Oklahoma Corporation Commission Oil & Gas Conservation Division Post Office Box 52000 Oklahoma City, Oklahoma 73152-2000 Rule 165: 10-3-25

API No.: 35153236110000

Drill Type:

OTC Prod. Unit No.: 153-22269

Completion Report

Spud Date: September 20, 2017

Drilling Finished Date: October 27, 2017

1st Prod Date: November 26, 2017

Completion Date: November 20, 2017

Min Gas Allowable: Yes

Purchaser/Measurer: ENLINK

First Sales Date: 11/26/2017

Well Name	: PATSY 13/12-20-17 1H
Location:	WOODWARD 24 20N 17W
	N2 N2 NE NE
	245 ENI 660 EEL of 1/4 SEC

HORIZONTAL HOLE

245 FNL 660 FEL of 1/4 SEC Latitude: 36.20130526 Longitude: -98.95783412 Derrick Elevation: 1724 Ground Elevation: 1699

Operator: TAPSTONE ENERGY LLC 23467

100 E MAIN ST OKLAHOMA CITY, OK 73104-2509

	Completion Type	Location Exception	Increased Density
Х	Single Zone	Order No	Order No
	Multiple Zone	673573	There are no Increased Density records to display.
	Commingled		

				С	asing and Cen	nent				
	Гуре		Size	Weight	Grade	Fe	et	PSI	SAX	Top of CMT
SU	RFACE		13 3/8	48	J-55	56	64	750	515	SURFACE
INTER	MEDIATE		9 5/8	40	L-80	85	56	2015	1030	2050
PRO	OUCTION		5 1/2	20	P-110	196	602	2150	1800	7744
					Liner					
Туре	Size	Wei	ght	Grade	Length	PSI	SAX	Тор	Depth	Bottom Dept
				There are	no Liner record	ds to displa	ay.			

Total Depth: 19605

Pac	ker		Р	lug
Depth	Brand & Type	Depti	n	Plug Type
9299	AS1-X	ТІ	here are no Pluç	records to display.

Initial Test Data

Test Date	Format	tion	Oil BBL/Day	Oil-Gi (Al	ravity PI)	Gas MCF/Day	Gas-Oil Ratio Cu FT/BBL	Water BBL/Day	Pumpin or Flowing	Initial Shut- In Pressure	Choke Size	Flow Tubing Pressure
Feb 12, 2018	MISSISSIPF CHEST MISSISSI	ER)-	497	3	7	3609	7261	1615	FLOWING		42	974
			Cor	npletio	on and	Test Data I	by Producing I	ormation	•			
	Formation N CHESTER)	lame: MISSI	SSIPPIAN (E	ΞX		Code: 35	59MSNLC	C	lass: OIL			
	Spacing) Orders					Perforated	ntervals				
Orde	er No	U	nit Size			Fror	n	1	о			
672	107		640			946	5	14	524			
673	697	ML	ILTIUNIT				I					
	Acid Ve	olumes					Fracture Tre	atments		7		
	67,662 GALLC	ONS 15% H0	CL		47	3,048 BARI	RELS, 20,285,6	35 POUNDS	PROPPANT			
	Formation N	lame: MISSI	SSIPPIAN			Code: 35	59MSSP	C	lass: OIL			
	Spacing	g Orders					Perforated	ntervals				
Orde	er No	U	nit Size			Fror	n	٦	о			
661	944		640			1452	24	19	605			
673	697	ML	ILTIUNIT									
	Acid Vo	olumes					Fracture Tre	atments		7		
ACIDIZED	WITH MISSISS	IPPIAN (LES	SS CHESTE	R)		FRAC'D WI	TH MISSISSIPF	PIAN (LESS (CHESTER)			
	Formation N CHESTER)-			ΞX		Code:		C	lass: OIL			
Formation			т	ор			Vere open hole	logs run? No				
BASE HEEBNI	ER						Date last log run	-				
DOUGLAS SA	NDS					6198	Was H2S Er	ncountered?	Yes	Depth Enco	ountered:	9242
TONKAWA						6318 _V	Vere unusual dr	illina circums	tances enco	intered? No		
COTTAGE GR	OVE						Explanation:	g en eante				
HOGSHOOTE	R					7043						
OSWEGO						7417						
ΑΤΟΚΑ						7857						
CHESTER						8155						
BASAL MANN	ING					9170						
UPPER MERA	MEC					9242						
Other Remark	s											

