

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

NM OIL CONSERVATION Form C-102
Revised October 12, 2005
Submit to Appropriate District Office
State Lease- 4 Copies
Fee Lease- 3 Copies

RECEIVED

☒ AMENDED REPORT
As Drilled

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-40761	Pool Code 97565	Pool Name North Seven Rivers, Glorieta - Yeso
Property Code 39485	Property Name OSAGE "18" FEE C COM	Well Number 1H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3576.4'

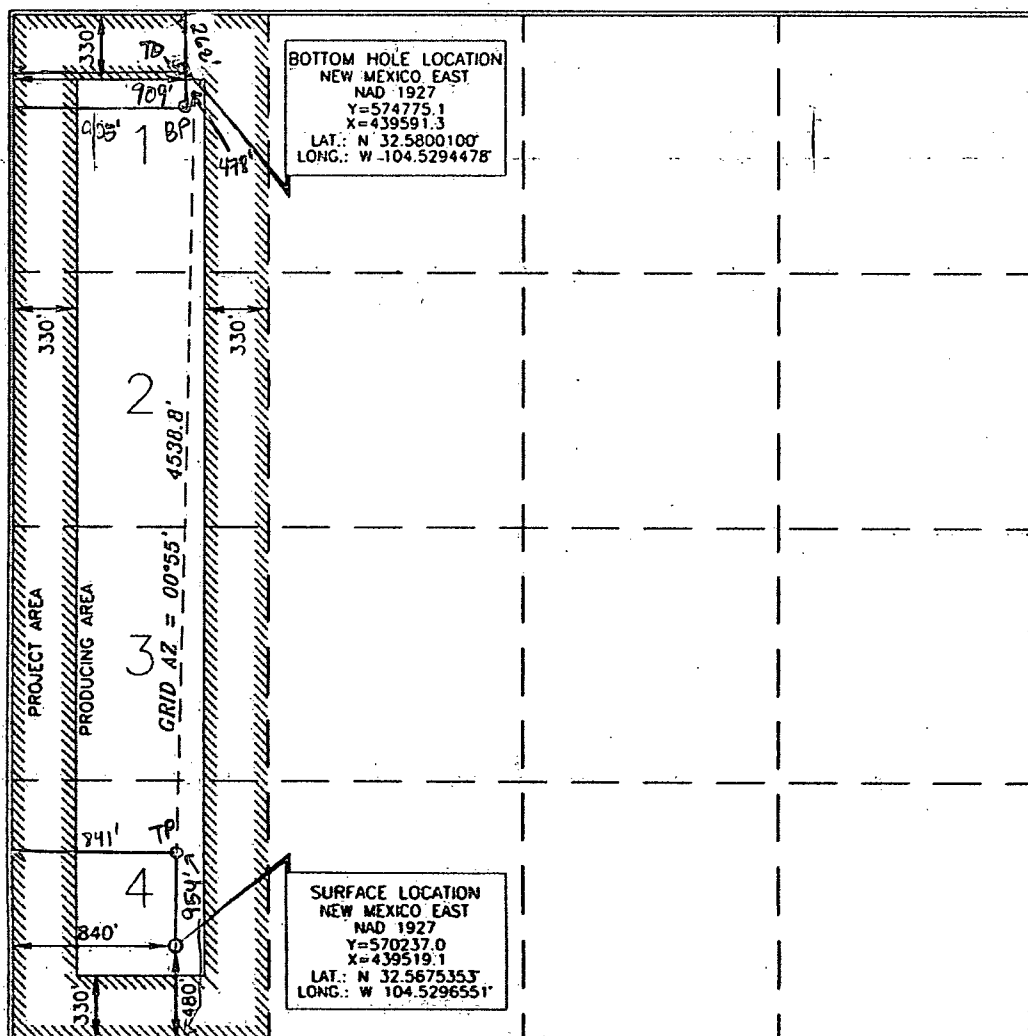
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
4	18	20 SOUTH	25 EAST, N.M.P.M.		480'	SOUTH	840'	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	18	20 SOUTH	25 EAST, N.M.P.M.		300' 262'	NORTH	840' 909'	WEST	EDDY
Dedicated Acres 158.4	Joint or Infill	Consolidation Code	Order No.	TD- 262' FNL 909' FNL BP- 478' FNL 905' FNL TP- 954' FSL 841' FNL					

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

[Signature] 3/26/15
Signature Date
Jana Mendiola
Printed Name

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

SEPTEMBER 21, 2009
Date of Survey
[Signature]
Signature of Professional Surveyor
Certificate Number 15079
WOB 110921WL-c (Rev. A) (KA)

NM OIL CONSERVATION
ARTESIA DISTRICT

MAR 30 2015

RECEIVED

OCCIDENTAL PERMIAN LTD.

