chief Exploration & Dovelopment, LLC, Chief Oil and Gas, LLC, Radier 2000 Umited Partnerhstp and Enerplus Resources to Chevron USA Inc	25/105 Chief Exploration & Development, LLC, Chief Off & Ges, LLC, Radier 2000 Limited Partnership and Enerplus Resources (USA) Corporation to Chevron USA Inc.	756/397 AB Resources LLC to Chevron USA Inc	40/57 Chevron USA Inc to TH Exploration LLC
								23/353 Gastar Exploration USA Inc. to Atlnum Marcellus		23/633 AB Resources LLC to	24/319 AB Resources LLC to Chief Exploration & Development LLC and Radies	25/1 Chief Exploration & Development, LC, Chief Oil and Gas, LLC, Radier 2000 Limited Partnerhsip and Enerplus	25/105 Chief Exploration & Development, LLC, Chief Oil & Gas, LLC, Radier 2000 Limited Partnership and Enerphus Resources (USA) Corporation to Chevron USA Inc.	756/397 AB Resources LLC to Chevron USA Inc	40/57 Chevron USA Inc to TH Exploration LLC
10*19340 10*19293				GASTAR EXPLORATION USA INC	1/8+	665	407	111C N/A	Resources LLC	TriEnergy Holdings LLC 19/623 TriEnergy Inc to AB Resources LLC	2000 Limited Partnership 24/319 AB Resources LLC to Chief Exploration & Development LLC and Radier 2000 Limited Partnership	Resources to Chevron USA Inc 25/1 Chief Exploration & Development, LLC, Chief Oil and Gas, LLC, Radjer 2000 Limited Partnerhsip and Enerplus Resources to Chevron USA Inc	25/105 Chief Exploration & Development, LLC, Chief Oil & Gas, LLC, Radier 2000 Limited Partnership and Enerplus Resources (USA) Corporation to Chevron USA Inc.		40/57 Chevron USA Inc to TH Exploration LLC
_		1													40/57 Chevron USA Inc to TH
10°19295		5-15-6.1	KEVIN J. KELLY PAMELA MARKEN-KELLY MARISSA C MARKEN	CHEVRON USA INC	1/8+ 1/8+	858 837	381	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A	N/A N/A	N/A N/A	Exploration LLC 40/57 Chevron USA Inc to TH Exploration LLC
······································		1													40/57 Chevron USA Inc to TH
10*19297	Ð	5-15-6.1	PHILIP LEONARD MARKEN	CHEVRON USA INC	1/8+	839	410	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC 40/57 Chevron USA Inc to TH
0*19298	D	5-15-6.1	BETTY J MARXEN SLEZAK	CHEVRON USA INC	1/8+	872	351	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC 40/57 Chevron USA Inc to TH
0*19299	D	5-15-6.1	ANNETTE CONWAY MARXEN	CHEVRON USA INC	1/8+	817	512	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC
0*19300		5-15-6.1		CHEVRON USA INC	1/8+	815	145	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40/57 Chevron USA inc to TH Exploration LLC
19301	D	5-15-6.1	SANDRA HAGEMAN KANGAS	CHEVRON USA INC	1/84	815	150	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40/57 Chevron USA Inc to TH Exploration LLC
0*19302	D	5-15-6.1	JEFFREY C MARXEN SAMANTHA L MARXEN	CHEVRON USA INC	1/8+	817	506	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40/57 Chevron USA inc to TH Exploration LLC
0*19303	D	5-15-6,1	THOMAS O MARXEN	CHEVRON USA INC	1/8+	814	589	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40/57 Chevron USA Inc to TH Exploration LLC
0*19304		5-15-6.1	DEAN L. RINE, IR. PAMELA F. RINE	CHEVRON USA INC	1/8+	813	635	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40/57 Chevron USA inc to TH Exploration U.C
0*19305	D	5-15-6.1		CHEVRON USA INC	1/8+	813	605	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40/57 Chevron USA Inc to TH Exploration LLC
									N/A	N/A	N/A	N/A	N/A	N/A	40/57 Chevron USA Inc to TH Exploration LLC
0*19306		1		CHEVRON USA INC	3/8+ 1/8+	814 815	594 155	N/A	N/A N/A	N/A	N/A	N/A	N/A N/A	N/A	40/57 Chevron USA Inc to TH Exploration LLC
0 1930/						- 013									40/57 Chevron USA Inc to TH
0*19308	D	5-15-6.1	WILLIAM WEBER	CHEVRON USA INC	1/8+	817	645	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC
							_			19/623 TriEnergy Inc to AB	24/319 AB Resources LLC to Chief Exploration & Development LLC and Radler	25/1 Chief Exploration & Development, LLC, Chief Oil and Gas, LLC, Radier 2000 Limited Partnerhsip and Enerplus	25/105 Chief Exploration & Development, LLC, Chief Oil & Gas, LLC, Radler 2000 Limited Partnership and Enerpius Resources (USA) Corporation to Chevron	756/397 AB Resources LLC to	40/57 Chevron USA inc to TH
0*19293	3	5-15-6	JOSEPH I. KRAMAR, SR. JO ANN KRAMAR	TRIENERGY, INC.	1/8+	655	566	N/A	- N/A	Resources LLC	2000 Limited Partnership	Resources to Chevron USA Inc	USA Inc.	Chevron USA Inc	Exploration LLC 40/57 Chevron USA Inc to TH
0*19295	E	5-15-6	KEVIN I. KELLY PAMELA MARXEN-KELLY	CHEVRON USA INC	1/8+	858	381	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC 40/57 Chevron USA Inc to Til
0*19295	E	5-15-6	MARISSA C MARXEN	CHEVRON USA INC	1/8+	837	120	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC
0*19297	E	5-15-6	PHILIP LEONARD MARXEN	CHEVRON USA INC	1/8+	839	410	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40/57 Chevron USA Inc to TH Exploration LLC
0*19298	F	5-15-6	BETTY J MARXEN SLEZAK	CHEVRON USA INC	1/8+	822	351	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40/57 Chevron USA inc to TH Exploration LLC

.

### WW-6A1 Supplement

•



-

ŝ

Leaso No.	Tags	Parcel	Lessor	Lesset	Royalty	Book	Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
											N/A	N/A	N/A	N/A	40/57 Chevron USA Inc to TH Exploration LLC
10*19299	E	5-15-6	ANNETTE CONWAY MARXEN	CHEVRON USA INC	1/8+	.817	512	N/A	N/A	N/A	N/A	N/A	iya		40/57 Chevron USA Inc to TH
			DEBORAH F HAGEMAN HUPPERT	CHEVRON LISA INC	1/8+	815	145	N/A	N/A	N/A	N/A	h/A	N/A	N/A	Exploration LLC
10°19300	┝┈╚	5-15-6	DEBOARN F HAGENGAN NOFFENI	CREVADA IISA INC	404										40/57 Chevron USA Inc to TH
10*19301	ε	5-15-6	SANDRA HAGEMAN KANGAS	CHEVRON USA INC	1/8+	815	150	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC
											N/A	N/A	N/A	N/A	40/57 Chevron USA inc to TH Exploration LLC
10*19302	£	5-15-6	JEFFREY C MARXEN SAMANTHA L MARXEN	CHEVRON USA INC	1/B+	817	506	N/A	N/A	N/A	N/A	NVA	100	140	40/57 Chevron USA Inc to TH
			THOMAS O MARXEN	CHEVRON USA INC	1/8+	814	589	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC
10°19303	E	5-15-6	THOMAS C MARAEN	CREARON GOA THE	- 401		343								40/57 Chevron USA Inc to TH
10*19304	Ε	5-15-6	DEAN L. RINE, JR. PAMELA F. RINE	CHEVRON USA INC	1/8+	813	635	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC
											N/A	N/A	N/A	N/A	40/57 Chevron USA Inc to TH Exploration LLC
10*19305	٤	S-15-6	KAREN MARXEN SONCROL	CHEVRON USA INC	1/8+	813	605	N/A	N/A	R/A	R/A	N/A			40/57 Chevron USA Inc to TH
10*19306		5-15-6	RICHARD L. TATE MARCELINE RINE TATE	CHEVRON USA INC	1/8+	814	594	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC
70.13209		2-12-0	BRENDAD L. TATE MURICELINE ONLE TATE	Chevron ook inc										_	40/57 Chevron USA Inc to TH
10°19307	E	5-15-6	MARY SUE RINE-WALTER	CHEVRON USA INC	1/8+	815	155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Exploration LLC
	· · · · ·										N/A	N/A	N/A	N/A	40/57 Chevron USA Inc to TH Exploration LLC
10*19308	E	5-15-6	WILLIAM WEBER	CHEVRON USA INC	1/8+	B17	645	N/A	N/A	N/A	RyA				
													25/105 Chief Exploration & Development, LLC, Chief Oil & Gas, LLC, Radler 2000		
1 .	I										24/319 AB Resources LLC to Chief Exploration &	Development, LLC, Chief Oll and Gas, LLC, Radier 2000 Limited	Limited Partnership and Enerplus		
		1				1 1				19/523 TriEnergy Inc to AB	Development LLC and Radier			756/397 AB Resources LLC to	40/57 Chevron USA Inc to TH
10*19293			KRAMAR JOSEPH ET UX	TRIENERGY, INC.	1/8+	655	566	h/A	N/A	Resources LLC	2000 Limited Partnership		USA Inc.	Chevron USA Inc	Exploration LLC
10 13233		5-11-12	NVUDAJOJCI ILI VA	Hucherd I, Inc.								25/1 Chief Exploration &	25/105 Chief Exploration & Development,		
1					1	1			23/617 Gastar Exploration		24/319 AB Resources LLC to	Development, LLC, Chief Oll and	LLC, Chief Oli & Gas, LLC, Radier 2000		
								23/353 Gastar Exploration	USA toc and Atinum		Chief Exploration &	Gas, LLC, Radier 2000 Limited	Limited Partnership and Enerplus		
		1	1					USA Inc. to Atlnum Marcellus	Marcellus I LLC to AB	23/633 AB Resources LLC to	Development LLC and Radier			756/397 AB Resources LLC to Chevron USA Inc	40/57 Chevron USA Inc to TH Exploration LLC
10*19336	G	5-11-11,3	BONNIE JEAN DAWSON	GASTAR EXPLORATION USA INC	1/8+	665	397	iuc	Resources LLC	TriEnergy Holdings U.C	2000 Limited Partnership		USA Inc.	Chevich OSA Inc	Exploration LLL
												25/1 Chief Exploration &	25/105 Chief Exploration & Development,		
		1							23/617 Gastar Exploration		24/319 AB Resources LLC to	Development, UC, Chief Oil and Gas, UC, Radler 2000 Umbed	LLC, Chief Oil & Gas, LLC, Radier 2000 Limited Partnership and Enerplus		
								23/353 Gastar Exploration	USA inc and Atinum	23/633 AB Resources LLC to	Chief Exploration & Development LLC and Radier			756/397 AB Resources LLC to	40/57 Chevron USA Inc to TH
				GASTAR EXPLORATION USA INC	1/8+	665	397	USA Inc. to Alinum Marcellus	Marcellus I LLC to AB Resources LLC	TriEnergy Holdings LLC	2000 Limited Partnership		USA Inc.	Chevron USA Inc	Exploration LLC
10*19336	G	5-11-11.3	BONNIE JEAN DAWSON	GASTAR EAPLORATION USA INC	401				heroerees ac	111111B1 11110		25/1 Chief Exploration &	25/105 Chief Exploration & Development,		
				1					23/617 Gastar Exploration		24/319 AB Resources LLC to	Development, LLC, Chief Gil and	LLC, Chief Oll & Gas, LLC, Radier 2000		
					1			23/353 Gastar Exploration	USA Inc and Atlaum		Chief Exploration &	Gas, LLC, Radier 2000 Umited	Umited Partnership and Enerpius		
								USA Inc. to Atlaum Marcellus	Marcellus I LLC to AB	23/633 AB Resources LLC to	Development LLC and Radler	Partnerhsip and Enerplus		756/397 AB Resources LLC to	40/57 Chevron USA Inc to TH
10*19336	н	5-11-11.4	BONNIE JEAN DAWSON	GASTAR EXPLORATION USA INC	1/8+	665	397	ILLC	Resources LLC	TriEnergy Holdings LLC	2000 Limited Partnership		USA Inc.	Chevron USA inc	Exploration LLC N/A
10*18972	1		MARGARET CLICKNER	TH EXPLORATION LLC	1/8+	\$41	281	N/A	N/A	N/A	N/A	N/A	N/A	N/A 32/362 Gastar Exploration inc and	N/A
		1				1		1				735/263 Gastar Exploration USA.	21/41 Merger Gastar Exploration USA, Inc		40/127 Chevron USA Inc to
			AMYSUE G BAHL	GASTAR EXPLORATION USA INC	1/2+	731	166	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	and Gastar Exploration Inc.	USA Inc	TH Exploration LLC
10*19224	<u>  '</u>	15-11-13	AMITSUE G BARL	GASTAR EXPLORATION GALINE		1 131								32/362 Gastar Exploration inc and	
	1						}					735/263 Gaster Exploration USA,		Atinum Marcellus I LLC to Chevron	40/127 Chevron USA Inc to
10*19225		5-11-13	LOIS BURNS	GASTAR EXPLORATION USA INC	1/8+	731	174	N/A	N/A	H/A	N/A	ine to Athum Marcellus I LLC	and Gastar Exploration Inc	USA Inc 32/362 Gastar Exploration Inc and	TH Exploration LLC
					Ĩ.	1	1				1	735/263 Gester Exploration USA,	21/41 Merger Gastar Exploration USA, Inc		40/127 Chevron USA Inc. to
		1			1/8+		162	N/A	N/A	N/A	N/A	inc to Athum Marcellus I LLC	and Gastar Exploration Inc	USA inc	TH Exploration LLC
10*19225		5-11-13	THOMAS RAY GATTS	TRIENERGY, INC.	1/81	731	102	140	1 190					32/362 Gastar Exploration inc and	
			1	1									21/41 Merger Gastar Exploration USA, Inc	Atlnum Marcellus I LLC to Chevron	40/127 Chevron USA Inc to
10*19227	1	5-11-13	CONNIE KRESS KNAPP	GASTAR EXPLORATION USA INC	1/8+	734	451	N/A	N/A	N/A	N/A	to Atlnum Marcellus   LLC	and Gastar Exploration inc	USA Inc	TH Exploration LLC
												75/102 Garter Synlacetion 1104 Inc.	21/41 Merger Gaster Exploration USA, Inc	32/362 Gastar Exploration Inc and Atlnum Marcellus III C to Chewron	40/127 Chevron USA Inc to
1.		1	l				1		N/A	N/A	N/A	26/183 Gastar Exploration USA, Inc to Atinum Marcellus I LLC	and Gastar Exploration Inc	USA Inc	TH Exploration LLC
10*19228	<u>                                      </u>	5-11-13	CAROLE J LAMBERT	GASTAR EXPLORATION USA INC	1/8+	737	225	N/A		11/A				32/362 Gastar Exploration Inc and	
				l	1							735/263 Gastar Exploration USA,		Atlaum Marcellus I LLC to Chevron	40/127 Chevron USA inc to
10-19229	1.	5-11-19	PATRICIA A LAMBERT	GASTAR EXPLORATION USA INC	1/8+	731	158	N/A	N/A	N/A	H/A	Inc to Atinum Marcellus I LLc	and Gastar Exploration Inc	USA Inc	TH Exploration LLC
	<u>                                     </u>	1		1	1	1		1						32/362 Gaster Exploration Inc and Atinum Marcellus I LC to Chevron	40/177 Charmen Hits Insta
1	1	1	1	1	Ι.	1	1					735/263 Gastar Exploration USA,	21/41 Merger Gastar Exploration USA, inc and Gastar Exploration inc	USA Inc	40/127 Chevron USA Inc to TH Exploration LLC
10*19230		6.11.13	MARIANN VIRGINIA MUNN	GASTAR EXPLORATION USA INC	1/8+	731	160	N/A	N/A	N/A	N/A	Inc to Atlnum Marcellus I LLc	Tene orset explorences me	NAL REPORT	I adjenter to the set