Lateral Holes

Sec: 12 TWP: 20N RGE: 17W County: WOODWARD

NW NE NE NE

196 FNL 660 FEL of 1/4 SEC

Depth of Deviation: 8620 Radius of Turn: 927 Direction: 3 Total Length: 10058

Measured Total Depth: 19605 True Vertical Depth: 8991 End Pt. Location From Release, Unit or Property Line: 196

FOR COMMISSION USE ONLY

Status: Accepted

1138924

API 3515323611	PLEASE TYPE OR USE BI	ACK INK ONLY					REC	1 Cal	VIEND	F
		DTE:			SCORPORATI	ON COMMISSION	Canad Value			
OTC PROD. 15322269	Attach copy of if recompletion			Pos	t Office Box	52000	FEE	3262	2018	
		in or reentry.		Oklahoma C	ity, Oklahom Rule 165:10	a 73152-2000 -3-25	AVIALION		AULTADO	
AMENDED (Reason)				COM	PLETION R		OKLAHOM	MISS	ON NUMBER	
TYPE OF DRILLING OPERAT	-	V1	SF	PUD DATE	9/20/	2017	001	640 Acres	5	_
STRAIGHT HOLE	DIRECTIONAL HOLE	X HORIZONTAL HO	and the second se	RLG FINISHED	10/27				X	
If directional or horizontal, see				ATE ATE OF WELL						
COUNTY WOODV				OMPLETION	11/20	/2017				
NAME PA	ATSY 13/12-20-17	WELL NO.	1H 1s	t PROD DATE	11/26	/2017				-
N2 1/4 N2 1/4 NE	1/4 NE 1/4 FND OF	245' FEDDF 174 SEC	660' RE	ECOMP DATE		V	V			E
ELEVATION 1,724' Grou	nd 1,699' Latitude (i	if known) 36.2013	30526	Longitude (if known)	-98.957	/83412			· · · · · · · · · · · · · · · · · · ·	
OPERATOR NAME	Tapstone Energy,	LLC	ОТС/ОС	00	234	67				
ADDRESS		PO BOX 1608		TOR NO.						
	klahoma City				70404	1000				
		STATE		DK ZIP	73101		L	OCATE WE	ELL	-
X SINGLE ZONE		CASING & CEME TYPE	ENT (Form SIZE				DOL	CAV	TOP OF OMT	Г
MULTIPLE ZONE			SIZE	WEIGHT	GRADE	FEET	PSI	SAX	TOP OF CMT	-
Application Date COMMINGLED			10.0	0 40	1.55	E0.41	750	FAF	0005405	_
Application Date	72572 (Interim)			-	J-55	564'	750	515	SURFACE	-
EXCEPTION ORDER C	73573 (Interim)		9 5/8		L-80	8,556'	2,015	1,030	2,050' EST	
ORDER NO.			5 1/2	2 20	P-110	19,602'	2,150	1,800	7,744' EST	_
0.0001		LINER						TOTAL	·	-
PACKER @ 9,299' BRAN		PLUG @		PE	PLUG @	TYPE		TOTAL DEPTH	19,605'	
PACKER @BRAN COMPLETION & TEST DAT		PLUG@		PE		TYPE				
FORMATION	MISSISSIPPIAN	(Less Ches			2011	1155P	1			ĥ
SPACING & SPACING	1	C		MISSIG	SIDPIC	16E	Did To h		eported	-
DRDER NUMBER 672101 CLASS: Oil, Gas, Dry, Inj,	01210110010	## 673697([Multan	16619	4/4 (6	40) 61	3697 (Must	tunit	S Frac Fo	ells
Disp, Comm Disp, Svc	OIL			oil			-			1
PERFORATED	1452	4								
NTERVALS	9,465' - 19,605'		1	4524-1	9605					
CID/VOLUME	67,662 gal 15% HC		1	Acidized	with 1	Nississipp	ian Aess C	keste		
	473,048 BBLS					//				
RACTURE TREATMENT Fluids/Prop Amounts)	20,285,635# PROF	PANT	F	rac dw	ith Mis	ssissippian	(iess Chess	ter)]
				$\boldsymbol{\Lambda}$		//				1
	Min Gas A	llowable (16	5:10-17-7)		Gas Pu	urchaser/Measurer		ENI	LINK	-
ITIAL TEST DATA		R			First S	ales Date		11/26	6/2017	
ITIAL TEST DATE	2/12/2018	able (165:10-13-3	5)							1
										-
IL-BBL/DAY	497									4
IL-GRAVITY (API)	37						minin	m		1
AS-MCF/DAY	3609			_/////	/////					
AS-OIL RATIO CU FT/BBL	7262							18		
/ATER-BBL/DAY	1615			310	; C	LBM		5		1
UMPING OR FLOWING	FLOWING			-2 M	JU					1
IITIAL SHUT-IN PRESSURE				-11111		///////////////////////////////////////		11/-		1
HOKE SIZE	42			_1/////		///////////////////////////////////////	///////////////////////////////////////			1
LOW TUBING PRESSURE	974									-
A record of the formations drill o make this report, which was	ed through, and pertinent rema prepared by me or under my s	arks are presented on th supervision and direction	e reverse. , with the da	I declare that I h ata and facts sta	ave knowledg	ge of the contents o be true, correct. an	f this report and am d complete to the be	authorized b est of my kno	by my organization	
(yx1lat				n Rother		,, un	2/21/2018		5-702-1600	
SIGNAT			NAME (PF	RINT OR TYPE)		DATE	PH	IONE NUMBER	1
PO BOX		Oklahoma City	OK	73101-16	808	REGULATC	RY@TAPSTC		RGY.COM	
ADDRE	SS	CITY	STATE	ZIP			EMAIL ADDR	ESS		