North Seven Rivers
Eddy County, NM (Grid North)
Osage "18" Fee C Com #1H
VH - Job #320414-K-560

Survey: drop Gyro

SDI Survey Report

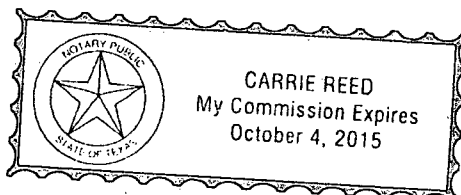
This survey is correct to the best of my knowledge and is supported by actual field data.

Richard

Notarized this date 30th of May, 2014.

Carrie Reed

Notary Signature
County of Midland
State of Texas



SDI
SDI Survey Report

Company:	OCCIDENTAL PERMIAN LTD.	Local Co-ordinate Reference:	Well Osage "18" Fee C Com #1H
Project:	North Seven Rivers	TVD Reference:	Mean Sea Level (System)
Site:	Eddy County, NM (Grid North)	MD Reference:	Mean Sea Level (System)
Well:	Osage "18" Fee C Com #1H	North Reference:	Grid
Wellbore:	VH - Job #320414-K-560	Survey Calculation Method:	Minimum Curvature
Design:	VH - Job #320414-K-560	Database:	EDM-Regulatory

Project:	North Seven Rivers		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site	Eddy County, NM (Grid North)				
Site Position:		Northing:	570,099.69 usft	Latitude:	32° 34' 1.817 N
From:	Lat/Long	Easting:	442,288.43 usft	Longitude:	104° 31' 14.394 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16"	Grid Convergence:	-0.10 °

Well	Osage "18" Fee C Com #1H, Horizontal					
Well Position	+N/-S	0.0 usft	Northing:	570,237.39 usft	Latitude:	32° 34' 3.131 N
	+E/-W	0.0 usft	Easting:	439,519.08 usft	Longitude:	104° 31' 46.758 W
Position Uncertainty		0.0 usft	Wellhead Elevation:	0.0 usft	Ground Level:	0.0 usft

Wellbore:	VH - Job #320414-K-560				
Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF2010	4/23/2014	7.70	60.27	48,457

Design:	VH - Job #320414-K-560				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)	
	0.0	0.0	0.0	0.91	

Survey Program	Date 5/15/2014			
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
109.4	630.0	drop Gyro (VH - Job #320414-K-560)	Keeper	Keeper Surface Readout

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	N/S (usft)	E/W (usft)	Closure Azimuth (°)	Closure Distance (usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.0
109.4	0.75	282.18	109.4	0.2	-0.7	282.18	0.7
199.7	0.46	271.90	199.7	0.3	-1.6	279.95	1.7
288.3	0.43	277.52	288.3	0.3	-2.3	278.39	2.4
374.9	0.67	280.39	374.9	0.5	-3.1	278.62	3.2
460.4	0.66	282.47	460.3	0.7	-4.1	279.29	4.2
543.3	0.58	292.10	543.3	0.9	-5.0	280.64	5.1
630.0	0.71	303.58	630.0	1.4	-5.8	283.48	6.0



