API NUMBER: 049 25085

Within 1 mile of municipal water well?

Wellhead Protection Area? N

Liner not required for Category: C

Pit Location is BED AQUIFER

Pit Location Formation: DUNCAN

Category of Pit: C

is located in a Hydrologically Sensitive Area.

Oil & Gas

Horizontal Hole

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

Approval Date: 11/17/2016
Expiration Date: 05/17/2017

PERMIT TO DRILL

WELL LOCATION: Sec				FOT		
SPOT LOCATION: SW	NE SW SW	FEET FROM QUARTER: FROM SECTION LINES:	<b>SOUTH</b> FROM <b>W 850</b> 99	EST		
Lease Name: SOME	-PS 0404	Well No:	1-31-30SXH		II will be 850 feet from nearest u	nit or lease boundary.
		Well No.				
Operator M/ Name:	ARATHON OIL COMPANY		Telephone: 7132	962003	OTC/OCC Number:	1363 0
MARATHON (	OIL COMPANY					
5555 SAN FELIPE ST				SAG LLC		
HOUSTON, TX 77056-2701				3418 ROBERT DRIVE		
110001011,		77000 2701		DUNCAN	OK 7353	33
, , ,	Permit Valid for Listed Forr	• ,				
Name		Depth		Name	Depth	
1 SPRIN	IGER	11318	6 7			
2			8			
4			9			
5			10			
Spacing Orders: No Spacing Location Exception		Orders:		Increased Density Orders:		
	<u> </u>					
Pending CD Numbers:	201604703				Special Orders:	
	201604704					
	201604705					
	201604707					
	201604709					
Total Depth: 22860	Ground Elevation: 10	88 Surface	Casing: 1500		Depth to base of Treatable Water-Be	aring FM: 450
rotar Boptini 22000	Ground Elevation. 18	Guriace	oasing. 1000		Dopuit to Date of Treatable Trace. De	ag 100
Under Federal Jurisdiction: No Fresh Water			r Supply Well Drilled:	No	Surface Water used	to Drill: Yes
PIT 1 INFORMATION			Appro	Approved Method for disposal of Drilling Fluids:		
Type of Pit System: C	CLOSED Closed System Means S	teel Pits				
Type of Mud System: WATER BASED				D. One time land application (REQUIRES PERMIT) PERMIT NO: 16-31699		
Chlorides Max: 5000 Average: 3000				EE MEMO		
Is depth to top of groun	d water greater than 10ft below ba	se of pit? Y				

## 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? N
Wellhead Protection Area? N

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 4W Sec 30 Twp 4N County **GARVIN** NW Spot Location of End Point: N2 NW NW Feet From: NORTH 1/4 Section Line: 150 Feet From: WEST 1/4 Section Line: 330

Depth of Deviation: 12190
Radius of Turn: 462
Direction: 358
Total Length: 9944

Measured Total Depth: 22860

True Vertical Depth: 13174

End Point Location from Lease,
Unit, or Property Line: 150

Notes:

Category Description

DEEP SURFACE CASING 10/28/2016 - G71 - APPROVED; NOTIFY OCC FIELD INSPECTOR IMMEDIATELY OF ANY LOSS

OF CIRCULATION OR FAILURE TO CIRCULATE CEMENT TO SURFACE ON ANY CONDUCTOR

OR SURFACE CASING

HYDRAULIC FRACTURING 10/28/2016 - G71 - OCC 165:10-3-10 REQUIRES: 1) THE CHEMICAL DISCLOSURE OF

HYDRAULIC FRACTURING INGREDIENTS FOR ALL WELLS BE REPORTED TO FRACFOCUS USING THE FOLLOWING LINK HTTP://FRACFOCUS.ORG/ WITH NOTICE GIVEN 48 HOURS IN ADVANCE OF FRACTURING TO THE LOCAL OCC DISTRICT OFFICE; AND, 2) PRIOR TO COMMENCEMENT OF FRACTURING OPERATIONS FOR HORIZONTAL WELLS, NOTICE ALSO

GIVEN FIVE BUSINESS DAYS IN ADVANCE TO OFFSET OPERATORS WITH WELLS COMPLETED IN THE SAME COMMON SOURCE OF SUPPLY WITHIN 1/2 MILE.

MEMO 10/28/2016 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST. PIT 2

- OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

PENDING CD - 201604703 10/28/2016 - G60 - (640)(HOR) 31-4N-4W

VAC 218926 SPRG

**EST SPRG** 

POE TO BHL NLT 660' FB REC. 11-15-16 (M. PORTER)

PENDING CD - 201604704 10/28/2016 - G60 - (640)(HOR) 31-4N-4W

VAC 646397 SPRG

**EST SPRG** 

POE TO BHL NLT 660' FB REC. 11-15-16 (M. PORTER) Category Description

PENDING CD - 201604705 10/28/2016 - G60 - (I.O.) 30 & 31-4N-4W

EST MULTIUNIT HÒRIZONTAL WELL X201604703 (30-4N-4W) SPRG X201604704 (31-4N-4W) SPRG

50% 30-4N-4W 50% 31-4N-4W NO OP. NAMED

REC. 11/15/16 (M. PORTER)

PENDING CD - 201604707 10/28/2016 - G60 - (I.O.) 30-4N-4W

X2016047030 SPRG

COMPL. INT. (31-4N-4W) NCT 150' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (30-4N-4W) NCT 0' FSL, NCT 150' FNL, NCT 330' FWL

NO OP. NAMED

REC. 11-15-16 (M. PORTER)

PENDING CD - 201604709 10/28/2016 - G60 - (I.O.) 31-4N-4W

X201604704 SPRG

COMPL. INT. (31-4N-4W) NCT 150' FSL, NCT 0' FNL, NCT 330' FWL COMPL. INT. (30-4N-4W) NCT 0' FSL, NCT 150' FNL, NCT 330' FWL

NO OP. NAMÈD

REC. 11-15-16 (M. PORTER)