PLEASE TYPE OR USE BLAC FORMATION RECO Give formation names and tops, if available, or descript drilled through. Show intervals cored or drillstem tested	RD	LEASE NAME PATSY 13/12-20-17 WELL NO 1H
NAMES OF FORMATIONS	ТОР	FOR COMMISSION USE ONLY
BASE HEEBNER	5,898'	ITD on file YES NO
DOUGLAS SANDS	6,198'	
TONKAWA	6,318'	2) Reject Codes
COTTAGE GROVE	6,774'	
HOGSHOOTER	7,043'	
OSWEGO	7,417'	
АТОКА	7,857'	
CHESTER	8,155'	
BASAL MANNING	9,170'	
UPPER MERAMEC	9,242'	Were open hole logs run?yes X_no Date Last log was run was co2 encountered?yes X_no at what depths?
		was H ₂ 5 encountered? X yes no at what depths? 9242'
		Were unusual drilling circumstances encountered?yesno
Other remarks:		

640 Acres

If more than three drainholes are proposed, attach a separate sheet indicating the necessary information.

Direction must be stated in degrees azimuth. Please note, the horizontal drainhole and its end point must be located within the boundaries of the lease or spacing unit.

Directional surveys are required for all drainholes and directional wells.

 	 6407	Acres		

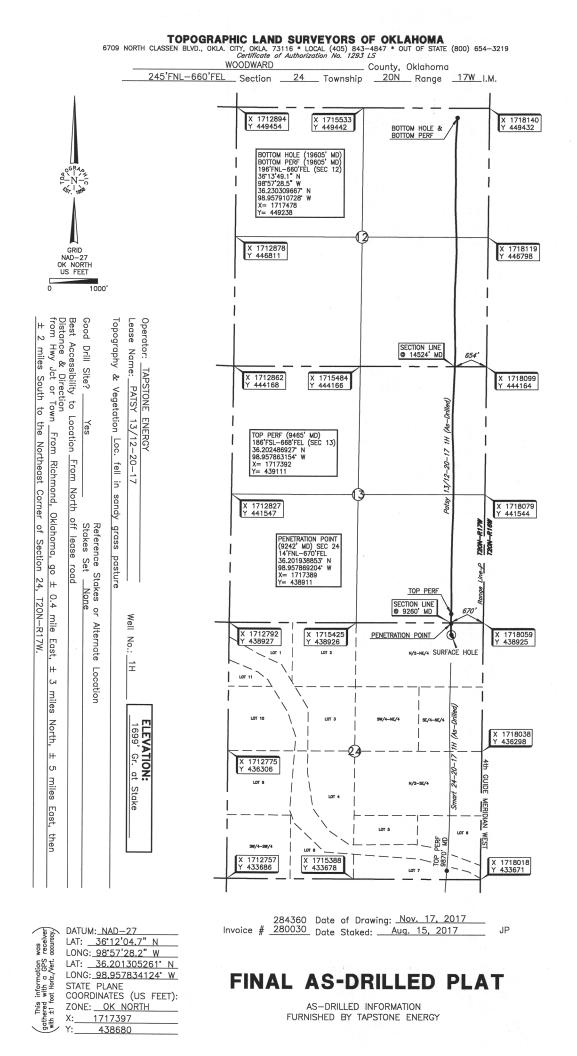
BOTTOM HOLE LOCATION FOR DIRECTIONAL HOLE

SEC	TWP	RGE		COUNTY			
Spot Loca	ation 1/4	1/4	1/4	1/	4 Feet From 1/4 Sec Lines	FNL	FEL
Measured	d Total Depth		True Vertical De	pth	BHL From Lease, Unit, or P	roperty Line:	

BOTTOM HOLE LOCATION FOR HORIZONTAL HOLE: (LATERALS)

^{SEC} 12	TWP 20N	RGE	17W	COUNTY		WO	ODWA	RD		
Spot Loca NW	tion 1/4 NE	1/4	NE 1/4	NE	1/4	Feet From 1/4 Sec Lines	FNL	196'	FEL	660
Depth of Deviation	8,620)	Radius of Turn	927		Direction 3.46	Total Length		10,058	3
Measured	Total Depth		True Vertical De	epth		BHL From Lease, Unit, or Prop	perty Line:			
	19,605'		8,9	91'			196'			
LATERAL	#2					÷				
LATERAL SEC	#2 TWP	RGE		COUNTY						
	TWP	RGE								
SEC	TWP	RGE	1/4		1/4	Feet From 1/4 Sec Lines	FSL		FWL	
SEC	TWP		1/4 Radius of Turn			Feet From 1/4 Sec Lines Direction	FSL Total Length		FWL	

EC	TWP	RGE	COL	JNTY			
Spot Location					East From 1/4 Soc Linos	FSL	FWL
	1/4	1/4	1/4	1/4	Feet From 1/4 Sec Lines	FOL	FVVL
Depth of			Radius of Turn	1 1 Y	Direction	Total	
Deviation						Length	
Measured T	otal Depth		True Vertical Depth		BHL From Lease, Unit, or Pro		