Scientific Drilling

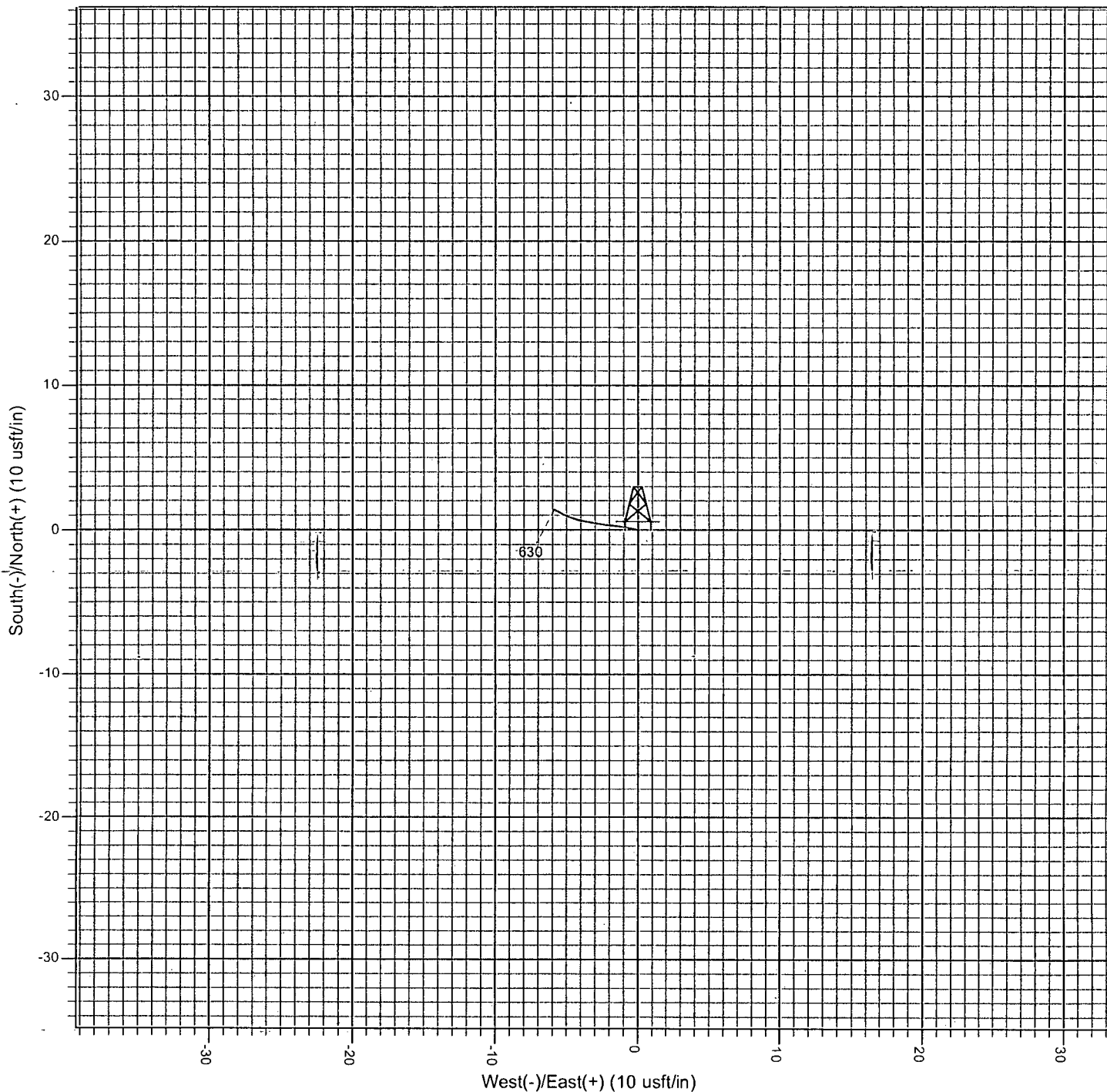
Project: North Seven Rivers
Eddy County, NM (Grid North)
Well: Osage "18" Fee C Com #1H
Wellbore: VH - Job #320414-K-560
Design: VH - Job #320414-K-560

WELL DETAILS: Osage "18" Fee C Com #1H

Mean Sea Level (System)

Ground Level: 0.0

+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Slot
0.0	0.0	570237.39	439519.08	32° 34' 3.131 N	104° 31' 46.758 W	



PROJECT DETAILS: North Seven Rivers	SITE DETAILS: Eddy County, NM (Grid North)
Geodetic System: US State Plane 1927 (Exact solution)	Site Centre Latitude: 32° 34' 1.817 N
Datum: NAD 1927 (NADCON CONUS)	Longitude: 104° 31' 14.394 W
Ellipsoid: Clarke 1866	Positional Uncertainty: 0.0
Zone: New Mexico East 3001	Convergence: -0.10
System Datum: Mean Sea Level	Local North: Grid



Weatherford International Ltd.