## Tarret Or's Well No. Bryan N - 5HM

Ŋ

ĩ

### WW-6A1 Supplement

												*****			1
Lease No.	Tags	Parcel	Lessor	Lessee	Royalty	Book	Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	diside time
							- 1							32/362 Gastar Exploration inc and	
					1.								21/41 Merger Gastar Exploration USA, Inc	Attnum Marcelkis I LLC to Chevron	40/12/ Chevron USA His L
*19231	-	5-11-13	DALE F RADCLIFF	GASTAR EXPLORATION USA INC	1/8+	734	452	H/A	54	N/A	N/A	to Atlaum Marcellus I LLC		USA Inc	TH Exploration LLC
				1	1									32/362 Gastar Exploration Inc and	a line of a second second
		}	1			1						735/263 Gestar Exploration USA,		Atinum Marcellus I LLC to Chevron	40/127 Chevron USA inc to
0*19232	1	5-11-13	SANDRA J STOWE HARMON	GASTAR EXPLORATION USA INC	1/8+	731	149	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLc	and Gastar Exploration Inc	USA Inc	TH Exploration LLC
					1				-	1				32/362 Gastar Exploration Inc and	
						1 1					1	735/263 Gastar Exploration USA,		Athum Marcellus   LLC to Chevron	
0*19233	1	5-11-13	SHERLEY RAY STOWE	GASTAR EXPLORATION USA INC	1/8+	731	170	N/A	N/A	N/A	N/A	Inc to Atlaum Marcellus   LLc	and Gaster Exploration Inc	USA Inc	TH Exploration LLC
	<u> </u>					1	I							32/362 Gastar Exploration Inc and	
		1			1						1	26/183 Gaster Exploration USA, Inc	21/41 Merger Gastar Exploration USA, Inc	Atinum Marcellus I LLC to Chevron	40/127 Chevron USA Inc to
0*19234	1 1	5-11-13	STANLEY EUGENE STOWE	GASTAR EXPLORATION USA INC	1/8+	732	631	N/A	N/A	A/A	N/A	to Atinum Marcellus I LLC	and Gastar Exploration inc	USA Inc	TH Exploration LLC
											1			32/362 Gaster Exploration inc and	1
	1	1				1				1		735/263 Gastar Exploration USA,	21/41 Merger Gastar Exploration USA, Inc	Atimum Marcellus I LLC to Chevron	40/127 Chevron USA Inc to
0*19235	1.	5-11-13	ROSE EDGE	GASTAR EXPLORATION USA INC	1/8+	731	164	N/A	N/A	R/A	1 N/A	Inc to Atloum Marcellus I LLC	and Gastar Exploration inc	USA Inc	TH Exploration LLC
	<u> </u>	<u></u>									T			32/362 Gastar Exploration Inc and	1
	ł				1	1						75/183 Gastar Exploration USA, Inc.	21/41 Merger Gastar Exploration USA, Inc	Atinum Marcellus I LLC to Chevron	40/127 Chevron USA Inc to
0*19244	ι.	E 14-12	JERRY L BLOOD	GASTAR EXPLORATION USA INC	1/8+	736	177	N/A	N/A	N/A	N/A	to Atinum Marcellus I LLC	and Gastar Exploration inc	USA Inc	TH Exploration LLC
0-19244	<b>⊢ •</b>	19-11-13	JEANT COLUMN			1								32/362 Gastar Exploration inc and	1
					1	1						16/628 Caster Evaloration USA inc	21/41 Merger Gastar Exploration USA, Inc	Atinum Marcelius I LLC to Chevron	40/127 Chevron USA tric to
	Ι.		JUANTA MOVEY	GASTAR EXPLORATION USA INC	1/8+	745	580	N/A	N/A	N/A	N/A	to Atinum Marcellus I LLC	and Gastar Exploration inc	USA Inc	TH Exploration LLC
0*19247		5-11-13	JOY DENEAN GARTMAN	TH EXPLORATION LLC	1/8+	951	595	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21009				TH EXPLORATION LLC	1/8+	952	428	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21042			REBECCA ASPERY	TH EXPLORATION, LLC	2/8+	951	591	H/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21046			KELLY R DUNN		1/8+	951	591	N/A	N/A	N/A	N/A	IVA IVA	N/A	N/A	N/A
10*21047			RACHEL D DONAHUE	TH EXPLORATION, LLC	1/8+	951	593	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21048		5-11-13	MICHAEL POLSON	TH EXPLORATION, LLC				N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
0*21253	1	5-11-13	MARY ANN STURGELL	TH EXPLORATION, LLC	1/8+	952	430	R/A	NA				ive	32/352 Gastar Exploration USA Inc	
						1							23/353 Gastar Exploration USA Inc. to	and Atlnum Marcellus FLIC to	40/127 Chevron USA Inc to
						1							Atinum Marcellus I LiC	Chevron USA	TH Exploration LLC
t0*19139	3	5-11-26	MOORE HIRAM V - SFX	GASTAR EXPLORATION USA, INC.	1/8+	599	53	N/A	H/A	N/A	N/A	N/A	ALINUM MERCERUS I LLC		Tra Exploration CCC
					1	1				1	1			32/352 Gastar Exploration USA inc	
		1				1					1 .		23/353 Gastar Exploration USA Inc. to	and Atinum Marcellus HLC to	40/127 Chevron USA Inc to
10*19179	1	5-11-16	HAUGHT KEITH ET UX - SFX	GASTAR EXPLORATION USA, INC.	1/8+	710	587	N/A	N/A	N/A	N/A	N/A	Atinum Marcellus I LLC	Chevron USA	TH Exploration LLC
	1	1	1										1	32/362 Gastar Exploration USA inc	
	Į	1		TRIENERGY, INC LEASE SAYS		1					1		23/353 Gastar Exploration USA Inc. to	and Atonum Marcellus I LLC to	40/127 Chevron USA inc to
10*19180		5-11-16	HAUGHT STEVEN - SFX	GASTAR EXPLORATION USA INC	1/8+	710	67	N/A	N/A	N/A	N/A	N/A	Atinum Marcellus I LLC	Chevron USA	TH Exploration LLC
	1	-									}			32/362 Gastar Exploration USA Inc	
						1							23/353 Gastar Exploration USA Inc. to	and Atlnum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19178		5-11-16	HAUGHT JOSEPH - SFX	GASTAR EXPLORATION USA, INC.	1/8+	710	69	N/A	N/A	N/A	N/A	N/A	Atlnum Marcellus I LLC	Chevron USA	TH Exploration LLC
														32/362 Gastar Exploration USA inc	
	1			1		1			1		1	735/263 Gaster Exploration USA,	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA inc to
10*19176		5-11-17	MAUNA MAXINE BEYSER	GASTAR EXPLORATION USA INC	1/8+	710	602	N/A	N/A	N/A	N/A	ine to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10.13110	<u> </u>													32/362 Gastar Exploration USA Inc	
					1				1			735/263 Gastar Exploration USA,	21/41 Cert, of Merger Gastar Exploration	and Atlnum Marcellus I LLC to	40/127 Chevron USA Inc to
	ĸ		NINA L KOVACS	GASTAR EXPLORATION USA INC	1/8+	710	594	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19177	ĸ	5-11-1/.	I RUHA C ROVACS	- GASTAR EAFTCINITION USA INC	1/01	- 1.0		1975						32/362 Gastar Exploration USA Inc	
		1				1	1					735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atlnum Marcellus I LLC to	40/127 Chevron USA Inc to
		L		GASTAR EXPLORATION USA INC	1/8+	710	598	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gaster Exploration Inc	Chevron USA	TH Exploration LLC
10*19185	K	5-11-17.	2 HARRIETT LODUTH FOLEY	GASTAR EAFLORATION OSATINC	1/07		330	- B/A						32/362 Gastar Exploration USA Inc	
		1	1			1	1	ł				735/263 Gastar Exploration USA,	21/41 Cert, of Merger Gastar Exploration		40/127 Chevron USA Inc to
	1	L				1	6.00	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19185	K	5-11-17.	2 KOEL GLOVER	GASTAR EXPLORATION USA INC	1/8+	710	600	гуа	N/A	190			1	32/362 Gastar Exploration USA Inc	
	1	1	1	1		1		1	1	1	1	735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA Inc to
	1										N/A	Inc to Atinum Marcelius I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19189	K	5-11-17.	2 SHERRY ANN MCPHERON	GASTAR EXPLORATION USA INC	1/8+	710	605	N/A	N/A	N/A	- IVA	are to realight marchaes rate	The second secon	32/362 Gaster Exploration USA Inc	
		1			1	1	1		1	1	1	735 DE3 Gautas Curlantina Mich	31/41 Carl of Marrier Cartar Dealerstin		40/177 Chauma LICA Inc.
	1		1		1	1	1					735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA Inc to
10*19190	ĸ	5-11-17	2 SALLY LEE RIVERA	GASTAR EXPLORATION USA INC	1/8+	710	550	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus   LLC	USA, Inc to Gaster Exploration Inc	Chevron USA	TH Exploration LLC
	1	1							1	1	1	1		32/362 Gastar Exploration USA Inc	
	1	1	1			1	1		1		1	73S/253 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA Inc to
					1	1	608	N/A	N/A	N/A	N/A	Inc to Atlnum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19191	l x	5-11-17	2 ISHARLA EETH WEAVER	GASTAR EXPLORATION USA INC	1/8+	710	000	140	IVA	140					
10°19191	<u> </u>	5-11-17.	2 SHARLA BETH WEAVER	GASTAR EXPLORATION USA INC	1/8+	1/10	000							32/362 Gastar Exploration USA Inc	
10 <b>°1</b> 9191	*	5-11-17.	2 SHARLA BETH WEAVER	GASTAK EXPLORATION USA INC	1/8+	/10	000					735/263 Gaster Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc		40/127 Chevron USA inc to TH Exploration LLC

