API NUMBER: 051 24666

OKLAHOMA CORPORATION COMMISSION OIL & GAS CONSERVATION DIVISION P.O. BOX 52000 **OKLAHOMA CITY, OK 73152-2000** (Rule 165:10-3-1)

07/02/2019 Approval Date: Expiration Date: 01/02/2021

Horizontal Hole Multi Unit

Oil & Gas

PERMIT TO DRILL

		•		<u></u>	
ELL LOCATION: Sec: 12 T	wp: 9N Rge: 5W	County: GRAD		V EST	
	SECT	TION LINES:	308 1	324	
Lease Name: LIVINGSTON 011	2	Well No:	5H	Well w	rill be 308 feet from nearest unit or lease boundary
Operator EOG RESOUR Name:	CES INC		Telephone: 4052	463224	OTC/OCC Number: 16231 0
EOG RESOURCES INC				MARY LOUISE L	IVINGSTON MARITAL TRUST
3817 NW EXPRESSWA			1ST HAWAIIAN BANK		
	10.1100		PO BOX 3708		
OKLAHOMA CITY, OK 731		12-1483		HONOLULU	HI 96811
1 WOODFORD 2		9350	6 7		
3			8		
4			9		
5			10		
Spacing Orders: 698051		Location Exception 0	Orders:		Increased Density Orders:
ending CD Numbers: 20180923	6				Special Orders:
20190232	0				
20190302	7				
Total Depth: 19516	Ground Elevation: 1344 Surface Ca		Casing: 1000		Depth to base of Treatable Water-Bearing FM: 880
Under Federal Jurisdiction: No		Fresh Water	Supply Well Drilled:	No	Surface Water used to Drill: Ves

PERMIT NO: 19-36419

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED Chlorides Max: 5000 Average: 3000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well? Y Wellhead Protection Area?

is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C Pit Location is BED AQUIFER Pit Location Formation: DUNCAN H. SEE MEMO

D. One time land application -- (REQUIRES PERMIT)

Approved Method for disposal of Drilling Fluids:

G. Haul to recycling/re-use facility: Sec. 1 Twn. 15N Rng. 11W Cnty. 11 Order No: 662791

PIT 2 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: OIL BASED
Chlorides Max: 300000 Average: 200000

Is depth to top of ground water greater than 10ft below base of pit? Y

Within 1 mile of municipal water well?

Wellhead Protection Area?

Y

Pit is located in a Hydrologically Sensitive Area.

Category of Pit: C

Liner not required for Category: C
Pit Location is BED AQUIFER
Pit Location Formation: DUNCAN

HORIZONTAL HOLE 1

Rge 5W Sec 01 Twp 9N County **GRADY** NW Spot Location of End Point: ΝE NE ΝE Feet From: NORTH 1/4 Section Line: 165 WEST Feet From: 1/4 Section Line: 2382

Depth of Deviation: 8518 Radius of Turn: 477

Direction: 355

Total Length: 10249

Measured Total Depth: 19516

True Vertical Depth: 9481

End Point Location from Lease,
Unit, or Property Line: 165

Notes:

Category

MEMO

Description

HYDRAULIC FRACTURING

6/11/2019 - G71 - OCC 165:10-3-10 REQUIRES:

1) PRIOR TO COMMENCEMENT OF HYDRAULIC FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE:

2) WITH NOTICE ALSO GIVEN 48 HOURS IN ADVANCE OF HYDRAULIC FRACTURING ALL WELLS TO BOTH THE OCC CENTRAL OFFICE AND LOCAL DISTRICT OFFICES, USING THE "FRAC NOTICE FORM" FOUND AT THE FOLLOWING LINK:

OCCEWEB.COM/OG/OGFORMS.HTML; AND,

3) THE CHEMICAL DISCLOSURE OF HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS TO BE REPORTED TO FRACFOCUS WITHIN 60 DAYS AFTER THE CONCLUSION THE

HYDRAULIC FRACTURING OPERATIONS, USING THE FOLLOWING LINK: FRACFOCUS.ORG

6/11/2019 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 1 - WBM/CUTTINGS WILL BE SOIL FARMED & PIT 2 - CUTTINGS TO BE HAUL TO COMM SOIL FARMING FAC (HEARTLAND RES) 660850/661694/662791/663822 OR TO DEQ APPROVED FAC -

SOURTHERN PLAINS LANDFILL (GRADY CO) 3526013, PIT 2 - OBM TO VENDOR

PENDING CD - 201809236 7/2/2019 - G58 - 1 & 12-9N-5W

X201804554 WDFD 7 WELLS

NO OP. NAMED

REC 4/24/2019 (M. PORTER)

PENDING CD - 201902320 7/2/2019 - G58 - (I.O.) 1 & 12-9N-5W

X165:10-3-28(C)(2)(B) WDFD (LIVINGSTON 0112 5H) MAY BE CLOSER THAN 600' TO PROPOSED WELLS MAY BE CLOSER THAN 600' TO PYRITE 1-12 WELL MAY BE CLOSER THAN 600' TO LIVINGSTON 12-1H WELL

REC 5/21/2019 (NORRIS)

This permit does not address the right of entry or settlement of surface damages. The duration of this permit is SIX MONTHS, except as otherwise provided by Rule 165: 10-3-1. Rule 165: 10-3-4 (c) (7) (e) - The Operator shall give 24 Hours notice by telephone to the appropriate District Office of the Conservation Division as to when Surface Casing will be run.

