

3001546046-00

**OXY**

**PRD NM DIRECTIONAL PLANS (NAD 1983)  
PLATINUM MDP1 34-3 FED COM  
PLATINUM MDP1 34-3 FED COM 177H**

**Wellbore #1**

**Plan: Permitting Plan**

## **Standard Planning Report**

**20 May, 2019**

# Oxy Planning Report

<b>Database:</b>	HOPSPP	<b>Local Co-ordinate Reference:</b>	Well PLATINUM MDP1 34-3 FED COM 177H
<b>Company:</b>	ENGINEERING DESIGNS	<b>TVD Reference:</b>	RKB=26.5' @ 3453.40ft
<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)	<b>MD Reference:</b>	RKB=26.5' @ 3453.40ft
<b>Site:</b>	PLATINUM MDP1 34-3 FED COM	<b>North Reference:</b>	Grid
<b>Well:</b>	PLATINUM MDP1 34-3 FED COM 177H	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Permitting Plan		

<b>Project:</b>	PRD NM DIRECTIONAL PLANS (NAD 1983)		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	New Mexico Eastern Zone		Using geodetic scale factor

<b>Site:</b>	PLATINUM MDP1 34-3 FED COM		
<b>Site Position:</b>	<b>Northing:</b>	461,352.44 usft	<b>Latitude:</b> 32° 16' 1.502765 N
<b>From:</b> Map	<b>Easting:</b>	714,923.95 usft	<b>Longitude:</b> 103° 46' 18.211063 W
<b>Position Uncertainty:</b>	50.00 ft	<b>Slot Radius:</b> 13.200 in	<b>Grid Convergence:</b> 0.30 °

<b>Well:</b>	PLATINUM MDP1 34-3 FED COM 177H		
<b>Well Position</b>	<b>+N/-S</b>	190.25 ft	<b>Northing:</b> 461,542.68 usft
	<b>+E/-W</b>	1,789.10 ft	<b>Easting:</b> 716,712.95 usft
<b>Position Uncertainty</b>	2.00 ft	<b>Wellhead Elevation:</b>	0.00 ft
		<b>Ground Level:</b>	3,426.90 ft

<b>Wellbore:</b>	Wellbore #1		
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>
	HDGM	5/20/2019	6.77
			59.97
			47,954

<b>Design:</b>	Permitting Plan		
<b>Audit Notes:</b>			
<b>Version:</b>	<b>Phase:</b>	PROTOTYPE	<b>Tie On Depth:</b> 0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>
	(ft)	(ft)	(ft)
	0.00	0.00	184.81

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3,720.00	0.00	0.00	3,720.00	0.00	0.00	0.00	0.00	0.00	0.00	
4,220.14	10.00	309.45	4,217.61	27.67	-33.63	2.00	2.00	0.00	309.45	
10,377.81	10.00	309.45	10,281.67	707.31	-859.50	0.00	0.00	0.00	0.00	
11,282.35	10.00	179.74	11,179.94	678.46	-920.31	2.00	0.00	-14.34	-154.52	
12,081.80	89.95	179.74	11,653.40	114.76	-917.73	10.00	10.00	0.00	0.00	FTP (Platinum)
22,530.34	89.95	179.74	11,663.40	-10,333.68	-869.94	0.00	0.00	0.00	0.00	PBHL (Platinum)

# Oxy Planning Report

Database:	HOPSP	Local Co-ordinate Reference:	Well PLATINUM MDP1 34-3 FED COM 177H
Company:	ENGINEERING DESIGNS	TVD Reference:	RKB=26.5' @ 3453.40ft
Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3453.40ft
Site:	PLATINUM MDP1 34-3 FED COM	North Reference:	Grid
Well:	PLATINUM MDP1 34-3 FED COM 177H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	N-S (ft)	E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00	0.00	0.00	1,100.00	0.00	0.00	0.00	0.00	0.00	0.00
1,200.00	0.00	0.00	1,200.00	0.00	0.00	0.00	0.00	0.00	0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00	0.00	0.00	1,600.00	0.00	0.00	0.00	0.00	0.00	0.00
1,700.00	0.00	0.00	1,700.00	0.00	0.00	0.00	0.00	0.00	0.00
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00	0.00	0.00	2,500.00	0.00	0.00	0.00	0.00	0.00	0.00
2,600.00	0.00	0.00	2,600.00	0.00	0.00	0.00	0.00	0.00	0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00	0.00	0.00	2,900.00	0.00	0.00	0.00	0.00	0.00	0.00
3,000.00	0.00	0.00	3,000.00	0.00	0.00	0.00	0.00	0.00	0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00	0.00	0.00	3,300.00	0.00	0.00	0.00	0.00	0.00	0.00
3,400.00	0.00	0.00	3,400.00	0.00	0.00	0.00	0.00	0.00	0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00	0.00	0.00	3,700.00	0.00	0.00	0.00	0.00	0.00	0.00
3,720.00	0.00	0.00	3,720.00	0.00	0.00	0.00	0.00	0.00	0.00
3,800.00	1.60	309.45	3,799.99	0.71	-0.86	-0.63	2.00	2.00	0.00
3,900.00	3.60	309.45	3,899.88	3.59	-4.37	-3.21	2.00	2.00	0.00
4,000.00	5.60	309.45	3,999.55	8.69	-10.56	-7.77	2.00	2.00	0.00
4,100.00	7.60	309.45	4,098.89	15.99	-19.43	-14.30	2.00	2.00	0.00
4,200.00	9.60	309.45	4,197.76	25.49	-30.98	-22.80	2.00	2.00	0.00
4,220.14	10.00	309.45	4,217.61	27.67	-33.63	-24.75	2.00	2.00	0.00
4,300.00	10.00	309.45	4,296.25	36.49	-44.34	-32.64	0.00	0.00	0.00
4,400.00	10.00	309.45	4,394.73	47.52	-57.75	-42.51	0.00	0.00	0.00
4,500.00	10.00	309.45	4,493.21	58.56	-71.16	-52.38	0.00	0.00	0.00
4,600.00	10.00	309.45	4,591.69	69.60	-84.57	-62.26	0.00	0.00	0.00
4,700.00	10.00	309.45	4,690.17	80.63	-97.98	-72.13	0.00	0.00	0.00
4,800.00	10.00	309.45	4,788.65	91.67	-111.40	-82.00	0.00	0.00	0.00
4,900.00	10.00	309.45	4,887.13	102.71	-124.81	-91.88	0.00	0.00	0.00
5,000.00	10.00	309.45	4,985.61	113.75	-138.22	-101.75	0.00	0.00	0.00
5,100.00	10.00	309.45	5,084.09	124.78	-151.63	-111.62	0.00	0.00	0.00

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Project:	PRD NM DIRECTIONAL PLANS (NAD 1983)	MD Reference:	RKB=26.5' @ 3453.40ft
Site:	PLATINUM MDP1 34-3 FED COM	North Reference:	Grid
Well:	PLATINUM MDP1 34-3 FED COM 177H	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Permitting Plan		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,200.00	10.00	309.45	5,182.57	135.82	-165.05	-121.50	0.00	0.00	0.00
5,300.00	10.00	309.45	5,281.05	146.86	-178.46	-131.37	0.00	0.00	0.00
5,400.00	10.00	309.45	5,379.53	157.90	-191.87	-141.24	0.00	0.00	0.00
5,500.00	10.00	309.45	5,478.01	168.93	-205.28	-151.12	0.00	0.00	0.00
5,600.00	10.00	309.45	5,576.49	179.97	-218.69	-160.99	0.00	0.00	0.00
5,700.00	10.00	309.45	5,674.97	191.01	-232.11	-170.86	0.00	0.00	0.00
5,800.00	10.00	309.45	5,773.45	202.05	-245.52	-180.74	0.00	0.00	0.00
5,900.00	10.00	309.45	5,871.93	213.08	-258.93	-190.61	0.00	0.00	0.00
6,000.00	10.00	309.45	5,970.41	224.12	-272.34	-200.48	0.00	0.00	0.00
6,100.00	10.00	309.45	6,068.89	235.16	-285.75	-210.36	0.00	0.00	0.00
6,200.00	10.00	309.45	6,167.37	246.19	-299.17	-220.23	0.00	0.00	0.00
6,300.00	10.00	309.45	6,265.85	257.23	-312.58	-230.10	0.00	0.00	0.00
6,400.00	10.00	309.45	6,364.33	268.27	-325.99	-239.98	0.00	0.00	0.00
6,500.00	10.00	309.45	6,462.81	279.31	-339.40	-249.85	0.00	0.00	0.00
6,600.00	10.00	309.45	6,561.29	290.34	-352.81	-259.72	0.00	0.00	0.00
6,700.00	10.00	309.45	6,659.77	301.38	-366.23	-269.60	0.00	0.00	0.00
6,800.00	10.00	309.45	6,758.25	312.42	-379.64	-279.47	0.00	0.00	0.00
6,900.00	10.00	309.45	6,856.73	323.46	-393.05	-289.34	0.00	0.00	0.00
7,000.00	10.00	309.45	6,955.21	334.49	-406.46	-299.22	0.00	0.00	0.00
7,100.00	10.00	309.45	7,053.69	345.53	-419.88	-309.09	0.00	0.00	0.00
7,200.00	10.00	309.45	7,152.17	356.57	-433.29	-318.96	0.00	0.00	0.00
7,300.00	10.00	309.45	7,250.65	367.60	-446.70	-328.84	0.00	0.00	0.00
7,400.00	10.00	309.45	7,349.13	378.64	-460.11	-338.71	0.00	0.00	0.00
7,500.00	10.00	309.45	7,447.61	389.68	-473.52	-348.58	0.00	0.00	0.00
7,600.00	10.00	309.45	7,546.09	400.72	-486.94	-358.46	0.00	0.00	0.00
7,700.00	10.00	309.45	7,644.57	411.75	-500.35	-368.33	0.00	0.00	0.00
7,800.00	10.00	309.45	7,743.05	422.79	-513.76	-378.20	0.00	0.00	0.00
7,900.00	10.00	309.45	7,841.53	433.83	-527.17	-388.08	0.00	0.00	0.00
8,000.00	10.00	309.45	7,940.01	444.87	-540.58	-397.95	0.00	0.00	0.00
8,100.00	10.00	309.45	8,038.49	455.90	-554.00	-407.82	0.00	0.00	0.00
8,200.00	10.00	309.45	8,136.97	466.94	-567.41	-417.70	0.00	0.00	0.00
8,300.00	10.00	309.45	8,235.45	477.98	-580.82	-427.57	0.00	0.00	0.00
8,400.00	10.00	309.45	8,333.93	489.02	-594.23	-437.44	0.00	0.00	0.00
8,500.00	10.00	309.45	8,432.41	500.05	-607.65	-447.32	0.00	0.00	0.00
8,600.00	10.00	309.45	8,530.89	511.09	-621.06	-457.19	0.00	0.00	0.00
8,700.00	10.00	309.45	8,629.37	522.13	-634.47	-467.06	0.00	0.00	0.00
8,800.00	10.00	309.45	8,727.85	533.16	-647.88	-476.94	0.00	0.00	0.00
8,900.00	10.00	309.45	8,826.33	544.20	-661.29	-486.81	0.00	0.00	0.00
9,000.00	10.00	309.45	8,924.81	555.24	-674.71	-496.68	0.00	0.00	0.00
9,100.00	10.00	309.45	9,023.29	566.28	-688.12	-506.56	0.00	0.00	0.00
9,200.00	10.00	309.45	9,121.77	577.31	-701.53	-516.43	0.00	0.00	0.00
9,300.00	10.00	309.45	9,220.24	588.35	-714.94	-526.30	0.00	0.00	0.00
9,400.00	10.00	309.45	9,318.72	599.39	-728.35	-536.18	0.00	0.00	0.00
9,500.00	10.00	309.45	9,417.20	610.43	-741.77	-546.05	0.00	0.00	0.00
9,600.00	10.00	309.45	9,515.68	621.46	-755.18	-555.92	0.00	0.00	0.00
9,700.00	10.00	309.45	9,614.16	632.50	-768.59	-565.80	0.00	0.00	0.00
9,800.00	10.00	309.45	9,712.64	643.54	-782.00	-575.67	0.00	0.00	0.00
9,900.00	10.00	309.45	9,811.12	654.57	-795.42	-585.54	0.00	0.00	0.00
10,000.00	10.00	309.45	9,909.60	665.61	-808.83	-595.42	0.00	0.00	0.00
10,100.00	10.00	309.45	10,008.08	676.65	-822.24	-605.29	0.00	0.00	0.00
10,200.00	10.00	309.45	10,106.56	687.69	-835.65	-615.16	0.00	0.00	0.00
10,300.00	10.00	309.45	10,205.04	698.72	-849.06	-625.04	0.00	0.00	0.00
10,377.81	10.00	309.45	10,281.67	707.31	-859.50	-632.72	0.00	0.00	0.00
10,400.00	9.60	308.31	10,303.54	709.68	-862.44	-634.84	2.00	-1.80	-5.16