### 4 7 0 5 1 0 2 0 7 7 Operator's Well No. Bryan N - 5HM

÷

Leaso No.	Tags	Parcel	Lessor	Lassee	Royalty	Book	Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
														32/362 Gastar Exploration USA Inc	
						1 1					1	735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA Inc to
10*19201	ĸ	5-11-17.2	DANIEL K YOHO	GASTAR EXPLORATION USA INC	1/8+	714	125	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gaster Exploration Inc		TH Exploration LLC
												1		32/362 Gastar Exploration USA Inc	
					1	1 1			1			735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevran USA Inc to
10*19202	ĸ	5-11-17.2	DEBORAH L WOOLEY	GASTAR EXPLORATION USA INC	1/8+	714	131	N/A	N/A	N/A	N/A	inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
		1			1-3	1					1			32/362 Gaster Exploration USA Inc	
					1						)	735/263 Gastar Exploration USA	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19203	. بر ا	5-11-172	CAROL M YOHO	GASTAR EXPLORATION USA INC	1/8+	713	205	N/A	N/A	N/A	N/A	inc to Atlaum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
	<del>  ^</del>				- 4/01	113	_203	19/0					1	32/352 Gastar Exploration USA Inc	
										1		735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus   LLC to	40/127 Chevron USA inc to
10*19204		l	DAYNA MARLENE YOKO	GASTAR EXPLORATION USA INC				N/A	N/A	N/A	N/A	Inc to Atloum Marcellus I LLC	USA, Inc to Gastar Exploration inc	Chevron USA	TH Exploration LLC
10-19204	<u> </u>	3-11-17.2	DATINA MARLENE TURU	GASTAR EXPLORATION USA INC	1/8+	714	127	N/A	R/A	dyA	1 100			32/362 Gastar Exploration USA Inc	
				1					1	1		The form the function life	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
									1	1	1	735/263 Gastar Exploration USA,		Chevron USA	TH Exploration LLC
10*19205	ĸ	S-11-17.2	JEFFREY C YOHO	GASTAR EXPLORATION USA INC	1/8+	713	203	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, inc to Gaster Exploration inc		Th Exploration LLC
					1	1 1			1	I	1			32/362 Gastar Exploration USA inc	
					1	I I			1	1			21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19251	ĸ	5-11-17.2	RAE SUZETTE BAKER	GASTAR EXPLORATION USA INC	1/8+	748	315	N/A	N/A	N/A	N/A	to Atlnum Marcellus I LLC	USA, Inc to Gaster Exploration Inc	Chevron USA	TH Exploration LLC
													1	32/362 Gastar Exploration USA Inc	
					1	1				1		25/639 Gastar Exploration USA, Inc			40/127 Chevron USA Inc to
10*19252	ĸ	5-11-17.2	JOHN WILSON	GASTAR EXPLORATION USA INC	1/8+	749	522	N/A	n/A	N/A	N/A	to Atinum Marcellus   LLC	USA, inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10°19502			SUSAN BLANCHE BEYSER	TH EXPLORATION LLC	1/8+	942	623	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19893			WINIFRED & AND EDDIE & TURNER	TH EXPLORATION, LLC	1/8+	948	277	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21041			SHERY AND RANDEN RITCHEA	TH EXPLORATION, LLC	1/8+	949	365	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	<u> </u>	-	KEVIN R. CORLEY AND ANITA L. CORLEY,		1 401					141					40/127 Chevron USA Inc to
10*19126	.	6.44.47	HUSBAND AND WIFE	CHEVRON USA INC	1/8+	859	44	N/A	N/A	N/A	N/A	N/A	N/A	N/A .	TH Exploration LLC
	<u> </u>	13-11-1/	nosario vito tirt	CRETRON OJA INC	401	633			146	199				32/362 Gastar Exploration USA Inc	
	I 1	{		l	1							735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus ( LLC to	40/127 Chevron USA Inc to
				1					1				USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19176	L	5-11-17	MAUNA MAXINE BEYSER	GASTAR EXPLORATION USA INC	1/8+	710	602	N/A	N/A	N/A	N/A	inc to Atlaum Marcellus [ 1LC	USA, INC TO GASEST EXPLOTATION ME	32/362 Gastar Exploration USA inc	Th Exploration Coc
					1	1 1				1				and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
		1		1					1		1	735/263 Gester Exploration USA,	21/41 Cert. of Merger Gastar Exploration		
10*19177	L	5-11-17	NINA L KOVACS	GASTAR EXPLORATION USA INC	1/8+	710	594	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus HLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
						1 1						1		32/362 Gastar Exploration USA inc	
					1				i i			735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19185	L L	5-11-17	HARRIETT LODUTH FOLEY	GASTAR EXPLORATION USA INC	1/8+	710	598	N/A	_N/A	N/A	N/A	Inc to Atinum Marcelius & LUC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
		1								1				32/362 Gastar Exploration USA Inc	
					1				1	ł		735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19185	1 1	5-11-17	IOEL GLOVER	GASTAR EXPLORATION USA INC	1/8+	710	600	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
			······································		1									32/352 Gastar Exploration USA Inc	
	1				1	1 1						735/263 Gaster Exploration USA,	Z1/41 Cert. of Merger Gastar Exploration	and Atlnum Marcelius I LLC to	40/127 Chevron USA Inc to
10*19189	ι	5.11.17	SHERRY ANN MCPHERON	GASTAR EXPLORATION USA INC	1/8+	710	606	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
		3-11-17		CASTAL LA CONTROL CONTROL	- 451		000							32/362 Gaster Exploration USA Inc	
									1	1		735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcelius   LLC to	40/127 Chevron USA Inc to
	.	L				1			N/A	R/A	N/A	Inc to Alinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19190	<u> </u>	5-11-1/	SALLY LEE RIVERA	GASTAR EXPLORATION USA INC	1/8+	710	590	N/A	N/A	IVA	17/6	ine to Activity interestor Face	bort ale to destal Explorate and	32/362 Gester Exploration USA Inc	
												THE /TER Castar Evaluration LISA	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcelius I LLC to	40/127 Chevron USA Inc to
				1	· ·	1			I .		1	735/263 Gastar Exploration USA,			
10*19191	L	5-11-17	SHARLA BETH WEAVER	GASTAR EXPLORATION USA INC	1/8+	710	608	N/A	N/A	N/A	N/A	Inc to Atlaum Marcellus I LLC	USA, Inc to Gaster Exploration Inc	Chevron USA	TH Exploration LLC
					4	1			1					32/362 Gastar Exploration USA Inc	
					1							735/263 Gastar Exploration USA,		and Atinum Marcelius I LLC to	40/127 Chevron USA inc to
10°19192	L	5-11-17	JAMES E YOKO	GASTAR EXPLORATION USA INC	1/8+	714	129	N/A	N/A	N/A	N/A	Inc to Atlnum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
		1		1										32/362 Gastar Exploration USA Inc	
				1		1 1						73S/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19201	1 1	5-11-17	DANIEL K YOHO	GASTAR EXPLORATION USA INC	1/8+	714	125	N/A	N/A	H/A	N/A	inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
		r			1	1				·	1			32/362 Gester Exploration USA Inc	1
1	1								1		1	735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19202	L	5.11.17	DEBORAH L WOOLEY	GASTAR EXPLORATION USA INC	1/8+	714	131	N/A	N/A	N/A	N/A	inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration U.C.
10 19202		3-11-1/	DEDUINIT L WOULET	GASTAN EAPLOIGHTUN USA INC	- 407	14	161	N/A	N/A					32/362 Gaster Exploration USA Inc	
	1			1	1	1 1			1		1	735 / 262 Cartar Evaluration 116 4	71/41 Cart of Margar Gaster Fundamilan		40/127 Chauron 1154 Inch
.				1	1.	1 1	'				1	735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19203	L	5-11-17	CAROL M YOHO	GASTAR EXPLORATION USA INC	1/8+	713	205	N/A	N/A	N/A	N/A	Inc to Atlnum Marcellus 1 LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
		1								1	1			32/362 Gastar Exploration USA Inc	
		1 .		1	1	1			1		1	735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus 11LC to	40/127 Chevron USA Inc to
10*19204		1	DAYNA MARLEKE YOKO		1/8+			N/A	N/A	N/A	N/A	inc to Atlaum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC

### 4 7 0 5 1 0 2 0 7 7 Bryan N - 5HM

		1	· · · · · · · · · · · · · · · · · · ·	t	Daught	Back	D	Assistant	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
Lease No.	Tags	Parcel	Lessor	Lessee	Royalty	ROCK	Page	Assignment	Assignment	Assignment	Assignment			32/362 Gastar Exploration USA Inc	
										1		735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
											51/6		USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10° 19205	_ L	5-11-17	JEFFREY C YOHD	GASTAR EXPLORATION USA INC	1/8+	713	203	N/A	N/A	N/A	N/A	Inc to Atlnum Marcellus I LLC	DSA, Inc to Gastar Exploration Inc	32/362 Gastar Exploration USA Inc	TH EXPRESSION CEC
					1				1	1					a franciska service a
													21/41 Cert. of Merger Gastar Exploration	and Atlnum Marcellus I LLC to	40/127 Chevron USA Inc to
10°19251	1 เ	5-11-17	RAE SUZETTE BAKER	GASTAR EXPLORATION USA INC	1/8+	748	315	N/A	N/A	N/A	N/A	to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
	<u>+</u>	<u></u>			1									32/362 Gaster Exploration USA Inc	
												26/639 Gastar Exploration USA, Inc	21/41 Cert. of Merger Gastar Exploration	and Atlnum Marcellus I LLC to	40/127 Chevron USA Inc to
	Ι.	5-11-17	KOKN WESON	GASTAR EXPLORATION USA INC	1/8+	749	522	N/A	N/A	N/A	N/A	to Atlnum Marcellus I LLC	USA, Inc to Gaster Exploration Inc	Chevron USA	TH Exploration LLC
10*19252				TH EXPLORATION LLC	1/8+	942	623	N/A N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19502			SUSAN BLANCHE BEYSER					N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19893			WINIFRED G AND EDDIE G TURNER	TH EXPLORATION, LLC	1/8+	948	277			N/A N/A	N/A	N/A	N/A	N/A	N/A
10*21041	L	5-11-17	SHERY AND RANDEN RITCHEA	TH EXPLORATION, LLC	1/8+	949	365	N/A	N/A	N/A	N/A	N/A	nya	32/362 Gastar Exploration USA Inc	
	1	1				1			1		1				and the state of the state of the state
	1								1			735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA Inc to
10*19176	I M	5-11-17,1	MAUNA MAXINE BEYSER	GASTAR EXPLORATION USA INC	1/8+	710	602	N/A	N/A	N/A	N/A	inc to Atinum Marcellus HLC	USA, Inc to Gaster Exploration Inc	Chevron USA	TH Exploration LLC
	1		· · · · · · · · · · · · · · · · · · ·	1	1									32/362 Gastar Exploration USA inc	
i	1		1		1	1			1	1		735/263 Gaster Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcelius I LLC to	40/127 Chevron USA inc to
	M	L	NINA L KOVACS	GASTAR EXPLORATION USA INC	1/8+	710	594	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus   LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19177	<b>M</b>	5-11-17.1	MINA C KOVALS	GASTAR EAR BOARTION COATING	1	110								32/362 Gastar Exploration USA Inc	
	1				1						1	735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA inc to
				1	1 .					1	1			Chevron USA	TH Exploration LLC
10*19185	M	\$-11-17.	HARRIETT LODUTH FOLEY	GASTAR EXPLORATION USA INC	1/8+	710	598	N/A	N/A	N/A	N/A	inc to Athum Marcellus I LLC	USA, Inc to Gastar Exploration Inc		TH Exploration LDC
		1									1			32/362 Gastar Exploration USA Inc	
	1	1			1							735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LC to	40/127 Chevron USA Inc to
10*19185		5.11.17	JOEL GLOVER	GASTAR EXPLORATION USA INC	1/8+	710	600	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gaster Exploration Inc	Chevron USA	TH Exploration LIC
10 13140		1			1						1			32/362 Gaster Exploration USA Inc	
					1							735/263 Gastar Exploration USA,	21/41 Cert. of Marger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
									N/A	N/A	N/A	Inc to Atinum Marcellus ( LLC	USA, inc to Gastar Exploration Inc.	Chevron USA	TH Exploration LLC
10*19189	M	5-11-17.	SHERRY ANN MCPHERON	GASTAR EXPLORATION USA INC	1/8+	710	606	N/A	N/A	N/A		are to Autent materials ( the	out all to destar Exploration are	32/362 Gastar Exploration USA inc	
1									1	1					and and the same street in a sec
		1		1		1						735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus i LLC to	40/127 Chevron USA Inc to
10*19150	I M	5-11-17.	SALLY LEE RIVERA	GASTAR EXPLORATION USA INC	1/8+	710	\$90	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus HLLC	USA, inc to Gastar Exploration inc	Chevron USA	TH Exploration LLC
		1		-					1					32/362 Gastar Exploration USA inc	
			1			1						735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus FLLC to	40/127 Chevron USA Inc to
	1		SHARLA BETH WEAVER	GASTAR EXPLORATION USA INC	1/8+	710	608	N/A	N/A	N/A	N/A	Inc to Atlaum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19191	- M	5-11-17.	SHARA DE IN WEAVEN	GASTAR EXPLOSATION OUA INC		1.00								32/362 Gastar Exploration USA Inc	
1										1		735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atlnum Marcellus   LLC to	40/127 Chevron USA Inc to
1									1		1				TH Exploration LLC
10*19192	м.	5-11-17.	JAMES E YOHO	GASTAR EXPLORATION USA INC	1/B+	714	129	N/A	N/A	N/A	N/A	Inc to Atlnum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	Th Deporation SUC
						1								32/362 Gastar Exploration USA Inc	
	1					1			1			735/263 Gastar Exploration USA,		and Atlnum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19201	N N	15.11.17	DANIEL K YOHO	GASTAR EXPLORATION USA INC	1/8+	714	125	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10 10,01		+							1					32/362 Gastar Exploration USA Inc	
												735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
	I				1/8+	714	131	N/A	N/A	N/A	N/A	inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc.	Chevron USA	TH Exploration LLC
10*19202	M	5-11-17.	DEBORAH L WOOLEY	GASTAR EXPLORATION USA INC	1/8+	/14	151	N/A	N/A	11/5		and to Fight and the could be the		32/362 Gastar Exploration USA Inc	
													31/41 Cart al Manua Cartas Sustantia	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
												735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gustar Exploration		
10*19203	{ M	5-11-17.	CAROL M YOHO	GASTAR EXPLORATION USA INC	1/8+	713	205	N/A ,	, N/A	N/A	N/A	Inc to Atinum Marcelius I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
	1	1				1			I	1	1	1	1	32/362 Gastar Exploration USA Inc	1
	1		1			1			1	1	1	735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcelius I LLC to	40/127 Chevron USA inc to
110*19204		E.44.47	DAYNA MARLENE YOHO	GASTAR EXPLORATION USA INC	1/8+	714	127	N/A	N/A	N/A	N/A	Inc to Athum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10.19504	- <u>M</u>	-12-11-1/		Granal Ca Constituit Can Hite		┽╧╧								32/362 Gaster Exploration USA Inc	1
ł	1			1		1			1		1	735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus ILLC to	40/127 Chevron USA inc to
1	1			1	1	1					N/A	Inc to Atinum Marcellus I LLC	USA, inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10* 19205	M	5-11-17.	JEFFREY C YOHO	GASTAR EXPLORATION USA INC	1/8+	713	203	N/A	N/A	N/A	n/A	Inc to Autum Marcenss I LUC	Topy the to dester explorement like		In contrained and
				1 ·····	1				1					32/362 Gastar Exploration USA Inc	Later at the second
			1									26/639 Gastar Exploration USA, Inc		and Atlnum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19251	M	5-11-17	RAE SUZETTE BAKER	GASTAR EXPLORATION USA INC	1/8+	748	315	N/A	• N/A	N/A	N/A	to Atlnum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
	+			1		1		i		1				32/362 Gastar Exploration USA Inc	
1	1	1				1					1	26/639 Gastar Exploration USA, Inc	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA Inc to
1.	1	I.				1				N/A	N/A	to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19252			1 JOHN WILSON	GASTAR EXPLORATION USA INC	1/8+	749	522	N/A	N/A		N/A N/A	N/A	N/A	N/A	N/A
10°19502			I SUSAN BLANCHE BEYSER	TH EXPLORATION LLC	1/8+	942	623	N/A	N/A	N/A				N/A	N/A N/A
10*19893	M	5-11-17	WINIFRED G AND EDDIE G TURNER	TH EXPLORATION, LLC	1/8+	948	277	N/A	N/A	N/A	N/A	N/A	N/A		
10°21041	M	5-11-17	1 SHERY AND RANDEN RITCHEA	TH EXPLORATION, LLC	1/8+	949	365	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*18945			1 DAVID E GRAY	TH EXPLORATION, LLC	1/8+	939	385	N/A	N/A	N/A	N/A	<u>N/A</u>	N/A	N/A	N/A
10*18945			DAVID E GRAY	TH EXPLORATION LLC	1/8+	939	386	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 19342	1 4	12-11-45	1000 L 0000	THE DAY DOLDARD BUT DOW		1.00			A and the second se						

