

Submit 1 Copy To Appropriate District Office

District I - (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II - (575) 748-1283
811 S. First St., Artesia, NM 88210
District III - (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV - (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

WELL API NO.
30-041-20987

5. Indicate Type of Lease
STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

7. Lease Name or Unit Agreement Name

Haley Chaveroo San Andres Unit

8. Well Number 303 H

9. OGRID Number
164557

10. Pool name or Wildcat
Chaveroo; San Andres (12049)

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well ☒ Gas Well ☐ Other ☐

2. Name of Operator
Ridgeway Arizona Oil Corp

3. Address of Operator
575 N Dairy Ashford Rd, EC II, Suite 210, Houston, TX 77079

4. Well Location

Unit Letter N : 1100 feet from the S line and 1517 feet from the W line
Section 34 Township 07S Range 33E NMPM County ROOSEVELT

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
4400' Surface

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐
PULL OR ALTER CASING ☐ MULTIPLE COMPL ☐
DOWNHOLE COMMINGLE ☐
CLOSED-LOOP SYSTEM ☐
OTHER: ☐

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐
COMMENCE DRILLING OPNS. ☐ P AND A ☐
CASING/CEMENT JOB ☐

OTHER: Directional Survey ☒

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Attached is the final directional survey for the subject well.

Spud Date:

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE William Boyd TITLE Land & Regulatory Manager DATE 1/30/2020

Type or print name William Boyd E-mail address: wboyd@pedevco.com PHONE: (713) 574-7912
For State Use Only

APPROVED BY: [Signature] TITLE Petroleum Engineer DATE 02/05/2020
Conditions of Approval (if any):

Titan Directional Drilling

Survey Report

Company:	Ridgeway Arizona Oil Corp.	Local Co-ordinate Reference:	Well Haley Chaveroo SAU #303H
Project:	Permian NM E'83	TVD Reference:	GL+KB @ 4416.00usft (Norton 6)
Site:	HC SAU 301-303 Pad	MD Reference:	GL+KB @ 4416.00usft (Norton 6)
Well:	Haley Chaveroo SAU #303H	North Reference:	Grid
Wellbore:	#303H OH	Survey Calculation Method:	Minimum Curvature
Design:	#303H OH	Database:	EDM 5k-14

Project	Permian NM E'83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	New Mexico Eastern Zone	Using geodetic scale factor	

Site		HC SAU 301-303 Pad, Centered on est. 301 FTP 100'FNL 350'FWL			
Site Position:		Northing:	967,312.46 usft	Latitude:	33° 39' 23.732 N
From:	Map	Easting:	776,371.47 usft	Longitude:	103° 33' 39.349 W
Position Uncertainty:	0.00 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.43 °

Well	Haley Chaveroo SAU #303H					
Well Position	+N/-S	0.00 usft	Northing:	968,530.80 usft	Latitude:	33° 39' 35.699 N
	+E/-W	0.00 usft	Easting:	777,533.40 usft	Longitude:	103° 33' 25.495 W
Position Uncertainty		0.00 usft	Wellhead Elevation:	usft	Ground Level:	4,400.00 usft

Wellbore	#303H OH				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2015	07/18/19	6.83	61.33	48,560.46936611

Design	#303H OH				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.00
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.00	0.00	0.00	179.84	

Survey Program	Date 07/30/19			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
141.00	10,057.00	Survey #1 (#303H OH)	MWD	MWD - Standard
10,109.00	10,109.00	Projection (#303H OH)	ZERO-ERROR	Zero Error

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
HCSAU 303H SL										
141.00	0.70	152.30	141.00	-0.76	0.40	0.76	0.50	0.50	0.00	
232.00	0.90	162.80	231.99	-1.94	0.87	1.94	0.27	0.22	11.54	
323.00	1.60	138.40	322.97	-3.57	1.92	3.58	0.95	0.77	-26.81	
413.00	2.90	122.80	412.90	-5.74	4.67	5.76	1.58	1.44	-17.33	
503.00	4.70	113.60	502.69	-8.45	9.97	8.48	2.11	2.00	-10.22	
595.00	6.90	108.70	594.22	-11.73	18.66	11.79	2.45	2.39	-5.33	
687.00	8.90	104.00	685.34	-15.23	30.80	15.31	2.28	2.17	-5.11	
778.00	10.70	102.20	775.01	-18.72	45.89	18.84	2.01	1.98	-1.98	