# Oxy Planning Report

**Database:** HOPSP  
**Company:** ENGINEERING DESIGNS  
**Project:** PRD NM DIRECTIONAL PLANS (NAD 1983)  
**Site:** PLATINUM MDP1 34-3 FED COM  
**Well:** PLATINUM MDP1 34-3 FED COM 177H  
**Wellbore:** Wellbore #1  
**Design:** Permitting Plan

**Local Co-ordinate Reference:**  
**TVD Reference:**  
**MD Reference:**  
**North Reference:**  
**Survey Calculation Method:**

**Well PLATINUM MDP1 34-3 FED COM 177H**  
 RKB=26.5' @ 3453.40ft  
 RKB=26.5' @ 3453.40ft  
 Grid  
 Minimum Curvature.

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N-S (ft)	+E-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,500.00	7.87	301.75	10,402.38	718.46	-874.81	-642.54	2.00	-1.74	-6.56
10,600.00	6.29	291.73	10,501.61	724.09	-885.71	-647.24	2.00	-1.58	-10.02
10,700.00	5.01	275.91	10,601.13	726.56	-895.14	-648.91	2.00	-1.27	-15.82
10,800.00	4.33	252.61	10,700.81	725.88	-903.09	-647.57	2.00	-0.69	-23.30
10,900.00	4.51	226.52	10,800.52	722.05	-909.54	-643.21	2.00	0.18	-26.09
11,000.00	5.47	206.13	10,900.15	715.07	-914.49	-635.84	2.00	0.96	-20.39
11,100.00	6.89	192.93	10,999.57	704.95	-917.93	-625.47	2.00	1.42	-13.20
11,200.00	8.54	184.52	11,098.67	691.70	-919.86	-612.10	2.00	1.66	-8.42
11,282.35	10.00	179.74	11,179.94	678.46	-920.31	-598.86	2.00	1.77	-5.80
11,300.00	11.77	179.74	11,197.27	675.12	-920.29	-595.54	10.00	10.00	0.00
11,400.00	21.77	179.74	11,292.90	646.31	-920.16	-566.85	10.00	10.00	0.00
11,500.00	31.77	179.74	11,382.07	601.34	-919.96	-522.05	10.00	10.00	0.00
11,600.00	41.77	179.74	11,462.08	541.56	-919.69	-462.50	10.00	10.00	0.00
11,700.00	51.77	179.74	11,530.49	468.80	-919.36	-390.03	10.00	10.00	0.00
11,800.00	61.77	179.74	11,585.23	385.26	-918.98	-306.82	10.00	10.00	0.00
11,900.00	71.77	179.74	11,624.63	293.49	-918.56	-215.40	10.00	10.00	0.00
12,000.00	81.77	179.74	11,647.49	196.27	-918.12	-118.56	10.00	10.00	0.00
12,081.80	89.95	179.74	11,653.40	114.76	-917.73	-37.37	10.00	10.00	0.00
12,100.00	89.95	179.74	11,653.42	96.55	-917.65	-19.24	0.00	0.00	0.00
12,200.00	89.95	179.74	11,653.51	-3.45	-917.19	80.37	0.00	0.00	0.00
12,300.00	89.95	179.74	11,653.61	-103.44	-916.73	179.98	0.00	0.00	0.00
12,400.00	89.95	179.74	11,653.70	-203.44	-916.28	279.59	0.00	0.00	0.00
12,500.00	89.95	179.74	11,653.80	-303.44	-915.82	379.20	0.00	0.00	0.00
12,600.00	89.95	179.74	11,653.90	-403.44	-915.36	478.80	0.00	0.00	0.00
12,700.00	89.95	179.74	11,653.99	-503.44	-914.91	578.41	0.00	0.00	0.00
12,800.00	89.95	179.74	11,654.09	-603.44	-914.45	678.02	0.00	0.00	0.00
12,900.00	89.95	179.74	11,654.18	-703.44	-913.99	777.63	0.00	0.00	0.00
13,000.00	89.95	179.74	11,654.28	-803.44	-913.53	877.24	0.00	0.00	0.00
13,100.00	89.95	179.74	11,654.37	-903.44	-913.08	976.84	0.00	0.00	0.00
13,200.00	89.95	179.74	11,654.47	-1,003.43	-912.62	1,076.45	0.00	0.00	0.00
13,300.00	89.95	179.74	11,654.57	-1,103.43	-912.16	1,176.06	0.00	0.00	0.00
13,400.00	89.95	179.74	11,654.66	-1,203.43	-911.70	1,275.67	0.00	0.00	0.00
13,500.00	89.95	179.74	11,654.76	-1,303.43	-911.25	1,375.28	0.00	0.00	0.00
13,600.00	89.95	179.74	11,654.85	-1,403.43	-910.79	1,474.88	0.00	0.00	0.00
13,700.00	89.95	179.74	11,654.95	-1,503.43	-910.33	1,574.49	0.00	0.00	0.00
13,800.00	89.95	179.74	11,655.04	-1,603.43	-909.87	1,674.10	0.00	0.00	0.00
13,900.00	89.95	179.74	11,655.14	-1,703.43	-909.42	1,773.71	0.00	0.00	0.00
14,000.00	89.95	179.74	11,655.24	-1,803.43	-908.96	1,873.32	0.00	0.00	0.00
14,100.00	89.95	179.74	11,655.33	-1,903.42	-908.50	1,972.92	0.00	0.00	0.00
14,200.00	89.95	179.74	11,655.43	-2,003.42	-908.04	2,072.53	0.00	0.00	0.00
14,300.00	89.95	179.74	11,655.52	-2,103.42	-907.59	2,172.14	0.00	0.00	0.00
14,400.00	89.95	179.74	11,655.62	-2,203.42	-907.13	2,271.75	0.00	0.00	0.00
14,500.00	89.95	179.74	11,655.71	-2,303.42	-906.67	2,371.36	0.00	0.00	0.00
14,600.00	89.95	179.74	11,655.81	-2,403.42	-906.21	2,470.97	0.00	0.00	0.00
14,700.00	89.95	179.74	11,655.91	-2,503.42	-905.76	2,570.57	0.00	0.00	0.00
14,800.00	89.95	179.74	11,656.00	-2,603.42	-905.30	2,670.18	0.00	0.00	0.00
14,900.00	89.95	179.74	11,656.10	-2,703.42	-904.84	2,769.79	0.00	0.00	0.00
15,000.00	89.95	179.74	11,656.19	-2,803.41	-904.38	2,869.40	0.00	0.00	0.00
15,100.00	89.95	179.74	11,656.29	-2,903.41	-903.93	2,969.01	0.00	0.00	0.00
15,200.00	89.95	179.74	11,656.38	-3,003.41	-903.47	3,068.61	0.00	0.00	0.00
15,300.00	89.95	179.74	11,656.48	-3,103.41	-903.01	3,168.22	0.00	0.00	0.00
15,400.00	89.95	179.74	11,656.58	-3,203.41	-902.56	3,267.83	0.00	0.00	0.00
15,500.00	89.95	179.74	11,656.67	-3,303.41	-902.10	3,367.44	0.00	0.00	0.00
15,600.00	89.95	179.74	11,656.77	-3,403.41	-901.64	3,467.05	0.00	0.00	0.00

# Oxy Planning Report

**Database:** HOPSPP  
**Company:** ENGINEERING DESIGNS  
**Project:** PRD NM DIRECTIONAL PLANS (NAD 1983)  
**Site:** PLATINUM MDP1 34-3 FED COM  
**Well:** PLATINUM MDP1 34-3 FED COM 177H  
**Wellbore:** Wellbore #1  
**Design:** Permitting Plan

**Local Co-ordinate Reference:**  
**TVD Reference:**  
**MD Reference:**  
**North Reference:**  
**Survey Calculation Method:**