### Operator's Well No. <u>Bryan N - 5HM</u>

Lease No.	Thes	Parcel	Lessor	Lessee	Royalty	Book	Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
														32/362 Gastar Exploration USA Inc	
					1							735/263 Gastar Exploration USA,	21/41 Cort. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19176	N	5-11-22	MAUNA MAXINE BEYSER	GASTAR EXPLORATION USA INC	1/8+	710	602	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevran USA	TH Exploration LLC
						1						1		32/362 Gastar Exploration USA Inc	
					1							735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LIC to	40/127 Chavron USA Inc to
10*19177	N	\$11.22	NINA L KOVACS	GASTAR EXPLORATION USA INC	1/8+	710	594	n/A	N/A	N/A	N/A	inc to Alinum Marcellus / LLC	USA, Inc to Gastar Exploration Inc.	Chevron USA	TH Exploration U.C
10-131/7	п	3-11-22		GASTAR EXPEDICATION USA INC	1/04	- <u>~</u>	339	N/K						32/362 Gaster Exploration USA Inc	
												735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gaster Exploration	and Alinum Marcellus I LLC to	40/127 Chevron USA Inc to
10110105	N			GASTAR EXPLORATION USA INC	1/0.			N/A	N/A	N/A	N/A	Inc to Atlnum Marcellus I LLC	USA, inc to Gastar Exploration inc		TH Exploration U.C.
10*19185	<u>N</u>	3-11-22	HARRIETT LODUTH FOLEY	GASTAR EXPLORATION OSATINC	1/8+	710	598	N/A		IVA				32/362 Gaster Exploration USA inc	
				1		1 1						735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Athum Marcellus I LLC to	40/127 Chevron USA Inc to
		L		1		11					N/A	Inc to Atinum Marcelius I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19185	N	5-11-22	JOEL GLOVER	GASTAR EXPLORATION USA INC	1/8+	710	600	N/A	N/A	N/A	N/A	the to Autom marcents i cec	104A, the in onstat Exploration the	32/362 Gastar Exploration USA Inc	The opport doin do
						1 1							and the state of t		40/127 Chevron USA Inc to
			ł			1 1						735/263 Gaster Exploration USA,	21/41 Cert. of Merger Gastar Exploration		
10*19189	N	5-11-22	SHERRY ANN MCPHERON	GASTAR EXPLORATION USA INC	3/8+	710	606	N/A	N/A	N/A	N/A	Inc to Atinom Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
														32/362 Gastar Exploration USA Inc	
									1			735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration		40/127 Chavron USA Inc to
10*19190	N	5-11-22	SALLY LEE RIVERA	GASTAR EXPLORATION USA INC	1/8+	710	<b>S50</b>	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
		1												32/362 Gastar Exploration USA Inc	
		1										735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19191		L	SHARLA BETH WEAVER		1/5+	710	608	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC		Chevron USA	TH Exploration LLC
10.19191	<u> </u>	D-11-22	SHARLA BEIN WEAVER	GASTAR EXPLORATION USA INC	1/87	/10	608	N/A	N/A		WA			32/362 Gastar Exploration USA Inc	
												735/263 Gester Exploration USA,	23/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
									1					Chevron USA	TH Exploration LLC
10*19192	N	5-11-22	IAMES E YOHO	GASTAR EXPLORATION USA INC	1/8+	714	129	N/A	N/A	N/A	N/A	Inc to Atlaum Marcellus I LLC	USA, Inc to Gastar Exploration Inc		TH Exploration LLC
												1	1	32/362 Gastar Exploration USA Inc	
		1										735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19201	N	5-11-22	DANIEL K YOHO	GASTAR EXPLORATION USA INC	1/8+	714	125	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration inc	Chevron USA	TH Exploration LLC
		1												32/352 Gastar Exploration USA Inc	
		1			1				1			735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atlnum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19202	ы	L	DEBORAH L WOOLEY	GASTAR EXPLORATION USA INC	1/8+	714	131	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I U.C	USA, Inc to Gaster Exploration Inc	Chevron USA	TH Exploration LLC
10 19202		3-11-55	DEDUNAR L WOOLET	GASTAR EXPLORATION GALINC		-/14	191	N/A	N/A	10/4	194			32/362 Gastar Exploration USA Inc	
					1				f			735/263 Gaster Exploration USA,	21/43 Cert. of Merger Gastar Exploration	and Atinum Marcellus J LLC to	40/127 Chevron USA Inc to
			1		1	i						inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19203	<u>N</u>	5-11-22	CAROL M YOHO	GASTAR EXPLORATION USA INC	1/8+	713	205	N/A	N/A	N/A	N/A	Inc to Aunum Marcenus Luc	1034, Inc to Gaster Exploration are		Th Exploration LLC
						1 1								32/352 Gastar Exploration USA Inc	
								1				735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus HLC to	40/127 Chevron USA inc to
10°19204	N	5-11-22	DAYNA MARLENE YOHO	GASTAR EXPLORATION USA INC	1/8+	714	127	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus   UC	USA, Inc to Gastar Exploration inc	Chevron USA	TH Exploration LLC
														32/352 Gastar Exploration USA Inc	
			•		1							735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus # LLC to	40/127 Chevron USA Inc to
10*19205	ы	5-11-22	JEFFREY C YOHO	GASTAR EXPLORATION USA INC	1/8+	713	203	N/A	N/A	N/A	N/A	ine to Atlnum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
														32/362 Gastar Exploration USA Inc	
			1					1				26/639 Gastar Exploration USA, Inc	21/41 Cert. of Mergar Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19251		C	RAE SUZETTE BAKER	GASTAR EXPLORATION USA INC	1/8+	748	315	N/A	N/A	N/A	N/A	to Alinum Marcellus I LLC		Chevron USA	TH Exploration LLC
10-19291	<u>n</u>	5-11-22	NAE SUZETTE BAKER	GASTAR EAPLORATION USA INC	1/01	/48	315	N/A	190		144			32/362 Gastar Exploration USA Inc.	
		1			1							action Contra Surfacellas MA	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus   LLC to	40/327 Chevron USA Inc to
														Chevron USA	
10*19252			JORN WILSON	GASTAR EXPLORATION USA INC	1/8+	749	522	N/A	N/A	N/A	N/A	to Atinum Marcellus I LLC			TH Exploration LLC
10*19502			SUSAN BLANCHE BEYSER	TH EXPLORATION LLC	1/8+	942	623	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19893	N	5-11-22	WINIFRED G AND EDDIE G TURNER	TH EXPLORATION, LLC	1/8+	948	277	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21041	N	5-11-22	SHERY AND RANDEN RITCHEA	TH EXPLORATION, LLC	1/8+	949	365	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		T		1					1	5				32/362 Gastar Exploration USA Inc	1
		1		1	1			1	1			735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcelius I LLC to	40/127 Chevron USA Inc to
10*19176	6	5-11-10	MAUNA MAXINE BEYSER	GASTAR EXPLORATION USA INC	1/8+	710	602	N/A	N/A	N/A	N/A	Inc to Atlaum Marceikus I LLC	USA, Inc to Gester Exploration Inc	Chevron USA	TH Exploration LLC
	<u>*</u>		THE COURSE AND THE SAME CARDEN	State the balance and the		1		196				1	1	32/362 Gastar Exploration USA Inc	
		1	1	1	1	1	1	1	1	1	1	735/263 Gester Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcelus I LLC to	40/127 Chevron USA Inc to
									N/A	N/A	N/A	inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19177	<u> </u>	5-11-18	NINA L KOVACS	GASTAR EXPLORATION USA INC	1/8+	710	594	N/A	N/A	N/A	N/A	The re reaction marcelles I LLC	To any site to cassian exploration time	32/362 Gastar Exploration USA Inc	
		1	ł	1	1	1	1	1	1	1	1		lane in the second state		
ł		1	1		1		}	1	1	1	}	735/263 Gastar Exploration USA,		and Atloum Marcelius   LLC to	40/127 Chevron USA Inc to
10*19185	0	5-11-18	HARRIETT LODUTH FOLEY	GASTAR EXPLORATION USA INC	1/8+	710	598	N/A	N/A	N/A	N/A	inc to Atinum Marcellus I LLC	USA, inc to Gastar Exploration inc	Chevron USA	TH Exploration LLC
		1			1	1						1		32/362 Gastar Exploration USA Inc	
		1			1				1	1	1	735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcelius I LIC to	40/127 Chevron USA Inc to
10*19186	0	5.72.20	JOEL GLOVER	GASTAR EXPLORATION USA INC	1/8+	710	600	N/A	N/A	N/A	N/A	inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10 19100	<u> </u>	3-22-28	Internet and the	SANTAG CATONININ UZA INC		1.10	000	INVA.		190				32/362 Gastar Exploration USA Inc	
		1			1					1	ł	735/263 Gaster Exploration USA,	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA Inc to
1	1	L		I		1	l	1				Inc to Atinum Marcellus   LLC	USA, Inc to Gastar Exploration Inc		TH Exploration LLC
10*19189	0		SKERRY ANN MCPHERON	GASTAR EXPLORATION USA INC	1/8+	710	606	N/A	N/A	N/A	N/A	THE TO ATTRUM MORICENUS I LLC.	I DAM, LINE LD GAMAT EXCLORATION INC	ILLIEVTON USA	I I III EXOLOGATION LLC.

.