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Site:	HC SAU 301-303 Pad	MD Reference:	GL+KB @ 4416.00usft (Norton 6)
Well:	Haley Chaveroo SAU #303H	North Reference:	Grid
Wellbore:	#303H OH	Survey Calculation Method:	Minimum Curvature
Design:	#303H OH	Database:	EDM 5k-14

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
870.00	12.70	102.90	865.09	-22.78	64.09	22.96	2.18	2.17	0.76
963.00	14.60	105.20	955.46	-28.14	85.37	28.37	2.12	2.04	2.47
1,054.00	16.20	105.90	1,043.19	-34.62	108.65	34.92	1.77	1.76	0.77
1,146.00	16.20	108.90	1,131.54	-42.29	133.13	42.67	0.91	0.00	3.26
1,238.00	16.30	109.80	1,219.87	-50.82	157.42	51.26	0.29	0.11	0.98
1,329.00	15.60	111.00	1,307.36	-59.53	180.86	60.04	0.85	-0.77	1.32
1,421.00	14.30	110.30	1,396.25	-67.91	203.07	68.48	1.43	-1.41	-0.76
1,515.00	14.90	110.30	1,487.21	-76.13	225.29	76.76	0.64	0.64	0.00
1,609.00	14.70	109.20	1,578.09	-84.25	247.89	84.94	0.37	-0.21	-1.17
1,703.00	14.90	108.00	1,668.98	-91.90	270.64	92.66	0.39	0.21	-1.28
1,798.00	15.40	108.20	1,760.67	-99.62	294.24	100.44	0.53	0.53	0.21
1,891.00	15.60	111.20	1,850.29	-108.00	317.63	108.88	0.89	0.22	3.23
1,986.00	15.40	112.60	1,941.84	-117.46	341.19	118.41	0.45	-0.21	1.47
2,080.00	16.70	112.40	2,032.17	-127.41	365.20	128.43	1.38	1.38	-0.21
2,174.00	17.80	114.00	2,121.94	-138.40	390.81	139.49	1.27	1.17	1.70
2,259.00	17.90	116.40	2,202.85	-149.49	414.38	150.65	0.87	0.12	2.82
2,311.00	17.75	114.13	2,252.36	-156.28	428.77	157.48	1.36	-0.29	-4.36
9 5/8"									
2,375.00	17.60	111.30	2,313.34	-163.79	446.69	165.03	1.36	-0.23	-4.43
2,466.00	15.80	104.80	2,400.50	-171.95	471.49	173.27	2.85	-1.98	-7.14
2,559.00	14.80	99.40	2,490.21	-177.13	495.45	178.51	1.87	-1.08	-5.81
2,650.00	13.00	100.60	2,578.54	-180.91	516.98	182.35	2.00	-1.98	1.32
2,741.00	12.90	101.70	2,667.23	-184.85	536.99	186.35	0.29	-0.11	1.21
2,834.00	13.30	99.40	2,757.81	-188.70	557.71	190.26	0.71	0.43	-2.47
2,928.00	13.50	97.80	2,849.25	-191.96	579.25	193.57	0.45	0.21	-1.70
3,021.00	13.40	104.70	2,939.70	-196.17	600.43	197.84	1.73	-0.11	7.42
3,115.00	13.10	102.20	3,031.20	-201.18	621.37	202.91	0.69	-0.32	-2.66
3,207.00	12.60	102.40	3,120.90	-205.54	641.36	207.33	0.55	-0.54	0.22
3,301.00	13.40	110.60	3,212.50	-211.57	661.58	213.42	2.14	0.85	8.72
3,394.00	13.10	109.20	3,303.02	-218.83	681.62	220.73	0.47	-0.32	-1.51
3,489.00	12.80	110.50	3,395.60	-226.06	701.64	228.02	0.44	-0.32	1.37
3,582.00	12.70	108.00	3,486.31	-232.82	721.01	234.84	0.60	-0.11	-2.69
3,675.00	11.80	107.10	3,577.19	-238.78	739.82	240.84	0.99	-0.97	-0.97
3,707.00	11.70	106.80	3,608.52	-240.68	746.06	242.76	0.37	-0.31	-0.94
3,738.00	12.10	110.30	3,638.86	-242.71	752.11	244.81	2.66	1.29	11.29
3,770.00	13.20	119.80	3,670.08	-245.69	758.43	247.81	7.34	3.44	29.69
3,802.00	14.50	127.00	3,701.15	-249.92	764.80	252.06	6.74	4.06	22.50
3,832.00	16.40	133.50	3,730.07	-255.10	770.87	257.25	8.56	6.33	21.67
3,864.00	19.10	139.10	3,760.55	-262.17	777.58	264.34	9.97	8.44	17.50
3,896.00	21.80	141.40	3,790.53	-270.77	784.72	272.96	8.80	8.44	7.19
3,927.00	24.40	143.70	3,819.04	-280.43	792.10	282.64	8.88	8.39	7.42
3,958.00	26.70	144.90	3,847.01	-291.29	799.90	293.52	7.60	7.42	3.87
3,990.00	29.40	146.10	3,875.25	-303.69	808.41	305.95	8.62	8.44	3.75