WET Survey Report X&Y's



Weatherford

Company: Occidental Permian Ltd.	Date: 5/1/2014	Time: 06:36:52	Page: 1
Field: Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference:	Well: Osage 18 Fee C Com #1H, Grid, North	
Site: Osage 18 Fee C Com #1H	Vertical (TVD) Reference:	SITE 3592.9	
Well: Osage 18 Fee C Com #1H	Section (VS) Reference:	Well (0.00N:0.00E,0.91Azi)	
Wellpath: 1	Survey Calculation Method:	Minimum Curvature	Db: Sybase

Survey:	Start Date:
Company:	Engineer:
Tool:	Tied-to:

Site:	Osage 18 Fee C Com #1H				
Site Position:	Northing:	570237.00 ft	Latitude:	32 34 3.127 N	
From: Map	Easting:	439519.10 ft	Longitude:	104 31 46.758 W	
Position Uncertainty:	0.00 ft		North Reference:	Grid	
Ground Level:	3576.40 ft		Grid Convergence:	-0.11 deg	

Well:	Osage 18 Fee C Com #1H				
Well Position:	+N/-S	0.00 ft	Northing:	570237.00 ft	Latitude: 32 34 3.127 N
	+E/-W	0.00 ft	Easting:	439519.10 ft	Longitude: 104 31 46.758 W
Position Uncertainty:	0.00 ft				

Wellpath: 1	Drilled From:	Surface
Current Datum: SITE	Tie-on Depth:	0.00 ft
Magnetic Data: 12/18/2013	Above System Datum:	Mean Sea Level
Field Strength: 48491 nT	Declination:	7.74 deg
Vertical Section: Depth From (TVD)	Mag Dip Angle:	60.28 deg
	+E/-W	Direction
	ft	deg
0.00	0.00	0.00
		0.91

Survey Program for Definitive Wellpath					
Date: 5/1/2014	Validated: No	Version: 1			
Actual From	To	Survey	Toolcode	Tool Name	
ft	ft				
0.00	630.00	Gyro (0.00-630.00)	NS-GYRO-MS	North sensing gyrocompassing m	
630.00	6865.00	MWD (630.00-6865.00)	MWD	MWD - Standard	

Survey										
MD	Incl	Azim	TVD	N/S	E/W	DLS	VS	MapN	MapE	Comment
ft	deg	deg	ft	ft	ft	deg/100ft	ft	ft	ft	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	570237.00	439519.10	
109.36	0.75	282.18	109.36	0.15	-0.70	0.69	0.14	570237.15	439518.40	
199.71	0.46	271.90	199.70	0.29	-1.64	0.34	0.26	570237.29	439517.46	
288.31	0.43	277.52	288.30	0.34	-2.33	0.06	0.31	570237.34	439516.77	
374.92	0.67	280.39	374.91	0.48	-3.15	0.28	0.43	570237.48	439515.95	
460.36	0.66	282.47	460.34	0.67	-4.12	0.03	0.61	570237.67	439514.98	
543.34	0.58	292.10	543.31	0.93	-4.97	0.16	0.86	570237.93	439514.13	
630.00	0.71	303.58	629.97	1.40	-5.83	0.21	1.30	570238.40	439513.27	TieOn Gyro SD
760.00	0.81	315.65	759.96	2.50	-7.14	0.14	2.39	570239.50	439511.96	First Svy
895.00	0.92	312.95	894.94	3.92	-8.60	0.09	3.78	570240.92	439510.50	
1030.00	0.77	312.99	1029.93	5.28	-10.06	0.11	5.12	570242.28	439509.04	
1165.00	0.83	308.63	1164.91	6.51	-11.48	0.06	6.32	570243.51	439507.62	
1300.00	0.92	310.17	1299.90	7.82	-13.08	0.07	7.61	570244.82	439506.02	
1435.00	0.87	306.95	1434.88	9.13	-14.72	0.05	8.90	570246.13	439504.38	
1570.00	0.92	304.66	1569.87	10.36	-16.43	0.05	10.10	570247.36	439502.67	
1704.00	0.88	307.76	1703.85	11.60	-18.13	0.05	11.32	570248.60	439500.97	
1839.00	0.89	305.84	1838.83	12.85	-19.80	0.02	12.54	570249.85	439499.30	
1974.00	0.82	305.09	1973.82	14.02	-21.44	0.05	13.68	570251.02	439497.66	
2019.00	0.93	302.40	2018.81	14.40	-22.01	0.26	14.05	570251.40	439497.09	
2064.00	1.55	344.71	2063.80	15.19	-22.48	2.37	14.83	570252.19	439496.62	
2108.00	6.03	0.43	2107.70	18.07	-22.62	10.36	17.71	570255.07	439496.48	
2153.00	11.38	1.17	2152.16	24.88	-22.51	11.89	24.52	570261.88	439496.59	
2198.00	16.73	1.00	2195.80	35.80	-22.31	11.89	35.44	570272.80	439496.79	
2243.00	22.03	1.96	2238.23	50.72	-21.91	11.80	50.37	570287.72	439497.19	