API NO. 3515323611 OTC PROD. 15222260		DTE:	0		ORPORATION s Conservation		RE		
UNIT NO. 15322269	Attach copy of if recompletion	v		Pos Oklahoma C	t Office Box 520 ity, Oklahoma	000 73152-2000		UG 2 9	
X AMENDED (Reason)	Update spacing	order numbers	_		Rule 165:10-3-2 PLETION REP		OKLAHO	MA CO	RPORATION
TYPE OF DRILLING OPERAT	-		SPUE	DATE	9/20/20	17	U	OMMIS 640 Acres	SION
SERVICE WELL	- · · · · · · · · · · · · · · · · · · ·	X HORIZONTAL HOLI	DRLG	FINISHED	10/27/2				X
If directional or horizontal, see COUNTY WOODV		on. TWP 20N RGE 17	DATE	OF WELL					
EASE			COM	PLETION	11/20/2				
	TSY 13/12-20-17	NQ.		ROD DATE	11/26/20	017 w			
N2 1/4 N2 1/4 NE	1/4 INL 1/4 1/4 SEC	245 174 SEC 0		OMP DATE					
Derrick FL 1,724' Groun	.,	/	1526 (if known)	-98.9578	3412			
JAME	Tapstone Energy,	LLC	OTC/OCC OPERATO	R NO.	2346	7			
ADDRESS		PO BOX 1608							
OI (11)	klahoma City	STATE	OK	ZIP	73101-1	608 L	L	OCATE WE	 LL
COMPLETION TYPE		CASING & CEMEN	NT (Form 10	02C must b	e attached)				
X SINGLE ZONE		TYPE	SIZE	WEIGHT	GRADE	FEET	PSI	SAX	TOP OF CMT
Application Date		CONDUCTOR							
Application Date		SURFACE	13 3/8	48	J-55	564'	750	515	SURFACE
EXCEPTION ORDER 0	73573 (Interim)		9 5/8	40	L-80	8,556'	2,015	1,030	2,050' EST
DRDER NO.		PRODUCTION	5 1/2	20	P-110	19,602'	2,150	1,800	7,744' EST
0.0001		LINER				****		TOTAL	10.005
PACKER @ 9,299' BRAN PACKER @ BRAN	ND & TYPE AS1-X	PLUG @	TYPE		PLUG @			DEPTH	19,605'
COMPLETION & TEST DAT		ATION 7359	MSN/	10	_PLUG @	TYPE			
ORMATION 359MSSF	MISSISSIPPIAN-1)-12 m	Sissip	ian				
PACING & SPACING RDER NUMBER	640 - 661944	640 - 67210		Sissif		DIAM	11		
LASS: Oil, Gas, Dry, Inj,					1 1-10	3109/1111	Itislast		
	OIL	oil			6/2	369/114	Highit		
					6/2	3697114	HismF		
Disp, Comm Disp, Svc	OIL 1452 9,465' - 19,605'	4			6/2	36977114	<u>Ití Uni F</u>		
Disp, Comm Disp, Svc	1452				6/2	36977114	<u>Ití Uni F</u>		
Disp, Comm Disp, Svc	1452	4 14524-1	19605	A MISS	6/2				
Disp, Comm Disp, Svc	9,465' - 1 9,605 '	Ч 14524-1 Сі Де	19605	A Miss					
Disp, Comm Disp, Svc ERFORATED ITERVALS CID/VOLUME RACTURE TREATMENT	9,465' - 19,605' 67,662 gal 15% H0	4 14524-1 Cl <u>AL</u> Frac Fluid	19605 dižel 6						
Disp, Comm Disp, Svc PERFORATED NTERVALS CID/VOLUME RACTURE TREATMENT	9,465' - 19,605' 67,662 gal 15% H0 473,048 BBLS J	4 14524-1 Cl <u>AL</u> Frac Fluid	19605 dižel 6						
Disp, Comm Disp, Svc	9,465' - 19,605' 67,662 gal 15% H0 473,048 BBLS J 20,285,635# PROI	4 14524-1 CI ALL Frac Fluid DPANT Fra Newvable (165)	19605 dižel 6		issigna sippian			ENI	