### 4705102077 Operator's Well No. <u>Bryan N - 5HM</u>

Phy         Phy <th>Lesse No.</th> <th>Tasts</th> <th>Parcel</th> <th>Lessor</th> <th>Lessae</th> <th>Royalty</th> <th>Book</th> <th>Page</th> <th>Assignment</th> <th>Assignment</th> <th>Assignment</th> <th>Assignment</th> <th>Assignment</th> <th>Assignment</th> <th>Assignment</th> <th>Assignment</th>	Lesse No.	Tasts	Parcel	Lessor	Lessae	Royalty	Book	Page	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
PHINE         C         No.         No. <td></td>																
PHINE         C         No.         No. <td></td> <td></td> <td></td> <td></td> <td>1</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>735/263 Gastar Exploration USA,</td> <td>21/41 Cert. of Merger Gastar Exploration</td> <td>and Atinum Marcellus I LLC to</td> <td>40/127 Chevron USA Inc to</td>					1		1						735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
A         A	10419190	6	5.11.18	SALLY LEE DIVERA	GASTAR CYPI ORATION USA INC	1/04	710	500	4/4	N/A	N/A	NZA				
unpub         unpub <th< td=""><td></td><td><u>+</u></td><td>5-11-10</td><td></td><td>GASTAR CAPCONATION DAA INC</td><td></td><td>- 10</td><td>350</td><td></td><td>1.170</td><td>190</td><td>Wa</td><td></td><td></td><td></td><td></td></th<>		<u>+</u>	5-11-10		GASTAR CAPCONATION DAA INC		- 10	350		1.170	190	Wa				
P1193         P         P1193         PA         P1193         PA         PA        PA        <			1		1	1							725 DC2 Course Supportion 1154	31/41 Cart of Margar Cartar Synlaration		
Prime         Prim         Prime         Prime					1	<b></b>				1						
2         1         2         1         3         1         3         1         3	10-19191	<u> </u>	5-11-18	SHARLA BETH WEAVER	GASTAR EXPLORATION USA INC	1/8+	710	605	N/A	N/A	N/A	N/A	Inc to Alinum Marcellus I LLC	USA, Inc to Gastar exploration inc		
PHOLE         No         Fund         No         Fund         No         No        No </td <td>1</td> <td>1</td> <td>1</td> <td></td> <td></td> <td>1</td> <td></td>	1	1	1			1										
Profile         Profile <t< td=""><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>						1										
Part Part Part Part Part Part Part Part	10*19192	0	5-11-18	JAMES & YOHO	GASTAR EXPLORATION USA INC	1/8+	714	129	N/A	N/A	N/A	N/A	inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc		TH Exploration LLC
PHDDD         PhDDD <td></td> <td></td> <td>1</td> <td></td> <td></td> <td>1</td> <td></td> <td>1</td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td>32/362 Gastar Exploration USA Inc.</td> <td></td>			1			1		1		1					32/362 Gastar Exploration USA Inc.	
P2100         P2100         Satisfield Section Sectin Sectin Sectin Section Section Sectin Section Section Sectin Sec				1						1			735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
Physic         Physic<	10*19201	0	5-11-18	DANIEL K YOHO	GASTAR EXPLORATION USA INC	1/8+	714	125	N/A	N/A	N/A	N/A		USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
Part 20         D         Sold Sold Sold Sold Sold Sold Sold Sold		<u> </u>					1							· · · · · · · · · · · · · · · · · · ·	37/357 Gester Emboration USA Inc.	
2 #1939         0         52:10         PECADE         PECADE        PECADE        PECADE			1			1						1	725/262 Carter Contaction USA	31/41 Cart of Margar Carter Evolutation		40/127 Cheuron USA Inc to
Bits         Company         Solar         Company         Com			L				1									
gene         gene <th< td=""><td>10-19202</td><td>0</td><td>5-11-18</td><td>DEBORAH L WCOLEY</td><td>GASTAR EXPLORATION USA INC</td><td>1/8+</td><td>714</td><td>131</td><td>N/A</td><td>N/A</td><td>N/A</td><td>N/A</td><td>INC to Atinum Marcellus I LLC</td><td>OSA, Inc to Gaster exploration inc</td><td></td><td></td></th<>	10-19202	0	5-11-18	DEBORAH L WCOLEY	GASTAR EXPLORATION USA INC	1/8+	714	131	N/A	N/A	N/A	N/A	INC to Atinum Marcellus I LLC	OSA, Inc to Gaster exploration inc		
			1			1	1					}				
And Particle And Participants (Participants)         Applies And Participants)         Applies And Parit Applies And Participants)         Applies			1			1	1					1				
D         S	10*19203	0	5-11-18	CAROL M YOHO	GASTAR EXPLORATION USA INC	1/8+	713	205	N/A	N/A	N/A	i n/A	inc to Atinum Marcellus   LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
D* 11-18         Dent MARK MARKERTONG         AUXAM BEFORM MARKERTONG         AUXAM BEFORM MARKERTONG         Character Logic Control (Control (Contro) (Contro) (Control (Control (Contro) (Control (Contro) (Control										1		1			32/362 Gastar Exploration USA Inc	
D* 11-18         Dent MARK MARKERTONG         AUXAM BEFORM MARKERTONG         AUXAM BEFORM MARKERTONG         Character Logic Control (Control (Contro) (Contro) (Control (Control (Contro) (Control (Contro) (Control			1			1					•	1	735/263 Gastar Exploration USA.	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
Participant	10110304		5.11.10	DAVNA MARIENE VOUO	CALLAR EVELOPATION MEA INC	1/0.	1		1 11/2		1 1/4	N/A				
b         c         b	10 19204	<u> </u>	3-11-18	DATRA RARLERE TORO	GASTAR EXPLORATION DSA INC	1/07	124		n/A	N/A	ityn	ive	are to Assist Marcular I are	Cart and the Cartan Capital and the		
$ \begin{array}{  c  c  c  c  c  c  c  c  c  c  c  c  c $	1 I	1	1	1	1	1	1		1	1	1	1				Long the second second
-         -		1				1	1	1			1	1				
or         Sala         Bulger Hause         Optimized State Section State Sec	10*19205	0	S-11-18	JEFFREY C YOHO	GASTAR EXPLORATION USA INC	1/8+	713	203	N/A	N/A	N/A	N/A	Inc to Atlaum Marcellus I LLC	USA, Inc to Gaster Exploration Inc		TH Exploration U.C
9         5	1 1	1														
A         A			1		1	1	1	1	1	1	1		26/639 Gastar Exploration USA, Inc	21/41 Cert. of Merger Gastar Exploration	and Atlnum Marcellus I U.C to	40/127 Chevron USA Inc to
No.         No. <td>10*19251</td> <td>0</td> <td>5-11-18</td> <td>RAE SUZETTE BAKER</td> <td>GASTAR EXPLORATION USA INC</td> <td>1/8+</td> <td>748</td> <td>315</td> <td>NA</td> <td>N/A</td> <td>N/A</td> <td>N/A</td> <td>to Atiourn Marcellus ( LLC</td> <td>USA, Inc to Gastar Exploration Inc.</td> <td>Chevron USA</td> <td>TH Exploration LLC</td>	10*19251	0	5-11-18	RAE SUZETTE BAKER	GASTAR EXPLORATION USA INC	1/8+	748	315	NA	N/A	N/A	N/A	to Atiourn Marcellus ( LLC	USA, Inc to Gastar Exploration Inc.	Chevron USA	TH Exploration LLC
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		<u> </u>													32/362 Gastar Exploration USA Inc.	
or #31.8         O         \$31.4         Dest Mark         Out WILCOM         Gate Description (D         Derver UAA         THE Operation ULC           0 # 1582.         0         \$31.4         UMA RECERT ETCA DEFCOATION ULC         1/4         94         22         N/A         N/A <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>1</td> <td>1</td> <td>1</td> <td></td> <td></td> <td></td> <td>26/620 Contra Symbolishing LISA inc</td> <td>21/41 Cart of Margar Cartar Evaloration</td> <td></td> <td>1</td>							1	1	1				26/620 Contra Symbolishing LISA inc	21/41 Cart of Margar Cartar Evaloration		1
0         51.16         51.44         Status Electronic         100			L		1		1	l	1	1						
0       51/15       WMRING 6 AND DOD 6 TURKIR       IN 2020/MIDB, LIC       1/4       9/4       N/A																
0*10-0         0-13-39         9 (BPR AND PARTOR (LC         1/#         90         35         N/A         N/A </td <td></td>																
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			5-11-18		TH EXPLORATION, LLC	1/8+	948									
P = 51.5  NEVER A CORLEY AND ARTICL CORLEY, WU CREWNON USA NC 1/4 20 0.0 N/A	10*21041	0	5-11-18	SHERY AND RANDEN RITCHEA	TH EXPLORATION, LLC	1/8+	949	365	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Company         Company <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td>40/127 Chevron USA Inc to</td></t<>										1						40/127 Chevron USA Inc to
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	10'19126	P		KEVIN 8. CORLEY AND ANITA L CORLEY, HI		· ·			1							
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			5-11-5		UICHEVRON USA INC	1/8+	1 859	1 44	N/A	N/A	N/A	N/A	) N/A	N/A	N/A	TH Exploration LLC
9         51.15         MUNA MAXINE BAYSER         OSSTAR EXPLORATION USA INC         1/8         7/10         6/2         N/A		1	5-11-5		UICHEVRON USA WC	1/8+	859	44	N/A	N/A	N/A	N/A	N/A	. N/A		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	10110170		5-11-5		UICHEVRON USA INC	1/8+	859		N/A	N/A	N/A	N/A			32/362 Gastar Exploration USA Inc	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			1										735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	32/362 Gastar Exploration USA Inc and Atlnum Marcellus I LLC to	40/127 Chevron USA fac to
artistic         P         5-11.5         NRAL KOVACS         GATAR EXPLOANTION USA.INC         1/b         720         534         N/A         N/A        N/A		Р	1										735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	32/362 Gastar Exploration USA Inc and Atlnum Marcelius I LLC to Chevron USA	40/127 Chevron USA Inc to TH Exploration LLC
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		Р	1										735/263 Gester Exploration USA, Inc to Athum Mercellus I LLC	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc	32/362 Gastar Exploration USA Inc and Atlnum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc	40/127 Chevron USA inc to TH Exploration LLC
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			5-11-5	MAUNA MAXINE BEYSER	GASTAR EXPLORATION USA INC	1/8+		602	N/A	N/A	N/A	N/A	735/263 Gastar Exploration USA, Inc to Atlnum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration	32/362 Gastar Exploration USA Inc and Atinum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Atinum Marcelius I LLC to	40/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	10*19177		5-11-5	MAUNA MAXINE BEYSER	GASTAR EXPLORATION USA INC	1/8+	710	602	N/A	N/A	N/A	N/A	735/263 Gastar Exploration USA, Inc to Atlnum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration	32/362 Gastar Exploration USA Inc and Atinum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Atinum Marcelius I LLC to Chevron USA	49/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$			5-11-5	MAUNA MAXINE BEYSER	GASTAR EXPLORATION USA INC	1/8+	710	602	N/A	N/A	N/A	N/A	735/263 Gastar Exploration USA, Inc to Atlnum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration	32/362 Gastar Exploration USA Inc and Atinum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Atinum Marcelius I LLC to Chevron USA	49/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
$ \frac{1}{0^{191265}} = \frac{1}{1} + \frac{1}$			5-11-5	MAUNA MAXINE BEYSER	GASTAR EXPLORATION USA INC	1/8+	710	602	N/A	N/A	N/A	N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Deplaration USA, Inc to Athum Marcellus I LLC	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc	32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc	49/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	10*19177	P	5-11-5 5-11-5	MAUNA MAXINE BEYSER NINA L KOVACS	GASTAR EXPLORATION USA INC	1/8+ 1/8+	710 710	602 594	N/A N/A	N/A	N/A N/A	N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration	32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to	49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to
$p^{0}$ 5-11-5DEL GLOVERGASTAR EXPLORATION USA INC $1/8^{0}$ 710600N/AN/AN/AN/AN/AInt to Athum Marcellus ILLCUSA, Int to Gastar Exploration inc.Charmon USA, Charmon USA, TAS/263 Gastar Exploration USA, (hot 0 Athum Marcellus ILLC)The Exploration USA, (hot 0 Athum Marce		P	5-11-5 5-11-5	MAUNA MAXINE BEYSER NINA L KOVACS	GASTAR EXPLORATION USA INC	1/8+ 1/8+	710 710	602 594	N/A N/A	N/A	N/A N/A	N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration	32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA	49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to
Interview	10*19177	P	5-11-5 5-11-5	MAUNA MAXINE BEYSER NINA L KOVACS	GASTAR EXPLORATION USA INC	1/8+ 1/8+	710 710	602 594	N/A N/A	N/A	N/A N/A	N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc	32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA	49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to TH Exploration LLC
10°19199       P       SHERRY ANN MCPHERON       GASTAR EXPLORATION USA INC       1/8+       710       606       N/A	10°19177 10°19185	p	5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NINA L KOVACS HARRIETT LODUTH FOLEY	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+	710 710 710	602 594 598	N/A R/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Atlaum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Atlaum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Atlaum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration	32/362 Gastar Exploration USA Inc and Athurn Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athurn Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athurn Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athurn Marcelius I LLC to	49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	10*19177	p	5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NINA L KOVACS HARRIETT LODUTH FOLEY	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+	710 710 710	602 594 598	N/A R/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Atlaum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Atlaum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Atlaum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration	32/362 Gestar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gester Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gester Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gester Exploration USA Inc and Athum Marcelius I LLC to Chevron USA	40/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
$\frac{1}{10^{19}19190} = \frac{1}{10^{19}19190} = \frac{1}{10^{19}1919} = \frac{1}{1$	10°19177 10°19185	p	5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NINA L KOVACS HARRIETT LODUTH FOLEY	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+	710 710 710	602 594 598	N/A R/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc	32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc	49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to TH Exploration LLC
Instrume     Instrum     Instrume     Instrume     Instru	10°19177 10°19185	p	5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NINA L KOVACS HARRIETT LODUTH FOLEY	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+	710 710 710	602 594 598	N/A R/A N/A	N/A N/A N/A	N/A N/A N/A	N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc	32/362 Gastar Exploration USA Inc and Athum Marcelius i LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to	49/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	10°19177 10°19185	P P P	5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NRIA L KOVACS HARRIETT LODUTH FOLEY IDEL GLOVER	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710	602 594 598 600	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc	32/362 Gastar Exploration USA Inc and Athum Marcelius i LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to	49/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to
$p$ 5-11-5SALLY LEE RIVERAGASTAR EXPLORATION USA INC1/8+710590N/AN/AN/AN/AInc to Athum Marcellus ILCUSA, Inc to Gastar Exploration Inc.Citevron USATH Exploration LLC $10^{+}19192$ $p$ 5-11-5SHARLA BETH WEAVERGASTAR EXPLORATION USA INC1/8+710590N/AN	10°19177 10°19185 10°19186	P P P	5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NRIA L KOVACS HARRIETT LODUTH FOLEY IDEL GLOVER	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710	602 594 598 600	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc	32/362 Gestar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gestar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gestar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gester Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gester Exploration USA inc and Athum Marcelius I LLC to Chevron USA	49/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to
10*19191       P       5-11-5       SHARLA BETH WEAVER       GASTAR DOPLORATION USA INC       1/8+       710       608       N/A       N/A       N/A       N/A       N/A       N/A       1/8+       710       608       N/A	10°19177 10°19185 10°19186	P P P	5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NRIA L KOVACS HARRIETT LODUTH FOLEY IDEL GLOVER	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710	602 594 598 600	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC	21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc	32/2362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA	40/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
And Participation       And Participation       And Album Marcellus ILLC to 40/127 Chevron USA Inc	<u>10*19177</u> 10*19185 10*19185 10*19185	р р Р	5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NRA L KOVACS HARRIETT LODUTH FOLEY IDEL GLOVER SHERRY ANN MCPHERON	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710 710	602 534 538 600 606	N/A N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc	32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA	49/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to
P       5-11-5       SHARLA BETH WEAVER       GASTAR EXPLORATION USA INC       1/8+       710       608       N/A       N/A       N/A       N/A       Incto Athrum Marcelius ILLC       USA, Inc to Gastar Exploration Inc.       Chevron USA       TH Exploration LLC         10919191       P       5-11-5       JAMES E YOHO       GASTAR EXPLORATION USA INC.       1/8+       710       608       N/A       N/A       N/A       N/A       Inc to Athrum Marcelius ILLC.       USA, Inc to Gastar Exploration Inc.       Chevron USA       1/8+       710       608       N/A       N/A       N/A       N/A       Inc to Athrum Marcelius ILLC.       32/362 Gastar Exploration INSA       0/127 Chevron USA Inc to 40/127 Chevron USA Inc to 40/127 Chevron USA Inc to 40/127 Chevron USA Inc to 1/8+       714       1/8+       714       1/9       N/A       N/A       N/A       N/A       N/A       N/A       Inc to Athrum Marcelius I LLC       USA, Inc to Gastar Exploration Inc.       Chevron USA Inc to 40/127 Chevron USA Inc to 40/127 Chevron USA Inc to 40/127 Chevron USA Inc to 1/8+       735/263 Gastar Exploration Inc.       Chevron USA       TH Exploration ILC.         109'19192       P       5-11-5       IAMES E YOHO       Gastar Exploration USA Inc.       N/A       N/A       N/A       N/A       N/A       N/A       N/A       S0/25/263 Gastar Exploration Inc.       Chev	10°19177 10°19185 10°19186	р р Р	5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NRA L KOVACS HARRIETT LODUTH FOLEY IDEL GLOVER SHERRY ANN MCPHERON	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710 710	602 534 538 600 606	N/A N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc	32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA	40/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
13/362 Gastar Exploration USA Inc 10°19192 P 5-11-5 JAMES E YOHO GASTAR EXPLORATION USA INC 1/8+ 714 129 N/A N/A N/A N/A N/A N/A N/A Inc to Althum Marcellus I LIC USA, to to Gastar Exploration Inc 1/8+ 714 129 N/A N/A N/A N/A N/A N/A Inc to Althum Marcellus I LIC USA, to to Gastar Exploration Inc 1/8+ 714 129 N/A N/A N/A N/A N/A Inc to Althum Marcellus I LIC USA, to to Gastar Exploration Inc 1/8+ 714 129 N/A N/A N/A N/A N/A Inc to Althum Marcellus I LIC USA, to to Gastar Exploration Inc 1/8+ 714 129 N/A N/A N/A N/A N/A N/A N/A N/A N/A Inc to Althum Marcellus I LIC USA, to to Gastar Exploration Inc 1/8+ 714 129 N/A N/A N/A N/A N/A N/A Inc to Althum Marcellus I LIC USA, to to Gastar Exploration Inc 1/8+ 714 129 N/A	<u>10*19177</u> 10*19185 10*19185 10*19185	р р Р	5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NRA L KOVACS HARRIETT LODUTH FOLEY IDEL GLOVER SHERRY ANN MCPHERON	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710 710	602 534 538 600 606	N/A N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC	21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc	32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chewron USA	40/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
Name     Nam     Name     Name     Name	10*19177 10*19185 10*19185 10*19189 10*19199	р 	5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NIMA L KOVACS HARRIETT LODUTH FOLEY JOEL GLOVER SHERRY ANN MCPHERON SALLY LEE RIVERA	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710 710 710	602 594 598 600 606 590	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc	32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to ichevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA Inc and Athum Marcelius I LLC to Chevron USA	49/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
Name     Nam     Name     Name     Name	<u>10*19177</u> 10*19185 10*19185 10*19185	р 	5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NIMA L KOVACS HARRIETT LODUTH FOLEY JOEL GLOVER SHERRY ANN MCPHERON SALLY LEE RIVERA	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710 710 710	602 594 598 600 606 590	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc	32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA	40/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
International Control of	10*19177 10*19185 10*19185 10*19189 10*19199	р 	5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NIMA L KOVACS HARRIETT LODUTH FOLEY JOEL GLOVER SHERRY ANN MCPHERON SALLY LEE RIVERA	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710 710 710	602 594 598 600 606 590	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration Inc	32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA	40/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
32/362 Gastar Exploration USA he and Althour Marcelus I LLC to 40/127 Chevron USA her and Althour Marcelus I LLC to 40/127 Chevron USA her to 40/127	10*19177 10*19185 10*19185 10*19189 10*19199	р 	5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NIMA L KOVACS HARRIETT LODUTH FOLEY JOEL GLOVER SHERRY ANN MCPHERON SALLY LEE RIVERA	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710 710 710	602 594 598 600 606 590	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC	21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc	32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA	49/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
735/263 Gastar Exploration USA, 21/41 Cert. of Merger Gastar Exploration and Atinum Marcellus I LLC to 40/127 Chevron USA Inc.	10*19177 10*19185 10*19185 10*19189 10*19190 10*19191	р р р р	5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NIRA L KOVACS HARRIETT LODUTH FOLEY IDEL GLOVER SHERRY ANN MCPHERON SALLY LEE RIVERA SHARLA BETH WEAVER	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710 710 710 710 710	602 594 598 600 606 590 608	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc	32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to ichevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA	49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to TH Exploration LLC
	10*19177 10*19185 10*19185 10*19189 10*19199	р р р р	5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NIRA L KOVACS HARRIETT LODUTH FOLEY IDEL GLOVER SHERRY ANN MCPHERON SALLY LEE RIVERA SHARLA BETH WEAVER	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710 710 710 710 710	602 594 598 600 606 590 608	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc	32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/352 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA	40/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
10° 19201 P IS-11-5 DANIEL KYOHO   GASTAR DIPLORATION USA INC 1/8+ 714 125 N/A N/A N/A N/A Incto Atinum Matecilus I LLC USA, Incto Gastar Exploration Inc Chevron USA TH Exploration LLC	10*19177 10*19185 10*19185 10*19189 10*19190 10*19191	р р р р	5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NIRA L KOVACS HARRIETT LODUTH FOLEY IDEL GLOVER SHERRY ANN MCPHERON SALLY LEE RIVERA SHARLA BETH WEAVER	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710 710 710 710 710	602 594 598 600 606 590 608	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC	21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc 21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc	32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chewron USA	40/127 Chevron USA Inc to TH Exploration LLC 40/127 Chevron USA Inc to TH Exploration LLC
	10*19177 10*19185 10*19185 10*19189 10*19199 10*19190 10*19191	р Р Р Р	5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5 5-11-5	MAUNA MAXINE BEYSER NIRA L KOVACS HARRIETT LODUTH FOLEY IDEL GLOVER SHERRY ANN MCPHERON SALLY LEE RIVERA SHARLA BETH WEAVER JAMES E YOHO	GASTAR EXPLORATION USA INC GASTAR EXPLORATION USA INC	1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+ 1/8+	710 710 710 710 710 710 710 710 710	602 594 598 600 606 590 608 129	N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A	N/A N/A N/A N/A N/A N/A N/A	735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC 735/263 Gastar Exploration USA, Inc to Athum Marcellus I LLC	21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc 21/41 Cert. of Merger Gastar Exploration USA, inc to Gastar Exploration inc	32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to ichevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA 32/362 Gastar Exploration USA inc and Athum Marcelius I LLC to Chevron USA	49/127 Chevron USA Inc to TH Exploration LLC 49/127 Chevron USA Inc to TH Exploration LLC