**Well PLATINUM MDP1 34-3 FED COM 177H**  
 RKB=26.5' @ 3453.40ft  
 RKB=26.5' @ 3453.40ft  
 Grid  
 Minimum Curvature

Planned Survey										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	
15,700.00	89.95	179.74	11,656.86	-3,503.41	-901.18	3,566.65	0.00	0.00	0.00	
15,800.00	89.95	179.74	11,656.96	-3,603.41	-900.73	3,666.26	0.00	0.00	0.00	
15,900.00	89.95	179.74	11,657.05	-3,703.40	-900.27	3,765.87	0.00	0.00	0.00	
16,000.00	89.95	179.74	11,657.15	-3,803.40	-899.81	3,865.48	0.00	0.00	0.00	
16,100.00	89.95	179.74	11,657.25	-3,903.40	-899.35	3,965.09	0.00	0.00	0.00	
16,200.00	89.95	179.74	11,657.34	-4,003.40	-898.90	4,064.69	0.00	0.00	0.00	
16,300.00	89.95	179.74	11,657.44	-4,103.40	-898.44	4,164.30	0.00	0.00	0.00	
16,400.00	89.95	179.74	11,657.53	-4,203.40	-897.98	4,263.91	0.00	0.00	0.00	
16,500.00	89.95	179.74	11,657.63	-4,303.40	-897.52	4,363.52	0.00	0.00	0.00	
16,600.00	89.95	179.74	11,657.72	-4,403.40	-897.07	4,463.13	0.00	0.00	0.00	
16,700.00	89.95	179.74	11,657.82	-4,503.40	-896.61	4,562.74	0.00	0.00	0.00	
16,800.00	89.95	179.74	11,657.92	-4,603.39	-896.15	4,662.34	0.00	0.00	0.00	
16,900.00	89.95	179.74	11,658.01	-4,703.39	-895.69	4,761.95	0.00	0.00	0.00	
17,000.00	89.95	179.74	11,658.11	-4,803.39	-895.24	4,861.56	0.00	0.00	0.00	
17,100.00	89.95	179.74	11,658.20	-4,903.39	-894.78	4,961.17	0.00	0.00	0.00	
17,200.00	89.95	179.74	11,658.30	-5,003.39	-894.32	5,060.78	0.00	0.00	0.00	
17,300.00	89.95	179.74	11,658.39	-5,103.39	-893.86	5,160.38	0.00	0.00	0.00	
17,400.00	89.95	179.74	11,658.49	-5,203.39	-893.41	5,259.99	0.00	0.00	0.00	
17,500.00	89.95	179.74	11,658.59	-5,303.39	-892.95	5,359.60	0.00	0.00	0.00	
17,600.00	89.95	179.74	11,658.68	-5,403.39	-892.49	5,459.21	0.00	0.00	0.00	
17,700.00	89.95	179.74	11,658.78	-5,503.39	-892.03	5,558.82	0.00	0.00	0.00	
17,800.00	89.95	179.74	11,658.87	-5,603.38	-891.58	5,658.42	0.00	0.00	0.00	
17,900.00	89.95	179.74	11,658.97	-5,703.38	-891.12	5,758.03	0.00	0.00	0.00	
18,000.00	89.95	179.74	11,659.06	-5,803.38	-890.66	5,857.64	0.00	0.00	0.00	
18,100.00	89.95	179.74	11,659.16	-5,903.38	-890.21	5,957.25	0.00	0.00	0.00	
18,200.00	89.95	179.74	11,659.26	-6,003.38	-889.75	6,056.86	0.00	0.00	0.00	
18,300.00	89.95	179.74	11,659.35	-6,103.38	-889.29	6,156.46	0.00	0.00	0.00	
18,400.00	89.95	179.74	11,659.45	-6,203.38	-888.83	6,256.07	0.00	0.00	0.00	
18,500.00	89.95	179.74	11,659.54	-6,303.38	-888.38	6,355.68	0.00	0.00	0.00	
18,600.00	89.95	179.74	11,659.64	-6,403.38	-887.92	6,455.29	0.00	0.00	0.00	
18,700.00	89.95	179.74	11,659.73	-6,503.37	-887.46	6,554.90	0.00	0.00	0.00	
18,800.00	89.95	179.74	11,659.83	-6,603.37	-887.00	6,654.51	0.00	0.00	0.00	
18,900.00	89.95	179.74	11,659.93	-6,703.37	-886.55	6,754.11	0.00	0.00	0.00	
19,000.00	89.95	179.74	11,660.02	-6,803.37	-886.09	6,853.72	0.00	0.00	0.00	
19,100.00	89.95	179.74	11,660.12	-6,903.37	-885.63	6,953.33	0.00	0.00	0.00	
19,200.00	89.95	179.74	11,660.21	-7,003.37	-885.17	7,052.94	0.00	0.00	0.00	
19,300.00	89.95	179.74	11,660.31	-7,103.37	-884.72	7,152.55	0.00	0.00	0.00	
19,400.00	89.95	179.74	11,660.40	-7,203.37	-884.26	7,252.15	0.00	0.00	0.00	
19,500.00	89.95	179.74	11,660.50	-7,303.37	-883.80	7,351.76	0.00	0.00	0.00	
19,600.00	89.95	179.74	11,660.60	-7,403.36	-883.34	7,451.37	0.00	0.00	0.00	
19,700.00	89.95	179.74	11,660.69	-7,503.36	-882.89	7,550.98	0.00	0.00	0.00	
19,800.00	89.95	179.74	11,660.79	-7,603.36	-882.43	7,650.59	0.00	0.00	0.00	
19,900.00	89.95	179.74	11,660.88	-7,703.36	-881.97	7,750.19	0.00	0.00	0.00	
20,000.00	89.95	179.74	11,660.98	-7,803.36	-881.51	7,849.80	0.00	0.00	0.00	
20,100.00	89.95	179.74	11,661.07	-7,903.36	-881.06	7,949.41	0.00	0.00	0.00	
20,200.00	89.95	179.74	11,661.17	-8,003.36	-880.60	8,049.02	0.00	0.00	0.00	
20,300.00	89.95	179.74	11,661.27	-8,103.36	-880.14	8,148.63	0.00	0.00	0.00	
20,400.00	89.95	179.74	11,661.36	-8,203.36	-879.68	8,248.23	0.00	0.00	0.00	
20,500.00	89.95	179.74	11,661.46	-8,303.35	-879.23	8,347.84	0.00	0.00	0.00	
20,600.00	89.95	179.74	11,661.55	-8,403.35	-878.77	8,447.45	0.00	0.00	0.00	
20,700.00	89.95	179.74	11,661.65	-8,503.35	-878.31	8,547.06	0.00	0.00	0.00	
20,800.00	89.95	179.74	11,661.74	-8,603.35	-877.85	8,646.67	0.00	0.00	0.00	
20,900.00	89.95	179.74	11,661.84	-8,703.35	-877.40	8,746.28	0.00	0.00	0.00	
21,000.00	89.95	179.74	11,661.94	-8,803.35	-876.94	8,845.88	0.00	0.00	0.00	

# Oxy Planning Report

**Database:** HOPSPP  
**Company:** ENGINEERING DESIGNS  
**Project:** PRD NM DIRECTIONAL PLANS (NAD 1983)  
**Site:** PLATINUM MDP1 34-3 FED COM  
**Well:** PLATINUM MDP1 34-3 FED COM 177H  
**Wellbore:** Wellbore #1  
**Design:** Permitting Plan

**Local Co-ordinate Reference:** Well PLATINUM MDP1 34-3 FED COM 177H  
**TVD Reference:** RKB=26.5' @ 3453.40ft  
**MD Reference:** RKB=26.5' @ 3453.40ft  
**North Reference:** Grid  
**Survey Calculation Method:** Minimum Curvature

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
21,100.00	89.95	179.74	11,662.03	-8,903.35	-876.48	8,945.49	0.00	0.00	0.00
21,200.00	89.95	179.74	11,662.13	-9,003.35	-876.03	9,045.10	0.00	0.00	0.00
21,300.00	89.95	179.74	11,662.22	-9,103.35	-875.57	9,144.71	0.00	0.00	0.00
21,400.00	89.95	179.74	11,662.32	-9,203.34	-875.11	9,244.32	0.00	0.00	0.00
21,500.00	89.95	179.74	11,662.41	-9,303.34	-874.65	9,343.92	0.00	0.00	0.00
21,600.00	89.95	179.74	11,662.51	-9,403.34	-874.20	9,443.53	0.00	0.00	0.00
21,700.00	89.95	179.74	11,662.61	-9,503.34	-873.74	9,543.14	0.00	0.00	0.00
21,800.00	89.95	179.74	11,662.70	-9,603.34	-873.28	9,642.75	0.00	0.00	0.00
21,900.00	89.95	179.74	11,662.80	-9,703.34	-872.82	9,742.36	0.00	0.00	0.00
22,000.00	89.95	179.74	11,662.89	-9,803.34	-872.37	9,841.96	0.00	0.00	0.00
22,100.00	89.95	179.74	11,662.99	-9,903.34	-871.91	9,941.57	0.00	0.00	0.00
22,200.00	89.95	179.74	11,663.08	-10,003.34	-871.45	10,041.18	0.00	0.00	0.00
22,300.00	89.95	179.74	11,663.18	-10,103.34	-870.99	10,140.79	0.00	0.00	0.00
22,400.00	89.95	179.74	11,663.28	-10,203.33	-870.54	10,240.40	0.00	0.00	0.00
22,500.00	89.95	179.74	11,663.37	-10,303.33	-870.08	10,340.00	0.00	0.00	0.00
22,530.34	89.95	179.74	11,663.40	-10,333.68	-869.94	10,370.23	0.00	0.00	0.00

Design Targets									
Target Name	hit/miss target Shape	Dip Angle (°)	Dip Dir (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude Longitude
FTP (Platinum MDP1 - plan hits target center - Point		0.00	0.00	11,653.40	114.76	-917.73	461,657.43	715,795.27	32° 16' 4.475565 N 103° 46' 8.044400
PBHL (Platinum MDP1 - plan hits target center - Point		0.00	0.01	11,663.40	-10,333.68	-869.94	451,209.60	715,843.06	32° 14' 21.086190 N 103° 46' 8.127517

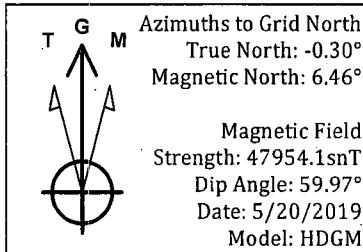
Plan Annotations				
Measured Depth (ft)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
3,720.00	3,720.00	0.00	0.00	Build 2.00°/100'
4,220.14	4,217.61	27.67	-33.63	Hold 10.00° Tangent
10,377.81	10,281.67	707.31	-859.50	Turn 2.00°/100'
11,282.35	11,179.94	678.46	-920.31	KOP, Build 10.00°/100'
12,081.80	11,653.40	114.76	-917.73	Landing Point
22,530.34	11,663.40	-10,333.68	-869.94	TD at 22530.34' MD



Project: PRD NM DIRECTIONAL PLANS (NAD 1983)  
 Site: PLATINUM MDP1 34-3 FED COM  
 Well: PLATINUM MDP1 34-3 FED COM 177H  
 Wellbore: Wellbore #1  
 Design: Permitting Plan

PROJECT DETAILS: NM DIRECTIONAL PLANS (NAD 1983)

Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: New Mexico Eastern Zone  
 System Datum: Mean Sea Level

