

For KCC	Use:
Effective	Date:
District #	
SGA?	Yes No

Kansas Corporation Commission Oil & Gas Conservation Division

1167851

Form C-1

March 2010

Form must be Typed

Form must be Signed

All blanks must be Filled

NOTICE OF INTENT TO DRILL

Expected Spud Date:				Spot Description:	
	month	day	year		V
OPERATOR: License#				(Q/Q/Q/Q) feet from N / S Line of S	ectio
Name:				feet from E / W Line of S	ectio
Address 1:			_	Is SECTION: Regular Irregular?	
Address 2:					
City:				(Note: Locate well on the Section Plat on reverse side)	
Contact Person:		•		County: Well #:	
Phone:					
CONTRACTOR: License#				Field Name:	¬ N.a
Name:				Is this a Prorated / Spaced Field?	
valle.				Target Formation(s):	
Well Drilled For:	Well Class:	Тур	e Equipment:	Nearest Lease or unit boundary line (in footage):	
Oil Enh F	Rec Infield		Mud Rotary	Ground Surface Elevation:fee	_
Gas Stora	ge Pool E	xt.	Air Rotary	Water well within one-quarter mile:	
Dispo	osal Wildca	at	Cable	Public water supply well within one mile:	No
Seismic ;#	of Holes Other			Depth to bottom of fresh water:	
Other:				Depth to bottom of usable water:	
If OWWO: old well	information on falls			Surface Pipe by Alternate: III	
II OWWO: old well	information as folio	ows:		Length of Surface Pipe Planned to be set:	
Operator:				Length of Conductor Pipe (if any):	
Well Name:				Projected Total Depth:	
Original Completion Da	ate:	Original Tota	Depth:	Formation at Total Depth:	
				Water Source for Drilling Operations:	
Directional, Deviated or Ho			Yes No	Well Farm Pond Other:	
If Yes, true vertical depth: _				DWR Permit #:	
Bottom Hole Location:				(Note: Apply for Permit with DWR)	
KCC DKT #:				Will Cores be taken? Yes	No
				If Yes, proposed zone:	
			٨٥	FIDAVIT	
The undersigned hereby	affirms that the dr	illing compl		ugging of this well will comply with K.S.A. 55 et. seq.	
-		-		ugging of this well will comply with N.S.A. 35 et. seq.	
It is agreed that the follow					
 Notify the appropri 					
2. A copy of the appro				0 0 .	
				t by circulating cement to the top; in all cases surface pipe shall be set are underlying formation.	
				trict office on plug length and placement is necessary <i>prior to plugging</i> ;	
				ged or production casing is cemented in:	
			, ,	ed from below any usable water to surface within 120 DAYS of spud date.	
Or pursuant to App	endix "B" - Easter	n Kansas si	urface casing order #	133,891-C, which applies to the KCC District 3 area, alternate II cementing	
must be completed	within 30 days of	the spud da	ate or the well shall b	e plugged. In all cases, NOTIFY district office prior to any cementing.	
ubmitted Electro	nically				
				Remember to:	
For KCC Use ONLY				- File Certification of Compliance with the Kansas Surface Owner Notification	
API # 15				Act (KSONA-1) with Intent to Drill;	
Conductor pipe required				- File Drill Pit Application (form CDP-1) with Intent to Drill;	1
				- File Completion Form ACO-1 within 120 days of spud date;	
Minimum surface pipe red	uired	fee	t per ALT. [] I [] II	- File acreage attribution plat according to field proration orders;	
Approved by:				- Notify appropriate district office 48 hours prior to workover or re-entry;	1
This authorization expire	š:	.,	_	- Submit plugging report (CP-4) after plugging is completed (within 60 days);	
I	rilling not started witi	thin 12 months	of approval data	 Obtain written approval before disposing or injecting salt water. 	- 1

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Spud date: _

If well will not be drilled or permit has expired (See: authorized expiration date)
please check the box below and return to the address below.

Well will not be drilled or Permit Expired	Date:
Signature of Operator or Agent:	



For KCC Use ONLY	
API # 15	

IN ALL CASES PLOT THE INTENDED WELL ON THE PLAT BELOW

In all cases, please fully complete this side of the form. Include items 1 through 5 at the bottom of this page.

Operator:							_ Lo	cation of W	/ell: Coun	nty:				
Lease:										fe	eet from	N /	S Line	of Section
Well Numb	oer:									fe	eet from	E /	W Line	of Section
Field:							_ Se	C	Twp		S. R		E	W
Number of QTR/QTR							15 '	Section:	Regu	lar or	Irregula	ar		
		Ü					If S	Section is lection corne	_	, locate w	ell from r		orner boun SW	dary.
		ads, tank b			d electrica	l lines, as	required b	r unit bound by the Kans plat if desi	as Surfac					
272 ft.		:	:	:		:	:	:			LEG	END		
			: : :								Tank Pipel Elect	Location Battery ine Loca ric Line I e Road I	Location ition Location	
		: : :	: : : : :	3	6		: : : : : : :	: : : :		EXAMPL	E : :			
											♀ -┐	 İ		1980' FSL
					•••••					SEWARD CO	3390' FE	 : : :	·	
		:	:	:		:	:	:]					

NOTE: In all cases locate the spot of the proposed drilling locaton.