### Operator's Well No. <u>Bryan N - 5HM</u>

Lease No.	Tags	Parcel	Lessor	Lessea	Royalty	Book	2420	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
]		1			1					1	1			32/362 Gaster Exploration USA Inc	
		ł			1						1	735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA Inc to
10*19202	<u>P</u>	5-11-5	DEBORAH L WOOLEY	GASTAR EXPLORATION USA INC	1/8+	714	131	N/A	N/A	H/A	N/A	Inc to Athum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LC
		1			1									32/362 Gastar Exploration USA inc	
1		1			1	I						735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atlnum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19203	P	5-11-5	CAROL M YOHO	GASTAR EXPLORATION USA INC	1/8+	713	205	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
					1						1			32/362 Gastar Exploration USA Inc	
					1	I						735/263 Gastar Exploration USA,		and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19204	P	S-11-5	DAYNA MARLENE YOHO	GASTAR EXPLORATION USA INC	1/B+	714	127	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus   LLC	USA, inc to Gastar Exploration inc	Chevron USA	TH Exploration LLC
											1			32/362 Gastar Exploration USA inc	
						1 1			1		1	735/263 Gastar Exploration USA,		and Atlaum Marcellus 1 LLC to	40/127 Chevron USA Inc to
10*19205	P	5-11-5	JEFFREY C YOKO	GASTAR EXPLORATION USA INC	1/8+	713	203	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
														32/362 Gastar Exploration USA Inc	1 1
						1 1			1		1	26/639 Gastar Exploration USA, Inc		and Atinum Marcelius I LLC to	40/127 Chevron USA Inc to
10*19251	P	5-11-5	RAE SUZETTE BAKER	GASTAR EXPLORATION USA INC	1/8+	748	315	N/A	N/A	N/A	N/A	to Atlnum Marcellus I LLC	USA, inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
		<u> </u>												32/362 Gastar Exploration USA Inc	
					1	1 1					1	26/639 Gastar Exploration USA, Inc	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19252	P	5-11-5	JOHN WILSON	GASTAR EXPLORATION USA INC	1/8+	749	522	N/A	N/A	N/A	N/A	to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc.	Chevron USA	TH Exploration LLC
10*19502	P	5-11-5	SUSAN BLANCHE BEYSER	TH EXPLORATION LLC	1/8+	942	623	H/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*19893	P	5-11-5	WINIFRED G AND EDDIE G TURNER	TH EXPLORATION, LLC	1/8+	948	277	N/A	N/A	N/A	N/A	R/A	N/A	N/A	N/A
10*21041			SHERY AND RANDEN BITCHEA	TH EXPLORATION, LLC	1/8+	949	365	N/A	N/A	N/A	N/A	h/A	N/A	N/A	N/A
		<u> </u>	HIRAMS ESTATE FAMILY LIMITED LIABILITY				- 203	100							
10*18722		5-11-3	UMITED PARTNERSHIP	TH EXPLORATION LLC	1/6+	938	523	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10 18/22	<u> </u>	2.11.3	CAMILED PARTNERSHIP	In EARDANING LLC		938	3/3	NA	N/A			1	192		40/127 Chevron USA Inc to
10-19126		5-11-3	KEVIN R. CORLEY AND ANITA L. CORLEY, HU		1/8+	1	44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	TH Exploration LLC
10.13159	<u> </u>	5-11-3	REVIN R. CORLEY AND ARITA L. CORLET, HU	CHEAKON D24 INC	1/8+	859	44	NVA	NYA	N/A	SVA	N/A	N/A	32/362 Gastar Exploration USA Inc	in opported on the
					1								and the stand of the same Contraction	and Atiourn Marcellus I LLC to	40/127 Chevron USA Inc to
												735/263 Gester Exploration USA,	21/41 Cert. of Merger Gastar Exploration	Chevron USA	
10*19176	Q	5-11-3	MAUNA MAXINE BEYSER	GASTAR EXPLORATION USA INC	1/8+	710	602	N/A	N/A	N/A	N/A	Inc to Allnum Marcellus I LLC	USA, Inc to Gastar Exploration Inc		TH Exploration LLC
									1	1		1		32/362 Gastar Exploration USA Inc	
			1			1 1			1			735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcollus I LLC to	40/127 Chevron USA Inc to
10*19177	Q	5-11-3	NINA L KOVACS	GASTAR EXPLORATION USA INC	1/8+	710	594	N/A	N/A	N/A	N/A	Inc to Atlaum Marcellus I LLC	USA, inc to Gastar Exploration inc	Chevron USA	TH Exploration LLC
									1					32/362 Gastar Exploration USA Inc	
					1				1	1	1	735/263 Gastar Exploration USA,		and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19185	Q	5-11-3	HARRIETT LODUTH FOLEY	GASTAR EXPLORATION USA INC	1/8+	710	598	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
														32/362 Gastar Exploration USA Inc	
				1		1						735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19186	0	5-11-3	JOEL GLOVER	GASTAR EXPLORATION USA INC	1/8+	710	600	N/A	N/A	N/A	N/A	inc to Atlaum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
					1				1	1			T	32/352 Gastar Exploration USA Inc	
					1	1 1			1			735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19189	a	5-11-3	SHERRY ANN MCPHERON	GASTAR EXPLORATION USA INC	1/8+	710	606	N/A	N/A	N/A	A/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10 15105						1.00		194				-	1	32/352 Gastar Exploration USA Inc	
		1							i			735/263 Gaster Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19130	~	5-11-3	SALLY LEE RIVERA	GASTAR EXPLORATION USA INC	1/8+	710	590	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC		Chevran USA	TH Exploration LLC
10,19120	ų	3.11.3	SALLT LEE NIVERA	GASTAR EXPEDRATION USA INC		1 /10	330	N/A	n/A					32/362 Gastar Exploration USA Inc	
		1		1	1				1	1	1	735/263 Gastar Exploration USA.	21/41 Cert, of Merger Gastar Exploration	and Atinum Marcellus 1 LLC to	40/127 Chevron USA Inc to
		- ··· ·			1					. N/A	N/A	inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration inc	Chevron USA	TH Exploration LLC
10*19191	٩	5-11-3	SHARLA BETH WEAVER	GASTAR EXPLORATION USA INC	1/8+	710	608	N/A	N/A	· • •/A	A/A	HIS CO AUGULI FILLORISS I CLG	LossA trie to genes Printingcott Br	32/362 Gastar Exploration USA inc	TH SAME SUULI LLS
		ł		1	1			1	1	1		The free course Freehoustics size	21 /41 Cart of Manual Contra Data	and Atinum Marcellus I LIC to	40/127 Chevron USA Inc to
												735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gester Exploration	Chevron USA	
10'19192	<u> </u>	S-11-3	JAMES E YOHO	GASTAR EXPLORATION USA INC	1/8+	714	129	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus i LLC	USA, Inc to Gastar Exploration Inc		TH Exploration LLC
		1	1		1	1			1	1	1			32/362 Gastar Exploration USA Inc	
		1	1	1	1	1			1			735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atinum Marcellus I LLC to	40/127 Chevron USA Inc to
10*19201	Q	5-11-3	DANIEL K YOKO	GASTAR EXPLORATION USA INC	1/8+	714	125	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
				1						1	i	1		32/362 Gastar Exploration USA Inc	1. !
1		1	]	1	1	1				1		735/263 Gastar Exploration USA,		and Atisum Marcelkis I LLC to	40/127 Chevron USA Inc to
10*19202	Q	5-11-3	DEBORAH L WOOLEY	GASTAR EXPLORATION USA INC	1/8+	714	131	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration U.C
		1	1	1	1					1		1		32/362 Gastar Exploration USA inc	
		1	1	1	1			1	1	1	1	735/263 Gastar Exploration USA,	21/41 Cert. of Merger Gastar Exploration	and Atlnum Marcellus   LLC to	40/127 Chevron USA inc to
				GASTAR EXPLORATION USA INC	1	713	205	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus   LLC	USA, Inc to Gastar Exploration Inc	Chevron USA	TH Exploration LLC
10*19203	a	5-11-3	CAROL M YOHO	IGASTAR EXPLORATION USA PAC	1 1/8+			····						32/362 Gastar Exploration USA Inc	
10*19203	<u>a</u>	5-11-3	CAROL M YOHO	GASTAR EXPLORATION USA INC	1/8+	1.12		1						122/202 OBSIEL COPID/EUCH OWNER	
10*19203	<u>    q     </u>	5-11-3	CAROL M YOHO	GASTAR EXPLORATION USA INC	1/8+	1		1		1		735/263 Gastar Exploration USA.	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA inc to
							137	NIA	N/A	N/A	N/A	735/263 Gastar Exploration USA, Inc to Atinum Marcelius I LLC	21/41 Cert. of Merger Gastar Exploration USA, Inc to Gastar Exploration Inc.	and Atinum Marcellus I LLC to	40/127 Chevron USA inc to TH Exploration LLC
10*19203 10*19204	_a_	5-11-3 5-11-3	CAROL M YOHO	GASTAR EXPLORATION USA INC	1/8+	714	127	N/A	N/A	N/A	N/A	735/263 Gastar Exploration USA, Inc to Atinum Marcellus I LLC	21/41 Cert, of Merger Gastar Exploration USA, inc to Gastar Exploration Inc	and Atlnum Marcellus I LLC to Chevron USA	40/127 Chevron USA inc to TH Exploration LLC
							127	N/A	N/A	N/A	N/A	Inc to Atinum Marcellus I LLC	USA, Inc to Gastar Exploration Inc	znd Atlnum Marcellus I LLC to Chevron USA 32/362 Gastar Exploration USA inc	TH Exploration LLC
	_a	5-11-3					127 203	N/A	N/A	N/A	N/A			and Atlnum Marcellus I LLC to Chevron USA	

### 4705102077 Operator's Well No. Bryan N - 5HM

### WW-6A1 Supplement

Lease No.		Parce	1	1	Baumlan	Book	Page	Beelenneut	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment	Assignment
Lease No.	lage	Parce	Lessar	Lessee	Royalty	BOOK	Pare	Assignment	Assignment	rungenitein				32/362 Gastar Exploration USA Inc	
						1 1						75/639 Gastar Evoloration 1154 Inc.	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA inc to
							315	N/A	N/A	N/A	N/A			Chevron USA	TH Exploration LLC
10*19251	<u> </u>	5-11-3	RAE SUZETTE BAKER	GASTAR EXPLORATION USA INC	1/8+	748	312	n/A	nin					32/352 Gastar Exploration USA Inc	
				1		1 1					]	26/629 Gastar Evaluration USA Inc.	21/41 Cert. of Merger Gastar Exploration		40/127 Chevron USA Inc to
	_	L			1/8+		522		N/A	N/A	N/A			Chevron USA	TH Exploration LLC
10*19252	Q	5-11-3	JOHN WILSON	GASTAR EXPLORATION USA INC	1/81	749	522	A/A	NA	the second se			borg the to castal Diptoration ine		
10*19502	à	5-11-3	SUSAN BLANCHE BEYSER	TH EXPLORATION LLC	1/8+	942	623	N/A	N/A	N/A .	N/A	N/A	N/A	N/A	N/A
10'19893	Q	5-11-3	WINIFRED & AND EDDIE & TURNER	TH EXPLORATION, LLC	1/8+	948	277	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
10*21041	a	5-11-3	SHERY AND RANDEN RITCHEA	TH EXPLORATION, LLC	1/8+	949	365	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			WALTER C. RINE AND CHERYLANN RINE.											1	
10*19127	R	5-11-2	HUSBAND AND WIFE	CHEVRON USA INC	1/8+	859	49		1					<u></u>	
		1	LARRY W DUNLAP AND BARBARA E		1	1								1	1
10*47051.059,0	5	5-11-1.	DUNLAP	TH EXPLORATION LLC	3/8+	864	148	N/A	N/A	N/A	N/A	N/A	N/A	H/A	N/A

### STATE OF WEST VIRGINIA

COUNTY OF MARSHALL

· ~ + . . Sec. 34

MM8040 ME0057

4705102077

#### ASSIGNMENT AND BILL OF SALE

§ §

§.

This ASSIGNMENT AND BILL OF SALE (this "Assignment") dated as of August 1, 2017 (the "<u>Signing Date</u>"), but effective from and after 7:00 a.m., Eastern Standard Time on . August 2, 2017 being the day immediately following the Signing Date (the "<u>Effective Date</u>"), is rade by Chevron U.S.A. Inc., a Pennsylvania corporation, with an address at 700 Cherrington Parkway, Coraopolis, PA 15108 ("<u>Chevron</u>" or "<u>Assignor</u>") to TH Exploration II, LLC and TH Exploration, LLC, Texas limited liability companies, with an address at 1320 S. University Drive, Suite 500, Fort Worth, TX 76107 (collectively "<u>Assignee</u>") and is accepted by Assignee upon the following terms and conditions.