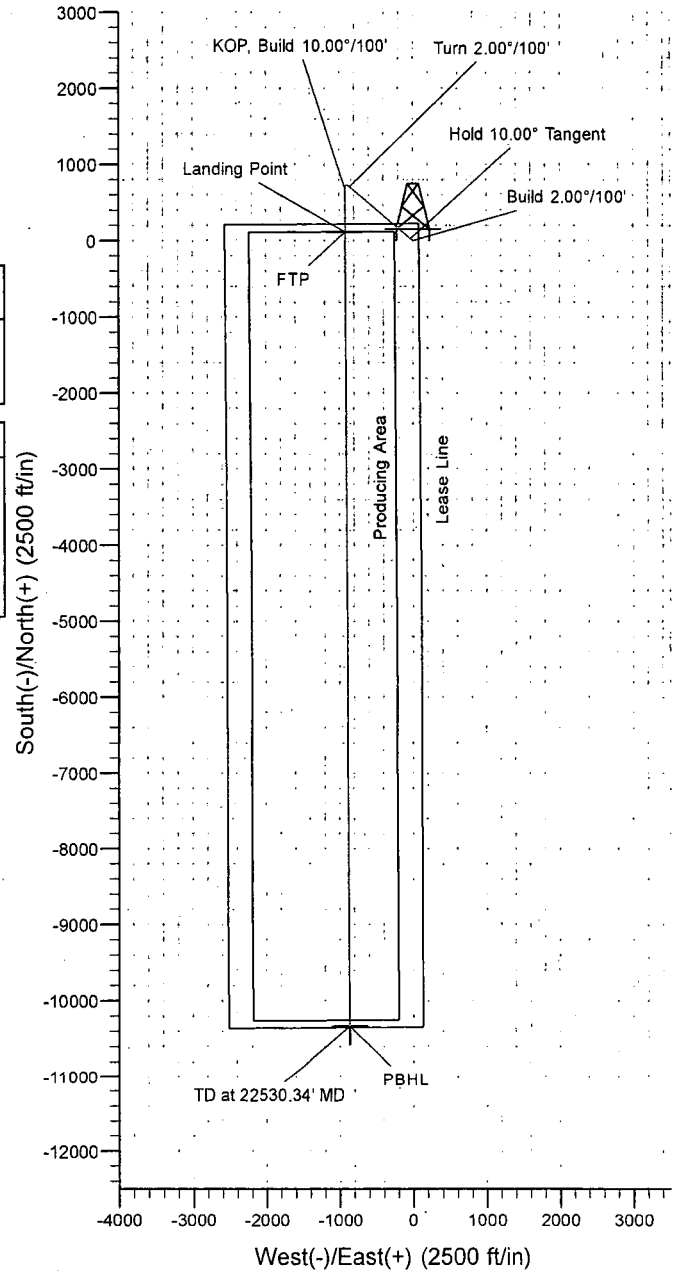
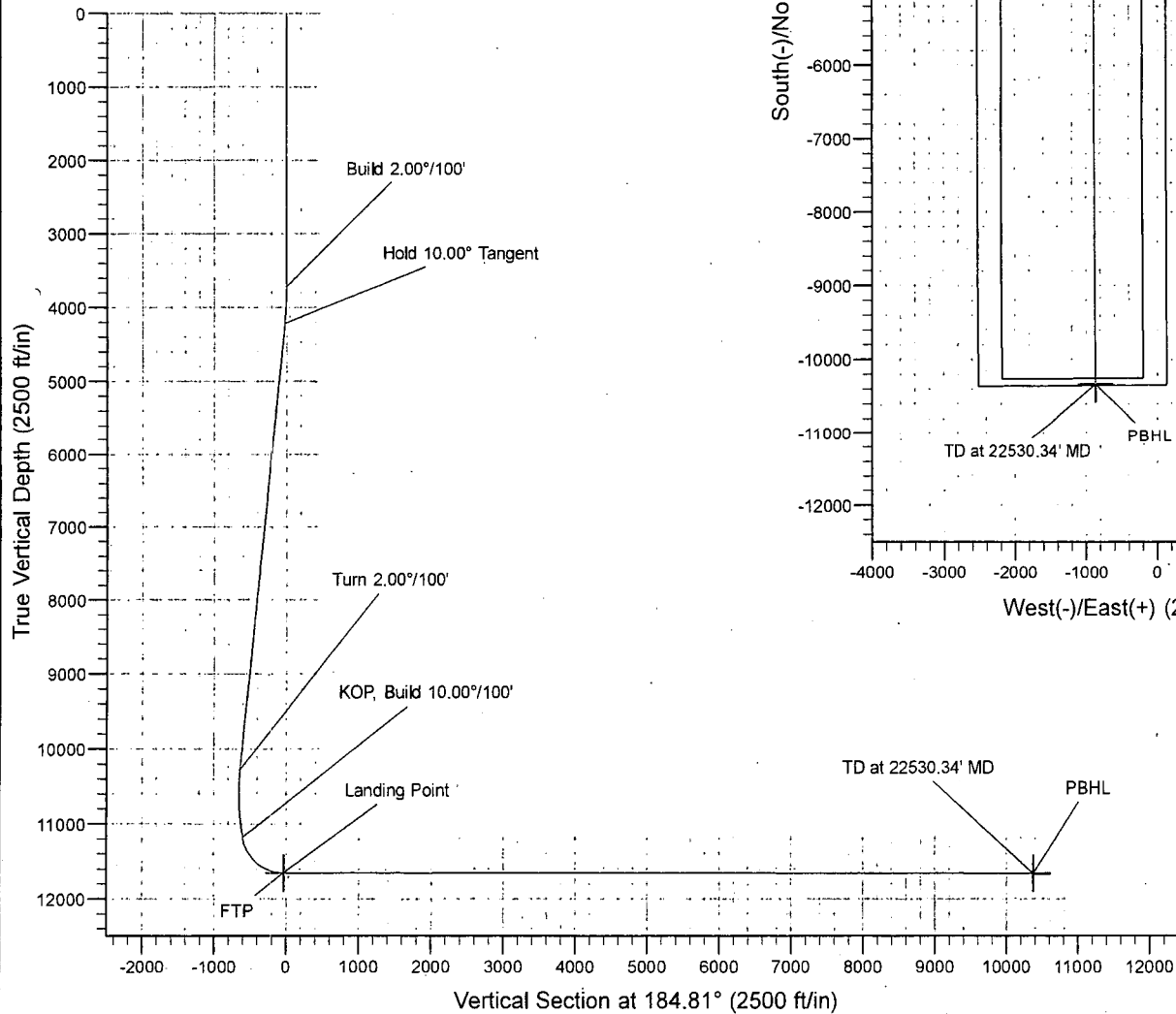


WELL DETAILS: PLATINUM MDP1 34-3 FED COM 177H

+N/-S	+E/-W	Ground Level	3426.90	Latitude	Longitude
0.00	0.00	Northing	461542.68	32° 16' 3.292168 N	103° 45' 57.363455 W
		Eastings	716712.95		

SECTION DETAILS

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dieg	TFace	VSeet	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3720.00	0.00	0.00	3720.00	0.00	0.00	0.00	0.00	0.00	Build 2.00°/100'
4220.14	10.00	309.45	4217.61	27.67	-33.63	2.00	309.45	-24.75	Hold 10.00° Tangent
10377.81	10.00	309.45	10281.67	707.31	-859.50	0.00	0.00	-632.72	Turn 2.00°/100'
11282.35	10.00	179.74	11179.94	678.46	-920.31	2.00	-154.52	-598.86	KOP, Build 10.00°/100'
12081.80	89.95	179.74	11653.40	114.76	-917.73	10.00	0.00	-37.37	Landing Point
22530.34	89.95	179.74	11663.40	-10333.68	-869.94	0.00	0.00	10370.23	TD at 22530.34' MD





## 1. Geologic Formations

TVD of target	11678'	Pilot Hole Depth	N/A
MD at TD:	22514'	Deepest Expected fresh water:	647'

## Delaware Basin

Formation	TVD - RKB	Expected Fluids
Rustler	570	
Salado	898	Brine
Castile	2,855	Brine
Lamar/Delaware	4,320	Brine
Bell Canyon	4,347	Oil/Gas
Cherry Canyon	5,232	Oil/Gas
Brushy Canyon	6,496	Losses
Bone Spring	8,158	Oil/Gas
1st Bone Spring	9,218	Oil/Gas
2nd Bone Spring	9,811	Oil/Gas
3rd Bone Spring	11,037	Oil/Gas
<b>Wolfcamp</b>	<b>11,491</b>	<b>Oil/Gas</b>

\*H2S, water flows, loss of circulation, abnormal pressures, etc.

## 2. Casing Program - see COA

Hole Size (in)	Casing Interval		Csg. Size (in)	Weight (lbs)	Grade	Conn.	SF		Buoyant	
	From (ft)	To (ft)					Collapse	Burst	Body SF Tension	Joint SF Tension
17.5	0	620 <del>633</del>	13.375	54.5	J-55	BTC	1.125	1.2	1.4	1.4
12.25	0	4370 <del>4385</del>	9.625	43.5	L-80	BTC	1.125	1.2	1.4	1.4
8.5	0	11182	7.625	26.4	L-80 HC	SF (0 ft to 4000 ft) FJ (4000 ft to 11182 ft)	1.125	1.2	1.4	1.4
6.75	0	22530	5.5	20	P-110	DQX	1.125	1.2	1.4	1.4
SF Values will meet or Exceed										

All casing strings will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.h

\*Oxy requests the option to set casing shallower yet still below the salts if losses or hole conditions require this. Cement volumes may be adjusted if casing is set shallower and a DV tool may be run in case hole conditions merit pumping a second stage cement job to comply with permitted top of cement. If cement circulated to surface during first stage, we will drop a cancelation cone and not pump the second stage.

\*Oxy requests the option to run production casing with DQX, SF TORQ, and/or DQW TORQ connections to accommodate hole conditions or drilling operations.

**Annular Clearance Variance Request**

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow deviation from the 0.422" annular clearance requirement from Onshore Order #2 under the following conditions:

1. Annular clearance to meet or exceed 0.422" between intermediate casing ID and production casing coupling only on the first 500' overlap between both casings.
2. Annular clearance less than 0.422" is acceptable for the curve and lateral portions of the production open hole section.

	Y or N
Is casing new? If used, attach certification as required in Onshore Order #1	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards? If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	N
If yes, are the first 2 strings cemented to surface and 3 <sup>rd</sup> string cement tied back 500' into previous casing?	
Is well located in R-111-P and SOPA?	Y
If yes, are the first three strings cemented to surface?	Y
Is 2 <sup>nd</sup> string set 100' to 600' below the base of salt?	Y
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

### 3. Cementing Program

RMP - see COP

Casing String	#Sks	Wt (lb/gal)	Yld (ft <sup>3</sup> /sack)	H <sub>2</sub> O (gal/sk)	500# Comp. Strength (hours)	Slurry Description
Surface (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Surface (Tail)	659	14.8	1.33	6.365	5:26	Class C Cement, Accelerator
Intermediate (Lead)	932	12.9	1.88	10.130	14:22	Pozzolan Cement, Retarder
Intermediate (Tail)	155	14.8	1.33	6.370	12:45	Class C Cement, Accelerator
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	218	13.2	1.65	8.640	11:54	Class H Cement, Retarder, Dispersant, Salt
Intermediate II 2nd Stage (Tail Slurry) to be pumped as Bradenhead Squeeze from surface, down the Intermediate annulus						
Intermediate II 2nd Stage (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	355	12.9	1.92	10.410	23:10	Class C Cement, Accelerator
Production (Lead)	N/A	N/A	N/A	N/A	N/A	N/A
Production (Tail)	868	13.2	1.38	6.686	3:49	Class H Cement, Retarder, Dispersant, Salt

Casing String	Top (ft)	Bottom (ft)	% Excess
Surface (Lead)	N/A	N/A	N/A
Surface (Tail)	0	620	100%
Intermediate (Lead)	0	3870	50%
Intermediate (Tail)	3870	4370	20%
Intermediate II 1st Stage (Lead)	N/A	N/A	N/A
Intermediate II 1st Stage (Tail)	6746	11182	5%
Intermediate II 2nd Stage (Lead)	N/A	N/A	N/A
Intermediate II 2nd Stage (Tail)	0	6746	25%
Production (Lead)	N/A	N/A	N/A
Production (Tail)	10682	22530	20%

### Offline Cementing

Oxy requests a variance to cement the 9.625" and/or 7.625" intermediate casing strings offline in accordance to the approved variance, EC Tran 461365.