In plotting the proposed location of the well, you must show:

- 1. The manner in which you are using the depicted plat by identifying section lines, i.e. 1 section, 1 section with 8 surrounding sections, 4 sections, etc.
- 2. The distance of the proposed drilling location from the south / north and east / west outside section lines.
- 3. The distance to the nearest lease or unit boundary line (in footage).
- 4. If proposed location is located within a prorated or spaced field a certificate of acreage attribution plat must be attached: (C0-7 for oil wells; CG-8 for gas wells).
- 5. The predicted locations of lease roads, tank batteries, pipelines, and electrical lines.



Kansas Corporation Commission Oil & Gas Conservation Division

Form CDP-1 May 2010 Form must be Typed

APPLICATION FOR SURFACE PIT

Submit in Duplicate

Operator Name:			License Number:		
Operator Address:					
Contact Person:			Phone Number:		
Lease Name & Well No.:			Pit Location (QQQQ):		
Type of Pit: Emergency Pit Burn Pit Settling Pit Workover Pit Haul-Off Pit (If WP Supply API No. or Year Drilled)	Pit is: Proposed If Existing, date continued in the continue	Existing nstructed: (bbls)	SecTwpR East WestFeet from North / South Line of SectionFeet from East / West Line of SectionCounty		
Is the pit located in a Sensitive Ground Water A	rea? Yes	No	Chloride concentration: mg/l (For Emergency Pits and Settling Pits only)		
Is the bottom below ground level?	Artificial Liner?	No	How is the pit lined if a plastic liner is not used?		
Pit dimensions (all but working pits):	Length (fee	et)	Width (feet) N/A: Steel Pits		
Depth fro	om ground level to dee	epest point:	(feet) No Pit		
Distance to nearest water well within one-mile of	of nit	Denth to shallo	west fresh waterfeet.		
Distance to nearest water well within one-fille t	л рп.	Source of inform	nation:		
feet Depth of water well	feet	measured	well owner electric log KDWR		
Emergency, Settling and Burn Pits ONLY: Producing Formation: Number of producing wells on lease: Barrels of fluid produced daily:		Type of materia	ver and Haul-Off Pits ONLY: I utilized in drilling/workover: xing pits to be utilized: procedure:		
Does the slope from the tank battery allow all s flow into the pit? Yes No	pilled fluids to	·	e closed within 365 days of spud date.		
Submitted Electronically					
	KCC	OFFICE USE O	NLY Liner Steel Pit RFAC RFAS		
Date Received: Permit Numl	ber:	Permi	t Date: Lease Inspection: Yes No		



1167851

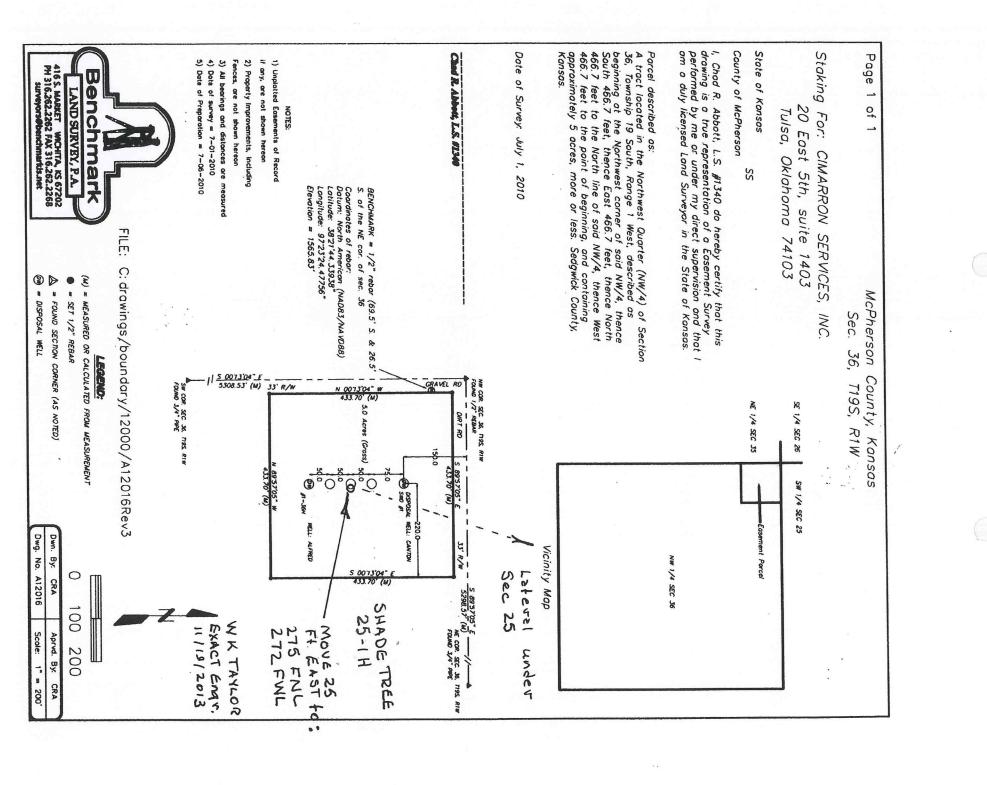
Form KSONA-1
July 2010
Form Must Be Typed
Form must be Signed
All blanks must be Filled

CERTIFICATION OF COMPLIANCE WITH THE KANSAS SURFACE OWNER NOTIFICATION ACT

This form must be submitted with all Forms C-1 (Notice of Intent to Drill); CB-1 (Cathodic Protection Borehole Intent); T-1 (Request for Change of Operator Transfer of Injection or Surface Pit Permit); and CP-1 (Well Plugging Application).

Any such form submitted without an accompanying Form KSONA-1 will be returned.