Weatherford International Ltd.

WET Survey Report X&Y's



Weatherford

Company: Occidental Permian Ltd.	Date: 5/1/2014	Time: 06:36:52	Page: 2
Field: Eddy Co, NM (Nad 27)	Co-ordinate(NE) Reference:	Well: Osage 18 Fee C Com #1H, Grid North	
Site: Osage 18 Fee C Com #1H	Vertical (TVD) Reference:	SITE 3592.9	
Well: Osage 18 Fee C Com #1H	Section (VS) Reference:	Well (0.00N,0.00E,0.91Az)	
Wellpath: 1	Survey Calculation Method:	Minimum Curvature	Db: Sybase.

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
2287.00	26.86	4.03	2278.28	68.90	-20.93	11.15	68.56	570305.90	439498.17	
2332.00	31.64	6.02	2317.53	90.79	-18.97	10.84	90.48	570327.79	439500.13	
2377.00	36.57	7.00	2354.78	115.85	-16.10	11.02	115.58	570352.85	439503.00	
2422.00	41.02	5.58	2389.84	143.87	-13.03	10.08	143.64	570380.87	439506.07	
2467.00	46.40	5.09	2422.36	174.82	-10.15	11.98	174.63	570411.82	439508.95	
2511.00	51.54	4.18	2451.24	207.89	-7.47	11.79	207.74	570444.89	439511.63	
2556.00	57.08	3.52	2477.48	244.34	-5.03	12.37	244.23	570481.34	439514.07	
2601.00	62.69	1.80	2500.05	283.21	-3.24	12.90	283.12	570520.21	439515.86	
2646.00	68.38	1.39	2518.68	324.13	-2.10	12.67	324.06	570561.13	439517.00	
2691.00	74.35	1.38	2533.05	366.74	-1.07	13.27	366.68	570603.74	439518.03	
2736.00	79.80	1.30	2543.11	410.57	-0.05	12.11	410.52	570647.57	439519.05	
2781.00	86.11	1.09	2548.63	455.20	0.88	14.03	455.16	570692.20	439519.98	
2824.00	89.47	1.45	2550.29	498.15	1.83	7.86	498.12	570735.15	439520.93	
2914.00	91.98	1.98	2549.15	588.10	4.53	2.85	588.10	570825.10	439523.63	
3004.00	92.38	2.77	2545.72	677.96	8.25	0.98	678.00	570914.96	439527.35	
3094.00	90.84	2.43	2543.19	767.82	12.33	1.75	767.92	571004.82	439531.43	
3184.00	90.16	1.29	2542.41	857.77	15.26	1.47	857.91	571094.77	439534.36	
3274.00	90.19	1.40	2542.13	947.75	17.37	0.13	947.90	571184.75	439536.47	
3364.00	90.40	359.82	2541.67	1037.74	18.33	1.77	1037.90	571274.74	439537.43	
3454.00	90.67	0.10	2540.83	1127.73	18.26	0.43	1127.88	571364.73	439537.36	
3544.00	91.12	359.91	2539.43	1217.72	18.27	0.54	1217.86	571454.72	439537.37	
3634.00	91.00	359.85	2537.76	1307.71	18.08	0.15	1307.83	571544.71	439537.18	
3724.00	90.88	359.80	2536.28	1397.69	17.81	0.14	1397.80	571634.69	439536.91	
3814.00	90.79	359.44	2534.97	1487.68	17.21	0.41	1487.77	571724.68	439536.31	
3904.00	90.65	359.27	2533.84	1577.67	16.20	0.24	1577.73	571814.67	439535.30	
3994.00	90.25	0.72	2533.13	1667.66	16.19	1.67	1667.71	571904.66	439535.29	
4084.00	90.21	0.60	2532.77	1757.66	17.23	0.14	1757.71	571994.66	439536.33	
4174.00	89.65	359.81	2532.88	1847.66	17.55	1.08	1847.70	572084.66	439536.65	
4264.00	89.35	0.66	2533.67	1937.65	17.92	1.00	1937.69	572174.65	439537.02	
4354.00	89.14	0.44	2534.85	2027.64	18.78	0.34	2027.68	572264.64	439537.88	
