PI NUMBER: 083 24371 izontal Hole Oil & Gas	OIL & GAS CON P.O. I OKLAHOMA C	PORATION COMMISSION SERVATION DIVISION BOX 52000 CITY, OK 73152-2000 165:10-3-1)	Approval Date:01/29/2015Expiration Date:07/29/2015
	PERM	IIT TO DRILL	
WELL LOCATION: Sec: 21 Twp: 19N Rge: 3V	V County: LOGAN		
SPOT LOCATION: S2 NW NE NW	FEET FROM QUARTER: FROM NORTH	FROM WEST	
	SECTION LINES: 600	1650	
Lease Name: CROSSFIELD A 21-19N-3W	Well No: 4WH		will be 600 feet from nearest unit or lease boundary.
Operator DEVON ENERGY PRODUCTION C Name:	O LP Tele	phone: 4052353611; 4052353	OTC/OCC Number: 20751 0
DEVON ENERGY PRODUCTION CO L 333 W SHERIDAN AVE DEC 34.428	P	RUTH D. DANIE 8523 THACKER	EL-MANAGER, DANIEL MANAGEMENT, LTD Y #1208
OKLAHOMA CITY, OK	73102-5010	DALLAS	TX 75225
Formation(s) (Permit Valid for Listed For Name 1 WOODFORD 2 3 4 5	Depth 5801	Name 6 7 8 9 10	Depth
Spacing Orders: 600665	Location Exception Orders:	634171	Increased Density Orders: 634170
Pending CD Numbers:			Special Orders:
Total Depth: 10506 Ground Elevation: 10	041 Surface Casing	j: 500	Depth to base of Treatable Water-Bearing FM: 260
Under Federal Jurisdiction: No	Fresh Water Supply V	Well Drilled: No	Surface Water used to Drill: Yes
PIT 1 INFORMATION		Approved Method for disposal	of Drilling Fluids:
Type of Pit System: CLOSED Closed System Means	Steel Pits		
		D. One time land application -	(REQUIRES PERMIT) PERMIT NO: 15-294
		H. SEE MEMO	
Type of Mud System: WATER BASED		TH: OEE MEMO	
Type of Mud System: WATER BASED Chlorides Max: 5000 Average: 3000	ise of pit? Y		
Type of Mud System: WATER BASED	ise of pit? Y		
Type of Mud System: WATER BASED Chlorides Max: 5000 Average: 3000 Is depth to top of ground water greater than 10ft below ba	ase of pit? Y		
Type of Mud System: WATER BASED Chlorides Max: 5000 Average: 3000 Is depth to top of ground water greater than 10ft below be Within 1 mile of municipal water well? N	ase of pit? Y		
Type of Mud System: WATER BASED Chlorides Max: 5000 Average: 3000 Is depth to top of ground water greater than 10ft below ba Within 1 mile of municipal water well? N Wellhead Protection Area? N	ase of pit? Y		
Type of Mud System: WATER BASED Chlorides Max: 5000 Average: 3000 Is depth to top of ground water greater than 10ft below ba Within 1 mile of municipal water well? N Wellhead Protection Area? N Pit is located in a Hydrologically Sensitive Area.	ase of pit? Y		
Type of Mud System: WATER BASED Chlorides Max: 5000 Average: 3000 Is depth to top of ground water greater than 10ft below ba Within 1 mile of municipal water well? N Wellhead Protection Area? N Pit is located in a Hydrologically Sensitive Area. Category of Pit: C	ase 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
 C

Pit Location is BED AQUIFER Pit Location Formation: GARBER

HORIZONTAL HOLE 1

Sec	21	Twp	19N	Rge	ЗW	/ (County	LOGAN
Spot I	_ocatior	of En	d Poin	t: SE	Ξ	SW	SW	SE
Feet I	From:	SOL	ITH	1/4 Se	ctior	n Line	: 50)
Feet I	From:	EAS	Т	1/4 Se	ctior	n Line	: 21	80
Depth of Deviation: 5463								
Radius of Turn: 358								
Direction: 163								
Total Length: 4481								
Measured Total Depth: 10506								
True Vertical Depth: 5821								
End Point Location from Lease,								
Unit, or Property Line: 50								

Notes:	
Category	Description
INCREASED DENSITY - 634170	1/29/2015 - G76 - 21-19N-3W X600665 WDFD, OTHER 4 WELLS DEVON ENERGY PROD. CO., L.P. 12/15/2014
LOCATION EXCEPTION - 634171	1/29/2015 - G76 - (I.O.) 21-19N-3W X600665 WDFD, OTHERS COMPL. INT. NCT 150 FNL, NCT 150 FSL, NCT 1230 FEL DEVON ENERGY PROD. CO., L.P. 12/15/2014
MEMO	1/27/2015 - G71 - PITS 1 & 2 - CLOSED SYSTEM=STEEL PITS PER OPERATOR REQUEST, PIT 2 - OBM RETURNED TO VENDOR, CUTTINGS PERMITTED PER DISTRICT
SPACING - 600665	1/29/2015 - G76 - (640)(HOR) 21-19N-3W EXT OTHER EXT 597354 WDFD, OTHERS POE TO BHL NCT 330' FB (SUPERSEDE NON-DEVELOPED NON-HORIZONTAL SPACING UNITS; COEXIST WITH PRODUCING NON-HORIZONTAL SPACING UNITS)