The summarized operational sequence will be as follows:

1. Run casing as per normal operations. While running casing, conduct negative pressure test and confirm integrity of the float equipment (float collar and shoe).
2. Land casing.
3. Fill pipe with kill weight fluid, and confirm well is static.
  - a. If well is not static notify BLM and kill well.
  - b. Once well is static notify BLM with intent to proceed with nipple down and offline cementing.
4. Set and pressure test annular packoff.
5. After confirmation of both annular barriers and internal barriers, nipple down BOP and install cap flange. If any barrier fails to test, the BOP stack will not be nipped down until after the cement job is completed.

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6. Skid rig to next well on pad.
7. Confirm well is static before removing cap flange.
8. If well is not static notify BLM and kill well prior to cementing or nipping up for further remediation.
9. Install offline cement tool.
10. Rig up cement equipment.
  - a. Notify BLM prior to cement job.
11. Perform cement job.
12. Confirm well is static and floats are holding after cement job.
13. Remove cement equipment, offline cement tools and install night cap with pressure gauge for monitoring.

### 4. Pressure Control Equipment

BOP installed and tested before drilling which hole?	Size?	Min Required WP	Type	✓	Tested to:
12.25" Hole	13-5/8"	3M	Annular	✓	70% of working pressure
		3M	Blind Ram	✓	250 psi / 3000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		
8.5" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		5M	Blind Ram	✓	250 psi / 5000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		
6.75" Hole	13-5/8"	5M	Annular	✓	70% of working pressure
		10M	Blind Ram	✓	250 psi / 10000 psi
			Pipe Ram		
			Double Ram	✓	
			Other*		

\*Specify if additional ram is utilized.

Per BLM's Memorandum No. NM-2017-008: *Decision and Rationale for a Variance Allowing the Use of a 5M Annular Preventer with a 10M BOP Stack*, Oxy requests to employ a 5M annular with a 10M BOPE stack in the pilot and lateral sections of the well and will ensure that two barriers to flow are maintained at all times. Please see attached Well Control Plan.

Oxy will utilize a 5M annular with a 10M BOPE stack. The BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per Onshore Order 2 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. If the system is upgraded all the components installed will be functional and tested.

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Pipe rams will be operationally checked each 24 hour period. Blind rams will be operationally checked on each trip out of the hole. These checks will be noted on the daily tour sheets. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. See attached schematics.

	Formation integrity test will be performed per Onshore Order #2. On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with Onshore Oil and Gas Order #2 III.B.1.i.
	A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.
Y	Are anchors required by manufacturer?
	A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per Onshore Order #2 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015. See attached schematics.

### BOP Break Testing Request

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow BOP Break Testing under the following conditions:

- After a full BOP test is conducted on the first well on the pad. *- see COA*
- When skidding to drill an intermediate section that does not penetrate into the ~~Wolfcamp~~.
- Full BOP test will be required prior to drilling any production hole.

*- Break testing is allowed only for the 15.375" casing and 9.625" casing.*

## 5. Mud Program

Depth		Type	Weight (ppg)	Viscosity	Water Loss
From (ft)	To (ft)				
0	620	Water-Based Mud	8.6-8.8	40-60	N/C
620	4370	Saturated Brine-Based Mud	9.8-10.0	35-45	N/C
4370	11182	Water-Based or Oil-Based Mud	8.0-9.6	38-50	N/C
11182	22530	Water-Based or Oil-Based Mud	9.5-12.0	38-50	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

What will be used to monitor the loss or gain of fluid?	PVT/MD Totco/Visual Monitoring
---	--------------------------------

## 6. Logging and Testing Procedures

Logging, Coring and Testing		
Yes	Will run GR from TD to surface (horizontal well – vertical portion of hole). Stated logs run will be in the Completion Report and submitted to the BLM.	
No	Logs are planned based on well control or offset log information.	
No	Drill stem test? If yes, explain	
No	Coring? If yes, explain	
Additional logs planned		Interval
No	Resistivity	
No	Density	
No	CBL	
Yes	Mud log	ICP - TD
No	PEX	

## 7. Drilling Conditions

Condition	Specify what type and where?
BH Pressure at deepest TVD	7288 psi
Abnormal Temperature	No
BH Temperature at deepest TVD	174°F

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Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal isolation.

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of Onshore Oil and Gas Order #6. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

N H2S is present

Y H2S Plan attached

### 8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe. <ul style="list-style-type: none"><li>We plan to drill the three well pad in batch by section: all surface sections, intermediate sections and production sections. The wellhead will be secured with a night cap whenever the rig is not over the well.</li></ul>	Yes
Will more than one drilling rig be used for drilling operations? If yes, describe. <ul style="list-style-type: none"><li>Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for this well. If the timing between rigs is such that Oxy would not be able to preset surface, the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the attached document for information on the spudder rig.</li></ul>	Yes

**Total estimated cuttings volume:** 1724.7 bbls.

#### Attachments

- ☒ Directional Plan
- ☒ H2S Contingency Plan
- ☒ Flex III Attachments
- ☒ Spudder Rig Attachment
- ☒ Premium Connection Specs

### 9. Company Personnel

Name	Title	Office Phone	Mobile Phone
Lucas Garibaldi	Drilling Engineer	713-366-5763	281-795-9270
Margaret Giltner	Drilling Engineer Supervisor	713-366-5026	210-683-8480
Simon Benavides	Drilling Superintendent	713-522-8652	281-684-6897
Diego Tellez	Drilling Manager	713-350-4602	713-303-4932

## Oxy Well Control Plan

### A. Component and Preventer Compatibility Table

The table below, which covers the drilling and casing of the >5M MASP portion of the well, outlines the tubulars and the compatible preventers in use. This table, combined with the mud program, documents that two barriers to flow can be maintained at all times, independent of the rating of the annular preventer.

Pilot hole and Lateral sections, 10M requirement

Component	OD	Preventer	RWP
Drillpipe	4-1/2"-5"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
HWDP	4-1/2"-5"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Drill collars and MWD tools	4-3/4" - 5-1/2"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Mud Motor	4-3/4"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
Production casing	5-1/2"	Lower 3-1/2 - 5-1/2" VBR Upper 3-1/2 - 5-1/2" VBR	10M
ALL	0" - 13-5/8"	Annular	5M
Open-hole	6-3/4"	Blind Rams	10M

VBR = Variable Bore Ram. Compatible range listed in chart.

HWDP = Heavy Weight Drill Pipe

MWD = Measurement While Drilling

### B. Well Control Procedures

Well control procedures are specific to the rig equipment and the operation at the time the kick occurs. Below are the minimal high-level tasks prescribed to assure a proper shut-in while drilling, tripping, running casing, pipe out of the hole (open hole), and moving the Bottom Hole Assembly (BHA) through the Blowout Preventers (BOP). The pressure at which control is swapped from the annular to another compatible ram will occur when the anticipated pressure is approaching or envisioned to exceed 70% of the 5M annular Rated Working Pressure (RWP) or 3500 PSI.

#### General Procedure While Drilling

1. Sound alarm (alert crew)
2. Space out drill string
3. Shut down pumps (stop pumps and rotary)
4. Shut-in Well (uppermost applicable BOP, typically annular preventer first. The Hydraulic Control Remote (HCR) valve and choke will already be in the closed position).
5. Confirm shut-in
6. Notify tool pusher/company representative



7. Read and record the following:
  - a. SIDPP and SICP
  - b. Pit gain
  - c. Time
8. Regroup and identify forward plan
9. If pressure has built or expected to reach 70% of the annular RWP during kill operations, crew will reconfirm spacing and swap to the upper pipe ram

#### General Procedure While Tripping

1. Sound alarm (alert crew)
2. Stab full opening safety valve and close
3. Space out drill string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. The HCR and choke will already be in the closed position)
5. Confirm shut-in
6. Notify tool pusher/company representative
7. Read and record the following
  - a. SIDPP and SICP
  - b. Pit gain
  - c. Time
  - d. Regroup and identify forward plan
  - e. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to the upper pipe ram

#### General Procedure While Running Casing

1. Sound alarm (alert crew)
2. Stab crossover and full opening safety valve and close
3. Space out string
4. Shut-in (uppermost applicable BOP, typically annular preventer first. The HCR and choke will already be in the closed position).
5. Confirm shut-in
6. Notify tool pusher/company representative
7. Read and record the following:
  - a. SIDPP and SICP
  - b. Pit gain
  - c. Time
  - d. Regroup and identify forward plan.
  - e. If pressure has built or is anticipated during the kill to reach the RWP of the annular preventer, confirm spacing and swap to compatible pipe ram.

#### General Procedure With No Pipe In Hole (Open Hole)

1. Sound alarm (alert crew)
2. Shut-in with blind rams or BSR. (The HCR and choke will already be in the closed position)
3. Confirm shut-in
4. Notify tool pusher/company representative

5. Read and record the following:
  - a. SICP
  - b. Pit gain
  - c. Time
6. Regroup and identify forward plan

#### General Procedures While Pulling BHA thru Stack

1. PRIOR to pulling last joint of drill pipe thru the stack.
  - a. Perform flow check, if flowing:
  - b. Sound alarm (alert crew)
  - c. Stab full opening safety valve and close
  - d. Space out drill string with tool joint just beneath the upper pipe ram
  - e. Shut-in using upper pipe ram. (The HCR and choke will already be in the closed position)
  - f. Confirm shut-in
  - g. Notify tool pusher/company representative
  - h. Read and record the following:
    - i. SIDPP and SICP
    - ii. Pit gain
    - iii. Time
    - iv. Regroup and identify forward plan
2. With BHA in the stack and compatible ram preventer and pipe combo immediately available.
  - a. Sound alarm (alert crew)
  - b. Stab crossover and full opening safety valve and close
  - c. Space out drill string with upset just beneath the compatible pipe ram
  - d. Shut-in using compatible pipe ram. (The HCR and choke will already be in the closed position.)
  - e. Confirm shut-in
  - f. Notify tool pusher/company representative
  - g. Read and record the following:
    - i. SIDPP and SICP
    - ii. Pit gain
    - iii. Time
    - iv. Regroup and identify forward plan
3. With BHA in the stack and NO compatible ram preventer and pipe combo immediately available.
  - a. Sound alarm (alert crew)
  - b. If possible to pick up high enough, pull string clear of the stack and follow "Open Hole" scenario
  - c. If impossible to pick up high enough to pull the string clear of the stack
  - d. Stab crossover, make up one joint/stand of drill pipe, and full opening safety valve and close
  - e. Space out drill string with tool joint just beneath the upper pipe ram