Select the corresponding form being filed: C-1 (Intent) CB-1 (CB-1)	Cathodic Protection Borehole Intent) T-1 (Transfer) CP-1 (Plugging Application)
OPERATOR: License #	Well Location:
Name:	
Address 1:	County:
Address 2:	Lease Name: Well #:
City:	If filing a Form T-1 for multiple wells on a lease, enter the legal description of
Contact Person:	the lease below:
Phone: () Fax: ()	
Email Address:	
Surface Owner Information:	
Name:	When filing a Form T-1 involving multiple surface owners, attach an additional
Address 1:	sheet listing all of the information to the left for each surface owner. Surface owner information can be found in the records of the register of deeds for the
Address 2:	county, and in the real estate property tax records of the county treasurer.
City:	
the KCC with a plat showing the predicted locations of lease roads, tank	dic Protection Borehole Intent), you must supply the surface owners and a batteries, pipelines, and electrical lines. The locations shown on the plat in the Form C-1 plat, Form CB-1 plat, or a separate plat may be submitted.
☐ I certify that, pursuant to the Kansas Surface Owner Notice A owner(s) of the land upon which the subject well is or will be to CP-1 that I am filing in connection with this form; 2) if the form to form; and 3) my operator name, address, phone number, fax, at ☐ I have not provided this information to the surface owner(s). I at KCC will be required to send this information to the surface owner(s).	cknowledge that, because I have not provided this information, the vner(s). To mitigate the additional cost of the KCC performing this
task, I acknowledge that I am being charged a \$30.00 handling If choosing the second option, submit payment of the \$30.00 handling form and the associated Form C-1, Form CB-1, Form T-1, or Form CP-	fee with this form. If the fee is not received with this form, the KSONA-1
Submitted Electronically	









Orca Operating Company

McPherson County Kansas Section 36-19S-1W Shade Tree Farms 25-1H

Sump Hole

Plan: Plan 1

Standard Planning Report

16 October, 2013







Design:	Wellbore:	Well:	Site:	Project:		Company:	Database:
Plan 1	Sump Hole	Shade Tree Farms 25-1H	Section 36-19S-1W	McPherson County Kansas		Orca Operating Company	Oklahoma District
		Survey Calculation Method:	North Reference:	MD Reference:		TVD Reference:	Local Co-ordinate Reference:
		Minimum Curvature	True	Shade Tree Farms 25-1H 1566' GL + 16' RKB @ 1582.0usft (Original Well Elev)	@ 1582.0usft (Original Well Elev)	Shade Tree Farms 25-1H 1566' GL + 16' RKB	Well Shade Tree Farms 25-1H

Project	McPherson County Kansas, McPherson County, South Central Kansas	ounty, South Central Kansas		
Map System: Geo Datum: Map Zone:	US State Plane 1983 North American Datum 1983 Kansas Southern Zone	System Datum:	Mean Sea Level	

Site	Section 36-19S-1W	W				
Site Position:			Northing:		Latitude:	38° 21' 44.339 N
From:	Lat/Long		Easting:	1,630,558.55 usft Lo	Longitude:	97° 23' 24.477 W
Position Uncertainty:		0.0 usft	0.0 usft Slot Radius:	0" G r	0 " Grid Convergence:	0.68 °
Well	Shade Tree Farms 25-1H, Mississippian	s 25-1H, Mis	sissippian			
Well Position	+N/-S	100.0 usft	Northing:	1,931,764.18 usft	t Latitude:	38° 21′ 45.327 N
	+E/-W	25.0 usft	Easting:	1,630,582.35 usft	t Longitude:	97° 23' 24.163 W
Position Uncertainty		2.0 usft	Wellhead Elevation:	1.582.0 usft	t Ground Level:	1.566.0 usft

	Magnetics	Wellbore
IGRF2010	Model Name	Sump Hole
10/15/2013	Sample Date	
3.99	Declination (°)	
66.30	Dip Angle (°)	
52,423	Field Strength (nT)	

Design					
Audit Notes:					
Version:	Phase:	PLAN	Tie On Depth:	0.0	
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W	Direction (°)	
	0.0	0.0	0.0	20.95	

4,051.8	3,439.8	2,625.0	1,825.0	0.0	Plan Sections Measured Depth Incli (usft)
60.00	60.00	60.00	0.00	0.00	Inclination (°)
20.95	20.95	20.95	0.00	0.00	Azimuth
3,200.0	2,894.0	2,486.6	1,825.0	0.0	Vertical Depth (usft)
1,510.7	1,015.7	356.7	0.0	0.0	+N/-S (usft)
578.4	388.9	136.6	0.0	0.0	+E/-W
0.00	0.00	7.50	0.00	0.00	Dogleg Rate (°/100usft)
0.00	0.00	7.50	0.00	0.00	Build Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	Turn Rate (°/100usft)
0.00 P	0.00	20.95	0.00	0.00	TFO (°)
PBHL Shade Tree Fai					Target

