API NUMBER: 045 23464 A

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:	02/26/2015
Expiration Date:	08/26/2015

Oil & Gas

PERMIT TO DRILL

WELL LOCATION:	Sec:	03	Twp:	16N		Rge: 2	4٧	V County	: ELLIS	3		
SPOT LOCATION:	SE	[s	SE S	SE	[SW]	FEET FROM QUARTER:	FROM	SOUTH	FROM	WEST
								SECTION LINES:		225		2541
Lease Name: V	ו ום ווא	FF						We	II No:	2-3H		

Well No: 2-3H Well will be 225 feet from nearest unit or lease boundary.

Operator DUNCAN OIL PROPERTIES INC Telephone: 4052721800 OTC/OCC Number: 15876 0

DUNCAN OIL PROPERTIES INC 100 PARK AVE STE 1200

OKLAHOMA CITY, OK 73102-8023

OKLAHOMA DEPARTMENT OF WILDLIFE CONSERVATION

P.O. BOX 53465

OKLAHOMA CITY OK 73152

Formation(s) (Permit Valid for Listed Formations Only):

	Name	Depth	Name	Depth
1	CLEVELAND	9703 6		
2		7		
3		8		
4		9		
5		10		
Spacing Orders:	135144	Location Exception Orders: 621783		Increased Density Orders:

Pending CD Numbers: Special Orders:

Total Depth: 14350 Ground Elevation: 2103 Surface Casing: 490 Depth to base of Treatable Water-Bearing FM: 440

Under Federal Jurisdiction: No Fresh Water Supply Well Drilled: No Surface Water used to Drill: No

PIT 1 INFORMATION

Type of Pit System: CLOSED Closed System Means Steel Pits

Type of Mud System: WATER BASED Chlorides Max: 90000 Average: 5000

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: OGALLALA

Approved Method for disposal of Drilling Fluids:

A. Evaporation/dewater and backfilling of reserve pit.

D. One time land application -- (REQUIRES PERMIT) PERMIT NO: 14-26883

E. Haul to Commercial pit facility: Sec. 24 Twn. 14N Rng. 21W Cnty. 129 Order No: 372833

H. SEE MEMO

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: OGALLALA

HORIZONTAL HOLE 1

Sec 03 Twp 16N Rge 24W County **ELLIS** E2 NE NW Spot Location of End Point: ΝE Feet From: NORTH 1/4 Section Line: 330 Feet From: EAST 2600 1/4 Section Line:

Depth of Deviation: 9135 Radius of Turn: 573

Direction: 1

Total Length: 4282

Measured Total Depth: 14350

True Vertical Depth: 9708

End Point Location from Lease,
Unit, or Property Line: 330

Notes:

Category Description

LOCATION EXCEPTION - 621783 4/21/2014 - G72 - 3-16N-24W I.O. X 135144 CLVD, OTHERS;

COMPL INT 1ST PERF NCT 330 FSL NCT 1320 FEL OR FWL,

LAST PERF NCT 330 FNL NCT 1320 FEL OR FWL.

DUNCAN OIL PROPERTIES, INC.

2/20/2014

MEMO PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS (REQUIRED - CANADIAN RIVER), PIT 2 - OBM

RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT

SPACING - 135144 4/21/2014 - G72 - 3-16N-24W (640) EST CLVD, EXT OTHERS.