- f. Shut-in using upper pipe ram. (The HCR and choke will already be in the closed position)
- g. Confirm shut-in
- h. Notify tool pusher/company representative
- i. Read and record the following:
  - i. SIDPP and SICP
  - ii. Pit gain
  - iii. Time
- j. Regroup and identify forward plan

# PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

<b>OPERATOR'S NAME:</b>	<b>OXY USA Incorporated</b>
<b>LEASE NO.:</b>	<b>NMNM043744</b>
<b>WELL NAME &amp; NO.:</b>	<b>Platinum MDP1 33-4 Federal Com 177H</b>
<b>SURFACE HOLE FOOTAGE:</b>	<b>220'N &amp; 2557'W</b>
<b>BOTTOM HOLE FOOTAGE:</b>	<b>20'S &amp; 2200'W</b>
<b>LOCATION:</b>	<b>Section 34, T.23 S., R.31 E., NMPM</b>
<b>COUNTY:</b>	<b>Eddy County, New Mexico</b>

COA

H2S	<input type="radio"/> Yes	<input checked="" type="radio"/> No	
Potash	<input type="radio"/> None	<input type="radio"/> Secretary	<input checked="" type="radio"/> R-111-P
Cave/Karst Potential	<input checked="" type="radio"/> Low	<input type="radio"/> Medium	<input type="radio"/> High
Variance	<input type="radio"/> None	<input checked="" type="radio"/> Flex Hose	<input type="radio"/> Other
Wellhead	<input type="radio"/> Conventional	<input type="radio"/> Multibowl	<input checked="" type="radio"/> Both
Other	<input type="checkbox"/> 4 String Area	<input type="checkbox"/> Capitan Reef	<input type="checkbox"/> WIPP
Other	<input checked="" type="checkbox"/> Fluid Filled	<input checked="" type="checkbox"/> Cement Squeeze	<input type="checkbox"/> Pilot Hole
Special Requirements	<input type="checkbox"/> Water Disposal	<input checked="" type="checkbox"/> COM	<input type="checkbox"/> Unit

**All Previous COAs Still Apply**

## A. CASING

### Casing Design:

1. The **13-3/8 inch** surface casing shall be set at approximately **633 feet** (a minimum of **70 feet (Eddy County)** into the Rustler Anhydrite and above the salt) and cemented to the surface.
  - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
  - b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
  - c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength,

whichever is greater.

- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
2. The minimum required fill of cement behind the **9-5/8 inch intermediate casing 1** shall be set at approximately **4325 feet** is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**  
**Cement excess is less than 25%, more cement might be required.**

**Intermediate casing must be kept fluid filled to meet BLM minimum collapse requirement.**

3. The minimum required fill of cement behind the **7-5/8 inch intermediate casing 2** is:
  - Cement to surface. If cement does not circulate see B.1.a, c-d above.  
**Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

**Operator has proposed to pump down 9-5/8" X 7-5/8" annulus. Operator must run a CBL from TD of the 7-5/8" casing to surface. Submit results to BLM.**

4. The minimum required fill of cement behind the **5-1/2 inch production casing** is:
  - Cement should tie-back **500 feet** into the previous casing. Operator shall provide method of verification.  
**Cement excess is less than 25%, more cement might be required.**

## **B. PRESSURE CONTROL**

1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).
- 2.

### **Option 1:**

- a. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **3000 (3M) psi**.
- b. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **intermediate casing 1** shoe shall be **5000 (5M) psi**.

- c. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **intermediate casing 2** shoe shall be **5000 (5M)** psi.

**Option 2:**

1. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be **5000 (5M)** psi.
  - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
  - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
  - c. Manufacturer representative shall install the test plug for the initial BOP test.
  - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
  - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

**C. SPECIAL REQUIREMENT (S)**

**Break Testing**

- Break testing variance is approved to be conducted only from 0-10000 feet or the top of the 3<sup>rd</sup> Bone Spring which ever is shallower.
- Pressure above 500 psi and/or flow above 500 mcf or 100 bbl over the anticipated conditions while drilling require notification to the Authorized Officer before any pressure test can begin.

## GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

☒ Chaves and Roosevelt Counties

Call the Roswell Field Office, 2909 West Second St., Roswell NM 88201.

During office hours call (575) 627-0272.

After office hours call (575)

☒ Eddy County

Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220,  
(575) 361-2822

☒ Lea County

Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575)  
393-3612

1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
  - a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
  - b. When the operator proposes to set surface casing with Spudder Rig
    - Notify the BLM when moving in and removing the Spudder Rig.
    - Notify the BLM when moving in the 2<sup>nd</sup> Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
    - BOP/BOPE test to be conducted per Onshore Oil and Gas Order No. 2 as soon as 2nd Rig is rigged up on well.
2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
3. The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as

well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.

A. CASING

1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends, 2) until cement has been in place at least 24 hours. WOC time will be recorded in the driller's log.
3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements.
4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
8. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.



**B. DRILLING MUD**

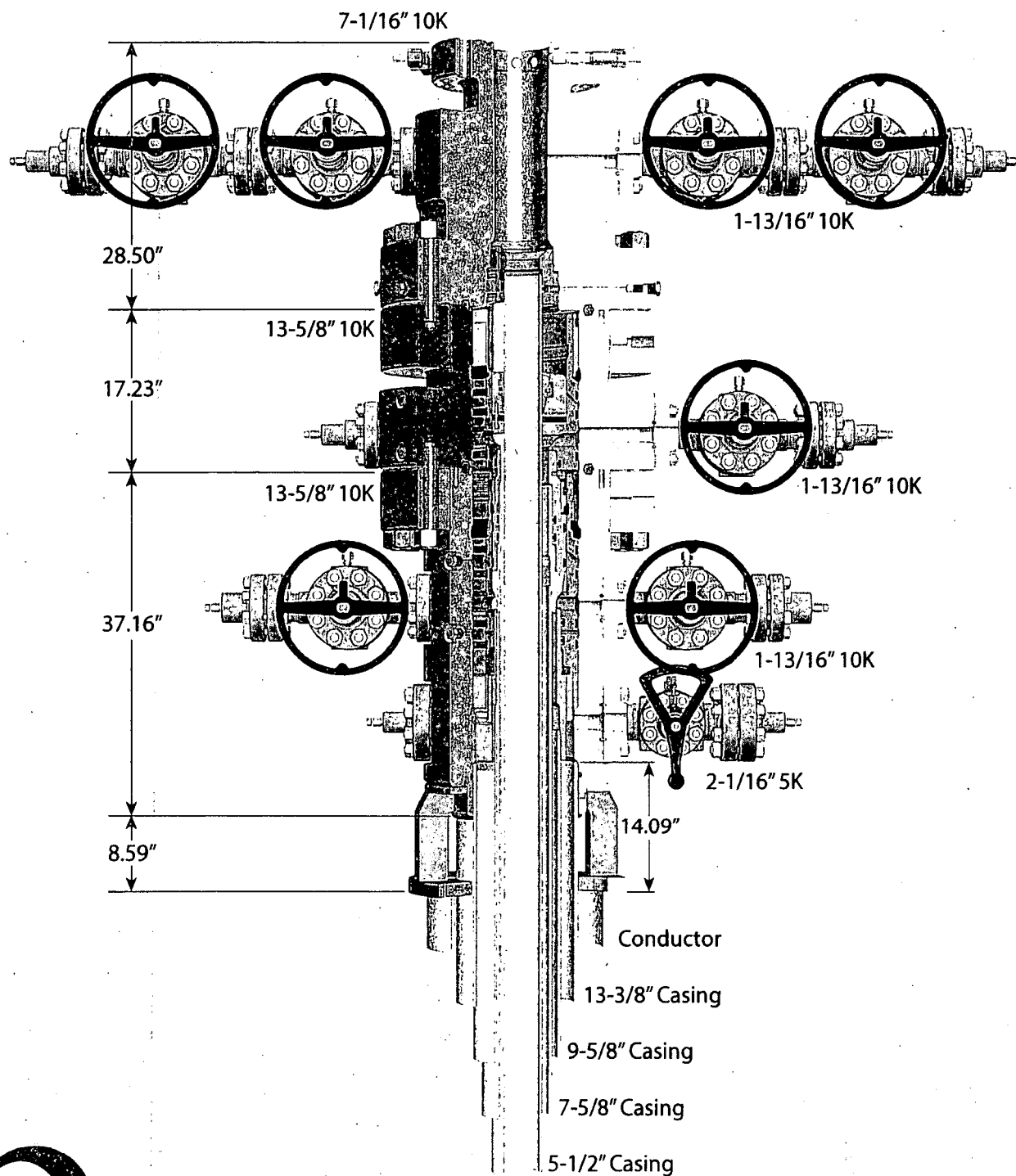
Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.



# CAMERON

A Schlumberger Company

## 13-5/8" 10K MN-DS Wellhead Four String



1615045

NOTE: All dimensions on this drawing are estimated measurements and should be evaluated by engineering.

# PERFORMANCE DATA

**TMK UP TORQ™ DQW**  
**Technical Data Sheet**

**5.500 in**

**20.00 lbs/ft**

**P110 CY**

## Tubular Parameters

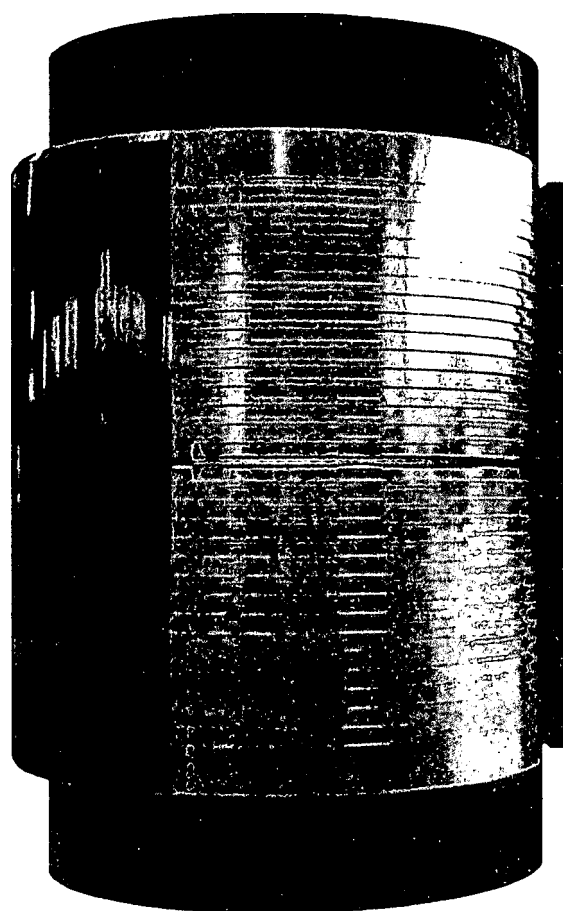
Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P110 CY		Yield Load	641,000	lbs
PE Weight	19.81	lbs/ft	Tensile Load	729,000	lbs
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,640	psi
Nominal ID	4.778	in	Collapse Pressure	11,110	psi
Drift Diameter	4.653	in			
Nom. Pipe Body Area	5.828	in <sup>2</sup>			