Titan Directional Drilling

Survey Report

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Site:	HC SAU 301-303 Pad	MD Reference:	GL+KB @ 4416.00usft (Norton 6)
Well:	Haley Chaveroo SAU #303H	North Reference:	Grid
Wellbore:	#303H OH	Survey Calculation Method:	Minimum Curvature
Design:	#303H OH	Database:	EDM 5k-14

Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
4,021.00	32.10	147.20	3,901.89	-316.94	817.12	319.22	8.90	8.71	3.55
4,051.00	34.80	149.30	3,926.92	-331.00	825.81	333.30	9.79	9.00	7.00
4,082.00	37.80	150.40	3,951.90	-346.87	835.02	349.20	9.90	9.68	3.55
4,114.00	40.40	151.40	3,976.73	-364.50	844.83	366.86	8.36	8.13	3.13
4,122.00	40.94	151.69	3,982.80	-369.09	847.32	371.45	7.17	6.76	3.66
5 1/2"									
4,145.00	42.50	152.50	3,999.96	-382.61	854.48	385.00	7.17	6.78	3.51
4,175.00	45.40	153.00	4,021.56	-401.12	864.01	403.54	9.74	9.67	1.67
4,207.00	48.20	154.90	4,043.46	-422.08	874.24	424.52	9.76	8.75	5.94
4,238.00	50.70	155.60	4,063.62	-443.47	884.10	445.94	8.24	8.06	2.26
4,270.00	53.40	155.50	4,083.29	-466.44	894.54	468.94	8.44	8.44	-0.31
4,300.00	55.30	155.50	4,100.78	-488.62	904.65	491.15	6.33	6.33	0.00
4,332.00	57.80	155.80	4,118.41	-512.95	915.66	515.50	7.85	7.81	0.94
4,352.00	58.36	155.67	4,128.99	-528.42	922.63	531.00	2.86	2.81	-0.63
Tangent Start									
4,364.00	58.70	155.60	4,135.25	-537.75	926.86	540.33	2.86	2.81	-0.62
4,395.00	58.90	155.50	4,151.31	-561.88	937.83	564.50	0.70	0.65	-0.32
4,425.00	59.09	155.59	4,166.77	-585.29	948.48	587.94	0.68	0.62	0.31
7"									
4,427.00	59.10	155.60	4,167.79	-586.85	949.18	589.50	0.68	0.63	0.31
4,458.00	59.20	155.40	4,183.69	-611.07	960.22	613.75	0.64	0.32	-0.65
4,489.00	59.60	155.50	4,199.47	-635.34	971.31	638.05	1.32	1.29	0.32
4,520.00	60.20	155.60	4,215.02	-659.76	982.41	662.50	1.96	1.94	0.32
4,551.00	60.50	155.50	4,230.35	-684.28	993.56	687.05	1.01	0.97	-0.32
4,583.00	61.00	156.00	4,245.99	-709.74	1,005.03	712.54	2.07	1.56	1.56
4,614.00	61.50	156.50	4,260.90	-734.61	1,015.97	737.45	2.15	1.61	1.61
4,619.00	61.74	156.83	4,263.28	-738.65	1,017.71	741.49	7.48	4.80	6.53
Tangent End									
4,645.00	63.00	158.50	4,275.33	-759.96	1,026.47	762.82	7.48	4.85	6.44
4,677.00	64.60	160.40	4,289.46	-786.84	1,036.54	789.73	7.31	5.00	5.94
4,708.00	66.20	162.50	4,302.37	-813.56	1,045.50	816.48	8.04	5.16	6.77
4,740.00	68.40	164.30	4,314.72	-841.85	1,053.93	844.79	8.61	6.88	5.63
4,771.00	70.30	165.80	4,325.65	-869.88	1,061.41	872.84	7.62	6.13	4.84
4,803.00	72.20	166.90	4,335.93	-899.32	1,068.56	902.30	6.77	5.94	3.44
4,834.00	74.00	168.10	4,344.95	-928.28	1,074.98	931.28	6.89	5.81	3.87
4,866.00	75.40	169.30	4,353.39	-958.54	1,081.03	961.56	5.68	4.38	3.75
4,897.00	76.50	170.60	4,360.92	-988.15	1,086.27	991.18	5.40	3.55	4.19
4,929.00	78.40	172.20	4,367.87	-1,019.04	1,090.94	1,022.08	7.69	5.94	5.00
4,960.00	80.70	173.60	4,373.49	-1,049.28	1,094.71	1,052.34	8.65	7.42	4.52
4,991.00	82.60	175.00	4,377.99	-1,079.80	1,097.75	1,082.86	7.58	6.13	4.52
4,994.00	82.77	175.09	4,378.38	-1,082.77	1,098.01	1,085.83	6.42	5.62	3.14
S3 Entry - HCSAU 303H S3 Entry									
5,023.00	84.40	176.00	4,381.62	-1,111.50	1,100.25	1,114.57	6.42	5.63	3.12
5,055.00	86.60	177.40	4,384.13	-1,143.34	1,102.08	1,146.42	8.14	6.88	4.38