#### RECITALS

- A. Assignor desires to sell, convey, transfer, assign and deliver to Assignee Assignor's Bryan 1H well and certain related assets, including certain leasehold interests, located in Marshall County, West Virginia.
- B. Through an Acreage Trade Agreement to be executed contemporaneously with this Assignment, Assignor desires to transfer, convey and assign to Assignce certain of Assignor's oil and gas leasehold interests located in Marshall County, West Virginia in exchange for the transfer, conveyance and assignment to Assignor by Assignee certain of Assignee's oil and gas leasehold interests located in Marshall County, West Virginia and Greene County, West Virginia.
- C. In consideration of the mutual promises set out in this Assignment, including execution of the Acreage Trade Agreement, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree to be bound by the terms of this Assignment.

#### DEFINITIONS 1.

Definitions. As used in this Assignment, these words and expressions have the 1.1 following meanings:

"Acreage Trade Agreement" means that certain Acreage Trade Agreement by and between Chevron U.S.A. Inc. and TH Exploration, LLC with an Effective Date of August 1, 2017 to be contemporaneously executed with this Assignment.

"Act" has the meaning given to such term in Section 9.1(C).

"<u>Affiliate</u>" means any legal entity which controls, is controlled by, or is under common control with, another legal entity. An entity is deemed to "control" another if it owns directly or indirectly at least fifty percent of either of the following: (A) the shares entitled to vote at a general election of directors of such other entity or (B) the voting interest in such other entity if such entity does not have either shares or directors.

"Applicable Law(s)" means all laws, principles of common law, regulations, statutes, codes, rules, orders, ordinances, permits, enforceable policies, licenses, certifications, decrees, constitutions, standards or other requirements with similar effect of any Government Entity and any binding interpretations of the foregoing.

"Assets" has the meaning given to such term in Section 2.1 of this Assignment.

"Assigned Hydrocarbons" means all Hydrocarbons produced and severed from, or allocable, after severance, to the Leases, Units, and Wells on and after the Effective Date.

• •

. .....

Page 1 of 33

··· · · · .

NICHAEL NORAN BRIGHTON RESOLACES SEEL ELLSWORTH AVENUE, 11 PITTSBURGH PA 15232-1707

δ

STATE OF WEST VIRGINIA Ş COUNTY OF MARSHALL

# ASSIGNMENT AND CONVEYANCE

Karshall County Jan Pest, Clerk Instrument 1428354 08/16/2017 @ 12:08:49 PM ASSIGNMENTS Book 40 @ Page 127 Pages Recorded 25 Recording Cost \$ 33.00

.. .

BUK0040 BEC 127

THIS ASSIGNMENT AND CONVEYANCE (the "<u>Assignment</u>") is made and entered into this day of <u>August</u>, 2017 (the "<u>Effective Date</u>"), by and between CHEVRON U.S.A. INC. (hereinafter "<u>Assignor</u>") and TH EXPLORATION, LLC (hereinafter "Assignee") pursuant to the terms of that certain Acreage Trade Agreement between the Assignor and the Assignee dated the 1st day of August, 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"), less and except certain overriding royalty interests and exclusions; 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, subject to certain overriding royalty interests and less and except certain exclusions.

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, except that Assignor excepts and reserves from this Assignment the following:

A. The Chevron ORRI previously conveyed to Assignor and as described in that certain Memorandum of Assignment of Oil and Gas Lease Interests dated November 6, 2012 by and between Cornell Holdings Incorporated and Chevron U.S.A. Inc., which is recorded at Book 0028, Page 0239 in the Office of the County Clerk of Marshall County, West Virginia, and

B. As to each of the Leases and all oil, gas, and associated hydrocarbons produced, saved and sold thereunder, an overriding royalty interest equal to the difference between 82% and the



STATE OF TEXAS	ş
	§ SS
COUNTY OF TARRANT	ş

On this 18th day of October , 2016, before me, the undersigned authority, personally appeared David D. Kalish ("Affiant") who being first duly sworn under oath, deposes and saith:

- 1. TH Exploration, LLC, TH Exploration II, LLC and TH Exploration III, LLC are wholly owned subsidiaries of THQ Appalachia I, LLC.
- 3. Tug Hill Operating, LLC provides oil and gas operations services to THQ Appalachia I, LLC under an Operating Services Agreement dated July 23, 2014.
- 3. David D. Kalish, the Affiant, is the Vice President of Tug Hill Operating, LLC, THQ Appalachia I, LLC, TH Exploration, LLC, TH Exploration II, LLC and TH Exploration III, LLC, and;
- Tug Hill Operating, LLC is authorized to operate and maintain the assets owned by THQ Appalachia I, LLC, 3. including, as referenced above, TH Exploration, LLC, TH Exploration II, LLC, and TH Exploration III, LLC, including oil and gas leases, wells, pipelines, surface facilities, and other all other assets that support the business of THO Appalachia I, LLC, and;
- 4. Specifically, Tug Hill Operating, LLC is authorized to submit and obtain well work permits and carry out all activities pursuant to such work permits for assets owned by TH Exploration, LLC, TH Exploration II, LLC, TH Exploration III, LLC.

FURTHER, AFFIANT SAITH NOT.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this 18th day of Octo ber , 2016.

Jan Pest MARBHALL County 03:44:28 PM Affiant: David D. Kalish Instrument No 1416299 Date Recorded 10/19/2016 JURAT Office of Oil and Gas Document Type MIS Pages Recorded 1 Book-Page 28-62 JUL 11 2018 STATE OF TEXAS 8 Recording Fee \$5.00 § SS Additional \$6.00 WV Department of Environmental Protection COUNTY OF TARRANT

Sworn and subscribed to (or affirmed) before me on this, the 18th day of October, 2016, by David D. Kalish

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



My Commission Expires: _	10-02-2050
Signature/Notary Public:	John Bock
Name/Notary Public (Print)	Robin Bock

#### NICHAEL HORAN BRIGHTON RESOURCES 5951 ELLSWORTH AVENUE, #1 PITTSBURGH PA 15232-1707

δ

# BOK0040 BEE0 | 27

STATE OF WEST VIRGINIA §

COUNTY OF MARSHALL

#### ASSIGNMENT AND CONVEYANCE

Marshall County Jan Pest, Clerk Instrument 1428356 08/16/2017 @ 12:08:49 PM ASSIGNENTS Book 40 @ Page 127 Pages Recorded 25 Recording Cost \$ 33.00

THIS ASSIGNMENT AND CONVEYANCE (the "<u>Assignment</u>") is made and entered into this day of <u>AUAUSF</u>, 2017 (the "<u>Effective Date</u>"), by and between CHEVRON U.S.A. INC. '(hereinafter "<u>Assignor</u>") and TH EXPLORATION, LLC (hereinafter "Assignee") pursuant to the terms of that certain Acreage Trade Agreement between the Assignor and the Assignee dated the 1st day of August, 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"), less and except certain overriding royalty interests and exclusions; 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, subject to certain overriding royalty interests and less and except certain exclusions.

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, except that Assignor excepts and reserves from this Assignment the following:

A. The Chevron ORRI previously conveyed to Assignor and as described in that certain Memorandum of Assignment of Oil and Gas Lease Interests dated November 6, 2012 by and between Cornell Holdings Incorporated and Chevron U.S.A. Inc., which is recorded at Book 0028, Page 0239 in the Office of the County Clerk of Marshall County, West Virginia, and

B. As to each of the Leases and all oil, gas, and associated hydrocarbons produced, saved and sold thereunder, an overriding royalty interest equal to the difference between 82% and the

> RECEIVED Office of Oil and Gas

JUL 11 2018 WV Department of Environmental Protection

#### DPS Land services CDRP 6000 TULN Center Boulevard, Suite 145 Canonsburg pa 15317-5841

· · ·

STATE OF WEST VIRGINIA

#### COUNTY OF MARSHALL

## ASSIGNMENT AND BILL OF SALE

§ §

§

This ASSIGNMENT AND BILL OF SALE (this "<u>Assignment</u>") dated as of August 1, 2017 (the "<u>Signing Date</u>"), but effective from and after 7:00 a.m., Eastern Standard Time on August 2, 2017 being the day immediately following the Signing Date (the "<u>Effective Date</u>"), is made by Chevron U.S.A. Inc., a Pennsylvania corporation, with an address at 700 Cherrington Parkway, Coraopolis, PA 15108 ("<u>Chevron</u>" or "<u>Assignor</u>") to TH Exploration II, LLC and TH Exploration, LLC, Texas limited liability companies, with an address at 1320 S. University Drive, Suite 500, Fort Worth, TX 76107 (collectively "<u>Assignee</u>") and is accepted by Assignee upon the following terms and conditions.

#### RECITALS

- A. Assignor desires to sell, convey, transfer, assign and deliver to Assignee Assignor's Bryan 1H well and certain related assets, including certain leasehold interests, located in Marshall County, West Virginia.
- B. Through an Acreage Trade Agreement to be executed contemporaneously with this Assignment, Assignor desires to transfer, convey and assign to Assignee certain of Assignor's oil and gas leasehold interests located in Marshall County, West Virginia in exchange for the transfer, conveyance and assignment to Assigner by Assignee certain of Assignee's oil and gas leasehold interests located in Marshall County, West Virginia and Greene County, West Virginia.
- C. In consideration of the mutual promises set out in this Assignment, including execution of the Acreage Trade Agreement, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree to be bound by the terms of this Assignment.

#### 1. **DEFINITIONS**

1.1 **Definitions.** As used in this Assignment, these words and expressions have the following meanings:

"<u>Acreage Trade Agreement</u>" means that certain Acreage Trade Agreement by and between Chevron U.S.A. Inc. and TH Exploration, LLC with an Effective Date of August 1, 2017 to be contemporaneously executed with this Assignment.

"<u>Act</u>" has the meaning given to such term in Section 9.1(C).

"Affiliate" means any legal entity which controls, is controlled by, or is under common control with, another legal entity. An entity is deemed to "control" another if it owns directly or indirectly at least fifty percent of either of the following: (A) the shares entitled to vote at a general election of directors of such other entity or (B) the voting interest in such other entity if such entity does not have either shares or directors.

"<u>Applicable Law(s)</u>" means all laws, principles of common law, regulations, statutes, codes, rules, orders, ordinances, permits, enforceable policies, licenses, certifications, decrees, constitutions, standards or other requirements with similar effect of any Government Entity and any binding interpretations of the foregoing.

"Assets" has the meaning given to such term in Section 2.1 of this Assignment.

"<u>Assigned Hydrocarbons</u>" means all Hydrocarbons produced and severed from, or allocable, after severance, to the Leases, Units, and Wells on and after the Effective Date.

RECEIVED Office of Oil and Gas

JUL 11 2018

WV Department of Environmental Protection

. ....



# 4705 02077

July 10, 2018

WV Department of Environmental Protection Office of Oil & Gas 601 57<sup>th</sup> Street, SE Charleston, WV 25304 Attention: Laura Cooper

RE: Bryan N-5HM

Subject: Marshall County Route 76 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 76 in the area reflected on the Bryan N-5HM well plat. THO has conducted a full title search in the relevant Court House to confirm its ownership under said County Route 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 304-689-7676, or by email at Jwhite@tug-hillop.com.

Sincerely,

Wite

Jonathan White Regulatory Analyst – Appalachia Region Cell 304-689-7676 Email: jwhite@tug-hillop.com

> RECEIVED Office of Oil and Gas

JUL 11 2018

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

Date of Notice Certification: 12/14/2017

API No. 47- 051	
<b>Operator's Well No</b>	Bryan N-5HM
Well Pad Name:B	ryan

# Notice has been given:

Pursuant to the provisions in West Virginia Code § 22-6A, the Operator has provided the required parties with the Notice Forms listed below for the tract of land as follows:

State:	West Virginia	UTM NAD 83	Easting:	519,136.39
County:	Marshall	UTWINAD 65	Northing:	4,402,884.48
District:	Franklin	Public Road Ac	cess:	Rines Ridge Road
Quadrangle:	Powhatan Point 7.5'	Generally used t	farm name:	CNX Land Resources, Inc.
Watershed:	Fish Creek (HUC-10)			

Pursuant to West Virginia Code § 22-6A-7(b), every permit application filed under this section shall be on a form as may be prescribed by the secretary, shall be verified and shall contain the following information: (14) A certification from the operator that (i) it has provided the owners of the surface described in subdivisions (1), (2) and (4), subsection (b), section ten of this article, the information required by subsections (b) and (c), section sixteen of this article; (ii) that the requirement was deemed satisfied as a result of giving the surface owner notice of entry to survey pursuant to subsection (a), section ten of this article six-a; or (iii) the notice requirements of subsection (b), section sixteen of this article were waived in writing by the surface owner; and Pursuant to West Virginia Code § 22-6A-11(b), the applicant shall tender proof of and certify to the secretary that the notice requirements of section ten of this article have been completed by the applicant.

Pursuant to West Virginia Code § 22-6A, the Operator has attached proof to this Notice Certification that the Operator has properly served the required parties with the following:	
*PLEASE CHECK ALL THAT APPLY	OOG OFFICE USE ONLY
□ 1. NOTICE OF SEISMIC ACTIVITY or ■ NOTICE NOT REQUIRED BECAUSE NO SEISMIC ACTIVITY WAS CONDUCTED	RECEIVED/ NOT REQUIRED
■ 2. NOTICE OF ENTRY FOR PLAT SURVEY or □ NO PLAT SURVEY WAS CONDUCTED	RECEIVED
□ 3. NOTICE OF INTENT TO DRILL or ■ NOTICE NOT REQUIRED BECAUSE NOTICE OF ENTRY FOR PLAT SURVEY WAS CONDUCTED or	RECEIVED/ NOT REQUIRED
U WRITTEN WAIVER BY SURFACE OWNER (PLEASE ATTACH)	
4. NOTICE OF PLANNED OPERATION	
■ 5. PUBLIC NOTICE	RECEIVED
6. NOTICE OF APPLICATION	

# **Required Attachments:**

Required Attachments: The Operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that wave here is to the operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that wave here is the operator of the operator shall attach to this Notice Certification Form all Notice Forms and Certifications of Notice that wave here is the operator of t the required parties and/or any associated written waivers. For the Public Notice, the operator shall attach a copy of the Class in 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 AMUL Blue	e	Canonsburg, PA 15317	
Its:	Permit Specialist - Appalachia	Facsimile:	724-338-2030	
Telephone: 724-749-8388		Email: an	amiller@tug-hillop.com	
Matti Cra My Con	NOTARIAL SEAL NOTARIAL SEAL hew W. Reese, Notary Public inberry Twp., Butler County nmission Expires June 30, 2019 ENWSYLVANIA ASSOCIATION OF NOTARIES	-ch	pro before me this 6th day of July 2018. Notary Public spires Jule 20, 2019	

# **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.

RECEIVED Office of Oil and Gas

JUL 11 2018

WW-6A (9-13)

API NO. 47	-
OPERATOR WE	L NO. Bryan N-5HM
Well Pad Name:	Iryan

#### 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: 7/3/2018 Date Permit Application Filed: 7/6/2018

Notice	of:
--------	-----

$\checkmark$	PERMIT FOR ANY
	WELL WORK

# CERTIFICATE OF APPROVAL FOR THE 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: CNX Land Resources, Inc. (Pad)	Name: Leatherwood, Inc.
Address: 1000 Consol Energy Drive	Address: 1000 Consol Energy Drive
Canonsburg, PA 15317	Canonsburg, PA 15317-6506
Name: Greg and Christina Riddle (Road)	Canonsburg, PA 15317-6506  COAL OPERATOR  Name:  Address
Address: 4205 Rines Ridge Road	Name: Name:
Proctor, WV 26055	Address:
SURFACE OWNER(s) (Road and/or Other Disturbance)	Address:JUL 11 2018 SURFACE OWNER OF WATER WELL WV Department of AND/OR WATER PURVEYOR(s) Name: 'See attached sheet
Name: Ray E. and Katherine L. Minor	SURFACE OWNER OF WATER WELL For W Depart
Address: 4193 Rines Ridge Road	AND/OR WATER PURVEYOR(s)
Proctor, WV 26055	Name: *See attached sheet
Name: Michael R. and Brenda K. Bryan	Address:
Address: 195 Isaiah Drive	
Proctor, WV 26055	OPERATOR OF ANY NATURAL GAS STORAGE FIELD
□ SURFACE OWNER(s) (Impoundments or Pits)	Name:
Name:	Address:
Address:	
	*Please attach additional forms if necessary

API NO. 47-OPERATOR WELL NO. Bryan N-5HM Well Pad Name: Bryan

# 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 Environmeting of Oil and Gas Protection headquarters, located at 601 57th Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting www.dep.wv.gov/oil-JUL 11 2018 and-gas/pages/default.aspx.