## Connection Parameters

Connection OD	6.050	in
Connection ID	4.778	in
Make-Up Loss	4.324	in
Critical Section Area	5.828	in <sup>2</sup>
Tension Efficiency	100.0	%
Compression Efficiency	100.0	%
Yield Load In Tension	641,000	lbs
Min. Internal Yield Pressure	12,640	psi
Collapse Pressure	11,110	psi
Uniaxial Bending	92	% / 100 ft

## Make-Up Torques

Min. Make-Up Torque	14,000	ft-lbs
Opt. Make-Up Torque	16,000	ft-lbs
Max. Make-Up Torque	18,000	ft-lbs
Operating Torque	36,800	ft-lbs
Yield Torque	46,000	ft-lbs



Printed on: March-05-2019

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# PERFORMANCE DATA

**TMK UP DQX**  
**Technical Data Sheet**

**5.500 in**

**20.00 lbs/ft**

**P-110**

## Tubular Parameters

Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P-110		Yield Load	641,000	lbs
PE Weight	19.81	lbs/ft	Tensile Load	729,000	lbs
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,600	psi
Nominal ID	4.778	in	Collapse Pressure	11,100	psi
Drift Diameter	4.653	in			
Nom. Pipe Body Area	5.828	in <sup>2</sup>			

## Connection Parameters

Connection OD	6.050	in
Connection ID	4.778	in
Make-Up Loss	4.122	in
Critical Section Area	5.828	in <sup>2</sup>
Tension Efficiency	100.0	%
Compression Efficiency	100.0	%
Yield Load In Tension	641,000	lbs
Min. Internal Yield Pressure	12,600	psi
Collapse Pressure	11,100	psi

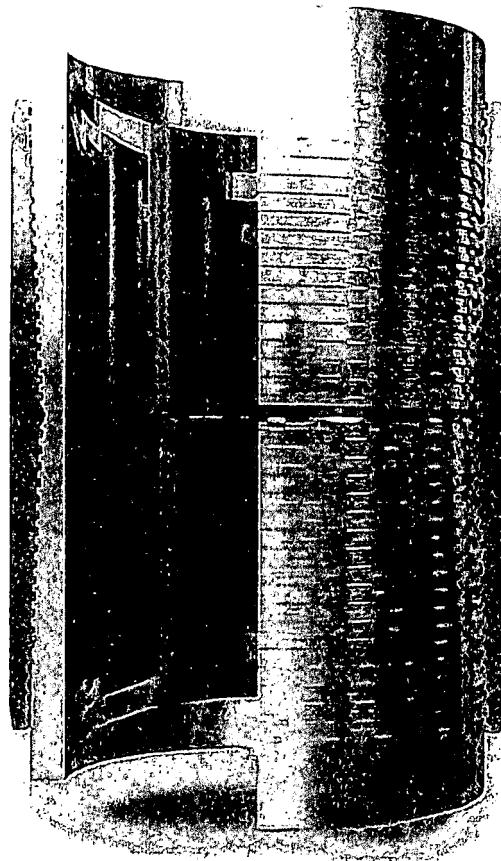
## Make-Up Torques

Min. Make-Up Torque	11,600	ft-lbs
Opt. Make-Up Torque	12,900	ft-lbs
Max. Make-Up Torque	14,100	ft-lbs
Yield Torque	20,600	ft-lbs

**Printed on: July-29-2014**

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# TECHNICAL DATA SHEET TMK UP DQX 5.5 X 20 P110

## TUBULAR PARAMETERS

Nominal OD, (inch)	5.500
Wall Thickness, (inch)	0.361
Pipe Grade	P110
Coupling	Regular
Coupling Grade	P110
Drift	Standard

## PIPE BODY PROPERTIES

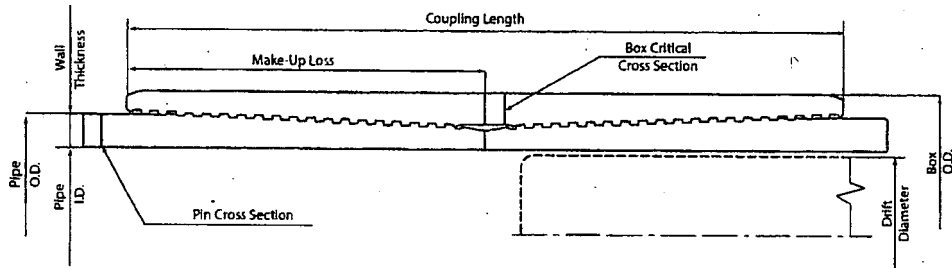
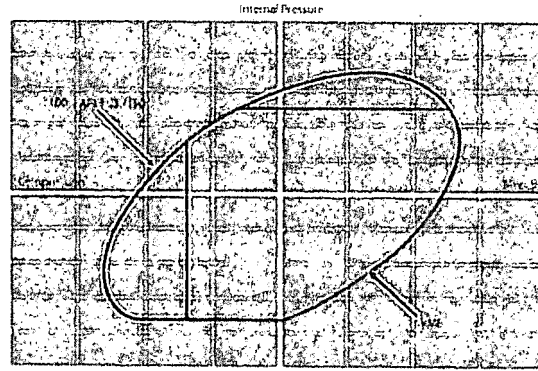
PE Weight, (lbs/ft)	19.81
Nominal Weight, (lbs/ft)	20.00
Nominal ID, (inch)	4.778
Drift Diameter, (inch)	4.653
Nominal Pipe Body Area, (sq inch)	5.828
Yield Strength in Tension, (klbs)	641
Min. Internal Yield Pressure, (psi)	12 640
Collapse Pressure, (psi)	11 110

## CONNECTION PARAMETERS

Connection OD (inch)	6.05
Connection ID, (inch)	4.778
Make-Up Loss, (inch)	4.122
Connection Critical Area, (sq inch)	5.828
Yield Strength in Tension, (klbs)	641
Yield Strength in Compression, (klbs)	641
Tension Efficiency	100%
Compression Efficiency	100%
Min. Internal Yield Pressure, (psi)	12 640
Collapse Pressure, (psi)	11 110
Uniaxial Bending (deg/100ft)	91.7

## MAKE-UP TORQUES

Yield Torque, (ft-lb)	20 600
Minimum Make-Up Torque, (ft-lb)	11 600
Optimum Make-Up Torque, (ft-lb)	12 900
Maximum Make-Up Torque, (ft-lb)	14 100



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Print date: 12/07/2017 18:09

# PERFORMANCE DATA

TMK UP SF TORQ™

5.500 in

20.00 lbs/ft

P110 HC

## Technical Data Sheet

### Tubular Parameters

Size	5.500	in	Minimum Yield	110,000	psi
Nominal Weight	20.00	lbs/ft	Minimum Tensile	125,000	psi
Grade	P110 HC		Yield Load	641,000	lbs
PE Weight	19.81	lbs/ft	Tensile Load	728,000	lbs
Wall Thickness	0.361	in	Min. Internal Yield Pressure	12,640	psi
Nominal ID	4.778	in	Collapse Pressure	12,780	psi
Drift Diameter	4.653	in			
Nom. Pipe Body Area	5.828	in <sup>2</sup>			

### Connection Parameters

Connection OD	5.777	in
Connection ID	4.734	in
Make-Up Loss	5.823	in
Critical Section Area	5.875	in <sup>2</sup>
Tension Efficiency	90.0	%
Compression Efficiency	90.0	%
Yield Load In Tension	576,000	lbs
Min. Internal Yield Pressure	12,640	psi
Collapse Pressure	12,780	psi
Uniaxial Bending	83	% / 100 ft

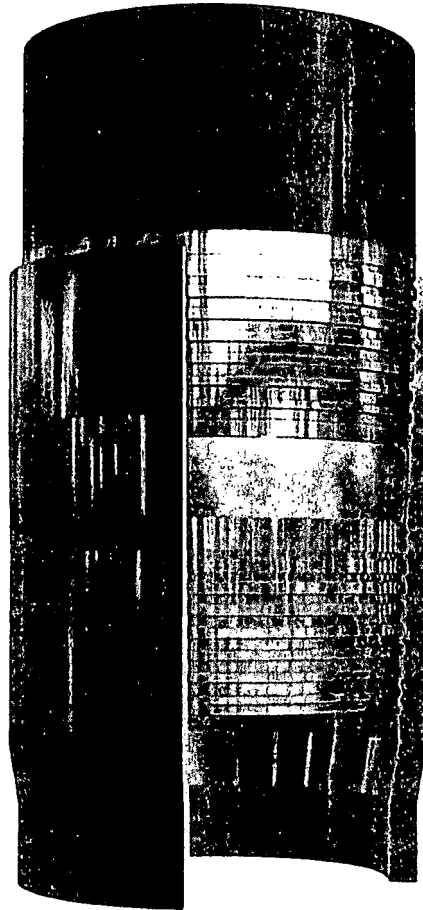
### Make-Up Torques

Min. Make-Up Torque	15,700	ft-lbs
Opt. Make-Up Torque	19,600	ft-lbs
Max. Make-Up Torque	21,600	ft-lbs
Operating Torque	29,000	ft-lbs
Yield Torque	36,000	ft-lbs

Printed on: February-22-2018

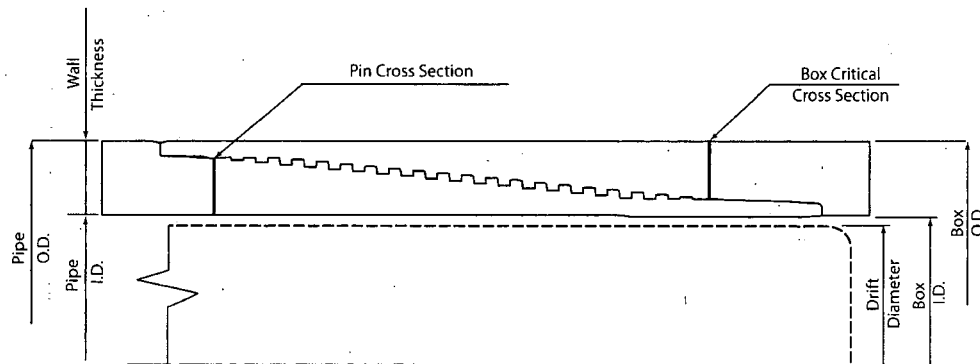
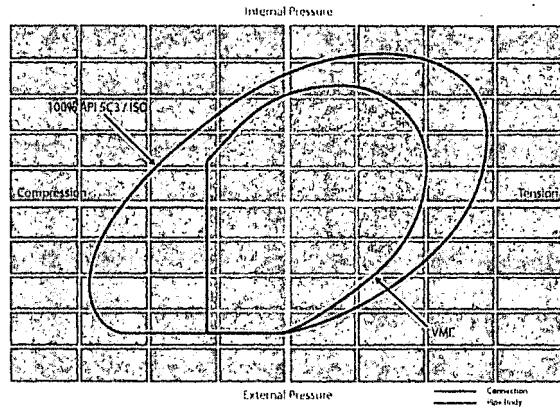
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# TECHNICAL DATA SHEET TMK UP FJ 7.625 X 26.4 L80 HC