051 24666 LIVINGSTON 0112 5H

Category Description

7/2/2019 - G58 - (I.O.) 1 & 12-9N-5W X698051 WDFD, OTHERS PENDING CD - 201903027

X165:10-3-28(C)(2)(B) MAY BE CLOSER THAN 600' TO EXISTING/PROPOSED WELL COMPL. INT. 12-9N-5W NCT 165' FSL, NCT 0' FNL, NCT 1320' FEL

COMPL. INT. 1-9N-5W NCT 0' FSL, NCT 165' FNL, NCT 1320' FEL

NO OP. NAMED

REC 6/25/2019 (MILLER)

PUBLIC WATER SUPPLY WELLS 6/11/2019 - G71 - COUNTRY MHP - 2 PWS/WPA, NE/4 14-9N-5W

SPACING - 698051 7/2/2019 - G58 - (1280)(HOR) 1 & 12-9N-5W

VAC OTHER X611142 WDFD,

POE TO BHL NCT 165' FSL, NCT 165' FNL, NCT 330' FWL

(COEXIST SP. ORDER 611142 WDFD)

TOPOGRAPHIC LAND SURVEYORS OF OKLAHOMA

13800 Wireless Way, Okla. City, OK. 75134 * LOCAL (405) 843-4847 * OUT OF STATE (800) 654-3219

GRADY

County Oklahoma County, Oklahoma 9N Range 308'FSL-1324'FEL 5W_1.M. 12 Section Township Range PROVIDED BY OPERATOR LISTED, Township TION-R5W T9N---R5W 2098336 712582 W) 2093055 712558 X 2095696 Y 712570 FOR H BOTTOM HOLE & LAST TAKE POINT CONSTRUCTION PURPOSES ONLY LOT 3 LOT LOT 2 0 R482 LOT 4 55, 1,958 D, NOT SURVEYED. BOTTOM HOLE & LAST TAKE POINT 165"FNL-2382"FNL NAD-27 (US Feet) 35"17"25.7" N 97"40"48.8" W 35.290475442" N 97.680219592" W X=2095438 Y=712404 S/2-NW/4 S/2-NE/4 GRID NAD-27 OK SOUTH US Feet INFORMATION SCALE: 1" = 1000' S Best Accessibility to Lo Distance & Direction from Hwy Jct or Town Good Topography Lease Operator: _____ South on --R5W Drill Name: Site? EOG ******* 79N 8 Š * Vegetation LIVINGSTON RESOURCES, Location 76, then Yes S, INC 0112 From Location ±1 mile the fell Jct West 9 X 2095710 Y 707281 X 2098353 Y 707293 of PATH Stakes Reference level St to 8 00 off DRILL 1 the Twy pad, county MCCLAIN PROPOSED GRADY Set SE Stakes or None rig 76 Cor road South on of location Well Sec. æ Alternate St Z County 12-T9N-R5W Hwy. Location X 2098360 Y 704648 ű 39 12 90 LANDING POINT & FIRST TAKE POINT 165 FSL - 2382 FWL NAD - 27 (US Feet) 35 15 '44.3" N 97.40 '48.9" W 35.262318916 N 97.680252830 W X = 2095460 Y = 702155 BOUNDARY 11 X 2093070 Y 704625 ±2 **ELEVATION:** miles Gr. CORPORATE on 23'38' eve 11 Pad NEWCASTLE 1320' LANDING POINT & FIRST TAKE POINT 11 2093079 701981 1.324 >308 X 2095723 Y 701991 X 2098367 Y 702002 Date of Drawing: June 26, 2019 was receiver accuracy. Project # 124196C Date Staked: <u>June 24, 2019</u> DATUM: NAD-27 LC SSIONAL LAT: 35°15'45.8"N LONG: 97°40'29.8"W CERTIFICATE: s information d with a GPS foot Horiz./Vert. LAT: 35.262714895 N LONG: 97.674951151 W Thomas L. Howell _an Oklahoma Licensed Land THOMAS L. SURVE Surveyor and an authorized agent of Topographic Land Surveyors of Oklahoma, do hereby certify to the STATE PLANE HOWELL COORDINATES: (US Feet) information shown herein. This gathered with ±1 foo ZONE: OK SOUTH -26 2097043 2. Nu Chemi 702304 Oklahoma Lic. No. 1433