4444.00	90.09	1.05	2535.46	2117.63	19.95	1.25	2117.68	572354.63	439539.05	
4534.00	89.58	0.79	2535.72	2207.61	21.40	0.64	2207.68	572444.61	439540.50	
4624.00	89.16	0.49	2536.71	2297.60	22.40	0.57	2297.67	572534.60	439541.50	
4714.00	89.26	0.58	2537.95	2387.59	23.24	0.15	2387.66	572624.59	439542.34	
4804.00	89.02	0.46	2539.30	2477.58	24.06	0.30	2477.65	572714.58	439543.16	
4895.00	88.84	0.89	2541.00	2568.55	25.13	0.51	2568.63	572805.55	439544.23	
4986.00	90.54	1.10	2541.49	2659.54	26.71	1.88	2659.62	572896.54	439545.81	
5077.00	90.63	1.54	2540.56	2750.51	28.81	0.49	2750.62	572987.51	439547.91	
5167.00	90.16	2.06	2539.94	2840.46	31.63	0.78	2840.60	573077.46	439550.73	
5272.00	89.81	2.82	2539.97	2945.36	36.10	0.80	2945.57	573182.36	439555.20	
5362.00	90.42	1.89	2539.79	3035.29	39.80	1.24	3035.54	573272.29	439558.90	
5452.00	91.93	0.75	2537.94	3125.24	41.88	2.10	3125.51	573362.24	439560.98	
5542.00	91.91	0.43	2534.93	3215.18	42.80	0.36	3215.46	573452.18	439561.90	
5632.00	91.54	0.25	2532.22	3305.14	43.34	0.46	3305.41	573542.14	439562.44	
5722.00	91.10	0.29	2530.15	3395.12	43.76	0.49	3395.38	573632.12	439562.86	
5812.00	90.96	359.65	2528.53	3485.10	43.71	0.73	3485.36	573722.10	439562.81	
5901.00	91.05	0.63	2526.97	3574.09	43.93	1.11	3574.33	573811.09	439563.03	
5991.00	90.53	1.09	2525.73	3664.07	45.28	0.77	3664.32	573901.07	439564.38	
6081.00	90.09	0.50	2525.24	3754.06	46.53	0.82	3754.32	573991.06	439565.63	
6171.00	91.49	1.52	2524.00	3844.03	48.12	1.92	3844.31	574081.03	439567.22	
6261.00	91.56	1.71	2521.60	3933.96	50.65	0.22	3934.27	574170.96	439569.75	
6351.00	91.35	2.05	2519.32	4023.89	53.60	0.44	4024.23	574260.89	439572.70	



Weatherford International Ltd.

WFT Survey Report X&Y's

**Weatherford**

Company:	Occidental Permian Ltd.	Date:	5/1/2014	Time:	06:36:52	Page:	3
Field:	Eddy Co. NM (Nad 27)	Co-ordinate(NF) Reference:	Well: Osage 18 Fee C. Com #1H, Grid North				
Site:	Osage 18 Fee C. Com #1H	Vertical (TVD) Reference:	SITE 3592.9				
Well:	Osage 18 Fee C. Com #1H	Section (VS) Reference:	Well (0.00N,0.00E,0.91Azi)				
Wellpath:	21	Survey Calculation Method:	Minimum Curvature			Db:	Sybase

Survey

MD ft	Incl deg	Azim deg	TVD ft	N/S ft	E/W ft	DLS deg/100ft	VS ft	MapN ft	MapE ft	Comment
6441.00	90.96	2.35	2517.50	4113.80	57.06	0.55	4114.19	574350.80	439576.16	
6530.00	90.11	2.36	2516.67	4202.72	60.71	0.96	4203.15	574439.72	439579.81	
6620.00	90.56	1.61	2516.15	4292.66	63.83	0.97	4293.14	574529.66	439582.93	
6710.00	90.14	1.33	2515.60	4382.63	66.14	0.56	4383.13	574619.63	439585.24	
6810.00	90.02	0.84	2515.46	4482.61	68.03	0.50	4483.13	574719.61	439587.13	Last Svy
6865.00	90.02	0.84	2515.44	4537.61	68.84	0.00	4538.13	574774.61	439587.94	Proj to Bit