TUBULAR PARAMETERS		PIPE BODY PROPERTIES	
Nominal OD, (inch)	7.625	PE Weight, (lbs/ft)	25.56
Wall Thickness, (inch)	0.328	Nominal Weight, (lbs/ft)	26.40
Pipe Grade	L80 HC	Nominal ID, (inch)	6.969
Drift	Standard	Drift Diameter, (inch)	6.844
CONNECTION PARAMETERS		Nominal Pipe Body Area, (sq inch)	7.519
		Yield Strength in Tension, (klbs)	601
		Min. Internal Yield Pressure, (psi)	6 020
		Collapse Pressure, (psi)	3 910
Connection OD (inch)	7.63		
Connection ID, (inch)	6.975		
Make-Up Loss, (inch)	4.165		
Connection Critical Area, (sq inch)	2.520		
Yield Strength in Tension, (klbs)	347		
Yield Strength in Compression, (klbs)	347		
Tension Efficiency	58%		
Compression Efficiency	58%		
Min. Internal Yield Pressure, (psi)	6 020		
Collapse Pressure, (psi)	3 910		
Uniaxial Bending (deg/100ft)	28.0		
MAKE-UP TORQUES			
Yield Torque, (ft-lb)	22 200		
Minimum Make-Up Torque, (ft-lb)	12 500		
Optimum Make-Up Torque, (ft-lb)	13 900		
Maximum Make-Up Torque, (ft-lb)	15 300		



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Print date: 07/10/2018 20:11

# TECHNICAL DATA SHEET TMK UP SF 7.625 X 26.4 L80 HC

## TUBULAR PARAMETERS

Nominal OD, (inch)	7.625
Wall Thickness, (inch)	0.328
Pipe Grade	L80 HC
Drift	Standard

## PIPE BODY PROPERTIES

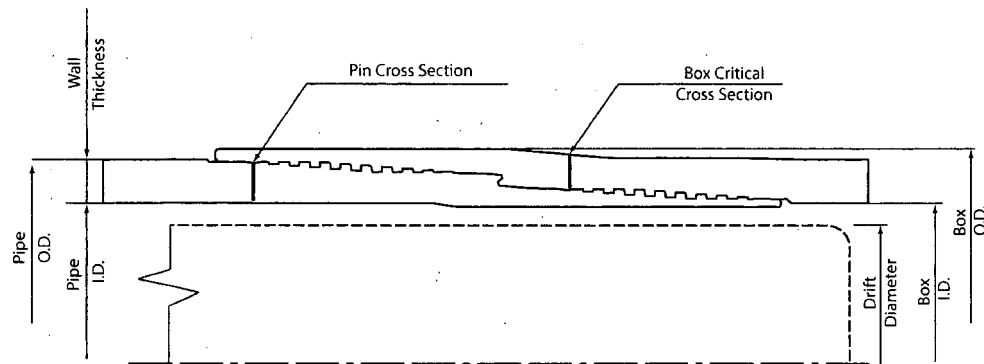
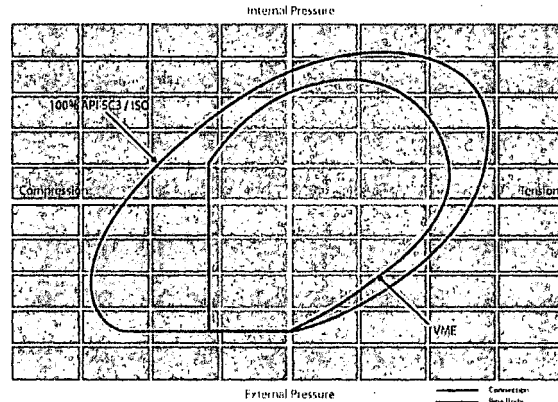
PE Weight, (lbs/ft)	25.56
Nominal Weight, (lbs/ft)	26.40
Nominal ID, (inch)	6.969
Drift Diameter, (inch)	6.844
Nominal Pipe Body Area, (sq inch)	7.519
Yield Strength in Tension, (klbs)	601
Min. Internal Yield Pressure, (psi)	6 020
Collapse Pressure, (psi)	3 910

## CONNECTION PARAMETERS

Connection OD (inch)	7.79
Connection ID, (inch)	6.938
Make-Up Loss, (inch)	6.029
Connection Critical Area, (sq inch)	5.948
Yield Strength in Tension, (klbs)	533
Yield Strength in Compression, (klbs)	533
Tension Efficiency	89%
Compression Efficiency	89%
Min. Internal Yield Pressure, (psi)	6 020
Collapse Pressure, (psi)	3 910
Uniaxial Bending (deg/100ft)	42.7

## MAKE-UP TORQUES

Yield Torque, (ft-lb)	22 600
Minimum Make-Up Torque, (ft-lb)	15 000
Optimum Make-Up Torque, (ft-lb)	16 500
Maximum Make-Up Torque, (ft-lb)	18 200



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Print date: 07/10/2018 20:00



District I  
1625 N. French Dr., Hobbs, NM 88240  
Phone: (505) 393-6161 Fax: (505) 393-0720  
District II  
811 S. First St., Artesia, NM 88210  
Phone: (505) 748-1283 Fax: (505) 748-9720  
District III  
1000 Rio Bravero Road, Aztec, NM 87410  
Phone: (505) 334-6178 Fax: (505) 334-6170  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505  
Phone: (505) 476-3460 Fax: (505) 476-3462

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

Form C-102  
Revised August 1, 2011  
Submit one copy to appropriate  
District Office

☒ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

OK

API Number 30-015- pending	Pool Code 98220	Pool Name Purple Sage Wolfcamp
Property Code	Property Name PLATINUM MDP1 "34_3" FEDERAL COM	Well Number 177H
OGRID No. 16696	Operator Name OXY USA INC.	Elevation 3426.9'

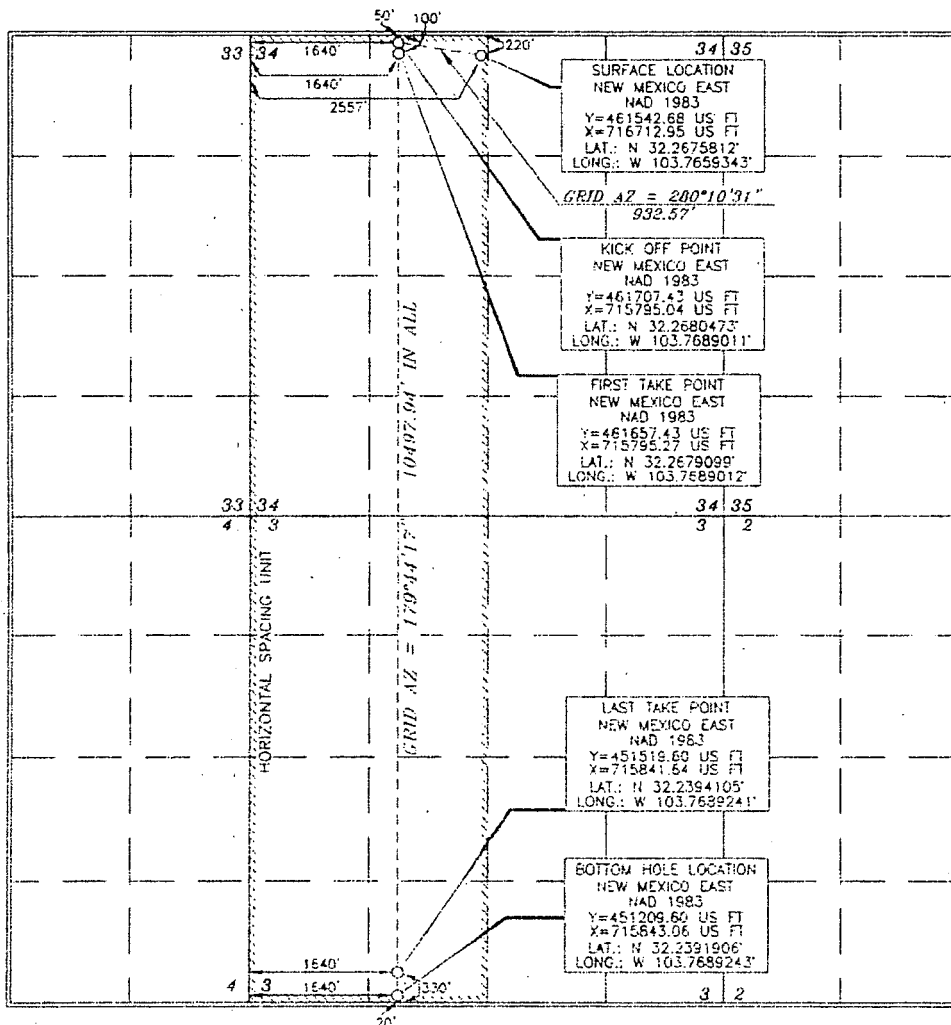
Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	34	23 SOUTH	31 EAST, N.M.P.M.		220'	NORTH	2557'	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
N	3	24 SOUTH	31 EAST, N.M.P.M.		20'	SOUTH	1640'	WEST	EDDY
Dedicated Acres 640	Joint or Infill	Consolidation Code	Order No.						

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 accurate to the best of my knowledge and belief, and that this organization either owns a working interest or undivided 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.

Hereby entered by the division:

Sarah Chapman 5/17/19

Sarah Chapman

Sarah.Chapman@oxy.com

SURVEYOR CERTIFICATION

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

15079  
AUGUST 30, 2018  
Date of Survey  
Signature and Seal of Professional Surveyor

Terry J. Carl 5/14/19  
Certificate Number 15079

Intent ☒ As Drilled ☐

API # 30-015-pending		
Operator Name:  OXY USA Inc.	Property Name:  Platinum HDPI 34-3 Federal Com	Well Number  1774

Kick Off Point (KOP)

UL C	Section 34	Township 23S	Range 31E	Lot	Feet 50	From N/S North	Feet 1640	From E/W West	County EDDY
Latitude 32.2680473					Longitude -103.7689011				NAD NAD83

First Take Point (FTP)

UL C	Section 34	Township 23S	Range 31E	Lot	Feet 100	From N/S North	Feet 1640	From E/W West	County EDDY
Latitude 32.2679099					Longitude -103.7689012				NAD NAD83

Last Take Point (LTP)

UL N	Section 3	Township 24S	Range 31E	Lot	Feet 330	From N/S South	Feet 1640	From E/W West	County EDDY
Latitude 32.2394105					Longitude -103.7689241				NAD NAD83

Is this well the defining well for the Horizontal Spacing Unit? ☐

Is this well an infill well? ☐

If infill is yes please provide API if available, Operator Name and well number for Defining well for Horizontal Spacing Unit.

API #		
Operator Name:	Property Name:	Well Number

KZ 06/29/2018