Disp, Comm Disp, Svc ERFORATED ITERVALS CID/VOLUME RACTURE TREATMENT (Juids/Prop Amounts)	9,465' - 19,605' 67,662 gal 15% HC 473,048 BBLS / 20,285,635# PROI	H 14524-1 CI ALL Frac Fluid DPANT Frac Muewable (165: DR	19605 idi <i>žed</i> 6 ze'd <i>C</i> 1		issigna sippian	n haser/Measurer		ENI	
Disp, Comm Disp, Svc ERFORATED VTERVALS CID/VOLUME RACTURE TREATMENT Fluids/Prop Amounts)	9,465' - 19,605' 67,662 gal 15% HC 473,048 BBLS 20,285,635# PRO Min Gas X	H 14524-1 CI ALL Frac Fluid DPANT Frac Nuewable (165) DR	19605 idi <i>žed</i> 6 ze'd <i>C</i> 1		Gas Purc	n haser/Measurer		ENI	
Disp, Comm Disp, Svc ERFORATED VTERVALS CID/VOLUME RACTURE TREATMENT Fluids/Prop Amounts) VITIAL TEST DATE	9,465' - 19,605' 67,662 gal 15% HC 473,048 BBLS 20,285,635# PROI Min Gas X Oil Allow	H 14524-1 CI ALL Frac Fluid DPANT Frac Muewable (165: DR	19605 idi <i>žed</i> 6 ze'd <i>C</i> 1		Gas Purc	n haser/Measurer		ENI	
Disp, Comm Disp, Svc PERFORATED VITERVALS CID/VOLUME RACTURE TREATMENT Fluids/Prop Amounts) VITIAL TEST DATA VITIAL TEST DATE	9,465' - 19,605' 67,662 gal 15% HG 473,048 BBLS J 20,285,635# PROI Min Gas Oil Allow 2/12/2018	4 14524-1 Cl <u>AL</u> Frac Fluid PANT Fra PANT Fra Novable (165:10-13-3)	19605 idized e zeid e 10-17-7)	Missis	Gas Purc First Sale	haser/Measurer rs Date		ENI	
Disp, Comm Disp, Svc PERFORATED VITERVALS CID/VOLUME RACTURE TREATMENT Fluids/Prop Amounts) VITIAL TEST DATA VITIAL TEST DATE VIL-BBL/DAY	9,465' - 19,605' 67,662 gal 15% HC 473,048 BBLS 20,285,635# PROI Min Gas X 0il Allow 2/12/2018 497	4 14524-1 Cl <u>AL</u> Frac Fluid PANT Fra PANT Fra Novable (165:10-13-3)	19605 idized e zeid e 10-17-7)	Missis	Gas Purc First Sale	haser/Measurer rs Date		ENI	
Disp, Comm Disp, Svc PERFORATED VITERVALS CID/VOLUME RACTURE TREATMENT Fluids/Prop Amounts) VITIAL TEST DATA VITIAL TEST DATE VIL-BBL/DAY VIL-GRAVITY (API) VAS-MCF/DAY	9,465' - 19,605' 67,662 gal 15% HC 473,048 BBLS J 20,285,635# PROI Min Gas J Oil Allow 2/12/2018 497 37	4 14524-1 Cl <u>AL</u> Frac Fluid PANT Fra PANT Fra Novable (165:10-13-3)	19605 idized 6 zed C1	M155755	Gas Purc First Sale	haser/Measurer is Date		ENI	
Disp, Comm Disp, Svc ERFORATED VTERVALS CID/VOLUME RACTURE TREATMENT Fluids/Prop Amounts) VITIAL TEST DATA VITIAL TEST DATE IL-BBL/DAY IL-GRAVITY (API) AS-MCF/DAY AS-OIL RATIO CU FT/BBL	9,465' - 19,605' 67,662 gal 15% H0 473,048 BBLS / 20,285,635# PRO Min Gas Z/12/2018 497 37 3609	4 14524-1 Cl <u>AL</u> Frac Fluid PANT Fra PANT Fra Novable (165:10-13-3)	19605 idized 6 zed C1	M155755	Gas Purc First Sale	haser/Measurer is Date		ENI	