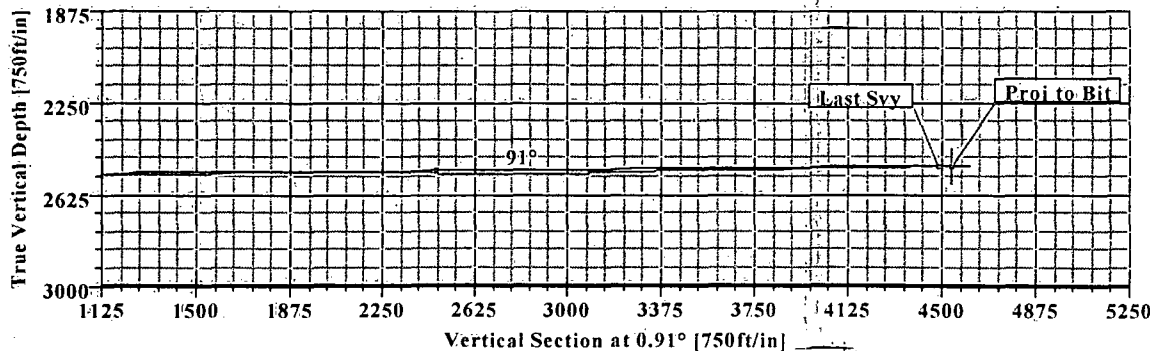
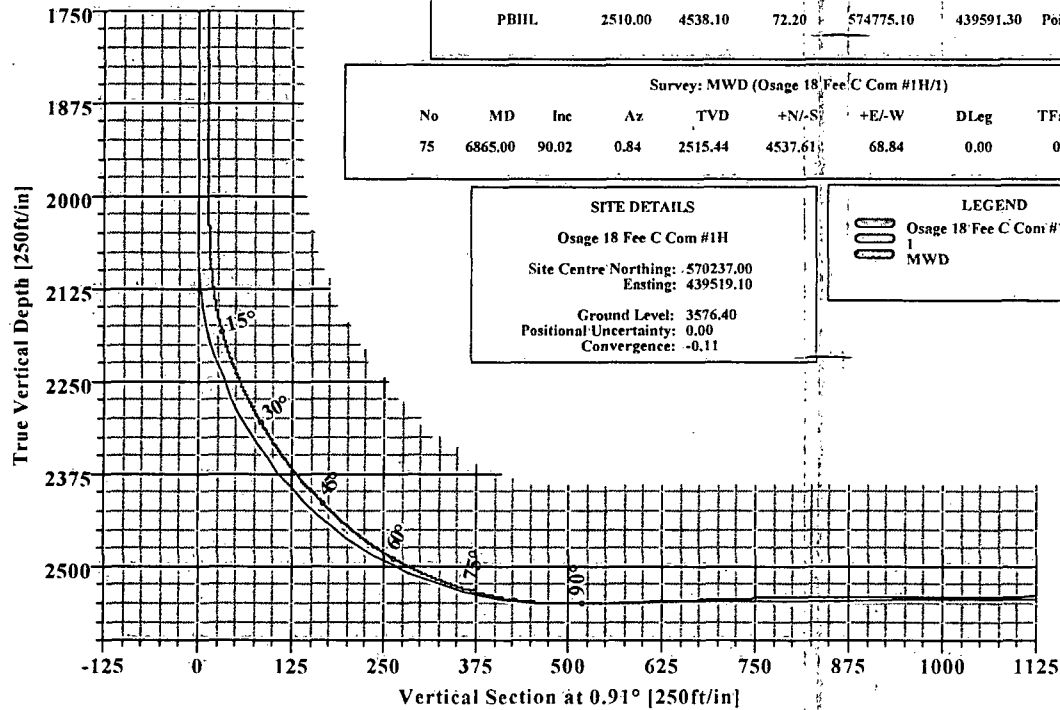
Annotation