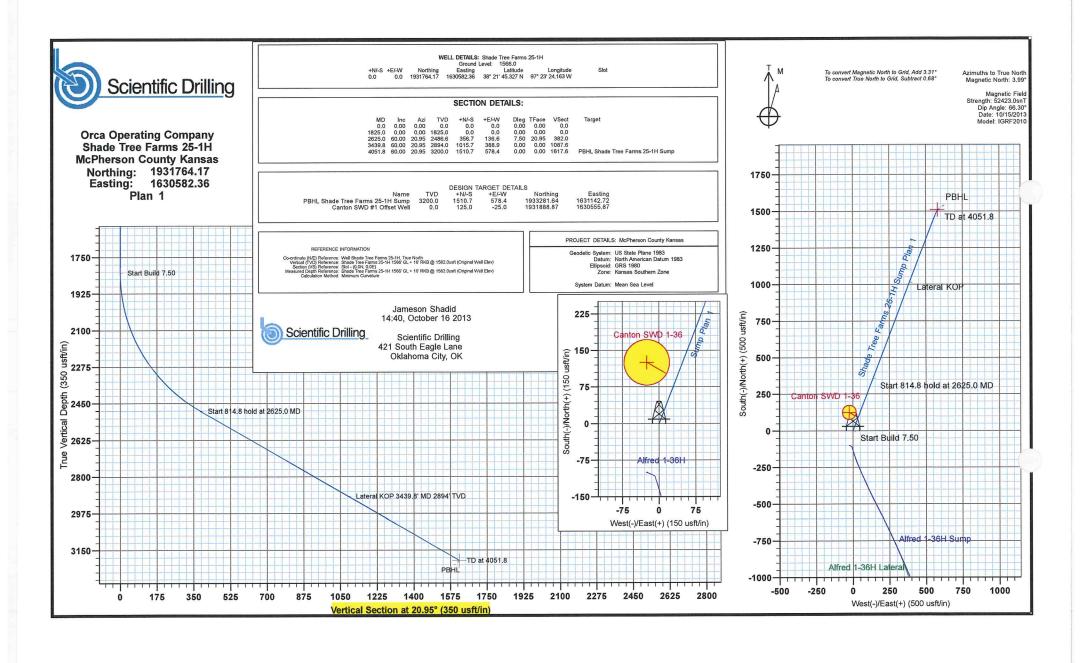




Wellbore: Sump Hole	Well: Shade Tree Farms 25-1H Survey	Site: Section 36-19S-1W North Reference:	Project: McPherson County Kansas MD Reference	Company: Orca Operating Company TVD Reference:	Database: Oklahoma District Local C
	Survey Calculation Method: Minimum Curvature	erence: True	## Shade Tree Farms 25-1H 1566' GL + 16' RKB @ 1582.0usft (Original Well Elev)	ence: Shade Tree Farms 25-1H 1566' GL + 16' RKB @ 1582.0usft (Original Well Elev)	Local Co-ordinate Reference: Well Shade Tree Farms 25-1H

																														Planned Survey
PBHL Shade	4,051.8	4,000.0	3,900.0	3,800.0	3,700.0	3,600.0	3,500.0	3,439.8	3,400.0	3,300.0	3,200.0	3,100.0	3,000.0	2,900.0	2,800.0	2,700.0	2,625.0	2,600.0	2,500.0	2,400.0	2,300.0	2,200.0	2,100.0	2,000.0	1,900.0	1,825.0	Canton SWD	0.0	Measured Depth (usft)	Survey
PBHL Shade Tree Farms 25-1H Sump	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00	58.13	50.63	43.13	35.63	28.13	20.63	13.13	5.63	0.00	Canton SWD #1 Offset Well	0.00	Inclination (°)	
1H Sump	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	20.95	0.00		0.00	Azimuth	
	3,200.0	3,174.1	3,124.1	3,074.1	3,024.1	2,974.1	2,924.1	2,894.0	2,874.1	2,824.1	2,774.1	2,724.1	2,674.1	2,624.1	2,574.1	2,524.1	2,486.6	2,473.7	2,415.5	2,347.2	2,270.0	2,185.1	2,094.1	1,998.5	1,899.9	1,825.0		0.0	Vertical Depth (usft)	
	1,510.7	1,468.8	1,387.9	1,307.0	1,226.2	1,145.3	1,064.4	1,015.7	983.5	902.6	821.8	740.9	660.0	579.1	498.3	417.4	356.7	336.7	260.8	192.7	133.5	84.2	45.7	18.6	3.4	0.0		0.0	+N/-S (usft)	
	578.4	562.3	531.4	500.4	469.4	438.5	407.5	388.9	376.6	345.6	314.6	283.7	252.7	221.7	190.8	159.8	136.6	128.9	99.9	73.8	51.1	32.3	17.5	7.1	1.3	0.0		0.0	+E/-W (usft)	
	1,617.6	1,572.8	1,486.2	1,399.6	1,312.9	1,226.3	1,139.7	1,087.6	1,053.1	966.5	879.9	793.3	706.7	620.1	533.5	446.9	382.0	360.5	279.3	206.4	143.0	90.2	49.0	20.0	3.7	0.0		0.0	Vertical Section (usft)	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	0.00		0.00	Dogleg Rate (°/100usft)	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	0.00		0.00	Build Rate (°/100usft)	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00	Turn Rate (°/100usft)	
																														L

	Design largets									
	target	Dip Angle	Dip Dir.	TVD	+N/-S	+E/-W	Northing	Easting		
-	- Shape			(usft)	(usft)	(usft)	(usft)	(usft)	Latitude	Longitude
	Canton SWD #1 Offset \ 0.00 0.00 0.0 125.0 -25.0 - plan misses target center by 127.5usft at 0.0usft MD (0.0 TVD, 0.0 N, 0.0 E) - Circle (radius 46.8)	0.00 enter by 127.	0.00 5usft at 0.0us	0.0 sft MD (0.0 T	125.0 VD, 0.0 N, 0.	-25.0 0 E)	1,931,888.87	1,630,555.87	38° 21' 46.563 N	97° 23' 24.477 W
1.00	PBHL Shade Tree Farm: - plan hits target center - Point	0.00 er	0.00	3,200.0	1,510.7	578.4	1,933,281.64	1,631,142.72	38° 22' 0.261 N	38° 22′ 0.261 N 97° 23′ 16.901 W
ſ										