Disp, Comm Disp, Svc ERFORATED ITERVALS CID/VOLUME RACTURE TREATMENT Iuids/Prop Amounts) IITIAL TEST DATA IITIAL TEST DATE IL-BBL/DAY IL-GRAVITY (API) AS-MCF/DAY AS-OIL RATIO CU FT/BBL IATER-BBL/DAY	9,465' - 19,605' 67,662 gal 15% H0 473,048 BBLS J 20,285,635# PROI Min Gas 2/12/2018 497 37 3609 7262 1615	4 14524-1 Cl <u>AL</u> Frac Fluid PANT Fra PANT Fra Novable (165:10-13-3)	19605 idized 6 zed C1	M155755	Gas Purc First Sale	haser/Measurer rs Date		ENI	
Disp, Comm Disp, Svc ERFORATED VITERVALS CID/VOLUME RACTURE TREATMENT Fluids/Prop Amounts) VITIAL TEST DATA NITIAL TEST DATE IL-BBL/DAY IL-GRAVITY (API) AS-MCF/DAY AS-OIL RATIO CU FT/BBL /ATER-BBL/DAY UMPING OR FLOWING	9,465' - 19,605' 67,662 gal 15% HC 473,048 BBLS / 20,285,635# PROI X 0il Allow 2/12/2018 497 37 3609 7262	4 14524-1 Cl <u>AL</u> Frac Fluid PANT Fra PANT Fra Novable (165:10-13-3)	19605 idized 6 zed C1	M155755	Gas Purc First Sale	haser/Measurer is Date		ENI	
Disp, Comm Disp, Svc ERFORATED VTERVALS CID/VOLUME RACTURE TREATMENT Fluids/Prop Amounts) ILIAL TEST DATE IL-BBL/DAY IL-GRAVITY (API) AS-MCF/DAY AS-OIL RATIO CU FT/BBL /ATER-BBL/DAY UMPING OR FLOWING IITIAL SHUT-IN PRESSURE	9,465' - 19,605' 67,662 gal 15% H0 473,048 BBLS J 20,285,635# PROI Min Gas 2/12/2018 497 37 3609 7262 1615 FLOWING	4 14524-1 Cl <u>AL</u> Frac Fluid PANT Fra PANT Fra Novable (165:10-13-3)	19605 idized 6 zed C1	M155755	Gas Purc First Sale	haser/Measurer is Date		ENI	
Disp, Comm Disp, Svc PERFORATED NTERVALS CID/VOLUME RACTURE TREATMENT Fluids/Prop Amounts) NITIAL TEST DATA NITIAL TEST DATE DIL-BBL/DAY DIL-GRAVITY (API) SAS-MCF/DAY SAS-OIL RATIO CU FT/BBL VATER-BBL/DAY UMPING OR FLOWING NITIAL SHUT-IN PRESSURE HOKE SIZE	9,465' - 19,605' 67,662 gal 15% H0 473,048 BBLS / 20,285,635# PRO Min Gas 0il Allow 2/12/2018 497 37 3609 7262 1615 FLOWING 42	4 14524-1 Cl <u>AL</u> Frac Fluid PANT Fra PANT Fra Novable (165:10-13-3)	19605 idized 6 zed C1	M155755	Gas Purc First Sale	haser/Measurer is Date		ENI	
Disp, Comm Disp, Svc PERFORATED NTERVALS ACID/VOLUME FRACTURE TREATMENT Fluids/Prop Amounts) NITIAL TEST DATA NITIAL TEST DATA NITIAL TEST DATE DIL-BBL/DAY DIL-GRAVITY (API) SAS-OIL RATIO CU FT/BBL VATER-BBL/DAY PUMPING OR FLOWING NITIAL SHUT-IN PRESSURE CHOKE SIZE LOW TUBING PRESSURE	9,465' - 19,605' 67,662 gal 15% H0 473,048 BBLS J 20,285,635# PROI 20,285,635# PROI Min Gas 0il Allow 2/12/2018 497 37 3609 7262 1615 FLOWING 42 974	4 14524-1 Cl AL Frac Fluid PANT Frac Able (165:10-13-3)	9605 202 0 0 200 0 000 0 000000	Missie SU	Gas Purc First Sale	haser/Measurer is Date			5/2017