MD ft	TVD ft	
630.00	629.97	Tie On Gyro SDI
760.00	759.96	First Svy
6810.00	2515.46	Last Svy
6865.00	2515.44	Proj to Bit



Osage 18 Fee C Com 1H Eddy Co., NM

KB ELEV: 3592.9
GL ELEV: 3576.4



SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	DLeg	TFace	VSec	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2072.56	0.00	0.00	2072.56	0.00	0.00	0.00	0.00	0.00	
3	2827.27	90.56	0.91	2550.00	482.11	7.67	12.00	0.91	482.17	
4	6883.97	90.56	0.91	2510.00	4538.10	72.20	0.00	0.00	4538.67	PBHL

WELL DETAILS

Name	+N/-S	+E/-W	Northing	Eastng	Latitude	Longitude	Slot
Osage 18 Fee C Com #1H	0.00	0.00	570237.00	439519.10	32°34'03.127N	104°31'46.758W	N/A

TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Eastng	Shape
PBHL	2510.00	4538.10	72.20	574775.10	439591.30	Point

Survey: MWD (Osage 18 Fee C Com #1H/1)

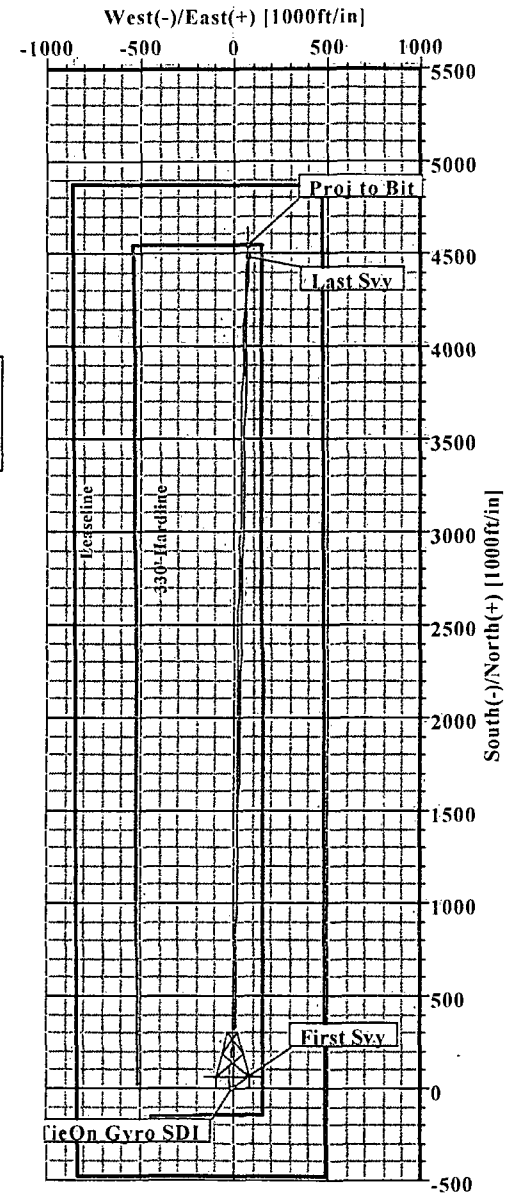
No	MD	Inc	Az	TVD	+N/-S	+E/-W	DLeg	TFace	VSec
75	6865.00	90.02	0.84	2515.44	4537.61	68.84	0.00	0.00	4538.13

SITE DETAILS

Osage 18 Fee C Com #1H
Site Centre Northing: 570237.00
Eastng: 439519.10
Ground Level: 3576.40
Positional Uncertainty: 0.00
Convergence: -0.11

LEGEND

Osage 18 Fee C Com #1H, Plan #5
MWD



Weatherford®

Survey: MWD (Osage 18 Fee C Com #1H/1)

Created By: Michael Dill

Date: 5/1/2014

OXY USA INC.

Osage 18 Fee C Com 1H

API No. 30-015-40761

14-3/4" hole @ 380'

11-3/4" csg @ 325'

w/ 985sx-TOC-Surf-Circ.

10-5/8" hole @ 690'

8-5/8" csg @ 682'

w/ 400sx-TOC-Surf-Circ.

7-7/8" hole @ 6865'

5-1/2" csg @ 6851'

w/ 1140sx-TOC-Surf-Circ.

Perfs @ 2800-6650'

TD- 6865'M 2515'V