API NUMBER: 117 23590

Chlorides Max: 5000 Average: 3000

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

Liner not required for Category: 2
Pit Location is BED AQUIFER
Pit Location Formation: VANOSS

Category of Pit: 2

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

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: 03/25/2014
Expiration Date: 09/25/2014

PERMIT TO DRILL

WELL LOCATION: Sec: 09 Twp: 22N Rge: 5E SPOT LOCATION: W2 W2 SW SE	County: PAWNE	EOUTH FROM EAST			
o. o. 100,o ( ) ( ) (ex. ) (ex. )	SECTION LINES:	60 2440			
Lease Name: CLO	Well No: 1	-16H	Well will be 660 feet	rom nearest unit or lease boundary.	
Operator CUMMINGS OIL COMPANY Name:		Telephone: 4059481818; 40	59481 OTC/OCC I	Number: 5481 0	
CUMMINGS OIL COMPANY 5400 NW GRAND BLVD STE 100 OKLAHOMA CITY, OK 73112-6113			KERRY & LENORA GASKEY 49773 E 43 ROAD		
OREAHOWA OHT,	73112 0113	PAWN	IEE	OK 73112	
Formation(s) (Permit Valid for Listed Formation Name  1 MISSISSIPPI 2 3 4 5	mations Only):  Depth  3385	Name 6 7 8 9 10		Depth	
Spacing Orders: No Spacing	Location Exception Or	ders:	Increased Density Orders:		
Pending CD Numbers:			Special Orders:		
Total Depth: 6476 Ground Elevation: 97	Surface Ca	asing: 350	Depth to base of Treatable Water-Bearing FM: 160		
Under Federal Jurisdiction: No	Fresh Water S	upply Well Drilled: No	Surfa	ace Water used to Drill: No	
PIT 1 INFORMATION		Approved Method for disposal of Drilling Fluids:			
Type of Pit System: ON SITE  Type of Mud System: WATER BASED		A. Evaporation/o	lewater and backfilling of reserve pit		

## HORIZONTAL HOLE 1

Sec 16 Twp 22N Rge 5E County PAWNEE

Spot Location of End Point: C SW SW NE
Feet From: SOUTH 1/4 Section Line: 330
Feet From: WEST 1/4 Section Line: 330

Depth of Deviation: 3000
Radius of Turn: 583
Direction: 180
Total Length: 1980

Measured Total Depth: 6476

True Vertical Depth: 3583

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

Notes:

Category Description

POINT OF ENTRY 3/25/2014 - G30 - POINT OF ENTRY WILL BE GREATER THAN 330' FROM LEASE BOUNDARY

LINE

SPACING 3/25/2014 - G30 - FORMATION UNSPACED, 160 ACRE LEASE (NE4)