Disp, Comm Disp, Svc PERFORATED NTERVALS ACID/VOLUME FRACTURE TREATMENT Fluids/Prop Amounts) NITIAL TEST DATA NITIAL TEST DATE DIL-BBL/DAY DIL-GRAVITY (API) GAS-MCF/DAY GAS-OIL RATIO CU FT/BBL VATER-BBL/DAY PUMPING OR FLOWING NITIAL SHUT-IN PRESSURE CHOKE SIZE	9,465' - 19,605' 67,662 gal 15% HC 473,048 BBLS J 20,285,635# PROI 20,285,635# PROI Min Gas 2/12/2018 497 37 3609 7262 1615 FLOWING 42 974 ad thready, and pertinent rem	4 14524-1 CI ALL Frac Fluid DPANT Fra Allowable (165:10-13-3) I I I I I I I I I I I I I I I I I I I	9605 2020 00 2020 00 2000 00 2000 00 2000 00 2000 00 2000 00 2000 000 00000000	Missing SU SU	Gas Purc First Sale	haser/Measurer is Date			5/2017
Disp, Comm Disp, Svc PERFORATED NTERVALS ACID/VOLUME FRACTURE TREATMENT Fluids/Prop Amounts) NITIAL TEST DATA NITIAL TEST DATA DIL-BBL/DAY DIL-GRAVITY (API) GAS-OIL RATIO CU FT/BBL VATER-BBL/DAY PUMPING OR FLOWING NITIAL SHUT-IN PRESSURE CHOKE SIZE COW TUBING PRESSURE A record of the formations drille o make this report, which was	9,465' - 19,605' 67,662 gal 15% H0 473,048 BBLS J 20,285,635# PROI Min Gas 20,285,635# PROI 20,285,635# PROI 011 Allow 2/12/2018 497 37 3609 7262 1615 FLOWING 42 974 ed through, and pertinent rem performed by me or under my set	4 14524-1 Cl AL Frac Fluid PANT Frac Able (165:10-13-3) able (165:10-13-3) able (165:10-13-3)	reverse. I de with the data Ryan I	MISSING SU SU Clare that I hand facts start Koontz	Gas Purc First Sale	haser/Measurer is Date	is report and am omplete to the be 8/28/2018	ENI 11/26	by my organization wiledge and belief. 5-702-1600
Disp, Comm Disp, Svc PERFORATED NTERVALS ACID/VOLUME RACTURE TREATMENT Fluids/Prop Amounts) NITIAL TEST DATA NITIAL TEST DATA NITIAL TEST DATE DIL-BBL/DAY DIL-GRAVITY (API) GAS-OIL RATIO CU FT/BBL VATER-BBL/DAY UMPING OR FLOWING NITIAL SHUT-IN PRESSURE HOKE SIZE LOW TUBING PRESSURE A record of the formations drill	9,465' - 19,605' 67,662 gal 15% H0 473,048 BBLS J 20,285,635# PROI Min Gas 20,285,635# PROI 20,285,635# PROI 011 Allow 2/12/2018 497 37 3609 7262 1615 FLOWING 42 974 ed through, and pertinent rem por ared by me or under my solutions of the second sec	4 14524-1 Cl AL Frac Fluid PANT Frac Able (165:10-13-3) able (165:10-13-3) able (165:10-13-3)	reverse. I de with the data Ryan I NAME (PRIN	MISSING SU SU Clare that I hand facts start Koontz	Gas Purc First Sale	haser/Measurer is Date	his report and am complete to the be 8/28/2018 DATE	ENI 11/26	by my organization wiledge and belief. 5-702-1600 ONE NUMBER