Orca Operating Company

McPherson County Kansas Section 36-19S-1W Shade Tree Farms 25-1H

Original Wellpath

Plan: Plan 1

Standard Planning Report

16 October, 2013







Design:	Wellbore:	Well:	Site:	Project:	Company:	Database.
Plan 1	Original Wellpath	Shade Tree Farms 25-1H	Section 36-19S-1W	McPherson County Kansas	Orca Operating Company	Oklahoma District
		Survey Calculation Method:	North Reference:	MD Reference:	TVD Reference:	Local Co-ordinate Reference:
		Minimum Curvature	True	Shade Tree Farms 25-1H 1566' GL + 16' RKB @ 1582.0usft (Original Well Elev)	Shade Tree Farms 25-1H 1566' GL + 16' RKB @ 1582.0usft (Original Well Elev)	Well Shade Tree Farms 25-1H

Project	McPherson County Kansas, McPherson County, South Central Kansas	ounty, South Central Kansas		
Map System: Geo Datum: Map Zone:	US State Plane 1983 North American Datum 1983 Kansas Southern Zone	System Datum:	Mean Sea Level	

Site	Section 36-19S-1W					
Site Position: From: Position Uncertainty:	Lat/Long	Northing: Easting: 0.0 usft Slot Radius:	Northing: Easting: Slot Radius:	1,931,663.88 usft L 1,630,558.55 usft L 0" G	usft Latitude: usft Longitude: 0 " Grid Convergence:	38° 21' 44.339 N 97° 23' 24.477 W 0.68°
Well	Shade Tree Farms 25-1H, Mississippian	-1H, Missis	sippian			
Well Position	+N/-S 100 +E/-W 25	100.0 usft 25.0 usft	Northing: Easting:	1,931,764.18 usft 1,630,582.35 usft	sft Latitude: sft Longitude:	97° 23' 24.163 W
Position Uncertainty		2.0 usft	Wellhead Elevation:	1,582.0 usft	sft Ground Level:	Level: 1,566.0 usft

	Magnetics M	Wellbore Origin
IGRF2010	Model Name	Original Wellpath
10/15/2013	Sample Date	
3.99	Declination (°)	
66.30	Dip Angle (°)	
52,423	Field Strength (nT)	

Design Audit Notes:	Plan 1				
Audit Notes:					
Version:		Phase:	PLAN	Tie On Depth:	3,439.8
Vertical Section:		Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
		0.0	0.0	0.0	20.95

0.00 PBHL Shade Tree Fai	0.00	0.00	0.00	1,377.1	3,597.4	2,925.0	20.95	90.00	6,209.6
0.00 660 FSL NW/4 1000 F	0.00	0.00	0.00	1,368.5	3,575.0	2,925.0	20.95	90.00	6,185.6
-0.01	0.00	24.76	24.76	430.2	1,123.8	2,925.0	20.95	90.00	3,561.0
0.00	0.00	0.00	0.00	388.9	1,015.7	2,894.0	20.95	60.00	3,439.8
TFO Target	Turn Rate (°/100usft)	Build Rate (°/100usft)	Dogleg Rate (°/100usft)	+E/-W (usft)	+N/-S (usft)	Vertical Depth (usft)	Azimuth	Inclination (°)	Plan Sections Measured Depth (usft)





Database:	Oklahoma District	Local Co-ordinate Reference:	Well Shade Tree Farms 25-1H
Company:	Orca Operating Company	TVD Reference:	Shade Tree Farms 25-1H 1566' GL + 16' RKB
			@ 1582.0usft (Original Well Elev)
Project:	McPherson County Kansas	MD Reference:	Shade Tree Farms 25-1H 1566' GL + 16' RKB
			@ 1582.0usft (Original Well Elev)
Site:	Section 36-19S-1W	North Reference:	True
Well:	Shade Tree Farms 25-1H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Original Wellpath		
Design:	Plan 1		