# Well Location Restrictions

WV Department of Environme Pursuant to W. Va. Code § 22-6A-12, Wells may not be drilled within two hundred fifty feet measured horizontally from any existing Protection 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. (c) 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

WW-6A (8-13)

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 after the application is filed with the secretary. All persons described in West Virginia Code § 22-6A-10(b) may file written commended by the location or construction of the applicant's proposed well work to the Secretary at:

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

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.

JUL 11 2018

WV Department of Environmental Protection

WW-6A (8-13) API NO. 47-\_\_\_\_\_ OPERATOR WELL NO. Bryan N-5HM Well Pad Name: Bryan

# 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-

<u>Permits/Pages/default.aspx</u> 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.

RECEIVED Office of Cil and Gas

JUL 11 2018

WW-6A (8-13) API NO. 47-OPERATOR WEIL TO DRy 5 N-5HM 0 2 0 7 7 Well Pad Name: Bryan

# Notice is hereby given by:

Well Operat	or: Tug Hill Operati	ng, LLC		
Telephone:	724-749-8388			
	r@tug-hillop.com	anus	tille	

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.

-	NO	TARIAL	SEAL	
	MAU	REEN A	STEAD	
	N	otary P	ublic	
C	CIL TWP,	WASHI	IGTON (	COUNT
864	Commissi	on Expl	res Jan	28, 20

Subscriped and sworn before me this _2	day of JVLM 2018.
Maurcen & Stond	Notary Public
My Commission Expires	3/19

RECEIVED Office of Oil and Gas

JUL 11 2018

WW-6A

Supplement Pg. 1A

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

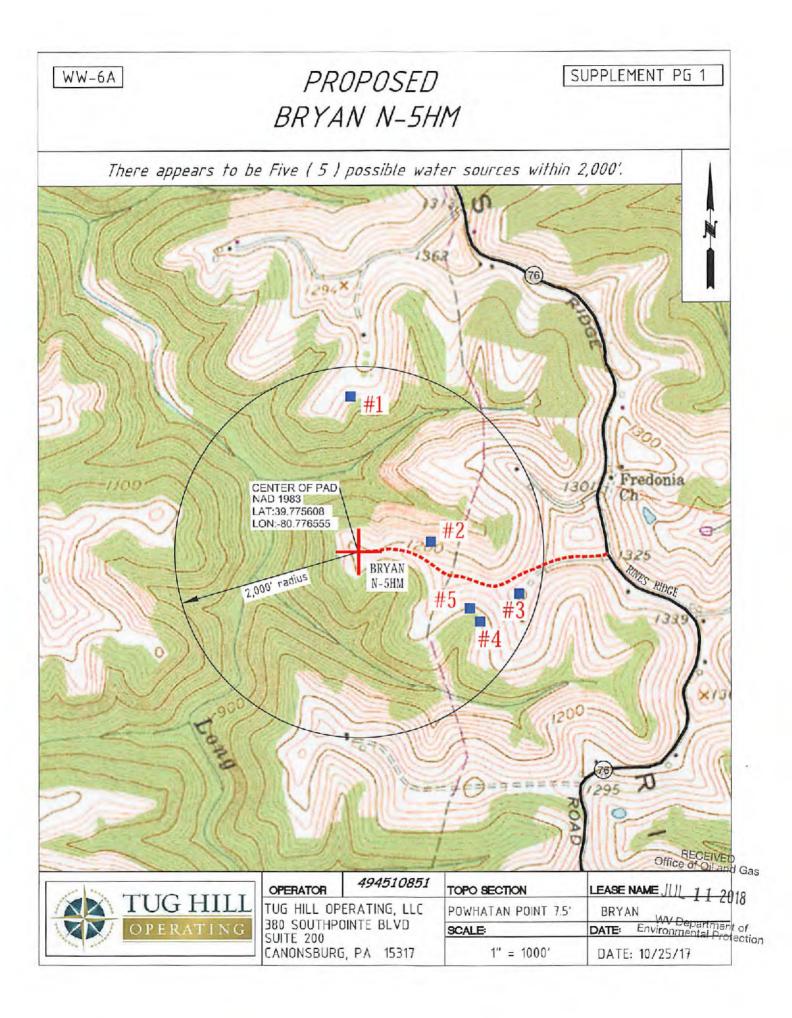
# WATER WELL REPORT

Well: BRYAN No. N-5HMDistrict: FranklinCounty: MarshallState: WV

There appears to be Five (5) possible water sources within 2,000 feet of the above referenced well location.

Topo spot #1 (Possible Spring) TM 15 Par.6 Joseph & Joann Kramer 304-845-0896 3303 Rines Ridge Rd. Proctor, WV 26055	Topo Spot # 2 (Spring) TM 15 Par. 9 CNX Land Resources, LLC 724-485-4000, 713-893-4476 1000 Consol Energy Dr. Canonsburg, PA 15317	Topo Spot # 3 (Water Well) TM 16 Par. 23 CNX Land Resources, LLC 724-485-4000, 713-893-4476 1000 Consol Energy Dr. Canonsburg, PA 15317
Topo Spot # 4 (Water Trough) TM 16 Par. 23 CNX Land Resources, LLC 724-485-4000, 713-893-4476 1000 Consol Energy Dr. Canonsburg, PA 15317	Topo Spot # 5 (Water Trough) TM 15 Par. 9 CNX Land Resources, LLC 724-485-4000, 713-893-4476 1000 Consol Energy Dr. Canonsburg, PA 15317	

Office of Oil and Gas RECEIVED Office of Oil and Gas Office of Oil and Gas ULL 11 2018 WV Department of Environmental Protection



entry

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

Notice Time Requirement: Notice shall be provided at least SEVEN (7) days but no more than FORTY-FIVE (45) days prior to

Date of Notice: 8/10/2017 Date of Planned Entry: 8/17/2017

Delivery method pursuant to West Virginia Code § 22-6A-10a

PERSONAL	REGISTERED	METHOD OF DELIVERY THAT REQUIRES A
SERVICE	MAIL	RECEIPT OR SIGNATURE CONFIRMATION

Pursuant to West Virginia Code § 22-6A-10(a), Prior to filing a permit application, the operator shall provide notice of planned entry on to the surface tract to conduct any plat surveys required pursuant to this article. Such notice shall be provided at least seven days but no more than forty-five days prior to such entry to: (1) The surface owner of such tract; (2) to any owner or lessee of coal seams beneath such tract that has filed a declaration pursuant to section thirty-six, article six, chapter twenty-two of this code; and (3) any owner of minerals underlying such tract in the county tax records. The notice shall include a statement that copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, which statement shall include contact information, including the address for a web page on the Secretary's web site, to enable the surface owner to obtain copies from the secretary.

# Notice is hereby provided to:

SURFACE OWNER(s)	COAL OWNER OR LESSEE		
Name: CNX Land Resources, Inc.	Name: Leatherwood, Inc.		
Address: 1000 Consol Energy Drive	Address: 1000 Consol Energy Drive		
Canonsburg, PA 15317	Canonsburg, PA 15317-6506		
Name: Ray E. and Katherine L. Minor			
Address: 4193 Rines Ridge Road	MINERAL OWNER(s)		
Proctor, WV 26055	Name: Greg and Christina Riddle		
Name: Michael R. and Brenda K. Bryan	Address: 4205 Rines Ridge Road		
Address: 195 Isaiah Drive	Proctor, WV 26055		
Proctor, WV 26055 *See Attachment	*please attach additional forms if necessary		

# Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-10(a), notice is hereby given that the undersigned well operator is planning entry to conduct a plat survey on the tract of land as follows:

State:	West Virginia	Approx. Latitude & Longitude:	39.7756312; -80.7766011	
County:	Marshall	Public Road Access:	Rines Ridge Road (County Route 76)	
District:	Franklin	Watershed:	(HUC-10) Fish Creek	
Quadrangle:	Powhatan Point	Generally used farm name:	Michael and Brenda Bryan	

Copies of the state Erosion and Sediment Control Manual and the statutes and rules related to oil and gas exploration and production may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450). Copies of such documents or additional information related to horizontal drilling may be obtained from the Secretary by visiting www.dep.wv.gov/oil-and-gas/pages/default.aspx.

Notice is here Well Operator:		Address:	380 Southpointe Boulevard, Plaza II, Suite 200	RECEIVED Office of Oil and Gas
Telephone:	724-749-8388		Canonsburg, PA 15317	JUL 1 1 2018
Email:	amiller@tug-hillop.com	Facsimile:	724-338-2030	
Oil and Gas Privacy Notice:			Er	WV Department of ivironmental Protection

## **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.

# STATE OF WEST VIRGINIA 4705 \* 02077 DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS NOTICE OF PLANNED OPERATION

Notice Time Requirement: notice shall be provided no later than the filing date of permit application. Date of Notice: 07/03/2018 Date Permit Application Filed: 07/06/2018

Delivery method pursuant to West Virginia Code § 22-6A-16(c)

CERTIFIED MAIL	HAND
RETURN RECEIPT REQUESTED	DELIVERY

Pursuant to W. Va. Code § 22-6A-16(c), no later than the date for filing the permit application, an operator shall, by certified mail return receipt requested or hand delivery, give the surface owner whose land will be used for the drilling of a horizontal well notice of the planned operation. The notice required by this subsection shall include: (1) A copy of this code section; (2) The information required to be provided by subsection (b), section ten of this article to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. (d) The notices required by this section shall be given to the surface owner at the address listed in the records of the sheriff at the time of notice.

#### Notice is hereby provided to the SURFACE OWNER(s)

(at the address listed in the records of the sheriff at the time of notice):

Name: CNX Land Resources, Inc.	Name: Ray E. and Katherine L. Minor	
Address: 1000 Consol Energy Drive	Address: 4193 Rines Ridge Road	
Canonsburg, PA 15317	Proctor, WV 26055 *See attached sheet	

#### Notice is hereby given:

Pursuant to West Virginia Code § 22-6A-16(c), notice is hereby given that the undersigned well operator has developed a planned operation on the surface owner's land for the purpose of drilling a horizontal well on the tract of land as follows:

State:	West Virgnia	UTALNAD 82	Easting:	519,136.39	
County:	Marshall	UTM NAD 83	Northing:	4,402,884.43	
District:	Franklin	Public Road Acc	ess:	Rines Ricge Road	
Quadrangle:	Powhatan Point 7.5'	Generally used fa	arm name:	CNX Land Resources, Inc.	
Watershed:	Fish Creek (HUC-10)				

#### This Notice Shall Include:

Pursuant to West Virginia Code § 22-6A-16(c), this notice shall include: (1)A copy of this code section; (2) The information required to be provided by W. Va. Code § 22-6A-10(b) to a surface owner whose land will be used in conjunction with the drilling of a horizontal well; and (3) A proposed surface use and compensation agreement containing an offer of compensation for damages to the surface affected by oil and gas operations to the extent the damages are compensable under article six-b of this chapter. Additional information related to horizontal drilling may be obtained from the Secretary, at the WV Department of Environmental Protection headquarters, located at 601 57<sup>th</sup> Street, SE, Charleston, WV 25304 (304-926-0450) or by visiting <u>www.dep.wv.gov/oil-and-gas/pages/default.aspx</u>.

Well Operator:	Tug Hill Operating, LLC	Address:	380 Southpointe Boulevard, Plaza II, Suite 200	
Telephone:	724-749-8388		Canonsburg, PA 15317	
Email:	amiller@tug-hillop.com	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 <u>depprivacyofficer@wv.gov</u>.

Office of Oil and Gas JUL 1 1 2018 WV Department of Environmental Protection

# 4705 \* 02077

Operator Well No. Bryan N-5HM

# WW-6A5 NOTICE OF PLANNED OPERATION

# ATTACHMENT 1 OF 1

Surface Owner(s):

)

Greg and Christina Riddle 4205 Rines Ridge Road Proctor, WV 26055

Michael R. and Brenda K. Bryan 195 Isaiah Drive Proctor, WV 26055

Office of Oil and Gas JUL 11 2018 Environmental Protection

4705 02077



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION

# **Division of Highways**

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

Jim Justice Governor Thomas J. Smith, P. E. Secretary of Transportation/ Commissioner of Highways

September 7, 2017

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

Subject: DOH Permit for the Bryan Pad, Marshall County Bryan N-5HM Well site

Dear Mr. Martin,

This well site will be accessed from a DOH permit #06-2017-0528 which has been issued to Tug Hill Operating, LLC for access to the State Road for a well site located off of Marshall County Route 76 SLS.

The operator has signed a STATEWIDE 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 January 3, 2012.

Very Truly Yours,

Dary K. Claytors

Gary K. Clayton, P.E. Regional Maintenance Engineer Central Office O&G Coordinator

RECEIVED Office of Oil and Gas

JUL 11 2018

WV Department of Environmental Protection

Cc: Jonathan White Tug Hill Operating, LLC CH, OM, D-6 File



# PLANNED ADDITIVES TO BE USED IN FRACTURING OR STIMULATION

Well No. Bryan N-5HM			
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