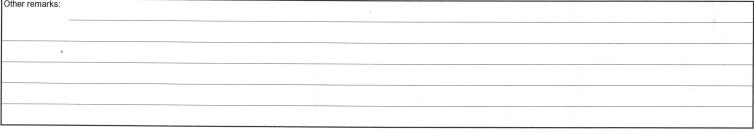
PLEASE TYPE OR USE BLACK INK ONLY FORMATION RECORD

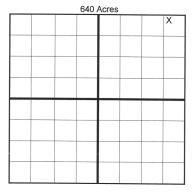
Give formation names and tops, if available, or descriptions and thickness of formations drilled through. Show intervals cored or drillstem tested.

NAMES OF FORMATIONS	705	
	TOP	
BASE HEEBNER	5,898'	
DOUGLAS SANDS	6,198'	
TONKAWA	6,318'	
COTTAGE GROVE	6,774'	
HOGSHOOTER	7,043'	
OSWEGO	7,417'	
АТОКА	7,857'	
CHESTER	8,155'	
BASAL MANNING	9,170'	
UPPER MERAMEC	9,242'	

LEASE NAME	PATSY 13	/12-:	20-17	WELL NO.	1H
ITD on file	YES DISAPPROVED	F0f]NO	2) Reject Codes	EONLY	
		yes	X no X no at what o no at what o		9242'
	ng circumstances encou		d?	yes	X_no

Other remarks:





If more than three drainholes are proposed, attach a separate sheet indicating the necessary information.

Direction must be stated in degrees azimuth. Please note, the horizontal drainhole and its end point must be located within the boundaries of the lease or spacing unit.

Directional surveys are required for all drainholes and directional wells. 640 Acres

 	 	0.101	10103		
				5	

BOTTOM HOLE LOCATION FOR DIRECTIONAL HOLE

SEC	TWP	RGE	COUNTY			
Spot Loc	ation 1/4	1/4	1/4 1/4	Feet From 1/4 Sec Lines	FNL	FEL
Measure	d Total Depth	1	True Vertical Depth	BHL From Lease, Unit, or Pro	operty Line:	

BOTTOM HOLE LOCATION FOR HORIZONTAL HOLE: (LATERALS)

LATERAL													
^{SEC} 12	TWP	20N	RGE	17W	/	COUNTY		WO	ODWA	٩RD			
Spot Loca NW	ation 1/4	NE	1/4	NE	1/4	NE	1/4	Feet From 1/4 Sec Lines	FNL	196'		FEL	660'
Depth of Deviation		8,620		Radius of T	ſurn	927		Direction 3.46	Total Length	ı	1	0,058	3
Measured	Total De	pth		True Vertic	al De	pth		BHL From Lease, Unit, or Prop	perty Line	:			
	19,6	05'			8,9	91'			196	1			

SEC	TWP	RGE		COUNTY			
Spot Loo	cation 1/4	1/4	1/4	1/4	Feet From 1/4 Sec Lines	FSL	FWL
Depth of Deviatio	n		Radius of Turn		Direction	Total Length	
Measure	ed Total Depth		True Vertical De	pth	BHL From Lease, Unit, or Pr	operty Line:	

LATERAL #3 TWP SEC RGE COUNTY Spot Location FWL Feet From 1/4 Sec Lines FSL 1/4 1/4 1/4 1/4 Depth of Direction Radius of Turn Total Deviation Length Measured Total Depth BHL From Lease, Unit, or Property Line: True Vertical Depth