Measured Depth (usft)	Inclination (°)	Azimuth	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)
3,439.8	60.00	20.95	2,894.0	1,015.7	388.9	1,087.6	0.00	0.00
Canton SWI	Canton SWD 1-36 Offset Well	Ī						
3,500.0	74.90		2,917.0	1,067.5	408.7	1,143.1	24.76	24.76
3,561.0	90.00	20.95	2,925.0	1,123.8	430.2	1,203.3	24.76	24.76
LP Shade Tr	LP Shade Tree Farms 25-1H							
3,600.0	90.00	20.95	2,925.0	1,160.2	444.2	1,242.3	0.00	0.00
3,700.0	90.00	20.95	2,925.0	1,253.6	479.9	1,342.3	0.00	0.00
3.800.0	90.00	20.95	2.925.0	1.347.0	515.7	1,442.3	0.00	0.00
3 900 0	90 00	20.95	2.925.0	1.440.4	551.4	1.542.3	0.00	0.00
4.000.0	90.00	20.95	2,925.0	1,533.8	587.2	1,642.3	0.00	0.00
4.100.0	90.00	20.95	2,925.0	1,627.2	622.9	1,742.3	0.00	0.00
4,200.0	90.00	20.95	2,925.0	1,720.6	658.7	1,842.3	0.00	0.00
4,300.0	90.00	20.95	2,925.0	1,814.0	694.4	1,942.3	0.00	0.00
4,400.0	90.00	20.95	2,925.0	1,907.4	730.2	2,042.3	0.00	0.00
4,500.0	90.00	20.95	2,925.0	2,000.7	765.9	2,142.3	0.00	0.00
4,600.0	90.00	20.95	2,925.0	2,094.1	801.7	2,242.3	0.00	0.00
4,700.0	90.00	20.95	2,925.0	2,187.5	837.4	2,342.3	0.00	0.00
4,800.0	90.00	20.95	2,925.0	2,280.9	873.2	2,442.3	0.00	0.00
4,900.0	90.00	20.95	2,925.0	2,374.3	908.9	2,542.3	0.00	0.00
5,000.0	90.00	20.95	2,925.0	2,467.7	944.7	2,642.3	0.00	0.00
5,100.0	90.00	20.95	2,925.0	2,561.1	980.4	2,742.3	0.00	0.00
5,200.0	90.00	20.95	2,925.0	2,654.5	1,016.2	2,842.3	0.00	0.00
5,300.0	90.00	20.95	2,925.0	2,747.9	1,051.9	2,942.3	0.00	0.00
5,400.0	90.00	20.95	2,925.0	2,841.3	1,087.7	3,042.3	0.00	0.00
5,500.0	90.00	20.95	2,925.0	2,934.7	1,123.4	3,142.3	0.00	0.00
5,600.0	90.00	20.95	2,925.0	3,028.1	1,159.2	3,242.3	0.00	0.00
5,700.0	90.00	20.95	2,925.0	3,121.4	1,194.9	3,342.3	0.00	0.00
5,800.0	90.00	20.95	2,925.0	3,214.8	1,230.7	3,442.3	0.00	0.00
5,900.0	90.00	20.95	2,925.0	3,308.2	1,266.4	3,542.3	0.00	0.00
6,000.0	90.00	20.95	2,925.0	3,401.6	1,302.2	3,642.3	0.00	0.00
6,100.0	90.00	20.95	2,925.0	3,495.0	1,337.9	3,742.3	0.00	0.00
6,185.6	90.00	20.95	2,925.0	3,575.0	1,368.5	3,828.0	0.00	0.00
660 FSL NV	660 FSL NW/4 1000 FEL NW/4	14						
6 200 0	90.00	20.95	2,925.0	3,588.4	1,373.6	3,842.3	0.00	0.00
0,000.0		20 05	2.925.0	3,597.4	1,377.1	3,852.0	0.00	0.00

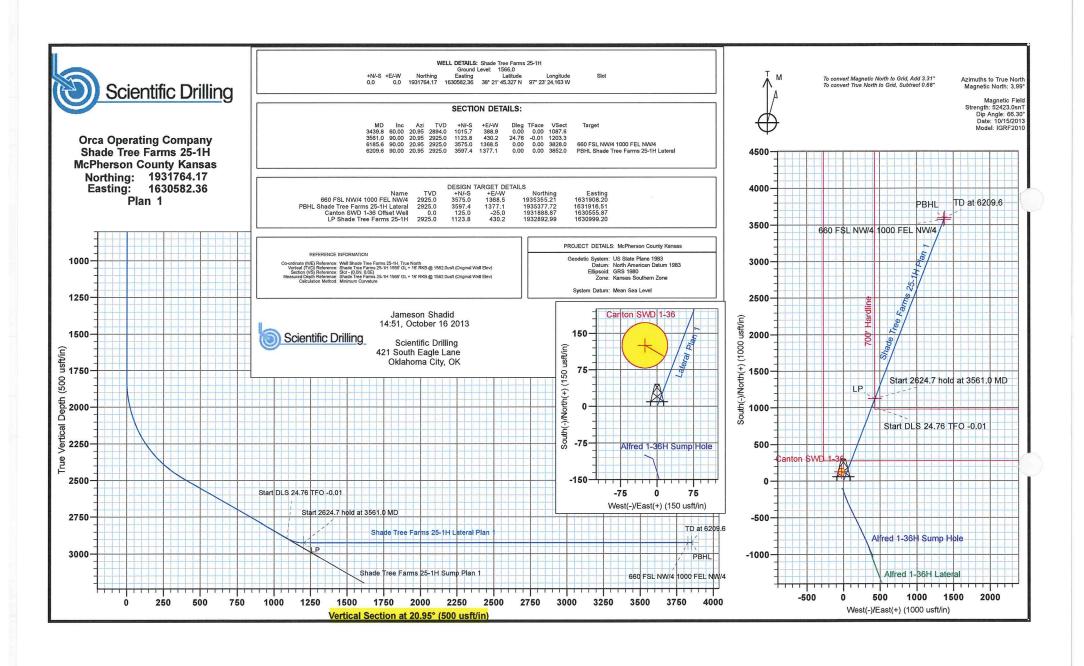




			Deorgii.
		Plan 1	Design:
		Original Wellpath	Wellbore:
Minimum Curvature	Survey Calculation Method:	Shade Tree Farms 25-1H	Well:
True	North Reference:	Section 36-19S-1W	Site:
Shade Tree Farms 25-1H 1566' GL + 16' RKB @ 1582.0usft (Original Well Elev)	MD Reference:	McPherson County Kansas	Project:
Shade Tree Farms 25-1H 1566' GL + 16' RKB @ 1582.0usft (Original Well Elev)	TVD Reference:	Orca Operating Company	Company:
Well Shade Tree Farms 25-1H	Local Co-ordinate Reference:	Oklahoma District	Database:

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle	Dip Dir.	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Canton SWD 1-36 Offse 0.00 0.00 125.0 -25.0 1,9 -plan misses target center by 3056.1 usft at 3439.8 usft MD (2894.0 TVD, 1015.7 N, 388.9 E) - Circle (radius 46.8)	0.00 enter by 3056	0.00 s.1usft at 343	0.0 39.8usft MD	125.0 (2894.0 TVD,	-25.0 1015.7 N, 388	1,931,888.87 !.9 E)	1,630,555.87	38° 21' 46.563 N	97° 23' 24.477 W
LP Shade Tree Farms 2t - plan hits target center - Point	0.00	0.00	2,925.0	1,123.8	430.2	1,932,892.99	1,630,999.19	38° 21' 56.437 N	97° 23′ 18.761 W
PBHL Shade Tree Farm: - plan hits target center - Point	0.00	0.00	2,925.0	3,597.4	1,377.1	1,935,377.73	1,631,916.51	38° 22' 20.889 N	97° 23' 6.871 W
660 FSL NW/4 1000 FEI - plan hits target center - Point	0.00	0.00	2,925.0	3,575.0	1,368.5	1,935,355.21	1,631,908.20	38° 22' 20.668 N	97° 23' 6.979 W

10/16/2013 2:44:24PM Page 4 COMPASS 5000.1 Build 70



of record, unitize and consolidate the oil and gas rights in and to the oil and gas leasehold estate created well in the Mississippian formation in a 640 acre unit underlying Section 25, Township 9 South, Range 1 Orca Operating Company has acquired the leasehold interest necessary to drill a horizontal producing by the oil and gas leases listed below to form an oil and gas unit of approximately 640 acres. West in McPherson County, Kansas. Orca intends to, by filing of a Declaration of Unitization Instrument

Oil and Gas Leases

LEASE NO. 1:

December 28, 1973

Recorded: Book 202 at Page 243

Lessors: James Peters and Marjorie Peters, husband and wife

Description: S/2 NW/4, Section 25-T19S-R1W,

LEASE NO. 2:

April 19, 2013

Recorded: Book 657 at Page 6112

Lessors: Anthony J. Sullivan and Charlsie M. Sullivan, his wife Sullivan Tract in SW/4 Section 25-T19S-R1W,

Description:

More fully described as:

Beginning at the SW/c SW/4; North 589.43 feet

for a POB; North 345.57 feet; East 833.79 feet;

South 329.53 feet; West 833.63 feet to the POB

LEASE NO. 3:

April 24, 2013

Recorded: Book 657 at Page 4347

Lessors: Shade Tree Farms, L.P., a Kansas limited partnership

Description: North 53.33 acres of SW/4, Section 25-T19S-R1W

LEASE NO. 4:

April 27, 2009

Recorded: Book 647 at Page 4981

Lessors: Jean Koehn, Trustee of the Jean Koehn Revocable Trust dated 4/23/1997

Description: W/2 SE/4, Section 25-T19S-R1W

LEASE NO. 5:

April 22, 2009

Recorded: Book 657 at Page 4973

Lessors: Leroy E. & Doris L. Bitikofer Revocable Living Trust, dated January 15, 2007

Description: NE/4 SE/4, Section 25-T19S-R1W

LEASE NO. 6:

Date:

Recorded: April 22, 2009 Book 647 at Page 4971

Description: Lessors: Juanita Koehn, a widow SE/4 SE/4, Section 25-T19S-R1W

LEASE NO. 7:

April 15, 2009

Recorded:

Lessors: Book 647 at Page 4987

DuMont K. Schmidt as Attorney-in-Fact for Ella M. Schmidt a/k/a Ella K. Schmidt,

a widow

Description: NE/4 NW4, NW/4 NW/4, Section 25-T19S-R1W

LEASE NO. 8:

April 3, 2009

Recorded: Book 647 at Page 2778

Lessors: Lloyd S. Voth Trustee of the Lloyd S. Voth Revocable Trust dated 2/1/79 and Marlene R. Voth Trustee of the Marlene R. Voth Revocable Trust dated 2/1/79 N/2 NE/4, Section 25-T19S-R1W

Description:

LEASE NO. 9:

April 6, 2009

Recorded: Book 647 at Page 2780

Lessors:

Description: Shade Tree Farms LP S/2 NE/4, Sec. 25;E/2, Sec. 36;in T19S-R1W

LEASE NO. 10:

August 17, 2009

Recorded: Book 648 at Page 2449

Shade Tree Farms LP

Description: South 106.67 acres of the SW/4, Section 25-T19S-R1W

Two separate highway deeds issued to the Kansas Department of Transportation covering a total of 2.98 net mineral acres across the north 75 feet of the the NW NW & NE NW.