Titan Directional Drilling

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Well:	Haley Chaveroo SAU #303H	North Reference:	Grid
Wellbore:	#303H OH	Survey Calculation Method:	Minimum Curvature
Design:	#303H OH	Database:	EDM 5k-14

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
5,087.00	88.30	177.30	4,385.55	-1,175.28	1,103.56	1,178.35	5.32	5.31	-0.31	
5,129.00	89.20	177.40	4,386.47	-1,217.22	1,105.50	1,220.30	2.16	2.14	0.24	
5,224.00	90.60	177.80	4,386.63	-1,312.13	1,109.48	1,315.23	1.53	1.47	0.42	
5,319.00	90.90	178.70	4,385.39	-1,407.08	1,112.38	1,410.18	1.00	0.32	0.95	
5,412.00	90.20	178.80	4,384.50	-1,500.05	1,114.41	1,503.16	0.76	-0.75	0.11	
5,506.00	89.30	179.20	4,384.91	-1,594.04	1,116.05	1,597.15	1.05	-0.96	0.43	
5,601.00	90.90	180.20	4,384.74	-1,689.03	1,116.55	1,692.14	1.99	1.68	1.05	
5,694.00	90.70	180.60	4,383.44	-1,782.02	1,115.90	1,785.13	0.48	-0.22	0.43	
5,787.00	89.50	181.10	4,383.28	-1,875.01	1,114.52	1,878.11	1.40	-1.29	0.54	
5,881.00	88.50	181.70	4,384.92	-1,968.96	1,112.22	1,972.06	1.24	-1.06	0.64	
5,975.00	88.50	181.50	4,387.38	-2,062.90	1,109.60	2,065.99	0.21	0.00	-0.21	
6,070.00	88.80	181.50	4,389.62	-2,157.84	1,107.11	2,160.92	0.32	0.32	0.00	
6,164.00	89.00	178.70	4,391.42	-2,251.81	1,106.95	2,254.89	2.99	0.21	-2.98	
6,258.00	89.80	178.30	4,392.41	-2,345.77	1,109.41	2,348.86	0.95	0.85	-0.43	
6,352.00	90.50	178.70	4,392.16	-2,439.74	1,111.87	2,442.83	0.86	0.74	0.43	
6,443.00	89.90	179.50	4,391.85	-2,530.72	1,113.30	2,533.82	1.10	-0.66	0.88	
6,534.00	90.70	179.70	4,391.37	-2,621.72	1,113.94	2,624.82	0.91	0.88	0.22	
6,625.00	90.40	180.10	4,390.50	-2,712.72	1,114.09	2,715.82	0.55	-0.33	0.44	
6,715.00	90.60	180.60	4,389.71	-2,802.71	1,113.55	2,805.81	0.60	0.22	0.56	
6,805.00	89.30	180.20	4,389.79	-2,892.71	1,112.92	2,895.80	1.51	-1.44	-0.44	
6,897.00	88.90	179.00	4,391.23	-2,984.69	1,113.56	2,987.79	1.37	-0.43	-1.30	
6,989.00	89.80	177.40	4,392.28	-3,076.64	1,116.45	3,079.74	2.00	0.98	-1.74	
7,081.00	90.00	177.10	4,392.44	-3,168.53	1,120.86	3,171.65	0.39	0.22	-0.33	
7,172.00	90.20	177.30	4,392.28	-3,259.42	1,125.31	3,262.55	0.31	0.22	0.22	
7,265.00	89.70	177.60	4,392.36	-3,352.33	1,129.45	3,355.47	0.63	-0.54	0.32	
7,356.00	90.60	178.30	4,392.12	-3,443.27	1,132.70	3,446.42	1.25	0.99	0.77	
7,448.00	90.00	179.90	4,391.64	-3,535.25	1,134.15	3,538.40	1.86	-0.65	1.74	
7,540.00	90.60	179.90	4,391.16	-3,627.25	1,134.31	3,630.40	0.65	0.65	0.00	
7,631.00	90.00	179.90	4,390.68	-3,718.25	1,134.47	3,721.40	0.66	-0.66	0.00	
7,723.00	89.90	180.20	4,390.76	-3,810.25	1,134.36	3,813.40	0.34	-0.11	0.33	
7,817.00	90.50	180.60	4,390.43	-3,904.24	1,133.73	3,907.39	0.77	0.64	0.43	
7,910.00	90.90	180.20	4,389.30	-3,997.23	1,133.08	4,000.38	0.61	0.43	-0.43	
8,004.00	90.30	180.10	4,388.31	-4,091.23	1,132.83	4,094.38	0.65	-0.64	-0.11	
8,099.00	90.10	182.20	4,387.98	-4,186.20	1,130.93	4,189.35	2.22	-0.21	2.21	
8,194.00	91.40	184.30	4,386.74	-4,281.04	1,125.54	4,284.16	2.60	1.37	2.21	
8,288.00	91.40	185.90	4,384.44	-4,374.63	1,117.19	4,377.73	1.70	0.00	1.70	
8,383.00	90.00	188.70	4,383.28	-4,468.84	1,105.12	4,471.91	3.29	-1.47	2.95	
8,478.00	90.50	188.70	4,382.87	-4,562.75	1,090.75	4,565.78	0.53	0.53	0.00	
8,572.00	91.10	191.30	4,381.55	-4,655.30	1,074.43	4,658.29	2.84	0.64	2.77	
8,667.00	91.30	190.40	4,379.56	-4,748.58	1,056.55	4,751.52	0.97	0.21	-0.95	
8,761.00	90.00	191.10	4,378.50	-4,840.93	1,039.02	4,843.81	1.57	-1.38	0.74	
8,855.00	89.70	190.60	4,378.74	-4,933.24	1,021.33	4,936.08	0.62	-0.32	-0.53	
8,950.00	90.70	190.40	4,378.41	-5,026.65	1,004.01	5,029.44	1.07	1.05	-0.21	
9,044.00	90.50	190.40	4,377.43	-5,119.10	987.05	5,121.84	0.21	-0.21	0.00	

Titan Directional Drilling Survey Report

Company:	Ridgeway Arizona Oil Corp.	Local Co-ordinate Reference:	Well Haley Chaveroo SAU #303H
Project:	Permian NM E'83	TVD Reference:	GL+KB @ 4416.00usft (Norton 6)
Site:	HC SAU 301-303 Pad	MD Reference:	GL+KB @ 4416.00usft (Norton 6)
Well:	Haley Chaveroo SAU #303H	North Reference:	Grid
Wellbore:	#303H OH	Survey Calculation Method:	Minimum Curvature
Design:	#303H OH	Database:	EDM 5k-14