3649S-1W	Shade Tree Farms LP SUMP HOLE PBHL: 1225' FSL SW4 & 850' FWL SW1 Anthony J. Sullivan and Charlise M Sullivan, his wife	James Peters and Marjorie Peters, husband and wife LATERAL PBHL: 660 FSL NW4 & 1000' FEL NW4	Ella K Schmidt Life Estate Ella K Schmidt Life Estate
-1W	Leroy E. & Doris L. Bitikofer Revocable Living Trust; dated January 15, 2007 Jean Koehn, Trustee of the Jean Koehn Revocable Trust dated 4/23/1997 Juanita Koehn, a widow	Shade Tree Farms LP	Lloyd S. Voth Trustee of the Lloyd S. Voth Revocable Trust (2/1779) and Marlene R. Voth Trustee of the Marlene R Voth Revocable Trust (2/1/79)

6206284877

RELEASE BY SURFACE OWNER

Surface Owner: Dennis E. Bitikofer and Mary J. Bitikofer, Trustees of the

Dennis E. & Mary J. Bitikofer Rev. Living Trust dtd. Jan. 15, 2007 1135 29th Street

Canton, KS 67428

Operator:

Orca Operating Company, LLC 427 S. Boston, Ste. 400

Tulsa, OK 74103

Effective Date: November 18, 2013

injuries or damages of whatever nature, kind, or character sustained by Surface Owner personally, or to the property or lands of Surface Owner, as a result of the construction of an off-site reserve pit (the "Reserve Pit") to service the drilling of the ShadeTree No. 1-25H, with said Reserve Pit being located on the following lands in McPherson County, KS: officers, agents, contractors, subcontractors, employees, successors, and assigns, from any and all claims, demands, damages, liabilities, and causes of action caused by or arising from any For adequate consideration, the receipt and sufficiency of which is acknowledged, Surface Owner, named above, releases and discharges in full, Operator, named above, and its

Township 19 South, Range 1 West

S/2 Section 36

Release is accepted by Surface Owner as full and final payment, settlement, and discharge of all claims of whatever nature, kind, and character which Surface Owner may have against Operator related to the construction, use or closure and remediation of the Reserve Pit. The consideration paid by Operator to Surface Owner at the time of delivery of this

commencement of construction of the Reserve Pit. nearly as is reasonably practical to the same condition the property was in prior to the Upon abandonment of the property, Operator shall restore the surface of the land as

effective for all purposes as of the Effective Date This Release is signed by Surface Owner as of the date beside the signature below but is

SURFACE OWNER:

Ву: CHILLE

Dennis E. Bitikofer

Date:

By:

Mary J. Blikofer

Date:

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Sam Brownback, Governor

Mark Sievers, Chairman Thomas E. Wright, Commissioner Shari Feist Albrecht, Commissioner

November 22, 2013

WADE CAGLE Orca Operating Company LLC 427 S. BOSTON, STE 400 TULSA, OK 74103

Re: Drilling Pit Application SHADE TREE 25-1H NW/4 Sec.36-19S-01W McPherson County, Kansas

Dear WADE CAGLE:

According to the drilling pit application referenced above, no earthen pits will be used at this location. Steel pits will be used. Please inform the Commission in writing as to which disposal well you utilized to dispose of the contents in the steel pits and the amount of fluid that was disposed. Please file form CDP-5 (August 2008), Exploration and Production Waste Transfer, within 30 days of fluid removal.

Should a haul-off pit be necessary please file form CDP-1 (April 2004), Application for Surface Pit, through KOLAR. This location will have to be inspected prior to approval of the haul-off pit application.

A copy of this letter should be posted in the doghouse along with the approved Intent to **Drill**. If you have any questions or concerns please feel free to contact the District Office at (316) 630-4000.

Conservation Division Finney State Office Building 130 S. Market, Rm. 2078 Wichita, KS 67202-3802



Phone: 316-337-6200 Fax: 316-337-6211 http://kcc.ks.gov/

Sam Brownback, Governor

Mark Sievers, Chairman Thomas E. Wright, Commissioner Shari Feist Albrecht, Commissioner

HAUL-OFF PIT APPLICATION FILING REQUIREMENTS

82-3-607. (a)	DISPOSAL OF DIKE AND PIT CONTENTS. Each operator shall perform one of the following when disposing of dike or
pit	contento
(1)	contents: Remove the liquid contents to a disposal well or other oil and gas operation approved by the commission or to road maintenance or construction locations approved by the department;
(2)	dispose of reserve pit waste down the annular space of a well completed according to the alternate I requirements of K.A.R. 82-3-106, if the waste to be disposed of was generated during the drilling and completion of the well;
or	
(3)	dispose of the remaining solid contents in any manner required by the commission. The requirements may include any of the following: (A) Burial in place, in accordance with the grading and restoration requirements in K.A.R. 82-3-602 (f); (B) removal and placement of the contents in an on-site disposal area
	approved by the commission;
	(C) removal and placement of the contents in an off-site disposal area
on	acreage owned by the same landowner or to another producing
lease from	or unit operated by the same operator, if prior written permission
пош	the landowner has been obtained; or

	(D)	removal of the contents to a permitted off-site disposal area
approved		
		by the department.
(b)	Eac	h violation of this regulation shall be punishable by the following:
(1	1) A \$ ²	1,000 penalty for the first violation;
(2	2) a \$2	2,500 penalty for the second violation; and
(3	a \$5	5,000 penalty and an operator license review for the third violation.

File Haul-Off Pit Application in KOLAR. Review the information below and attach all required documents to the pit application when submitting through KOLAR. This form will automatically generate and fill in from questions asked in KOLAR.

Haul-off pit will be located in an on-site disposal area:YesNo	
Haul-off pit is located in an off-site disposal area on acreage owned by the same landowner: YesNo If yes, written permission from the land owner must be obtained. Attach written permission to haul-off pit application.	
Haul-off pit is located in an off-site disposal area on another producing lease or unit operated by the same operator:YesNo If yes, written permission from the land owner must be obtained. Attach permission and a copy of the lease assignment that covers the acreage whe the haul-off pit is to be located, to the haul-off pit application.	Э