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	±N/S (usft)	±E/W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
9,138.00	89.60	189.90	4,377.35	-5,211.63	970.48	5,214.32	1.10	-0.96	-0.53
9,232.00	90.40	189.60	4,377.35	-5,304.27	954.56	5,306.92	0.91	0.85	-0.32
9,326.00	90.00	189.90	4,377.02	-5,396.91	938.64	5,399.51	0.53	-0.43	0.32
9,420.00	90.00	191.00	4,377.02	-5,489.35	921.59	5,491.90	1.17	0.00	1.17
9,515.00	90.50	191.00	4,376.60	-5,582.61	903.47	5,585.11	0.53	0.53	0.00
9,610.00	90.00	191.30	4,376.19	-5,675.81	885.10	5,678.26	0.61	-0.53	0.32
9,702.00	89.20	191.50	4,376.83	-5,765.99	866.91	5,768.39	0.90	-0.87	0.22
9,796.00	89.90	190.00	4,377.57	-5,858.34	849.38	5,860.69	1.76	0.74	-1.60
9,830.00	90.23	189.28	4,377.53	-5,891.86	843.69	5,894.19	2.33	0.96	-2.13
5 1/2"									
9,890.00	90.80	188.00	4,377.00	-5,951.17	834.68	5,953.48	2.33	0.96	-2.13
9,930.27	90.50	189.71	4,376.54	-5,990.96	828.48	5,993.25	4.32	-0.74	4.26
HCSAU 303H LTP p4									
9,984.00	90.10	192.00	4,376.26	-6,043.72	818.36	6,045.98	4.32	-0.75	4.26
9,992.00	90.00	192.07	4,376.25	-6,051.55	816.69	6,053.80	1.48	-1.23	0.82
330°Exit - HCSAU 303H 330°Exit									
9,993.36	89.98	192.08	4,376.25	-6,052.88	816.41	6,055.14	1.48	-1.23	0.82
HCSAU 303H LTP									
10,057.00	89.20	192.60	4,376.70	-6,115.04	802.81	6,117.26	1.48	-1.23	0.82
HCSAU 303H PBHL p4									
10,109.00	89.20	192.60	4,377.43	-6,165.79	791.47	6,167.97	0.00	0.00	0.00
HCSAU 303H BHL - HCSAU 303H PBHL									

Design Targets

Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	±N/S (usft)	±E/W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
HCSAU 303H SL	0.00	0.00	0.00	0.00	0.00	968,530.80	777,533.40	33° 39' 35.699 N	103° 33' 25.495 W
- actual wellpath hits target center									
- Point									
HCSAU 303H 330°Exit	0.00	0.00	4,376.25	-6,051.55	816.69	962,479.42	778,350.07	33° 38' 35.773 N	103° 33' 16.373 W
- actual wellpath hits target center									
- Point									
HCSAU 303H BHL	0.00	0.00	4,377.43	-6,165.79	791.47	962,365.18	778,324.84	33° 38' 34.644 N	103° 33' 16.681 W
- actual wellpath hits target center									
- Point									
HCSAU 303H S3 Entry	0.00	0.00	4,378.38	-1,082.77	1,098.01	967,448.06	778,631.38	33° 39' 24.906 N	103° 33' 12.602 W
- actual wellpath hits target center									
- Point									

Titan Directional Drilling

Survey Report

Company:	Ridgeway Arizona Oil Corp.	Local Co-ordinate Reference:	Well Haley Chaveroo SAU #303H
Project:	Permian NM E'83	TVD Reference:	GL+KB @ 4416.00usft (Norton 6)
Site:	HC SAU 301-303 Pad	MD Reference:	GL+KB @ 4416.00usft (Norton 6)
Well:	Haley Chaveroo SAU #303H	North Reference:	Grid
Wellbore:	#303H OH	Survey Calculation Method:	Minimum Curvature
Design:	#303H OH	Database:	EDM 5k-14

Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
2,311.00	2,252.36	9 5/8"	9-5/8	13-1/2	
4,122.00	3,982.80	5 1/2"	5-1/2	8-3/4	
4,425.00	4,166.77	7"	7	8-3/4	
9,830.00	4,377.53	5 1/2"	5-1/2	8-3/4	

Design Annotations				
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment
		+N/S (usft)	+E/W (usft)	
4,352.00	4,128.99	-528.42	922.63	Tangent Start
4,619.00	4,263.28	-738.65	1,017.71	Tangent End
4,994.00	4,378.38	-1,082.77	1,098.01	S3 Entry
9,992.00	4,376.25	-6,051.55	816.69	330' Exit